

Datasheet

- Three phase 5A current transformer operated
- Accuracy class 1 (Active Energy)
- Bi-directional measurement for kW and kWh (SDM72CT-BI)
- Fixed pulse output
- Active energy and power measurement
- Resettable energy counter

The SDM72CT Series is a entry level three phase energy monitoring solution with pulse output and RS485 RTU Modbus port. This product will measure and display total active energy (kWh) and power (watts) (SDM72CT-D) with optional partial reset energy (SDM72CT-DR) or the bi-directional version which will read import/export and total active energy (kWh) (SDM72CT-BI).Housed for DIN rail mounting, IP51 protection and 5A/100mV current transformer operated. The required current inputs are obtained via current transformers. This meter can be configurable to work with a wide range of C s, giving the unit a wide range of operation.

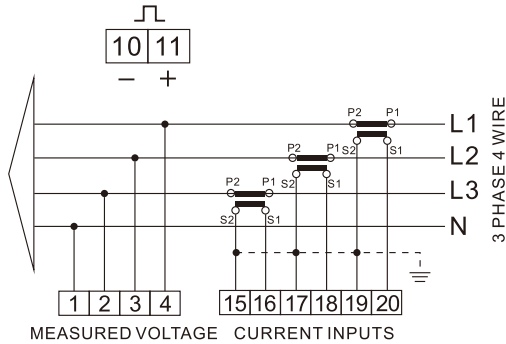


Specification Table

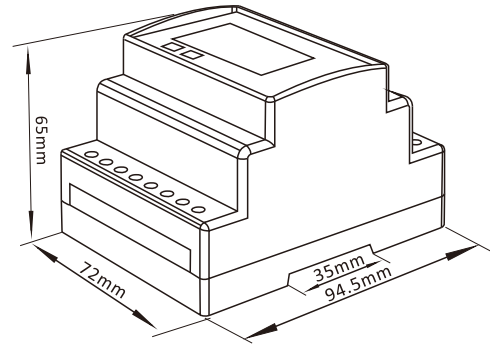
Specification	
Model	SDM72CT-D/BR/BI
Nominal voltage(Un)	3x230/400 V ac
Operational voltage	80%~120% of Un
Insulation capabilities	
- AC voltage withstand	4KV for 1 minute
- Impulse voltage withstand	6KV-1.2μS
Basic current (Ib)	5A
Maximum rated current (Imax)	6A
Operational current range	0.4% Ib-Imax
Over current withstand	20 Imax for 0.01s
Operational frequency range	50/60Hz
Power consumption per phase	≤ 2W/10VA
Pulse output	1000imp/kWh
Display	LCD
Max reading	999999.9 kWh

Performance criteria	
Operating humidity	≤ 90%, no condensing
Storage humidity	≤ 95%, no condensing
Operating temperature	-25°C - +55°C/-40°C - +70°C
Storage temperature	-40°C - +70°C
Reference temperature	23°C± 2°C
International standard	IEC 62053-21
Accuracy class	Class1
Installation category	CAT III
Mechanical environment	M1
Electromagnetic environment	E2
Degree of pollution	2
Protection against penetration of dust and water	IP51(indoor)
Insulating encased meter of protective class	II
Altitude	up to 2000m
Electrostatic discharges	8kV contact / 15kV air gap
Electromagnetic HF fields	IEC 61000-4-3
Electrical fast transients	4kV
Surge	4kV
Radiated & conducted emissions	EN 55022

Wiring Configuration



Dimension Drawing



Height 94.5mm
Width 72mm
Depth 65mm

Ordering Options

Meter Type	Description of Meter
SDM72CT-D	3PH, 3X230(400)V, 5A CT input, 50/60Hz, Active energy (kWh) Pulse output, Class 1.0 Accuracy, 72mm 4 module width, Din rail mounting.
SDM72CT-DR	3PH, 3X230(400)V, 5A CT input, 50/60Hz, Active energy (kWh) + active power (W) Resettable partial energy, Pulse output, Class 1.0 Accuracy, 72mm 4 module width, Din rail mounting
SDM72CT-BI	3PH, 3X230(400)V, 5A CT input, 50/60Hz, Active energy (kWh) + active power (W), Bi-directional measurement (Import & export), Pulse output, Class 1.0 Accuracy, 72mm 4 module width, Din rail mounting.

Conformity References

Electromagnetic Compatibility: EN 61326-1:2013 & EN 61326-2-3:2013

Low Voltage Directive: EN 61010_1:2010+A1:2019 & EN 61010-2-30-2010