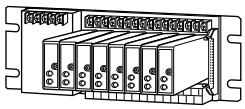
Dual Output Super-mini Signal Conditioners Pico-M Series

INSTALLATION BASE (8 positions)

Functions & Features

• Holding up to 8 modules of Pico-M series signal conditioners
• Power supplied through printed wiring on the base
• Saving wiring work within an instrumentation panel



MODEL: M8BS-8[1]-[2][3]

ORDERING INFORMATION

• Code number: M8BS-8[1]-[2][3]
Specify codes from below for each of [1] through [3].
(e.g. M8BS-8U1-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
U1: Fujitsu FCN type connector / Screw terminal block
E1: Toshiba DCS SAMP1 use / Screw terminal block
(Panasonic AXM240001 used)
(DISCONTINUED; reprace with code "E1A".)
E1A: Toshiba DCS SAMP1 supported / Screw terminal block
(Omron XG4A-4031 used)
E3: Toshiba DCS SAIN1 use / Screw terminal block
(Panasonic AXM220001 used)
(DISCONTINUED; replace with code "E3A".)
E3A: Toshiba DCS SAIN1 supported / Screw terminal block
(Omron XG4A-2031 used)
K3: Azbil DCS J-PIM00 module use / Screw terminal block

[2] POWER SUPPLY UNIT

AC Power
K: 85 – 132 V AC; single power source
(Operational voltage range 85 – 132 V, 47 – 63 Hz)
KK: 85 – 132 V AC; two independent power sources
(Operational voltage range 85 – 132 V, 47 – 63 Hz)
L: 170 – 264 V AC; single power source
(Operational voltage range 170 – 264 V, 47 – 63 Hz)
DC Power
R: 24 V DC; no power supply unit
(Operational voltage range 24 V ±10 %, ripple 10 %p-p max.)
Redundant power supplies are recommended for long time use without interruption.

[3] OPTIONS

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

SPECIFICATIONS OF OPTION: Q

COATING (For the detail, refer to our web site.)
Only solder side of the main PWB is coated.
/C01: Silicone coating
/C02: Polyurethane coating
/C03: Rubber coating

GENERAL SPECIFICATIONS

Capacity: 8 positions
Connection
Power input: M3.5 screw terminals (M3 screw terminals for AC power input) (torque 0.8 N·m, 0.5 N·m for AC power input)
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

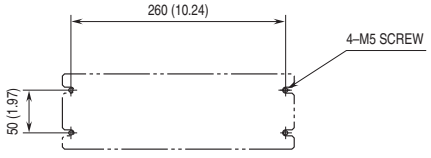
INSTALLATION

Power Consumption
•AC: 130 VA min.
•DC: 0.7 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)
Mounting: Surface
Weight:
0.8 kg (1.8 lb) for power code K, L
0.9 kg (2.0 lb) for power code KK
0.7 kg (1.5 lb) for power code R

PERFORMANCE

Insulation resistance: ≥ 100 MΩ with 500 V DC
Dielectric strength:
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)
500 V AC @1 minute (output 1 or output 2 to FG for AC power input)

MOUNTING REQUIREMENTS unit: mm (inch)



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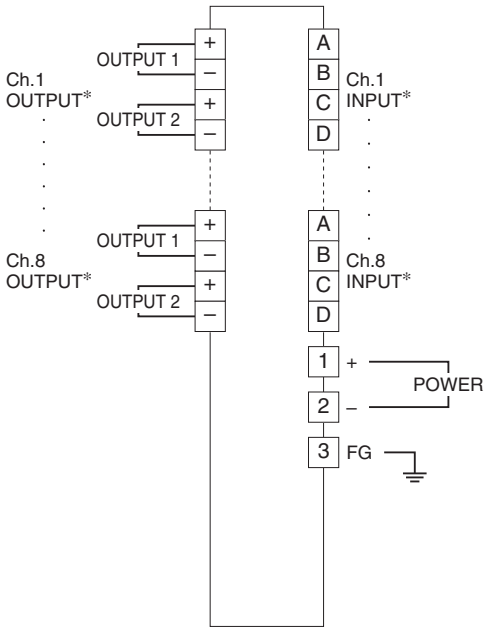
CONNECTION DIAGRAM

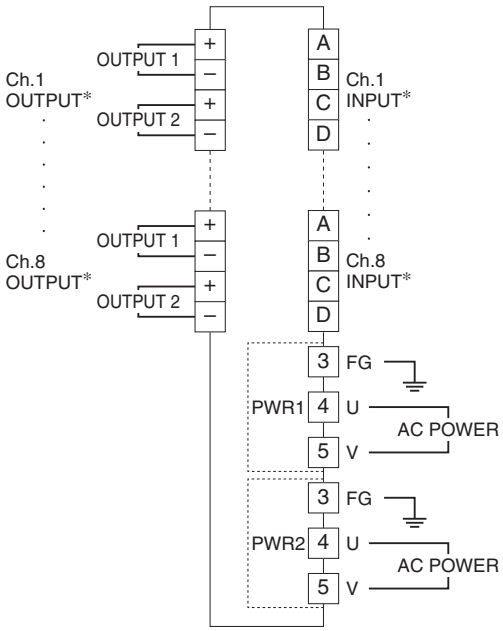
■ MODEL: M8BS-8U0 (screw terminal block / screw terminal block)

■ CONNECTION DIAGRAM

■ DC Power Supply



■ Single Power Supply, Two Independent Power Sources



PWR2 provided only for two independent power sources.

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

■ MODEL: M8BS-8U1 (Fujitsu FCN type connector / screw terminal block)

• Connector Pin Assignment

I/O Connector: OTAX N364P040AU

(Fujitsu FCN-364P040-AU...discontinued)

CN1: Output 1 or input

PIN NO.	ASSIGNMENT	PIN NO.	ASSIGNMENT
A1	ch.1 +	B1	ch.1 –
A2	ch.2 +	B2	ch.2 –
A3	ch.3 +	B3	ch.3 –
A4	ch.4 +	B4	ch.4 –
A5	ch.5 +	B5	ch.5 –
A6	ch.6 +	B6	ch.6 –
A7	ch.7 +	B7	ch.7 –
A8	ch.8 +	B8	ch.8 –
A9 – A20, B9 – B20: Unused			

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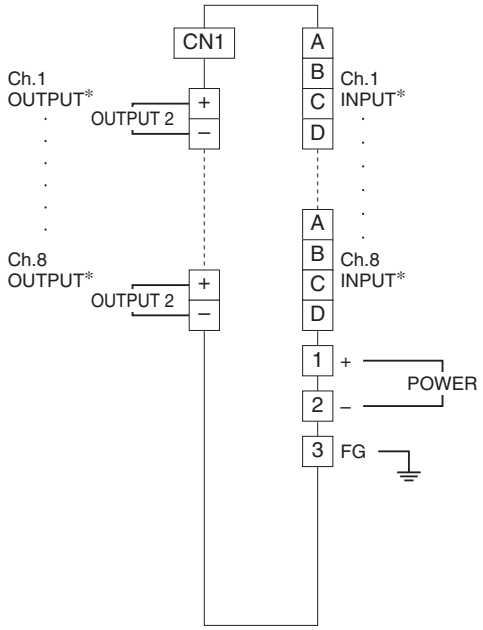
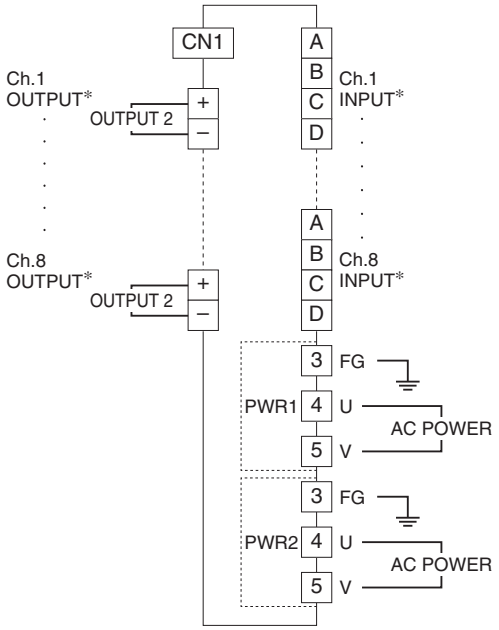
■ CONNECTION DIAGRAM

■ DC Power Supply



■ Single Power Supply, Two Independent Power Sources



PWR2 provided only for two independent power sources.

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

■ MODEL: M8BS-8E1A (Toshiba DCS SAMP1 use / screw terminal block)

• Connector Pin Assignment

Output connector: Omron XG4A-4031

CN1: SAMP1

The input or output 1 is connected to the connector.

PIN NO.	ASSIGNMENT	PIN NO.	ASSIGNMENT
1	NC	21	NC
2	NC	22	NC
3	NC	23	ch.5 +
4	NC	24	ch.5 –
5	NC	25	NC
6	NC	26	NC
7	NC	27	ch.4 +
8	NC	28	ch.4 –
9	NC	29	NC
10	NC	30	NC
11	ch.8 +	31	ch.3 +
12	ch.8 –	32	ch.3 –
13	NC	33	NC
14	NC	34	NC
15	ch.7 +	35	ch.2 +
16	ch.7 –	36	ch.2 –
17	NC	37	NC
18	NC	38	NC
19	ch.6 +	39	ch.1 +
20	ch.6 –	40	ch.1 –

Toshiba DCS SAMP1 uses Panasonic AXM240001. As connector is discontinued, Omron XG4A-4031 is used as an alternative. (Replace cable side.)

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■ MODEL: M8BS-8E3A (Toshiba DCS SAIN1 use / screw terminal block)

• Connector Pin Assignment

Output connector: Omron XG4A-2031

CN1: SAIN1

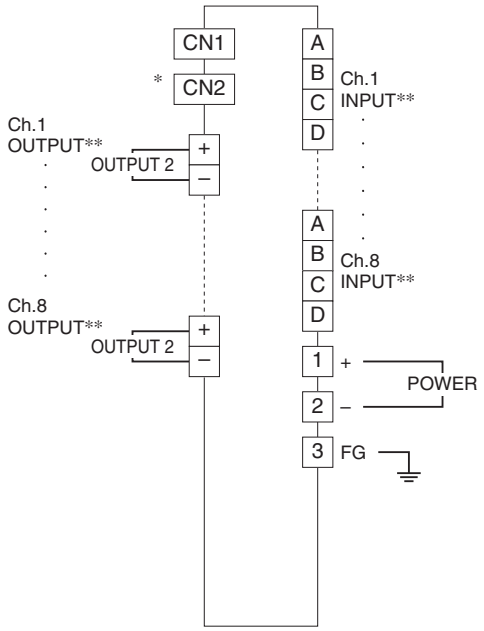
CN2: SAIN1 for redundancy

PIN NO.	ASSIGNMENT	PIN NO.	ASSIGNMENT
1	NC	11	ch.5 –
2	NC	12	ch.5 +
3	NC	13	ch.4 –
4	NC	14	ch.4 +
5	ch.8 –	15	ch.3 –
6	ch.8 +	16	ch.3 +
7	ch.7 –	17	ch.2 –
8	ch.7 +	18	ch.2 +
9	ch.6 –	19	ch.1 –
10	ch.6 +	20	ch.1 +

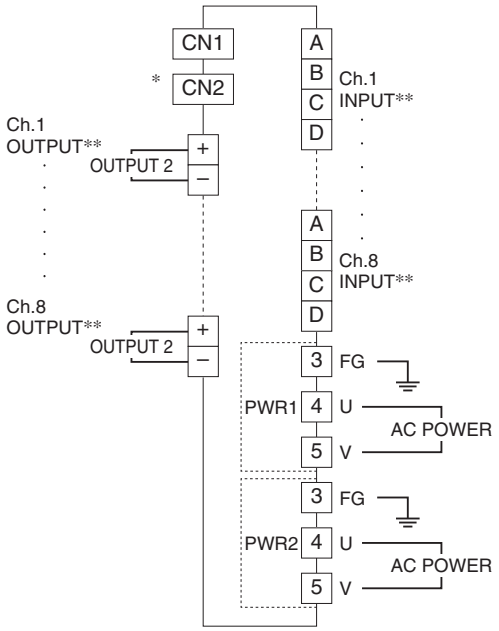
Toshiba DCS SAMP1 uses Panasonic AXM220001. As connector is discontinued, Omron XG4A-2031 is used as an alternative. (Replace cable side.)

■ CONNECTION DIAGRAM

■DC Power Supply



■Single Power Supply, Two Independent Power Sources



PWR2 provided only for two independent power sources.

* For model M8BS-8E3A.

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

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■ MODEL: M8BS-8K3 (Azbil DCS J-PIM00 module use / screw terminal block)

I/O cable : J-SSL / J-SSK
J-SRL / J-SRK

• Location

Output connector : 57GE-40500-751

CN1 : J-PIM00 module use

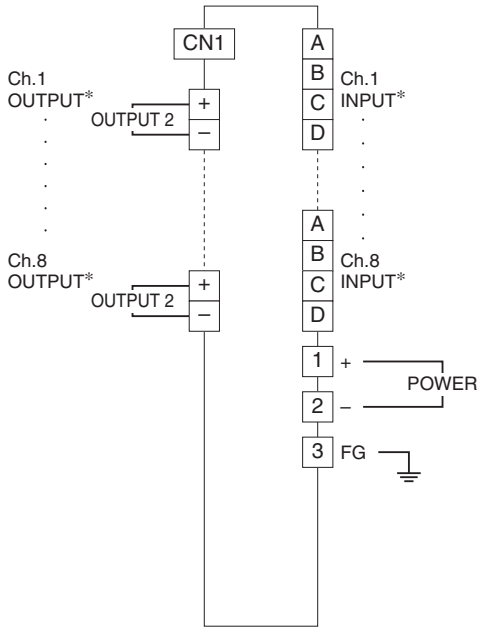
The input or output 1 is connected to the connector.

Pico-M LOCATION NO.							
1	2	3	4	5	6	7	8
1	2	3	4	5	6	7	8
AZBIL DCS PI CONNECTOR							

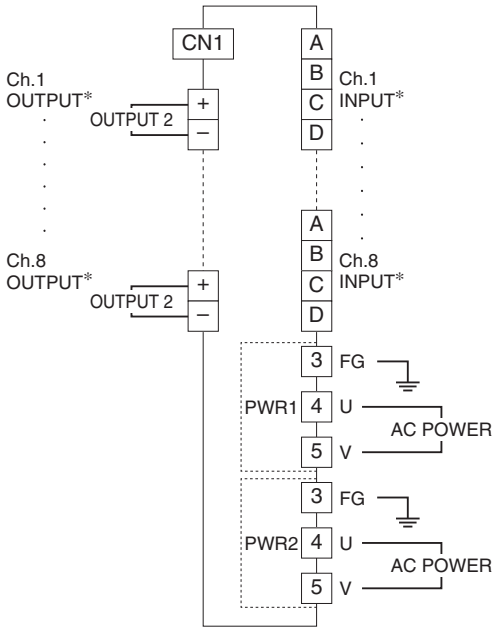
The internal power supply is used for excitation of the pulse input module.

■ CONNECTION DIAGRAM

■ DC Power Supply



■ Single Power Supply, Two Independent Power Sources



PWR2 provided only for two independent power sources.

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

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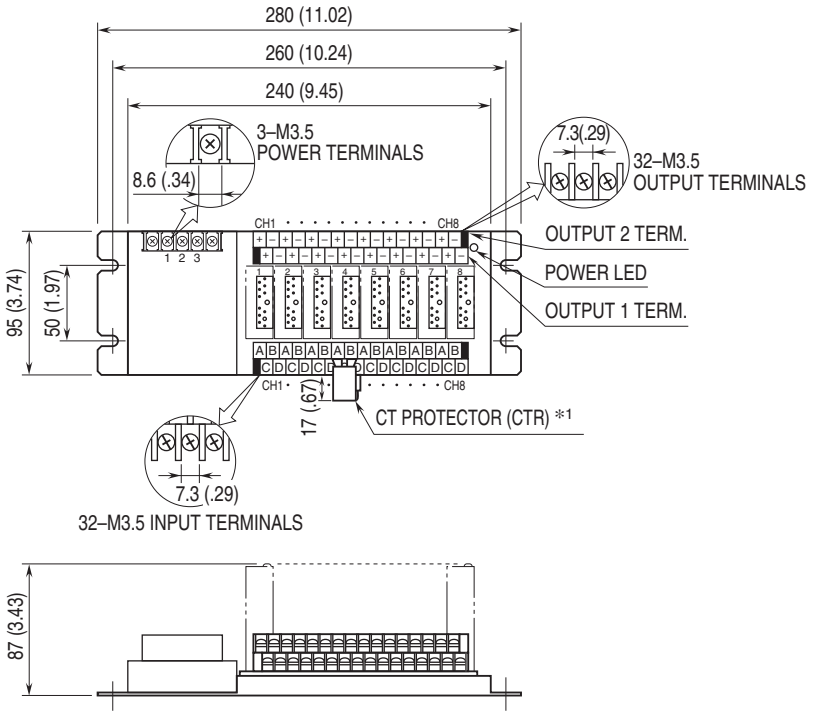
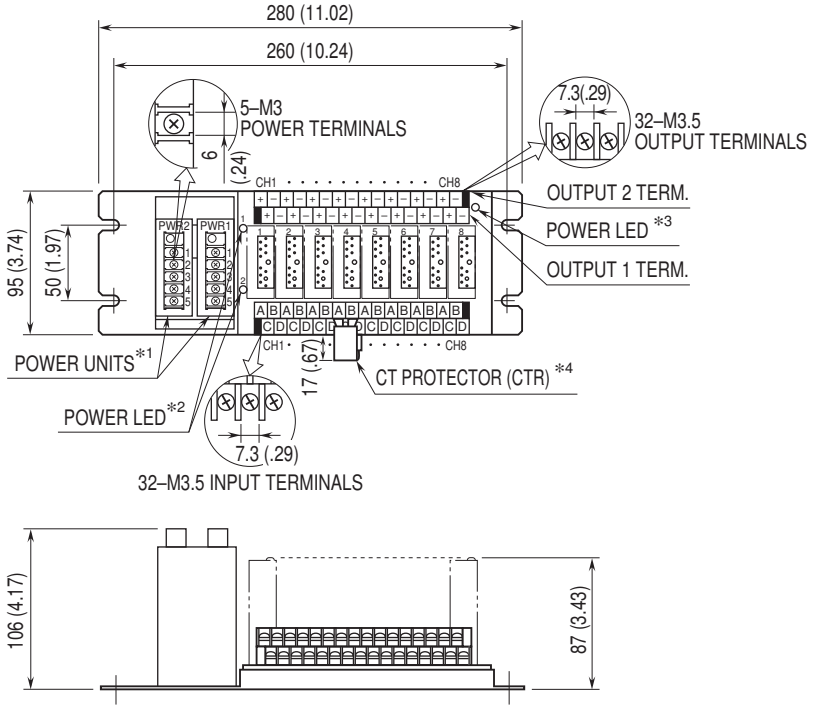
EXTERNAL DIMENSIONS unit: mm [inch]

■ M8BS-8U0-R



*1. Included with M8CTx.

■ M8BS-8U0-K, KK, L



*1. PWR2 provided only for two independent power sources.
*2. Provided only for two independent power sources.
*3. Provided only for single power source.
*4. Included with M8CTx.

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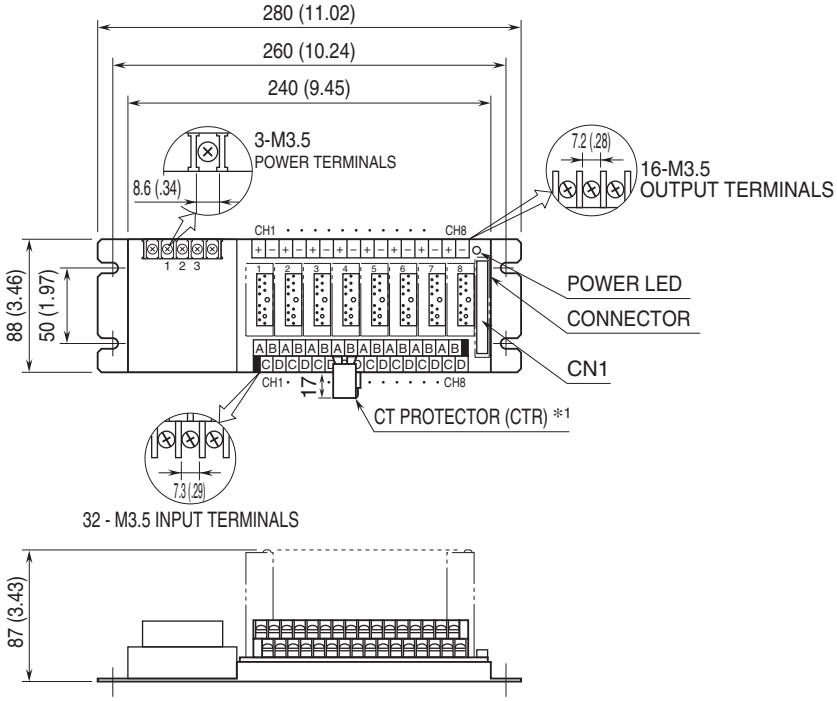
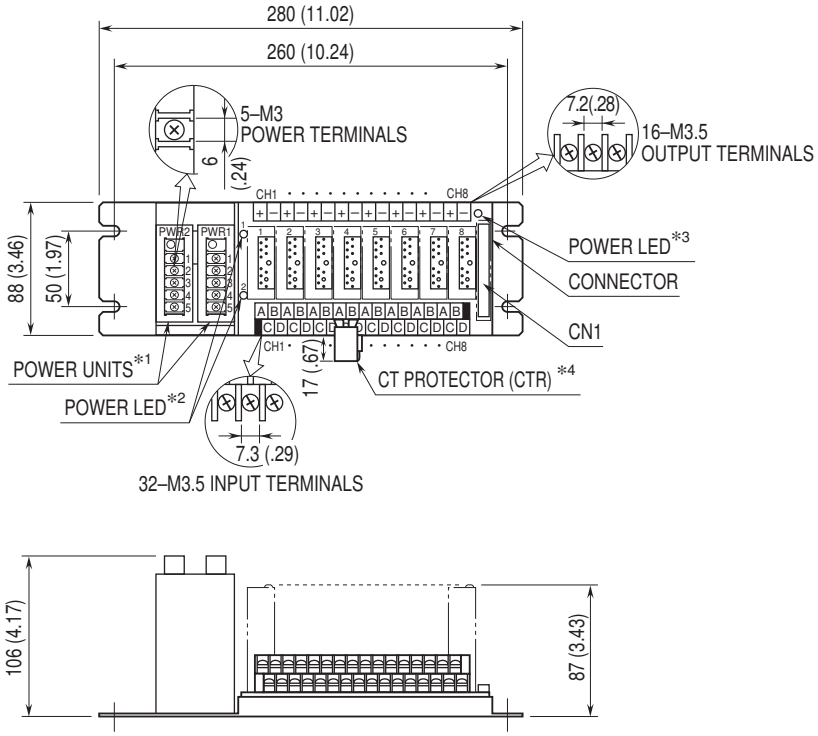
■ M8BS-8U1, 8E1A, 8K3-R



*1. Included with M8CTx.

■ M8BS-8U1, 8E1A, 8K3-K, KK, L



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*2. Provided only for two independent power sources.
*3. Provided only for single power source.
*4. Included with M8CTx.

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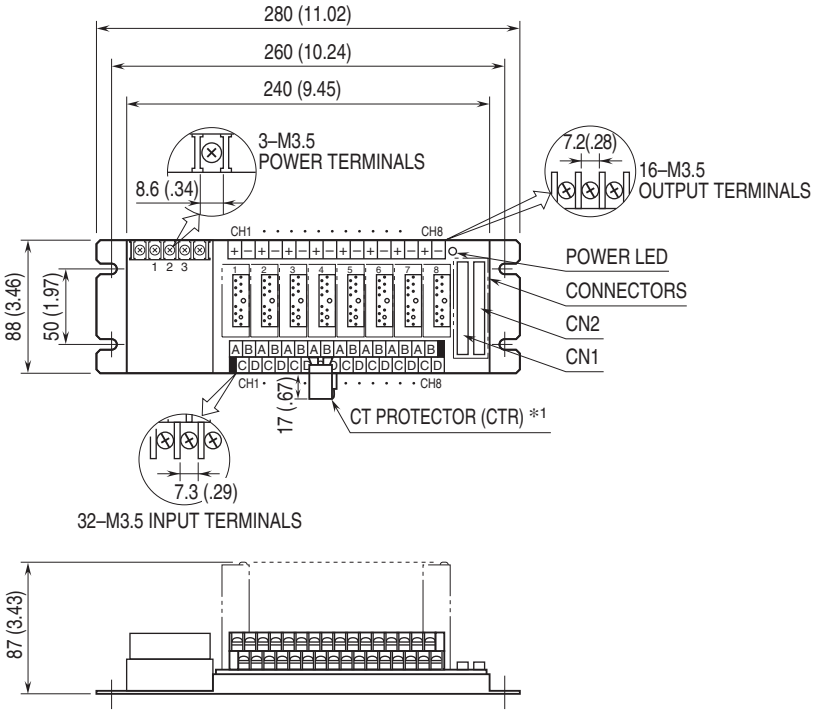
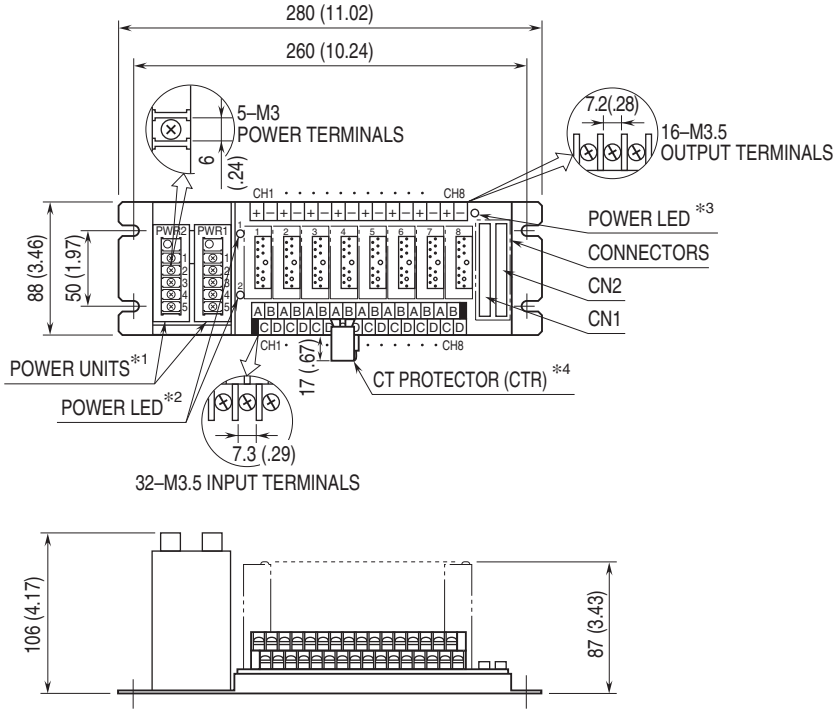
■ M8BS-8E3A-R



*1. Included with M8CTx.

■ M8BS-8E3A-K, KK, L



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*4. Included with M8CTx.

⚠ Specifications are subject to change without notice.

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