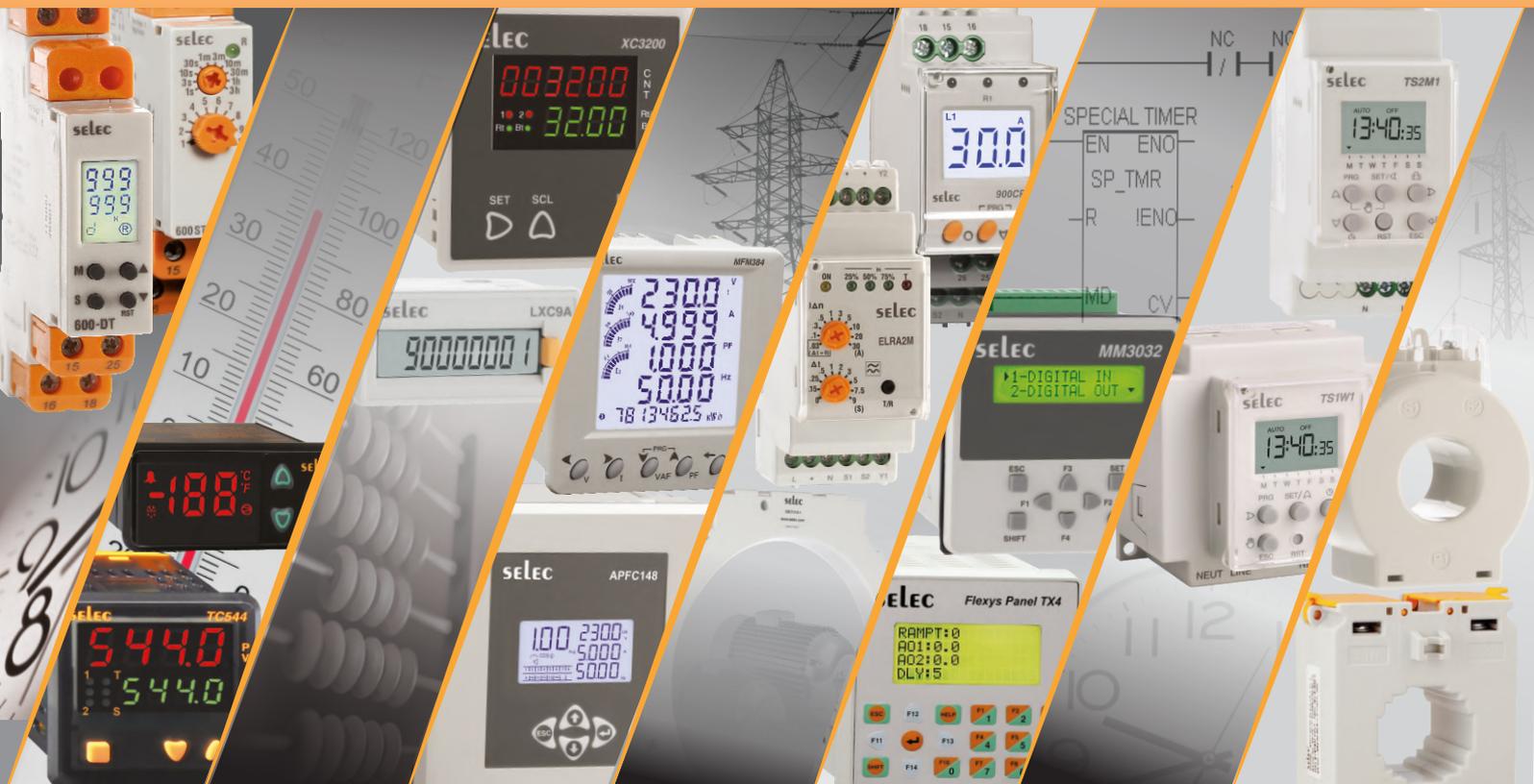


# PRODUCT SELECTION GUIDE

**selec**<sup>®</sup>  
Creating Best Value



- Meters • CTs • Protection Relays • Power Factor Controllers
- Time Switches • Timers • Counters • Temperature Controllers
- Process Indicators • PLCs • HMI • Aluminium Enclosures

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**MFM384**  
96(H) x 96(W)mm



**MFM284**  
72(H) x 72(W)mm



**MFM383A**  
96(H) x 96(W)mm



**MFM376**  
96(H) x 96(W)mm

<b>FEATURES</b>	<ul style="list-style-type: none"> <li>! Bar graph representation for current</li> <li>! Single pulse output</li> <li>! %THD up to 31<sup>st</sup> level</li> <li>! Demand measurement</li> </ul>	<ul style="list-style-type: none"> <li>! Compact size</li> <li>! Single pulse output</li> <li>! %THD up to 31<sup>st</sup> level</li> <li>! Demand measurement</li> </ul>	<ul style="list-style-type: none"> <li>! Single pulse output</li> <li>! Energy (Active / Reactive / Apparent)</li> </ul>	<ul style="list-style-type: none"> <li>! Single pulse output</li> <li>! Max / Min demand (Power)</li> <li>! Run hour</li> <li>! Auxiliary interrupts</li> <li>! Phase angle detection</li> </ul>
<b>DISPLAY</b>	LCD with backlight			7 segment LED
<b>DIGITS</b>	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 display		3 rows of 4 digits
<b>ELECTRICAL CONNECTION</b>	1Ø - 2W, 2Ø - 3W, 3Ø - 3W, 3Ø - 4W			
<b>RATED INPUT VOLTAGE</b>	11 to 300V AC (L - N), 19 to 519V AC (L - L)			
<b>RATED INPUT CURRENT</b>	Nominal 5A AC (Min - 11mA; Max - 6A)			Nominal 5A AC (Min - 14mA; Max - 6A) (Isolation CTs mandatory)
<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: 0.1k, 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
<b>CT PRIMARY</b>	1 / 5A to 10kA (Programmable for any value)			
<b>CT SECONDARY</b>	1 / 5A (Programmable)			
<b>PT PRIMARY</b>	100V to 500kV (Programmable for any value)	100V to 10kV (Programmable for any value)	100V to 500kV (Programmable for any value)	
<b>PT SECONDARY</b>	100 to 500V AC (L - L) (Programmable for any value)			
<b>COMMUNICATION</b>	RS485 MODBUS RTU protocol (Optional)			
<b>MEASURING PARAMETER</b>	Voltage (L - L / L - N) (Individual / Average), Current (Individual / Average), Frequency, Power factor (Individual / Total), Active, Reactive & Apparent Power (Individual / Total), Active, Reactive & Apparent Energy (Total)			
<b>ADDITIONAL FUNCTIONS</b>	Phase sequence detection, Neutral current measurement		---	Max instantaneous (Current / Voltage), (Import / Export) Energy, %THD up to 31 <sup>st</sup> level (For MFM376-C)
<b>SUPPLY VOLTAGE</b>	100 to 240V AC, -15% to +12%, 50 / 60Hz (Power consumption : Less than 8VA)			240V AC, ±20% (For MFM376-230VAC), 50 / 60Hz, 85V to 270V AC 50 / 60Hz & 40 to 270V DC, (For MFM376-C)

## Din Rail Multifunction Meter



**MFM384-R-C**  
90(H) x 70(W)mm

## Din Rail Energy Meter



**EM2M**  
90(H) x 35(W)mm

<b>FEATURES</b>	<ul style="list-style-type: none"> <li>! Energy (Active, Reactive, Apparent)</li> <li>! RS485 MODBUS RTU protocol</li> <li>! Import / Export energy</li> <li>! Demand measurement</li> </ul>	<ul style="list-style-type: none"> <li>! Self powered, 100A direct connection</li> <li>! 1Ø - 2 wire network</li> <li>! Bi-directional import &amp; export</li> <li>! Demand measurement</li> </ul>
<b>DISPLAY</b>	LCD with backlight	
<b>DIGITS</b>	1 row of 4 digits, 2 rows of 7 digits	1 row of 7 digits
<b>ELECTRICAL CONNECTION</b>	1Ø - 2W, 2Ø - 3W, 3Ø - 3W, 3Ø - 4W	1Ø - 2W
<b>RATED INPUT VOLTAGE</b>	11 to 300V AC (L - N), 19 to 519V AC (L - L)	176 to 276V AC (L - N)
<b>RATED INPUT CURRENT</b>	Nominal 5A AC (Min - 11mA; Max - 6A)	Base current 10A (Min - 0.5A; Max - 100A)
<b>FREQUENCY</b>	45Hz to 65Hz	
<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: 0.01, Frequency: 0.1Hz	For Energy: 0.01k, For Power, Voltage, Current: Auto resolution, For Power factor: 0.01
<b>ACCURACY CLASS</b>	Voltage (L - L / L - N), Current: ±0.5% of F.S., Power factor: ±0.01, Frequency: ±0.1% of F.S., Power (kW, kVA, kVA): 1% of F.S., Energy (Active, Reactive, Apparent): 1% of F.S.	Voltage (L - N), Current: ±0.5% of F.S., Power factor: ±0.01, Frequency: ±0.1% of F.S., Power (kW, kVA, kVA): 1% of F.S., Active energy: Class 1, Reactive energy: Class 2
<b>CT PRIMARY</b>	1 / 5A to 10kA (Programmable for any value)	---
<b>CT SECONDARY</b>	1 / 5A (Programmable)	---

## Din Rail Multifunction Meter

## Din Rail Energy Meter

PT PRIMARY	100V to 500kV (Programmable for any value)	---
PT SECONDARY	100V to 500V AC (L - L) (Programmable for any value)	---
MEMORY RETENTION FOR ENERGY	10 years	
COMMUNICATION	RS485 MODBUS RTU protocol	
INDICATIONS	LCD: Max demand of power, Communication in progress; LED: Integration of energy	LCD: Integration of energy; LED: 2 Pulse outputs
MEASURING PARAMETER	Voltage (L - L / L - N) (Individual / Average), Current (Individual / Average), Frequency, Power factor (Individual / Total), Active, Reactive & Apparent power (Individual / Total), Active, Reactive & Apparent energy (Import / Export), Demand (Min / Max Active & Reactive Power, Max apparent power)	Voltage, Current, Frequency, Power factor, Import / Export, Max demand for power
SUPPLY VOLTAGE	85 to 270V AC, 50 / 60Hz	176 to 276V AC (L-N), Self powered

## Plug-n-Wire Multifunction Meters



**MRJ4M**  
90(H) x 70(W)mm



**MRJ4M-SL**  
90(H) x 70(W)mm



**MRJ385**  
96(H) x 96(W)mm

FEATURES	<ul style="list-style-type: none"> <li>! Energy (Active, Reactive)</li> <li>! RJ45 connector current input</li> <li>! Single pulse output</li> <li>! Max demand of power</li> <li>! Self powered</li> </ul>	<ul style="list-style-type: none"> <li>! Energy (Active, Reactive)</li> <li>! RJ45 connector current input</li> <li>! 2 pulse outputs</li> <li>! Max demand of power</li> <li>! Self powered</li> </ul>	<ul style="list-style-type: none"> <li>! Energy (Active, Reactive, Apparent)</li> <li>! Split load, RJ45 connector current input</li> <li>! Single pulse output</li> <li>! Demand measurement</li> <li>! Self powered</li> <li>! %THD up to 31<sup>st</sup> level</li> </ul>
DISPLAY	LCD with backlight		
DIGITS	2 rows of 4 digits, 1 row of 7 digits to show electrical parameters		4 rows of 4 digits, Bar graph representation for current, 1 row of 8 digits for energy display
ELECTRICAL CONNECTION	1Ø - 2W, 3Ø - 4W		
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, 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 (Programmable for any value)		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 MODBUS RTU protocol		
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 (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 (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 (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 31 <sup>st</sup> level.
SUPPLY VOLTAGE	60 to 300V AC 50 / 60Hz, Self powered (V1, N)		

## Plug-n-Wire Current Transformers



**PWCT**

DESCRIPTION	PWCT
CURRENT INPUT	60A, 100A, 125A, 150A, 160A, 200A, 250A, 300A, 400A, 500A, 600A, 630A, 800A, 1000A, 1250A, 1600A
APERTURE SIZES	15.5 x 25mm, 16 x 20mm, 21 x 25mm, 31 x 31mm, 54 x 50mm