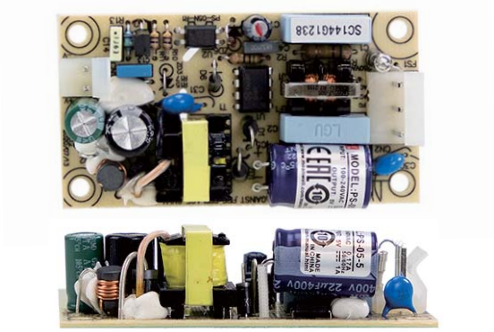
Uradni distributer LCR d.o.o., www.lcr.si, www.meanwell.si

5W Single Output Switching Power Supply PS-05 series



User's Manual

Features :

- Universal AC input / Full range
- Low leakage current <0.5mA
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- 100% full load burn-in test
- Fix switching frequency at 67KHz
- Low cost
- High reliability
- 2 years warranty

BS EN/EN62368-1 TPTC004 IEC62368-1

GTIN CODE

MW Search: https://www.meanwell.com/serviceGTIN.aspx

SPECIFICATION

MODEL		PS-05-5	PS-05-12	PS-05-15	PS-05-24	PS-05-48
OUTPUT	DC VOLTAGE	5V	12V	15V	24V	48V
	RATED CURRENT	1A	0.45A	0.35A	0.22A	0.11A
	CURRENT RANGE	0 ~ 1.2A	0 ~ 0.5A	0 ~ 0.4A	0 ~ 0.25A	0 ~ 0.125A
	RATED POWER	5W	5.4W	5.25W	5.28W	5.28W
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	120mVp-p	200mVp-p	200mVp-p
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±2.0%	±2.0%	±1.0%
	LINE REGULATION	±1.0%	±1.0%	±1.0%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±0.5%	±0.5%
	SETUP, RISE TIME	1000ms, 20ms				
	HOLD UP TIME(Typ.)	100ms at full load				
INPUT	VOLTAGE RANGE	85 ~ 264VAC 120 ~ 370VDC				
	FREQUENCY RANGE	47 ~ 63Hz				
	EFFICIENCY(Typ.)	70%	75%	75%	76%	76%
	AC CURRENT (Typ.)	0.15A/115VAC 0.07A/230VAC				
	INRUSH CURRENT (Typ.)	COLD START 30A/230VAC				
	LEAKAGE CURRENT	<0.5mA / 240VAC				
PROTECTION	OVERLOAD	Above 105% rated output power				
		Protection type : Hiccup mode, recovery automatically after fault condition is removed				
	OVER VOLTAGE	5.75 ~ 6.75V	13.8 ~ 16.2V	17.2 ~ 20.2V	27.6 ~ 32.4V	55.2 ~ 64.8V
	OVER TEMPERATURE	Hiccup mode, recovery automatically after fault condition is removed				
ENVIRONMENT	WORKING TEMP.	-10 ~ +60℃ (Refer to "Derating Curve")				
	WORKING HUMIDITY	20 ~ 90% RH non-condensing				
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH				
	TEMP. COEFFICIENT	±0.05%/℃ (0 ~ 50℃)				
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes				
SAFETY & EMC (Note 4)	SAFETY STANDARDS	TUV BS EN/EN62368-1,EAC TP TC 004 approved, IEC62368-1 CB approved by TUV				
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC				
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25℃/ 70% RH				
	EMI CONDUCTION & RADIATION	Compliance to BS EN/EN55032 (CISPR32) Class B, EAC TP TC 020				
	HARMONIC CURRENT	Compliance to BS EN/EN61000-3-2,-3				
	EMS IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, light industry level, EAC TP TC 020				
OTHERS	MTBF	6873.2K hrs min. Telcordia SR-332 (Bellcore) ; 1271.1K hrs min. MIL-HDBK-217F (25℃)				
	DIMENSION	75*40*20mm (L*W*H)				
	PACKING	0.05Kg; 120pcs/6.25Kg/0.56CUFT				

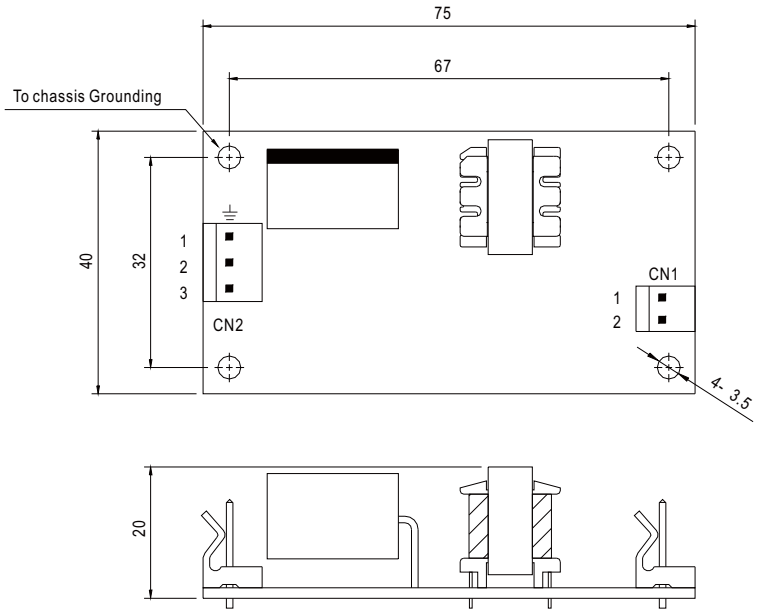
NOTE

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μF & 47 μF 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 https://www.meanwell.com//Upload/PDF/EMI_statement_en.pdf)
5. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/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

Unit:mm



AC Input Connector (CN2) : Molex 5285-03 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	FG ⏚	Molex 5058 or equivalent	Molex 2478 or equivalent
2	AC/N		
3	AC/L		

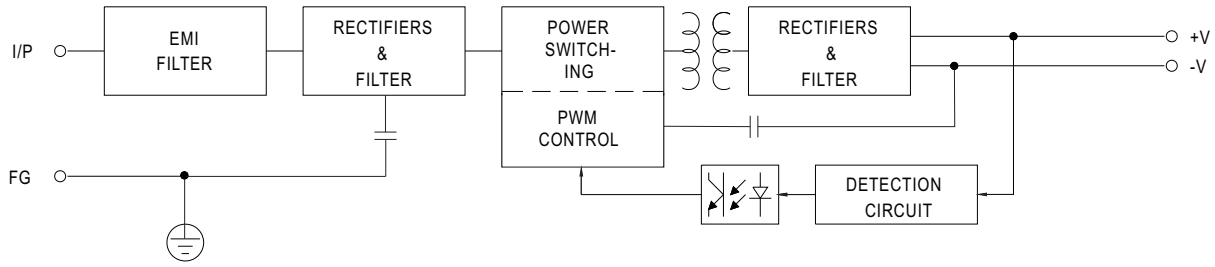
DC Output Connector (CN1) : Molex 5273-02 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	+V	Molex 5195 or equivalent	Molex 5194 or equivalent
2	-V		

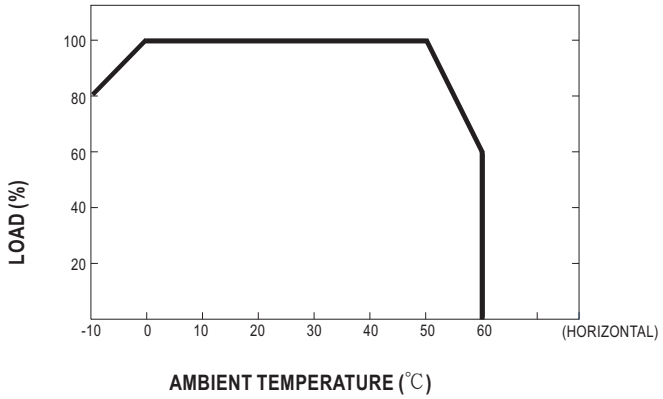
⏚ : Grounding Required
CN2:Pin 1 is safety ground

■ Block Diagram

fosc : 67KHz



■ Derating Curve



■ Static Characteristics

