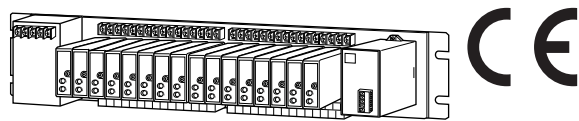


## Dual Output Super-mini Signal Conditioners Pico-M Series

### INSTALLATION BASE (for network interface)

#### Functions & Features

- Holding up to 16 modules of Pico-M series signal conditioners
- Direct connection to various networks via the 61-Unit Analog Input Modules mounted on the base
- Power supplied through printed wiring on the base
- Saving wiring work within an instrumentational panel



### MODEL: M8BS2-[1][2]-[3][4]

#### ORDERING INFORMATION

- Code number: M8BS2-[1][2]-[3][4]
- Specify a code from below for each of [1] through [4].  
(e.g. M8BS2-161-R/Q)
- Specify the specification for option code /Q  
(e.g. /C01)

#### [1] CAPACITY

- 04:** 4 positions
- 08:** 8 positions
- 16:** 16 positions

#### [2] I/O TYPE

- 1: Input (Select 1 - 5V for Output 1.)
- 2: Output (Select model M8YVx with 1 - 5V input.)
- 3: Output (Select model M8YSx with 1 - 5V input.)
- 4: Input/Output  
(Input channel 8 points: Select 1 - 5 V for Output 1.)  
(Output channel 8 points: Select model M8YVx with 1 - 5V input.)  
(Specify capacity code 16.)  
(Only 61C-163-R is available for related products.)  
(CE not available)

#### [3] 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  $\pm$ 10 %, ripple 10 %p-p max.)

#### [4] 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

#### RELATED PRODUCTS

- Analog I/O Module (model: 61x)
- Specify power input code 'R' (24V DC).  
For Input/Output type, specify 61C-163-R.

#### PACKAGE INCLUDES...

- Ferrite core (model: GRFC-10)(Kitagawa Industries): 1 pce.  
(Only for M2 power)

#### GENERAL SPECIFICATIONS

- Capacity:** 4, 8 or 16 positions
- Connection**
- Power input**
- M2:** M3 screw terminals (torque 0.8 N·m)
- R:** 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**
- AC power:**
- 1.0 kg (2.2 lb) (4 positions)
  - 1.2 kg (2.6 lb) (8 positions)
  - 2.5 kg (5.5 lb) (16 positions)
- DC power:**
- 0.6 kg (1.3 lb) (4 positions)
  - 0.8 kg (1.8 lb) (8 positions)
  - 2.0 kg (4.4 lb) (16 positions)

## PERFORMANCE

### Insulation resistance

**Input use:**  $\geq 100 \text{ M}\Omega$  with 500 V DC  
(input to output 2 to power to FG)

**Output use:**  $\geq 100 \text{ M}\Omega$  with 500 V DC  
(output 1 to output 2 to power to FG)

**Input/Output use:**  $\geq 100 \text{ M}\Omega$  with 500 V DC  
(Input(input side) to Output 2(input side) to Output 1(output side) to Output 2(output side) to power to FG)

### Dielectric strength

#### • Input use

#### DC power:

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

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

#### AC power:

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

1500 V AC @1 minute (input to FG)

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

#### • Output use (M8YVx)

#### DC power:

1500 V AC @1 minute (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)

#### • Output use (M8YSx)

#### DC power:

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

500 V AC @1 minute (input to power)

#### AC power:

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

1000 V AC @1 minute (output to FG)

500 V AC @1 minute (input to power to FG)

#### • Input/Output use

#### DC power:

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

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

#### AC power:

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

1500 V AC @1 minute (Input(input side) to FG)

500 V AC @1 minute (Output 2(input side) to Output 1(output side) to Output 2(output side) 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

Installation Category II

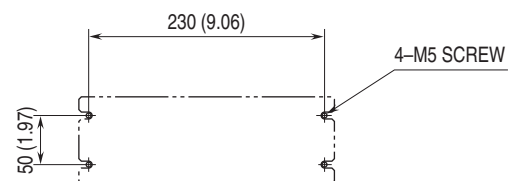
Pollution Degree 2

Max. operating voltage 300 V

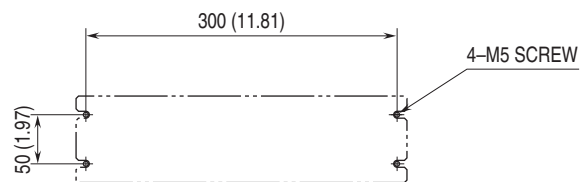
RoHS Directive

## MOUNTING REQUIREMENTS unit: mm (inch)

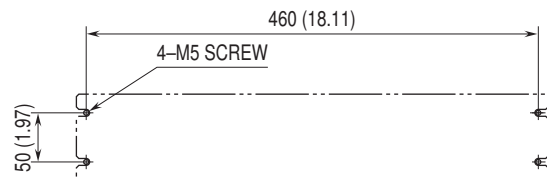
### ■ M8BS2-04x



### ■ M8BS2-08x

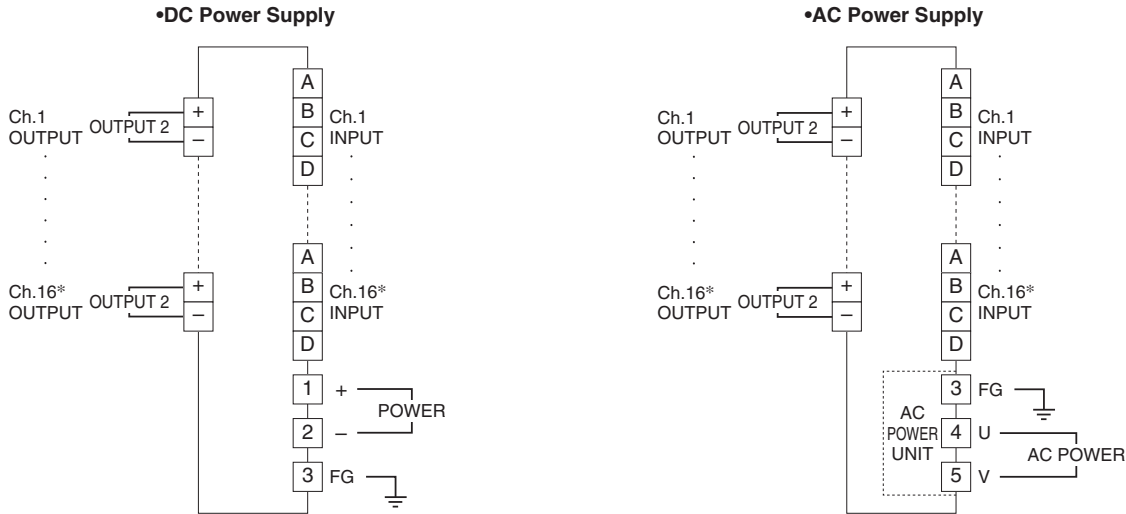


### ■ M8BS2-16x



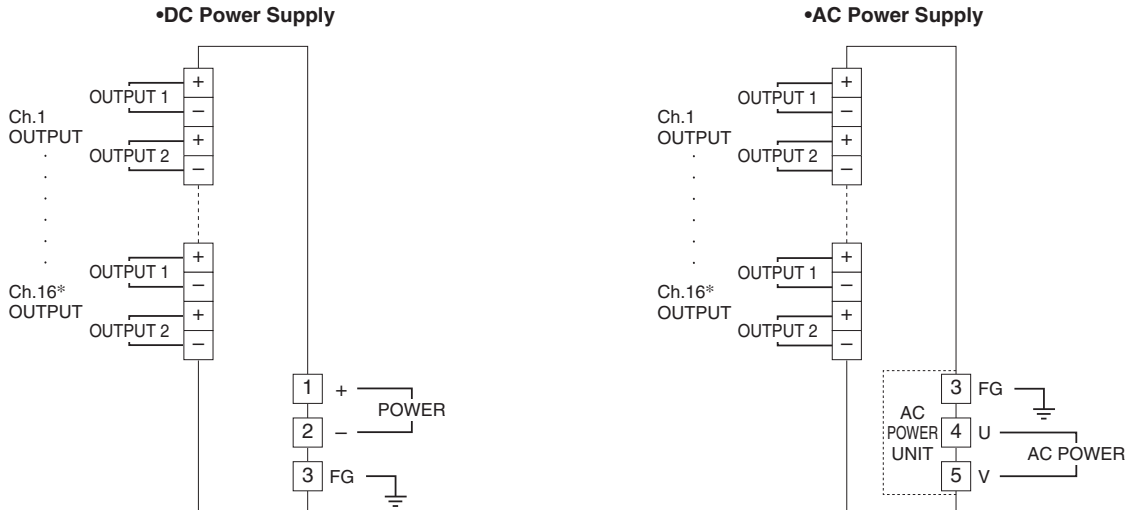
## CONNECTION DIAGRAM

### ■ FIELD INPUT TYPE



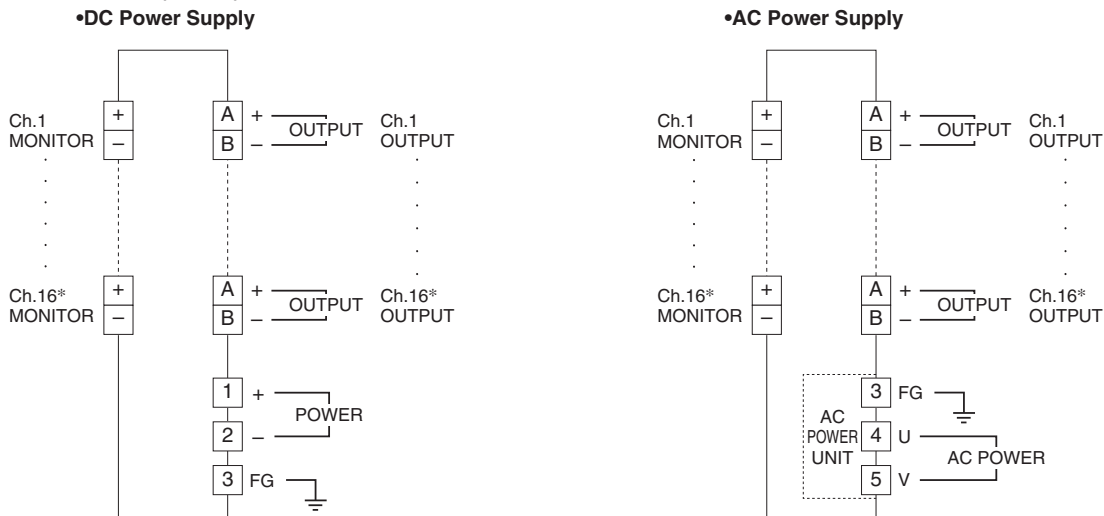
\*Up to 4 channels for M8BS2-04, 8 channels for M8BS2-08.

### ■ FIELD OUTPUT TYPE (M8YVx)



\*Up to 4 channels for M8BS2-04, 8 channels for M8BS2-08.

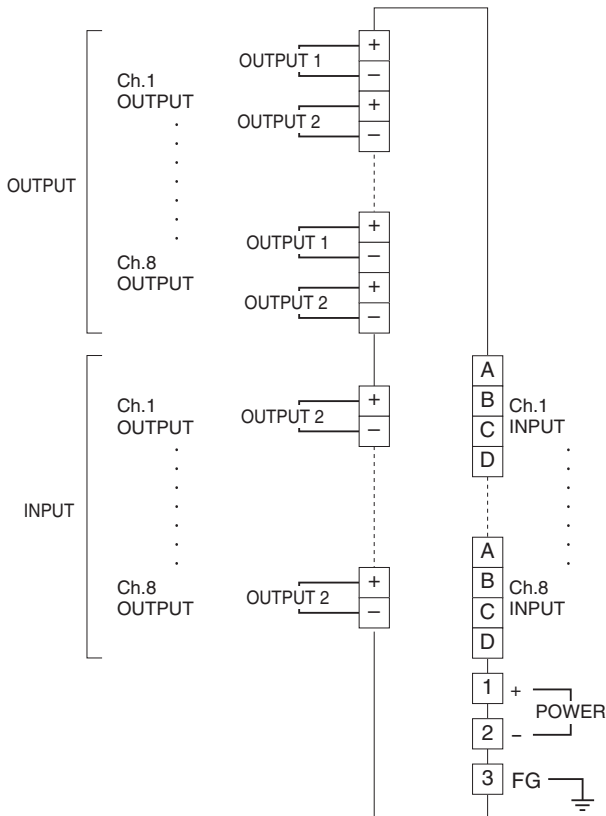
### ■ FIELD OUTPUT TYPE (M8YSx)



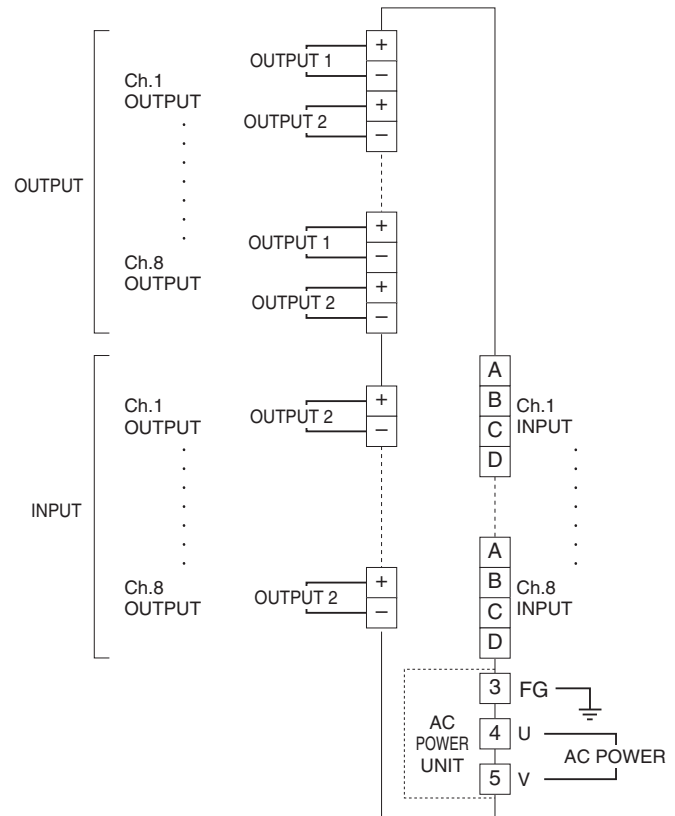
\*Up to 4 channels for M8BS2-04, 8 channels for M8BS2-08.

## INPUT/OUTPUT TYPE

### •DC Power Supply

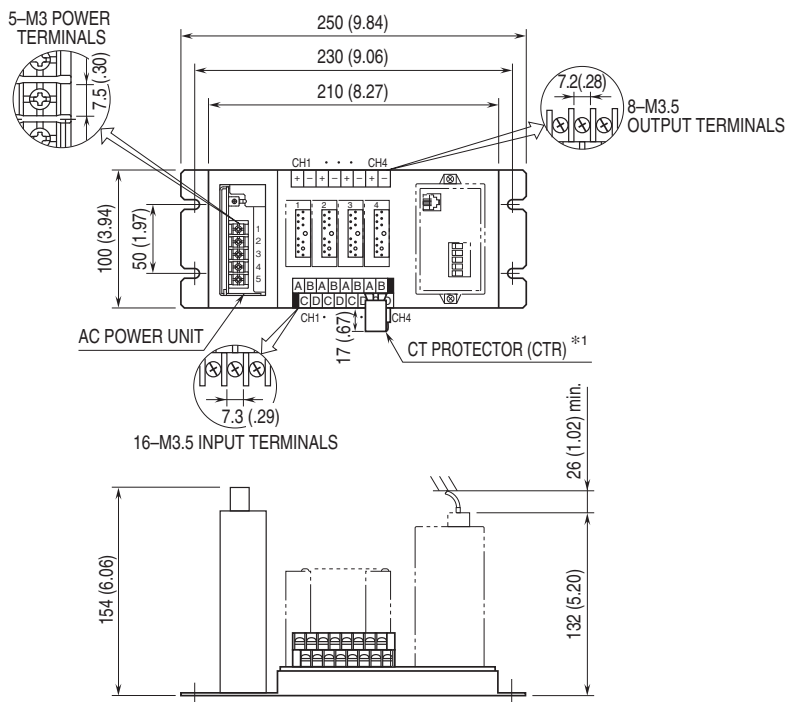


### •AC Power Supply



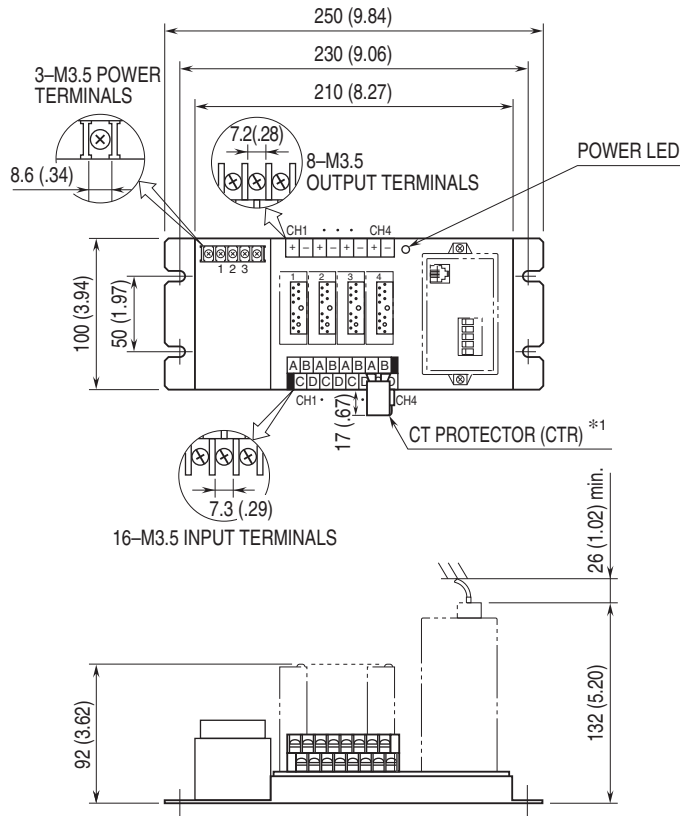
## EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]

### ■ M8BS2-041-M2



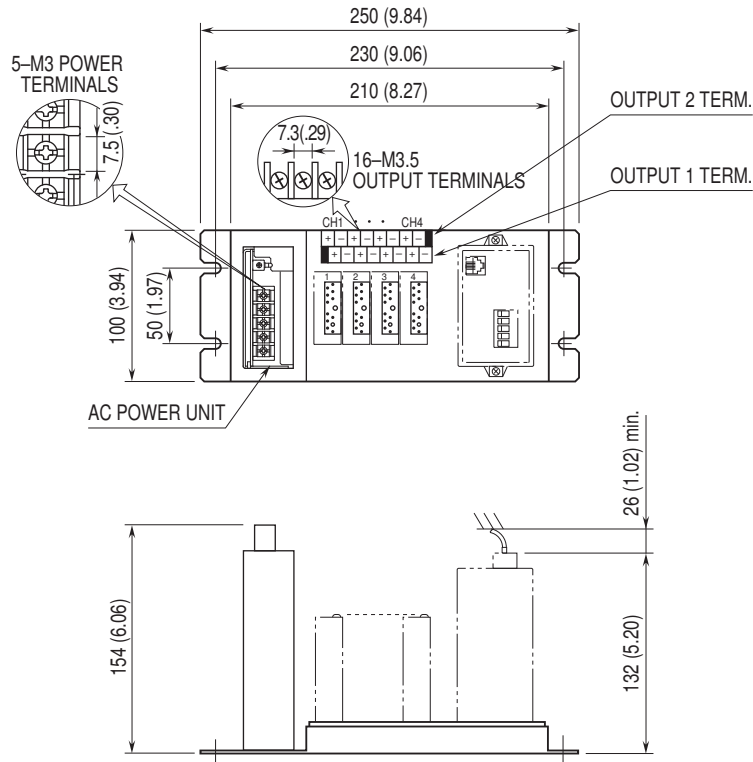
\*1. Included with M8CTx.

## ■ M8BS2-041-R

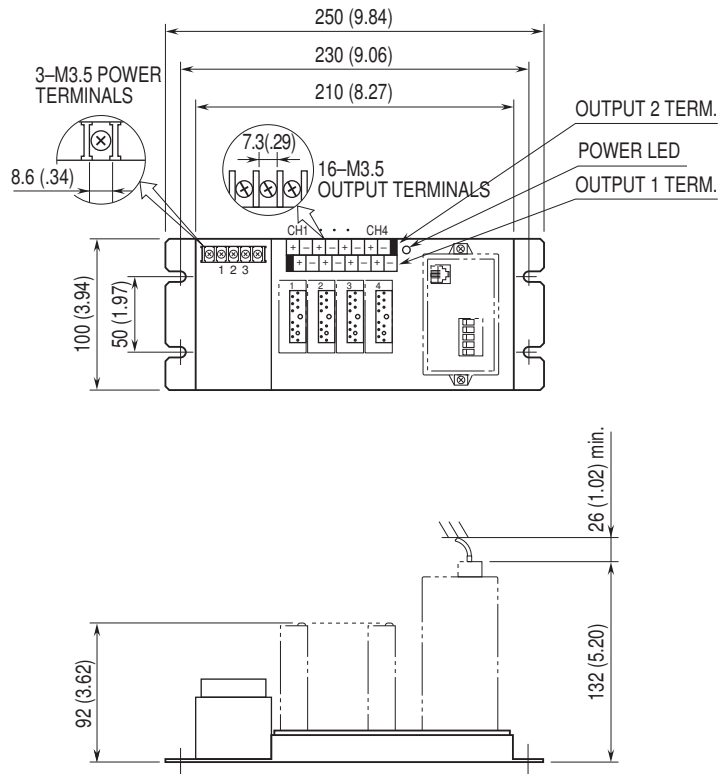


\*1. Included with M8CTx.

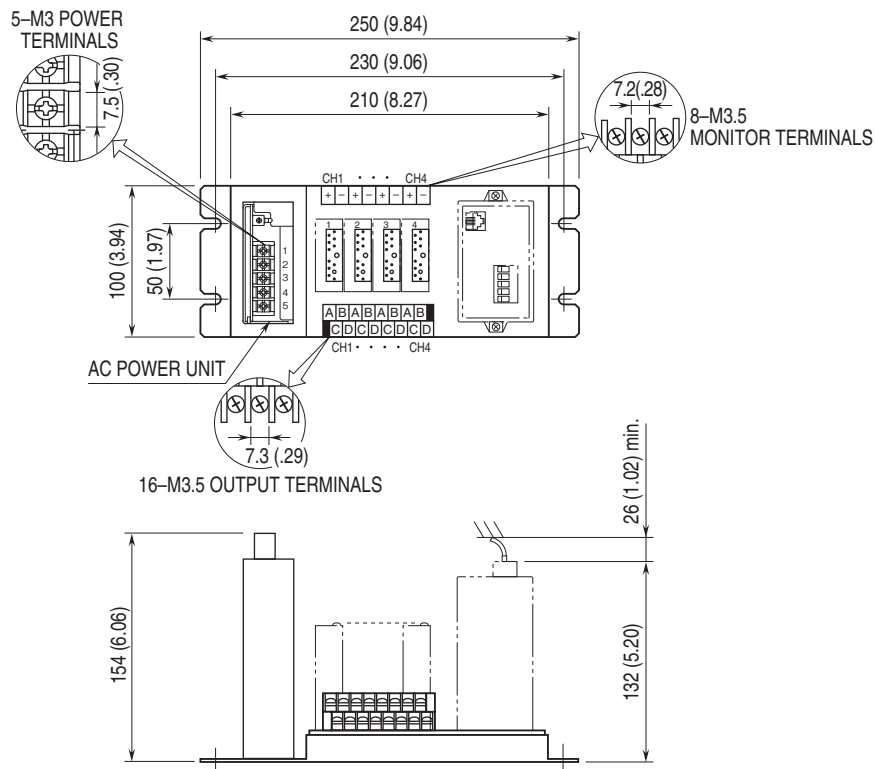
## ■ M8BS2-042-M2



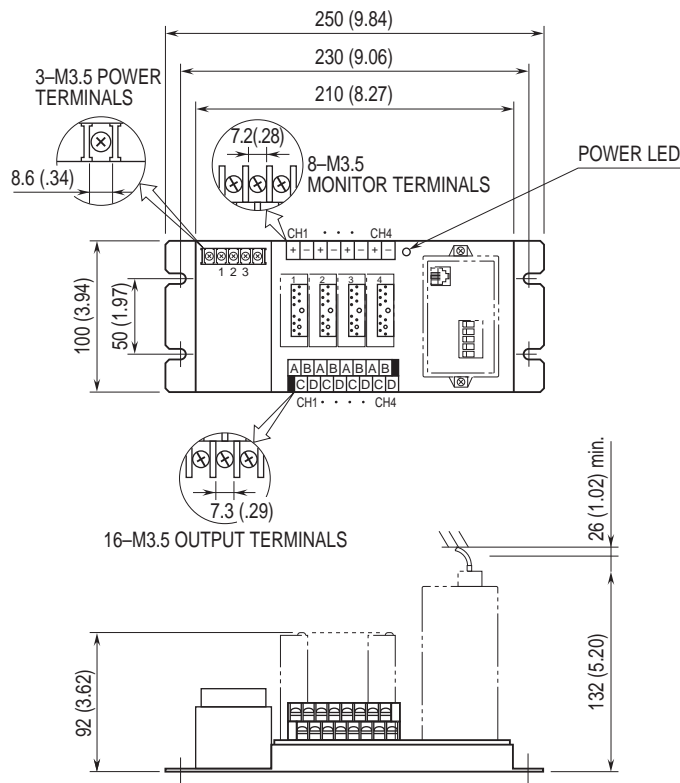
## ■ M8BS2-042-R



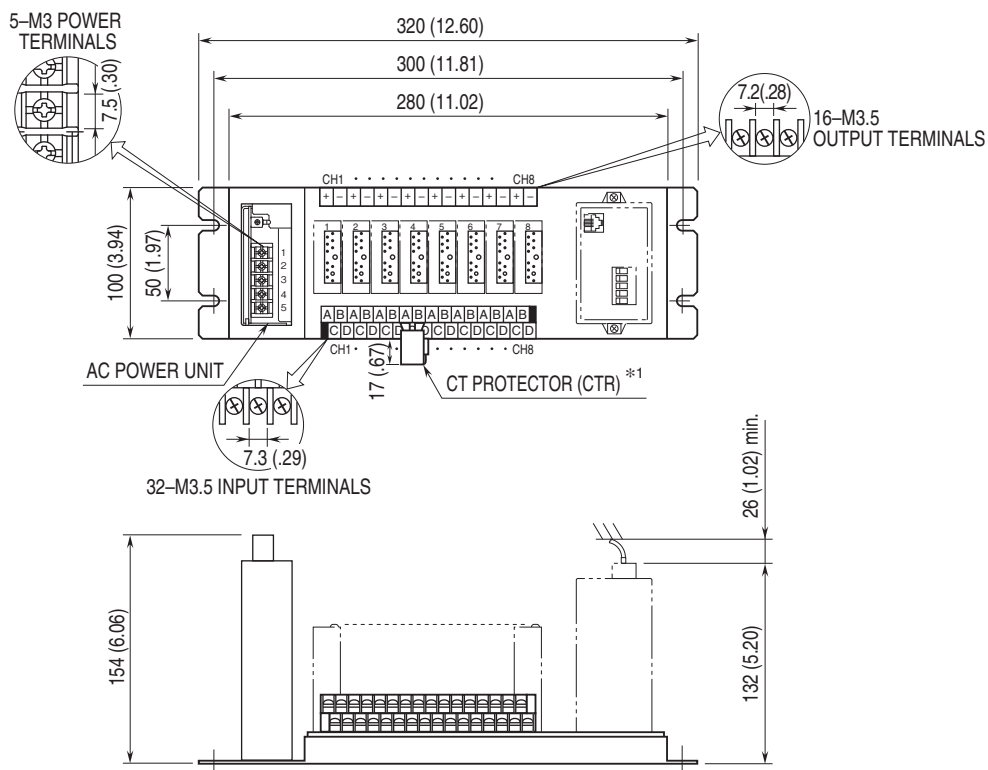
## ■ M8BS2-043-M2



## ■ M8BS2-043-R

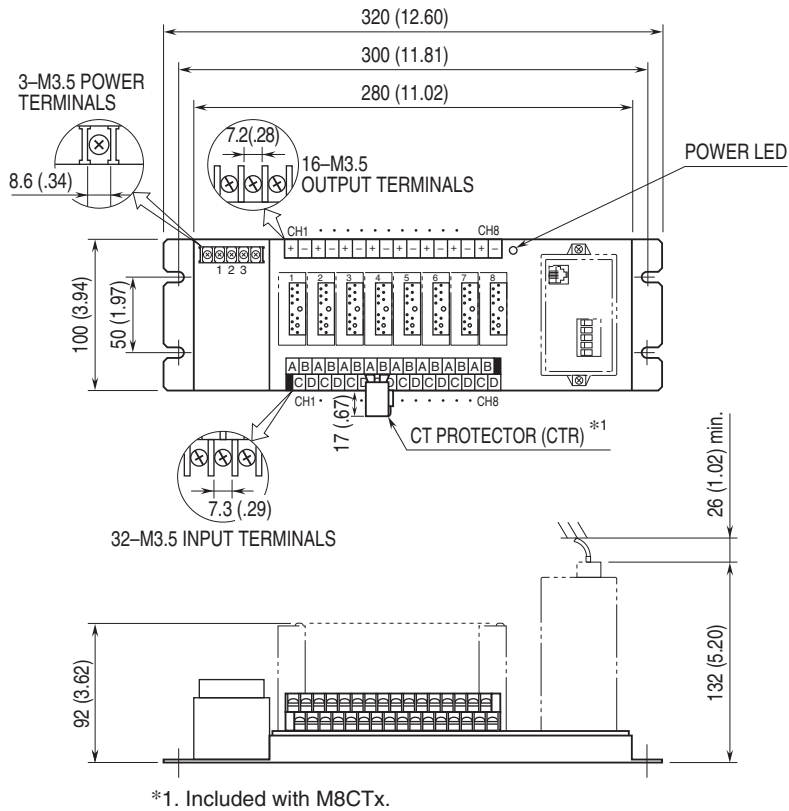


## ■ M8BS2-081-M2

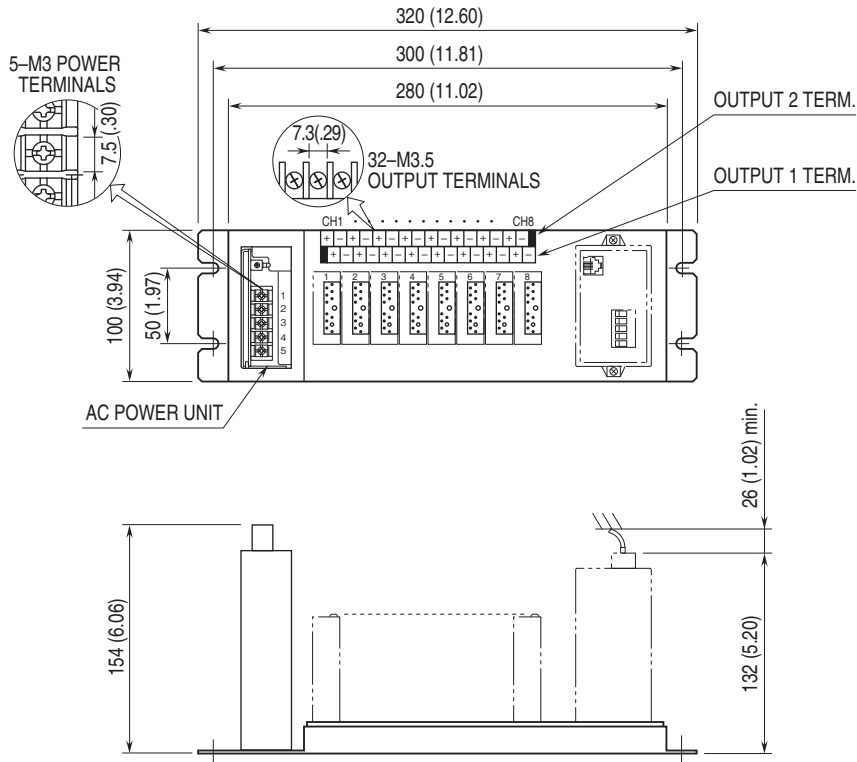


\*1. Included with M8CTx.

## ■ M8BS2-081-R

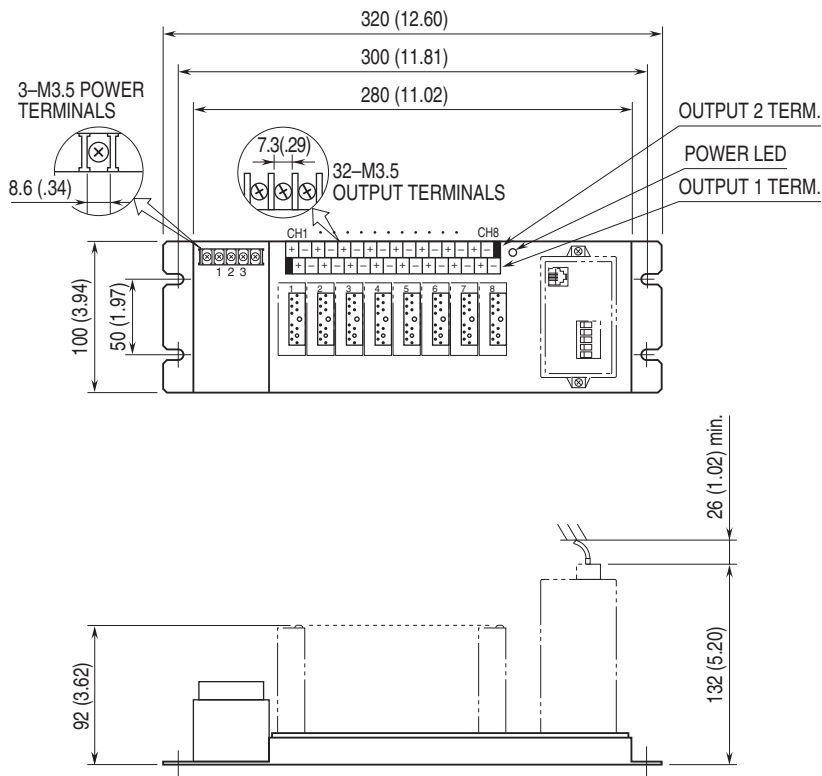


## ■ M8BS2-082-M2

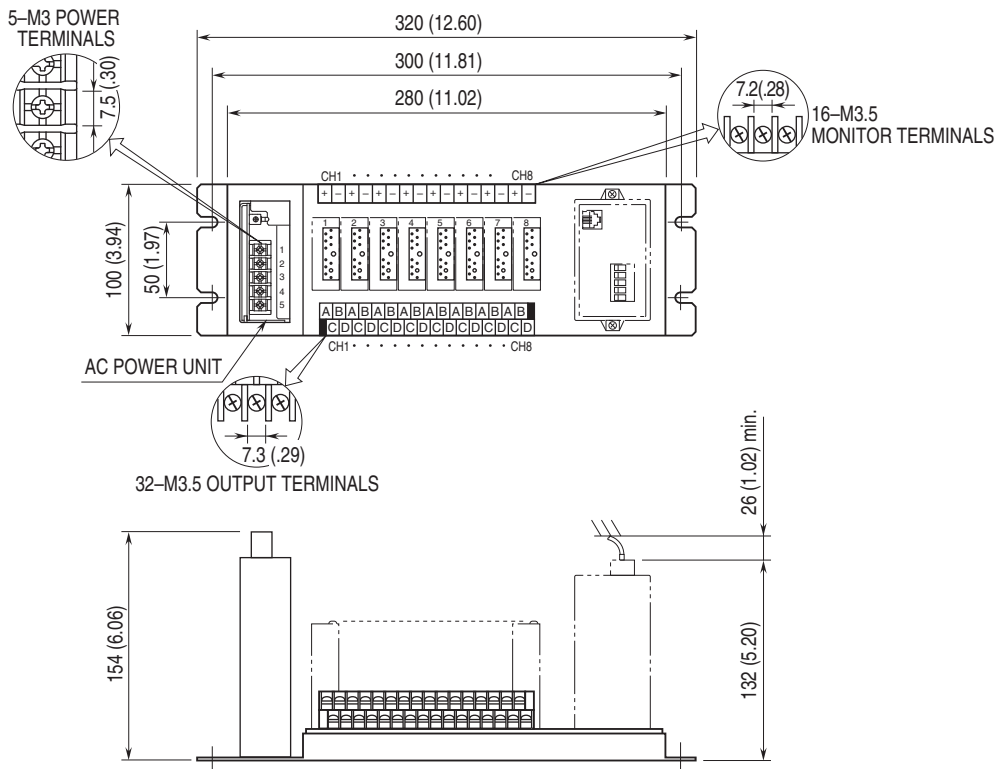




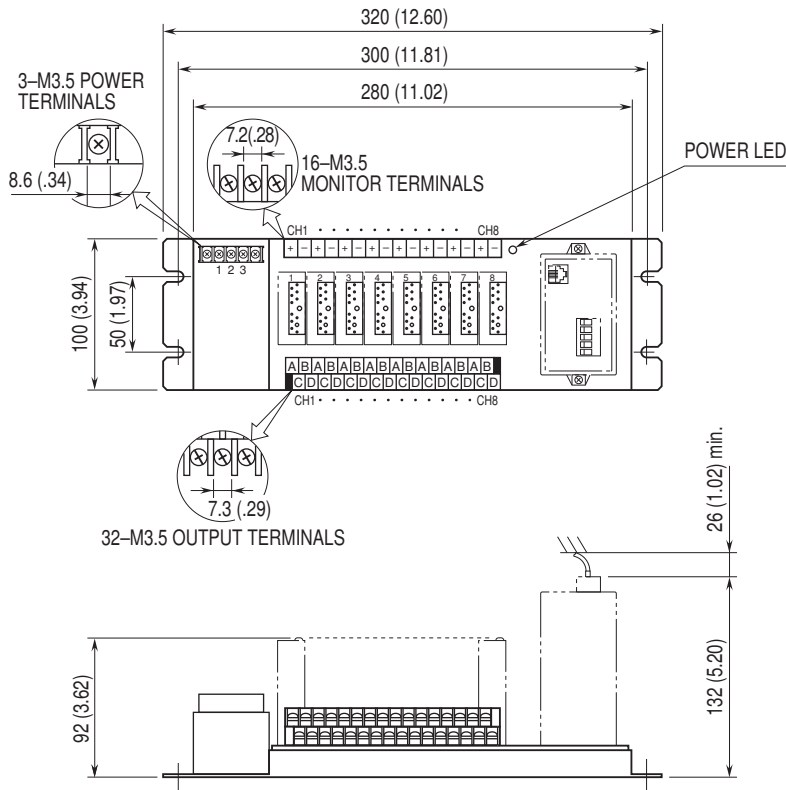
## ■ M8BS2-082-R



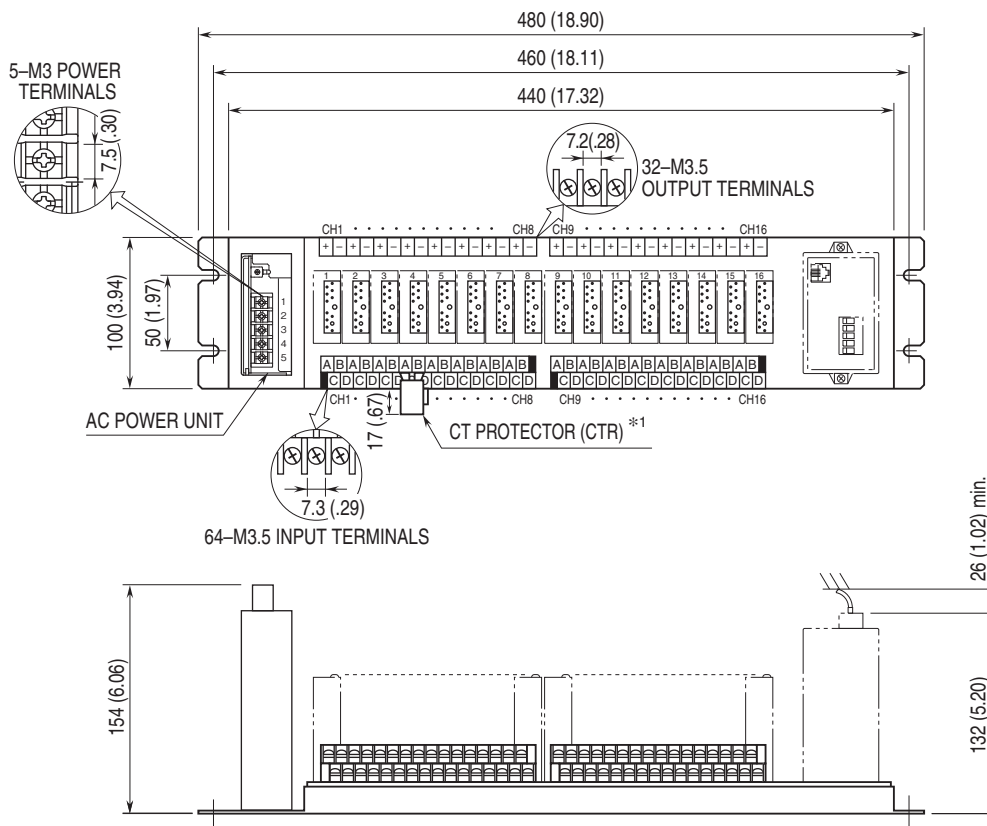
## ■ M8BS2-083-M2



## ■ M8BS2-083-R

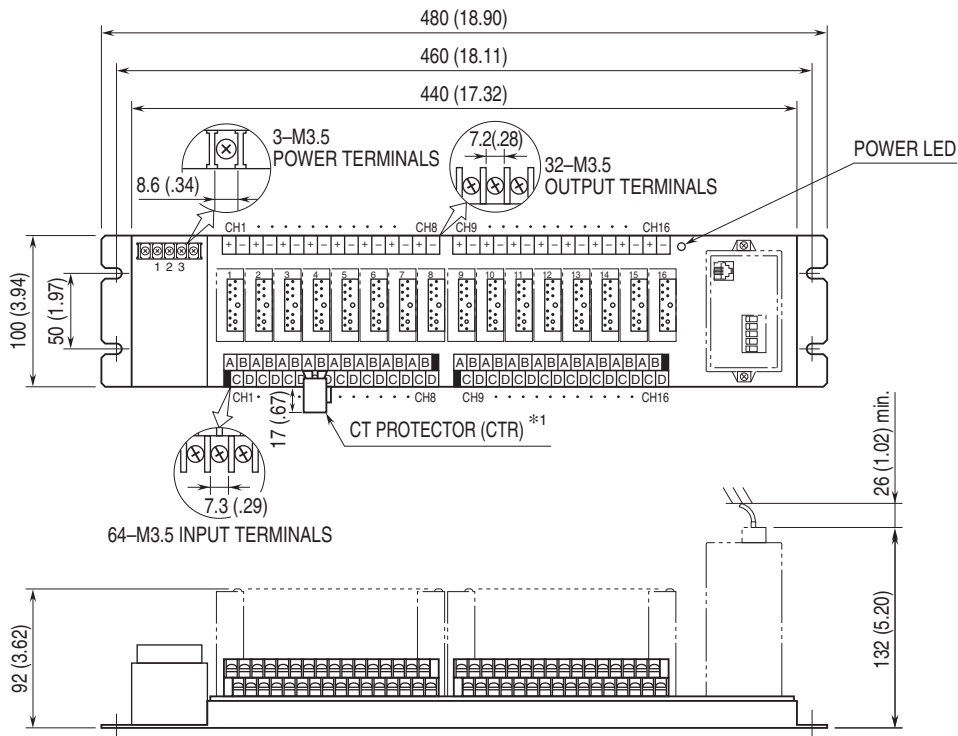


## ■ M8BS2-161-M2



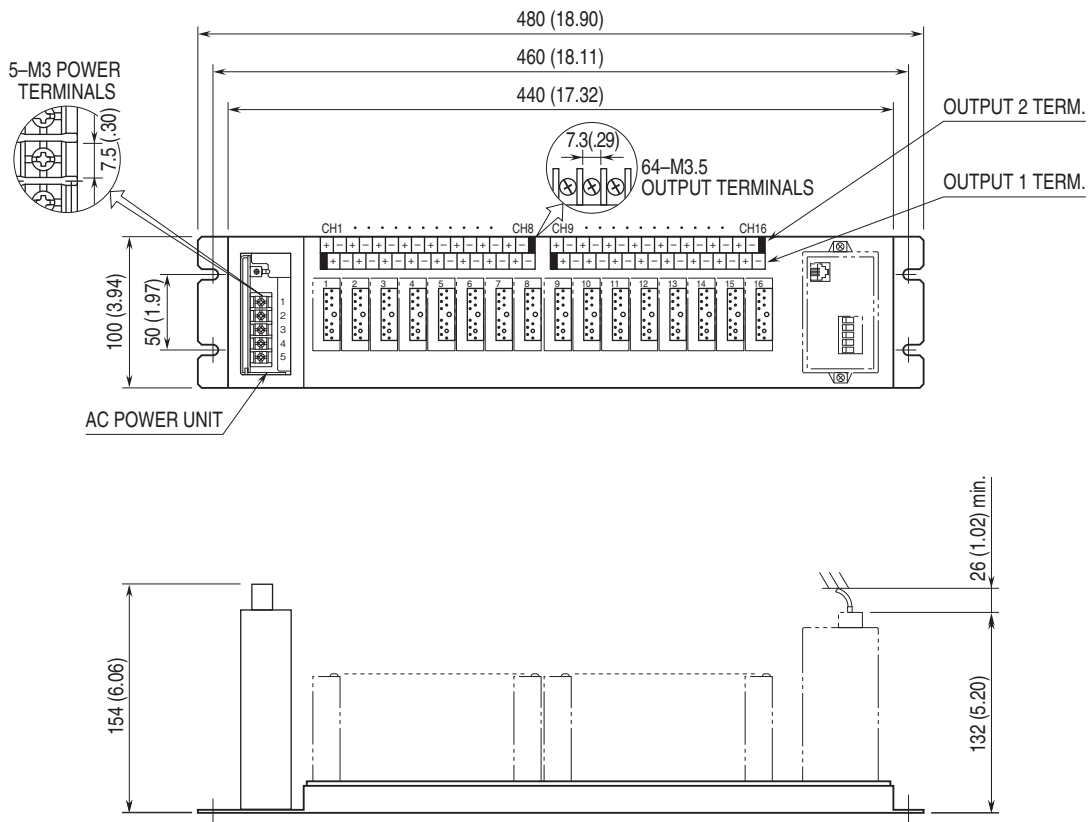
\*1. Included with M8CTx.

## ■ M8BS2-161-R

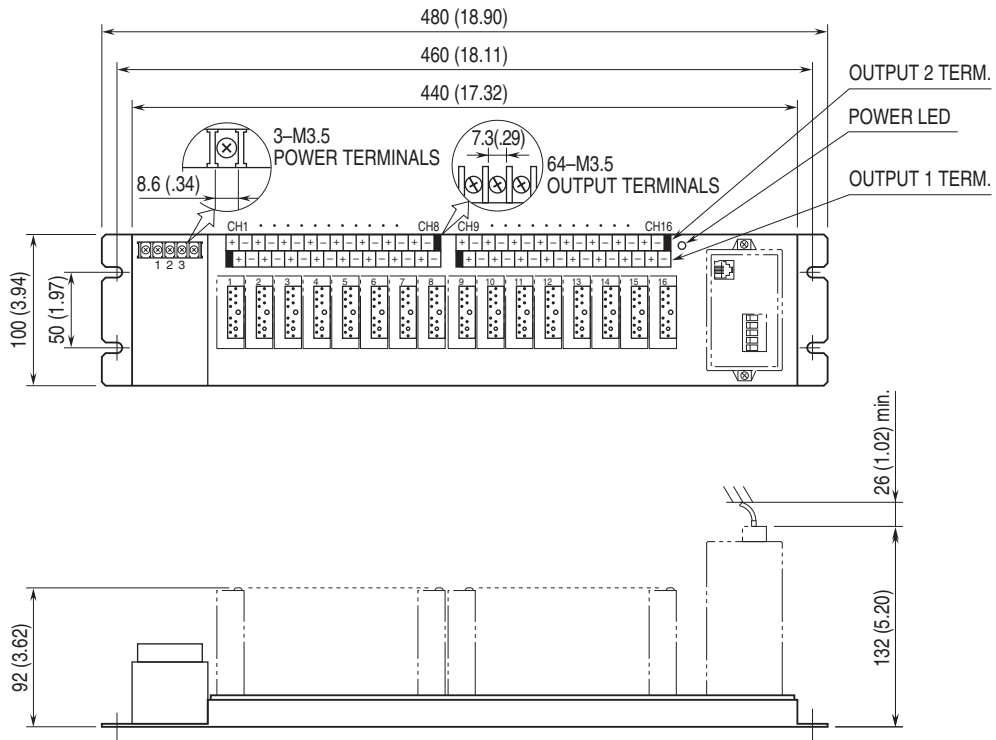


\*1. Included with M8CTx.

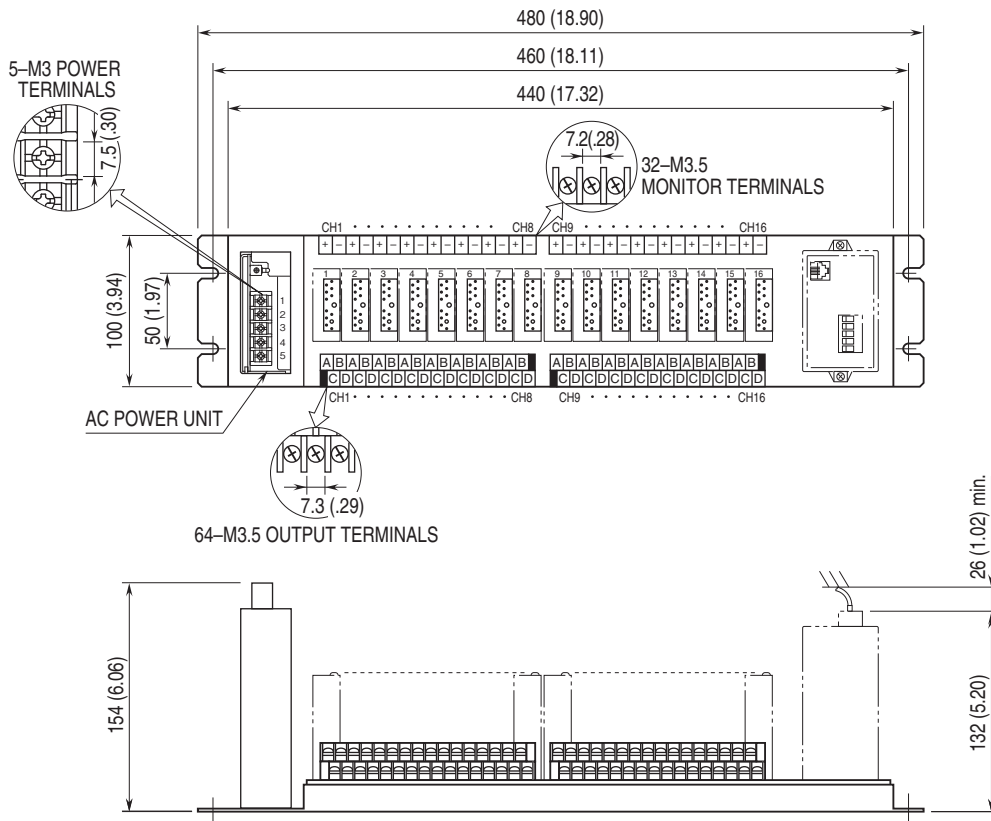
## ■ M8BS2-162-M2



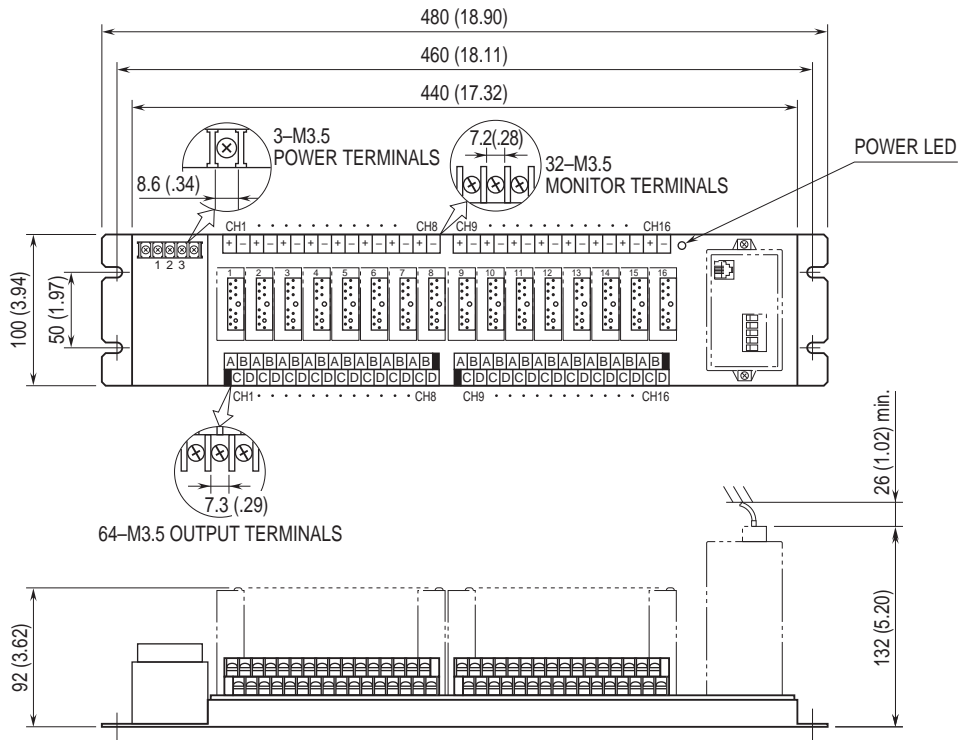
## ■ M8BS2-162-R



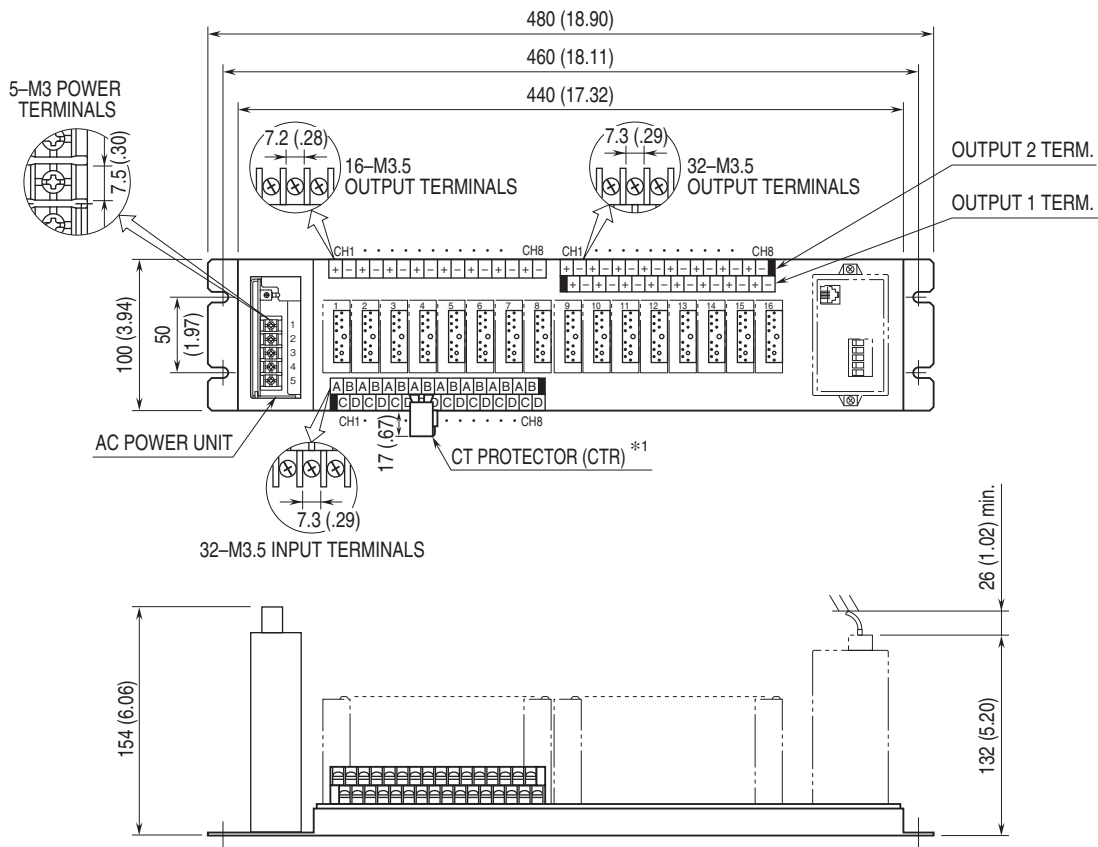
## ■ M8BS2-163-M2



## ■ M8BS2-163-R

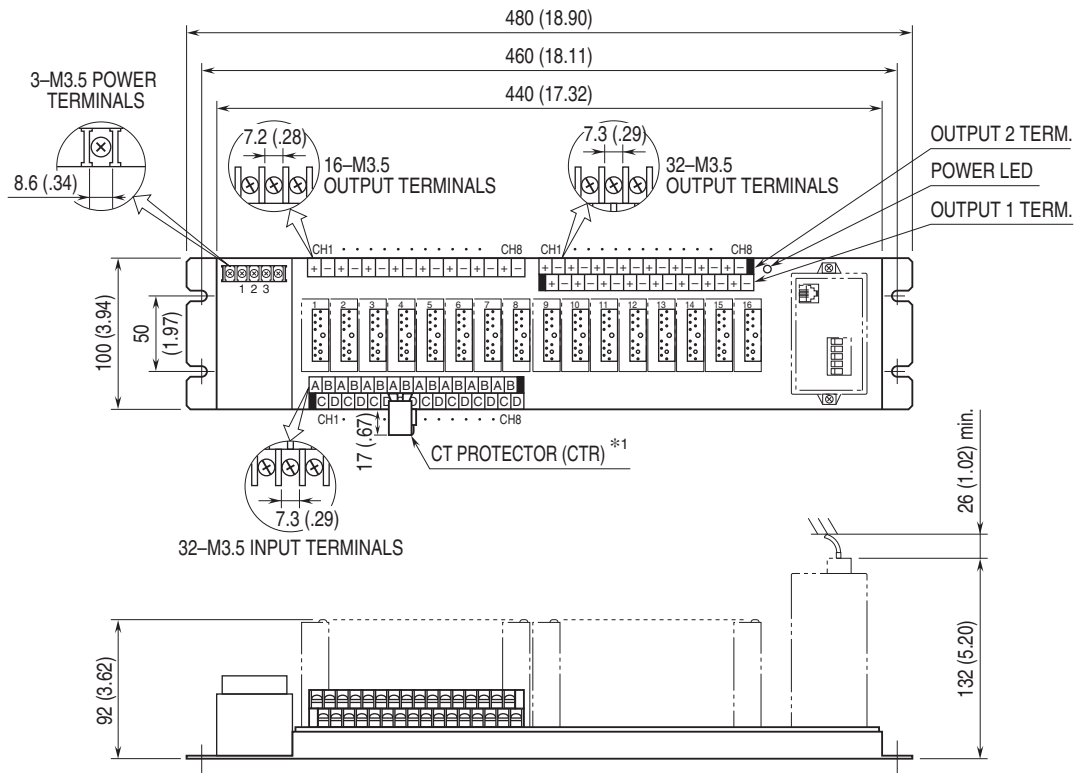


## ■ M8BS2-164-M2



\*1. Included with M8CTx.

■ M8BS2-164-R



\*1. Included with M8CTx.



Specifications are subject to change without notice.