

SDM210-DR

Single-Phase Two Module DIN rail Meters



- Measure A/V/W/kWh
- Pulse output
- Din rail mounting 35mm
- 100A direct connection
- Better than Class1/B accuracy

User Manual V1.0

2022

Statements

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The company reserves the right to amend the product specifications in this manual without prior notice. Before placing an order, please contact our company or local agent to get the latest specifications.

Application

The energy-meters “with a back-lighted LCD screen for perfect reading” are used to measure single-phase like residential, Utility and Industrial application. The unit measures and displays various important electrical parameters.

PART 1 Specification

General Specifications

Voltage AC (Un)	230V
Voltage Range	176~276V AC
Base Current (Ib)	10A
Max. Current (Imax)	100A
Mini Current (Imin)	0.5A
Starting current	0.4% of Ib
Power consumption	<2W/10VA
Frequency	50Hz/60Hz(±10%) non-MID 50Hz(±10%) MID
AC voltage withstand	4KV for 1 minute
Impulse voltage withstand	6KV-1.2uS waveform
Overcurrent withstand	30Imax for 0.01s
Pulse output rate	1000imp/kWh
Display	LCD with backlight
Max. Reading	999999.9kWh

Accuracy

Active energy	Class 1 IEC62053-21 Class B EN50470-1/3
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Environment

Operating temperature	-25°C to +55°C
Storage and transportation temperature	-40°C to +70°C
Reference temperature	23°C ± 2°C
Relative humidity	0 to 95%, non-condensing
Altitude	up to 2000m
Warm up time	5s
Installation category	CAT III
Mechanical Environment	M1
Electromagnetic environment	E2
Degree of pollution	2

Pulse Output

The meter provides pulse output. Pulse output is passive type. constant 1000imp/KWh, pulse width 100ms, non-configurable

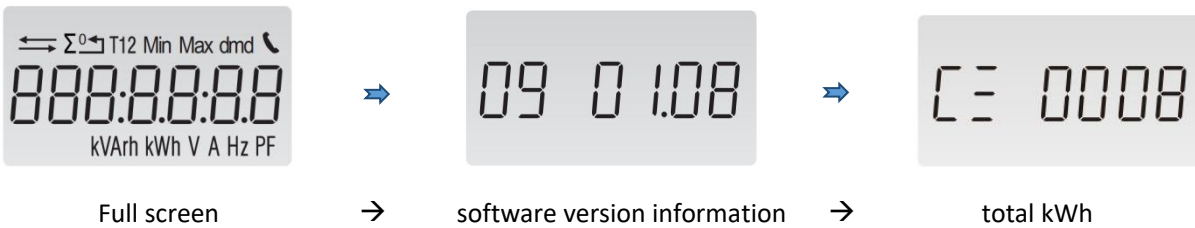
Mechanics

Din rail dimensions	36x99x63 (WxHxD) DIN 43880
Mounting	DIN rail 35mm
Ingress Protection	IP51 (indoor)
Material	self-extinguishing UL94V-0

PART 2 Operation

Start up screens

When it is powered on, the meter will initialize and do self-checking.






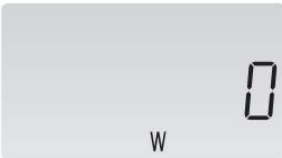


Scroll display by Button

After initialization and self-checking program, the meter display the measured values. The default page is total kWh. If the user wants to check other information, he needs to press the scroll button on the front panel.

The display order by scroll button :

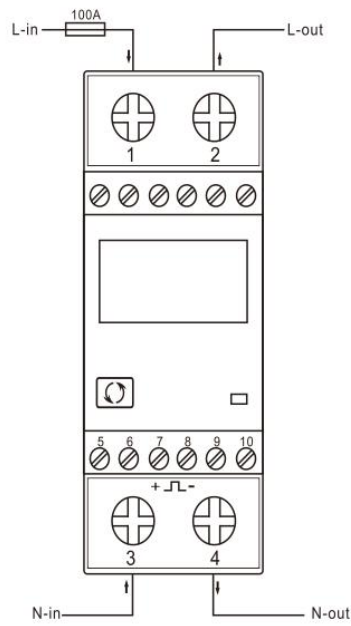
Total kWh → partial KWh (resettable) → import kWh → export kWh → power → voltage → current

Page	Display	Descriptions
1		Total active energy Example:0.26kWh

2		Total partial energy (resettable)
3		Import energy
4		Export energy
5		Active Power Example: 0W
6		Voltage Example: 297.3V
7		Current Example: 0A

Long press button  for 3s to clear the partial energy.

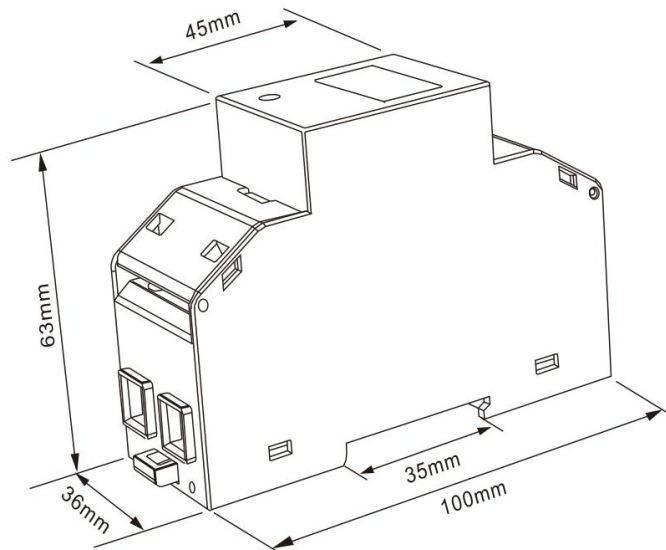
Wiring diagram



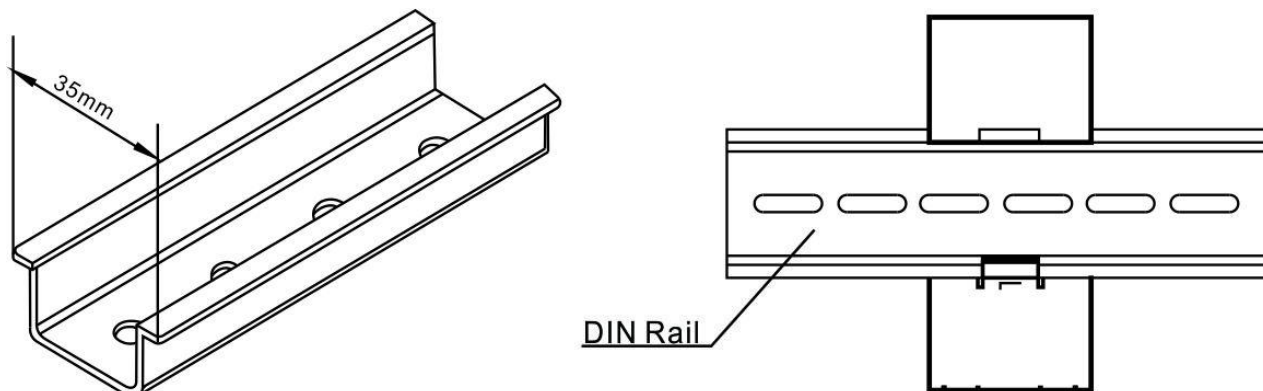
Torque Value of Terminals

Terminals Capacity	Pulse	0.5~1.5 mm ²
	Load	4~16 mm ²
Screw Torque	Pulse	0.4Nm
	Load	3Nm

Dimensions



Installation



IF you have any question, please feel free to contact our sales team.

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