



PRODUCT RANGE OVERVIEW 1/2008

-
- Complete systems
 - Solar thermal systems
 - Residential heating products
-

Part 1

Content part 1.....	3
Air-to-water heat pump.....	4
Brine-to-water heat pump.....	23
Water-to-water heat pump.....	34
Buffer tanks and accessories.....	39
Hot water cylinders and accessories.....	41
Distribution system for heat pumps.....	44
Fan convectors heating/cooling.....	47
Heat pump regulation and accessories.....	48
Heat pump module.....	49
Hot water heat pump.....	50
Local domestic ventilation.....	53
Central domestic ventilation.....	54

Solar collectors

Solar collectors.....	51
-----------------------	----

Part 2

Content part 2.....	63
Dimplex storage heaters.....	64
PERMATHERM® storage heaters.....	75
Direct heating.....	82
Industrial heaters.....	88
Air curtains.....	90
Hand dryer.....	92
AKO direct heating.....	93
AKO infrared heater.....	94
Underfloor heating systems.....	99
Heating cable.....	104
Control and regulation devices.....	105
Instantaneous water heaters.....	114
Compact hot water cylinder.....	116
Wall-mounted cylinder.....	116
Floor standing cylinders.....	118
Split air conditioners.....	120

Appendix

Appendix.....	121
---------------	-----

Air source	Air-to-water heat pump with 90° air deflection 4	Air-to-water (indoor)
	Air-to-water heat pump with straight air flow 8	
	Special accessories for air-to-water heat pump installed indoors..... 10	
	Air-to-water heat pump for installation close to walls 12	Air-to-water (outdoor)
	Air-to-water heat pump for free-standing installation..... 13	
	Air-to-water heat pump with higher flow temperatures..... 14	
	Special accessories for air-to-water heat pump installed outdoors 15	
	Air-to-water heat pump 16	
	Air-to-water heat pump for swimming pools 16	
	Air-to-water heat pump for heating and cooling 17	Heating/Cooling
Special accessories cooling regulation 20		
Reversible air-to-water heat pump with simplified controller 21		
Ground source	Package solution for brine-to-water heat pump in compact design..... 23	Brine-to-water
	Domestic hot water preparation for compact brine-to-water heat pump..... 24	
	Brine-to-water heat pump in a compact design..... 25	
	Design tank for compact brine-to-water heat pump 26	
	Brine-to-water heat pump in universal design 28	
	Special accessories for brine-to-water heat pump..... 33	
	Water-to-water heat pump 34	Water-to-water
	Passive cooling with brine-to-water or water-to-water heat pump..... 35	
	Active cooling with brine-to-water heat pump 36	
	Special accessories cooling regulation 37	
Active cooling with brine-to-water heat pump 38		
Accessories	Buffer tanks and accessories..... 39	Accessories
	Hot water cylinders and accessories 41	
	Distribution system for heat pumps..... 44	
	Fan convectors heating/cooling 47	
	Heat pump regulation and accessories 48	
HR & V / Solar	Heat pump module – indoor air as a heat source 49	DHW
	Hot water heat pump – indoor air as a heat source..... 50	
	Solar collectors and accessories 51	Ventilation
	Local domestic ventilation with passive heat recovery..... 53	
	Central domestic ventilation with active heat recovery 54	
	Central domestic ventilation with passive heat recovery..... 56	
	Special accessories for central domestic ventilation 57	
	Air duct accessories for central domestic ventilation units 58	

Air-to-water heat pump with 90° air deflection

Air-to-water (indoor)

Air-to-water (outdoor)

Heating/Cooling

Brine-to-water

Water-to-water

Accessories

DHW

Ventilation

Low-temperature air-to-water heat pump

Max. flow temp. for heating 58 °C
Casing colour white

Compact design

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). The integrated air flow with 90° air deflection enables direct corner installation without air ducts or wall installation with air ducts on the air outlet side. Sound-optimised through low-noise axial-flow fan and vibration-isolated compressor. High coefficients of performance using an evaporator optimised for heating operation and energy-efficient defrosting by reverse circulation. Compact design with optional domestic hot water preparation and integrated components for direct connection of an unmixed heating circuit (must not be used for bivalent systems):

- Expansion vessel (24l)
- Heat circulating pump (free compression 45,000 Pa)
- Overflow valve and safety module
- Buffer tank (50 l) with integrated 2 kW heating element

Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) and 3 flexible connecting hoses (1", 500 mm) included in the scope of supply.

Lower operating limit heat source (heating operation) -25 °C; Upper operating limit heat source (heating operation) 35 °C; Refrigerant R404A; Connection heating 1"

LIK 8ME



LIK 8TE



Order reference	Item-No.	Heat output with 1 compressor / COP	Connection voltage	Air outlet	Width x Height x Depth mm	Weight kg
LIK 8ME	352750	7.5 / 3.3 (3.2)	1/N/PE ~230 V, 50 Hz	right	750 x 1900 x 680	245
LIK 8TE	352590			left		
LIK 8TEL	352600		3/PE ~400 V, 50 Hz	left	852 x 1900 x 680	252

Heat output and COP acc. to EN 255 (EN 14511) at A2/W35 (A2 = air inlet temp. +2 °C, W35 = heating water outlet temp. +35 °C)

Delivery times for heat pumps with air output on the left on request!

Low-temperature air-to-water heat pump

Max. flow temp. for heating 58 °C
Casing colour white

Universal design

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). The integrated air flow with 90° air deflection enables direct corner installation without air ducts or wall installation with air ducts on the air outlet side. Sound-optimised through low-noise axial-flow fan and vibration-isolated compressor. High coefficients of performance using an evaporator optimised for heating operation and energy-efficient defrosting by reverse circulation. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits
- Switchable supplementary heating (2/4/6 kW),

Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) included in the scope of supply.

Lower operating limit heat source (heating operation) -25 °C; Upper operating limit heat source (heating operation) 35 °C; Refrigerant R404A; Connection heating 1"; Connection voltage 3/N/PE ~400 V, 50 Hz

LI 9TE



Order reference	Item-No.	Heat output with 1 compressor / COP	Air outlet	Width x Height x Depth mm	Weight kg
LI 9TE	352610	7.5 / 3.3 (3.2)	right	750 x 1250 x 680	177
LI 9TEL	352620		left		

Heat output and COP acc. to EN 255 (EN 14511) at A2/W35 (A2 = air inlet temp. +2 °C, W35 = heating water outlet temp. +35 °C)

Delivery times for heat pumps with air output on the left on request!

Heating water hose connection set

Hydraulic connection set to facilitate installation of air-to-water heat pumps. Consisting of:

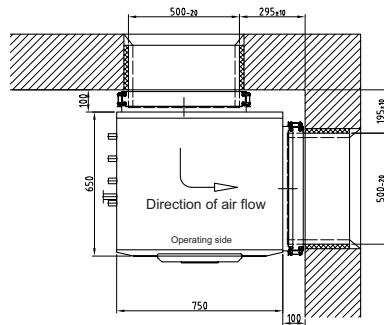
- Two metal braided hoses (500 mm)
- two double nipples
- two 90° brackets
- two flat gaskets

SAS ...

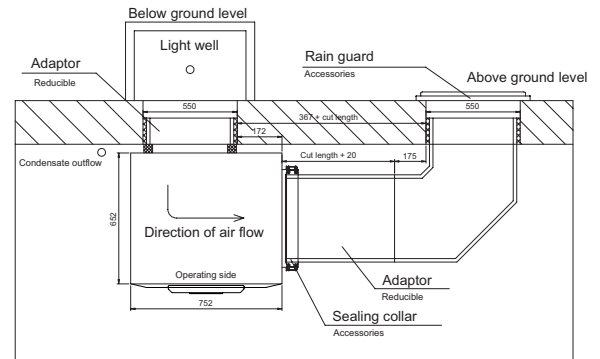


Order reference	Item-No.	For device type	Connection heating	Weight kg
SAS 100	340320	LI 9	1	4

Corner installation for LIK 8 and LI 9



Wall installation LIK 8 and LI 9



Air ducts 500

Optimally suited for air-to-water heat pump air circuits; GFRG exterior; thermally-insulated and sound-insulated on the inside to prevent the formation of condensate and considerably reduce sound transmission. The ducts must be protected against driving rain and can, if necessary, be cut to length and/or painted with water-proof emulsion paint on site. Minor damage to the outer surface has no effect on the efficiency and can be repaired with standard plaster.

Order reference	Item-No.	Short text	For device type	Length mm	Width x Height mm	Weight kg
LKL 500	339710	Long air duct	LIK 8 LI 9	1250	500 x 500	23
LKK 500	339720	Short air duct		625		12
LKB 500	339730	90° air duct bend		800		17

For solid-borne sound insulation, the air ducts are not screwed directly onto the heat pump. They must be mounted (i.e. suspended) on site. The dimension drawings of the air ducts are available at www.dimplex.de/luftkanale for downloading!



LKK ...



LKB ...



DMK ...

Sealing collar 500 for air intake or air outlet

Circumferential rubber gasket for vibration-free connection of the air duct to the air intake and air outlet side of the heat pump. The component is attached via a screwed fastening frame (packaging unit 1).

Order reference	Item-No.	For device type	Weight kg
DMK 500-1	340260	Air duct 500	4

Heat pump rain guard

Specially developed rain guard for protection from driving rain, for air-to-water heat pumps with low pressure loss of approx. 5 Pa; the permissible overall pressure loss is not exceeded when standardly integrated with the air hose set and/or air ducts; aluminium frame (width 25 mm) for wall mounting; painted grey-white (RAL 9002).

Order reference	Item-No.	For device type	Width x Height x Depth mm	Weight kg
RSG 500	340220	LIK 8 LI 9	650 x 650 x 50	3



RSG ...

Installation hardware 500

Installation hardware for sealing the cut edges, where ducts need to be cut to length. Consisting of channel-section frame (U profile) and fitting compound.

Order reference	Item-No.	For device type	Weight kg
VSK 500	341200	Air duct 500	2



VSK ...

Air-to-water (indoor) | Air-to-water (outdoor) | Heating/Cooling | Brine-to-water | Water-to-water | Accessories | DHW | Ventilation



SYL 250

Elasticated sound insulation strip

For solid-borne sound insulation of heat pumps for indoor installation and compensation of floor unevenness; strip-shaped support for the base frame; 12 mm thick (deformation approx. 1 mm); max. load 140 kg/RM; 2.5 m long (can be cut to appropriate length), colour green.

Order reference	Item-No.	Length mm	Width x Height mm	Weight kg
SYL 250	352260	2500	30 x 12	0.3

Medium-temperature air-to-water heat pump

Max. flow temp. for heating 65 °C
Casing colour white

Compact design



LIKI 14TE

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). The integrated air flow with 90° air deflection enables direct corner installation without air ducts or wall installation with air ducts on the air outlet side. High coefficients of performance due to compliance with EN 14511 for larger volume flows on the heat consumption side, optimised high-performance evaporator for heating operation and dual differential pressureless manifold for the reduction of the pump operating times. Sound-optimised through low-noise ventilator and insulated metal casing; integrated solid-borne sound insulation for direct connection to the heating system with free-swinging compressor base plate.

Compact design with optional domestic hot water preparation and integrated components for direct connection of an unmixed heating circuit (must not be used for bivalent systems):

- Heat circulating pump (note the free compression)
- Expansion vessel (24l)

Buffer tank (120 l, can be dismantled) with integrated switchable supplementary heating 3/6 kW, safety module. Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) included in the scope of supply.

A heat circulating pump not included in the scope of supply is required for the distribution system.

Refrigerant R417a; Connection heating 1¼"; Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Item-No.	Heat output with 1 compressor / COP	Air outlet	Width x Height x Depth mm	Weight kg
LIKI 14TE	356010	10.1 / 3.6 (3.4)	right	962 x 2100 x 785	300

Heat output and COP acc. to EN 255 (EN 14511) at A2/W35 (A2 = air inlet temp. +2 °C, W35 = heating water outlet temp. +35 °C)

For the air circuit, varying duct dimensions are to be used (air intake side 800, air outlet side 600)!

Air duct for air inlet side LIKI 14TE



LKK ...

Optimally suited for air-to-water heat pump air circuits; GFRC exterior; thermally-insulated and sound-insulated on the inside to prevent the formation of condensate and considerably reduce sound transmission. The ducts must be protected against driving rain and can, if necessary, be cut to length and/or painted with water-proof emulsion paint on site. Minor damage to the outer surface has no effect on the efficiency and can be repaired with standard plaster.

Order reference	Item-No.	For device type	Short text	Length mm	Width x Height mm	Weight kg
LKK 800	339810	LI(H) 22 - 28	Short air duct	625	769 x 769	17
LKL 800	339800	LIKI 14 - Air intake	Long air duct	1250		34

Air duct for the air outlet side LIKI 14TE



LKB ...

Order reference	Item-No.	For device type	Short text	Length mm	Width x Height mm	Weight kg
LKL 600	339740	LI 11...(R) LIKI 14 - Air outlet	Long air duct	1250	600 x 600	28
LKB 600	339760		90° air duct bend	1100		25
LKK 600	339750		Short air duct	625		14

For solid-borne sound insulation, the air ducts are not screwed directly onto the heat pump. They must be mounted (i.e. suspended) on site. The dimension drawings of the air ducts are available at www.dimplex.de/luftkanaele for downloading!

Sealing collar 600 / 800



DMK ...

Circumferential rubber gasket for vibration-free connection of the air duct to the air intake and air outlet side of the heat pump. The component is attached via a screwed fastening frame (packaging unit 1).

Order reference	Item-No.	For device type
DMK 800-1	356140	Air duct 800
DMK 600-1	356120	Air duct 600

Heat pump rain guard



RSG ...

Specially developed rain guard for protection from driving rain, for air-to-water heat pumps with low pressure loss of approx. 5 Pa; the permissible overall pressure loss is not exceeded when standardly integrated with the air hose set and/or air ducts; aluminium frame (width 25 mm) for wall mounting; painted grey-white (RAL 9002).

Order reference	Item-No.	For device type	Width x Height x Depth mm	Weight kg
RSG 600	340230	Air duct 600	750 x 750 x 50	4
RSG 800	340250	Air duct 800	920 x 920 x 70	7

Air-to-water heat pump with straight air flow

Max. flow temp. for heating 58 °C
Casing colour white

Low-temperature air-to-water heat pump

Universal design

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). The integrated air flow enables corner or wall installation with air ducts at the air intake and the air outlet side. Sound-optimised through low-noise axial-flow fan and vibration-isolated compressor. High coefficients of performance using an evaporator optimised for heating operation and energy-efficient defrosting by reverse circulation. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits
- Switchable supplementary heating (2/4/6 kW), Lower operating limit heat source (heating operation) -25 °C; Upper operating limit heat source (heating operation) 35 °C; Refrigerant R404A; Connection heating 1¼"



LI 11ME



LI 11/16TE(L)

Order reference	Item-No.	Heat output with 1 compressor / COP	Connection voltage	Air outlet	Width x Height x Depth mm	Weight kg
LI 11ME	352760	9.1 / 3.4 (3.3)	1/N/PE ~230 V, 50 Hz	right	750 x 805 x 880	200
LI 11TE	352630	8.8 / 3.2 (3.1)	3/N/PE ~400 V, 50 Hz	left	750 x 1360 x 880	
LI 11TEL	352640			right	750 x 1570 x 880	235
LI 16TE	352650	left				
LI 16TEL	352660	12.2 / 3.2 (3.1)				

Heat output and COP acc. to EN 255 (EN 14511) at A2/W35 (A2 = air inlet temp. +2 °C, W35 = heating water outlet temp. +35 °C)

Delivery times for heat pumps with air output on the left on request!

Air duct hose set

Air circuit for internally installed air-to-water heat pumps for use in rooms with low temperatures and low humidity. The set contains a 5m length of thermally-insulated and sound-insulated air hose which can be used for both the air intake and the air outlet side. The air intake and air outlet can be established via a light well or wall opening which must be constructed and insulated on site. Mounting plates for the heat pump and the wall opening for intake and outlet as well as all the required installation materials are included in the scope of supply.



LUS ...

Order reference	Item-No.	For device type	Diameter mm	Length m	Weight kg
LUS 11	337390	LI 11	500	5	50
LUS 16	337400	LI 16	630		

Cannot be used for reversible heat pumps and in rooms with high humidity!

Built-under buffer tank

Nominal content 140 l; in air-to-water heat pump design to enable space-saving installation on top of the built-under buffer; polyurethane insulation with minimal downtime losses (can be used for heating and cooling), incl. 2 1½" bushes for immersion heaters (up to CTHK 636); 1" heating water connections; colour: white; brown red design screen.

Order reference	Item-No.	For device type	Width x Height x Depth mm	Weight kg
PSP 140E	353970	LI 11- LI 20..(R)	750 x 600 x 850	72

Low-temperature air-to-water heat pump

Max. flow temp. for heating 58 °C
Casing colour white

Universal design with two performance levels



LI 20-28TE(L)

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). The integrated air flow enables corner or wall installation with air ducts at the air intake and the air outlet side. Sound-optimised through low-noise axial-flow fan and vibration-isolated compressor. High coefficients of performance using an evaporator optimised for heating operation and energy-efficient defrosting by reverse circulation. Universal design with two compressors for output reduction when operating at partial load, optional DHW preparation and the possibility of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) included in the scope of supply. Lower operating limit heat source (heating operation) -25 °C; Upper operating limit heat source (heating operation) 35 °C; Refrigerant R404A; Connection heating 1 1/4"; Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Item-No.	Heat output with 1 compressor / COP	Heat output with 2 compressors / COP	Air outlet	Width x Height x Depth mm	Weight kg
LI 20TE	352670	9.3 / 3.2 (3.1)	14.9 / 3.1 (3.0)	right	750 x 1570 x 880	255
LI 20TEL	352680			left		
LI 24TE	352690	10.9 / 3.0 (3.0)	19.2 / 3.2 (3.1)	right	750 x 1710 x 1030	310
LI 24TEL	352700			left		
LI 28TE	352710	12.8 / 3.0 (3.0)	22.3 / 3.0 (3.0)	right		314
LI 28TEL	352720			left		

Heat output and COP acc. to EN 255 (EN 14511) at A2/W35 (A2 = air inlet temp. +2 °C, W35 = heating water outlet temp. +35 °C)

Delivery times for heat pumps with air output on the left on request!

High-temperature air-to-water heat pump

Max. flow temp. for heating 75 °C
Casing colour white

Universal design with low- and high-temperature levels



LIH 22/26TE

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). The integrated air flow enables corner or wall installation with air ducts at the air intake and the air outlet side. Sound-optimised through low-noise axial-flow fan and vibration-isolated compressor. High coefficients of performance using an evaporator optimised for heating operation and energy-efficient defrosting by reverse circulation. Universal design with low-temperature and high-temperature levels, optional DHW preparation and the possibility of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

In the summer a maximum heating flow temperature of 58 °C is available for domestic hot water preparation. Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) included in the scope of supply.

Lower operating limit heat source (heating operation) -25 °C; Upper operating limit heat source (heating operation) 35 °C; Refrigerant R404A; Refrigerant R134a; Connection heating 1 1/4"; Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Item-No.	Heat output with 1 compressor / COP	Heat output with 2 compressors / COP	Width x Height x Depth mm	Weight kg
LIH 22TE	352730	13.6 / 3.1 (3.0)	13.5 / 2.1	750 x 1710 x 1030	370
LIH 26TE	352740	15.9 / 3.2 (3.0)	15.2 / 2.2		377

Heat output and COP acc. to EN 255 (EN 14511) at A2/W35 (A2 = air inlet temp. +2 °C, W35 = heating water outlet temp. +35 °C)

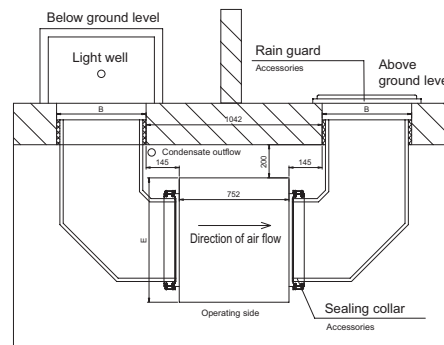
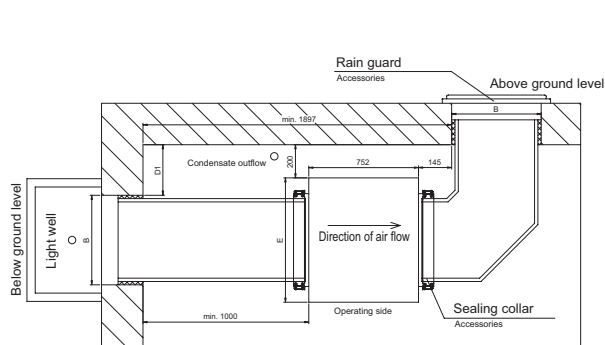
Heat output with 2 compressors and COP acc. to EN 14511 at A-7/W45 (A-7 = air intake temp. -7 °C, W45 = heating water outlet temp. +45 °C)

The max. flow temperature of 75 °C is reached at an air intake temperature from -25 °C to +10 °C (high-temperature level).

At outdoor temperatures above 10 °C the max. flow temperature is +58 °C (low-temperature level)

Corner installation for LI 11-28

Wall installation for LI 11-28



Air intake and outlet can be released by a light well or a rain guard!

Air duct type	Heat pump	B (in mm)	D ₁ (in mm)	E (in mm)
600	LI 11	650	301	852
700	LI 16 / LI 20	745	254	852
800	LI(H) 22 - LI(H) 28	820	291	1002

Special accessories for air-to-water heat pump installed indoors

Air ducts

Optimally suited for air-to-water heat pump air circuits; GFRG exterior; thermally-insulated and sound-insulated on the inside to prevent the formation of condensate and considerably reduce sound transmission. The ducts must be protected against driving rain and can, if necessary, be cut to length and/or painted with water-proof emulsion paint on site. Minor damage to the outer surface has no effect on the efficiency and can be repaired with standard plaster.

Order reference	Item-No.	Short text	For device type	Length mm	Width x Height mm	Weight kg
LKK 600	339750	Short air duct	LI 11...(R) LIKI 14 - Air outlet	625	600 x 600	14
LKL 600	339740	Long air duct		1250		28
LKB 600	339760	90° air duct bend		1100		25
LKK 700	339780	Short air duct	LI 16...(R) LI 20	625	694 x 694	16
LKL 700	339770	Long air duct		1250		32
LKB 700	339790	90° air duct bend		1244		
LKK 800	339810	Short air duct	LI(H) 22 - 28	625	769 x 769	17
LKL 800	339800	Long air duct	LIKI 14 - Air intake	1250		34
LKB 800	339820	90° air duct bend	LI(H) 22-28	1319		36

For solid-borne sound insulation, the air ducts are not screwed directly onto the heat pump. They must be mounted (i.e. suspended) on site. The dimension drawings of the air ducts are available at www.dimplex.de/luftkanaele for downloading!



LKK ...

LKL ...

LKB ...

Sealing collars for air intake and air outlet

Circumferential rubber gasket for vibration-free connection of the air duct to the air intake and air outlet side of the heat pump. The component is attached via screwed fastening frames (package contains 2 items).



DMK ...

Order reference	Item-No.	For device type	Weight kg
DMK 600	340270	Air duct 600	9
DMK 700	340280	Air duct 700	10
DMK 800	340290	Air duct 800	12

Heat pump rain guard

Specially developed rain guard for protection from driving rain, for air-to-water heat pumps with low pressure loss of approx. 5 Pa ; the permissible overall pressure loss is not exceeded when standardly integrated with the air hose set and/or air ducts; aluminium frame (width 25 mm) for wall mounting; painted grey-white (RAL 9002).



RSG ...

Order reference	Item-No.	For device type	Width x Height x Depth mm	Weight kg
RSG 600	340230	Air duct 600	750 x 750 x 50	4
RSG 700	340240	Air duct 700	840 x 840 x 50	5
RSG 800	340250	Air duct 800	920 x 920 x 70	7

Installation hardware

Only required if ducts need to be cut to length. Consisting of channel-section frame and adhesive paste for sealing the cut edges.



VSK ...

Order reference	Item-No.	For device type	Weight kg
VSK 600	341210	Air duct 600	3.0
VSK 700	341220	Air duct 700	3.5
VSK 800	341230	Air duct 800	4.0

Elasticated sound insulation strip

For solid-borne sound insulation of heat pumps for indoor installation and compensation of floor unevenness; strip-shaped support for the base frame; 12 mm thick (deformation approx. 1 mm); max. load 140 kg/RM; 2.5 m long (can be cut to appropriate length), colour green.



SYL 250

Order reference	Item-No.	Length mm	Width x Height mm	Weight kg
SYL 250	352260	2500	30 x 12	0.3

Heating water hose connection set



SAS ...

Order reference	Item-No.	For device type	Connection heating	Weight kg
SAS 110	340330	LI(H) 11 - 28	1¼	5

Air-to-water heat pump for installation close to walls

Air-to-water (indoor)
 Air-to-water (outdoor)
 Heating/Cooling
 Brine-to-water
 Water-to-water
 Accessories
 DHW
 Ventilation



LA 8AS

Low-temperature air-to-water heat pump for installation close to walls

Max. flow temp. for heating 55 °C
Casing colour white aluminium

Air-to-water heat pumps for outdoor installation with external temperature controlled WPM 2006 plus heat pump manager. The diagonal air circuit allows installation close to walls. A minimum clearance of 30 cm must be allowed for on the air intake side. When mounting is done in an unprotected place, the air outlet must not be positioned against the main wind direction. Sound-optimised through the use of low-speed crescent wing axial-flow fans. Energy-efficient defrosting by reverse circulation und diagonally positioned evaporator. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated flow sensor and soft starter, return flow sensor and external temperature sensor included in the scope of supply.

Electric cable EVL ... to connect the heat pump and heat pump manager, must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C; Upper operating limit heat source (heating operation) 35 °C;

Refrigerant R404A; Connection heating 1"

Order reference	Item-No.	Heat output with 1 compressor / COP	Connection voltage	Width x Height x Depth mm	Weight kg
LA 8AS	342230	6.6 / 3.1 (3.0)	3/N/PE ~400 V, 50 Hz	750 x 1280 x 650	166

Heat output and COP acc. to EN 255 (EN 14511) at A2/W35 (A2 = air inlet temp. +2 °C, W35 = heating water outlet temp. +35 °C)

Medium-temperature air-to-water heat pump for installation close to walls

Max. flow temp. for heating 65 °C
Casing colour white aluminium



LA 9PS

Medium-temperature air-to-water heat pumps for outdoor installation with external temperature controlled WPM 2006 plus heat pump manager. Sound-optimised through the use of low-speed crescent wing axial-flow fans. When mounting is done in an unprotected place, the air outlet must not be positioned against the main wind direction. Energy-efficient defrosting by reverse circulation. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated flow sensor and soft starter, return flow sensor and external temperature sensor included in the scope of supply.

Electric cable EVL ... to connect the heat pump and heat pump manager, must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C; Upper operating limit heat source (heating operation) 35 °C;

Refrigerant R290; Connection heating 1"

Order reference	Item-No.	Heat output with 1 compressor / COP	Connection voltage	Width x Height x Depth mm	Weight kg
LA 9PS	340000	7.1 / 3.2 (3.1)	3/N/PE ~400 V, 50 Hz	770 x 1320 x 660	168

Heat output and COP acc. to EN 255 (EN 14511) at A2/W35 (A2 = air inlet temp. +2 °C, W35 = heating water outlet temp. +35 °C)

The high flow temperatures are available for DHW preparation all year round!

Air-to-water heat pump for free-standing installation

Low-temperature air-to-water heat pump for free-standing installation

Max. flow temp. for heating 55 °C
Casing colour white aluminium



LA 11/16AS

Air-to-water heat pumps for outdoor installation with external temperature controlled WPM 2006 plus heat pump manager. Sound-optimised through the use of low-noise crescent wing axial-flow fans and deflector hoods. Energy-efficient defrosting by reverse circulation und inclined evaporator. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated flow sensor and soft starter, return flow sensor and external temperature sensor included in the scope of supply.

Electric cable EVL ... to connect the heat pump and heat pump manager, must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C; Upper operating limit heat source (heating operation) 35 °C; Refrigerant R404A; Connection heating 1"

Order reference	Item-No.	Heat output with 1 compressor / COP	Connection voltage	Width x Height x Depth mm	Weight kg
LA 11MS	342420	9.1 (3.4)	1/N/PE ~230 V, 50 Hz	1360 x 1360 x 850	219
LA 16MS	351270	12.7 (3.2)		1550 x 1570 x 850	264
LA 11AS	339950	8.8 / 3.2 (3.1)	3/N/PE ~400 V, 50 Hz	1360 x 1360 x 850	219
LA 16AS	339960	12.2 / 3.2 (3.1)		1550 x 1570 x 850	264

Heat output and COP acc. to EN 255 (EN 14511) at A2/W35 (A2 = air inlet temp. +2 °C, W35 = heating water outlet temp. +35 °C)

Low-temperature air-to-water heat pump with two performance levels

Max. flow temp. for heating 55 °C
Casing colour white aluminium



LA 20-28AS

Air-to-water heat pumps for outdoor installation with external temperature controlled WPM 2006 plus heat pump manager and two compressors for output reduction when operating at partial load. Sound-optimised through the use of low-noise crescent wing axial-flow fans and deflector hoods. Energy-efficient defrosting by reverse circulation und inclined evaporator. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated flow sensor and soft starter, return flow sensor and external temperature sensor included in the scope of supply.

Electric cable EVL ... to connect the heat pump and heat pump manager, must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C; Upper operating limit heat source (heating operation) 35 °C; Connection voltage 3/N/PE ~400 V, 50 Hz; Refrigerant R404A; Connection heating 1 1/4"

Order reference	Item-No.	Heat output with 1 compressor / COP	Heat output with 2 compressors / COP	Width x Height x Depth mm	Weight kg
LA 20AS	339970	9.3 / 3.1 (3.1)	14.9 / 3.0 (3.0)	1550 x 1570 x 850	284
LA 24AS	339980	10.9 / 3.0 (3.0)	19.2 / 3.2 (3.1)	1680 x 1710 x 1000	351
LA 28AS	339990	12.8 / 3.0 (3.0)	22.3 / 3.0 (3.0)		355

Heat output and COP acc. to EN 255 (EN 14511) at A2/W35 (A2 = air inlet temp. +2 °C, W35 = heating water outlet temp. +35 °C)

Low-temperature air-to-water heat pump with two performance levels

Max. flow temp. for heating 55 °C
Casing colour white aluminium



LA 40AS

Heat pump for heating for outdoor installation with wall-mounted heat pump manager and two compressors for output reduction when operating at partial load. The horizontal air circuit allows installation close to walls; for free-standing installation the air outlet should face in the main wind direction. Sound-optimised through low-noise, low-speed axial-flow fan and encapsulated compressor housing; energy-efficient defrosting by reverse circulation. High coefficients of performance due to compliance with the requirements according to EN 14511 for larger volume flows on the heat consumption side and a high-performance evaporator. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) included in the scope of supply.

Electric cable EVL ... to connect the heat pump and heat pump manager, must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C; Upper operating limit heat source (heating operation) 35 °C; Connection voltage 3/N/PE ~400 V, 50 Hz; Refrigerant R404A

Order reference	Item-No.	Heat output with 1 compressor / COP	Heat output with 2 compressors / COP	Width x Height x Depth mm	Weight kg
LA 40AS	356000	17.1 / 4.0 (3.9)	30.4 / 3.9 (3.8)	1735 x 2100 x 890	585

Heat output and COP acc. to EN 255 (EN 14511) at A2/W35 (A2 = air inlet temp. +2 °C, W35 = heating water outlet temp. +35 °C)

Air-to-water heat pump with higher flow temperatures

Air-to-water (indoor)

Air-to-water (outdoor)



LA 11PS

Medium-temperature air-to-water heat pump for free-standing installation

Max. flow temp. for heating 65 °C
Casing colour white aluminium

Medium-temperature air-to-water heat pumps for outdoor installation with external temperature controlled WPM 2006 plus heat pump manager. Sound-optimised through the use of low-speed crescent wing axial-flow fans, deflector hoods and energy-efficient hot gas defrosting. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated flow sensor and soft starter, return flow sensor and external temperature sensor included in the scope of supply.

Electric cable EVL ... to connect the heat pump and heat pump manager, must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C; Upper operating limit heat source (heating operation) 35 °C; Refrigerant R290; Connection heating 1"

Order reference	Item-No.	Heat output with 1 compressor / COP	Connection voltage	Width x Height x Depth mm	Weight kg
LA 11PS	353320	9.2 / 3.1 (3.0)	3/N/PE ~400 V, 50 Hz	1550 x 1570 x 850	259

Heat output and COP acc. to EN 255 (EN 14511) at A2/W35 (A2 = air inlet temp. +2 °C, W35 = heating water outlet temp. +35 °C)

The high flow temperatures are available for DHW preparation all year round!

Heating/Cooling

Brine-to-water



LA 17-22PS

Medium-temperature air-to-water heat pump with two performance levels

Max. flow temp. for heating 65 °C
Casing colour white aluminium

Medium-temperature air-to-water heat pump for outdoor installation with external temperature controlled WPM 2006 plus heat pump manager and two compressors for flexible capacity. Sound-optimised through the use of low-speed crescent wing axial-flow fans, deflector hoods and energy-efficient hot gas defrosting. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated flow sensor and soft starter, return flow sensor and external temperature sensor included in the scope of supply.

Electric cable EVL ... to connect the heat pump and heat pump manager, must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C; Upper operating limit heat source (heating operation) 35 °C; Refrigerant R290; Connection voltage 3/N/PE ~400 V, 50 Hz; Connection heating 1¼"

Order reference	Item-No.	Heat output with 1 compressor / COP	Heat output with 2 compressors / COP	Width x Height x Depth mm	Weight kg
LA 17PS	353330	8.7 / 3.2 (3.0)	14.5 / 3.1 (3.0)	1550 x 1570 x 850	330
LA 22PS	348420	10.6 / 3.0 (3.0)	16.7 / 3.1 (3.0)	1680 x 1710 x 1000	360
LA 26PS	351890	11.7 / 3.1 (3.0)	18.8 / 3.1 (3.0)		371

Heat output and COP acc. to EN 255 (EN 14511) at A2/W35 (A2 = air inlet temp. +2 °C, W35 = heating water outlet temp. +35 °C)

The high flow temperatures are available for DHW preparation all year round!

Water-to-water

Accessories



LA 22/26HS

High-temperature air-to-water heat pump with low- and high-temperature levels

Max. flow temp. for heating 75 °C
Casing colour white aluminium

High temperature air-to-water heat pump for outdoor installation with external temperature controlled heat pump manager. Sound-optimised through the use of low-noise crescent wing axial-flow fans and deflector hoods. Energy-efficient defrosting by reverse circulation and inclined evaporator. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

In the summer a maximum heating flow temperature of 58 °C is available for domestic hot water preparation. Integrated flow sensor and soft starter, return flow sensor and external temperature sensor included in the scope of supply.

Electric cable EVL ... to connect the heat pump and heat pump manager, must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C; Upper operating limit heat source (heating operation) 35 °C; Refrigerant R404A; Refrigerant R134a; Connection heating 1¼"; Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Item-No.	Heat output with 1 compressor / COP	Heat output with 2 compressors / COP	Width x Height x Depth mm	Weight kg
LA 22HS	340120	13.6 / 3.1 (3.0)	13.5 / 2.1	1680 x 1710 x 1000	411
LA 26HS	340130	15.9 / 3.2 (3.0)	15.2 / 2.2		418

Heat output and COP acc. to EN 255 (EN 14511) at A2/W35 (A2 = air inlet temp. +2 °C, W35 = heating water outlet temp. +35 °C)

Heat output with 2 compressors and COP acc. to EN 14511 at A-7/W45 (A-7 = air intake temp. -7 °C, W45 = heating water outlet temp. +45 °C)

The max. flow temperature of 75 °C is reached at an air intake temperature from -25 °C to +10° C (high-temperature level).

At outdoor temperatures above 10 °C the max. flow temperature is +58 °C (low-temperature level)

Ventilation

Hydraulic tower with heat pump manager

Casing colour white aluminium



HPK 200S

The hydraulic tower (W = 680mm; H = 1660; D = 775) with integrated regulation WPM 2006 plus enables the fast and simple connection of an externally mounted air-to-water heat pump to a heating system with an unmixed heating circuit. The following components are mounted and wired in a space-saving way in a white sheet steel casing with red-brown design screen:

- Buffer tank (200l) with installation option for an additional immersion heater (up to CTHK 634)
- Electronically regulated circulating pump for unmixed heating circuits (consumer circuit)
- Expansion vessel (24l) with safety module and switchable pipe heater (2,4,6 kW)
- The hydraulic isolation of the generator circuit and the consumer circuit is done via two differential pressureless manifolds (bypass pipes), which are each fitted with a check valve.

The unregulated circulating pump in the generator circuit is only operated when the compressor is running in order to reduce the run-times. The uniform flow through the buffer tank connected in series extends the runtimes of the compressor and ensures the required heating water flow in all operating situations. Access for service work from the front, no minimum clearances required on the sides. Integration option for hot water circulating pump and an additional mixed heating circuit (special accessories).

Order reference	Item-No.	Features	Weight kg
HPL 11MS	356850	LA 11MS heating package and HPK 200S hydraulic tower	406
HPL 16MS	356860	LA 16MS heating package and HPK 200S hydraulic tower	451
HPL 8AS	356720	LA 8AS heating package and HPK 200S hydraulic tower	353
HPL 11AS	356730	LA 11AS heating package and HPK 200S hydraulic tower	406
HPL 16AS	356740	LA 16AS heating package and HPK 200S hydraulic tower	451
HPL 20AS	356750	LA 20AS heating package and HPK 200S hydraulic tower	471
HPL 24AS	356760	LA 24AS heating package and HPK 200S hydraulic tower	538
HPL 28AS	356770	LA 28AS heating package and HPK 200S hydraulic tower	542
HPL 9PS	356780	LA 9PS heating package and HPK 200S hydraulic tower	355
HPL 11PS	356790	LA 11PS heating package and HPK 200S hydraulic tower	446
HPL 17PS	356800	LA 17PS heating package and HPK 200S hydraulic tower	517
HPL 22PS	356810	LA 22PS heating package and HPK 200S hydraulic tower	547
HPL 26PS	356820	LA 26PS heating package and HPK 200S hydraulic tower	558
HPL 22HS	356830	LA 22HS heating package and HPK 200S hydraulic tower	598
HPL 26HS	356840	LA 26HS heating package and HPK 200S hydraulic tower	605

Electric cable EVL ... to connect the heat pump and the hydraulic tower must be ordered separately.

The hydraulic tower cannot be ordered separately due to the integrated heat pump manager. For every combinable heat pump there is a sales package consisting of the heat pump without regulation and the hydraulic tower.

Electric connecting line heat pump - heat pump manager

Control line between the heat pump manager and an air-to-water heat pump for outdoor installation. Wired ready for use und with coded plug connections on both ends (non-confusable) for installation in a protection tube (diameter min. 70 mm).



EVL ...

Order reference	Item-No.	For device type	Length m	Weight kg
EVL 996-1	321990	LA	10	3.1
EVL 997-1	322000		20	5.8
EVL 998-1	322010		30	9.6

Should be installed separately from the mains cable
Extension of the control line by the owner is not allowed!

General installation material

for connecting the heat pump to the heating system



AS ...



TUE ...



SCHT ...

Order reference	Item-No.	Short text	Connection heating	Features	Weight kg
AS 976	322180	1" connecting hose	1	Flexible, compression-proof hose for connecting the heat pump to the heating system, length 10 m, can be cut to length, without insulation.	7.0
AS 976-1	330530	1¼" connecting hose	1¼		8.5
SCHT 975-1	322250	1" external thread hose nozzle for 1" connecting hose	1	Hose nozzle with external thread and hose clip for connecting hose, (for connection to the heating system e.g. compact manifold).	0.3
SCHT 975-3	322260	1¼" external thread hose nozzle for 1" connecting hose	1¼		
SCHT 975-4	330540	1¼" external thread hose nozzle for 1¼" connecting hose	1¼		
TUE 430	337430	1" nozzle for 1" connecting hose	1	Nozzle with cap nut (internal thread) for connecting hose (for connection to heat pump).	0.4
TUE 440	337440	1¼" nozzle for 1¼" connecting hose	1¼		

Air-to-water heat pump

Air-to-water (indoor)

Air-to-water (outdoor)

Heating/Cooling

Brine-to-water

Water-to-water

Accessories

DHW

Ventilation

Air-to-water heat pump with simplified controller

Max. flow temp. for heating 58 °C
Casing colour white aluminium

Compact design



LAK 10M

Air-to-water heat pumps for close-to-wall outside installation and integrated heat pump control. The remote control included in the scope of supply enables the manual setting of the desired return temperature or the external switching via a higher-level regulation system. Energy-efficient defrosting by reverse circulation. Essential components of the heating circuit are already integrated into the device:

- Switchable supplementary heating (2/4/6 kW),
- Expansion vessel (8l)
- Safety module
- Return flow and external temperature sensors

Lower operating limit heat source (heating operation) -20 °C; Upper operating limit heat source (heating operation) 35 °C; Refrigerant R404A; Connection heating 1"

Order reference	Item-No.	Heat output with 1 compressor / COP	Connection voltage	Width x Height x Depth mm	Weight kg
LAK 10M	354540	8.1 / 3.4 (3.2)	1/N/PE ~230 V, 50 Hz	1285 x 880 x 695	185

Heat output and COP at A7/W35 (A7 = air intake temp. +7 °C, W35 = heating water outlet temp. +35 °C)

Cooling capacity and COP at A35/W7 (A35 = air intake temp. +35°C, W7 = cooling water outlet temp. +7°C)

Heat pump controller for simplified regulation



WPR

Heat pump controller for combination with the simplified WPC regulation. The heating controller enables the external or room-temperature-controlled regulation during heating operation. In cooling operation the silent cooling can be regulated acc. to the dew point using the room temperature and humidity of a reference room (special accessory room climate control station). The heating water request is managed via a hot water sensor which is to be connected to the WPC. As well as the basic heating of the hot water cylinder via the heat pump, a time-controlled reheating can be done by means of an electric flange heater.

Order reference	Item-No.	Width x Height x Depth mm
WPR 2007	352400	212 x 90 x 302

Air-to-water heat pump for swimming pools

Air-to-water heat pump for swimming pools with titanium heat exchanger

Max. flow temp. for heating 40 °C
Casing colour white aluminium



LAS 10-22M(T)T

Air-to-water heat pump for outdoor installation for heating swimming pool water. Titanium heat exchanger for safe operation, also suitable for salt water and any type of water preparation; efficient use of environmental energy thanks to SCROLL compressor; year-round operation thanks to integrated automatic defrosting as standard; soft starter as standard; control via wired remote control included in the scope of supply; stainless steel upright support; powder-coated sheet steel casing. Refrigerant R407C; Lower operating limit heat source (heating operation) -10 °C; Upper operating limit heat source (heating operation) 35 °C

Order reference	Item-No.	Heat output with 1 compressor / COP	Connection voltage	Width x Height x Depth mm	Weight kg
LAS10MT	352060	4.2 (12.1)	1/N/PE ~230 V, 50 Hz	1270 x 880 x 670	147
LAS15MT	352070	3.5 (16.6)			155
LAS22TT	352080	4.4 (22.3)	3/N/PE ~400 V, 50 Hz		162

Heat output and COP at A20/W24 (A20 = air intake temp. +20 °C, W24 = heating water outlet temp. +24 °C)

Reversible air-to-water heat pump

Max. flow temp. for heating 58 °C
Flow temperature cooling min. 7 °C
Casing colour white

Compact design optimised for heating



LIK 8MER

Heat pump for heating and cooling for indoor installation with integrated regulation WPM 2007 plus . The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). The integrated air flow with 90° air deflection enables direct corner installation without air ducts or wall installation with air ducts on the air outlet side. Sound-optimised through low-noise axial-flow fan and vibration-isolated compressor. High coefficients of performance using an evaporator optimised for heating operation and energy-efficient defrosting by reverse circulation. Must not be used for bivalent systems. Compact design with optional DHW preparation and integrated components for direct connection with fan convectors:

- Expansion vessel (24l)
- Heat circulating pump (free compression 45,000 Pa)
- Overflow valve and safety module
- Buffer tank (50 l) with integrated 2 kW heating element

Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) and 3 flexible connecting hoses (1", 500mm) included in the scope of supply.

Refrigerant R404A; Connection voltage 1/N/PE ~230 V, 50 Hz; Lower operating limit heat source (cooling operation) 15 °C;

Upper operating limit heat source (cooling operation) 40 °C

Order reference	Item-No.	Heat output with 1 compressor / COP	Cooling capacity / COP	Connection heating "	Width x Height x Depth mm	Weight kg
LIK 8MER	352790	7.5 / 3.3 (3.2)	7.9 / 2.6	1"	750 x 1900 x 680	250

Heat output and COP acc. to EN 255 (EN 14511) at A2/W35 (A2 = air inlet temp. +2 °C, W35 = heating water outlet temp. +35 °C)

Cooling capacity and COP acc. to EN 14511 at A27/W7 (A27 = air intake temp. +27°C, W7 = cooling water outlet temp. +7°C)

Start-up should be carried out by authorised after-sales service personnel, especially for heating and cooling equipment!

Reversible air-to-water heat pump

Max. flow temp. for heating 58 °C
Flow temperature cooling min. 7 °C
Casing colour white

Optimised for heating



LI 11MER

Heat pump for heating and cooling for indoor installation with integrated regulation WPM 2007 plus . The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). The integrated air flow enables corner or wall installation with air ducts at the air intake and the air outlet side. Sound-optimised through low-noise axial-flow fan and vibration-isolated compressor. High coefficients of performance using an evaporator optimised for heating operation and energy-efficient defrosting by reverse circulation. Universal design with optional DHW preparation and the option of flexible expansion for:

- bivalent operation (bivalent-renewable not possible)
- combined distribution systems for heating and cooling
- unmixed and mixed heating and cooling circuits

Silent cooling via panel heating/cooling systems requires the use of the room climate control station (special accessory) to regulate the flow temperature on the basis of the air temperature and humidity of a reference room. Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) included in the scope of supply.

Refrigerant R404A; Connection voltage 1/N/PE ~230 V, 50 Hz; Lower operating limit heat source (cooling operation) 15 °C;

Upper operating limit heat source (cooling operation) 40 °C

Order reference	Item-No.	Heat output with 1 compressor / COP	Cooling capacity / COP	Connection heating "	Width x Height x Depth mm	Weight kg
LI 11MER	352800	8.9 / 3.4 (3.3)	8.8 / 2.8	1¼"	750 x 805 x 880	205

Heat output and COP acc. to EN 255 (EN 14511) at A2/W35 (A2 = air inlet temp. +2 °C, W35 = heating water outlet temp. +35 °C)

Cooling capacity and COP acc. to EN 14511 at A27/W7 (A27 = air intake temp. +27°C, W7 = cooling water outlet temp. +7°C)

Reversible air-to-water heat pump

Max. flow temp. for heating 58 °C
Flow temperature cooling min. 7 °C
Casing colour white

Optimised for heating operation with waste heat recovery

Heat pump for heating and cooling for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). The integrated air flow enables corner or wall installation with air ducts at the air intake and the air outlet side. Sound-optimised through low-noise axial-flow fan and vibration-isolated compressor. High coefficients of performance using an evaporator optimised for heating operation and energy-efficient defrosting by reverse circulation. Reversible refrigerating circuit with additional heat exchanger for higher DHW temperatures in heating operation and waste heat recovery in cooling operation. Universal design with the option of flexible expansion for:

- bivalent operation (bivalent-renewable not possible)
- unmixed and mixed heating and cooling circuits

Silent cooling via panel heating/cooling systems requires the use of the room climate control station (special accessory) to regulate the flow temperature on the basis of the air temperature and humidity of a reference room. Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) included in the scope of supply.

Refrigerant R404A; Connection voltage 3/N/PE ~400 V, 50 Hz; Lower operating limit heat source (cooling operation) 15 °C; Upper operating limit heat source (cooling operation) 40 °C

Order reference	Item-No.	Heat output with 1 compressor / COP	Cooling capacity / COP	Connection heating	Width x Height x Depth mm	Weight kg
LI 11TER+	352770	8.8 / 3.2 (3.1)	8.8 / 2.8	1¼"	750 x 1360 x 880	222
LI 16TER+	352780	12.8 / 3.4 (3.2)	12.5 / 2.6		750 x 1570 x 880	260

Heat output and COP acc. to EN 255 (EN 14511) at A2/W35 (A2 = air inlet temp. +2 °C, W35 = heating water outlet temp. +35 °C)

Cooling capacity and COP acc. to EN 14511 at A27/W7 (A27 = air intake temp. +27°C, W7 = cooling water outlet temp. +7°C)

Start-up should be carried out by authorised after-sales service personnel, especially for heating and cooling equipment!

The use of waste heat for DHW preparation produces high coefficients of performance in cooling operation!

Air ducts

Optimally suited for air-to-water heat pump air circuits; GFRG exterior; thermally-insulated and sound-insulated on the inside to prevent the formation of condensate and considerably reduce sound transmission. The ducts must be protected against driving rain and can, if necessary, be cut to length and/or painted with water-proof emulsion paint on site. Minor damage to the outer surface has no effect on the efficiency and can be repaired with standard plaster.

Order reference	Item-No.	For device type	Width x Height mm	Weight kg
LKL 600	339740	LI 11...(R) LIKI 14 - Air outlet	600 x 600	28
LKK 600	339750			14
LKB 600	339760			25
LKL 700	339770	LI 16...(R) LI 20	694 x 694	32
LKB 700	339790			16
LKK 700	339780			16

For solid-borne sound insulation, the air ducts are not screwed directly onto the heat pump. They must be mounted (i.e. suspended) on site. The dimension drawings of the air ducts are available at www.dimplex.de/luftkanaele for downloading!

Sealing collars for air intake and air outlet

Circumferential rubber gasket for vibration-free connection of the air duct to the air intake and air outlet side of the heat pump. The component is attached via screwed fastening frames (package contains 2 items).

Order reference	Item-No.	For device type	Weight kg
DMK 600	340270	Air duct 600	9
DMK 700	340280	Air duct 700	10

Heat pump rain guard

Specially developed rain guard for protection from driving rain, for air-to-water heat pumps with low pressure loss of approx. 5 Pa; the permissible overall pressure loss is not exceeded when standardly integrated with the air hose set and/or air ducts; aluminium frame (width 25 mm) for wall mounting; painted grey-white (RAL 9002).

Order reference	Item-No.	For device type	Width x Height x Depth mm	Weight kg
RSG 600	340230	Air duct 600	750 x 750 x 50	4
RSG 700	340240	Air duct 700	840 x 840 x 50	5

Air-to-water (indoor)



LI 11/16TER+

Air-to-water (outdoor)

Heating/Cooling

Brine-to-water



LKB ...

Water-to-water



LKL ...

Accessories



DMK ...

DHW



RSG ...

Ventilation

Reversible air-to-water heat pump

Max. flow temp. for heating 65 °C
Flow temperature cooling min. 7 °C
Casing colour white aluminium

Optimised for heating



LA 11MSR

Air-to-water heat pump for outdoor installation with external temperature controlled heat pump manager WPM 2006 R and reversible refrigerating circuit for heating and cooling. Sound-optimised through the use of low-noise crescent wing axial-flow fans and deflector hoods. Energy-efficient defrosting by reverse circulation und inclined evaporator. Universal design with optional DHW preparation and the option of flexible expansion for:

- bivalent operation (bivalent-renewable not possible)
- combined distribution systems for heating and cooling
- unmixed and mixed heating and cooling circuits

Silent cooling via panel heating/cooling systems requires the use of the room climate control station (special accessory) to regulate the flow temperature on the basis of the air temperature and humidity of a reference room.

Electric cable EVL ..R to connect the heat pump and heat pump manager must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C; Upper operating limit heat source (heating operation) 35 °C; Refrigerant R290; Connection voltage 3/N/PE ~400 V, 50 Hz; Lower operating limit heat source (cooling operation) 15 °C; Upper operating limit heat source (cooling operation) 40 °C

Order reference	Item-No.	Heat output with 1 compressor / COP	Cooling capacity / COP	Connection heating	Width x Height x Depth mm	Weight kg
LA 11MSR	342690	8.9 (3.4)	8.8 / 2.8	1 ~	1360 x 1360 x 850	224

Heat output and COP acc. to EN 255 (EN 14511) at A2/W35 (A2 = air inlet temp. +2 °C, W35 = heating water outlet temp. +35 °C)
Cooling capacity and COP acc. to EN 14511 at A27/W7 (A27 = air intake temp. +27°C, W7 = cooling water outlet temp. +7°C)

Reversible air-to-water heat pump

Max. flow temp. for heating 58 °C
Flow temperature cooling min. 7 °C
Casing colour white aluminium

Optimised for heating operation with waste heat recovery



LA 11/16ASR

Air-to-water heat pump for outdoor installation with external temperature controlled heat pump manager WPM 2006 R and reversible refrigerating circuit for heating and cooling. Sound-optimised through the use of low-noise crescent wing axial-flow fans and deflector hoods. Energy-efficient defrosting by reverse circulation und inclined evaporator. Reversible refrigerating circuit with additional heat exchanger for higher DHW temperatures in heating operation and waste heat recovery in cooling operation. Universal design with the option of flexible expansion for:

- bivalent operation (bivalent-renewable not possible)
- combined distribution systems for heating and cooling
- unmixed and mixed heating and cooling circuits

Silent cooling via panel heating/cooling systems requires the use of the room climate control station (special accessory) to regulate the flow temperature on the basis of the air temperature and humidity of a reference room.

Electric cable EVL ..R to connect the heat pump and heat pump manager must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C; Upper operating limit heat source (heating operation) 35 °C; Refrigerant R404A; Connection voltage 3/N/PE ~400 V, 50 Hz; Lower operating limit heat source (cooling operation) 15 °C; Upper operating limit heat source (cooling operation) 40 °C

Order reference	Item-No.	Heat output with 1 compressor / COP	Cooling capacity / COP	Connection heating	Width x Height x Depth mm	Weight kg
LA 11ASR	342730	8.8 / 3.2 (3.1)	8.8 / 2.8	1 ~	1360 x 1360 x 850	241
LA 16ASR	340090	12.8 / 3.4 (3.2)	12.5 / 2.6		1550 x 1570 x 850	289

Heat output and COP acc. to EN 255 (EN 14511) at A2/W35 (A2 = air inlet temp. +2 °C, W35 = heating water outlet temp. +35 °C)
Cooling capacity and COP acc. to EN 14511 at A27/W7 (A27 = air intake temp. +27°C, W7 = cooling water outlet temp. +7°C)

The use of waste heat for DHW preparation produces high coefficients of performance in cooling operation!

Electric connecting line heat pump - heat pump manager

Control line between the heat pump manager WPM 2006 R and a reversible air-to-water heat pump for outdoor installation. Wired ready for use und with coded plug connections on both ends (non-confusable) for installation in a protection tube (diameter min. 70 mm).



EVL 10...30R

Order reference	Item-No.	For device type	Length m	Weight kg
EVL 10R	342510	LA...R	10 m	5
EVL 20R	342520		20 m	9
EVL 30R	342530		30 m	14

Should be installed separately from the mains cable
Extension of the control line by the owner is not allowed!

Room climate control station for temperature and humidity measurement



RKS WPM

This accessory is essential for silent cooling using panel heating/cooling systems. Connection to a cooling controller to control the flow temperature based on the measured room temperature and humidity via a reference room.

Order reference	Item-No.	For device type	Width x Height x Depth mm	Weight kg
RKS WPM	342220	WPM	127 x 80 x 30	0.5

Dew point monitor and dew point sensors

Dew point monitor

Switching relay for electronic evaluation of up to 5 connectable dew point sensors to interrupt cooling operation of the complete system in case of condensation at vulnerable points in the cooling distribution system; TPF 341 dew point sensors must be ordered separately; connection to the cooling controller; operating voltage 24 V~ / 50 Hz.

Dew point sensor

Flexible PCB which sends a signal to the dew point monitor (TPW WPM) when it comes into contact with moisture, connection cable (10 m, 2 x 0.25 mm²).

Order reference	Item-No.	Short text	For device type	Width x Height x Depth mm
TPW WPM	350970	Dew point monitor	WPM	36 x 86 x 63
TPF 341	350980	Dew point sensor	RTK 601U	66 x 27

When the dew point sensor comes into contact with condensation, the cooling of the system is interrupted!

Heating/cooling ON/OFF room temperature controller

Room temperature controller

Electronic room temperature controller heating/cooling; switchable between "Heating" and "Cooling" operating modes using an external change-over contact of the heat pump manager; flat switch mounting frame for flush mounting as standard; can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer; switch ON / antifreeze; controlling range 5 to 30 °C; thermostat dial; temperature range limitation in the casing cover; operating voltage 24 V ~/50 Hz; switching capacity 24 V AC ~/1 A, can control up to 5 valve actuators (24 V~ closed when de-energised), IP30 when flush-mounted, colour alpine white (similar to RAL 9010). Dew point sensor TPF 341, for interrupting cooling operation when there is risk of condensate, optional connection (dew point sensors are not included in the scope of supply).

Dew point sensor

Flexible PCB which sends a signal to the dew point monitor (TPW WPM) when it comes into contact with moisture, connection cable (10 m, 2 x 0.25 mm²).

Order reference	Item-No.	Short text	Width x Height x Depth mm	Weight kg
RTK 601U	355610	Room temperature controller Heating/Cooling	82 x 82 x 45	0.150
TPF 341	350980	Dew point sensor	66 x 27	

When the dew point sensor comes into contact with condensation, the cooling of a room is interrupted by the motors attached to the room temperature controller.

Further room temperature controllers are listed in the chapter on control and regulation devices!

Air-to-water (indoor)

Air-to-water (outdoor)

Heating/Cooling

Brine-to-water

Water-to-water

Accessories

DHW

Ventilation

Reversible air-to-water heat pump with simplified controller

Reversible air-to-water heat pump

Max. flow temp. for heating 58 °C
Flow temperature cooling min. 7 °C
Casing colour white aluminium

Compact design optimised for heating



LAK 10MR



Air-to-water heat pump for outdoor installation with reversible refrigerating circuit for heating and cooling and integrated heat pump regulation. The remote control included in the scope of supply enables the manual setting of the desired room temperature or the external switching via a higher-level regulation system. Essential components of the heating circuit are already integrated into the device:

- Switchable supplementary heating (2/4/6 kW),
- Heat circulating pump (note the free compression)
- Expansion vessel (8l)
- Safety module
- Return flow and external temperature sensors

Lower operating limit heat source (heating operation) 20 °C; Upper operating limit heat source (heating operation) 35 °C;
Lower operating limit heat source (cooling operation) 17 °C; Upper operating limit heat source (cooling operation) 40 °C;
Refrigerant R407C; Connection heating 1"

Order reference	Item-No.	Heat output with 1 compressor / COP	Cooling capacity / COP	Connection voltage	Width x Height x Depth mm	Weight kg
LAK 10MR	354510	9.3 (3.8)	7.8 / 2.2	1/N/PE ~230 V, 50 Hz	1270 x 860 x 670	170

Heat output and COP at A7/W35 (A7 = air intake temp. +7 °C, W35 = heating water outlet temp. +35 °C)
Cooling capacity and COP at A35/W7 (A35 = air intake temp. +35 °C, W7 = cooling water outlet temp. +7 °C)

Reversible air-to-water heat pump

Max. flow temp. for heating 60 °C
Flow temperature cooling min. 7 °C
Casing colour white aluminium

Compact design optimised for cooling



LA 6MR - 16TR



LA 10MR - 16TR

Air-to-water heat pump for outdoor installation with reversible refrigerating circuit for heating and cooling and integrated heat pump regulation. The remote control included in the scope of supply enables the manual setting of the desired return temperature or the external switching via a higher-level regulation system. Energy-efficient defrosting by reverse circulation. Essential components of the heating circuit are already integrated into the device:

- Heat circulating pump (note the free compression)
- Expansion vessel (8l)
- Safety module
- Return flow and external temperature sensors

Lower operating limit heat source (heating operation) -20 °C; Upper operating limit heat source (heating operation) 35 °C;
Lower operating limit heat source (cooling operation) 15 °C; Upper operating limit heat source (cooling operation) 40 °C;
Refrigerant R407C; Connection heating 1"

Order reference	Item-No.	Heat output with 1 compressor / COP	Cooling capacity / COP	Connection voltage	Width x Height x Depth mm	Weight kg
LA 6MR	350790	6.1 (3.3)	6.4 / 2.7	1/N/PE ~230 V, 50 Hz	1270 x 860 x 670	159
LA 8MR	350800	7.4 (3.3)	7.7 / 2.9			165
LA 10MR	350810	8.5 (3.4)	9 / 2.9			170
LA 12TR	350820	11.9 (3.3)	13.6 / 3.0	3/N/PE ~400 V, 50 Hz		185
LA 16TR	350830	15.3 (3.3)	16.1 / 3.0			196

Heat output and COP at A7/W35 (A7 = air intake temp. +7 °C, W35 = heating water outlet temp. +35 °C)
Cooling capacity and COP at A35/W7 (A35 = air intake temp. +35 °C, W7 = cooling water outlet temp. +7 °C)



LAC 12 - 16TR

Reversible air-to-water heat pump

Optimised for cooling at higher outside temp.

Max. flow temp. for heating 60 °C
 Flow temperature cooling min. 7 °C
 Casing colour white aluminium

Air-to-water heat pump for outdoor installation with reversible refrigerating circuit for heating and cooling and integrated heat pump regulation. The remote control included in the scope of supply enables the manual setting of the desired return temperature or the external switching via a higher-level regulation system. Energy-efficient defrosting by reverse circulation. Essential components of the heating circuit are already integrated into the device:

- Switchable supplementary heating (2/4/6 kW),
- Heat circulating pump (note the free compression)
- Expansion vessel (8l)
- Safety module
- Return flow and external temperature sensors

Lower operating limit heat source (heating operation) -20 °C; Upper operating limit heat source (heating operation) 35 °C;
 Lower operating limit heat source (cooling operation) 15 °C; Upper operating limit heat source (cooling operation) 45 °C;
 Refrigerant R417a; Connection heating 1"

Order reference	Item-No.	Heat output with 1 compressor / COP	Cooling capacity / COP	Connection voltage	Width x Height x Depth mm	Weight kg
LAC 12TR	355410	10.4 (3.3)	11.7 / 2.9	3/N/PE ~400 V, 50 Hz	1270 x 860 x 670	185
LAC 16TR	355240	13.3 (3.7)	14.0 / 2.8			196

Heat output and COP at A7/W35 (A7 = air intake temp. +7 °C, W35 = heating water outlet temp. +35 °C)

Cooling capacity and COP at A35/W7 (A35 = air intake temp. +35°C, W7 = cooling water outlet temp. +7°C)

Heat pump controller for simplified regulation

Heat pump controller for combination with the simplified WPC regulation. The heating controller enables the external or room-temperature-controlled regulation during heating operation. In cooling operation the silent cooling can be regulated acc. to the dew point using the room temperature and humidity of a reference room (special accessory room climate control station). The heating water request is managed via a hot water sensor which is to be connected to the WPC. As well as the basic heating of the hot water cylinder via the heat pump, a time-controlled reheating can be done by means of an electric flange heater.



WPR

Order reference	Item-No.	Width x Height x Depth mm
WPR 2007	352400	212 x 90 x 302

Basic package for heating - low-temperature

Max. flow temp. for heating 58 °C
Casing colour white



HPK 7-14TE

Consisting of compact brine-to-water heat pump, built-under buffer tank PSP 100E and connection set VSH KS for quick and easy connection of the individual components to the heating system. **Brine circuit manifold must be ordered separately.**

Order reference	Item-No.	For device type	Heat output kW	Width x Height x Depth mm	Weight kg
HPK 7TE	353420	SIK 7TE	6.8	652 x 1660 x 688	238
HPK 9TE	353430	SIK 9TE	9.0		239
HPK 11TE	353440	SIK 11TE	11.7		250
HPK 14TE	353450	SIK 14TE	14.4		262

Heat output acc. to EN 255 at B0/W35 (B0 = brine inlet temp. 0°C, W35 = heating water outlet temp. +35°C)

The descriptions of the individual components can be found on the next pages!

Basic package for heating - high-temperature

Max. flow temp. for heating 70 °C
Casing colour white



HPKH 6/9TE

Consisting of compact brine-to-water heat pump, built-under buffer tank PSP 100E and connection set VSH KS for quick and easy connection of the individual components to the heating system. **Brine circuit manifold must be ordered separately.**

Order reference	Item-No.	For device type	Heat output kW	Width x Height x Depth mm	Weight kg
HPKH 6TE	356150	SIKH 6TE	6.4	652 x 1660 x 688	254
HPKH 9TE	356160	SIKH 9TE	9.3		264

Heat output acc. to EN 255 at B0/W35 (B0 = brine inlet temp. 0°C, W35 = heating water outlet temp. +35°C)

The descriptions of the individual components can be found on the next pages!

Passive cooling station and connection set

Passive cooling station

Module for passive cooling via borehole heat exchangers. Consisting of heat exchanger, brine circulating pump, temperature sensor, passive cooling controller, and enclosed change-over valve (DN25) with electrothermal actuators. Cooling operation mode is added to the existing heat pump manager by an electronic connection between the heating and cooling controller; (software update may be necessary). The components are permanently mounted in a white sheet metal casing, which can be mounted vertically or horizontally.



PKS ..

Connection set

Passive cooling station extension hose kit, to enable the use of the heating connection kit (VSH KS) in addition to the heating and brine circuit connection of the passive cooling station PKS 14, situated on the compact brine-to-water heat pump. Consisting of 2 elbow unions with manual air bleeds, crosspiece and 4 corrugated stainless steel pipes with high-and-low-temperature insulation.



VS PKS

Order reference	Item-No.	Short text	For device type	Width x Height x Depth mm	Weight kg
PKS 14	342460	Passive cooling station	SI(H) SIK(H)	650 x 400 x 320	30
VS PKS	348630	Extension hose kit for passive cooling station	VSH KS with PKS		

The descriptions of the individual components can be found on the next pages!

Air-to-water (indoor)



HPK(H) ... WWSP 442E

Air-to-water (outdoor)

Heating/Cooling



WWSP 229E

Brine-to-water

Water-to-water

Accessories

DHW

Ventilation

Supplementary package for DHW preparation

Hot water cylinder

The 400 l hot water cylinder is heated by the heat pump for heating purposes and offers convenient hot water preparation, also during longer shut-off times. It matches the height and design of the compact brine-to-water heat pump with built-under buffer tank.

Order reference	Item-No.	Short text	Features	Width x Height x Depth mm	Weight kg
WWSP TE	353460	Supplementary package for DHW preparation	Domestic hot water preparation with short reheating times and adjustable time programs; sales package consisting of WWSP 442 E hot water cylinder with UP 80 circulating pump for domestic hot water preparation and WSW KS hot water connection kit.	650 x 1660 x 680	190

The descriptions of the individual components can be found on the next pages!

Built-under hot water cylinder and connection set

Built-under hot water cylinder

Nominal capacity 227 l, in brine-to-water heat pump design to enable space-saving installation on the built-under buffer, tube heat exchanger (internal), steel cylinder (special inside enamelling) with protection anode, polyurethane insulation with minimum stand-by losses; integrated temperature sensor for connection to the heat pump manager, colour: white, brown red design screen heat exchanger area 2.9 m² smooth pipe (internal), heating connection 1¼" external thread, hot water connection 1" external thread, circulation connection ¾" internal thread.

Connection set

Hose set for easy connection of the compact brine-to-water heat pump and the built-under hot water cylinder to the heating systems. Consisting of 2 corrugated stainless steel pipes with high-and-low temperature insulation, 2 elbow unions with manual air bleeds and an installation option for the hot water circulating pump (pump not included in the scope of supply).

Order reference	Item-No.	Short text	For device type	Width x Height x Depth mm	Weight kg
WWSP 229E	353380	Built-under hot water cylinder	up to S(KH) 9	650 x 1040 x 680	110
VSW 229	356050	Connection set, hot water	SIK(H) with WWSP 229E		

Can be used in service areas with short shut-off times or reduced hot water consumption.

Note: A minimum buffer volume of the heating system of 10% of the heating water flow must be ensured either by a buffer tank or other suitable measures!

Brine-to-water heat pump in a compact design

Low-temperature brine-to-water heat pump

Max. flow temp. for heating 55 °C
Casing colour white

Compact design



SIK 11/16ME



SIK 7-14TE

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Integrated brine components enable direct connection of the heat source:

- Heat circulating pump (note the free compression)
- Expansion vessel (8l)
- Safety valve and pressure manometer

Sound-optimised through insulated metal casing and double vibration-isolated compressor. Integrated solid-borne sound insulation for direct connection to the heating system. Economiser for high coefficients of performance. Compact design with optional domestic hot water preparation and integrated components for direct connection of an unmixed heating circuit (must not be used for bivalent systems):

- Brine circulating pump (note the free compression)
- Overflow valve and safety module
- Expansion vessel (24l)

Soft starter (from SI(K) 9), integrated flow and return flow sensors; external sensor (standard NTC-2), dirt filter and large-capacity breather with micro air bubble deposition for brine circuit included in the scope of supply.

Lower operating limit heat source (heating operation) -5 °C; Upper operating limit heat source (heating operation) 25 °C; Refrigerant R407C; Connection heating 1¼"; Heat source connection 1¼"

Order reference	Item-No.	Heat output with 1 compressor / COP	Connection voltage	Width x Height x Depth mm	Weight kg
SIK 11ME	352990	11.8 (4.4)	1/N/PE ~230 V, 50 Hz	652 x 1115 x 688	191
SIK 16ME	353000	15.8 (4.2)			203
SIK 7TE	352810	6.9 / 4.3 (4.1)	3/N/PE ~400 V, 50 Hz		179
SIK 9TE	352820	9.2 / 4.4 (4.2)			180
SIK 11TE	352830	11.8 / 4.4 (4.2)			191
SIK 14TE	352840	14.5 / 4.5 (4.3)			203

Heat output and COP acc. to EN 255 (EN 14511) at B0/W35 (B0 = brine inlet temp. 0 °C, W35 = heating water outlet temp. +35 °C)

With borehole heat exchangers, the free compression values in the device information are to be adhered to (max. heat exchanger depth at DN32: 80 m)!

High-temperature brine-to-water heat pump

Max. flow temp. for heating 70 °C
Casing colour white

Compact design



SIKH 9ME



SIKH 6/9TE

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Integrated brine components enable direct connection of the heat source:

- Heat circulating pump (note the free compression)
- Expansion vessel (8l)
- Safety valve and pressure manometer

Sound-optimised through insulated metal casing and double vibration-isolated compressor. Integrated solid-borne sound insulation for direct connection to the heating system. High COPs through economiser and compliance with the requirements of EN 14511 for larger volume flows on the heat consumption side. Compact design with optional domestic hot water preparation and integrated components for direct connection of an unmixed heating circuit (must not be used for bivalent systems):

- Brine circulating pump (note the free compression)
- Overflow valve and safety module
- Expansion vessel (24l)

Soft starter (from SI(K) 9), integrated flow and return flow sensors; external sensor (standard NTC-2), dirt filter and large-capacity breather with micro air bubble deposition for brine circuit included in the scope of supply.

Refrigerant R134a; Connection heating 1¼"; Heat source connection 1¼"

Order reference	Item-No.	Heat output with 1 compressor / COP	Connection voltage	Width x Height x Depth mm	Weight kg
SIKH 9ME	356530	9.4 / 4.4 (4.2)	1/N/PE ~230 V, 50 Hz	652 x 1115 x 688	203
SIKH 6TE	356070	6.4 / 4.7 (4.5)	3/N/PE ~400 V, 50 Hz		195
SIKH 9TE	356080	9.3 / 4.7 (4.5)			205

Heat output and COP acc. to EN 255 (EN 14511) at B0/W35 (B0 = brine inlet temp. 0 °C, W35 = heating water outlet temp. +35 °C)

Design tank for compact brine-to-water heat pump

Air-to-water (indoor)



PSP 100E

Design built-under buffer tank

Nominal content 100 l; in brine-to-water heat pump design to enable space-saving installation on top of the built-under buffer tank; polyurethane insulation for minimal downtime losses (can be used for heating and cooling); 1½" bush for immersion heaters (up to CTHK 635); 1¼" heating water connections; colour: white; brown red design screen.

Order reference	Item-No.	Short text	For device type	Width x Height x Depth mm	Weight kg
PSP 100E	353360	Built-under buffer tank	SIK(H) 7-14 SI(H) 5-14	650 x 550 x 653	54

Air-to-water (outdoor)



WWSP 442E

Design hot water cylinder

Casing colour white

Nominal content 400 l, in brine-to-water heat pump design, tube heat exchanger (internal), three supporting feet, steel cylinder (special inside enamelling) with protection anode, polyurethane insulation with minimal stand-by losses (approx. 2.7 kWh/24h), integrated temperature sensor for connection to the heat pump manager, colour white, brown red design screen.
Permissible operating pressure 10 bar; Flange TK150/DN110;

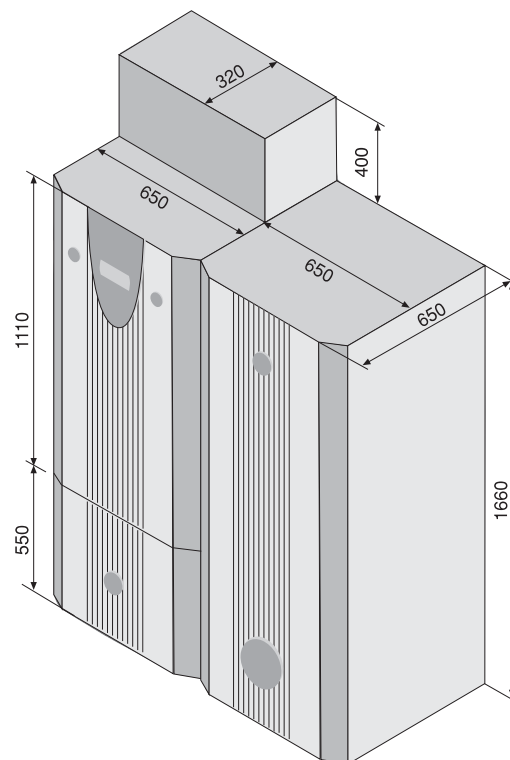
Order reference	Item-No.	For device type	Usable capacity l	Heat exchanger surface area m ²	Con-nection heating "	Con-nection circulation "	Con-nection hot water "	Width x Height x Depth mm	Weight kg
WWSP 442E	353370	SIK 7-14 SIKH 6,9 SI(H) 20-30	353	4.2	1¼	¾	1	650 x 1660 x 680	187

The reachable hot water temperatures are dependent on the maximum heat output of the heat pump, the heat exchanger area and the volume flow in the load circuit (the respective design for a maximum hot water temperature of 45 °C according to the project planning documentation). For heat pumps with two performance levels, the DHW preparation can be done using a compressor.

Heating/Cooling

Brine-to-water

Dimension drawing compact brine-to-water heat pump



Dimensions of compact brine-to-water heat pump with built-under buffer tank, passiv cooling station and design hot water cylinder.

Water-to-water

Accessories

DHW

Ventilation

Design built-under hot water cylinder



WWSP 229E

Nominal capacity 227 l, in brine-to-water heat pump design to enable space-saving installation on the built-under buffer, tube heat exchanger (internal), steel cylinder (special inside enamelling) with protection anode, polyurethane insulation with minimum stand-by losses; integrated temperature sensor for connection to the heat pump manager, colour: white, brown red design screen
Permissible operating pressure 10 bar; Flange TK150/DN110;

Order reference	Item-No.	For device type	Usable capacity l	Heat exchanger surface area m ²	Con-nection heating "	Con-nection circulation "	Con-nection hot water "	Width x Height x Depth mm	Weight kg
WWSP 229E	353380	to SI(KH) 9	206	2.9	1¼	¾	1	650 x 1040 x 680	110

Recommended for service areas without shut-off times or with reduced hot water consumption.

Note: A minimum buffer volume of the heating system of 10% of the heating water flow must be ensured either by a buffer tank or other suitable measures!

Compact brine-to-water heat pump connection set



VSH KS



VSW KS



VS PKS



VSW 229

Order reference	Item-No.	For device type	Short text	Features
VSH KS	343110	SIK(H)	Heating connection set	Hose set for easy connection of the compact brine-to-water heat pump and built-under buffer tank to heating system (minimum distance from wall 20 cm). Consisting of four elbow unions with three manual air bleeds, buffer connection with filling and drain cocks and two corrugated stainless steel pipes with high-and-low temperature insulation. 1" internal thread connection to the heating system.
VSW KS	343120	VSH KS with WWSP	Hot water expansion kit	Hot water extension hose kit, to enable the use of the heating connection kit (VSH KS) in addition to the hot water cylinder connection and a circulating pump. Consisting of 3 elbow unions with 2 manual air bleeds, 1 tee joint, pump shut-offs for the hot water circulating pump (pump not included in the scope of supply) and 2 corrugated stainless steel pipes with high-and-low temperature insulation.
VS PKS	348630	VSH KS with PKS	Extension hose kit for passive cooling station	Passive cooling station extension hose kit, to enable the use of the heating connection kit (VSH KS) in addition to the heating and brine circuit connection of the passive cooling station PKS 14, situated on the compact brine-to-water heat pump. Consisting of 2 elbow unions with manual air bleeds, cross-piece and 4 corrugated stainless steel pipes with high-and-low-temperature insulation.
VSW 229	356050	SIK(H) with WWSP 229E	Connection set, hot water	Hose set for easy connection of the compact brine-to-water heat pump and the built-under hot water cylinder to the heating systems. Consisting of 2 corrugated stainless steel pipes with high-and-low temperature insulation, 2 elbow unions with manual air bleeds and an installation option for the hot water circulating pump (pump not included in the scope of supply).

Brine-to-water heat pump in universal design

Low-temperature brine-to-water heat pump

Max. flow temp. for heating 58 °C
Casing colour white

Universal design

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Variable connection options for brine and heating connections on the rear wall of the casing. Sound-optimised through insulated metal casing and double vibration-isolated compressor. Economiser for high coefficients of performance. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Soft starter, load contactor for brine circulating pump, integrated flow and return flow sensor; external sensor (standard NTC-2) and dirt filter for brine circuit included in the scope of supply.

Brine package and brine circuit manifold must be ordered separately.

Lower operating limit heat source (heating operation) -5 °C; Upper operating limit heat source (heating operation) 25 °C; Refrigerant R407C; Connection heating 1¼"; Heat source connection 1¼"



SI 5 - 14ME



SI 5 - 17TE

Order reference	Item-No.	Heat output with 1 compressor / COP	Connection voltage	Width x Height x Depth mm	Weight kg
SI 5ME	353010	5.0 / 4.0 (3.8)	1/N/PE ~230 V, 50 Hz	650 x 805 x 462	109
SI 7ME	353020	6.5 / 3.9 (3.7)			111
SI 9ME	353030	9.3 / 4.0 (3.8)			118
SI 11ME	353040	11.0 / 4.0 (3.9)			122
SI 14ME	353050	15.0 / 4.1 (3.9)			130
SI 5TE	352850	5.3 / 4.3 (4.1)	3/N/PE ~400 V, 50 Hz		109
SI 7TE	352860	6.9 / 4.3 (4.1)			111
SI 9TE	352870	9.2 / 4.4 (4.2)			118
SI 11TE	352880	11.8 / 4.4 (4.2)			122
SI 14TE	352890	14.5 / 4.5 (4.3)			130
SI 17TE	352900	17.1 / 4.6 (4.4)		133	

Heat output and COP acc. to EN 255 (EN 14511) at B0/W35 (B0 = brine inlet temp. 0 °C, W35 = heating water outlet temp. +35 °C)

High-temperature brine-to-water heat pump

Max. flow temp. for heating 70 °C
Casing colour white

Universal design

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Variable connection options for brine and heating connections on the rear wall of the casing. Sound-optimised through insulated metal casing and double vibration-isolated compressor. High COPs through economiser and compliance with the requirements of EN 14511 for larger volume flows on the heat consumption side. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated soft starter and load contactor for brine circulating pump, integrated flow and return flow sensors; external sensor (standard NTC-2) and dirt filter for brine circuit included in the scope of supply.

Brine package and brine circuit manifold must be ordered separately.

Refrigerant R134a; Connection heating 1¼"; Heat source connection 1¼"



SIH 6 - 11ME



SIH 6 - 11TE

Order reference	Item-No.	Heat output with 1 compressor / COP	Connection voltage	Width x Height x Depth mm	Weight kg
SIH 6ME	355170	6.2 / 4.3 (4.1)	1/N/PE ~230 V, 50 Hz	650 x 805 x 462	118
SIH 9ME	355180	9.1 / 4.2 (4.0)			130
SIH 11ME	355190	10.8 / 4.6 (4.5)			133
SIH 6TE	355140	6.2 / 4.6 (4.5)	3/N/PE ~400 V, 50 Hz		118
SIH 9TE	355150	9.0 / 4.5 (4.4)			130
SIH 11TE	355160	11.2 / 4.7 (4.5)			133

Heat output and COP acc. to EN 255 (EN 14511) at B0/W35 (B0 = brine inlet temp. 0 °C, W35 = heating water outlet temp. +35 °C)

The high flow temperatures are available for DHW preparation all year round!

Brine-to-water heat pump connection kit

Hose set for connecting a heat pump to the KPVS 25 compact manifold or the VTB 25 manifold bar. The set contains two flexible Wellflex pipes with high-and-low temperature insulation for fast and easy installation (can also be used for connecting the brine circuit).

Order reference	Item-No.	For device type
VSH BS	347790	SI(H) 5 - SI 17 Heating circuit SI(H) 5 - SI 11 Brine circuit

VSH BS



Design built-under buffer tank



PSP 100E

Nominal content 100 l; in brine-to-water heat pump design to enable space-saving installation on top of the built-under buffer tank; polyurethane insulation for minimal downtime losses (can be used for heating and cooling); 1½" bush for immersion heaters (up to CTHK 635); 1¼" heating water connections; colour: white; brown red design screen.

Order reference	Item-No.	Short text	For device type	Width x Height x Depth mm	Weight kg
PSP 100E	353360	Built-under buffer tank	SIK(H) 7-14 SI(H) 5-14	650 x 550 x 653	54

Design built-under hot water cylinder



WWSP 229E

Nominal capacity 227 l, in brine-to-water heat pump design to enable space-saving installation on the built-under buffer, tube heat exchanger (internal), steel cylinder (special inside enamelling) with protection anode, polyurethane insulation with minimum stand-by losses; integrated temperature sensor for connection to the heat pump manager, colour: white, brown red design screen
Permissible operating pressure 10 bar; Flange TK150/DN110

Order reference	Item-No.	For device type	Usable capacity l	Heat exchanger surface area m ²	Con-nection heating "	Con-nection circulation "	Con-nection hot water "	Width x Height x Depth mm	Weight kg
WWSP 229E	353380	to SI(KH) 9	206	2.9	1¼	¾	1	650 x 1040 x 680	110

Recommended for service areas without shut-off times or with reduced hot water consumption.

Note: A minimum buffer volume of the heating system of 10% of the heating water flow must be ensured either by a buffer tank or other suitable measures!

Low-temperature brine-to-water heat pump

Max. flow temp. for heating 58 °C
Casing colour white

Universal design



SI 21TE

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Variable connection options for brine and heating connections on the rear wall of the casing. Sound-optimised through insulated metal casing and double vibration-isolated compressor. Economiser for high coefficients of performance. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Soft starter, load contactor for brine circulating pump, integrated flow and return flow sensor; external sensor (standard NTC-2) and dirt filter for brine circuit included in the scope of supply.

Brine package and brine circuit manifold must be ordered separately.

Refrigerant R407C; Connection heating 1¼"; Heat source connection 1½"; Lower operating limit heat source (heating operation) -5 °C; Upper operating limit heat source (heating operation) 25 °C

Order reference	Item-No.	Heat output with 1 compressor / COP	Connection voltage	Width x Height x Depth mm	Weight kg
SI 21TE	353410	21.1 / 4.3 (4.1)	3/N/PE ~400 V, 50 Hz	650 x 1445 x 575	225

Heat output and COP acc. to EN 255 (EN 14511) at B0/W35 (B0 = brine inlet temp. 0 °C, W35 = heating water outlet temp. +35 °C)

Brine package for brine-to-water heat pump with one performance level

Brine accessory package for ground heat collectors consisting of premounted safety module, expansion vessel 18l/0.5 bar admission pressure, 1½" ball valves, large-capacity breather with micro air bubble deposition 1½" and brine circulating pump (without brine circuit manifold and pipework).



SZB: Safety module



SZB: Breather

Order reference	Item-No.	For device type	Circulating pump	Weight kg
SZB 680	336680	SI 5 / SIH 6 / SI 7	Top-S 25/7,5	24
SZB 690	336690	SI(H) 9, SI 11, SI 14		
SZB 700	336700	SI 17	Top-S 30/10	25
SZB 710	336710	SI 21	CHI 4-20	

For borehole heat exchangers the free compression of the brine circulating pump is to be taken into account (recommended max. heat exchanger depth at DN 32: 80m)!

Air-to-water (indoor)



SYL 250

Elasticated sound insulation strip

For solid-borne sound insulation of heat pumps for indoor installation and compensation of floor unevenness; strip-shaped support for the base frame; 12 mm thick (deformation approx. 1 mm); max. load 140 kg/RM; 2.5 m long (can be cut to appropriate length), colour green.

Order reference	Item-No.	Length mm	Width x Height mm	Weight kg
SYL 250	352260	2500	30 x 12	0.3

Air-to-water (outdoor)



SI 24-37TE

Low-temperature brine-to-water heat pump

Max. flow temp. for heating 60 °C
Casing colour white

Universal design with two performance levels

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Variable connection options for brine and heating connections on the rear wall of the casing. Access for service work from the front, no minimum clearances required on the sides. A sound-optimised insulated metal casing and integrated solid-borne sound insulation with free-swinging compressor base plate, make direct connection with the heating system possible. High COPs through economiser and compliance with the requirements of EN 14511 for larger volume flows on the heat consumption side. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated soft starter and load contactor for brine circulating pump, integrated flow and return flow sensors; external sensor (standard NTC-2) and dirt filter for brine circuit included in the scope of supply.

Brine package and brine circuit manifold must be ordered separately.

Refrigerant R404A; Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Item-No.	Heat output with 1 compressor / COP	Heat output with 2 compressors / COP	Width x Height x Depth mm	Weight kg
SI 24TE	352910	12.5 / 4.4 (4.3)	24.0 / 4.3 (4.1)	1000 x 1660 x 775	282
SI 30TE	355640	14.4 / 4.2 (3.9)	31.2 / 4.6 (4.3)		365
SI 37TE	352920	17.0 / 4.2 (4.5)	37.2 / 4.6 (4.3)		371

Heat output and COP acc. to EN 255 (EN 14511) at B0/W35 (B0 = brine inlet temp. 0 °C, W35 = heating water outlet temp. +35 °C)

Brine package and brine circuit manifold must be ordered separately.

Heating/Cooling

Brine-to-water

Water-to-water

Accessories

DHW

Ventilation

Design hot water cylinder



SI(HK) with WWSP 442E

Nominal content 400 l, in brine-to-water heat pump design, tube heat exchanger (internal), three supporting feet, steel cylinder (special inside enamelling) with protection anode, polyurethane insulation with minimal stand-by losses (approx. 2.7 kWh/24h), integrated temperature sensor for connection to the heat pump manager, colour white, brown red design screen. Permissible operating pressure 10 bar; Flange TK150/DN110

Order reference	Item-No.	For device type	Usable capacity l	Heat exchanger surface area m ²	Con-nection heating "	Con-nection circula-tion "	Con-nection hot water "	Width x Height x Depth mm	Weight kg
WWSP 442E	353370	SIK 7-14 SIKH 6,9 SI(H) 20-30	353	4.2	1¼	¾	1	650 x 1660 x 680	187

The reachable hot water temperatures are dependent on the maximum heat output of the heat pump, the heat exchanger area and the volume flow in the load circuit (the respective design for a maximum hot water temperature of 45 °C according to the project planning documentation). For heat pumps with two performance levels, the DHW preparation can be done using a compressor.

Low-temperature brine-to-water heat pump

Max. flow temp. for heating 60 °C
Casing colour white

Universal design with two performance levels



SI 50-130TE

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Variable connection options for brine and heating connections on the rear wall of the casing. Access for servicing from the front, no minimum clearance required on the sides, accessible from underneath with a lift truck. A sound-optimised insulated metal casing and integrated solid-borne sound insulation with free-swinging compressor base plate, make direct connection with the heating system possible. High COPs through economiser and compliance with the requirements of EN 14511 for larger volume flows on the heat consumption side. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated soft starter and load contactor for brine circulating pump, integrated flow and return flow sensors; external sensor (standard NTC-2) and dirt filter for brine circuit included in the scope of supply. Brine package must be ordered separately.

Refrigerant R404A; Connection voltage 3/N/PE ~400 V, 50 Hz;

Order reference	Item-No.	Heat output with 1 compressor / COP	Heat output with 2 compressors / COP	Width x Height x Depth mm	Weight kg
SI 50TE	352930	23.0 / 4.4 (4.2)	46.7 / 4.5 (4.3)	1350 x 1890 x 775	486
SI 75TE	352940	37.6 / 4.3 (4.1)	75.2 / 4.4 (4.2)		571
SI 100TE	352950	48.4 / 4.6 (4.3)	96.3 / 4.6 (4.4)		652
SI 130TE	352960	63.3 / 4.2 (4.1)	125.8 / 4.3 (4.1)		860

Heat output and COP acc. to EN 255 (EN 14511) at B0/W35 (B0 = brine inlet temp. 0 °C, W35 = heating water outlet temp. +35 °C)

In combination with borehole heat exchangers, brine-to-water heat pumps can also be used for passive cooling. SI 30TE and SI 75TE are also available as reversible heat pumps for active cooling!

Max. flow temp. for heating 70 °C
Casing colour white

High-temperature brine-to-water heat pumps

Universal design with two performance levels

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Variable connection options for brine and heating connections on the rear wall of the casing. Access for service work from the front, no minimum clearances required on the sides. A sound-optimised insulated metal casing and integrated solid-borne sound insulation with free-swinging compressor base plate, make direct connection with the heating system possible. High COPs through economiser and compliance with the requirements of EN 14511 for larger volume flows on the heat consumption side. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated soft starter and load contactor for brine circulating pump, integrated flow and return flow sensors; external sensor (standard NTC-2) and dirt filter for brine circuit included in the scope of supply. Brine package must be ordered separately.

Refrigerant R134a; Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Item-No.	Heat output with 1 compressor / COP	Heat output with 2 compressors / COP	Width x Height x Depth mm	Weight kg
SIH 20TE	352970	11.8 / 4.8 (4.6)	21.8 / 4.7 (4.4)	1000 x 1660 x 775	307
SIH 40TE	352980	18.6 / 4.4 (4.1)	36.6 / 4.4 (4.1)	1350 x 1890 x 775	502

Heat output and COP acc. to EN 255 (EN 14511) at B0/W35 (B0 = brine inlet temp. 0 °C, W35 = heating water outlet temp. +35 °C)

The high flow temperatures are available for DHW preparation all year round!

Delivery time on request



SIH 20TE



SIH 40TE



AF 40 ... 80

Connecting flange for heating and brine circuits

Coupling from the outer thread of the heat pump to a standard flange (DIN 2501).

Order reference	Item-No.	Connection heating "	Nominal width
AF 40	351900	1½ "	DN 40
AF 50	351910	2 "	DN 50
AF 65	351920	2½ "	DN 65
AF 80	351930	3 "	DN 80

Brine package for brine-to-water heat pump

with two performance levels

Brine accessory package for ground heat collectors consisting of membrane safety valve, large-capacity breather with micro air bubble deposition, low-noise brine circulating pump with flange connection, manometer, expansion vessel, cap valve, ball valves, couplings and seals.

Order reference	Item-No.	For device type	Expansion vessel	Large-capacity breather	Circulating pump
SZB 250	352490	SI 21/24 SIH 20	18 l	1½"	Top-S 40/10
SZB 300	355990	SI 30		2"	

For borehole heat exchangers the free compression of the brine circulating pump is to be taken into account (recommended max. heat exchanger depth at DN 32: 80 m)!

Brine package for brine-to-water heat pump

Flange connection

Brine accessory package for ground heat collectors consisting of membrane safety valve, large-capacity breather with micro air bubble deposition and flange connection, low-noise brine circulating pump with flange connection, manometer, expansion vessel, cap valve, ball valves, couplings and seals.

Order reference	Item-No.	For device type	Expansion vessel	Large-capacity breather	Circulating pump
SZB 400	352500	SI 37 / SIH 40	18 l	DN 50	Top-S 40/10
SZB 500	352270	SI 50	25 l	DN 65	Top-S 50/10
SZB 750	352280	SI 75	35 l	DN 80	Top-S 65/13
SZB 1000	352290	SI 100	50 l	DN 100	
SZB 1300	352300	SI 130			

With borehole heat exchangers, the free compression values in the device information are to be adhered to (max. heat exchanger depth at DN32: 80 m)!



SZB 500

Special accessories for brine-to-water heat pump

Connection package brine manifold

The AP SVT connection package makes the connection of a maximum of 8 circuits possible.
The AP SVT 16 connection package makes the connection of a maximum of 2 x 8 circuits possible using a tee joint.



AP SVT



AP SVT 16

Order reference	Item-No.	Features	Weight kg
AP SVT	348900	Contains two 1½" ball valves, two end caps with seals 2" and two filling and drain cocks; 1½" internal thread connection to the heat pump.	3
AP SVT16	356060	Connection package brine manifold consisting of: 2 ball valves 2"; 2 tee joints 2"; 4 end caps with seals 2"; 4 filling and drain cocks; heat pump connections 2" internal thread.	4

Brine circuit manifold

Brine manifold for ball valves (1" internal thread), brine collector (1" external thread), up to max. eight circuits can be screwed together (flat sealing), MS58 material. **Connection package AP SVT up to max. eight circuits or AP SVT 16 up to max. 2 x 8 circuits must be ordered separately!**



SVT 300 with AP SVT



SVT 400

Order reference	Item-No.	Number of brine circuits	Heat source connection "	Length mm	Weight kg
SVT 200	348910	2	2	160	4
SVT 300	348920	3		240	5
SVT 400	348930	4		320	6

Brine circuit low pressure controller

Pipe assembly 1½" internal thread/external thread with connecting plug for installation in the brine circuit. When pressure loss occurs in the brine circuit, a digital blocking signal is transmitted to the heat pump manager. The built-in type"PS3-W" pressure controller complies with the standard DIN 32 733 / EN 12 263 (type examination).



SWPR 500

Order reference	Item-No.	Heat source connection	Weight kg
SWPR 500	337500	1½	2

A brine low pressure controller is only necessary if required by the authorities!

Brine circuit antifreeze

Pure monoethylene glycol for mixing with water, percentage of antifreeze 25 % for frost protection down to -14 °C.



AFN 825

Order reference	Item-No.	Nominal volume l	Weight kg
AFN 825	328610	20	22
AFN 824	324610	200	220

Purging and filling station



SOLFFP

Order reference	Item-No.	Short text	Features
SOL FFP	356300	Purging and filling station	Purging and filling station for solar energy systems and for the brine circuits of heat pumps (supplementary set SOL FHP required). Powerful pump allows solar energy systems and brine circuits to be filled quickly with heat carrier fluid. Mounted on an easily transportable cart with pipe holder containing a high temperature resistant hose, a canister with stop cock and a fine filter for filtering out deposits (canister can be removed easily for cleaning).
SOL FHP	356310	Supplementary set for filling station	Supplementary set to SOL-FFP for filling the brine circuit of heat pumps. Two external containers, 150 l each with ball valve and connecting accessories.

Delivery time on request

Water-to-water heat pump

Max. flow temp. for heating 58 °C
Casing colour white

Water-to-water heat pump with stainless steel coil heat exchanger

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Variable connection options for the ground water and heating connections on the rear wall of the casing. Sound-optimised through insulated metal casing and double vibration-isolated compressor. Economiser for high coefficients of performance. Integrated corrosion-proof and freeze-proof stainless steel coil heat exchanger. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated soft starter (from WI 14), integrated flow rate switch and load contactor for a well water pump; flow sensor, return flow sensor, external sensor (standard NTC-2) and dirt filter for ground water included in the scope of supply.

Lower operating limit heat source (heating operation) 7 °C; Upper operating limit heat source (heating operation) 25 °C; Refrigerant R407C; Connection heating 1¼"; Heat source connection 1¼"



WI 9/14ME



WI 9-27TE

Order reference	Item-No.	Heat output with 1 compressor / COP	Connection voltage	Width x Height x Depth mm	Weight kg
WI 9ME	353340	8.3 / 5.1 (4.9)	1/N/PE ~230 V, 50 Hz	650 x 1445 x 575	156
WI 14ME	353350	13.6 / 5.2 (5.0)			168
WI 9TE	353120	8.3 / 5.1 (4.9)	3/N/PE ~400 V, 50 Hz		156
WI 14TE	353130	13.6 / 5.2 (5.0)			168
WI 18TE	353140	17.1 / 5.3 (5.2)			187
WI 22TE	353150	21.5 / 5.5 (5.3)			189
WI 27TE	353160	26.4 / 5.1 (4.9)			259

Heat output and COP acc. to EN255 (EN 14511) at W10/W35 (W10 = ground water inlet temp. +10 °C, W35 = heating water outlet temp. +35 °C)

Important information for coil heat exchangers:

at water temperatures below 13 °C, no water analysis with regard to corrosion is necessary.

Note for heat source systems:

If the limits for iron (Fe up to 0.2 mg/l) or manganese (Mn up to 0.1 mg/l) there is danger of ochre sedimentation of the heat source system.

This is also true for coil heat exchangers.

Water-to-water heat pump

Max. flow temp. for heating 55 °C

with two performance levels

High-performance water-to-water heat pump for indoor installation with external temperature controlled heat pump manager WPM 2006 plus, external switch box and two compressors for flexible capacity. External sensor, return flow sensor and two electric connecting leads (1.5 and 10 m) are included in the scope of delivery. Dirt trap, adjustable protective motor switch and load contactor for a well pump, two electronic soft starters for starting currents < 60 A built in as standard.

Lower operating limit heat source (heating operation) 7 °C; Upper operating limit heat source (heating operation) 25 °C; Refrigerant R407C; Connection voltage 3/N/PE ~400 V, 50 Hz



WI 40/90CS

Order reference	Item-No.	Heat output with 1 compressor / COP	Heat output with 2 compressors / COP	Width x Height x Depth mm	Weight kg
WI 40CS	340050	23.4 (5.9)	44.4 (5.7)	1480 x 830 x 890	309
WI 90CS	340060	49.8 (5.9)	91.2 (5.4)		460

Heat output and COP acc. to EN255 (EN 14511) at W10/W35 (W10 = ground water inlet temp. +10 °C, W35 = heating water outlet temp. +35 °C)

A ground water analysis for the copper-soldered stainless steel heat exchanger is mandatory (see the project planning documentation) !

Plate heat exchanger for the use of

Water as a heat source

Screwed stainless steel plate heat exchanger. Max. operating pressure 10 bar, max. temperature 80 °C.

Intermediate heat exchangers for polluted heat sources or heat sources with poor water quality.

Order reference	Item-No.	For device type	Width x Height x Depth mm	Weight kg
WT 733	349010	to SI(H) 17	180 x 774 x 325	50
WT 1634	349020	to SI(H) 37	320 x 832 x 375	150
WT 1686	349030	to SI 75	320 x 832 x 590	190
WT 16112	356020	to SI 130	320 x 832 x 840	240

Delivery time on request

If, due to water quality, an intermediate heat exchanger is necessary, a brine-to-water heat pump should be used!

Passive cooling station with cooling controller



Module for passive cooling via borehole heat exchangers. Consisting of heat exchanger, brine circulating pump, temperature sensor, passive cooling controller; 3-way distribution valve with electrothermal actuator included in the scope of supply. Cooling operation mode is added to the existing heat pump manager by an electronic connection between the heating controller and the cooling controller (where the software versions of the heating controller and the cooling controller differ, a software update is necessary and must be bought from after-sales service). The components are permanently mounted in a white sheet metal casing, which can be mounted vertically or horizontally.

Order reference	Item-No.	For device type	Cooling capacity kW	Features	Width x Height x Depth mm	Weight kg
PKS 14	342460	SI(H)	14	Change-over valve: DN 25	650 x 400 x 320	30
PKS 25	342470	SIK(H)	25	Change-over valve: DN 40		32

Transferrable cooling capacity at a brine inlet temperature of approx. 10 °C and a cooling water inlet temperature of 20 °C!
Start-up should be carried out by authorised after-sales service personnel, especially for heating and cooling equipment!

Passive cooling controller



Wall-mounted cooling controller with temperature sensors to record the flow and return temperatures. The passive cooling controller adds cooling operation mode to the existing heat pump manager (where the software versions of the heating controller and the cooling controller differ, a software update is necessary (subject to a charge)). Both controllers are operated within the network and control a combined system for heating and passive cooling with brine-to-water or water-to-water heat pumps. The cooling capacity is transferred via a heat exchanger not included in the scope of supply. This heat exchanger must be configured according to the cooling capacity to be transferred, the volume flow and the water quality.

Order reference	Item-No.	For device type	Width x Height x Depth mm	Weight kg
WPM PK	348190	SI WI	370 x 340 x 90	4.0

Plate heat exchanger for passive cooling

Screwed stainless steel plate heat exchanger. Max. operating pressure 10 bar, max. temperature 80 °C. For passive cooling in the case of polluted heat sources or heat sources with poor water quality. The required condensate tray must be provided by the customer. (Delivery time on request)

Order reference	Item-No.	Volume flow primary m³/h	Volume flow secondary m³/h	Cooling capacity kW	Heat source connection	Width x Height x Depth mm	Weight kg
WT 733	349010	3.5	2.0	20	1/4	180 x 774 x 325	50
WT 1634	349020	9.5	5.0	50		320 x 832 x 375	150
WT 1686	349030	20	8	90	2	320 x 832 x 590	190
WT 16112	356020	37	11.5	130		320 x 832 x 840	240

Transferrable cooling capacity at a brine inlet temperature of approx. 10 °C and a cooling water inlet temperature of 20 °C!

Hydraulic passive cooling accessories



Order reference	Item-No.	Pressure drop	Dimensions	Features	Weight kg
DWU 25	347760	14000 Pa at 2,5m³/h	DN 25	Change-over valve for switching the heat return flow in passive cooling operation. Essential accessories: Actuator ETS DWU.	2.0
DWU 40	347770	14000 Pa at 3,5 m³/h	DN 40		2.5
ZWU 25	348940	14000 Pa at 1,3 m³/h	DN 25	Two-way valve for blocking heat flow in passive cooling operation. Parallel cooling operation and DHW preparation is possible due to hydraulic separation of the cooling circuit. Essential accessories: Actuator ETS DWU.	1.5
ZWU 32	348950	14000 Pa at 1,5 m³/h	DN 32		2.0
ETS DWU	347780			Electrothermal actuator for two-way valve and change-over valve. ~230V, 50 Hz, de-energised in heating operation, switching time approx. 3.5 min.	1.0

Active cooling with brine-to-water heat pump

Air-to-water (indoor)
 Air-to-water (outdoor)
 Heating/Cooling
 Brine-to-water
 Water-to-water
 Accessories
 DHW
 Ventilation

Reversible brine-to-water heat pump

Max. flow temp. for heating 55 °C
 Flow temperature cooling min. 7 °C
 Casing colour white

Optimised for cooling operation



SI 75ZSR

Heat pump for heating and cooling with integrated regulation installed indoors. Variable connection options for brine and heating connections on the rear wall of the casing. Access for servicing from the front, no minimum clearance required on the sides, accessible from underneath with a lift truck. A sound-optimised insulated metal casing and integrated solid-borne sound insulation with free-swinging compressor base plate, make direct connection with the heating system possible. High coefficients of performance due to compliance with EN 14511 for larger volume flows on the heat consumption side. Reversible refrigerating circuit with 2 performance levels. Universal design with the option of flexible expansion for:

- bivalent operation (bivalent-renewable not possible)
- combined distribution systems for heating and cooling
- unmixed and mixed heating and cooling circuits

Silent cooling via panel heating/cooling systems requires the use of the room climate control station (special accessory) to regulate the flow temperature on the basis of the air temperature and humidity of a reference room. Integrated soft starter and load contactor for brine circulating pump, integrated flow and return flow sensors; external sensor (standard NTC-2) and dirt filter for brine circuit included in the scope of supply.

Refrigerant R404A; Lower operating limit heat source (heating operation) -5 °C; Upper operating limit heat source (heating operation) 25 °C; Upper operating limit heat source (cooling operation) 30 °C; Lower operating limit heat source (cooling operation) 5 °C; Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Item-No.	Heat output with 1 compressor / COP	Heat output with 2 compressors / COP	Cooling capacity with 2 compressors / COP cooling operation	Width x Height x Depth mm	Weight kg
SI 75ZSR	344950	35.1 / 3.9 (3.8)	65.9 / 3.7 (3.5)	81.1 / 5.0	1350 x 1890 x 750	607

Heat output and COP acc. to EN 255 (EN 14511) at B0/W35 (B0 = brine inlet temp. 0 °C, W35 = heating water outlet temp. +35 °C)

Cooling capacity acc. to EN 14511 at B20/W10 (B20 = brine inlet temp. 20 °C; W10 = cooling water outlet temp. 10 °C)

Start-up should be carried out by authorised after-sales service personnel, especially for heating and cooling equipment!

Reversible brine-to-water heat pump

Max. flow temp. for heating 55 °C
 Flow temperature cooling min. 7 °C
 Casing colour white

Optimised for cooling with waste heat recovery



SI 30TER+

Heat pump for heating and cooling with integrated regulation installed indoors. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Variable connection options for brine and heating connections on the rear wall of the casing. Access for service work from the front, no minimum clearances required on the sides. A sound-optimised insulated metal casing and integrated solid-borne sound insulation with free-swinging compressor base plate, make direct connection with the heating system possible. High coefficients of performance due to compliance with EN 14511 for larger volume flows on the heat consumption side. Reversible refrigerating circuit with additional heat exchanger for higher DHW temperatures in heating operation and waste heat recovery in cooling operation. Universal design with the option of flexible expansion for:

- bivalent operation (bivalent-renewable not possible)
- combined distribution systems for heating and cooling
- unmixed and mixed heating and cooling circuits

Silent cooling via panel heating/cooling systems requires the use of the room climate control station (special accessory) to regulate the flow temperature on the basis of the air temperature and humidity of a reference room. Integrated soft starter and load contactor for brine circulating pump, integrated flow and return flow sensors; external sensor (standard NTC-2) and dirt filter for brine circuit included in the scope of supply.

Refrigerant R404A; Upper operating limit heat source (cooling operation) 30 °C; Lower operating limit heat source (cooling operation) 5 °C; Upper operating limit heat source (heating operation) -5 °C; Lower operating limit heat source (heating operation) 25 °C; Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Item-No.	Heat output with 1 compressor / COP	Heat output with 2 compressors / COP	Cooling capacity with 2 compressors / COP cooling operation	Width x Height x Depth mm	Weight kg
SI 30TER+	355650	15.4 / 4.2 (4.1)	28.5 / 3.9 (3.8)	39.4 / 5.1	1000 x 1660 x 775	385
SI 75TER+	354480	34.0 / 3.9 (3.7)	66.4 / 3.6 (3.4)	75.5 / 4.5	1350 x 1890 x 750	658

Heat output and COP acc. to EN 255 (EN 14511) at B0/W35 (B0 = brine inlet temp. 0 °C, W35 = heating water outlet temp. +35 °C)

Cooling capacity acc. to EN 14511 at B20/W10 (B20 = brine inlet temp. 20 °C; W10 = cooling water outlet temp. 10 °C)

The use of waste heat for DHW preparation produces high coefficients of performance in cooling operation!



SI 75TER+

Special accessories cooling regulation

Room climate control station for temperature and humidity measurement



RKS WPM

This accessory is essential for silent cooling using panel heating/cooling systems. Connection to a cooling controller to control the flow temperature based on the measured room temperature and humidity via a reference room.

Order reference	Item-No.	For device type	Width x Height x Depth mm	Weight kg
RKS WPM	342220	WPM	127 x 80 x 30	0.5

Dew point monitor and dew point sensors

Dew point monitor

Switching relay for electronic evaluation of up to 5 connectable dew point sensors to interrupt cooling operation of the complete system in case of condensation at vulnerable points in the cooling distribution system; TPF 341 dew point sensors must be ordered separately; connection to the cooling controller; operating voltage 24 V~ / 50 Hz.



TPW WPM

Dew point sensor

Flexible PCB which sends a signal to the dew point monitor (TPW WPM) when it comes into contact with moisture, connection cable (10 m, 2 x 0.25 mm²).

Order reference	Item-No.	Short text	For device type	Width x Height x Depth mm
TPW WPM	350970	Dew point monitor	WPM	36 x 86 x 63
TPF 341	350980	Dew point sensor	RTK 601U	66 x 27



TPF 341

When the dew point sensor comes into contact with condensation, the cooling of the system is interrupted!

Heating/cooling ON/OFF room temperature controller

Room temperature controller

Electronic room temperature controller heating/cooling; switchable between "Heating" and "Cooling" operating modes using an external change-over contact of the heat pump manager; flat switch mounting frame for flush mounting as standard; can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer; switch ON / antifreeze; controlling range 5 to 30 °C; thermostat dial; temperature range limitation in the casing cover; operating voltage 24 V ~/50 Hz; switching capacity 24 V AC ~/1 A, can control up to 5 valve actuators (24 V~ closed when de-energised), IP30 when flush-mounted, colour alpine white (similar to RAL 9010). Dew point sensor TPF 341, for interrupting cooling operation when there is risk of condensate, optional connection (dew point sensors are not included in the scope of supply).



RTK 601U

Dew point sensor

Flexible PCB which sends a signal to the dew point monitor (TPW WPM) when it comes into contact with moisture, connection cable (10 m, 2 x 0.25 mm²).

Order reference	Item-No.	Short text	Width x Height x Depth mm	Weight kg
RTK 601U	355610	Room temperature controller Heating/Cooling	82 x 82 x 45	0.150
TPF 341	350980	Dew point sensor	66 x 27	

When the dew point sensor comes into contact with condensation, the cooling of a room is interrupted by the motors attached to the room temperature controller.

Further room temperature controllers are listed in the chapter on control and regulation devices!

Active cooling with brine-to-water heat pump

Reversible brine-to-water heat pump

Max. flow temp. for heating 55 °C
Flow temperature cooling min. 7 °C
Casing colour white

Compact design optimised for heating

Brine-to-water heat pump with reversible refrigerating circuit for heating and cooling and integrated heat pump regulation.

The following modules are integrated into the casing:

- Heat circulating pump (note the free compression)
- Brine circulating pump (note the free compression)
- Safety valve and pressure manometer
- Expansion vessel (8l)

Main breather and dirt trap included in the scope of supply; integrated return flow sensor and soft starter. Variable connection options for brine and heating connections on the rear wall of the casing. **Brine circuit manifold must be ordered separately.**

Lower operating limit heat source (heating operation) -5 °C; Upper operating limit heat source (heating operation) 25 °C;

Refrigerant R407C; Lower operating limit heat source (cooling operation) 5 °C; Upper operating limit heat source (cooling operation) 25 °C; Connection heating 1"; Heat source connection 1"



SI 8MR-20TR

Order reference	Item-No.	Heat output with 1 compressor / COP	Cooling capacity 1 compressor / COP	Connection voltage	Width x Height x Depth mm	Weight kg
SI 8MR	348470	9.3 / 4.0	12.0 / 5.4	1/N/PE ~230 V, 50 Hz	640 x 1220 x 624	151
SI 10MR	348480	11.6 / 4.1	14.1 / 5.3			3/N/PE ~400 V, 50 Hz
SI 12TR	348490			161		
SI 14TR	348500	13.7 / 4.0	17.4 / 5.9	173		
SI 16TR	348510	16.4 / 4.0	21.5 / 5.9	181		
SI 20TR	348520	20.0 / 4.2	26.0 / 5.7	231		

Heat output and COP acc. to EN 255 at B0/W35 (B0 = brine inlet temp. 0 °C, W35 = heating water outlet temp. +35 °C)

Cooling capacity and COP acc. to EN 255 at B20/W10 (B20 = brine inlet temp. 20 °C; W10 = cooling water outlet temp. 10 °C)

Heat pump controller for simplified regulation

Heat pump controller for combination with the simplified WPC regulation. The heating controller enables the external or room-temperature-controlled regulation during heating operation. In cooling operation the silent cooling can be regulated acc. to the dew point using the room temperature and humidity of a reference room (special accessory room climate control station). The heating water request is managed via a hot water sensor which is to be connected to the WPC. As well as the basic heating of the hot water cylinder via the heat pump, a time-controlled reheating can be done by means of an electric flange heater.



WPR

Order reference	Item-No.	Width x Height x Depth mm
WPR 2007	352400	212 x 90 x 302

Built-under buffer tank



Order reference	Item-No.	For device type	Features	Width x Height x Depth mm	Weight kg
PSP 100E	353360	SIK(H) 7-14 SI(H) 5-14	Nominal content 100 l; in brine-to-water heat pump design to enable space-saving installation on top of the built-under buffer tank; polyurethane insulation for minimal downtime losses (can be used for heating and cooling); 1½" bush for immersion heaters (up to CTHK 635); 1¼" heating water connections; colour: white; brown red design screen.	650 x 550 x 653	54
PSP 140E	353970	LI 11- LI 20..(R)	Nominal content 140 l; in air-to-water heat pump design to enable space-saving installation on top of the built-under buffer; polyurethane insulation with minimal downtime losses (can be used for heating and cooling), incl. 2 1½" bushes for immersion heaters (up to CTHK 636); 1" heating water connections; colour: white; brown red design screen.	750 x 600 x 850	72

Floor-mounted buffer tank

Permissible operating pressure 3 bar; Max. operating temperature 95 °C;



Order reference	Item-No.	For device type	Diameter mm	Features	Height mm	Weight kg
PSW 100	351090	to LI 11 to LA 11	512	Nominal content 100 l, polyurethane insulation for minimal downtime losses (can be used for heating and cooling), incl. 2 bushes 1½" for immersion heaters (to CTHK 633; 4.5 kW), heating water connections 1".	850	55
PSW 200	339830	to SI 37 to WI 27	600	Nominal content 200 l, polyurethane insulation for minimal downtime losses (can be used for heating and cooling), incl. 3 bushes 1½" for immersion heaters (to CTHK 634), heating water connections 1¼", 3 supporting feet (adjustable).	1300	60
PSW 500	339210	to max. 100 kW	700	Universal buffer tank, nominal capacity 500 l, polyurethane insulation for minimal downtime losses (can be used for heating and cooling), incl. 3 bushes 1½" for immersion heaters (to CTHK 635), heating water connections 2 ½", flange DN 180 for installation of a RWT 500 ribbed tube heat exchanger.	1950	115

Immersion heater

For electrical supplementary heating in mono energy operation; consisting of individual radiators with temperature controller; safety temperature limiter; degree of protection IP 54, 1½" external thread with plastic cover, in accordance with EN 60335-T1 requirements.



Order reference	Item-No.	Connection voltage	Heat output kW	Immersion depth mm	Unheated length mm	Weight kg
CTHK 631	336180	1/N/PE ~230 V, 50 Hz	2.0	250	95	1.3
CTHK 632	335910		2.9			1.5
CTHK 633	322140	3/N/PE ~400 V, 50 Hz	4.5	350	110	1.6
CTHK 634	322150		6.0	450		1.7
CTHK 635	322160		7.5	550		1.8
CTHK 636	322170		9.0	650		1.9

Air-to-water (indoor)

Solar heat exchanger for universal buffer PSW 500



Finned tube heat exchanger

For connection of an external supplementary heating system with required system separation (e.g. solar) in connection with the PSW 500 universal buffer. Consisting of a flange cover with antitwist protection and 2.3 m² heat exchanger (for a solar collector area of up to approx. 10 m²), 3/4" external thread connection.

Order reference	Item-No.	For device type	Connection heating	Transmission capacity kW	Weight kg
RWT 500	339840	PSW 500	3/4"	9	8

Air-to-water (outdoor)

Immersion heater pipe assembly



HDLR 450

Insulated pipe assembly for screwing in a 1 1/2" immersion heater (CTHK 631, CTHK 632, CTHK 633 or CTHK 634); integration into the heat flow for volume flows up to 2.5 m³/h; 1 1/4" heating water connection; installation material for wall mounting included in the scope of supply. **Immersion heater (CTHK ...) must be ordered separately.**

Order reference	Item-No.	For device type	Weight kg
HDLR 450	337450	CTHK 631-634	4.5

Heating/Cooling

Pipe heater (radiator)



HCT 300

Insulated, built-in 3 kW radiator for heat flow (1" flat sealing), max. volume flow 1.5 m³/h, controlling range 20–75 °C, degree of protection IP44, safety temperature limiter, 16 A fuse.

Order reference	Item-No.	Connection voltage	Heat output kW	Weight kg
HCT 300	351210	1/N/PE ~230 V, 50 Hz	3.0	5

Brine-to-water

Water-to-water

Accessories

DHW

Ventilation

Hot water cylinder with foil cladding and temperature sensor



WWSP 332

Steel cylinder (special inside enamelling) with protection anode and 3 supporting feet, polyurethane insulation with minimal stand-by losses, temperature sensor for connection to the heat pump manager included in the scope of supply, colour white, heating connection 1 1/4", hot water connection 1" external thread, circulation connection 3/4".
Permissible operating pressure 10 bar; Flange TK150/DN110

Order reference	Item-No.	For device type	Diameter mm	Features	Height mm	Weight kg
WWSP 332	346610	to LI 20 excepting LI 16 to LA 22 excepting LA 16 / LA 22HS to SI 11 to WI 14	700	Nominal content 300l, usable capacity 277l, heat exchanger area 3,2 m ² for a transmission capacity up to approx. 16 kW, stand-by loss approx. 2.4 kWh/24h	1294	130
WWSP 880	337880	to LI 28 excepting LIH 26TE to LA 28 excepting LA 26HS to SI 30 to WI 27		Nominal content 400 l, usable capacity 350 l, heat exchanger area 4.2 m ² for a transmission capacity up to approx. 20 kW, stand-by loss approx. 2.8 kWh/24h	1591	159
WWSP 900	339220	to LI(H) 28 to LA 28 to SI 50 to WI 40		Nominal content 500 l, usable capacity 430 l, heat exchanger area 5.7 m ² for a transmission capacity up to approx. 30 kW, stand-by loss approx. 3.3 kWh/24h	1920	180

The solar station SST 25 can be used to support DHW preparation for all hot water cylinders.

The reachable hot water temperatures are dependent on the maximum heat output of the heat pump, the heat exchanger area and the volume flow in the load circuit (the respective design for a maximum hot water temperature of 45 °C according to the project planning documentation).
For heat pumps with two performance levels, the DHW preparation can be done using a compressor.

Design hot water cylinder

Casing colour white



WWSP 442E

Nominal content 400 l, in brine-to-water heat pump design, tube heat exchanger (internal), three supporting feet, steel cylinder (special inside enamelling) with protection anode, polyurethane insulation with minimal stand-by losses (approx. 2.7 kWh/24h), integrated temperature sensor for connection to the heat pump manager, colour white, brown red design screen.
Permissible operating pressure 10 bar; Flange TK150/DN110;

Order reference	Item-No.	For device type	Usable capacity l	Heat exchanger surface area m ²	Con-nection heating "	Con-nection circulation "	Con-nection hot water "	Width x Height x Depth mm	Weight kg
WWSP 442E	353370	SIK 7-14 SIKH 6,9 SI(H) 20-30	353	4.2	1 1/4	3/4	1	650 x 1660 x 680	187

The reachable hot water temperatures are dependent on the maximum heat output of the heat pump, the heat exchanger area and the volume flow in the load circuit (the respective design for a maximum hot water temperature of 45 °C according to the project planning documentation).
For heat pumps with two performance levels, the DHW preparation can be done using a compressor.

Air-to-water (indoor)



WWSP 229E

Design built-under hot water cylinder

Nominal capacity 227 l, in brine-to-water heat pump design to enable space-saving installation on the built-under buffer, tube heat exchanger (internal), steel cylinder (special inside enamelling) with protection anode, polyurethane insulation with minimum stand-by losses; integrated temperature sensor for connection to the heat pump manager, colour: white, brown red design screen
Permissible operating pressure 10 bar; Flange TK150/DN110

Order reference	Item-No.	For device type	Usable capacity l	Heat exchanger surface area m ²	Con-nection heating "	Con-nection circula-tion "	Con-nection hot water "	Width x Height x Depth mm	Weight kg
WWSP 229E	353380	to SI(KH) 9	206	2.9	1¼	¾	1	650 x 1040 x 680	110

Recommended for service areas without shut-off times or with reduced hot water consumption.

Note: A minimum buffer volume of the heating system of 10% of the heating water flow must be ensured either by a buffer tank or other suitable measures!

Air-to-water (outdoor)

Heating/Cooling



FLH 60

Flange heater for hot water cylinder

For reheating and thermal disinfection; temperature controller, adjustable from 15 °C to 85 °C; safety temperature limiter, suitable for all hot water cylinders (WWSP). FLHU 70 is switchable between 2.0 kW, 2.7 kW and 4.0 kW.

Order reference	Item-No.	Connection voltage	Heat output kW	Flange
FLH 25M	349430	1/N/PE ~230 V, 50 Hz	2.5	TK150/8
FLHU 70	338070	3/N/PE ~400 V, 50 Hz	4.0	
FLH 60	338060		6.0	

Brine-to-water



SVK 852

Accessories for hot water cylinder

Order reference	Item-No.	Short text	Features	Weight kg
SVK 852	326660	Safety valve combination	For the cold water connection of drinking water cylinders to the supply network according to DIN 1988; connection 1" external thread.	1
KRRV 003	322070	Thermostat for heating and domestic hot water	Capillary tube controller setting range: 0-70 °C switching capacity at 230 V, 50 Hz, 10 A switching temperature difference: 1.0 - 2.0 K, sheath tube length: 200 mm.	0.5

Water-to-water



KRRV 003

Combination tank for heating and DHW preparation

Floor-mounted cylinder for optimum use of floor space, consisting of a 100 l buffer tank and a 300 l hot water cylinder. Tank and cylinder hydraulically decoupled; buffer tank with bush 1½" for immersion heaters (to CTHK 635), heating connection 1¼"; hot water cylinder usable capacity 277 l, heat exchanger area 3.2 m² smooth pipe (special inside enamelling), heating connection 1¼", hot water connection 1", circulation connection ¾", temperature sensor enclosed, installation of flange heater possible; colour aluminium white.

Order reference	Item-No.	For device type	Diameter mm	Height mm	Weight kg
PWS 332	348620	to LI 11 / LA 11 to SI(H) 11 to WI 14	700	1800	195

Accessories



PWS 332

DHW



CTHK ...

Radiators for the combination tank PWS 332

Order reference	Item-No.	Short text	Connection voltage	Heat output kW	Weight kg
CTHK 635	322160	Immersion heater for heating	3/N/PE ~400 V, 50 Hz	7.5 kW	1.8
FLH 60	338060	Flange heater for domestic hot water		6.0 kW	4

All of the following immersion heaters can be used to supplement the heating: CTHK 631, 632, 633 and 634.

Ventilation



FLH 60

Combo tank for the integration of solar energy

DHW heating in flow principle



PWD 750

Floor-mounted tank for heating and domestic hot water preparation with central flow with three internally tin-plated heat exchangers (external pipework using special accessories VS PWD necessary); consisting of a 200 l buffer tank for heating and a 550 l buffer tank for hot water; heating water buffer tank used as a preheating stage for hot water preparation. A circular plate prevents the different water layers with varying temperatures from becoming mixed together; integrated heat riser pipes distribute the energy from an additional heat generator (e.g. wood boiler) to the supplementary heating system and the domestic hot water preparation on the basis of the temperature (flange connection for integration of the RWT 750 solar heat exchanger); two 1½" bushes for immersion heaters in heater or hot water buffer tank (CTHK 635 and 636); cylinder charging for DHW preparation possible up to max. 2.5 m³/h and 30 kW heat output; separate delivery of the 120 mm PE foam insulation; tilting dimension 1,920 mm, colour: white.

Order reference	Item-No.	For device type	Diameter mm	Width x Height x Depth mm	Weight kg
PWD 750	349100	to heat output max. 30 kW to water flow rate max. 2,5 m³/h	1000	790 x 1730 x 790	246

Cannot be used for reversible heat pumps and water hardness above 14° dH! The given width, height and depth measurement is without insulation.

Connection kit for PWD 750 heat exchanger



VS PWD

For easy installation of pipework for the 3 integrated hot water heat exchangers of the PWD 750. Consisting of two DN16 (1000 / 500 mm) ready-to-use flexible stainless steel corrugated pipes, 13 mm insulation thickness, ¾" cap nut and seal on both sides; maximum operating pressure 7 bar.

Order reference	Item-No.	For device type	Weight kg
VS PWD	354030	PWD 750	5

Immersion heaters for the combo tank PWD 750



CTHK ...

For the combination tank PWD 750, immersion heaters with an unheated length of 110 mm are used to support heating and DHW preparation.

Order reference	Item-No.	Connection voltage	Heat output kW	Immersion depth mm	Unheated length mm	Weight kg
CTHK 635	322160	3/N/PE ~400 V, 50 Hz	7.5	550	110	1.8
CTHK 636	322170		9.0	650		1.9

Change-over valve for combo tank PWD 750



DWUS 25

Change-over valve for switching from heating to DHW preparation in flow and/or return flow. Motor operated for short switching times (set time open 12s, set time closed 6s); for a maximum volume flow of 2 m³/h; max. differential pressure 0.6; range of operating temperatures for heating water 5-88 °C; max. ambient temperature 50 °C.

Order reference	Item-No.	Connection heating	Nominal width
DWUS 25	355630	1	DN 25

Solar heat exchanger for PWD 750 combo tank



Finned tube heat exchanger

For connection of an external supplementary heating and domestic water system with required system separation (e.g. solar) in connection with the PWD 750 combo tank. Consisting of a flange cover with antitwist protection and 2.3 m² heat exchanger (for a solar collector area of up to approx. 15m²).

Order reference	Item-No.	For device type	Connection heating	Transmission capacity kW	Weight kg
RWT 750	351640	PWD 750	¾	9	8

Distribution system for heat pumps

Module for connecting the buffer tank and ensuring the heating water flow

Compact manifold

Combinable module with insulation jackets for installation-friendly connection of the heat pump, buffer tank, hot water cylinder and hot water distribution system. Consisting of one overflow valve, four ball valves, two integrated thermometers, one check valve, immersion sleeve for return flow sensor, safety module with pressure gauge and connection possibilities for expansion vessel. Installation option for circulating pump, inside micrometer 180 mm, DN 25 (pump not included in the scope of supply). Recommended for connection of heat pumps with a heating water flow of up to 1.3 m³/h in combination with the extension module EB KPV to 2.0 m³/h (max. volume flow 2.5 m³/h). The extension module should generally be used for systems with different volume flows in the generator and consumer circuits (i.e. radiators).

Extension module

For connecting to the KPV 25 compact distributor, enabling decoupling from the consumer circuit without differential pressure. Consisting of a corrugated stainless steel pipe with union and connecting pieces. Recommended for connection of heat pumps with a heating water flow of up to 2.0 m³/h. The consumer circuit requires a separate circulating pump due to the hydraulic isolation.

Dual differential pressureless manifold

Combinable module with insulation jackets for installation-friendly connection of the heat pump, buffer tank, hot water cylinder (using the tee joint included) and heating system. Consisting of 2 stop-cocks, 2 bypass pipes with return flow inhibitor (2000 Pa start-to-leak pressure), safety module with pressure gauge and connection options for expansion vessel. Installation option for circulating pump, inside micrometer 180 mm, DN 32 (pump not included in the scope of supply).

Recommended for connection of heat pumps with a heating water flow of up to 2.5 m³/h and external energy infeed (e.g. wood / solar) in the buffer tank connected in series (see project planning documentation). For reduction of the pump operating times the heat circulating pump can only be used with the compressor. In this case, the return flow sensor included in the scope of supply must be installed in the immersion sleeve provided, and connected. The consumer circuit requires a separate circulating pump due to the hydraulic isolation.

Order reference	Item-No.	For device type	Short text	Width x Height x Depth mm	Weight kg
KPV 25	346590	to LI / LA 11 to SI 17 to WI 18	Compact manifold with overflow valve	250 x 500 x 250	13
EB KPV	348650	to LI/LA 22 with KPV 25 to SI 21 with KPV 25 to WI 22 with KPV 25	EB KPV extension module	250 x 100 x 150	2
DDV 32	348450	to LI(H) 28 / LA(H) 28 to SI 24 to WI 27	Dual differential pressureless manifold	340 x 550 x 250	13

Circulating pumps for main heat pump circuit

Unregulated heat circulating pump to ensure minimum heating water flow through the heat pump, inside micrometer 180 mm. In connection with KPV 25 and EB KPV, the UP 60 can be used up to LI/LA 20, SI 21 and WI 22. The circulating pump UP 70-32 ensures the minimum heating water flow in connection with DDV 32 to LI/LA 28, SI 24 and WI 27.

Order reference	Item-No.	For device type	Nominal width	Features	Weight kg
UP 60	340300	KPV 25	DN 25	Delivery height max. 3,5 m at a volume flow of 2 m ³ /h.	2.4
UP 80	340310			Delivery height max. 4 m at a volume flow of 5 m ³ /h.	4.5
UP 60-32	355970	DDV 32	DN 32	Delivery height max. 3,5 m at a volume flow of 2 m ³ /h.	2.6
UP 70-32	354020			Delivery height max. 4 m at a volume flow of 5 m ³ /h.	5.0

Pump dimensioning must be checked according to the pressure drop and volume flow!



KPV with UP 60



EB KPV



DDV 32



UP 80

Heating distribution system modules

Unmixed heating circuit module

Combinable module with insulation jackets for connecting an unmixed heating circuit or DHW or swimming pool water preparation. Can be used for a heating water flow rate of up to 2.5 m³/h. Consisting of two ball valves with check valve, two integrated thermometers, pump ball valve, insulation jackets, installation option for circulating pump, inside micrometer 180 mm, DN 25 (pump not included in the scope of supply).

Mixed heating circuit module

Combinable module with insulation jackets for connecting a mixed heating circuit. Can be used for a heating water flow rate of up to 2 m³/h. Consisting of two ball valves with check valve, two thermometers, 3-way mixer with actuator and 140 sec. runtime, connection voltage ~230 V, degree of protection IP40, strap-on sensor and insulation jackets, installation option for regulated circulating pump, inside micrometer 180 mm, DN 25, which is to be constructed after pressure loss of the heating system (pump not included in the scope of supply).

Manifold bar

Combinable module with insulation jackets for simultaneous connection of several heating distribution system modules, with two 1½" (external/internal thread) connecting pairs each to the top and bottom, universally combinable with KPV 25, MMH 25 and WWM 25, complete with union and connecting pieces (flat sealing).

Order reference	Item-No.	Short text	Width x Height x Depth mm	Weight kg
WWM 25	346600	Hot water module / unmixed heating circuit module	250 x 420 x 250	10
MMH 25	348640	Mixed heating circuit module with temperature sensor		
VTB 25	339870	Manifold bar	500 x 150 x 140	6

If the hot water distribution system is used for heating and cooling, the water-bearing pipes must have a low-temperature insulation within the insulation jackets. With reversible heat pumps with additional heat exchanger no manifold bar is necessary for the connection of the DHW preparation!



WWM 25 with UP ..

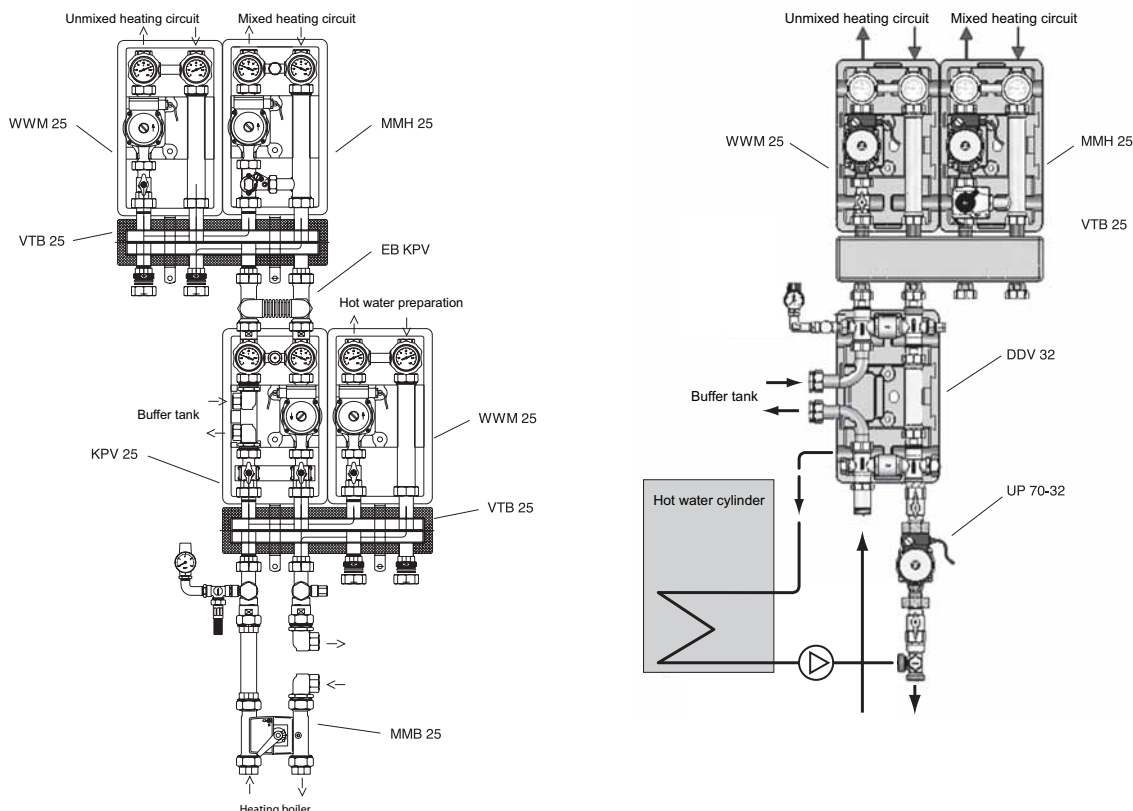


MMH 25 with UP ..



VTB 25

Combination possibilities for the distribution system



Domestic hot water preparation distribution system modules

Hot water module

Combinable module with insulation jackets for connecting DHW or swimming pool water preparation. Can be used for a heating water flow rate of up to 2.5 m³/h. Consisting of two ball valves with check valve, two integrated thermometers, pump ball valve, insulation jackets, installation option for circulating pump, inside micrometer 180 mm, DN 25, which is to be constructed after pressure loss of the heating system (not included in the scope of supply).

Manifold bar

Combinable module with insulation jackets for connecting to a KPV 25 compact manifold and WWM 25 hot water module. Each with two connecting pairs 1½" (external thread/internal thread) upwards and downwards, useable for a hot water flow of up to max. 2.5 m³/h (flat sealing).



WWM 25 with UP ..



VTB 25

Order reference	Item-No.	Short text	Width x Height x Depth mm	Weight kg
WWM 25	346600	Hot water module / unmixed heating circuit module	250 x 420 x 250	10
VTB 25	339870	Manifold bar	500 x 150 x 140	6

Hot water pump unit

Pump unit for direct mounting of the hot water circulating pump on the rear of the hot water cylinder (pump not included in the scope of supply). Consisting of: Elbow union with manual bleeders, installation option for DN 25 circulating pump with two ball valves and gravity control.

Order reference	Item-No.	For device type	Connection heating	Weight kg
WPG 25	356030	UP 60 UP 80	1½"	10

Circulating pumps for DHW preparation

Unregulated circulating pump, applicable for the hot water load circuit, inner micrometer 180 mm.



UP 80

Order reference	Item-No.	Nominal width	Features	Weight kg
UP 60	340300	DN 25	Delivery height max. 3,5 m at a volume flow of 2 m ³ /h.	2.4
UP 60-32	355970	DN 32		2.6
UP 80	340310	DN 25	Delivery height max. 4 m at a volume flow of 5 m ³ /h.	4.5

The reachable hot water temperatures are dependent on the maximum heat output of the heat pump, the heat exchanger area and the volume flow in the load circuit (the respective design for a maximum hot water temperature of 45 °C according to the project planning documentation). For heat pumps with two performance levels, the DHW preparation can be done using a compressor.

Mixer module for bivalent systems

Combinable mixer module for connecting a second heat generator (e.g. oil boiler) or a renewable heat generator with heat accumulator. Can be used for a heating water flow rate of up to 2 m³/h. Consisting of a 4-way mixer with actuator and 140 sec. runtime, connection voltage ~230 V, degree of protection IP40.



MMB 25

Order reference	Item-No.	Width x Height x Depth mm	Weight kg
MMB 25	348880	180 x 365 x 150	5

Solar station for hot water

Solar back-up for domestic hot water preparation

Heat exchanger solar station consisting of solar separation system and pump assembly with insulation jackets for integrating solar installations up to 10 m² into the DHW heating system. The solar station enables efficient hot water heating via the heat pump as well as via the solar installation. Modules with primary and secondary cycle consisting of: 2 circulating pumps (WILO- STAR-ST 25/6 and STAR-RS 24/4); 4 ball valves 1" with thermometer, return flow inhibitor, safety assembly with safety valve and 0–10 bar pressure gauge, connection options for expansion vessel (solar controller not included in scope of supply).



SST 25

Order reference	Item-No.	Width x Height x Depth mm	Weight kg
SST 25	348430	320 x 1050 x 320	19

Special accessory SOLCU 1 can be used as a solar controller!

Fan convectors heating/cooling with integrated electronic thermostat

Casing colour white
Connection voltage 1/N/PE ~230 V, 50 Hz



HL ... with ZH 1

Exclusive rounded design; compact dimensions; especially suited for wall mounting; ceiling suspension possible; floor mounting using special accessories (ZH1). Water connections can be reversed during installation ($\frac{1}{2}$ " internal thread connections); adjustable ventilation grid; the fan convector switches off automatically when the ventilation grid closes; electronic temperature control; automatic speed change on the ventilator; automatic operating mode switch-over and automatic switch-on/switch-off depending on the flow temperature; minimum flow temperature of 35 °C for heating operation, maximum of 17 °C for cooling operation; constant-volume water flow; ventilation unit with radial fan and 3 speed levels; especially low-noise operation; with electronically regulated fan as standard.

Order reference	Item-No.	Heating output 35/30 °C W	Heating output 50/45 °C W	Cooling capacity 7/12 °C W	Water flow l/h	Pressure drop Pa	Width x Height x Depth mm	Weight kg
HL 11C	351730	510	880	650	111	1170	640 x 507 x 187	13.6
HL 16C	351740	760	1300	950	163	2420	750 x 512 x 189	14.6
HL 26C	351750	1410	2390	1790	307	8555	980 x 522 x 191	17.6
HL 36C	351760	1780	3020	2330	399	6470	1200 x 526 x 198	20.6

By replacing the radiators present in existing buildings with fan convectors, the system temperatures can be lowered thereby increasing the annual performance factor of the heat pump heating system.

Fan convectors heating/cooling with external electronic thermostat for surface mounting

Casing colour white
Connection voltage 1/N/PE ~230 V, 50 Hz



HL ... with ZH 1

Exclusive rounded design; compact dimensions; especially suited for ceiling suspension and for mounting in wall recesses; floor-mounting using special accessories (ZH1) Water connections can be reversed during installation ($\frac{1}{2}$ " internal thread connections); adjustable ventilation grid; the fan convector switches off automatically when the ventilation grid closes; PXL2E electronic temperature control for surface mounting (W x H x D: 70 x 145 x 29; cable length max. 3 m) and SW3 flow temperature sensor included in the scope of supply; automatic speed change on the ventilator; automatic operating mode switch-over and automatic switch-on/switch-off based on the flow temperature; minimum flow temperature of 35 °C for heating operation, maximum of 17 °C for cooling operation; constant-volume water flow; ventilation unit with radial fan and 3 speed levels; especially low-noise operation; with electronically regulated fan as standard.

Order reference	Item-No.	Heating output 35/30 °C W	Heating output 50/45 °C W	Cooling capacity 7/12 °C W	Water flow l/h	Pressure drop Pa	Width x Height x Depth mm	Weight kg
HL 11SK	351770	510	880	650	111	1170	640 x 507 x 187	13.6
HL 16SK	351780	760	1300	950	163	2420	750 x 512 x 189	14.6
HL 26SK	351790	1410	2390	1790	307	8550	980 x 522 x 191	17.6
HL 36SK	351800	1780	3020	2330	399	6470	1200 x 526 x 198	20.6

Device base for floor mounting

Supporting feet for direct floor mounting of the fan convector with the option of feeding through the connecting pipes (base height: 93 mm); colour white (packaging unit 2).



ZH

Order reference	Item-No.	For device type	Weight kg
ZH 1	351850	HL 11-36C/SK	0.9

Heat pump regulation and accessories

Heating controller - heat pump manager



WPM 2006 plus

Controller for the heat pump heating system with large back-lit LC display, time-controlled lowering and raising of the heating characteristic curve, time functions for DHW preparation according to need using the heat pump, with optional targeted reheating by flange heater. "Bivalent-renewable" operating mode for combining the heat pump with additional renewable energy sources such as wood or solar heat; dynamic input menus with different levels for technicians as well as users. Two independent mixer outputs for controlling an additional heat generator and a maximum of two mixed heating circuits. Automatic program for targeted heat drying of screed floors. PC, modem and bus connection via plug-in cards (special accessories); external sensor (standard NTC-2) included in the scope of supply.

Order reference	Item-No.	Features	Width x Height x Depth mm	Weight kg
WPM 2006 plus	352550	Delivered as a wall mounted controller in the scope of supply of the air-to-water heat pump installed outdoors.	370 x 330 x 90	4.1

General accessories for the heat pump manager



FG 3115



RBG WPM

Order reference	Item-No.	Short text	Features
MWPM 300	355660	Modem plug-in card for heat pump manager	Heat pump manager extension module for a modem connection.
LWPM 410	339410	Data bus plug-in card for heat pump manager	Extension module for heat pump manager for data transfer via Modbus interface protocol to higher-level building management systems.
FG 3115	336620	External temperature sensor with casing	Norm NTC-2 temperature sensor (2.43 kOhm/ 20 °C) according to DIN 44574 with weather proof casing for surface mounting, terminal connection.
RBG WPM	339700	Swimming pool / remote fault indicator relay module	For connecting the swimming pool circulating pump (M19) and the output of a 230 V signal if a system fault occurs (not required for heating and cooling systems).

Special accessories for the heat pump manager WPM 2006



WPM 2006



FA 550



EVL 996-1



EVL ...

Order reference	Item-No.	Short text	Features
FWPM 470	337470	Remote control for the WPM 2006	For connection to the wall-mounted WPM 2006 heat pump manager with integrated display. The remote control has an LC-Display with identical menu navigation, backlighting and an acoustic warning signal. The AWPM 900 connecting line must be ordered separately.
AWPM 900	340210	FWPM 470 connection cable	Heat pump manager / remote control connecting line, 6-core cable. Can also be used as a connecting line for the removable control panel of the WPM 2007. (Length 15 m)
Norm NTC-2	353400	Temperature sensor	For connection to the wall-mounted WPM 2006 heat pump manager with integrated display. Can be used as a strap-on sensor for mixed heating circuits, as a flow or cylinder sensor for the bivalent-renewable operating mode, as a hot water and room temperature sensor (for installation in on-site wall casing), standard NTC-2 sensor according to DIN 44574, diameter of 6 mm, connection cable 6m.
FA 550	338550	Strap-on sensor	Temperature sensor for the heating circuit or hot water cylinder with 6 m connection cable, diameter 9.7 mm. Connection to the heat pump manager (standard NTC sensor according to DIN 44574).
EVL 996-1	321990	10m control line	Coded connecting line between the heat pump manager (heating controller) and an air-to-water heat pump installed outdoors. Wired ready for use with non-confusable plug connections (ductwork at least 70 mm).
EVL 997-1	322000	20m control line	
EVL 998-1	322010	30m control line	

Special accessories for the heat pump manager WPM 2007



WPM 2007



MS PGD

Order reference	Item-No.	Short text	Features
NTC-10	353390	Temperature sensor NTC-10	For connection to the WPM 2007 heat pump manager with removable control panel. Can be used as a strap-on sensor for mixed heating circuits, as a flow or cylinder sensor for the bivalent-renewable operating mode, as a hot water and room temperature sensor (for installation in on-site wall casing), diameter of 6 mm, connection cable 6 m.
MS PGD	353810	Wall mounting set MS PGD	For using the WPM 2007's removable control panel as a remote control or for installation at an optimum operating height. Consists of plastic frames for wall mounting, incl. fixing material, 6 m connecting cable and brown red plastic covers for the design screen.

Heat pump module – indoor air as a heat source

Air-to-water heat pump

Max. flow temp. for heating 70 °C

for utilisation of waste heat



LI 2M

A heat pump module for utilisation of waste heat; integrated radial fan, exhaust and outgoing air stubs for optional connection of a duct system DN 160 (maximum length 10m), infinitely variable return set temperature. The transfer of the generated heat output is done via an integrated stainless steel heat exchanger (external circulating pump required). Heat output approx. 2 kW at an exhaust air temperature of 25°C and a heating water outlet temperature of 35°C.

Connection heating ½"; Refrigerant R134a; Lower operating limit heat source (heating operation) -2 °C; Upper operating limit heat source (heating operation) 40 °C;

Order reference	Item-No.	Heat output with 1 compressor / COP	Connection voltage	Width x Height x Depth mm	Weight kg
LI 2M	356330	2.3 (3.0)	1/N/PE ~230 V, 50 Hz	400 x 725 x 500	54

Heat output and COP at A35/W45 (A35 = air intake temp. +35 °C, W45 = heating water outlet temp. +45 °C)

Hot water heat pump with foil cladding

Hot-water temp. up to max. 60 °C

and air duct connection

Lower operating limit intake air 8 °C
Upper operating limit intake air 35 °C



BWP 30H

Insulated foil cladding, radial fan, exhaust air stub and outgoing air stub for optional connection of a duct system with a maximum length of 10 m, infinitely adjustable hot water temperature for total volume of 300 l, switches for heat pump and heating element, steel cylinder enamelled acc. to DIN 4753, protection anode against corrosion, medium heat pump output 1870 W, hot water temperature selectable during heat pump operation (23° to 60 °C), heating up to 65 °C with standard heating element (1.5 kW) possible, can be either manually controlled or, e.g., via an external timer, refrigerant designation R134A, colour white (similar to RAL 9003).

Order reference	Item-No.	Connection voltage	COP according to EN 255 for heating up from 15 °C to 45 °C	Width x Height x Depth mm	Weight kg
BWP 30H	351960	1/N/PE ~230 V, 50 Hz	3.5	660 x 1695 x 660	110

Nipple size DN 160, connection with pipe DN 160, air pipe IFR 165 or bush MFE 16

The maximum hot water temperature reachable and the lower operating limit vary by +/- 2K due to component tolerances!

In order to prevent an air short circuit, a room height of approx. 2.5 m is necessary for free blowing-out mounting. The minimum height of the installation room is reduced to approx. 2m by using a pipe bend on the air outlet side or by using a connection to an air duct system.

Hot water heat pump with foil cladding

Hot-water temp. up to max. 60 °C

Air duct connection and additional heat exchanger

Lower operating limit intake air 8 °C
Upper operating limit intake air 35 °C



BWP 30HLW

Insulated foil cladding, radial fan, exhaust air stub and outgoing air stub for optional connection of a duct system with a maximum length of 10 m, infinitely adjustable hot water temperature for usable capacity of 290 l, switches for heat pump, heating element and second heat generator, steel cylinder enamelled acc. to DIN 4753, protection anode against corrosion, medium heat pump output 1870 W, hot water temperature selectable during heat pump operation (23° to 60 °C), heating up to 65 °C with standard heating element (1.5 kW) possible, can be either manually controlled or, e.g., via an external timer, integrated additional heat exchanger (approx. 1.45 m²) for connecting an external heat generator (e.g., boiler or solar installation), cladding tube for external cylinder sensor, connection option for an external block of heat pump operation, relay output for controlling an external loading pump, refrigerant designation R 134a, colour white (similar to RAL 9003).

Order reference	Item-No.	Connection voltage	COP according to EN 255 for heating up from 15 °C to 45 °C	Width x Height x Depth mm	Weight kg
BWP 30HLW	351380	1/N/PE ~230 V, 50 Hz	3.5	660 x 1695 x 660	125

Nipple size DN 160, connection with pipe DN 160, air pipe IFR 165 or bush MFE 16

The maximum hot water temperature reachable and the lower operating limit vary by ± 2K due to component tolerances!

In order to prevent an air short circuit, a room height of approx. 2.5 m is necessary for free blowing-out mounting. The minimum height of the installation room is reduced to approx. 2m by using a pipe bend on the air outlet side or by using a connection to an air duct system.

Hot water heat pump – indoor air as a heat source

Hot water heat pump with sheet-steel casing

Hot-water temp. up to max. 60 °C
Lower operating limit intake air 8 °C
Upper operating limit intake air 35 °C

Air duct connection and additional heat exchanger

High-grade painted sheet steel casing, radial fan, exhaust air stub and outgoing air stub for optional connection of a duct system with a maximum length of 10 m, infinitely adjustable hot water temperature for total volume of 290 l, switches for heat pump, heating element and second heat generator, steel cylinder enamelled acc. to DIN 4753, protection anode against corrosion, medium heat pump output 1870 W, hot water temperature selectable during heat pump operation (23° to 60 °C), heating up to 65 °C with standard heating element (1.5 kW) possible, can be either manually controlled or, e.g., via an external timer, integrated additional heat exchanger (approx. 1.45 m²) for connecting an external heat generator (e.g., boiler or solar installation), cladding tube for external cylinder sensor, connection option for an external block of heat pump operation, relay output for controlling an external loading pump, refrigerant designation R 134a, colour white (similar to RAL 9003).



AWP 30HLW

Order reference	Item-No.	Connection voltage	COP according to EN 255 for heating up from 15 °C to 45 °C	Width x Height x Depth mm	Weight kg
AWP 30HLW	351390	1/N/PE ~230 V, 50 Hz	3.5	650 x 1700 x 660	175

Nipple size DN 160, connection with pipe DN 160, air pipe IFR 165 or bush MFE 16

The maximum hot water temperature reachable and the lower operating limit vary by +/- 2K due to component tolerances!

In order to prevent an air short circuit, a room height of approx. 2.5 m is necessary for free blowing-out mounting. The minimum height of the installation room is reduced to approx. 2m by using a pipe bend on the air outlet side or by using a connection to an air duct system.

Special accessories for hot water heat pumps

Order reference	Item-No.	Short text	Features	Weight kg
SVK 852	326660	Safety valve combination	For the cold water connection of drinking water cylinders to the supply network according to DIN 1988; connection 1" external thread.	1
IFR 165	336960	Isoflex hose DN 160	Flexible, perforated aluminium hose with meshed wire inlay, protective foil, 25 mm insulation, external vapour block foil, inner diameter 160 mm, length 10 m, nominal volume flow: 220 m ³ /h.	15
BGN 16-90	341340	Bend (160mm, 90°)	Bend, pressed, smooth sheet steel, acc. to DIN 24145, lip seal.	1.0
TES 16-1	341370	160 mm telephony sound damper flex	Telephony sound damper with aluminium end caps, two-layer aluminium on inside and outside, flexible (smallest bend radius = 630 mm), 25 mm sound-absorbing packing, pipe mounting Outer diameter 210 mm.	1.4
MFE 16	341320	Sleeve DN 160	Installation between moulded parts DN 160, smooth sheet steel, acc. to DIN 24145.	0.2



IFR 165



BGN ...



TES ...

MFE ...

Solar package

Solar package to supplement the hot water heat pump with integrated additional internal heat exchanger (BWP 30HLW, AWP 30HLW).

Order reference	Item-No.	Features
SP CUPU 4	356510	Consisting of two collectors SOLK 1204 AM, mounting set for vertical mounting onto the roof (pantiled roof) and connection of both collectors (SOLK 120 ADG and SOLK 120 ADE), solar controller (SOLCU 1), solar station (SOLPU 1), expansion vessel (8 l, SOLEV 8) and connection set for expansion vessel (SOLVK 1).

Connecting material between the collector field, the solar station and the cylinder as well as the solar liquid are not part of the solar package

Solar collectors



SOLK 1204 AM

High-performance flat plate collector for mounting onto roofs and flat roofs or free-standing installation, laser-welded full surface absorber with highly-selective coating, universally applicable collector with meander pipe and two collection manifolds can be used for larger surface areas as well as for single mounting. The four connections (two each alongside) make a fast and hydraulically safe mounting possible using compression-tube fittings. Delivery includes pre-mixed SOLHT 20 solar fluid and provides the required anti-freeze. The collector casing consists of anthracite coloured powder-coated aluminium. The structured solar safety glass protects the collector reliably.

Nominal volume 1.7 l; Connections 22 mm; Nominal flow 50 - 120 l/h; Pressure drop 28 Pa; Stagnation temperature 205 °C; Permissible operating overpressure 10 bar; Efficiency level 78 %

Order reference	Item-No.	Aperture surface m ²	Gross surface m ²	Width x Height x Depth mm	Weight kg
SOLK 1204 AM	356190	2,0	2.15	1870 x 1150 x 95	39

Installation accessories solar collectors



SOLK 120 ADG



SOLK 120 FAG

Order reference	Item-No.	Short text	Features
SOLK 120 ADG	356200	On-roof system	Mounting set for the vertical roof mounting (pantiled roof) of a collector. Easy installation using stop anchors and rails to hold the collector safely above the roof surface. Connection set additionally includes the components for the hydraulic integration of the collector along with compression-tube fittings, elbow bends and flat gaskets and 2 insulated stainless steel corrugated tubes (length approx. 0.8 m)
SOLK 120 ADE	356400	Supplementary set for on-roof system	Mounting set for the vertical roof mounting (pantiled roof) of an additional collector. Easy installation using stop anchors and rails to hold the collector safely above the roof surface. To be used exclusively as a supplementary set to the basic set SOLK 120 ADG. Connection set additionally includes the components for the hydraulic, parallel integration of the neighbouring collector.
SOLK 120 ADK	356540	Installation set for on-roof system with compensation set	Mounting set for the vertical roof mounting (pantiled roof) of an additional collector. Easy installation using stop anchors and rails to hold the collector safely above the roof surface. To be used exclusively as a supplementary set to the basic set SOLK 120 ADG. Connection set additionally includes the components for the hydraulic, parallel integration of the neighbouring collector. Corrugated tube hose set to compensate for the extension with more than three collectors.
SOLK 120 FAG	356210	Rack installation system	Rack installation system with variable angle from 45° to 60° of a collectors.
SOLK 120 FAE	356410	Supplementary set for rack installation system	Supplementary set for the additional installation of a collector, supplementary to the basic set SOLK 120 FAG, rack installation system with a variable angle from 45° to 60° of a collector
SOLK 120 FAK	356550	Installation set for free-standing system with compensation set	Rack installation system with variable angle from 45° to 60° of a collectors. Corrugated tube hose set to compensate for the extension with more than three collectors.
SOLFH 15	356320	Connection set	Pre-insulated pipe system for connecting a solar collector to the hot water cylinder and the solar station. The system consists of two pre-insulated stainless steel corrugated tubes DN 16 each 15 m long with integrated sensor leads
SOLAS 1	356290	De-aerator	De-aerator and quick-vent valve for installation in closed solar energy systems

Air-to-water (indoor)
 Air-to-water (outdoor)
 Heating/Cooling
 Brine-to-water
 Water-to-water
 Accessories
 DHW
 Ventilation

Solar controller and solar station



SOLCU 1



SOLPU 1

Order reference	Item-No.	Short text	Features
SOLCU 1	356220	Solar controller	Solar controller for the monitoring and control of thermal solar energy systems with one collector field and one cylinder, speed-controlled control of the solar circuit pump, visual display of the operating status and the complete solar circuit, storage of minimum / maximum temperature of the collector and cylinder, cylinder temperature limiting, holiday mode, operating hour recording for the solar circuit pump, tube collector function and antifreeze function. Delivery includes 3 temperature sensors (Pt 1000) for measuring the collector temperature and the lower cylinder temperature and for displaying the upper cylinder temperature.
SOLPU 1	356230	Solar station	Two-cable solar station pre-mounted as a connecting element between the collector field and the hot water cylinder with integrated heat exchanger for solar fluid, consisting of a 3-level standard pump (WILO-STAR ST 20/6), all-metal dial thermometer in flow and return flow, flow volume display 1-20 l/min, safety valve 6 bar, manometer 0-6 bar high-temperature proof, gravity control in flow and return flow, integrated air scoop for continuous air extraction during operation, integrated purging and filling unit, elastic insulation casing (EPP), wall mounting with sheet-steel wall bracket, connections 3/4" flat sealing.

Solar expansion vessels



SOLEV ..



SOLVK 1

Order reference	Item-No.	Nominal volume l	Features
SOLEV 8	356240	8	Diaphragm expansion vessel for solar energy systems, short-time temperature resistance up to 100 °C
SOLEV 18	356250	18	
SOLVK 1	356280		Connection set 3/4" for expansion vessel, stainless steel corrugated tube 3/4", internal thread - internal thread x 500 mm, wall bracket with mounting material, for max. vessel diameter of 440 mm

Solar accessories

Order reference	Item-No.	Short text	Features
SOLHT 20	356260	Heat carrier fluid	Ready-to-use heat carrier fluid (20 l) for solar energy systems, propylene glycol-based, with corrosion protection and antifreeze capacity down to -28 °C.
SOLH TTK	356270	Test set	Test set for solar fluid, consisting of a refractometer for testing antifreeze and pH indicator rods for the corrosion protection test.

Purging and filling station



SOLFFP

Order reference	Item-No.	Short text	Features
SOL FFP	356300	Purging and filling station	Purging and filling station for solar energy systems and for the brine circuits of heat pumps (supplementary set SOL FHP required). Powerful pump allows solar energy systems and brine circuits to be filled quickly with heat carrier fluid. Mounted on an easily transportable cart with pipe holder containing a high temperature resistant hose, a canister with stop cock and a fine filter for filtering out deposits (canister can be removed easily for cleaning).
SOL FHP	356310	Supplementary set for filling station	Supplementary set to SOL-FFP for filling the brine circuit of heat pumps. Two external containers, 150 l each with ball valve and connecting accessories.

Delivery time on request

Local domestic ventilation with passive heat recovery

Local ventilation unit with heat recovery



DL 60 WR

Domestic ventilation unit for de-aeration and ventilation of individual rooms

- ideal for the modernisation of old buildings, since no air distribution system must be installed
- dissipates used, humid room air to the outside and uses the heat in this air to heat up the supplied fresh air
- Heat recovery from the extracted air by means of a cross current heat exchanger
- Up to 75% of the heat is recovered
- extremely low-noise, only 23.7 dB (A) at 17 m³/h
- electrostatic filter G4 for fresh/ exhaust air, also available as F7 filter
- Wired remote control (essential for operation), available either as flush-mounted or surface-mounted version (FDL 60 U/A must be ordered separately)

Order reference	Item-No.	Features
DL 60 WR	356340	Local domestic ventilation for the de-aeration and ventilation of individual rooms up to ca. 30 / 45 m ² (air exchange 0.6 / 0.4 at 45m ³ /h); volume flow adjustable in 4 levels 17 / 30 / 45 / 60 m ³ /h. The scope of supply includes wall mounting sleeve. Measurements for wall mounting (DO x L) 350 x 346.5 mm; internal cover white plastic (RAL 9016), can be painted on request, external wall cover stainless steel. Electrical connection 1/N/PE 230 V AC / 50 Hz.

Essential accessory for DL 60WR

Wired remote control



FDL 60 A

- ON/OFF switch
- Fan operation adjustable in 4 levels (17 / 30 / 45 / 60 m³/h)
- fresh-air only/exhaust air-only operation can be set
- Filter change indication with adjustable time period (2–6 months)
- Malfunction indicator in case of fan motor failure.

Order reference	Item-No.	Short text	Features
FDL 60 U	356350	Wired remote control for flush-mounting	Connection cable with plug to the device (3 m) included in the scope of supply, can be extended using a standard CAT cable.
FDL 60 A	356360	Wired remote control for surface-mounting	

Accessory for DL 60WR

Order reference	Item-No.	Short text	Features
ARDL 60	356390	External stainless steel frame	Required for walls lesser than 340 mm thick for dressing the projecting end on the outside wall. Individually adjustable using interlinked sliding components (delivery time on request)
VRDL 60	356420	Extension ring	Plastic ring (length 111 mm) with separating web for fresh air and exhaust air, which is connected to the available wall openings and can be shortened as required; necessary for wall thicknesses greater than 360 mm; for wall thicknesses greater than 460 mm, several plastic rings must be ordered.

Filter set for DL 60WR



EFDL 60 G4

Order reference	Item-No.	Features
EFDL 60 G4	356370	Replacement filter G4 for fresh and exhaust air (packaging unit 2 items)
EFDL 60 F7	356380	Replacement filter F7 (pollen filter) for fresh and exhaust air (packaging unit 1)

Central domestic ventilation with active heat recovery

Compact domestic ventilation unit (exhaust air) with central domestic hot water preparation

Hot-water temp. up to max. 60 °C
Lower operating limit intake air 15 °C
Upper operating limit intake air 30 °C

Compact domestic ventilation unit for 2-pipe system with a central exhaust air system and local external air flow via external wall valves (accessories), nominal exhaust air volume flow 230 m³/h, active heat recovery via heat pump module for domestic hot water preparation, exhaust air stub and outgoing air stub (2 x DN 160) for connecting a pipe duct system (special accessories: ALS D, ALS B). Wired remote control for ventilation operation (3 levels, 230 / 185 / 120 m³/h), infinitely adjustable hot water temperature for total volume of 290 l, (23 °C to 60 °C), control switches for heat pump, heating element and second heat generator, steel cylinder enamelled acc. to DIN 4753, protection anode against corrosion, medium heat pump output 1550 W, heating up to 65 °C with standard heating element (1.5 kW) possible, can be either manually controlled or, e.g., via an external timer, integrated additional heat exchanger (approx. 1.45 m²) for connecting an external heat generator (e.g., boiler or solar installation), cladding tube for external cylinder sensor, relay output for controlling an external loading pump, refrigerant designation R134a, sheet steel casing, colour: white (similar to RAL 9003).



LWP 300W

Order reference	Item-No.	Connection voltage	COP according to EN 255 for heating up from 15 °C to 45 °C	Width x Height x Depth mm	Weight kg
LWP 300W	352220	1/N/PE ~230V, 50 Hz	3.4	650 x 1700 x 660	175

The maximum hot water temperature reachable and the lower operating limit vary by ± 2K due to component tolerances!

Ventilation package for LWP 300W

Exhaust air distribution system consisting of: 6-way air manifold, 1 DN 160 Isoflex hose (10 m), 1 external wall grid, 1 flush-mounted box, 6 exhaust air valves compl. incl. filter, 3 constant volume flow controllers (15/30m³/h)
Fresh air system consisting of: 6 VTK 100 fresh air unit for external walls (thermostat controlled).

Wall/ceiling (ALS D)

10 x DN 80 Isoflex hose (10 m each), 4 hose joints, installation material.

Wall/ceiling/floor (ALS B)

4 x DN 80 Isoflex hose (10 m each), 4 DN 80 duct connecting elements, 6 Quadroflex pipes (5 m each) to be installed in the floor, 4 Quadroflex connecting elements, 4 couplings, 4 diverters, 2 hose joints, installation material.

Order reference	Item-No.	Short text	Features
ALS D	341000	Wall / ceiling	Fresh air two-pipe system for installation in walls and ceilings
ALS B	341010	Wall / ceiling / floor	Fresh air two-pipe system for installation in walls, ceilings and floors.

Supplementary components for air distribution LWP 300 W

Order reference	Item-No.	Short text	Features
VTK 100	342940	VTK 100 fresh air unit for external walls	Fresh air valve for external wall installation, self-regulating disk valve - based on external temperature (current-free thermostat), wall duct DN 100 mm (wall opening D = 105 mm), telescopic wall duct up to 280 mm wall thickness, rain guard, G3 fresh air filter.
FR 100	343400	FR 100 extension tube	Extension tube for wall opening for VTK 100 external wall valve, length L = 150 mm, diameter D = 100 mm.
MB VV 2	343420	2 mm spacer ring for VTK 100	Spacer ring for VTK 100 fresh air external wall valves to ensure that there is a minimum gap at the valve head. To compensate for valve play, a 2 mm spacer ring must be ordered in addition.
MB VV 4	343430	4 mm spacer ring for VTK 100	
EFV 100	342950	Replacement filter element for VTK 100	G3 replacement filter element for VTK 100 fresh air external wall valves.
VS 100	343410	VS 100 wind protection	Wind protection for fresh air external wall valves, used instead of the standard rain guard external wall grid if unit is exposed to strong winds.
EFA	337130	G3 exhaust air filter for AVS 08	Replacement exhaust air filter (for exhaust air valves), (package contents: 25 items)



FR 100



VS 100



EFV 100

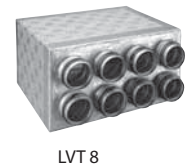
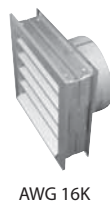


MB VV 2/4

Supplementary components for air distribution



Order reference	Item-No.	Short text	Features
IFR 165	336960	Isoflex hose DN 160	Flexible, perforated aluminium hose with meshed wire inlay, protective foil, 25 mm insulation, external vapour block foil, inner diameter 160 mm, length 10 m, nominal volume flow: 220 m ³ /h.
NPE 16	341060	Nipple DN 160	DN160 hose joint, smooth sheet steel, acc. to DIN 24145, lip seal.
IFR 0810	336970	Isoflex hose DN 80	Flexible, perforated aluminium hose with meshed wire inlay, protective foil, 25-mm insulation, external vapour block foil, inner diameter 82 mm, length 10 m, max. volume flow: 30 m ³ /h.
NPE 08	337060	Nipple DN 80	Hose joint DN 80 with lip seal for Isoflex hoses DN 80.
QFR 85	336990	Quadroflex pipe	Flexible, rectangular steel pipe for installation under the screed. Width 80 mm, height 50 mm; Max. volume flow: 30 m ³ /h.
VQF 85	337000	Quadroflex connector	Hose joint for 80 x 50 mm Quadroflex pipes.
UQF 85	337010	Reducer DN 80 to Quadroflex	Reducer (straight transition) from 80 x 50 mm Quadroflex pipe to Isoflex hose DN 80, made of stainless steel.
UML 90	341070	90° elbow	90° elbow from 80 x 50 mm Quadroflex pipe to Isoflex hose DN 80, made of stainless steel.
AVS 08	336920	Exhaust air valve DN 80	Exhaust air valve for NW 80 mm valve collar, white plastic. Max. volume flow: 30 m ³ /h.
ZVB 08	337040	Fresh air valve DN 80	Fresh air valve for NW 80 mm valve collar, white plastic. Max. volume flow: 30 m ³ /h.
EBM 80	337090	Built-in sleeve for valve DN 80	Built-in sleeve for fresh air and exhaust air valve NW 80, plastic.
AWG 16K	353170	Aluminium external wall grid with wall mounting box	External wall grid, rectangular, with aluminium water deflectors, flush-mounted box with DN160 pipe connection; max. volume flow: 220 m ³ /h.
SPA 10	341090	Tightening strap K	Nylon tightening strap for pipe connections up to a diameter of 100 mm (packaging unit 100 items).
SPA 20	341100	Tightening strap L	Nylon tightening strap for pipe connections up to a diameter of 200 mm (packaging unit 10 items).
ALU 50	341080	Aluminium adhesive tape	Aluminium adhesive tape, e.g., to seal the vapour block foil, 50 mm x 50 m
DHB 16	341130	Roof cover DN 160	Roof cover for pointed roof, incl. rolled lead storage, pipe connection DN 160. Max. volume flow: 220 m ³ /h; colour: black.
LVT 8	341120	8-way air manifold	Air manifold, insulated with pipe connection 8 x DN 80 and 1 x DN 160. Max. volume flow: 220 m ³ /h.
KVR 15	337100	Constant volume flow controllers 15 m ³ /h	Volume flow controller (automatic) for installation in NW 80 mm pipe
KVR 30	337110	Constant volume flow controllers 30 m ³ /h	
KVR 45	337120	Constant volume flow controllers 45 m ³ /h	



AVS 08

Central domestic ventilation unit

with automatic bypass circuit



ZL 270EO-R/L

Domestic ventilation unit for de-aeration and ventilation of living quarters of up to approx. 120 m² / 180 m² (0.6 / 0.4 air exchange), 3 fan levels (110/175/270 m³/h) can be selected using a wired remote control, heating of incoming fresh air using heat recovery from the exhaust air using a cross counter current heat exchanger, wall mounting. Powder-coated sheet-steel casing colour white / white aluminium.

Optional remote control device (in standard or comfort design) must be ordered separately

- 90 % of the heat is recovered
- Efficient direct current ventilators with electronic constant volume flow regulation
- Integrated bypass with optimised outdoor and room temperature control
- Automatic defrosting using exhaust heat
- Switching off of the exhaust air ventilator in the case of a fault in the fresh air ventilator
- Easily replaceable filter G4 for exhaust air, fresh air and bypass
- DIBT certification

Order reference	Item-No.	Short text	Features	Width x Height x Depth mm	Weight kg
ZL 270EO-R	352130	Connections at the top for preferred installation in basement or utility rooms	Pipe connection for outside air: on the left front Pipe connection for exhaust air: on the left back Pipe connection for outgoing air: on the right front Pipe connection for fresh air: on the right back	692 x 742 x 454	38
ZL 270EZ-R	352140	Connections at the bottom for fresh air and exhaust for preferred installation in the attic	Pipe connection for outside air: on the left top Pipe connection for exhaust air: on the bottom left Pipe connection for outgoing air: on the top right Pipe connection for fresh air: on the bottom right		36

Versions ZL 270EO/EZ-L with changed air circuit available on request!

ZL 270 with rotated air circuit



ZL 270EO-R/L

Order reference	Item-No.	Short text	Features	Width x Height x Depth mm	Weight kg
ZL 270EO-L	352150	Domestic ventilation unit with changed air circuit	Pipe connection for outside air: on the right back Pipe connection for exhaust air: on the right front Pipe connection for outgoing air on the left back Pipe connection for fresh air: on the left front	692 x 742 x 454	38
ZL 270EZ-L	352160	Connections at the bottom for fresh air and exhaust for preferred installation in the attic	Pipe connection for outside air: on the top right Pipe connection for exhaust air on the bottom right Pipe connection for outgoing air: on the top left Pipe connection for fresh air: on the bottom left		36

Delivery time on request

Essential accessories for ZL 270EO/EZ-R(L)

Wired remote control



PFB 03



KFB 03

Order reference	Item-No.	Short text	Features	Width x Height x Depth mm	Weight kg
PFB 03	343350	Standard remote control unit	Standard remote control unit (key component) for ON/OFF functions and three fan levels, 1/N/PE~230 V, 50 Hz connection, wall mounting (surface mounting using flush box), 5-pole connecting cable to ventilation unit (1.5 mm ²).	74 x 74 x 24	0.6
KFB 03	343360	Comfort remote control unit	Comfort remote control unit (alternative to standard remote control PFB 03), timer for automatic operation, ventilation, selector switch (OFF, normal operation, lower operation, automatic, party), filter change indication (timer), with relay module, 1/N/PE~230 V, 50 Hz connection, 5-pole connecting cable to ventilation unit (1.5 mm ²).	162 x 80 x 45	0.8

Accessories filter box and und replacement filter



LFB 160



ETF 5/7

Order reference	Item-No.	For device type	Short text	Features
LFB 160	343370		Filter box for pocket filters	Outside air filter box for pocket filters, optionally for F5 fine filter or F7 fine filter ("pollen filter"), air duct connection 2 x DN 160.
ETF 5	337140	LFB 16(0)	Outside air filter, Class F5	Outside air pocket filter, filter class F5, (package contains 2 items).
ETF 7	337150		Outside air filter, Class F7 ("pollen filter")	Outside air pocket filter, filter class F7, ("pollen filter").

Replacement filter for domestic ventilation unit ZL 270



EFG 270

Order reference	Item-No.	For device type	Short text	Features
EFG 270	343380	ZL 270	Replacement filter for ZL 270	G4 replacement filter, outside and exhaust air, for ventilation unit (package contains 2 items)
EFB 270-RL	352170	ZL 270EO-R/L ZL 270EZ-R/L	Replacement filter for bypass	G4 replacement filter for bypass (package contains 1 item)
EFB 270	343390	ZL 270EO ZL 270EZ		

Replacement filter for domestic ventilation unit ZWP



ZFT

Order reference	Item-No.	For device type	Short text	Features
EFS 26	348150	ZWP(K) 260S(1)	Replacement filter	Replacement filter for fresh and exhaust air, filter class F5, package contains 10 items, can be used in combination with aluminium filter frame (standard with devices manufactured after 8401) Caution: 2 aluminium filter frames must be ordered separately once for devices before MD 8401!
EFS 27/55	348140	ZWP(K) 270L(1) ZWP(K) 550L(1)		Replacement filter for fresh and exhaust air, filter class F5, package contains 10 items, can be used in combination with aluminium filter frame (standard with devices manufactured after 8401)
ZFT 1L/10	334190	ZWP 200L		Replacement filter for fresh and exhaust air, filter class F5 (package contains 10 items).
FR 26	348170	ZWP(K) 260S(1)	Filter frame	Filter frame, aluminium, for fresh air and exhaust air filters; package contents: 2 items.
FR 27/55	348160	ZWP(K) 270L(1) ZWP(K) 550L(1)		

Caution: 2 aluminium filter frames must be ordered separately once for devices before MD 8401!

Air-to-water (indoor)
 Air-to-water (outdoor)
 Heating/Cooling
 Brine-to-water
 Water-to-water
 Accessories
 DHW
 Ventilation

SPR



Spiral-wound duct

Spiral-wound duct, zinc-plated smooth sheet steel, acc. to DIN 24145.

Order reference	Item-No.	Nominal width	Length mm	Weight kg
SPR 10-3	334330	DN 100	3000	5.4
SPR 12-3	334340	DN 125		6.6
SPR 14-3	334350	DN 140		7.2
SPR 16-3	341240	DN 160		8.1
SPR 20-3	334360	DN 200		10.2

TST sym.



Tee joint, symmetrical, 90°

Tee joint symmetrical, 90°, zinc-plated smooth sheet steel, acc. to DIN 24145, lip seal.

Order reference	Item-No.	Nominal width	Length mm	Weight kg
TST 10-10	334370	DN 100/100	151	0.5
TST 12-10	334380	DN 125/100	184	0.6
TST 12-12	334390	DN 125/125		0.7
TST 14-10	334400	DN 140/100	175	0.6
TST 14-12	334410	DN 140/125	215	0.7
TST 14-14	334420	DN 140/140	230	
TST 16-12	341260	DN 160/125	229	0.8
TST 16-14	350430	DN 160/140	230	
TST 16-16	341250	DN 160/160	204	
TST 20-10	334430	DN 200/100	175	1.0
TST 20-12	334440	DN 200/125	215	
TST 20-14	334450	DN 200/140	230	
TST 20-20	334460	DN 200/200	281	

TST asym.



Tee joint, asymmetrical, 90°

Tee joint, asymmetrical, 90°, zinc-plated smooth sheet steel, acc. to DIN 24145, lip seal

Order reference	Item-No.	Nominal width	Nominal width of the branch mm	Length mm	Height of the branch mm	Weight kg
TST 12-10-10	334470	DN 125/100/100	100	255	78	1
TST 14-10-10	334480	DN 140/100/100		275	85	1.1
TST 14-12-10	334490	DN 140/125/100		240		
TST 14-12-12	334500	DN 140/125/125	125	265	90	1.2
TST 20-14-10	334510	DN 200/140/100	100	300	115	1.5
TST 20-14-12	334520	DN 200/140/125	125	325	120	1.7
TST 20-14-14	334530	DN 200/140/140	140	350		1.8

RDU ...



Reduction by means of a moulded part

Reduction using a moulded part, zinc-plated smooth sheet steel, acc. to DIN 24145, outgoing side with lip seal.

Order reference	Item-No.	Nominal width	Length mm	Weight kg
RDU 12-10	334540	DN 125/100	62	0.2
RDU 16-12	341270	DN 160/125	67	
RDU 20-10	334550	DN 200/100	98	0.4
RDU 20-12	334560	DN 200/125	86	
RDU 20-16	341280	DN 200/160	73	

Reducer – symmetrical

Reduction, symmetrical, zinc-plated smooth sheet steel, acc. to DIN 24145, lip seal.



RDU sym.

Order reference	Item-No.	Nominal width	Length mm	Weight kg
RDU 14-10 S	334570	DN 140/100	85	0.3
RDU 14-12 S	334580	DN 140/125	51	
RDU 16-10 S	342920	DN 160/100	112	0.4
RDU 16-12 S	341290	DN 160/125	78	
RDU 16-14 S	350440	DN 160/140	57	0.5
RDU 20-14 S	334590	DN 200/140	112	
RDU 20-16 S	341300	DN 200/160	85	

Reducer – asymmetrical

Reduction, asymmetrical, used primarily for visible air duct mounting, zinc-plated smooth sheet steel, acc. to DIN 24145, lip seal.



RDU asym.

Order reference	Item-No.	Nominal width	Length mm	Weight kg
RDU 12-10 US	334600	DN 125/100	64	0.3
RDU 14-10 US	334610	DN 140/100	85	
RDU 14-12 US	334620	DN 140/125	51	
RDU 20-10 US	334630	DN 200/100	167	0.6
RDU 20-12 US	334640	DN 200/125	133	
RDU 20-14 US	334650	DN 200/140	112	0.5
RDU 20-16 US	341310	DN 200/160	85	

Nipple

DN 100 hose joint, smooth sheet steel, acc. to DIN 24145, lip seal.



NPE ...

Order reference	Item-No.	Nominal width	Length mm	Weight kg
NPE 10	334660	DN 100	8	0.1
NPE 12	334670	DN 125		0.2
NPE 14	334680	DN 140		
NPE 16	341060	DN 160	10	0.3
NPE 20	334690	DN 200		

Bush

Installation between moulded parts, smooth sheet steel, acc. to DIN 24145.



MFE ...

Order reference	Item-No.	Nominal width	Length mm	Weight kg
MFE 10	334700	DN 100	90	0.1
MFE 12	334710	DN 125		0.2
MFE 14	334720	DN 140		
MFE 16	341320	DN 160		
MFE 20	334730	DN 200		0.3

Air-to-water (indoor)



BGN ...

Bend (d1, angle°)

Bend, pressed, smooth sheet steel, acc. to DIN 24145, lip seal.

Order reference	Item-No.	Nominal width	Length mm	Bracket °	Weight kg
BGN 10-90	334740	DN 100	100	90	0.4
BGN 10-45	334750		43	45	0.3
BGN 12-90	334760	DN 125	125	90	0.6
BGN 12-45	334770		52	45	0.4
BGN 14-90	334780	DN 140	140	90	0.8
BGN 14-45	334790		56	45	0.4
BGN 16-90	341340	DN 160	160	90	1.0
BGN 16-45	341350		66	45	0.6
BGN 20-90	334800	DN 200	200	90	1.5
BGN 20-45	334810		83	45	0.9

Air-to-water (outdoor)

Heating/Cooling



EDL ...

End cover

End cover for being inserted into hose, smooth sheet steel, acc. to DIN 24145, lip seal.

Order reference	Item-No.	Nominal width	Length mm	Weight kg
EDL 10	334820	DN 100	10	0.1
EDL 12	334830	DN 125		
EDL 14	334840	DN 140		
EDL 16	341360	DN 160		0.2
EDL 20	334850	DN 200		0.3

Brine-to-water

Flexible pipes

Flexible pipe, 2-layer aluminium, compressed for transport (1200 mm).

Order reference	Item-No.	Nominal width	Length mm	Weight kg
FLR 10-5	334860	DN 100	5000	1.4
FLR 12-5	334870	DN 125		1.7
FLR 14-5	334880	DN 140		1.8
FLR 16-5	341330	DN 160		2.1
FLR 20-5	334890	DN 200		2.7

Water-to-water



FLR ...

Accessories

Insulating tube

Flexible insulating hose to slip over spiral-wound duct, for thermal insulation and prevention of condensation when routed within the thermal envelope, inner hose of PE material, outer hose of polyester / aluminium laminate, 50 mm insulation, delivery form: roll.

Order reference	Item-No.	Nominal width	Length mm
ISH 10-4	334900	über 100	4000
ISH 12-4	334910	über 125	
ISH 14-4	334920	über 140	
ISH 16-4	342930	über 160	
ISH 20-4	334930	über 200	

DHW

Ventilation

Fresh air grid



VR ...

Ventilation grid for wall mounting with pipe guard, with holes in the frame for screw mounting.

Order reference	Item-No.	Nominal width	
VR 12	341390	DN 125	
VR 16	341400	DN 160	
VR 20	341410	DN 200	

Sound damper



SDP ...

Sound damper, rigid, 50 mm insulation, smooth sheet steel, acc. to DIN 24145, lip seal.

Order reference	Item-No.	Nominal width	Length mm	Weight kg
SDP 10-6	334980	DN 100	600	3
SDP 12-6	334990	DN 125		4
SDP 14-6	335000	DN 140		5
SDP 16-6	341380	DN 160		6
SDP 20-6	335010	DN 200		7

Telephony sound damper flex



TES ...

Telephony sound damper with aluminium end caps, two-layer aluminium inside and outside, flexible, 25 mm sound-absorbing packing, pipe mounting.

Order reference	Item-No.	Nominal width	Length mm	Weight kg
TES 10-1	334940	DN 100	1000	1.0
TES 12-1	334950	DN 125		1.2
TES 14-1	334960	DN 140		1.4
TES 16-1	341370	DN 160		1.8
TES 20-1	334970	DN 200		

Exhaust air valve



AVS ...

Exhaust air valve, sheet steel, enamelled white.

Order reference	Item-No.	Nominal width	Weight kg
AVS 10	335040	DN 100	0.2
AVS 12	335050	DN 125	

Supply air valve



ZVS ...

Supply air valve, sheet steel, enamelled white.

Order reference	Item-No.	Nominal width	Weight kg
ZVS 10	335080	DN 100	0.3
ZVS 12	335090	DN 125	

Air-to-water (indoor)



REG ...REG ...

Pipe-integrated grid

Pipe-integrated air grid, zinc-plated sheet steel, for exhaust air, with straight gate for volume flow adjustment, spiral-wound duct, DN 160 min.

Order reference	Item-No.	Features	Width x Height mm	Weight kg	
REG 20 A3	335120	Pipe-integrated air grid, zinc-plated sheet steel, for exhaust air, with straight gate for volume flow adjustment, spiral-wound duct, DN 160 min.	325 x 75	1.1	
REG 20 A4	335130		425 x 75	1.4	
REG 20 Z3	335140	Pipe-integrated air grid, zinc-plated sheet steel, for supply air, with diagonal gate for volume flow adjustment, spiral-wound duct, DN 160 min.	325 x 75	1.1	
REG 20 Z4	335150		425 x 75	1.4	

Air-to-water (outdoor)



ABG ...

Air outlet bend

Air outlet bend, 90°, with bird guard, zinc-plated sheet steel, fits into folded spiral-seam duct.

Order reference	Item-No.	Nominal width	
ABG 14	335160	DN 140	
ABG 16	341420	DN 160	
ABG 20	335170	DN 200	

Heating/Cooling

Brine-to-water

Perforated steel ribbon

Perforated ribbon, zinc-plated steel, roll, 0.9 x 16 mm.

Order reference	Item-No.	Width x Height mm	
LBD 10	335180	16 x 0.9	

Water-to-water

Sealing tape

Textile fabric, grey, roll, length 50 m.

Order reference	Item-No.	Width mm	
DBD 50	335190	38	

Accessories



ROS ...

Pipe clamp

2-piece, with rubber inlay, M8 connection thread.

Order reference	Item-No.	Nominal width	Weight kg	
ROS 10	335200	DN 100	0.2	
ROS 12	335210	DN 125		
ROS 14	335220	DN 140		
ROS 16	341430	DN 160	0.3	
ROS 20	335230	DN 200	0.4	

DHW

Ventilation

Storage heaters	Dimplex storage heaters.....	64	Storage heaters
	Accessories	68	
	System components	72	
	Dimplex static storage heaters.....	74	
	PERMATHERM® storage heaters	75	
	Accessories	78	
	System components	81	
Direct heating	Direct heating	82	Direct heaters
	Industrial heaters	88	
	Air curtains	90	
	Hand dryer	92	
	AKO direct heating	93	
	AKO infrared heater	94	
Underfloor heating	Heating mats, heating mats set (Under tile heating mats)	99	Underfloor heating
	Installation accessories		
	Floor heating mats	102	
	Installation accessories		
	Self-regulating electric heating cable.....	104	
	Installation accessories electric heating cable		
Controls	Control and regulation devices for electric heating cables and exterior surface heating.....	105	Controls
	DC charge controls for storage heating systems	106	
	AC charge controls for storage heating systems	107	
	Room temperature controller	108	
	Floor temperature controller.....	111	
Domestic hot water	Instantaneous water heaters.....	114	Domestic hot water appliances
	Compact hot water cylinder	116	
	Wall-mounted cylinder.....	116	
	Floor standing cylinder	118	
	Components for instantaneous water heaters.....	118	
Air conditioner	Split air conditioner.....	120	Air conditioner
	Pre-filled refrigerant pipes		
	Accessories for air conditioners		

ThermoComfort duo-electronic storage heaters

Connection voltage 3/N/PE ~400 V, 50 Hz

Compact design



VFDi...C

- Digital electronic duo charge controller with 2 control inputs for optional connection to DC charge controls (0.91–1.43 V) or to AC charge controls (AC 230 V, % operating time)
- AC control system adjustable from 80% operating time to 37/40% operating time or to 68/70% operating time
- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- 5 selectable switch-off temperatures for charge optimisation
- Positive/negative fault behaviour adjustable on the duo charge controller
- Integrated thermal enable contactor
- Suitable for direct control without heating contactor
- Infinitely variable manual selection of the charge volume for operation without charge control
- Discharging via special accessory wall-mounted or integrated room temperature controller
- High-performance, low-noise radial fan
- Operator controls in the control recess on the right-hand side panel
- Radiator kit for optimised device adaptation to charge type and heat consumption
- A day current supplementary heater can be installed as a special accessory for additional/transitional heating
- Powder-coated sheet-steel casing
- Casing colour **traffic white** (similar to RAL 9016), air outlet grid **birch grey**
- Delivery form: casing, brick bundles and radiator kit
- VDE approval mark

Order reference	Item-No.	Rated power W	Number of brick bundles	Brick bundle type	Size	Width x Height x Depth mm	Weight kg
VFDi 20C/HFi 212	345010	1250	4	Kolli 25	S 20E	626 x 672 x 250	98
VFDi 20C/HFi 216	345020	1600					
VFDi 20C/HFi 220	345030	2000					
VFDi 20C/HFi 227 *	345040	2700					
VFDi 30C/HFi 318	345050	1850	6		S 30E	776 x 672 x 250	137
VFDi 30C/HFi 324	345060	2400					
VFDi 30C/HFi 330	345070	3000					
VFDi 30C/HFi 340 *	345080	4000					
VFDi 40C/HFi 425	345090	2500	8		S 40E	926 x 672 x 250	176
VFDi 40C/HFi 432	345100	3200					
VFDi 40C/HFi 440	345110	4000					
VFDi 40C/HFi 452 *	345120	5200					
VFDi 50C/HFi 540	345130	4000	10		S 50E	1076 x 672 x 250	215
VFDi 50C/HFi 550	345140	5000					
VFDi 50C/HFi 564 *	345150	6400					
VFDi 60C/HFi 648	345160	4800					
VFDi 60C/HFi 660	345170	6000	12	S 60E	1226 x 672 x 250	254	
VFDi 60C/HFi 676 *	345180	7600					
VFDi 70C/HFi 756	345190	5600					
VFDi 70C/HFi 770	345200	7000					
VFDi 70C/HFi 790 *	345210	9000	14	S 70E	1376 x 672 x 250	293	

* for rated charge time $t_c = 5$ and 6 hours

Depth plus 35 mm wall connection

Order reference comprises the casing, the radiator kit and brick bundles

ThermoComfort storage heaters

Connection voltage 3/N/PE ~400 V, 50 Hz

Compact design



VFMi ...C

- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- Thermomechanical charge controller for connection to AC charge control (230 V alternating voltage)
- AC control system 230V AC, 80% operating time
- Infinitely variable manual selection of the charge volume for operation without charge control
- Radiator kit for optimised device adaptation to charge type and heat consumption
- Discharging via special accessory wall-mounted or integrated room temperature controller
- A day current supplementary heater can be installed as a special accessory for additional/transitional heating
- Casing colour **traffic white** (similar to RAL 9016), air outlet grid **birch grey**
- Delivery form: casing, brick bundles and radiator kit
- VDE approval mark

Order reference	Item-No.	Rated power W	Number of brick bundles	Brick bundle type	Size	Width x Height x Depth mm	Weight kg
VFMi 20C/HFi 212	345220	1250	4	Kolli 25	S 20E	626 x 672 x 250	98
VFMi 20C/HFi 216	345230	1600					
VFMi 20C/HFi 220	345240	2000					
VFMi 20C/HFi 227 *	345250	2700					
VFMi 30C/HFi 318	345260	1850	6		S 30E	776 x 672 x 250	137
VFMi 30C/HFi 324	345270	2400					
VFMi 30C/HFi 330	345280	3000					
VFMi 30C/HFi 340 *	345290	4000					
VFMi 40C/HFi 425	345300	2500	8		S 40E	926 x 672 x 250	176
VFMi 40C/HFi 432	345310	3200					
VFMi 40C/HFi 440	345320	4000					
VFMi 40C/HFi 452 *	345330	5200					
VFMi 50C/HFi 540	345340	4000	10		S 50E	1076 x 672 x 250	215
VFMi 50C/HFi 550	345350	5000					
VFMi 50C/HFi 564 *	345360	6400					
VFMi 60C/HFi 648	345370	4800					
VFMi 60C/HFi 660	345380	6000	12		S 60E	1226 x 672 x 250	254
VFMi 60C/HFi 676 *	345390	7600					
VFMi 70C/HFi 756	345400	5600					
VFMi 70C/HFi 770	345410	7000					
VFMi 70C/HFi 790 *	345420	9000	14	S 70E	1376 x 672 x 250	293	

* for rated charge time $t_f = 5$ and 6 hours

Depth plus 35 mm wall connection

Order reference comprises the casing, the radiator kit and brick bundles

ThermoComfort duo-electronic storage heaters

Connection voltage 3/N/PE ~400 V, 50 Hz

Slim Line Casing



FSD ...C

- With wall bracket for mounting on load-bearing brickwork included as standard
- Digital electronic duo charge controller with 2 control inputs for optional connection to DC charge controls (0.91–1.43 V) or to AC charge controls (AC 230 V, % operating time)
- AC control system adjustable from 80 % operating time to 37/40 % operating time or to 68/70 % operating time
- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- 5 selectable switch-off temperatures for charge optimisation
- Positive/negative fault behaviour adjustable on the duo charge controller
- Integrated thermal enable contactor
- Suitable for direct control without heating contactor
- Infinitely variable manual selection of the charge volume for operation without charge control
- Discharging via special accessory wall-mounted or integrated room temperature controller
- High-performance, low-noise radial fan
- Operator controls in the control recess on the right-hand side panel
- Radiator kit for optimised device adaptation to charge type and heat consumption
- A day current supplementary heater can be installed as a special accessory for additional/transitional heating
- Powder-coated sheet-steel casing
- Casing colour **traffic white** (similar to RAL 9016), air outlet grid **birch grey**
- **Can be extended to a two-circuit storage heater (using kit GH 18) for controlled storage heating GEH (charge type of EnBW / ODR)**
- Delivery form: casing, brick bundles and radiator kit
- VDE approval mark

Order reference	Item-No.	Rated power W	Number of brick bundles	Brick bundle type	Size	Width x Height x Depth mm	Weight kg
FSD 12C/HS 1207	345430	750	2	Kolli 18	F 12E	636 x 533 x 214	75
FSD 12C/HS 1209	345440	900					
FSD 12C/HS 1210	345450	1050					
FSD 12C/HS 1212	345460	1200	3		F 18E	786 x 533 x 214	104
FSD 18C/HS 1811	345470	1150					
FSD 18C/HS 1813	345480	1350					
FSD 18C/HS 1816	345490	1600	4		F 24E	936 x 533 x 214	133
FSD 18C/HS 1818	345500	1800					
FSD 24C/HS 2415	345510	1500					
FSD 24C/HS 2418	345520	1800	5		F 30E	1086 x 533 x 214	162
FSD 24C/HS 2421	345530	2100					
FSD 24C/HS 2424	345540	2400					
FSD 24C/HSZ 2425	345550	2550	6		F 36E	1236 x 533 x 214	191
FSD 30C/HS 3019	345560	1900					
FSD 30C/HS 3022	345570	2250					
FSD 30C/HS 3026	345580	2650	7		F 42E	1386 x 533 x 214	220
FSD 30C/HS 3030	345590	3000					
FSD 30C/HSZ 3032	345600	3250					
FSD 36C/HS 3622	345610	2250	8		F 48E	1536 x 533 x 214	249
FSD 36C/HS 3627	345620	2700					
FSD 36C/HS 3631	345630	3150					
FSD 36C/HS 3636	345640	3600					
FSD 42C/HS 4226	345650	2600					
FSD 42C/HS 4231	345660	3150					
FSD 42C/HS 4237	345670	3700					
FSD 42C/HS 4242	345680	4200					
FSD 48C/HS 4830	345690	3000					
FSD 48C/HS 4836	345700	3600					
FSD 48C/HS 4842	345710	4200					
FSD 48C/HS 4848	345720	4800					

Depth = installation depth incl. wall connection

HSZ radiator only for the EnBW / ODR charge type GEH (controlled storage heating)

Order reference comprises the casing, the radiator kit and brick bundles

The two-circuit cylinder kit **GH 18** enables the use of the basic device FSD 12C–FSD 36C as a two-circuit storage heater for controlled storage heating (GEH) of the EnBW / ODR utility company.

ThermoComfort duo-electronic storage heaters

Connection voltage 3/N/PE ~400 V, 50 Hz

Low series



VNDi...C

- Digital electronic duo charge controller with 2 control inputs for optional connection to DC charge controls (0.91–1.43 V) or to AC charge controls (AC 230 V, % operating time)
- AC control system adjustable from 80% operating time to 37/40% operating time or to 68/70% operating time
- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- 5 selectable switch-off temperatures for charge optimisation
- Positive/negative fault behaviour adjustable on the duo charge controller
- Integrated thermal enable contactor
- Suitable for direct control without heating contactor
- Infinitely variable manual selection of the charge volume for operation without charge control
- Discharging via special accessory wall-mounted or integrated room temperature controller
- High-performance, low-noise radial fan
- Operator controls in the control recess of the front panel
- Radiator kit for optimised device adaptation to charge type and heat consumption
- A day current supplementary heater can be installed as a special accessory for additional/transitional heating
- Powder-coated sheet-steel casing
- Casing colour **traffic white** (similar to RAL 9016), air outlet grid **birch grey**
- Delivery form: casing, brick bundles and radiator kit
- VDE approval mark

Order reference	Item-No.	Rated power W	Number of brick bundles	Brick bundle type	Size	Width x Height x Depth mm	Weight kg
VNDi 30C/HNi 3024	346030	2400	8	Kolli 25N	N 30E	890 x 484 x 250	156
VNDi 30C/HNi 3030	346040	3000					
VNDi 36C/HNi 3629	346050	2900	10		N 36E	1040 x 484 x 250	191
VNDi 36C/HNi 3636	346060	3600					
VNDi 43C/HNi 4334	346070	3450	12		N 43E	1190 x 484 x 250	226
VNDi 43C/HNi 4343	346080	4300					
VNDi 50C/HNi 5040	346090	4000	14		N 50E	1340 x 484 x 250	261
VNDi 50C/HNi 5050	346100	5000					

Depth plus 35 mm wall connection
 Order reference comprises the casing, the radiator kit and brick bundles

ThermoComfort duo-electronic storage heaters

Connection voltage 3/N/PE ~400 V, 50 Hz

Low design with minimal width



VTDi...C

- Digital electronic duo charge controller with 2 control inputs for optional connection to DC charge controls (0.91–1.43 V) or to AC charge controls (AC 230 V, % operating time)
- AC control system adjustable from 80% operating time to 37/40% operating time or to 68/70% operating time
- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- 5 selectable switch-off temperatures for charge optimisation
- Positive/negative fault behaviour adjustable on the duo charge controller
- Integrated thermal enable contactor
- Suitable for direct control without heating contactor
- Infinitely variable manual selection of the charge volume for operation without charge control
- Discharging via special accessory wall-mounted or integrated room temperature controller
- High-performance, low-noise radial fan
- Operator controls in the control recess of the front panel
- Radiator kit for optimised device adaptation to charge type and heat consumption
- A day current supplementary heater can be installed as a special accessory for additional/transitional heating
- Powder-coated sheet-steel casing
- Casing colour **traffic white** (similar to RAL 9016), air outlet grid **birch grey**
- Delivery form: casing, brick bundles and radiator kit
- VDE approval mark

Order reference	Item-No.	Rated power W	Number of brick bundles	Brick bundle type	Size	Width x Height x Depth mm	Weight kg
VTDi 45C/HTi 4536	346190	3600	6	Kolli 36T	T 45E	740 x 654 x 360	195
VTDi 45C/HTi 4545	346200	4500					
VTDi 60C/HTi 6048	346210	4800	8		T 60E	890 x 654 x 360	251
VTDi 60C/HTi 6060	346220	6000					
VTDi 75C/HTi 7560	346230	6000	10		T 75E	1040 x 654 x 360	307
VTDi 75C/HTi 7575	346240	7500					

Depth plus 35 mm wall connection
 Order reference comprises the casing, the radiator kit and brick bundles

ThermoComfort duo-electronic storage heaters

Connection voltage 3/N/PE ~400 V, 50 Hz

Hearth design



VKD 24 with VKE 20

- Can be integrated, mounted under a worktop or panelled with solid kitchen panelling
- Digital electronic duo charge controller with 2 control inputs for optional connection to DC charge controls (0.91–1.43 V) or to AC charge controls (AC 230 V, % operating time)
- AC control system adjustable from 80 % operating time to 37/40 % operating time or to 68/70 % operating time
- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- Integrated thermal enable contactor
- Suitable for direct control without heating contactor
- Infinitely variable manual selection of the charge volume for operation without charge control
- Discharging via room temperature controller integrated as standard
- Radiator kit for optimised device adaptation to charge type and heat consumption
- A "supplementary heating relay kit" can be installed as a special accessory for additional/transitional heating
- Casing colour kitchen white
- Delivery form: casing, brick bundles and radiator kit
- VDE approval mark

Order reference	Item-No.	Rated power W	Number of brick bundles	Brick bundle type	Size	Width x Height x Depth mm	Weight kg
VKD 24/HK 219F	346310	1900	2	Kolli 33	H 24E	450 x 840 x 570	133
VKD 24/HK 224F	346320	2400					

Built-under unit delivered without front cover and worktop

Height adjustable

Order reference comprises the casing, the radiator kit and brick bundles

Accessories

Supplementary kit – hearth storage heater in free-standing

Supplementary kit for converting the built-under unit to a stand-alone unit consisting of: front cover, worktop, fixing accessories (worktop height: 40 mm), colour kitchen white.



VKE 20

Order reference	Item-No.	For device type
VKE 20	317820	VKD 24

Two-circuit cylinder kit

With the basic device GH 18 the devices FSD 12C–FSD 36C and VKD 24 can be upgraded to two-circuit storage heaters. With this, the two-circuit system for required for controlled storage heating (GEH) by the EnBW / ODR is made possible.

Key solution:

2/3 of the rated power is switched as P_s (storage part) and 1/3 of the rated power as P_{sf} (storage-free part).



GH 18

Order reference	Item-No.	For device type
GH 18	325100	VKD 24 FSD 12C–FSD 36C

Integrated room temperature controller



Order reference	Item-No.	For device type	Features
RTID 31	324530	VFDi 20C–VFDi 70C FSD 12C–FSD 48C VNDi 30C–VNDi 50C VTDi 45C–VTDi 75C	Integrated electronic fan speed controller (wave packet control), complete kit, can be plugged into the duo charge controller, with switch for "lowering the temperature at night" and switch for "supplementary heating" with control lamps, control panel in control recess, 230 V / 60 VA (fan) / 10 A (supplementary heating), controlling range 8°C to 30°C.
RTED 30	324520		Integrated electronic ON/OFF controller, complete kit, can be plugged into the duo charge controller, with switch for "lowering the temperature at night" and switch for "supplementary heating" with control lamps, control panel in control recess, 230 V / 60 VA (fan) / 10 A (supplementary heating), controlling range 8°C to 30°C.
RTEV 99	333990	VFDi...C & ESS...K FSD...C & ESF...K VNDi...C & ESN...K VTDi...C & EST...K	Integrated electromechanical ON/OFF controller with thermal feedback, complete universal kit, with ON/OFF switch and switch for "supplementary" heating with control lamps. Control panel in control recess, 230 V / 10 (4) A, controlling range 5°C to 30°C.

Caution: not for use in combination with water-proofing kits

Day current supplementary heating



Day current supplementary heating kit for installation in the storage heater. Functions as direct heating if heat is immediately required and the storage heater is uncharged (e.g. transition periods; guestrooms).

Note: An integrated room temperature controller or wall-mounted room temperature controller with switching output, "supplementary heating" is required for operation. For installation in Dimplex and PERMATHERM® storage heaters.*

Order reference	Item-No.	Rated power W	For device type
ZHi 050 E	341950	500	S 20E F 12E
ZHi 070 E	341960	700	S 30E–S 70E F 18E–F 48E N 30E–N 50E T 45E–T 75E
ZHi 110 E	341970	1100	S 40E–S 70E F 36E–F 48E N 30E–N 50E T 60E–T 75E
ZHi 150 E	341980	1500	S 50E–S 70E F 48E N 36E–N 50E T 75E
ZHi 200 E	341990	2000	S 50E–S 70E N 36E–N 50E T 75E

Day current supplementary heating relay kit



A third of the rated power of the kitchen storage heater is switched to direct heating if instant heat is required and the storage heater is uncharged (e.g. transition periods, guestrooms).

Order reference	Item-No.	For device type
RZ 20	315670	VKD 24 ESK 24.. K

RZ 20



BKOi 25

Floor brackets

For installation of electric storage heaters with 10 cm ground clearance, floor mounting, angle adjustable, suitable for skirting board, can be used for deep-pile carpeting, suitable for wall and floor mounting, can be secured against tipping over, fixing accessories, colour: birch grey, (package contents: set = 2 items)

Order reference	Item-No.	For device type	
BKOi 25	328580	VFDi 20C-VFDi 70C VNDi 30C-VNDi 50C	



WKO 18

Wall/floor bracket for FSD ...C storage heaters

For wall/floor mounting if the brickwork cannot bear loads and for free-standing installation. Painted profile angle with unscrewable ground support and fixing accessories. 10.4 cm ground clearance, colour: birch grey, (package contents: set = 2 items)

Order reference	Item-No.	For device type	
WKO 18	324470	FSD 12C-FSD 48C	



BKO 18

Ground support for FSD ...C storage heaters

For wall/floor mounting if the brickwork cannot bear heavy loads, used in combination with serial bracket, 10.4 cm ground clearance (package contents: set = 2 items), colour: birch grey.

Order reference	Item-No.	For device type	
BKO 18	326480	FSD 12C-FSD 48C	



DRWi ...



DRW ...

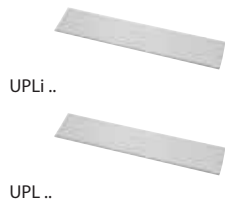
Rear panelling for Dimplex storage heaters

For covering the rear of the device in the event of free-standing installation. Colour: traffic white (similar to RAL 9016).

Order reference	Item-No.	For device type	Width x Height x Depth mm	
DRWi 20C	344370	VFDi 20C	562 x 627 x 41	
DRWi 30C	344380	VFDi 30C	712 x 627 x 41	
DRWi 40C	344390	VFDi 40C	862 x 627 x 41	
DRWi 50C	344400	VFDi 50C	1012 x 627 x 41	
DRWi 60C	344410	VFDi 60C	1162 x 627 x 41	
DRWi 70C	344420	VFDi 70C	1312 x 627 x 41	
DRW 30NC	344430	VNDi 30C	862 x 457 x 41	
DRW 36NC	344440	VNDi 36C	1012 x 457 x 41	
DRW 43NC	344450	VNDi 43C	1162 x 457 x 41	
DRW 50NC	344460	VNDi 50C	1312 x 457 x 41	

Base plate for Dimplex storage heaters

Heat-insulating calcium-silicate based base plate prevents pressure marks and discolouration when devices are installed on light-coloured carpeting, temperature-sensitive floor coverings and pressure-sensitive parquet floors.



Order reference	Item-No.	For device type	Width x Height x Depth mm
UPLi 20	328220	S 20E	630 x 10 x 260
UPLi 30	328230	S 30E	780 x 10 x 260
UPLi 40	328240	S 40E	930 x 10 x 260
UPLi 50	328250	S 50E	1080 x 10 x 260
UPLi 60	328260	S 60E	1230 x 10 x 260
UPLi 70	328270	S 70E	1380 x 10 x 260
UPL 12	324330	F 12E	630 x 10 x 200
UPL 18	324340	F 18E	780 x 10 x 200
UPL 24	324350	F 24E	930 x 10 x 200
UPL 30	324360	F 30E	1080 x 10 x 200
UPL 36	324370	F 36E	1230 x 10 x 200
UPL 42	324380	F 42E	1380 x 10 x 200
UPL 48	324390	F 48E	1530 x 10 x 200
UPL 30 N	343190	N 30E	890 x 10 x 260
UPL 36 N	343200	N 36E	1040 x 10 x 260
UPL 43 N	343210	N 43E	1190 x 10 x 260
UPL 50 N	343220	N 50E	1340 x 10 x 260
UPL 45 T	338680	T 45E	760 x 10 x 370
UPL 60 T	338690	T 60E	910 x 10 x 370
UPL 75 T	338700	T 75E	1060 x 10 x 370

Water-proofing kit

Enables installation of storage heaters according to VDE regulations. Do not use in combination with special accessories for the integrated room temperature controller. Degree of protection IP X4 (splash water protection).



WS 25 i

Order reference	Item-No.	For device type
WS 25 i	328590	S 20E S 30E
BWS 25 N	335670	N 30E N 36E
TWS 12	325850	F 12E
TWS 18	325860	F 18E
TWS 24	325870	F 24E

Wall fixing bracket

Additional protection against tipping over for electric storage heaters, left.



EZ ZW 1

Order reference	Item-No.	For device type
EZ ZW 1	IC251271	S 20E-S 70E N 30E-N 50E

Dimplex system components

Electronic charge controller



LRD 2000 plus



LR 100



P 10 K

Order reference	Item-No.	Features
LRD 2000 plus	338830	Digital electronic DC/AC charge controller with two control inputs for ThermoComfort duo-electronic VFDi..(C), VFD., FSD..(C), VNDi..(C), VTDi..(C), and VKD.. storage heaters, optional connection to DC charge control (0.91–1.43 V) or an AC charge control (AC 230 V, % operating time), with jumper for adjustment of AC control system from 80% operating time to 72/68% operating time or to 37/40% operating time, jumper for selectable switch-off temperatures, plug position 520+ for raising the target charge rate by 5% as compared to the central control unit default, potentiometer 10 k Ω included in the scope of supply.
LR 100	338840	Electronic DC charge controller (control signal DC 0.91–1.43 V) for ThermoComfort electronic VF 20–70, VF 20–70 HY, VN 30/40, VK 24, VF 75, FS 12–36, and FZ 12–36 storage heaters.
LR 90	338850	Electronic DC charge controller (control signal DC 0.91–1.43 V), replacement device for LR 88 S, LR 50 S, LR 50/300, LR 45 S, LR 60/230, LR 60/300, and RG 6000 charge controllers.
KBS 12L	348870	Cable harness with 12-pole cable connector for use in combination with LR90 and LR100 DC charge controllers; (potentiometer not included in the scope of supply)

Intensity actuator

Order reference	Item-No.	Features
P 10 K	338860	Potentiometer (10 k Ω), for storage heaters ThermoComfort duo-electronic (with LRD 2000, LRD 2000 plus charge controllers) and ThermoComfort electronic (with LR 100 charge controller).
P 360	338870	Potentiometer (360 Ω), for storage heaters with electronic charge control (LR 90, LR 88 S, LR 50 S, LR 50/300, LR 45 S, LR 60/230, LR 60/300 and RG 6000 charge controllers).

Residual heat sensor



RF 2000



RF 90

Order reference	Item-No.	Features
RF 2000	338880	PTC residual heat sensor for storage heaters with LRD 2000, LRD 2000 plus electronic DC/AC charge controllers and LR 100 electronic DC charge controller (107 Ω / 20°C).
RF 90	338890	PTC residual heat sensor for storage heaters with LR 90, LR 88 S, LR 60., LR 50., and LR 45 S electronic DC charge controllers (732 Ω ; / 20°C).



THR 3

Thermo relay

Order reference	Item-No.	Features
THR 3	338900	3-pole thermo relay for storage heaters with electronic charge control. Can be used in combination with LRD 2000, LRD 2000plus, LR 100, LR 90, LR 88 S, LR 60 ..., LR 50., LR 45 S, and RG 6000.



RL 15R / 25R



RL 15 RF

Radial fan

Radial fan, right, complete for Dimplex and PERMATHERM® storage heaters

Order reference	Item-No.	For device type
RL 15R	344960	S 20(E) – S 40(E) N 30(E) – N 43(E) T 45(E) – T 60(E)
RL 25R	344970	S 50(E) – S 70(E) N 50(E) T 75(E)
RL 15RF	351880	F 12(E) – F 48(E)

Capillary tube charge controller



ALR 80 AC

Order reference	Item-No.	Features
ALR 80 AC	351870	Thermomechanical AC charge controller (3-pole; 80% operating time system) for Dimplex VFMi.. and PERMATHERM® ESS., ESF., EST., ESN., and ESK.. storage heaters

Dimplex static storage heaters

Static storage heaters WMS series

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP X2

Charge controller can be manually selected (depending on residual heat and room temperature)

Heat transfer occurs as a combination of radiant heat on the front of the device and convectional heat transfer. Transfer of the convectional heat can be controlled using a preset bimetal controlled shutter system. Supporting feet included in the scope of supply.

- Delivery form: Casing and brick bundles
- Supporting feet included in the scope of supply
- Colour birch white

Order reference	Item-No.	Rated power W	Width x Height x Depth mm	Weight kg
WMS 712	354280	1700	560 x 700 x 183	77
WMS 718	354290	2550	788 x 700 x 183	110
WMS 724	354300	3400	1016 x 700 x 183	145



WMS

Static storage heaters WMX series

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP X2

Charge controller can be manually selected (depending on residual heat)

Heat transfer occurs as a combination of radiant heat on the front of the device and convectional heat transfer. Transfer of the convectional heat can be controlled using a preset bimetal controlled shutter system. Supporting feet included in the scope of supply. (not in the case of WMX 706)

- Delivery form: Casing and brick bundles
- Supporting feet included in the scope of supply
- Colour birch white

Order reference	Item-No.	Rated power W	Width x Height x Depth mm	Weight kg
WMX 706	354210	850	332 x 700 x 183	41
WMX 712	354220	1700	560 x 700 x 183	77
WMX 718	354230	2550	788 x 700 x 183	110
WMX 724	354240	3400	1016 x 700 x 183	145



WMX

Static storage heaters DUO

- Heat transfer occurs mainly as radiant heat transfer through the front of the casing
- Charging the static storage heater is done during the more favourable low tariff periods
- In addition, a surface heating element has been built into the entire front of the device to reach the most constant surface temperature possible to provide a uniform radiant heat transfer
- Electronic regulation – the surface heating element and the charge rate of the storage core are regulated automatically, depending on the chosen room temperature
- Child lock option for setting the room temperature
- Control using a central control line possible
- Delivery form: Casing and brick bundles
- Supporting feet included in the scope of supply
- Colour birch white

Order reference	Item-No.	Rated power W	Width x Height x Depth mm	Weight kg
DUO 300i	354420	1300 300	600 x 712 x 140	65
DUO 400i	354430	1950 350	830 x 712 x 140	94
DUO 500i	354440	2600 400	1060 x 712 x 140	124

The rated power is made up of the storage part and the storage-free part



DUO

PERMATHERM® storage heaters

Connection voltage 3/N/PE ~400 V, 50 Hz

Compact design *Universa*



ESS...K

- Storage heater in compact design
- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- Dynamic discharge
- Thermomechanical AC charge controller
- AC control system 230V AC, 80% operating time
- Casing colour: sepia white (similar to RAL 9001), grey-brown air outlet grid
- Delivery form: casing, brick bundles and radiator kit
- VDE approval mark

Order reference	Item-No.	Rated power W	Number of brick bundles	Brick bundle type	Size	Width x Height x Depth mm	Weight kg
ESS 2012 K	IC251335	1250	4	Kolli 25	S 20E	626 x 672 x 250	98
ESS 2016 K	IC251337	1600					
ESS 2020 K	IC251339	2000					
ESS 2027 K *	IC251344	2700					
ESS 3018 K	IC251347	1850	6		S 30E	776 x 672 x 250	137
ESS 3024 K	IC251351	2400					
ESS 3030 K	IC251355	3000					
ESS 3040 K *	IC251357	4000					
ESS 4025 K	IC251362	2500	8		S 40E	926 x 672 x 250	176
ESS 4032 K	IC251365	3200					
ESS 4040 K	IC251367	4000					
ESS 4052 K *	IC251369	5200					
ESS 5040 K	IC251374	4000	10		S 50E	1076 x 672 x 250	215
ESS 5050 K	IC251376	5000					
ESS 5064 K *	IC251378	6400	12		S 60E	1226 x 672 x 250	254
ESS 6048 K	IC251386	4800					
ESS 6060 K	IC251388	6000					
ESS 6076 K *	IC251390	7600					
ESS 7056 K	IC251397	5600	14	S 70E	1376 x 672 x 250	293	
ESS 7070 K	IC251399	7000					
ESS 7090 K *	IC251401	9000					

* for rated charge time $t_f = 5$ and 6 hours
Depth plus 35 mm wall connection

PERMATHERM® storage heaters

Connection voltage 3/N/PE ~400 V, 50 Hz

Slim Line Casing *Optima*



ESF...K

- Storage heater in flat design
- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- Dynamic discharge
- Thermomechanical AC charge controller
- AC control system 230V AC, 80% operating time
- Wall mounting for load-bearing brickwork
- Casing colour: sepia white (similar to RAL 9001), grey-brown air outlet grid
- Delivery form: casing, brick bundles and radiator kit
- VDE approval mark

Order reference	Item-No.	Rated power W	Number of brick bundles	Brick bundle type	Size	Width x Height x Depth mm	Weight kg
ESF 1207 K	IC260070	750	2	Kolli 18	F 12E	636 x 533 x 214	75
ESF 1209 K	IC260080	900					
ESF 1210 K	IC260090	1050					
ESF 1212 K	IC260100	1200	3		F 18E	786 x 533 x 214	104
ESF 1811 K	IC260110	1150					
ESF 1813 K	IC260120	1350					
ESF 1816 K	IC260130	1600	4		F 24E	936 x 533 x 214	133
ESF 1818 K	IC260140	1800					
ESF 2415 K	IC260150	1500					
ESF 2418 K	IC260160	1800	5		F 30E	1086 x 533 x 214	162
ESF 2421 K	IC260170	2100					
ESF 2424 K	IC260180	2400					
ESF 3019 K	IC260190	1900	6		F 36E	1236 x 533 x 214	191
ESF 3022 K	IC260200	2250					
ESF 3026 K	IC260210	2650					
ESF 3030 K	IC260220	3000	7		F 42E	1386 x 533 x 214	220
ESF 3622 K	IC260230	2250					
ESF 3627 K	IC260240	2700					
ESF 3631 K	IC260250	3150	8		F 48E	1536 x 533 x 214	249
ESF 3636 K	IC260260	3600					
ESF 4226 K	IC260270	2600					
ESF 4231 K	IC260280	3150					
ESF 4237 K	IC260290	3700					
ESF 4242 K	IC260300	4200					
ESF 4830 K	IC260310	3000					
ESF 4836 K	IC260320	3600					
ESF 4842 K	IC260330	4200					
ESF 4848 K	IC260340	4800					

Depth = installation depth incl. wall connection

PERMATHERM® storage heaters

Connection voltage 1/N/PE ~230 V, 50 Hz

Two-circuit unit in slim line casing *Optima*



ESFZ...K

- Two-circuit storage heater for controlled electrical heating GEH (charge type of the EnBW/ODR)
- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- Thermomechanical AC charge controller
- AC control system 230V AC, 80 % operating time
- Wall mounting for load-bearing brickwork
- Casing colour: sepia white (similar to RAL 9001), grey-brown air outlet grid
- Key solution: Kit ESF ZKM is used to convert the basic device into a two-circuit system as required for controlled storage heating by the EnBW/ODR utility company and thus into a two-circuit storage heater.
- Delivery form: casing, brick bundles and radiator kit
- Including two-circuit storage heater kit ESF ZKM
- VDE approval mark

Order reference	Item-No.	Rated power W	Number of brick bundles	Brick bundle type	Size	Width x Height x Depth mm	Weight kg
ESFZ 1212 K	IC260350	800 400	2	Kolli 18	F 12E	636 x 533 x 214	75
ESFZ 1818 K	IC260360	1200 600	3		F 18E	786 x 533 x 214	104
ESFZ 2425 K	IC260370	1600 950	4		F 24E	936 x 533 x 214	133
ESFZ 3032 K	IC260380	2000 1250	5		F 30E	1086 x 533 x 214	162
ESFZ 3636 K	IC260390	2400 1200	6		F 36E	1236 x 533 x 214	191

Depth = installation depth incl. wall connection

The rated power is made up of the storage part and the storage-free part

PERMATHERM® storage heaters

Connection voltage 3/N/PE ~400 V, 50 Hz

Low series



ESN...K

- For installation under low windows
- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- Dynamic discharge
- Thermomechanical AC charge controller
- AC control system 230V AC, 80 % operating time
- Casing colour: sepia white (similar to RAL 9001), grey-brown air outlet grid
- Delivery form: casing, brick bundles and radiator kit
- VDE approval mark

Order reference	Item-No.	Rated power W	Number of brick bundles	Brick bundle type	Size	Width x Height x Depth mm	Weight kg
ESN 3024 K	IC251288	2400	8	Kolli 25N	N 30E	890 x 484 x 250	156
ESN 3030 K	IC251293	3000			N 36E	1040 x 484 x 250	191
ESN 3629 K	IC251291	2900	10		N 43E	1190 x 484 x 250	226
ESN 3636 K	IC251295	3600			N 50E	1340 x 484 x 250	261
ESN 4334 K	IC251299	3450			12		
ESN 4343 K	IC251301	4300					
ESN 5040 K	IC251305	4000	14				
ESN 5050 K	IC251307	5000					

Depth plus 35 mm wall connection

PERMATHERM® storage heaters

Connection voltage 3/N/PE ~400 V, 50 Hz

Extra-deep



EST...K

- For living rooms with minimal floor space and a high heating requirement.
- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- Dynamic discharge
- Thermomechanical AC charge controller
- AC control system 230V AC, 80 % operating time
- Casing colour: sepia white (similar to RAL 9001), grey-brown air outlet grid
- Delivery form: casing, brick bundles and radiator kit
- VDE approval mark

Order reference	Item-No.	Rated power W	Number of brick bundles	Brick bundle type	Size	Width x Height x Depth mm	Weight kg
EST 60481 K	IC260510	4800	8	Kolli 36T	T 60E	890 x 654 x 360	251
EST 60601 K	IC260520	6000			T 75E	1040 x 654 x 360	307
EST 75601 K	IC260530		10				
EST 75751 K	IC260540	7500					

Depth plus 35 mm wall connection

PERMATHERM® storage heaters

Connection voltage 3/N/PE ~400 V, 50 Hz

Hearth design can be integrated

- Hearth design can be panelled with solid kitchen panelling
- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- Dynamic discharge
- Thermomechanical AC charge controller
- AC control system 230V AC, 80% operating time
- built-in room temperature controller
- ON/OFF switch for "supplementary heating"
- Temperature lowering at night can be remote controlled e.g using a timer.
- Control panel kitchen white, base grey-brown
- Delivery form: casing, brick bundles and radiator kit
- VDE approval mark



ESK...K with EZK ES

Order reference	Item-No.	Rated power W	Number of brick bundles	Brick bundle type	Size	Width x Height x Depth mm	Weight kg
ESK 2419 K	IC251318	1900	2	Kolli 33	H 24E	450 x 840 x 570	110
ESK 2424 K	IC251320	2400					

Height adjustable

Accessories

Supplementary kit–hearth storage heater in free-standing

installation

For conversion to a free-standing unit, consisting of front panel, worktop, fixing accessories, colour kitchen white, worktop height: 40 mm.

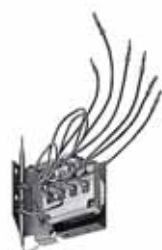


EZK ES

Order reference	Item-No.	For device type
EZK ES	IC251314	ESK 24.. K

Supplementary heating installation kit

Relay installation kit for switching 1/3 of the rated power as supplementary heating, suitable for installation in PERMATHERM® hearth storage heater ESK.



RZ 20

Order reference	Item-No.	For device type
RZ 20	315670	VKD 24 ESK 24.. K

Integrated room temperature controller



RTEV 99

Order reference	Item-No.	For device type	Features
RTEV 99	333990	VFDi...C & ESS...K FSD...C & ESF...K VNDi...C & ESN...K VTDi...C & EST...K	Integrated electromechanical ON/OFF controller with thermal feedback, complete universal kit, with ON/OFF switch and switch for "supplementary" heating with control lamps. Control panel in control recess, 230 V / 10 (4) A, controlling range 5°C to 30°C.

Day current supplementary heating



ZHi...E

Day current supplementary heating kit for installation in the storage heater. Functions as direct heating if heat is immediately required and the storage heater is uncharged (e.g. transition periods; guestrooms).

Note: An integrated room temperature controller or wall-mounted room temperature controller with switching output „supplementary heating“ is required for operation. For installation in Dimplex and PERMATHERM® storage heaters.*

Order reference	Item-No.	Rated power W	For device type
ZHi 050 E	341950	500	S 20E F 12E
ZHi 070 E	341960	700	S 30E-S 70E F 18E-F 48E N 30E-N 50E T 45E-T 75E
ZHi 110 E	341970	1100	S 40E-S 70E F 36E-F 48E N 30E-N 50E T 60E-T 75E
ZHi 150 E	341980	1500	S 50E-S 70E F 48E N 36E-N 50E T 75E
ZHi 200 E	341990	2000	S 50E-S 70E N 36E-N 50E T 75E

Floor brackets



EZ BKS

For PERMATHERM® Universa and low designs, floor installation, angle adjustable. For installation of the electric storage heaters with a depth of 25 cm 100 mm above the screed, for wall and floor mounting, secured against tipping over and including fixing material, colour grey-brown (package contains: set = 2 items)

Order reference	Item-No.	For device type
EZ BKS	IC251270	ESS 20.. K-ESS 70.. K ESN 30.. K-ESN 50.. K

Bracket PERMATHERM®



EZ KK F

For wall/floor mounting if the brickwork cannot bear loads and for free-standing installation. Painted profile angle with unscrewable ground support and fixing accessories. 10.4 cm ground clearance, colour: grey-brown, (package contents: set = 2 items). For all PERMATHERM® Optima (flat storage heaters).

Order reference	Item-No.	For device type
EZ KK F	IC251133	ESF 12.. K-ESF 48.. K

Ground support for ESF ...K



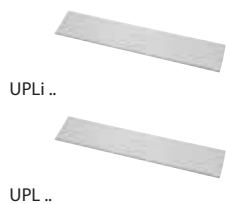
EZ BA F

For wall/floor mounting if the brickwork cannot bear heavy loads, used in combination with serial bracket, 10.4 cm ground clearance (package contents: set = 2 items), colour: grey-brown. For all PERMATHERM® Optima (flat storage heaters).

Order reference	Item-No.	For device type
EZ BA F	IC251134	ESF 12.. K-ESF 48.. K

PERMATHERM® base plate

Heat-insulating calcium-silicate based base plate prevents pressure marks and discolouration when devices are installed on light-coloured carpeting, temperature-sensitive floor coverings and pressure-sensitive parquet floors.



UPLi ..

UPL ..

Order reference	Item-No.	For device type	Width x Height x Depth mm
UPLi 20	328220	S 20E	630 x 10 x 260
UPLi 30	328230	S 30E	780 x 10 x 260
UPLi 40	328240	S 40E	930 x 10 x 260
UPLi 50	328250	S 50E	1080 x 10 x 260
UPLi 60	328260	S 60E	1230 x 10 x 260
UPLi 70	328270	S 70E	1380 x 10 x 260
UPL 12	324330	F 12E	630 x 10 x 200
UPL 18	324340	F 18E	780 x 10 x 200
UPL 24	324350	F 24E	930 x 10 x 200
UPL 30	324360	F 30E	1080 x 10 x 200
UPL 36	324370	F 36E	1230 x 10 x 200
UPL 42	324380	F 42E	1380 x 10 x 200
UPL 48	324390	F 48E	1530 x 10 x 200
UPL 30 N	343190	N 30E	890 x 10 x 260
UPL 36 N	343200	N 36E	1040 x 10 x 260
UPL 43 N	343210	N 43E	1190 x 10 x 260
UPL 50 N	343220	N 50E	1340 x 10 x 260
UPL 60 T	338690	T 60E	910 x 10 x 370
UPL 75 T	338700	T 75E	1060 x 10 x 370

Wall fixing bracket

Additional protection against tipping over for electric storage heaters, left.



EZ ZW 1

Order reference	Item-No.	For device type
EZ ZW 1	IC251271	S 20E-S 70E N 30E-N 50E

Water-proofing kit

Enables installation of storage heaters according to VDE regulations. Do not use in combination with special accessories for the integrated room temperature controller. Degree of protection IP X4 (splash water protection).



WS 25 i

Order reference	Item-No.	For device type
WS 25 i	328590	S 20E S 30E
BWS 25 N	335670	N 30E N 36E
TWS 12	325850	F 12E
TWS 18	325860	F 18E
TWS 24	325870	F 24E

Conversion kit operating time control system

For electric storage heaters with thermomechanical charge controller for adjustment to 37/40 % operating time control system.

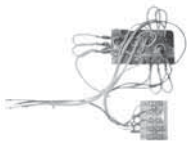


EZ US 8037 2

Order reference	Item-No.	For device type
EZ US 8037 2	IC251198	ESS...K ESF...K ESN...K EST...K & ESK 24.. K

Supplementary kit two-circuit storage heater

for PERMATHERM® Optima (flat design) F 12E–F 36E and PERMATHERM® hearth storage heater for converting to two-circuit system for controlled electric heating GEH (charge type of the EnBW/ODR).



ESF ZKM

Order reference	Item-No.	For device type
ESF ZKM	IC260600	ESF 12.. K – ESF 36.. K ESK 24.. K

Thermal enable contactor

Thermo relay installation kit for charge enable via safety output control signal (direct control without heating contactor with auxiliary relay)



EZK FS

Order reference	Item-No.	For device type
EZK FS	IC260610	ESS...k ESF...K ESN...K EST...K & ESK...K

System components

Radial fan

Radial fan, right, complete for Dimplex and PERMATHERM® storage heaters.



RL 15R / 25R



RL 15 RF

Order reference	Item-No.	For device type
RL 15R	344960	S 20(E) – S 40(E) N 30(E) – N 43(E) T 45(E) – T 60(E)
RL 25R	344970	S 50(E) – S 70(E) N 50(E) T 75(E)
RL 15RF	351880	F 12(E) – F 48(E)

Capillary tube charge controller



ALR 80 AC

Order reference	Item-No.	Features
ALR 80 AC	351870	Thermomechanical AC charge controller (3-pole; 80% operating time system) for Dimplex VFMi.. and PERMATHERM® ESS.., ESF.., EST.., ESN.., and ESK.. storage heaters

Radiant panel heaters GPE series

Connection voltage 1/N/PE ~230 V, 50 Hz

with design glass front

Degree of protection IP 21

Protection class I

Wall mounting using wall stand, connection cable for fixed connection, high quality easy-care glass front, surface heating element behind the whole glass front, electronic infinitely variable room thermostat, protection against overheating, function switch for ON / OFF/ Antifreeze / Lower. Lowering can be centrally regulated using an external regulator e.g. timer. Programming using module RMT 1 possible.

Temperature lowering 7 K; Length of the connection cable 1.2 m; Approval mark NF; Colour black

Order reference	Item-No.	Rated power W	Width x Height x Depth mm	Weight kg
GPE 100	334000	1000	600 x 480 x 97	9.0

phase out

Radiant panel heater FPE series

Connection voltage 1/N/PE ~230 V, 50 Hz

horizontal model

Degree of protection IP 20

Protection class I

Wall mounting using wall bracket, connection cable for fixed connection, high-quality metal casing, aluminium surface heating element, electronic infinitely variable room thermostat, protection against overheating, function switch for ON / OFF/ Antifreeze / Lower.

Lowering can be centrally regulated using an external regulator e.g. timer Programming using module RMT 1 possible.

Colour white; Temperature lowering 3 K; Length of the connection cable 0.8 m; Approval mark VDE

Order reference	Item-No.	Rated power W	Width x Height x Depth mm	Weight kg
FPE 051 H	348740	500	515 x 440 x 112	4.3
FPE 101 H	348750	1000	620 x 440 x 112	5.3
FPE 151 H	348760	1500	830 x 440 x 112	7.2
FPE 201 H	348770	2000	1040 x 440 x 112	9.0

Radiant panel heater FPE series

Connection voltage 1/N/PE ~230 V, 50 Hz

vertical model

Degree of protection IP 20

Protection class I

Wall mounting using wall bracket, connection cable for fixed connection, high-quality metal casing, aluminium surface heating element, electronic infinitely variable room thermostat, protection against overheating, function switch for ON / OFF/ Antifreeze / Lower.

Lowering can be centrally regulated using an external regulator e.g. timer Programming using module RMT 1 possible.

Length of the connection cable 0.8 m; Approval mark VDE; Temperature lowering 3 K; Colour white

Order reference	Item-No.	Rated power W	Width x Height x Depth mm	Weight kg
FPE 101 V	348780	1000	440 x 830 x 112	7.6
FPE 201 V	348790	2000	440 x 1145 x 112	10.1

Design wall convector GFP series

Connection voltage 1/N/PE ~230 V, 50 Hz

with design glass front

Degree of protection IP X4

Protection class I

Design convector with precise electronic room temperature regulation, infinitely adjustable +5°C to +30°C, antifreeze setting, connecting lead for fixed connection, high-grade metal casing with easy-care glass front, ON/OFF switch, temperature lowering using a programming module or external control of the control line possible, e.g. using a timer, switch etc., protection against overheating, fold-down wall support.

Approval mark BEAB; Length of the connection cable 1.0 m

Order reference	Item-No.	Rated power W	Colour	Width x Height x Depth mm	Weight kg
GFP 200 B	356180	2000	black	940 x 565 x 107	19.4
GFP 200 W	356170		white		

Depth incl. wall clearance

Storage heaters

GPE ...



Direct heaters

FPE...H



Underfloor heating

FPE...V



Controls

GFP 200 B



GFP 200 W



Domestic hot water appliances

Air conditioner

Natural stone heating

Connection voltage 1/N ~230 V, 50 Hz
Degree of protection IP 25
Protection class II

Natural stone heating for horizontal or vertical wall mounting using the mounting kit included in the scope of supply, main heat provided by heating pipes integrated in the stone, special pipe routing for especially uniform surface temperature, dual overtemperature protection, connecting cable for fixed connection approx. 1.3 m, must be controlled via external room temperature controller. External room temperature controller **RT 204 U** and **RT 104 ST** suitable for MP natural stone heating.



MP...VAR



MP...GA



MP...SYA

Order reference	Item-No.	Type of stone	Rated power W	Width x Height x Depth mm	Weight kg
MP 35 VAR	343860	Varios	350	600 x 400 x 70	21
MP 65 VAR	343870		650	1000 x 400 x 70	35
MP 85 VAR	343880		850	1000 x 500 x 70	44
MP 115 VAR	343890		1150	1000 x 600 x 70	52
MP 145 VAR	343900		1450	1250 x 600 x 70	62
MP 35 GA	343910	Galaxis	350	600 x 400 x 70	21
MP 65 GA	343920		650	1000 x 400 x 70	35
MP 85 GA	343930		850	1000 x 500 x 70	44
MP 115 GA	343940		1150	1000 x 600 x 70	52
MP 145 GA	343950		1450	1250 x 600 x 70	62
MP 35 SYA	343960	Sylvia Antik	350	600 x 400 x 70	21
MP 65 SYA	343970		650	1000 x 400 x 70	35
MP 85 SYA	343980		850	1000 x 500 x 70	44
MP 115 SYA	343990		1150	1000 x 600 x 70	52
MP 145 SYA	344000		1450	1250 x 600 x 70	62

Natural stone heaters are unique natural products. Variations in colour and structure compared to the picture are therefore a sign of individuality.

Wall convectors KSE series

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 21
Protection class I

Wall mounting using a wall bracket, connection cable for fixed connection, high-grade metal casing, alu finned heating element, electronic infinitely variable room thermostat 7 °C to 29 °C, protection against overheating, function switch for ON / OFF / Antifreeze / Lowering, lowering also centrally using external controls e.g. a timer. Programming using module **RMT 1** possible. Temperature lowering 4 K; Approval mark VDE; Length of the connection cable 1.0 m; Colour white



KSE ...

Order reference	Item-No.	Rated power W	Width x Height x Depth mm	Weight kg
KSE 100	335320	1000	420 x 430 x 105	4.2
KSE 150	335340	1500	580 x 430 x 105	5.5
KSE 200	335360	2000	740 x 430 x 105	6.6

Low profile panel convectors KLE series

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 21
Protection class I

Wall mounting using wall bracket, connection cable for fixed connection, high-quality metal casing, aluminium finned heating element, electronic infinitely variable room thermostat 7 °C, protection against overheating, function switch for ON / OFF / Antifreeze / Lower. Lowering can be centrally regulated using an external regulator e.g. timer. Programming using module **RMT 1** possible. Colour white; Length of the connection cable 1.0 m; Approval mark NF; Temperature lowering 7 K



KLE ...

Order reference	Item-No.	Rated power W	Width x Height x Depth mm	Weight kg
KLE 050	335370	500	580 x 220 x 105	3.7
KLE 075	335380	750	820 x 220 x 105	4.7
KLE 125	335390	1250	1060 x 220 x 105	5.9
KLE 150	337960	1500	1300 x 220 x 105	7.1

phase out: KLE 050

Programming cassette RMT 1

incl. master function



RMT 1

Order reference	Item-No.	Features
RMT 1	337990	Programming cassette connectable to radiant panel heaters and convectors of the GPE, GFP, FPE, EPX, KSE and KLE series. Clearly laid out LC Display; seven specified programs and an individual program to set the heating and lowering times. Each day of the week can have one of the programs assigned to it. Where several ecomfort devices are used together with a common control line, a programming cassette can be used to control up to 20 devices simultaneously.

Wall convectors EPX series

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP X4
Protection class I

electronically regulated



EPX 2000

Precise electronic room temperature control, infinitely variable from 5°C to 30°C, antifreeze setting, connection cable for fixed connection, ON/OFF switch, temperature lowering using a programming module or external control of the control line e.g. timer or switch possible. Protection against overheating, fold-down wall bracket, high-quality metal casing. Temperature lowering 5 K; Colour white; Length of the connection cable 1.0 m; Approval mark BEAB

Order reference	Item-No.	Rated power W	Width x Height x Depth mm	Weight kg
EPX 500	351530	500	448 x 430 x 115	4.8
EPX 750	351540	750	618 x 430 x 115	6.2
EPX 1000	351550	1000		
EPX 1500	351560	1500	686 x 430 x 115	6.6
EPX 2000	351570	2000	858 x 430 x 115	8.0
EPX 2500	351580	2500		8.5

Programming cassette for EPX and GFP wall convectors



RX PW 1



RX TI RB

Order reference	Item-No.	Features
RX TI 24	RXTI24	24h programming cassette with LC display, connectable to EPX wall convectors. Four IN and OUT times freely programmable, lit display, key lock. Where several EPX devices are connected using a control line, a programming cassette can be used to control these devices simultaneously. Similarly, devices from the FPE, GPE, GFP, KSE and KLE series can be connected to the control line.
RX PW 1	RXPW1	Weekly programming cassette with LC display, connectable to EPX wall convectors, up to four programs can be set for a weekend block (Sat-Sun) or a workday block (Mon-Fri), the IN and OUT switch times are set, with lit display and key lock. Where several EPX devices are connected using a control line, a programming cassette can be used to control these devices simultaneously. Similarly, devices from the FPE, GPE, GFP, KSE and KLE series can be connected to the control line.
RX TI RB	RXTIRB	Limited specified heating periods; programming cassette for setting a heating period from 0.5 – 4.0 hours, adjustable in 0.5 hour steps, when the specified heating period ends, the device shuts off or turns to antifreeze mode. Where several EPX devices are connected using a control line, a programming cassette can be used to control these devices simultaneously. Similarly, devices from the FPE, GPE, GFP, KSE and KLE series can be connected to the control line.

Wall convectors PLX series

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP X4
Protection class I

High-quality metal casing, connection cable with connector, infinitely variable room thermostat 5°C to 30°C, ON/OFF switch, 2 heating levels (not for PLX 500), controller cover, protection against overheating, fold-down wall support
Colour white; Length of the connection cable 1.0 m; Approval mark VDE



PLX 2000

Order reference	Item-No.	Rated power W	Width x Height x Depth mm	Weight kg
PLX 500	351450	500	448 x 430 x 115	4.8
PLX 750	351460	750	618 x 430 x 115	6.2
PLX 1000	351470	1000		
PLX 1500	351480	1500	686 x 430 x 115	6.6
PLX 2000	351490	2000	858 x 430 x 115	8.0
PLX 2500	351500	2500	858 x 430 x 145	8.5
PLX 3000	351510	3000		8.6

Wall convectors PLX series with timer

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP X4
Protection class I

High-grade metal casing, connection cable with plug, infinitely variable room thermostat 5°C to 30°C, ON/OFF switch, 2 heating levels, controls cover, protection against overheating, removable fold-down wall support. With mechanical 24-hour timer.
Colour white; Length of the connection cable 1.0 m; Approval mark VDE



PLX 2000 TI

Order reference	Item-No.	Rated power W	Width x Height x Depth mm	Weight kg
PLX 2000 TI	351520	2000	858 x 430 x 115	8.0

Wall convectors DXW series

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 20
Protection class I

Infinitely variable thermostat, fold-down wall bracket, sheet-steel casing, connection cable for fixed connection, ON/OFF switch, 2 heating levels, (DXW 315 to DXW 330).
Length of the connection cable 1.0 m; Approval mark VDE; Colour white



DXW 330

Order reference	Item-No.	Rated power W	Width x Height x Depth mm	Weight kg
DXW 307	342990	750	577 x 367 x 124	4.4
DXW 310	343000	1000		
DXW 315	343010	1500		
DXW 320	343020	2000		
DXW 325	343030	2500	697 x 367 x 124	5.1
DXW 330	343040	3000		

Free-standing convectors ECW series

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 20
Protection class I

Length of the connection cable 1.0 m; Colour white; Approval mark VDE



ECW 934



ECW 937 T

Order reference	Item-No.	Rated power W	Features	Width x Height x Depth mm	Weight kg
ECW 934	343050	2000	Infinitely variable thermostat, 2 heating levels, indicator lamp, connection cable with plug, wall mounting with accompanying accessories possible.	577 x 432 x 205	4.1
ECW 937 T	343060		Infinitely variable thermostat, 2 heating levels, indicator lamp, connection cable with plug, wall mounting with accompanying accessories possible. With fan level, cold air level.		4.3

Depth for wall mounting: 90 mm

Bathroom fan heater EF 6/20 series

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 23
Protection class I

Solid sheet-steel casing, infinitely variable room thermostat, protection against overheating, antifreeze mode, connection cable with plug.
Colour white; Length of the connection cable 0.8 m

Order reference	Item-No.	Rated power W	Features	Width x Height x Depth mm	Weight kg
EF 6/20	322640	2000	With 60 min timer, 1 kW via thermostat, 1 kW via timer.	300 x 400 x 102	4.0
EF 6/20 TI	322650				4.2
EF 6/20 TID	322660		With 24-hour timer.		
EF 6/10	324630	1000			4.0



EF 6/20



EF 6/20 TI

Towel dryer bathroom fan heater

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 20
Protection class I

Combination of radiant panel heater, towel dryer and bathroom fan heater, electronic room thermostat, electronic timer for ventilation operation 0.5 h / 1.0 h / 2.0 h, protection against overheating, lint filter, indicator lamp for heating operation, connection cable for fixed connection, temperature lowering possible via external control of the control line e.g. timer, infinitely variable hangers with optional left or right mounting.

Colour white; Length of the connection cable 1.0 m; Approval mark NF

Order reference	Item-No.	Rated power W	Width x Height x Depth mm	Weight kg
TRFW 101	348710	1000	431 x 1058 x 173	17.5
TRFW 151	348720	1500	431 x 1472 x 173	20.0
TRFW 201	348730	2000		

Device depth without hanger; hanger depth 65–95 mm



TRFW 201

Towel dryer/fan heater for bathrooms TRFB

Connection voltage 1/N ~230 V, 50 Hz
Degree of protection IP 24
Protection class II

Combination of radiant panel heater, towel dryer and bathroom fan heater, electronic room thermostat, electronic timer for ventilation operation 0.5 hour / 1.0 hour / 2.0 hours, protection against overheating, lint filter, indicator lamp for heating operation, connection cable for fixed connection, temperature lowering via external control of the control line e.g. a timer possible.

Length of the connection cable 0.9 m; Colour white; Approval mark NF; Temperature lowering 3 K

Order reference	Item-No.	Rated power W	Width x Height x Depth mm	Weight kg
TRFB 150	354900	1500	440 x 1010 x 121	13.0



TRFB 150

Towel dryers DTR series

Connection voltage 1/N ~230 V, 50 Hz
Degree of protection IP 24
Protection class II



DTR 350 C

Dry heating element for short heat-up time, connecting line with plug and ON/OFF switch, cable connection on the right, protection against overheating, without an integrated thermostat. Approval mark BEAB; Length of the connection cable 1.5 m

Order reference	Item-No.	Rated power W	Casing colour	Width x Height x Depth mm	Weight kg
DTR 350 C	354860	300	chromed	602 x 843 x 115	7.9
DTR 350 W	354850	350	white		



DTR 350 W

Towel dryer BR series

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP X4
Protection class I



BR 400

Combined connection for operation using the built-in electric heating element and/or the hot water central heating, water connection 1/2", connection cable with plug and switch, device is delivered already filled and ready-to-use, connection cable on the left, without integrated thermostat. Colour white

Order reference	Item-No.	Rated power W	Width x Height x Depth mm	Weight kg
BR 250	332300	250	610 x 665 x 155	9.0
BR 400	332310	400	610 x 1003 x 155	14.0

phase out

Wall-mounted rapid heater with pull switch

Connection voltage 1/N ~230 V, 50 Hz
Degree of protection IP 22
Protection class II



FX 20 V

2-level control, downwards air outlet, thermostat adjustable in the device with 3 temperature positions, fixed connection, 1 kW / 2 kW connected load can be chosen on the device, protection against overheating, white plastic casing. Colour white; Approval mark BEAB

Order reference	Item-No.	Rated power W	Width x Height x Depth mm	Weight kg
FX 20 V	342490	2000	229 x 242 x 109	1.4

Industrial fan heaters IHP series

Connection voltage 1/N/PE ~230 V, 50 Hz

portable

Degree of protection IP 24

Protection class I

Fan heaters in metal design with carrying handle for portable use. Controls integrated directly in the device, room temperature control with antifreeze setting, wall mounting using the accompanying wall bracket in not easily reachable heights possible. Casing colour blue, air outlet grid black.

Approval mark VDE



IHP 30

Order reference	Item-No.	Rated power W	Type of plug	Number of fan levels	Air volume flow m ³ /h	Max. temperature increase K	Width x Height x Depth mm	Weight kg
IHP 20	348530	2000	Euro-plug	1	150	34	360 x 330 x 210	5.6
IHP 30	348540	3000		2	300	38	385 x 390 x 260	6.1
IHP 50	348550	5000	CEE 16 A		450	58		

phase out: IHP 20

Industrial fan heaters CFH series

Connection voltage 3/N/PE ~400 V, 50 Hz

wall-mounted

Degree of protection IP 20

Protection class I

Robust metal/plastic design for wall mounting, wall bracket with universal turn and pivot options, controlled using an external wall mountable operating panel CFCH. Up to 7 CFH devices can be connected in series via control panel. The connections between the fan heater and the control panel as well as between the devices are established using a standard data cable type CAT 5 (not included in the scope of supply). Colour white, air outlet grid black.

Approval mark BEAB



CFH 60

Order reference	Item-No.	Rated power W	Air volume flow m ³ /h	Max. temperature increase K	Sound pressure level in 3 m dB (A)	Width x Height x Depth mm	Weight kg
CFH 60	351330	6000	900	39	60	386 x 360 x 630	12.7
CFH 90	351340	9000	850	52			13.8
CFH 120	351350	12000		61			

Control panel CFCH is an essential accessory

Control panel CFCH for CFH industrial fan heater



CFCH

Order reference	Item-No.	Features
CFCH	351360	Digital control panel for CFH industrial fan heater, lit LC display, room temperature regulation from 5°C to 35°C, antifreeze feature, cold air level, up to 32 individually set programs, programming of a limited operating time of max. 5 hours, serial connection up to 7 CFH devices using a simple plug connection CAT 5, CAT 5 E, CAT 6 standard data cable (not supplied).

Fan heater metal casing



HL 185



HL 185 T

Order reference	Item-No.	Rated power W	Features	Width x Height x Depth mm	Weight kg
HL 185/2	335790	2000	OFF / Cold / 2000 W, radial blower, protection against overheating, indicator lamp, wall device, 2/PE ~ 400 V, fixed connection, colour anthracite.	230 x 230 x 160	4.6
HL 185 T	335780		OFF / Cold / 2000 W, thermostat, radial blower, protection against overheating, indicator lamp, wall device, connection cable with plug, colour anthracite. 1/N/PE ~230 V, 50 Hz		
HL 185/3	335960	700	OFF / Cold / 700 W, thermostat, radial blower, protection against overheating, indicator lamp, wall device, connection cable with plug, colour anthracite. 1/N/PE ~230 V, 50 Hz		

Vector infrared heater

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 20
Protection class I



Vector II VR ..

Wall mounting or ceiling mounting (suspended), metal casing, reflector and heating element gold-plated, fixed connection, minimum mounting height 1.8–3.0 m depending on the type of device. The heating elements can be externally controlled individually.

Order reference	Item-No.	Rated power W	Width x Height x Depth mm	Weight kg
Vector II VR 30	334050	3000	1024 x 112 x 140	4

Phase out

Finned radiators

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 54
Protection class I



RHK 2000

Order reference	Item-No.	Rated power W	Features	Width x Height x Depth mm	Weight kg
RHK 2000	328810	2000	Hot-dip galvanised casing, overtemperature protection, without internal temperature control.	1580 x 195 x 160	19.0
RHK 1000	328800	1000		900 x 195 x 160	12.0
RHK 1100	328820	1100	Hot-dip galvanised casing, overtemperature protection, without internal temperature control, with additional switch for OFF / 50% / 100% rated output	1580 x 195 x 160	19.0
RHK 2000 S	342980	2000		900 x 195 x 160	12.0
RHK 1000 S	342970	1000			

Air Curtains AC...N series

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 20
Protection class I

Electric operation

Mounting above doors or on ceilings, adjustable air output direction, 2 heating levels, 1 cold air level. Controllable on the device itself or with a remote control (only AC 3RN) only. Door width covered adjustable from 600 mm (AC 3 and AC 45) to 900 mm (AC 6).
Approval mark BEAB

AC...N



Order reference	Item-No.	Rated power W	Air volume flow m ³ /h	Max. tempera- ture increase K	Sound pressure level in 3 m dB (A)	Width x Height x Depth mm	Weight kg
AC 3 N	348220	3000	212	42	50	605 x 214 x 135	5.1
AC 45 N	348230	4500	248	53	52		5.2
AC 6 N	348240	6000	446	40	57	905 x 214 x 135	7.2
AC 3 RN	348250	3000	212	42	50	605 x 214 x 135	5.3

Air barrier CAB series

Connection voltage 3/N/PE ~400 V, 50 Hz
Protection class I

Electric operation

Mounting above doors, ceilings or hidden (optional installation kit needed), modular design allows simple placing of devices in a row, adjustable direction of flow, 2 heating levels, cold air level, 2 ventilation levels, controllable using wall-mounted low-voltage control or by connecting to a building management system. A separate control panel allows regulation of up to 4 devices at a time, optional door sensor switching. Essential accessories: CAB C1 operator control; Accessories for combining up to 4 devices: connection set CAB M1; Colour white, intake grid black.

Approval mark BEAB; Mounting height max. 2.7 m

CAB 10 E



Order reference	Item-No.	Rated power W	Air volume flow m ³ /h	Max. tempera- ture increase K	Sound pressure level in 3 m dB (A)	Width x Height x Depth mm	Weight kg
CAB 10 E	348660	9000	1200	44	54	1057 x 262 x 316	25.0
CAB 15 E	348670	13500	1800		55	1557 x 262 x 316	36.0

Air barrier DAB series

Connection voltage 3/N/PE ~400 V, 50 Hz
Protection class I

Electric operation

Mounting above doors, ceilings or hidden (optional installation kit needed), modular design allows simple placing of devices in a row, adjustable direction of flow, 2 heating levels, cold air level, 2 ventilation levels, controllable using wall-mounted low-voltage control or by connecting to a building management system. A separate control panel allows regulation of up to 4 devices at a time, optional door sensor switching. Essential accessories: CAB C1 operator control; Accessories for combining up to 4 devices: connection set CAB M1; Colour white, intake grid black.

Approval mark BEAB; Mounting height max. 4.0 m

DAB 10 E



Order reference	Item-No.	Rated power W	Air volume flow m ³ /h	Max. tempera- ture increase K	Sound pressure level in 3 m dB (A)	Width x Height x Depth mm	Weight kg
DAB 10 E	348680	12000	3000	23	58	1060 x 360 x 390	39.0
DAB 15 E	348690	18000	4000	26	59	1560 x 360 x 390	50.0

Air barrier CAB series

Connection voltage 1/N/PE ~230 V, 50 Hz
Protection class I

hot water operation

Mounting above doors, ceilings or hidden (optional installation kit needed), modular design allows simple placing of devices in a row, adjustable direction of flow, 2 heating levels, cold air level, 2 ventilation levels, controllable using wall-mounted low-voltage control or by connecting to a building management system. A separate control panel allows regulation of up to 4 devices at a time, optional door sensor switching. Essential accessories: CAB C2 operator control; Accessories for combining up to 4 devices: connection set CAB M1; Colour white, intake grid black.

Approval mark BEAB; Mounting height max. 2.7 m

CAB 10 W



Order reference	Item-No.	Rated power W	Air volume flow m ³ /h	Max. tempera- ture increase K	Sound pressure level in 3 m dB (A)	Width x Height x Depth mm	Weight kg
CAB 10 W	110749	8500	1100	23	53	1057 x 262 x 316	25.0
CAB 15 W	110756	12700	1700	22	54	1557 x 262 x 316	36.0

Rated output at 20 °C air intake temperature

Rated output at 80 °C flow temperature and 60 °C return flow temperature

Air barrier DAB series

Connection voltage 1/N/PE ~230 V, 50 Hz
Protection class I

hot water operation



DAB 10 W

Mounting above doors, ceilings or hidden (optional installation kit needed), modular design allows simple placing of devices in a row, adjustable direction of flow, 2 heating levels, cold air level, 2 ventilation levels, controllable using wall-mounted low-voltage control or by connecting to a building management system. A separate control panel allows regulation of up to 4 devices at a time, optional door sensor switching. Essential accessories: CAB C2 operator control; Accessories for combining up to 4 devices: connection set CAB M1; Colour white, intake grid black.

Approval mark BEAB; Mounting height max. 4.0 m

Order reference	Item-No.	Rated power W	Air volume flow m ³ /h	Max. temperature increase K	Sound pressure level in 3 m dB (A)	Width x Height x Depth mm	Weight kg
DAB 10 W	110800	13200	2500	15	57	1060 x 360 x 390	39.0
DAB 15 W	110817	18100	3500		58	1560 x 360 x 390	50.0

Rated output at 20°C air intake temperature

Rated output at 80°C flow temperature and 60°C return flow temperature

Accessories for air barrier CAB-DAB series



CAB C1



CAB C2

Order reference	Item-No.	Features
CAB C 1	348810	Wall-mounted controls for remote control of up to 4 hot-air curtains DAB..E / CAB..E, 4 ON/OFF switches, half/full ventilator output, heating output OFF/Half/Full, Manual/Automatic mode.
CAB C 2	112132	Wall-mounted control panel for remote control of up to 4 hot-air curtains DAB..W / CAB..W, 3 ON/OFF switches, two ventilation levels, Automatic/Manual mode.
CAB M 1	348820	Connection kit for electrical and mechanical connection of hot-air curtains of the CAB / DAB series.
CAB KT 10	348830	Installation kit for hidden installation (e.g. false ceilings) for CAB 10 E / CAB 10 W
CAB KT 15	348840	Installation kit for hidden installation (e.g. false ceilings) for CAB 15 E / CAB 15 W
DAB KT 10	348850	Installation kit for hidden installation (e.g. false ceilings) for DAB 10 E / DAB 10 W
DAB KT 15	348860	Installation kit for hidden installation (e.g. false ceilings) for DAB 15 E / DAB 15 W

Hand dryer

Storage heaters



HD 701 AM

Direct heaters



HD 601 AM



HD 501 AK

Underfloor heating



HD 201 AK

Controls

Domestic hot water appliances

Air conditioner

Order reference	Item-No.	Rated power W	Features	Width x Height x Depth mm	Weight kg
HD 701 AM	354760	2250	Robust metal casing with epoxy coating, colour white, similar to RAL 9010, infrared safety proximity switch with adjustable sensitivity, rated air flow 470 m ³ /h with approx. 96 km/h, air outlet temperature approx. 53 °C, heat output 2000 W, motor power 250 W, fixed connection, protection class I, degree of protection IP 23, safety temperature limiter, VDE certification	276 x 245 x 210	4.65
HD 601 AM	354770	1640	Sheet-steel casing 1.9mm with epoxy coating, colour white, similar to RAL 9010, infrared safety proximity switch with adjustable sensitivity, rated air flow 280 m ³ /h with approx. 65 km/h, air outlet temperature approx. 52 °C, heat output 1500 W, motor power 140 W, fixed connection, protection class II, degree of protection IP 21, safety temperature limiter, VDE certification	255 x 302 x 140	4.45
HD 501 AK	354780		Plastic casing made of 3 mm ABS, colour white, similar to RAL 9010, infrared safety proximity switch with adjustable sensitivity, rated air flow 280 m ³ /h with approx. 65 km/h, air outlet temperature approx. 52 °C, heat output 1500 W, motor power 140 W, fixed connection, protection class II, degree of protection IP 21, safety temperature limiter, VDE certification	253 x 302 x 153	3.0
HD 201 AK	354790	1100	Compact dimensions and high dry output, plastic casing made of 3 mm ABS, colour white, similar to RAL 9010, infrared safety proximity switch with adjustable sensitivity, rated air flow 110 m ³ /h with approx. 85 km/h, air outlet temperature approx. 47 °C, heat output 950 W, motor power 150 W, fixed connection, protection class II, degree of protection IP 23, safety temperature limiter, VDE certification	145 x 258 x 138	1.2

Radiant panel heaters WW... series

Connection voltage 1/N/PE ~230 V, 50 Hz



Order reference	Item-No.	Units on Euro pallet	Packaging unit	Rated power W	Features	Width x Height x Depth mm	Weight kg
WW 120 K	AKO150630	24	1	1000	Free-standing or wall-mounted installation. Metal heating plate, thermostat, antifreeze, four levels: OFF / 0.4 / 0.6 / 1.0 kW, protection against overheating, indicator lamp for heating operation, colour white/grey, degree of protection IP 20, protection class I, VDE certification.	710 x 430 x 180	4.3
WW 100	AKO150611	16		1500	Free-standing installation on casters, or wall-mounted. Metal heating plate, mech. thermostat, antifreeze, three levels: OFF / 0.65 / 1.0 kW, protection against overheating, indicator lamp for heating operation, colour white, degree of protection IP 24 (splash water protection), TÜV GS certification, protection class II.	620 x 560 x 250	6.7
WW 150	AKO150615			2000	Free-standing installation on casters, or wall-mounted. Metal heating plate, mech. thermostat, antifreeze, three levels: OFF / 1.0 / 1.5 kW, protection against overheating, indicator lamp for heating operation, colour white, degree of protection IP 24 (splash water protection). TÜV GS certification, protection class II.	930 x 560 x 250	9.5
WW 200	AKO150620			2000	Free-standing installation on casters, or wall-mounted. Metal heating plate, mech. thermostat, antifreeze, three levels: OFF / 1.3 / 2.0 kW, protection against overheating, indicator lamp for heating operation, colour white, degree of protection IP 24 (splash water protection). TÜV GS certification, protection class II.	1170 x 560 x 250	12.1

Free-standing convectors

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 20
Protection class I



Temperature setting range; Colour white; Length of the connection cable 1.8 m; Approval mark VDE

Order reference	Item-No.	Units on Euro pallet	Packaging unit	Rated power W	Features	Width x Height x Depth mm	Weight kg
K 810	AKO150350	24	1	2000	Wall mounting or free-standing installation, thermostat, antifreeze, four levels OFF / 0.75 / 1.25 / 2.0 kW, protection against overheating, colour white/grey.	710 x 430 x 180	3.4
K 820	AKO150330				Wall mounting or free-standing installation, thermostat, antifreeze, four levels OFF / 0.75 / 1.25 / 2.0 kW, protection against overheating, colour white/grey. With turbo blowers.		3.8

Column radiators

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 20
Protection class I

Oil-free

Colour silver; Approval mark BEAB;

Order reference	Item-No.	Units on Euro pallet	Packaging unit	Rated power W	Features	Width x Height x Depth mm	Weight kg
RD 909 TS	352470	18	1	2000	Finned radiator with casters, environmentally-friendly oil-free design with shortened heat-up time, indicator lamp for heating operation, protection against overheating, 9 fins, three levels OFF / 1.4 / 2.0 kW, colour: silver grey / anthracite, BEAB certification	515 x 620 x 245	3.4
RD 911 TS	352480	16		2500	Finned radiator with casters, environmentally-friendly oil-free design with shortened heat-up time, indicator lamp for heating operation, protection against overheating, 11 fins, three levels OFF / 1.7 / 2.0 kW, colour: silver grey / anthracite, BEAB certification	610 x 620 x 245	3.8



RD 909 TS



RD 911 TS

AKO infrared heater

Infrared heater (compact range)

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP X4
Protection class I

Approval mark VDE; Colour silver;

Order reference	Item-No.	Packaging unit	Units on Euro pallet	Rated power W	Number of heating elements pcs	Features	Width x Height x Depth mm	Weight kg
BS 1800	AKO106748	6	144	1800	3	Quartz radiator for horizontal wall mounting, fixed connection, 3 quartz radiator bars, pivoting angle 20-40°, 4 performance levels OFF / 0.6 / 1.2 / 2.0 kW, controllable with a pull switch on the device, colour silver, VDE certification.	510 x 140 x 115	1.7
BS 510/1 W	AKO106725					Quartz radiator for horizontal wall mounting special high-grade workmanship and enamelling, fixed connection, 3 quartz radiator bars, pivoting angle 20-40°, four performance levels OFF / 0.6 / 1.2 / 1.8 kW, controllable with a pull switch on the device, colour white enamel, VDE certification.		1.9
BS 1200/1	AKO106747			1200	2	Quartz radiator for horizontal wall mounting, fixed connection, 2 quartz radiator bars, pivoting angle 20-40°, 4 performance levels OFF / 0.6 / 1.2 / 2.0 kW, controllable with a pull switch on the device, colour silver, VDE certification.		1.6



BS 1800



BS 510/1 W



BS 1200/1

Infrared heaters (low profile range)

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP X4
Protection class I

Approval mark VDE; Colour silver



BK 1200/1



BK 2000/1 S

Order reference	Item-No.	Packaging unit	Units on Euro pallet	Rated power W	Number of heating elements pcs	Features	Width x Height x Depth mm	Weight kg
BK 1200/1	AKO106448	6	108	1200	1	Infrared heater (low profile range) for horizontal wall mounting, fixed connection, 1 quartz radiator bar, pivoting angle 20-40°, 2 performance levels OFF / 1.2 kW, controllable with a pull switch on the device, colour silver, VDE certification.	750 x 90 x 110	1.8
BK 2000/1 S	AKO106444			2000	2	Infrared heater (low profile range) for horizontal wall mounting, fixed connection, 2 quartz radiator bars, pivoting angle 20-40°, 4 performance levels OFF / 0.6 / 1.2 / 2.0 kW, controllable with a pull switch on the device, colour silver, VDE certification.		1.9

Infrared heater for changing table

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 23
Protection class I

Approval mark VDE; Colour silver; Length of the connection cable 2 m



BY 800 S

Order reference	Item-No.	Packaging unit	Units on Euro pallet	Rated power W	Number of heating elements pcs	Features	Width x Height x Depth mm	Weight kg
BY 800 S	AKO106408	3	108	500	1	Changing table heater for horizontal wall mounting, connection cable with connector, 1 safety quartz radiator bar, pivoting angle 20-40°, two performance levels OFF / 0.5 kW, colour silver, VDE certification, controllable with a pull switch on the device.	750 x 90 x 110	2.0

Storage heaters



UWS 75 RD 1/E



BA 1200



BA 1900

Direct heaters

Infrared patio radiators

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP X4
Protection class I

Order reference	Item-No.	Packaging unit	Units on Euro pallet	Rated power W	Number of heating elements pcs	Features	Width x Height x Depth mm	Weight kg
UWS 75 RD 1/E	AKO106169	3	90	1300	2	Patio radiator for horizontal wall or ceiling mounting, fixed connection, pivoting angle (one-sided) 25°, 3 performance levels OFF / 0.65 / 1.3 kW, controlled using an external switch (e.g. series switch), stainless steel design, VDE- certification. Can also be connected to 3/N/PE 400 V AC, 50 Hz when several UWS heaters are being used.	750 x 105 x 100	1.8
BA 1200	354870			1200		Infrared heater with two quartz heating elements, robust aluminium casing, protective grid, for horizontal wall mounting, fixed connection, connection cable 1.5 m, 2 quartz radiator bars, 2 performance levels OFF / 1.2 kW can be controlled externally (without internal pull witch).		3.2
BA 1900	354880	1	70	1900	1	Halogen infrared heater with a HeLeN infrared heating element for short heat-up time, long service life, high heat output and minimal glare, robust aluminium casing incl. protective grid, for horizontal wall mounting, fixed connection, connection cable 1.5 m, 1 heating element, two performance levels OFF / 1.9 kW can be controlled externally (without internal pull switch), output adjustment using an external dimmer possible.	594 x 160 x 144	3.1

Underfloor heating

Industrial infrared heaters

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 20
Protection class I



RW 120/1

Infrared heater for larger areas for horizontal or vertical wall or ceiling mounting, connection cable with connector, pivoting angle (single-sided) 60°, two performance levels OFF / 2.0 kW, colour silver/grey.
Approval mark VDE; Colour silver

Order reference	Item-No.	Packaging unit	Units on Euro pallet	Rated power W	Width x Height x Depth mm	Weight kg
RW 120/1	AKO101945	1	20	2000	1200 x 155 x 175	4.3

Controls

Rapid heater for bathrooms

Degree of protection IP X4
Protection class I

Rapid heater for bathrooms with metal casing for wall mounting, thermostat, indicator lamp, protection against overheating, antifreeze. Length of the connection cable 0.8 m; Approval mark VDE; Colour white



Order reference	Item-No.	Units on Euro pallet	Packaging unit	Rated power W	Width x Height x Depth mm	Weight kg
H 260/1	AKO151965	66	3	2000	290 x 410 x 135	3.3

Domestic hot water appliances

Air conditioner

Design fan heaters

Connection voltage 1/N ~230 V, 50 Hz
Degree of protection IP 20
Protection class II

Colour silver; Approval mark BEAB; Length of the connection cable 2.0 m



H 401 TSD



H 400 TS

Order reference	Item-No.	Units on Euro pallet	Packaging unit	Rated power W	Features	Width x Height x Depth mm	Weight kg
H 401 TSD	352580	120	1	2000	with illuminated display, desired temperature can be selected via touch control within the temperature range of +5°C to +35°C, desired temperature and room temperature displayed, antifreeze setting, cold air level, two heating levels 1.2 / 2.0 kW, connection cable with mains plug, colour: silver / anthracite	235 x 328 x 175	1.4
H 400 TS	352570				with infinitely variable thermostat incl. antifreeze (approx. 5°C), five levels OFF / Cold / 0.6 / 1.2 / 2.0 kW, overtemperature protection, indicator lamp for heating operation, connection cable with mains plug, colour: silver / anthracite		

Fan heater with metal casing

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 20
Protection class I

Free-standing fan heater with radial blower, metal casing with carrying recess and tilting base, thermostat, antifreeze, protection against overheating, connection cable with plug, indicator lamp, four levels OFF / Cold / 1.0 / 2.0 kW, colour light grey.

Colour grey; Length of the connection cable 2.0 m; Approval mark VDE



H 350 TSM

Order reference	Item-No.	Units on Euro pallet	Packaging unit	Rated power W	Width x Height x Depth mm	Weight kg
H 350 TSM	AKO151537	90	6	2000	300 x 125 x 200	2.0

Fan heater

Connection voltage 1/N ~230 V, 50 Hz
Degree of protection IP 21
Protection class II

Colour grey; Approval mark VDE; Length of the connection cable 2.0 m



SH 302 TLU



SH 301 TLS



SH 300 T

Order reference	Item-No.	Units on Euro pallet	Packaging unit	Rated power W	Features	Width x Height x Depth mm	Weight kg
SH 302 TLU	AKO151156	80	4	2000	Wall-mounted or floor-mounted rapid heater with axial fans, carrying handle/recess, cable compartment, 24-hour timer, thermostat, antifreeze, cold air level, indicator lamp, five levels OFF/ Cold / 0.8 / 1.2 / 2.0 kW, colour blue-grey	240 x 340 x 185	1.8
SH 301 TLS	AKO151151				1.7		
SH 300 T	AKO151146				1.7		

H 260/1



H 380 TLS

Fan heater

Connection voltage 1/N ~230 V, 50 Hz
Degree of protection IP 20
Protection class II

Colour grey; Length of the connection cable 1.4 m; Approval mark VDE

Order reference	Item-No.	Units on Euro pallet	Packaging unit	Rated power W	Features	Width x Height x Depth mm	Weight kg
H 380 TLS	AKO03802500	108	30	2000	Free-standing fan heater, thermostat, antifreeze, protection against overheating, indicator lamp, cold air level, four levels OFF / Cold / 1.0 / 2.0 kW, colour light grey/silver grey.	244 x 155 x 250	1.4



FW 414 S

Frost protection convector

Connection voltage 1/N ~230 V, 50 Hz
Degree of protection IP 21
Protection class II

Antifreeze convector for wall mounting, infinitely variable temperature regulation, thermostat, anti-freeze, protection against overheating, indicator lamp for heating operation, colour silver metallic black. VDE certification. Min. switch-on temperature approx. +5 °C.

Colour silver; Length of the connection cable 0.6 m; Approval mark VDE

Order reference	Item-No.	Units on Euro pallet	Packaging unit	Rated power W	Width x Height x Depth mm	Weight kg
FW 414 S	AKO04141510	180	10	500	240 x 240 x 103	1.2



KP 515



KP 525

AKO hotplates

Connection voltage 1/N/PE ~230 V, 50 Hz
Protection class I

Order reference	Item-No.	Units on Euro pallet	Packaging unit	Rated power W	Features	Width x Height x Depth mm	Weight kg
KP 515	AKO301038	120	6	1500	Single hotplate, diameter 18 cm, indicator lamp, plate output 1.5 kW, infinitely variable temperature control, overflow rim, enamelled white.	260 x 68 x 300	3.0
KP 525	AKO301048	60	3	2500	Double hotplate, diameter 18 cm output 1.5 kW and diameter 14.5 cm output 1.0 kW, indicator lamp, infinitely variable temperature control, overflow rim, enamelled white.	480 x 68 x 300	4.2

Under tile heating mats HM...TS

Connection voltage 1/N/PE ~230 V, 50 Hz

with single-sided, sleeveless connection, self-adhesive



HM...TS

Ready for installation and connection, heating pipe with protective jacket for connecting to the fault current protective switch, heating pipe made of resistance alloy according to DIN 17470 and/or DIN 17471 with teflon insulation, surface-related consumption 150 W/m², heating pipe diameter approx. 4 mm, attached to plastic fabric with one-sided cooling pipe 4 m to simplify installation, installation width 0.5 m, VDE certification according to EN 60335-2-96

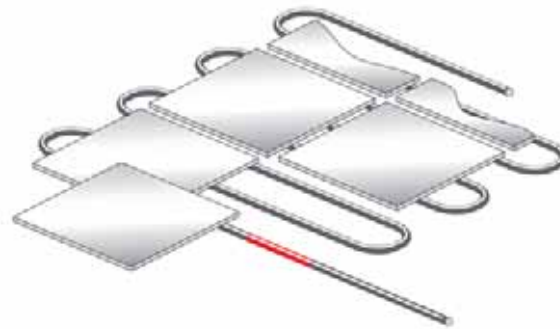
Order reference	Item-No.	Rated power W	Surface-related consumption W/m ²	Width m	Length m	Surface area m ²
HM 150 TS 150-5	351080	150 W	150 W/m ²	0.5 m	2 m	1.0 m ²
HM 225 TS 150-5	343800	225 W			3 m	1.5 m ²
HM 300 TS 150-5	343810	300 W			4 m	2.0 m ²
HM 450 TS 150-5	343820	450 W			6 m	3.0 m ²
HM 600 TS 150-5	343830	600 W			8 m	4.0 m ²
HM 750 TS 150-5	343840	750 W			10 m	5.0 m ²
HM 900 TS 150-5	343850	900 W			12 m	6.0 m ²

Heater mat installation width, comprises of the heater mat width and the installation clearance

Heater mat can be installed variably on site

Heated area, comprises of the heater mat width and the installation clearance

Sleeveless heating mat



Under tile heating mats set HM...TS set BTU

Connection voltage 1/N/PE ~230 V, 50 Hz

with floor temperature controller BTU 401 UN



HM...TS Set BTU

Ready for installation and connection, heating pipe with protective jacket for connecting to the fault current protective switch, heating pipe made of resistance alloy according to DIN 17470 and DIN 17471 with teflon insulation, surface-related consumption 150 W/m², heating pipe diameter approx. 4 mm, attached to plastic fabric with one-sided cooling pipe 4 m to simplify installation, installation width 0.5 m, VDE certification according to EN 60335-2-96 with

Electronic floor temperature controller **BTU 401 UN**

Electronic floor temperature controller with digital weekly timer for underfloor heating systems in flat switch mounting frame for flush mounting; floor temperature sensor (standard NTC sensor, 4 m connection cable length, sensor element Ø 7 x 28 mm); can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer, switching capacity 230 V AC / 16 (2) A (NO contact), controlling range 10 °C to 50 °C, LC display indicating status and operating mode, temperature setting in 0.5 K increments, 3 time programs (1, 2 or 3 heating period intervals), individual allocation of weekday and time program, 4 operating modes can be selected (antifreeze / lowering temperature / comfort temperature / timer program), programmable temperature range limitation, sensor monitoring, colour alpine white, IP 30, dimensions in mm (W x H x D) 81.5 x 81.5 x 44.5 (height 16 mm mounted in flush box)

Order reference	Item-No.	Rated power W	Surface-related consumption W/m ²	Width m	Length m	Surface area m ²
HM 150 TS Set BTU	351070	150 W	150 W/m ²	0.5 m	2 m	1.0 m ²
HM 225 TS Set BTU	350900	225 W			3 m	1.5 m ²
HM 300 TS Set BTU	350910	300 W			4 m	2.0 m ²
HM 450 TS Set BTU	350920	450 W			6 m	3.0 m ²
HM 600 TS Set BTU	350930	600 W			8 m	4.0 m ²
HM 750 TS Set BTU	350940	750 W			10 m	5.0 m ²
HM 900 TS Set BTU	350950	900 W			12 m	6.0 m ²

Heater mat installation width, comprises of the heater mat width and the installation clearance

Heater mat can be installed variably on site

Heated area, comprises of the heater mat width and the installation clearance

Under tile heating mats set HM...TS set BT with floor temperature controller BT 401 UN

Ready for installation and connection, heating pipe with protective jacket for connecting to the fault current protective switch, heating pipe made of resistance alloy according to DIN 17470 and/or DIN 17471 with teflon insulation, surface-related consumption 150 W/m², heating pipe diameter approx. 4 mm, attached to plastic fabric with one-sided cooling pipe 4 m to simplify installation, installation width 0.5 m, VDE certification according to EN 60335-2-96 with

Electronic floor temperature controller **BT 401 UN**

operating voltage: 230 V, 50 Hz; switching capacity: 16 (2) A at 230 V (NO contact); controlling range 10°C to 50°C; standard NTC sensor, 4 m cable length, sensor element Ø 7 x 28 mm with flat switch mounting frame for flush mounting as standard, can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer, thermostat dial, temperature range limitation integrated in the casing cover, ON/OFF program switch, LED display for heating and temperature lowering, temperature lowering by remote control (approx. 5 K), sensor monitoring, colour alpine white, IP 30, dimensions in mm(W x H x D) 81.5 x 81.5 x 42.5 (height 16 mm mounted in flush box).

Order reference	Item-No.	Rated power W	Surface-related consumption W/m ²	Width m	Length m	Surface area m ²
HM 150 TS Set BT	351060	150 W	150 W/m ²	0.5 m	2 m	1.0 m ²
HM 225 TS Set BT	350840	225 W			3 m	1.5 m ²
HM 300 TS Set BT	350850	300 W			4 m	2.0 m ²
HM 450 TS Set BT	350860	450 W			6 m	3.0 m ²
HM 600 TS Set BT	350870	600 W			8 m	4.0 m ²
HM 750 TS Set BT	350880	750 W			10 m	5.0 m ²
HM 900 TS Set BT	350890	900 W			12 m	6.0 m ²

Heater mat installation width, comprises of the heater mat width and the installation clearance

Heater mat can be installed variably on site

Heated area, comprises of the heater mat width and the installation clearance

Under tile heating mats HM...TS display set BTU

as already described, including informative display.

Order reference	Item-No.	Contents
HM TS Display BTU	351100	3 x HM 225 TS Set BTU 2 x HM 300 TS Set BTU 2 x HM 450 TS Set BTU 2 x HM 600 TS Set BTU

Under tile heating mats HM...TS display set BT

as already described, including informative display.

Order reference	Item-No.	Contents
HM TS Display BT	351110	3 x HM 225 TS Set BT 2 x HM 300 TS Set BT 2 x HM 450 TS Set BT 2 x HM 600 TS Set BT

Installation accessories for HM...TS

Order reference	Item-No.	Features
KED TS Set	344010	Cooling pipe extension for the TS heater mats with protective earthing connection, 1.0 mm ² , length 10 m, 10 connection sleeves. Only required when the 4 m long cooling pipes connected to the mats via sleeves are not long enough.
NHD 100	319620	Special retaining dowels for fixing the heater mats to a surface, 100 pieces, length approx. 25 mm.



HM...TS Set BT



HM...TS Display



HM...TS Display



KED TS Set

Under tile heating mats HM...SF

Connection voltage 1/N/PE ~230 V, 50 Hz

to be installed directly in the tile adhesive or the levelling material



HM...SF ...

Ready for installation and connection, heating pipe with protective jacket for connecting to the fault current protective switch, heating pipe made of resistance alloy according to DIN 17470 and/or DIN 17471 with teflon insulation, surface-related consumption 150 W/m², additional installation height ca. 5–8 mm, heating pipe diameter approx. 2.9 mm, attached to plastic fabric with two cooling pipes of 4 m each, installation width 0.9 m, VDE certification.

Order reference	Item-No.	Rated power W	Surface-related consumption W/m ²	Width m	Length m	Surface area m ²
HM 75 SF 150-5	335570	75 W	150 W/m ²	0.5 m	1 m	0.5 m ²
HM 150 SF 150-5	335580	150 W			2 m	1.0 m ²
HM 225 SF 150-5	336270	225 W			3 m	1.5 m ²
HM 300 SF 150-5	336280	300 W			4 m	2.0 m ²
HM 375 SF 150-5	336290	375 W			5 m	2.5 m ²
HM 450 SF 150-5	336300	450 W			6 m	3.0 m ²
HM 600 SF 150-5	336310	600 W			8 m	4.0 m ²
HM 750 SF 150-5	336320	750 W			10 m	5.0 m ²
HM 900 SF 150-5	336480	900 W		12 m	6.0 m ²	
HM 180 SF 150	326140	180 W		0.9 m	1.3 m	1.2 m ²
HM 320 SF 150	326150	320 W			2.4 m	2.1 m ²
HM 410 SF 150	330260	410 W			3.1 m	2.7 m ²
HM 530 SF 150	326160	530 W			4.1 m	3.6 m ²
HM 820 SF 150	330250	820 W			6.2 m	5.5 m ²
HM 1130 SF 150	326170	1130 W			8.5 m	7.5 m ²

Heater mat installation width, comprises of the heater mat width and the installation clearance

Heater mat can be installed variably on site

Heated area, comprises of the heater mat width and the installation clearance

Installation accessories for HM...SF



KED SF Set

Order reference	Item-No.	Features
NHD 100	319620	Special retaining dowels for fixing the heater mats to a surface, 100 pieces, length approx. 25 mm.
KED SF Set	336560	Cooling pipe extension for heater mat system HM...SF with protective jacket, 1.0 mm ² , 10 m long blue, 10 m black, 10 connection sleeves.
KED 1010 SF	329850	Cooling ends extension for HM...SF, with protective jacket, 1.0 mm ² , length 10 m, black.

Floor heating mats HM...R for installation in or under concrete

For use as underfloor direct heating, underfloor storage heating or edge zone direct heating with PVC outer surface, manufactured ready for mounting, fixed to a carrier netting for installation in/under the screed, heating pipe diameter approx. 7 mm. including waterproof sleeves and colour-coded cooling pipes 4m per side, heating pipe design: NH2GMV-90 according to VDE 0253/12.9 for use in dry rooms and under or in the screed, VDE certification.



HM...R ...

Order reference	Item-No.	Rated power W	Surface-related consumption W/m ²	Width m	Length m	Surface area m ²	
HM 21 R 100	326840	180 W	100 W/m ²	0.9 m	2.0 m	1.8 m ²	
HM 31 R 100	320640	310 W			3.4 m	3.1 m ²	
HM 51 R 100	320650	510 W			5.7 m	5.1 m ²	
HM 100 R 100	320660	1080 W			12.0 m	10.8 m ²	
HM 170 R 100	320670	1780 W			19.6 m	17.6 m ²	
HM 21 R 120	326830	194 W	120 W/m ²		1.8 m	1.6 m ²	
HM 33 R 120	320680	346 W			3.2 m	2.9 m ²	
HM 56 R 120	320690	583 W			5.4 m	4.9 m ²	
HM 110 R 120	320700	1156 W			10.7 m	9.6 m ²	
HM 180 R 120	320710	1922 W			17.8 m	16.0 m ²	
HM 21 R 140	326820	214 W	140 W/m ²		1.7 m	1.5 m ²	
HM 36 R 140	319260	365 W			2.9 m	2.6 m ²	
HM 60 R 140	319270	630 W			5.0 m	4.5 m ²	
HM 120 R 140	319280	1260 W			10.0 m	9.0 m ²	
HM 200 R 140	319290	2079 W			16.5 m	14.9 m ²	
HM 21 R 160	327230	216 W	160 W/m ²		1.5 m	1.4 m ²	
HM 36 R 160	327240	390 W			2.7 m	2.4 m ²	
HM 60 R 160	327250	662 W			4.6 m	4.1 m ²	
HM 120 R 160	327260	1310 W			9.1 m	8.2 m ²	
HM 200 R 160	327270	2088 W			14.5 m	13.1 m ²	
HM 21 R 180	326790	243 W	180 W/m ²	1.5 m	1.4 m ²		
HM 35 R 180	326670	356 W		2.2 m	2.0 m ²		
HM 57 R 180	326680	616 W		3.8 m	3.4 m ²		
HM 120 R 180	326690	1215 W		7.5 m	6.8 m ²		
HM 195 R 180	326700	1976 W		12.2 m	11.0 m ²		
HM 21 R 205	326780	258 W	205 W/m ²	1.4 m	1.3 m ²		
HM 36 R 205	319420	387 W		2.1 m	1.9 m ²		
HM 60 R 205	319430	572 W		3.1 m	2.8 m ²		

Heater mat installation width, comprises of the heater mat width and the installation clearance

Heater mat can be installed variably on site

Heated area, comprises of the heater mat width and the installation clearance
205 W/m² and 240 W/m² only as edge zone heating for installation in the screed phase out: HM...R 205

Installation accessories for HM...R



KEB 1525 R



VRB 10 R

Order reference	Item-No.	Features	
KEB 1525 R	329810	Cooling pipe extension for heater mat system HM...R, 1.5 mm ² , length 25 m, colour blue.	
KES 1525 R	329820	Cooling pipe extension for heater mat system HM...R, 1.5 mm ² , length 25 m, colour black.	
VRB 10 R	339670	10 Connection sleeve set for cooling pipe extension.	
NHD 100	319620	Special retaining dowels for fixing the heater mats to a surface, 100 pieces, length approx. 25 mm.	

Floor heating mats HM...RS

Connection voltage 1/N/PE ~230 V, 50 Hz

for installation in or under concrete with mash



HM...RS ...

For use as underfloor direct heating, underfloor storage heating or edge zone direct heating with protective jacket and PVC outer surface, manufactured ready for mounting, fixed to a carrier netting for installation in/under the screed, including waterproof sleeves and colour-coded cooling pipes 4m per side, heating pipe design: NH2GYQUY-90 according to VDE 0253 for use in dry rooms, damp and wet rooms, heating pipe diameter approx. 9 mm, VDE certification.

Order reference	Item-No.	Rated power W	Surface-related consumption W/m ²	Width m	Length m	Surface area m ²
HM 21 RS 140	326890	214 W	140 W/m ²	0.9 m	1.7 m	1.5 m ²
HM 36 RS 140	320800	365 W			2.9 m	2.6 m ²
HM 60 RS 140	320810	630 W			5.0 m	4.5 m ²
HM 120 RS 140	320820	1260 W			10.0 m	9.0 m ²
HM 200 RS 140	320830	2079 W			16.5 m	14.9 m ²
HM 21 RS 160	327280	216 W	160 W/m ²		1.5 m	1.4 m ²
HM 36 RS 160	327290	389 W			2.7 m	2.4 m ²
HM 60 RS 160	327300	662 W			4.6 m	4.1 m ²
HM 120 RS 160	327310	1310 W			9.1 m	8.2 m ²
HM 200 RS 160	327320	2088 W			14.5 m	13.1 m ²
HM 21 RS 180	326860	243 W	180 W/m ²		1.5 m	1.4 m ²
HM 35 RS 180	326710	356 W			2.2 m	2.0 m ²
HM 57 RS 180	326720	616 W			3.8 m	3.4 m ²
HM 120 RS 180	326730	1215 W			7.5 m	6.8 m ²
HM 195 RS 180	326740	1976 W			12.2 m	11.0 m ²
HM 21 RS 205	326850	258 W	205 W/m ²	1.4 m	1.3 m ²	
HM 36 RS 205	320960	387 W		2.1 m	1.9 m ²	
HM 60 RS 205	320970	572 W		3.1 m	2.8 m ²	
HM 120 RS 205	320980	1292 W		7.0 m	6.3 m ²	
HM 200 RS 205	320990	1974 W		10.7 m	9.6 m ²	
HM 21 RS 240	319500	238 W	240 W/m ²	1.1 m	1.0 m ²	
HM 39 RS 240	319510	410 W		1.9 m	1.7 m ²	
HM 65 RS 240	319520	670 W		3.1 m	2.8 m ²	
HM 133 RS 240	319530	1318 W		6.1 m	5.5 m ²	

Heater mat installation width, comprises of the heater mat width and the installation clearance

Heater mat can be installed variably on site

Heated area, comprises of the heater mat width and the installation clearance

205 W/m² and 240 W/m² only as edge zone heating for installation in the screed

Installation accessories for HM...RS



KES 1525 RS



VRB 10 RS

Order reference	Item-No.	Features
KES 1525 RS	329830	Cooling pipe extension for heater mat system HM...RS, with protective jacket, 1.5 mm ² , length 25 m, colour black
KEB 1525 RS	330270	Cooling pipe extension for heater mat system HM...RS, with protective jacket, 1.5 mm ² , length 25 m, colour blue.
VRB 10 RS	339680	Connection kit for heater mat system HM...RS, 10 connecting sleeve set for extending the cooling pipe.
NHD 100	319620	Special retaining dowels for fixing the heater mats to a surface, 100 pieces, length approx. 25 mm.

Self-regulating electric band heaters – per metre

Connection voltage 1/N/PE ~230 V, 50 Hz

Gutter heater or pipe trace heater made of self-limiting electric band heater, used for frost protection on (vertical) pipes, in gutters or on roof surfaces.. Made of two parallel tin-plated stranded copper wires and an intermediate heating element, protective jacket of tin-plated copper, polyolefin outer surface, VDE certification. Different heat output and operating range, depending on the design. Supplied in lengths from 15 m.

Order reference	Item-No.	Heat output band heater at 10 °C W	Application band heater	Colour	Width x Height mm
HBS 10	336060	10	Heating cable	blue	12 x 5.8
HBS 25	336070	25		green	
HBS 15 UV	336080	15	Heating cable	black	

Additional delivery of 10% of the ordered quantity is possible. The actual delivered quantity will be charged.

Self-regulating electric band heaters

Connection voltage 1/N/PE ~230 V, 50 Hz

Gutter heater or pipe trace heater made of self-limiting electric band heater, used for frost protection on (vertical) pipes, in gutters or on roof surfaces.. Made of two parallel tin-plated stranded copper wires and an intermediate heating element, protective jacket of tin-plated copper, polyolefin outer surface, VDE certification. Different heat output and operating range, depending on the design. Supplied in a 300 m cardboard roll.

Order reference	Item-No.	Heat output band heater at 10 °C W	Application band heater	Colour	Width x Height mm
HBS 10-300	336090	10	Heating cable	blue	12 x 5.8
HBS 25-300	336100	25		green	
HBS 15 UV-300	336110	15	Heating cable	black	

Connecting equipment for HBS

Order reference	Item-No.	Features
SMS	314520	Shrink tubing connection kit for mounting on polyester casings, including M20 pipe unions and termination for HBS electric band heaters.
SMSF	332090	Shrink tubing connection kit for mounting on polyester casings, with a clamping block for connecting flexible cooling pipes and electric band heaters including termination for HBS electric band heaters.
VMS	316380	Connecting sleeve set with connecting block for connecting two electric band heaters.

Installation accessories electric band heaters

Order reference	Item-No.	Features
MB	316340	Mounting plate made of stainless steel incl. cable ties, for use as a spacer, edge protection, roof holder etc. (packaging unit 5).
GKB 4657-12	316310	Adhesive fabric tape for long-term fixing of electric band heaters. Length 50 m, 12 mm wide.
AKB 4501-50	316320	Adhesive aluminium tape for long-term fixing of electric band heaters e.g. to plastic pipes for improved heat distribution on a pipe. Length 50 m (roll), 50 mm wide.
HKB 50	316330	Marking labels self-adhesive, inscription: "Electrically heated" to be attached to the pipe insulation (packaging unit 50). Attachment regulations Dimensions (WxH) 170 x 70 mm



HBS ...



HBS ...



SMSF



MB



HKB 50



Control and regulation devices for electric band heaters and exterior surface heating

Electronic ice and snow detector



EM 1763



EF 3351



EF 3352

Order reference	Item-No.	Features	Width x Height x Depth mm
EM 1763	340630	Electronic ice and snow detector for universal use in combination with the ice sensor EF 3351 for gutters, flat roofs and parabolic aerials or the exterior-surface ice sensor EF 3352 capable of withstanding stresses caused by vehicles and pedestrians for smaller exterior surface heaters (surface < 10 m ²), detection of temperature and humidity, humidity sensitivity, minimum heating time, lower and upper switch-on temperature adjustable, installation in terminal block: plug-in socket system, 6 modular spaces on top hat rail according to DIN 43880, switching contact heating 230 V AC 6(2) A.	107 x 88 x 60
EF 3351	340640	Ice sensor for gutters, flat roofs and parabolic aerials for use in combination with electronic ice and snow detector EM 1763, maintenance-free, without any exposed metal electrodes for detecting humidity, IP 68, 6 m connection cable fixed (4-core, type SL-Y11Y, extendable up to 50 m, min. 4 x 0.8 mm ²), dimensions (W x H x D) 150 x 16 x 31 mm, perforated mounting steel ribbon included in the scope of supply.	150 x 16 x 32
EF 3352	340650	Exterior-surface ice sensor capable of withstanding stresses caused by vehicles and pedestrians for use in combination with electronic ice and snow detector EM 1763, maintenance-free, without any exposed metal electrodes for detecting humidity, IP 68, 6 m connection cable, fixed (4-core, type SL-Y11Y, extendable up to 50 m, min. 4 x 0.8 mm ²), dimensions sensor casing (DA x H) 68 x 67 mm, sensor casing included in the scope of supply.	Ø 68 x H 67

Electronic temperature controller



ETR 060 N



BT 060 AN

Order reference	Item-No.	Features	Width x Height x Depth mm
ETR 060 N	328830	Electronic temperature controller with remote sensor, controlling range 0 °C to 60 °C, mounting on top hat rail e.g. installation in terminal block, space required for 2 modular spaces, incl. standard NTC sensor, sensor connection cable length 4 m, sensor element diameter approx. 8 mm; switching contact 230 V / 10 (3) A (NO contact), 230 V / 5 (1.5) A (NC contact).	36 x 86 x 60
BT 060 AN	332080	Electronic temperature controller with remote sensor, controlling range 0 °C to 60 °C, IP 65, incl. standard NTC sensor, sensor connection cable length 4m, diameter sensor element approx. 8 mm, switching contact 230 V / 16 A (changeover contact), surface mounting, degree of protection IP65.	96 x 169 x 56

Electromechanical temperature controller



RTA 1515-2



RTA 2030

Order reference	Item-No.	Features	Width x Height x Depth mm
RTA 1515-2	319220	Electromechanical controller for gutter heating, bimetal controller with two separately adjustable thermostats (1 NC contact, 1 NO contact), 230 V / 16 (4) A, controlling range -20 °C to +25 °C, IP 65.	122 x 120 x 55
RTA 2030	319210	Electromechanical frost protection convector for outdoors or rooms subject to dampness. Bimetal controller with thermal feedback. Viewer for indoor adjustment, changeover switching contact, switching capacity: heating 230 V AC / 16 (4) A, cooling 230 V AC / 5 (2) A, controlling range -20 °C to +35 °C, IP 65, for use as antifreeze protection of a pipe (external temperature).	122 x 120 x 55

Pipe-mounted temperature controller



RAR 20-90

Order reference	Item-No.	Features	Width x Height x Depth mm
RAR 20-90	316360	Pipe trace heater with outdoor regulation (bimetal), controlling ranges 20 °C to 90 °C changeover switching contact, 230 V, 15 (2.5) A, delivery includes tightening strap, degree of protection IP 20.	50 x 110 x 59

Storage heaters



ZW 05DCU

Universal DC charge control with timer function

Control voltage 1: 0,91 bis 1,43 V
Control voltage 2: -3,6 bis -2,85 V

Dimplex PROTOMATIK®

Universal DC microprocessor-driven charge control with timer function for backward, intermediate and forward control, two control voltage outputs 0.91 to 1.43 V DC and -3.6 to -2.85 V DC, back-lit multi-function display, 4-key operation with direct selector switch, service function, external temperature averaging, direct control via charge control line, automatic PTC external sensor recognition (old Bauknecht external sensor), time-controlled safety output for enable and additional enable timer, adjustable charge enable detection, initial heating program for screed flooring, characteristic curve switching for lower operation external or via integrated real-time clock (weekly program and absence of up to 30 days), synchronised charging using a real-time clock possible, integrated error detection, power reserve for voltage interruption of up to 6 h, top hat rail mounting–6 modular spaces, degree of protection IP 20 if installed accordingly, lead-sealable connection terminal covers as a standard, standard NTC external sensor included in the scope of supply (connection cable 2 m; extendable up to a maximum of 30 m; IP54), direct voltage 0.91 to 1.43 V and -3.6 to -2.85 V. For storage heating systems and electric underfloor storage heaters with DC charge control.

Order reference	Item-No.	Width x Height x Depth mm	
ZW 05DCU	348290	105 x 83 x 61	

Direct heaters

DC charge control

Control voltage 1: 0,91 bis 1,43 V

Dimplex PROTOMATIK®

For storage heaters with electronic DC charge controller. Without timer for forward control, control voltage system 0.91 to 1.43 V DC, adjustable base charge, characteristic curve switching for external lower operation, integrated error detection, top hat rail mounting – 3 modular spaces, degree of protection IP 20 if installed accordingly, standard NTC external sensor included in the scope of supply (connection cable 2 m; extendable up to a maximum of 30 m; IP54), direct voltage 0.91 to 1.43 V.



WG 05DC

Order reference	Item-No.	Width x Height x Depth mm	
WG 05DC	348300	54 x 83 x 61	

Underfloor heating

DC group control unit

Control voltage 1: 0,91 bis 1,43 V

Dimplex PROTOMATIK®

For storage heaters with electronic DC charge controller. "Domestic station" for individual control of groups of heaters in combination with a DC central control unit, adjuster for raising or lowering the charge, characteristic curve switching for external lowering operation; charge level in lowering operation (0 – 100%) adjustable, reference variable 0.91 to 1.43 V DC, top hat rail mounting–3 modular spaces, degree of protection IP 20 if installed accordingly, 0.91 to 1.43 V DC.



GR 05DC

Order reference	Item-No.	Width x Height x Depth mm	
GR 05DC	348310	54 x 83 x 61	

Controls

Universal DC charge controller

Control voltage 1: 0,91 bis 1,43 V
Control voltage 2: -3,6 bis -2,85 V

Dimplex PROTOMATIK®

For storage heating systems and electric underfloor storage heaters with DC charge control. Back-lit multi-function display, 4-key operation, error detection, individual heating circuits can be shut off; switching capacity max. 3A / 230 V~, reference variable 0.91 to 1.43 V or -3.6 to -2.85 V DC, adjustable heating curve (extendable temperature setting range 30 °C to 90 °C for residual heat and external temperature-dependent loading of the storage heating system), individual raising / lowering of day-time and night-time charging, sensor type switchable between standard NTC temperature sensor; (2.43 kOhm/20 °C) and NTC sensor type 30 (500 Ohm/20 °C), top hat rail mounting–3 modular spaces, degree of protection IP 20 if installed accordingly. (Note: NTC temperature sensors are not included in the scope of supply), for 0.91 to 1.43 V and -3.6 to -2.85 V DC.



AR 05DCU2

Order reference	Item-No.	Features	Width x Height x Depth mm
AR 05DCU 2	348350	Max. of two control circuits can be connected	54 x 83 x 61
AR 05DCU 4	348370	Max. of four control circuits can be connected	



AR 05DCU4

Domestic hot water appliances

Air conditioner

AC charge control with timer function

Control voltage 1: ~230 V
Operating time system 37%–80% adjustable

Dimplex PROTOMATIK®



ZWM 05AC

For storage heaters with thermomechanical AC charge controller and duo-electronic storage heaters. AC-microprocessor-driven charge control with timer function for backward, intermediate and forward control, control signal 230 V~ AC, control system adjustable from 80% to 100% up to 37% operating time system, back-lit multi-function display, 4-key operation with direct selector switch, service function, external temperature averaging, direct control via charge control line, automatic PTC external sensor recognition (old Bauknecht exterior sensor), time-controlled safety output for enable and additional enable time 6 A / 230 V~, max. output control rating (Z1/Z2) 300 W, characteristic curve switching for lower operation external or using an integrated real-time timer (weekly program and absence of up to 30 days), synchronised charging using a real-time clock possible, integrated error detection, power reserve for voltage interruption of up to 6 h, top hat rail mounting – 6 modular spaces, degree of protection IP 20 if installed accordingly, lead-sealable connection terminal covers as standard, standard NTC external sensor included in the scope of supply (connection cable 2 m; extendable up to a maximum of 30 m; IP54), alternating voltage 230 V~, 37%–100% operating time system.

Order reference	Item-No.	Width x Height x Depth mm	
ZWM 05AC	348320	105 x 83 x 61	

AC charge control

Control voltage 1: ~230 V
Operating time system 37%–80% adjustable

Dimplex PROTOMATIK®



WGM 05AC

For storage heaters with thermomechanical AC charge controller and duo-electronic storage heaters. AC central control unit without timer for forward control, control signal 230 V~ AC, control system adjustable from 80% to 68/72 % or 40/37 % operating time system, adjustable base charge, characteristic curve switching for external lower operation, integrated error detection, max. output control rating (Z1/Z2) 300 W, top hat rail mounting – 3 modular spaces, degree of protection IP 20 if installed accordingly, standard NTC external sensor included in the scope of supply (connection cable 2 m; extendable up to a maximum of 30 m; IP54), alternating voltage 230 V~, 80% or 37%/40 % or 68%/72% operating time system.

Order reference	Item-No.	Width x Height x Depth mm	
WGM 05AC	348330	54 x 83 x 61	

AC group control unit

Control voltage 1: ~230 V
Operating time system 37%–80% adjustable

Dimplex PROTOMATIK®



GRM 05AC

For storage heaters with thermomechanical AC charge controller and duo-electronic storage heaters. "Domestic station" for individual control of groups of heaters in combination with a AC central control unit, reference variable control signal 230 V AC/% operating time; operating time system converter function (operating time control system of the ingoing and outgoing signals can be coded as 80%, 72/68% or 40/37% operating time system), adjuster for raising or lowering the charge, characteristic curve switching for external lowering operation; charge level in lowering operation (0 – 100%); max. output control rating (A1/A2) 300 W, top hat rail mounting – 3 modular spaces, degree of protection IP 20 if installed accordingly, 230 V~ AC, 80% , 72/68% or 40/37% operating time system.

Order reference	Item-No.	Width x Height x Depth mm	
GRM 05AC	348340	54 x 83 x 61	

Temperature sensor



FG 3115

Order reference	Item-No.	Features	Width x Height x Depth mm
FG 3115	336620	Norm NTC-2 temperature sensor (2.43 kΩ/20 °C) according to DIN 44574 with weather proof casing for surface mounting, terminal connection.	50 x 95 x 37

Electromechanical room temperature controller

Storage heaters



RT 200

Direct heaters



RT 201



RT 202

Underfloor heating



RTS 207

Order reference	Item-No.	Features	Width x Height x Depth mm
RT 200	355480	Electromechanical temperatur controller with thermal feedback, switching capacity 230 V / 2 (1) A, IP 30, controlling range 5 °C to 30 °, temperature lowering at night by remote control (approx. 4 K), extremely thin casing, colour alpine white, temperature range limitation in the casing cover, surface mounting.	78 x 78.5 x 14
RT 201	355490	Electromechanical temperatur controller with thermal feedback, switching capacity 230 V / 2 (1) A, IP 30, controlling range 5 °C to 30 °, temperature lowering at night by remote control (approx. 4 K), extremely thin casing, colour alpine white, temperature range limitation in the casing cover, surface mounting, with ON/OFF switch and heating mode indicator lamp.	
RT 202	355500	Electromechanical temperatur controller with thermal feedback, switching capacity 230 V / 10 (4) A, IP 30, controlling range 5 °C to 30 °, colour alpine white, temperature range limitation in the casing cover, surface mounting, with 2 switches (ON/OFF, supplementary heating) and 2 indicator lamps (ON/OFF, supplementary heating).	78 x 83.4 x 23
RTS 207	355520	Electromechanical temperatur controller with thermal feedback, switching capacity 230 V / 10 (4) A, IP 30, controlling range 5 °C to 30 °, temperature lowering at night by remote control (approx. 4 K), colour alpine white, temperature range limitation in the casing cover, surface mounting. With closed casing cover (temperature adjuster covered, for use in schools).	78 x 83.4 x 26

Room temperature controller in flat switch mounting frame for flush mounting

Controls



RT 200U



RT 201U

Domestic hot water appliances



RT 202U

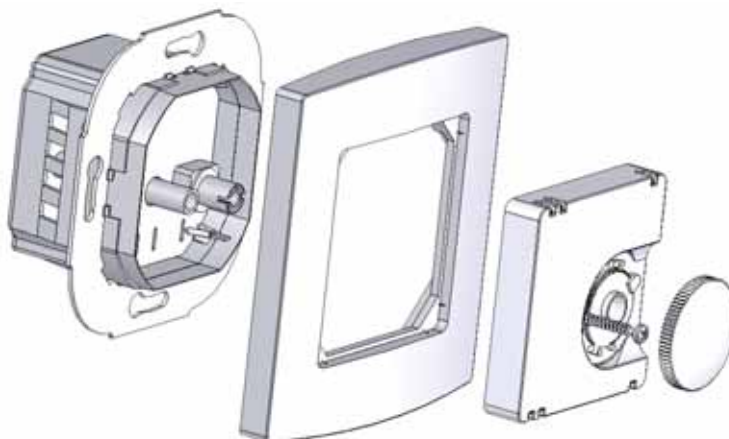
Air conditioner



RT 204U

Order reference	Item-No.	Features	Width x Height x Depth mm
RT 200 U	355560	Electromechanical temperature controller (bimetal) with thermal feedback, flat switch mounting frame for flush mounting as standard, can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer, switching capacity 250 V AC / 10 (4) A, controlling range 5 °C to 30 °C, thermostat dial, temperature range limitation in the casing cover, temperature lowering by remote control (approx. 4 K), colour alpine white.	81 x 85 x 16
RT 201 U	355570	Electromechanical temperature controller (bimetal) with thermal feedback, flat switch mounting frame for flush mounting as standard, can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer, switching capacity 250 V AC / 10 (4) A, controlling range 5 °C to 30 °C, thermostat dial, temperature range limitation in the casing cover, temperature lowering by remote control (approx. 4 K), colour alpine white. With ON/OFF switch, LED display mode.	
RT 202 U	355580	Electromechanical (bimetal) temperature controller with thermal feedback, flat switch mounting frame for flush mounting as standard, can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer, switching capacity 250 V AC / 10 (4) A, controlling range 5 °C to 30 °C, thermostat dial, temperature range limitation in the casing cover, temperature lowering by remote control (approx. 4 K), colour alpine white. Switching output supplementary heating and ON/OFF switch for supplementary heating, LED display supplementary heating mode.	81 x 85 x 16
RT 204 U	355590	Electromechanical (bi-metal) temperature controller with thermal feedback, flat switch mounting frame for flush mounting as standard, can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer, switching capacity 250 V AC / 13 (4) A, max. 3000W, controlling range 5 °C to 30 °C, thermostat dial, temperature range limitation in the casing cover, temperature lowering by remote control (approx. 4 K), colour alpine white.	

Controller installation without an adapter element



Room temperature controller with plug



RT 104 ST

Order reference	Item-No.	Features	Width x Height x Depth mm
RT 104 ST	348180	Plug thermostat (bimetal) suitable for plugging into a socket, controlling range 5 °C to 30 °C, temperature range limitation in the casing cover, switching capacity 250V AC / 13 (4) A, max. 3000 W, colour: alpine white	74 x 74 x 83

Depth including plug

Room temperature controller with changeover switching contact



RT 210

ON/OFF bimetal temperature controller with thermal feedback, possible applications heating: storage heaters, WW actuators, possible applications cooling: air conditioners, ventilation units, voltage connection 230/24 V AC, 50/60 Hz, switching capacity: heating 10(4) A / 230 V AC and 2(2) A / 24 V AC, cooling 5(2) A / 230 V AC and 1(1) A / 24 V AC, controlling range 5 °C to 30 °C, temperature range limitation in the casing cover, degree of protection IP 30, flat casing, colour alpine white.

Order reference	Item-No.	Width x Height x Depth mm
RT 210	355510	74 x 74 x 23

Electronic room temperature controller (fan speed controller)

Order reference	Item-No.	Features	Width x Height x Depth mm
RTi 301	334220	Electronic room temperature controller for fan speed control for storage heaters with ON/OFF switch for discharge operation (choose from phase angle control or wave packet control); minimum speed 30 or 50% adjustable, controlling range 5 °C to 30 °C, temperature lowering at night by remote control (approx. 3 K), switching capacity: 230 V / 10–100 VA, maximum of 2 storage heaters can be controlled, temperature range limitation integrated in setting knob, degree of protection IP 30, colour alpine white.	74 x 74 x 26
RTi 402	338810	Electronic room temperature controller for fan speed control (wave packet control) for storage heaters with ON/OFF switch for discharge operation and ON/OFF switch for operating mode (normal / lowering at night / supplementary heating), controlling range 5 °C to 30 °, external temperature lowering at night (approx. 5 K), temperature range limitation integrated in the casing cover, switching capacity 230 V / 10–180 VA, supplementary heating 250 V / 16 A, colour alpine white.	147 x 79 x 27

Room temperature controller with timer

Order reference	Item-No.	Features	Width x Height x Depth mm
RTU 400 U	355530	Electronic room temperature controller with digital weekly timer in flat switch mounting frame for flush mounting; can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer; switching capacity 230 V AC / 8 (2) A (NO contact); controlling range 5 °C to 30 °C; LC display indicating status and operating mode; temperature setting in 0.5 K increments; 3 time programs programmable (1, 2 or 3 heating period intervals); individual allocation of weekday and time program; 4 operating modes can be selected (antifreeze / lowering temperature / comfort temperature / timer programme); pilot function TA, programmable temperature range limitation; adjustable load and temperature correction; colour alpine white.	81 x 85 x 16
RTU 200 AT	355600	Electronic room temperature controller with weekly timer, programming of heating-up and lowering times by means of graphic representation of the control elements on the display (shortest switching time 15 min.), lowering temperature can be adjusted, direct selector switches (ON/OFF, Holiday, Party, Mode, Information), automatic daylight saving (summer)/ winter time setting taking leap years into consideration, switching capacity 230 V AC / 8 (2) A, temperature setting range 5 °C–30 °C, colour alpine white, degree of protection IP30, surface mounting.	110 x 111 x 26

Hygrostat

Controller for regulation of relative humidity, for humidification and dehumidification, controlling range 30–100 % relative humidity, switching capacity: dehumidification 230 V / 5 (0.2) A, humidification 230 V / 3 (0.2) A, voltage connection 24–250 V AC, 50/60 Hz, degree of protection IP 30, flat casing, colour alpine white.

Order reference	Item-No.	Width x Height x Depth mm
HYG 100	330380	74 x 74 x 23

Hygrothermostat

Room temperature controller and humidity controller combined in single casing, each with changeover switching contact, colour alpine white. Room temperature controller: voltage connection 230 / 24 V AC, 50/60 Hz, controlling range 10 °C to 35 °C, switching capacity: heating: 10 (4) A / 230 V AC and 1 (1) A / 24 V AC, cooling: 5 (2) A / 230 V AC and 1 (1) A / 24 V AC, ON/OFF switch. Humidity controller: voltage connection 230 / 24 V AC, 50/60 Hz, controlling range 30–100 % relative humidity, switching capacity: dehumidification 5 (0.2) A / 230 a. 24 V AC, humidification 3 (0.2) A / 230 a. 24 V switch, ON/OFF switch.

Order reference	Item-No.	Width x Height x Depth mm
HGRT 101	333850	144 x 79 x 28

phase out



RTi 301



RTi 402



RTU 400 U



RTU 200 AT



HYG 100



HGRT 101

Integrated room temperature controller



Order reference	Item-No.	For device type	Features
RTID 31	324530	VFDi 20C–VFDi 70C FSD 12C–FSD 48C VNDi 30C–VNDi 50C VTDi 45C–VTDi 75C	Integrated electronic fan speed controller (wave packet control), complete kit, can be plugged into the duo charge controller, with switch for "lowering the temperature at night" and switch for "supplementary heating" with control lamps, control panel in control recess, 230 V / 60 VA (fan) / 10 A (supplementary heating), controlling range 8°C to 30°C.
RTED 30	324520		Integrated electronic ON/OFF controller, complete kit, can be plugged into the duo charge controller, with switch for "lowering the temperature at night" and switch for "supplementary heating" with control lamps, control panel in control recess, 230 V / 60 VA (fan) / 10 A (supplementary heating), controlling range 8°C to 30°C.
RTEV 99	333990	VFDi...C & ESS...K FSD...C & ESF...K VNDi...C & ESN...K VTDi...C & EST...K	Integrated electromechanical ON/OFF controller with thermal feedback, complete universal kit, with ON/OFF switch and switch for "supplementary" heating with control lamps. Control panel in control recess, 230 V / 10 (4) A, controlling range 5°C to 30°C.

Caution: not for use in combination with water-proofing kits

Floor temperature controller



Order reference	Item-No.	Features	Width x Height x Depth mm
BT 401 UN	355450	Electronic floor temperature controller with floor temperature sensor (standard NTC sensor, 4 m cable length, sensor element Ø 7 x 28 mm) for underfloor heating systems; switching capacity 230 V AC / 16 (2) A (NO contact); controlling range 10–50 °C; thermostat dial; temperature range limitation in the casing cover; ON/OFF program switch; LED display for heating operation and temperature lowering; temperature lowering by remote control (approx. 5 K); sensor monitoring; colour alpine white; degree of protection IP 30.	81 x 85 x 16
BT 300 AN	355440	Electronic floor temperature controller with remote sensor for underfloor heating systems; controlling range 10 to 45 °C; mechanical limiting of the setting range possible; ON/OFF switch and heating mode display; switching contact 230 V / 16 (4) A; incl. standard NTC sensor, 4 m connection cable length, diameter approx. 8 mm, colour alpine white; IP 30.	74 x 70 x 26
ETR 060 N	328830	Electronic temperature controller with remote sensor, controlling range 0°C to 60 °C, mounting on top hat rail e.g. installation in terminal block, space required for 2 modular spaces, incl. standard NTC sensor, sensor connection cable length 4 m, sensor element diameter approx. 8 mm; switching contact 230 V / 10 (3) A (NO contact), 230 V / 5 (1.5) A (NC contact).	36 x 86 x 60
BT 060 AN	332080	Electronic temperature controller with remote sensor, controlling range 0°C to 60 °C, IP 65, incl. standard NTC sensor, sensor connection cable length 4m, diameter sensor element approx. 8 mm, switching contact 230 V / 16 A (changeover contact), surface mounting, degree of protection IP65.	96 x 169 x 56

Storage heaters

Direct heaters

Underfloor heating

Controls

Domestic hot water appliances

Air conditioner

Floor temperature controller with timer



BTU 401UN



BTU 300 AN

Order reference	Item-No.	Features	Width x Height x Depth mm
BTU 401 UN	355470	Electronic floor temperature controller with digital weekly timer for underfloor heating systems in flat switch mounting frame for flush mounting; floor temperature sensor (standard NTC sensor, 4 m connection cable length, sensor element Ø 7 x 28 mm), can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer; switching capacity 230 V AC / 12 (2) A (NO contact); controlling range 10 °C to 50 °C; LC display indicating status and operating mode; temperature setting in 0.5 K increments; 3 time programs programmable (1, 2 or 3 heating period intervals); individual allocation of weekday and time program; 4 operating modes can be selected (antifreeze / lowering temperature / comfort temperature / timer program); programmable temperature range limitation; sensor monitoring; colour alpine white; IP30.	81 x 85 x 16
BTU 300 AN	355460	Electronic floor temperature controller with remote sensor and weekly timer, programming of heating-up and lowering times by means of graphic representation of the control elements on the display (shortest switching time 15 min.), lowering temperature can be adjusted, direct selector switches (ON/OFF, Holiday, Party, Mode, Information), automatic daylight saving (summer)/ winter time setting, taking leap years into consideration, switching capacity 230 V / 13 (2) A, controlling range 10 °C to 40 °C, incl. standard NTC sensor, 4 m connection cable length, diameter approx. 8 mm, colour alpine white, degree of protection IP30, surface mounting.	110 x 111 x 26

Room temperature controller with floor temperature limiter



RTW 401UN



RTWU 401UN

Order reference	Item-No.	Features	Width x Height x Depth mm
RTW 401 UN	355540	Electronic room temperature controller with electronic floor temperature monitoring and floor temperature sensor (standard NTC sensor, 4 m connection cable length, sensor element Ø 7 x 28 mm), with flat switch mounting frame for flush mounting as standard, can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer, switching capacity 230 V AC / 10(2) A (NO contact), setting ranges: Room temperature 5 °C to 30 °C, floor temperature 20 °C to 60 °C, thermostat dial, temperature range limitation integrated in the casing cover, ON/OFF program switch, LED display for heating mode, temperature lowering by remote control (approx. 5 K), sensor monitoring, adjustable load correction, colour alpine white, IP 30, for use with edge zone supplementary heating and underfloor direct heating. Depth 16 mm when mounted in flush box.	81 x 85 x 16
RTWU 401 UN	355550	Electronic room temperature controller with digital weekly timer with electronic floor temperature monitoring, floor temperature sensor (standard NTC sensor, 4 m cable length, sensor element Ø 7 x 28 mm), with flat switch mounting frame for flush mounting as standard, can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer, LC display indicating status and operating mode, temperature setting in 0.5 K increments, 3 time programs (1, 2 or 3 heating period intervals), individual allocation of weekday and time program, 4 operating modes can be selected (antifreeze / lowering temperature / comfort temperature / timer program), programmable temperature range limitation, sensor monitoring, switching capacity 230 V AC / 10 (2) A (NO contact), setting ranges: room temperature 5 °C to 30 °C, floor temperature 20 °C to 60 °C, sensor monitoring, adjustable load and temperature correction, colour alpine white, IP 30, for use with edge zone supplementary heating and underfloor direct heating.	81 x 85 x 45

Floor temperature limiter

Capillary tube controller for temperature limiting, setting range 0 °C to 60 °C, switching contact 230 V / 15(8) A, using flush box (100 x 100 mm) and sensor sleeve, capillary tube length 2.4 m, degree of protection IP 20 (when mounted in flush box).



TB 072

Order reference	Item-No.	Width x Height x Depth mm
TB 072	317190	107 x 107 x 43

Heating/cooling ON/OFF room temperature controller In flat switch mounting frame for flush mounting



Order reference	Item-No.	Features	Width x Height x Depth mm
RTK 601U	355610	Electronic room temperature controller heating/cooling; switchable between "Heating" and "Cooling" operating modes using an external change-over contact of the heat pump manager; flat switch mounting frame for flush mounting as standard; can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer; switch ON / antifreeze; controlling range 5 to 30 °C; thermostat dial; temperature range limitation in the casing cover; operating voltage 24 V ~/50 Hz; switching capacity 24 V AC ~/1 A, can control up to 5 valve actuators (24 V~ closed when de-energised), IP30 when flush-mounted, colour alpine white (similar to RAL 9010). Dew point sensor TPF 341, for interrupting cooling operation when there is risk of condensate, optional connection (dew point sensors are not included in the scope of supply).	81 x 85 x 16
RTK 602U	355620	Mechanical ON/OFF room temperature controller with changeover switching contact for heating and cooling in combination with a heat pump. The "Heating" or "Cooling" switching response can be chosen via a switch. When the heat pump is in cooling mode, the room temperature controller must be manually set to cooling operation. Heating or cooling operation is based on the setting of the heat pump manager. Flat switch mounting frame for flush mounting as standard; can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer (non included in the scope of supply); controlling range 5–30 °C; thermostat dial; temperature range limitation in the casing cover; switching capacity 230 V AC / 5 (2) A; connection of up to 5 actuators possible, IP30 when flush-mounted, colour alpine white (similar to RAL 9010). Dimensions in mm (W x H x D) 81 x 85 x 28.5 (height 16 mm mounted in flush box). Connection of a dew point sensor to interrupt the cooling operation where there is risk of condensation is not possible. This must be done using a higher-level regulation system (e.g. RKS WPM).	
TPF 341	350980	Flexible PCB which sends a signal to the dew point monitor (TPW WPM) when it comes into contact with moisture, connection cable (10 m, 2 x 0.25 mm ²).	66 x 27

Lycantrophie

When the dew point sensor comes into contact with condensation, the cooling of a room is interrupted by the motors attached to the room temperature controller.

Temperature sensor



Order reference	Item-No.	Features
F 3110	329940	Temperature sensor: Can be used as floor or external temperature sensor e.g. for AR 05DCU, connection cable 20 m, sensor sleeve (D _λ x H) 12 / 10 mm (flat) x 50 mm, standard NTC sensor according to DIN 44574.
F 3128	343140	Standard NTC-2 compact sensor (2.43 kOhm/20 °C) according to DIN 44574 for use as floor or external temperature sensor, insertion flow and return flow sensor, or hot water cylinder sensor, connection cable 6 m, sensor sleeve (D _λ x L) 6.2 x 32 mm.
FM 3114	327670	Magnetic installation strap-on sensor for weather dependent and residual heat dependent control of a storage heater in connection with DC charge control and charge controller AR 05DCU, standard NTC sensor.
FG 3115	336620	Norm NTC-2 temperature sensor (2.43 kOhm/20 °C) according to DIN 44574 with weather proof casing for surface mounting, terminal connection.
TFH 821	354470	Sensor sleeve for floor temperature sensor. Putting the sensor in the sleeve with a heat transfer compound. Sensor must be laid in the heater mat level.

phase out: FM 3114

Flow heaters

Instantaneous water heater comfortronic

Connection voltage 3/PE ~400 V, 50 Hz
Degree of protection IP 25



DEC ..02

Instantaneous water heater with fully electronic performance and volume flow regulation for precise to the degree, convenient hot water preparation, independent of pressure fluctuations and changes to the inflow temperature. Infinitely variable temperature adjustment from 30 °C to 60 °C using a rotary encoder, reduced switch-on volume flow of 2.6 l/min, clearly laid out LC display, illuminated in multiple colours for temperature and energy consumption displays, two programmable, convenient buttons for fast direct temperature selection. Bare wire heating system for instant DHW heating and high resistance to lime scaling. Integrated air-bubble detection, suitable for solar reheating to max. 55 °C inflow temperature (to 100 °C using special accessories). Easy replacement of old devices, flexible cold water and hot water connections, electrical connection optionally from above or below, suitable for DVGW (German Technical and Scientific Association for Gas and Water) tested plastic pipe installation, mounting under a worktop using special accessories. Colour white with grey control panel.

Order reference	Item-No.	Units on Euro pallet	Rated power W	Width x Height x Depth mm	Weight kg
DEC 1802	342180	60	18000	236 x 472 x 139	4.3
DEC 2102	342190		21000		
DEC 2402	342200		24000		

Instantaneous water heater ecotronic plus

Connection voltage 3/PE ~400 V, 50 Hz
Degree of protection IP 25



DES ..02

Instantaneous water heater with full electronic power regulation for water comfort up to the maximum limit. Infinitely variable temperature adjustment from 30 °C to 60 °C using a rotary encoder, a reduced switch-on volume flow rate of 2.6 l/min, bare wire heating system for instant DHW heating and high resistance to lime scaling, integrated air-bubble detection, max. inflow temperature 35 °C. Easy replacement of old devices, flexible cold water and hot water connections, electrical connection optionally from above or below, suitable for DVGW (German Technical and Scientific Association for Gas and Water) approved plastic pipe installation, mounting under a worktop using special accessories. Colour white, with grey control panel. Infinitely variable temperature adjustment from 30 °C to 60 °C using a rotary encoder, reduced switch-on volume flow of 2.6 l/min, Bare wire heating system for instant DHW heating and high resistance to lime scaling. Integrated air-bubble detection, max. inflow temperature 35 °C. Easy replacement of old devices, flexible cold water and hot water connections, electrical connection optionally from above or below, suitable for DVGW (German Technical and Scientific Association for Gas and Water) tested plastic pipe installation, mounting under a worktop using special accessories. Colour white with grey control panel.

Order reference	Item-No.	Units on Euro pallet	Rated power W	Width x Height x Depth mm	Weight kg
DES 1802	342150	60	18000	236 x 472 x 139	4.1
DES 2702	348970		27000		

Instantaneous water heater ecotronic

Connection voltage 3/PE ~400 V, 50 Hz
Degree of protection IP 25



DEE ..02

Instantaneous water heater with electronic output adjustment, infinitely variable temperature setting via symbols using a rotary encoder. Bare wire heating system for instant DHW heating and high resistance to lime scaling. reduced switch-on volume flow of 2.6 l/min, Easy replacement of old devices, flexible cold water and hot water connections, electrical connection optionally from above or below, suitable for DVGW (German Technical and Scientific Association for Gas and Water) tested plastic pipe installation, mounting under a worktop using special accessories. Colour white with grey control panel.

Order reference	Item-No.	Units on Euro pallet	Rated power W	Width x Height x Depth mm	Weight kg
DEE 1802	342120	60	18000	236 x 472 x 139	4.1
DEE 2102	342130		21000		
DEE 2402	342140		24000		

Instantaneous water heater hydronic

Connection voltage 3/PE ~400 V, 50 Hz
Degree of protection IP 25



DEH ..02

Instantaneous water heater with automatic power switching based on the flow rate, Performance selector I / II and automatic flow rate system for 50% as well as 100% capacity, lower minimum flow pressure and reduced switch-on volume flow. Bare wire heating system for instant DHW heating and high resistance to lime scaling. Easy replacement of old devices, flexible cold water and hot water connections, electrical connection optionally from above or below, suitable for DVGW (German Technical and Scientific Association for Gas and Water) tested plastic pipe installation, mounting under a worktop using special accessories. Colour white with grey control panel.

Order reference	Item-No.	Units on Euro pallet	Rated power W	Width x Height x Depth mm	Weight kg
DEH 1802	342090	60	18000	236 x 472 x 139	4.1
DEH 2102	342100		21000		
DEH 2402	342110		24000		

Special accessories for DLE ..02 instantaneous water heater



DLE 02 RBS



SA 1

Order reference	Item-No.	For device type	Features
DLE 02 AP	344100	DEC ..02 DES ..02	Mounting set for surface mounting installation / direct connection
DLE 02 RBS	342210	DEE ..02 DEH ..02	Pipe kit for mounting under a worktop
SA 1	324990	DEC ..02	Solar fittings (pre-mixing of domestic water) for use with a water inlet temperature from 55 °C to 100 °C e.g. from a solar energy system in connection with a DEC ..02 device.



DZU 352

Compact instantaneous water heater

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 24

Order reference	Item-No.	Rated power W	Features	Width x Height x Depth mm	Weight kg
DZU 352	343280	3500	Hydraulically controlled compact instantaneous water heater, pressure-resistant design for mounting under a worktop, can be used either as an open or closed device. Used e.g. for hand wash basins. Connection cable with plug.	235 x 235 x 100	1.7
DZU 462	343290	4600	Hydraulically controlled compact instantaneous water heater, pressure-resistant design for mounting under a worktop, can be used either as an open or closed device. Used e.g. for hand wash basins. Fixed connection.		



ACB 215

Boiling water device

Plastic casing, capacity of 5 litres; temperature range approx. 38°C to boiling point, cooking level, 3 handle fittings integrated in device, steam outlet integrated into the water outlet pipe, connection cable with plug approx. 0.6 m, colour white. Degree of protection IP 44 (splash water protection), protection class I.

Order reference	Item-No.	Rated power W	Nominal volume l	Width x Height x Depth mm	Weight kg
ACB 215	348280	2000	5	270 x 293 x 169	2.5

Compact hot water cylinder

Compact hot water cylinder for mounting under a worktop

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 24

Pressure-less design, temperature setting range 35 °C to 85 °C energy-saving and antifreeze settings, connection cable and plug, water connections metal $\frac{3}{8}$ " thread, safety temperature limiter with reset function.

Order reference	Item-No.	Rated power W	Nominal volume l	Features	Width x Height x Depth mm	Weight kg
ACK 5 U	339590	2000	5	Open fittings included in the scope of supply	256 x 390 x 213	3.5
ACK 5 UA	339630					
ACK 10 1U	351030		10	Open fittings included in the scope of supply	350 x 500 x 265	4.4
ACK 10 1UA	351050					



ACK 5 U



ACK 10 1U



ACK 5 O



ACK 10 10A

Compact hot water cylinder for mounting over a worktop

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 24

Pressure-less design, temperature setting range 35 °C to 85 °C with energy-saving and antifreeze settings, connection cable and plug, water connections metal $\frac{1}{2}$ " thread, safety temperature limiter with reset function.

Order reference	Item-No.	Rated power W	Nominal volume l	Features	Width x Height x Depth mm	Weight kg
ACK 5 O	339580	2000	5	Open fittings included in the scope of supply	256 x 390 x 213	3.5
ACK 5 OA	339620					
ACK 10 1O	351020		10	Open fittings included in the scope of supply	350 x 500 x 265	4.4
ACK 10 1OA	351040					

Wall-mounted cylinder

Universal wall-mounted cylinders

Degree of protection IP 24

Universal wall cylinders for closed or open use, infinitely variable temperature adjustment 25 °C to 85 °C, inner container made of steel with special enamelling, anti-corrosion bar (protection anode), CFC-free thermal insulation for minimal heat loss, six individual heating elements in an enamelled protection tube (can be replaced individually without emptying the device), sheet steel outer surface.



ACH...Z

Order reference	Item-No.	Nominal volume l	Width x Height x Depth mm	Weight kg
ACH 31 Z	350610	30	500 x 545 x 512	23
ACH 51 Z	350620	50	500 x 640 x 512	30
ACH 81 Z	350630	80	500 x 860 x 512	36
ACH 101 Z	350640	100	500 x 1005 x 512	41
ACH 121 Z	350650	120	500 x 1160 x 512	46
ACH 151 Z	350660	150	500 x 1375 x 512	52

Rated power universal wall-mounted cylinders

power rating ACH 31 Z				power rating ACH 51 Z - ACH 151 Z			
off peak		on peak		off peak		on peak	
power rating	voltage	power rating	voltage	power rating	voltage	power rating	voltage
4,2	3/N/PE ~ 400V	1,4 / 4,2 0,7 / 4,2	3/N/PE ~ 400V	6,0 / 4,0	3/N/PE ~ 400V	3,0 / 6,0 2,0 / 6,0 1,0 / 6,0	3/N/PE ~ 400V
2,8 / 2,1	2/N/PE ~ 400 V	1,4 / 2,1 0,7 / 2,1	2/N/PE ~ 400 V	4,0 / 3,0 / 2,0	2/N/PE ~ 400 V	2,0 / 4,0 1,0 / 4,0 3,0 / 3,0 2,0 / 3,0 1,0 / 2,0	2/N/PE ~ 400 V
2,1 / 1,4 / 0,7	1/N/PE ~ 230 V	1,4 / 2,1 0,7 / 2,1	1/N/PE ~ 230 V	4,0 / 3,0 / 2,0 / 1,0	1/N/PE ~ 230 V	3,0 / 4,0 2,0 / 4,0 1,0 / 4,0 1,0 / 2,0	1/N/PE ~ 230 V

Single-circuit wall-mounted cylinder

Degree of protection IP 24

Single circuit wall cylinders for closed or open use, infinitely variable temperature adjustment from 25 °C to 85 °C, inner container made of steel with special enamelling, anti-corrosion bar (protection anode), CFC-free thermal insulation for minimal heat loss, three individual heating elements in an enamelled protection tube (can be replaced without emptying the device), sheet steel outer surface.



ACH...E

Order reference	Item-No.	Nominal volume l	Width x Height x Depth mm	Weight kg
ACH 31 E	350670	30	500 x 545 x 512	23
ACH 51 E	350680	50	500 x 640 x 512	30
ACH 81 E	350690	80	500 x 860 x 512	36
ACH 101 E	350700	100	500 x 1005 x 512	41
ACH 121 E	350710	120	500 x 1160 x 512	46
ACH 151 E	350720	150	500 x 1375 x 512	52

Special accessories wall-mounted cylinders



SG 1



SG 2

Order reference	Item-No.	For device type	Features
SG 1	326350	ACH 31 E–ACH 151 E ACH 31 Z–ACH 151 Z	for wall cylinders, required for closed operation, for pressure up to 4.8 bars.
SG 2	326360		for wall cylinders, required for closed operation, for pressure above 4.8 bars, with pressure reducer.



ACS...Z

Floor standing cylinders

Degree of protection IP 24

For closed use as a single-circuit or two-circuit cylinder, infinitely variable temperature adjustment to 85 °C, inner container made of steel with special enamelling, anti-corrosion bar (protection anode), CFC-free thermal insulation for minimal heat loss, sheet steel outer surface, dial thermometer, hot/cold water connection 1" thread, colour white (similar to RAL 9016).

Order reference	Item-No.	Nominal volume l	Diameter mm	Connection circulation "	Height mm	Weight kg
ACS 200 Z	339640	200	600	3/4	1365	99
ACS 300 Z	339650	300			1797	130
ACS 400 Z	339660	400	670	1	1832	170

Rated power Universal floor standing cylinders

power rating ACS 200 Z - ACS 400 Z			
off peak		on peak	
power rating	voltage	power rating	voltage
6,0	3/N/PE ~ 400V	2,0 / 6,0	3/N/PE ~ 400V
3,0 / 4,0	2/N/PE ~ 400 V	3,0 / 6,0	
2,0 / 4,0	1/N/PE ~ 230 V	4,0 / 6,0	
		6,0 / 6,0	



SVK 852

Accessories for floor standing cylinders

Order reference	Item-No.	For device type	Features
SVK 852	326660	ACS...Z	For the cold water connection of drinking water cylinders to the supply network according to DIN 1988; connection 1" external thread.
ACS STF	341910		Supporting feet, height-adjustable, contents 3 items

Radiator complete (for DEH ..00/01; DEE ..00/00L; DEC ..00)



DLE HK ..

Order reference	Item-No.	Features
DLE HK 30	340460	Heating element 3.0 kW for DEH, DEE, DEC flow heaters
DLE HK 35	340470	Heating element 3.5 kW for DEH, DEE, DEC flow heaters
DLE HK 40	340480	Heating element 4.0 kW for DEH, DEE, DEC flow heaters
DLE HK 45	340490	Heating element 4.5 kW for DEH, DEE, DEC flow heaters
DLE HK 60	340500	Heating element 6.0 kW for DEH, DEE, DEC flow heaters
DLE HK 70	340510	Heating element 7.0 kW for DEH, DEE, DEC flow heaters
DLE HK 80	340520	Heating element 8.0 kW for DEH, DEE, DEC flow heaters
DLE HK 90	340530	Heating element 9.0 kW for DEH, DEE, DEC flow heaters

Components for measuring and regulating volume flow



DLE SSE



DLE MT ..



DLE ME 1



DLE IR

Order reference	Item-No.	Features
DLE SSE	340540	Protective switching unit for flow heaters DEH ...01 (production number 11/073.../01), DEE (production number 11/070.../02, production number 11/070.../03, production number 11/070.../04, production number 11/070.../05), DEC flow heaters.
DLE MT 1	340550	Measuring turbine and sensor unit for volume flow measurement for DEH and DEE flow heaters.
DLE MT 2	340560	Measuring turbine and sensor unit for volume flow measurement for DEC flow heaters.
DLE ME 1	340570	Motor unit complete for volume flow regulation for DEC flow heaters.
DLE LCB	340580	Control panel and LC display complete for DEC flow heaters.
DLE IR	340590	Infrared light barrier and sensor unit for measuring the flow rate for DEH, DEE, and DEC flow heaters.



DLE MST E



DLE MST H

Main electronics

Order reference	Item-No.	Features
DLE MST C	340620	Module control electronics for DEC flow heaters (production number 11/072.../01).
DLE MST E	340610	Module control electronics for DEC flow heaters (production number 11/070.../02, production number 11/070.../03, production number 11/070.../04, production number 11/070.../05).
DLE MST H	340600	Module control electronics for DEH ...01 flow heaters (production number 11/073.../01).

Split air conditioners with DC inverter

Connection voltage 1/N/PE ~230 V, 50 Hz



KSS ...08 AIV



Single-split room air conditioners, each consisting of an outdoor and an indoor component for wall mounting and refrigerant pipe incl. rapid coupling. The outdoor and indoor components are connected via a refrigerant pipe. The 4m pipe is connected to the indoor component and is connected to the outdoor component using rapid coupling. The coupling can be re-opened and re-closed.

- Microprocessor control with infrared remote control.
- DC inverter for extremely comfortable, quiet and simultaneously energy-saving operation,
- integrated heat pump switching, can be used for heating during the transition period.
- Built-in year-round control, also suitable for technical rooms (please note the operating limits).

There is no need to handle the refrigerant either during installation or during use.

Upper operating limit cooling outdoor component 43 °C; Lower operating limit cooling outdoor component -10 °C; Upper operating limit cooling indoor component 33 °C; Lower operating limit cooling indoor component 18 °C; Upper operating limit heating outdoor component 43 °C; Lower operating limit heating outdoor component -15 °C; Upper operating limit heating indoor component 30 °C; Lower operating limit heating indoor component 16 °C;

Order reference	Item-No.	Cooling capacity kW	Heat output kW	Energy efficiency class	Dimension indoor unit Width x Height x Depth mm	Dimension outdoor unit Width x Height x Depth mm
KSS 2508 AIV	354910	2.5	2.7	A	770 x 190 x 250	830 x 540 x 320
KSS 3508 AIV	354940	3.5	3.85	B	830 x 189 x 285	830 x 540 x 320
KSS 4508 AIV	354970	4.5	6.0	C	1020 x 319 x 234	914 x 685 x 384

Accessories for air conditioners

Pre-filled refrigerant pipes for KSS...AIV

Special accessories

Order reference	Item-No.	Features
KMSL 1412-2 AIV	353930	pre-filled, for extending the KSS...AIV connection: Extension for the refrigerant pipe, length 2.0 m. The connection is made using multiple removable rapid couplings. Extension of the electrical control line is also included in the connection. Multiple pipes can be combined with one another as necessary (maximum length: 20 m).

Condensate pump for split room air conditioners

Order reference	Item-No.	Features
KSI 3100	342450	Consisting of a float-type switch for mounting inside the device with a separate pump for external installation e.g. in a cable duct or suspended ceilings, max. suction height 2 m, max. delivery height 6 m, incl. 5 m condensate pipe and damping mounting plate, discharge rate max. 10 l/h, float-type switch (W x D x H) 55 x 38 x 32 mm, pump casing (W x D x H) 66 x 44 x 60 mm.

Wall-mounting brackets for split room air conditioners

Order reference	Item-No.	Features
WKS 357	343230	Wall bracket for fixing the outdoor air conditioner component e.g. on an external wall incl. damping elements and fixing material. (Set of 2 brackets)

Order ref.	Item-No.	EAN code	Page	Order ref.	Item-No.	EAN code	Page	Order ref.	Item-No.	EAN code	Page
HM 21 RS 160	327280	4015627327283	103	HPL 24AS	356760	4015627356764	15	LA 6MR	350790	4015627350793	21
HM 21 RS 180	326860	4015627326866	103	HPL 26HS	356840	4015627356849	15	LA 8AS	342230	4015627342231	12
HM 21 RS 205	326850	4015627326859	103	HPL 26PS	356820	4015627356825	15	LA 8MR	350800	4015627350809	21
HM 21 RS 240	319500	4015627319509	103	HPL 28AS	356770	4015627356771	15	LA 9PS	340000	4015627340008	12
HM 225 SF 150-5	336270	4015627336278	101	HPL 8AS	356720	4015627356726	15	LAC 12TR	355410	4015627355415	22
HM 225 TS 150-5	343800	4015627343801	99	HPL 9PS	356780	4015627356788	15	LAC 16TR	355240	4015627355248	22
HM 225 TS Set BT	350840	4015627350847	100	HYG 100	330380	4015627330382	110	LAK 10M	354540	4015627354548	16
HM 225 TS Set BTU	350900	4015627350908	99					LAK 10MR	354510	4015627354517	21
HM 300 SF 150-5	336280	4015627336285	101					LAS10MT	352060	4015627352063	16
HM 300 TS 150-5	343810	4015627343818	99					LAS15MT	352070	4015627352070	16
HM 300 TS Set BT	350850	4015627350854	100	IFR 0810	336970	4015627336971	55	LAS22TT	352080	4015627352087	16
HM 300 TS Set BTU	350910	4015627350915	99	IFR 165	336960	4015627336964	50, 55	LBD 10	335180	4015627335189	62
HM 31 R 100	320640	4015627320642	102	IHP 20	348530	4015627348530	88	LFB 160	343370	4015627343375	57
HM 320 SF 150	326150	4015627326156	101	IHP 30	348540	4015627348547	88	LI 11ME	352760	4015627352766	8
HM 33 R 120	320680	4015627320680	102	IHP 50	348550	4015627348554	88	LI 11MER	352800	4015627352803	17
HM 35 R 180	326670	4015627326675	102	ISH 10-4	334900	4015627334908	60	LI 11TE	352630	4015627352636	8
HM 35 RS 180	326710	4015627326712	103	ISH 12-4	334910	4015627334915	60	LI 11TEL	352640	4015627352643	8
HM 36 R 140	319260	4015627319264	102	ISH 14-4	334920	4015627334922	60	LI 11TER+	352770	4015627352773	18
HM 36 R 160	327240	4015627327245	102	ISH 16-4	342930	4015627342934	60	LI 16TE	352650	4015627352650	8
HM 36 R 205	319420	4015627319424	102	ISH 20-4	334930	4015627334939	60	LI 16TEL	352660	4015627352667	8
HM 36 RS 140	320800	4015627320802	103					LI 16TER+	352780	4015627352780	18
HM 36 RS 160	327290	4015627327290	103					LI 20TE	352670	4015627352674	9
HM 36 RS 205	320960	4015627320963	103	K 810	AKO150350	4011652505276	93	LI 20TEL	352680	4015627352681	9
HM 375 SF 150-5	336290	4015627336292	101	K 820	AKO150330	4011652505283	93	LI 24TE	352690	4015627352698	9
HM 39 RS 240	319510	4015627319516	103	KBS 12L	348870	4015627348875	72	LI 24TEL	352700	4015627352704	9
HM 410 SF 150	330260	4015627330269	101	KEB 1525 R	329810	4015627329812	102	LI 28TE	352710	4015627352711	9
HM 450 SF 150-5	336300	4015627336308	101	KEB 1525 RS	330270	4015627330276	103	LI 28TEL	352720	4015627352728	9
HM 450 TS 150-5	343820	4015627343825	99	KED 1010 SF	329850	4015627329850	101	LI 2M	356330	4015627356344	49
HM 450 TS Set BT	350860	4015627350861	100	KED SF Set	336560	4015627336568	101	LI 9TE	352610	4015627352612	4
HM 450 TS Set BTU	350920	4015627350922	99	KED TS Set	344010	4015627344013	100	LI 9TEL	352620	4015627352629	4
HM 51 R 100	320650	4015627320659	102	KES 1525 R	329820	4015627329829	102	LIH 22TE	352730	4015627352735	9
HM 530 SF 150	326160	4015627326163	101	KES 1525 RS	329830	4015627329836	103	LIH 26TE	352740	4015627352742	9
HM 56 R 120	320690	4015627320697	102	KFB 03	343360	4015627343368	56	LIK 8ME	352750	4015627352759	4
HM 57 R 180	326680	4015627326682	102	KLE 050	335370	4015627335370	83	LIK 8MER	352790	4015627352797	17
HM 57 RS 180	326720	4015627326729	103	KLE 075	335380	4015627335387	83	LIK 8TE	352590	4015627352599	4
HM 60 R 140	319270	4015627319271	102	KLE 125	335390	4015627335394	83	LIK 8TEL	352600	4015627352605	4
HM 60 R 160	327250	4015627327252	102	KLE 150	337960	4015627337961	83	LIKI 14TE	356010	4015627356016	6
HM 60 R 205	319430	4015627319431	102	KML 1412-2 AIV	353930	4015627353930	120	LKB 500	339730	4015627339736	5
HM 60 RS 140	320810	4015627320819	103	KP 515	AKO301038	4011652507546	98	LKB 600	339760	4015627339767	7, 10, 18
HM 60 RS 160	327300	4015627327306	103	KP 525	AKO301048	4011652507553	98	LKB 700	339790	4015627339798	10, 18
HM 60 RS 205	320970	4015627320970	103	KPV 25	346590	4015627346598	44	LKB 800	339820	4015627339828	10
HM 600 SF 150-5	336310	4015627336315	101	KRRV 003	322070	4015627322073	42	LKK 500	339720	4015627339729	5
HM 600 TS 150-5	343830	4015627343832	99	KSE 100	335320	4015627335325	83	LKK 600	339750	4015627339750	7, 10, 18
HM 600 TS Set BT	350870	4015627350878	100	KSE 150	335340	4015627335349	83	LKK 700	339780	4015627339781	10, 18
HM 600 TS Set BTU	350930	4015627350939	99	KSE 200	335360	4015627335363	83	LKK 800	339810	4015627339811	6, 10
HM 65 RS 240	319520	4015627319523	103	KSI 3100	342450	4015627342453	120	LKL 500	339710	4015627339712	5
HM 75 SF 150-5	335570	4015627335578	101	KSS 2508 AIV	354910	4015627354913	120	LKL 600	339740	4015627339743	7, 10, 18
HM 750 SF 150-5	336320	4015627336322	101	KSS 3508 AIV	354940	4015627354944	120	LKL 700	339770	4015627339774	10, 18
HM 750 TS 150-5	343840	4015627343849	99	KSS 4508 AIV	354970	4015627354975	120	LKL 800	339800	4015627339804	6, 10
HM 750 TS Set BT	350880	4015627350885	100	KVR 15	337100	4015627337107	55	LR 100	338840	4015627338845	72
HM 750 TS Set BTU	350940	4015627350946	99	KVR 30	337110	4015627337114	55	LR 90	338850	4015627338852	72
HM 820 SF 150	330250	4015627330252	101	KVR 45	337120	4015627337121	55	LRD 2000 plus	338830	4015627338838	72
HM 900 SF 150-5	336480	4015627336483	101					LUS 11	337390	4015627337398	8
HM 900 TS 150-5	343850	4015627343856	99					LUS 16	337400	4015627337404	8
HM 900 TS Set BT	350890	4015627350892	100	LA 10MR	350810	4015627350816	21	LVT 8	341120	4015627341128	55
HM 900 TS Set BTU	350950	4015627350953	99	LA 11AS	339950	4015627339958	13	LWP 300W	352220	4015627352223	54
HM TS Display BT	351110	4015627351110	100	LA 11ASR	342730	4015627342736	19	LWPM 410	339410	4015627339415	48
HM TS Display BTU	351100	4015627351103	100	LA 11MS	342420	4015627342422	13				
HPK 11TE	353440	4015627353442	23	LA 11MSR	342690	4015627342699	19				
HPK 14TE	353450	4015627353459	23	LA 11PS	353320	4015627353329	14				
HPK 7TE	353420	4015627353428	23	LA 12TR	350820	4015627350823	21	MB	316340	4015627316348	104
HPK 9TE	353430	4015627353435	23	LA 16AS	339960	4015627339965	13	MB VV 2	343420	4015627334329	54
HPKH 6TE	356150	4015627356153	23	LA 16ASR	340090	4015627340091	19	MB VV 4	343430	4015627343436	54
HPKH 9TE	356160	4015627356160	23	LA 16MS	351270	4015627351271	13	MFE 10	334700	4015627334700	59
HPL 11AS	356730	4015627356733	15	LA 16MTR	350830	4015627350830	21	MFE 12	334710	4015627334717	59
HPL 11MS	356850	4015627356856	15	LA 17PS	353330	4015627353336	14	MFE 14	334720	4015627334724	59
HPL 11PS	356790	4015627356795	15	LA 20AS	339970	4015627339972	13	MFE 16	341320	4015627341326	50
HPL 16AS	356740	4015627356740	15	LA 22HS	340120	4015627340121	14	MFE 16	341320	4015627341326	59
HPL 16MS	356860	4015627356863	15	LA 22PS	348420	4015627348424	14	MFE 20	334730	4015627334731	59
HPL 17PS	356800	4015627356801	15	LA 24AS	339980	4015627339989	13	MMB 25	348880	4015627348882	46
HPL 20AS	356750	4015627356757	15	LA 26HS	340130	4015627340138	14	MMH 25	348640	4015627348646	45
HPL 22HS	356830	4015627356832	15	LA 26PS	351890	4015627351899	14	MP 115 GA	343940	4015627343948	83
HPL 22PS	356810	4015627356818	15	LA 28AS	339990	4015627339996	13	MP 115 SYA	343990	4015627343993	83
				LA 40AS	356000	4015627356009	13	MP 115 VAR	343890	4015627343894	83

Order ref.	Item-No.	EAN code	Page	Order ref.	Item-No.	EAN code	Page	Order ref.	Item-No.	EAN code	Page
MP 145 GA	343950	4015627343955	83	RDU 20-16 S	341300	4015627341302	59	SH 301 TLS	AKO151151	4011652507638	97
MP 145 SYA	344000	4015627344006	83	RDU 20-16 US	341310	4015627341319	59	SH 302 TLU	AKO151156	4011652507645	97
MP 145 VAR	343900	4015627343900	83	REG 20 A3	335120	4015627335127	62	SI 100TE	352950	4015627352957	31
MP 35 GA	343910	4015627343917	83	REG 20 A4	335130	4015627335134	62	SI 10MR	348480	4015627348486	38
MP 35 SYA	343960	4015627343962	83	REG 20 Z3	335140	4015627335141	62	SI 11ME	353040	4015627353046	28
MP 35 VAR	343860	4015627343863	83	REG 20 Z4	335150	4015627335158	62	SI 11TE	352880	4015627352889	28
MP 65 GA	343920	4015627343924	83	RF 2000	338880	4015627338883	72	SI 12TR	348490	4015627348493	38
MP 65 SYA	343970	4015627343979	83	RF 90	338890	4015627338890	72	SI 130TE	352960	4015627352964	31
MP 65 VAR	343870	4015627343870	83	RHK 1000	328800	4015627328808	89	SI 14ME	353050	4015627353053	28
MP 85 GA	343930	4015627343931	83	RHK 1000 S	342970	4015627342972	89	SI 14TE	352890	4015627352896	28
MP 85 SYA	343980	4015627343986	83	RHK 1100	328820	4015627328822	89	SI 14TR	348500	4015627348509	38
MP 85 VAR	343880	4015627343887	83	RHK 2000	328810	4015627328815	89	SI 16TR	348510	4015627348516	38
MS PGD	353810	4015627353817	48	RHK 2000 S	342980	4015627342989	89	SI 17TE	352900	4015627352902	28
MWPM 300	355660	4015627355668	48	RKS WPM	342220	4015627342224	20, 37	SI 20TR	348520	4015627348523	38
				RL 15R	344960	4015627344969	73, 81	SI 21TE	353410	4015627353411	29
				RL 15RF	351880	4015627351882	73, 81	SI 24TE	352910	4015627352919	30
				RL 25R	344970	4015627344976	73, 81	SI 30TE	355640	4015627355644	30
				RMT 1	337990	4015627337992	84	SI 30TER+	355650	4015627355651	36
				ROS 10	335200	4015627335202	62	SI 37TE	352920	4015627352926	30
				ROS 12	335210	4015627335219	62	SI 50TE	352930	4015627352933	31
				ROS 14	335220	4015627335226	62	SI 5ME	353010	4015627353015	28
				ROS 16	341430	4015627341432	62	SI 5TE	352850	4015627352858	28
				ROS 20	335230	4015627335233	62	SI 75TE	352940	4015627352940	31
				RSG 500	340220	4015627340220	5	SI 75TER+	354480	4015627354487	36
				RSG 600	340230	4015627340237	7, 11, 18	SI 75ZSR	344950	4015627344952	36
				RSG 700	340240	4015627340244	11, 18	SI 7ME	353020	4015627353022	28
				RSG 800	340250	4015627340251	7, 11	SI 7TE	352860	4015627352865	28
				RT 104 ST	348180	4015627348189	109	SI 8MR	348470	4015627348479	38
				RT 200	355480	4015627355484	108	SI 9ME	353030	4015627353039	28
				RT 200 U	355560	4015627355569	108	SI 9TE	352870	4015627352872	28
				RT 201	355490	4015627355491	108	SIH 11ME	355190	4015627355194	28
				RT 201 U	355570	4015627355576	108	SIH 11TE	355160	4015627355163	28
				RT 202	355500	4015627355507	108	SIH 20TE	352970	4015627352971	32
				RT 202 U	355580	4015627355583	108	SIH 40TE	352980	4015627352988	32
				RT 204 U	355590	4015627355590	108	SIH 6ME	355170	4015627355170	28
				RT 210	355510	4015627355514	109	SIH 6TE	355140	4015627355149	28
				RTA 1515-2	319220	4015627319226	105	SIH 9ME	355180	4015627355187	28
				RTA 2030	319210	4015627319219	105	SIH 9TE	355150	4015627355156	28
				RTED 30	324520	4015627324527	69, 111	SIK 11ME	352990	4015627352995	25
				RTEV 99	333990	4015627333994	69, 78, 111	SIK 11TE	352830	4015627352834	25
				RTI 301	334220	4015627334229	110	SIK 14TE	352840	4015627352841	25
				RTI 402	338810	4015627338814	110	SIK 16ME	353000	4015627353008	25
				RTID 31	324530	4015627324534	69, 111	SIK 7TE	352810	4015627352810	25
				RTK 601U	355610	4015627355613	20, 37, 113	SIK 9TE	352820	4015627352827	25
				RTK 602U	355620	4015627355620	113	SIKH 6TE	356070	4015627356078	25
				RTS 207	355520	4015627355521	110	SIKH 9ME	356530	4015627356535	25
				RTU 200 AT	355600	4015627355606	108	SIKH 9TE	356080	4015627356085	25
				RTU 400 U	355530	4015627355538	110	SMS	314520	4015627314528	104
				RTW 401 UN	355540	4015627355545	112	SMSF	332090	4015627332096	104
				RTWU 401 UN	355550	4015627355552	112	SOL FFP	356300	4015627356306	33, 52
				RW 120/1	AKO101945	4011652500202	96	SOL FHP	356310	4015627356313	33, 52
				RWT 500	339840	4015627339842	40	SOLAS 1	356290	4015627356290	51
				RWT 750	351640	4015627351646	43	SOLCU 1	356220	4015627356221	52
				RX PW 1	RXPW1	5011139020680	84	SOLEV 8	356240	4015627356245	52
				RX TI 24	RXTI24	5011139020673	84	SOLEV 18	356250	4015627356252	52
				RX TI 18	RXTI18	5011139020703	84	SOLFH 15	356320	4015627356320	51
				RZ 20	315670	4015627315679	69, 78	SOLH TTK	356270	4015627356276	52
								SOLHT 20	356260	4015627356269	52
								SOLK 120 ADE	356400	4015627356405	51
				SA 1	324990	4015627324992	115	SOLK 120 ADG	356200	4015627356207	51
				SAS 100	340320	4015627340329	4	SOLK 120 ADK	356540	4015627356542	51
				SAS 110	340330	4015627340336	11	SOLK 120 FAE	356410	4015627356412	51
				SCHT 975-1	322250	4015627322257	15	SOLK 120 FAG	356210	4015627356214	51
				SCHT 975-3	322260	4015627322264	15	SOLK 120 FAK	356550	4015627356559	51
				SCHT 975-4	330540	4015627330542	15	SOLK 1204 AM	356190	4015627356191	51
				SDP 10-6	334980	4015627334984	61	SOLPU 1	356230	4015627356238	52
				SDP 12-6	334990	4015627334991	61	SOLVK 1	356280	4015627356283	52
				SDP 14-6	335000	4015627335004	61	SP CUPU 4	356510	4015627356511	51
				SDP 16-6	341380	4015627341388	61	SPA 10	341090	4015627341098	55
				SDP 20-6	335010	4015627335011	61	SPA 20	341100	4015627341104	55
				SG 1	326350	4015627326354	117	SPR 10-3	334330	4015627334335	58
				SG 2	326360	4015627326361	117	SPR 12-3	334340	4015627334342	58
				SH 300T	AKO151146	4011652507621	97	SPR 14-3	334350	4015627334359	58

Order ref.	Item-No.	EAN code	Page
ZHi 050 E	341950	4015627341951	69, 79
ZHi 070 E	341960	4015627341968	69, 79
ZHi 110 E	341970	4015627341975	69, 79
ZHi 150 E	341980	4015627341982	69, 79
ZHi 200 E	341990	4015627341999	69, 79
ZHi 200 E	341990	4015627341999	79
ZL 270EO-L	352150	4015627352155	56
ZL 270EO-R	352130	4015627352131	56
ZL 270EZ-L	352160	4015627352162	56
ZL 270EZ-R	352140	4015627352148	56
ZVB 08	337040	4015627337046	55
ZVS 10	335080	4015627335080	61
ZVS 12	335090	4015627335097	61
ZW 05DCU	348290	4015627348295	106
ZWM 05AC	348320	4015627348325	107
ZWU 25	348940	4015627348943	35
ZWU 32	348950	4015627348950	35

Order ref.	Item-No.	EAN code	Page
------------	----------	----------	------

Order ref.	Item-No.	EAN code	Page
------------	----------	----------	------



Visit www.dimplex.de and
www.heating-with-heatpump.com
for further up-to-date information

 **Dimplex**

INNOVATIVE HEATING AND COOLING

Glen Dimplex Deutschland GmbH
Dimplex Division
Am Goldenen Feld 18
D-95326 Kulmbach
Phone: +49 9221 709-201
Fax: +49 9221 709-233
export@dimplex.de
www.dimplex.de