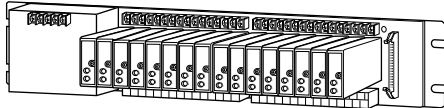


## Dual Output Super-mini Signal Conditioners Pico-M Series

### INSTALLATION BASE (16 positions)

#### Functions & Features

- Holding up to 16 modules of Pico-M series signal conditioners
- Power for the I/O modules supplied via printed wiring on the base
- Wiring within the instrumentation panel is minimized through the collective power input terminal



### MODEL: M8BS1-16[1]-[2][3]

#### ORDERING INFORMATION

- Code number: M8BS1-16[1]-[2][3]  
Specify codes from below for each [1] trough [3].  
(e.g. M8BS1-16U0-R/Q)
- Specify the specification for option code /Q  
(e.g. /C01)

#### [1] CONNECTION (output 1/output 2)

- U0: Screw terminal block / Screw terminal block  
U3: Omron MIL type connector / Screw terminal block

#### [2] POWER INPUT

##### AC Power

M2: 100 - 240 V AC (Operational voltage range 85 - 264 V, 47 - 63 Hz)

##### DC Power

R: 24 V DC  
(Operational voltage range 24 V ±10 %, ripple 10 %p-p max.)

#### [3] OPTIONS

- blank: none  
/Q: With options (specify the specification)

#### SPECIFICATIONS OF OPTION: Q

##### COATING (For the detail, refer to M-System's web site.)

Only solder side of the main PWB is coated.

- /C01: Silicone coating  
/C02: Polyurethane coating  
/C03: Rubber coating

#### GENERAL SPECIFICATIONS

- Capacity: 16 positions  
Connection  
Power input: M3.5 screw terminals (torque 0.8 N·m)  
Input and output: M3.5 screw terminals (torque 0.8 N·m)  
Screw terminal: Nickel-plated steel  
Isolation: Input to output 1 to output 2 to power to FG  
Power indicator LED: ON with normal voltage level

#### INSTALLATION

##### Power Consumption

- AC: 130 VA min.
- DC: 2.5 A min.

##### Operating temperature: 0 to 55°C (32 to 131°F)

0 to 50°C (32 to 122°F) for AC power

##### Operating humidity: 30 to 90 %RH (non- condensing)

30 to 85 %RH for AC power

##### Atmosphere: No corrosive gas or heavy dust

##### Mounting: Surface

##### Weight

##### M8BS1-16U0:

- 1.9 kg (4.2 lb) for power code M2
- 1.5 kg (3.3 lb) for power code R

##### M8BS1-16U3:

- 1.7 kg (3.7 lb) for power code M2
- 1.3 kg (2.9 lb) for power code R

#### PERFORMANCE

Insulation resistance: ≥ 100 MΩ with 500 V DC

##### Dielectric strength

##### DC power:

1500 V AC @1 minute (input to output 1 or output 2 or power to FG)

500 V AC @1 minute (output 1 to output 2 to power)

##### AC power:

1500 V AC @1 minute (input to output 1 or output 2 or power)

1500 V AC @1 minute (input to FG)

500 V AC @1 minute (output 1 to output 2 to power to FG)

#### STANDARDS & APPROVALS

##### EU conformity:

EMC Directive

EMI EN 61000-6-4

EMS EN 61000-6-2

Low Voltage Directive

The AC power unit conforms with the following standards:

EN 50178

EN 60950-1

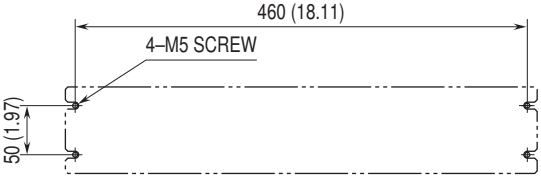
Installation Category II

Pollution Degree 2



Max. operating voltage 300 V  
 RoHS Directive  
 EN 50581

## MOUNTING REQUIREMENTS mm (inch)

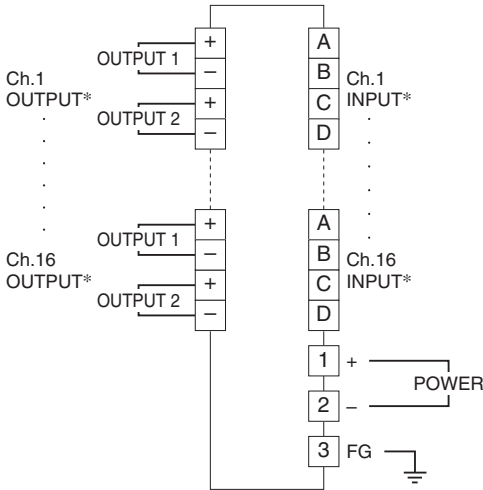


## CONNECTION DIAGRAM

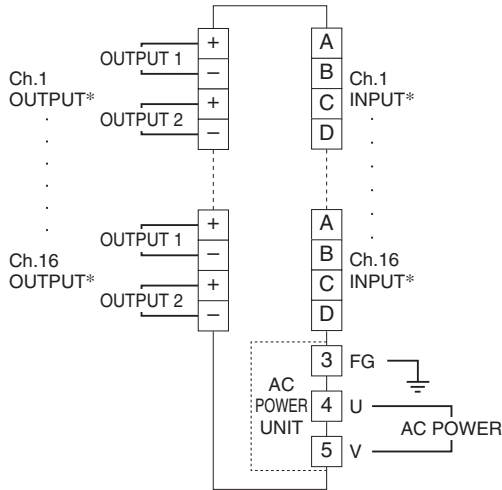
■ MODEL: M8BS1-16U0 (screw terminal block / screw terminal block)

### CONNECTION DIAGRAM

■ DC Power Supply



■ Single Power Supply



\*The input and output terminals are reversed for model M8YSx, M8YCx. Use either Output 1 or Output 2 terminal for the input.



■ **MODEL: M8BS1-16U3 (Omron MIL type connector, XG4A-3431 / screw terminal block)**

· **Connector Pin Assignment**

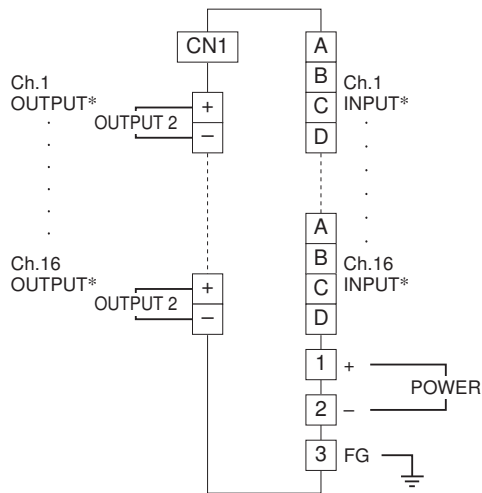
**CN1 :**

PIN NO.	ASSIGNMENT	PIN NO.	ASSIGNMENT
1	ch. 1 +	2	ch. 1 -
3	ch. 2 +	4	ch. 2 -
5	ch. 3 +	6	ch. 3 -
7	ch. 4 +	8	ch. 4 -
9	ch. 5 +	10	ch. 5 -
11	ch. 6 +	12	ch. 6 -
13	ch. 7 +	14	ch. 7 -
15	ch. 8 +	16	ch. 8 -
17	ch. 9 +	18	ch. 9 -
19	ch. 10 +	20	ch. 10 -
21	ch. 11 +	22	ch. 11 -
23	ch. 12 +	24	ch. 12 -
25	ch. 13 +	26	ch. 13 -
27	ch. 14 +	28	ch. 14 -
29	ch. 15 +	30	ch. 15 -
31	ch. 16 +	32	ch. 16 -

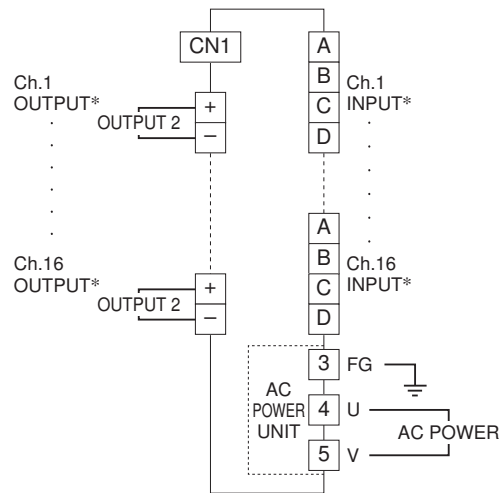
33, 34: Unused

■ **CONNECTION DIAGRAM**

**DC Power Supply**



**Single Power Supply**

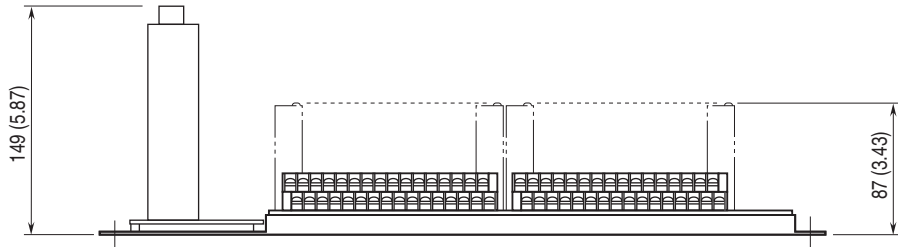
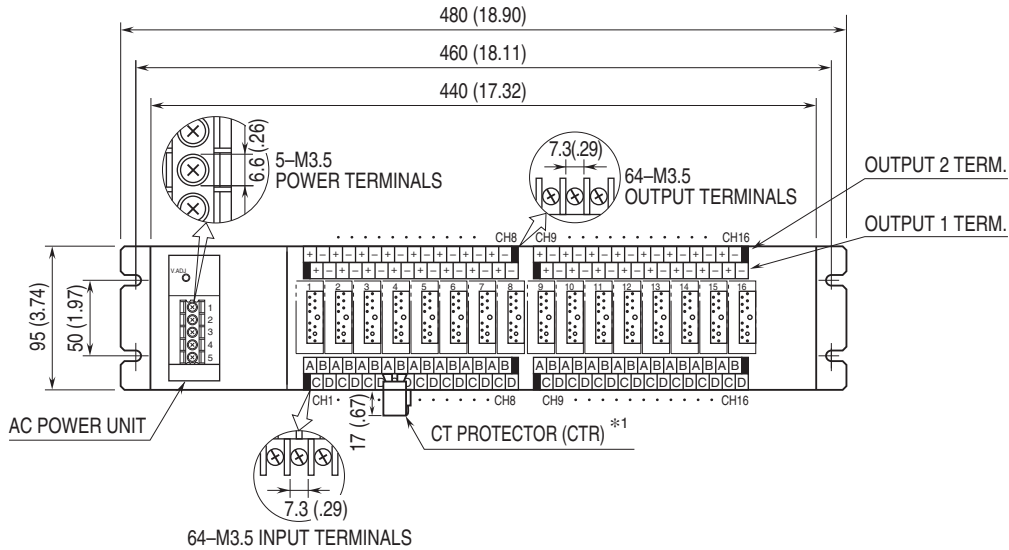


\* The input and output terminals are reversed for model M8YSx, M8YCx.  
Use either Output 1 (connector) or Output 2 terminal for the input.



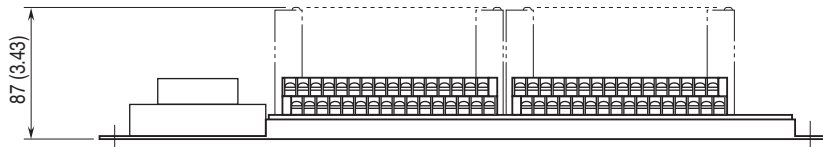
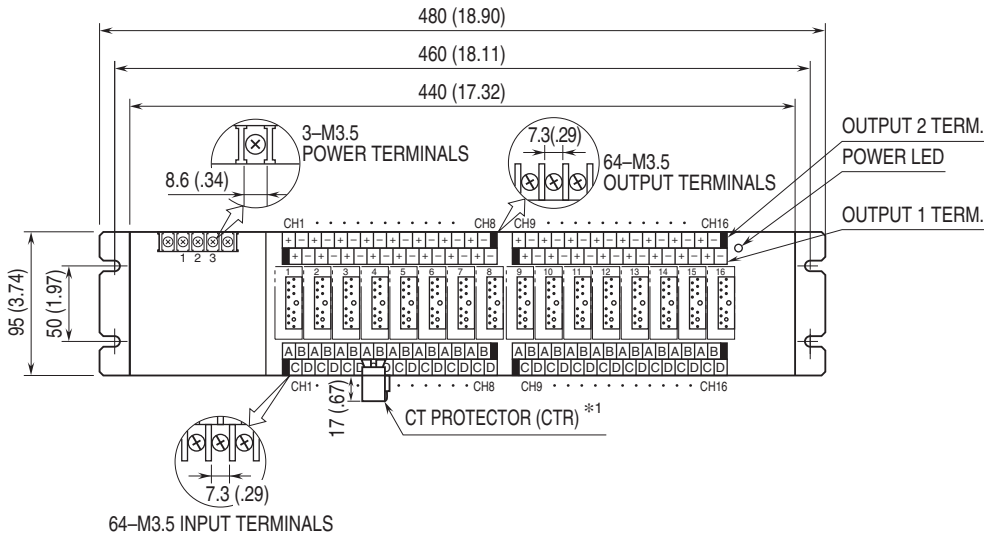
**DIMENSIONS unit: mm (inch)**

■ M8BS1-16U0-M2



\*1. Included with M8CTx.

■ M8BS1-16U0-R

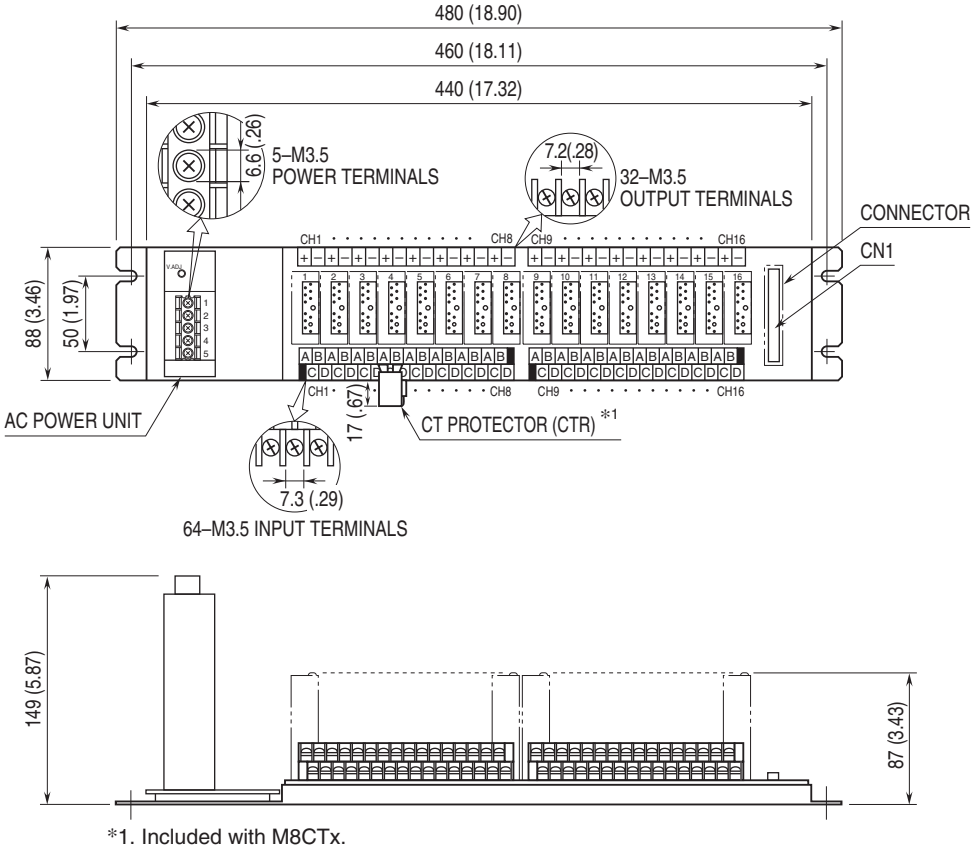


\*1. Included with M8CTx.

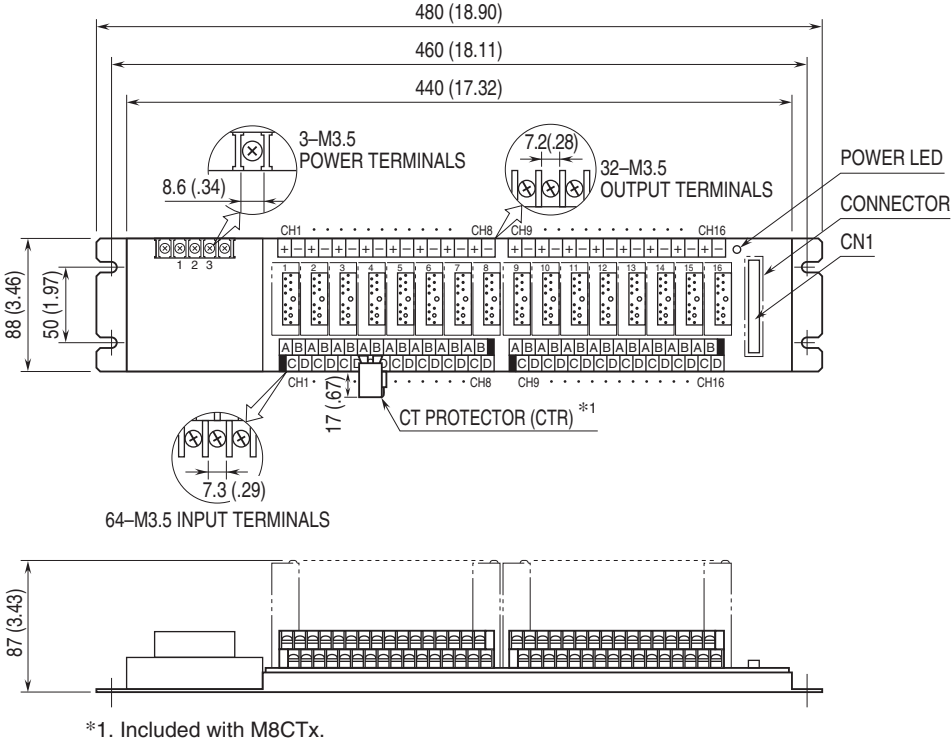


# MODEL: M8BS1-16

## ■ M8BS1-16U3-M2



## ■ M8BS1-16U3-R





Specifications are subject to change without notice.

