

APPLICATION

Inductive voltage transformers are used to separate measuring and protection equipment from high voltages and to transform measured voltages to the values suitable for measuring and protection equipment.

STANDARDS

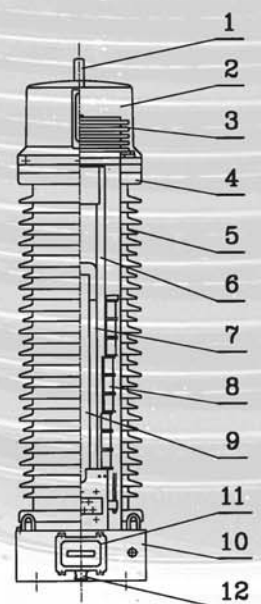
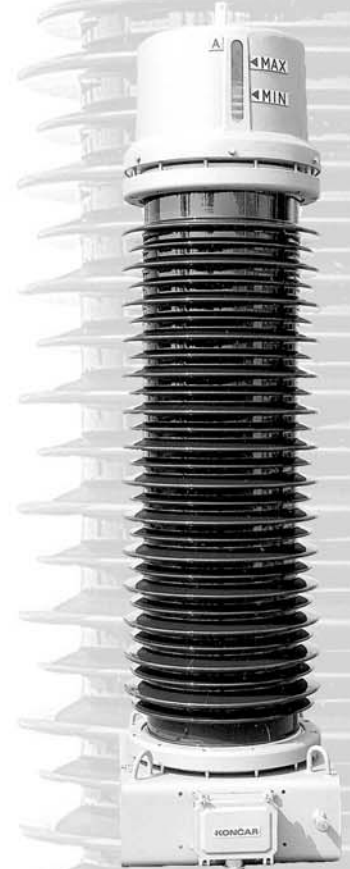
Voltage transformers are designed in accordance with IEC, VDE, ANSI, BS or other agreed standards.

DESCRIPTION OF MAIN PARTS

- The core is open-bar type, made of cold-rolled high-quality grain-oriented magnetic steel sheets.
- The insulation between the windings and the grounded parts is made of insulating paper impregnated with transformer oil under high vacuum. Conductive screens inserted into the main insulation provide a capacitor bushing that improves the resistance of VTs to atmospheric impulse voltages.
- Transformers are filled with high-quality oil with added inhibitor, which improves its aging resistance. Degassing and dehydrating of oil are made in high vacuum up to a moisture content less than 10 microgram per gram, what ensures excellent dielectric properties. We guarantee that the transformer oil in our instrument transformers is free from any polychlorinated biphenyls

and terphenyls (PCB and PCT).

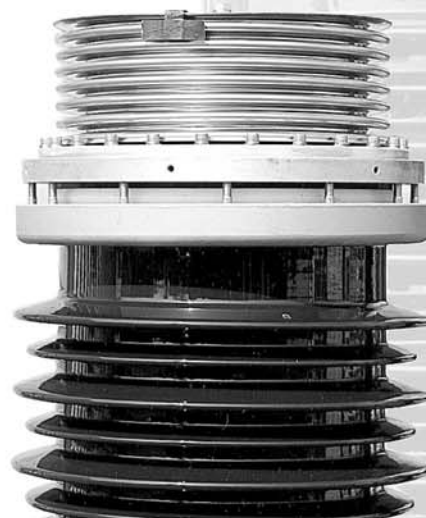
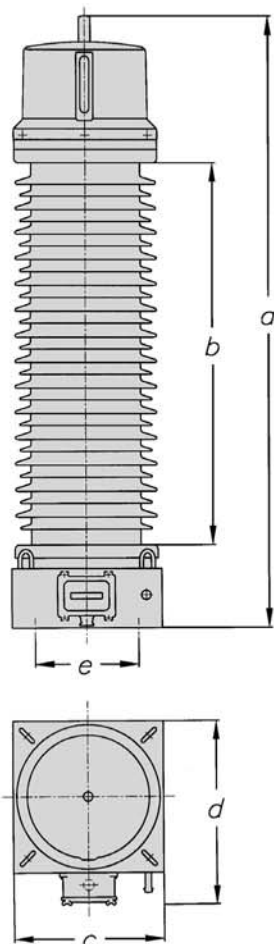
- The insulator is made of high-quality porcelain, cylindrically shaped and brown-glazed (if requested, the glaze can be of some other colour). Creepage distance depends on ambient air pollution at the place of installation. Standard creepage distances are 20, 25 or 31 mm per kV of highest voltage of equipment, depending on client's request. Besides porcelain, the insulator, as the outside insulation, can be also made of composite materials (GFK silicone).
- Primary terminals are made of electrolytic copper (30 x 80 mm). Copper terminals are corrosion protected by hot dip tinning.
- Secondary terminals are inside the secondary terminal box, together with earthing terminal for secondary windings. They are made of M8 stainless steel screw.
- Heat dilatation of oil volume is compensated by metal bellows made of stainless steel.
- The transformer housing is made of steel plates. High quality anti corrosive protection is achieved by hot dip galvanizing. The transformer head is made of casted aluminium.
- Seismic resistance of the transformer is higher than 0.3 g.



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|---------------------|----------------------------|
| 1. Primary terminal | 7. Secondary winding |
| 2. Bellows guard | 8. Primary winding |
| 3. Bellows | 9. Core |
| 4. Cable gland | 10. Housing |
| 5. Insulator | 11. Secondary terminal box |
| 6. Main insulation | 12. Cable gland |

MAIN CHARACTERISTICS

- Rated secondary voltage:
- $100/\sqrt{3}$, $100/3$ or $110/\sqrt{3}$, $110/3$
- Total thermal power - 2000 VA
- The number of secondary windings, rated burden of each winding, measuring and/or protection accuracy classes, rated voltage factor and rated frequency are in accordance with client's requests or agreed standard.
- The standard inductive voltage transformer designs are intended for ambient temperatures -25 / +40 C.


Transformer head

Secondary terminal box

Type	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	weight (kg)
VPU-72.5	1640	940	450	550	4xØ22/□330	300
VPU-123	1860	1220	480	580	4xØ22/□330	385
VPU-145	2145	1410	480	580	4xØ22/□330	440
VPU-170	2380	1645	480	580	4xØ22/□330	500
VPU-245	3470	2560	560	660	4xØ22/□410	850
VPU-300	3710	2820	560	660	4xØ22/□410	640
VPU-362	4235	3200	630	730	4xØ22/□470	1350
VPU-420	4600	3570	630	730	4xØ22/□470	1560
VPU-525	5120	4080	630	730	4xØ22/□470	1730

Note: Data given in this prospect are for informative purposes only. With the view of constant improvement of quality of our product we reserve the right to changes.