



JSL INDUSTRIES LTD.

“Jyoti” Current Transformer (Indoor)

Introduction

Features & Technical Specification

Dimensional Details

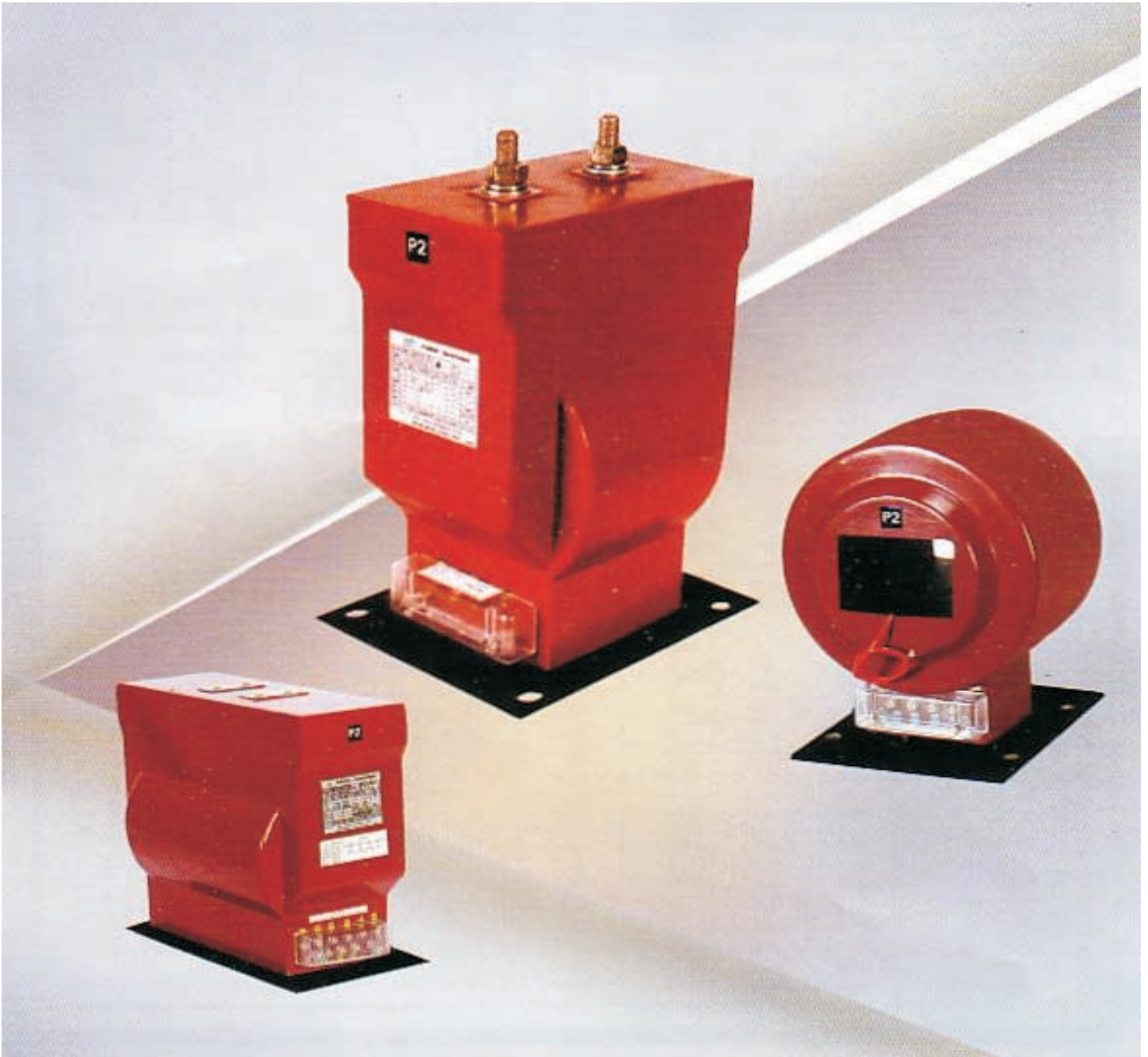
Technical Details



JSL INDUSTRIES LTD.

One Piece Epoxy Resin
Insulation, Compact design,
High mechanical and
dielectric properties
Complying with latest
IS : 2705/IEC-185

'Jyoti' Current Transformers (Indoor)



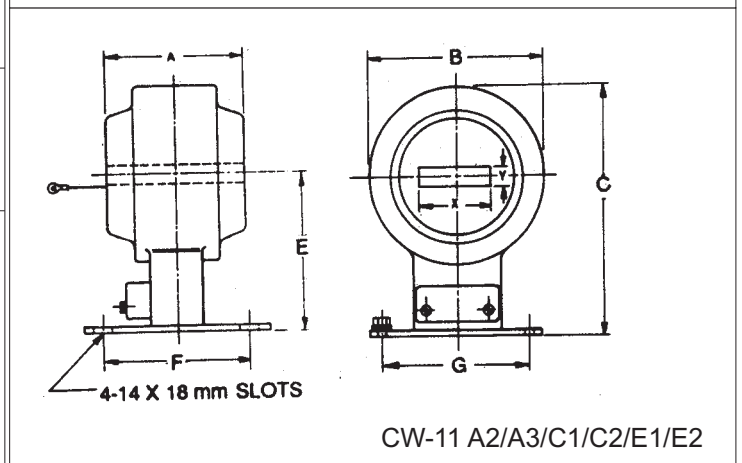
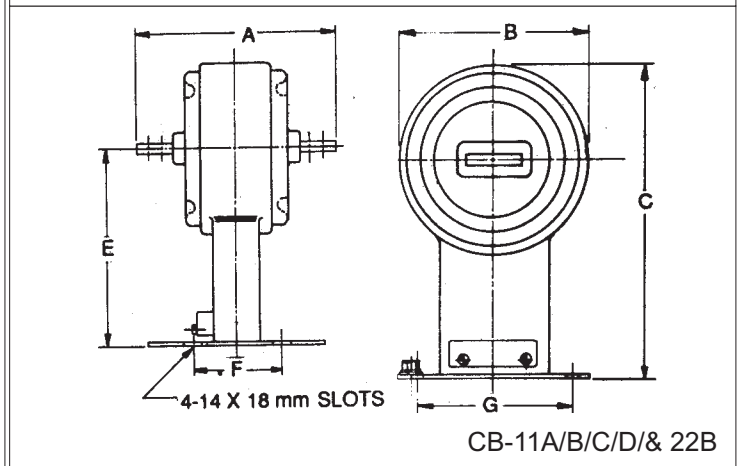
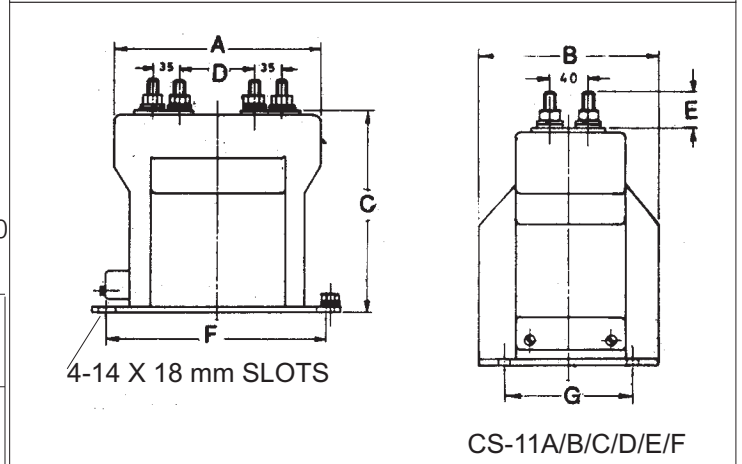
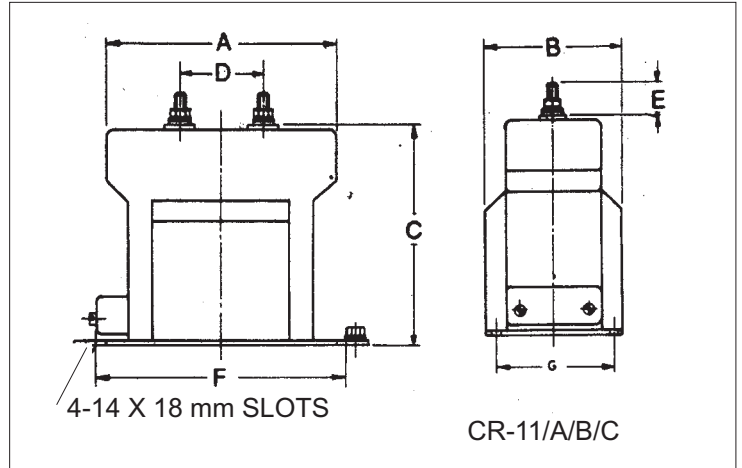
DISTINCT FEATURES :

- One piece Epoxy resin moulding.
- Non-combustible.
- Non-hygroscopic, tropicalised.
- Can be mounted in any position.
- Requires very little maintenance.
- Routine & Type tested as per latest IS-2705/IEC-185.
- Tested successfully for cantilever loading of 5000 Newtons.
- Assuring high insulation reliability by partial discharge measurement as per IS 11322/IEC-44-4 incorporated as a routine test.
- Large number of varieties of models to suit Customer's need & achieve cost / space economy.

TECHNICAL PARTICULARS :

- | | |
|----------------------------------|---|
| • Primary Current | Upto 5000 Amp |
| • Secondary Current | 1 Amp, 5 Amp |
| • Double ratio of Transformation | By Secondary tapping |
| • Rated System voltage (KV) | 3.3 6.6 11 22 33 |
| • Highest system voltage (KV) | 3.6 7.2 12 24 26 |
| • Insulation level (KV) | 10/40 20/60 28/75 50/125 70/170 |

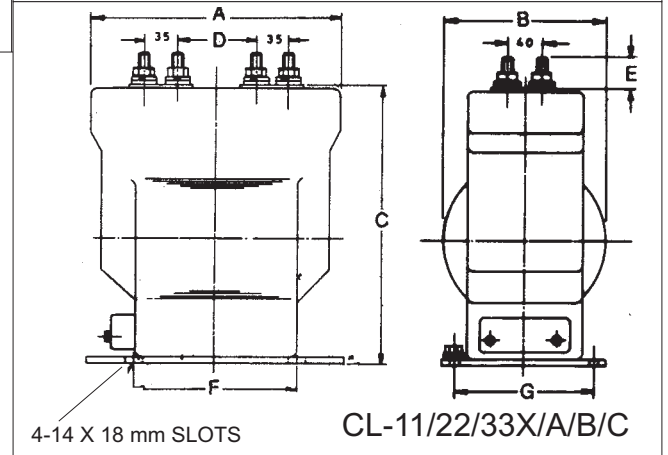
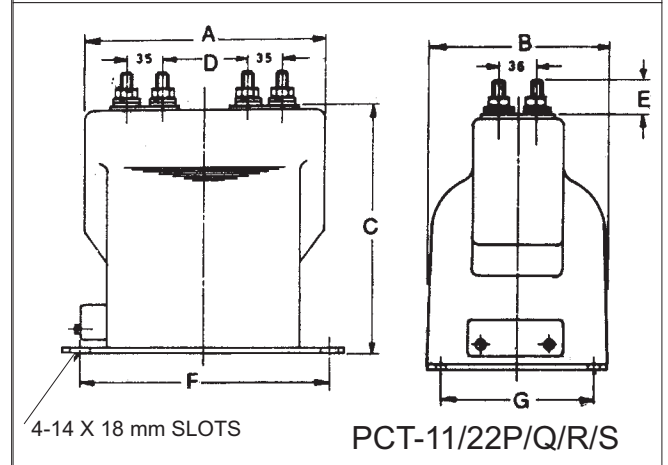
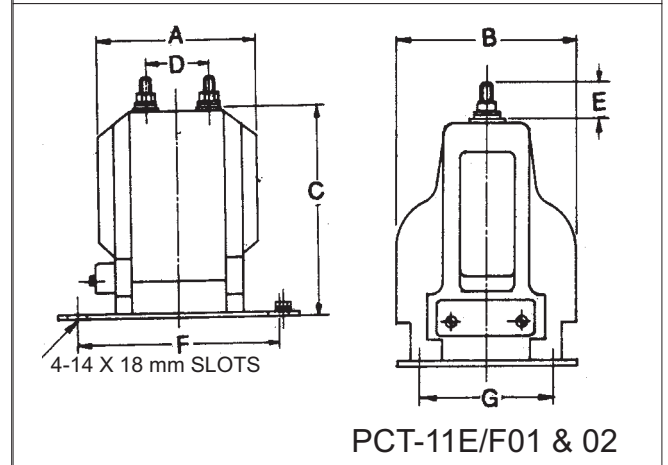
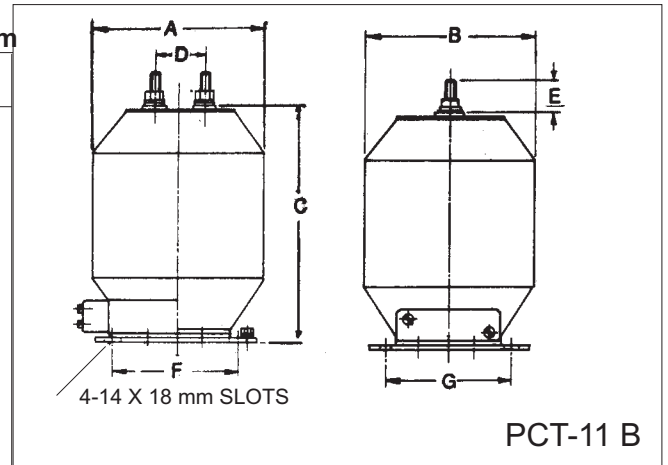
TYPE	MODEL	MAX. RATING		Max.No Of Sec.	Weight in Kg. (Approx)
		Ip Amp.	Ith KA/Sec.		
W O U N D	PCT - 118	250	184/1	2	14.0
	PCT-11E1	250	18.4/1	2	19.0
	PCT-11F1	250	17.4/1	3	29.0
	PCT-11E2	1600	45/1	2	21.0
	PCT-11F2	1600	45/1	3	30.0
	PCT-1/22/Q	1600	45/1	2	30
	PCT-11/22/R	2000	40/3	3	36
	PCT-11/22/S	2000	40/3	3	42
	CL-11/22/33/X	1600	45/1	2	27.0
	CL-11/22/33/A	2500	40/3	3	40.0
	CL-11/22/33/C	2500	40/3	3	50.0
	CL-11/22/33/B	2500	18.4/1	4	60.0
	CR-11 A	250	26.4/1	1	12.0
	CR-11 B	800	26.4/1	2	18.0
	CR-11 C	800	18.4/1	3	24.0
	CS-11 A	250	45/1	1	14.0
CS-11 B	1600	45/1	2	17.0	
CS-11 C	1600	45/1	2	20.0	
CS-11 D	1600	45/1	3	23.0	
CS-11 E	1600	45/1	3	27.0	
CS-11 F	1600	40/3	3	31.0	
B A R	CB-11 A	3000	40/3	1	12.0
	CB-11 B	3000	40/3	2	16.0
	CB-11 C	3000	40/3	2	20.0
	CB-11 D	3000	40/3	2	25.0
	CB-228	3000	40/3	3	35.0
W I N D O W	CW-11 A1	1600	40/3	1	8.0
	CW-11 A2	1600	40/3	2	12.0
	CW-11 A3	1600	40/3	2	15.0
	CW-11 A4	1600	40/3	3	18.0
	CW-11 C1	4000	40/3	1	15.0
	CW-11 C2	4000	40/3	2	20.0
	CW-11 E1	5000	40/3	2	25.0
	CW-11 E2	5000	40/3	3	48.0



DIMENSIONAL DETAILS

All Dimensions in mm

No.	Model	A	B	C	D	E	F	G
1	PCT - 118	190 \emptyset	190 \emptyset	250	53	45	140	170
2	PCT-11E/01	205	195	253	80	45	250	170
3	PCT-11F/01	262	195	253	80	45	250	170
4	PCT-11E/02	213	195	250	80	45	250	170
5	PCT-11F/02	270	195	250	80	45	250	170
6	PCT-1/22/Q	240	200	280	60	45	250	170
7	PCT-11/22/R	270	200	280	60/95	45	250	170
8	PCT-11/22/S	305	200	280	60/95	45	340	170
9	CL-11/22/33/X	245	200	330	90	45	250	170
10	CL-11/22/33/A	305	200	330	95/150	45	250	170
11	CL-11/22/33/C	365	200	330	95/150	45	250	170
12	CL-11/22/33/B	425	200	330	95/150	45	250	170
13	CR-11 A	185	148	228	95	45	250	120
14	CR-11 B	248	148	228	80	45	250	120
15	CR-11 C	295	148	228	80	45	250	120
16	CS-11 A	190	165	250	95	45	250	140
17	CS-11 B	215	165	250	60	45	250	140
18	CS-11 C	245	165	250	60	45	250	140
19	CS-11 D	270	165	250	60	45	250	140
20	CS-11 E	310	165	250	120	45	250	140
21	CS-11 F	360	165	250	120	45	340	140
22	CB-11 A	260	200 \emptyset	276	-	176	140	170
23	CB-11 B	290	200 \emptyset	276	-	176	140	170
24	CB-11 C	330	200 \emptyset	276	-	176	140	170
25	CB-11 D	370	200 \emptyset	276	-	176	140	170
26	CB-22 B	380	280 \emptyset	496	-	356	140	170
27	CW-11 A1	80	205 \emptyset	278	-	176	140	170
28	CW-11 A2	160	205 \emptyset	278	-	176	140	170
29	CW-11 A3	200	205 \emptyset	278	-	176	140	170
30	CW-11 A4	200	240 \emptyset	296	-	176	140	170
31	CW-11 C1	160	240 \emptyset	296	-	176	140	170
32	CW-11 C2	200	240 \emptyset	296	-	176	140	170
33	CW-11 E1	140	300 \emptyset	360	-	210	140	170
34	CW-11 E2	200	300 \emptyset	360	-	210	140	170



NOTE : Size of primary terminals and window opening corresponding to current rating

'Jyoti' Current Transformer for Indoor Application meets the demands of reliable measurement of Power & protection of Distribution Systems upto 33 KV ratings.

DESIGN :

Available in three ma or groups to cover the entire range of specifications upto 33KV System Voltage as follows

- 1) Wound type 2) Bar type 3) Window type

In Wound type and Bar type, the primary and secondary windings, while in Window type, secondary windings alongwith magnetic core are embedded under vacuum in epoxy resin. Total encapsulation provides high mechanical strength and compactness which also protects the transformer from the effects of ageing and deterioration under prolonged period of operation in various atmospheric conditions.

TESTING :

The Current Transformers manufactured and supplied are tested by precisely accurate and sophisticated testing equipments installed in our test setup. The test equipments are adequate for carrying out the type testing (partly) as well as the routine testing of Current Transformers. Each Current Transformer is tested for all routine tests as per latest IS-2705/IEC-185. The Current Transformers are tested thoroughly at our wor as well as at reputed testing houses such as CPRI, ERDA etc.for Routine and type tests.

Other than electrical characteristics, all the materials and components embodied in the Current Transformer are sub ected to a methodical chec ing, at various stages of manufacturing.

With adequate designing, manufacturing with latest setup & testing equipments, it is possible to offer following distinct features for all **CTs** manufactured at our wor s.

High dielectric and mechanical properties combined with its mouldability to almost any shape to help reduce considerably the dimensions and thereby bring about saving of space.

- High dielectric and mechanical properties combined with its mouldability to almost any shape to help reduce considerably the dimensions and thereby bring about saving of space.
- Epoxy resin insulation does not absorb moisture, even under severe humid conditions. It is an excellent insulation ffor tropical countries. In addition, it is not affected by chemicals, such as acids, al alis and solvents, or chemically polluted atmospheres.
- Epoxy moulding surface having high surface trac ing resistance and high degree of toughness, does not call for any maintenance except the periodic cleaning of sedimentation of dirt and dust.
- Due to the integral moulding, the Current Transformer can be mounted in any desired position.

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
- I.S.F. (Max) in case of metering core
- In case of Special protectin class
 - Knee point voltage (min.) VK in Volts.
 - Secondary Resistance (max.) RCT in ohms at 75°C or formula for specified relay operation.
 - Excitation Current (max.) Lex. In MA at VK or at part VK
- Other Special requirement, if any.
- Class of Insulation
- Rated short time thermal current & durations.