# **DPV-20** series

20W Single Output Switching Power Supply with PFC Function





#### ■ Features:

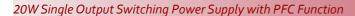
- Constant voltage design
- Built-in active PFC function, PFC > 0.9
- Universal AC input / Full range
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Cooling by free air convection
- Class 2 power unit, Isolation class II
- IP54 design



### **ELECTRICAL SPECIFICATION**

MODEL	DPV-20-12	DPV-20-24
OUTPUT		
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>
INPUT		
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	
PROTECTIONS		
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		
WORKING TEMPERATURE	-40°C ÷ 60°C	
WORKING HUMIDITY	20 ÷ 95% RH non-condensing	
STORAGE TEMPERATURE AND HUMIDITY	-40°C ÷ 80°C, 10 ÷ 95% RH non-condensing	
SAFETY AND EMC REGULATIONS		
SAFETY STANDARDS	Compliance to EN 61347-1, EN 61347-2-13, UL 8750	
WITHSTAND VOLTAGE	I-P/O-P: 3.75kVAC	
ISOLATION RESISTANCE	I-P/O-P:100MΩ/500VDC/25°C/70%	
EMC EMISSION	Compliance to EN 55015	
EMC IMMUNITY	Compliance to EN 61547; IEC 61000-4-2, -3, -4, -5, -6, -8, -11	
HARMONIC CURRENT	Compliance z EN61000-3-3; EN61000-3-2 class C	
OTHERS		
MTBF	975 000 h, Telcordia SR-332 (40°C)	
DIMENSIONS	134.5 x 34 x 25.5mm (L x W x H)	
WEIGHT	0.17kg	
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- All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
- $2. \textit{ Ripple \& noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 \mu F i 47 \mu F parallel capacitor.} \\$
- 3. Tolerance incudes 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**

