

Programmable Ammeter / Voltmeter

Front size: 48x48mm, 72x72mm, 80x80mm, 96x48mm, 96x96mm, 120x120mm

1. General

The PZ series programmable ammeters and voltmeters are a kind of programmable electric digital meters. It can measure electrical network currents or voltages accurately. With 4 keys on the front panel, we can set the parameters according to measurement need, such as ratio CT/ VT, address and baud of communication etc..

They comply EN 61326:2006 and EN 61010-1:2001. At the same time they can transmit the measure data with the options of analog output and communication RS485. With digital input or digital output, they can realize alarming or controlling the status of switches.



2. Technical feature

TECHNICAL PARAMETER		VALUE
Input	Measurable	AL(SP); AL1, AL2, AL3(3P) VL(SP); VL1, VL2, VL3, VL1-2, VL2-3, VL3-1(3P)
	Current range	AC1A, 5A (Consult us for special range)
	Voltage range	AC100V, 220V, 380V, 450V (Consult us for special range)
	CT / VT ratio	Programmable
	Over load	Voltage: 540V (continuous), 1000V (30s); current: 6A (continuous), 50A (30s)
	Frequency	45Hz ~ 65Hz
	Consumption	each voltage, current Input < 0.5VA
	Accuracy class	0.2%
Insulation resistance	Range	AC85 ~ 265V or DC110 ~ 350V
	Consumption	< 1.2W
Insulation resistance		> 100MΩ
Isolation		2kV/1min (RMS) power / Input / output
MTBN		> 50000h
Env	Temperature	Operation: LCD: -10C ~ +45C; LED: -20C ~ +55C Storage: -20C ~ +70C
		Humidity
	Altitude	< 2500m

3. Output options

OPTIONS	FEATURES
Display (L)	LED or LCD display, the brightness can be programmable
Communication (/C)	RS485 (Modbus-RTU); 1 start bit, 8 data bit, 1 stop bit, no parity, speed (1200/2400/4800/9600/19200)
Alarm output(/J)	1 passive relay (1A/30VDC, 5A/250VAC) alarms of over voltage, under voltage and over current The hysteresis and the delay can be programmable
Analog output(/M)	DC 4 ~ 20mA, DC0 ~ 20mA (load < 600Ω), DC 0 ~ 5V, DC 1~5V (load > 1kΩ) Number: /M, /M3 (1 or 3 analog outputs)
Digital options(/K)	4 DI and 2 DO DI: dry contact Input (to display the switches' status) DO: NO-NC contact; 1A/30VDC, 5A/250VAC (to control the status of switches)

4. Specification

96 x 96 x 85 model

TYPE	DESCRIPTION	MEASUREMENT	OPTION
PZ96-AI	Single phase ammeter	AL	4DI/2DO+C J+M3+C
PZ96L-AI	Single phase ammeter LCD		
PZ96-AV	Single phase voltmeter	VL	
PZ96L-AV	Single phase voltmeter LCD		
PZ96-AI3	3 phase ammeter	AL1, AL2, AL3	
PZ96L-AI3	3 phase ammeter LCD		
PZ96-AV3	3 phase voltmeter	VL1, VL2, VL3, VL1-2, VL2-3, VL3-1	
PZ96L-AV3	3 phase voltmeter LCD		

48 x 48 x 88 model

TYPE	DESCRIPTION	MEASUREMENT	OPTION
PZ48-AI	Single phase ammeter	AL	C or M
PZ48-AV	Single phase voltmeter	VL	
PZ48-AI3	3 phase ammeter	AL1, AL2, AL3	
PZ48-AV3	3 phase voltmeter	VL1, VL2, VL3, VL1-2, VL2-3, VL3-1	

96 x 48 x 97.5 model

TYPE	DESCRIPTION	MEASUREMENT	OPTION
PZ96B-AI	Single phase ammeter	AL	-
PZ96BL-AI	Single phase ammeter LCD	AL	
PZ96B-AV	Single phase voltmeter	VL	
PZ96BL-AV	Single phase voltmeter LCD	VL	

80 x 80 x 97.5 model

TYPE	DESCRIPTION	MEASUREMENT	OPTION
PZ80-AI	Single phase ammeter	AL	2DI/2DO+C J+M+C
PZ80L-AI	Single phase ammeter LCD	AL	
PZ80-AV	Single phase voltmeter	VL	
PZ80L-AV	Single phase voltmeter LCD	VL	
PZ80-AI3	3 phase ammeter	AL1,AL2,AL3	4DI/2DO+C J+M3+C
PZ80L-AI3	3 phase ammeter LCD	AL1,AL2,AL3	
PZ80-AV3	3 phase voltmeter	VL1, VL2, VL3, VL1-2, VL2-3, VL3-1	
PZ80L-AV3	3 phase voltmeter LCD	VL1, VL2, VL3, VL1-2, VL2-3, VL3-1	

72 x 72 x 97.5 model

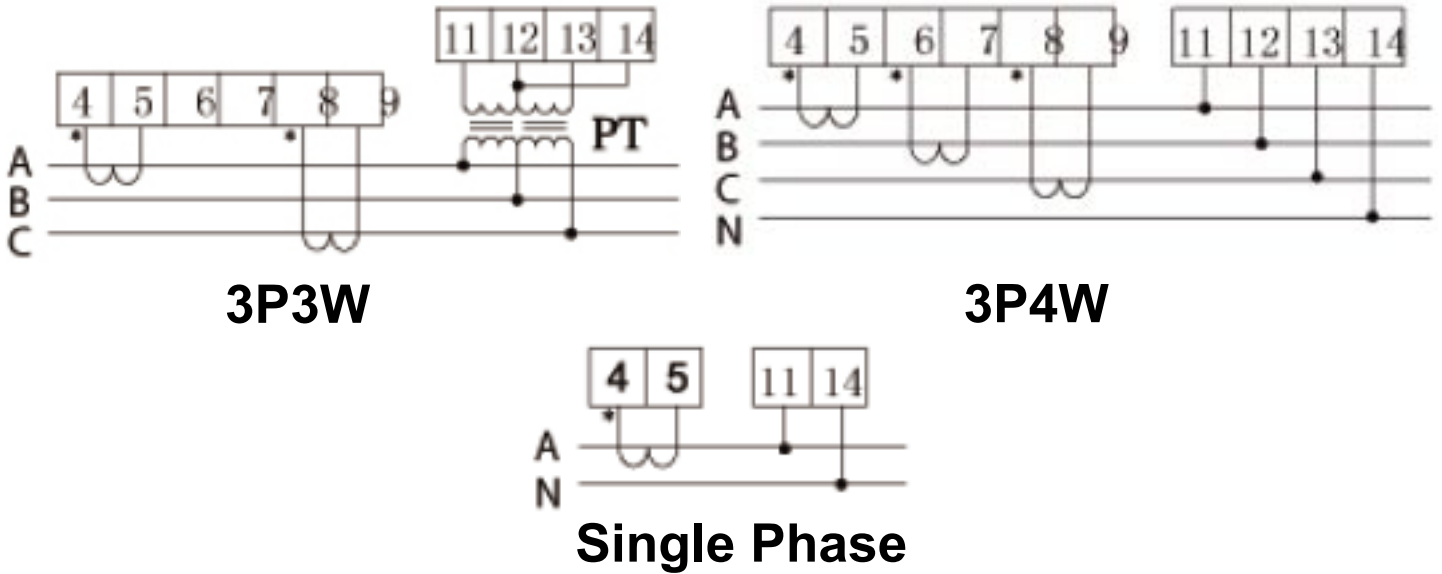
TYPE	DESCRIPTION	MEASUREMENT	OPTION
PZ72-AI	Single phase ammeter	AL	2DI/2DO+C J+M+C
PZ72L-AI	Single phase ammeter LCD	AL	
PZ72-AV	Single phase voltmeter	VL	
PZ72L-AV	Single phase voltmeter LCD	VL	
PZ72-AI3	3 phase ammeter	AL1,AL2,AL3	
PZ72L-AI3	3 phase ammeter LCD	AL1,AL2,AL3	
PZ72-AV3	3 phase voltmeter	VL1, VL2, VL3, VL1-2, VL2-3, VL3-1	
PZ72L-AV3	3 phase voltmeter LCD	VL1, VL2, VL3, VL1-2, VL2-3, VL3-1	

120 x 120 x 85 model

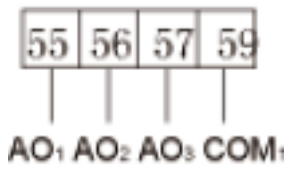
TYPE	DESCRIPTION	MEASUREMENT	OPTION
PZ42-AI	Single phase ammeter	AL	4DI/2DO+C J+M3+C
PZ42L-AI	Single phase ammeter LCD	AL	
PZ42-AV	Single phase voltmeter	VL	
PZ42L-AV	Single phase voltmeter LCD	VL	
PZ42-AI3	3 phase ammeter	AL1,AL2,AL3	
PZ42L-AI3	3 phase ammeter LCD	AL1,AL2,AL3	
PZ42-AV3	3 phase voltmeter	VL1, VL2, VL3, VL1-2, VL2-3, VL3-1	
PZ42L-AV3	3 phase voltmeter LCD	VL1, VL2, VL3, VL1-2, VL2-3, VL3-1	

5. Wiring diagram

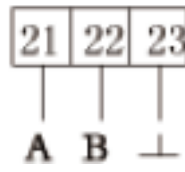
5.1 Input



5.2 Options



analog output



RS485

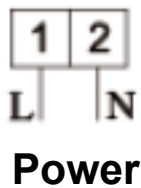


4 DI



2 DO/ Alarm

5.2 Power supply



6. Order example

When your order, please inform us the range of your measuring and the options.

For example:

Need the 3 phase 96 model ammeter with RS485 communication and LCD display, the range of current is 0-5A

The product type is PZ96L-AI3/C