Analog signal to large current output positive and negative signal isolation proportional valve controller WJ205

Product features:

- Voltage or current output conversion accuracy is better than 0.2%
- 4-20mA/0-20mA/0- ± 20mA and other standard signal inputs
- 0-5V/0-10V/0- ± 5V/0- ± 10V and other standard signal inputs
- Large current signal output such as 0~± 100mA/0~± 165mA/0~± 500mA
- The output has over-current, over-voltage protection and short circuit protection
- Signal input/signal output 3000VDC isolation
- Auxiliary power supply: 24V DC single power supply
- The auxiliary power supply is not isolated from the output signal
- Standard DIN35 guide rail installation
- Size: 106.7 x 79.0 x 25.0mm
- Industrial temperature range: -40~+85 ℃

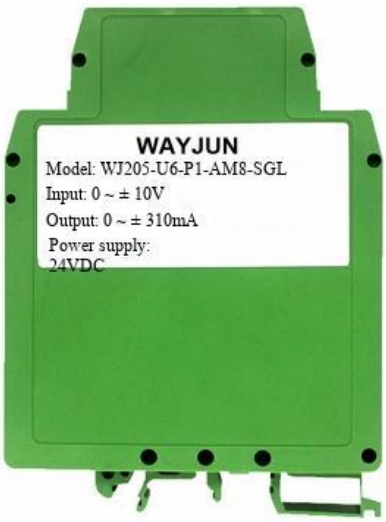


Figure 1 WJ205 module appearance

Typical applications:

- Industrial field signal isolation and amplification
- High speed railway equipment commissioning positive and negative signal generator
- Positive and negative movement control of two-way proportional valve
- Enhancement of current signal amplification or voltage signal driving capability
- Linear actuator of solenoid valve and proportional valve
- Electromagnetic switch linear controller
- Electromagnetic drive coil or high-power load
- Light control, LED intelligent dimming control
- Machine vision light control
- DC motor control and forward and reverse rotation control
- Ground wire interference suppression

Product selection:

WJ205- U (A) □ - P □ - UM (AM) □ - □

Input signal		Power supply		output signal		Three isolation or not	
Voltage input	**code**	**P**	**code**	**Voltage output**	**code**		**code**
0-5V	U1	24VDC	P1	0-5V	UM1	The default shipment is Two isolated, Input and output isolation, Output and power supply are not isolated	nothing
0-10V	U2	User defined	Pu	0-10V	UM2		
0-75mV	U3			0-15V	UM3		
0-2.5V	U4			0-24V	UM4		
0- ± 5V	U5			0- ± 5V	UM5	Three isolated versions, Input, output and power supply Are isolated from each other	SGL
0- ± 10V	U6			0- ± 10V	UM6		
0- ± 100mV	U7			0- ± 24V	UM7		
User defined	U8			User defined	UM8		
Current input	**code**			**Current output**	**code**		
0-1mA	A1			0-100mA	AM1		
0-10mA	A2			0-165mA	AM2		
0-20mA	A3			0-200mA	AM3		
4-20mA	A4			0-500mA	AM4		
0- ± 1mA	A5			0- ± 100mA	AM5		
0- ± 10mA	A6			0- ± 165mA	AM6		
0- ± 20mA	A7			0- ± 500mA	AM7		
User defined	A8			User defined	AM8		

Note 1: When the voltage is output, the maximum output load current is 500mA.

Note 2: When the current is output, the maximum load resistance that the output can carry can be calculated by Ohm's law.For example, the power supply of 500mA output is 24V, and the maximum output resistance is 24V/0.5A=48 Ω. The load exceeding this resistance will make the current less than 500mA.

Note 3: For conventional products with two isolated outputs, the power supply negative and output signal negative cannot be shorted.

Example of model selection:

Example 1: Input signal: 0-10V Power supply: 24V Output signal: 0-500mA Conventional two isolation model: WJ205-U2-P1-AM4

Example 2: Input signal: 4-20mA Power supply: 24V Output signal: 0- ± 165mA Conventional two isolation model: WJ205-A4-P1-AM6

Example 3: Input signal: 0- ± 10V Power supply: 24V Output signal: 0- ± 24V Conventional two isolation model: WJ205-U6-P1-UM7

Example 4: Input signal: 0-5V Power supply: 24V Output signal: 0- ± 500mA Conventional two isolation model: WJ205-U1-P1-AM7

Example 5: Input signal: 0-75mV Power supply: 24V Output signal: 0-100mA Three isolation model: WJ205-U3-P1-AM1-SGL

WJ205 general parameters:

(typical @+25 ℃, Vs is 24VDC, two isolation products)

Precision: 0.2%

Temperature drift: ± 50 ppm/℃ (± 100 ppm/℃, maximum)

Input resistance: 100 Ω (4-20mA/0-20mA/0- ± 20mA/0-10mA/0- ± 10mA/0-1mA/0- ± 1mA current input)

More than 100K (5V/10V voltage input)

More than 1M Ω (voltage input below 2.5V)

Input terminal protection: over-voltage protection, over-current protection

Output range: current output 0~± 500mA

Voltage output 0~± power supply voltage

Limit output: current output 600mA

Voltage output power supply voltage

Output protection: output overvoltage protection, output overcurrent protection.

Response time: 100 ms

Working power supply: 24VDC ± 10%, internal anti reverse connection and overvoltage protection circuit

Power consumption: less than 20W.

Operating temperature: -40~+85 ℃

Operating humidity: 10~90% (no condensation)

Storage temperature: -40~+85 ℃

Storage humidity: 10~95% (no condensation)

Isolation and withstand voltage: conventional two isolation: isolation between input/output: 3KVDC, 1 minute, leakage current 1mA, power supply and output are not isolated

Three isolation: 3KVDC isolation between input and output, 3KVDC isolation between input and power supply, and 1.5KVDC isolation between power supply and output

Overall dimensions: 106.7 mm x 79 mm x 25mm

Pin definition:

Table 1 Pin definition

Pin	Name	Description	Pin	Name	Description
one	PW+	Positive end of power supply	**seven**	IN+	Analog signal input positive terminal
two	NC	Empty foot	**eight**	IN-	Analog signal input negative terminal
three	GND	Negative terminal of power supply	**nine**	NC	Empty foot
four	OUT+	Analog signal output positive terminal	**ten**	NC	Empty foot
five	OUT-	Analog signal output negative terminal	**eleven**	NC	Empty foot
six	NC	Empty foot	**twelve**	NC	Empty foot

Note: For conventional products with two isolated outputs, the power supply negative and output signal negative cannot be shorted.

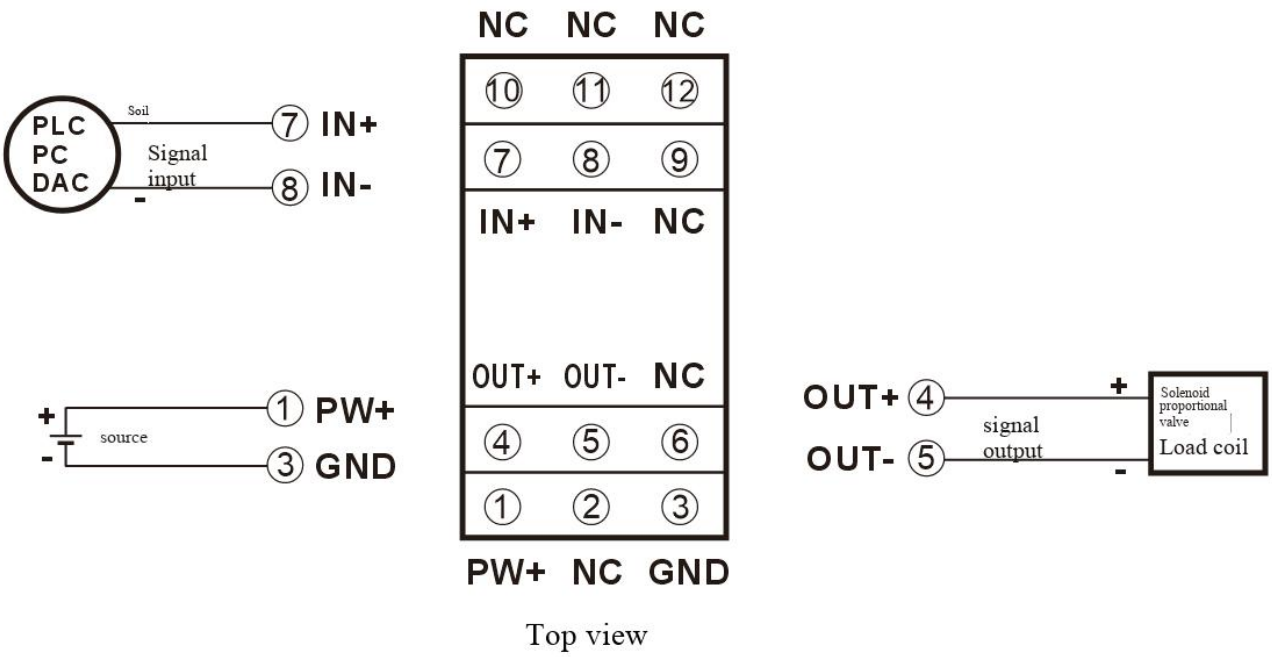
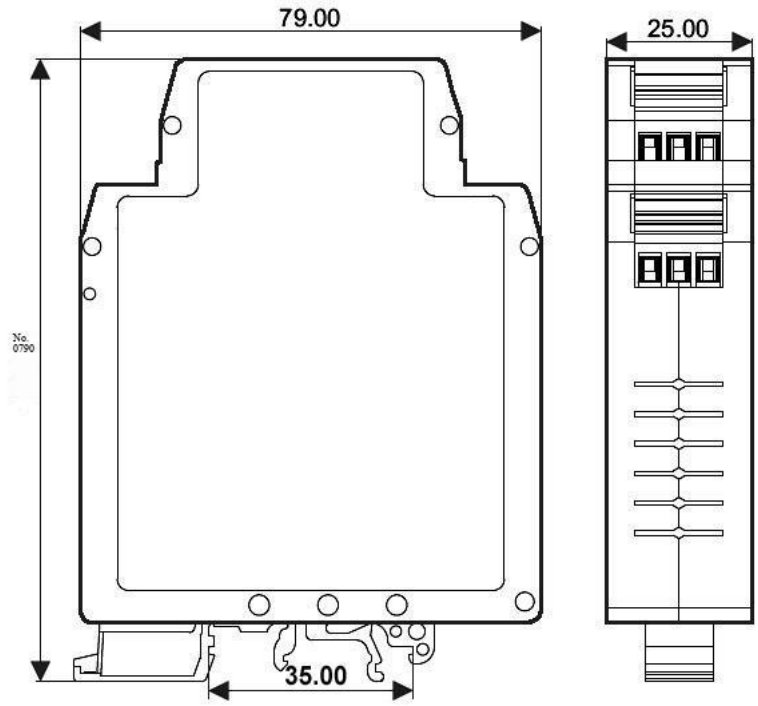


Figure 2 WJ205 Module Wiring Diagram

Overall dimension: (unit: mm)



Can be installed on standard DIN35 guide rail

Warranty:

Within two years from the date of sale of this product, if the user complies with the storage, transportation and use requirements, but the product quality is lower than the technical indicators, the product can be returned to the factory for free maintenance.In case of damage due to violation of operating regulations and requirements, the device cost and maintenance cost shall be paid.

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