

CONPROSYS Series
12VDC AC-DC Power Supply Unit
CPS-PWD-15AW12-01



This product is an optional Power supply unit for the CPS-MC341 series in the CONPROSYS series.* The IEEE802.3af and IEEE802.3at standards are not supported.

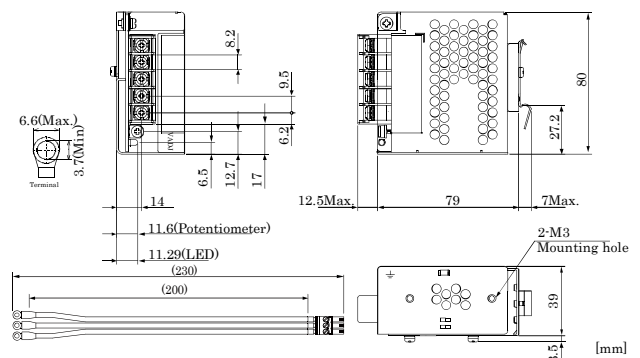
* Specifications, color and design of the products are subject to change without notice.

Specification

Requirement	Description
Power supply space	
Rated input voltage *	100 to 240VAC, 50 to 60Hz
Permissible input voltage *	85 to 264VAC, 50 to 60Hz
Input current	0.4A typ (100VAC), 0.25A typ (230VAC)
Rated output voltage	12.0VDC
Rated output current	1.3A (Max)
Isolation	Input-Output
	3000VAC 1minute 50M Ω (500VDC) (At room temperature)
	Input-FG
Output-FG	2000VAC 1minute 50M Ω (500VDC) (At room temperature)
	500VAC 1minute 50M Ω (500VDC) (At room temperature)
Environmental specs	
Temperature *	Operating : -20 to +70°C non operating : -20 to +75°C
Humidity	Operating : 20 to 90%RH (No condensation) Non operating : 20 to 90%RH (No condensation)
Floating dust particles	Not to be excessive
Corrosive gases	None
Vibration resistance	10 to 55Hz / 2.0G
Construction	
Length of DC cable (mm)	200 (not include connector)
External dimensions (mm)	39.0(W)x80.0(D)x79.0(H) (not include projection)
Weight	Main body : 305g Max.
Longevity	5years (temperature 40°C, Input 100VAC, Output 1.17A)
Standard	
FCC Class B, UL/c-UL, TUV CE Marking (EMC Directive Class B, LVD, RoHS Directive)	

* The derating is required.

Physical Dimensions



Packing List

Power Supply ... 1
Product guide ... 1
Serial Number Label ... 1
DC Cable ... 1
Warranty Certificate ... 1

List of Option

AC power cable

IPC-ACC003 : AC cable with 3-round-end terminal
(Length : 2 meters, Rating : 7A 125V)

* Visit the Contec website regarding information on the optional products

External Dimensions

Derating by input voltage

Figure1. below shows derating curve by input voltage.

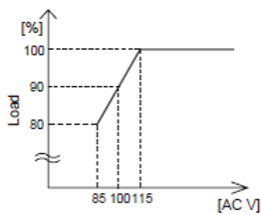


Figure 1 Input voltage derating curve

Derating by operating ambient temperature

Figure 1. and Figure 2. show the derating characteristics by operating ambient temperature. A ripple and a ripple noise specification varies in the shadow area. This unit requires checking at temperature measurement points as well.

(1) Temperature measurement points

Make sure the temperatures at point A and point B stay lower than the one listed in Table a.

Confirm even under the condition of forced air, it satisfies the temperature condition indicated in Table a.

The expected lifetime of point A and point B at maximum temperature is approximately three years. If you plan to extend the expected lifetime, see "Expected Lifetime" (Table b.) and "Warranty" (Table c.).

Mounting Method	Load factor	Max temperature [°C]
A, B, C	50% < $I_o \leq 100\%$	78
	$I_o \leq 50\%$	85

Table a. Temperature of Point A PLA15F

(2) Derating by operating ambient temperature

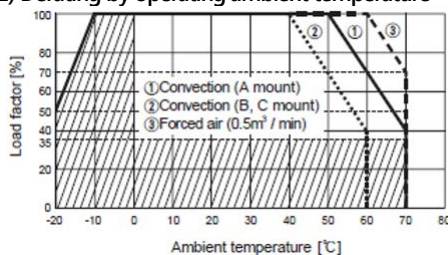


Figure 2 Ambient temperature derating curve for PLA15F

Operating ambient temperature indicates the place 5- 10 cm apart from the unit side that is unaffected by the heat dissipation. Contact us for details regarding Operating ambient temperature

Mounting Method	Cooling Method	Average ambient temperature	Expected lifetime [years]	
			$I_o \leq 50\%$	$I_o \leq 100\%$
A	Convection	Ta = 40°C	7	5
		Ta = 50°C	5	3
B, C	Convection	Ta = 30°C	7	5
		Ta = 40°C	5	3
A, B, C	Forced air cooling	Ta = 50°C	5	5
		Ta = 60°C	5	3

Table b. Expected lifetime

Mounting	Cooling method	Average ambient temperature	Warranty [years]	
			$I_o \leq 50\%$	$I_o \leq 100\%$
A	Convection	Ta = 40°C	5	5
		Ta = 50°C	5	3
B, C	Convection	Ta = 30°C	5	5
		Ta = 40°C	5	3
A, B, C	Forced air cooling	Ta = 50°C	5	5
		Ta = 60°C	5	3

Table c. Warranty

When mounting the power unit, do not fail to connect an input FG terminal and the unit frame (at least two places) to the ground wire.