

TE-AI/U Series AC Current/Voltage Transmitter

- The TE-AI/U series AC current/voltage transmitter is used to isolate and convert standard process current/voltage signals from AC transformers to control rooms, PLC/DCS, and display instruments.
- Internally, efficient magnetic and electrical isolation technology is used, with input and output isolated from each other and strong anti-interference ability. It has the characteristics of high accuracy, high linearity, and polar temperature drift.
- DIN35mm standard guide rail installation method.

SELECTION TABLE				
TE-AI/U	X	X	X	Instructions
Channel	1			1 IN 1 OUT
Input Signal	A			0-1A
	B			0-5A
	C			0-10A
	D			0-120V
	E			0-250V
	F			0-500V
	Z			Customized
Output Signal		1		4-20mA
		2		0-20mA
		5		0-5V
		7		0-10V

Note: Customers need to determine the input signal form and output signal form when placing an order. If there are special needs, they can customize it

Product Selection

TE-AUXXX
Eg: TE-AU1E1,1 IN 1 OUT,input:0-250V,output :DC 4-20mA.
TE-AIXXX
Eg: TE-AI1B1,1 IN 1 OUT,input:0-5A,output :DC 4-20mA.

MAIN TECHNICAL PARAMETERS

Input

Input current range:AC 0-1A/2A/5A/10A
Input voltage range:AC 0-30V/50V/120V/250V/500V
Frequency range: 40Hz-60Hz

Output

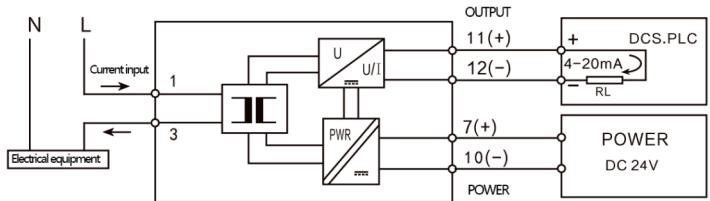
Output signal:4-20mA;0-20mA;0-5v;0-10v
Output load resistance:RL≤500Ω (Output is current signal)
RL≥10KΩ (Output is voltage signal)

Basic Parameter

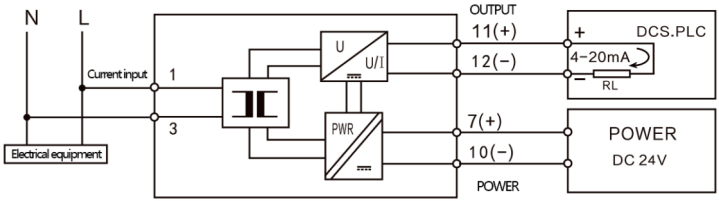
Power supply: DC24V,Voltage range:DC18-36V;or AC 85-265V
Rated power: ≤1W (1 IN 1 OUT,DC24V,when 20mA output)
Basic accuracy: ≤0.5%F.S
Temperature drift:0.02%F.S/°C (-20°C~+55°C)
Response time:≤400mS(0-90%)(TYP)
Insulation strength:2000VAC/1min(Between input,output and power)
Insulation resistance:≥100MΩ(Between input,output and power)
Working temperature range:-20~+55°C

Electromagnetic Compatibility: According to GB/T 18268.1(IEC61326-1)

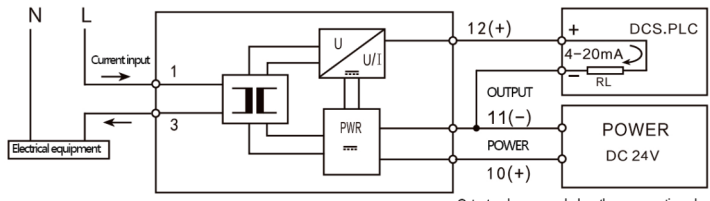
WIRING DIAGRAM



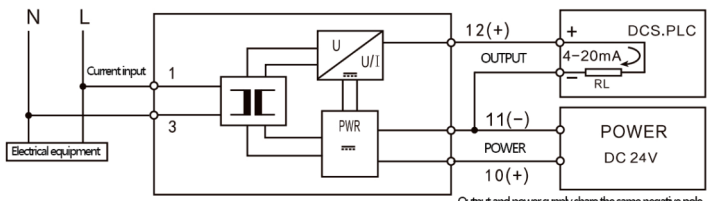
TE-AIXXX



TE-AUXXX



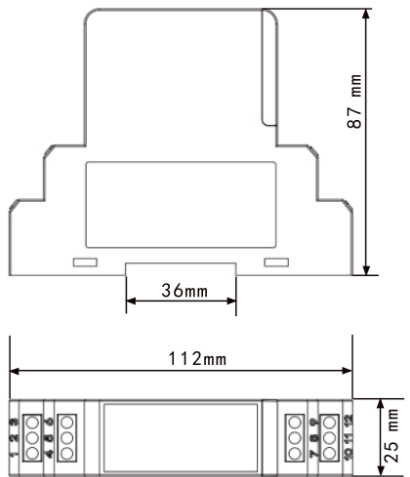
TE-AIXXX-N



TE-AUXXX-N



OVERALL DIMENSION



TEK-AI/U Series AC Current/Voltage Transmitter

- The TEK-AI/U series perforated current transmitter uses a magnetic balanced Hall closed-loop sensor to detect DC, AC, pulse, and other arbitrary waveform current signals. After isolation and conversion, it is converted into standard signals such as 4-20mA, 0-5V, and output to DCS or other secondary instruments. The product is applied to variable frequency speed control systems, welding machines, electrochemistry, power monitoring, electric locomotives, CNC machine tools, etc.
- Adopting perforated input without insertion loss. Internally, efficient magnetic and electrical isolation technology is used, with input and output isolated from each other and strong anti-interference ability. It has the characteristics of high accuracy, high linearity, and fast response speed.
- Choose between two installation methods: DIN rail and flat screw fixation.

SELECTION TABLE				
TEK-AI/U	X	X	X	Instructions
Channel	1			1 IN 1 OUT
Input Signal	A			0-1A
	B			0-5A
	C			0-10A
	D			0-120A
	E			0-250A
	F			0-500A
	Z			Customized
Output Signal		1		4-20mA
		2		0-20mA
		5		0-5V
		7		0-10V

Note: Customers need to determine the input signal form and output signal form when placing an order. If there are special needs, they can customize it

Product Selection

TEK-AUXXX
Eg: TEK-AU1E1,1 IN 1 OUT,input:0-250A,output :DC 4-20mA.
TEK-AIXXX
Eg: TEK-AI1B1,1 IN 1 OUT,input:0-5A,output :DC 4-20mA.

MAIN TECHNICAL PARAMETERS

Input

Input current range:AC/DC 1-500A
Frequency range: DC-100KHz

Output

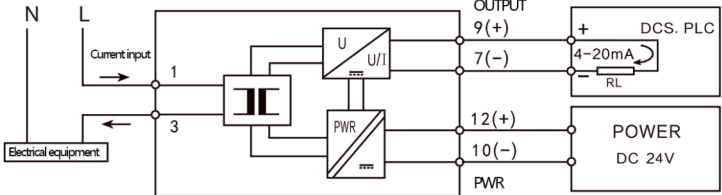
Output signal:4-20mA;0-20mA;0-5v;0-10v
Output load resistance:RL≤500Ω (Output is current signal)
RL≥10KΩ (Output is voltage signal)

Basic Parameter

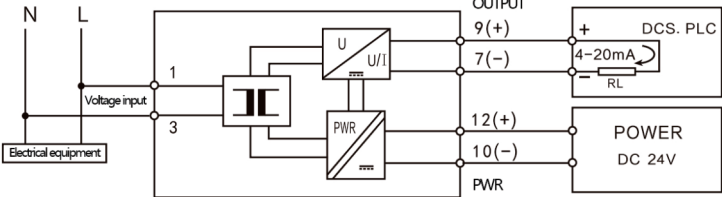
Power supply: DC24V,Voltage range:DC18-36V
Rated power: ≤1W (1 IN 1 OUT,DC24V,when 20mA output)
Linearity:0.2%
Basic accuracy: ≤0.5%F.S

Temperature drift:0.05%F.S/°C (-20°C~+55°C)
Response time:≤0.01mS(0-90%)(TYP)
Insulation strength:2000VAC/1min(Between input,output and power)
Insulation resistance:≥100MΩ(Between input,output and power)
Working temperature range:-20~+55°C
Electromagnetic Compatibility: According to GB/T 18268.1(IEC61326-1)

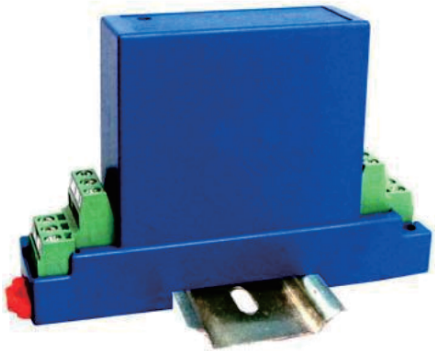
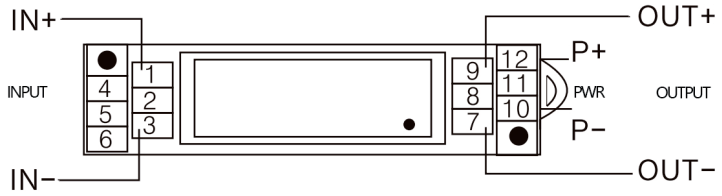
WIRING DIAGRAM



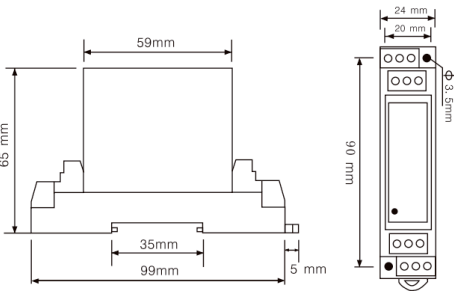
TEK-AIXXX



TEK-AUXXX



OVERALL DIMENSION



TEK-TAI Series Perforated AC Current/Voltage Transmitter

● The TEK-TAI series perforated AC transmitter is used to isolate and convert AC signals from AC transformers into standard process current/voltage signals to control rooms, PLC/DCS, and display instruments.

● Adopting perforated input without insertion loss. Internally, efficient magnetic and electrical isolation technology is used, with input and output isolated from each other and strong anti-interference ability. It has the characteristics of high accuracy, high linearity, and polar temperature drift.

● Choose between two installation methods: DIN rail and flat screw fixation.

SELECTION TABLE				
TEK-TAI	X	X	X	Instructions
Channel	1			1 IN 1 OUT
Input Signal	A			0-5A
	B			0-10A
	C			0-100A
	Z			Customized
Output Signal		1		4-20mA
		2		0-20mA
		5		0-5V
		7		0-10V

Note: Customers need to determine the input signal form and output signal form when placing an order. If there are special needs, they can customize it

Product Selection

TEK-TAXXX
Eg: TEK-TAI1B1,1 IN 1 OUT,input:0-10A,output :DC 4-20mA.

MAIN TECHNICAL PARAMETERS

Input

Input current range:AC 0.5-150A
Frequency range: 40Hz-60Hz

Output

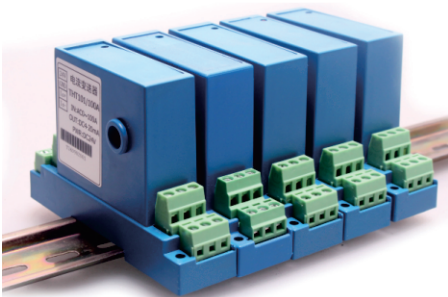
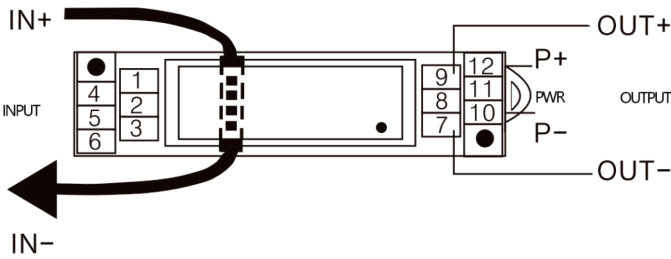
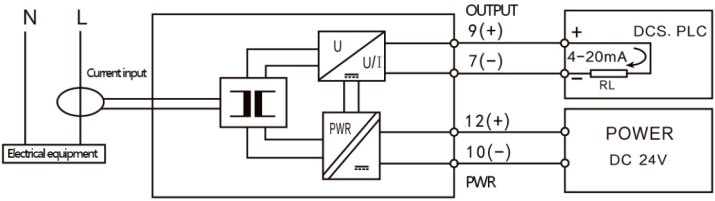
Output signal:4-20mA;0-20mA;0-5v;0-10v
Output load resistance:RL≤500Ω (Output is current signal)
RL≥10KΩ (Output is voltage signal)

Basic Parameter

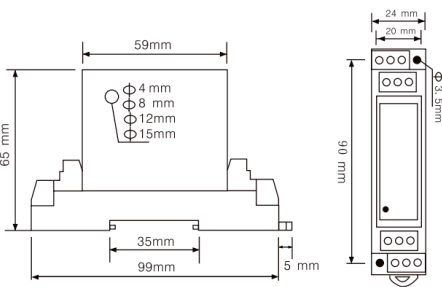
Power supply: DC24V,±10% or AC85-265V
Rated power: ≤1W (1 IN 1 OUT,DC24V,when 20mA output)
Basic accuracy: ≤0.5%F.S
Temperature drift:0.02%F.S/°C (-20°C~+55°C)
Response time:≤400mS(0-90%)(TYP)
Insulation strength:2000VAC/1min(Between input,output and power)
Insulation resistance:≥100MΩ(Between input,output and power)
Working temperature range:-20~+55°C

Electromagnetic Compatibility: According to GB/T 18268.1(IEC61326-1)

WIRING DIAGRAM



OVERALL DIMENSION



TEK-74XX Series Single-phase AC Power Acquisition Module

- TEK-74XX series products are a series of industrial grade standard single-phase AC power acquisition products, including single-phase AC current acquisition, single-phase AC voltage acquisition, and single-phase power acquisition products.
- Adopting RS-485 communication interface, the application layer adopts standard MODBUS-RTU protocol, which complies with industrial standards and is suitable for various industrial occasions and automation systems. Convenient communication with the upper computer, enabling fast networking and construction of detection systems.

Product Selection

- TEK-7411:Single-phase AC power acquisition module
0-20A input ,0-500V input .
- TEK-7421:Single phase
0-10A Current acquisition module
- TEK-7422:Single phase
0-50A Current acquisition module
- TEK-7424:Single phase
0-100A Current acquisition module
- TEK-7431:Single phase
0-100A Voltage acquisition module
- TEK-7432:Single phase
0-300A Voltage acquisition module
- TEK-7433:Single phase
0-500A Voltage acquisition module

MAIN TECHNICAL PARAMETERS

Input

- Input range:Reference model description
- Frequency range: 45Hz-65Hz
- Samples frequency:Update rate≤3Hz
- Current accuracy:0.5%
- Voltage accuracy:0.5%
- Votage frequency:±0.1Hz(When the input voltage is below 10V, accurate measurement will not be possible)
- Apparent power accuracy:0.5%
- Active power accuracy:±Active power accuracyx0.5%
- Reactive power accuracy:±Active power accuracyx0.5%

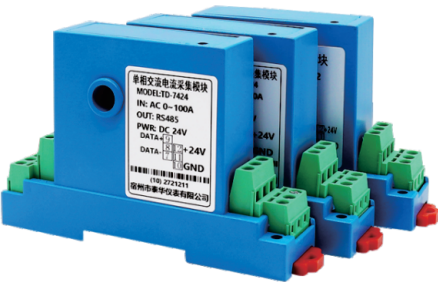
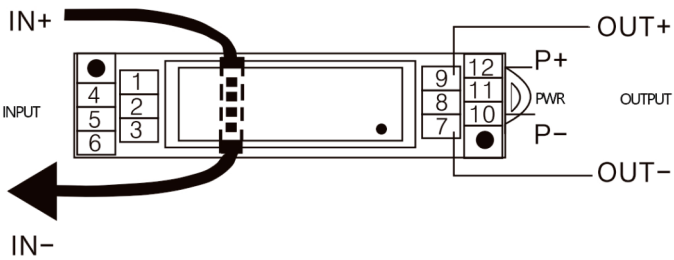
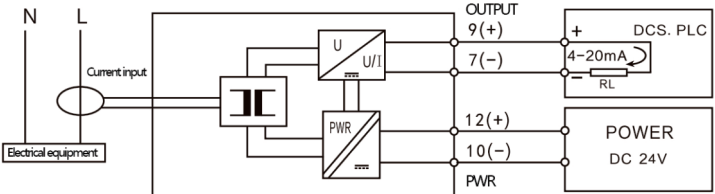
Output

- Signal type:RS-485 digital signal
- BAUD:1200、2400、4800、9600、19200、38400、57600、115200bps
- Output load resistance:RL≤500Ω (Output is current signal)
- Verification method: no verification, odd verification, or even verification
- Data bits:8bits
- Communication protocol: Standard MODBUS-RTU protocol
- Communication Distance:1200m(TYP)

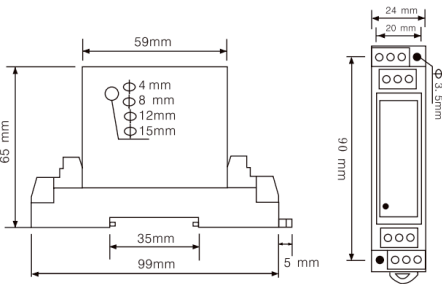
Basic Parameter

- Power supply: DC24V,Voltage range:DC9-30V
- Power consumption: ≤2W@DC24V
- Insulation strength:1500VAC/1min(Between input and output)
- Insulation resistance:≥100MΩ(Between input and output)
- Electromagnetic Compatibility: According to GB/T 18268.1(IEC61326-1)
- Suitable for on-site devices: configuration software, PLC, touch screen, computer, and other devices that support the MODBUS-RTU protocol.

WIRING DIAGRAM



OVERALL DIMENSION



TEL-TAI Series Perforated AC Current Transmitter

- The TEL-TAI series perforated AC current transmitter is used to isolate and convert AC signals from AC transformers into standard process current/voltage signals to control rooms, PLCs, DCS, and display instruments.
- Internally, efficient magnetic and electrical isolation technology is used, with input and output isolated from each other and strong anti-interference ability. It has the characteristics of high accuracy, high linearity, and polar temperature drift.
- Choose between two installation methods: DIN rail and flat screw fixation.

SELECTION TABLE				
TEL-TAI	X	X	X	Instructions
Channel	1			1 IN 1 OUT
Input Signal		A		0-5A
		B		0-10A
		C		0-100A
		Z		Customized
Output Signal			1	4-20mA
			2	0-20mA
			5	0-5V
			7	0-10V

Note: Customers need to determine the input signal form and output signal form when placing an order. If there are special needs, they can customize it

Product Selection

TEL-TAIXXX
Eg: TEL-TAI1B1,1 IN 1 OUT,input:0-100A,output :DC 4-20mA.

MAIN TECHNICAL PARAMETERS

Input

Input current range:AC 1-500A
Frequency range: 40Hz-65Hz

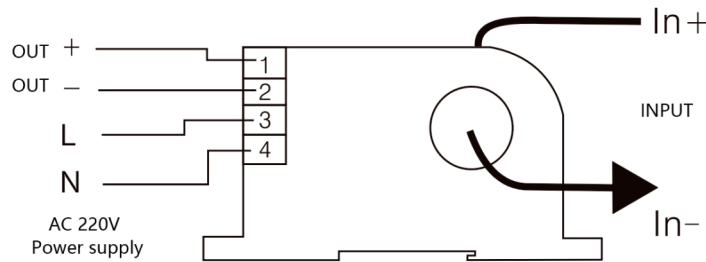
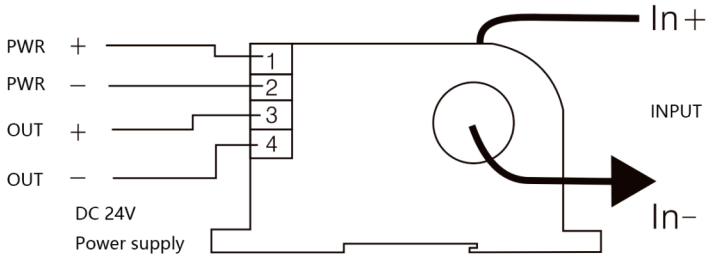
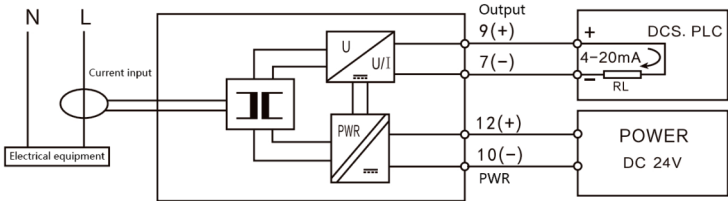
Output

Output signal:4-20mA;0-20mA;0-5v;0-10v
Output load resistance:RL≤500Ω (Output is current signal)
RL≥10KΩ (Output is voltage signal)

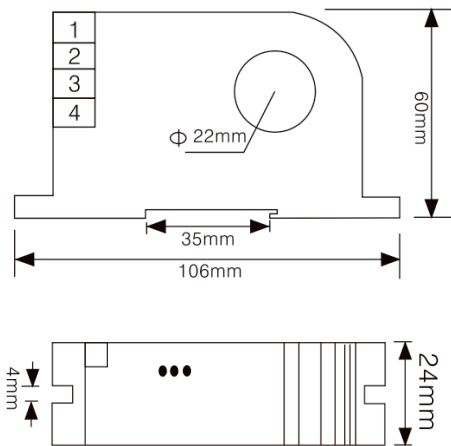
Basic Parameter

Power supply: DC24V,±10% or AC85-265V
Rated power: ≤1W (1 IN 1 OUT,DC24V,when 20mA output)
IBasic accuracy: ≤0.5%F.S
Temperature drift:0.02%F.S/°C (-20°C~+55°C)
Response time:≤400mS(0-90%)(TYP)
Insulation strength:2000VAC/1min(Between input,output and power)
Insulation resistance:≥100MΩ(Between input,output and power)
Working temperature range:-20~+55℃
Electromagnetic Compatibility: According to GB/T 18268.1(IEC61326-1)

WIRING DIAGRAM



OVERALL DIMENSION



TD-4117 High Common mode 8-channel Analog Quantity Acquisition Module

- Eight channel analog quantity acquisition module, supporting MODBUS-RTU protocol.
- DIN rail installation method, can be stacked for installation.

MAIN TECHNICAL PARAMETERS

Input

Channels:8
Resolution ratio:16Bit
Input range:±15V, ±10V,±5V,±1V,±500mV,±150mV,±20mA,4-20mA,
0-15V,0-10V,0-5V,0-1V,0-500mV,0-150mV,0-20mA
Input method:8 channel current or voltage differential single, bipolar input
Sampling frequency:≤10Hz, 50Hz or 100Hz
Accuracy class:≤0.1%
Input impedance:current:100Ω, voltage:20MΩ
Common mode voltage: ≤200VDC
Communication terminal
Signal type:RS-485 digital signal
BAUD:1200-115200bps
Verification method: no verification, odd or even verification
Data bits:8Bit ;Stop bits:1Bit
Communication protocol: Standard MODBUS-RTU protocol
Communication distance:1200m

Basic Parameter

Power supply: DC24V,Voltage range:DC9-30V
Consumption power: <1.5W@DC24V
Insulation strength:3000VAC/1min(Between communicate and input)
Insulation resistance:≥100MΩ(Between communicate and input)
Electromagnetic Compatibility: According to GB/T 18268.1(IEC61326-1)
Working temperature range:-40~+85°C
Relative humidity:10%~90%RH(No condensation)
Applicable to on-site devices: configuration software, PLC, touch screen, and computers that support the MODBUS-RTU protocol

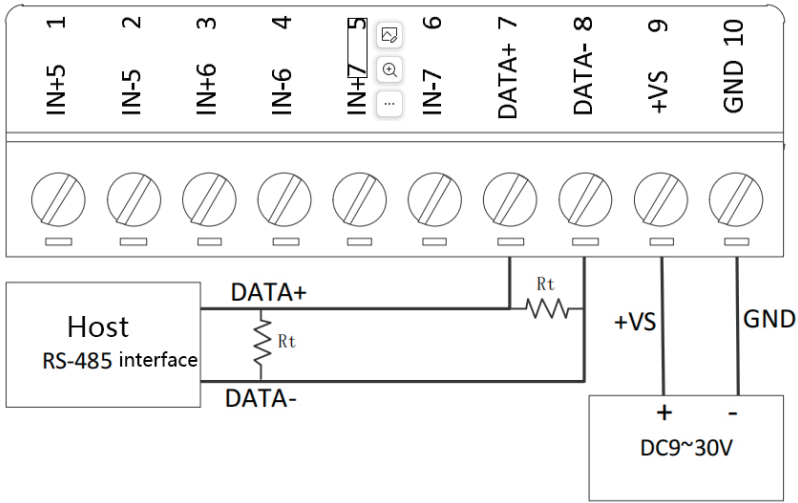
Equipment Terminal Description

Terminal No.	Terminal name	Instructions
1	In5+	Analog input 5 channel positive terminal
2	In5-	Analog input 5 channel negative terminal
3	In6+	Analog input 6 channel positive terminal
4	In6-	Analog input 6 channel negative terminal
5	In7+	Analog input 7 channel positive terminal
6	In7-	Analog input 7 channel negative terminal
7	DATA+	RS-485 communication interface positive end
8	DATA-	RS-485 communication interface negative end
9	+VS	External power supply positive terminal (9-30V)
10	GND	External power supply negative terminal (Ground)
11	In0+	Analog input 0, channel positive end
12	In0-	Analog input 0, channel negative end
13	In1+	Analog input 1, channel positive end
14	In1-	Analog input 1, channel negative end

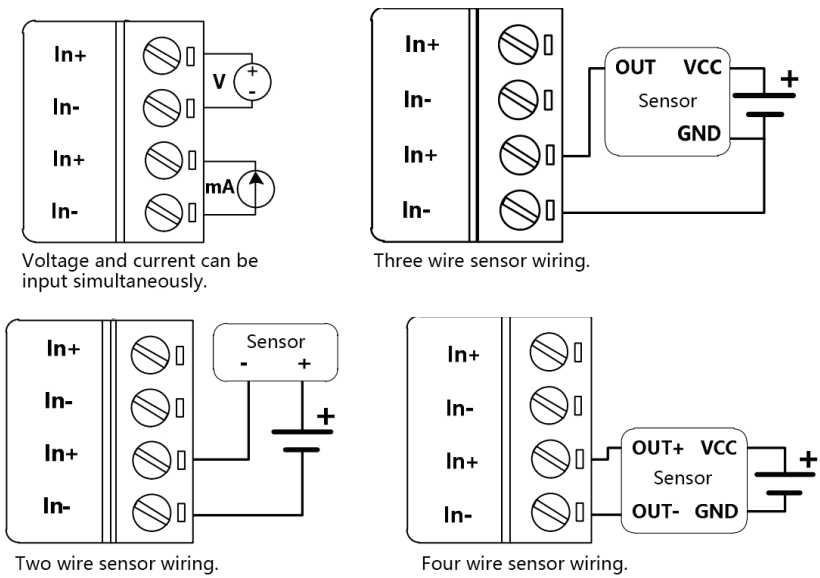
15	In2+	Analog input 2 channel positive terminal
16	In2-	Analog input 2 channel positive terminal
17	In3+	Analog input 3 channel negative terminal
18	In3-	Analog input 3 channel positive terminal
19	In4+	Analog input 4 channel negative terminal
20	In4-	Analog input 4 channel positive terminal

WIRING DIAGRAM

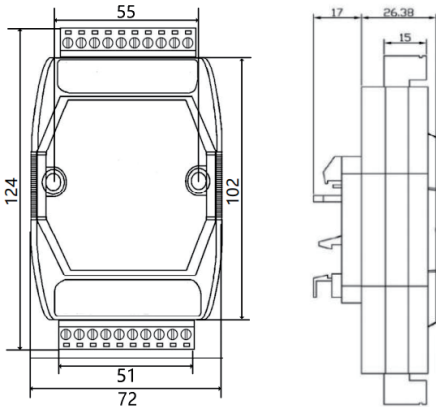
Communication and power wiring diagramThe RS485 communication line is connected in a hand in hand manner. If a star link is required, please add a splitter, and the terminal resistor Rt can be added at both ends of the communication line as needed.



Input signal wiring diagram



OVERALL DIMENSION



TD-4017 8-channel Analog Quantity Acquisition Module

- Eight channel analog quantity acquisition module, supporting MODBUS-RTU protocol.
- DIN rail installation method, can be stacked for installation.

MAIN TECHNICAL PARAMETERS

Input

Channels:8
Resolution ratio:16Bit
Input range:±10V,±5V,±1V,±500mV,±150mV,±20mA,4-20mA
Input method:8 channel current or voltage differential single, bipolar input
Sampling frequency:≤10Hz,50Hz or 100Hz
Accuracy class:≤0.1%
Input impedance:current:100Ω, voltage:20MΩ
Common mode voltage: ≤11VDC

Communication terminal

Signal type:RS-485 digital signal
BAUD:1200-115200bps
Verification method: no verification, odd or even verification
Data bits:8Bit ;Stop bits:1Bit
Communication protocol: Standard MODBUS-RTU protocol
Communication distance:1200m

Basic Parameter

Power supply: DC24V,Voltage range:DC9-30V
Consumption power: <1.5W@DC24V
Insulation strength:3000VAC/1min(Between communicate and input)
Insulation resistance:≥100MΩ(Between communicate and input)
Electromagnetic Compatibility: According to GB/T 18268.1(IEC61326-1)
Working temperature range:-40~+85°C
Relative humidity:10%~90%RH(No condensation)
Applicable to on-site devices: configuration software, PLC, touch screen, and computers that support the MODBUS-RTU protocol

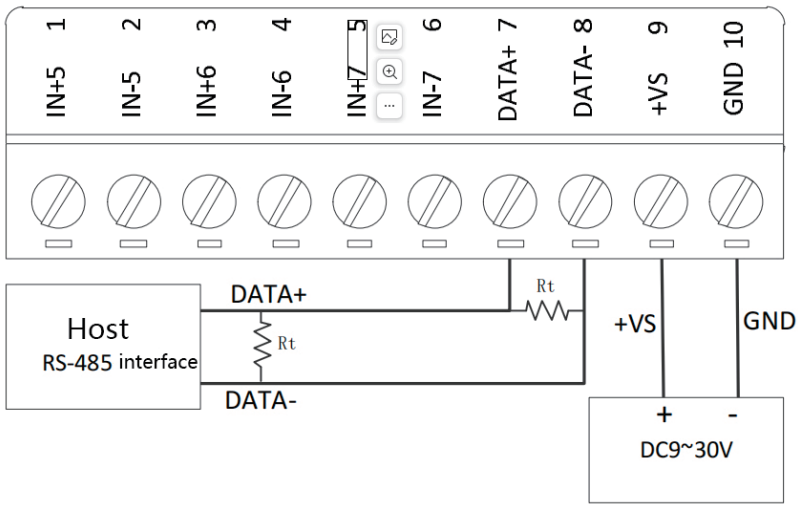
Equipment Terminal Description

Terminal No.	Terminal name	Instructions
1	In5+	Analog input 5 channel positive terminal
2	In5-	Analog input 5 channel negative terminal
3	In6+	Analog input 6 channel positive terminal
4	In6-	Analog input 6 channel negative terminal
5	In7+	Analog input 7 channel positive terminal
6	In7-	Analog input 7 channel negative terminal
7	DATA+	RS-485 communication interface positive end
8	DATA-	RS-485 communication interface negative end
9	+VS	External power supply positive terminal (9-30V)
10	GND	External power supply negative terminal (Ground)
11	In0+	Analog input 0, channel positive end
12	In0-	Analog input 0, channel negative end
13	In1+	Analog input 1, channel positive end
14	In1-	Analog input 1, channel negative end

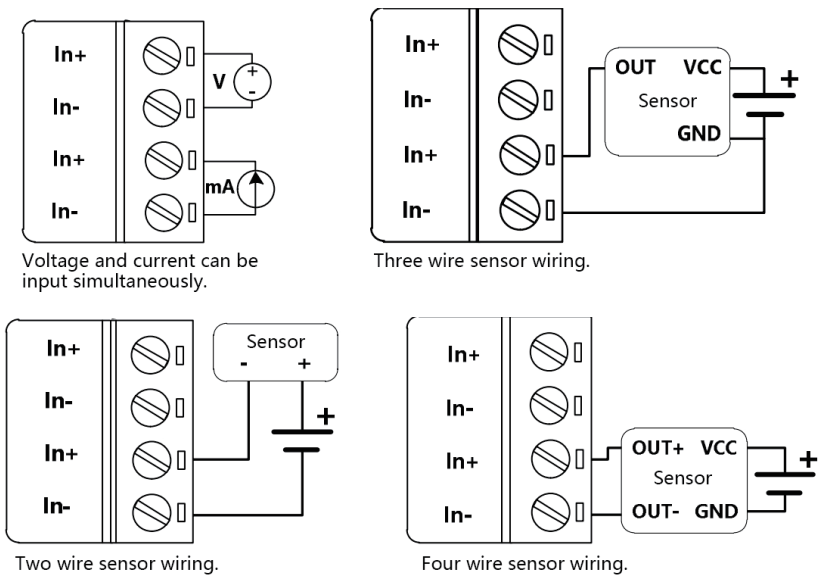
15	In2+	Analog input 2 channel positive terminal
16	In2-	Analog input 2 channel positive terminal
17	In3+	Analog input 3 channel negative terminal
18	In3-	Analog input 3 channel positive terminal
19	In4+	Analog input 4 channel negative terminal
20	In4-	Analog input 4 channel positive terminal

WIRING DIAGRAM

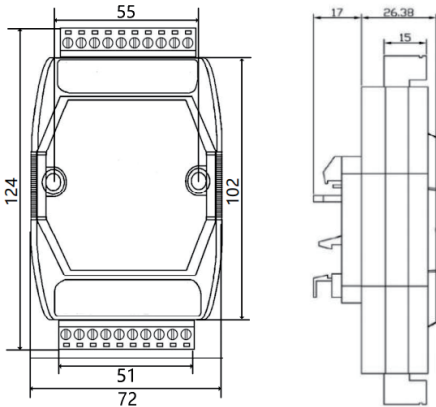
Communication and power wiring diagramThe RS485 communication line is connected in a hand in hand manner. If a star link is required, please add a splitter, and the terminal resistor Rt can be added at both ends of the communication line as needed.



Input signal wiring diagram



OVERALL DIMENSION



TED-3I 3 Phase AC Current Transmitter

- The TED-3U series AC voltage transmitter converts the AC signal from the AC transformer into a standard process signal, used for central monitoring of the power supply line and its voltage by the conversion station, and for monitoring non-standard voltage drops due to overload.
- The three ports of input, output, and power supply are highly reliable and isolated.

SELECTION TABLE				
TED-3U	X	X	X	Instructions
Channel	1			1 IN 1 OUT
	5			2 IN 2 OUT
	8			3 IN 3 OUT
Input Signal	A			0-100V
	B			0-300V
	C			0-500V
	D			Customized
Output Signal		1		4-20mA
		2		0-20mA
		5		0-5V
		7		0-10V

Note: Customers need to determine the input signal form and output signal form when placing an order. If there are special needs, they can customize it

Product Selection

TED-3UXXX
Eg: TED-3U8B1,input:3Phase,0-300v,output :3road- 4-20mA.
Power supply 220v

MAIN TECHNICAL PARAMETERS

Input

Input voltage range:AC0-1000V
Frequency range: 40Hz-60Hz

Output

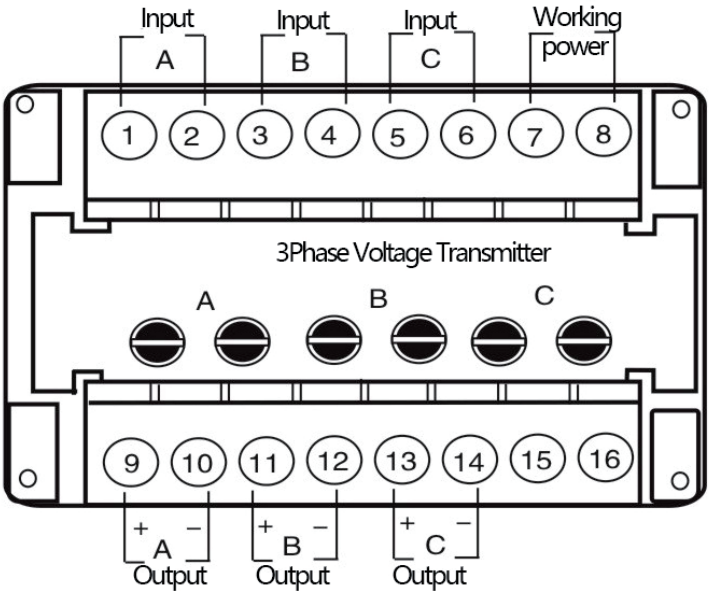
Output signal:4-20mA;0-20mA;0-5v;0-10v
Output load resistance:RL≤500Ω (Output is current signal)
RL≥10KΩ (Output is voltage signal)

Basic Parameter

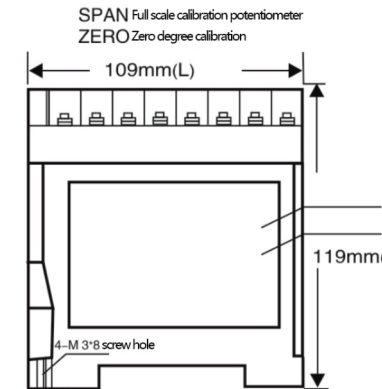
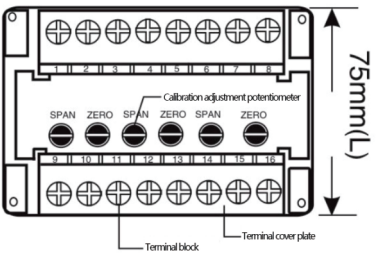
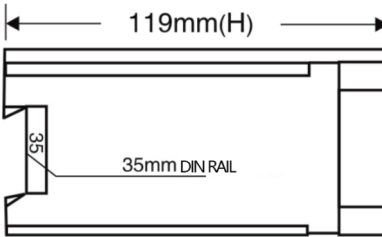
Power supply: AC 85-265V
Rated power: ≤2W (3 IN 3 OUT,AC220V,when 20mA output)
Basic accuracy: ≤0.5%F.S
Temperature drift:0.02%F.S/°C (-20°C~+55°C)
Response time:≤400mS(0-90%)(TYP)
Insulation strength:2000VAC/1min(Between input,output and power)
Insulation resistance:≥100MΩ(Between input,output and power)
Working temperature range:-20~+55°C

Electromagnetic Compatibility: According to GB/T 18268.1(IEC61326-1)

WIRING DIAGRAM



OVERALL DIMENSION



TED Series Reactive Power Transmitter

● Reactive power transmitter is a type of device that can isolate input voltage and current signals and convert them into DC signals output in linear proportion to the input reactive power. It can reflect the characteristics of the system (capacitive or inductive) and can operate continuously for a long time. It can be widely used in places where power and non power systems have high requirements for measuring reactive power. The reactive power is measured using the cross phase method: suitable for measuring three-phase three-wire symmetrical balance systems with frequencies of 50HZ or 60HZ; The reactive power is measured using phase shift method; Suitable for measuring single-phase, three-phase three wire balanced or unbalanced systems, and three-phase four wire systems with frequencies of 50Hz or 60Hz.

SELECTION TABLE					
TED-	X	X	X	X	Instructions
Channel	2Q				Signle phase 2 wire
	3Q				3 phase 3 wire
	4Q				3 phase 4 wire
Current input range		A			0-1A
		B			0-5A
		G			Customized
Voltage input range		C			0-100V
		D			0-220V
		E			0-380V
		F			Customized
Output signal			1		4-20mA
			2		0-20mA
			5		0-5V
			7		0-10V

Note: Customers need to determine the input signal form and output signal form when placing an order. If there are special needs, they can customize it

Product Selection

TED-XXXX
Eg: TED-3QAC1,Three phase three wire reactive power transmitter,input:0-1A,0-100v,output :4-20mA.
Power supply220v

MAIN TECHNICAL PARAMETERS

Input

Input current range:AC 0-5A
Input voltage range:AC 0-500V
Frequency range: 40Hz-60Hz

Output

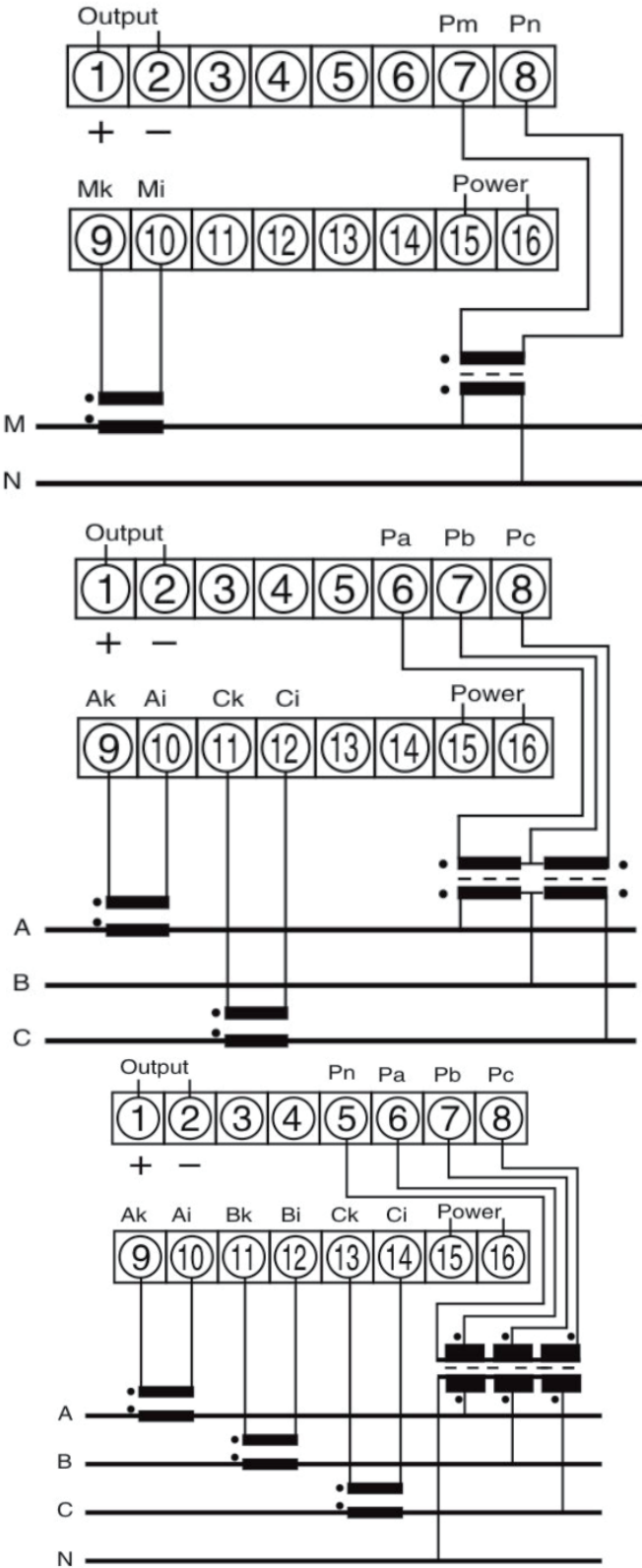
Output signal:4-20mA;0-20mA;0-5v;0-10v
Output load resistance:RL≤500Ω (Output is current signal)
RL≥10KΩ (Output is voltage signal)

Basic Parameter

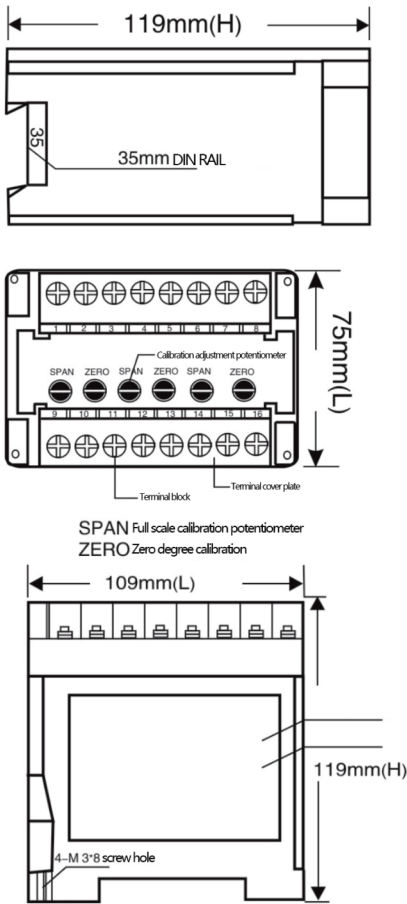
Power supply: AC 85-265V
Rated power: ≤4W (AC220V,when 20mA output)
Basic accuracy: ≤0.5%F.S
Temperature drift:0.02%F.S/°C (-20°C~+55°C)

Response time:≤400mS(0-90%)(TYP)
Insulation strength:2000VAC/1min(Between input,output and power)
Insulation resistance:≥100MΩ(Between input,output and power)
Working temperature range:-20~+55°C
Electromagnetic Compatibility: According to GB/T 18268.1(IEC61326-1)

WIRING DIAGRAM



OVERALL DIMENSION



TED Series Active Power Transmitter

● Active power transmitter is a type of device that can sample, isolate and amplify the voltage and current of the measured electricity separately, and convert them into input signals through high-precision time-division multiplier operation. The active power is linearly proportional to the DC signal output, and it can reflect the transmission direction of the measured power in the system. This series of transmitters is suitable for single-phase and three-phase (balanced or unbalanced) lines with frequencies of 50Hz or 60Hz. It can be widely used in places with high power measurement requirements in power and non power systems, and can operate continuously for a long time to achieve measurement and control of system power.

SELECTION TABLE					
TED-	X	X	X	X	Instructions
Channel	2W				Signle phase 2 wire
	3W				3 phase 3 wire
	4W				3 phase 4 wire
Current input range		A			0-1A
		B			0-5A
		G			Customized
Voltage input range			C		0-100V
			D		0-220V
			E		0-380V
			F		Customized
Output signal				1	4-20mA
				2	0-20mA
				5	0-5V
				7	0-10V

Note: Customers need to determine the input signal form and output signal form when placing an order. If there are special needs, they can customize it

Product Selection

TED-XXXX
Eg: TED-3WAC1,Three phase three wire active power transmitter,input:0-1A,0-100v,output :4-20mA.
Power supply220v

MAIN TECHNICAL PARAMETERS

Input

Input current range:AC 0-5A
Input voltage range:AC 0-500V
Frequency range: 40Hz-60Hz

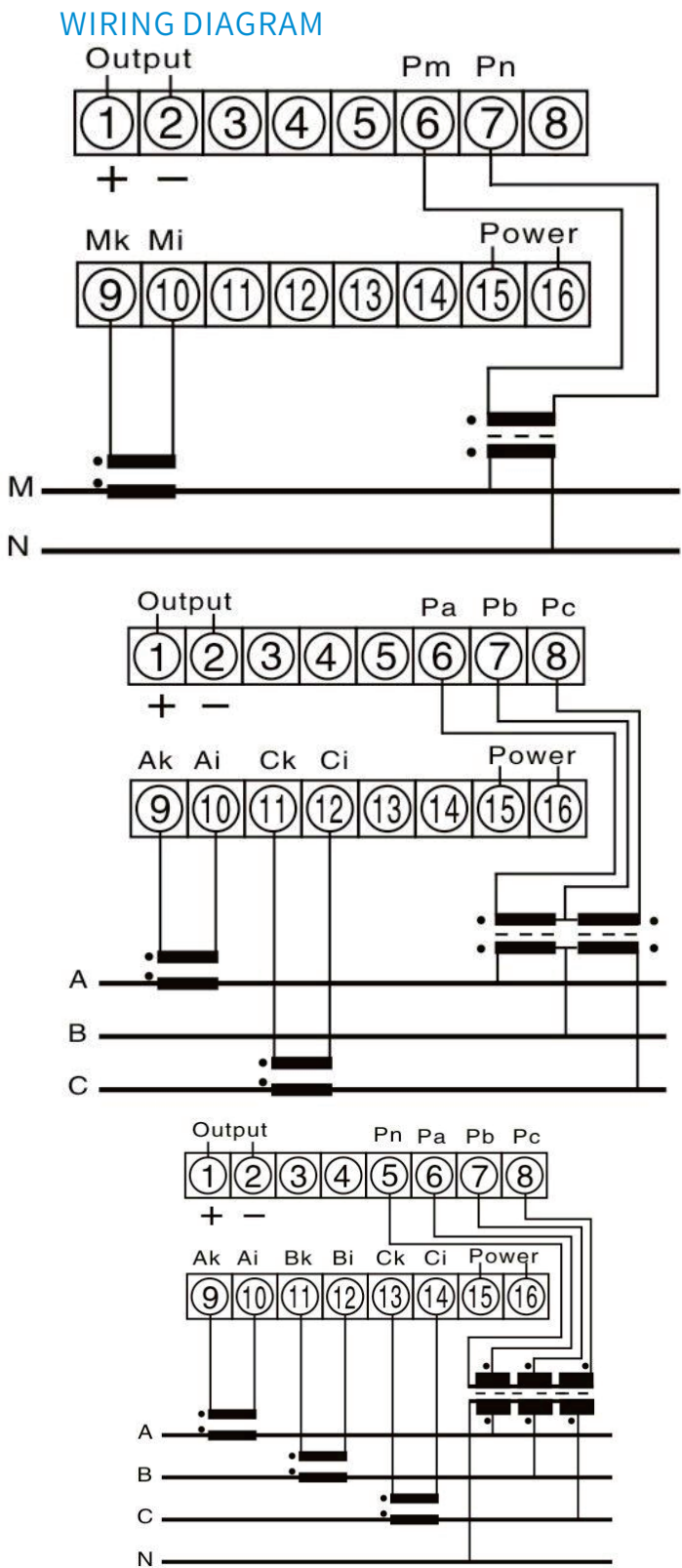
Output

Output signal:4-20mA;0-20mA;0-5v;0-10v
Output load resistance:RL≤500Ω (Output is current signal)
RL≥10KΩ (Output is voltage signal)

Basic Parameter

Power supply: AC 85-265V
Rated power: ≤4W (AC220V,when 20mA output)
Basic accuracy: ≤0.5%F.S
Temperature drift:0.02%F.S/°C (-20°C~+55°C)

Response time:≤400mS(0-90%)(TYP)
Insulation strength:2000VAC/1min(Between input,output and power)
Insulation resistance:≥100MΩ(Between input,output and power)
Working temperature range:-20~+55°C
Electromagnetic Compatibility: According to GB/T 18268.1(IEC61326-1)



OVERALL DIMENSION

