

(2) F3PU30-0N/F3PU30-0S Power Supply Modules

● Specifications

Item	Specifications
	F3PU30-0N/F3PU30-0S*1
Supply voltage	100 to 240V AC, single phase, 50/60Hz
Range of supply voltage change	85 to 264V AC, 50/60Hz ±3Hz
Power consumption	100VA
Inrush current	20A max. (120V AC, Ta=25°C), 45A max. (240V AC, Ta=25°C)
Fuse	Time-lag fuse (Built into the L and N terminals and cannot be replaced.)
Rated output voltage	5V DC
Rated output current	6.0A
Insulation resistance	5MΩ min. when tested between a group of external AC terminals and the FG terminal using a 500V DC insulation resistance tester
	5MΩ min. when tested between a group of FAIL-signal contact output and internal circuit using a 500V DC insulation resistance tester.
Withstanding voltage	1500V AC for one minute between a group of external AC terminals and the FG terminal
	1000V AC for one minute between a group of FAIL-signal contact output and internal circuit.
Leakage current	3.5mA max.
Allowable momentary power failure time	20ms
External dimensions	58.0 (W) x 100 (H) x 126.1(D)mm *2
Weight	380g
Compatible base module	Dedicated to F3BU05, F3BU09, F3BU13 and F3BU16

*1: The only difference between modules F3PU30-0N and F3PU30-0S lies in the screw diameter of their screw terminal blocks.

*2: Excluding protrusions (see the dimensional figures for more information)

● Components and Their Functions

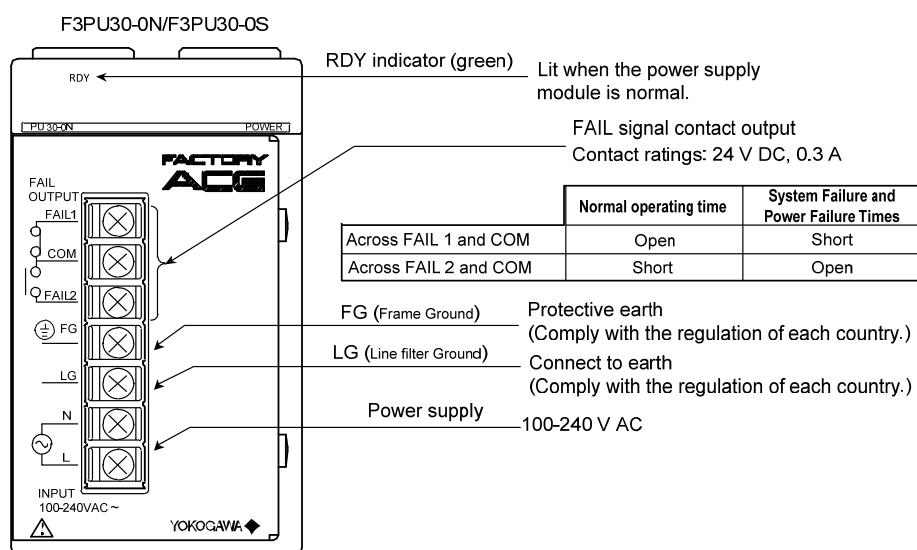


Figure A2.3 F3PU30-0N/F3PU30-0S Power Supply Modules



WARNING

To avoid electrical shock, turn off the power before wiring.

Note

LG terminal has a half potential of the input power supply voltage when LG terminal isn't connected to earth appropriately.

● Terminal dimensions



● Adaptable crimp-on terminals

Vendor	Model	Compatible Conductor	Crimping Torque	
			F3PU30-0N	F3PU30-0S
Japan Solderless Terminal Mfg Co., Ltd.	V1.25-M3	AWG22 to 18 (0.33 to 0.82mm ²) (Copper wire)	0.8N·m (7.1 lbf·in)	May not be used
Nippon Tanshi Co., Ltd.	RAV1.25-3.5			1.2N·m (10.6 lbf·in)
Japan Solderless Terminal Mfg Co., Ltd.	V1.25-M4			
Japan Solderless Terminal Mfg Co., Ltd.	V2-M4	AWG16 to 14 (1.3 to 2.1mm ²) (Copper wire)		

Note

When crimping terminals, be sure only to use the tool specified by each terminal manufacturer.

Once the power supply module is installed in the base module, both the FG terminal of the power supply module and the signal ground (GND terminal of the module's 5V output) of the FA-M3 automatically come into contact with the metal chassis of the base module. The FG terminal and the signal ground are isolated from each other inside the power supply module.

For details on the grounding lines of the FA-M3, see subsection A3.3.2, "Grounding Lines."

Note

- F3PU30-0S module is the same as F3PU30-0N module, but it uses M4 terminal screws instead of M3.5 terminal screws. Other than terminal screw diameter, their dimensions and internal circuitries are identical.
- F3PU30-0N is not CE Marking compliant.
F3PU30-0S is CE Marking compliant.
- For compliance to CE Marking of the final product incorporating these modules, F3PU30-0S must be used.

Note

Power supply circuit which is connected to FAIL signal contact output terminal must be SELV and limited-energy circuit separated by reinforced insulation or double insulation from hazardous voltage.