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Technical Specification

Product Code: CU4EM125K

Description: 125A Three Phase Energy Meter Kit

Description: Three Phase 125A Energy Meter Current Transformer

General Information

Dimensions (mm)	76 (W) x 80 (H) x 76 (D)
Materials	Housing: Self-extinguishing Polycarbonate
Colour	Light Grey
RAL Number	7035
Mounting	Foot mounting, busbar mounting or snap on 35mm DIN rail mounting
Warranty (Years)	3

Rated Standard

Rated Primary Current (A) (Ipr)	125
Frequency Range (Hz)	47-63
Rated Continuous Current (Icth)	100% Rated Current
Rated Short Time Thermal Current (Ith)	<60In
Rated Dynamic Current (Idyn)	2.5Ith
Instrument Security Factor (FS)	<5
Rated Secondary Output (Vsr)	330mV
Accuracy Class	Class 1 to IEC/EN60044-8 & IEC/EN61869-2
Rated Secondary Burden (Rbr)	>5kΩ

Insulation

Insulation Type	Dry transformer, air insulation; Class B
Highest voltage (Um)	0.72kV r.m.s.
Rated Insulation Level	3kV r.m.s. 50Hz/1 min
Primary Winding	Passing Cable
Secondary Winding	RJ45 Connection

Environment

Ingress Protection	IP20 (Terminals), IP40 (Housing)
Operational Temperature (°C)	-25 to +40
Reference Temperature (°C)	23 (±1)
Daily Mean Temperature (°C)	≤30
Storage Temperature (°C)	-40 to +85
Maximum Humidity (%)	85 (non-condensing)

Standards BS EN 50470-1, BS EN 50470-3, BS EN IEC 63000

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CLICK OR SCAN Catalogue Range DoC Installation CLICK OR SCAN

Description: Three Phase Modbus Multi-Function Energy Meter

General Information

Dimensions (mm)	70 (W) x 118.5 (H) x 66 (D)
Materials	Housing: Self-extinguishing Polycarbonate (UL94 V-0)
Warranty	3

Display

Display Type	LCD, High Definition with White Backlight
Digit Height (mm)	6.35
Page Scrolling	Manual by front key or auto scroll mode
Displayed Parameters & Accuracies	Voltage 0.5% of full scale Current 0.5% of full scale Frequency 0.1% of full scale (L-N>20V) Power factor 1% of unity Active power 1% Reactive power 1% Apparent power 1% Active Energy Class 1, Class B (IEC/EN62053-21, IEC/EN50470) Reactive Energy Class 2 (IEC/EN62053-23)
Energy Display Maximum	9999999
Resolution	0.01K, 0.1K, 1K, 0.01M, 0.1M (depending on CT ratio & VT ratio)

Programming

Programmable Parameters	**CT Primary current **VT primary voltage **VT secondary voltage Communication address Communication speed (Baud) Communication Parity Communication number of stop bits Back-light time-out period Demand period (for integration) Pulse duration Pulse output (kWh) **Reset to Factory Default **Reset Energy and Maximum Demand **Reset Active Energy **Reset Reactive Energy **Reset Apparent Energy Reset Maximum Current Reset Maximum Active Power Reset Minimum Active Power Reset Maximum Reactive Power Reset Minimum Reactive Power Reset Maximum Apparent Power NOTE: Once Programming Mode Is entered, the settings marked ** will be locked out after 15 Mins. No further adjustment is possible without return to factory.
Programming Access	Password protected (user selectable)
Memory Reserve	Non-volatile memory

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CLICK OR SCAN Catalogue Range DoC Installation CLICK OR SCAN

Description: Three Phase Modbus Multi-Function Energy Meter - Continued

Input	
Connection	Three phase four wire
Input Voltage Range (L-N)	3 x 100 to 240
Input Voltage Range (L-L)	3 x 173 to 415
Nominal Current Input (A)	1 (330mV) - easywire®
Maximum Current (A) (Imax)	1.2 (396mV) - easywire®
Voltage Circuit Power Consumption (Max.)	<8
Starting Current (mA)	2mA (0.66mV)
Short Time Overcurrent	30 x Imax to IEC/EN62053-21 + 23
Impulse Voltage Withstand (kV)	6 (1.2/50µS 0.5J)
Voltage Withstand (AC)	4kV 50Hz for 1 min
CT Ratio Range (A)	5 - 6000
VT Ratio Range (V)	100 - 600
Frequency	50
Current Distortion Factor	According to IEC/EN50470
Auxiliary Supply	
Voltage Range	Self-supplied from measuring input
Outputs - Energy Pulses	
Number of Pulse Outputs	1
Pulse Output Function	kWh
Pulse Output Type	1
Pulse Output Current (Max)	100mA
Pulse Output Voltage Range (V DC)	5 to 27
Pulse Duration	50 / 100 / 150 / 200 / 250 / 300ms
Selectable Pulse Resolution	0.01K, 0.1K, 1K, 0.01M, 0.1M (depending on CT ratio & VT ratio)
Communication - Modbus Version	
Communication Protocol	Modbus
Communication Type	RS485
Address	1 to 255
Number of Bits	8
Parity	None, odd, even
Baud Rate (bps)	300, 600, 1200, 2400, 4800, 9600, 19200
Required Response Time to Request	≤100ms
Number of Connected Meters	32 (up to 255 with RS485 repeater)
Distance from Master Device (m Max)	500
Insulation	
Installation Category	III
Pollution Degree	2
Insulation Voltage Rating	300V (L-N)
Environment	
Ingress Protection	IP20 (Terminals), IP54 (Front of Housing)
Reference Temperature (°C)	23 (±2)
Operational Temperature (°C)	-10 to +55
Storage Temperature (°C)	-20 to +75
Maximum Humidity (%)	85 (non-condensing)
Mechanical Environment	M1
Electromagnetic Environment	E2
Mechanical	
Tamper Sealing	Meter housing (by means of a tamper evident seal). Sealable terminal covers.
Voltage Input Terminal Type	Pluggable terminal block - Screw clamp type
Voltage Input Maximum Cable Size (mm^2)	2.5
Voltage Output Terminal Type	Pluggable terminal block - Screw clamp type
Voltage Output Maximum Cable Size (mm^2)	2.5
Communication Output (RS485 & Pulse)	Pluggable terminal block - Screw clamp type
Communication Output Maximum Cable Size (mm^2)	1.5
Standards	BS EN 50470-1, BS EN 50470-3, BS EN IEC 63000
Additional Information	For cleaning / polishing of products, use only a soft, dry, clean cloth. Tamper Seal (must be fitted to comply with MID). Installation must comply with MID certified requirements.

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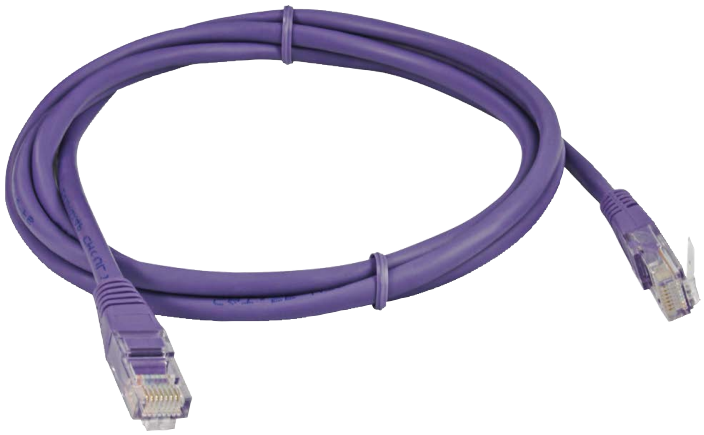
CLICK OR SCAN Catalogue Range DoC Installation CLICK OR SCAN

Description: Energy Meter Power Supply Cable - 1000mm

General Information

Dimensions (mm)	1000
Colour	Black
Termination Type	Insulated Bootlace Ferrules
Connector Installed	easywire® termination block
Warranty (Years)	3

Description: RJ45 Cable - 300mm



General Information

Dimensions (mm)	300
Colour	Purple
Connector Installed	RJ45
Warranty (Years)	3

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