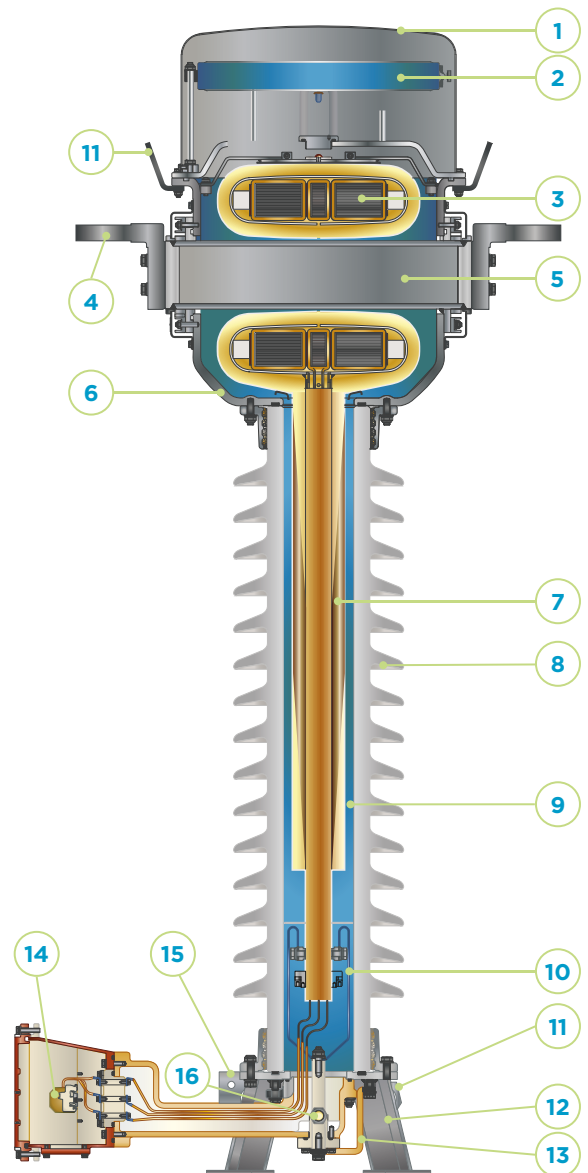


CA SERIES

Oil-paper insulation:
model CA up to 800 kV.



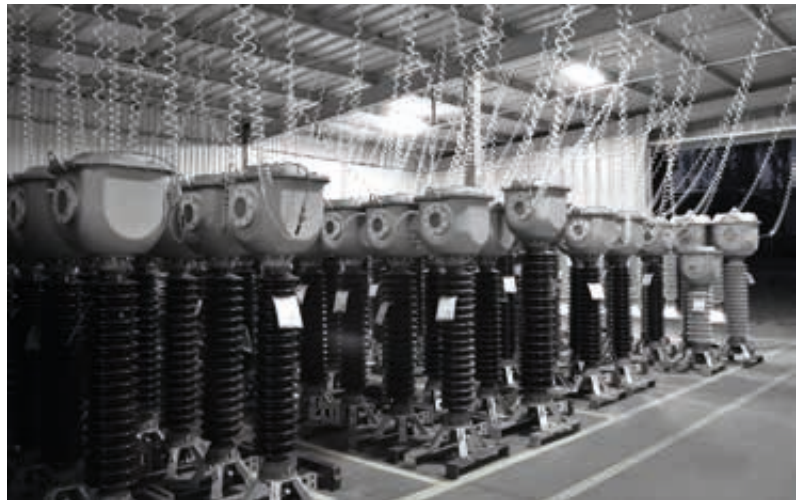
1. Top cover
2. Oil volume compensating system
3. Cores and secondary windings
4. Primary terminal
5. Primary winding
6. Head
7. Capacitive bushing
8. Insulator
9. Insulating oil
10. Reinforced ground connection
11. Lifting holes
12. Base
13. Tangent delta tap
14. Secondary terminals
15. Grounding terminal
16. Oil sampling valve



DESIGN AND MANUFACTURING

The current transformer primary conductor is usually a pass-through bar (with or without external reconnections) or sometimes a winding. The secondaries, which are one or several cores with their corresponding windings, are located in the top section of the unit within the external aluminum enclosure.

These active parts are inside a metal enclosure that acts as a low-voltage shield, with the main oil-paper insulation wrapped around, ending up with a high-voltage shield. The gap between this shield and the external enclosure is filled with oil. The secondary cable outputs run into the secondary terminal box through an oil-paper insulated capacitive bushing with several shields for proper electrical field distribution.



CHARACTERISTICS

- › Very high and invariable accuracy (up to 0.1%) steady for the operational life of the equipment, with maximum reliability.
- › All types of measurement and protection cores: multi-ratio, linear...
- › Wide range of primary currents: from 1 to 5000 A.
- › Primary and/or secondary reconnection.
- › Very high rated currents and short-circuit currents.
- › Reinforced safety design.
- › Robust mechanical strength.
- › Excellent response under extreme environmental conditions: Temperatures from -60°C up to +60°C, high altitudes, seismic hazard areas, violent winds, etc.
- › Maintenance-free throughout their complete lifespan of more than 30 years. Only periodic monitoring is recommended.
- › Tangent Delta (DDF) tap for on-site testing.
- › Oil sampling valve and oil level indicator for monitoring.
- › Hermetically sealed to guarantee complete water tightness with the minimum volume of oil. Each unit is tested individually.
- › Metallic oil level compensating system that effectively regulates changes in oil volume mainly caused by temperature.
- › Officially homologated in-house testing facilities.
- › Quality management system certifications: ISO9001, ISO14001 and OHSAS 18001.
- › Each unit is routine tested following applicable standards.
- › Complete type tests reports following international standards.
- › Compliance to any international or domestic standards.
- › Environmentally friendly. The materials used for construction are recyclable and resistant to the elements. Its advanced design adheres to environmental regulations using high-quality insulating oils, free of PCBs.
- › Reduced size due to a compact design that is easy to transport, store and install, and which reduces visual impact.
- › May be transported and stored horizontally or vertically.

OPTIONS:

- › Internal arc test compliant as per IEC 61869 and other standards.
- › Porcelain or polymeric insulators.
- › Sealable secondary terminals.
- › Different cable glands and accessories.
- › Wide range of primary and secondary terminals.
- › Secondary protection devices inside the terminal box (spark gaps...).
- › Capacitive voltage tap.

RANGE

This series is named with the letters CA, followed by 2 or 3 numbers indicating the maximum service voltage for which they have been designed.

The table on the next page shows the range manufactured by ARTECHE. These characteristics are merely indicative; ARTECHE can manufacture transformers to comply with any domestic or international standard.

Ratio: Multiple combinations possible in a single device.

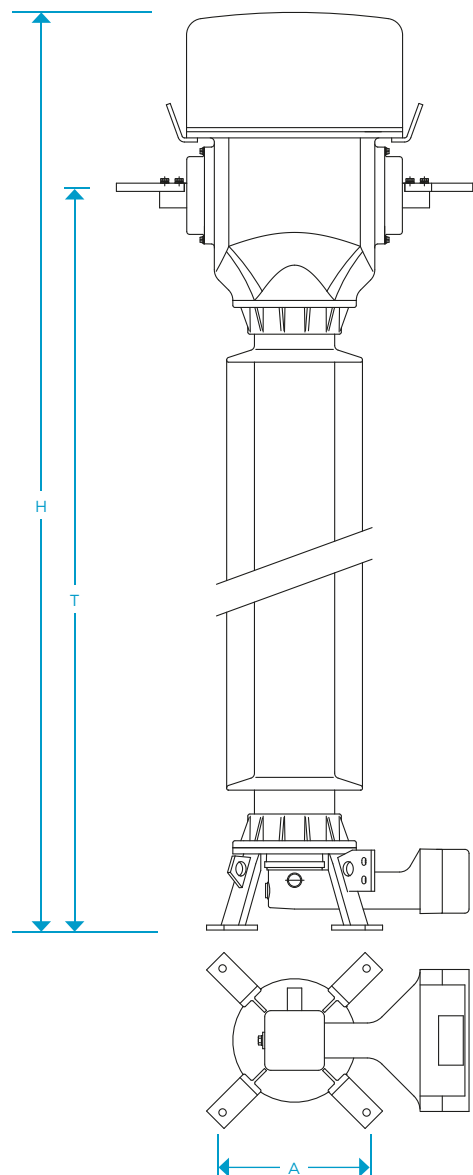
Secondary windings for:

- › Protection: all possible types, including linear cores, low induction, etc.
- › Metering: accuracy classes for any metering/billing need (including high accuracy class 0.1 / 0.15 with extended range in current).

Number of secondary windings: up to 10 secondary windings are possible in a single device.

Primary currents: from 1 A to 5000 A.

Short circuit current: up to 120 kA/1s.



| Oil-paper insulation > Model CA | | | | | | | | | |
|---------------------------------|----------------------|------------------------|-------------------------------|-------------------------|---------------------------------|------------|--------|--------|-------------|
| Model | Highest voltage (kV) | Rated insulation level | | | Standard creepage distance (mm) | Dimensions | | | Weight (kg) |
| | | Power frequency (kV) | Lightning impulse (BIL) (kVp) | Switching impulse (kVp) | | A (mm) | T (mm) | H (mm) | |
| CA-36 | 36 | 70 | 170 | - | 900 | 350 | 1350 | 1750 | 220 |
| CA-52 | 52 | 95 | 250 | - | 1300 | 350 | 1350 | 1750 | 220 |
| CA-72 | 72.5 | 140 | 325 | - | 1825 | 350 | 1350 | 1750 | 220 |
| CA-100 | 100 | 185 | 450 | - | 2500 | 350 | 1350 | 1750 | 220 |
| CA-123 | 123 | 230 | 550 | - | 3075 | 350 | 1785 | 2230 | 265 |
| CA-145 | 145 | 275 | 650 | - | 3625 | 350 | 1785 | 2230 | 265 |
| CA-170 | 170 | 325 | 750 | - | 4250 | 350 | 1945 | 2390 | 305 |
| CA-245 | 245 | 460 | 1050 | - | 6125 | 350 | 2590 | 2975 | 375 |
| | | 395 | 950 | | | | | | |
| CA-300 | 300 | 460 | 1050 | 850 | 7500 | 450 | 3070 | 3455 | 600 |
| CA-362 | 362 | 510 | 1175 | 950 | 9050 | 600 | 4015 | 4495 | 1090 |
| CA-420 | 420 | 630 | 1425 | 1050 | 10500 | 600 | 4015 | 4495 | 1090 |
| | | 575 | 1300 | | | | | | |
| CA-525 | 550 | 680 | 1550 | 1175 | 13125 | 600 | 4525 | 5195 | 1150 |
| CA-550 | 550 | 800 | 1800 | 1175 | 13750 | 600 | 5205 | 5960 | 1700 |
| CA-765 | 800 | 880 | 1950 | 1425 | 15300 | 600 | 5720 | 6650 | 2250 |
| | | 975 | 2100 | 1550 | | | | | |

These dimensions and weights are approximate based on standard requirements.

For detailed values please consult with Arteche.