

MORNSUN®

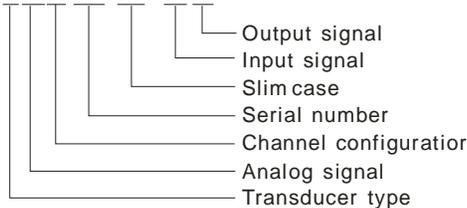
12.5mm SLIM CASE PASSIVE SIGNAL ISOLATORS

—TAx06W-11 Series



PART NUMBER SYSTEM

TAx06W-XX



FEATURES

- Two-port electrical isolation (input and output)
- High accuracy (0.1% F.S.)
- High linearity (0.1% F.S.)
- Low temperature drift(35PPM/° C)
- High reliability(MTBF>500,000 hours)

GENERAL DESCRIPTION

TAx06W-xx Passive Signal Isolators, ideal for applied in the industrial automation system ,receive the 4~20mA signal from the industrial field equipment, and provide an isolated output to DCS/PLC. Galvanic isolation eliminates ground loops, reduces noise, and blocks transient signals, which improve system stability.

The products can also be used in the application of output loop circuit power supply. Through this way, it can power the two wire system instruments, and receive 4~20mA signal from the instruments which can be isolated output to PLC or DCS without any independent power supply.

The product contain 1-input-1-output,2-input-2-output, 3-input-3-output and so on. The thickness of 12.5mm meeting the need for high density field installation.

SELECTION GUIDE

Model	Input	Output	channels
TA306W-11	4~20mA	4~20mA	3
TA206W-11	4~20mA	4~20mA	2
TA106W-11	4~20mA	4~20mA	1

ELECTRICAL CHARACTERISTICS

Input	Input signal	4~20mA
	Input impedance	5V(@20mA input)
	Input over-current	≤30mA (Over-current protection)
Output	Output signal	4~20mA
	Load	≤ 300Ω

TRANSMISSION CHARACTERISTICS

Zero offset	0.1%F.S.
Precision	0.1%F.S.(Output loop circuit power supply accuracy:0.3%F.S.)
Response time	<0.5S
Temperature drift coefficient	0.0035%F.S./°C (Operating temperature:-25 ~ +71°C)

ISOLATION CHARACTERISTICS

Electrical Isolation	Two-port isolation (input and output)
Isolation strength	DC3000V@1min; AC2000V@1min, leakage current≤5mA
Insulation resistance	100MΩ, 500VDC

OTHER CHARACTERISTICS

Ambient Temperature	Operating temperature :-25~+71°C
	Transport and Storage temperature: -40~+85°C
Package	35mm DIN-rail package

Weight	90g.typ
Service environment	No dust, strong vibration, shock and corrosion of the gas product in surroundings
Note:1. All specifications measured at Ta=25°C, humidity<75%, nominal input voltage and rated output load unless otherwise specified. 2. All characteristics are meant for listed model, non-standard models may perform differently, you can contact MORNSUN FAE for more details.	

OPERATION NOTES

1. Please read the user manual carefully before using. If any question, please contact our technical support department.
2. Please don't use this product in hazardous area.
3. To avoid void of explosion proof, or any failure, users disassemble this product is forbidden.

AFTER-SALES SERVICE

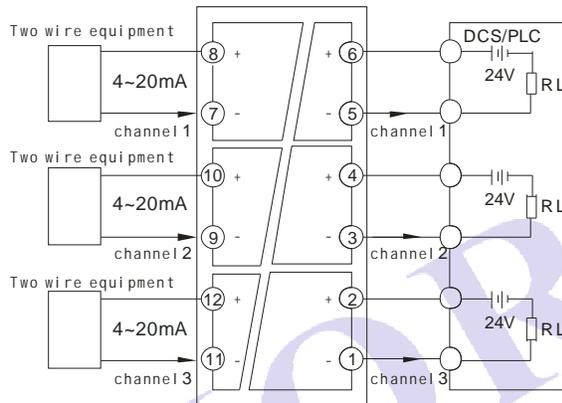
1. Products are carefully inspected and quality controlled during production and before shipment. If they operated abnormally or there was anything wrong, please contact our agent from which you purchased or MORNSUN FAE as soon as possible.
2. MORNSUN warranty our product for 3 years from manufacturing date. During this period, MORNSUN will repair or replace the product if product was found to have manufacturing defect.

APPLICATION CIRCUIT

You can see " A APPLICATION GUIDE TO ISOLATION TRANSMITTER"

APPLICATION CIRCUIT DIAGRAM & PIN DESCRIPTION

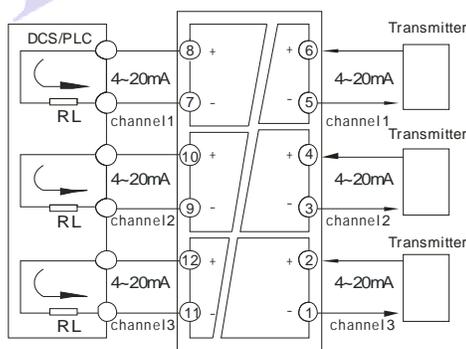
Wiring diagram of output loop circuit power supply application



Output loop circuit of power supply pin description

PIN	Description (3 IN 3 OUT)
1	lout3 channel 3 current output
2	Vin3+ channel 3 power input+
3	lout 2 channel 2 current output
4	Vin 2+ channel 2 power input+
5	lout 1 channel 1 current output
6	Vin 1+ channel 1 power input+
7	lin1 channel 1 current input
8	Vout1+ channel 1 voltage output+
9	lin 2 channel 2 current input
10	Vout2+ channel 2 voltage output+
11	lin 3 channel 3 current input
12	Vout3+ channel 3 voltage output+

Wiring diagram of current source application



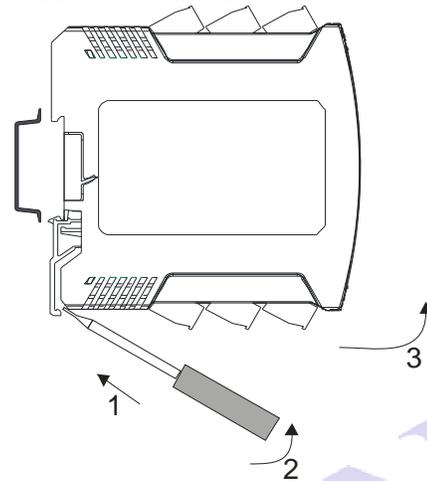
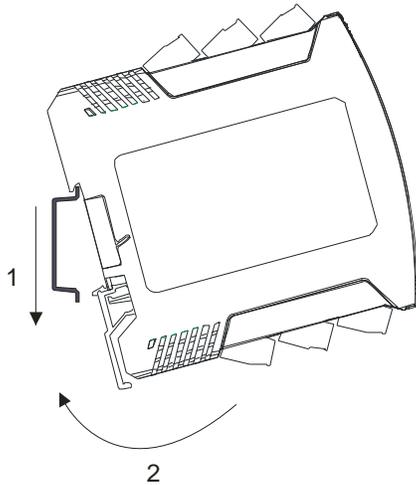
Current source input pin description

PIN	Description (3 IN 3 OUT)
1	Si3- signal 3 input-
2	Si3+ signal 3 input+
3	Si2- signal 2 input-
4	Si2+ signal 2 input+
5	Si1- signal 1 input-
6	Si1+ signal 1 input+
7	So1- signal 1 output-
8	So1+ signal 1 output+
9	So2- signal 2 output-
10	So2+ signal 2 output+
11	So3- signal 3 output-
12	So3+ signal 3 output+

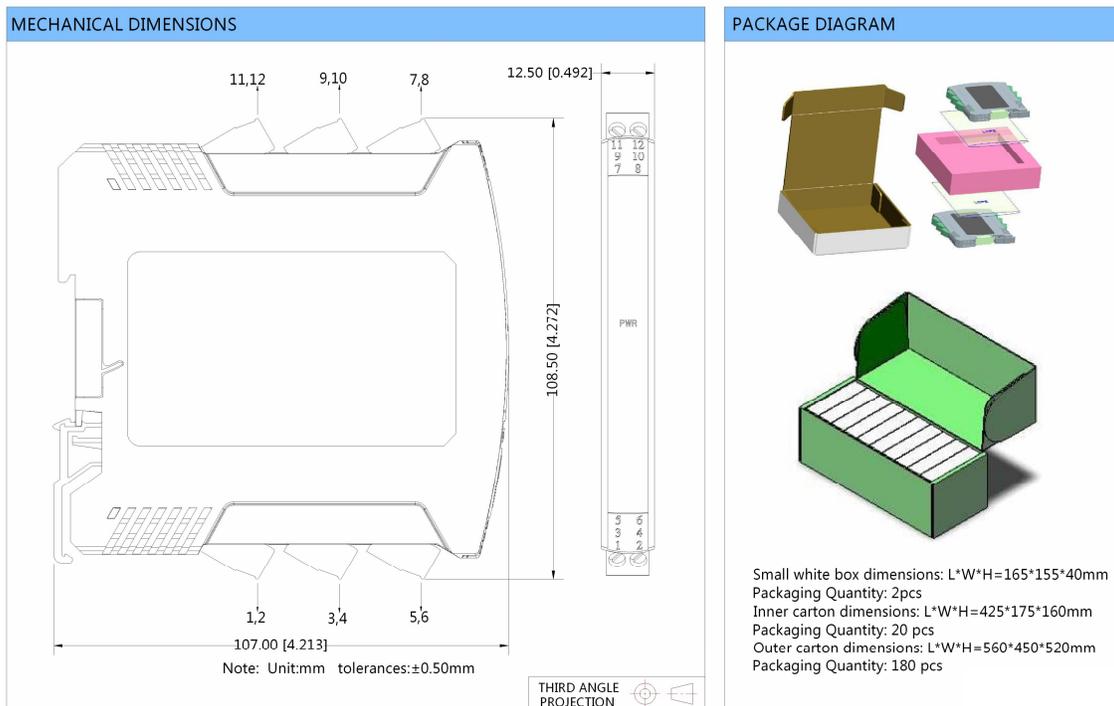
INSTALLATION & DISASSEMBLY

DIN35mm standard rail installation:

1. Insert the top of the instrument card in the rail;
2. Push the bottom of the instrument into the rail.
1. Insert a screwdriver between the bottom of the card lock and the rail;
2. Pull up the screwdriver and press the card lock downwards;
3. Pull the instrument out of the rail.



PACKAGING DIMENSION & PACKAGING DIAGRAM



Note:

1. All specifications are measured at $T_a=25^{\circ}\text{C}$, humidity<75%, nominal input voltage and rated output load unless otherwise specified.
2. In this datasheet, all the test setup and methods are based on our corporate standards.
3. All characteristics are for listed models, and non-standard models may perform differently. Please contact our technical support for more detail.
4. Contact us for your specific requirement.
5. Specifications are subject to change without prior notice.

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