



Current Transformer



About us :

A vision, by three professionals having a collective experience of more than 50 years, of providing Best of Art, Reliable and Technologically Advance Protection (Pro), Control (Co) and Metering (M) gave birth to MRM *PROCOM*[®] Pvt.Ltd. The company designs and manufactures micro-processors/DSP based sophisticated systems for protection, controls and measurements of Power Generation and Distribution.

In year 2005 this vision was translated into reality when MRM *PROCOM*[®] Pvt. Ltd was incorporated/ registered by the Indian Company act and started its operation at a 1000 square feet rented premises in Okhla industrial Estate. Initial Couple of years were Utilized by the company in trying to carve a name of it, as well as, have an in depth understanding of the Generator Market.

By 2008 the company was well established and had earned the trust of the customers. The brand *PROCOM*[®] was an accepted trade mark. Customer acceptability translated into orders demanding more human, machinery and working area resources. The company moved into a new premise of 3000 sqft. in 2009 another premises of 2500 sqft was hired to enhance the production capacity. Haryana Government allotted one Acre of Industrial Plot and construction of State of Art g Plant having a covered area of around 40,000 sqft was started. The company shifted to its new in Nov 2012.



And
In 2010
manufacturin
premises, at Faridabad

MRM *PROCOM*[®] always believed that the quality of its products depends upon the quality of manpower, Production equipment, coupled with strict adherence to Quality System and Procedures. Special emphasis is given to all these. In 2009 *PROCOM*[®] qualified for ISO-9001 certification.

MRM *PROCOM*[®] lays very heavy emphasis on the production and testing equipments. We believe that the chain is a strong as its weakest link and hence the production and testing equipments are procured only from well renowned manufactures. All the testing equipment is calibrated at regular intervals. The production is equipped to handle both through hole and SMD technology and is capable of handling both leaded and lead free components. We have installed Fully Automatic Pick and Place Machine from Juki Japan, Stencil printer from Akra, Germany, Reflow of EMS and Wave Soldering machine with Dual wave from EMS. The calibration and testing facilities are also up to date and consists of State of the Art Calibration with reference meter from ZERA and simulator and voltage & current source from Calmet, Multi-Meters from Fluke, oscilloscopes from Tektronix, LCR Meter from HP. A complete EMI/EMC testing facilities is under consideration.

Current Transformer :

Procom Manufacture Wide Range of LT Current Transformer For Rating Upto 3000A that Includes.

- Rectangular Molded Current Transformer
- Round Molded Current Transformer
- Rasing Cast LT Current Transformer
- Wound Primary Current Transformer
- Core Balance Current Transformer

Various Models are Available to Suit Different Mounting & Busbar Arrangement

Measuring CT:

- The principal requirements of a measuring CT are that, for primary currents up to 120% or 125% of the rated current, its secondary current is proportional to its primary current to a degree of accuracy as defined by its "Class" and, in the case of the more accurate types, that a specified maximum phase angle displacement is not exceeded.
- A desirable characteristic of a measuring CT is that it should "saturate" when the primary current exceeds the percentage of rated current specified as the upper limit to which the accuracy provisions apply. This means that at these higher levels of primary current the secondary current is less than proportionate. The effect of this is to reduce the extent to which any measuring device connected to the CT secondary is subjected to current Overload.
- On the other hand the reverse is required of the protective type CT, the principal purpose of which is to provide a secondary current proportional to the primary current when it is several, or many, times the rated primary current. The measure of this characteristic is known as the "Accuracy Limit Factor" (A.L.F.).

- A protection type CT with an A.L.F. of 10 will produce a proportional current in the secondary winding (subject to the allowable current error) with primary currents up to a maximum of 10 times the rated current. With a CT, an increase in the burden will result in an increase in the CT secondary output voltage. This is automatic and necessary to maintain the current to the correct magnitude. Conversely, a reduction in the burden will result in a reduction in the CT secondary output voltage.
- This rise in secondary voltage output with an increase in burden means that, theoretically, with infinite burden as is the case with the secondary load open circuit, an infinitely high voltage appears across the secondary terminals. For practical reasons this voltage is not infinitely high, but can be high enough to cause a breakdown in the insulation between primary and secondary windings or between either or both windings and the core. For this reason, primary current should never be allowed to flow with no load or with a high resistance load connected across the secondary winding.
- When considering the application of a CT it should be remembered that the total burden imposed on the secondary winding is not only the sum of the burden(s) of the individual device(s) connected to the winding but that it also includes the burden imposed by the connecting cable and the resistance of the connections.
- If, for example, the resistance of the connecting cable and the connections is 0.1 ohm and the secondary rating of the CT is 5A, the burden of the cable and connections ($R I^2$) is $0.1 \times 5 \times 5 = 2.5VA$. This must be added to the burden(s) of the connected device(s) when determining whether the CT has an adequately large burden rating to supply the required device(s) and the burden imposed by the connections.
- Should the burden imposed on the CT secondary winding by the connected device(s) and the connections exceed the rated burden of the CT the CT may partly or fully saturate and therefore not have a secondary current adequately linear with the primary current.
- The burden imposed by a given resistance in ohms [such as the resistance of a connecting cable] is proportional to the square of the rated secondary current. Therefore, where long runs of cable between CT and the connected device(s) are involved, the use of a 1A secondary CT and a 1A device rather than 5A will result in a 25-fold reduction in the burden of the connecting cables and connections. All burden ratings and calculations are at rated secondary current.

Technical Data

Standards	:	IS270S-1, IEC/EN 60044-1
Accuracy Class	:	1 (0.2 and 0.5 on request)
Rated Burden	:	See Product range
Rated Voltage	:	720 V
Rated Frequency	:	50-60 Hz
Secondary current	:	1 and 5A
Security Factor	:	FS 5
Temperature Range	:	Working : -20 to +55°C, Storage : -50 to +80°C
Insulation Class	:	E (Max 120°C)
Test Voltage	:	4kV _{eff} , 50Hz 1 min.
Protection Class	:	IP 20
Case	:	Nylon / Polycarbonate Housing
Rated thermal short circuit current I_{th}	:	60 I_n
Rated surges current	:	2.5 I_{th}

Error Limits in Transformers :

Class	Current error \pm %					Phase angle error \pm crad rated current			
	10	20	50	100	120	10	20	100	120
	% of nominal primary current					% of nominal prim. current			
0.1	0,25	0,2	-	0,1	0,1	0,3	0,24	0,15	0,15
0.2	0,5	0,35	-	0,2	0,2	0,6	0,45	0,3	0,3
0.5	1	0,75	-	0,5	0,5	1,8	1,35	0,9	0,9
1.0	2	1,5	-	1	1	3,6	2,7	1,8	1,8

Current Transformer

- ◆ Nylon Housing UL 94-V2
- ◆ Protection Class IP - 20
- ◆ Easy To Mount
- ◆ Bus Bar Clamp
- ◆ Dual Terminal For Fixing CT Shorting Link
- ◆ Finger Safe Terminal Cover

TYPE - PRO4530R21 Accuracy Class 1.0

Primary Current	VA Rating	Primary Current	VA Rating
50 (2PT)	2.5	100	2.5
60 (2PT)	2.5	150	3.75
T75 (2PT)	2.5		

Accessories : Mounting Bracket 2 No.

* Secondary 5A,1A, Add 50 Price Upto 400 A, # Available in Class 5

TYPE - PRO5030R14 Accuracy Class 1.0

Primary Current	VA Rating	Primary Current	VA Rating
50 (2 PT)	5	100	5
60	2.5	150	5
75	2.5		

Accessories : Mounting Bracket 2 No.

TYPE - PRO5030R21 Accuracy Class 1.0

Primary Current	VA Rating	Primary Current	VA Rating
50 (2PT)	2.5	100	2.5
60 (2PT)	2.5	150	3.75
75 (2PT)	2.5		

Accessories : Mounting Bracket 2 No. # Available in Class 5

TYPE - PRO5040R21 Accuracy Class 1.0

Primary Current	VA Rating	Primary Current	VA Rating
50 (2 PT)	5	100	5
60	2.5	100	5
75	2.5	150	5

Accessories : Mounting Bracket 2 No.

TYPE - PRO6030R21 Accuracy Class 1.0

Primary Current	VA Rating	Primary Current	VA Rating
50 (2 PT)	5	100	5
60	2.5	150	5
75	2.5		

Accessories : Mounting Bracket 2 No.

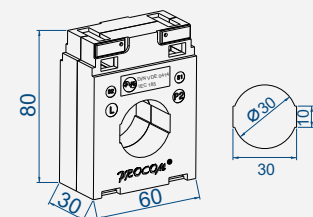
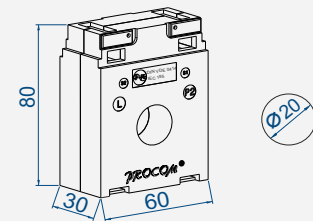
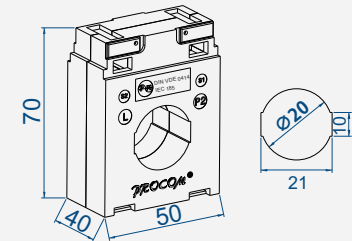
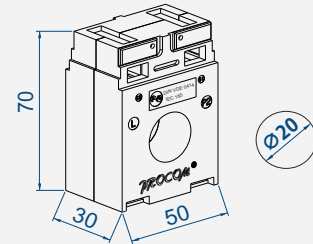
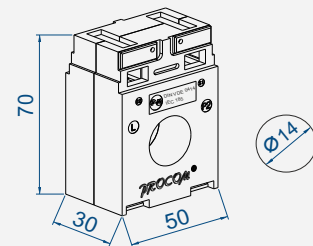
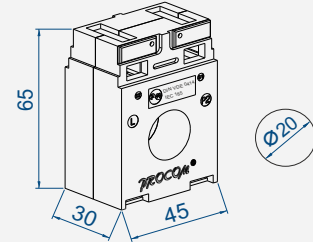
* Secondary 5A,1A, Add 50 Price Upto 400 A

TYPE - PRO6030R30 Accuracy Class 1.0

Primary Current	VA Rating	Primary Current	VA Rating
60 (2 Pt)	2.5	200	5
# 75 (2 Pt)	2.5	250	5
100	2.5	250	5
150	5		

Accessories : Mounting Bracket 2 No.

* Secondary 5A,1A, Add 50 Price Upto 400 A, # Available in Class 5

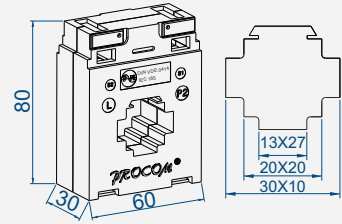


Current Transformer

TYPE - PRO6030B3010 Accuracy Class 1.0

Primary Current	VA Rating	Primary Current	VA Rating
100	2.5	250	5
150	5	300	5/10
200	5	400	5/10

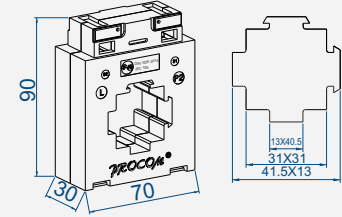
Accessories : Busbar Holder 1 No. , Screw Cap 2 No. , Screw 2 No. Mounting Bracket 2 No.
 * Secondary 5A,1A, Add 50 Price Upto 400 A, # Available in Class 5



TYPE - PRO7030B4010 Accuracy Class 1.0

Primary Current	VA Rating	Primary Current	VA Rating
200	2.5	400	5/10
250	5	500	5/10
300	7.5	600	5/10

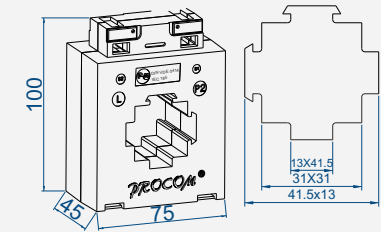
Accessories : Busbar Holder 1 No. , Screw Cap 2 No. , Screw 2 No. Mounting Bracket 2 No.
 * Secondary 5A,1A, Add 50 Price Upto 400A Above75 Upto 1000A



TYPE - PRO7545B4010 Accuracy Class 1.0

Primary Current	VA Rating	Primary Current	VA Rating
100	5	300	10/20
150	10	400	10/20
200	10	500	10/20
250	10/20	600	10/20

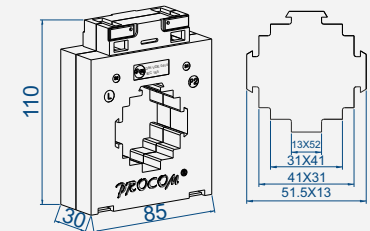
Accessories : Busbar Holder 1 No. , Screw Cap 2 No. , Screw 2 No. Mounting Bracket 2 No.
 * Secondary 5A,1A, Add 50 Price Upto 400A Above75 Upto 1000A



TYPE - PRO8530B5012 Accuracy Class 1.0

Primary Current	VA Rating	Primary Current	VA Rating
250	2.5	600	15
300	5	750	15
400	5 / 15	800	15
500	15	1000	20

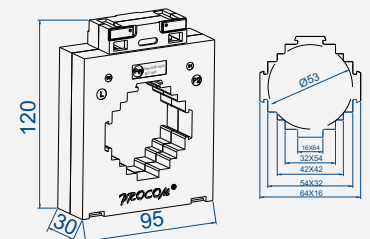
Accessories : Busbar Holder 1 No. , Screw Cap 2 No. , Screw 2 No. Mounting Bracket 2 No.
 * Secondary 5A,1A, Add 50 Price Upto 400A Above75 Upto 1000A



TYPE - PRO9530B6215 Accuracy Class 1.0

Primary Current	VA Rating	Primary Current	VA Rating
300	5	1000	20
400	7.5	1200	20
500	15	1250	20
600	15	1500	20
750	15	1600	20
800	15	2000	20

Accessories : Busbar Holder 1 No. , Screw Cap 2 No. , Screw 2 No. Mounting Bracket 2 No.
 * Secondary 200 Above 1000A
 * 0.5 Class On Request In Ratings More Then 400A



Current Transformer - Circular Molded(CMCT)(TWCT)

CT Ratio Primary / Secondary Current	Dimension (mm)				Class 0.5		Class 1		Class 5
	ID	OD	W	H	VA	—	VA	—	VA
50/5	31	75	50	96	---	—	—	—	5
60/5	31	80	100	96	—	—	—	—	5
75/5	31	75	50	96	—	—	—	—	5

CT Ratio Primary / Secondary Current	Dimension (mm)				class 0.5		class 1	
	ID	OD	H	W	VA	VA	VA	VA
100/5	31	75	96	50	2.5	5	5	5
150/5	31	75	96	50	5	5	5	5
200/5	31	75	96	50	5 / 10	5 / 10	5 / 10	5 / 10
200/5	43	92	113	41	5	5 / 10 / 15	5 / 10 / 15	5 / 10 / 15
200/5	58	100	121	41	5	5 / 10 / 15	5 / 10 / 15	5 / 10 / 15
250/5	43	92	113	41	5	5 / 10	5 / 10	5 / 10
250/5	58	100	121	41	5	5 / 10 / 15	5 / 10 / 15	5 / 10 / 15
300/5	43	92	113	41	5 / 10	5 / 10 / 15	5 / 10 / 15	5 / 10 / 15
300/5	58	100	121	41	5 / 10	5 / 10 / 15	5 / 10 / 15	5 / 10 / 15
400/5	43	92	113	41	5 / 10	5 / 10	5 / 10	5 / 10
400/5	58	100	121	41	5 / 10	5 / 10	5 / 10	5 / 10
500/5	58	100	121	41	5 / 10 / 15	5 / 10 / 15	5 / 10 / 15	5 / 10 / 15
600/5	58	100	121	41	5 / 10 / 15	5 / 10 / 15	5 / 10 / 15	5 / 10 / 15
800/5	72	110	131	41	5 / 10 / 15	5 / 10 / 15	5 / 10 / 15	5 / 10 / 15
800/5	85	134	155	30	5 / 10 / 15	5 / 10 / 15	5 / 10 / 15	5 / 10 / 15
1000/5	72	110	131	41	5 / 10 / 15	5 / 10 / 15	5 / 10 / 15	5 / 10 / 15
1000/5	85	134	155	30	5 / 10 / 15	5 / 10 / 15	5 / 10 / 15	5 / 10 / 15
1200/5	85	134	155	30	5	10 / 15	10 / 15	10 / 15
1200/5	113	160	181	40	15	15	15	15
1500/5	113	160	181	40	15	15	15	15
1600/5	113	160	181	40	15	15	15	15
1800/5	113	160	181	40	15	15	15	15
2000/5	113	160	181	40	15	15	15	15
3200/5	150	190	211	35	15	15	15	15
4000/5	200	235	256	35	15	15	15	15
5000/5	200	235	256	35	15	15	15	15

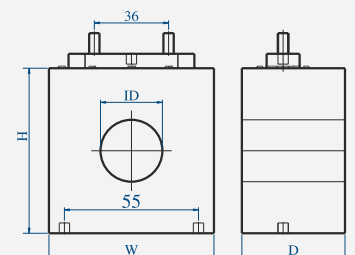
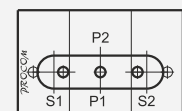
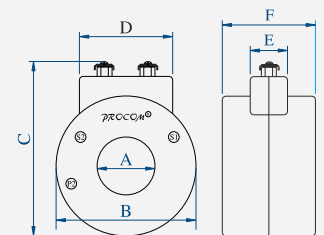
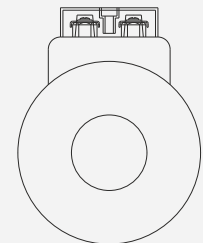
* All Above Rating are also Available with Wire Termination * Price of Ct with Wire Termination higher By Rs 40/-
Secondary Current : 5A(CT With 1A Secondary Current, on Request)

* FOR 1A SECONDARY CURRENT Add 15% Upto 800, 15% Upto 2000, 20% Above 2000

Resin Cast CT - Ring Type, Circular ID

CT Ratio Primary / Secondary Current	Dimension (mm)				Mounting Hole Distance (Center to Center) Screw Size M5	Class 1		Class 0.5	
	ID	H	W	D		VA	VA	VA	VA
100/5	30	80	80	45	55	5	5	5	5
100/5	30	90	90	50	55	10	10	10	10
150/5	30	70	70	45	55	5	5	5	5
150/5	30	70	70	50	55	10	10	10	10
200/5	30	70	70	45	55	5 / 10	5 / 10	5 / 10	5 / 10
200/5	30	70	70	50	55	15	15	15	15
250/5	45	90	90	40	55	5 / 10	5 / 10	5 / 10	5 / 10
250/5	45	90	90	50	55	15	15	15	15
300/5	55	90	90	40	55	5 / 10	5 / 10	5 / 10	5 / 10
300/5	55	90	90	45	55	15	15	15	15
400 /5	55	90	90	35	55	5	5	5	5
400/5	55	90	90	40	55	10	10	10	10
400/5	55	90	90	45	55	15	15	15	15
500/5	55	90	90	35	55	5 / 10	5 / 10	5 / 10	5 / 10
500/5	55	90	90	40	55	15	15	15	15
600/5	55	90	90	35	55	5 / 10	5 / 10	5 / 10	5 / 10
600/5	55	90	90	40	55	15	15	15	15
800/5	70	105	105	35	85	5	5	5	5
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800/5	70	105	105	45	85	15	15	15	15

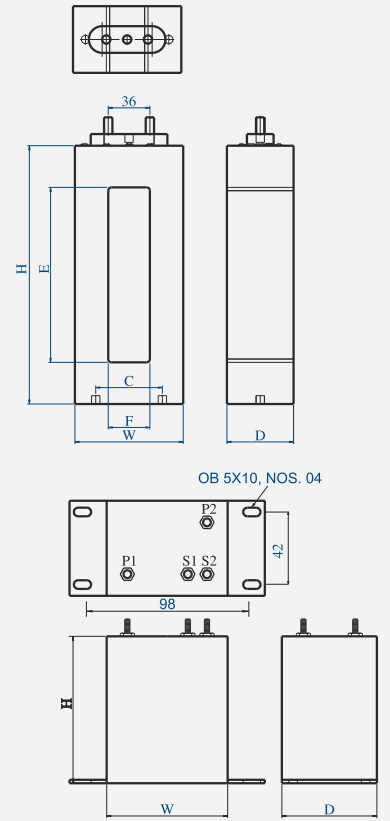
Other ID on Available - 65 & 75.



Current Transformer - Resin Cast

Resin Cast CT - Rectangular Type, Rectangular ID

CT Ratio Primary / Secondary Current	Dimension (mm)				Mounting Hole Distance (Center to Center) Screw Size M5	Class 1	Class 0.5
	ID (WXH)	H	W	D		VA	VA
800/5	105X25	160	80	45	60	10 / 15	10 / 15
1000/5	105X25	160	80	45	60	15	15
1200/5	105X40	155	100	45	60	15	15
1500/5	105X40	155	100	45	75	10 / 15	10 / 15
1600/5	105X40	155	100	45	75	5 / 10 / 15	5 / 10 / 15
2000/5	155X50	210	110	45	90	5 / 10 / 15	5 / 10 / 15
2500/5	155X50	210	110	45	90	5 / 10 / 15	5 / 10 / 15
3000/5	160X80	215	130	45	105	5 / 10 / 15	5 / 10 / 15
3200/5	160X80	215	130	45	105	5 / 10 / 15	5 / 10 / 15
4000/5	160X80	215	130	45	105	15	15
5000/5	230X80	310	160	45	110	15	15
6000/5	230X80	310	160	45	110	15	15



Other ID's on Available:-

- ID 130X50, OD 180x100
- ID 155X80, OD 215x130
- ID 155X60, OD 210x110
- ID 170X140, OD 250x230
- ID 220X140 OD 290x190
- ID 80x30 (OD) 140x90
- ID 65x25 (OD) 100x90
- Current Ratio Up To 2500 To 4000)
- ID 180X160 OD 250x230
- ID 160X150 OD 250x230
- ID 180X55 OD 210x110
- ID 55x17 OD 100x80
- ID 170X90 OD 215x130
- ID 190X110 OD 260x160

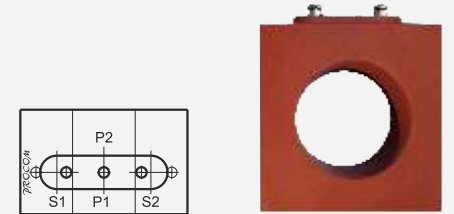
Resin Cast CT - Wound Primary

CT Ratio Primary / Secondary Current	Dimension (mm)			Mounting Hole Distance (Center to Center) Screw Size M5	Class 1	Class 0.5
	H	W	D		VA	VA
5/5 to 25/5	70	65	50	42 x 98	5 / 10	5 / 10
25/5 - 45/5	70	65	50	42 x 98	5 / 10	5 / 10
50/5 - 100/5	100	75	65	42 x 98	5 / 10	5 / 10

Current Transformer - Resin Cast Protection Class

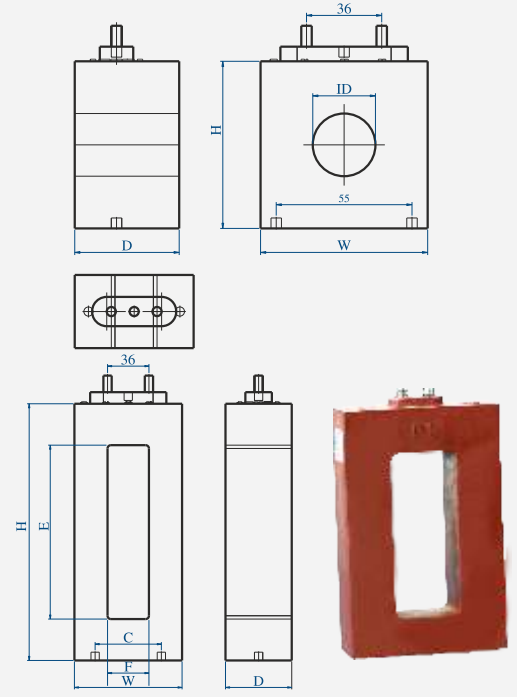
Resin Cast CT - Ring Type, Circular ID

CT Ratio Primary/Secondary Current	Dimension (mm)				Class 5P-10
	ID	H	W	D	VA
200/5	35	105	105	60	5 VA
250/5	45	105	105	40	5 VA
300/5	45	110	110	60	5 VA
300/5	55	110	110	60	5 VA
400/5	55	110	110	60	5 VA
500/5	55	120	120	60	10 VA
600/5	55	110	110	50	5 VA



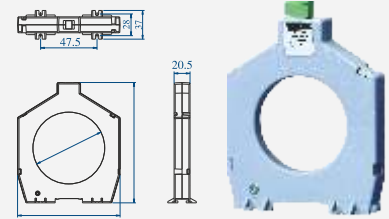
Resin Cast CT - Rectangular Type, Rectangular ID

CT Ratio Primary / Secondary Current	Dimension (mm)				Class 5P-10
	ID (WXH)	H	W	D	VA
800/5	105X25	155	80	60	5
800/5	105X25	185	100	65	10
800/5	105X25	185	100	65	15
1000/5	105X25	185	100	60	10
1000/5	105X25	185	100	70	15
1200/5	105X40	190	125	75	15
1500/5	105X40	190	125	60	10
1500/5	105X40	190	125	70	15
1600/5	105X40	190	125	60	10
1600/5	105X40	190	125	65	15
2000/5	155X50	235	130	75	15
2500/5	155X50	235	130	70	15
3000/5	155X80	235	160	70	15
3200/5	155X80	235	160	65	15
4000/5	155X80	235	160	65	15
5000/5	230X80	310	160	60	15
6000/5	230X80	310	160	60	15

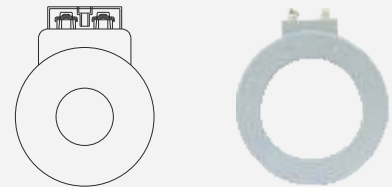


Current Transformer - CBCT

ID	Width (W)	Height (H)	Turn
37.5 mm	70 mm	90 mm	1000
57 mm	96 mm	116.5 mm	1000
92 mm	132 mm	155 mm	1000

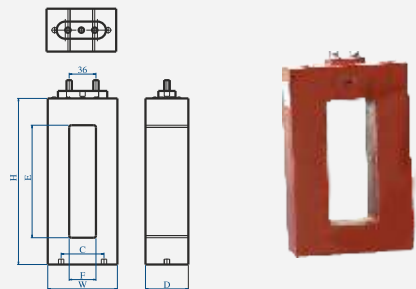


Molded Type CBCT			
ID	Width (W)	Height (H)	Turn
150 mm	190 mm	35 mm	1000
200 mm	235 mm	35 mm	1000



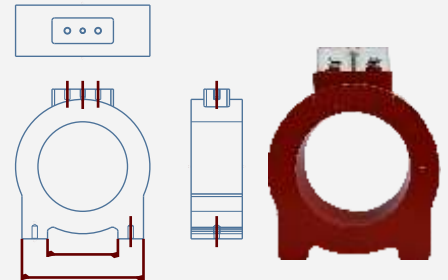
Resin Cast CBCT

Dimension (mm)				
ID	H	W	D	
250X70	310	120	40	
300X70	400	130	40	
390X100	410	160	40	
440X110	500	170	40	

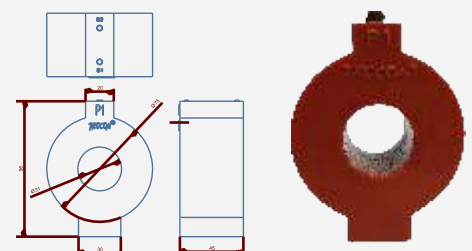


Current Transformer - Epoxy CT

CT Ratio Primary / Secondary Current	Dimension (mm)				Mounting Hole Distance Screw Size M5	Class 1		Class 0.5	
	ID	H	W	D		VA	PRICE	VA	PRICE
100/5	30	80	80	45	50 mm	5/10	845/1040	5/10	1200/1680
150/5	30	80	80	45	50 mm	5/10	845/940	5/10	1020/1170
200/5	35	80	80	45	50 mm	5/10	845/910	5/10	1060/1120
250/5	45	80	80	45	50 mm	5/10	970/1020	5/10	1120/1190
300/5	45	90	90	40	50 mm	5/10/15	845/940/1040	5/10/15	1020/1120/1560
400/5	55	90	90	40	50 mm	5/10/15	780/845/990	5/10/15	880/1000/1120
500/5	55	90	90	40	50 mm	5/10/15	870/980/990	5/10/15	1020/1050/1110
600/5	55	90	90	40	50 mm	5/10/15	870/910/990	5/10/15	980/1050/1110



CT Ratio Primary / Secondary Current	Dimension (mm)				Mounting Hole Distance Screw Size M5	Class 1		Class 0.5	
	ID	H	W	D		VA	PRICE	VA	PRICE
100/5	30	80	80	45	50 mm	5/10	810/1040	5/10	1070/1500
150/5	30	80	80	45	50 mm	5/10	810/900	5/10	980/1120
200/5	35	80	80	45	50 mm	5/10	810/880	5/10	1020/1080
250/5	45	80	80	45	50 mm	5/10	930/980	5/10	1080/1150
300/5	45	90	90	40	50 mm	5/10/15	810/900/1030	5/10/15	980/1080/1500
400/5	55	90	90	40	50 mm	5/10/15	750/810/950	5/10/15	850/975/1080
500/5	55	90	90	40	50 mm	5/10/15	840/950/955	5/10/15	980/1070/1150
600/5	55	90	90	40	50 mm	5/10/15	700/870/960	5/10/15	950/1000/1070



Products Range

- Multifunction Meters
- Current Transformers
- Protections Relays
- Din Rail Mounted Relays
- Wiring Harness
- AMF Controllers
- Manual Controllers
- Relay Boards
- Earth Leakage Relays & CBCT
- Battery Charger

Certificate



MRM PROCOM[®] Pvt. Ltd.

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