

# Electrical Meters

- Performance
- Elegance
- Innovation



- Multifunction Meters
- Energy Meters
- VAF Meters
- Panel Meters

For  
Dual Source / Din Rail /  
Harmonics / 24V DC Versions  
Consult Factory



MFM384



MFM383A

DESCRIPTION	MULTIFUNCTION METER	MULTIFUNCTION METER																																								
<b>Functions</b>	<ul style="list-style-type: none"> <li>• 3 Ø (True rms) Voltage</li> <li>• 3 Ø (True rms) Current</li> <li>• 3 Ø Power (Active, Reactive, Apparent)</li> <li>• 3 Ø Power Factor</li> <li>• Frequency</li> <li>• Energy (Active, Reactive, Apparent)</li> <li>• Programmable CT/PT Primary/Secondary</li> <li>• Modbus RTU Communication (RS485) (Optional)</li> <li>• Pulse Output</li> <li>• Demand (Min / Max Active Power, Min / Max Reactive Power, Max Apparent Power)</li> </ul>	<ul style="list-style-type: none"> <li>• 3 Ø (True rms) Voltage</li> <li>• 3 Ø (True rms) Current</li> <li>• 3 Ø Power (Active, Reactive, Apparent)</li> <li>• 3 Ø Power Factor</li> <li>• Frequency</li> <li>• Energy (Active)</li> <li>• Programmable CT/PT Primary/Secondary</li> <li>• Modbus RTU Communication (RS485) (Optional)</li> <li>• Pulse Output</li> </ul>																																								
<b>Display</b>	Liquid crystal display with backlight																																									
<b>Digits</b>	4 rows of 4 digits, 1 row of 8 digits for energy display Bargraph representation of current	3 rows of 4 digits, 7½ digits for energy																																								
<b>Input Type</b>	3 Ø - 3/4 wire, 2 Ø - 3 wire, 1 Ø - 2 wire																																									
<b>Rated input Voltage</b>	11 to 300V AC max phase to neutral, 50/60Hz 19 to 519V AC max phase to phase, 50/60Hz																																									
<b>Voltage Burden (max)</b>	0.2VA@ 300V (L-N)																																									
<b>Rated input Current</b>	10mA - 5A (6A max) (External CT must be connected for current more than 5A)																																									
<b>Current Burden (max)</b>	0.5VA@ 5A per phase																																									
<b>Frequency</b>	45 to 65 Hz																																									
<b>Resolution</b>	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- 0.01k, 0.1k, 1k (depending upon CT ratio X PT ratio) For Power, Voltage & Current- Auto resolution For Power factor - 0.001																																								
<b>Accuracy Class</b>	Class 1 for Active/Reactive/Apparent energy 1% for Active/Reactive/Apparent power ±0.5% of FS for $V_{L-L}$ , $V_{L-N}$ , Avg. $V_{L-N}$ , Avg. $V_{L-L}$ , I, Avg. I ±0.1% for Frequency ±1% for Power factor and Avg. Power factor																																									
<b>CT Primary</b>	1A / 5A upto 10,000A (Programmable for any Value) Note : 1A or 5A depends upon the CT secondary																																									
<b>CT Secondary</b>	1A or 5A (Programmable)																																									
<b>PT Primary</b>	100V to 500 kV (Programmable for any Value)	100V to 10000V (Programmable for any Value)																																								
<b>PT Secondary</b>	100V to 500V AC (phase to phase) (Programmable for any Value)	100V to 500V (Programmable for any Value)																																								
<b>Supply Voltage</b>	85 to 270V AC (50/60Hz), (Power Consumption : Less than 8VA)																																									
<b>Display Scrolling</b>	Automatic / Manual																																									
<b>LCD/LED Parameter Indications</b>	1) Numerical display for all measured parameters 2) Percentage of current in bar graph form	Numerical display for all measured parameters																																								
<b>Display Reset</b>	Available (Password Protected)																																									
<b>Memory Retention for Energy</b>	10 years																																									
<b>Output</b>	Pulse Output: Voltage range - External 24V DC max. Current capacity - 100 mA max. Pulse Width: 100 ms ± 5 ms.	Pulse Output: Voltage range - External 24V DC max. Current capacity - 100 mA max. Pulse Width: 100 ms ± 5 ms.																																								
<b>Communication</b>	RS485 MODBUS Communication (Optional)																																									
<b>Temperature / Humidity (non-condensing)</b>	Operating: -10°C to 55°C, Storage: -20°C to 75°C / Upto 85% RH																																									
<b>Order Code</b>	<table border="1"> <thead> <tr> <th>Order Code</th> <th>Supply Voltage</th> <th>Output</th> <th>Certification</th> </tr> <tr> <td></td> <td>85-270V AC</td> <td>Pulse Output Commn (RS485)</td> <td>CE cULus LISTED</td> </tr> </thead> <tbody> <tr> <td>MFM384</td> <td>■</td> <td>■</td> <td>■</td> </tr> <tr> <td>MFM384-CU</td> <td>■</td> <td>■</td> <td>■</td> </tr> <tr> <td>MFM384-C</td> <td>■</td> <td>■</td> <td>■</td> </tr> <tr> <td>MFM384-C-CU</td> <td>■</td> <td>■</td> <td>■</td> </tr> </tbody> </table>	Order Code	Supply Voltage	Output	Certification		85-270V AC	Pulse Output Commn (RS485)	CE cULus LISTED	MFM384	■	■	■	MFM384-CU	■	■	■	MFM384-C	■	■	■	MFM384-C-CU	■	■	■	<table border="1"> <thead> <tr> <th>Order Code</th> <th>Supply Voltage</th> <th>Output</th> <th>Certification</th> </tr> <tr> <td></td> <td>85-270V AC</td> <td>Pulse Output Commn (RS485)</td> <td>CE cULus LISTED</td> </tr> </thead> <tbody> <tr> <td>MFM383A</td> <td>■</td> <td>■</td> <td>■</td> </tr> <tr> <td>MFM383A-CU</td> <td>■</td> <td>■</td> <td>■</td> </tr> </tbody> </table> <p><b>Note :</b> For MFM383A-C(Communication version) / MFM383A-C-CU please contact factory.</p>	Order Code	Supply Voltage	Output	Certification		85-270V AC	Pulse Output Commn (RS485)	CE cULus LISTED	MFM383A	■	■	■	MFM383A-CU	■	■	■
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<b>Size (Bezel/Cutout) / Dimensions</b>	(96 x 96 / 92 x 92) / Refer diagram A on page 7																																									
<b>Refer terminal diagram on page no. 6</b>																																										



MFM374



VAF36A



VAF39A

- 3 Ø (True rms) Voltage
- 3 Ø (True rms) Current
- 3 Ø Power (Active, Reactive, Apparent)
- 3 Ø Power Factor
- Frequency
- Energy (Active, Reactive, Apparent)
- Programmable CT/PT Primary/Secondary
- Modbus RTU Communication (RS485) (Optional)
- Pulse Output

7 segment LED

3 rows of 4 digits, 8 digits for energy

3 Ø - 3/4 wire, 2 Ø - 3 wire, 1 Ø - 2 wire

11 to 300V AC max phase to neutral, 50/60Hz

19 to 519V AC max phase to phase, 50/60Hz

0.2VA@ 300V (L-N)

10mA - 5A (6A max)

(External CT must be connected for current more than 5A)

0.5VA@5A per phase

45 to 65 Hz

Auto Resolution

Class 1 for Active/Reactive/Apparent energy

1% for Active/Reactive/Apparent power

±0.5% of FS for  $V_{L-L}$ ,  $V_{L-N}$ , Avg.  $V_{L-N}$ , Avg.  $V_{L-L}$ , I, Avg. I

±0.1% for Frequency

±1% for Power factor and Avg. Power factor

1A / 5A upto 10,000A (Programmable for any Value)

Note : 1A or 5A depends upon the CT secondary

1A or 5A (Programmable)

100V to 500 kV (Programmable for any Value)

100V to 500V AC (phase to phase) (Programmable for any Value)

85 to 270V AC, (Power Consumption : Less than 8VA)

Automatic / Manual

LEDs for all measured parameters

Available (Password Protected)

10 years

Pulse Output: Voltage range - External 24V DC max.

Current capacity - 100 mA max.

Pulse Width: 100 ms ± 5 ms.

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Operating: -10°C to 55°C, Storage: -20°C to 75°C/ Upto 85% RH

Order Code	Supply Voltage	Output		Certification	
	85-270V AC	Pulse Output	Commn (RS485)	CE	cULus LISTED
MFM374	■	■			
MFM374-CU	■	■		■	■

Note : For MFM374-C(Communication version) / MFM374-C-CU please contact factory.

(96 x 96 / 92 x 92) / Refer diagram A on page 7

## DESCRIPTION

### Functions

## VAF METER

- 3 Ø (True rms) Voltage
- 3 Ø (True rms) Current
- Frequency
- Run Hour (Hour - Mins)
- RPM
- Programmable CT Primary, PT Primary & PT Secondary

### Display

Liquid crystal display with backlight

7 segment LED; Height: 0.5"

### Digits

3 rows of 3 digits, Bar graph

3 rows of 3 digits

### Input Type

3 Ø - 3/4 wire, 2 Ø - 3 wire, 1 Ø - 2 wire

### Rated Input Voltage

11 to 300V AC (phase to neutral)  
19 to 519 V AC (phase to phase)

### Rated Input Current

10mA - 5A (6A max)  
(External CT must be connected for current more than 5A)

### Burden (max)

0.5 VA max @ 5A per phase

### Frequency

50 or 60 Hz

### Resolution

Current : 0.01, 0.1, 1 A/kA (Depending on CT primary)  
Voltage : 0.1 V / kV  
RPM : 0.1  
Run Hour : 0.1hr

### Accuracy Class

Voltage(L-N / L-L) : ±0.5% of F.S. ±2digit  
Average Voltage (L-N / L-L) : ±0.5% of F.S. ±2 digit  
Current : ±1% of F.S. ±2 digit  
Average current : ±1% of F.S. ±2 digit  
Frequency : ±0.1Hz ±1digit  
Run Hour : ±1%  
RPM : ±0.5%

### CT Primary

5A to 10,000A (Programmable for any value)

### CT Secondary

5A fixed (External CT must be connected for current more than 5A)

### PT Primary

100V to 500kV (Programmable for any value)

### PT Secondary

100 to 500V AC (L-L) (Programmable for any value)

### Supply Voltage

230V AC, ±20% (50 Hz), 110V AC, ±20% (60 Hz), (Power Consumption : 5VA max.)

### Display Scrolling

Automatic / Manual

### LCD/LED Parameter indications

- 1) Numerical display for all measured parameters
- 2) Percentage of current in bargraph form

LEDs for all measured parameters

### Temperature / Humidity (non-condensing)

Operating: 0°C to 50°C, Storage: -20°C to 75°C/ Upto 85% RH

### Order Code

Order Code	Supply Voltage		Certification	
	110V AC	230V AC	CE	cULus PENDING
VAF36A-230-CE	■	■		
VAF36A-230-CU		■	■	■
VAF36A-110V	■			
VAF36A-110V-CU	■		■	■

Order Code	Supply Voltage		Certification	
	110V AC	230V AC	CE	cULus PENDING
VAF39A-230-CE		■		
VAF39A-230-CU		■	■	■
VAF39A-110V	■			
VAF39A-110V-CU	■		■	■

### Size (Bezel/Cutout) / Dimensions

(96 x 96 / 92 x 92) / Refer diagram A on page 7

Refer terminal diagram on page no. 6

For Dual Source / Din Rail Versions Consult Factory



EM368



EM306A

DESCRIPTION	ENERGY METER	ENERGY METER																																													
<b>Functions</b>	<ul style="list-style-type: none"> <li>• 3Ø Power (Active, Reactive)</li> <li>• 3Ø Power Factor</li> <li>• Energy (Active, Reactive, Apparent)</li> <li>• Programmable CT/PT Primary/Secondary</li> <li>• Modbus RTU Communication (RS485) (Optional)</li> <li>• Pulse Output</li> </ul>	<ul style="list-style-type: none"> <li>• Energy (Active)</li> <li>• Pulse Output</li> <li>• Programmable CT Primary / Secondary</li> </ul>																																													
<b>Display</b>	Liquid crystal display with backlight	LED Display																																													
<b>Digits</b>	8	6																																													
<b>Input Type</b>	3 Ø - 3/4 wire, 2 Ø - 3 wire, 1 Ø - 2 wire																																														
<b>Rated input Voltage</b>	11 to 300V AC max phase to neutral, 50/60Hz 19 to 519V AC max phase to phase, 50/60Hz																																														
<b>Voltage Burden (max)</b>	0.2VA @ 300V (L-N)																																														
<b>Rated Input Current</b>	10mA - 5A (6A max) (External CT must be connected for current more than 5A)																																														
<b>Current Burden (max)</b>	0.5VA @ 5A per phase																																														
<b>Frequency</b>	45 to 65 Hz																																														
<b>Resolution</b>	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, 10k (depending upon CT ratio)																																													
<b>Accuracy Class</b>	Class1 for Active/Reactive/Apparent energy 1% for Active/Reactive power ±1% for Power factor and Avg. Power factor	Class1																																													
<b>CT Primary</b>	1A / 5A upto 10,000A (Programmable for any Value) Note : 1A or 5A depends upon the CT secondary																																														
<b>CT Secondary</b>	1A or 5A (Programmable)																																														
<b>PT Primary</b>	100V to 500kV (Programmable for any Value)	---																																													
<b>PT Secondary</b>	100V to 500V AC (phase to phase) (Programmable for any Value)	---																																													
<b>Supply Voltage</b>	85 to 270V AC (50/60 Hz), (Power Consumption : Less than 8VA)	230V AC, ±20% (50/60 Hz)																																													
<b>Display Scrolling</b>	Automatic	---																																													
<b>LCD/LED Parameter indication</b>	INT, X10 (Resolution of 10), REV (Reverse connected CT warning) on LCD	INT, X10 (Resolution of 10), REV (Reverse connected CT warning) via LED																																													
<b>Display Reset</b>	Available (Password Protected)																																														
<b>Memory Retention for Energy</b>	10 years																																														
<b>Output</b>	Pulse Output: Voltage range - 24V DC max. Current capacity - 100 mA max. Pulse Width: 100 ms ± 5 ms.	Pulse Output: Voltage range - 24V DC max. Current capacity - 100 mA max. / INT RATE = 1000 imp / kWh Pulse Width: 100 ms ± 5 ms.																																													
<b>Communication</b>	RS485 MODBUS Communication (Optional)	---																																													
<b>Temperature / Humidity (non-condensing)</b>	Operating: -10°C to 55°C, Storage: -20°C to 75°C / Upto 85% RH	Operating: 0°C to 50°C, Storage: -20°C to 75°C / Upto 85% RH																																													
<b>Order Code</b>	<table border="1"> <thead> <tr> <th rowspan="2">Order Code</th> <th>Supply Voltage</th> <th>Output</th> <th colspan="2">Certification</th> </tr> <tr> <th>85-270V AC</th> <th>Pulse Output</th> <th>Comm (RS485)</th> <th>CE</th> <th>cULUS LISTED</th> </tr> </thead> <tbody> <tr> <td>EM368</td> <td>■</td> <td>■</td> <td></td> <td></td> <td></td> </tr> <tr> <td>EM368-CU</td> <td>■</td> <td>■</td> <td></td> <td>■</td> <td>■</td> </tr> <tr> <td>EM368-C</td> <td>■</td> <td>■</td> <td>■</td> <td></td> <td></td> </tr> <tr> <td>EM368-C-CU</td> <td>■</td> <td>■</td> <td>■</td> <td>■</td> <td>■</td> </tr> </tbody> </table>	Order Code	Supply Voltage	Output	Certification		85-270V AC	Pulse Output	Comm (RS485)	CE	cULUS LISTED	EM368	■	■				EM368-CU	■	■		■	■	EM368-C	■	■	■			EM368-C-CU	■	■	■	■	■	<table border="1"> <thead> <tr> <th rowspan="2">Order Code</th> <th>Supply Voltage</th> <th colspan="2">Output</th> </tr> <tr> <th>230V AC</th> <th>Pulse Output</th> <th>Comm (RS485)</th> </tr> </thead> <tbody> <tr> <td>EM306A</td> <td>■</td> <td>■</td> <td></td> </tr> </tbody> </table>	Order Code	Supply Voltage	Output		230V AC	Pulse Output	Comm (RS485)	EM306A	■	■	
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	85-270V AC	Pulse Output	Comm (RS485)	CE	cULUS LISTED																																										
EM368	■	■																																													
EM368-CU	■	■		■	■																																										
EM368-C	■	■	■																																												
EM368-C-CU	■	■	■	■	■																																										
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EM306A	■	■																																													
<b>Size (Bezel/Cutout) / Dimensions</b>	(96 x 96 / 92 x 92) / Refer diagram A on page 7																																														

Refer terminal diagram on page no. 6



DESCRIPTION	AMMETER	VOLTMETER	FREQUENCY METER	POWER FACTOR METER
<b>Functions</b>	<ul style="list-style-type: none"> <li>4 Digit, 7 segment LED Display</li> <li>True RMS Measurement</li> <li>For 1 Phase 2 wire electrical network</li> <li>CT Primary Programmable upto 4000A</li> </ul>	<ul style="list-style-type: none"> <li>3 Digit, 7 segment LED Display</li> <li>True RMS Measurement</li> <li>For 1 Phase 2 wire electrical network</li> </ul>	<ul style="list-style-type: none"> <li>4 Digit, 7 segment LED</li> <li>0.01 Resolution</li> </ul>	<ul style="list-style-type: none"> <li>4 Digit, 7 segment LED</li> <li>0.001 Resolution</li> </ul>
<b>Display</b>	4 digit, 7 segment LED Display	3 digit, 7 segment LED Display	4 digit, 7 segment LED Display	
<b>Display Range</b>	0 to 4960A (Scaled as per CT)	0 to 516V	45 to 65 Hz	-1.000 to 1.000
<b>Input Range</b>	50mA to 5A AC	50 to 480V AC	45 to 65 Hz	Current : 0.250-6 A(AC)
<b>Resolution</b>	0.001, 0.01, 0.1, 1 (depending on CT setting)	1	0.01	0.001
<b>Over-range / Under range indication</b>	"Or" for Input > 124% of CT Setting	"Or" for Input > 516V AC	"Ovfr" (Over 65 Hz) "Ur" (Under 45 Hz)	"Curr" ( For current absent.)
<b>Method</b>	True RMS			---
<b>Accuracy</b>	±0.5% of CT setting	±0.5% of F.S. over rated operating conditions	± 0.05 Hz	± 0.5% ± 1 digit
<b>CT Primary</b>	5, 10, 20, 30, 40, 50, 60, 75, 80, 100, 150, 200, 250, 300, 400, 500, 600, 800, 1000, 1200, 1500, 1600, 2000, 2500, 3000, 4000	---	---	---
<b>Electrical Connection</b>	1Ø - 2 wire			
<b>Continuous Max. Input Rating</b>	6.2A AC Max.	516V AC Max.	---	---
<b>Supply Voltage</b>	240V AC, ±20%, 50/60Hz 110V AC, ±20%, 50/60Hz		240V AC, ±20%, 45-65Hz 110V AC, ±20%, 45-65Hz	240V AC, ±20%, 50/60Hz 110V AC, ±20%, 50/60Hz
<b>Power Consumption</b>	5VA Max.			
<b>Temperature / Humidity (non-condensing)</b>	Operating: 0°C to 50°C, Storage: -20°C to 75°C / Upto 85% RH			

Order Code <sup>1</sup>	Order Code	CT Type	Supply Voltage		Certification	
			110V AC	240V AC	CE	UL US PENDING
MA12	MA12	■	■	■	■	■
MA12-CU	MA12-CU	■	■	■	■	■
MA12-110V	MA12-110V	■	■	■	■	■
MA12-110V-CU	MA12-110V-CU	■	■	■	■	■
MA202	MA202	■	■	■	■	■
MA202-CU	MA202-CU	■	■	■	■	■
MA302	MA302	■	■	■	■	■
	<b>Note:</b> CT Type-There is an internal CT with CT setting (5-4000A). For current input >5A, external CT is required.					

MA12, MV15, MF16, MP14 : (48 x 96 / 46 x 92) / Refer diagram C on page 7  
 MA202, MV205, MF216, MP214 : (72 x 72 / 67.5 x 67.5) / Refer diagram B on page 7  
 MA302, MV305, MF316, MP314 : (96 x 96 / 92 x 92) / Refer diagram E on page 7



<sup>1</sup>For other variants, visit us at [www.selec.com](http://www.selec.com)  
 Refer terminal diagram on page no. 6 & 7



DESCRIPTION	1Ø AMMETER	3Ø AMMETER	1Ø VOLTMETER	3Ø VOLTMETER									
<b>Functions</b>	<ul style="list-style-type: none"> <li>Liquid Crystal Display</li> <li>Single row, 4 digit</li> <li>Digital readout with Analog style bargraph indication</li> <li>True RMS measurement</li> <li>CT primary programmable up to 5000A</li> <li>For 1 phase 2 wire electrical network</li> </ul>	<ul style="list-style-type: none"> <li>Liquid Crystal Display</li> <li>Single row, 4 digit</li> <li>Digital readout with Analog style bargraph indication</li> <li>True RMS measurement</li> <li>CT primary programmable up to 5000A</li> <li>For 3 phase 4 wire electrical network</li> <li>Page selection using selector switch</li> </ul>	<ul style="list-style-type: none"> <li>Liquid Crystal Display</li> <li>Single row, 3 digit</li> <li>Digital readout with Analog style bargraph indication</li> <li>True RMS measurement</li> <li>For 1 phase 2 wire electrical network</li> </ul>	<ul style="list-style-type: none"> <li>Liquid Crystal Display</li> <li>Single row, 3 digit</li> <li>Digital readout with Analog style bargraph indication</li> <li>True RMS measurement</li> <li>For 3 phase 4 wire electrical network</li> <li>Page selection using selector switch</li> </ul>									
<b>Display</b>	4 digit, Liquid Crystal Display		3 digit, Liquid Crystal Display										
<b>Display Range</b>	0 - 6200A		0 - 516V										
<b>Bargraph</b>	Analog style bargraph indication												
<b>Input Type</b>	AC												
<b>Input Range</b>	50mA - 5A		50 - 480V										
<b>Measurement Type</b>	True RMS												
<b>Continuous Max. Input Rating</b>	6.2A		516V AC										
<b>Over-range indication</b>	"Or" for Input > 124% of CT Primary Setting		"Or" for Input > 516V AC										
<b>Burden / Input Impedance</b>	Input Burden : 0.5VA at 5A		Input Impedance : 1M Ω (± 5%)										
<b>Electrical Connection</b>	1Ø - 2 wire	3Ø - 4 wire	1Ø - 2 wire	3Ø - 4 wire									
<b>Accuracy</b>	± 0.5% of F.S. (CT primary setting)		± 0.5% of F.S.										
<b>Resolution</b>	0.001, 0.01, 0.1, 1A (Depending on CT Primary Setting)		1V										
<b>CT Primary</b>	5, 10, 15, 20, 25, 30, 40, 50, 60, 75, 80, 100, 125, 150, 175, 200, 250, 300, 400, 500, 600, 830, 750, 800, 1000, 1200, 1500, 1600, 2000, 2250, 2500, 3000, 3200, 4000, 5000. (Default setting : 5A AC)		---										
<b>CT Secondary</b>	5A Fixed		---										
<b>Sampling Rate</b>	3 samples / second												
<b>Supply Voltage</b>	240V AC (±20%) ; 110V AC (±20%), (Power Consumption : 12VA)		240V AC (±20%) ; 110V AC (±20%), (Power Consumption : 5VA)										
<b>Supply Variation</b>	0.75 to 1.25 x Vn												
<b>Temperature / Humidity (non-condensing)</b>	Operating: 0°C to 50°C, Storage: -20°C to 75°C / Up to 85% RH												
<b>Order Code</b>	<b>Order Code</b>	<b>CT Type</b>	<b>Supply Voltage</b>		<b>Certification</b>		<b>Order Code</b>	<b>Order Code</b>	<b>Supply Voltage</b>		<b>Certification</b>		
			110V AC	240V AC	CE	cUL <sub>us</sub> PENDING			110V AC	240V AC	CE	cUL <sub>us</sub> PENDING	
	MA501	■		■				MV507			■		
	MA501-CU	■		■	■	■		MV507-CU			■	■	■
	MA501-110V	■	■					MV507-110V	■				
	MA501-110V-CU	■	■					MV507-110V-CU	■			■	■
	MA201	■			■			MV207			■		
	MA201-CU	■			■	■		MV207-CU			■	■	■
	MA201-110V	■	■					MV207-110V	■				
	MA201-110V-CU	■	■					MV207-110V-CU	■			■	■
	MA2301	■			■			MV2307			■		
	MA2301-CU	■			■	■		MV2307-CU			■	■	■
	MA2301-110V	■	■					MV2307-110V	■				
	MA2301-110V-CU	■	■					MV2307-110V-CU	■			■	■
<b>Note:</b> CT Type-There is an internal CT with CT setting (5-5000A). For current input >5A, external CT is required.													
<b>Size (Bezel/Cutout) / Dimensions</b>	MA501 : (48 x 48 / 46.5 x 46.5) / Refer diagram D on page 7 MA201 & MA2301 : (72 x 72 / 67.5 x 67.5) / Refer diagram B on page 7						MV507 : (48 x 48 / 46.5 x 46.5) / Refer diagram D on page 7 MV207 & MV2307 : (72 x 72 / 67.5 x 67.5) / Refer diagram B on page 7						

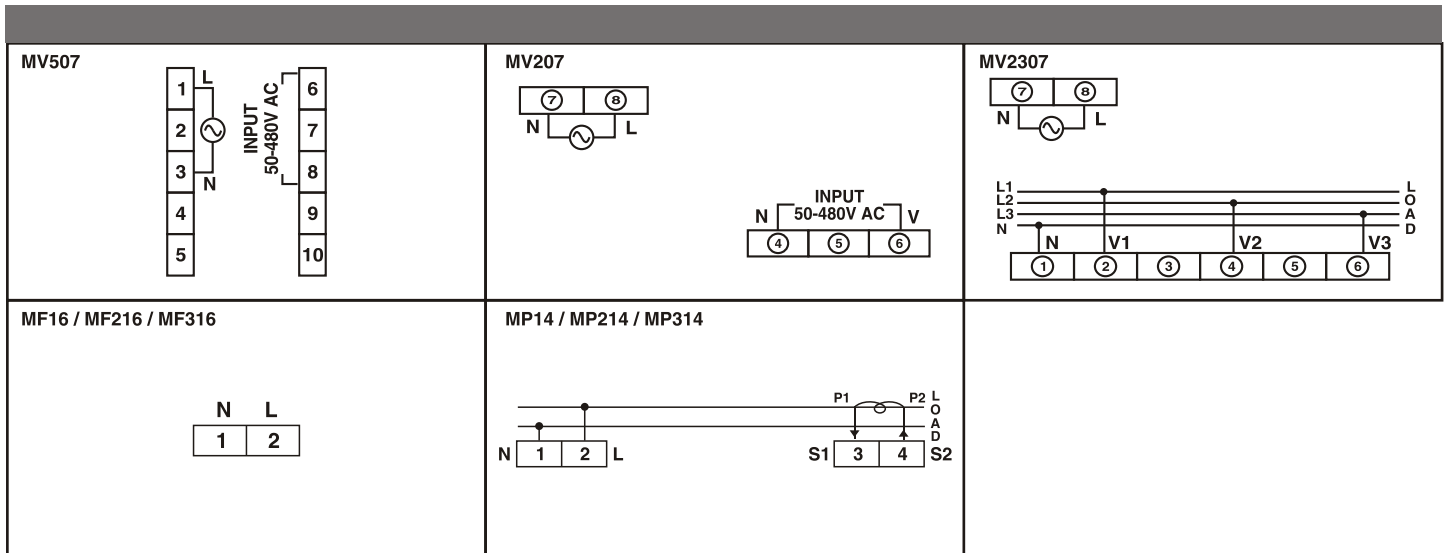
All sizes mentioned are in mm unless specified otherwise. Specifications are subject to change without prior notice.

Refer terminal diagram on page no. 6 & 7

# Terminal Connections

<p><b>MFM384</b></p> <p><b>MFM384-C</b></p>	<p><b>MFM383</b></p> <p><b>MFM383-C</b></p>	<p><b>MFM374</b></p> <p><b>VAF36A</b></p>
<p><b>EM368</b></p> <p><b>EM368-C</b></p>	<p><b>EM306</b></p> <p><b>EM306-C</b></p>	<p><b>VAF39A</b></p> <p><b>MV15 : AC Models</b></p> <p><b>MV15 : DC Models</b></p>
<p><b>MA12 : AC Models (CT Type<sup>1</sup>)</b></p> <p><b>MA12 : DC Models (Shunt Type<sup>2</sup>)</b></p> <p><b>MA12 : AC Models (Direct Type<sup>3</sup>)</b></p> <p><small>*NOTE</small></p> <ol style="list-style-type: none"> <li>1) CT Type: There is an internal CT with CT setting. Above 5A(0-5A model) external CT is required.</li> <li>2) Shunt Type: External Shunt (50mV / 100mV DC) is required for measurement.</li> <li>3) Direct Type: Input is directly connected to the input of the unit.</li> </ol>	<p><b>MA202</b></p> <p><b>MA302</b></p>	<p><b>MV205</b></p> <p><b>MV305</b></p>
<p><b>MA501</b></p>	<p><b>MA201</b></p>	<p><b>MA2301</b></p>

## Terminal Connections



## Dimensions

