



JSL INDUSTRIES LTD

# “Jyoti” Current Transformer Upto 33 kV (Outdoor)

Introduction

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Dimensional Details

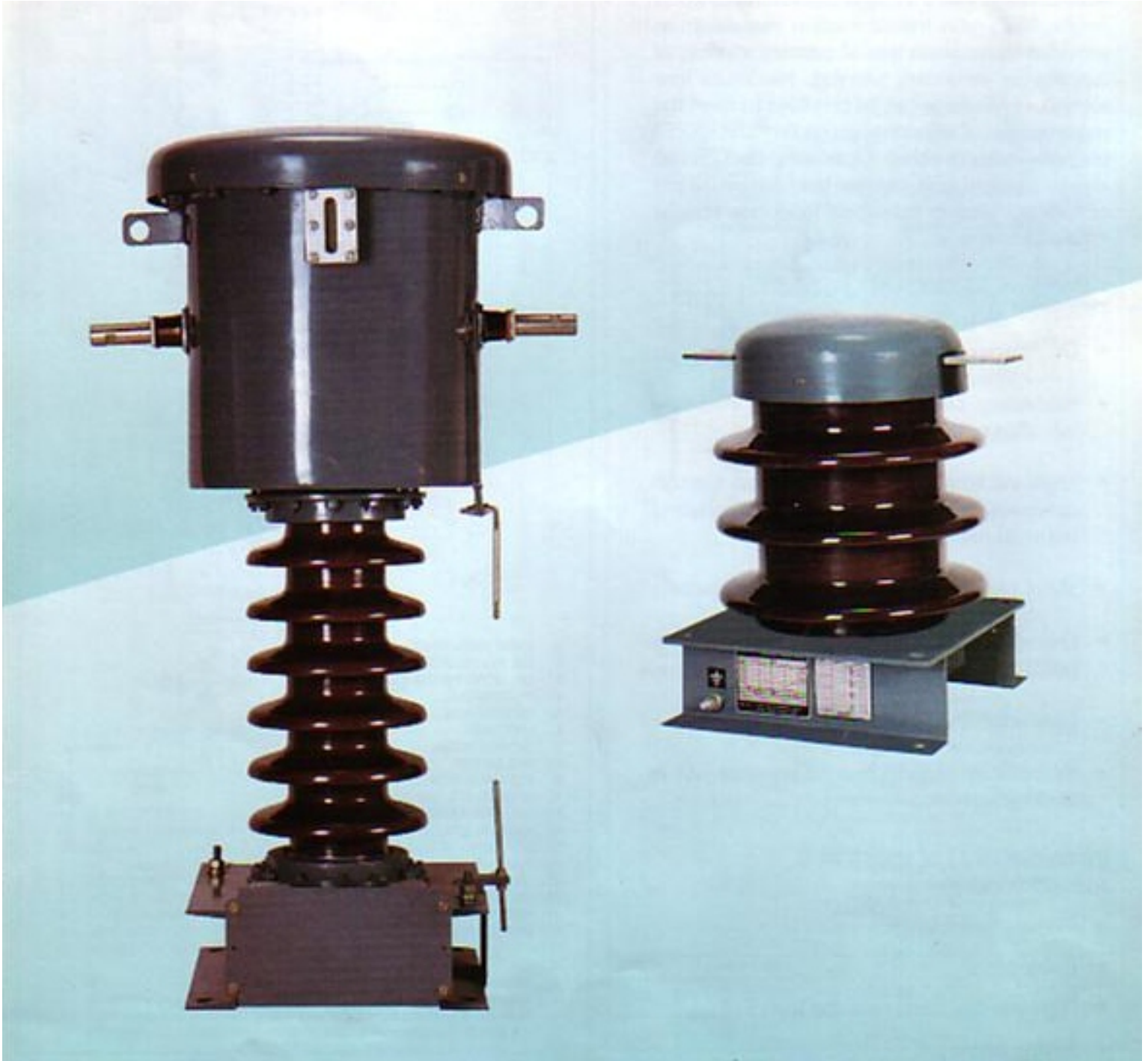
Information Required with Enquiry



**JSL INDUSTRIES LTD**

Oil / Paper Insulated, or  
Dry Type Compact  
Design, High Mechanical  
and Dielectric properties  
Complying with latest  
IS : 2705 / IEC-185

## 'Jyoti' Current Transformer Upto 33 kV (Outdoor)



**Home**

## ‘Jyoti’ Current Transformers - Oil cooled and Suitable for Outdoor Applications - Meet the Growing Industrial Demand for Reliable Measurement of Power and Protection of Distribution System Upto 33 KV rating

The reliability of the Current Transformers is very crucial and of prime importance in modern switchgear. The cost of CT is relatively very low compared to that of entire switchgear but the whole system depends on the performance of CTs for metering and protection requirements. The unit is hermetically sealed. The primary rating is available upto 2000 Amps. Multi-ratio transformation can either be provided by reconnection of primary winding or tapping on secondary winding. Maximum four secondary windings can be provided to meet the requirements of metering, protection and special purpose protective class. Optionally, the CTs can also be supplied with Nitrogen gas filled on the top of the oil. Higher insulation level can also be offered on request.

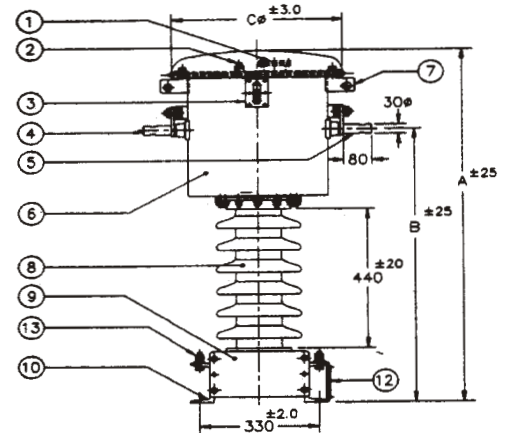
### CONSTRUCTION AND DESIGN FEATURES :

- Oil / Paper insulation
- Secondary Terminal Box tested successfully for degree of protection test IP 55.
- High insulation reliability (achieved through optimum capacitance grading by insulating paper of high dielectric strength)
- Metal part treated for corrosion resistance.
- Use of porcelain bushing suitable for heavily polluted atmosphere.
- Easy accessibility to L.V. Terminals.
- Successfully tested for wind pressure test at 200 kg/sq.meter

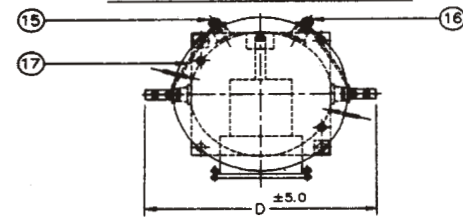
### PROVISION FOR OPTIONAL ACCESSORIES :

- Primary terminal connector
- Cable gland
- Nitrogen gas filling over the top of oil
- Arcing horns.

### CONSTRUCTION AND DESIGN FEATURES :

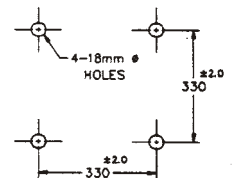


WOUND & BAR PRIMARY



DUAL PRIMARY  
(Primary Reconnection)

1	EXPLOSION VENT
2	OIL FILLING SCREW
3	OIL LEVEL INDICATOR
4	P1.TERMINAL
5	P2.TERMINAL
6	LIVE TANK
7	LIFTING HOOK
8	INSULATOR
9	TERMINAL BOX
10	BASE PLATE ASSLY
11	CAUTION LABEL
12	NAME PLATE
13	EARTHING TERMINAL (M12 THRD)
14	DRAIN PLUG
15	C1-TERMINAL
16	C2-TERMINAL
17	RECONNECTION LINK
18	EARTHING LABEL



#### NOTE :

- All dimension are in mm
- Total creepage distance = 900 mm min
- Multiratio is available by both the methods.  
(I.e. Primary reconnection & Taps on secondary)

## “JYOTI” CURRENT TRANSFORMER DRY TYPE FOR OUTDOOR APPLICATION-TYPE ORC-33 FOR 33 kV SYSTEM

Now ‘Jyoti’ also offers dry type Current Transformers upto 33 kV for outdoor applications with superior design features, and improved reliability.

The design has been successfully tested for all the routine / type tests as per latest IS : 2705/IEC 185. These have been supplied and commissioned by many reputed OEMS/State Electricity Board and are working satisfactorily for many years.

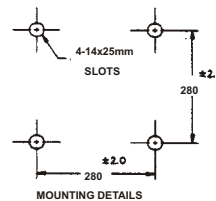
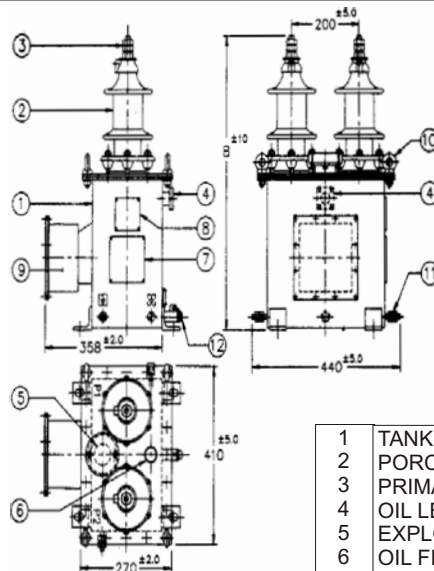
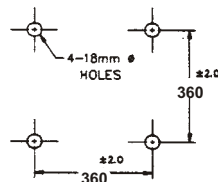
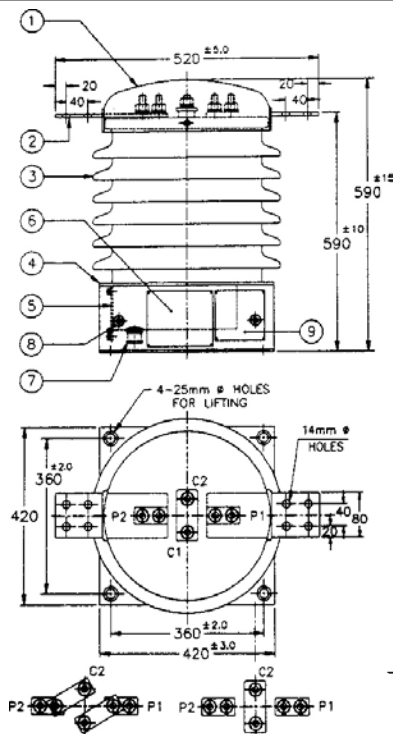
### DISTINCT FEATURES :

- Epoxy Resin/Porcelain insulation offers great reliability
- Compact design (reduction of height).
- No fear of oil leakage over a period of time.
- Sturdy construction eliminates transit damages
- Permits replacement of internal parts at site.

## “JYOTI” CURRENT TRANSFORMER OIL COOLED FOR OUTDOOR APPLICATION - TYPE OCT-12D FOR 11 kV SYSTEM

We also supply above current transformers with following features :

- Compact Design
- Hermetically sealed unit
- Approved by Electricity Boards like MSEB,APSEB etc.
- Can be given with painted or Hot Dip Galvanised Metal Tank.



- |    |                               |
|----|-------------------------------|
| 1  | TANK                          |
| 2  | PORCELAIN INSULATOR           |
| 3  | PRIMARY TERMINALS (SIZE-A)    |
| 4  | OIL LEVEL INDICATOR           |
| 5  | EXPLOSION VENT                |
| 6  | OIL FILLING SCREW             |
| 7  | NAME PLATE                    |
| 8  | SECONDARY TERMINAL BOX        |
| 9  | CONNECTION DIAGRAM            |
| 10 | LIFTING HOOKS                 |
| 11 | EARTHING TERMINAL (M10 THRDS) |
| 12 | OIL DRAIN PLUG                |

### Note

- All dimension are in mm.
- Total creepage distance = 270 mm (min)
- Total Weight ≈ 60 kg (Approx.)
- Oil ≈ 15 Liters (Approl.)

- |   |                          |
|---|--------------------------|
| 1 | LIVE TOP COVER           |
| 2 | PRIMARY TERMINALS        |
| 3 | INSULATOR                |
| 4 | BOTTOM ASSLY             |
| 5 | SECONDARY TERMINAL BOX   |
| 6 | NAME PLATE               |
| 7 | CABLE GLAND              |
| 8 | EARTHING TERMINALS (M10) |
| 9 | CONNECTION DIAGRAM       |

- Note**
- All dimension are in mm.
  - Total creepage distance = 900 mm( min )
  - WEIGHT ≈ KG (Approx.)

TYPE	RATING	Lth	SIZE - A	B
01	UP TO 250 A	16 kA / 1 Sec	M12 Thrds	695
02	ABOVE 250 A UP TO 400 A	20.4 kA / 1 Sec	M20 Thrds	673
03	ABOVE 250 A UP TO 630 A	26.4 kA / 3 Sec		

## DIMENSIONAL AND OTHER DETAILS

NO.	MODEL	MAX.RATING		A	B	Cø	D	Weight In kg. (Approx)	Oil In Liters
		Ip. Amp.	Ith kA/Sec.						
1. 2.	OCT-33AS OCT-33AD	600 2 X 400	26.4/1	1115	865	476	632	140	35
3. 4.	OCT-33BS OCT-33BD	600 2 X 400		1080	865	426	582	110	27
5. 6.	OCT-33CS OCT-33CD	600 2 X 400		1065	865	376	532	90	18
7. 8.	OCT-33AB OCT-33ABS	1250 2000	26.4/3	1115	830	476	635	140	35
9. 10.	OCT-33BB OCT-33BBS	1250 2000		1080	808	426	585	110	27
11. 12.	OCT-33CB OCT-33CBS	1250 2000		1065	792	376	535	90	18
13. 14.	OCT-33ASM OCT-33ADM	800 2 X 600		1115 1150	830 795	476 476	635 635	140 140	40 40

All the above models can also be offered for 22 kV

All the above models are suitable for heavily polluted atmosphere.

A wide range of burdens and class of accuracy can be offered in any of the above mentioned models

We are also one of the leading suppliers for 25 kV Outdoor Current Transformers as per RDSO Specifications for RAILWAYS.

## INFORMATION REQUIRED WITH ENQUIRY / ORDER :

- Application : Outdoor
- Nominal System Voltage
- Basic Insulation Level
- Rated Transformation Ratio.
- No. Of Secondary windings.
- Rated Burden in VA for each secondary winding
- Class of Accuracy for each secondary winding
- Rated Short Time Thermal Current with
- Maximum Instrument Security Factor in case of metering core
- Class of Insulation
- In case of special protection (PS Class)
  - Minimum knee point voltage (VK) in volts.
  - Maximum Secondary winding resistance in Ohms at 75° C
  - OR
  - Formula for specified relay operation.
  - Maximum excitation current in mA at Vk or at Part of Vk
  - Special requirement, if any.