



75W Single Output with PFC Function

ELP-75 series



■ Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- High efficiency up to 90%
- **Optional L-Bracket and cover (ELP-75-x-C, x=3,5,12,15,24,36,48)**
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection • 1U low profile
- LED indicator for power on
- No load power consumption<0.5W
- 3 years warranty

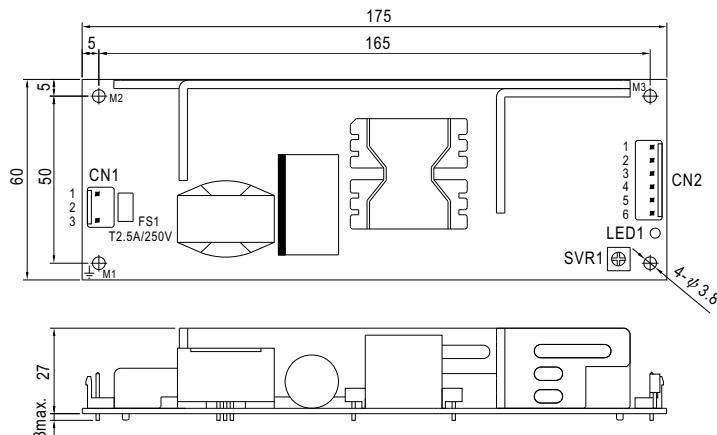
User's Manual



SPECIFICATION

MODEL	ELP-75-3.3	ELP-75-5	ELP-75-12	ELP-75-15	ELP-75-24	ELP-75-36	ELP-75-48
OUTPUT	DC VOLTAGE	3.3V	5V	12V	15V	24V	36V
	RATED CURRENT	15A	15A	6.25A	5A	3.15A	2.1A
	CURRENT RANGE	0 ~ 15A	0 ~ 15A	0 ~ 6.25A	0 ~ 5A	0 ~ 3.15A	0 ~ 2.1A
	RATED POWER	49.5W	75W	75W	75W	75.6W	76.8W
	RIPLINE & NOISE (max.) Note.2	80mVp-p	80mVp-p	120mVp-p	150mVp-p	240mVp-p	280mVp-p
	VOLTAGE ADJ. RANGE	3 ~ 3.6V	4.75 ~ 5.5V	10.8 ~ 13.2V	13.5 ~ 16.5V	21.6 ~ 26.4V	32.4 ~ 39.6V
	VOLTAGE TOLERANCE Note.3	±3.0%	±2.0%	±2.0%	±2.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±2.0%	±1.5%	±1.0%	±1.0%	±1.0%	±1.0%
	SETUP, RISE TIME	2500ms, 50ms/230VAC	2500ms, 50ms/115VAC at full load				
INPUT	HOLD UP TIME (Typ.)	20ms/230VAC	20ms/115VAC at full load				
	VOLTAGE RANGE Note.6	90 ~ 264VAC	127 ~ 370VDC				
	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR (Typ.) Note.5	3.3V: PF>0.91/230VAC	5V~48V: PF>0.95/230VAC	PF>0.98/115VAC at full load			
	EFFICIENCY (Typ.)	80%	82%	89%	90%	90%	90%
	AC CURRENT (Typ.)	1.8A/115VAC	1A/230VAC				
	INRUSH CURRENT (Typ.)	COLD START 60A/230VAC					
PROTECTION	LEAKAGE CURRENT	<1mA/240VAC					
	OVER LOAD	105 ~ 150% rated output power					
		Protection type : Hiccup mode, recovers automatically after fault condition is removed					
	OVER VOLTAGE	3.7 ~ 4.45V	5.6 ~ 6.75V	13.8 ~ 16.2V	17.25 ~ 20.25V	27.6 ~ 32.4V	39.7 ~ 46.8V
ENVIRONMENT		Protection type : Shut down o/p voltage, re-power on to recover					
	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)					
SAFETY & EMC (Note 4)	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes					
	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/ 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					
OTHERS	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					
	MTBF	345.3Khrs min.	MIL-HDBK-217F (25 °C)				
	DIMENSION	PCB:175*60*27mm (L*W*H) with optional CASE:195*68.5*33mm (L*W*H)					
NOTE	PACKING	PCB:0.25Kg; 48pcs/13Kg/0.96CUFT with optional CASE:0.54Kg; 25pcs/14.5Kg/0.7CUFT					
	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 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 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) 5. 3.3V PF>0.92/230VAC, others PF>0.95/230VAC. 6. Derating may be needed under low input voltage. Please check the derating curve for more details. 7. 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). ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx						

■ Mechanical Specification



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

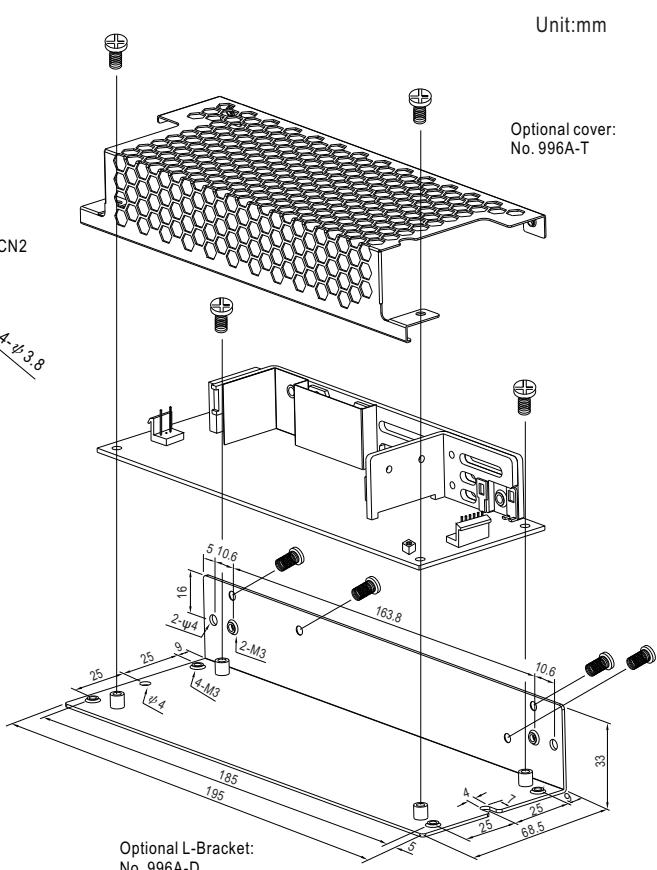
Pin No.	Assignment	Mating Housing	Terminal
1	AC/L		
2	No Pin	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
3	AC/N		

DC Output Connector (CN2) : JST B6P-VH or equivalent

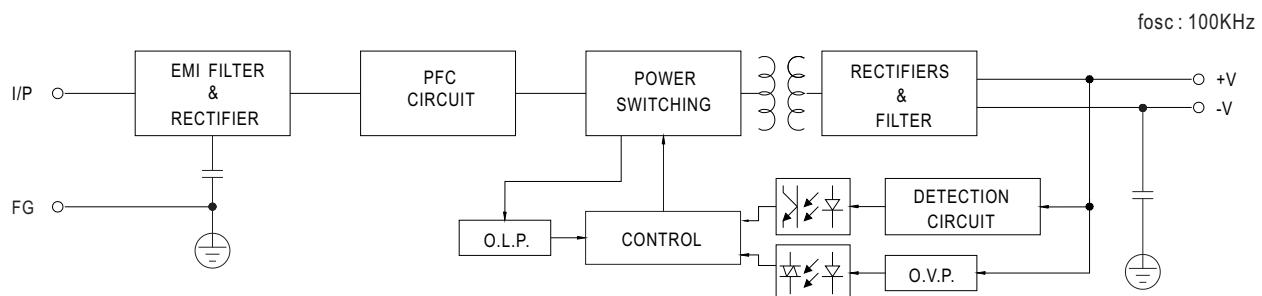
Pin No.	Assignment	Mating Housing	Terminal
1,2,3	-V	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
4,5,6	+V		

 $\underline{\underline{}} :$ Grounding Required

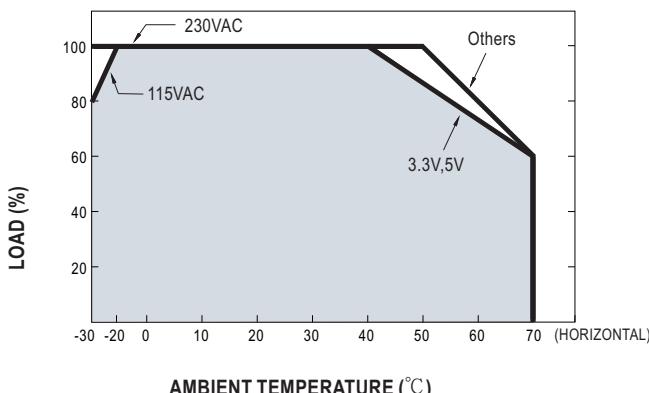
1. M1 is safety ground. For better EMC performance, Please secure an electrical connection between M1, M2, M3, and chassis grounding



■ Block Diagram



■ Output Derating



■ Output Derating VS Input Voltage

