

INSTALLATION BASE

(16 positions, Omron MIL type connector / M3.5 screw terminal)

MODEL **M8BS1-16U3**

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:

- Installation base..... (1)
- Ferrite core (Kitagawa Industries GRFC-10).....(1)

■ 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

■ CONFORMITY WITH EU DIRECTIVES

- This equipment is suitable for use in a Pollution Degree 2 environment and in Installation Category II, with the maximum operating voltage 300V. Basic insulation is maintained between the input and output. Prior to installation, check that the insulation class of this unit satisfies the system requirements.
- The equipment must be mounted inside a panel.
- Altitude up to 2000 meters.
- The equipment must be installed such that appropriate clearance and creepage distances are maintained to conform to CE requirements. Failure to observe these requirements may invalidate the CE conformity.
- The actual installation environments such as panel configurations, connected devices, connected wires, may affect the protection level of this unit when it is integrated in a panel system. The user may have to review the CE requirements in regard to the whole system and employ additional protective measures* to ensure the CE conformity.
- * For example, installation of noise filters and clamp filters for the power source, input and output connected to the unit, etc.
- Install lightning surge protectors for those wires connected to remote locations.

■ POWER INPUT RATING & OPERATIONAL RANGE

- Locate the power input rating marked on the product and confirm its operational range as indicated below:
 100 – 240V AC rating: 85 – 264V, 47 – 63 Hz, ≥ 130VA
 24V DC rating: 24V ±10%, ≥ 2.5A

■ GENERAL PRECAUTIONS

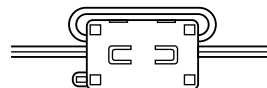
- Before you remove the unit from its base socket or mount it, turn off the power supply and input signal for safety.

■ ENVIRONMENT

- Indoor use.
- When heavy dust or metal particles are present in the air, install the installation base inside proper housing and ventilate it.
- Do not install the base where it is subjected to continuous vibration. Do not subject the unit to physical impact.
- Environmental temperature must be within 0 to 55°C or 32 to 131°F (0 to 50°C or 32 to 122°F for AC power) with relative humidity within 30 to 90% RH (30 to 85% RH for AC Power) in order to ensure adequate life span and operation.
- Be sure that the ventilation slits are not covered with cables, etc.

■ 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.
- When using M2 power, use a ferrite core close to the unit for power line. Using ferrite core is enough to eliminate noises, but turning the cable twice (1 round) as figure below is recommended.



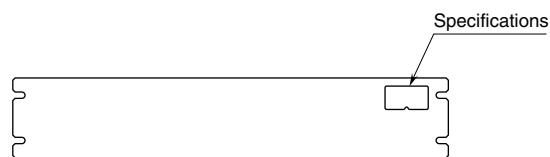
- Be sure to close the terminal cover for safety.

■ AND

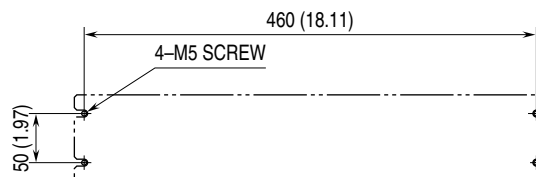
- The unit is designed to function as soon as power is supplied, however, a warm up for 10 minutes is required for satisfying complete performance described in the data sheet.

COMPONENT IDENTIFICATION

■ REAR VIEW



MOUNTING REQUIREMENTS unit: mm (inch)



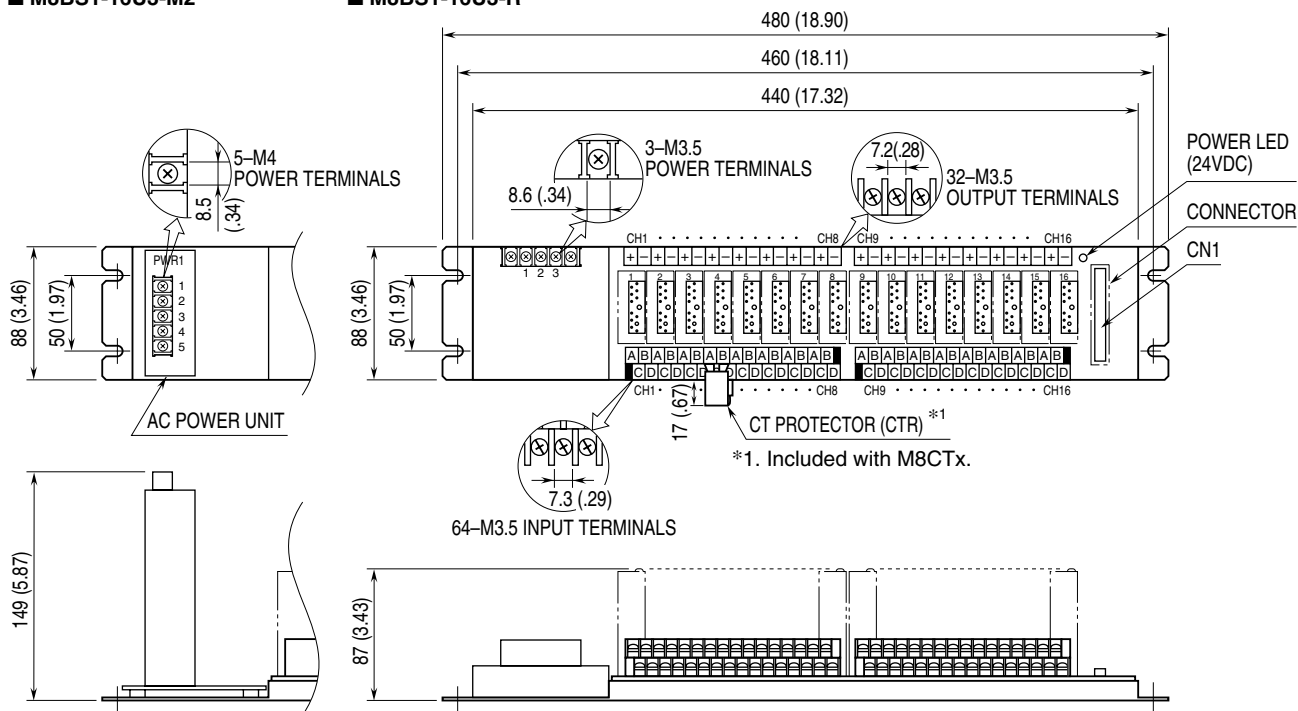
TERMINAL CONNECTIONS

Connect the unit as in the diagrams below.

EXTERNAL DIMENSIONS unit: mm (inch)

M8BS1-16U3-M2

M8BS1-16U3-R



CONNECTOR PIN ASSIGNMENT

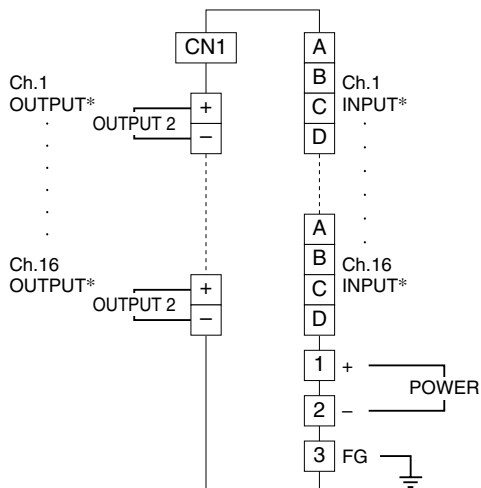
Connector: Omron MII type connector, XG4A-3431

CN1: output 1 or input

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			

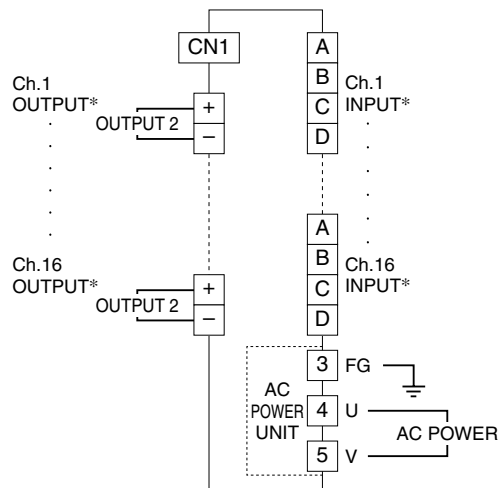
■ CONNECTION DIAGRAM

■ DC Power Supply



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

■ Single Power Supply



CHECKING

- 1) Terminal wiring: Check that all cables are correctly connected according to the connection diagram.
- 2) Power input voltage: Check voltage across the power terminals.
- 3) Installation & environment

MAINTENANCE

Power units' standard life is expected for 10 years with average ambient temperature 35°C (95°F) and 1.0A load. Contact us for use in extremely different conditions.

■ HOW TO REPLACE THE POWER UNIT (power input code: M2)

- 1) Prepare Power Unit (switching regulator) model HDC9.
- 2) Turn off the power supply connected to the Power Unit.
- 3) Remove the wire binding and wiring connected to the terminal 1 – 2 and 4 – 5.
- 4) Loosen and remove the mounting screws A (4 places).
- 5) Detach the Power Unit from the Installation Base.
- 6) Attach the new Power Unit to the Installation Base and tighten the screws in reverse order as explained above. Be sure to use the ferrite core included in the package. (If it is already used, no extras are required.)

Note: For questions on products purchased before 2009, please contact us.

