DMV-100 series

100W Single Output Switching Power Supply CV with PFC Function





■ Features:

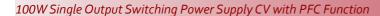
- Constant voltage design
- Built-in active PFC function, PFC > 0.9
- Universal AC input / Full range
- Protections: Short circuit / Over current / Over voltage Over temperature
- Cooling by free air convection
- Class 2 power unit, Isolation class II
- IP54 design



ELECTRICAL SPECIFICATION

MODEL	DMV-100-24	
OUTPUT		
DC VOLTAGE	24V	
RATED CURRENT	4.1A	
RATED POWER	100W	
LINE REGULATION	± 1%	
LOAD REGULATION	± 3%	
VOLTAGE TOLERANCE	3] ± 5%	
RIPPLE & NOISE (max.)	720mV _{P-P}	
SETUP, RISE, HOLD UP TIME	5) 500ms, 50ms, 10ms	
INPUT		
VOLTAGE RANGE	90 ÷ 305VAC; 127 ÷ 430VDC	
FREQUENCY RANGE	47 ÷ 63Hz	
EFFICIENCY (typ.)	87%	
AC CURRENT (typ.)	1.2A/115VAC, 0.6A / 230VAC	
POWER FACTOR	PF > 0.9 / 230VAC; PF > 0.9 / 115VAC at full load	
INRUSH CURRENT (max.)	<120A / 230VAC(25°C)	
PROTECTIONS		
OVER CURRENT	Range: 100 ÷ 120% rated current	
	Type: hiccup mode, auto-recovery.	
SHORT CIRCUIT	Type: hiccup mode, auto-recovery.	
OVER VOLTAGE	Max. 35V	
	Type: hiccup mode, auto-recovery.	
OVER TEMPERATURE	Range: 120°C ± 5°C	
	Type: shut down output voltage. Recovers automatically after temperature goes down.	

DMV-100 series





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; I-P/GND: 1.5kVAC; O-P/GND: 0.5kVAC
ISOLATION RESISTANCE	I-P/O-P, I-P/GND, O-P/GND: 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 (≥ 50% load)
OTHERS	
MTBF	975 000 h, Telcordia SR-332 (40°C)
DIMENSIONS	241 x 43 x 30mm (L x W x H)
WEIGHT	0.63 kg
1. All parameters NOT specially mentioned are measured at 2	30VAC 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 $0.1\mu F$ 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.

 5. Setup and rise time is measured from 0 to 90% rated output voltage.
- 6. 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

