



35W Single Output Switching Power Supply

EPS-35 series



■ Features :

- Universal AC input / Full range
- High efficiency up to 90%
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 3"×2" compact size
- LED indicator for power on
- No load power consumption<0.3W
- 3 years warranty

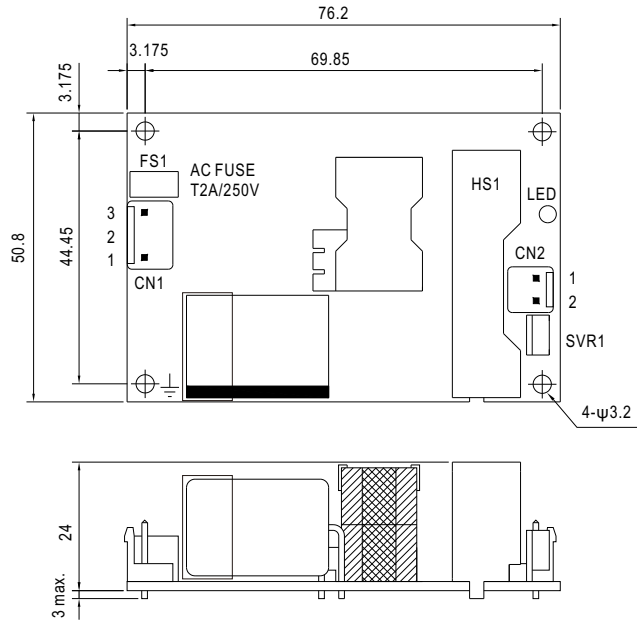


SPECIFICATION

MODEL	EPS-35-3.3	EPS-35-5	EPS-35-7.5	EPS-35-12	EPS-35-15	EPS-35-24	EPS-35-27	EPS-35-36	EPS-35-48		
OUTPUT	DC VOLTAGE	3.3V	5V	7.5V	12V	15V	24V	27V	36V	48V	
	RATED CURRENT	6A	6A	4.7A	3A	2.4A	1.5A	1.3A	1A	0.75A	
	CURRENT RANGE	0 ~ 6.6A	0 ~ 6.6A	0 ~ 5.2A	0 ~ 3.3A	0 ~ 2.65A	0 ~ 1.65A	0 ~ 1.45A	0 ~ 1.1A	0 ~ 0.82A	
	RATED POWER	19.8W	30W	35.25W	36W	36W	36W	35.1W	36W	36W	
	PEAK LOAD(10sec.) <small>Note.6</small>	21.78W	33W	39W	39.6W	39.75W	39.6W	39.15W	39.6W	39.36W	
	RIPPLE & NOISE (max.) <small>Note.2</small>	60mVp-p	70mVp-p	80mVp-p	100mVp-p	100mVp-p	180mVp-p	180mVp-p	200mVp-p	240mVp-p	
	VOLTAGE ADJ. RANGE	3.1 ~ 3.6V	4.75 ~ 5.5V	7.13 ~ 8.25V	10.8 ~ 13.5V	13.5 ~ 16.5V	21.6 ~ 27V	24.3 ~ 29.7V	32.4 ~ 39.6V	43.2 ~ 52.8V	
	VOLTAGE TOLERANCE <small>Note.3</small>	±2.5%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	LOAD REGULATION	±1.5%	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
SETUP, RISE TIME	1000ms, 30ms/230VAC 1000ms, 30ms/115VAC at full load										
HOLD UP TIME (Typ.)	50ms/230VAC 16ms/115VAC at full load										
INPUT	VOLTAGE RANGE <small>Note.5</small>	85 ~ 264VAC		120 ~ 370VDC							
	FREQUENCY RANGE	47 ~ 63Hz									
	EFFICIENCY (Typ.)	80%	82%	84%	87%	88%	89%	89%	89%	90%	
	AC CURRENT (Typ.)	0.75A/115VAC		0.5A/230VAC							
	INRUSH CURRENT (Typ.)	COLD START 40A/230VAC									
LEAKAGE CURRENT	<1mA/240VAC										
PROTECTION	OVER LOAD	115 ~ 170% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed									
	OVER VOLTAGE	3.7 ~ 4.6V	5.6 ~ 6.75V	8.63~ 10.5V	14 ~ 17V	17.25 ~ 20.25V	27.6 ~ 32.4V	31.05 ~ 36.45V	39.7 ~ 46.8V	53.3 ~ 64.8V	
		Protection type : 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)									
	OPERATING ALTITUDE <small>Note.8</small>	2000 meters									
SAFETY & EMC <small>(Note 4)</small>	SAFETY STANDARDS	UL62368-1, TUV BS EN/EN62368-1, EAC TP TC 004 approved									
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC									
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH									
	EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020									
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55024, heavy industry level, criteria A, EAC TP TC 020									
OTHERS	MTBF	649.1K hrs min. MIL-HDBK-217F (25°C)									
	DIMENSION	76.2*50.8*24mm (L*W*H)									
	PACKING	0.085Kg; 120pcs/11.2Kg/0.94CUFT									
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 & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. 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." (as available on http://www.meanwell.com)</p> <p>5. Derating may be needed under low input voltage. Please check the static characteristics for more details.</p> <p>6. 33% Duty cycle maximum within every 30 seconds. Average output power should not exceed the rated power.</p> <p>7. EPS-35-24/27/36/48 without Hs1.</p> <p>8. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).</p> <p>※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx</p>										

■ Mechanical Specification

Unit:mm



AC Input Connector (CN1) : JST B3P-VH or equivalent

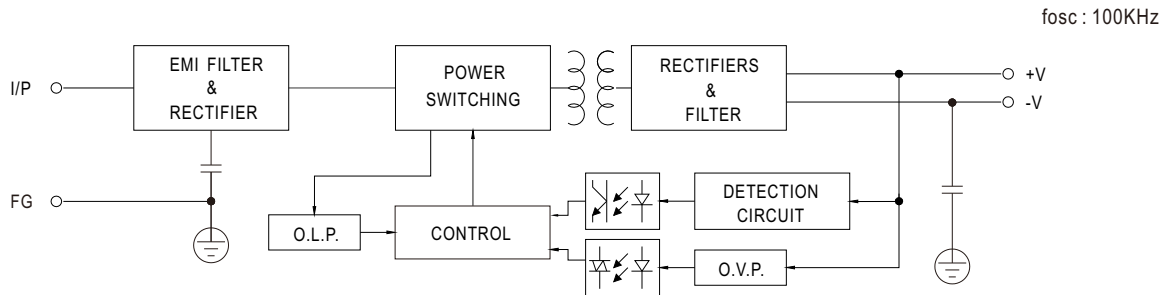
Pin No.	Assignment	Mating Housing	Terminal
1	AC/N	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
2	No Pin		
3	AC/L		

DC Output Connector (CN2) : JST B2P-VH or equivalent

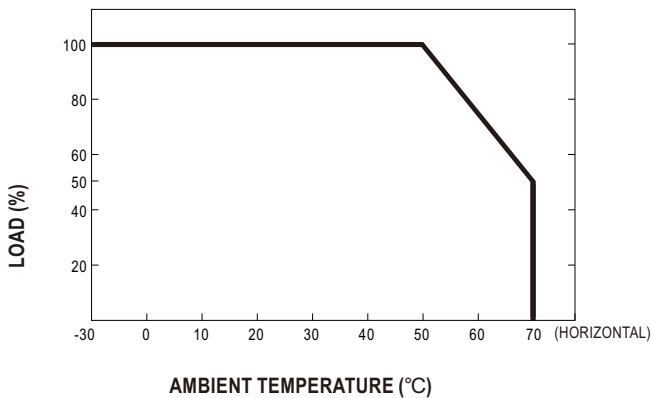
Pin No.	Assignment	Mating Housing	Terminal
1	-V	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
2	+V		

⚠ HS1(Note.7) must have safety isolation distance with system case.
 ⊥ : Grounding required

■ Block Diagram



■ Output Derating



■ Static Characteristics

