



narayan powertech pvt. ltd.

Engineering Excellence Through Expertise

Instrument Transformers



Products Catalog



narayan powertech pvt. ltd.



CONTENTS

Page 2	-----	Company Profile
Page 6	-----	Manufacturing Infrastructure
Page 9	-----	Operational Capabilities
Page 10	-----	Reliability Laboratory
Page 11	-----	CERTIFICATION
Page 12	-----	Laboratory- ISO 17025
Page 13	-----	Certifications Products & Sustainability
Page 14	-----	Awards
Page 15	-----	Products Range
Page 16	-----	Medium Voltage – Current Transformers
Page 29	-----	Potential Transformers
Page 49	-----	Metal Clad - Voltage transformers
Page 51	-----	Low Voltage - Instruments Transformers
Page 54	-----	Cast Resin Components
Page 60		Agent contract and data in Egypt



narayan powertech pvt. ltd.

< Company Profile

NARAYAN GROUP

**Gujarat Plug-in
Devices**

(Unit 1)

**Narayan Epoxy
Components**

(Unit 2)



Amtran Magnetics

(Unit 3)

Amran Inc. USA



narayan powertech pvt. ltd.

Our Organization



Vision: Creating wealth
in the form of

- Cutting-edge technology
- Patron customers
- Sustainable profit
- Passionate team
- Healthy environment

Mission:

- To create a world class organization, valued by customers

Goal:

- Be industry leader in customer value

Values:

- Honesty
- Respect
- Transparency
- Creativity



narayan powertech pvt. ltd.

- Narayan Powertech Pvt Ltd is an ISO 9001, 14001 and ISO 45001 company, we have Supply experience of 25 years and more with Physical presence in India and USA
- NABL accredited Testing facilities with ISO/IEC 17025:2017 Certification.
- Customers in more than 70 countries
- Consignment inventory services provided
- Products with UL, CE, CSA, GOST marking
- Products designed and manufactured as per all international product standards
- Registered with UN Global Compact
- Standardization service provided

Our CSR Policy

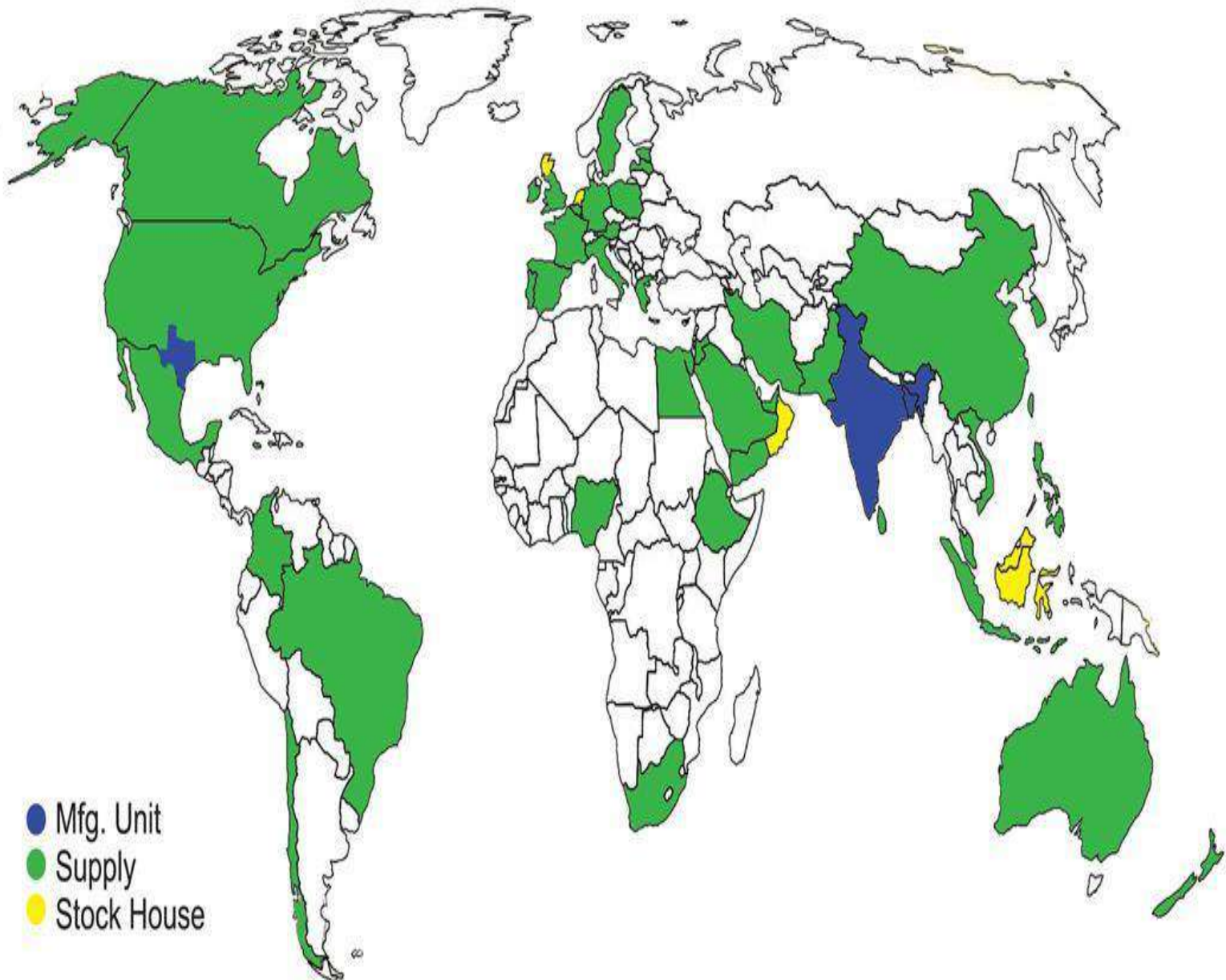
We believe in Engineering Excellence with focus on fast development and innovations. A well balanced mix of sophisticated machines and team of expert engineers enables us to offer the products for Generation, Transmission and Distribution equipment's.

We are driven by process approach towards total customer satisfaction.



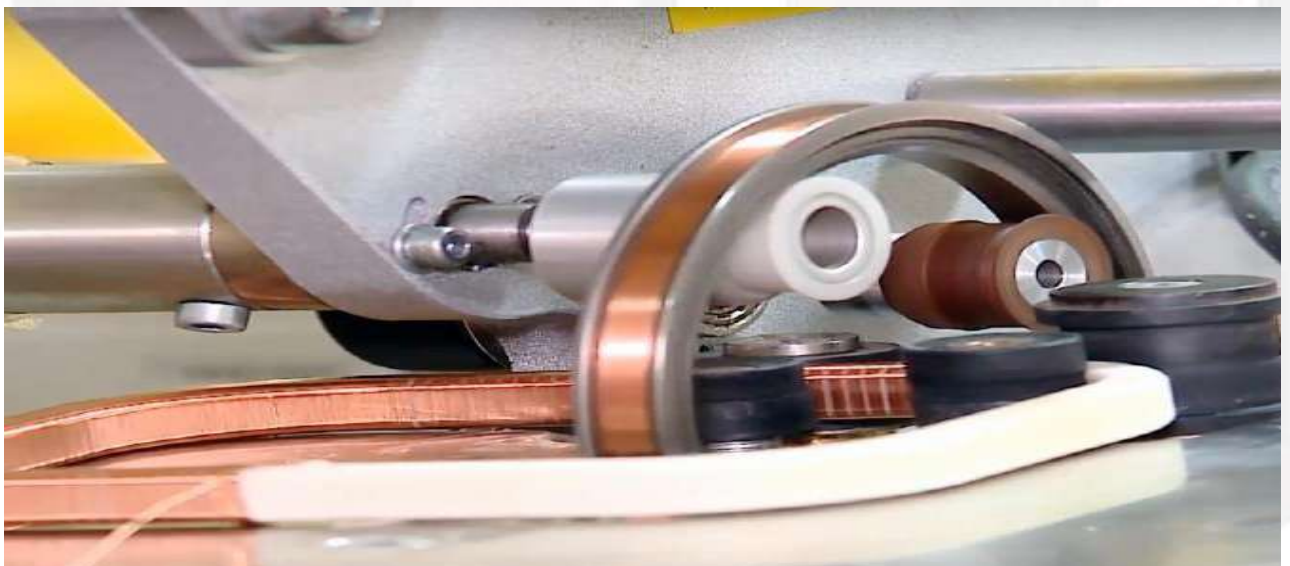
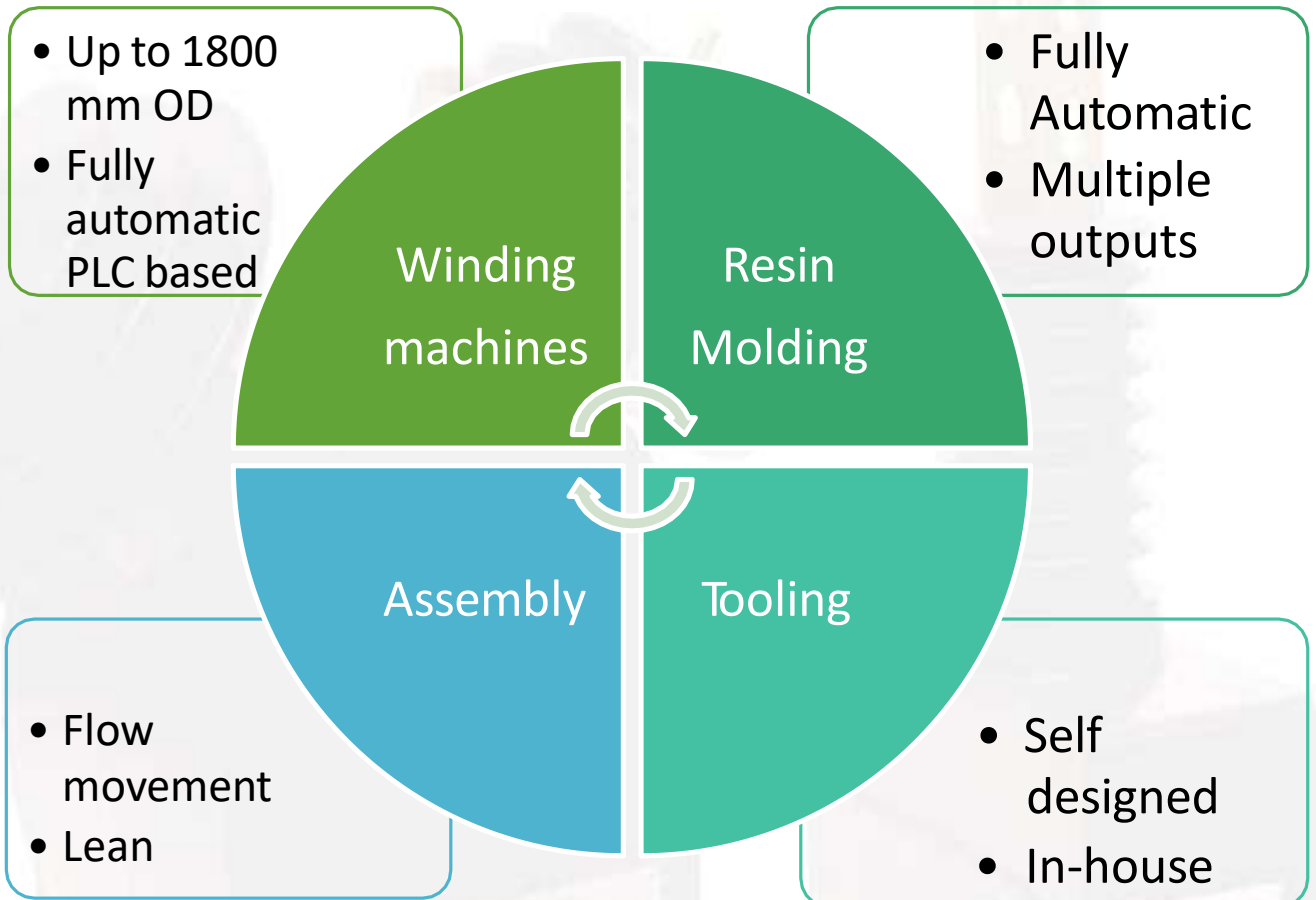
narayan powertech pvt. ltd.

Our Global Reach



Customer base in more than 70 Countries

Manufacturing Infrastructure





narayan powertech pvt. ltd.

Manufacturing Infrastructure



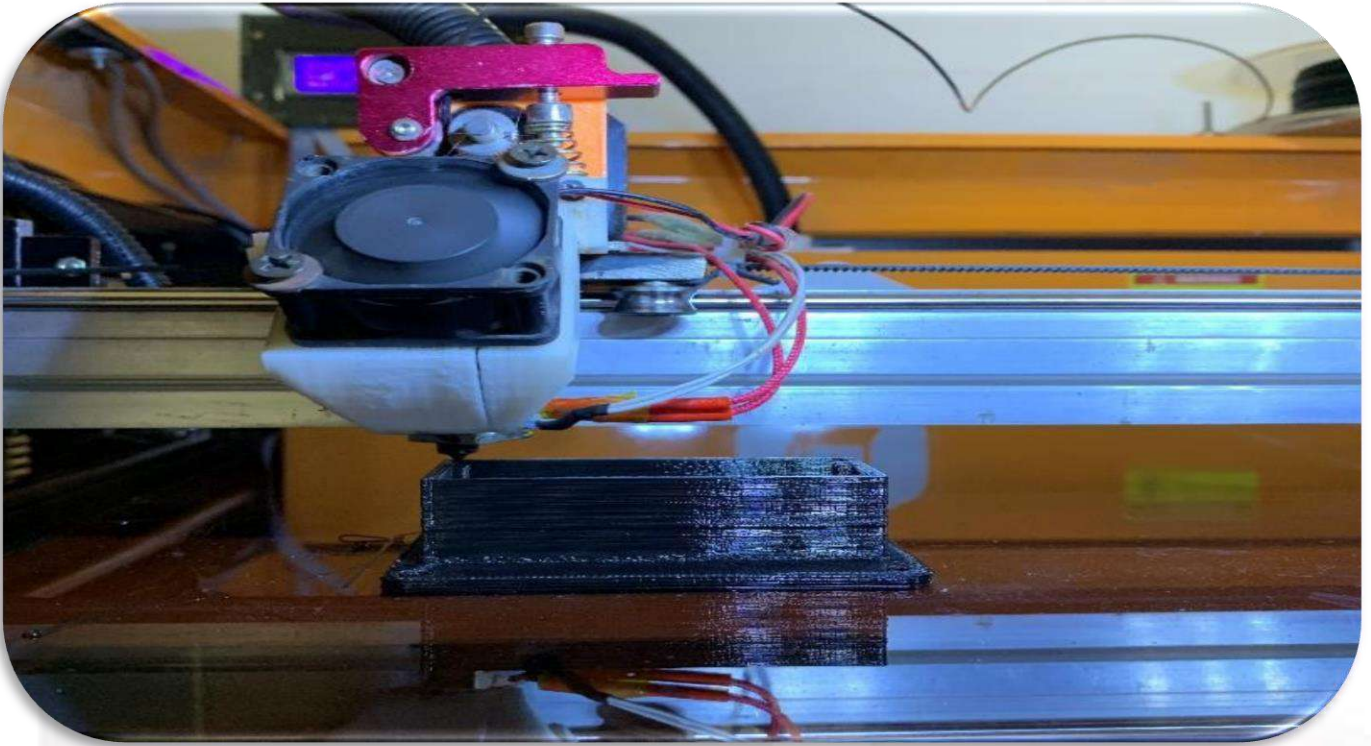


narayan powertech pvt. ltd.

Manufacturing Infrastructure



Operational Capabilities



- ✓ Cpk monitored for CTQs for each product line.
- ✓ Poka-Yoke used to simplify the processes and make them more fail safe.
- ✓ Non conformities measured in PPM and through FPY and RTY.
- ✓ Process approach towards Non conformities.
- ✓ All processes qualified at regular intervals and to verify the breaking point.
- ✓ Application specific tests devised, conducted and recorded.

Reliability Laboratory



Available Tests and Facilities:

1. Temperature cycling chamber from -50 Deg. C to 120 Deg. C
2. Glass transition (Tg) testing laboratory
3. Abrasion resistance tester
4. Cut through tester
5. Pin hole tester
6. Conductivity measurement
7. Salt fog test chamber



narayan powertech pvt. ltd.

CERTIFICATION



- ISO 9001-2015
- ISO 14001-2015
- OHSAS 18001-2007

ZERTIFIKAT ♦ CERTIFICATE ♦ СЕРТИФИКАТ ♦ CERTIFICADO ♦ CERTIFICAT



CERTIFICATE

The Certification Body
of TÜV SÜD South Asia Private Limited
certifies that:



Narayan Powertech Pvt. Ltd.
BLOCK NO-1276, PADRA-VADODARA, PADRA - 391 440, INDIA
including the sites and scope of application see enclosure

has implemented Quality Management System
in accordance with **ISO 9001:2015**
for the scope of

**Design, Manufacture and Supply of Instrument Transformers and Coil
for LV & MV Systems, Sensors, Indicators, Electronics Interface for
Current Transformers & Voltage Transformers**

The certificate is valid from **2024-04-23** until **2027-03-18**
Subject to successful completion of annual periodic audits
The present status of this certificate can be explored through TÜV SÜD website by scanning below QR code and by
entering the certificate number (which is posted on visit page). Further clarifications regarding the status & scope of
this certificate may be obtained by consulting the certification body at info@tsoindia.com

Certificate Registration No. **99 100 03790**
Date of Initial certification: **2010-08-16**
Issue Date: **2024-04-23 Rev. 00**




Rishi Kishor
Head of Certification Body
of TÜV SÜD South Asia Private Limited
Member of TÜV SÜD Group
Page 1 of 2



TÜV SÜD South Asia Pvt. Ltd. • TÜV SÜD India • SA (Ind) • (Ind) (Cert) • Mantra - 43002 • Maharashtra • India **TÜV®**

ZERTIFIKAT ♦ CERTIFICATE ♦ СЕРТИФИКАТ ♦ CERTIFICADO ♦ CERTIFICAT



CERTIFICATE

The Certification Body
of TÜV SÜD South Asia Private Limited
certifies that:



Narayan Powertech Pvt. Ltd.
BLOCK NO-1276, PADRA-VADODARA, PADRA - 391 440, INDIA
including the sites and scope of application see enclosure

has implemented Environmental Management System
in accordance with **ISO 14001:2015**
for the scope of

**Design, Manufacture and Supply of Instrument Transformers and Coil
for LV & MV Systems, Sensors, Indicators, Electronics Interface for
Current Transformers & Voltage Transformers**

The certificate is valid from **2024-04-23** until **2027-03-18**
Subject to successful completion of annual periodic audits
The present status of this certificate can be explored through TÜV SÜD website by scanning below QR code and by
entering the certificate number (which is posted on visit page). Further clarifications regarding the status & scope of
this certificate may be obtained by consulting the certification body at info@tsoindia.com

Certificate Registration No. **99 104 00563**
Date of Initial certification: **2018-03-19**
Issue Date: **2024-04-23 Rev. 00**




Rishi Kishor
Head of Certification Body
of TÜV SÜD South Asia Private Limited
Member of TÜV SÜD Group
Page 1 of 2



TÜV SÜD South Asia Pvt. Ltd. • TÜV SÜD India • SA (Ind) • (Ind) (Cert) • Mantra - 43002 • Maharashtra • India **TÜV®**

ZERTIFIKAT ♦ CERTIFICATE ♦ СЕРТИФИКАТ ♦ CERTIFICADO ♦ CERTIFICAT



CERTIFICATE

The Certification Body
of TÜV SÜD South Asia Private Limited
certifies that:



Narayan Powertech Pvt. Ltd.
BLOCK NO-1276, PADRA-VADODARA, PADRA - 391 440, INDIA
including the sites and scope of application see enclosure

has implemented Occupational Health and Safety Management System
in accordance with **ISO 45001:2018**
for the scope of

**Design, Manufacture and Supply of Instrument Transformers and Coil
for LV & MV Systems, Sensors, Indicators, Electronics Interface for
Current Transformers & Voltage Transformers**

The certificate is valid from **2024-04-23** until **2027-03-18**
Subject to successful completion of annual periodic audits
The present status of this certificate can be explored through TÜV SÜD website by scanning below QR code and by
entering the certificate number (which is posted on visit page). Further clarifications regarding the status & scope of
this certificate may be obtained by consulting the certification body at info@tsoindia.com

Certificate Registration No. **99 117 00449**
Date of Initial certification: **2020-05-22**
Issue Date: **2024-04-23 Rev. 00**




Rishi Kishor
Head of Certification Body
of TÜV SÜD South Asia Private Limited
Member of TÜV SÜD Group
Page 1 of 2



TÜV SÜD South Asia Pvt. Ltd. • TÜV SÜD India • SA (Ind) • (Ind) (Cert) • Mantra - 43002 • Maharashtra • India **TÜV®**



narayan powertech pvt. ltd.

Laboratory- ISO 17025

- Electrical Tests-Type and Routine
- Mechanical Tests- Type and Routine
- Reliability Tests
- Validation - processes of Products



  National Accreditation Board for Testing and Calibration Laboratories

CERTIFICATE OF ACCREDITATION

TESTING & CALIBRATION LABORATORY, NARAYAN POWERTECH PVT. LTD

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2017

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

PADRA-VADODARA ROAD, PADRA, VADODARA, GUJARAT, INDIA

in the field of

TESTING

Certificate Number: TC-5681

Issue Date: 31/07/2024

Valid Until: 30/07/2026

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.
(To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Name of Legal Entity: Narayan Powertech Pvt. Ltd.

Signed for and on behalf of NABL




N. Venkateswaran
Chief Executive Officer



narayan powertech pvt. ltd.

Certifications
Products &
Sustainability



ecovadis

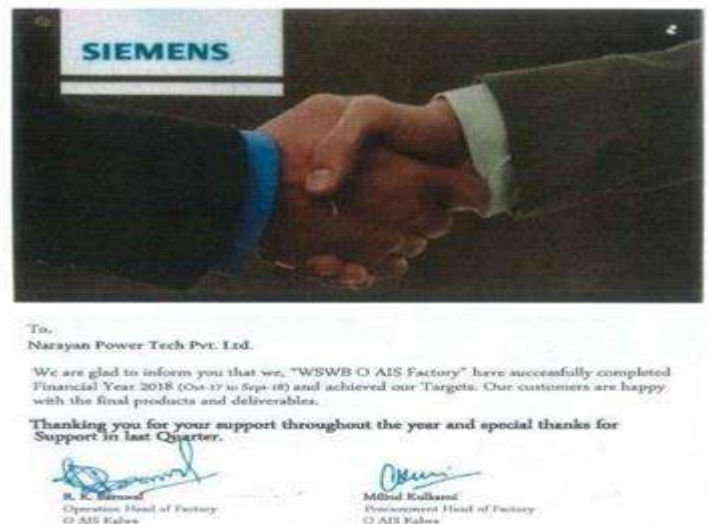


United Nations
Global Compact



narayan powertech pvt. ltd.

← Awards





Electrical Up to 36kV

Current
Transformers

Potential
Transformers

Metal Clad Voltage
transformers

Coils & Reactors

Electronics

Rogowski and
Integrators

Fault passage
indicators

Voltage detection
system

Sensors and
Integrators

Electro- Mechanical Up to 36kV

Resin cast
components

Assemblies

Transformer up to
2500kVA

Air core Reactors

Chokes

Iron core Reactors

Inductors

Magnetics



narayan powertech pvt. ltd.

Medium Voltage – Current Transformers





M.V Current Transformers

General Definitions

General definitions have been given according to International Standards IEC 61869-1 & 2 .

Instrument Transformer

A transformer intended to supply measuring instruments meters, protection relays and other similar apparatus.

Applicable Standards

Our transformers comply with applicable national and international standards.

Current Transformers

An instrument transformer in which the secondary current, in normal conditions of use, is substantially proportional to the primary current and differs in phase from it by angle which is approximately zero for an appropriate direction of the connections.

It isolates the instrument and protection circuit from the primary side and protect the devices against overload according to the overcurrent characteristics of the transformer. Current transformers can have several secondary windings with cores of identical or different characteristics completely isolated from each other.

Measuring Current Transformer

A current transformer intended to supply indicating instruments, integrating meters and similar apparatus.

Protective Current Transformer

A current transformer intended to supply protective relays.

Primary Winding

The winding through which flows the current to be transformed.

Secondary Winding

The winding, which supplies the current circuits of measuring instruments, meters, relays or similar devices.

Secondary Circuit

The external circuit supplied by the secondary winding of a transformer.

Rated Primary Current

The value of the primary current on which the performance of the transformer is based.

Rated Secondary Current

The value of the secondary current on which the performance of the transformer is based.

Rated Transformation Ratio

The ratio of rated primary current to the rated secondary current (I_{1N}/I_{2N} -i.e. 100/5A)

M.V Current Transformers

Current Error (Ratio Error)

The error which a transformer introduces into the measurement of a current and which arises from the fact that the actual transformation ratio is not equal to the rated transformation ratio.

The current error expressed in per cent is given by formula:

$$\text{Current Error \%} = \frac{K_n I_s - I_p}{I_p} \times 100$$

Where

K_n is the rated transformation ratio;

I_p is the actual primary current

I_s is the actual secondary current when I_p is flowing under the conditions of measurements.

Accuracy Class

A designation assigned to a current transformer errors of which remain within specified limits under prescribed conditions of use.

Burden

The impedance of the secondary circuit in ohms and power-factor. The burden is usually expressed as the apparent power in voltamperes absorbed at a specified power-factor and at the rated secondary current.

Rated Burden

The value of the burden on which the accuracy requirements are based on.

Rated Output

The value of the apparent power (in voltamperes at a specified power-factor) which the transformer is intended to supply to the secondary circuit at the rated secondary current and with rated burden connected to it.

Rated Insulation Level

The combination of voltage values which characterizes the insulation of a transformer with regard to its capability to withstand dielectric stresses.

Rated Frequency

This is the frequency for which the transformer is designed and given in Hz on the rating plate.

Rated Short-Time Thermal Current (I_{th})

The r.m.s. value of the primary current which a transformer will withstand for one second without suffering harmful effects the secondary winding being short-circuited.

Rated Dynamic Current (I_{dyn})

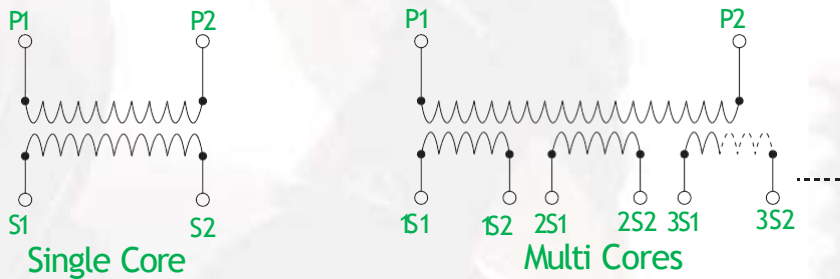
The peak value of the primary current which a transformer will withstand without being damaged electrically or mechanically by the resulting electromagnetic forces the secondary winding being short-circuited.

Rated Continuous Thermal Current

The value of the current which can be permitted to flow continuously in the primary winding the secondary winding being connected to the rated burden without temperature rise exceeding the values specified.

M.V Current Transformers..... CONNECTION DIAGRAMS

Single Ratio Current Transformers

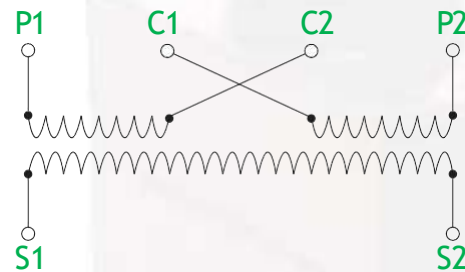


Reconnection of Current Transformer

In case of changeable ratios, it is possible to design the transformer with primary reconnection or secondary tapping;

Primary Reconnection

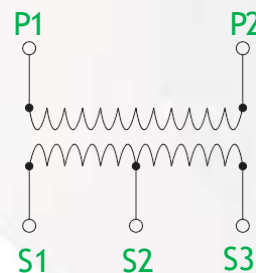
Changeover will be done at the primary side by using joint bars.
Can be used only for primary currents up to 2 x 600A



- C1-C2 short circuited: low rated current
- P1 - C1 and P2 - C2 short circuited: high rated current

Secondary Tapping

Changeover will be done at the secondary side.

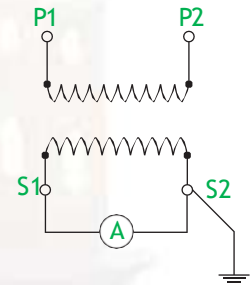


- S1-S2 low rated current
- S1- S3 high rated current

M.V Current Transformers...Safety Operation Conditions

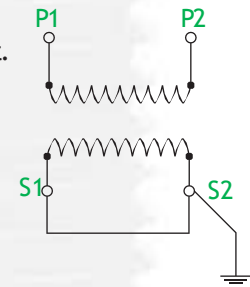
- When the secondary terminals are connected to the measuring or protection devices one of the terminals should be earthed for safety as seen in Diagram-1.

Diagram-1



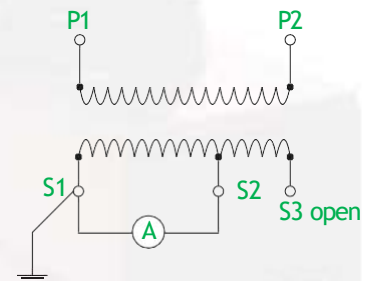
- The secondary circuit of a current transformer must not be operated with an open - circuit.
- The secondary winding of a current transformer which will not be used must be short - circuited and earthed as seen in Diagram-2

Diagram-2



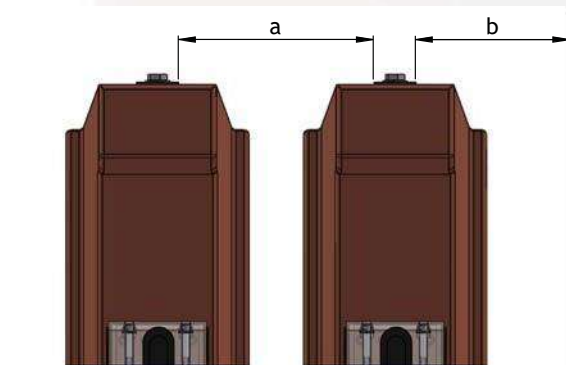
- For the transformer with reconnectable and - or tapped secondaries unused terminals must be left open as seen in Diagram-3.

Diagram-3



- The current transformers which have capacitive divider tap (Ck) must be connected to the indicator if the tap will not be used then it must be earthed.

M.V. CURRENT TRANSFORMERS CONNECTION CLEARENCES



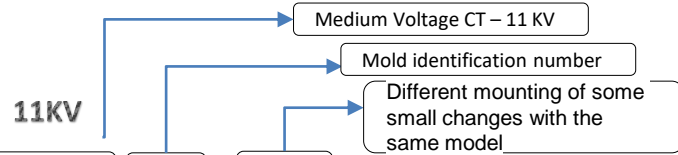
Insulation Level	a minimum	b
12kV	100mm	m
24kV	190mm	110mm
36kV	305mm	210mm
		325mm

**INDOOR SUPPORT TYPE CAST RESIN INSULATED CURRENT TRANSFORMERS
(Um=3,6kV 36kV BLOCK TYPES)**

Model : C990-4 22KV



- Up to 3 cores*
- On request with capacitive layer.
- On request with barrier.



Model : MCTE11 000 - 0000 (Family Name)

- MCTE11042-0003**
- MCTE11048-0000**
- MCTE11073-0002**
- MCTE11098-0000**
- MCTE11100-0000**

Technical Data ▾

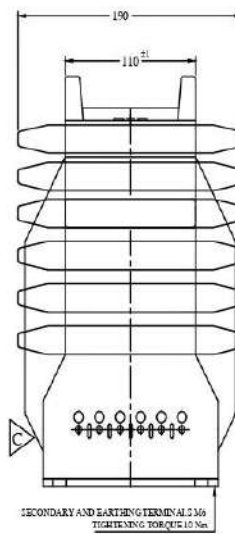
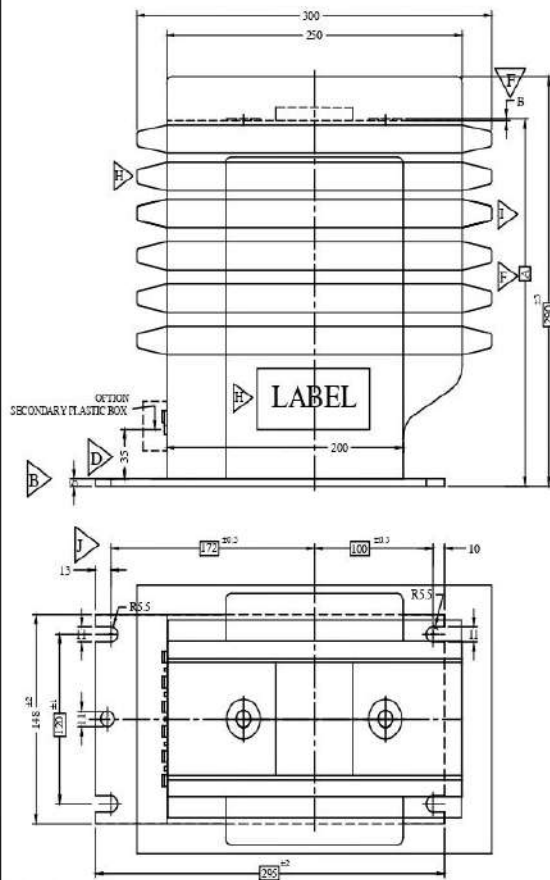
Model ▶	C990-4	MCTE11000-0000
Operating voltage, Um (kV)	17,5 22	3,6 7,2 11
Rated power-frequency withstand voltage (1 minute) (kV)	38 50	10 20 28
Rated impulse test voltage (1.2/50 μs) full wave (kV)	00	00
Rated frequency (Hz)	50-60	
Primary rated current (A)	5 - 2500 (On request 3000A 10xIn / Cont. & Insulation class E)	
Primary reconnection (A)	2 x 5 - 2 x 600	
Secondary rated current (A)	1-5	
Metering classes	0,2 - 0,2S - 0,5 - 0,5S - 1 - 3 - 5 Acc. to IEC 60044-1	
Protection classes	5P- 10P; CI:PX Acc. to IEC 60044-1	
Rated short-time thermal current (lth) (1s) (kA)	max. 1000 x In	
Rated dynamic current (ldyn) (kA)	2,5 x lth	
Short-time load (mechanical) (N)	5000	
Insulation class	E	
Ambient temperature (°C)	-5 +45*	
Altitude (m)	1000	
Standard	IEC 61869 1 & 2	
Weight (approx.) (kg)	33 - 36	28 - 33

* On request operating voltage of 17,5 kV is available..
 ** For more cores please contact with NARAYAN for feasibility..
 *** It can be produced according to customer's specified ambient temperature..Please contact with NARAYAN for feasibility..

INDOOR CTs : TECHNICAL DRAWING

Model C990-4

RESIN CAST MV CT



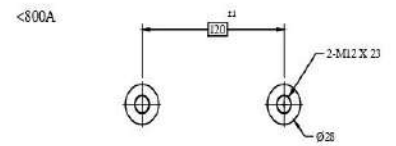
NOTE :
 1. CREEPAGE DISTANCE > 440 mm.
 2. TIGHTENING TORQUE VALUES

PRIMARY M12 : 50 Nm
 SECONDARY M6 : 10 Nm

NOTE :-
 TO INCREASE CREEPAGE DISTANCE, RIBS TO BE PROVIDED.
 SKETCH IS FOR IDEA ONLY.
 CTQs ARE MARKED :
 GENERAL TOLERANCE : ±2

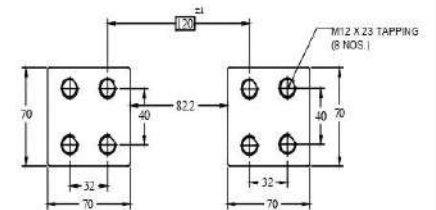
K	TIGHTENING TORQUE VALUE ADDED	R.V	31.10.18
J	MOUNTING PLATE DIM. UPDATED	H.G.S	5.8.15
I	RIB ADDED	V.K.S	30.9.14
H	RIB ADDED & LABEL POSITION CHANGED	B.R.M	4.12.2013
G	LABEL POSITION CHANGE	B.R.M	22.7.2013
F	TERMINAL PROJECTION DIM ADD	S.M.R	1.4.2013
E	PRIMARY CONTACT CHANGE	S.M.R	29.3.2013
D	SEC. TERMINAL POSITION	C.K.P	4/12/10
C	SHAPE UPDATED	C.K.P	11/11/10
B	DRAWING REVISE	C.K.P	03.03.10
REV	CHANGE RECORDE	BY	DATE

PRIMARY CONTACT



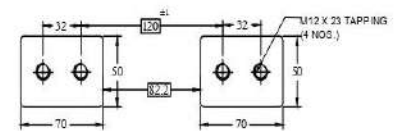
TERMINAL PROJECTION OUTSIDE
 SURFACE DIM. B=1.5mm DIM A=260±2
 MATERIAL : COPPER
 (SILVER PLATED)

1300A TO 2500A




TERMINAL PROJECTION OUTSIDE
 SURFACE DIM. B=5mm DIM A=263.5±2
 MATERIAL : BRASS
 (SILVER PLATED)


800A TO 1250A



TERMINAL PROJECTION OUTSIDE
 SURFACE DIM. B=5mm A=263.5±2
 MATERIAL : BRASS
 (SILVER PLATED)

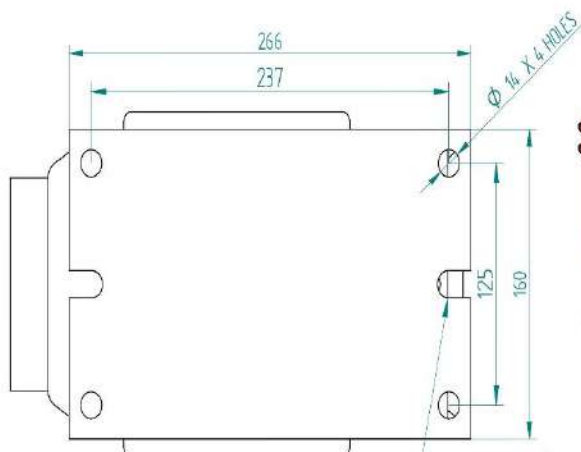
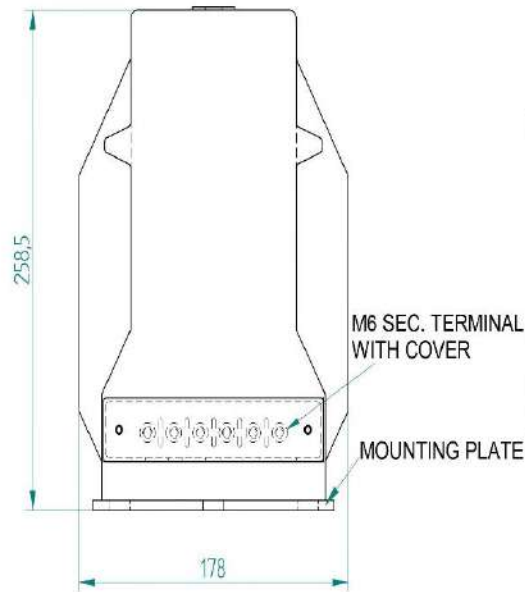
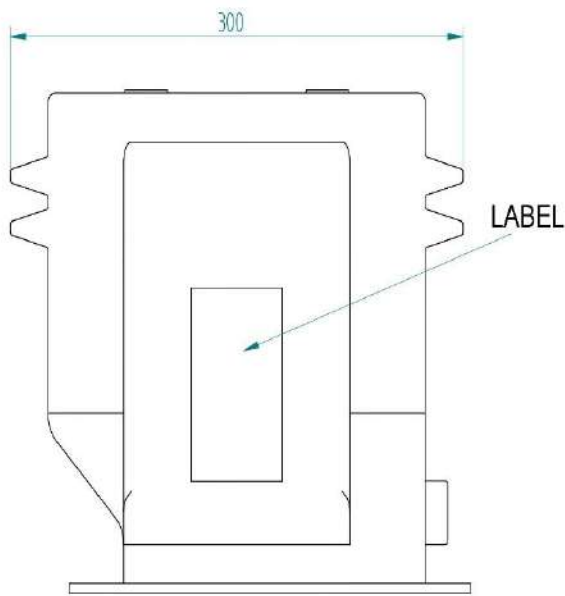
ALL DIMENSIONS ARE IN MM

DRN BY	C.K.P	SIGN	DATE	
CHD BY	C.P.P		1/08/09	
APPD BY	S.S.P			

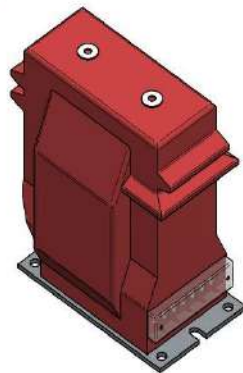
SCALE:-	TITLE:-	DRG NO	REV
	RESIN CAST MV CT	C990-4	K

- All dimensions are in mm..
 - Tolerances are according to DIN 7168-g when not specified..
 - NARAYAN reserves the right to change the specifications and the dimensions of the goods.. Please ask for updated information..
 - Customer designed products are also available..

CURRENT TRANSFORMER



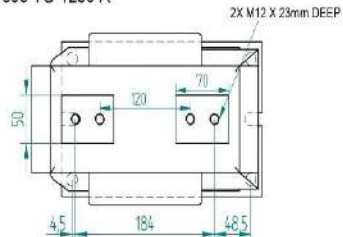
14 X 22 SLOT X 2 NOS.



NOTE:
 1) ALL DIMENSIONS ARE IN mm.
 2) CREEPAGE LENGTH > 240mm
 3) TIGHTENING TORQUE VALUES
 PRIMARY M12 : 50 Nm
 SECONDARY M6 : 10 Nm

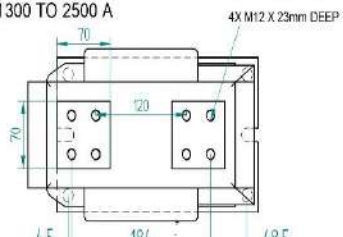
REV	BY	CHANGE RECORD	DATE
B	GNI	RIBS MODIFIED	18.3.15
C	GNI	MOUNTING PLATE CHANGED	30.7.2015
D	R.V	TIGHTENING TORQUE VALUE ADDED	31.10.18

800 TO 1250 A



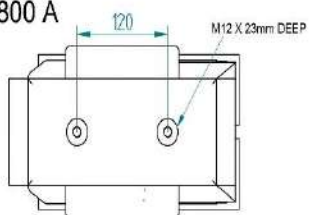
TERMINAL PROJECTION OUTSIDE: 5 mm
TOTAL HEIGHT: 263.5 2mm

1300 TO 2500 A

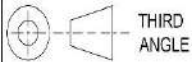



TERMINAL PROJECTION OUTSIDE: 5 mm
TOTAL HEIGHT: 263.5 2mm

<800 A

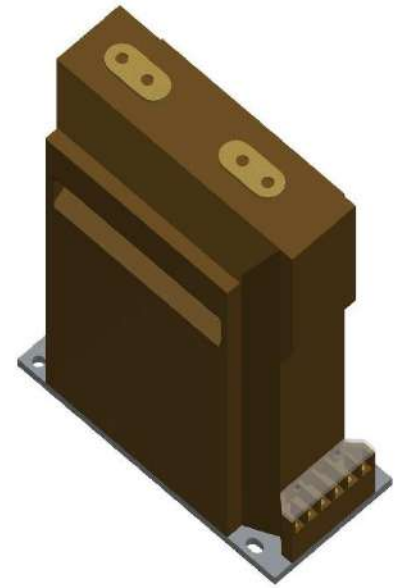
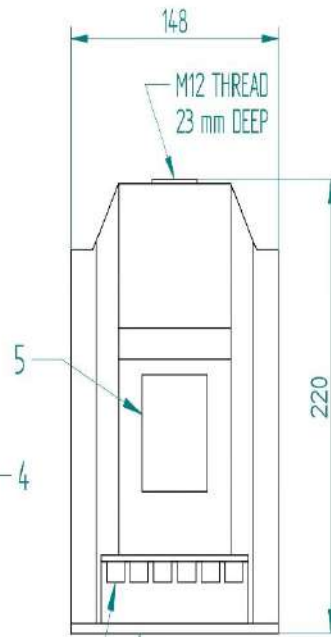
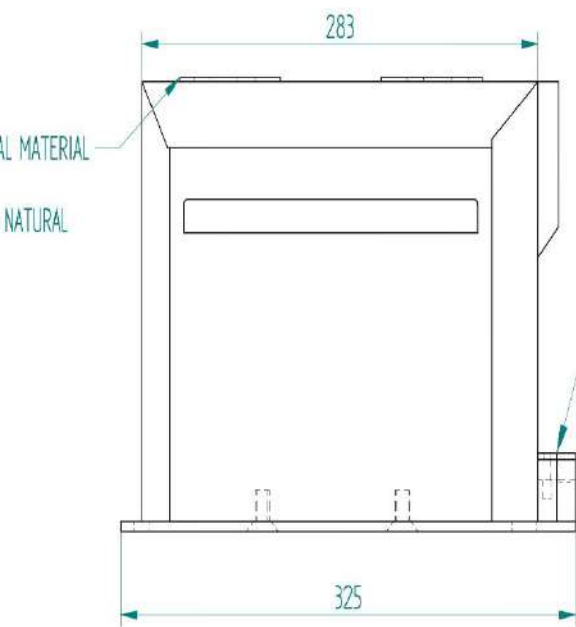
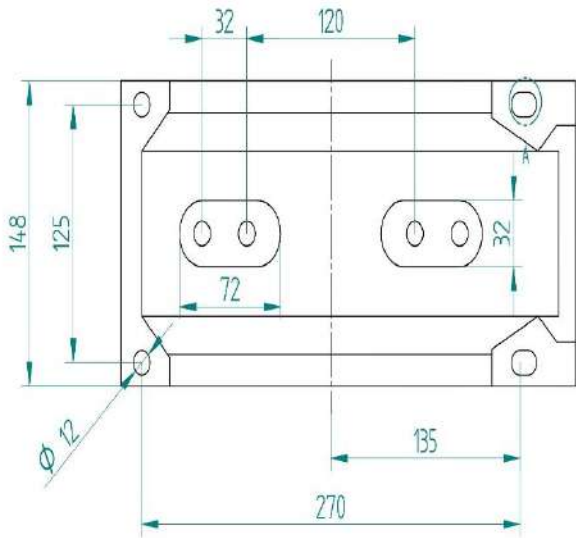


TERMINAL PROJECTION OUTSIDE: 1.5 mm
TOTAL HEIGHT: 260 2mm

 <p>THIRD ANGLE</p>	<p>THIS DRAWING IS PROPERTY OF NARAYAN POWERTECH PVT.LTD.-PDRRA AND UNAUTHORISED USE OF THERE OF BY COPYING ANY PARTY WHATSOEVER IS STRICTLY PROHIBITED</p>		<p>narayan powertech pvt. ltd.</p>		
	<p>DRN BY</p> <p>GNI</p>	<p>CHD BY</p> <p>C.P.P</p>	<p>DATE</p> <p>2.3.15</p>	<p>SCALE</p> <p>1:1.25</p>	
<p>STANDARD TOLERANCES UNLESS OTHERWISE SPECIFIED</p>	<p>LINEAR DIMENSION</p> <p>0.5 UP TO 3 ±0.5</p> <p>OVER 3 UP TO 6 ±1</p> <p>OVER 6 UP TO 30 ±1</p> <p>OVER 30 UP TO 120 ±1.5</p> <p>OVER 120 UP TO 400 ±2.5</p> <p>OVER 400 UP TO 1000 ±4</p>	<p>HOLE DIAMETER</p> <p>1 UP TO 6 ±0.5</p> <p>OVER 6 UP TO 12 ±0.5</p> <p>OVER 12 ±1</p>	<p>ANGLES</p> <p>DIMENSIONED ±1°</p> <p>UNDIMENSIONED 90° ±2°</p>	<p>TITLE</p> <p>CURRENT TRANSFORMER</p>	<p>DRG NO.</p> <p>MCTE11000-0000</p>
				<p>REV</p>	<p>D</p>

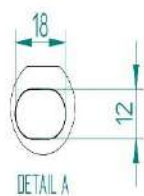
- All dimensions are in mm..
 - Tolerances are according to DIN 7168-g when not specified..
 - NARAYAN reserves the right to change the specifications and the dimensions of the goods.. Please ask for updated information..
 - Customer designed products are also available..

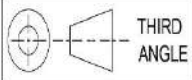

CURRENT TRANSFORMER



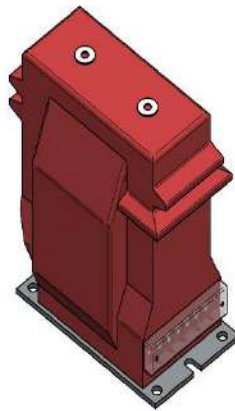
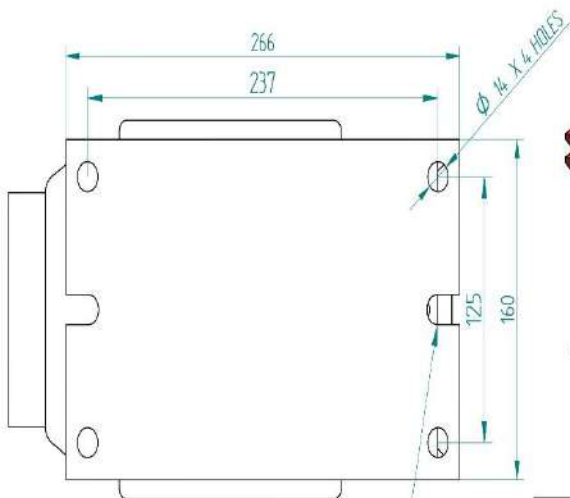
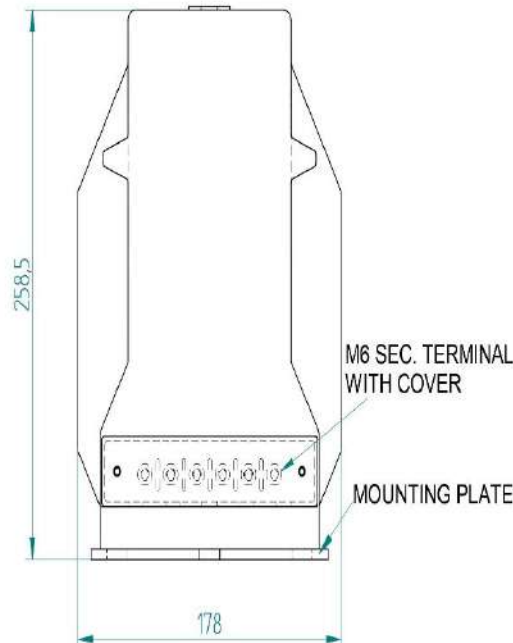
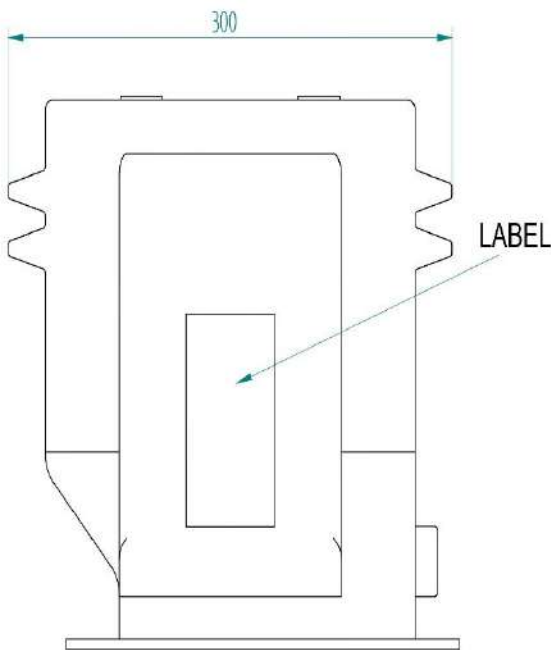
NOTES :

1. ALL DIMENSIONS ARE IN mm.
2. MOUNTING PLATE.
3. M5 SECONDARY TERMINAL.
4. TERMINAL COVER.
5. NAME PLATE.

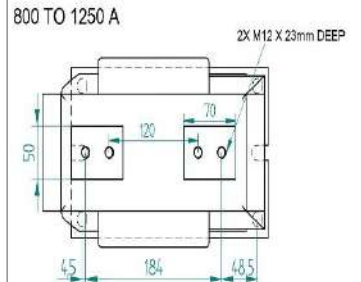


 THIRD ANGLE		<small>THIS DRAWING IS PROPERTY OF NARAYAN POWERTECH PVT.LTD.-PADRA AND UNAUTHORISED USE OF THERE OF BY COPYING ANY PARTY WHATSOEVER IS STRICTLY PROHIBITED</small>		narayan powertech pvt. ltd.			
<small>STANDARD TOLERANCES UNLESS OTHERWISE SPECIFIED</small>	<small>LINEAR DIMENSION</small>	<small>0.5 UP TO 3</small> <small>OVER 3 UP TO 6</small> <small>OVER 6 UP TO 30</small> <small>OVER 30 UP TO 120</small> <small>OVER 120 UP TO 400</small> <small>OVER 400 UP TO 1000</small>	<small>±0.5</small> <small>±1</small> <small>±1.5</small> <small>±2.5</small> <small>±4</small>	<small>DRN BY</small> <small>CHD BY</small> <small>DATE</small>	<small>SCALE</small>	<small>DRG NO.</small>	
	<small>HOLE DIAMETER</small>	<small>1 UP TO 6</small> <small>OVER 6 UP TO 12</small> <small>OVER 12</small>	<small>±0.5</small> <small>±0.5</small> <small>±1</small>	<small>G1</small> <small>C.P.P</small> <small>02.03.2017</small>	<small>N.T.S</small>	<small>MCTE11042-0003</small>	
	<small>ANGLES</small>	<small>DIMENSIONED ± 1°</small> <small>UNDIMENSIONED 90° ± 2°</small>		<small>TITLE</small> CURRENT TRANSFORMER		<small>REV</small> A	

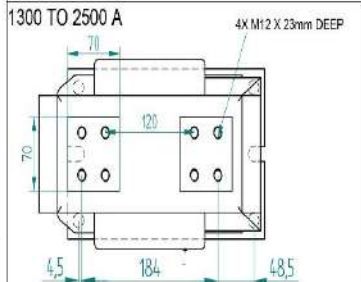
CURRENT TRANSFORMER



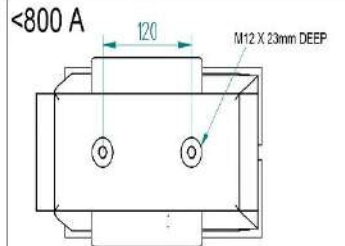
- NOTE:**
- 1) ALL DIMENSIONS ARE IN mm.
 - 2) CREEPAGE LENGTH > 240mm
 - 3) TIGHTENING TORQUE VALUES
PRIMARY M12 : 50 Nm
SECONDARY M6 : 10 Nm



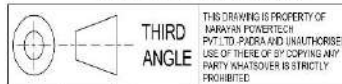
TERMINAL PROJECTION OUTSIDE: 5 mm
TOTAL HEIGHT: 263.5 2mm



TERMINAL PROJECTION OUTSIDE: 5 mm
TOTAL HEIGHT: 263.5 2mm



TERMINAL PROJECTION OUTSIDE: 1.5 mm
TOTAL HEIGHT: 260 2mm



narayan powertech pvt. ltd.



DRN BY	CHD BY	DATE	SCALE
GNI	C.P.P	2.3.15	1:1.25

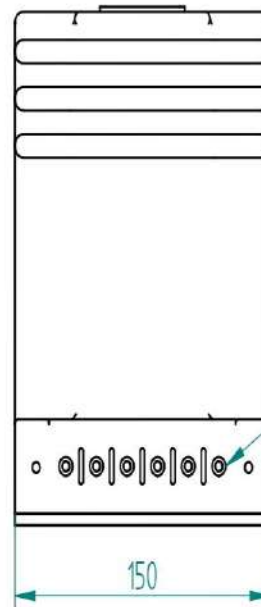
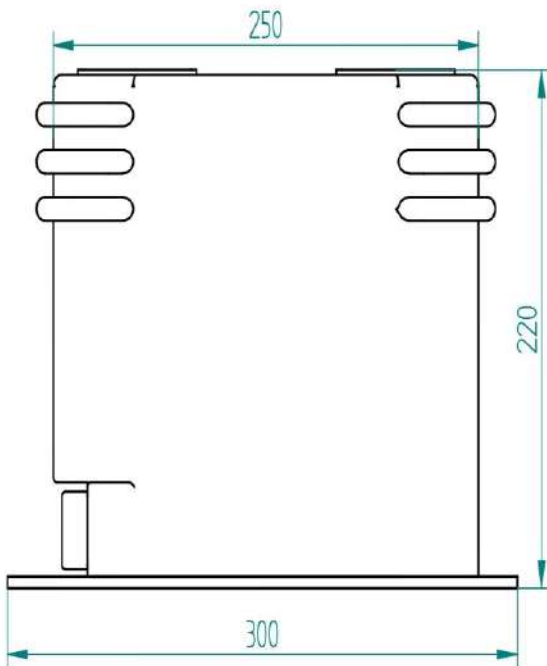
TITLE		DRG NO.
CURRENT TRANSFORMER		MCTE11048-0000
REV	D	

REV	BY	CHANGE RECORD	DATE
B	GNI	RIBS MODIFIED	18.3.16
C	GNI	MOUNTING PLATE CHANGED	30.7.2015
D	RV	TIGHTENING TORQUE VALUE ADDED	31.10.18

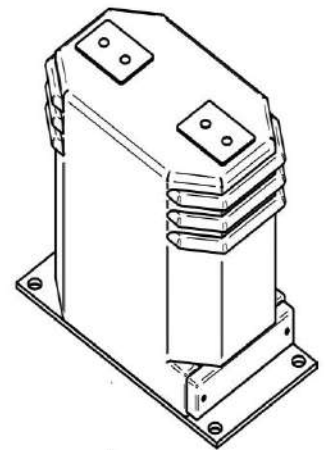
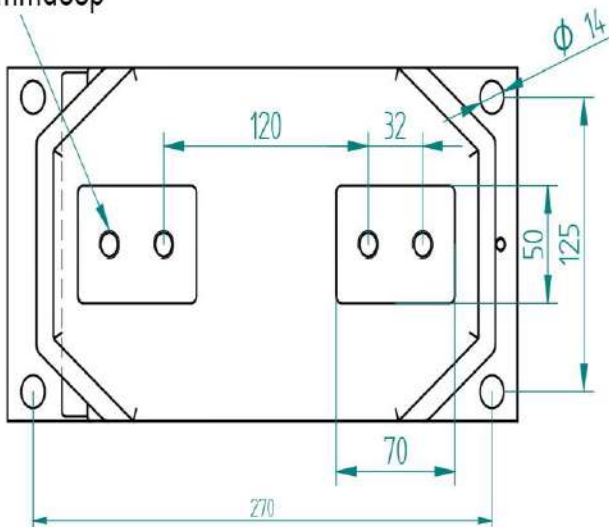
STANDARD TOLERANCES UNLESS OTHERWISE SPECIFIED	LINEAR DIMENSION	HOLE DIAMETER	ANGLES
	0.5 UP TO 3	1 UP TO 6	DIMENSIONED $\pm 1^\circ$
	OVER 3 UP TO 6	OVER 6 UP TO 12	UNDIMENSIONED $90^\circ \pm 2'$
	OVER 6 UP TO 30	OVER 12	
	OVER 30 UP TO 120		
	OVER 120 UP TO 400		
	OVER 400 UP TO 1000		

CURRENT TRANSFORMER

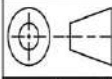

REV	CHANGE DESCRIPTION	CHANGE BY	DATE
B	RIBS ADDED	VKS	5.3.15
E	TORQUE VALUE ADD	GI	31.10.2018



M12X15mmdeep



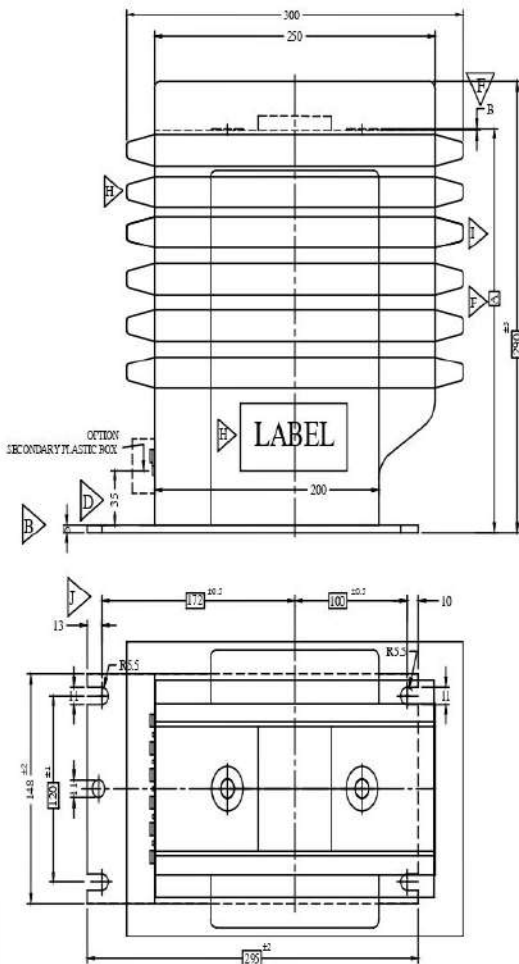
- Notes :
- Tightening Torque Value :
M12 : 50 Nm
M5 : 8 Nm

 <p>THIRD ANGLE</p>	<small>THIS DRAWING IS PROPERTY OF NARAYAN POWERTECH PVT.LTD. PAPER AND UNAUTHORISED USE OF THERE OF BY COPYING ANY PARTY WHATSOEVER IS STRICTLY PROHIBITED</small>		narayan powertech pvt. ltd.																														
	<small>STANDARD TOLERANCES UNLESS OTHERWISE SPECIFIED</small>	<table border="1"> <tr> <td>LINEAR DIMENSION</td> <td>0.5 UP TO 3</td> <td></td> </tr> <tr> <td></td> <td>OVER 3 UP TO 6</td> <td>±0.5</td> </tr> <tr> <td></td> <td>OVER 6 UP TO 30</td> <td>±1</td> </tr> <tr> <td></td> <td>OVER 30 UP TO 120</td> <td>±1.5</td> </tr> <tr> <td></td> <td>OVER 120 UP TO 400</td> <td>±2.5</td> </tr> <tr> <td></td> <td>OVER 400 UP TO 1000</td> <td>±4.0</td> </tr> </table>	LINEAR DIMENSION	0.5 UP TO 3				OVER 3 UP TO 6	±0.5		OVER 6 UP TO 30	±1		OVER 30 UP TO 120	±1.5		OVER 120 UP TO 400	±2.5		OVER 400 UP TO 1000	±4.0	<table border="1"> <tr> <td>DRN BY</td> <td>CHD BY</td> <td>DATE</td> <td rowspan="2">SCALE</td> </tr> <tr> <td>VKS</td> <td>C.P.P</td> <td>5.3.15</td> <td>1:2</td> </tr> </table>	DRN BY	CHD BY	DATE	SCALE	VKS	C.P.P	5.3.15	1:2	<table border="1"> <tr> <td>TITLE</td> <td>DRG NO.</td> </tr> <tr> <td>CURRENT TRANSFORMER</td> <td>MCTE11073-0002</td> </tr> </table>	TITLE	DRG NO.
LINEAR DIMENSION	0.5 UP TO 3																																
	OVER 3 UP TO 6	±0.5																															
	OVER 6 UP TO 30	±1																															
	OVER 30 UP TO 120	±1.5																															
	OVER 120 UP TO 400	±2.5																															
	OVER 400 UP TO 1000	±4.0																															
DRN BY	CHD BY	DATE	SCALE																														
VKS	C.P.P	5.3.15		1:2																													
TITLE	DRG NO.																																
CURRENT TRANSFORMER	MCTE11073-0002																																
<table border="1"> <tr> <td>HOLE DIAMETER</td> <td>1 UP TO 6</td> <td>±0.5</td> </tr> <tr> <td></td> <td>OVER 6 UP TO 12</td> <td>±1</td> </tr> <tr> <td></td> <td>OVER 12</td> <td>±1</td> </tr> </table>	HOLE DIAMETER	1 UP TO 6	±0.5		OVER 6 UP TO 12	±1		OVER 12	±1	<table border="1"> <tr> <td>ANGLES</td> <td>DIMENSIONED ± 1°</td> </tr> <tr> <td></td> <td>UNDIMENSIONED 90° ± 2°</td> </tr> </table>	ANGLES	DIMENSIONED ± 1°		UNDIMENSIONED 90° ± 2°	<table border="1"> <tr> <td>REV</td> <td>C</td> </tr> </table>	REV	C																
HOLE DIAMETER	1 UP TO 6	±0.5																															
	OVER 6 UP TO 12	±1																															
	OVER 12	±1																															
ANGLES	DIMENSIONED ± 1°																																
	UNDIMENSIONED 90° ± 2°																																
REV	C																																

INDOOR CTs : TECHNICAL DRAWING

Model MCTE11098-0000

RESIN CAST MV CT

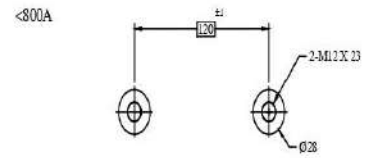


Creepage Distance > 440 mm.

NOTE :-
TO INCREASE CREEPAGE DISTANCE RIBS TO BE PROVIDED.
SKETCH IS FOR IDEA ONLY.
CTQs ARE MARKED :
GENERAL TOLERANCE : ±2

J	MOUNTING PLATE DIM. UPDATED	H.G.S	5.8.15
I	RIB ADDED	V.K.S	30.9.14
H	RIB ADDED & LABEL POSITION CHANGED	B.R.M	4.12.2013
G	LABEL POSITION CHANGE	B.R.M	22.7.2013
F	TERMINAL PROJECTION DIM.ADD	S.M.R	1.4.2013
E	PRIMARY CONTACT CHANGE	S.M.R	29.3.2013
D	SEC. TERMINAL POSITION	C.K.P	4/12/10
C	SHAPE UPDATED	C.K.P	11/11/10
B	DRAWING REVISE	C.K.P	03.03.10
REV	CHANGE RECORDE	BY	DATE

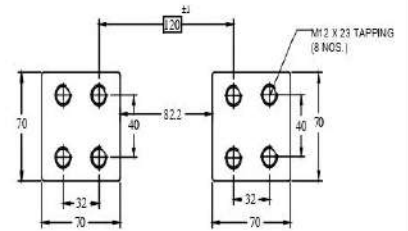
PRIMARY CONTACT



TERMINAL PROJECTION OUTSIDE
SURFACE DIM. B=1.5mm DIM A=260±2

MATERIAL : COPPER
(SILVER PLATED)

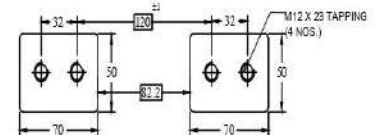
1300A TO 2500A



TERMINAL PROJECTION OUTSIDE
SURFACE DIM. B=5mm DIM A=263.5±2

MATERIAL : BRASS
(SILVER PLATED)



800A TO 1250A



TERMINAL PROJECTION OUTSIDE
SURFACE DIM. B=5mm A=263.5±2

MATERIAL : BRASS
(SILVER PLATED)

ALL DIMENSIONS ARE IN M.M

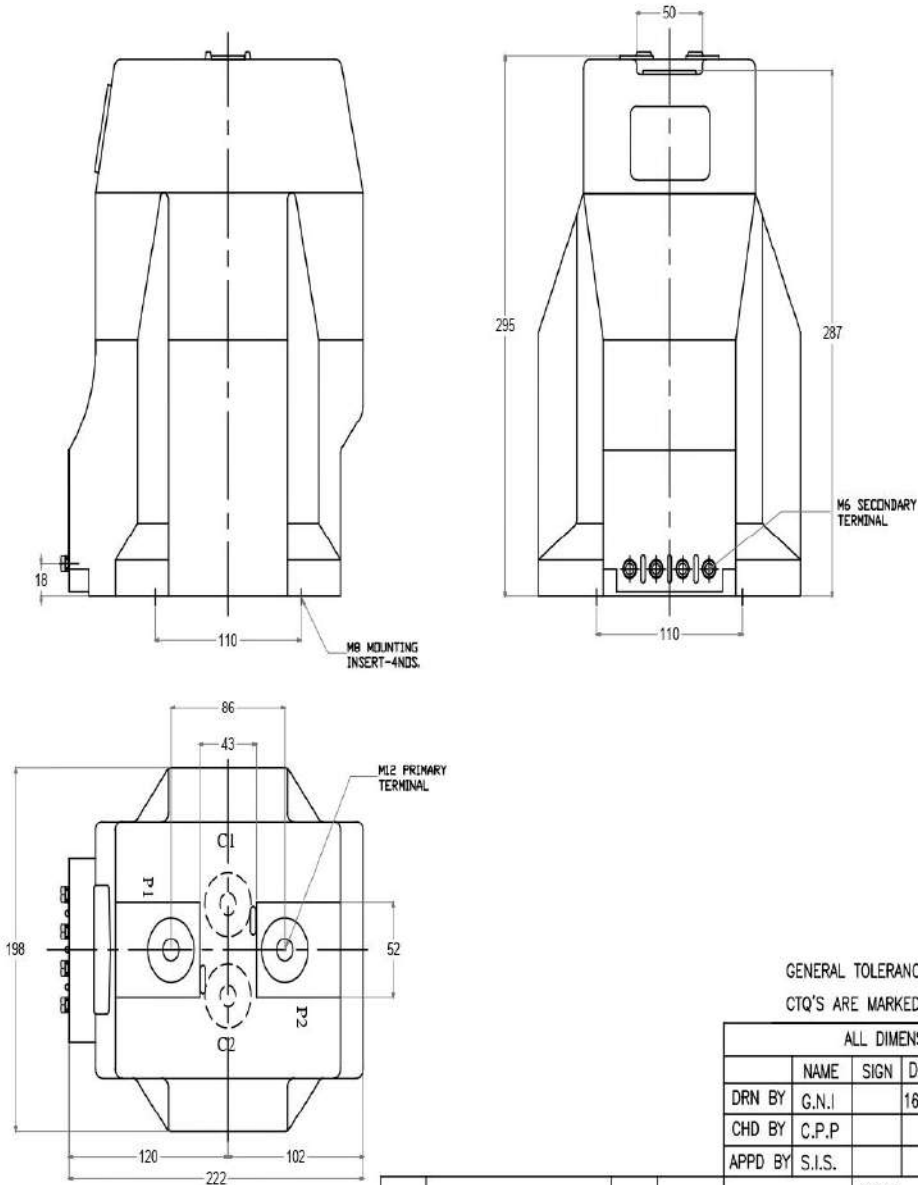
DRN BY	C.K.P	SIGN	1/08/09		DRG NO MCTE11098-0000	REV J
CHD BY	C.P.P					
APPD BY	S.S.P					
SCALE:-				TITLE:- RESIN CAST MV CT		

INDOOR CTs : TECHNICAL DRAWING

Model MCTE11100-0000


CURRENT TRANSFORMER

DIS. NO
N421-3610



THIS DRAWING IS PROPERTY OF NARAYAN POWERTECH PVT.LTD. PADRA AND UNAUTHORISED USE THERE OF BY COPYING ANY PART WHATSOEVER IS STRICTLY PROHIBITED.

REV	CHANGE RECORD	BY	DATE

ALL DIMENSIONS ARE IN mm.			
NAME	SIGN	DATE	
DRN BY	G.N.I	16.09.16	
CHD BY	C.P.P		
APPD BY	S.I.S.		
TITLE-			DRG.NO.
CURRENT TRANSFORMER			MCTE11100-0000
			REV.
			A



narayan powertech pvt. ltd.

Potential Transformers



Potential Transformers

Voltage Transformers

An instrument transformer in which the secondary voltage, in normal conditions of use, is substantially proportional to the primary voltage and differs in phase from it by an angle which is approximately zero for an appropriate direction of the connections.

It isolates the primary side rated voltage from the connected instruments and protection circuits and convert the primary voltage into a measurable secondary voltage, which is true in magnitude and phase.

Primary Winding

The winding to which the voltage to be transformed is applied.

Secondary Winding

The winding, which supplies the voltage circuits of measuring instruments, meters, relays or similar apparatus.

Rated Primary Voltage

The value of the primary voltage, which appears in the designation of the transformer and on which its performance is based.

Rated Secondary Voltage

The value of the secondary voltage, which appears in the designation of the transformer and on which its performance is based.

Rated Transformation Ratio

The ratio of the rated primary to the rated secondary voltage.

Voltage Error (Ratio Error)

The error which a transformer introduces into the measurement of a voltage and which arises when the actual transformation ratio is not equal to the transformation ratio.

The voltage error, expressed in per cent, is given by the formula:

$$\text{Voltage Error \%} = \frac{K_n U_s - U_p}{U_p} \times 100$$



Potential Transformers

Where
 K_n is the rated transformation ratio;
 U_p is the actual primary voltage;
 U_s is the actual secondary voltage when U_p is applied under the conditions of measurement.

Accuracy Class

A designation assigned to a voltage transformer, the errors of which remain within specified limits under prescribed conditions of use.

Burden

The admittance of the secondary circuit expressed in siemens and power factor (lagging or leading)

Rated Burden

The value of the burden on which the accuracy requirements are based on.

Rated Output

The value of apparent power (in voltamperes at a specified power - factor), which the transformer is intended to supply to the secondary circuit at the rated secondary voltage and with rated burden, connected to it.

Rated Insulation Level

The combination of voltage values which characterizes the isolation of a transformer with regard to its capability to withstand dielectric stresses.

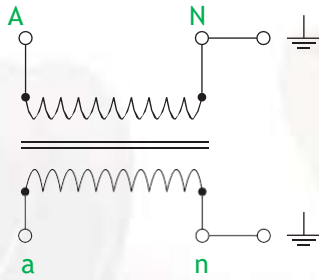
Rated Voltage Factor

The multiplying factor to be applied to the rated primary voltage to determine the maximum voltage at which a transformer must comply with the relevant thermal requirements for a specified time and with the relevant accuracy requirements.

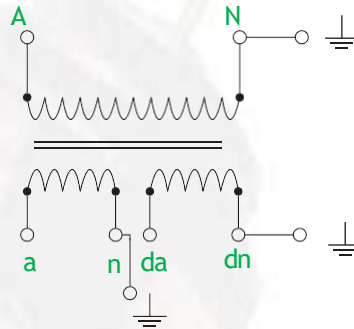


Potential Transformers

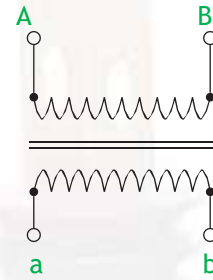
CONNECTION DIAGRAMS



Single Pole insulated voltage transformer
(e.g. 11000/√3: 100/√3V)



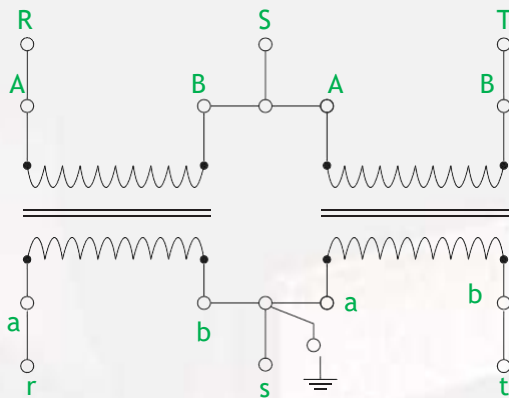
Single Pole insulated voltage transformer with an open delta winding (e.g. 11000/√3: 100/√3V - 100/3V)



Double pole insulated voltage transformer
(e.g. 11000: 100V)

It can be required for multi secondary winding and changeable ratios.

V-Connection of Two Double Pole Insulated Voltage Transformers



Safety Operation Conditions for Voltage Transformers

-When the Secondary terminals are connected to the measuring or protection devices, one of the terminals should be earthed for safety as seen in Diagram-1.

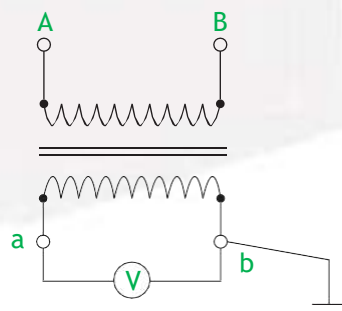


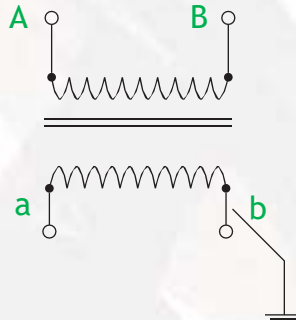
Diagram-1

Potential Transformers

CONNECTION DIAGRAMS

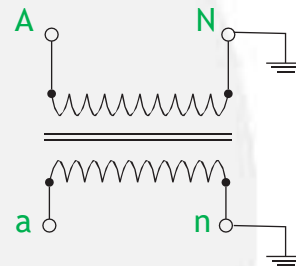
- The base plate must be earthed
- The secondary circuits must not be short-circuited during operation. Otherwise the voltage transformers will be thermally destroyed.
- If any of the secondary windings of a voltage transformer will not be used, then it must be left open with one of the terminals connected to the earth as seen in Diagram-2.

Diagram-2



- For the single phase transformers, the neutral terminal of the primary "N" must be earthed in the earthed (neutral) systems as seen in Diagram-3.

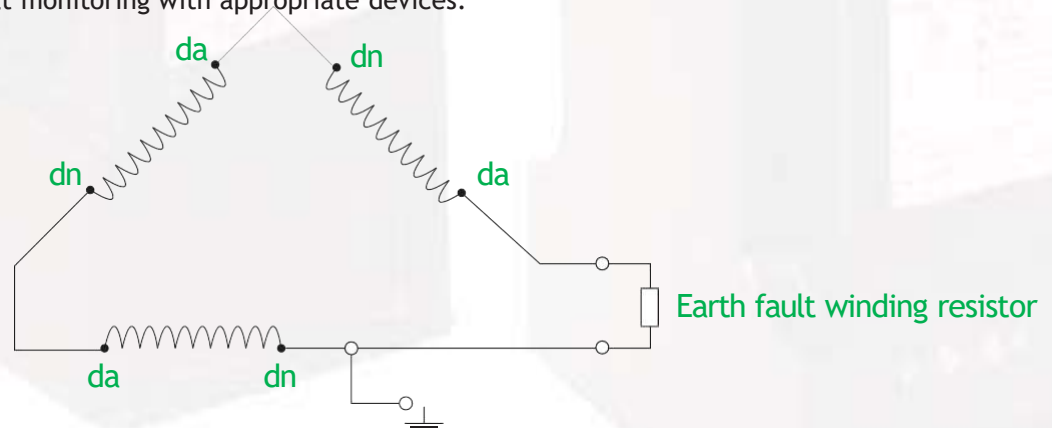
Diagram-3



Other Important Points and Notes

When using single pole insulated inductive voltage transformers it is very important to understand that, when a circuit is being closed or during the decaying period of an earth fault ferroresonance may occur. Ferroresonance can lead to the overheating and thermal destruction of the voltage transformer or high levels of voltages may be induced. In general, ferroresonance can be eliminated by the use of an appropriate resistor placed as a burden in open-delta circuit formed by three voltage transformers open-delta windings. The open-delta circuit must always be earthed only at one point as seen in Diagram-4. The open-delta connection can also be used for earth-fault monitoring with appropriate devices.

Diagram-4

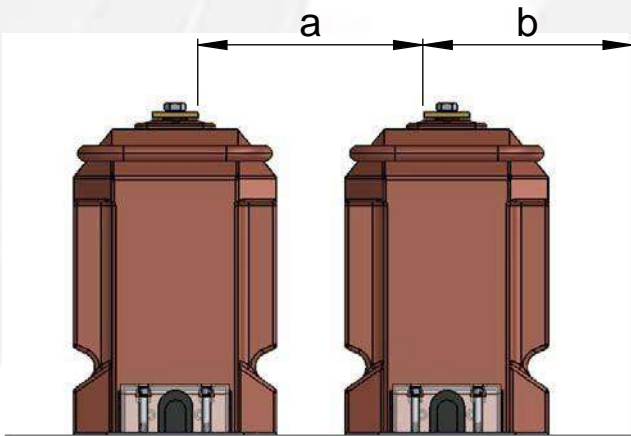


As the number of cable systems is increasing in the energy distribution systems, the protection of voltage transformers have become very important for the uninterrupted operation of the system without any failure and/or down time. For that reason, Narayan is always recommending the use of open-delta windings in single phase inductive voltage transformers.

Potential Transformers

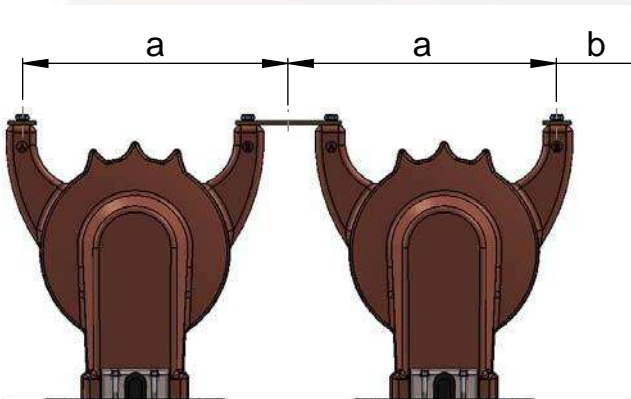
M.V. VOLTAGE TRANSFORMERS CONNECTION CLEARANCES

SINGLE PHASE VOLTAGE TRANSFORMERS



Insulation Level	a minimum	b minimum
12kV	100mm	110mm
24kV	190mm	210mm
36kV	305mm	325mm

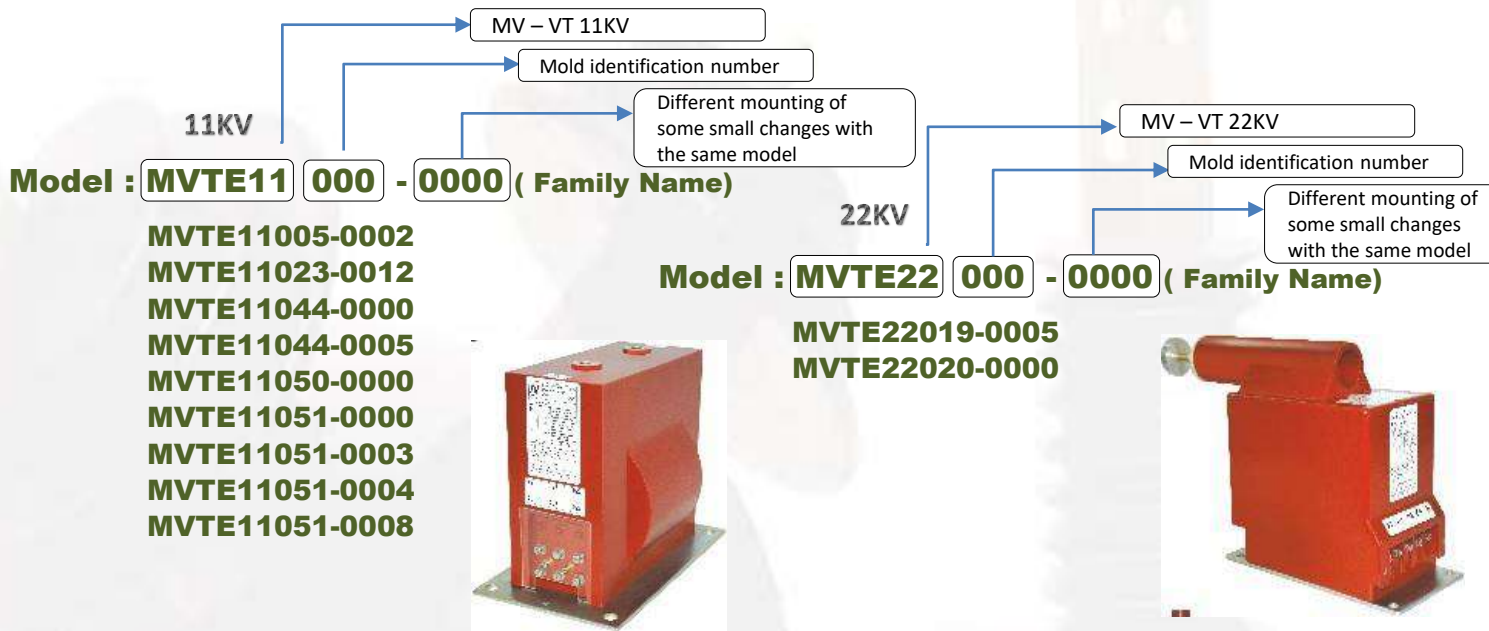
PHASE TO PHASE VOLTAGE TRANSFORMERS



Insulation Level	a minimum	b minimum
12kV	185mm	120mm
24kV	240mm	220mm
36kV	340mm	325mm

INDOOR Voltage Transformers TYPE CAST RESIN INSULATED

(Um=3,6kV.....36kV BLOCK TYPES)



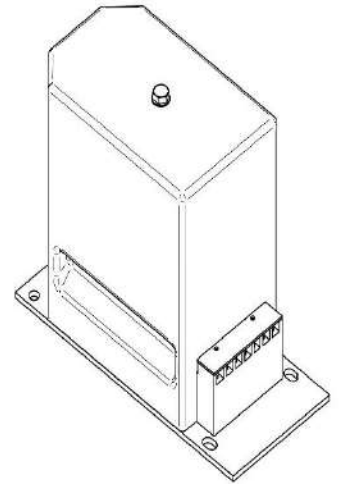
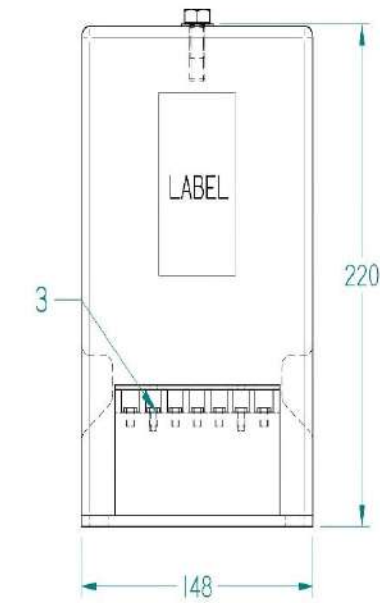
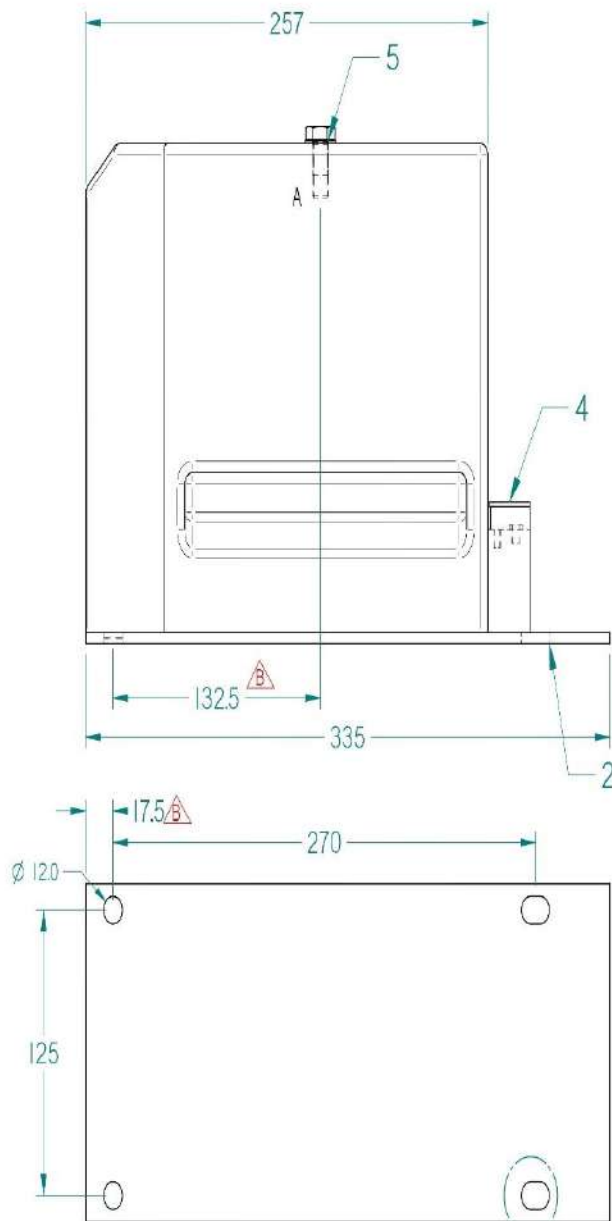
Technical Data ▾

TYPES	MVTE11 000 - 0000	MVTE22 000 - 0000
Operating voltage, Um (kV)	3,6 7,2 12	17,5 24
Rated power-frequency withstand voltage (1 minute) (kV)	10 20 28	38 50
Rated impulse test voltage (1.2/50µs) full wave (kV)	40 60 75	95 125
Rated frequency (Hz)	50-60	
Rated primary voltage (max.) (kV)	12/√3	24/√3
Secondary voltage (V)	100/√3 -110/√3 -120 /√3	100 /√3 - 110 /√3 -120 /√3
Rated burden (max.) in class 0,2 (VA)	30	50
Rated burden (max.) in class 0,5 (VA)	100	120
Rated burden (max.) in class 1 (VA)	200	250
Rated burden for protection purpose in class 3P (VA)	100	
Rated voltage factor (30 sec. or 8h) (Un)	1,2 , 1,9	
Insulation class	E	
Ambient temperature (°C)	-5 +50*	
Altitude (m)	1000	
Standard	IEC 61869 1 & 3	
Weight (approx.) (kg)	30 - 35	36 - 46

INDOOR Voltage Transformers Model : MVTE11000-0000

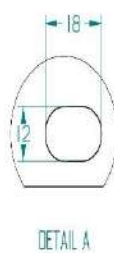
VOLTAGE TRANSFORMER

REV	BY	CHANGE RECORD	DATE
B	GI	DIVISION SHOW	26/8/2017



NOTES :

1. ALL DIMENSIONS ARE IN mm.
2. MOUNTING PLATE.
3. M5 SECONDARY TERMINAL WITH BRASS SCREW, TWO PLAIN WASHER, ONE SPRING WASHER.
4. TERMINAL COVER
5. M10 PRIMARY INSERT WITH ONE HEX BOLT, TWO PLAIN WASHER, ONE SPRING WASHER.

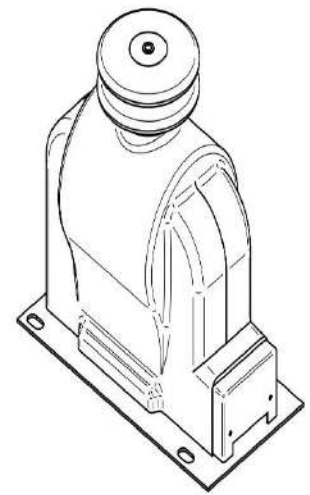
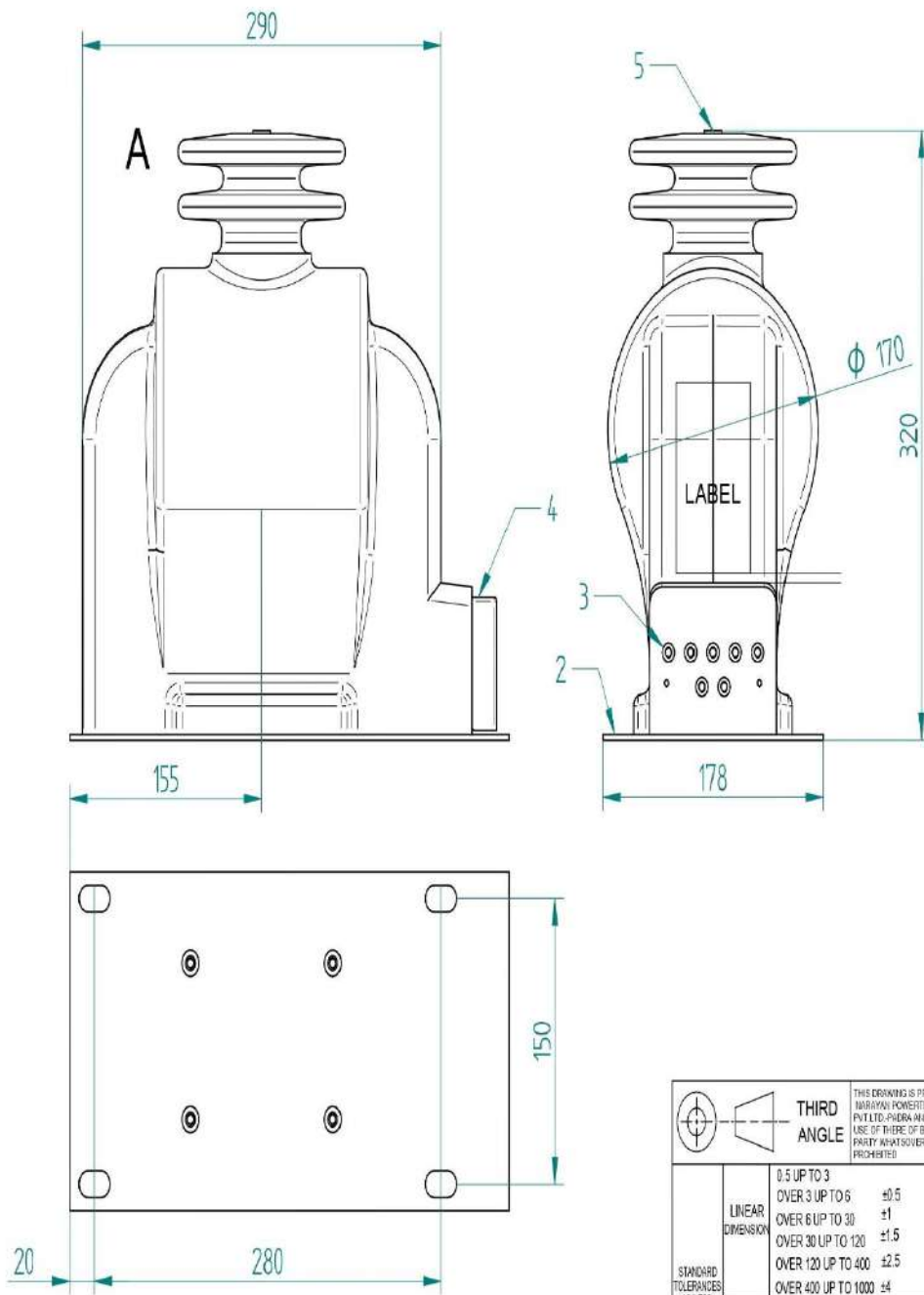


THIRD ANGLE		THIS DRAWING IS PROPERTY OF NARAYAN POWERTECH PVT.LTD.-PUNJAB AND UNAUTHORISED USE OF THERE OF BY COPYING ANY PARTY WHATSOEVER IS STRICTLY PROHIBITED.		narayan powertech pvt. ltd.	
STANDARD TOLERANCES UNLESS OTHERWISE SPECIFIED	LINEAR DIMENSION	0.5 UP TO 3		DRN BY	CHD BY
		OVER 3 UP TO 6	±0.5	GI	C.P.P
		OVER 6 UP TO 30	±1	DATE	
		OVER 30 UP TO 120	±1.5	16.08.2017	
		OVER 120 UP TO 400	±2.5	SCALE	
		OVER 400 UP TO 1000	±4	NTS	
	HOLE DIAMETER	1 UP TO 6	±0.5	TITLE	
		OVER 6 UP TO 12	±0.5	VOLTAGE TRANSFORMER	
		OVER 12	±1	DRG NO.	
	ANGLES	DIMENSIONED ± 1° UNDIMENSIONED 90° ± 2°		MVTE11000-0000	
				REV	B

INDOOR Voltage Transformers Model : MVTE22000-0000

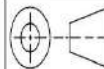

VOLTAGE TRANSFORMER

REV	DETAILS	BY	DATE
B	MODEL UPDATED	BJ	22/02/2019



NOTES :

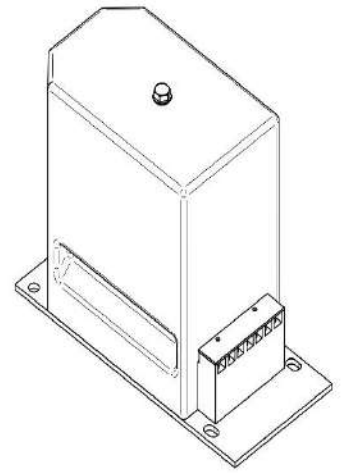
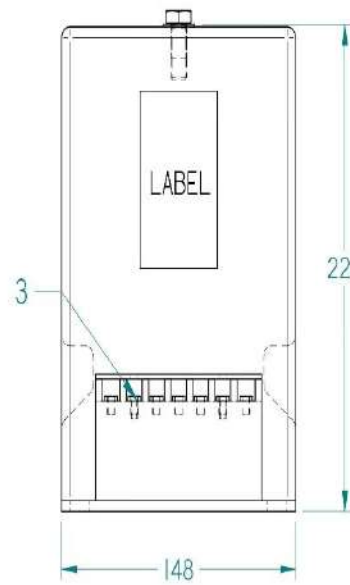
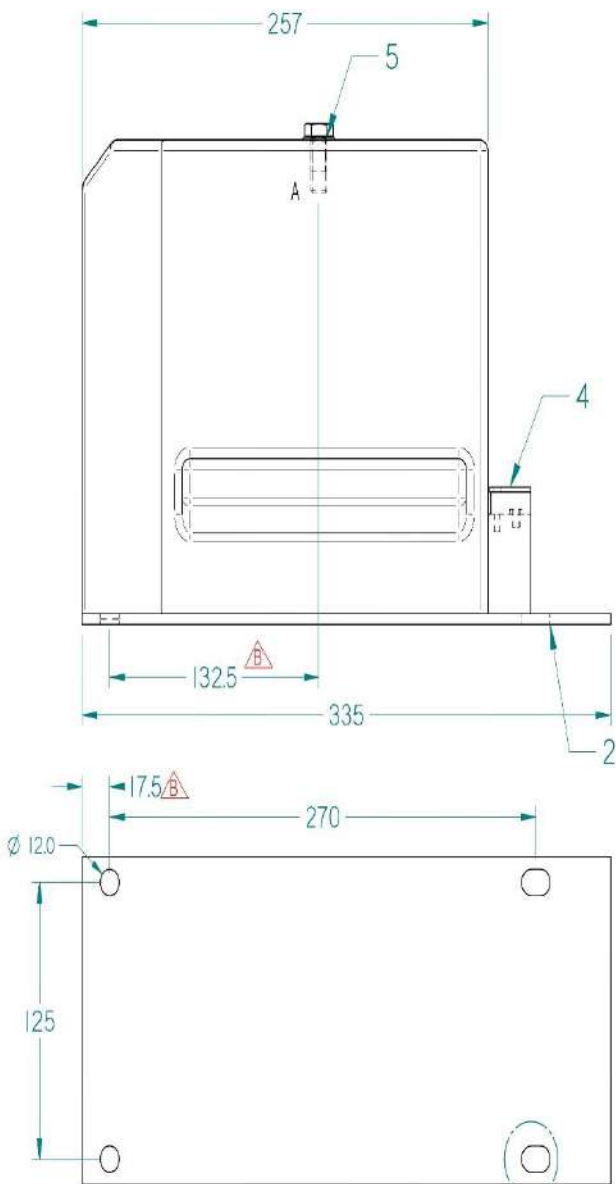
1. ALL DIMENSIONS ARE IN mm.
2. MOUNTING PLATE.
3. M6 SECONDARY TERMINAL.
4. SECONDARY TERMINAL COVER.
5. M10 PRIMARY TERMINAL.

 THIRD ANGLE	<small>THIS DRAWING IS PROPERTY OF NARAYAN POWERTECH PVT.LTD. AND UNAUTHORISED USE OF THERE OF BY COPYING ANY PARTY AND/OR COVER IS STRICTLY PROHIBITED</small>		narayan powertech pvt. ltd.																										
	<small>STANDARD TOLERANCES UNLESS OTHERWISE SPECIFIED</small>	<table border="1"> <tr> <td>LINEAR DIMENSION</td> <td>0.5 UP TO 3</td> <td>±0.5</td> </tr> <tr> <td></td> <td>OVER 3 UP TO 6</td> <td>±1</td> </tr> <tr> <td></td> <td>OVER 6 UP TO 30</td> <td>±1.5</td> </tr> <tr> <td></td> <td>OVER 30 UP TO 120</td> <td>±2.5</td> </tr> <tr> <td></td> <td>OVER 120 UP TO 400</td> <td>±2.5</td> </tr> <tr> <td></td> <td>OVER 400 UP TO 1000</td> <td>±4</td> </tr> </table>	LINEAR DIMENSION	0.5 UP TO 3		±0.5		OVER 3 UP TO 6	±1		OVER 6 UP TO 30	±1.5		OVER 30 UP TO 120	±2.5		OVER 120 UP TO 400	±2.5		OVER 400 UP TO 1000	±4	<table border="1"> <tr> <td>DRN BY</td> <td>CHD BY</td> <td>DATE</td> </tr> <tr> <td>GNI</td> <td>C.P.P</td> <td>06.09.2016</td> </tr> </table>	DRN BY	CHD BY	DATE	GNI	C.P.P	06.09.2016	<table border="1"> <tr> <td>SCALE</td> </tr> <tr> <td>N.T.S</td> </tr> </table>
LINEAR DIMENSION	0.5 UP TO 3	±0.5																											
	OVER 3 UP TO 6	±1																											
	OVER 6 UP TO 30	±1.5																											
	OVER 30 UP TO 120	±2.5																											
	OVER 120 UP TO 400	±2.5																											
	OVER 400 UP TO 1000	±4																											
DRN BY	CHD BY	DATE																											
GNI	C.P.P	06.09.2016																											
SCALE																													
N.T.S																													
<table border="1"> <tr> <td>HOLE DIAMETER</td> <td>1 UP TO 6</td> <td>±0.5</td> </tr> <tr> <td></td> <td>OVER 6 UP TO 12</td> <td>±0.5</td> </tr> <tr> <td></td> <td>OVER 12</td> <td>±1</td> </tr> </table>	HOLE DIAMETER	1 UP TO 6	±0.5		OVER 6 UP TO 12	±0.5		OVER 12	±1	<table border="1"> <tr> <td>TITLE</td> <td>DRG NO.</td> </tr> <tr> <td>VOLTAGE TRANSFORMER</td> <td>MVTE22000-0000</td> </tr> </table>	TITLE	DRG NO.	VOLTAGE TRANSFORMER	MVTE22000-0000	<table border="1"> <tr> <td>REV</td> <td>B</td> </tr> </table>	REV	B												
HOLE DIAMETER	1 UP TO 6	±0.5																											
	OVER 6 UP TO 12	±0.5																											
	OVER 12	±1																											
TITLE	DRG NO.																												
VOLTAGE TRANSFORMER	MVTE22000-0000																												
REV	B																												
<table border="1"> <tr> <td>ANGLES</td> <td>DIMENSIONED ± 1°</td> </tr> <tr> <td></td> <td>UNDIMENSIONED 90° ± 2°</td> </tr> </table>	ANGLES	DIMENSIONED ± 1°		UNDIMENSIONED 90° ± 2°																									
ANGLES	DIMENSIONED ± 1°																												
	UNDIMENSIONED 90° ± 2°																												

INDOOR Voltage Transformers Model : MVTE11005-0002

VOLTAGE TRANSFORMER

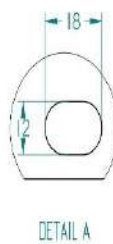
REV	BY	CHANGE RECORD	DATE
2	GJ	DIMENSION SHOWN	28.09.2017



NOTES :

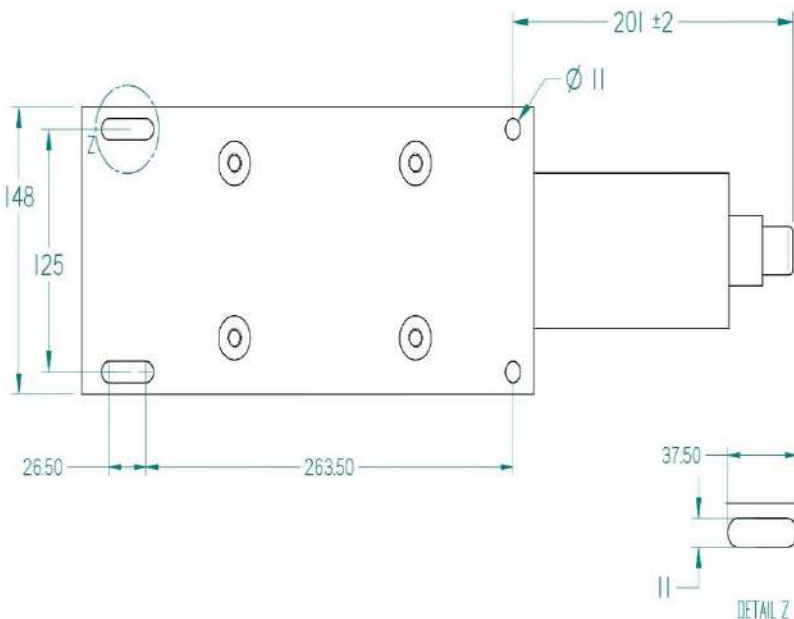
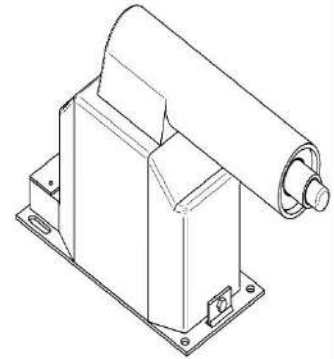
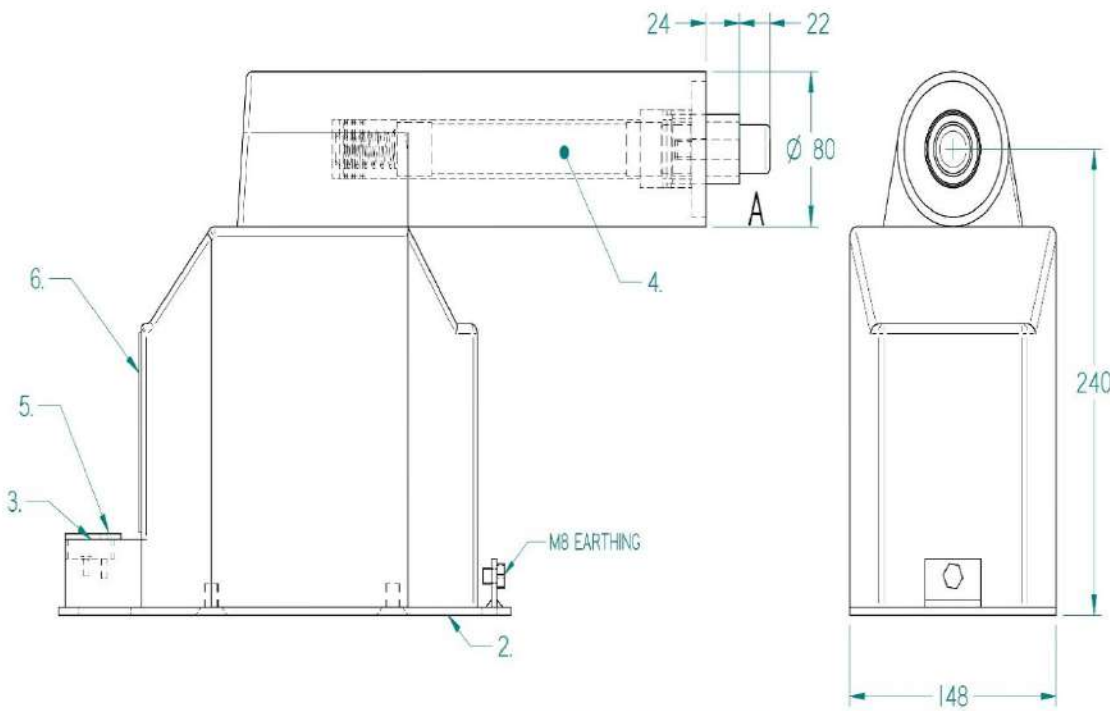
1. ALL DIMENSIONS ARE IN mm.
2. MOUNTING PLATE.
3. M5 SECONDARY TERMINAL WITH BRASS SCREW, TWO PLAIN WASHER, ONE SPRING WASHER.
4. TERMINAL COVER
5. M10 PRIMARY INSERT WITH ONE HEX BOLT, TWO PLAIN WASHER, ONE SPRING WASHER.

STANDARD TOLERANCES UNLESS OTHERWISE SPECIFIED		THIRD ANGLE	THIS DRAWING IS PROPERTY OF NARAYAN POWERTECH PVT.LTD. NO UNAUTHORIZED USE OF THERE OF BY COPYING ANY PARTY WHATSOEVER IS STRICTLY PROHIBITED	narayan powertech pvt. ltd.		
LINEAR DIMENSION	0.5 UP TO 3			DRN BY	CHD BY	DATE
	OVER 3 UP TO 6	± 0.5		GI	C.P.P	16.08.2017
HOLE DIAMETER	OVER 6 UP TO 30	± 1		SCALE		
	OVER 30 UP TO 120	± 1.5		NTS		
ANGLES	OVER 120 UP TO 400	± 2.5		TITLE		DRG NO.
	OVER 400 UP TO 1000	± 4		VOLTAGE TRANSFORMER		MVTE11005-0002
	1 UP TO 6	± 0.5		REV	B	
	OVER 6 UP TO 12	± 0.5				
	OVER 12	± 1				
	DIMENSIONED $\pm 1^\circ$					
	UNDIMENSIONED $90^\circ \pm 2^\circ$					



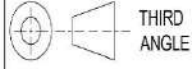

INDOOR Voltage Transformers Model : MVTE11023-0012

VOLTAGE TRANSFORMER



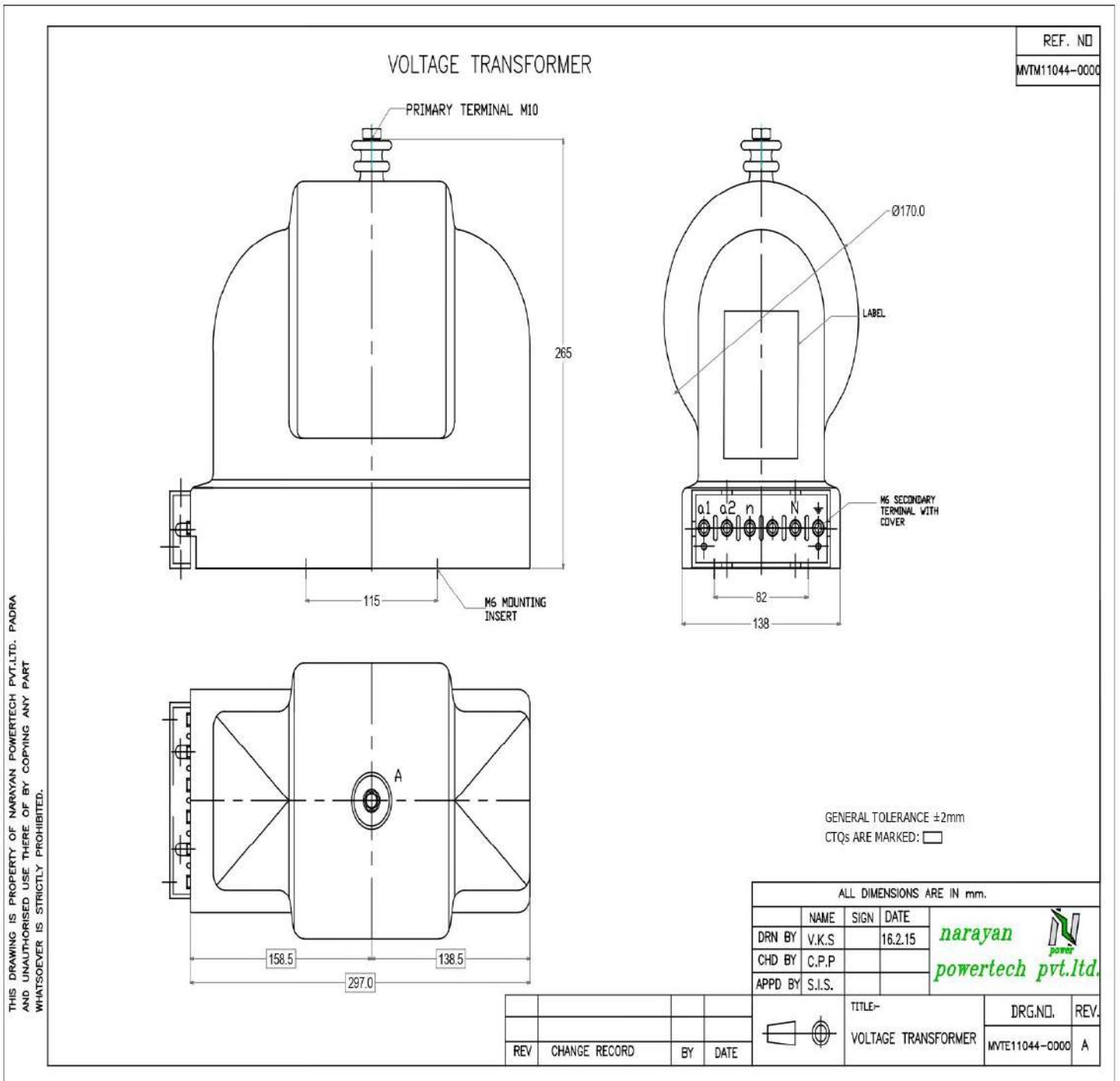
NOTES :

1. ALL DIMENSIONS ARE IN mm.
2. MOUNTING PLATE.
3. M5 SECONDARY TERMINAL WITH BRASS SCREW , ONE PLAIN WASHER, ONE SPRING WASHER.
4. HRC FUSE
5. TERMINAL COVER.
6. NAME PLATE.

 THIRD ANGLE		<small>THIS DRAWING IS PROPERTY OF NARAYAN POWERTECH PVT.LTD.-PADA AND UNAUTHORISED USE OF THERE OF BY COPYING ANY PARTY WHATSOEVER IS STRICTLY PROHIBITED.</small>		narayan powertech pvt. ltd.																												
<small>STANDARD TOLERANCES UNLESS OTHERWISE SPECIFIED</small>		<table border="1"> <tr> <td>LINEAR DIMENSION</td> <td>0.5 UP TO 3</td> <td>±0.5</td> </tr> <tr> <td></td> <td>OVER 3 UP TO 6</td> <td>±1</td> </tr> <tr> <td></td> <td>OVER 6 UP TO 30</td> <td>±1.5</td> </tr> <tr> <td></td> <td>OVER 30 UP TO 120</td> <td>±2.5</td> </tr> <tr> <td></td> <td>OVER 120 UP TO 400</td> <td>±4</td> </tr> <tr> <td></td> <td>OVER 400 UP TO 1000</td> <td>±4</td> </tr> </table>		LINEAR DIMENSION	0.5 UP TO 3		±0.5		OVER 3 UP TO 6	±1		OVER 6 UP TO 30	±1.5		OVER 30 UP TO 120	±2.5		OVER 120 UP TO 400	±4		OVER 400 UP TO 1000	±4	<table border="1"> <tr> <td>DRN BY</td> <td>CHD BY</td> <td>DATE</td> </tr> <tr> <td>R.V</td> <td>C.P.P</td> <td>16.11.2022</td> </tr> </table>		DRN BY	CHD BY	DATE	R.V	C.P.P	16.11.2022	<table border="1"> <tr> <td>SCALE</td> </tr> <tr> <td>N.T.S</td> </tr> </table>	SCALE
LINEAR DIMENSION	0.5 UP TO 3	±0.5																														
	OVER 3 UP TO 6	±1																														
	OVER 6 UP TO 30	±1.5																														
	OVER 30 UP TO 120	±2.5																														
	OVER 120 UP TO 400	±4																														
	OVER 400 UP TO 1000	±4																														
DRN BY	CHD BY	DATE																														
R.V	C.P.P	16.11.2022																														
SCALE																																
N.T.S																																
<table border="1"> <tr> <td>HOLE DIAMETER</td> <td>1 UP TO 6</td> <td>±0.5</td> </tr> <tr> <td></td> <td>OVER 6 UP TO 12</td> <td>±0.5</td> </tr> <tr> <td></td> <td>OVER 12</td> <td>±1</td> </tr> </table>		HOLE DIAMETER	1 UP TO 6	±0.5		OVER 6 UP TO 12	±0.5		OVER 12	±1	<table border="1"> <tr> <td>TITLE</td> <td>DRG NO.</td> </tr> <tr> <td>VOLTAGE TRANSFORMER</td> <td>MVTE11023-0012</td> </tr> </table>		TITLE	DRG NO.	VOLTAGE TRANSFORMER	MVTE11023-0012																
HOLE DIAMETER	1 UP TO 6	±0.5																														
	OVER 6 UP TO 12	±0.5																														
	OVER 12	±1																														
TITLE	DRG NO.																															
VOLTAGE TRANSFORMER	MVTE11023-0012																															
<table border="1"> <tr> <td>ANGLES</td> <td>DIMENSIONED ±1°</td> </tr> <tr> <td></td> <td>UNDIMENSIONED 90° ± 2°</td> </tr> </table>		ANGLES	DIMENSIONED ±1°		UNDIMENSIONED 90° ± 2°	<table border="1"> <tr> <td>REV</td> <td>A</td> </tr> </table>		REV	A																							
ANGLES	DIMENSIONED ±1°																															
	UNDIMENSIONED 90° ± 2°																															
REV	A																															



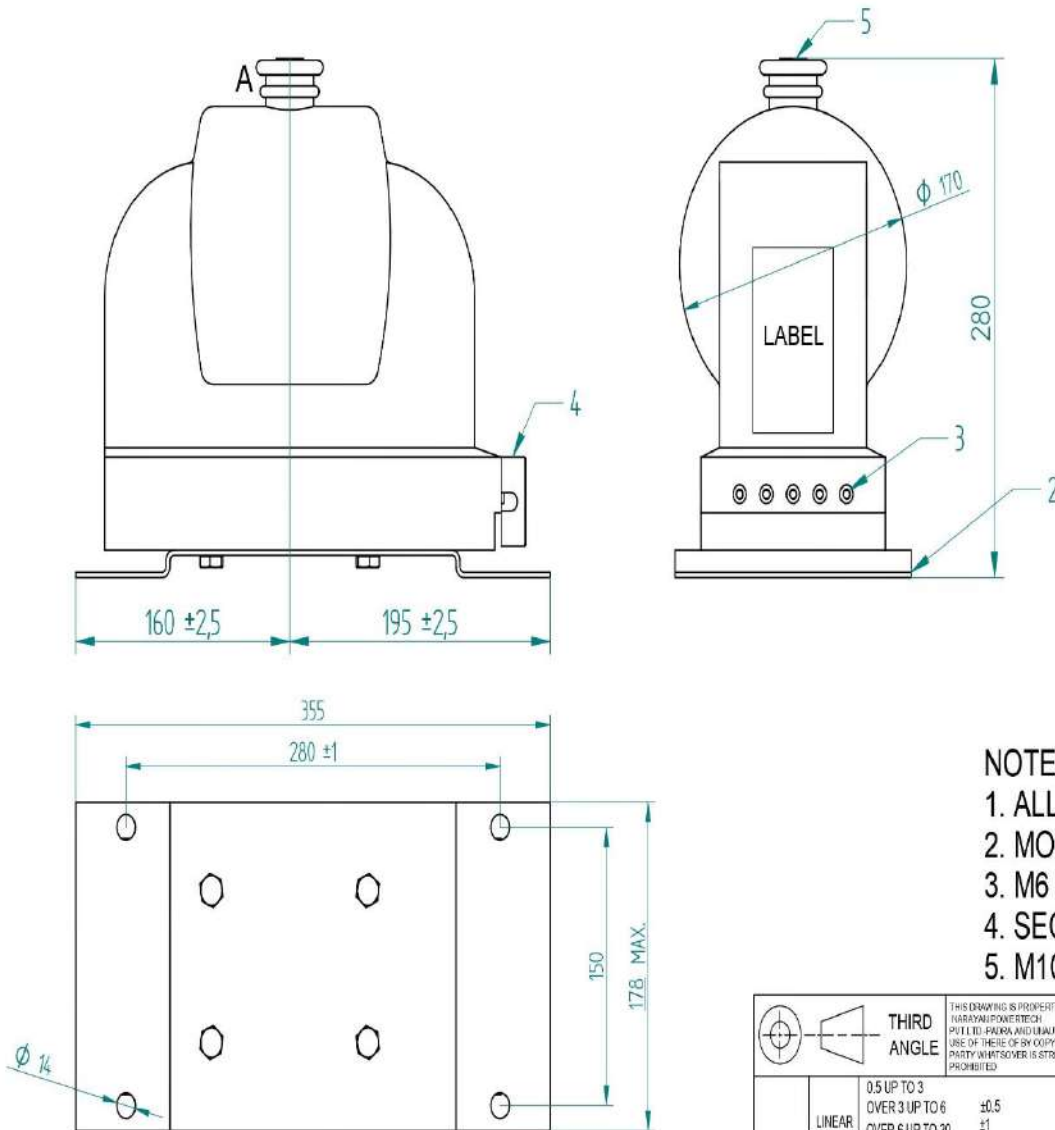
INDOOR Voltage Transformers Model : MVTE11044-0000



THIS DRAWING IS PROPERTY OF NARAYAN POWERTECH PVT.LTD. PADRA
 AND UNAUTHORISED USE THERE OF BY COPYING ANY PART
 WHATSOEVER IS STRICTLY PROHIBITED.



INDOOR Voltage Transformers Model : MVTE11044-0005

VOLTAGE TRANSFORMER



NOTES :

1. ALL DIMENSIONS ARE IN mm.
2. MOUNTING PLATE.
3. M6 SECONDARY TERMINAL.
4. SECONDARY TERMINAL COVER.
5. M10 PRIMARY TERMINAL.

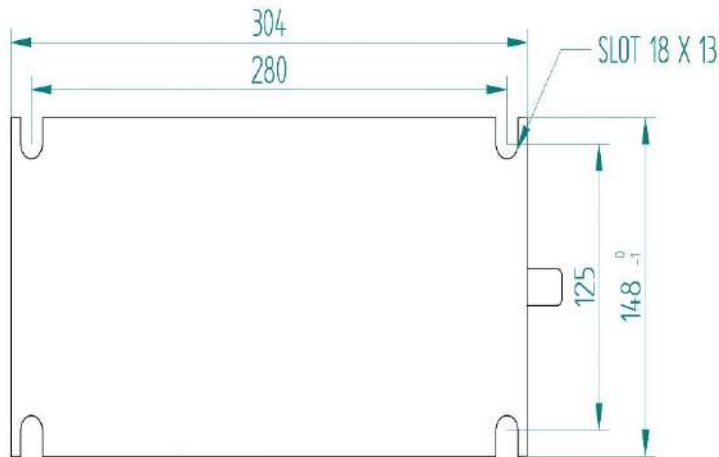
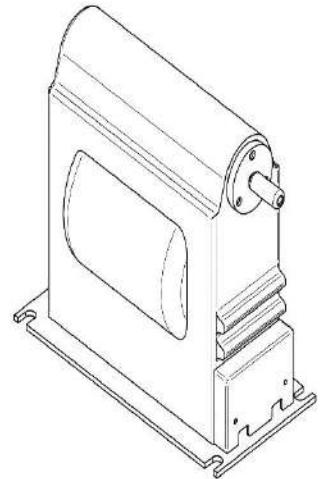
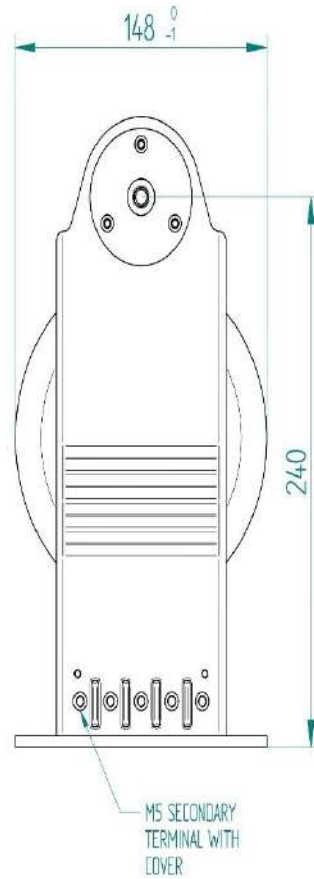
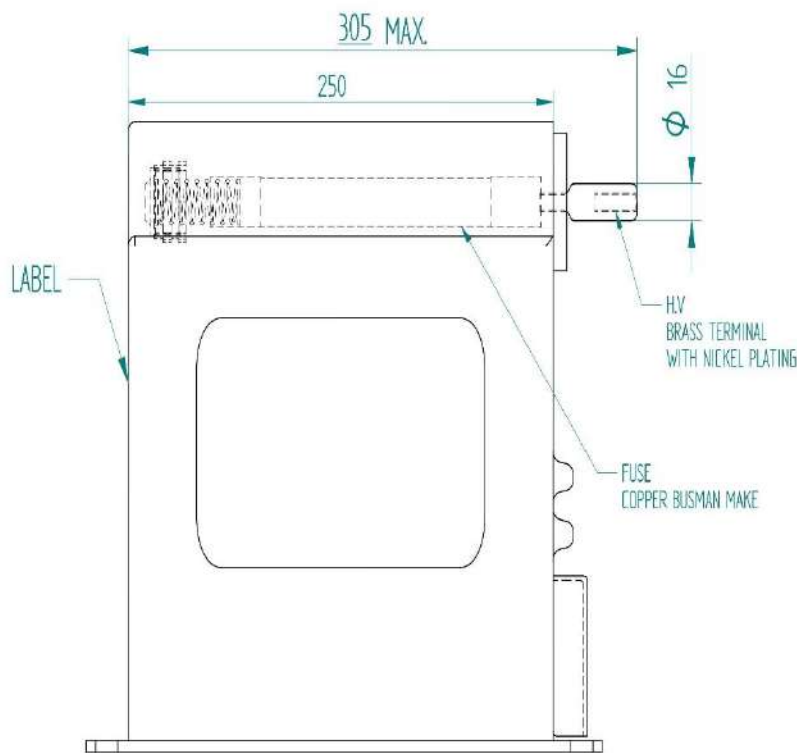
 <p>THIRD ANGLE</p>		<p>THIS DRAWING IS PROPERTY OF NARAYAN POWERTECH PVT. LTD. PAKRA AND QUALIFIED USE OF THESE OR BY COPYING ANY PARTY WHATSOEVER IS STRICTLY PROHIBITED</p>		<p>narayan powertech pvt. ltd.</p>			
<p>STANDARD TOLERANCES UNLESS OTHERWISE SPECIFIED</p>	<p>LINEAR DIMENSION</p>	<p>0.5 UP TO 3 ±0.5 OVER 3 UP TO 6 ±1 OVER 6 UP TO 30 ±1.5 OVER 30 UP TO 120 ±2.5 OVER 120 UP TO 400 ±4 OVER 400 UP TO 1000 ±4</p>	<p>DRN BY</p>	<p>CHD BY</p>	<p>DATE</p>	<p>SCALE</p>	
	<p>HOLE DIAMETER</p>	<p>1 UP TO 6 ±0.5 OVER 6 UP TO 12 ±0.5 OVER 12 ±1</p>	<p>GNI</p>	<p>C.P.P</p>	<p>06.09.2016</p>	<p>N.T.S</p>	
	<p>ANGLES</p>	<p>DIMENSIONED ±1° UNDIMENSIONED 90° ±2°</p>	<p>TITLE</p>			<p>DRG NO.</p>	
				<p>VOLTAGE TRANSFORMER</p>			<p>MVTE11044-0005</p>
			<p>REV</p>				<p>A</p>



INDOOR Voltage Transformers Model : MVTE11050-0000

VOLTAGE TRANSFORMER

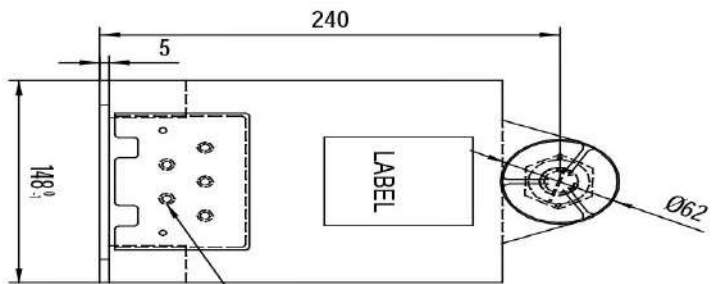
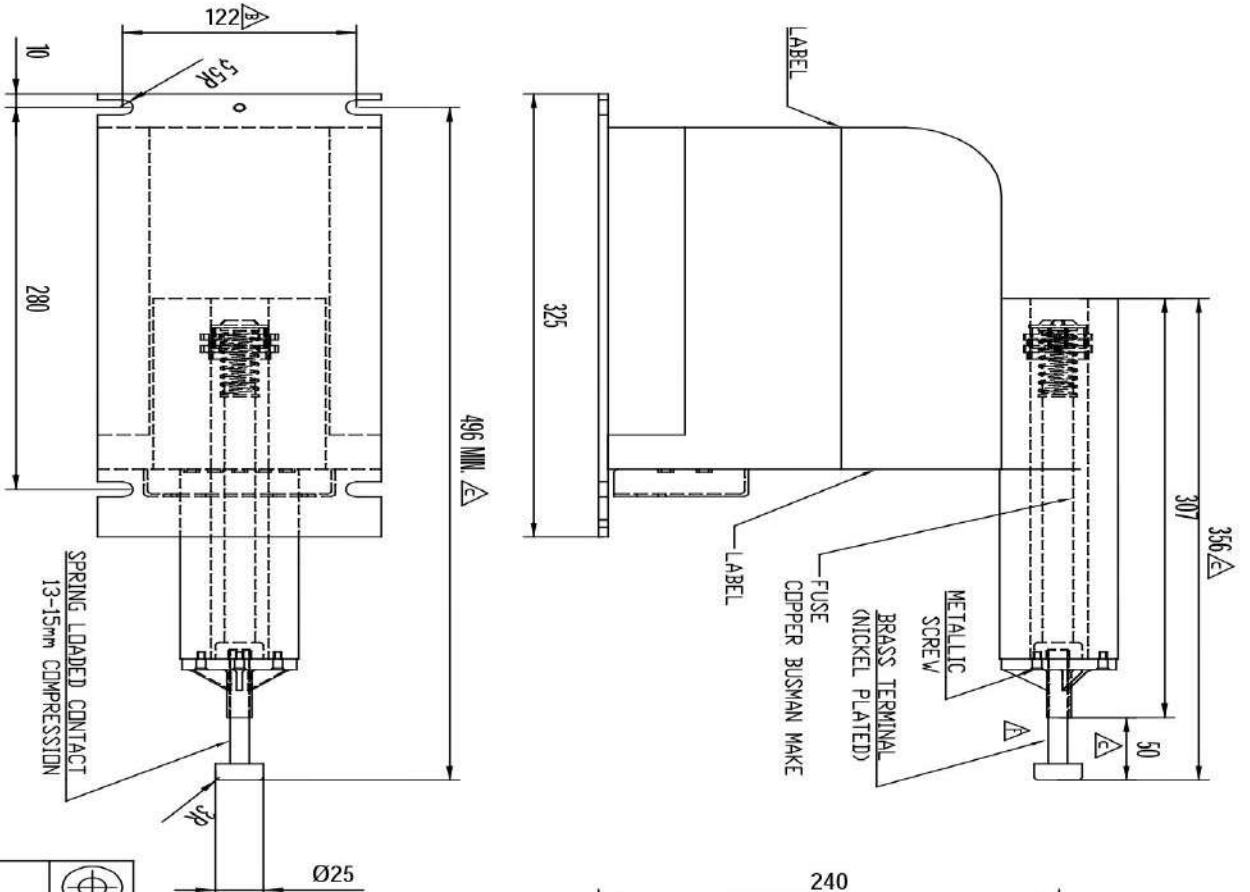
REV	BY	CHANGE RECORD	DATE
B	GN	RIBS ADDED ON SECONDARY SIDE	09.04.2016
C	GI	DETAILS ADDED	21.03.2017
D	GI	NON-METALL C SCREWS REMOVED	23.04.2018



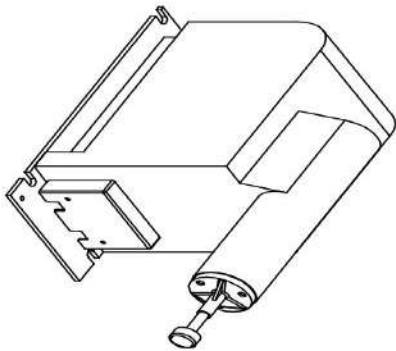
	THIRD ANGLE	THIS DRAWING IS PROPERTY OF NARAYAN POWERTECH PVT.LTD. PAKRA AND UNAUTHORISED USES OF THESE OR BY COPYING ANY PARTY WHATSOEVER IS STRICTLY PROHIBITED	narayan powertech pvt. ltd.																									
	<table border="1"> <tr> <td>STANDARD TOLERANCES UNLESS OTHERWISE SPECIFIED</td> <td>LINEAR DIMENSION</td> <td>0.5 UP TO 3 OVER 3 UP TO 6 OVER 6 UP TO 30 OVER 30 UP TO 120 OVER 120 UP TO 400 OVER 400 UP TO 1000</td> <td>±0.5 ±1 ±1.5 ±2.5 ±4</td> </tr> <tr> <td></td> <td>HOLE DIAMETER</td> <td>1 UP TO 6 OVER 6 UP TO 12 OVER 12</td> <td>±0.5 ±0.5 ±1</td> </tr> <tr> <td></td> <td>ANGLES</td> <td colspan="2">DIMENSIONED ± 1° UNDIMENSIONED 90° ± 2°</td> </tr> </table>	STANDARD TOLERANCES UNLESS OTHERWISE SPECIFIED	LINEAR DIMENSION	0.5 UP TO 3 OVER 3 UP TO 6 OVER 6 UP TO 30 OVER 30 UP TO 120 OVER 120 UP TO 400 OVER 400 UP TO 1000		±0.5 ±1 ±1.5 ±2.5 ±4		HOLE DIAMETER	1 UP TO 6 OVER 6 UP TO 12 OVER 12	±0.5 ±0.5 ±1		ANGLES	DIMENSIONED ± 1° UNDIMENSIONED 90° ± 2°		<table border="1"> <tr> <td>DRN BY</td> <td>CHD BY</td> <td>DATE</td> <td>SCALE</td> </tr> <tr> <td>GN</td> <td>C.P.P</td> <td>17.08.15</td> <td>1:1.25</td> </tr> </table>	DRN BY	CHD BY	DATE	SCALE	GN	C.P.P	17.08.15	1:1.25	<table border="1"> <tr> <td>TITLE</td> <td>DRG NO.</td> </tr> <tr> <td>VOLTAGE TRANSFORMER</td> <td>MVTE11050-0000</td> </tr> <tr> <td>REV</td> <td>D</td> </tr> </table>	TITLE	DRG NO.	VOLTAGE TRANSFORMER	MVTE11050-0000
STANDARD TOLERANCES UNLESS OTHERWISE SPECIFIED	LINEAR DIMENSION	0.5 UP TO 3 OVER 3 UP TO 6 OVER 6 UP TO 30 OVER 30 UP TO 120 OVER 120 UP TO 400 OVER 400 UP TO 1000	±0.5 ±1 ±1.5 ±2.5 ±4																									
	HOLE DIAMETER	1 UP TO 6 OVER 6 UP TO 12 OVER 12	±0.5 ±0.5 ±1																									
	ANGLES	DIMENSIONED ± 1° UNDIMENSIONED 90° ± 2°																										
DRN BY	CHD BY	DATE	SCALE																									
GN	C.P.P	17.08.15	1:1.25																									
TITLE	DRG NO.																											
VOLTAGE TRANSFORMER	MVTE11050-0000																											
REV	D																											

INDOOR Voltage Transformers Model : MVTE11051-0000

VOLTAGE TRANSFORMER



M5 SEC. TERMINAL WITH COVER

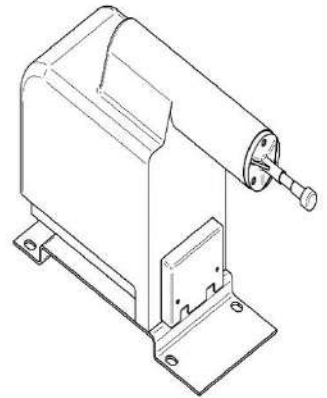
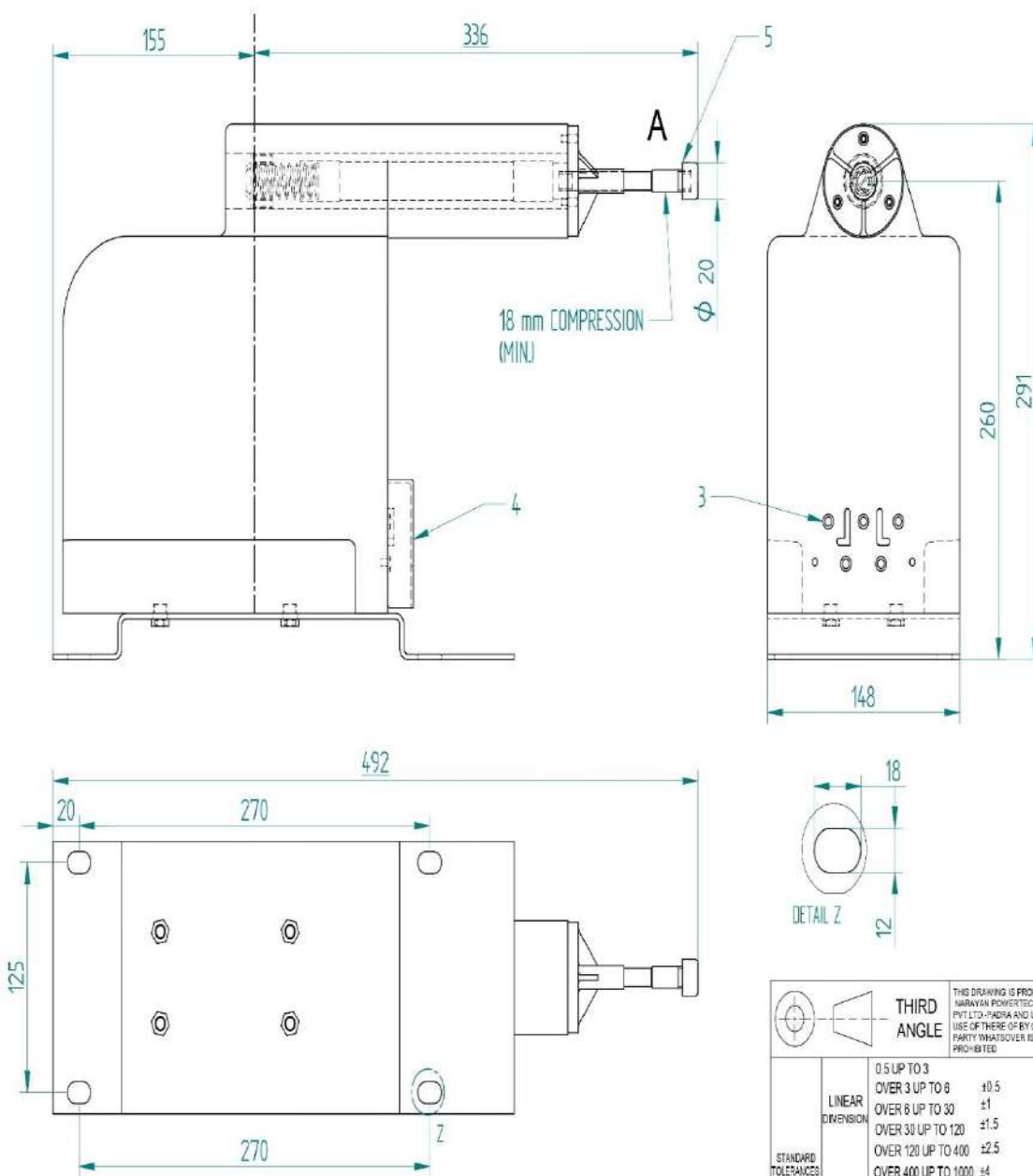


REV	BY	CHANGE RECORD	DATE
B	GM	DM. UPDATED	19/02/2016
C	MLG	DM. UPDATED	29/08/2016
D	GI	DETAILS ADDED	21/12/17
E	GI	MINI METRIC SCREWS (CHANGED TO METALLIC)	06/08/2017
F	RV	STEP REVISION FROM P.M. 3100	21/05/2023

THIRD ANGLE	THIS DRAWING IS PROPERTY OF NARAYAN POWERTECH PVT. LTD. AND UNAUTHORIZED REPRODUCTION IS STRICTLY PROHIBITED	DRN BY	CHD BY	DATE	SCALE															
<table border="1"> <tr> <td>LINEAR DIMENSION</td> <td>OVER 3 UP TO 6</td> <td>±0.05</td> </tr> <tr> <td></td> <td>OVER 6 UP TO 30</td> <td>±0.1</td> </tr> <tr> <td></td> <td>OVER 30 UP TO 120</td> <td>±0.15</td> </tr> <tr> <td></td> <td>OVER 120 UP TO 400</td> <td>±0.25</td> </tr> <tr> <td></td> <td>OVER 400 UP TO 1000</td> <td>±0.4</td> </tr> </table>	LINEAR DIMENSION	OVER 3 UP TO 6	±0.05		OVER 6 UP TO 30	±0.1		OVER 30 UP TO 120	±0.15		OVER 120 UP TO 400	±0.25		OVER 400 UP TO 1000	±0.4		narayan powertech pvt. ltd.			
LINEAR DIMENSION	OVER 3 UP TO 6	±0.05																		
	OVER 6 UP TO 30	±0.1																		
	OVER 30 UP TO 120	±0.15																		
	OVER 120 UP TO 400	±0.25																		
	OVER 400 UP TO 1000	±0.4																		
<table border="1"> <tr> <td>HOLE OVER 1.2</td> <td>OVER 6 UP TO 12</td> <td>±0.15</td> </tr> <tr> <td></td> <td>OVER 12</td> <td>±0.3</td> </tr> </table>	HOLE OVER 1.2	OVER 6 UP TO 12	±0.15		OVER 12	±0.3		VKS	C.P.P	18.6.15	1:2									
HOLE OVER 1.2	OVER 6 UP TO 12	±0.15																		
	OVER 12	±0.3																		
<table border="1"> <tr> <td>STANDARD CLEARANCES</td> <td>OVER 3 UP TO 6</td> <td>±0.05</td> </tr> <tr> <td></td> <td>OVER 6 UP TO 30</td> <td>±0.1</td> </tr> <tr> <td></td> <td>OVER 30 UP TO 120</td> <td>±0.15</td> </tr> <tr> <td></td> <td>OVER 120 UP TO 400</td> <td>±0.25</td> </tr> <tr> <td></td> <td>OVER 400 UP TO 1000</td> <td>±0.4</td> </tr> </table>	STANDARD CLEARANCES	OVER 3 UP TO 6	±0.05		OVER 6 UP TO 30	±0.1		OVER 30 UP TO 120	±0.15		OVER 120 UP TO 400	±0.25		OVER 400 UP TO 1000	±0.4		TITLE		DRG NO.	
STANDARD CLEARANCES	OVER 3 UP TO 6	±0.05																		
	OVER 6 UP TO 30	±0.1																		
	OVER 30 UP TO 120	±0.15																		
	OVER 120 UP TO 400	±0.25																		
	OVER 400 UP TO 1000	±0.4																		
		VOLTAGE TRANSFORMER		MVTE11051-0000																
		REV	F																	

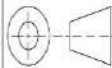

INDOOR Voltage Transformers Model : MVTE11051-0003

VOLTAGE TRANSFORMER



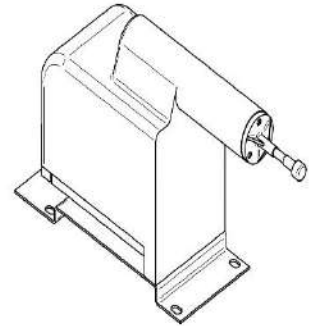
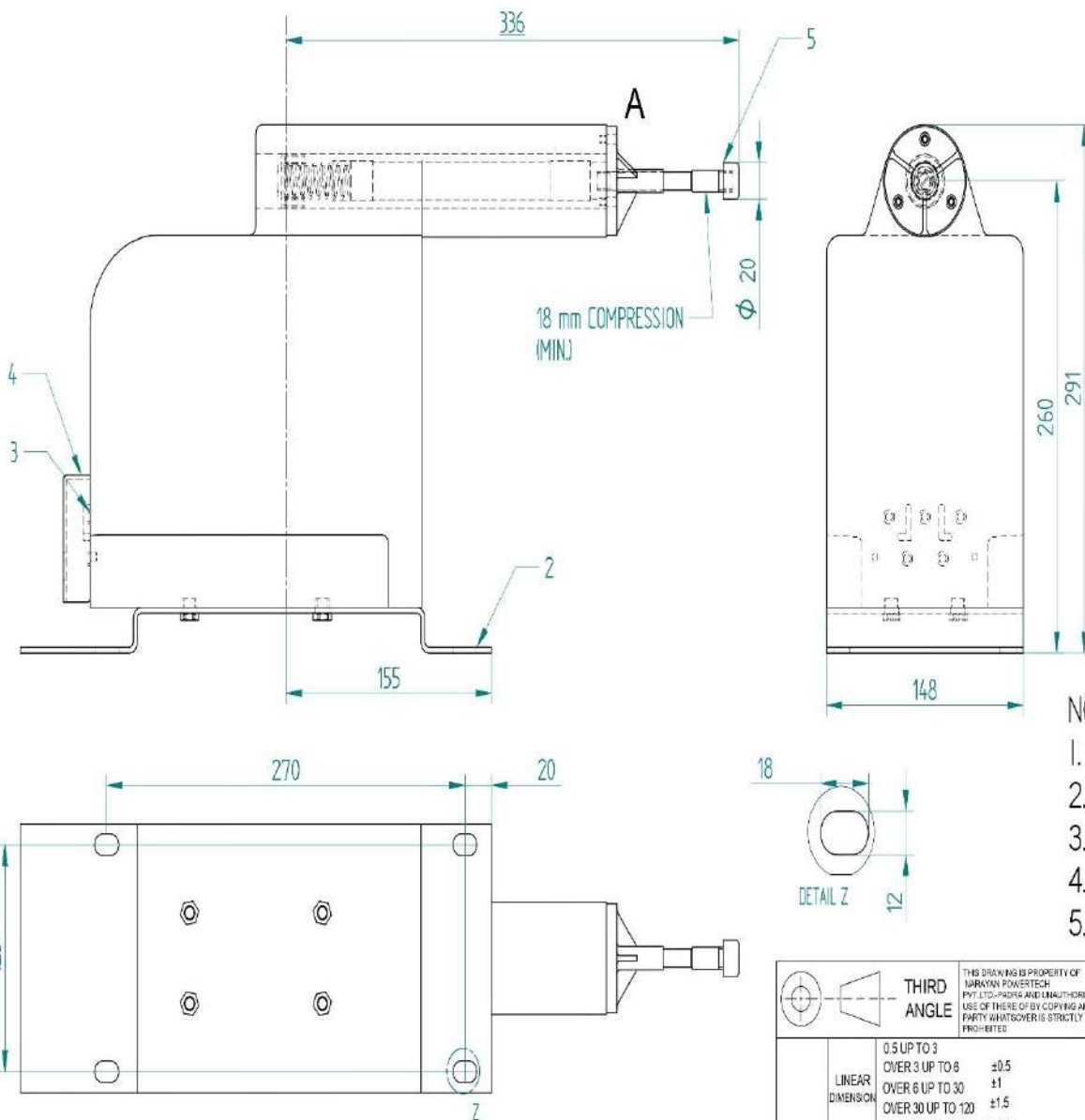
NOTES :

1. ALL DIMENSIONS ARE IN mm.
2. MOUNTING PLATE.
3. M5 SECONDARY TERMINAL.
4. TERMINAL COVER.
5. BRASS H.V TERMINAL.

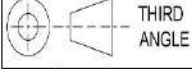

 THIRD ANGLE		<small>THIS DRAWING IS PROPERTY OF NARAYAN POWERTECH PVT.LTD.-PADRA AND UNAUTHORISED USE OF THERE OF BY COPYING ANY PARTY THEREAFTER IS STRICTLY PROHIBITED</small>		narayan powertech pvt. ltd.			
<small>STANDARD TOLERANCES UNLESS OTHERWISE SPECIFIED</small>	<small>LINEAR DIMENSION</small>	<small>0.5 UP TO 3</small> <small>OVER 3 UP TO 6</small> <small>OVER 6 UP TO 30</small> <small>OVER 30 UP TO 120</small> <small>OVER 120 UP TO 400</small> <small>OVER 400 UP TO 1000</small>	<small>±0.5</small> <small>±1</small> <small>±1.5</small> <small>±2.5</small> <small>±4</small>	<small>DRN BY</small> <small>G.I</small>	<small>CHD BY</small> <small>C.P.P</small>		<small>DATE</small> <small>19.09.18</small>
	<small>HOLE DIAMETER</small>	<small>1 UP TO 6</small> <small>OVER 6 UP TO 12</small> <small>OVER 12</small>	<small>±0.5</small> <small>±0.5</small> <small>±1</small>	<small>TITLE</small> VOLTAGE TRANSFORMER		<small>DRG NO.</small> MVTE11051-0003	
<small>ANGLES</small>	<small>DIMENSIONED ± 1°</small> <small>UNDIMENSIONED 90° ± 2°</small>			<small>REV</small> A			

INDOOR Voltage Transformers Model : MVTE11051-0004

VOLTAGE TRANSFORMER



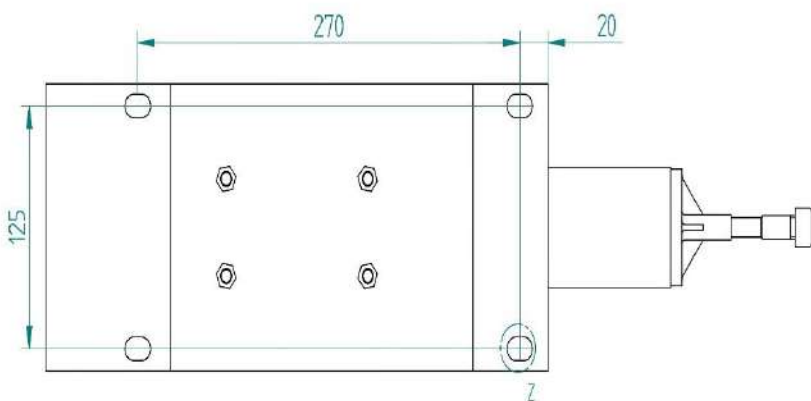
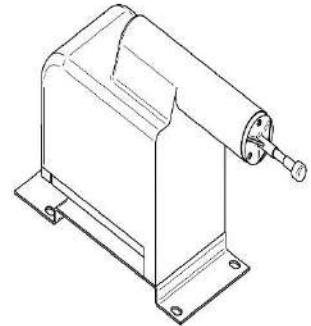
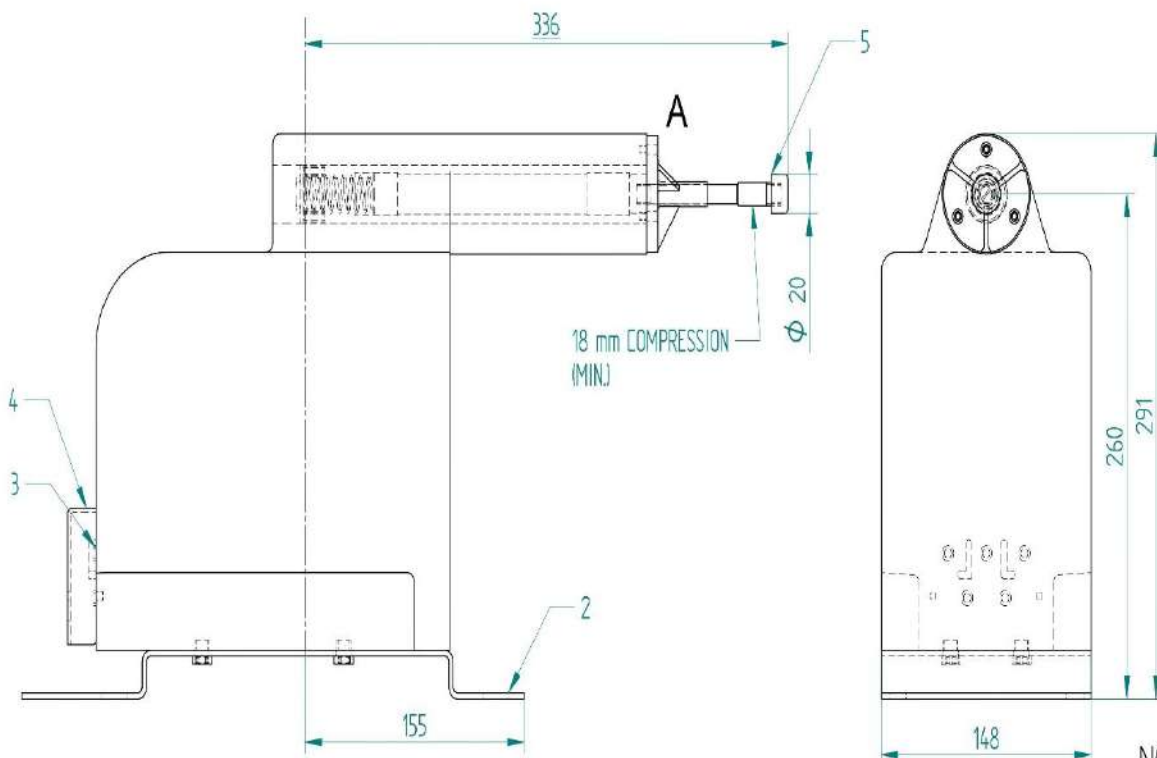
- NOTES :
1. ALL DIMENSIONS ARE IN mm.
 2. MOUNTING PLATE.
 3. M5 SECONDARY TERMINAL.
 4. TERMINAL COVER.
 5. BRASS H.V. TERMINAL.

 THIRD ANGLE		<small>THIS DRAWING IS PROPERTY OF NARAYAN POWERTECH PVT.LTD.-PDRR AND UNAUTHORISED USE OF THESE OR BY COPYING ANY PARTY WHATSOEVER IS STRICTLY PROHIBITED</small>		narayan powertech pvt. ltd.			
<small>STANDARD TOLERANCES UNLESS OTHERWISE SPECIFIED</small>	<small>LINEAR DIMENSION</small>	<small>0.5 UP TO 3</small> <small>OVER 3 UP TO 6</small> <small>OVER 6 UP TO 30</small> <small>OVER 30 UP TO 120</small> <small>OVER 120 UP TO 400</small> <small>OVER 400 UP TO 1000</small>	<small>±0.5</small> <small>±1</small> <small>±1.5</small> <small>±2.5</small> <small>±4</small>	<small>DRN BY</small> <small>G.I</small>	<small>CHD BY</small> <small>C.P.P</small>	<small>DATE</small> <small>19.09.18</small>	<small>SCALE</small> <small>N.T.S</small>
	<small>HOLE DIAMETER</small>	<small>1 UP TO 6</small> <small>OVER 6 UP TO 12</small> <small>OVER 12</small>	<small>±0.5</small> <small>±0.5</small> <small>±1</small>	<small>TITLE</small> VOLTAGE TRANSFORMER		<small>DRG NO.</small> MVTE11051-0004	
	<small>ANGLES</small>	<small>DIMENSIONED ± 1°</small> <small>UNDIMENSIONED 90° ± 2°</small>		<small>REV</small> A			



INDOOR Voltage Transformers Model : MVTE11051-0008

VOLTAGE TRANSFORMER



NOTES :

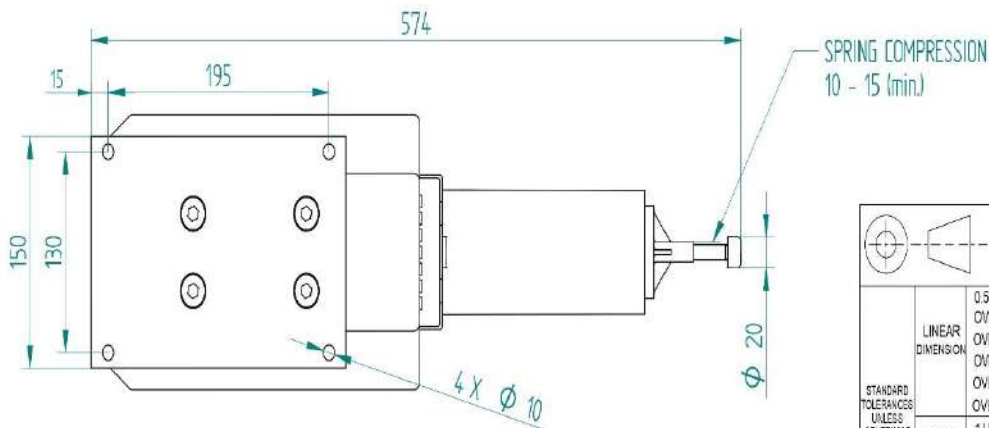
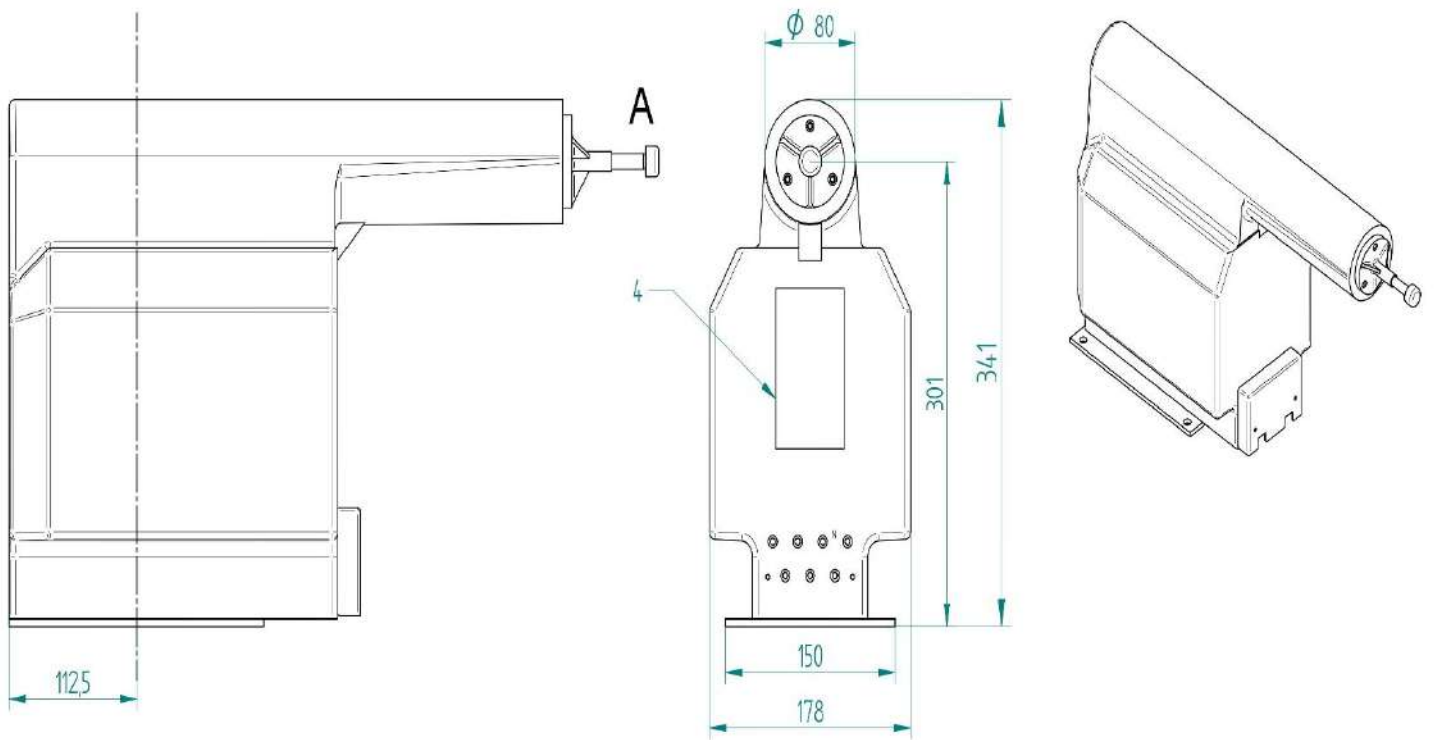
1. ALL DIMENSIONS ARE IN mm.
2. MOUNTING PLATE.
3. M5 SECONDARY TERMINAL.
4. TERMINAL COVER.
5. BRASS H.V. TERMINAL.

THIRD ANGLE		<small>THIS DRAWING IS PROPERTY OF NARAYAN POWERTECH PVT.LTD.-PADAHA AND UNAUTHORISED USE OF THERE OF BY COPYING ANY PARTY BARS/COVER IS STRICTLY PROHIBITED</small>		narayan powertech pvt. ltd.			
<small>STANDARD TOLERANCES UNLESS OTHERWISE SPECIFIED</small>	LINEAR DIMENSION	0.5 UP TO 3 OVER 3 UP TO 6 OVER 6 UP TO 30 OVER 30 UP TO 120 OVER 120 UP TO 400 OVER 400 UP TO 1000	±0.5 ±1 ±1.5 ±2.5 ±4	DRN BY G.I.	CHD BY C.P.P.		DATE 19.09.18
	HOLE DIAMETER	1 UP TO 6 OVER 6 UP TO 12 OVER 12	±0.5 ±0.5 ±1	TITLE VOLTAGE TRANSFORMER		DRG NO. MVTE11051-0008	
ANGLES	DIMENSIONED ±1° UNDIMENSIONED 90° ±2°		REV	A			



INDOOR Voltage Transformers Model : MVTE22019-0005

VOLTAGE TRANSFORMER



NOTES

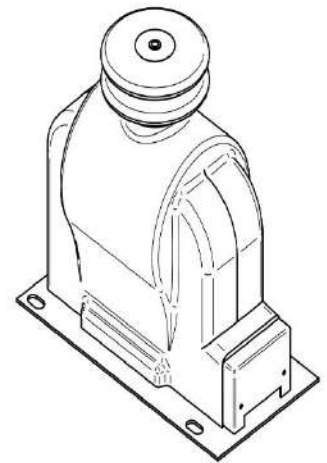
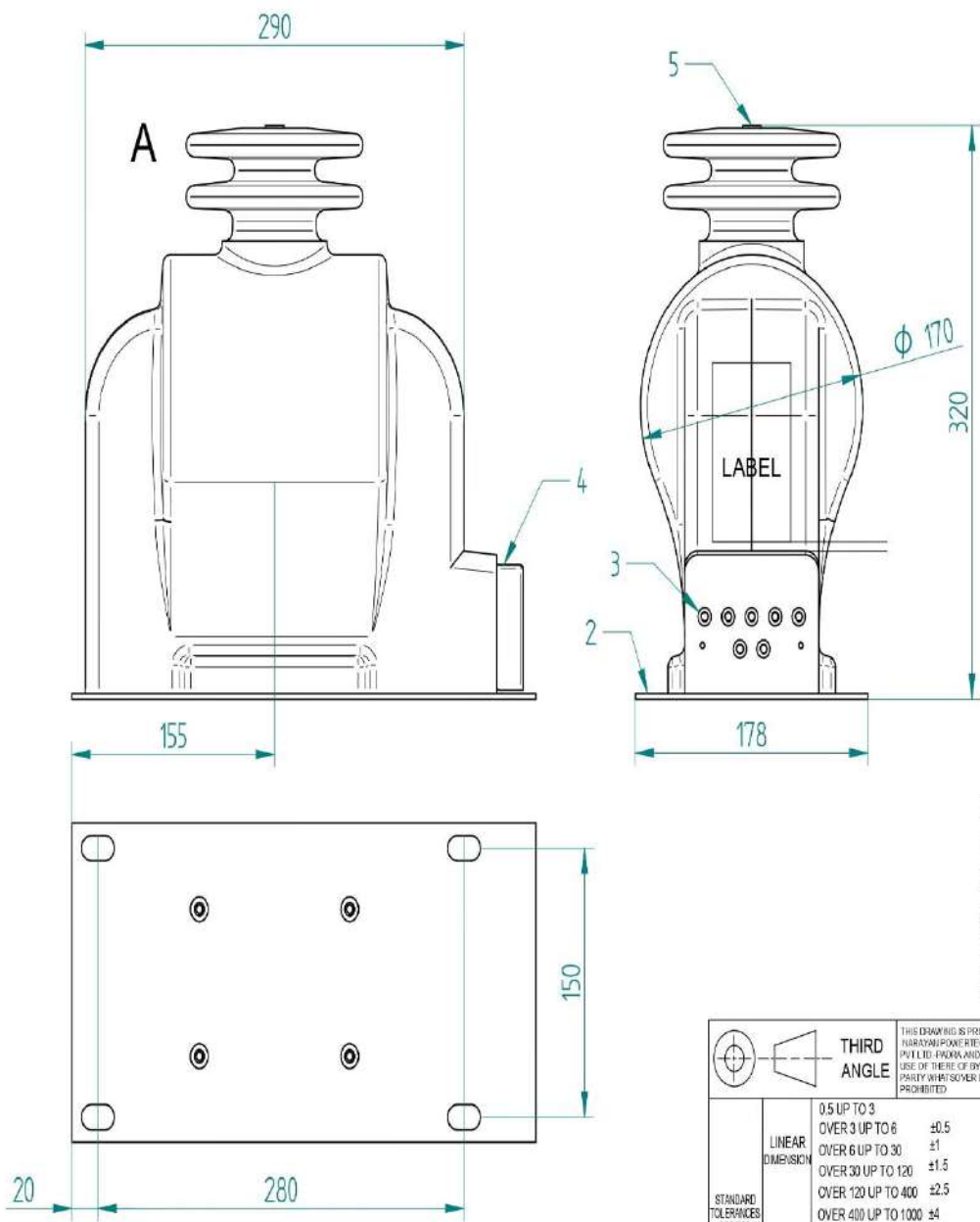
1. ALL DIMENSIONS ARE IN mm.
2. MOUNTING PLATE
3. M5 SECONDARY TRERMINAL WITH COVER.
4. NAME PLATE
5. CREEPAGE 440mm (min.)

THIRD ANGLE		<small>THIS DRAWING IS PROPERTY OF NARAYAN POWERTECH PVT.LTD.-PDRN AND UNAUTHORISED USE OF THESE OR BY COPYING ANY PARTY WHATSOEVER IS STRICTLY PROHIBITED</small>		narayan powertech pvt. ltd.			
<small>STANDARD TOLERANCES UNLESS OTHERWISE SPECIFIED</small>	<small>LINEAR DIMENSION</small>	<small>0.5 UP TO 3</small> <small>OVER 3 UP TO 6</small> <small>OVER 6 UP TO 30</small> <small>OVER 30 UP TO 120</small> <small>OVER 120 UP TO 400</small> <small>OVER 400 UP TO 1000</small>	<small>±0.5</small> <small>±1</small> <small>±1.5</small> <small>±2.5</small> <small>±4</small>	<small>DRN BY</small> <small>J.M.</small>	<small>CHD BY</small> <small>C.P.P</small>		<small>DATE</small> <small>05.10.19</small>
	<small>HOLE DIAMETER</small>	<small>1 UP TO 6</small> <small>OVER 6 UP TO 12</small> <small>OVER 12</small>	<small>±0.5</small> <small>±0.5</small> <small>±1</small>	<small>TITLE</small> VOLTAGE TRANSFORMER		<small>DRG NO.</small> <small>MVTE22019-0005</small>	
	<small>ANGLES</small>	<small>DIMENSIONED ± 1°</small> <small>UNDIMENSIONED 90° ± 2°</small>		<small>REV</small> <small>A</small>			

INDOOR Voltage Transformers Model : MVTE22020-0000

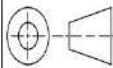

VOLTAGE TRANSFORMER

REV	DETAILS	BY	DATE
B	MODEL UPDATED	GI	22.03.2019



NOTES :

1. ALL DIMENSIONS ARE IN mm.
2. MOUNTING PLATE.
3. M6 SECONDARY TERMINAL.
4. SECONDARY TERMINAL COVER.
5. M10 PRIMARY TERMINAL.

 <p>THIRD ANGLE</p>	<small>THIS DRAWING IS PROPERTY OF NARAYAN POWERTECH PVT.LTD. PENALTY AND UNAUTHORIZED USE OF THIS OR BY ANY PARTY WHATSOEVER IS STRICTLY PROHIBITED</small>		narayan powertech pvt. ltd.																										
	<small>STANDARD TOLERANCES UNLESS OTHERWISE SPECIFIED</small>	<table border="1"> <tr> <td>LINEAR DIMENSION</td> <td>0.5 UP TO 3</td> <td>±0.5</td> </tr> <tr> <td></td> <td>OVER 3 UP TO 6</td> <td>±1</td> </tr> <tr> <td></td> <td>OVER 6 UP TO 30</td> <td>±1.5</td> </tr> <tr> <td></td> <td>OVER 30 UP TO 120</td> <td>±2.5</td> </tr> <tr> <td></td> <td>OVER 120 UP TO 400</td> <td>±4</td> </tr> <tr> <td></td> <td>OVER 400 UP TO 1000</td> <td>±4</td> </tr> </table>	LINEAR DIMENSION	0.5 UP TO 3		±0.5		OVER 3 UP TO 6	±1		OVER 6 UP TO 30	±1.5		OVER 30 UP TO 120	±2.5		OVER 120 UP TO 400	±4		OVER 400 UP TO 1000	±4	<table border="1"> <tr> <td>DRN BY</td> <td>CHD BY</td> <td>DATE</td> </tr> <tr> <td>GNI</td> <td>C.P.P</td> <td>06.09.2016</td> </tr> </table>	DRN BY	CHD BY	DATE	GNI	C.P.P	06.09.2016	<table border="1"> <tr> <td>SCALE</td> </tr> <tr> <td>N.T.S</td> </tr> </table>
LINEAR DIMENSION	0.5 UP TO 3	±0.5																											
	OVER 3 UP TO 6	±1																											
	OVER 6 UP TO 30	±1.5																											
	OVER 30 UP TO 120	±2.5																											
	OVER 120 UP TO 400	±4																											
	OVER 400 UP TO 1000	±4																											
DRN BY	CHD BY	DATE																											
GNI	C.P.P	06.09.2016																											
SCALE																													
N.T.S																													
<table border="1"> <tr> <td>HOLE DIAMETER</td> <td>1 UP TO 6</td> <td>±0.5</td> </tr> <tr> <td></td> <td>OVER 6 UP TO 12</td> <td>±0.5</td> </tr> <tr> <td></td> <td>OVER 12</td> <td>±1</td> </tr> </table>	HOLE DIAMETER	1 UP TO 6	±0.5		OVER 6 UP TO 12	±0.5		OVER 12	±1	<table border="1"> <tr> <td>TITLE</td> <td>DRG NO.</td> </tr> <tr> <td>VOLTAGE TRANSFORMER</td> <td>MVTE22020-0000</td> </tr> </table>	TITLE	DRG NO.	VOLTAGE TRANSFORMER	MVTE22020-0000	<table border="1"> <tr> <td>REV</td> <td>B</td> </tr> </table>	REV	B												
HOLE DIAMETER	1 UP TO 6	±0.5																											
	OVER 6 UP TO 12	±0.5																											
	OVER 12	±1																											
TITLE	DRG NO.																												
VOLTAGE TRANSFORMER	MVTE22020-0000																												
REV	B																												
<table border="1"> <tr> <td>ANGLES</td> <td>DIMENSIONED ± 1°</td> </tr> <tr> <td></td> <td>UNDIMENSIONED 90° ± 2°</td> </tr> </table>	ANGLES	DIMENSIONED ± 1°		UNDIMENSIONED 90° ± 2°																									
ANGLES	DIMENSIONED ± 1°																												
	UNDIMENSIONED 90° ± 2°																												



narayan powertech pvt. ltd.

Metal Clad Voltage transformers



Metal Clad

Voltage transformers



Metal Clad

Metal clad Voltage Transformers are single pole insulated and casted with epoxy resin for indoor application. The resin body is covered with a grounded metallic box. The high voltage end of the primary winding can be provided with silicone cone for specific plug in connection.

The VTs are suitable for installation in or outside switchgear/panel. The secondary terminals are integrated in resin body and protected with cover.

- Compact design and less space requirement
- Safe to touch due to grounded body
- No maintenance
- Simple for assembly



narayan powertech pvt. ltd.

Low Voltage Instruments Transformers





Low Voltage Instruments Transformers

Current Transformers

Narayan has a full range of LV CTs -Indoor as well as Outdoor, outline electrical parameters are as below:

- Can be resin casted, plastic cased or tape insulated.
- Split core current transformers possible
- Primary current rating up to 20,000 Amps.
- Secondary current rating of 1 Amps, 5 Amps, 0.577 Amps (or any relay feed current value) or custom specified.
- Multi core CTs up to 5 cores or more.
- Burden value up to 50 VA (IEC 60044, IS 2705) or more.
- Accuracy class up to 0.1 for metering (IEC 60044, IS 2705), up to 10P, 15P for relaying/protection (IEC 60044, IS 2705), 0.1 for metering (ANSI C 57.13) and up to C 800 for relaying (ANSI C 57.13).
- Special accuracy class like class PS (IS 2705)/PX (IEC 60044) with specific values of V_k and $I_{mag.}$, PR Class, TPS, TPX, TPY and TPZ

Low Voltage Instruments Transformers

Technical data

Frequency	50 Hz
Rated Input	5A - 4000A
Measuring range	5% Ip - 120% Ip
Rated Output	1A, 5A
System Voltage	0.72KV (AC)
Dielectric strength	3.0KV / 1mA / 1min
Case	PC/UL94 - V0
Operating Temp	-5°C ~ +55°C
Operating Humidity	≤ 85%
Output Connection	Terminal
Short Time Thermal Current I _{th} *	50 Ip
Dynamic Current I _{dyn} *	125 Ip
Standards	IEC 61869-1&2

Series features

- Covers primary current from 5 ~ 4000 A
- Compact sizes.
- Different types for different requirements.
- Unique serial number (upon customer request)
- Engraved data
- Sealable body
- Sealable cover



#	Type	Primary Current (A)	Application for	Outline Dimensions (mm)
1	LVCT10	5 up to 150	Primary terminal 2.5 x 14 mm	78.5 x 63 x 35
2	LVCT20	40 up to 100	Cable Φ = 14 mm	65 x 45 x 30
3	LVCT30	30 up to 200	Cable Φ = 20 mm	78.5 x 63 x 35
4	LVCT40	100 up to 500	Busbar 30 x 10 mm, up to Φ = 25 mm	70 x 49 x 36
5	LVCT50	30 up to 200	Busbar 30 x 10 mm, up to Φ = 30 mm	78.5 x 63 x 35
6	LVCT60	150 up to 600	Busbar 40 x 10 mm, up to Φ = 30 mm	78.5 x 63 x 35
7	LVCT70	100 up to 800	Busbar 40 x 10 mm, up to Φ = 30 mm	87.5 x 80 x 41
8	LVCT80	250 up to 1600	Busbar 60 x 12 mm, up to Φ = 49 mm	109.5 x 87.5 x 41
9	LVCT90	400 up to 2000	Busbar 60 x 12 mm, up to Φ = 49 mm	118 x 101 x 41
10	LVCT100	600 up to 2000	Busbar 80 x 12 mm, up to Φ = 65 mm	126 x 104 x 41
11	LVCT110	800 up to 4000	Busbar 100 x 30 mm, up to Φ = 85 mm	155 x 140 x 38



Cast Resin Components



Cast Resin Components

Insulators

Insulators are insulating and supporting components of the power transmission lines and busbars (distribution centers, switchgears) where they are fixed.

Insulators are intended to be used for 2 reason:

- Separating conductors from the earth in regards to electricity
- Supporting the weight of conductors and additional loads

Narayan Insulators are epoxy cast resin insulated with internal metal fittings.

The insulators are particularly suitable to be used as single support or voltage control.

Narayan MV Insulators are designed for indoor-outdoor and outdoor-outdoor applications (from 3,6kV to 36kV):

- Bushing Insulators
- Post Insulators
- Capacitive Insulators(voltage divider)

Post insulators for indoor installation

General characteristics

Epoxy resin post insulators, for indoor application, with internal metal fitting.

These insulators are particularly suitable to be used as single supports for conductors, for fuses and for other equipment (as switchgears).

Application

For indoor installation with working condition at T° max. 85 °C.

Service voltage

Up to 36 kV (40,5 kV available on request)

Routine Tests

Visual inspection

Testing of conductive connection of fixing inserts for post insulators Dry power-frequency withstand voltage

Partial discharge extinction voltage test

Standards

IEC 60273 (CEI 36/12) -
CENELEC HD 578 S1 IEC
60660

Cast Resin Components

General characteristics

Epoxy resin post insulators with capacitive divider for the reading of the voltage. Manufactured with internal metal fitting, they can be equipped with couplings and low voltage light signal box. These insulators are mainly suitable to be used as insulated supports of equipment, bus bar or fuses.

Application

Max working temperature of 85 °C.

Routine Tests

Visual inspection

Testing of conductive connection of fixing inserts for post insulators Dry power-frequency withstand voltage

Partial discharge extinction voltage test (connected to the voltage indicator)

Service voltage

Up to 36 kV (40,5 available on request)

Standards

IEC 60660

Bushing Insulators for indoor-indoor / outdoor-indoor

General characteristics

12 - 36 kV epoxy resin bushing insulators. The insulators can be fitted with copper bars designed from 250 up to 1250 A.

They are equipped with internal metal fittings for installation on the relevant frame and with brass nuts and washers for fastening of phase connectors.

Application

Indoor/outdoor installation at max working temperature of 85 °C.

Service voltage

Up to 36 kV.

Routine Tests

Visual inspection

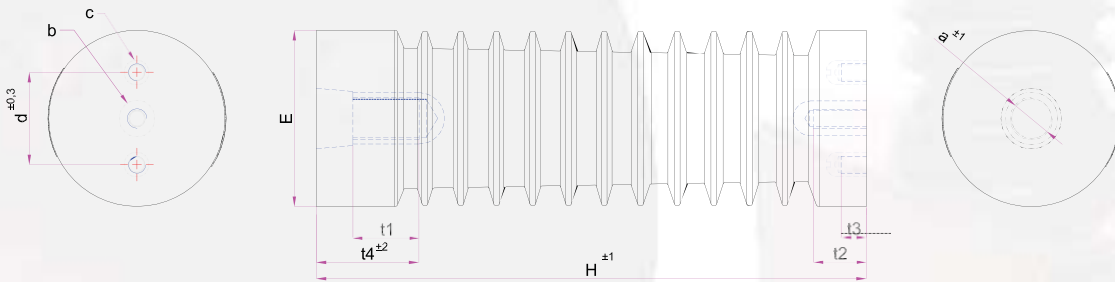
Dry power-frequency withstand voltage

Measurement of partial discharge quantity

Standards

IEC 60137

INDOOR POST INSULATORS UP TO 36kV

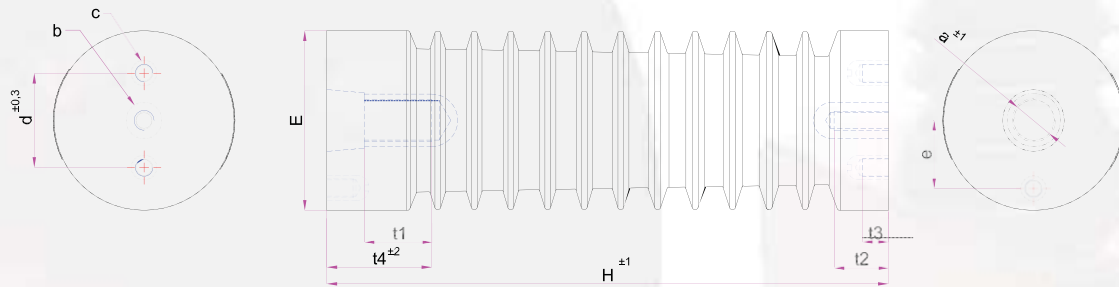


Material Type: Epoxy Resin
According to IEC 60273 (1990), IEC 60660 (1999)

TYPES	Um (kV)	Power-frequency withstand voltage, dry (kV)	Falling load bending (N)	Weight app. (kg)	Dimensions (mm)										Min. Creepage Distance (mm)	Number of ribs
					a	b	c	d	E	H	t1	t2	t3	t4		
	12	38	4000	0,60	M16	M12	M6	36	∅ 61	130	25	18	10	37	170	5
	12	38	10000	0,97	M20	M16	M10	46	∅ 80	130	27	24	12	42	160	5
	17,5	50	4000	0,95	M16	M12	M6	36	∅ 70	175	25	18	10	40	250	6
	17,5	50	10000	1,45	M20	M16	M10	46	∅ 82	175	27	24	12	42	250	6
	24	50	4000	1,30	M16	M12	M6	36	∅ 75	210	25	18	10	40	350	8
	24	50	10000	1,90	M20	M16	M10	46	∅ 85	210	27	24	12	42	330	8
	36	70	4000	2,00	M16	M12	M6	36	∅ 80	300	25	26	12	48	540	11
	36	70	10000	3,00	M24	M16	M10	46	∅ 96	300	38	28	12	56	460	11

Tolerance ± (Dimensions x 0,01 + 0,2) mm

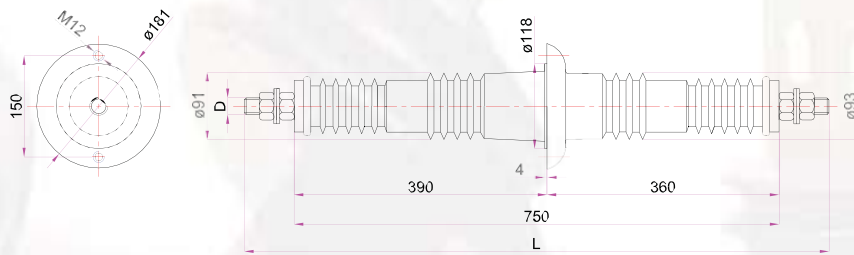
INDOOR CAPACITIVE POST INSULATORS UP TO 36kV



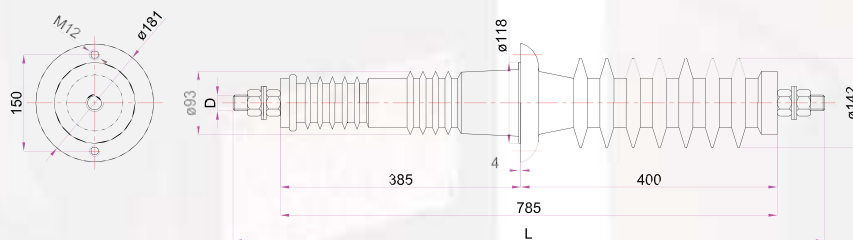
Material Type: Epoxy Resin

TYPES	Um (kV)	Power-frequency withstand voltage, dry (kV)	Falling load bending (N)	Weight app. (kg)	Dimensions (mm)										Min. Creepage Distance (mm)	Number of ribs	
					a	b	c	d	e	E	H	t1	t2	t3			t4
	12	38	10000	0,97	M20	M16	M10	46	30	80	130	27	24	12	42	160	5
	17,5	50	10000	1,46	M20	M16	M10	46	30	82	175	27	24	12	42	250	6
	24	50	4000	1,30	M16	M12	M6	36	30	75	210	25	18	10	40	350	8
	24	50	10000	1,90	M20	M16	M10	46	30	85	210	27	24	12	42	330	8
	36	70	4000	2,00	M16	M12	M6	36	34	80	300	25	26	12	48	540	11
	36	70	10000	3,00	M24	M16	M10	46	34	96	300	38	28	12	56	460	11

M.V. INDOOR -INDOOR BOLT BUSHING UP TO 1250A



TYPES	Um (kV)	Falling load bending (N)	In (A)	D	L	Weight (kg)
0000	36	3750	400	M16	840	8,6
			630	M20	860	9,8
			800	M24	880	11,7
			1250	M30	900	14,9



TYPES	Um (kV)	Falling load bending (N)	In (A)	D	L	Weight (kg)
0000	36	3750	400	M16	875	10,8
			630	M20	895	12,0
			800	M24	915	14,2
			1250	M30	935	19,4



narayan powertech pvt. ltd.

Agent Contract and data in Egypt



Overseas Representation Agreement

THIS AGENCY AND DISTRIBUTION AGREEMENT (the "Agreement") is made as of the First day of October, 2023, by and between Narayan Powertech Pvt Ltd with its principal place of business at Padra, Vadodara, India (the "Company"), and 'Universal Global Sourcing solutions, at District 12, Block 128, Sector K, 10th of Ramadan.Sharkia Government, Egypt company with its principal place of business at Agent (the "Agent/Distributor").

The parties agree as follows:

1. Appointment as Exclusive Agent/Distributor. The Company appoints the Agent/Distributor as its exclusive representative on all types of
 - Medium voltage, Current transformers & Voltage transformers.



Head Office : Building No.7 , 3th Settlement , First local Area, Beside GUC, new Cairo, Egypt.

Branch : Sharkia Government, 10th of Ramadan, District 12, Block 128, Sector K, 10th of Ramadan.



Tel : +2 02 44076174

Mobile : +2 01001081221 / +2 01001081135

What's app : +2 01013820534



Emails

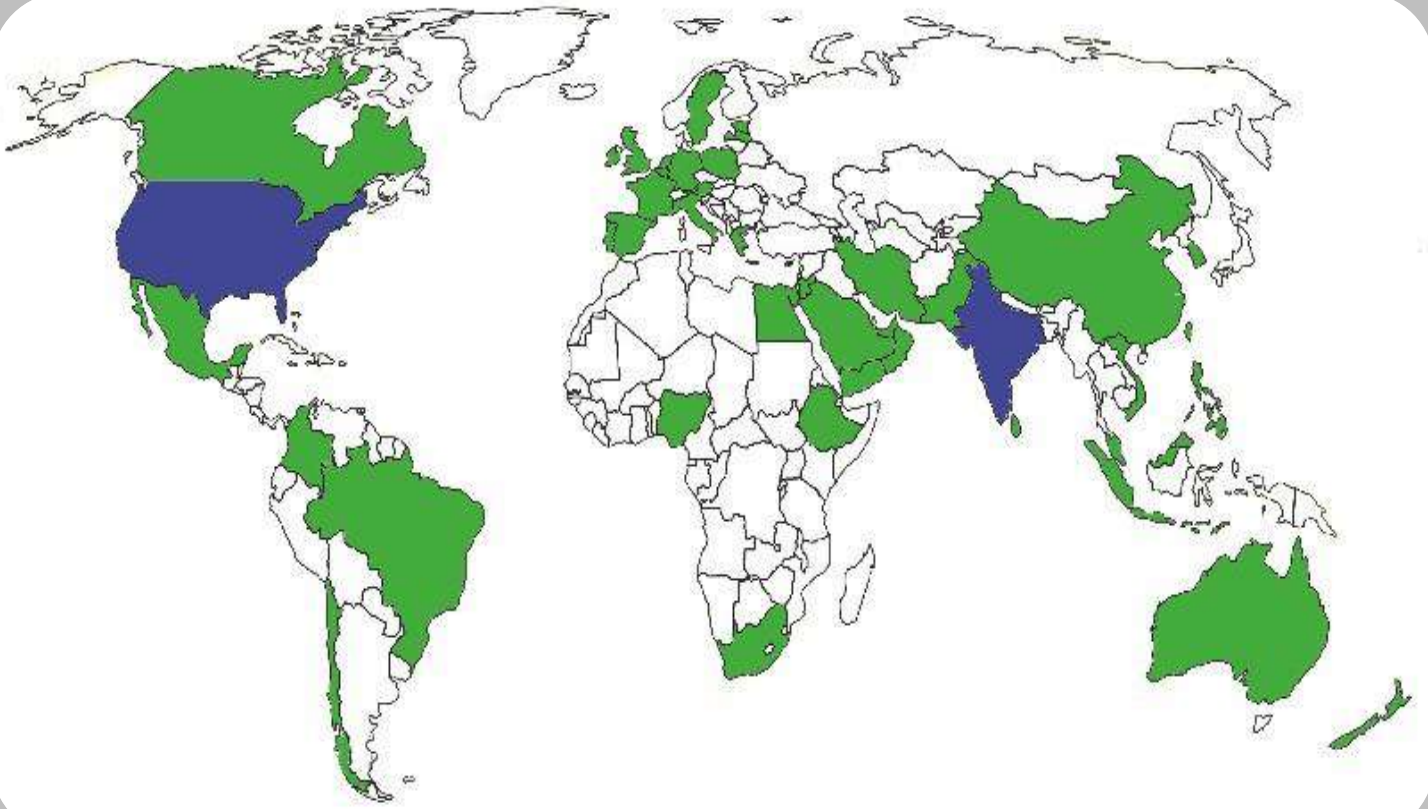
info@universal-gss.com

sales@universal-gss.com

Engineering@universal-gss.com



narayan powertech pvt. ltd.



Accepted in More than 70 Countries



narayan powertech pvt. ltd.

Padra-Vadodara Road, Padra 391 440. Dist. Vadodara. Gujarat, India.

Phone : +91 (265) 6455184/86, 6548822 Fax : +91 (2662) 221371 e-mail : sales@narayanpowertech.com

Website : www.narayanpowertech.com

www.narayanpowertech.com