

Datasheet

- Three phase 100A direct fed
- MID B+D certified
- Accuracy class 1 (Active Energy)
- Bi-directional measurement for kW and kWh (SDM72BI)
- Fixed pulse output
- Active energy and power measurement
- Resettable energy counter

The SDM72D/DR/BI is a entry level three phase energy monitoring solution with a fixed pulse output. This product will only measure and display total active energy (kWh) and power (watts) with optional partial reset energy (SDM72DR) or the bi-directional version which will read import/export and total active energy (kWh) (SDM72BI). Housed for DIN rail mounting, IP51 protection and direct connection up to 100A. Certified in the UK according to EU Directive 2014/32/EU. MID Certificate number 0120 / SGS0213

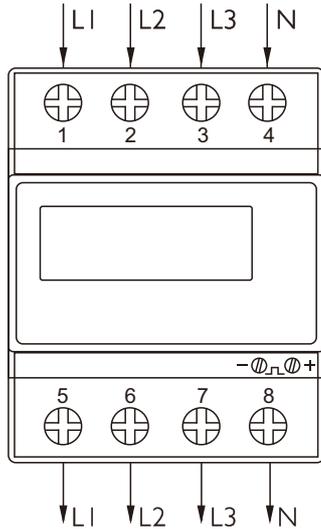


Specification Table

Specification	
Model	SDM72D/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)	10A
Maximum rated current (Imax)	100A
Operational current range	0.4% Ib-Imax
Over current withstand	30 Imax for 0.01s
Operational frequency range	50Hz for MID; 50/60Hz for non-MID
Power consumption per phase	≤ 2W/10VA
Pulse output	1000imp/kWh
Display	LCD
Max reading	999999.9 kWh

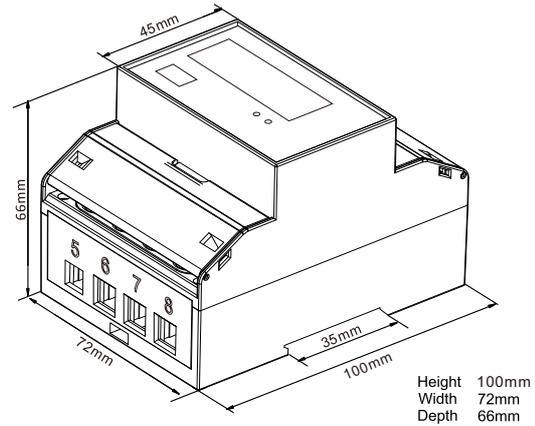
Performance criteria	
Operating humidity	≤ 90%, no condensing
Storage humidity	≤ 95%, no condensing
Operating temperature	-25°C - +55°C/-40°C - +70°C
Storage temperature	-40°C - +70°C
Reference temperature	23°C± 2°C
International standard	IEC 62053-21 / EN50470-1/3
Accuracy class	Class1/Class B
Installation 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



1/5 L1 IN/OUT
 2/6 L2 IN/OUT
 3/7 L3 IN/OUT
 4/8 Neutral
 -JL+ Pulse output contact

Dimension Drawing



Height 100mm
 Width 72mm
 Depth 66mm

Ordering Options

Meter Type	Description of Meter
SDM72D	3PH, 3X230(400)V, 0.5~10(100)A, 50/60Hz, Active energy (kWh) Pulse output, 100A direct load, Class 1.0 Accuracy, 72mm 4 module width, Din rail mounting.
SDM72DR	3PH, 3X230(400)V, 0.5~10(100)A, 50/60Hz, Active energy (kWh) + active power (W) Resettable partial energy, Pulse output, 100A direct load, Class 1.0 Accuracy, 72mm 4 module width, Din rail mounting.
SDM72BI	3PH, 3X230(400)V, 0.5~10(100)A, 50/60Hz, Active energy (kWh) + active power (W), Bi-directional measurement (Import & export), Pulse output, 100A direct load, 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

MID DIRECTIVE: 2014/32/EU

For more information on these products, please contact our sales team on 86 0573 83698881 or email sales@eastrongroup.com

www.eastrongroup.com