

General Specifications

SNB10D Safety Node Unit (Rack Mountable Type)



GS 32Q06K10-31E

■ GENERAL

This GS describes the hardware specifications of the safety node unit (SNB10D). The safety node unit is connected to the safety control unit. The safety node unit has an interface function to transmit analog input signals and contact signals from the field to the safety control unit via an ESB bus. It also has a function to supply power to I/O modules.

The safety node unit is mounted with power supply modules, ESB bus interface modules, optical ESB bus repeater modules, and I/O modules.

For details on the I/O modules, refer to the general specifications (GS 32Q06K30-31E and GS 32Q06K40-31E).

■ STANDARD SPECIFICATIONS

For the installation requirements standards that are common throughout the system, refer to the general specifications, "Outline of I/O Modules (for FIO)" (GS 32P06K60-01EN).

● Number of Connectable Safety Node Units

Up to 13 safety node units can be connected to S2SC70S/S2SC70D/SSC60S/SSC60D safety control unit using SEC402 ESB bus coupler module.

Up to 9 safety node units can be connected to safety control unit using SEC401 ESB bus coupler module.

● Power Supply Voltage

The power supply voltage is specified in the suffix codes.

Voltage: 100 to 120 V AC and 50/60 Hz frequency
Voltage: 220 to 240 V AC and 50/60 Hz frequency
Voltage: 24 V DC

● Power Consumption

100 to 120 V AC specification: 200 VA
220 to 240 V AC specification: 230 VA
24 V DC specification: 5.5 A

● Weight

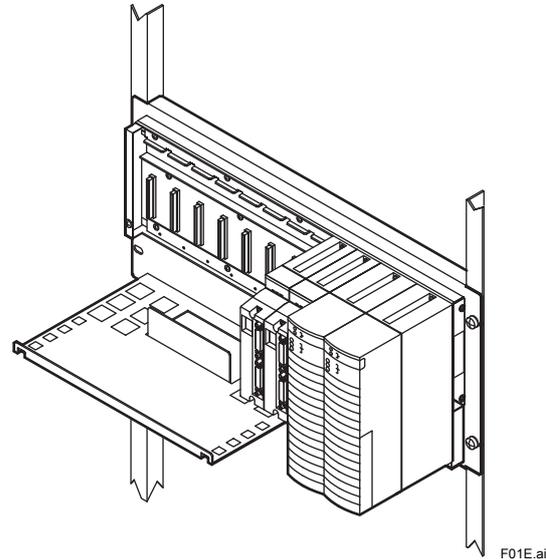
Approx. 5.9 kg

● Mounting Method

Rack mounting: Rack mount with four M5 screws
Insulation bushes (accessories) are used.

● Conformity Standards

Refer to "ProSafe-RS Standards Compliant Models" (GS 32P01B60-01EN).



■ CONFIGURATION

● Module Configuration

Power supply module: Supplies power to I/O module (two modules)

The power supply terminal uses M4 screws.

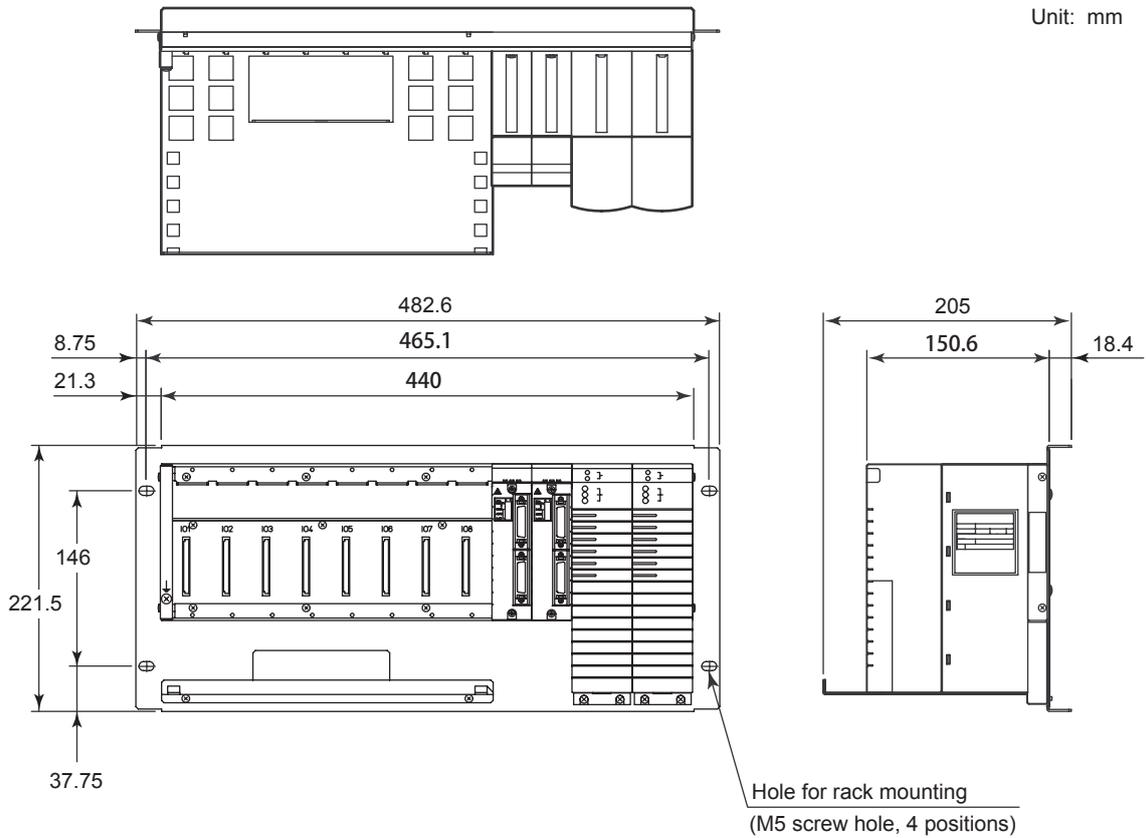
ESB bus interface module (SSB401): two modules

■ RESTRICTIONS AND CAUTIONS FOR MOUNTING

Regarding the mounting of I/O modules on the safety node unit, there are restrictions in terms of quantity and slot position. For details, refer to the "■ Node Unit Mounting Restrictions" of "Outline of I/O Modules (for FIO)" (GS 32P06K60-01EN).

EXTERNAL DIMENSIONS

● SNB10D Safety Node Unit



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Nominal Tolerances:

When the reference dimension is over 0.5 mm and equal or less than 120 mm, its nominal tolerance is ± 0.8 mm, while its combination of nominal tolerance is ± 1.5 mm.

When the reference dimension is over 120 mm, its nominal tolerance is in accordance with JEM 1459.

■ MODEL AND SUFFIX CODES

Safety node unit

| | | Description |
|---------------------|--------|---|
| Model | SNB10D | Safety Node Unit (Rack Mountable Type) |
| Suffix Codes | -2 | Dual-redundant power supply with software license for node expansion (R3) (*1) |
| | -4 | Dual-redundant power supply (R4.01 or later) |
| | 1 | 100 to 120 V AC power supply |
| | 2 | 220 to 240 V AC power supply |
| | 4 | 24 V DC power supply |
| | 5 E | ISA Standard G3 and temperature (-20 to 70 °C) with no explosion protection ISA Standard G3 and temperature (-20 to 70 °C) with explosion protection |
| Option Codes | /CU2N | Connector Unit for ESB Bus [Part number: S9342FA] |
| | /CU2T | Connector Unit with Terminator for ESB Bus [Part number: S9343FA] |
| | /ATDOC | Explosion Protection Manual |

Note: Install the 19-inch rack mountable type devices in a keyed metallic cabinet to conform to the safety standards, the EMC conformity standards and the explosion protection standards.

Note: Please use 1 m or longer YCB301 ESB bus cable to connect SNB10D with SSC□□□□.

Note: Select the option code "/ATDOC" to follow the ATEX Directive for use in potentially explosive atmospheres.

*1: SNB10D-2□□□ can be used with R4.01 or later.

Dummy cover

| | | Description |
|--------------|--------|-------------------------------|
| Model | SDCV01 | Dummy cover (for I/O modules) |

Note: Be sure to mount a dummy cover on a slot that is not mounted with an I/O module.

■ STANDARD ACCESSORIES

The safety node unit is supplied with the following accessory.

| Accessory | Part number | Description | Quantity | Remark |
|--------------------|-------------|-------------|----------|-----------|
| Insulating bushing | S9049PM | SNB10D | 4 | Accessory |

■ ORDERING INFORMATION

Specify the model and suffix codes.

For selecting the right products for explosion protection, please refer to TI 32S01J30-01E without fail.

■ TRADEMARKS

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