

## AMC series Programmable Intelligent Electric Parameter Meters

### Installation and operation instruction VI.1

#### 1 General

PZ Series programmable intelligent current, voltage meter, adopting AC sampling technology, can directly measure current and voltage of grid. It can be used for local display, and connecting industrial control device to form measuring control system .

Meters have RS-485 communication interface, adopt compatible Modbus-RTU protocol; can change electric parameter signal into standard analog output; or with 1 channel relay alarm output; or with 4 channel(2 channel) switching input/ 2 channel switching output Based on different request, by pressing related keys on instrument panel, parameter setting and control of transformation ratio, alarm, communication etc. can be done.

#### 2 Type and specification of products

Meter type	Basic function	Shape	Optional function
AMC48-AI AMC48-AV	Current,voltage measurement; LED digital display:	48	1、1 channel RS485 communication (/C) 2、1 channel transmitting output (/M)
AMC48-AI3 AMC48-AV3			no
AMC48L-AI AMC48L-AV	Current or voltage measurement; LCD liquid crystal display:	Square	1、1 channel RS485 communication (/C) 2、1 channel transmitting output (/M)
AMC48L-AI3 AMC48L-AV3			no
AMC72-AI AMC72-AV AMC72-AI3 AMC72-AV3	Current or voltage measurement; LED digital display:	72	1、1 channel RS485 communication (/C) 2、1 channel transmitting output (/M) 3、1 channel relay alarm (/J) 4、transmitting output+RS485 communication (/MC)
AMC72-DI AMC72-DV			5、RS485 communication+ switching 2DI2DO (/KC) 6、1 channel relay alarm+1 channel transmitting output+RS485 communication (/JMC)
AMC72L-AI AMC72L-AV AMC72L-AI3 AMC72L-AV3	Current or voltage measurement; LCD liquid crystal display:		

AMC72L-DI AMC72L-DV	Direct current or Direct voltage measurement; LCD liquid crystal display:		
AMC96-AI AMC96-AV AMC96-AI3 AMC96-AV3	Current or voltage measurement; LED digital display:	96	1、1 channel RS485 communication (/C) 2、transmitting output (/M or /3M) 3、1 channel relay alarm (/J) 4、transmitting output+RS485 communication (/MC or /M3C)
AMC96L-AI AMC96L-AV AMC96L-AI3 AMC96L-AV3	Current or voltage measurement; LCD liquid crystal display:	Square	5、RS485 communication+ switching 4DI2DO (/KC) 6、1 channel relay alarm+1 channel transmitting output+RS485 communication (/JMC)

Note:1. AI/AV express Single phase current/voltage, AI3/AV3 express Three phase current/voltage.

2./J is 1 channel relay alarm output (multiplexing with second channel switching output), for special request, please consult our company.

#### 3 Technical parameters

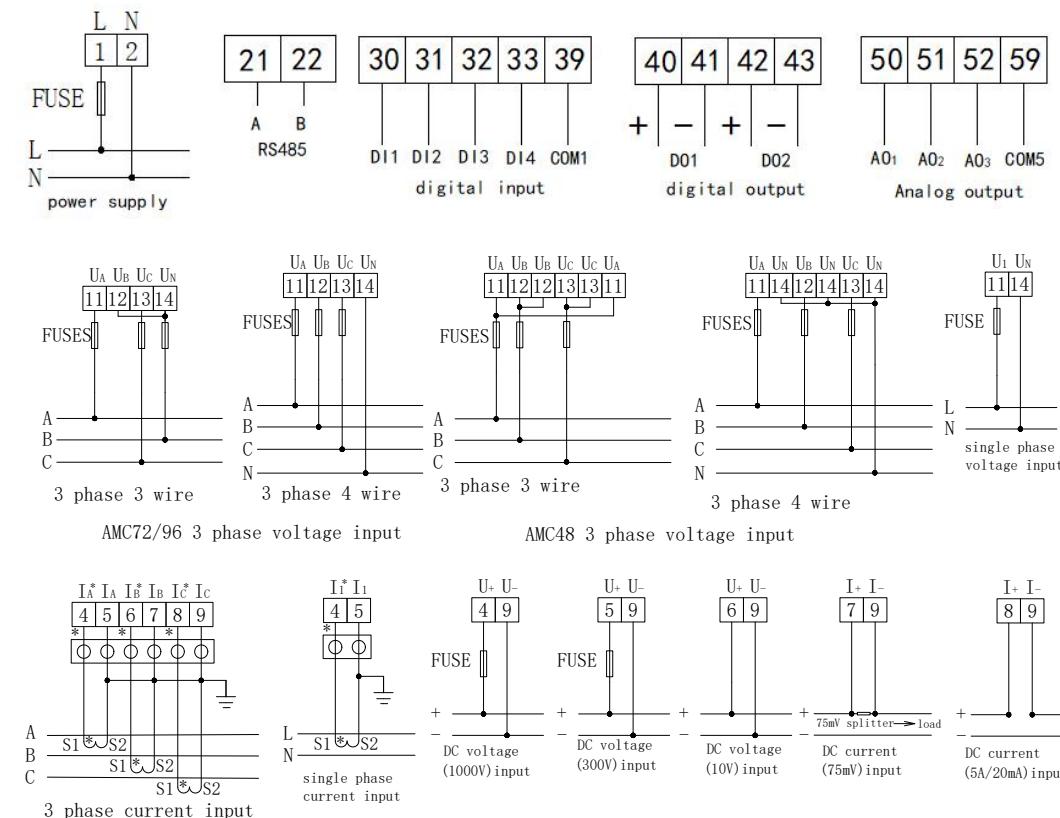
Technical parameter		Value
Input	Nominal value	AC voltage: Single phase AC 100V、400V;Three phase AC 100V、400V、660V (only 72、96, Three phase specific line voltage) AC current: AC 1A、5A; DC voltage: 1000V、300V; Direct current: 75mV、10V、 0-20mA、4-20mA、5A; Consult special specification in advance
	Overload	Voltage: 1.2 times continuous, 2 times continuous 1 second; current: 1.2 times continuous,10 times continuous 1 second
	Frequency	45Hz~65Hz
	Power consumption	Power consumption of each voltage, current Input circuit is less than 0.5VA
Accuracy class		0.5 级
Function	Display	LED or LCD display
	Communication	RS485, Modbus-RTU compatible protocol(1 start bit, 8 data bit, 1 stop bit, no parity)Baud Rate 2400/4800/9600/19200 bps

Alarm	Default 1 channel passive relay, contact capacity 3A/30VDC, 3A/250VAC, Used for high、low, unbalance alarm etc.	
Analog	DC4~20mA( load < 500 Ω ), (note: Shielded wire is specially selected for the above signal input and output)	
Switching	Input	4 channel or 2 channel dry contact Input, built in power supply, optoisolator
	Output	2 channel switching output, NO relay contact, capacity: 3A/30VDC, 3A/250VAC
Power supply	Voltage range AC220V Power consumption < 5VA	
Insulation resistance	$\geq 100M\Omega$	
Power frequency withstand voltage	Between power supply set of terminals and signal Input, output set of terminals 2kV/1min (RMS). Between the shell and all set of terminals (except the set of terminals reference voltage less than 40V) AC 4kV/1min.	
Mean time between failures	$\geq 50000h$	
Environment	Temperature	Operation: -10° C~+55° C Storage: -25° C ~+70° C
	Humidity	$\leq 95\%$ RH, no condensation, without corrosive gas
	Altitude	$\leq 2500m$

## 4 Shape Structure

Shape	Panel		Housing			Cut out	
Unit: mm	Width	Height	Width	Height	Depth	Width	Height
48 Square	49	49	44	44	93	45	45
72 Square	75	75	66.5	66.5	94.3	67	67
96 Square	96	96	90	90	77.8	92	92

## 5 Connection terminal



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