

smartcontroller

Electrical Excellence

PRODUCT CATALOGUE

DIN RAIL KWH METER





SINGLE PHASE 2 WIRE KWH METER

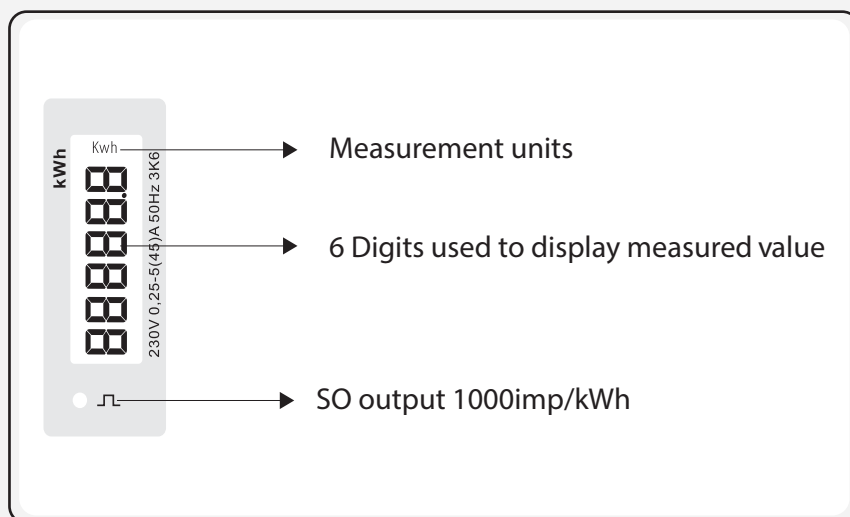
Model No: SMART-KME 400D

- 45A MAX, Direct Load
- One Module Wide
- Active Energy Measured
- Pulse Output
- Din Rail Mounted



DESCRIPTION

The Smart Controller A/D/DB series provides a unit-direction (anti-reverse) measurement model. It would only counts the forward energy, and not counts the reverse energy. It is widely used In solar generation energy measurement.

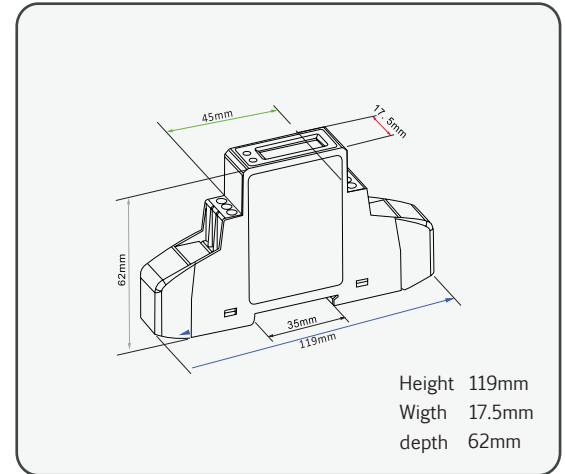


SPECIFICATION

Display	LCD
	LCD with Backlit
Nominal Voltage (Un)	120V or 230V ac
Operational Voltage	80%~120% of Un
Insulation Capabilitie	
- AC Voltage Withstand	4KV for 1 minute
- Impulse Voltage Withstand	6KV-1.2μS
Basic Current (Ib)	5A
Maximum Rated Current (Imax)	45A
Operational Current Rage	0.4% Ib-Imax
Over Current Withstand	30 Imax for 0.01s
Operational Frequency Range	50 / 60Hz
Internal Power Consumption	≤ 2W/10VA
Pulse Output	1000imp/kWh
Max Reading	99999.9 kWh



DIMENSIONS

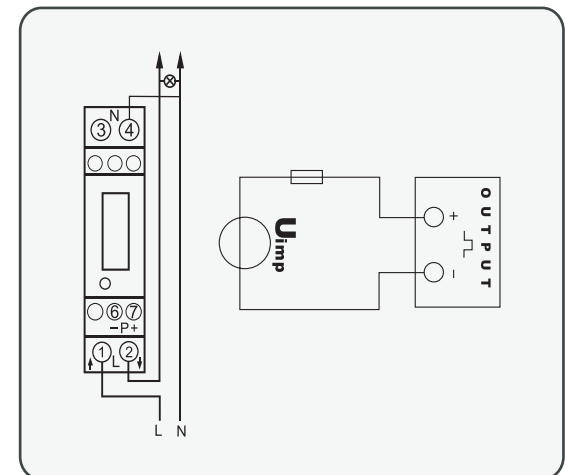


PERFORMANCE CRITERIA

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	Class1/Class B
Installation Category	CAT II
Mechanical Environment	M1
Degree of Pollution	E2
Protection Against Penetration of Dust and Water	2
Insulating Encased Meter of Protective Class	IP51(indoor)
Electrostatic Discharges	II
Electromagnetic HF Fields	8kV contact / 15kV air gap
Electrical Fast Transients	IEC 61000-4-3
Surge	4kV
Radiated and Conducted	4kV
Emissions	EN 55022



WIRING DIAGRAM



Pulso Output

ATTENTION:

Pulse output must be fed as show in the wiring diagram below. Scrupulously respect polarities and the connection mode to coupler with potential free SPST-NO content. Contact range: 5~27VDC
Max. current input: 27mA DC.



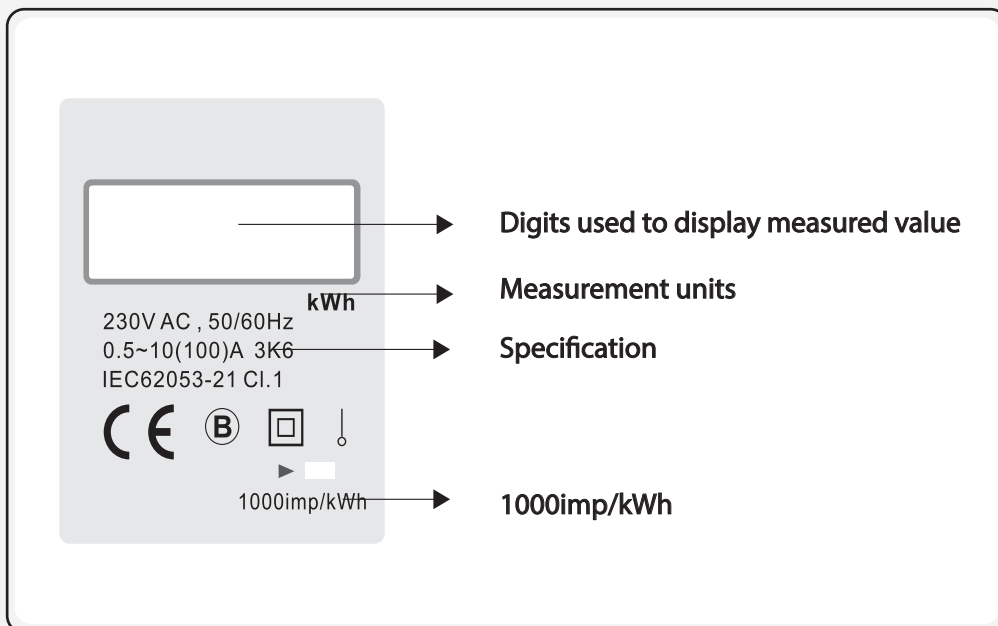
SINGLE PHASE 2 WIRE KWH METER

Model No: SMART-KME 401D

- 100A MAX, Direct Load
- Two Module Wide
- Active Energy Measured
- Pulse Output
- Din Rail Mounted



DESCRIPTION

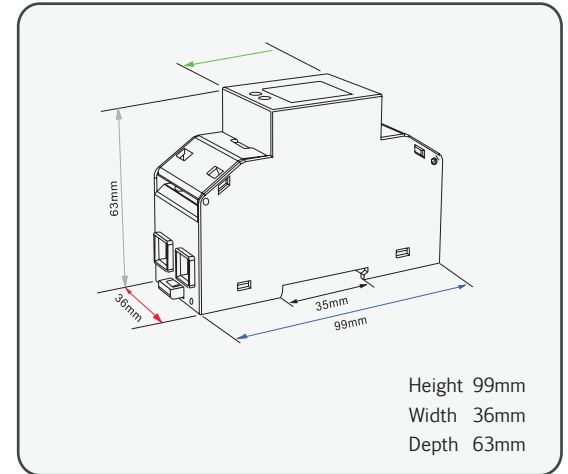


SPECIFICATION

Display	LCD
Nominal Voltage (Un)	120V or 230V ac
Operational Voltage	80%~120% of Un
Insulation Capabilitie	
- AC Voltage Withstand	4KV for 1 minute
- Impulse Voltage Withstand	6KV-1.2μS
Basic Current (Ib)	10A
Maximum Rated Current (Imax)	100A
Operational Current Rage	0.4% Ib-Imax
Over Current Withstand	30 Imax for 0.01s
Operational Frequency Range	50 or 60Hz
Internal Power Consumption	≤ 2W/10VA
Pulse Output	1000imp/kWh
Max Reading	999999.9 kWh(SDM230A)
	99999.9 kWh(SDM230D)



DIMENSIONS

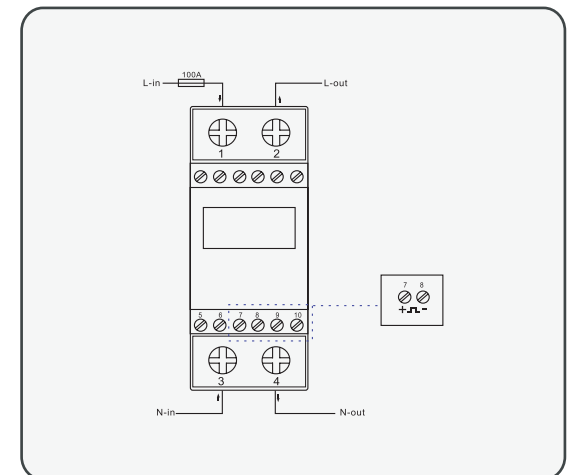


PERFORMANCE CRITERIA

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	Class1/Class B
Installation Category	CAT II
Mechanical Environment	M1
Degree of Pollution	E2
Protection Against Penetration of Dust and Water	2
Insulating Encased Meter of Protective Class	IP51(indoor)
Electrostatic Discharges	II
Electromagnetic HF Fields	up to 2000m
Electrical Fast Transients	8kV contact / 15kV air gap
Surge	IEC 61000-4-3
Radiated	4kV
Conducted Emissions	4kV
	EN 55022



WIRING DIAGRAM



MECHANICS

Din Rail Dimension	99x36x63 (WxHxD) DIN 43880
Mounting DIN Rail	35mm
Sealing	IP51 (indoor)
Material	self-extinguishing UL94V-0



SINGLE PHASE 2 WIRE KWH METER

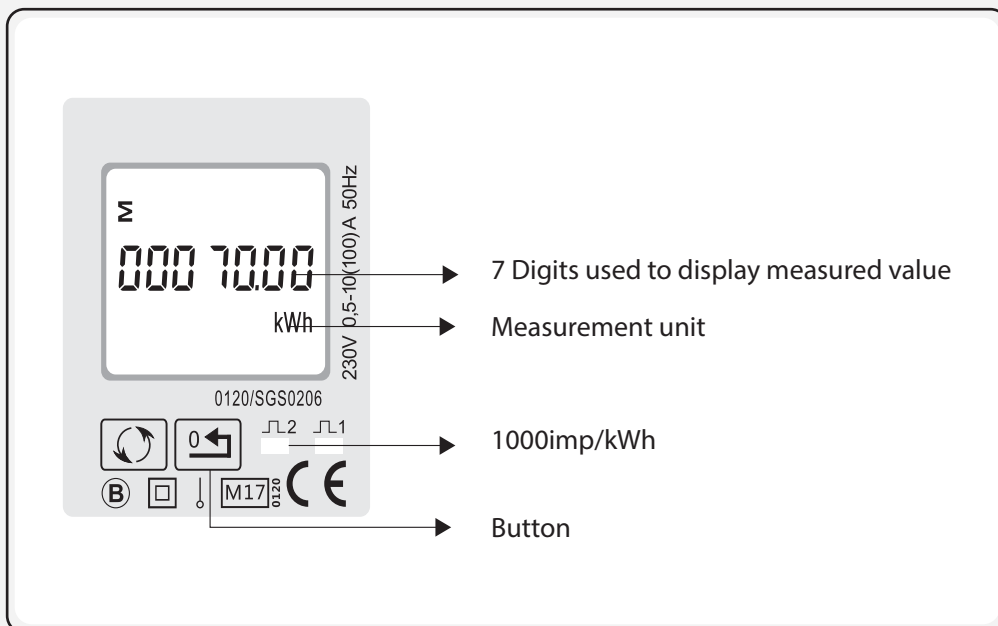
Model No: SMART-KME 402D

- 100A MAX, Direct Load
- Active Energy + Power Measured
- Resettable Energy
- Pulse Output
- Din Rail Mounted



DESCRIPTION

There are two buttons on the panel of Smart - KME 402D



This button is used to scroll the information pages.

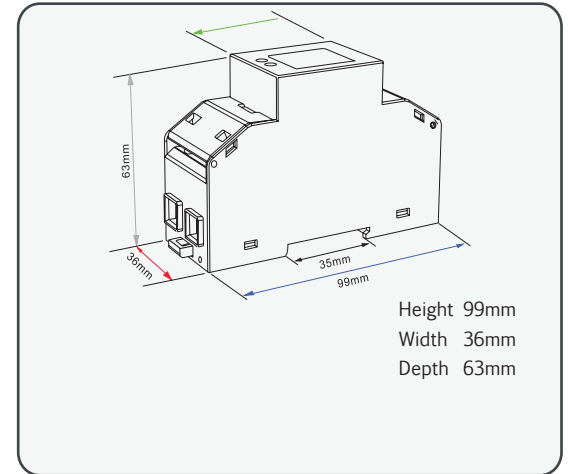
This button is used to rest the partial energy information.

SPECIFICATION

Display	LCD
Nominal Voltage (Un)	120V or 230V ac
Operational Voltage	80%~120% of Un
Insulation Capabilitie	
- AC Voltage Withstand	4KV for 1 minute
- Impulse Voltage Withstand	6KV-1.2μS
Basic Current (Ib)	10A
Maximum Rated Current (Imax)	100A
Operational Current Rage	0.4% Ib-Imax
Over Current Withstand	30 Imax for 0.01s
Operational Frequency Range	50 or 60Hz
Internal Power Consumption	≤ 2W/10VA
Pulse Output	1000imp/kWh
Max Reading	999999.9 kWh(SDM230A)
	99999.9 kWh(SDM230D)



DIMENSIONS

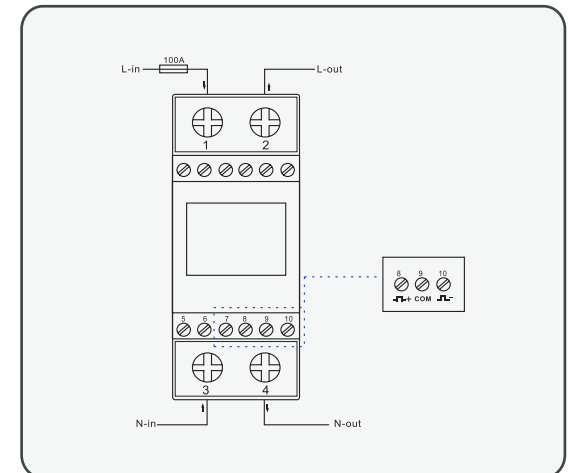


PERFORMANCE CRITERIA

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	Class1/Class B
Installation Category	CAT II
Mechanical Environment	M1
Degree of Pollution	E2
Protection Against Penetration of Dust and Water	2
Insulating Encased Meter of Protective Class	IP51(indoor)
Electrostatic Discharges	II
Electromagnetic HF Fields	up to 2000m
Electrical Fast Transients	8kV contact / 15kV air gap
Surge	IEC 61000-4-3
Radiated	4kV
Conducted Emissions	4kV
	EN 55022



WIRING DIAGRAM



MECHANICS

Din Rail Dimension	99x36x63 (WxHxD) DIN 43880
Mounting DIN Rail	35mm
Sealing	IP51 (indoor)
Material	self-extinguishing UL94V-0



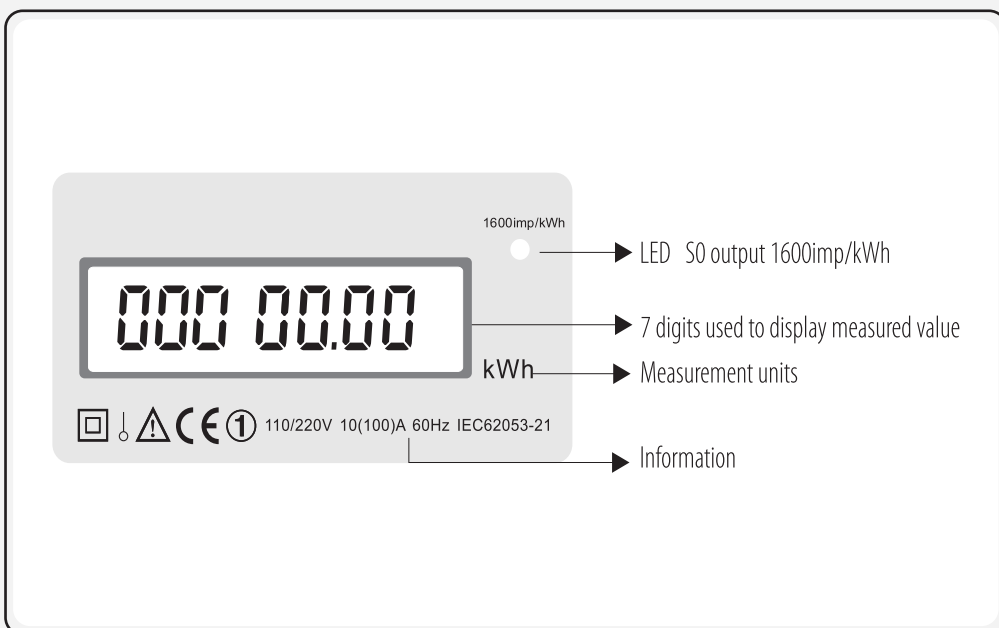
SINGLE PHASE 3 WIRE KWH METER

Model No: SMART-KME 403D

- 100A MAX, Direct Load
- Active Energy Measured
- 4 Module Wide
- Pulse Output
- IEC 62053-21 Class 1



DESCRIPTION

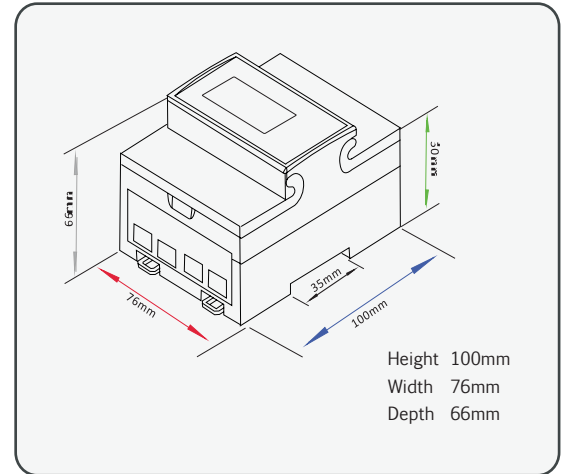


SPECIFICATION

Nominal Voltage(Un)	230V ac / 110V ac
Operational Voltage	30%~120% of Un
Instation 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	50 or 60Hz
Internal Power Consumption	≤ 2W/10VA
Pulse Output	1500imp/kWh
Display	LCD
Max Reading	99999.99 kWh



DIMENSIONS

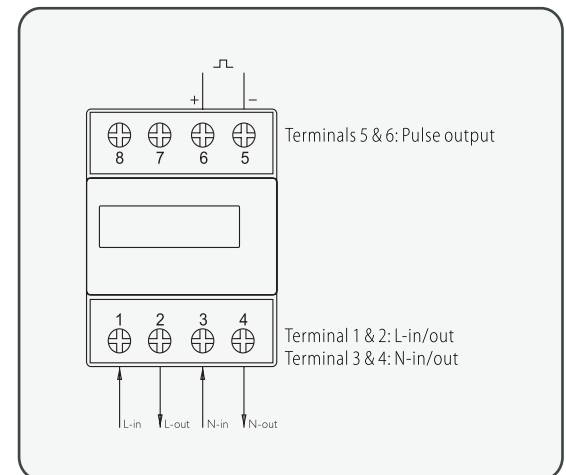


PERFORMANCE CRITERIA

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	Class1/Class B
Installation Category	CAT II
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
Electrostatic Discharges	up to 2000m
Electromagnetic HF Fields	8kV contact / 15kV air gap
Electrical Fast Transients	IEC 61000-4-3
Surge	4kV
Radiated Conducted Emissions	4kV
	EN 55022



WIRING DIAGRAM



MECHANICS

Din Rail Dimension	76x100x66 (WxHxD) DIN 43880
Mounting DIN Rail	35mm
Sealing	IP51 (indoor)
Material	self-extinguishing UL94V-0



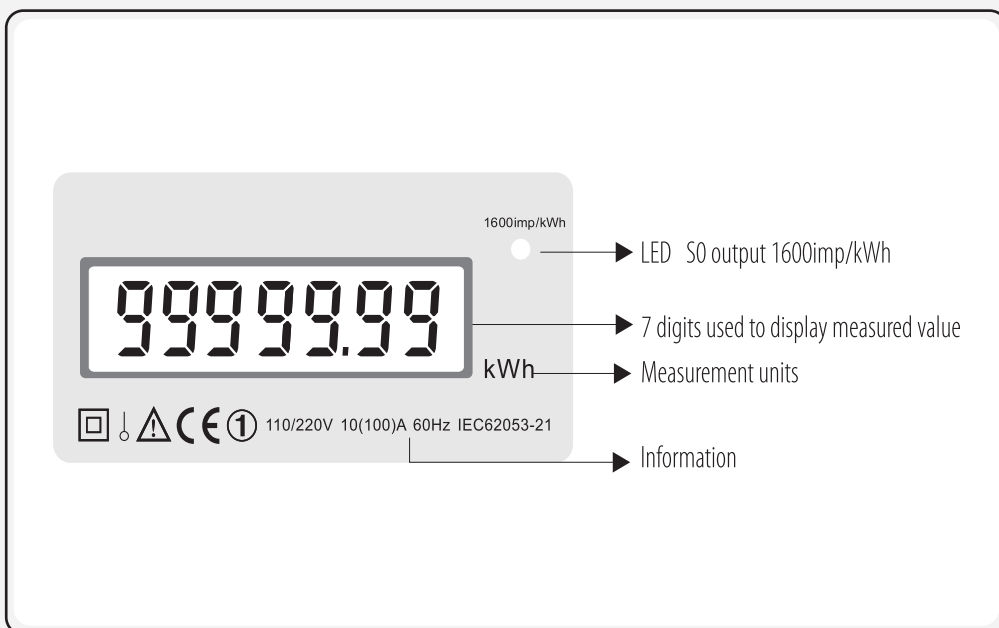
SINGLE PHASE 3 WIRE KWH METER

Model No: SMART-KME 404D

- 100A MAX, Direct Load
- Active Energy Measured
- 4 Module Wide
- Pulse Output



DESCRIPTION



SPECIFICATION

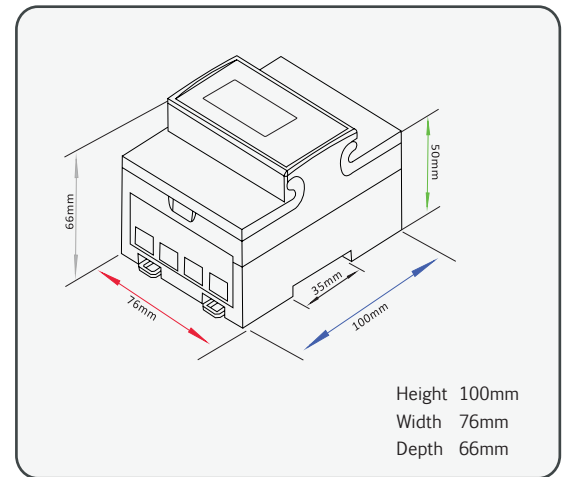
Nominal Voltage(Un)	110/220V ac
Operational Voltage	80%~120% of Un
Instation Capabilities	
- AC Voltage withstand	4KV for 1 minute
- Impulse Voltage withstand	6KV-1.2μS
Basic Current (Ib)	10A
Maximum Rated Current (Imax)	100A
Operational Current Range	0.4% Ib-I _{max}
Over Current withstand	30 I _{max} for 0.01s
Operational Frequency Range	50 or 60Hz
Internal Power Consumption	≤ 2W/10VA
Pulse Output	1600imp/kWh
Display	LCD
Max Reading	99999.99 kWh

PERFORMANCE CRITERIA

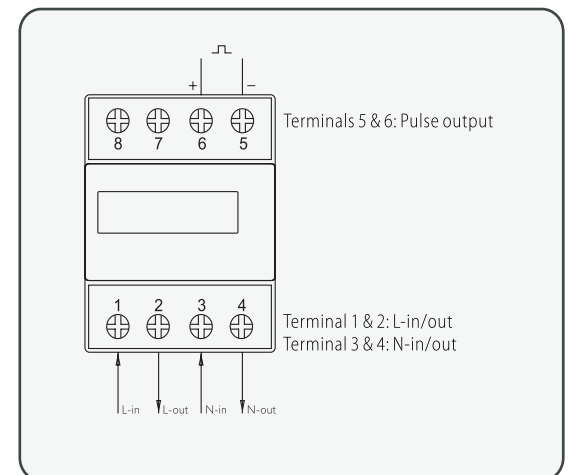
Operating Humidity	≤ 90%
Storage Humidity	≤ 95%
Operating Temperature	-25°C - +55°C
Storage Temperature	-40°C - +70°C
Reference Temperature	23°C± 2°C
International Standard	IEC 62053-21 / EN50470-1/3
Accuracy Class	Class1/Class B
Installation Category	CAT II
Mechanical Environment	M1
Electromagnetic Environment	E2
Degree of Pollution	2
Protection Against Penetration of Dust and Water	IP51(indoor)
Insulating Encased Meter of Protective Class	II
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



DIMENSIONS



WIRING DIAGRAM



MECHANICS

Din Rail Dimension	76x100x66 (WxHxD) DIN 43880
Mounting DIN Rail	35mm
Sealing	IP51 (indoor)
Material	self-extinguishing UL94V-0



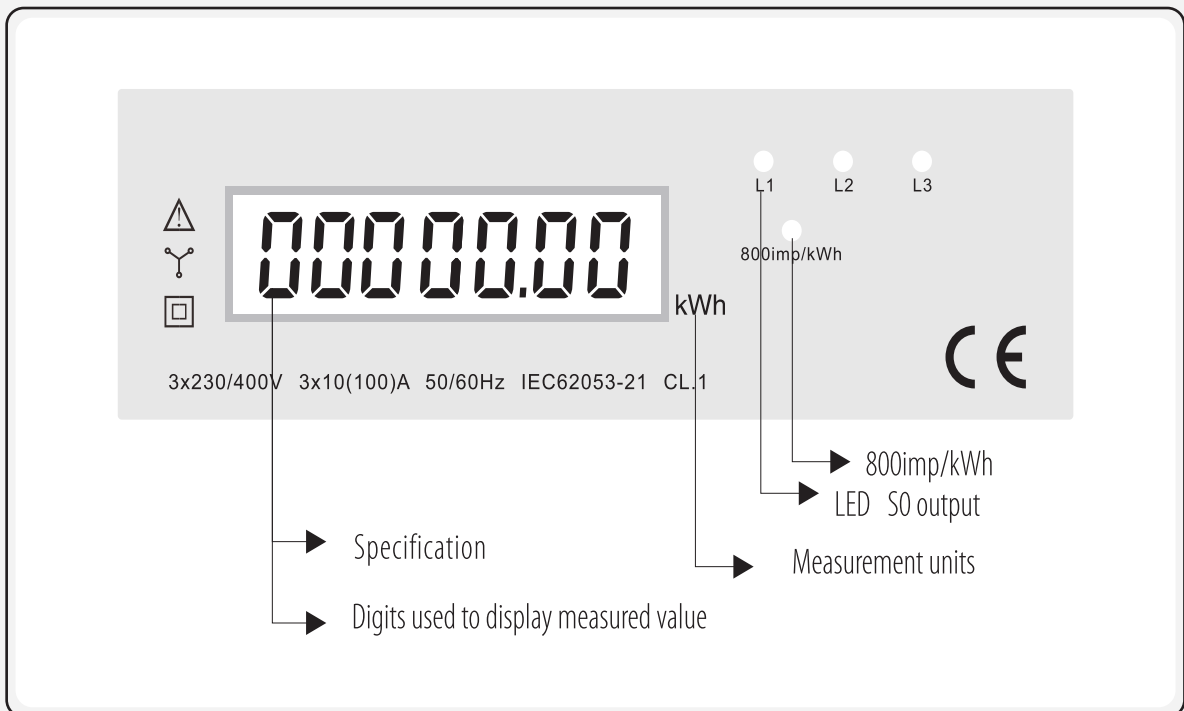
THREE PHASE 4 WIRE KWH METER

Model No: SMART-KME 405D

- 100A MAX, Direct Load
- Active Energy Measured
- 7 Module Wide
- Pulse Output
- 2 Tariffs Output



DESCRIPTION

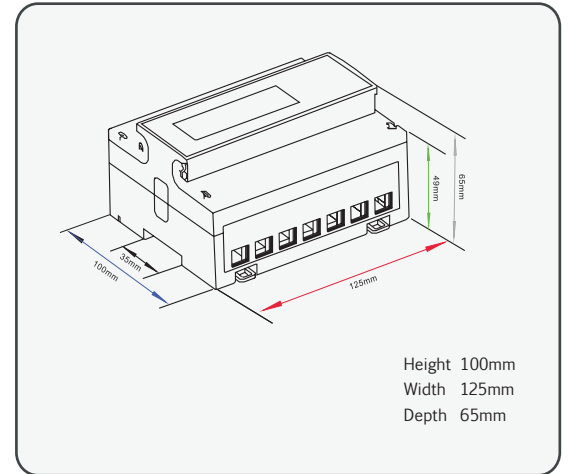


SPECIFICATION

Nominal Voltage(Un)	3x230/400V ac or 3x127/220V ac
Operational Voltage	80%~120% of Un
Instation Capabilities	
- AC Voltage Withstand	4KV for 1 minute
- Impulse Voltage Withstand	6KV-1.2 μ S
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	50 or 60Hz
Internal Power Consumption	\leq 2W/10VA
Pulse Output	1600imp/kWh
Display	LCD
Max Reading	99999.99 kWh
	999999.99 kWh



DIMENSIONS

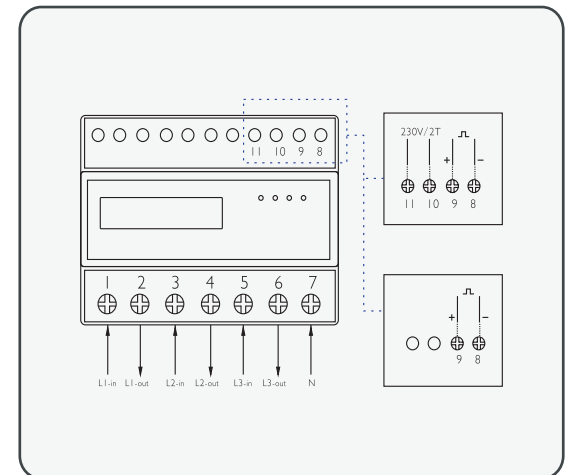


PERFORMANCE CRITERIA

Operating Humidity	\leq 90%
Storage Humidity	\leq 95%
Operating Temperature	-25°C - +55°C
Storage Temperature	-40°C - +70°C
Reference Temperature	23°C \pm 2°C
International Standard	IEC 62053-21 / EN50470-1/3
Accuracy Class	Class1/Class B
Installation Category	CAT II
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
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 DIAGRAM



MECHANICS

Din Rail Dimension	76x100x66 (WxHxD) DIN 43880
Mounting DIN Rail	35mm
Sealing	IP51 (indoor)
Material	self-extinguishing UL94V-0



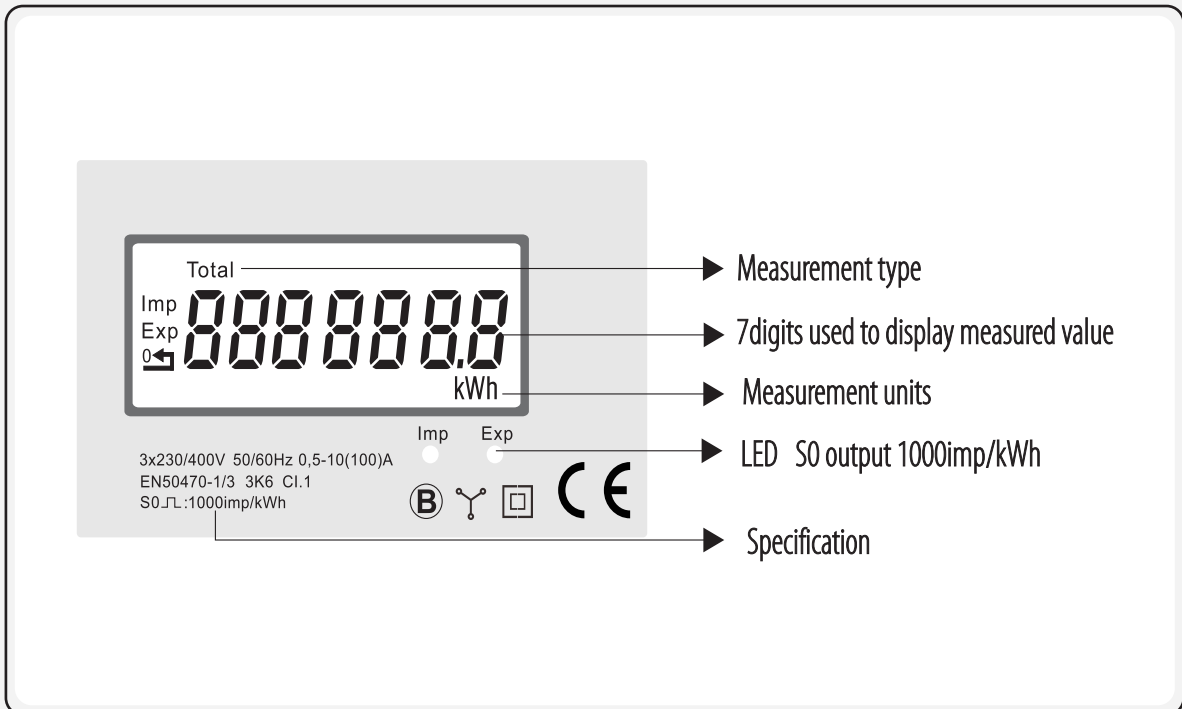
THREE PHASE 4 WIRE KWH METER

Model No: SMART-KME 406D

- 100A MAX, Direct Load
- 4 Module Wide
- Measures Active Energy(kWh) + power(W)
- Bi-Directional Measurement
- Pulse Output
- Resettable Energy



DESCRIPTION

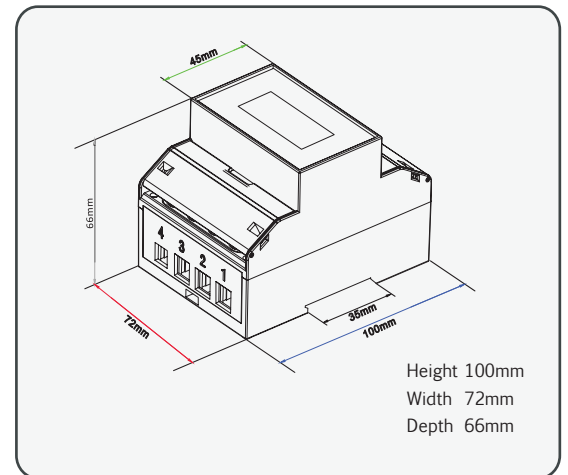


SPECIFICATION

Nominal Voltage(Un)	3x230/400 V ac or 3x127/220 V ac
Operational Voltage	80%~120% of Un
Instation Capabilities	
- AC Voltage Withstand	4KV for 1 minute
- Impulse Voltage Withstand	6KV-1.2μS
Basic Current (Ib)	10A
Maximum Rated Current (I _{max})	100A
Operational Current Range	0.4% I _b -I _{max}
Over Current Withstand	30 I _{max} for 0.01s
Operational Frequency Range	50 or 60Hz
Internal Power Consumption	≤ 2W/10VA
Pulse Output	1600imp/kWh
Display	LCD
Max Reading	99999.99 kWh
	999999.99 kWh



DIMENSIONS

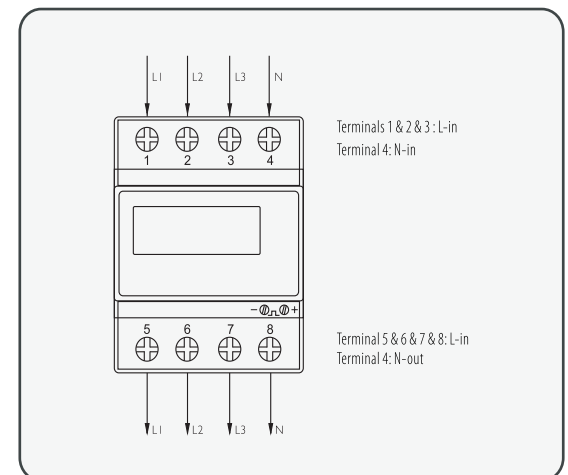


PERFORMANCE CRITERIA

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 1/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
Electrostatic Discharges	up to 2000m
Electromagnetic HF Fields	8kV contact / 15kV air gap
Electrical Fast Transients	IEC 61000-4-3
Surge	4kV
Radiated Conducted Emissions	4kV
	EN 55022



WIRING DIAGRAM



MECHANICS

Din Rail Dimension	72x100x66 (WxHxD) DIN 43880
Mounting DIN Rail	35mm
Sealing	IP51 (indoor)
Material	self-extinguishing UL94V-0



THREE PHASE 4 WIRE KWH METER

Model No: SMART-KME 407CT

- CT Operated
- 4 Module Wide
- Measures Active Energy(kWh) + Power(W)
- Bi-Directional Measurement
- Pulse Output
- Resettable Energy



DESCRIPTION

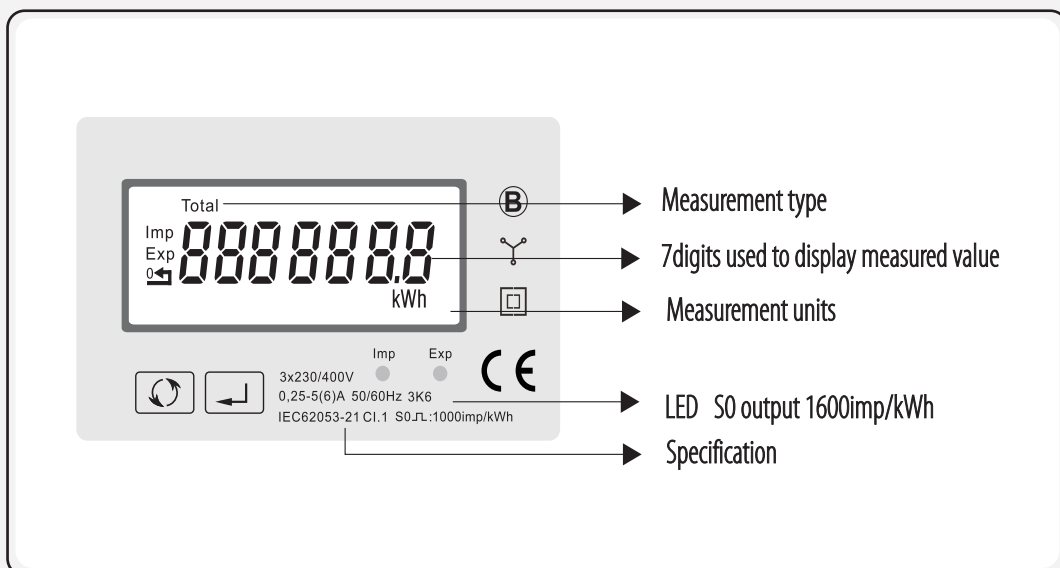
KEYS

Scroll display

Confirm selection

Reset the energy information

Getting into setup mode

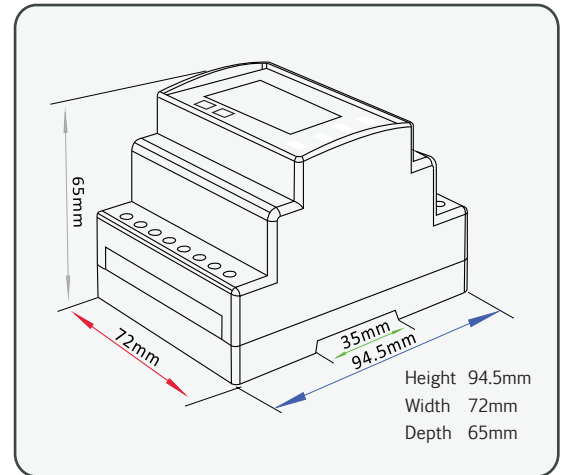


SPECIFICATION

Nominal Voltage(Un)	3x230/400V ac
Operational Voltage	80%~120% of Un
Instation 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	50 or 60Hz
Internal Power Consumption	≤ 2W/10VA
Pulse Output	1600imp/kWh
Display	LCD
Max Reading	99999.99 kWh
	999999.99 kWh



DIMENSIONS

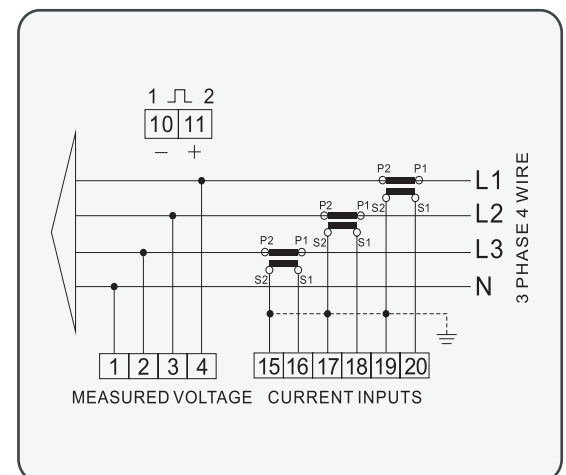


PERFORMANCE CRITERIA

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 1/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
Electrostatic Discharges	up to 2000m
Electromagnetic HF Fields	8kV contact / 15kV air gap
Electrical Fast Transients	IEC 61000-4-3
Surge	4kV
Radiated Conducted Emissions	4kV
	EN 55022



WIRING DIAGRAM



MECHANICS

Din Rail Dimension	100x125x65 (WxHxD) DIN 43880
Mounting DIN Rail	35mm
Sealing	IP51 (indoor)
Material	self-extinguishing UL94V-0



UNIT C7/4 Inchinnan Industrial Park
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