



Catalog

VFR+MIC **Epoxy-Silicone** **Transformer for Catenary**

AC Voltage Detectors

VFR + MIC

Silicone-Epoxy Transformer for AC Catenary

- ✓ Silicone-Epoxy Transformer **25kV_{AC} – 100 V_{AC}**
- ✓ **0–100 V_{AC} output** proportional to the catenary voltage
- ✓ **0.12 mm** copper primary winding
- ✓ **1.3 mm** copper secondary winding
- ✓ Primary winding made with **epoxy resin** insulation class E (CEI 60085 Standard)
- ✓ **Enclosed in galvanized steel** to prevent the projection of fragments
- ✓ **Non-polluting:** free of oils and fluorinated gases as insulating materials
- ✓ Weight: **40 kg**
- ✓ Creepage distance: **1,950 mm**
- ✓ Service life: **> 30 years**; maintenance-free
- ✓ Exclusively **vertical** mounting

MIC-25 – AC Catenary Voltage Detector

- ✓ **The MIC-25 displays the catenary voltage**
- ✓ Installed in **DIN rail**
- ✓ Auxiliary power supply **24 V_{DC}** or **230 V_{AC} 50Hz** depending on model

Applications

AC voltage presence detection in railway installations:

- High-speed trains
- Conventional AC trains
- AC metro systems



Transformer Model

Model	Primary Voltage	Secondary Voltage
VFR-25Kv-100	25 kV _{AC}	100 V _{AC}

Display Model

Model	Display range	Auxiliary Voltage
MIC-25kv	0-30 kV _{AC}	230 V _{AC}
MIC-25kv-24	0-30 kV _{AC}	24 V _{DC}

Technical data

MODEL VFR-25Kv-100

Electrical Characteristics

Rated Primary Voltage - U _{pn}	27.5 kV
Rated Secondary Voltage - U _{sn}	100 V
Maximum Service Voltage - U _m	36 kV
Rated power-frequency withstand voltage:	
Between primary and secondary to ground	70 kV
Between secondary and ground	3 kV
Maximum lightning impulse withstand voltage (peak value)	170 kV
Rated burden	100 VA
Accuracy class	1
Rated frequency (f)	50/60 Hz
Permissible continuous overvoltage (U _n) (kV)	1,2 U _{pn}

Mechanical Characteristics

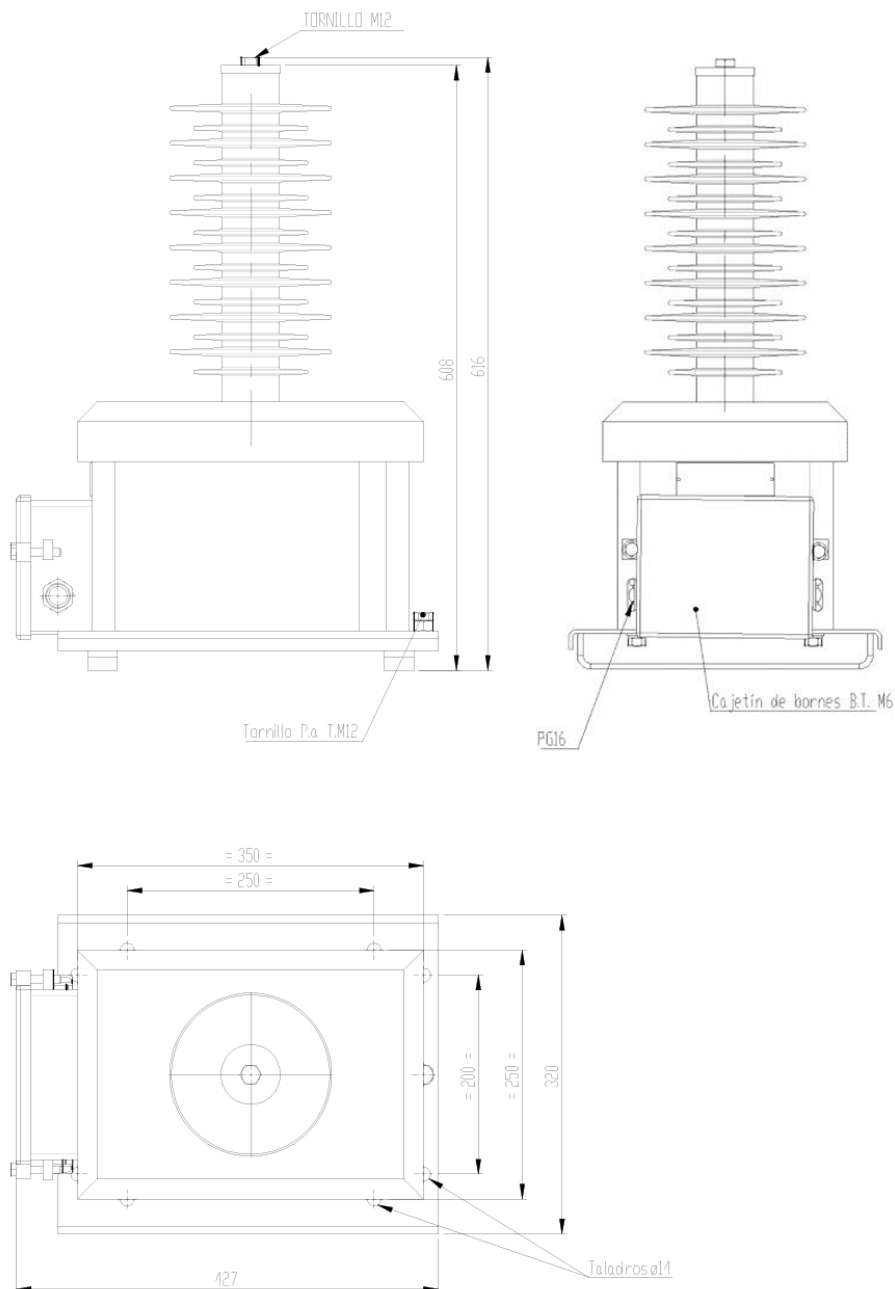
Tightening torque for M6 screws	4 Nm
Tightening torque for M12 screws	35 Nm
Primary terminal material	Aluminum
Ground terminal material	Stainless-steel
Sealed secondary terminal cover, sealable with cable gland connection	
Galvanized Steel tank to prevent corrosion	
Weight	40 kg
Creepage distance	1950 mm

Other Characteristics

Service life	>30 years
Enclosure material	Silicone
Internal material	Epoxy
Maintenance-free	



⚙️ Dimensions - VFR



⚙️ Dimensions - MIC

