

PD194Z-9HY Series

Real-time measurement Energy metering Switch status monitoring

Power quality monitoring Electric safety monitoring



Accuracy

- U, I, Class 0.2
- P, Q, PF Class 0.5
- kWh Class 0.5s

Applications

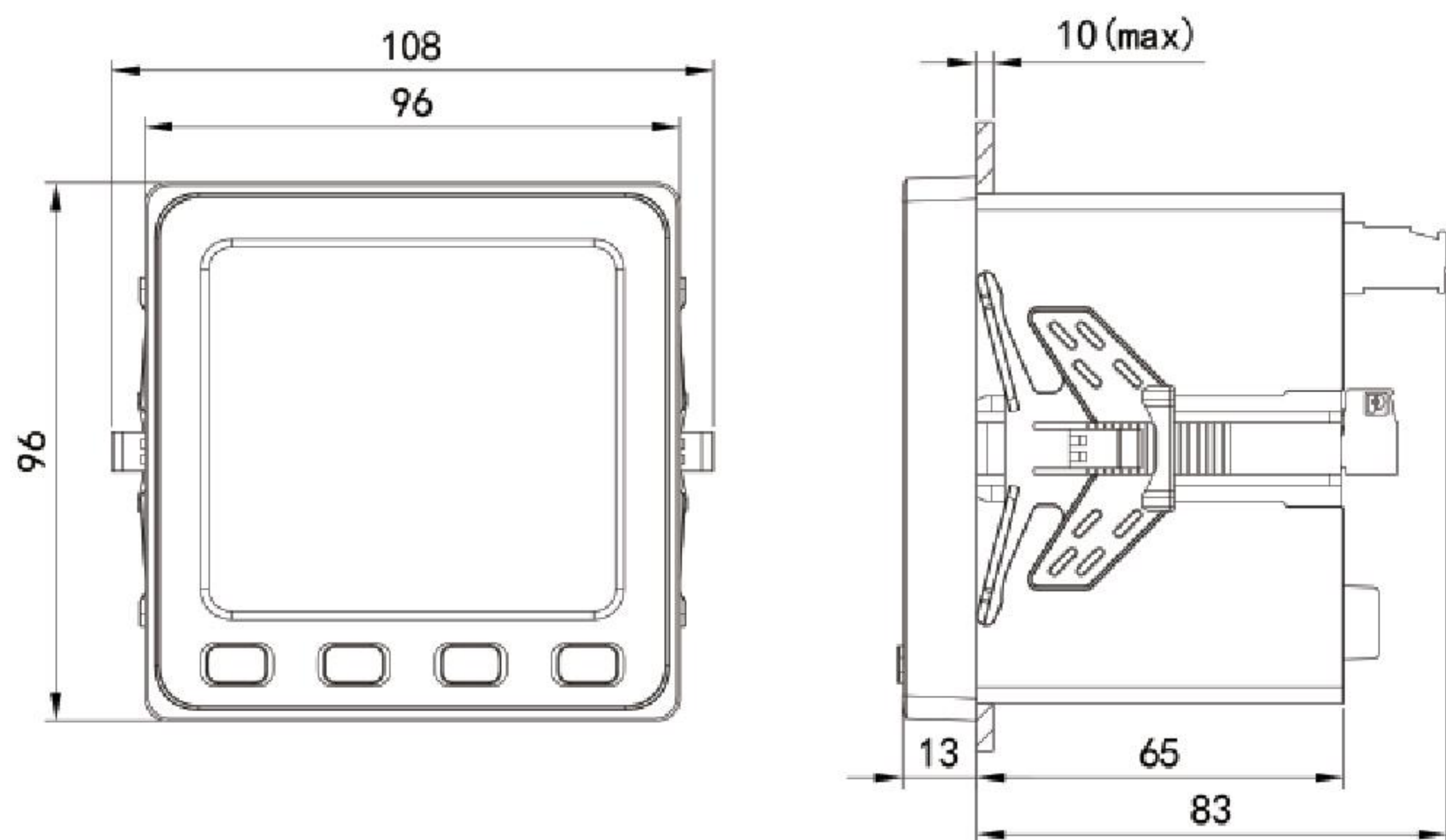
- Energy management
- Power monitoring

Model

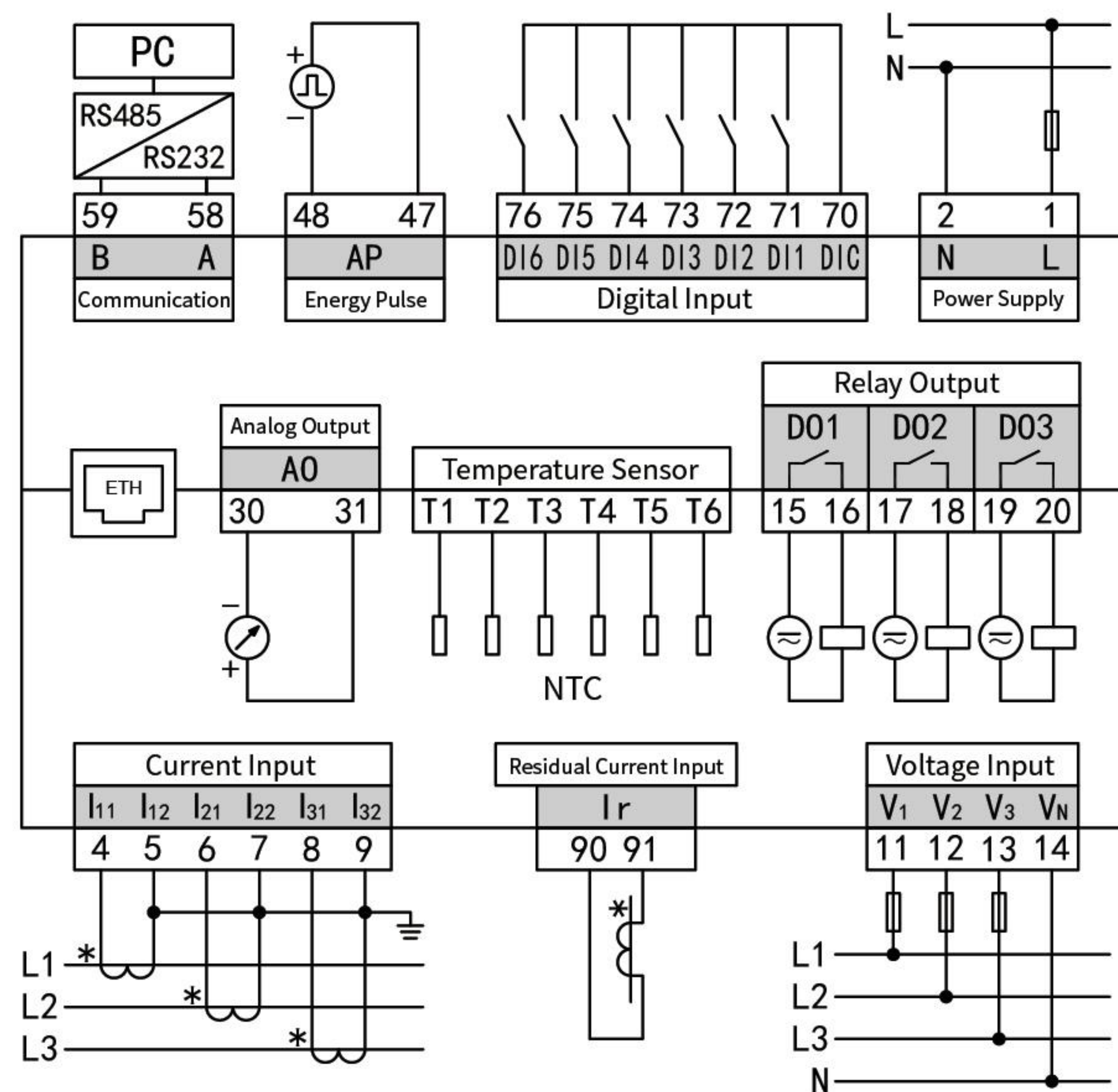
"●" Yes "—" No

Function		PD194Z-9HY	PD194Z-9HYE	PD194Z-9HYTR
Display method	3.8" LCD		●	
	U, I, P, Q, S, PF, Hz		●	
Real-time measurement	Demand		●	
	Max, Min, Average value		●	
	Residual current	—	—	1
	Temperature	—	—	6
Energy metering	Bi-directional active energy		●	
	Bi-directional reactive energy		●	
	Four-quadrant reactive energy		●	
	Tariff energy (6 sets)		●	
Power quality monitoring	THDi, THDu		●	
	Individual harmonic ratio		2-51st	
	Unbalance		●	
	Voltage crest factor		●	
Communication	Current K factor		●	
	RS485		1	
	Ethernet	—	1	—
Input/Output	Digital input		6	
	Relay output	3	2	2
	Analog output	1	—	—
Others	SOE data records		●	
	Freezing data		●	
	Communication register address mapping		●	

Dimensions



Typical Wiring



Technical Specification

Voltage input

Rated value	3x230/400VAC
Startup value	10V
Resolution	0.1 V
Impedance	$\geq 1.7 \text{ M}\Omega$ /phase
Power consumption	$\leq 0.1 \text{ VA}$ /phase
Overload	Continued: $1.2V_n$, Instantaneous: $2V_n/1\text{min}$
Frequency	45Hz-65Hz

Environmental features

Operating temperature	-25°C - +70°C
Relative humidity	5%-95%RH, No condensation
Working altitude	$\leq 2000\text{m}$
Pollution degree	2

Mechanical features

Dimension	96mm×96mm×83mm
IP	Front IP54, Back IP20

Security features

Measurement category	300V CAT III
Safety	IEC 61010-1, Double insulation

Analog output

Number of channels	1
Type	4-20mA, 4-12-20mA
Load capacity	$\leq 350 \Omega$

Current input

Rated value	1A or 5A
Startup value	10mA
Resolution	1mA
Impedance	$\leq 20\text{m}\Omega$ /phase
Power consumption	$\leq 0.2 \text{ VA}$ /phase
Overload	Continued: $2I_n$, Instantaneous: $20I_n/1\text{s}$

Relay output

Number of channels	3 (MAX)
Contact rating	AC 250V/5A or DC30V/5A (AC1)

Digital input

Number of channels	6
Type	Dry contact, built-in DC 24V

Auxiliary power

Voltage	AC/DC 80V-270V
Power consumption	$\leq 5\text{VA}$

Communication Interface

One RS485 Modbus-RTU	Default
One Ethernet Modbus-TCP	Optional

Real Time Clock

Clock drift	$\leq 0.5\text{s/day}$
-------------	------------------------

Standard

IEC 61557-12, IEC62053-22, IEC62053-23, IEC 61010-1, IEC 61326-1