Power Supply Unit
CK3W-PD048

Supplies power to the CK3M Controller

CK3W-PD048

Features

- 24 VDC input
- The power supply status indicator shows operating status

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Ordering Information

Applicable standards

Refer to the OMRON website (www.ia.omron.com) or ask your OMRON representative for the most recent applicable standards for each model.

Power Supply Unit

The models and outline of specifications are given below.

Product name	Specifications	Model
Power Supply Unit	Rated output voltage: 5 VDC/24 VDC Maximum output power: 5 VDC 23 W, 24 VDC 55 W	**CK3W-PD048**

Applicable Wires

Using Ferrules

If you use ferrules, attach the twisted wires to them.
Observe the application instructions for your ferrules for the wire stripping length when attaching ferrules.
Always use plated one-pin ferrules. Do not use unplated ferrules or two-pin ferrules.

The applicable ferrules, wires, and crimping tools are listed in the following table.

Manufacturer	Ferrule model	Applicable wire (mm² (AWG))	Crimping Tool (applicable wire size given in parentheses)
Phoenix Contact	AI0,25-8	0.25 (#24)	Phoenix Contact CRIMPFOX 6 (0.25 to 6 mm², AWG24 to 10)
	AI0,5-8	0.5 (#20)	
	AI0,75-8	0.75 (#18)	
	AI1,0-8	1.0 (#18)	
	AI1,5-8	1.5 (#16)	
Weidmüller	H0.25/12	0.25 (#24)	Weidmüller PZ6 Roto (0.14 to 6 mm², AWG26 to 10)
	H0.34/12	0.34 (#22)	
	H0.5/14	0.5 (#20)	
	H0.75/14	0.75 (#18)	
	H1.0/14	1.0 (#18)	
	H1.5/14	1.5 (#16)	

Using Twisted or Solid Wires

Wire type	Conductor cross-sectional area	Conductor length (stripping length)
Solid wire	0.2 to 4 mm²	8 mm
Twisted wire	0.2 to 2.5 mm²	8 mm

Required Tools

Use a flat-blade screwdriver to remove wires.
The recommended screwdriver is as follows.

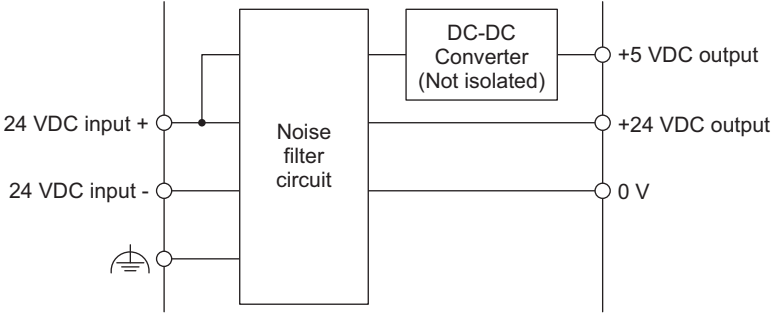| Model	Manufacturer
SZF 0-0,4X2,5	Phoenix Contact

General Specifications

This section describes the Motion Controller specifications.

Item		Specification
Enclosure		Mounted in a panel
Grounding Method		Ground to less than 100 Ω.
Operating Environment	**Ambient Operating Temperature**	0 to 55°C
	Ambient Operating Humidity	10% to 95% (with no condensation or icing)
	Atmosphere	Must be free of corrosive gases.
	Ambient Storage Temperature	-25 to 70°C (with no condensation or icing)
	Vibration Resistance	Conforms to IEC 60068-2-6. 5 to 8.4 Hz with 3.5-mm amplitude, 8.4 to 150 Hz, acceleration of 9.8 m/s^2 100 min each in X, Y, and Z directions (10 sweeps of 10 min each = 100 min total)
	Shock Resistance	Conforms to IEC 60068-2-27. 147 m/s^2, 3 times each in X, Y, and Z directions
Insulation Resistance		20 MΩ min. between isolated circuits (at 100 VDC)
Dielectric Strength		510 VAC between isolated circuits for 1 minute with a leakage current of 5 mA max.
Applicable Standards		cULus, EU: EN 61326, RCM, KC, EAC [1]

*1. The CK5M CPU Unit and CK5W-EXS01 are not EAC-compliant products.

Specifications

The specifications are shown below.

Item	Specification
Power supply voltage	24 VDC
Allowable power supply voltage range	20.4 to 26.4 VDC
Power consumption	101.7 W max.
Rated output voltage	5 VDC/24 VDC
Maximum output power [1]	5 VDC 23 W 24 VDC 55 W
Isolation method	Not isolated
Circuit configuration	
Weight	130 g max.
Dimensions (height × depth × width)	90(H)/80(D)/45(W)

*1. Internal components in the Power Supply Unit may deteriorate or be damaged if the Power Supply Unit is used for an extended period of time exceeding the power supply output capacity or used when the outputs are shorted.

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Part Names and Functions
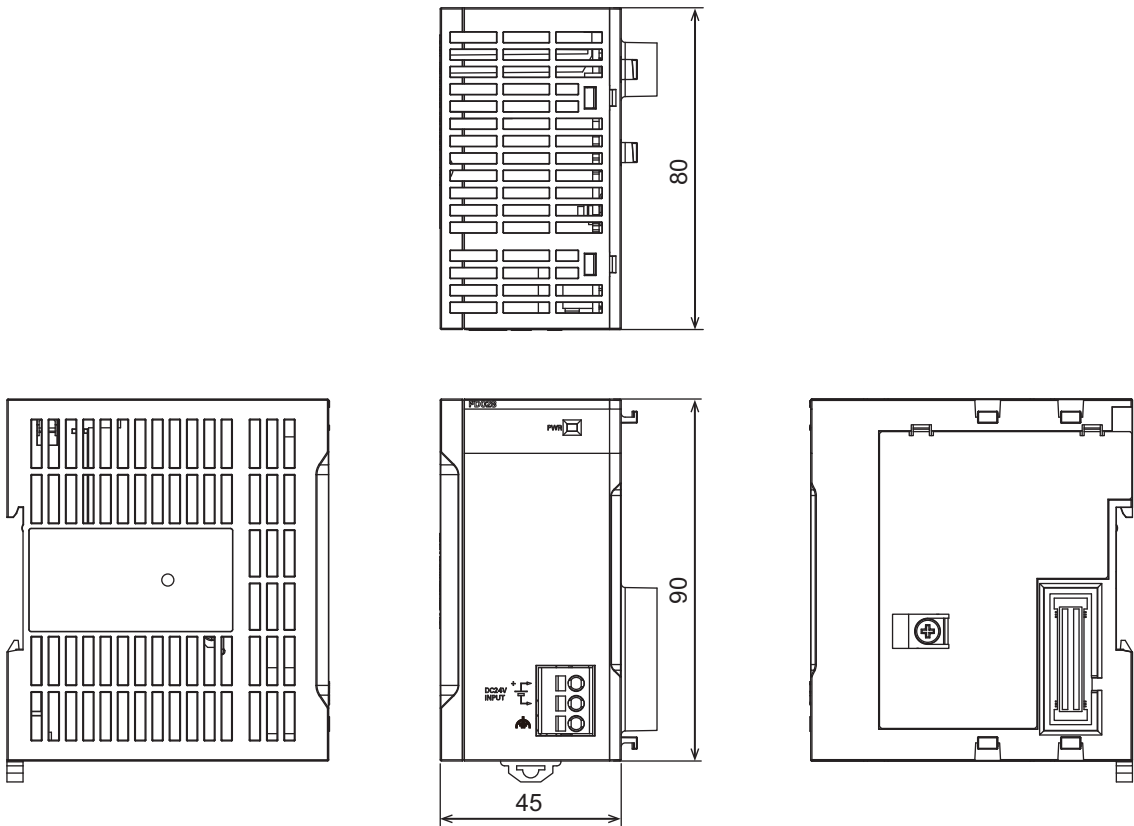
Part Names and Functions
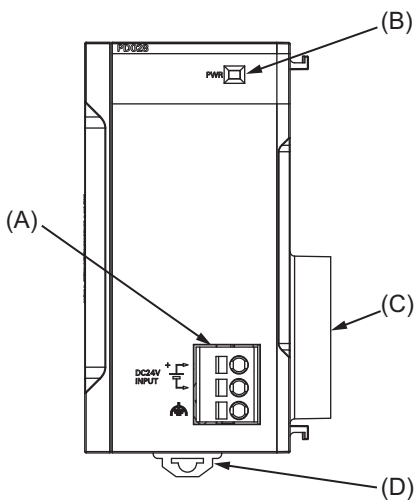
Letter	Name	Function
A	Power supply connection terminal block	Connects the power supply.
B	Power supply status indicator	Lights when 5 V is output from the Power Supply Unit.
C	CPU Unit connector	Connector that connects to the CPU Unit.
D	DIN Track mounting hook	Used to mount the Unit to a DIN Track.

Dimensions

(Unit: mm)

Power Supply Unit

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Related Manuals

The following manuals are related. Use these manuals for reference. Contact your OMRON representative for information on how to procure these manuals.

Manual name	Cat. No.	Application	Description
CK3M/CK5M-series Programmable Multi-Axis Controller Hardware User's Manual	O036	Learning the basic specifications of the CK3M/CK5M-series Programmable Multi-Axis Controller, including introductory information, design, installation, and maintenance. Mainly hardware information is provided.	An introduction to the entire CK3M/CK5M-series system is provided along with the following information. • Features and system configuration • Introduction • Part names and functions • General specifications • Installation and wiring • Maintenance and inspection
Power PMAC User's Manual	O014	Learning the features and usage examples of the Motion Controller.	The following information is provided on the Motion Controller. • Basic functions • Setup examples • Programming examples
Power PMAC Software Reference Manual	O015	Learning how to program Motion Controller.	The following information is provided on the Motion Controller. • Details of commands • Details of data structure
Power PMAC IDE User Manual	O016	Learning how to operate Power PMAC IDE, the integrated development environment of the Controller.	Describes the operating procedures of Power PMAC IDE, and examples of how to start the system.
Power PMAC-NC Quick Start Manual	O017	Briefly understanding the basic usage of Power PMAC-NC.	Describes the Quick setup procedure to run Power PMAC-NC on a desktop PC by showing some examples.
Power PMAC-NC .ini Configuration Manual	O018	Configuring an application for CNC devices by using Power PMAC-NC.	Describes how to set up PowerPmacNC.ini, the setup data file to be loaded when Power PMAC-NC starts.
Power PMAC-NC Software User Manual	O019	Learning about usage and features of Power PMAC-NC, Support Software required to use the Controller for CNC devices.	The following information is provided on Power PMAC-NC. • How to use the software • Features included in the software • Features that can be customized
Power PMAC-NC Mill G-Code Manual	O020	Creating programs for CNC devices by using Power PMAC-NC.	Describes the basic G-code set that can be used for Power PMAC-NC, and relevant instructions.

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PMAC is an abbreviation for Programmable Multi Axis Controller.

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