

TCL7 Coupler – 7.2 kV



Description

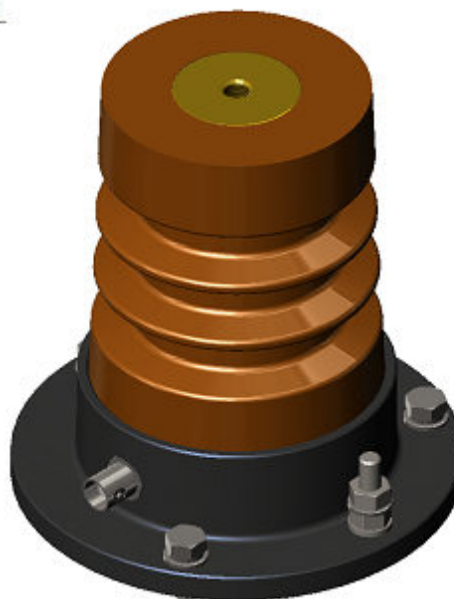
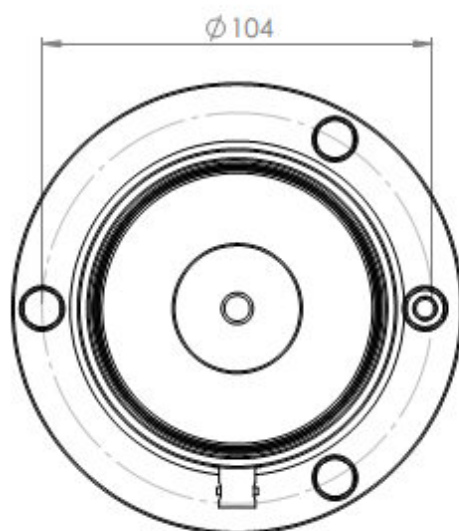
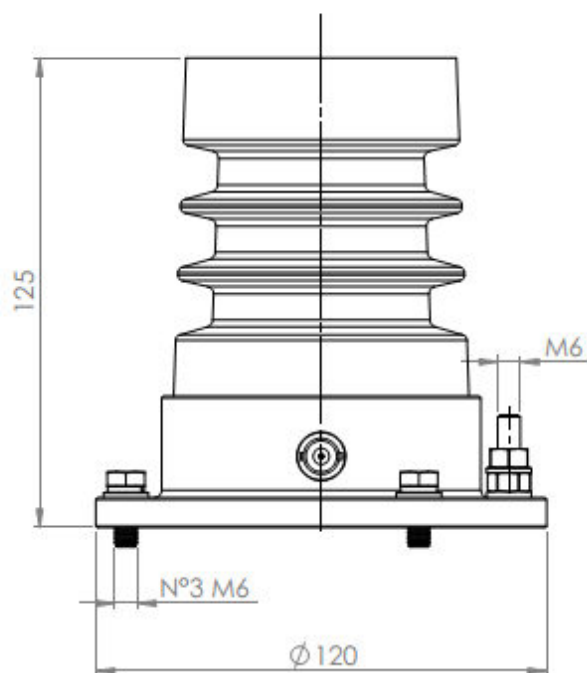
TCL7s are capacitive couplers specifically designed for partial discharge measurements. It perfectly matches Techimp measurement units such as PDCheck, PDScope or PDBasell systems. Its extremely compact size makes it a good choice for on line and off line PD tests on rotating machines, for both spot measurements and permanent monitoring applications. It can be permanently installed in terminal boxes of AC power generators as well as in power supply boxes of critical power motors or inside MV bus ducts. A BNC output termination is available on the base. For permanent installation it must be fixed through 4 holes on the bottom flange. It comes with a dark epoxy resin varnish which improves its environmental pollution resistance.

Features

TCL7 coupler contains an internal resistor which provides a suitable dividing ratio @50Hz (as well as 60Hz) for those equipments they require a synchronization signal. It also holds an internal overvoltage gas suppressor which keeps the output voltage below safety limits even in the presence of spikes and overvoltage transient peak on the bus bars. TCL7 couplers are individually tested according to the following international standards: IEC60358; IEC60694; IEC60270. Tested at high vibration level in order to assure high reliability under the most severe conditions. It can be installed in vertical position, upside down and in horizontal position. Endurance voltage test showed an expected life (at rated voltage) in excess of 10^6 hours, i.e. larger than the expected life of any device it should be matched to.

SPECIFICATIONS

Capacitance	940pF $\pm 10\%$
Capacitor type	Ceramic
Body material	Epoxy resin
Coating varnish	Epoxy resin
High voltage frequency range	50÷60 Hz
Rated Voltage (phase-to-phase)	7.2kV _{rms}
AC voltage withstand	28kV _{rms} (equivalent to class 12kV)
DC voltage withstand	75kV _{peak} (equivalent to class 12kV)
Lightning pulse withstand	75kV _{peak}
Creepage distance (IEC60815)	140mm (medium level pollution)
Tan δ	<0.3%
PD level @7.6kV / 50Hz	<2pC
Operative temperature range	-20 ÷ +90°C
Vibration withstand	5G or 6mm _{pp} (whatever is greater) from 5Hz to 500Hz
High voltage connection	M4 female thread
Overall Dimensions	Height 125mm; Diameter 80mm (body), 120mm (base)
Weight	1.0kg
Connector	BNC
Order code	018TL070


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Foglio / Sheet 1 / 1	Data / Date 01/04/2014	Disegnatore / Designer Barbieri A.		A4	Cod. eSolver / eSolver cod. -
Scala / Scale 1:1.5	Descrizione / Description TCL 7.2 kV			Dis. N° / DWG N° TS000393	Rev. 01