KWH1M100 KWH METER

FuseBox®

100A Single Phase kWh Meter(MID certified)

UKCA   CE   ♿   ☒   RoHS Compliant

Single phase bi directional (import & export energy) MID certified energy meter suitable for domestic, commercial and industrial single phase applications up to 100A (max) direct connected.
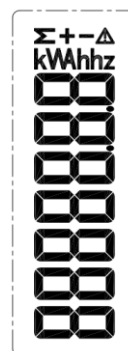
Single module, din rail mounting energy meter with easy to read backlit LCD display and pulse output.

Displays **active energy, (kWh),** it also measures common electrical parameters including **reactive energy, (kVArh),voltage (V), current, (A), active power, (W), reactive power, (Var), power factor, (pf) and frequency, (Hz).**

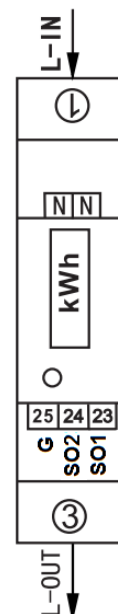These can be viewed using the touch screen button on the front of the meter.

Specifications

Part Number	KWH1M100
Barcode	5060523527397
Maximum rated current (Imax)	100A
Nominal Voltage(Un)	230V/50Hz
IP RATING Terminals/Case	**IP20** EN 60529/ **IP51**
MID approved	**Yes**
Mounting	35mm top hat din rail
Bi directional	**Yes**
Import/Export	Yes both
Torque (switch terminals)	**2.5Nm**
Maximum cable	25mm²
Complies with	EN 50470-1/3
Impulse Constant:	1000 imp/kWh
LCD Display:	LCD 5+2 = 99999.99kWh
Working Temperature:	-25～70℃
Storage Temperature:	-30~70℃
Power Consumption:	<12VA <1W
Start Current:	0.004Ib

Parts

A	LCD display
B	Casing
C	Terminals
D	Terminal cover
E	Din rail mounting
F	Terminal cover security seal
G	RED LED Consumption indicator

Connections

1:   L IN
3:   L OUT
23:   SO1 is SO (signal out) output for kWh or Active/reactive forward kWh optional
24:   SO2 is SO (signal out) output for kvarh or Active/reactive reverse kWh optional
25:   G is for GND
N: Neutral (reference) connection
Important: Torque all connections!

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Device must be installed by a qualified electrician in accordance with the current IET Wiring Regulations BS7671.

TECHNICAL

1 Specifications:

Meter type	DEM1A001

Operational voltage	230V AC
Insulation capabilities:	
- AC voltage withstand	4KV for 1 minute
- Impulse voltage withstand	6KV – 1.2µS waveform

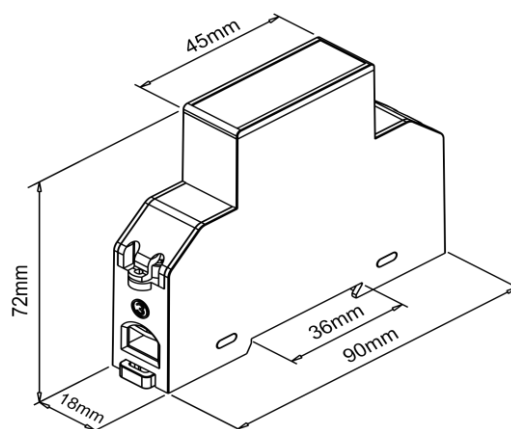|	
Basic current (Ib)	5A
Maximum rated current (Imax)	100A
Operational current range	0.4% Ib- Imax
Over current withstand	30Imax for 0.01s
Operational frequency range	50Hz ±10%
Internal power consumption	<12VA <1W
Test output flash rate (RED LED)	1000 imp/kWh

Consumption indicator (RED LED)	**Flash on load**

2 Performance criteria:

Operating humidity	≤ 75%
Storage humidity	≤ 95%
Accuracy class	B
IP Rating product	IP51
Insulating encased meter of protective class	Ⅱ

3 Dimensions

Height	90 mm
Width	18 mm
Depth	72 mm
Weight	0.12 Kg (net)

4 Environment

WASTE ELECTRICAL PRODUCTS SHOULD NOT BE DISPOSED OF IN HOUSEHOLD WASTE. CONTACT YOUR RETAILER OR LOCAL AUTHORITY FOR RECYCLING INFORMATION.

After installation and testing of this product it is essential that the INSTRUCTION LEAFLET is available for reference.

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	DEM1A001

LCD Scrolling Display

Reading	Content	Unit	Format	Remark
1	Total active energy	kWh	5+2 00000.00	
2	Forward active energy	kWh	5+2 00000.00	
3	Reverse active energy	kWh	5+2 00000.00	With indicator of "-"
4	Total reactive energy	kWh	5+2 00000.00	
5	Resettable *Reactive energy*	kVArh	5+2 00000.00	
6	*Reactive clearable power*	kVAr	5+2 00000.00	
7	*Voltage*	V	3+2 000.00	
8	*Current*	A	3+2 000.00	
9	*Active power*	*W*	5+0 00000	
10	*Reactive power*	var	5+0 00000	
11	*Apparent power*	VA	5+0 00000	
12	*Power factor*	*PF*	1+2 0.00	
13	*Frequency*	Hz	2+2 00.00	
14	*Forward Active demand*	W	5+0 00000	
15	Forward Maximum active demand	W	5+0 00000	
16	*Reverse Active demand*	*W*	5+0 00000	With indicator of "-"
17	Reverse Maximum active demand	*W*	5+0 00000	With indicator of "-"
18	*Forward Reactive power demand*	var	5+0 00000	
19	*Forward Maximum reactive demand*	var	5+0 00000	
20	*Reverse Reactive demand*	var	5+0 00000	With indicator of "-"
21	*Reverse Maximum reactive demand*	var	5+0 00000	With indicator of "-"

LCD Information display page

Long press button for more than 3 seconds at any Scrolling display page to enter the information display page "SETUP"

Page				
1	12-digit serial number of the meter		000000000000	
2	Scrolling time LCD		5 seconds	
3	Demand calculation method & cycle		15 minutes default	
4	Combination code		1-total =forward 2-Total=reverse **3-Total =forward +reverse (default)** 4-Total=Forward- Reverse	Default 3
5	SO Constant			Default : 1000imp/kWh,100ms 1000imp/kvarh,100ms
6	Software version number		V101	
7	CRC code		5A8E	