

# DIN Rail Mounted / Three Phase / (CT) SDM72CT Series

## Datasheet

- Three Phase 1/5A Current Transformer operated
- MID B+D Certified
- Accuracy Class 1 (Active Energy)
- Bi-directional Measurement for kW and kWh
- Fixed Pulsed Output
- RS485 Modbus Option SDM72CT
- Active Energy and Power Measurement
- Resettable energy counter
- Low Cost

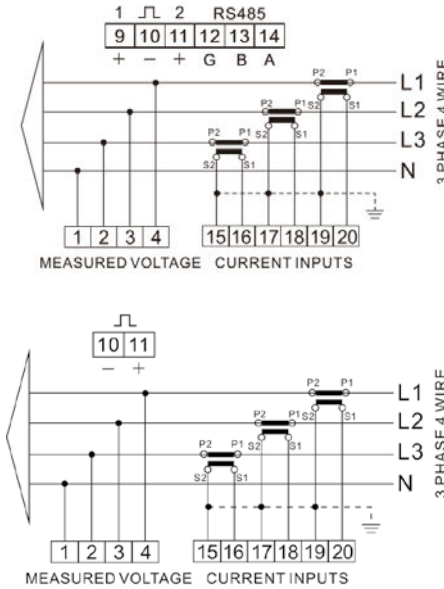


The SDM72CT-DR/BI is an entry level three-phase energy monitoring solution with a fixed pulsed output or RS485 RTU Modbus (SDM72CT-M) This product will only measure and display total active energy (kWh) and Power (Watts) with Optional partial reset energy (SDM72CT-DR) Or the Bi-directional version which will read Import/Export and Total Active Energy (kWh) (SDM72CT-BI).Housed for DIN rail mounting, IP51 protection and 1/5A current transformer operated. Certified in the UK according to EU Directive 2014/32/EU. MID Certificate number 0120 / SGS0213.

## Specification table

Specification			
Model	72CT-D/DR/BI	Accuracy class	Class1/Class B
Nominal voltage(Un)	3x230/400 V ac	Installation category	CAT III
Operational voltage	80%~120% of Un	Mechanical environment	M1
Insulation capabilities		Electromagnetic environment	E2
- AC voltage withstand	4KV for 1 minute	Degree of pollution	2
- Impulse voltage withstand	6KV-1.2μS	Protection against penetration of dust and water	IP51(indoor)
Basic current (Ib)	5A	Insulating encased meter of protective class	II
Maximum rated current (Imax)	6A	Electrostatic discharges	8kV contact / 15kV air gap
Operational current range	0.4% Ib-Imax	Electromagnetic HF fields	IEC 61000-4-3
Over current withstand	20 Imax for 0.01s	Electrical fast transients	4kV
Operational frequency range	50 or 60Hz	Surge	4kV
Power consumption per phase	≤ 2W/10VA	Radiated & conducted emissions	EN 55022
Pulse output	1000imp/kWh		
Display	LCD		
Max reading	999999.9 kWh		
Performance criteria		Modbus	
Operating humidity	≤90%	Bus type	RS485(semi-duplex)
Storage humidity	≤ 95%	Protocol	Modbus RTU
Operating temperature	-25°C - +55°C	Baud rate	1200/2400/4800/9600bps
Storage temperature	-40°C - +70°C	Address range	1-247
Reference temperature	23°C± 2°C	Max. Bus loading	64pcs
International standard	IEC 62053-21 / EN50470-1/3	Communication distance	1000M
		Parity	EVEN/ODD/NONE
		Data bit	8
		Stop bit	1

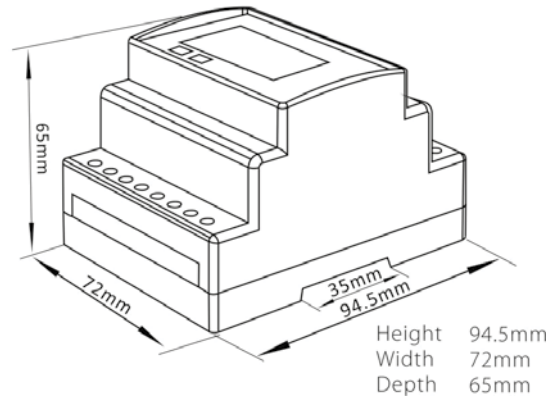
## Wiring Configuration



SDM72CT-M

SDM72CT-DR  
SDM72CT-BI

## Dimension Drawing



## Ordering options

Meter Type	Description of Meter
<b>SDM72CT-DR</b>	3P4W, 3X230(400)V, Active energy (kWh) + active power (W) Resettable partial energy, Pulse output, Class 1.0 Accuracy, 72mm 4 module width, Din rail mounting, 1A/5A CT operated, Class 1.0 accuracy.
<b>SDM72CT-BI</b>	3P4W, 3X230(400)V, Active energy (kWh) + active power (W), Bi-directional measurement (Import & export), Pulse output, Class 1.0 Accuracy, 72mm 4 module width, Din rail mounting, 1A/5A CT operated, Class 1.0 accuracy.
<b>SDM72CT-M</b>	2P3W, 3P4W, 3X230(400)V, Measures active energy & power Bi-directional measurement IMP & EXP Resettable partial energy Pulse output RS485 Modbus RTU, 1A/5A CT operated, Accuracy better than class 1/B.

## Conformity References

**Electromagnetic Compatibility:** EN61326-1:2013 & EN61326-2-3:2013

**Low Voltage Directive:** EN61010-1-2010 & EN61010-2-30-2010

**MID DIRECTIVE:** 2014/32/EU