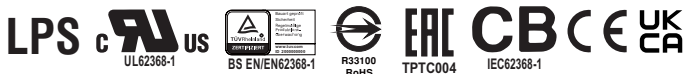




User's Manual



Features

- 2.06"x1.07" compact size
- Universal input 85~305VAC
- No load power consumption < 0.1W
- EMI Class B without additional components
- Wide operating temp. range -30~70°C
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- Isolation Class II
- Pass LPS
- 3 years warranty

Applications

- Industrial electrical equipment
- Mechanical equipment
- Factory automation equipment
- Hand-held electronic device

GTIN CODE

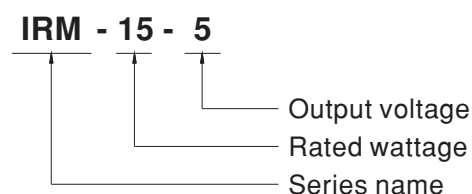
MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

Description

IRM-15 is a 15W miniature (52.4*27.2*24mm) AC-DC module-type power supply, ready to be soldered onto the PCB boards of various kinds of electronic instruments or industrial automation equipments. This product allows the universal input voltage range of 85~305VAC. The 94V-0 flame retardant plastic case and potted with silicone enhance the heat dissipation and meet the anti-vibration demand up to 5G; moreover, it provides the fundamental resistance to dust and moisture.

With the high efficiency up to 83% and the extremely low no-load power consumption below 0.1W, IRM-15 series fulfills the worldwide regulation for the low power consumption requirement for electronics. The entire series is a Class II design (no FG pin), incorporating the built-in EMI filtering components, enabling the compliance with BS EN/EN55032 Class B; the supreme EMC features keep the end electronic units from electromagnetic interference.

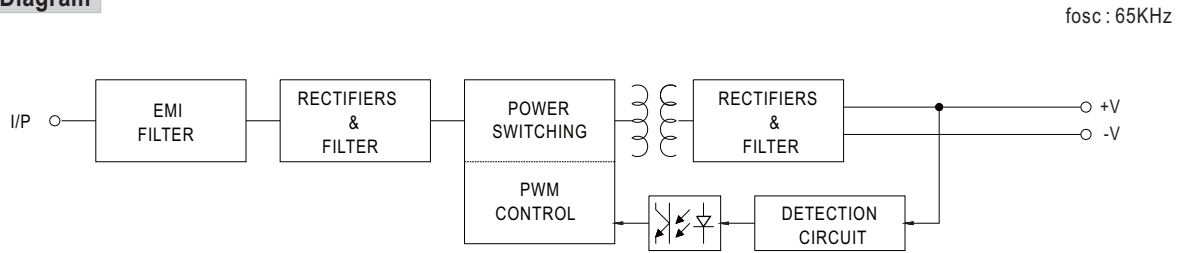
Model Encoding



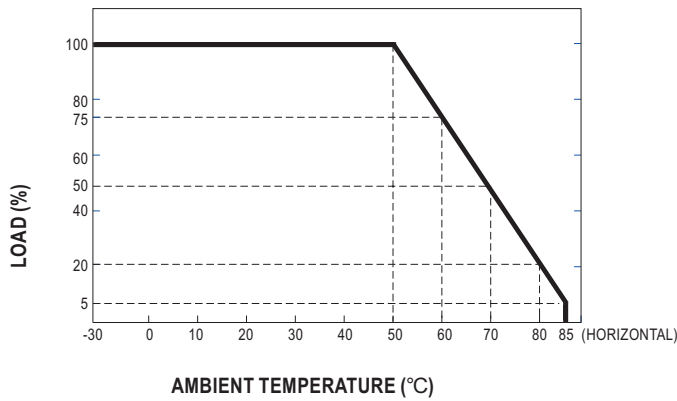
SPECIFICATION

MODEL		IRM-15-3.3	IRM-15-5	IRM-15-12	IRM-15-15	IRM-15-24
OUTPUT	DC VOLTAGE	3.3V	5V	12V	15V	24V
	RATED CURRENT	3.5A	3A	1.25A	1A	0.63A
	CURRENT RANGE	0 ~ 3.5A	0 ~ 3A	0 ~ 1.25A	0 ~ 1A	0 ~ 0.63A
	RATED POWER	11.55W	15W	15W	15W	15.12W
	RIPPLE & NOISE (max.) Note.2	200mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p
	VOLTAGE TOLERANCE Note.3	±2.5%	±2.5%	±2.5%	±2.5%	±2.5%
	LINE REGULATION	±0.5%	±0.5%	±0.3%	±0.3%	±0.3%
	LOAD REGULATION	±1%	±1%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME	1000ms, 20ms/230VAC 1000ms, 20ms/115VAC at full load				
	HOLD UP TIME (Typ.)	40ms/230VAC 10ms/115VAC at full load				
INPUT	VOLTAGE RANGE	85 ~ 305VAC 120 ~ 430VDC				
	FREQUENCY RANGE	47 ~ 440Hz				
	EFFICIENCY (Typ.)	74%	78%	82%	82%	83%
	AC CURRENT (Typ.)	0.35A/115VAC 0.2A/230VAC 0.17A/277VAC				
	INRUSH CURRENT (Typ.)	COLD START 20A/115VAC 40A/230VAC				
	LEAKAGE CURRENT	< 0.25mA/277VAC				
PROTECTION	OVERLOAD	115%~190% rated output power				
		Protection type : Hiccup mode, recovers automatically after fault condition is removed				
	OVER VOLTAGE	3.8 ~ 4.95V	5.75 ~ 6.75V	13.8 ~ 16.2V	17.25 ~ 20.25V	27.6 ~ 32.4V
ENVIRONMENT	WORKING TEMP.	-30 ~ +70℃ (Refer to "Derating Curve")				
	WORKING HUMIDITY	20 ~ 90% RH non-condensing				
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH				
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)				
	VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes				
	SOLDERING TEMPERATURE	Wave soldering: 265℃,5s (max.); Manual soldering: 390℃,3s (max.)				
	OPERATING ALTITUDE Note.4	2000 meters				
	SAFETY & EMC (Note.5)	SAFETY STANDARDS	IEC62368-1, UL62368-1, TUV BS EN/EN62368-1, EAC TP TC 004, BSMI CNS15598-1 approved			
WITHSTAND VOLTAGE		I/P-O/P:3KVAC				
ISOLATION RESISTANCE		I/P-O/P:100M Ohms / 500VDC / 25℃/ 70% RH				
EMC EMISSION		Parameter	Standard		Test Level / Note	
		Conducted	BS EN/EN55032(CISPR32), CNS15936		Class B	
		Radiated	BS EN/EN55032(CISPR32), CNS15936		Class B	
		Harmonic Current (Note 5)	BS EN/EN61000-3-2		Class A	
		Voltage Flicker	BS EN/EN61000-3-3		-----	
		EMC IMMUNITY	BS EN/EN55035, BS EN/EN61000-6-2			
Parameter			Standard		Test Level /Note	
ESD			BS EN/EN61000-4-2		Level 3, 8KV air; Level 2, 4KV contact, criteria A	
Radiated Susceptibility			BS EN/EN61000-4-3		Level 3, criteria A	
EFT/Burest			BS EN/EN61000-4-4		Level 3, criteria A	
Surge			BS EN/EN61000-4-5		Level 4,2KV/L-N, criteria A	
Conducted			BS EN/EN61000-4-6		Level 3, criteria A	
Magnetic Field			BS EN/EN61000-4-8		Level 4, criteria A	
Voltage Dips and interruptions			BS EN/EN61000-4-11		> 95% dip 0. 5 periods, 30% dip 25 periods, > 95% interruptions 250 periods	
OTHERS	MTBF	10656.2K hrs min. Telcordia SR-332 (Bellcore) ; 970.3K hrs min. MIL-HDBK-217F (25℃)				
	DIMENSION	52.4*27.2*24mm (L*W*H)				
	PACKING	0.05Kg/240pcs/13Kg/0.94CUFT				
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 μ F & 47 μ F parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. 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). 5. The power supply is considered as an independent unit ,but the final equipment still need to re-confirm that the whole system complies with the 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) ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx					

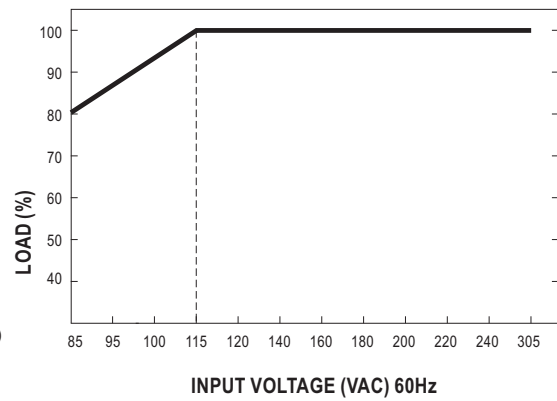
Block Diagram



Derating Curve



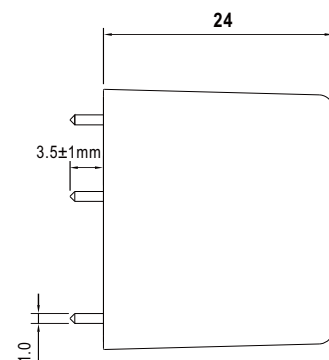
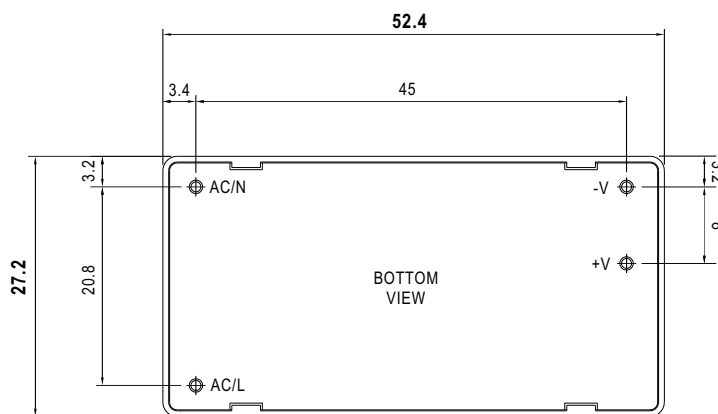
Output Derating VS Input Voltage



Mechanical Specification

(Unit:mm[inch], Tolerance:±0.5[±0.02])

Case No.219A



P/N diameter:1.0

Installation Manual

Please refer to : <http://www.meanwell.com/manual.html>

 www.simpex.ch

Besuchen Sie unseren Simpex E-Shop
mit über 12'000 Produkten.

Er bietet Ihnen eine breite Funktionsvielfalt, sowie intelligente
Suchfunktionen. Ob Sie den Shop als Einkaufsplattform oder als
Produktfinder nutzen – im Simpex E-Shop haben Sie alle Infor-
mationen schnell und tagesaktuell zur Hand.

24h und das 365 Tage im Jahr.



Hauptsitz

Simpex Electronic AG

Binzackerstrasse 33

CH-8620 Wetzikon

Telefon +41 44 931 10 10

E-Mail contact@simpex.ch

Internet www.simpex.ch

Manufaktur

Simpex Electronic SA

En Bas-le-Port 1

CH-2088 Cressier

E-Mail contact@simpex.ch

Internet www.simpex.ch