



## Basic Function

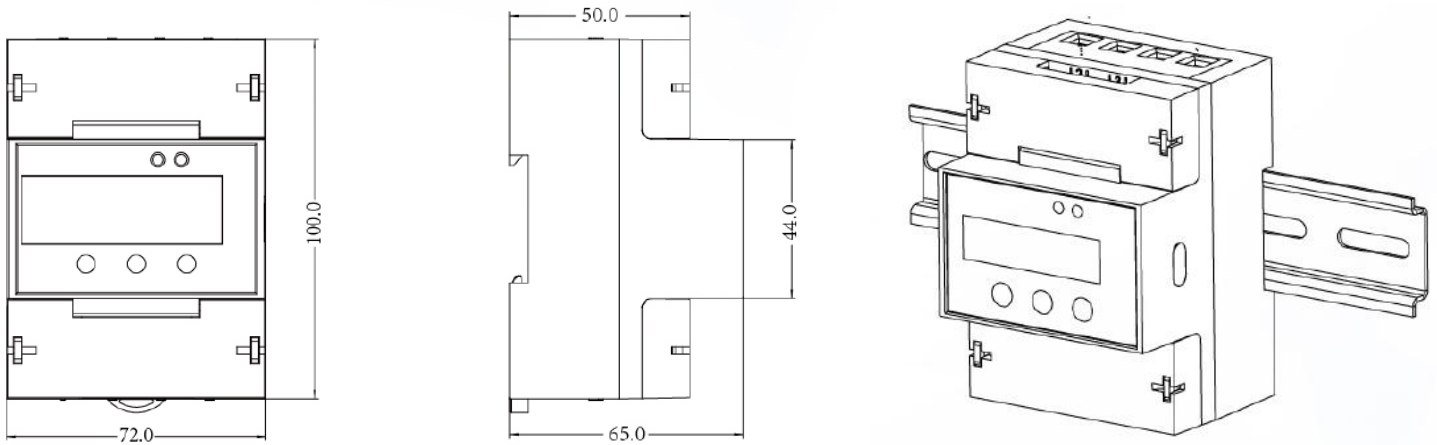
- Suit for 110V, 120V, 220V, 230V, 240V AC low voltage system
- 7 +1 digits LCD display (9999999.9 kWh)
- Measure and display V, I, P, PF, F, kWh, kvarh, Multi-tariff energy value
- Q,S can be read via RS485
- Record historical energy for latest 31 days, latest 12 months and latest 10 years
- kWh accuracy class 1.0
- 2 LED indicates pulse ((Settable for kWh or kvarh))
- LCD display prompt for phase sequence error
- 3 keys for programming, 35mm DIN rail installing, standard DIN ED5002
- High temperature resistant materials
- One RS485 port, MODBUS protocol
- Standard: IEC62053-21/ 23

## Technical Specification

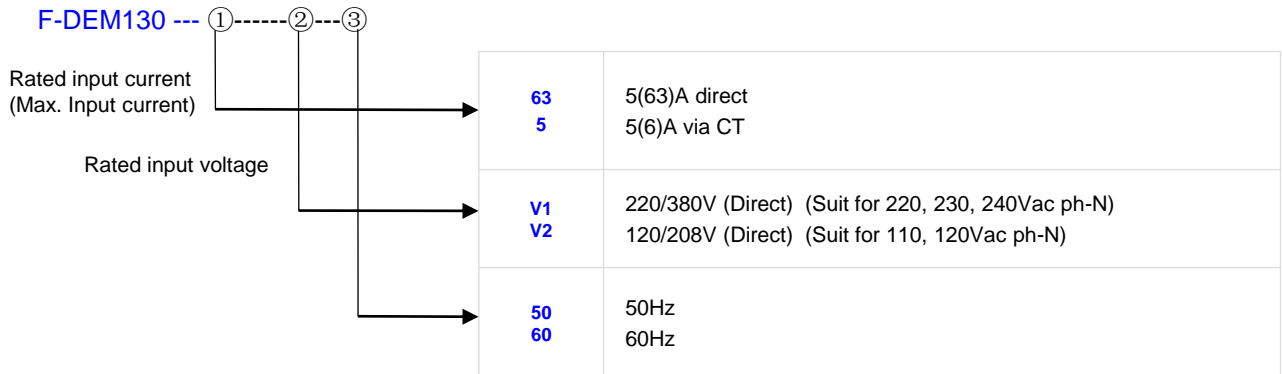
<b>Rated current</b>	Direct: 5(63) Or 5(6)A via CT	<b>Connection mode</b>	3-phase 4-wire	
<b>Rated voltage</b>	AC 220V ph-N or 120V ph-N (Optional)	<b>Pulse output</b>	2 channels (Settable for kWh or kvarh)	
<b>Frequency</b>	50/60Hz (Optional), range: 47~65Hz	<b>Starting Current</b>	0.4%Ib (direct connect), 0.2%Ib (via CT)	
<b>Burden</b>	<2W	<b>Power Frequency withstand voltage</b>	2kV	
<b>Power supply</b>	Self supply (Note: RS485 won't work, when connect 1 phase, ) For 220Vac (L-N), range: 184~276Vac For 120Vac (L-N), range: 96~144V	<b>Accuracy</b>	kWh accuracy: class 1.0	
<b>Communication</b>	RS485 serial, Modbus-RTU Baud rate: 2400, 4800, 9600 Address: 1~247	<b>Pulse constant</b>	1000	
<b>Environment</b>	Operating temperature: -20℃~ +55℃ Storage temperature: -40℃~ +70℃ Humidity: 5%~95% non-condensing	<b>Dimension</b>	72*100*65mm	
		<b>Standard (EMC)</b>	Electrostatic discharge immunity test	IEC 61000-4-2, Level 4
			Radiated immunity test	IEC 61000-4-3, Level 3
			Electrical fast transient/burst immunity test	IEC 61000-4-4, Level 4
			Surge immunity test (1, 2/50μs~8/20μs)	IEC 61000-4-5, Level 4
			Conducted emission	EN55022, Class B
			Radiated emission	EN55022, Class B

	Parameter	Accuracy	Resolution	Measuring Range
<b>Display data</b>	Voltage	0.2%	0.01V	For 220Vac (L-N), range: 184~276Vac For 120Vac (L-N), range: 96~144V
	Current	0.2%	0.001A	Direct: 5(63), Via CT: 5(6)A
	Active power	0.5%	0.1W	0~1MW
	Power factor	0.5%	0.001	-1.000~+1.000
	Frequency	0.01	0.01Hz	47~65Hz
	Active energy	Class 1	0.1kWh	0~9999999.9 kWh
	Reactive energy	Class 2	0.1kvarh	0~9999999.9 kvarh
<b>Communication data</b>	Reactive power	1.0%	0.1Var	0~1Mvar
	Apparent power	0.5%	0.1VA	0~1MVA

## Dimension & Installation



## Order Information



### Example 1:

Model No. F-DEM130-63-V1-50, which indicates the device provides basic function, accuracy class 1, rated current is 5(63)A , provides TOU (Multi-tariff) function and rated voltage input is 220/380V, 50Hz



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