

General Specifications

GS 33J60K41-01EN

AEPV7D
Power Supply Bus Unit,
Vertical Type
(for N-IO/FIO, Cabinet Mounting)



[Release 6]

■ GENERAL

These General Specifications (GS) describe the AEPV7D Primary Power Supply Bus Unit, which distributes power to the units installed in the same cabinet. The AEPV7D is designed to be able to receive power from two different power sources independently.

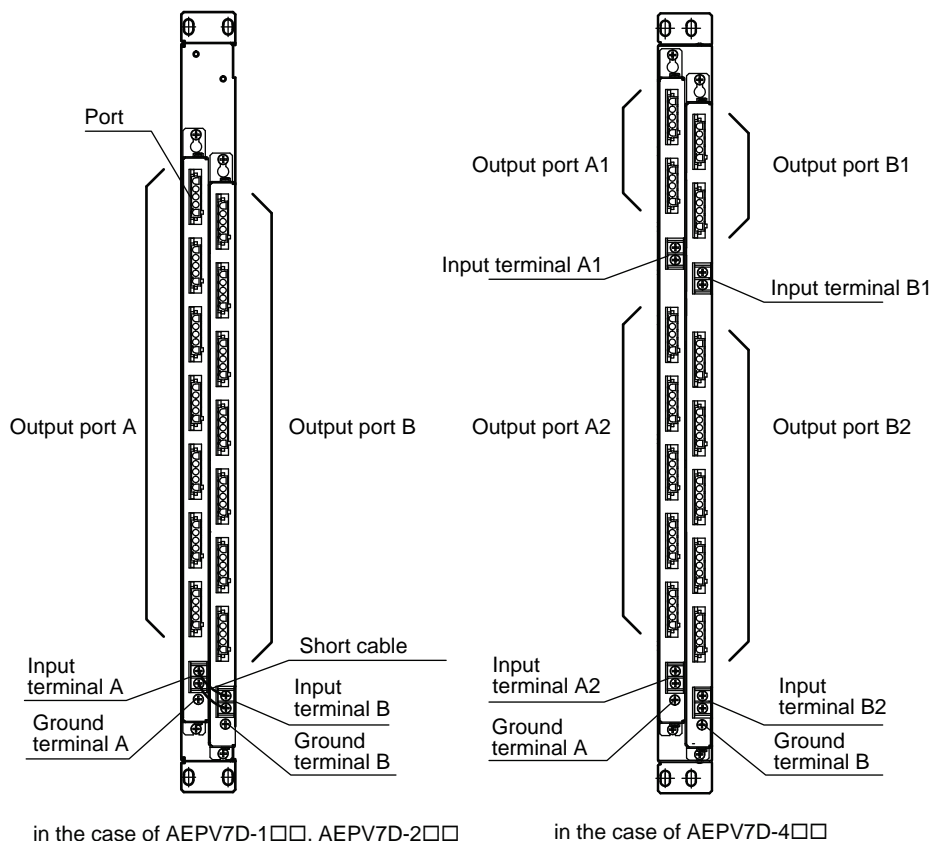
The AEPV7D for 100 V and 200 V in the figure on the left can provide seven outputs from output port A for input terminal A and another seven outputs from output port B for input terminal B. The AEPV7D for 24 V in the figure on the right can provide a total of seven outputs (two outputs from output port A1 for input terminal A1 and five outputs from output port A2 for input port A2). It can also provide another total of seven outputs (two outputs from output port B1 for input terminal B1 and five outputs from output port B2 for input terminal B2).

The AEPV7D is designed so that line A and line B can be maintained independently.

When input terminals A and B, input terminals A1 and B1, or input terminals A2 and B2 are connected with a short cable, a single input can provide 14 outputs.

AEPV7D has to be Style S2 or later when used with N-IO system.

AFV30□, AFV40□, A2FV50□, ACB51, ANB10□, ANB11□, and ANT10U can also be constructed by combining the Base Plate and each module. Refer to "FIO System Overview" (GS 33J60A10-01EN) and "N-IO System Overview" (GS 33J62A10-01EN).



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■ STANDARD SPECIFICATIONS

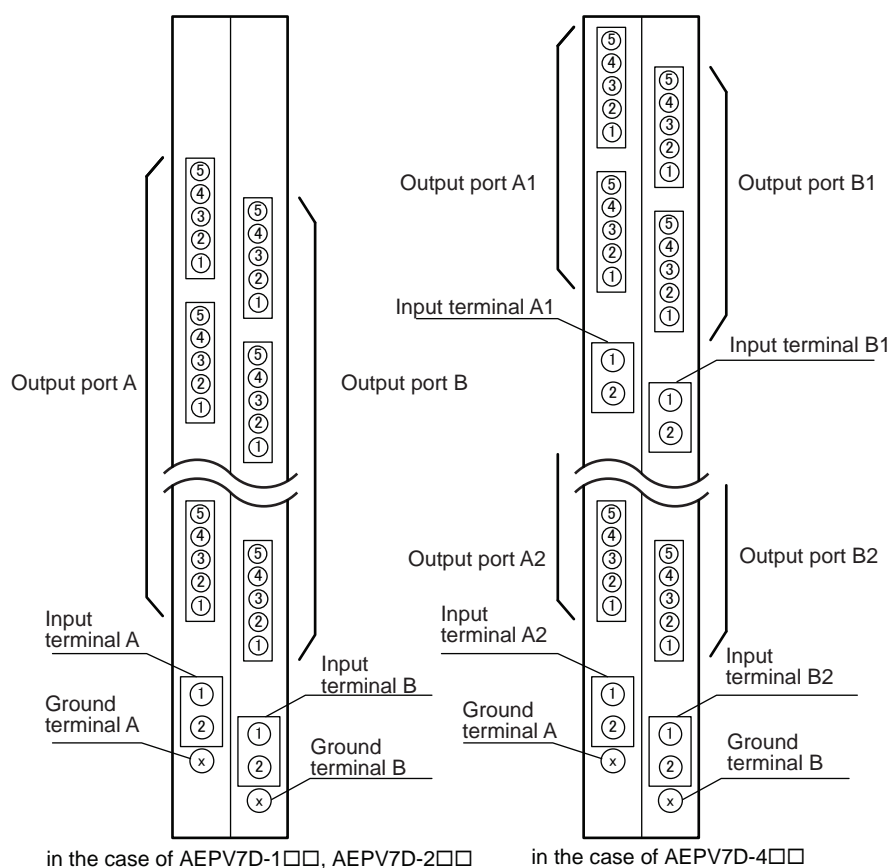
For the installation specifications and environmental conditions that are common to the systems, refer to the GS “Integrated Production Control System CENTUM VP System Overview” (GS 33J01A10-01EN).

● Electrical Specifications

| Item | Description | | |
|--|---|---|--|
| Model | AEPV7D-1□□ | AEPV7D-2□□ | AEPV7D-4□□ |
| Input power supply | Voltage: 100-120 V AC $\pm 10\%$ Frequency: 50/60 Hz | Voltage: 220-240 V AC $\pm 10\%$ Frequency: 50/60 Hz | Voltage: 24V DC $\pm 10\%$ |
| Withstanding voltage | 1500 V AC | 1500 V AC | 500 V AC |
| Max. input current/power supply bus unit | 20 A | 20 A | 42 A (Input terminals A1 & B1: 12 A) (Input terminals A2 & B2: 30 A) |
| Max. input current/port | 6 A | 6 A | 10 A |
| Weight | Approx. 2.9 kg | Approx. 2.9 kg | Approx. 2.9 kg |

● Pin Assignment

Pin Numbers of Terminal



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Correspondence Between Pin Numbers and Signals

| | Pin No. | Model | | |
|---|---------|-------------------|-------------------|-------------------|
| | | AEPVP7D-1□□ | AEPV7D-2□□ | AEPV7D-4□□ |
| Input Terminals A, B, A1, A2, B1 and B2 | 1 | L | L | + (24P) |
| | 2 | N | N | – (24N) |
| Ground Terminal A and B | – | Protective ground | Protective ground | Functional ground |
| Output Ports A, B, A1, A2, B1 and B2 (14-ports) MATE-N-LOK Connector (5 pins) | 1 | Protective ground | Protective ground | Functional ground |
| | 2 | N | – | – (24N) |
| | 3 | – | N | + (24P) |
| | 4 | L | L | – |
| | 5 | – | – | – |

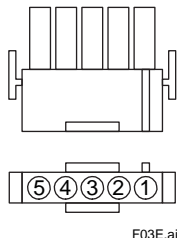
● Cables

The three types of cables shown below are provided for connecting the Primary Power Supply Bus Unit and equipment used.

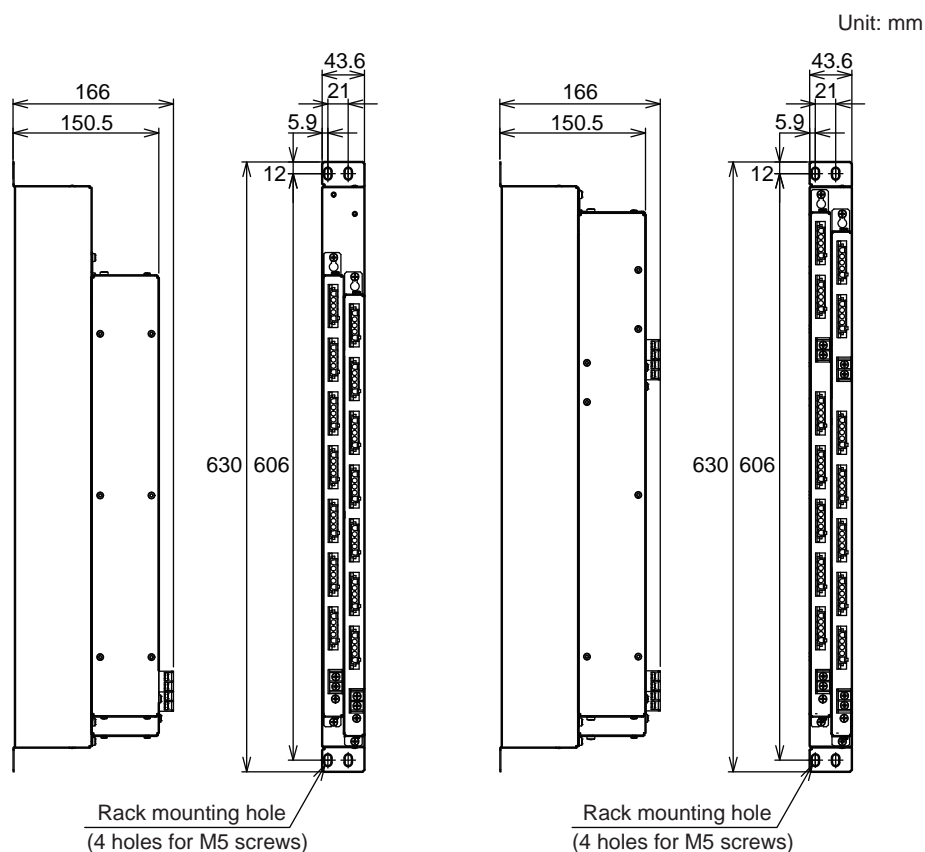
Power Supply Cables for Primary Power Supply Bus Unit

| Part number | Description | Correspondence between terminal pin numbers and cables | | |
|-------------|---|--|-------|-------|
| | | Black | White | Green |
| S9756UV | For AEPV7D-1□□, 100 V AC, 2 m, one end unterminated | 4 | 2 | 1 |
| S9757UV | For AEPV7D-2□□, 220 V AC, 2 m, one end unterminated | 4 | 3 | 1 |
| S9758UV | For AEPV7D-4□□, 24 V DC, 2 m, one end unterminated | 3 | 2 | 1 |

Connector Type



■ EXTERNAL DIMENSIONS



In the case of AEPV7D-10□, AEPV7D-20□

In the case of AEPV7D-40□

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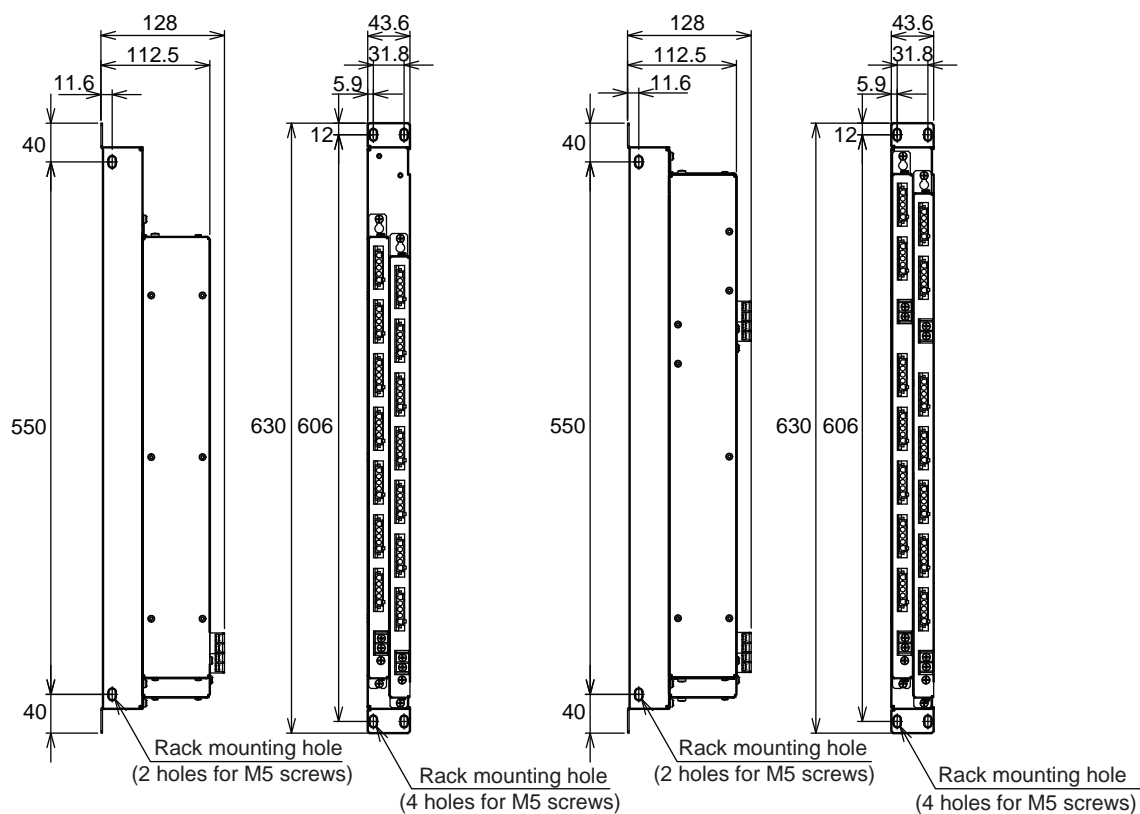
Note: Horizontal installation in the 19-inch rack is not possible.

Nominal tolerances :

Nominal tolerance is ± 0.8 mm for the dimensions of 0.5 mm or more and 120 mm or less, and the combined nominal tolerance is ± 1.5 mm.

The nominal tolerance is in accordance with JEM 1459 for the dimensions over 120 mm.

Unit: mm



In the case of AEPV7D-11□, AEPV7D-21□

In the case of AEPV7D-41□

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Note: Horizontal installation in the 19-inch rack is not possible.

Nominal tolerances :

Nominal tolerance is ± 0.8 mm for the dimensions of 0.5 mm or more and 120 mm or less, and the combined nominal tolerance is ± 1.5 mm.

The nominal tolerance is in accordance with JEM 1459 for the dimensions over 120 mm.

■ MODEL AND SUFFIX CODES

Power Supply Bus Unit, Vertical Type (for Cabinet Mounting)

| | | Description |
|---------------------|--------|---|
| Model | AEPV7D | Power Supply Bus Unit, Vertical Type (for N-IO/FIO, Cabinet Mounting) |
| Suffix Codes | -1 | 100 - 120 V AC power supply |
| | -2 | 220 - 240 V AC power supply |
| | -4 | 24 V DC power supply |
| | 0 | For Yokogawa cabinet (for AFV40□/ACB51) |
| | 1 | For general cabinet |
| | 5 | Basic type with no explosion protection |
| | 6 | With ISA Standard G3 option and no explosion protection |
| | E | Basic type with explosion protection |
| | F | With ISA Standard G3 option and explosion protection |

■ APPLICABLE STANDARDS

Refer to the GS "Integrated Production Control System CENTUM VP System Overview (GS 33J01A10-01EN)."

■ ORDERING INFORMATION

Specify model and suffix codes.

For selecting the right products for explosion protection, please refer to TI 33Q01J30-01E, TI 32S01J30-01E without fail.

■ TRADEMARK ACKNOWLEDGMENT

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