



96 x 96mm

Features:

- ▶ 3Ø True RMS measurement (Voltage, Current)
- ▶ 3Ø Power (Active, Reactive, Apparent),
- ▶ 3Ø Power factor (Average, Individual, Displacement & True PF)
- ▶ Energy (Active, Reactive, Apparent)
- ▶ Modbus RTU communication (RS485)
- ▶ % THD Up to 31st level
- ▶ Max/Min demand for power
- ▶ % Unbalance for voltage and current
- ▶ Suppression current
- ▶ Programmable CT/PT (Primary / Secondary)

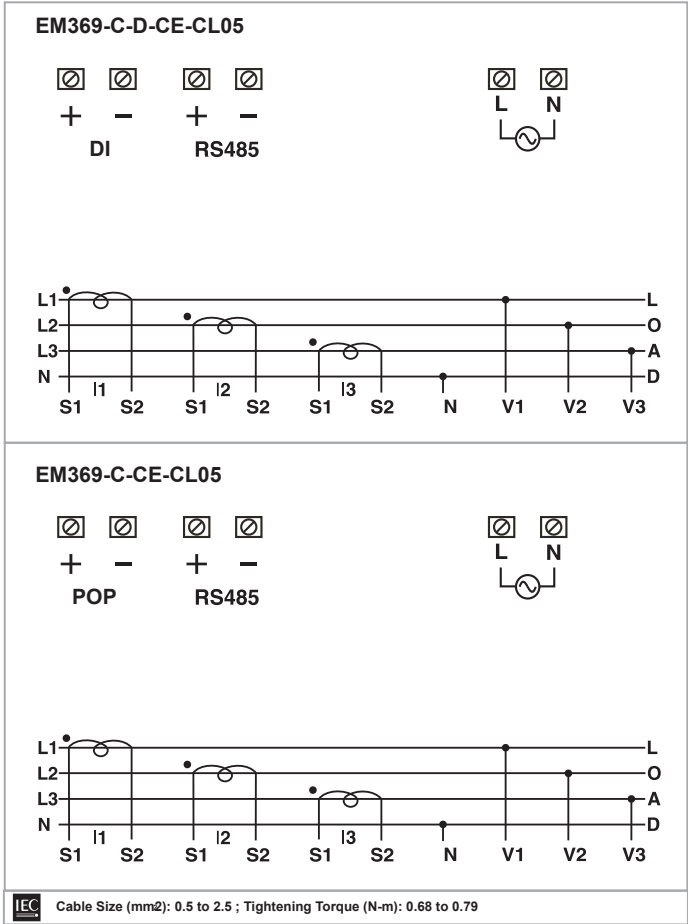
Certifications: 

Technical specifications

Display specifications	
Display	1 row LCD display
Digits	9
Digit height	0.56"
Resolution	For Energy: 0.001k (auto resolution)
	For Power, Voltage, Current: Auto resolution
	For Power factor: 0.001
	For Frequency: 0.01 Hz
Operational characteristics	
Type of measurement	True RMS
Sampling rate	121 Samples / Cycle
Electrical connections	3Ø - 3 wire (delta), 3Ø - 4 wire (wye), 2Ø - 3 wire, 1Ø - 2 wire (L - N)
Data update rate	1 sec
Input-Voltage	
PT primary	100V to 500kV (programmable for any value)
PT secondary	100V to 500V (programmable for any value)
Voltage nominal	240V AC (L-N) / 415V AC (L-L)
Measured V with full range	19V to 480V AC L-L (277V AC L-N) (CAT III), 520V AC L-L (300V AC L-N) (CAT II)
Impedance	≥0.8M Ohms
Frequency range	45 - 65Hz
VA burden	0.5VA Per phase
Input current	
CT primary	1 / 5A to 32760A (programmable for any value)
CT secondary	1A / 5A (programmable)
Current nominal	5mA to 6A
Withstand continuous	120A for 1 sec
Frequency range	45-65 Hz
VA burden	0.5VA per phase
Measurement accuracy	
Accuracy	Voltage (L-N / L-L): ±0.5% of full scale
	Current: ±0.5% of full scale
	Power factor: ±0.01
	Frequency: ±0.1% For L - N Voltage >20V, For L - L Voltage >35V
	Power (Active - ±0.5%, Reactive - ±2%, Apparent - ±0.5%)
	Energy (Active - Class 0.5S, Reactive - Class 2, Apparent - Class 0.5)

Input specifications	
Digital input	24V DC ($\pm 10\%$)
Output specifications	
Pulse output	Voltage range: External 24V DC max
	Current capacity: 100mA max
	Pulse width: 50ms
	Configurable pulse weight from 1 to 9999000 pulses / k _h (kWh, kVAh, or kVARh)
Device ID & Parity	1 to 255 & None, Odd, Even
Protocol & Interface	RS485 and MODBUS RTU
Baud rate	300, 600, 1200, 2400, 4800, 9600, 19200, 38400 (in bps)
Transmission mode	Half duplex
Transmission distance	500m maximum
Data types	Float, Integer and Hex
Stop bits	1 or 2
Isolation	2KV RMS
Mechanical specifications	
Weight	303 gm approx
Material	Polycarbonate
IP degree of protection	Front IP65, Back IP20
Torque at terminals	0.68 N-m to 0.79 N-m
Wire gauge at terminals	14 to 20 AWG; 75 °C
Mounting position	Vertical
Auxiliary supply specifications	
Supply voltage	40 to 300V AC/DC, 50-60 Hz
Power consumption	6VA max
Environmental characteristics	
Operating temperature	-10 °C to 55 °C (14 °F to 131 °F)
Storage temperature	-20 °C to 75 °C (-4 °F to 167 °F)
Humidity	85% (non - condensing)
Altitude	Up to 2000m
Measurement category	CAT III
Pollution degree	2

Terminal connections



L

N

EM369-C-CE-CL05

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POP

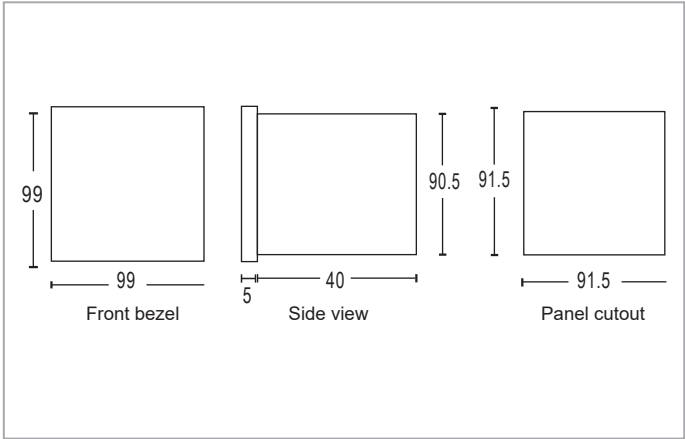
RS485

L

N

IEC Cable Size (mm2): 0.5 to 2.5 ; Tightening Torque (N-m): 0.68 to 0.79

Dimensions (All are in mm)



Compliance

Applicable EMI / EMC Standards	
Product standard : IEC 61326-1 Edition 3.0	
Category	Standards compliance
Electrostatic discharge	IEC 61000 - 4 - 2
Immunity to electromagnetic RF fields	IEC 61000 - 4 - 3
Conducted immunity	IEC 61000 - 4 - 6
Immunity to magnetic fields	IEC 61000 - 4 - 8
Immunity to voltage dips and interruptions	IEC 61000 - 4 - 11
Fast transient	IEC 61000 - 4 - 4
Immunity to surge waves	IEC 61000 - 4 - 5
Conducted and radiated emissions	CISPR-11
Safety standards	
IEC61010 Edition 3.0 CAT III, Protection class II	

Ordering information

Product code	Supply voltage	Input	Comm. (RS485)	Certification
EM369-C-D-CE-CL05	40 to 300V AC/DC 50/60 Hz	DI	YES	CE
EM369-C-CE-CL05	40 to 300V AC/DC 50/60 Hz	POP	YES	CE