MVA593-CE

DIGITAL PANEL METER

48 x 48mm

Features :

- **True RMS measurement**
- **Measure 3 Phase voltage and current**
- **3 Digit 7 segment dual line display**
- **Works with 1 phase and 3 phase CT**

Certification : CE

Display Specifications

Display parameters	Voltage & Current
Type	7 segment
Display	3 digit LED display with dual rows
Display height	8.6mm
Colour	Red and Green
Display scrolling	10 sec (with 3 phase CT), Fixed (with 1 phase CT)

Resolution

Current value	Resolution	Voltage value	Resolution
<10A	0.01A	<100V	0.1V
<100A	0.1A	>100V	1V
>100A	1A		

Input specifications

Network selection	Auto (based on CT module)
Rated input voltage	20-520VAC
Rated input current	5% to120% of full scale (based on CT module)
Operating frequency	50 to 60Hz
Current overload	120% of full Scale (based on CT module)

CT selection for converter

Parameter selection	Four DIP switches
CT Primary	5A / 400A / 500A / 630A / 800A

Accuracy

Meter	0.5% full scale
CT	1% full scale

Auxiliary supply

Input voltage range	85 to 276V AC
Consumption	4VA max
Frequency	50 to 60Hz

Environmental specification

Temperature	Operating : 0°C to 60°C Storage : -20 to 70 °C
Humidity	95% non-condensing
Pollution degree	II

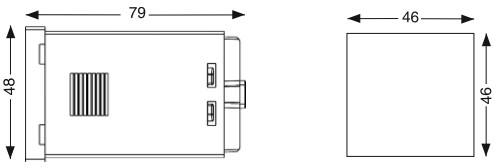
Mechanical specification

Mounting	Panel
Dimension	48 x 48mm
IP Front	IP 51
IP Back	IP 20
Torque	0.5 N-m

Packaging

Packing material	Corrugated box
Weight : Packed	113gms Unpacked : 74gms

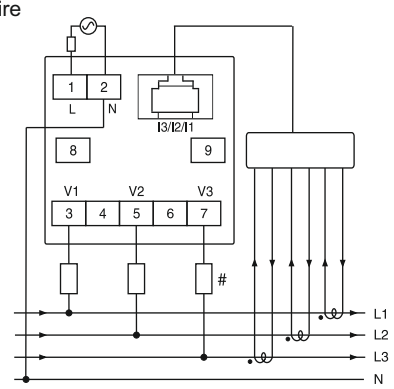
Dimensions (All are in mm)



Side view Panel cutout

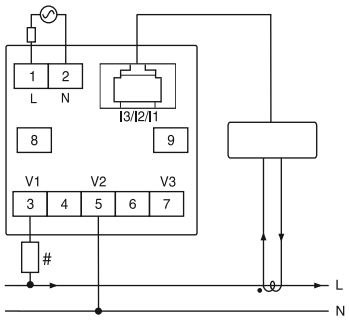
Terminal Connections

For 1Ø - 2 Wire
3Ø - 4 Wire



Note : Neutral to be connected for 3Ø - 4 wire

For 1Ø - 2wire



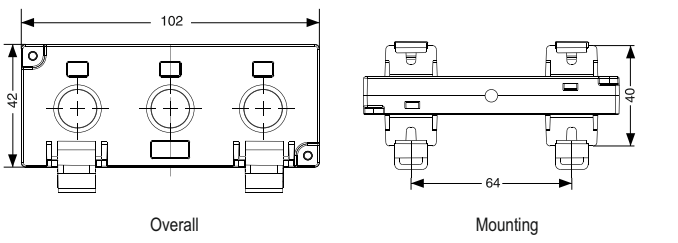
All fuse types : 0.5A class CC UL type ; 0.5A fast acting 600V

CT 3PH-D13mm-80A-G

Specification

Rated input current	Nominal 80A AC (Min 4A - Max 96A)
No. of phases	3
Inner dia	13mm
Mounting	Din rail & Wall mount

Dimension (All are in mm)

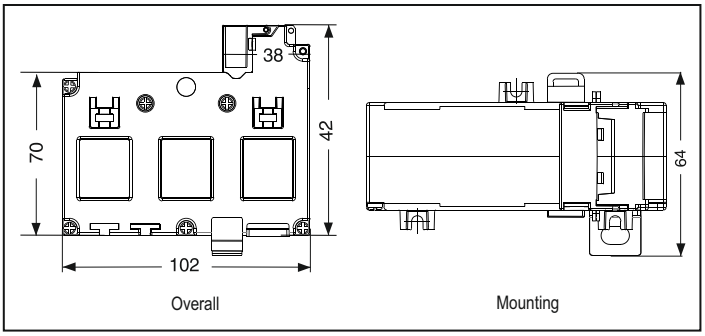


CT 3PH-21x25mm-250A-G

Specification

Rated input current	Nominal 250A AC (Min 10A - Max 300A)
No. of phases	3
Inner dia	21x 25mm
Mounting	Din rail & Wall mount

Dimension (All are in mm)

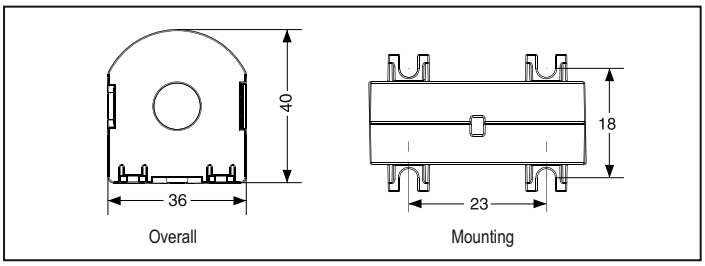


CT 1PH-D13mm-80A-G

Specification

Rated input current	Nominal 80A AC (Min 4A - Max 96A)
No. of phases	1
Inner dia	12mm
Mounting	Din rail & Wall mount

Dimension (All are in mm)

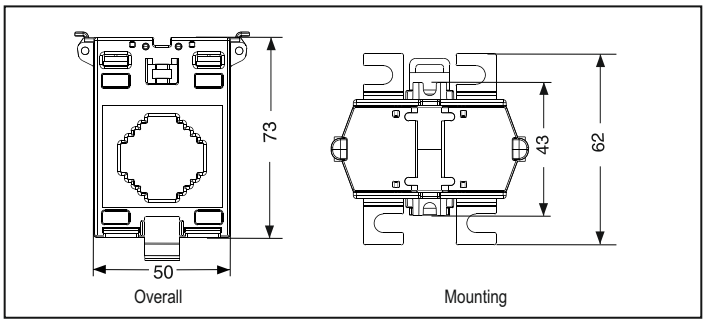


CT 1PH-30x10mm-250A-G

Specification

Rated input current	Nominal 250A AC (Min 10A - Max 300A)
No. of phases	1
Inner dia	30x10mm
Mounting	Din rail & Wall mount

Dimension (All are in mm)

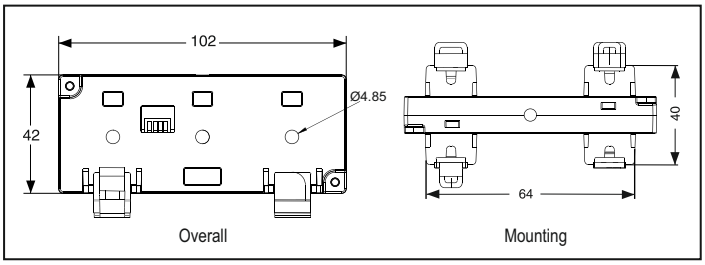


3PH 5A CONVERTER-G

Specification

Rated input current	Nominal 5A AC (Min 50mA - Max 6A)
No. of phases	3
Inner dia	4.85mm
Mounting	Din rail & Wall mount

Dimension (All are in mm)

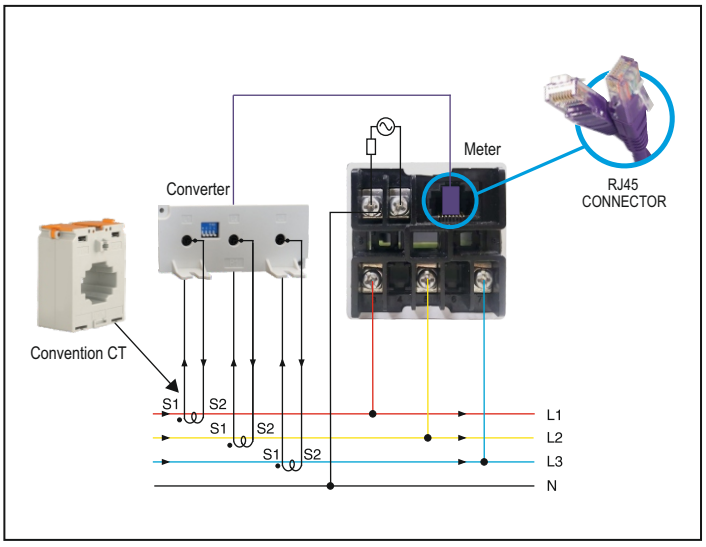


DIP switch selection for converter

DIP Configuration	CT
	5A
	400A
	500A
	630A
	800A
Switch Setting Example -	

Conventional CTs to be used along with converter

Wiring diagram



Compliance

Applicable EMI / EMC Standards		
Product Standard : IEC 61326-1		
Category		**Standards Compliance**
ESD Immunity	IEC 61000-4-2	Level II (Air discharge : 8kV), (Contact Discharge : 4kV)
Surge Immunity	IEC 61000-4-5	+/- 2kV common mode, (Line to ground)
Radiated Susceptibility	IEC 61000-4-3	Level III, 80 to 1000MHz (10V/m) Level II, 1.4GHz to 2GHz (3V/m) Level I, 2GHz to 2.7GHz (1V/m)
Conducted Susceptibility	IEC 61000-4-6	Level II (3Vrms)
Voltage Dips and Interruptions	IEC 61000-4-11	**Dips** : 0% residual voltage / 1 cycle (Criteria B), 40% residual voltage / 10 cycles 50Hz / 12 cycles 60Hz (Criteria C) 70% residual voltage / 25 cycles 50Hz / 30 cycles 60Hz (Criteria C) **Interruptions** : 0% residual voltage / 250 cycles 50Hz / 300 cycles 60Hz (Criteria C)
Conducted Emission	CISPR-11	
Radiated Emission	CISPR-11	
Electrical Fast Transient	IEC 61000-4-4	Level II (2kV)

Ordering information

Product code	Supply voltage / Current range	Certification
MVA593-CE	180 - 300 VAC, 50 / 60Hz	CE
CT 1PH-D13mm-80A-G	80A	CE
CT 1PH-30x10mm-250A-G	250A	CE
CT 3PH-D13mm-80A-G	80A	CE
CT 3PH-21x25mm-250A-G	250A	CE
3PH 5A CONVERTER-G	---	CE