

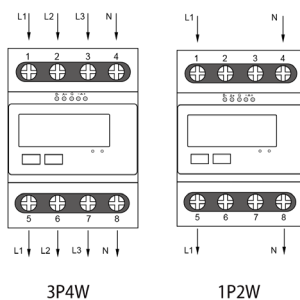
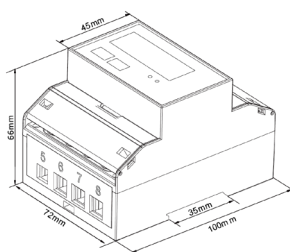
DIN Rail Mounted/Three Phase/ (100A) SDM72 Series

The SDM72D-M is a 4-wire, three-phase digital energy meter equipped with a white backlit LCD display for optimal reading. The unit measures and displays voltage, current, frequency, power factor, active power, reactive power, active energy, reactive energy, etc.

A resettable partial energy function is available, allowing the user to easily check the imported and exported active energy during a specific period. The SDM72D-M supports a direct connection up to a maximum of 100A, eliminating the costs and complications associated with connecting external current transformers (CTs); this makes the unit cost-effective and user-friendly.

The built-in interfaces provide a pulse output and an RS485 Modbus RTU output. The configuration is password-protected.

Certified in the United Kingdom in accordance with European Directive 2014/32/EU. MID Certificate Number: 0120/SGS0213.



Wiring configuration



KEY POINTS

1

Three-phase 100A direct connection

6

Pulse output

2

MID Module B+D certification

7

RS485 Modbus

3

Bi-directional measurement

8

Active energy and power measurement

4

Accuracy class 1
(active energy)

9

Resettable energy meter

TECHNICAL SPECIFICATIONS

Model	SDM72D-M
Nominal voltage (Un)	3x230/400 V ac
Operating voltage	80%~120% of Un
AC voltage withstand	4kV for 1 minute
Impulse voltage withstand	6kV~1.2S
Base current (Ib)	10A
Maximum rated current (Imax)	100A
Operating current range	0.4% Ib-Imax
Overcurrent withstand	30 Imax for 0.01s
Operating frequency range	50 or 60Hz
Internal power consumption	≤2W/10VA
Pulse output	Configurable
Display	LCD
Maximum reading	99999.9kWh
Operating humidity	≤90%
Storage humidity	≤95%
Operating temperature	-25°C~+55°C
Storage temperature	-40°C~+70°C
Reference temperature	23°C±2°C
International standard	IEC 62053-21/EN50470-1/3
Accuracy class	Class I/Class B
Installation category	CAT II
Mechanical environment	M1
Electromagnetic environment	E2
Pollution degree	2
Protection against dust and water ingress	IP51(indoor)
Meter with protection class insulating casing	II
Electrostatic discharges	8kV contact /15kV air gap
High-frequency (HF) electromagnetic fields	IEC 6100-4-3
Electrical fast transients	4kV
Surge	4kV
Radiated and conducted emissions	EN55022

MODBUS

Bus type	RS485(semi-duplex)
Protocol	Modbus RTU
Transmission speed	1200/2400/4800/9600bps
Address range	1-247
Maximum bus load	64pcs
Communication distance	1000M
Parity	EVEN/ODD/NONE
Data bits	8
Stop bits	1

ORDERING CODES

Order code	Description
SDM72D-M-1	2P3W, 3P4W, Measures active energy & power Bi-directional measurement IMP&EXP Resettable partial energy Pulse output RS485 Modbus RTU Max. 100A direct connection, Accuracy better then class 1/B
SDM72D-M-2	2P3W, 3P4W, Measures kW, kVarh, W, VAr, VA, V, A, PF, Hz, Pulse output RS485 Modbus RTU Max. 100A direct connection. Accuracy better then class 1/B

NORMS

EN61326-1: 2013 & EN61326-2-3:2013 (Electromagnetic Compatibility)
 EN61010-1:2010 & EN61010-2-30:2010 (Low Voltage Directive)
 2014/32/EU (Mid Directive)