# INSTRUCTION MANUAL

# **PULSE ISOLATOR**

### BEFORE USE ....

Thank you for choosing us. Before use, please check contents of the package you received as outlined below. If you have any problems or questions with the product, please contact our sales office or representatives.

### ■ PACKAGE INCLUDES:

Signal conditioner(1)
Mounting screw (M3.5 $\times$ 10)(2)

### MODEL NO.

Confirm Model No. marking on the product to be exactly what you ordered.

#### ■ INSTRUCTION MANUAL

This manual describes necessary points of caution when you use this product, including installation, connection and basic maintenance procedures.

### **POINTS OF CAUTION**

### ■ POWER INPUT RATING & OPERATIONAL RANGE

• Locate the power input rating marked on the product and confirm its operational range as indicated below: 24V DC rating: 24V ±10%, approx. 80mA

#### ■ GENERAL PRECAUTIONS

• Before you remove the unit or mount it, turn off the power supply and input signal for safety.

#### ENVIRONMENT

- Indoor use.
- When heavy dust or metal particles are present in the air, install the unit inside proper housing with sufficient ventilation.
- Do not install the unit where it is subjected to continuous vibration. Do not subject the unit to physical impact.
- Environmental temperature must be within -5 to +55°C (23 to 131°F) with relative humidity within 30 to 90% RH in order to ensure adequate life span and operation.

#### WIRING

- Do not install cables close to noise sources (relay drive cable, high frequency line, etc.).
- Do not bind these cables together with those in which noises are present. Do not install them in the same duct.
- Be sure to put the terminal cover on while the power is supplied.

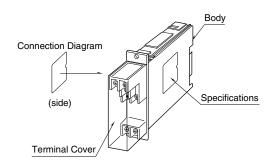
#### ■ AND ....

• The unit is designed to function as soon as power is supplied, however, a warm up for 10 minutes is required for satisfying complete performance described in the data sheet.

### MODEL

**10PP** 

# **COMPONENT IDENTIFICATION**



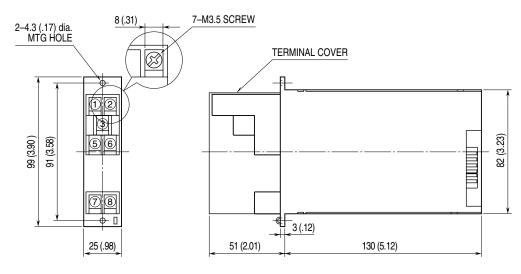
### INSTALLATION

Use Standard Rack (model: 10BXx).

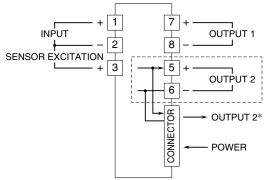
### **TERMINAL CONNECTIONS**

Connect the unit as in the diagram below or refer to the connection diagram on the side of the unit.

### EXTERNAL DIMENSIONS unit: mm (inch)



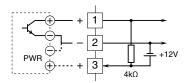
### ■ CONNECTION DIAGRAM



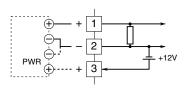
\* For 1 output channel type, OUTPUT 1 is also connected to the card-edge connector inside. Note: The section enclosed by broken line is only for 2nd output channel.

Input Connection Examples

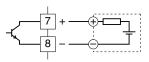
 Mechanical Contact or Open Collector



Voltage Pulse



Output Connection Examples
Open Collector



Voltage Pulse

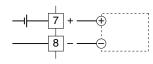
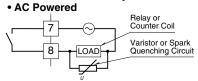
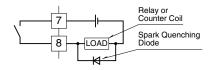


Photo MOSFET Relay Pulse



• DC Powered



# WIRING INSTRUCTIONS

SCREW TERMINAL

Torque: 0.8 N·m

# CHECKING

- 1) Terminal wiring: Check that all cables are correctly connected according to the connection diagram.
- 2) Power input voltage: Check voltage supplied to the rack (model: 10BXx). For the DC power source, be sure that the ripple level is within 10% p-p.
- 3) Input: Check that the input frequency is 30 Hz or less for Mechanical contact, 10 kHz or less for other types of input.

Be sure that the frequency is within the max. limit of output frequency.

Check also that the input pulse is of 10 msec. or wider for Mechanical contact, 10 µsec. or wider for other types of input.

4) Output: Check that the load resistance meets the specifications as shown below.

OUTPUT	LOAD REQUIREMENTS
Open collector	50V DC @100mA max.
Voltage pulse	250Ω min. for 5V 600Ω min. for 12V 1200Ω min. for 24V
Photo MOSFET relay pulse	30V DC @200mA max. (resistive load) 132V AC @200mA max. (cosø=1)

# LIGHTNING SURGE PROTECTION

We offer a series of lightning surge protector for protection against induced lightning surges. Please contact us to choose appropriate models.