



#### ■ Features

- AC input range selectable by switch
- Withstand 300VAC surge input for 5 seconds
- No load power consumption < 0.75W
- Miniature size and 1U low profile
- High operating temperature up to 70 °C
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Fanless design, no noisy good choice for household appliances
- High efficiency, long life and high reliability LED indicator for power on
- 100% full load burn-in test
- 2 years warranty

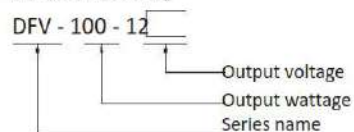
#### ■ Applications

- Industrial automation machinery
- Industrial control system
- Mechanical and electrical equipment
- Electronic instruments, equipments or Apparatus Household appliances
- For led lighting, led advertisement, as built-in model for fabric light or showcase etc.

#### ■ Description

- DCV-100 series is a 100W single-output enclosed type power supply with 21mm of low profile design.
- Adopting the input of 200VAC or 240VAC, the entire series provides an output voltage line of 12V and 24V.
- In addition to the high efficiency up to 90%, the design of metallic mesh case enhances the heat dissipation of DFV-300 that the whole series operates from - 30 °C through 70 °C under air convection with a fan.
- Delivering an extremely low no load power consumption ( less than 0.75W), it allows the end system to easily meet the worldwide energy requirement. DCV-100 has the complete protection functions and 5G anti-vibration capability;
- It is complied with the international safety regulations such as EN60335-1, EN61558-1/-2-16 and GB4943. DFV-300 series serves as a high price-to-performance power supply solution for various industrial applications.

#### ■ Model Encoding



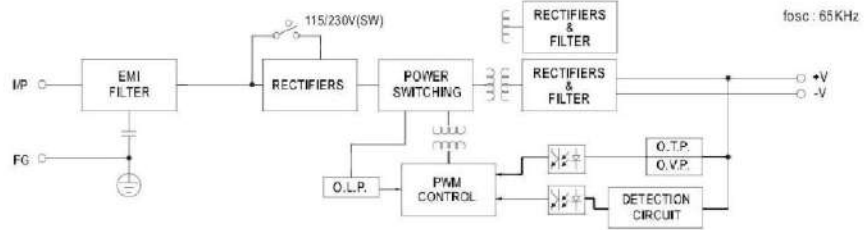
## 100W Single Output Switching Power Supply

## DCV-100 series

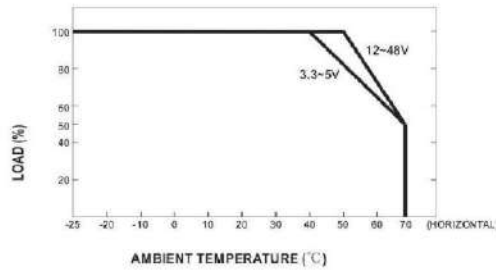
## SPECIFICATION

MODEL	DCV-100-12	DCV-100-24			
OUTPUT	DC VOLTAGE	12V	24V		
	RATED CURRENT	8A	4A		
	CURRENT RANGE	0 ~ 8A	0 ~ 4A		
	RATED POWER	100W	100W		
	RIPPLE & NOISE (max.) Note.2	200mVp-p	200mVp-p		
	VOLTAGE ADJ. RANGE	11.5 ~ 12.5V	23 ~ 25V		
	VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%		
	LINE REGULATION	±0.5%	±0.5%		
	LOAD REGULATION Note.5	±0.5%	±0.5%		
	SETUP, RISE TIME	500ms, 30ms/230VAC 500ms,30ms/115VAC at full load			
HOLD UP TIME (Typ.)	16ms/230VAC 12ms/115VAC at full load				
INPUT	VOLTAGE RANGE	85 ~ 132VAC / 170 ~ 264VAC by switch		240 ~ 370VDC (switch on 230VAC)	
	FREQUENCY RANGE	47 ~ 63Hz			
	EFFICIENCY (Typ.)	87.5%	89.0%		
	AC CURRENT (Typ.)	4.0A/115VAC 2.2A/230VAC			
	INRUSH CURRENT (Typ.)	COLD STAR 60A/230VAC			
	LEAKAGE CURRENT	<2.0mA / 240VAC			
PROTECTION	OVER LOAD	110 ~ 140% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed			
	OVER VOLTAGE	13.8 ~ 16.2V	28.8 ~ 33.6V		
		Protection type : Shut down o/p voltage, re-power on to recover			
	OVER TEMPERATURE	Shut down o/p voltage, re-power on to recover			
ENVIRONMENT	WORKING TEMP.	-30 ~ +70 °C (Refer to "Derating Curve")			
	WORKING HUMIDITY	20 ~ 90% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-40 ~ +85 °C, 10 ~ 95% RH			
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50 °C)			
	VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes			
SAFETY & EMC (Note 7)	SAFETY STANDARDS	EN60335-1, EN61558-1 / 2-16, CCC GB4943 approved			
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:2 KVAC O/P-FG:1.25 KVAC			
EMC (Note 7)	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25 °C / 70% RH			
	EMC EMISSION	Compliance to EN55022 (CISPR22), GB9254 Class B, EN55014, EN61000-3-2 Class A (575% Load), EN61000-3-3			
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61000-6-2 (EN50082-2), heavy industry level			
OTHERS	MTBF	601K hrs min. MIL-HDBK-217F (25 °C)			
	DIMENSION	179*53*21mm (L*W*H)			
PACKING		0.18Kg ; 100pcs/18.5Kg/ 36*32*27.8 CM			
	NOTE	<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 °C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. Line regulation is measured from low line to high line at rated load.</p> <p>5. Load regulation is measured from 0% to 100% rated load.</p> <p>6. Length of set up time is measured at cold first start. Turning ON/OFF the power supply very quickly may lead to increase of the set up time.</p> <p>7. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to EMI testing of component power supplies.</p> <p>8. The ambient temperature derating of 5 °C /1000m is needed for operating altitude greater than 2000m (6500ft).</p>			

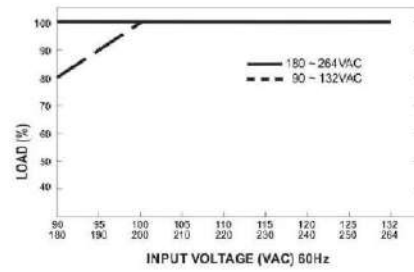
■ Block Diagram



■ Derating Curve



■ Static Characteristics



■ Mechanical Specification

Unit:mm

