

Switching Mode Power Supply
480 watt DIN-rail mounting for
ComNet™ CNGE2FE24MSPOE



Description

ComNet™ model PS48VDC-10A is a high-quality, low-noise switching mode power supply ideally suited to those applications requiring POE (Power Over Ethernet). This rugged unit may be either DIN-rail or shelf-mounted, providing an identical mounting configuration to the mating POE switch. Up to 24 POE field devices may be powered from a single supply, and the high output current capacity provides an adequate safety margin. A maximum of three of these units may be paralleled together to triple the number of POE devices supported. The wide ambient operating temperature range permits installation in most out-of-plant and unconditioned environments, such as those found in intelligent transportation systems or factory automation/industrial control applications. Unconditional line and load protection is provided.

Applications

- Power Supply for ComNet™ CNGE2FE24MSPOE

Features

- Universal AC input: 90 to 264 VAC, 47-63Hz
- Mounts on standard 7.5 or 15 mm DIN-rail
- Automatic power factor correction (PFC)
- High operating efficiency; up to 90%
- Small package for limited space installations
- Natural convection cooling; no troublesome fans

PART NUMBER	OUTPUT CURRENT (A)	VOLTAGE TRIM RANGE*		DC OK @ START UP (VDC)		DC LOW AFTER START UP (VDC)		TYPICAL EFFICIENCY
		MIN. VDC	MAX. VDC	MIN.	MAX.	MIN.	MAX.	
PS48VDC-10A 10		47.0	56.0	37.0	40.0	37.0	40.0	90%

* When S/P switch is set to parallel, it is not possible to trim output voltage.

specifications

OUTPUT DATA

Line regulation	± 0.5%
Load regulation, Non-parallel mode	± 0.5%
Load regulation, Parallel mode	± 5%
Output Voltage accuracy	+1% (factory adjusted)
Ripple and Noise	100 mV

Hold up time Vi = 230Vac	30 ms
Minimum load	0%
Parallel Operation	3 units max.

INPUT DATA

Rated input voltage range	
AC	90 - 264 Vac
DC	120 - 370 Vdc
Rated input current (115/230 VAC)	7 / 3.5A
Frequency range	47- 63 Hz
Inrush current	
Vi= 115Vac	25A
Vi= 230Vac	50A

OPTIONAL FEATURES

CODE	DESCRIPTION
B	Plug-in connectors



CONTROLS AND PROTECTIONS

Input Fuse	T10A/250Vac internal*
Output Overvoltage Protection	57 – 63VDC
Output Short Circuit Protection	Current limit
Rated Overload Protection	120-140%

GENERAL DATA

(@ NOMINAL LINE, FULL LOAD, 25°C)

Ambient operating temperature	-25°C to 71°C
Derating (>56°C to +71°C)	2.5%/°C
Ambient humidity	20 - 95%RH, non-condensing
Storage	-25°C to +85°C
Dimensions L x W x D	screw terminal connector: 12.5 x 17.5 x 12.3 cm 4.9 x 6.9 x 4.8 in
	plug connector version: 14.2 x 17.5 x 12.3 cm 5.6 x 6.9 x 4.8 in
Cooling	Natural convection
Case material	Aluminium, Powder Coat Finish
Weight	< 1.9 Kg (4.3 lbs)
Protection	IP20

APPROVALS AND EMC COMPLIANCE†

Insulation voltage I/O	3.000Vac
Insulation resistance I/O @ 500VDC	100Mohm
UL / cUL	UL508 listed, UL60950-1, Recognised
TUV	EN60950-1
CE	EN61000-6-3 EN55022 class B EN61000-3-2 EN61000-3-3 EN61000-6-2 EN55024

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† For complete compliance information contact ComNet for manufacturer's data sheet.

specifications

PIN ASSIGNMENT AND FRONT CONTROLS

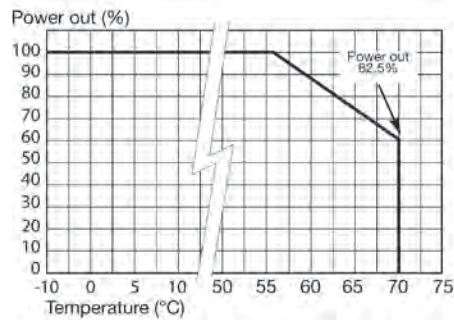
PIN #	DESIGNATION	DESCRIPTION
1	+	Positive output terminal
2	+	Positive output terminal
3	-	Negative output terminal
4	-	Negative output terminal
5	GND	Ground terminal to minimise High frequency emissions
6	L	Phase input (no polarity with DC input)
7	N	Neutral input (no polarity with DC input)
	DC ON	DC output ready LED
	DC LO	DC low indicator LED
	Vout ADJ.	Trimmer for fine output voltage adjustment
	S/P	Single parallel selection switch

INSTALLATION

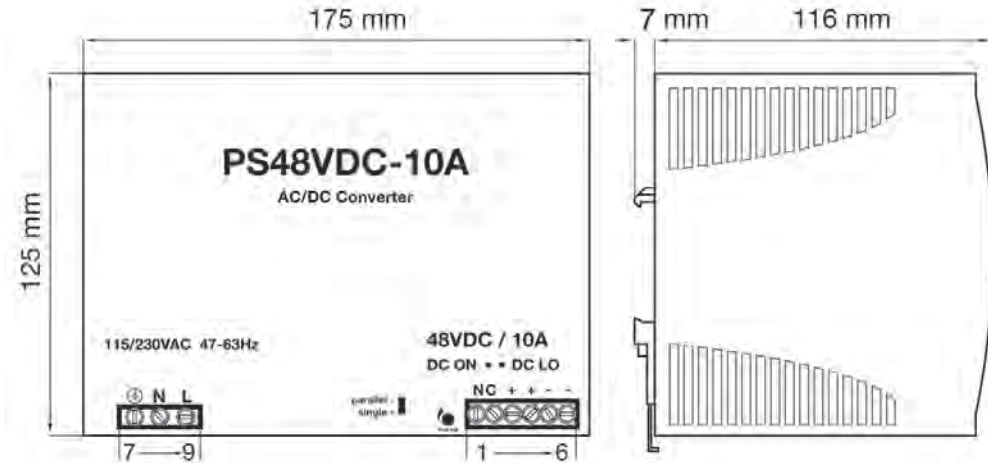
- COOLING: Natural air convection
Allow 25mm of free space along all sides to ensure adequate cooling
- SCREW CONNECTIONS: 10-24AWG Flexible or solid cable
- PLUG IN CONNECTORS: 10-24AWG Flexible or solid cable

NOTE: Specify desired connector style at time of order.

DERATING DIAGRAM



OUTLINE DRAWING



Specifications are subject to change without notice.



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