



JSL INDUSTRIES LTD

“Jyoti” Current Transformer 66 kV (Outdoor)

Introduction

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Oil Cooled and Suitable for Outdoor Applications
Meet the Growing Industrial Demand for Reliable Measurement of Power and Protection of Distribution System upto 66 KV Ratings

“Jyoti” Current Transformer 66 kV (Outdoor)



'Jyoti' Oil Cooled Current Transformer for Outdoor Installation to Meet the Growing Industrial Demand for Reliable Measurement of Power and Protection of Distribution System upto 66 kV Rating

The reliability of the Current Transformer is very crucial and of prime importance in Modern Switchgear. The unit is Hermetically sealed. The primary rating is available upto 1200 Amps. Multi-ratio Transformation can be provided by tapping on secondary winding. Maximum five secondary windings can be provided to meet the requirements of metering, protection and special purpose protective class, Optionally, the CT s can also be supplied with Nitrogen Gas filled on the top of the oil. Higher insulation level can also be offered on request.

SAILENT FEATURES

- Oil / Paper Insulation
- High insulation reliability (achieved through optimum capacitance grading by insulating paper of high dielectric strength)
- Metal parts treated for corrosion resistance
- Use of porcelain bushing suitable for heavily polluted atmosphere.
- Easy accessibility to L.V. Terminals
- Successfully tested for lightning impulse Voltage test, Short time thermal and Dynamic current test and Temperature rise test.

PROVISION FOR OPTIONAL ACCESSORIES

- Ferrous parts exposed to atmosphere are hot dip galvanized.
- Primary Terminal Connectors
- Cable Glands
- Stainless Steel bellows
- Nitrogen Gas filling above Oil level
- Arcing horns

CONSTRUCTIONAL FEATURES :

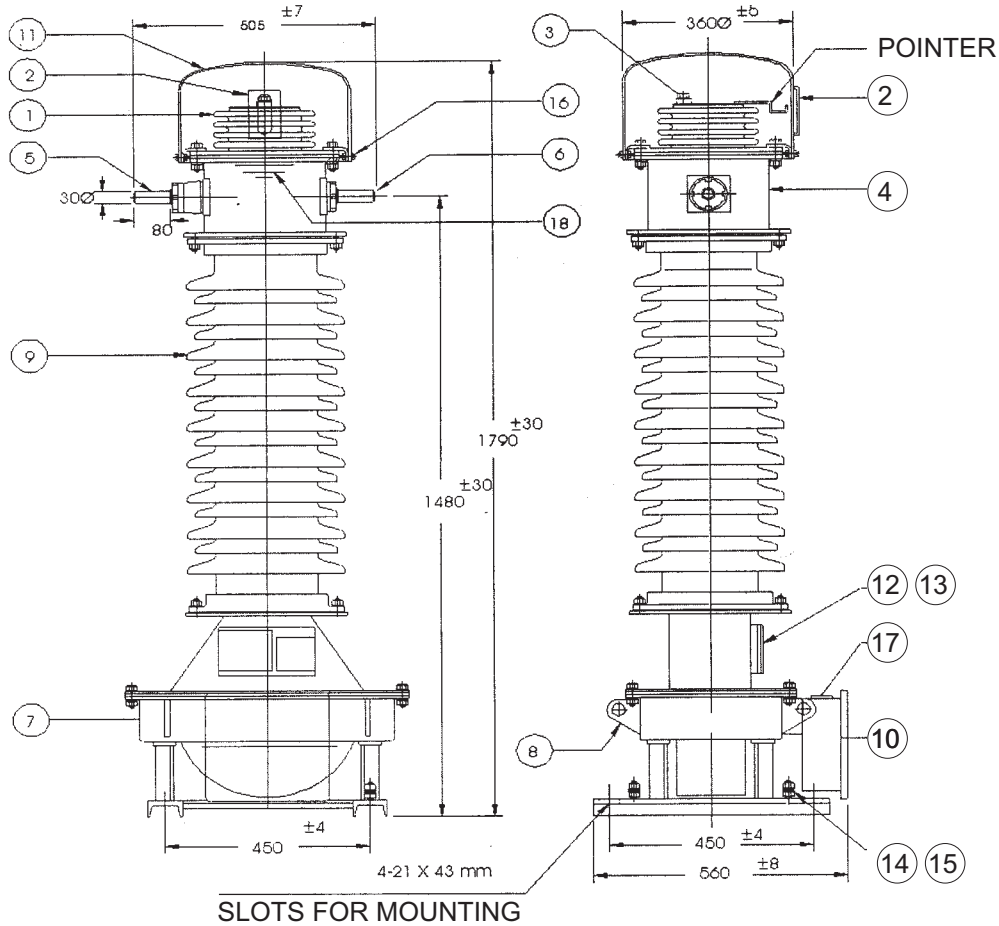
Secondary Winding is wound on high grade Silicon Steel Torroidal Cores. The winding is carried out with automatic Torrodal winding machine. Maximum 5 Nos Cores can be accommodated for metering, protection and special purpose cores. The primary winding consists of several numbers of Copper Strips put together and number of turns are wound over secondary winding. The paper insulation is wound over primary Conductor to offer complete insulation level, as per relevant IS/IEC standards, Generally Single turn is offered for rated current of CT above 600 Amps. The complete Assembly is tested as per relevant standard and housed in metal tank. High quality procelain bushing is used to offer basic insulation and adequate Creepage distance. The assembly is Dried up by heating and oil impregnated in vaccum under controlled conditions to achieve required insulation level and thereby for better reliability. Test tape for measurement of Tan delta and Capacitance shall be taken from primary winding insulation and shall be provided in the secondary terminal box.

The secondary terminals are made from M6 brass material and brought out in Secondary terminal box. The secondary terminal box is provided with removable gland plate and lockable cover for sealing purpose.

The Oil inlet, Drain Plug, Oil level indicator, Pressure Releasing Device, Earthing Terminals (2 Nos each of M 12 size) are provided on the tank/ The complete Assembly can be easily transported using the lifting hooks already provided on the tank.

Ratio	Upto 1200 Amps
Accuracy Class	As Required
Burden	As Required
Short time Current Rating & Its duration	Upto 31.5 kA/3 Sec.
Basic Insulation Level	72.5/140/350 kV
Creepage Distance	25mm/kV i.e 1810 mm(min)
No. Of Secondary Cores	5 (Max)

**GENERAL ARRANGEMENT OF 66 kV OIL FILLED OUTDOOR
CURRENT TRANSFORMER TYPE : OCT-66 (DEAD TANK DESIGN)**



NOTES :

Mounting Dimms : 450 mm x 450 mm
 Total Wt. : 220 kgs (Approx.)
 Oil : 50 Liters (Approx.)

Sr.No	PART NAME
1	Expansion Bellows
2	Glass Window for S.S. Bellows
3	Oil Filling Plug
4	Oil Expansion Chamber
5	P1 Terminal
6	P2 Terminal
7	Dead Tank
8	Lifting Hooks
9	Insulator

Sr.No	PART NAME
10	Terminal Box
11	Top Coer
12	Name Plate
13	Connection Diagram
14	Earthing Terminals
15	Earthing Lable
16	Cheese Head Screw
17	Caution Lable
18	Transformer Oil

TECHNICAL DETAILS REQUIRED ALONGWITH ENQUIRY / ORDER

System Voltage in kV

Insulation Level in kv

Rated Transformation Ratio

No. Of Secondary windings

Rated burden in VA for each secondary winding

Accuracy class of each secondary winding

ISF (max) in case of metering core

In case of special protection class (PS-class)

- Knee point Volatage (min) VK in volts.
- Secondary Resistance (max) Rct in ohms at 75°c
or formula for specified relay operation.
- Excitation Current (max.) Iex in mA at VK or at part of VK

Class of Insulation

Rated short time thermal current & duration

Other Special requirement, if any