

# DPV-20 series

20W Single Output Switching Power Supply with PFC Function



## ■ Features:

- Constant voltage design
- Built-in active PFC function, PFC > 0.9
- Universal AC input / Full range
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Cooling by free air convection
- Class 2 power unit, Isolation class II
- IP54 design

IP54 Class 2

## ELECTRICAL SPECIFICATION

MODEL	DPV-20-12	DPV-20-24
<b>OUTPUT</b>		
DC VOLTAGE	12V	24V
RATED CURRENT	1.7A	0.85A
RATED POWER	20.4W	20.4W
LINE REGULATION	± 1%	
LOAD REGULATION	± 2%	
VOLTAGE TOLERANCE [3]	± 5%	
RIPPLE & NOISE (max.) [2]	360mV <sub>p-p</sub>	720mV <sub>p-p</sub>
<b>INPUT</b>		
VOLTAGE RANGE	90 ÷ 277VAC; 127 ÷ 390VDC	
FREQUENCY RANGE	47 ÷ 63Hz	
EFFICIENCY (typ.)	82%	83%
AC CURRENT (typ.)	0.25A/115VAC, 0.15A / 230VAC	
POWER FACTOR	PF > 0.9 / 230VAC; PF > 0.95 / 115VAC at full load	
<b>PROTECTIONS</b>		
OVER CURRENT	Range: 110 ÷ 150% rated current	
	Type: hiccup mode, auto-recovery.	
SHORT CIRCUIT	Type: hiccup mode, auto-recovery.	
OVER VOLTAGE	Max. 34V	
	Type: shut down output voltage. Re-power on to recovery.	
OVER TEMPERATURE	Range: 120°C ± 5°C	
	Type: shut down output voltage. Recovers automatically after temperature goes down.	

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## WORKING ENVIRONMENT

<b>WORKING TEMPERATURE</b>	-40°C ÷ 60°C
<b>WORKING HUMIDITY</b>	20 ÷ 95% RH non-condensing
<b>STORAGE TEMPERATURE AND HUMIDITY</b>	-40°C ÷ 80°C, 10 ÷ 95% RH non-condensing

## SAFETY AND EMC REGULATIONS

<b>SAFETY STANDARDS</b>	Compliance to EN 61347-1, EN 61347-2-13, UL 8750
<b>WITHSTAND VOLTAGE</b>	I-P/O-P: 3.75kVAC
<b>ISOLATION RESISTANCE</b>	I-P/O-P:100MΩ/500VDC/25°C/70%
<b>EMC EMISSION</b>	Compliance to EN 55015
<b>EMC IMMUNITY</b>	Compliance to EN 61547; IEC 61000-4-2, -3, -4, -5, -6, -8, -11
<b>HARMONIC CURRENT</b>	Compliance z EN61000-3-3; EN61000-3-2 class C

## OTHERS

<b>MTBF</b>	975 000 h, Telcordia SR-332 (40°C)
<b>DIMENSIONS</b>	134.5 x 34 x 25.5mm (L x W x H)
<b>WEIGHT</b>	0.17kg

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF i 47μF parallel capacitor.
3. Tolerance includes set up tolerance, line regulation and load regulation.
4. Power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment must be re-qualify to comply with EMC Directives.

## MECHANICAL SPECIFICATION

