

Multifunction Meters



MFM384
Size : 96 x 96mm



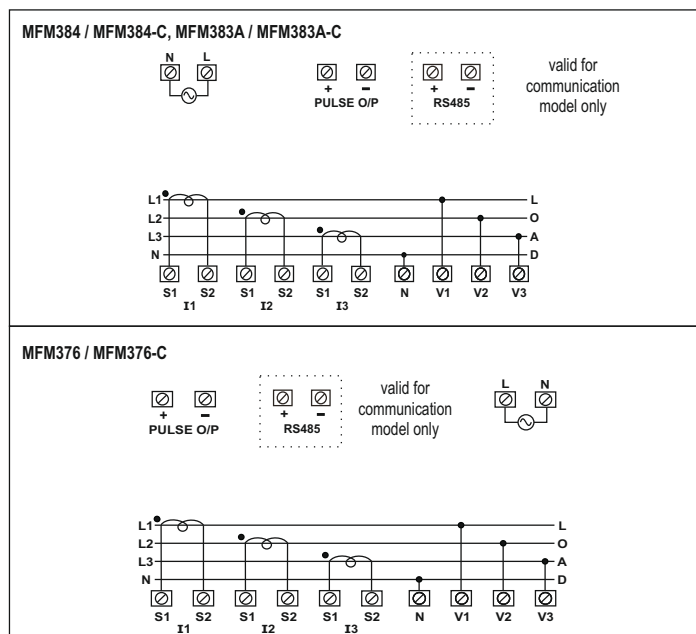
MFM383A
Size : 96 x 96mm



MFM376
Size : 96 x 96mm

FEATURES	<ul style="list-style-type: none"> • LCD type with Bargraph • Single Pulse Output • THD upto 31st level • Max / Min Demand (Power) • Max Demand Current 	<ul style="list-style-type: none"> • Single Pulse Output • Energy (Active / Reactive / Apparent) 	<ul style="list-style-type: none"> • Single Pulse Output • Max / Min Demand (Power) • Run Hour • Auxiliary Interrupts • Phase Angle
DISPLAY	LCD with Backlight	LCD with Backlight	7 segment LED
DIGITS	4 rows of 4 digits, Bargraph representation for current, 1 row of 8 digits for energy display	3 rows of 4 digits, 7½ digits for energy	3 rows of 4 digits
ELECTRICAL CONNECTION	3Ø - 4W, 3Ø - 3W, 2Ø - 3W, 1Ø - 2W		
RATED INPUT VOLTAGE	11 to 300V AC (L-N), 19 to 519V AC (L-L)		
RATED INPUT CURRENT	Nominal 5A AC (11mA min ; 6A max)		Nominal 5A AC (14mA min ; 6A max)
RESOLUTION	For energy : 0.01k, 0.1k, 1k, 0.01M, 0.1M, 1M (depending upon CT ratio x PT ratio), For Power, Voltage & Current : Auto resolution, For Power factor : 0.001	For energy : 0.1k, 1k (depending upon CT ratio x PT ratio) For Power, Voltage & Current : Auto resolution, For Power factor : 0.001	For energy : 0.01k, 0.1k, 1k, 0.01M, 0.1M, 1M (depending upon CT ratio x PT ratio), For Current, Voltage, Power : Auto resolution, For Power factor : 0.001
CT PRIMARY	1 / 5A to 10kA (Programmable for any value)		
CT SECONDARY	1 or 5A (Programmable)		
PT PRIMARY	100V to 500kV (Programmable for any value)	100V to 10kV (Programmable for any value)	100V to 500kV (Programmable for any value)
PT SECONDARY	100 to 500V AC (L-L) (Programmable for any value)		
COMMUNICATION	RS485 Communication MODBUS RTU Protocol (Optional)		
MEASURING PARAMETER	Voltage (L-L / L-N) (Individual / Average), Current (I1, I2, I3) (Individual / Average), Frequency, Power Factor (Individual / Total), Active, Reactive & Apparent power (Individual / Total), Active, Reactive & Apparent Energy (Total)		
ADDITIONAL FUNCTIONS	Phase sequence detection	---	Max instantaneous (Current / Voltage), (Import / Export) Energy, THD upto 31 st level (For MFM376-C)
SUPPLY VOLTAGE	100 to 240V AC, -15% to +12%, 50/60Hz (±5%) (Power consumption : Less than 8VA)		240V AC, ±20% (For MFM376-230VAC), 85V to 270V AC & 40 to 270V DC (For MFM376-C)

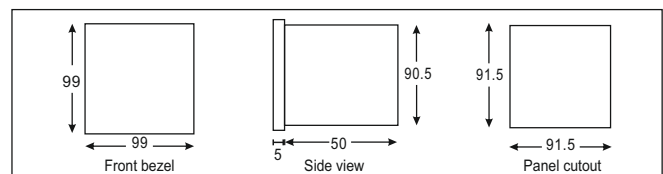
Terminal Connections



Ordering Information

PRODUCT CODE	SUPPLY VOLTAGE	OUTPUT		CERTIFICATION
		PULSE OUTPUT	COMM	
MFM384	100V to 240V AC -15% to +12%	■	---	---
MFM384-C		■	■	---
MFM384-C-CE		■	■	CE RoHS
MFM384-MB-CE-RoHS		■	■ (MBUS)	CE RoHS
MID384		■	■	MID CE RoHS
MFM383A		■	---	---
MFM383A-C		■	■	---
MFM383A-C-CE	■	■	CE RoHS	
MFM376-230V	240V AC ± 20%	■	---	---
MFM376-C	85 to 270V AC, 40 to 270V DC	■	■	---

Dimensions (All are in mm)



Din Rail Multifunction Meters



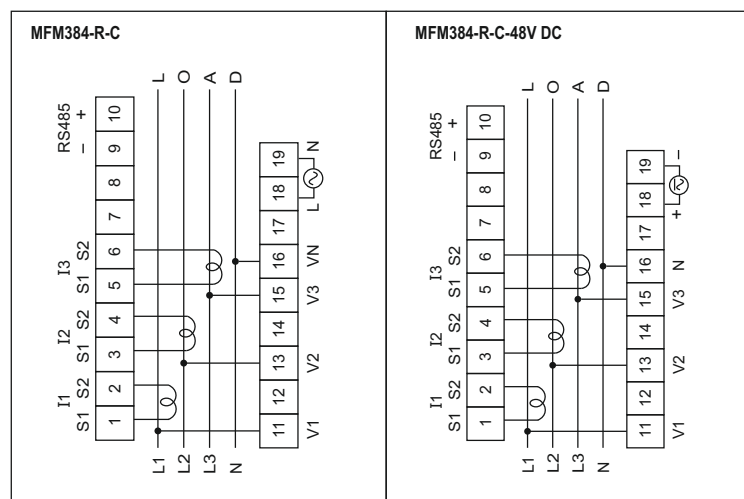
MFM384-R-C
Size : 70 x 90mm



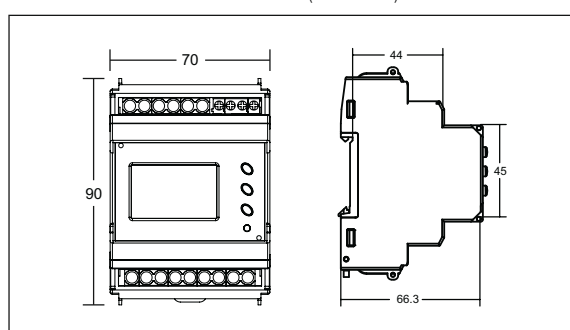
MFM384-R-C-48V DC
Size : 70 x 90mm

FEATURES	<ul style="list-style-type: none"> • Energy (Active, Reactive, Apparent) • RS485 Communication MODBUS RTU Protocol • Import / Export Energy • Max / Min Demand (Power) • 85 to 270V AC, 50/60Hz Supply 	<ul style="list-style-type: none"> • Energy (Active, Reactive, Apparent) • RS485 Communication MODBUS RTU Protocol • Import / Export Energy • Max / Min Demand (Power) • DC : 30 to 60V ; AC : 18 to 36V Supply
DISPLAY	LCD with backlight	
DIGITS	1 Row of 4 digits, 2 Rows of 7 digits	
ELECTRICAL CONNECTION	3Ø - 4W, 3Ø - 3W, 2Ø - 3W, 1Ø - 2W	
RATED INPUT VOLTAGE	11 to 300V AC (L-N), 19 to 519V AC (L-L)	2 to 76.2V AC (L-N), 3.5 to 132V AC (L-L)
RATED INPUT CURRENT	Nominal 5A AC (11mA min ; 6A max)	
FREQUENCY	45Hz to 65Hz	
RESOLUTION	For Energy : 0.01k, 0.1k, 1k, 0.01M, 0.1M, 1M (Depending upon CT ratio x PT ratio), For Power, Voltage, Current : Auto resolution, For Power Factor : 0.01, Frequency : 0.1Hz	For Energy : 0.01k, 0.1k, 1k, 0.01M, 0.1M, 1M (Depending upon CT ratio x PT ratio), For Power, Voltage, Current : Auto resolution, For Power Factor : 0.01, Frequency : 0.1Hz
ACCURACY CLASS	Voltage (L-L / L-N), Current : ±0.5% Power Factor : ±0.01 of full range, Frequency : ±0.1% of full range Power (kW, kVA, kVAr) : 1% of full range Energy (Active, Reactive, Apparent) : 1% of full range	Voltage & Current : ±0.5% of range, Frequency : ±0.15% of mid frequency Power (Active, Reactive, Apparent) : ±0.5% of range Energy (Active, Reactive, Apparent) : ±0.5% Power Factor : ±0.5% of unity.
CT PRIMARY	1 / 5A to 10kA (Programmable for any value)	
CT SECONDARY	1 or 5A (Programmable)	
PT PRIMARY	100V to 500kV (Programmable for any value)	80V to 500kV (Programmable for any value)
PT SECONDARY	100V to 500V AC (L-L) (Programmable for any value)	80V to 140V AC (L-L) (Programmable for any value)
MEMORY RETENTION FOR ENERGY	10 years	
COMMUNICATION	RS485 Communication MODBUS RTU Protocol (Optional)	
INDICATIONS	LCD : Max Demand of Power, Communication in progress ; LED : Integration of Energy.	
MEASURING PARAMETER	Voltage (L-L / L-N) (Individual / Average), Current (I1, I2, I3) (Individual / Average), Frequency, Power Factor (Individual / Total), Active, Reactive & Apparent power (Individual / Total), Active, Reactive & Apparent Energy (Total), Demand (Min / Max Active & Reactive Power, Max Apparent Power)	
SUPPLY VOLTAGE	85 to 270V AC, 50/60Hz	DC : 30 to 60V ; AC : 18 to 36V, 50/60Hz

Terminal Connections



Dimensions (All are in mm)



Ordering Information

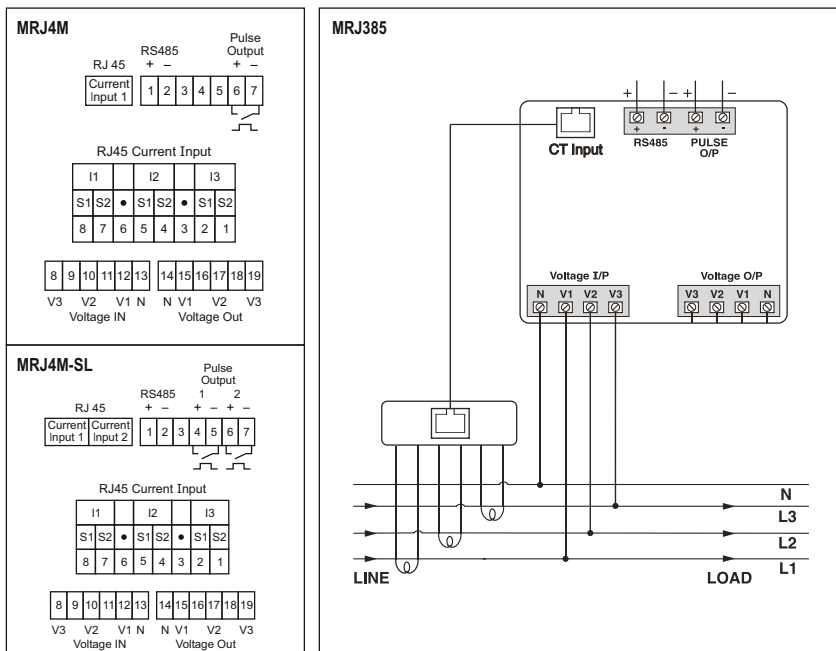
PRODUCT CODE	SUPPLY VOLTAGE	OUTPUT	CERTIFICATION
MFM384-R-C	85 to 270V AC	Commn (RS485)	---
MFM384-R-C-CE			CE RoHS
MFM384-R-C-48V DC	DC : 30 to 60V AC : 18 to 36V	Commn (RS485)	---

Plug-n-Wire Multifunction Meters

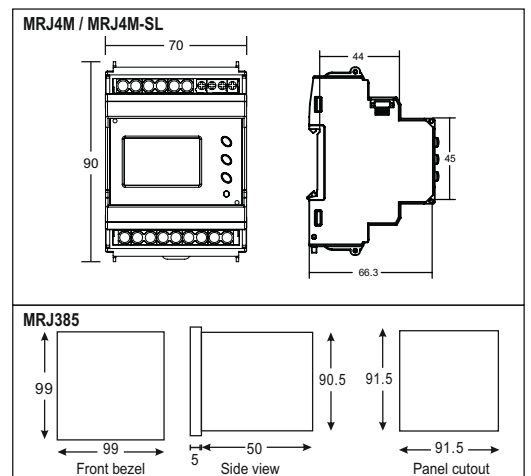


FEATURES	<ul style="list-style-type: none"> Energy (Active, Reactive) RJ45 Connector current input Single Pulse Output. Max Demand of Power Self powered 	<ul style="list-style-type: none"> Energy (Active, Reactive) RJ45 Connector current input 2 Pulse Output. Max Demand of Power Self powered 	<ul style="list-style-type: none"> Energy (Active, Reactive, Apparent) Split load, RJ45 for current input Single Pulse Output. Max / Min Demand of Power Self Powered THD upto 31st Level
DISPLAY	LCD with backlight		
DIGITS	2 Rows of 4 digits, 1 Row of 7 digits to show electrical parameters		4 rows of 4 digits, Bargraph representation for current, 1 row of 8 digits for energy display
ELECTRICAL CONNECTION	3Ø - 4W, 1Ø - 2W		
RATED INPUT VOLTAGE	60 to 300V AC (L-N), 104 to 520V AC (L-L)		100 to 240V AC (L-N), 173 TO 415V AC (L-L)
RESOLUTION	For Energy : 0.01K, 0.1K, 1K, 0.01M, 0.1M (depending upon CT ratio x PT ratio) For Power, Voltage, Current : Auto resolution For Power Factor : 0.01		For Energy : 0.01K, 0.1K, 1K, 0.01M, 0.1M, 1M (depending upon CT ratio x PT ratio) For Power, Voltage, Current : Auto resolution For Power Factor : 0.01
CT PRIMARY	5A to 10kA (Programmable for any value)		
CT SECONDARY	330mV		
PT PRIMARY	100V to 10kV		100V to 500kV (Programmable for any value)
PT SECONDARY	100 to 500V AC (L-L) (Programmable for any value)		173 to 415V AC (L-L) (Programmable for any value)
COMMUNICATION	RS485 Communication MODBUS RTU Protocol (Optional)		
INDICATIONS	LCD : Max demand of power, communication in progress ; LED : Integration of energy		LCD : Max / Min demand of power, communication in progress ; Integration of energy, Unit in Configuration Menu
MEASURING PARAMETER	Voltage (L-L / L-N) (Individual / Average), Current (I1, I2, I3) (Individual / Average), Frequency, Power factor (Individual / Average), Active, Reactive, Apparent power (Individual / Total), Active & Reactive Energy, Demand (Max Active Power, Max Apparent Power)	Voltage (L-L / L-N) (Individual / Average), Current (I1, I2, I3) (Individual), Frequency, Power factor (Individual / Average), Active, Reactive, Apparent power (Individual / Total), Active & Reactive Energy, Total Active & Reactive Energy (Current input-1 plus current Input-2), Demand (Max Active Power, Max Apparent Power)	Voltage (L-L / L-N) (Individual / Average), Current (I1, I2, I3) (Individual / Average), Frequency, Power factor (Individual / Average), Active, Reactive, Apparent power (Individual / Total), Active, Reactive, Apparent Energy (Phase wise (Import / Export) & Total (Import / Export)), Demand (Min / Max Active Power, Min / Max Reactive Power, Max Apparent Power), Harmonics individual for voltage & Current upto 31st level.
SUPPLY VOLTAGE	Self powered		

Terminal Connections



Dimensions (All are in mm)



Ordering Information

PRODUCT CODE	OUTPUT		CERTIFICATION
	PULSE OUTPUT	COMM (RS485)	
MRJ4M	■	■	CE RoHS
MRJ4M-SL	■	■	CE RoHS
MRJ385-G-PNW	■	■	CE RoHS

Energy Meters



EM306B
Size : 96 x 96mm



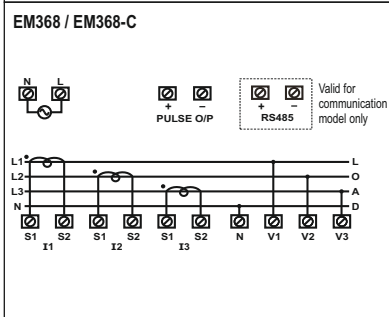
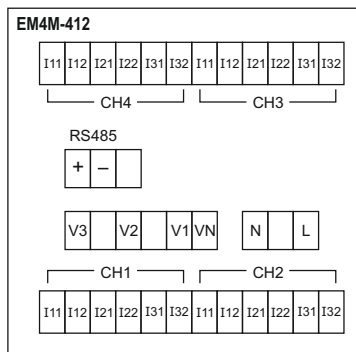
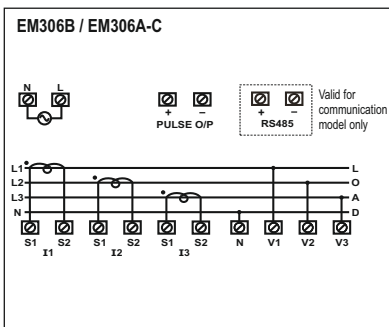
EM368
Size : 96 x 96mm



EM4M-412
Size : 70 x 90mm

FEATURES	<ul style="list-style-type: none"> Potential Free Pulse Output for Energy Active Energy 	<ul style="list-style-type: none"> Potential Free Pulse Output for Energy Power (Active / Reactive) Energy (Active / Reactive / Apparent) 	<ul style="list-style-type: none"> Four Loads (3 Ø), 12 Loads (1 Ø) Energy Monitoring Power (Active / Reactive / Apparent) Energy (Active / Reactive / Apparent)
DISPLAY	7 segment LED	LCD with Backlight	LCD with Backlight
DIGITS	6 digits	8 digits	2 Rows of 4 digits, 1 Row of 7 digits to show electrical parameters
ELECTRICAL CONNECTION	3 Ø - 4 W, 3 Ø - 3 W, 2 Ø - 3 W, 1 Ø - 2 W		
RATED INPUT VOLTAGE	11 to 300V AC (L-N), 19 to 519V AC (L-L)		
RATED INPUT CURRENT	Nominal 5AAC (min : 11mA; max : 6A)		Nominal 1AAC (min : 11mA; max : 1.2A)
RESOLUTION	0.01K, 0.1K, 1K & 10K (depending on CT ratio)	For energy : 0.01k, 0.1k, 1k, 0.01M, 0.1M, 1M, 10M (depending upon CT ratio x PT ratio) For Power : Auto resolution, For Power factor : 0.01	For Energy : 0.01k, 0.1k, 1k, 0.01M, 0.1M, 1M
ACCURACY	Class 1	Active Energy : Class 1, Reactive / Apparent Energy : ±1% Active / Reactive power : ±1%, PF & Avg. PF : ±1%	Active Energy : 1%
POWER CONSUMPTION	8VA Max		
CT PRIMARY	1 / 5A to 10kA (Programmable for any value)		1A to 10kA (Programmable for any value)
CT SECONDARY	1 or 5A (Programmable)		1A
PT PRIMARY	100V to 500kV (For EM306B)	100V to 500kV (Programmable for any value)	100V to 10kV (Programmable for any value)
PT SECONDARY	100V to 500V AC (L-L) (For EM306B)	100V to 500V AC (L-L) (Programmable for any value)	100V to 500V AC (L-L) (Programmable for any value)
COMMUNICATION	RS485 Communication MODBUS RTU Protocol (For EM306A-C)	RS485 Communication MODBUS RTU Protocol (Optional)	
MEASURING PARAMETER	Active Energy (kWh) Resettable	Power (Total Active / Reactive), Energy (Total Active / Reactive / Apparent), Power factor (Individual & Average)	Voltage, Current, Frequency, PF, 4 Loads & 12 Loads Energy, (Active, Reactive, Apparent), Power (Active, Reactive, Apparent)
LED INDICATIONS	Integration of energy, Resolution is 10, Reverse connected CT warning	Integration of energy, Resolution is 10, Reverse connected CT warning, Communication in progress, pulse output (All Indications on LCD)	Integration of energy
SUPPLY VOLTAGE	230V AC ±20% (50/60Hz) For EM306B 100V to 240V AC, -15% to +12% (50/60Hz) For EM306A-C	100 to 240V AC, -15% to +12%, 50/60Hz (±5%)	85 to 270V AC, (50/60Hz)

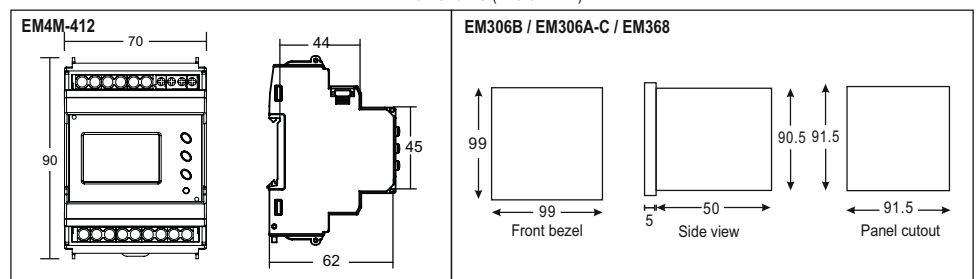
Terminal Connections



Ordering Information

PRODUCT CODE	SUPPLY VOLTAGE	OUTPUT		CERTIFICATION
		PULSE OUTPUT	COMM. (RS485)	
EM368	100 to 240V AC, -15% to +12%	■	---	---
EM368-C		■	■	---
EM368-CU		■	---	CE RoHS
EM368-C-CU	230V AC, ±20%	■	■	CE RoHS
EM306B		■	---	---
EM306A - C	100V to 240V AC, -15% to +12%	■	■	---
EM4M-412	85 to 270V AC	---	■	---
EM4M-412-CE	85 to 270V AC	---	■	CE RoHS

Dimensions (All are in mm)



VAF Meters - Digital



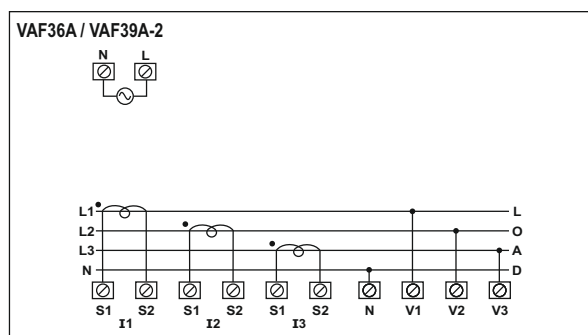
VAF36A
Size : 96 x 96mm



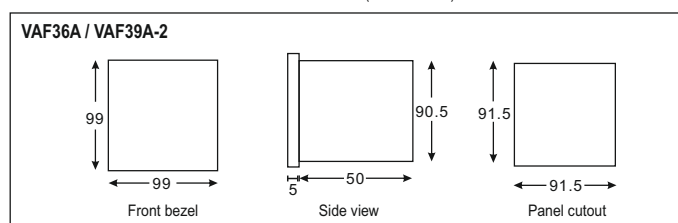
VAF39A-2
Size : 96 x 96mm

FEATURES	<ul style="list-style-type: none"> • 3Ø (True RMS) Voltage & Current • Frequency • Run Hour (Hour - Mins) • RPM • Analog Style Bargraph Indication 	<ul style="list-style-type: none"> • 3Ø (True RMS) Voltage & Current • Frequency • Run Hour (Hour - Mins) • RPM • Programmable CT Secondary
DISPLAY	LCD (with Backlight)	7 segment LED integrated with parameter units
DIGITS	3 Rows , 3 digits	
ELECTRICAL CONNECTION	3Ø - 4W, 3Ø - 3W, 2Ø - 3W, 1Ø - 2W	
RATED INPUT VOLTAGE	11 to 300V AC (L-N), 19 to 519V AC (L-L)	
RATED INPUT CURRENT	Nominal 5A (min : 20mA , max : 6A)	Nominal 5A (min : 30mA , max : 6A)
RESOLUTION	Current & Voltage : Depending on CT & PT primary setting, RPM : 0.1, Run Hour : 0.1hr	
ACCURACY	Voltage(L-N/L-L/ Average) : ± 0.5% of F.S. ± 2 digits, Current & Average Current : ± 1% of F.S. ± 2 digits, Run Hour : ± 1%, RPM : ± 0.5%, Frequency : ± 0.1 Hz ± 1 digit	
CT PRIMARY	5A to 10kA (Programmable for any value)	
CT SECONDARY	5A fixed	1 or 5A (Programmable)
PT PRIMARY	100V to 500kV (Programmable for any value)	
PT SECONDARY	100 to 500V AC (L-L) (Programmable for any value)	
MEASURING PARAMETER	Voltage (L-N / L-L) (Individual / Average), Current (I1, I2, I3) (Individual / Average), Frequency, RPM , Run Hour	
SUPPLY VOLTAGE	230V AC ±20% (50/60 Hz), 110V AC ±20% (50/60 Hz)	230V AC ±20% (50/60 Hz)

Terminal Connections



Dimensions (All are in mm)



Ordering Information

PRODUCT CODE	SUPPLY VOLTAGE		CERTIFICATION
	110V AC	230V AC	
VAF36A-230-CE	---	■	CE RoHS
VAF36A-110V-CU	■	---	CE RoHS
VAF39A-2-230V AC	---	■	---

Voltmeter - Digital



MV15
Size : 48 x 96mm

MV15-DC-200V
Size : 48 x 96mm

MV15-AC-20/200V
Size : 48 x 96mm

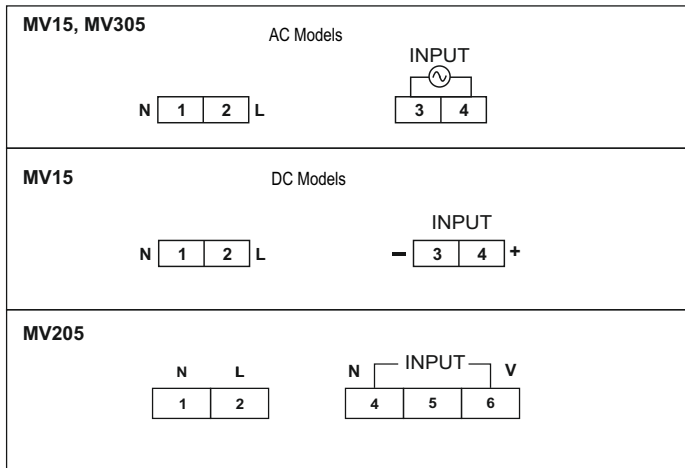
MV205
Size : 72 x 72mm

MV305
Size : 96 x 96mm

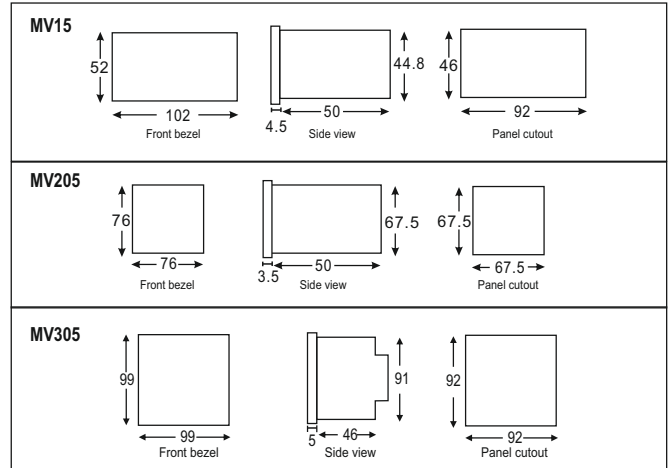
MV334-230V
Size : 96 x 96mm

FEATURES	<ul style="list-style-type: none"> • True RMS Measurement • 1Ø - 2W Electrical Network 	<ul style="list-style-type: none"> • True RMS Measurement • 1Ø - 2W Electrical Network 	<ul style="list-style-type: none"> • True RMS Measurement • 1Ø - 2W Electrical Network 	<ul style="list-style-type: none"> • True RMS Measurement • 1Ø - 2W Electrical Network 	<ul style="list-style-type: none"> • True RMS Measurement • 1Ø - 2W Electrical Network 	<ul style="list-style-type: none"> • True RMS Measurement • 3Ø - 4W, 3Ø - 3W, 1Ø - 2W Electrical Network • K LED for Kilo Indication
DISPLAY	7 segment LED					
DIGITS	3 digits	3½ digits			3 digits	4 digits
ELECTRICAL CONNECTION	1Ø - 2W					3Ø - 4W, 3Ø - 3W, 1Ø - 2W
RATED INPUT VOLTAGE	50 to 480V AC (516V max)	0 to ±200V	0 to 20/200V	50 to 480V AC (516V max)		11 to 300V AC (L-N) 19 to 516V AC (L-L)
RESOLUTION	1V	0.1	0.01 / 0.1	1V		Auto Resolution
ACCURACY	± 0.5% of full scale over rated operating condition					± 0.5% of full range
PT PRIMARY	--					100V - 999kV
PT SECONDARY	--					100V - 500V
SUPPLY VOLTAGE	240V AC ±20% (50/60Hz), 110V AC ±20% (60Hz)					230V AC ±20% (50/60Hz)

Terminal Connections



Dimensions (All are in mm)



Ordering Information

PRODUCT CODE	SUPPLY VOLTAGE		CERTIFICATION
	110V AC	230V AC	
MV15	---	■	---
MV15-110V-CU	■	---	CE RoHS
MV15-230V-CE	---	■	CE RoHS
MV15-DC-2V	---	■	---
MV15-DC-20V	---	■	---
MV15-DC-20V-110V-CU	■	---	CE RoHS
MV15-DC-200V	---	■	---
MV15-DC-200V-110V-CU	■	---	CE RoHS

PRODUCT CODE	SUPPLY VOLTAGE		CERTIFICATION
	110V AC	230V AC	
MV15-DC-200mV	---	■	---
MV15-AC-20/200V	---	■	---
MV15-AC-200/2000mV	---	■	---
MV205	---	■	---
MV305	---	■	---
MV305-110V	■	---	---
MV334-230V	---	■	---

Ammeter - Digital



MA12
Size : 48 x 96mm

MA12-DC-2mA
Size : 48 x 96mm

MA12-AC-2/20mA
Size : 48 x 96mm



MA202
Size : 72 x 72mm



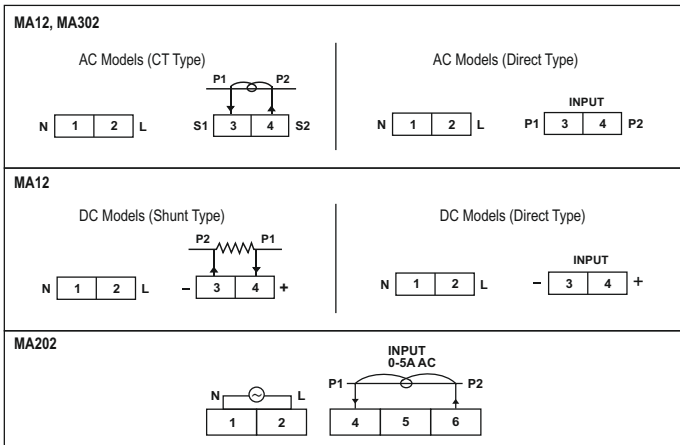
MA302
Size : 96 x 96mm



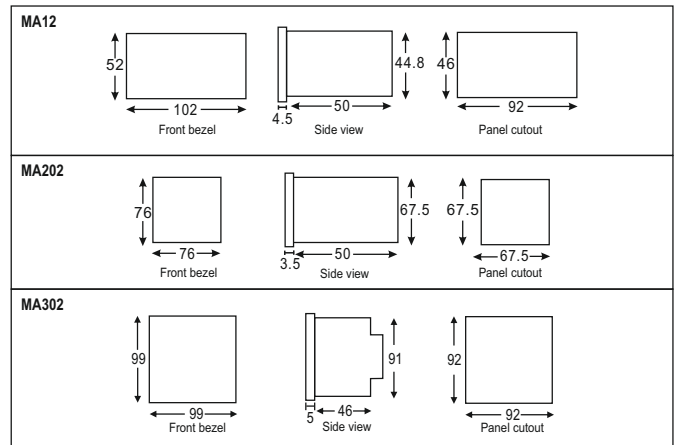
MA335-230V AC
Size : 96 x 96mm

FEATURES	<ul style="list-style-type: none"> • True RMS Measurement • 1Ø - 2W Electrical Network 		<ul style="list-style-type: none"> • True RMS Measurement • 1Ø - 2W Electrical Network • CT Primary Programmable Upto 4000A 		<ul style="list-style-type: none"> • True RMS Measurement • K LED for Kilo Indication
	DISPLAY	7 segment LED			
DIGITS	4 digits	3½ digits		4 digits	
ELECTRICAL CONNECTION	1Ø - 2W			3Ø - 4W, 3Ø - 3W, 1Ø - 2W	
INPUT TYPE	CT	Direct		CT	
RATED INPUT CURRENT	5AAC (min : 50mA, max : 6.2A)	0 to ± 2mA	0 to 2/20mA	5AAC (min : 50mA ; max : 6.2A)	
RESOLUTION	0.001, 0.01, 0.1, 1A (depending upon CT primary settings)	0.001	0.001 / 0.01	0.001, 0.01, 0.1, 1A (depending upon CT primary settings)	
ACCURACY	± 0.5% of full scale				
CT PRIMARY	5 to 4000A (Programmable in steps)	---	---	5 to 4000A (Programmable in steps)	
CT SECONDARY	5A Fixed	---	---	5A Fixed	
SUPPLY VOLTAGE	240V AC ±20% (50/60Hz), 110V AC ±20% (60Hz)			230V AC ±20% (50/60Hz)	

Terminal Connections



Dimensions (All are in mm)



Ordering Information

PRODUCT CODE	SUPPLY VOLTAGE		CERTIFICATION
	110V AC	230V AC	
MA12	---	■	---
MA12-110V-CU	■	---	CE RoHS
MA12-CE-RoHS	---	■	CE RoHS
MA12-AC-2/20mA	---	■	---
MA12-AC-200/2000mA	---	■	---
MA12-50mV-DC	---	■	---
MA12-50mV-DC-110V-CU	■	---	CE RoHS
MA12-DC-2mA	---	■	---

PRODUCT CODE	SUPPLY VOLTAGE		CERTIFICATION
	110V AC	230V AC	
MA12-DC-20mA	---	■	---
MA12-DC-200mA	---	■	---
MA12-20A-AC-110V	■	---	---
MA202	---	■	---
MA302	---	■	---
MA335-230V AC	---	■	---

Ammeter - Digital

Voltmeter - Digital



MA501 / MA201
Size : 48 x 48mm / 72 x 72mm



MA2301
Size : 72 x 72mm



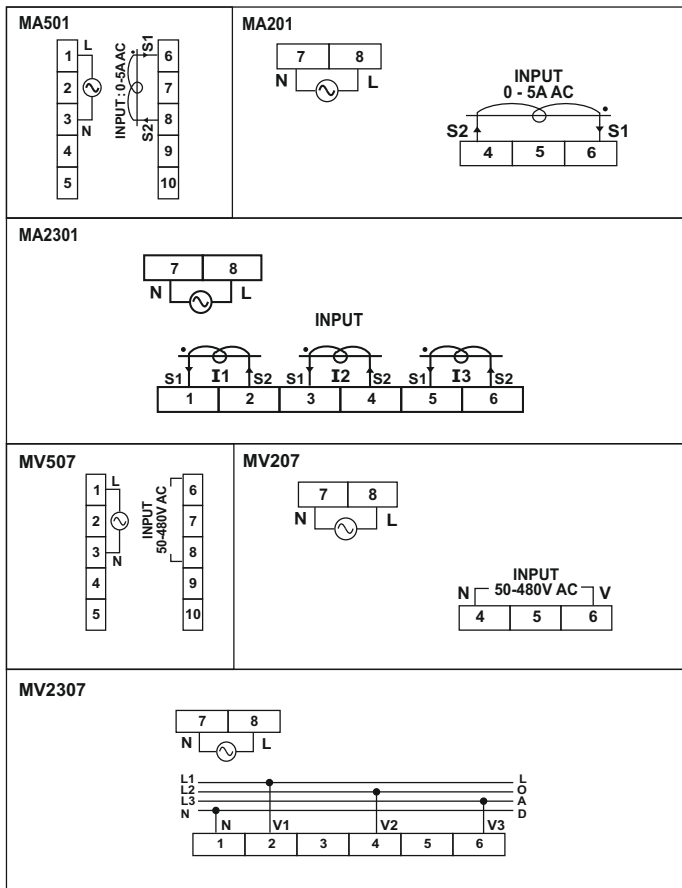
MV507 / MV207
Size : 48 x 48mm / 72 x 72mm



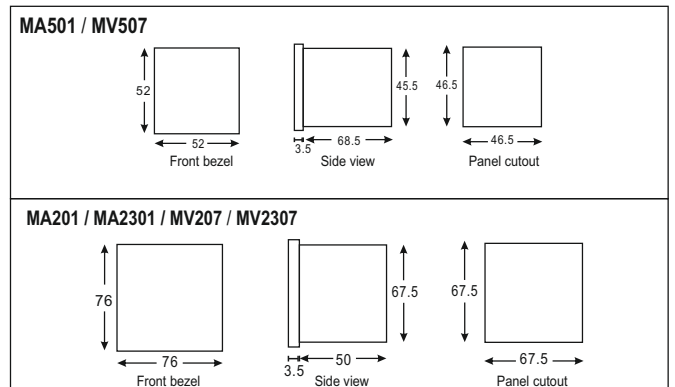
MV2307
Size : 72 x 72mm

FEATURES	Ammeter		Voltmeter	
	<ul style="list-style-type: none"> • True RMS Measurement • 1Ø - 2W Electrical Network • Analog Style Bargraph Indication • CT Primary Programmable Upto 5000A 	<ul style="list-style-type: none"> • True RMS Measurement • 3Ø - 4W Electrical Network • Analog Style Bargraph Indication • CT Primary Programmable Upto 5000A • Page Selection Using Selector Switch 	<ul style="list-style-type: none"> • True RMS Measurement • 1Ø - 2W Electrical Network • Analog Style Bargraph Indication 	<ul style="list-style-type: none"> • True RMS Measurement • 3Ø - 4W, 3Ø - 3W Electrical Network • Analog Style Bargraph Indication • Page Selection using Selector Switch
DISPLAY	LCD (with analog style bargraph indication)			
DIGITS	4 Digits		3 Digits	
ELECTRICAL CONNECTION	1Ø - 2W	3Ø - 4W	1Ø - 2W	3Ø - 4W, 3Ø - 3W
RATED INPUT VOLTAGE	--		50 to 480V AC (max : 516V)	
RATED INPUT CURRENT	5A AC (min : 50mA ; max : 6.2A)		--	
RESOLUTION	0.001, 0.01, 0.1, 1A (Depending on CT primary settings)		1V	
ACCURACY	± 0.5% of F.S.		± 0.5% of F.S. Over rated operating condition	
CT PRIMARY	5 to 5000A (Programmable in steps)		--	
CT SECONDARY	5A Fixed		--	
SUPPLY VOLTAGE	240V AC ±20% (50/60Hz), 110V AC ±20% (60Hz)			

Terminal Connections



Dimensions (All are in mm)



Ordering Information

PRODUCT CODE	SUPPLY VOLTAGE		CERTIFICATION
	110V AC	230V AC	
MA501	---	■	---
MA501-110V-CU	■	---	CE RoHS ^{LF}
MA501-230V-CE	---	■	CE RoHS
MA201	---	■	---
MA201-110V-CU	■	---	CE RoHS ^{LF}
MA201-230V-CE	---	■	CE RoHS
MA2301	---	■	---
MA2301-110V-CU	■	---	CE RoHS ^{LF}
MA2301-230V-CE	---	■	CE RoHS
MV507	---	■	---
MV507-110V-CU	■	---	CE RoHS ^{LF}
MV507-230V-CE	---	■	CE RoHS
MV207	---	■	---
MV2307	---	■	---
MV2307-110V-CU	■	---	CE RoHS ^{LF}
MV2307-230V-CE	---	■	CE RoHS

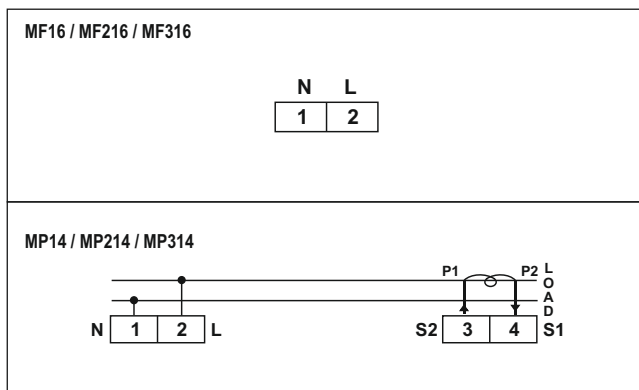
Frequency Meter - Digital

Power Factor Meters - Digital

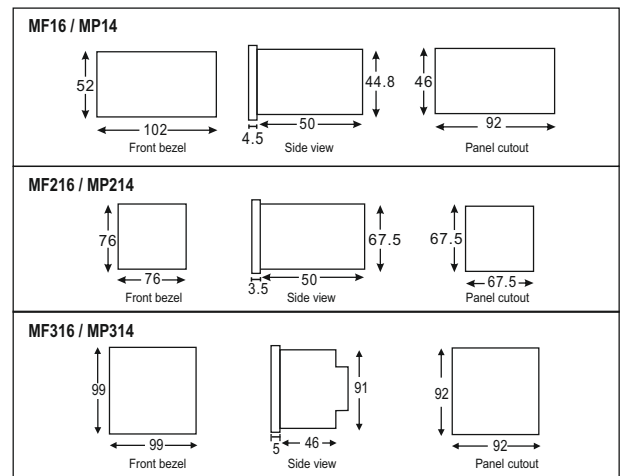


FEATURES	MF16 Size : 48 x 96mm	MF216 Size : 72 x 72mm	MF316 Size : 96 x 96mm	MP14 Size : 48 x 96mm	MP214 Size : 72 x 72mm	MP314 Size : 96 x 96mm
DISPLAY	7 segment LED					
DIGITS	4 digits					
ELECTRICAL CONNECTION	1Ø - 2W					
RESOLUTION	0.01Hz			0.001		
ACCURACY	± 0.05Hz			± 0.5% ± 1 digit		
MEASUREMENT RANGE	45 to 65Hz			-1.000 to +1.000		
SUPPLY VOLTAGE	240V AC ±20% (45 to 65Hz), 110V AC ±20% (45 to 65Hz)			240V AC ±20% (50/60Hz), 110V AC ±20% (50/60Hz)		

Terminal Connections



Dimensions (All are in mm)



Ordering Information

PRODUCT CODE	SUPPLY VOLTAGE		CERTIFICATION
	110V AC	230V AC	
MF16	---	■	---
MF16-110V-CU	■	---	CE RoHS
MF216	---	■	---
MF316	---	■	---

PRODUCT CODE	SUPPLY VOLTAGE		CERTIFICATION
	110V AC	230V AC	
MP14	---	■	---
MP14-110V-CU	■	---	CE RoHS
MP214	---	■	---
MP314	---	■	---

Ammeter - Analog

Voltmeter - Analog



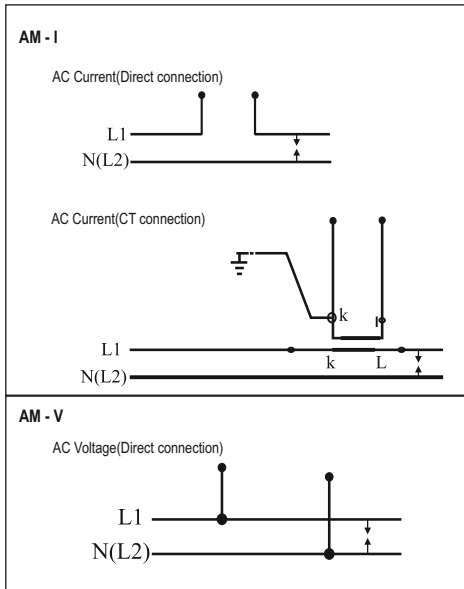
AM - I
Size : 72 x 72mm / 96 x 96mm



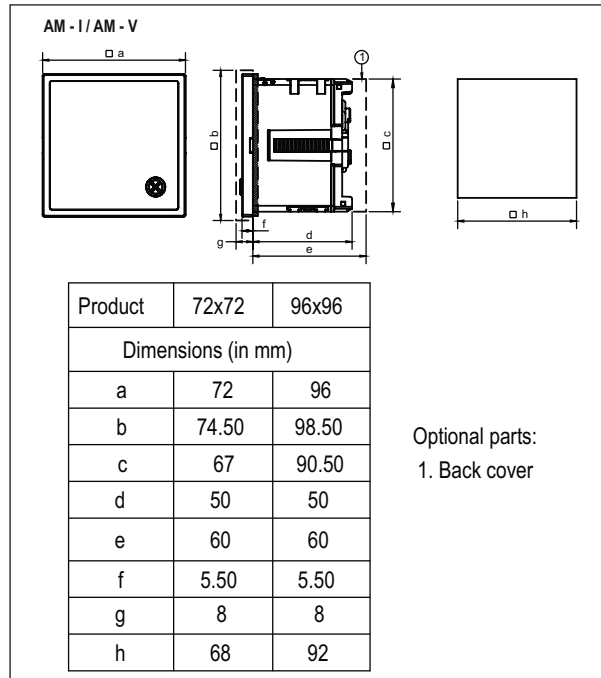
AM - V
Size : 72 x 72mm / 96 x 96mm

FEATURES	<ul style="list-style-type: none"> • Scale Interchangeability • Near Linear Scale • Knife Edge Pointer • Glass filled Nylon / Polycarbonate Housing • Easy Installation / Termination 	<ul style="list-style-type: none"> • Near Linear Scale • Knife Edge Pointer • Glass filled Nylon / Polycarbonate Housing • Easy Installation / Termination
MEASURING PARAMETER	AC Current	AC Voltage
POINTER DEFLECTION	0 to 90°	
SCALE CHARACTERISTICS	Near Linear above 10% of Nominal full scale value	
SCALE LENGTH	72 X 72mm : 63 mm / 96 X 96mm : 97 mm	
MEASURING VOLTAGE RANGE	--	0 to 300V & 0 to 500V
MEASURING CURRENT RANGE	0 to 5A (CT Secondary) , Suppress scale : 0 to 5 / 30A(CT Secondary)	--
ACCURACY	Class 1.5	
FREQUENCY	45 to 65Hz	

Terminal Connections



Dimensions (All are in mm)



Ordering Information

SCL	AM	I	2/3	30/5A to 4000/5A	6S
	AM	V	2/3	N/L	

- 6S : 6 times suppressed scale. Keep this cell blank if suppression not required
- N : 300V L - N, L : 500V L - L (For Voltmeters). Select required available current rating from datasheet (For Ammeters)
- 2 : 72 x 72 mm housing, 3 : 96 x 96 mm housing
- I : Ammeter, V : Voltmeter
- AM : Analog Meter
- SCL : Scale (to order only scale). Keep it blank if whole product is required.

Example:-

Separate dial plate	Ammeter	Voltmeter
SCL-AM-I-2-30/5A	AM-I-2-30/5A	AM-V-2-N
SCL-AM-I-2-30/5A-6S	AM-I-2-30/5A-6S	AM-V-2-L



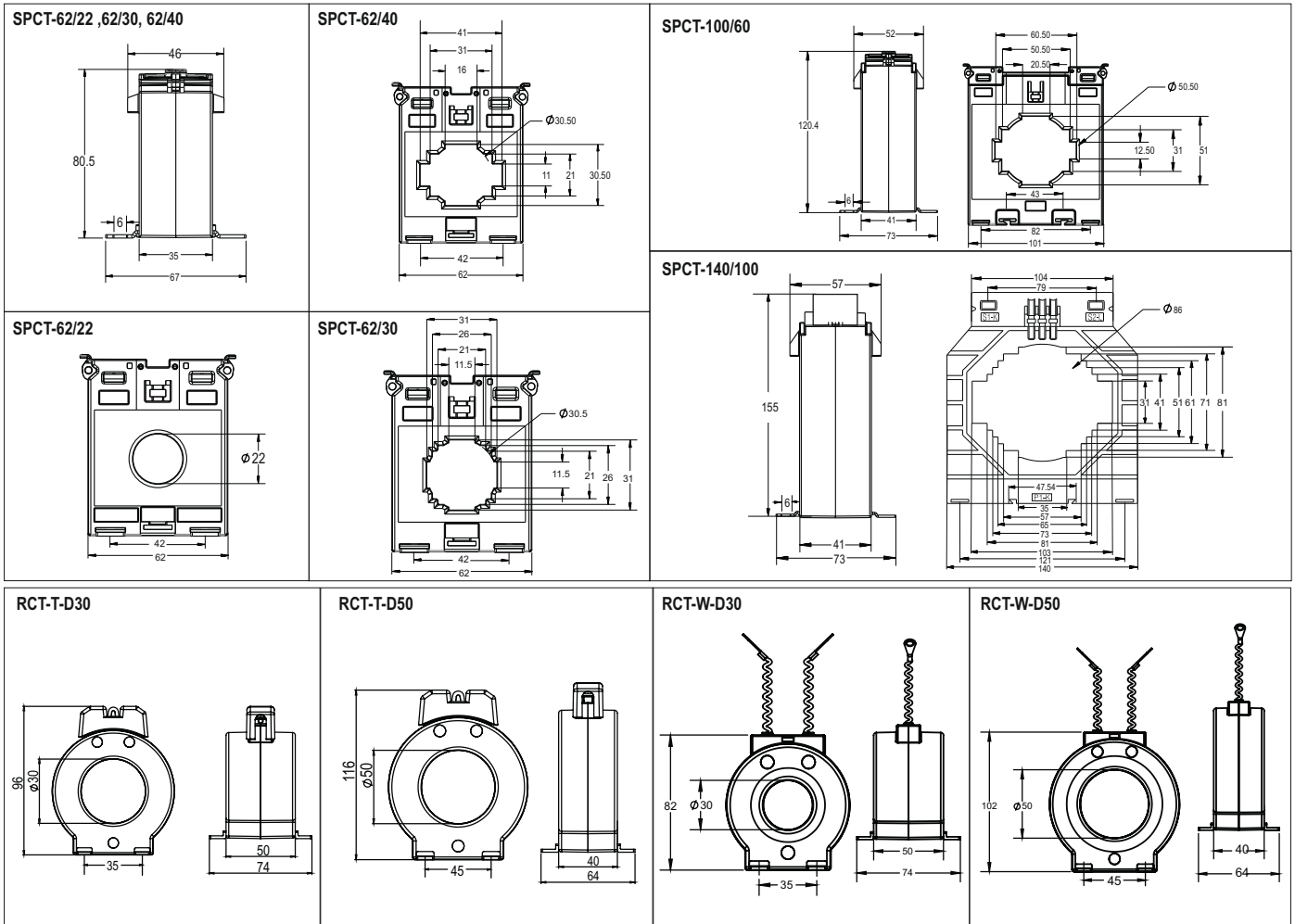
SPCT

RCT

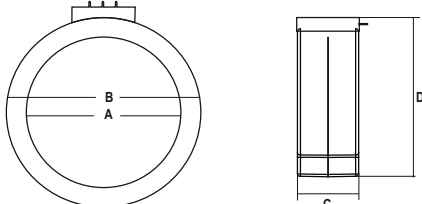
TWCT

FEATURES	<ul style="list-style-type: none"> • Use with different Bus Bar Size • Panel Mount / Din Rail Mount (Require optional accessory) • Accuracy : Class 0.5 to 5 	<ul style="list-style-type: none"> • Selable Terminal / Wire type Output • Panel Mount • Accuracy : Class 1 to 5 	<ul style="list-style-type: none"> • Terminal Output • Accuracy : Class 0.5 to 5
RATED PRIMARY RATING	30 to 4000A	30 to 600A	30 to 1600A
RATED SECONDARY OUTPUT	5A		
RATED BURDEN	1 to 15VA	1.5 to 5VA	1.5 to 10VA
ACCURACY	0.5 to 5	1 to 5	0.5 to 5
OPERATING FREQUENCY	AC 50/60Hz		
SYSTEM VOLTAGE	720V maximum		
APPLICABLE STANDARD	IEC 61869-2		

Dimensions (All are in mm)



Dimensions (All are in mm)

TWCT			PRODUCT	A	B	C	D
				TWCT-T-D35	35	70	45
			TWCT-T-D55 150/5 A	55	90	35	100
			TWCT-T-D55	55	90	25	100
			TWCT-T-D65	65	95	30	105
			TWCT-T-D110	110	35	35	145
			TWCT-T-D120	120	155	25	165

Ordering Information

SPCT

PRODUCT CODE	WIRE APERTURE In mm	CURRENT RATIO	BURDEN IN VA	ACCURACY CLASS
SPCT 62/22 30/5 A VA 1 CL 5	DIA 22	30/5	1	5
SPCT 62/30 50/5 A VA 1 CL 3	30x10	50/5	1	3
SPCT 62/30 50/5 A VA 1.5 CL 3	30x10	50/5	1.5	3
SPCT 62/30 75/5 A VA 1 CL 3	30x10	75/5	1	3
SPCT 62/30 75/5 A VA 3 CL 3	30x10	75/5	3	3
SPCT 62/30 100/5 A VA 1 CL 1	30x10	100/5	1	1
SPCT 62/30 100/5 A VA 3 CL 1	30x10	100/5	3	1
SPCT 62/40 100/5 A VA 1 CL 1	40x10	100/5	1	1
SPCT 62/40 125/5 A VA 1 CL 1	40x10	125/5	1	1
SPCT 62/40 150/5 A VA 1.5 CL 1	40x10	150/5	1.5	1
SPCT 62/40 150/5 A VA 3 CL 1	40x10	150/5	3	1
SPCT 62/40 160/5 A VA 1.5 CL 1	40x10	160/5	1.5	1
SPCT 62/40 200/5 A VA 2.5 CL 0.5	40x10	200/5	2.5	0.5
SPCT 62/40 200/5 A VA 3 CL 1	40x10	200/5	3	1
SPCT 62/40 250/5 A VA 2.5 CL 0.5	40x10	250/5	2.5	0.5
SPCT 62/40 250/5 A VA 3 CL 1	40x10	250/5	3	1
SPCT 62/40 300/5 A VA 3 CL 0.5	40x10	300/5	3	0.5
SPCT 62/40 400/5 A VA 3.75 CL 0.5	40x10	400/5	3.75	0.5
SPCT 62/40 400/5 A VA 5 CL 1	40x10	400/5	5	1
SPCT 100/60 500/5 A VA 5 CL 1	60x12	500/5	5	1
SPCT 100/60 600/5 A VA 5 CL 0.5	60x12	600/5	5	0.5
SPCT 100/60 600/5 A VA 7.5 CL 1	60x12	600/5	7.5	1
SPCT 100/60 800/5 A VA 10 CL 0.5	60x12	800/5	10	0.5
SPCT 100/60 1000/5 A VA 15 CL 0.5	60x12	1000/5	15	0.5
SPCT 100/60 1200/5 A VA 15 CL 0.5	60x12	1200/5	15	0.5
SPCT 140/100 800/5 A VA 15 CL 0.5	100x30	800/5	15	0.5
SPCT 140/100 1000/5 A VA 15 CL 0.5	100x30	1000/5	15	0.5
SPCT 140/100 1200/5 A VA 15 CL 0.5	100x30	1200/5	15	0.5
SPCT 140/100 1250/5 A VA 15 CL 0.5	100x30	1250/5	15	0.5
SPCT 140/100 1500/5 A VA 15 CL 0.5	100x30	1500/5	15	0.5
SPCT 140/100 1600/5 A VA 15 CL 0.5	100x30	1600/5	15	0.5
SPCT 140/100 2000/5 A VA 15 CL 0.5	100x30	2000/5	15	0.5
SPCT 140/100 2500/5 A VA 15 CL 0.5	100x30	2500/5	15	0.5
SPCT 140/100 3000/5 A VA 15 CL 0.5	100x30	3000/5	15	0.5
SPCT 140/100 3500/5 A VA 15 CL 0.5	100x30	3500/5	15	0.5
SPCT 140/100 4000/5 A VA 15 CL 0.5	100x30	4000/5	15	0.5

RCT

PRODUCT CODE	WIRE APERTURE In mm	CURRENT RATIO	BURDEN IN VA	ACCURACY CLASS	NO OF PRIMARY TURNS
RCT-T-D30-30/5 A VA 1.5 CL5	DIA 30	30/5	1.5	5	---
RCT-T-D30-30/5 A VA 5 (2T) CL5	DIA 30	30/5	5	5	2
RCT-T-D30-50/5 A VA 5 CL5	DIA 30	50/5	5	5	---
RCT-T-D30-75/5 A VA 5 CL5	DIA 30	75/5	5	5	---
RCT-T-D30-100/5 A VA 5 CL1	DIA 30	100/5	5	1	---
RCT-T-D30-150/5 A VA 5 CL1	DIA 30	150/5	5	1	---
RCT-T-D50-200/5 A VA 5 CL1	DIA 50	200/5	5	1	---
RCT-T-D50-250/5 A VA 5 CL1	DIA 50	250/5	5	1	---
RCT-T-D50-300/5 A VA 5 CL1	DIA 50	300/5	5	1	---
RCT-T-D50-400/5 A VA 5 CL1	DIA 50	400/5	5	1	---
RCT-T-D50-500/5 A VA 5 CL1	DIA 50	500/5	5	1	---
RCT-T-D50-600/5 A VA 5 CL1	DIA 50	600/5	5	1	---
RCT-W-D30-30/5 A VA 1.5 CL5	DIA 30	30/5	1.5	5	---
RCT-W-D30-30/5 A VA 5 (2T) CL5	DIA 30	30/5	5	5	2
RCT-W-D30-50/5 A VA 5 CL5	DIA 30	50/5	5	5	---
RCT-W-D30-75/5 A VA 5 CL5	DIA 30	75/5	5	5	---
RCT-W-D30-100/5 A VA 5 CL1	DIA 30	100/5	5	1	---
RCT-W-D30-150/5 A VA 5 CL1	DIA 30	150/5	5	1	---
RCT-W-D50-200/5 A VA 5 CL1	DIA 50	200/5	5	1	---
RCT-W-D50-250/5 A VA 5 CL1	DIA 50	250/5	5	1	---
RCT-W-D50-300/5 A VA 5 CL1	DIA 50	300/5	5	1	---
RCT-W-D50-400/5 A VA 5 CL1	DIA 50	400/5	5	1	---
RCT-W-D50-500/5 A VA 5 CL1	DIA 50	500/5	5	1	---
RCT-W-D50-600/5 A VA 5 CL1	DIA 50	600/5	5	1	---

TWCT

PRODUCT CODE	WIRE APERTURE In mm	CURRENT RATIO	BURDEN IN VA	ACCURACY CLASS
TWCT-T-D35 30/5 A VA 1.5 CL 5	DIA 35	30/5	1.5	5
TWCT-T-D35 50/5 A VA 5 CL 5	DIA 35	50/5	5	5
TWCT-T-D35 75/5 A VA 5 CL 5	DIA 35	75/5	5	5
TWCT-T-D35 100/5 A VA 5 CL 1	DIA 35	100/5	5	1
TWCT-T-D35 150/5 A VA 5 CL 1	DIA 35	150/5	5	1
TWCT-T-D55 150/5 A VA 5 CL 1	DIA 55	150/5	5	1
TWCT-T-D55 200/5 A VA 5 CL 1	DIA 55	200/5	5	1
TWCT-T-D55 250/5 A VA 5 CL 1	DIA55	250/5	5	1
TWCT-T-D55 300/5 A VA 5 CL 1	DIA 55	300/5	5	1
TWCT-T-D55 400/5 A VA 5 CL 1	DIA 55	400/5	5	1
TWCT-T-D65 500/5 A VA 5 CL 1	DIA 65	500/5	5	1
TWCT-T-D65 600/5 A VA 5 CL 1	DIA 65	600/5	5	1
TWCT-T-D110 800/5 A VA 10 CL 0.5	DIA 110	800/5	10	0.5
TWCT-T-D110 1000/5 A VA 10 CL 0.5	DIA 110	1000/5	10	0.5
TWCT-T-D120 1000/5 A VA 10 CL 0.5	DIA 120	1000/5	10	0.5
TWCT-T-D120 1200/5 A VA 10 CL 0.5	DIA 120	1200/5	10	0.5
TWCT-T-D120 1600/5 A VA 10 CL 0.5	DIA 120	1600/5	10	0.5