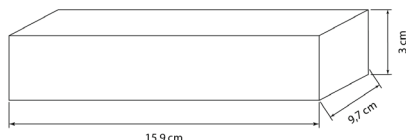




ARTIGO (REFERÊNCIA) <i>Producto Product</i>	GRULRS-150-24
SÉRIE <i>Serie Series</i>	LRS
TIPO <i>Tipo Type</i>	Transformador <i>Transformador Transformer</i>
TECNOLOGIA <i>Tecnología Technology</i>	Tensão constante AC/DC 24V <i>Tensión constante Constant voltage</i>
CÓDIGO DE BARRAS <i>Código de barras Barcode</i>	--
COR <i>Color Colour</i>	--
MATERIAL <i>Material Material</i>	Metal <i>Metal Metal</i>

DIÂMETRO (D.) <i>Diámetro Diameter</i>	--
ALTURA (A.) <i>Altura Height</i>	3cm
COMPRIMENTO (C.) <i>Longitud Length</i>	15,9cm
LARGURA (L.) <i>Ancho Width</i>	9,7cm
PESO <i>Peso Weight</i>	390g



INFORMAÇÃO GERAL

Información General | General Information

Índice de proteção <i>Índice de Protección Protection Index</i>	--
Classe de proteção <i>Clase de protección Protection class</i>	Classe I
Fator de potência <i>Factor de potencia Power factor</i>	0,45
Número de LED <i>Número de LED LED number</i>	--
Secção de entrada <i>Sección de entrada Input section</i>	--
Secção de saída <i>Sección de salida Output section</i>	--

INFORMAÇÃO TÉCNICA

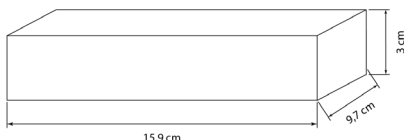
Información técnica | Technical information

Tensão de entrada <i>Voltaje de entrada Input voltage</i>	200-240Vac
Frequência <i>Frecuencia Frequency</i>	50/60Hz
Potência <i>Potencia Power</i>	150W
Corrente de entrada (máx) <i>Corriente de entrada (máx) Input current (max)</i>	1,7A
Tensão de saída <i>Voltaje de salida Output voltage</i>	24Vdc
Corrente de saída <i>Corriente de salida Output current</i>	6,5A
Eficiência (%) <i>Eficiencia Efficiency</i>	89%
Temperatura ambiente (Ta) <i>Temperatura ambiente Ambient temperature</i>	-30..+70°C
Temperatura Invólucro (Tc) <i>Temperatura de la carcasa Case Temperature</i>	--
Isolação <i>Aislamiento Insulation</i>	--
PROTEÇÕES <i>Protecciones Protections</i>	
Proteção curto circuito (SCP) <i>Protección contra cortocircuitos Short circuit protection</i>	Sim <i>Sí Yes</i>
Proteção sobrecarga (OPP) <i>Protección de sobrecarga Overload protection</i>	Sim <i>Sí Yes</i>
Proteção sobreaquecimento (OTP) <i>Protección contra sobretemperatura Over temperature protection</i>	Sim <i>Sí Yes</i>
Proteção sobretensões (OVP) <i>Protección contra sobretensiones Overvoltage protection</i>	Sim <i>Sí Yes</i>
Proteção de sobrecarga (L-N) <i>Protección de sobrecarga Surge protection</i>	--
Tremulação <i>Parpadeo Flicker</i>	--
Potência sem carga <i>Energia sin carga No-load power</i>	--



ARTIGO (REFERÊNCIA) <i>Producto Product</i>	GRULRS-150-24
SÉRIE <i>Serie Series</i>	LRS
TIPO <i>Tipo Type</i>	Transformador <i>Transformador Transformer</i>
TECNOLOGIA <i>Tecnología Technology</i>	Tensão constante AC/DC 24V <i>Tensión constante Constant voltage</i>
CÓDIGO DE BARRAS <i>Código de barras Barcode</i>	--
COR <i>Color Colour</i>	--
MATERIAL <i>Material Material</i>	Metal <i>Metal Metal</i>

DIÂMETRO (D.) <i>Diámetro Diameter</i>	--
ALTURA (A.) <i>Altura Height</i>	3cm
COMPRIMENTO (C.) <i>Longitud Length</i>	15,9cm
LARGURA (L.) <i>Ancho Width</i>	9,7cm
PESO <i>Peso Weight</i>	39g



INFORMAÇÃO GERAL

Información General | General Information

Índice de proteção <i>Índice de Protección Protection Index</i>	--
Classe de proteção <i>Clase de protección Protection class</i>	Classe I
Fator de potência <i>Factor de potencia Power factor</i>	0,45
Número de LED <i>Número de LED LED number</i>	--
Secção de entrada <i>Sección de entrada Input section</i>	--
Secção de saída <i>Sección de salida Output section</i>	--

INFORMAÇÃO TÉCNICA

Información técnica | Technical information

Tensão de entrada <i>Voltaje de entrada Input voltage</i>	200-240Vac
Frequência <i>Frecuencia Frequency</i>	50/60Hz
Potência <i>Potencia Power</i>	150W
Corrente de entrada (máx) <i>Corriente de entrada (máx) Input current (max)</i>	1,7A
Tensão de saída <i>Voltaje de salida Output voltage</i>	24Vdc
Corrente de saída <i>Corriente de salida Output current</i>	6,5A
Eficiência (%) <i>Eficiencia Efficiency</i>	89%
Temperatura ambiente (Ta) <i>Temperatura ambiente Ambient temperature</i>	-30..+70°C
Temperatura Invólucro (Tc) <i>Temperatura de la carcasa Case Temperature</i>	--
Isolação <i>Aislamiento Insulation</i>	--

PROTEÇÕES

Protecciones | Protections

Proteção curto circuito (SCP) <i>Protección contra cortocircuitos Short circuit protection</i>	Sim <i>Sí Yes</i>
Proteção sobrecarga (OPP) <i>Protección de sobrecarga Overload protection</i>	Sim <i>Sí Yes</i>
Proteção sobreaquecimento (OTP) <i>Protección contra sobretemperatura Over temperature protection</i>	Sim <i>Sí Yes</i>
Proteção sobretensões (OVP) <i>Protección contra sobretensiones Overvoltage protection</i>	Sim <i>Sí Yes</i>
Proteção de sobrecarga (L-N) <i>Protección de sobrecarga Surge protection</i>	--
Tremulação <i>Parpadeo Flicker</i>	--
Potência sem carga <i>Energia sin carga No-load power</i>	--



Features

- AC input range selectable by switch
- Withstand 300VAC surge input for 5 second
- No load power consumption < 0.5W
- Miniature size and 1U low profile
- High operating temperature up to 70°C
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Compliance to IEC/BS EN/EN 60335-1 (PD3) and IEC/BS EN/EN61558-1, 2-16 for household appliances
- Operating altitude up to 5000 meters
- Withstand 5G vibration test
- High efficiency, long life and high reliability
- LED indicator for power on
- Over voltage category III
- 100% full load burn-in test
- 3 years warranty

Applications

- Industrial automation machinery
- Industrial control system
- Mechanical and electrical equipment
- Electronic instruments, equipments or apparatus
- Household appliances

GTIN CODE

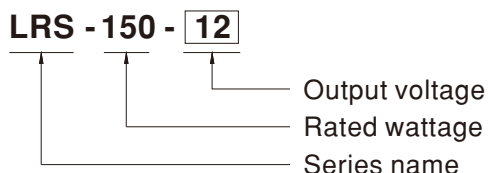
MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

Description

LRS-150 series is a 150W single-output enclosed type power supply with 30mm of low profile design. Adopting the input of 115VAC or 230VAC(selectable by switch), the entire series provides an output voltage line of 12V, 15V, 24V, 36V and 48V.

In addition to the high efficiency up to 90%, the design of metallic mesh case enhances the heat dissipation of LRS-150 that the whole series operates from -30°C through 70°C under air convection without a fan. Delivering an extremely low no load power consumption (less than 0.5W), it allows the end system to easily meet the worldwide energy requirement. LRS-150 has the complete protection functions and 5G anti-vibration capability; it is complied with the international safety regulations such as TUV BS EN/EN62368-1, BS EN/EN60335-1, BS EN/EN61558-1/-2-16, UL62368-1 and GB 4943.1. LRS-150 series serves as a high price-to-performance power supply solution for various industrial applications.

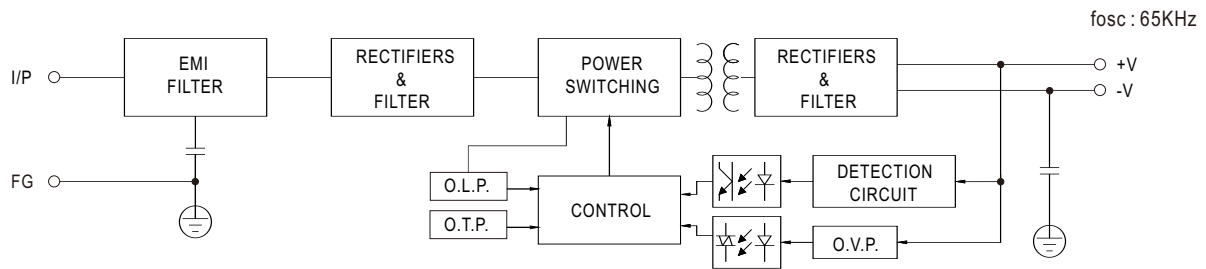
Model Encoding



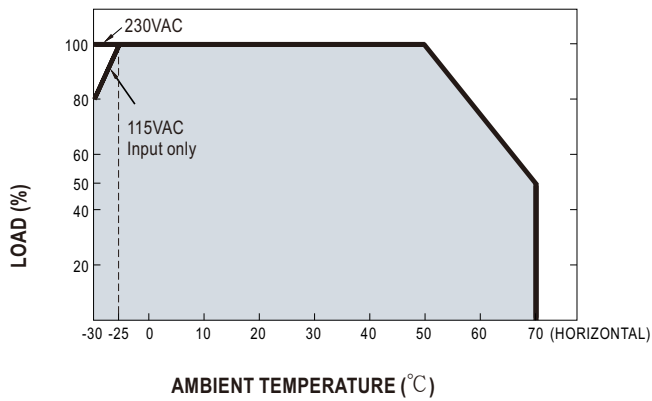
SPECIFICATION

MODEL		LRS-150-12	LRS-150-15	LRS-150-24	LRS-150-36	LRS-150-48
OUTPUT	DC VOLTAGE	12V	15V	24V	36V	48V
	RATED CURRENT	12.5A	10A	6.5A	4.3A	3.3A
	CURRENT RANGE	0 ~ 12.5A	0 ~ 10A	0 ~ 6.5A	0 ~ 4.3A	0 ~ 3.3A
	RATED POWER	150W	150W	156W	154.8W	158.4W
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	200mVp-p	200mVp-p	200mVp-p
	VOLTAGE ADJ. RANGE	10.2 ~ 13.8V	13.5 ~ 18V	21.6 ~ 28.8V	32.4 ~ 39.6V	43.2 ~ 52.8V
	VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION Note.4	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION Note.5	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME	500ms, 30ms/230VAC 500ms,30ms/115VAC at full load				
HOLD UP TIME (Typ.)	40ms/230VAC 35ms/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%	88.5%	89%	89%	90%
	AC CURRENT (Typ.)	3A/115VAC 1.7A/230VAC				
	INRUSH CURRENT (Typ.)	COLD STAR 60A/230VAC				
	LEAKAGE CURRENT	<0.75mA / 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	18.75 ~ 21.75V	28.8 ~ 33.6V	41.4 ~ 48.6V	55.2 ~ 64.8V
		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 non-condensing				
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)				
	VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes				
	OVER VOLTAGE CATEGORY	III ; Compliance to BS EN/EN61558, BS EN/EN50178, BS EN/EN60664-1, BS EN/EN62477-1; altitude up to 2000 meters				
SAFETY & EMC (Note 7)	SAFETY STANDARDS	UL62368-1, TUV BS EN/EN62368-1, BS EN/EN60335-1, BS EN/EN61558-1/-2-16, GB 4943.1, BSMI CNS15598-1, EAC TP TC 004, KC K60950-1 (for LRS-150-12 only), BIS IS13252 (Part1): 2010/IEC 60950-1: 2005 (NOTE 9), AS/NZS 62368.1 (by CB) approved				
	WITHSTAND VOLTAGE	I/P-O/P:4KVAC I/P-FG:2KVAC O/P-FG:1.25KVAC				
	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/EN55014, BS EN/EN61000-3-2 Class A (<=75% Load), BS EN/EN61000-3-3, GB17625.1, GB/T 9254.1, BSMI CNS15936, EAC TP TC 020, KC KN32, KN35 (for LRS-150-12 only)				
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2, 3, 4, 5, 6, 8, 11, BS EN/EN61000-6-2 (BS EN/EN50082-2), BS EN/EN55035, heavy industry level, EAC TP TC 020, KC KN32, KN35 (for LRS-150-12 only)				
OTHERS	MTBF	2707.7K hrs min. Telcordia SR-332 (Bellcore) ; 558.2Khrs min. MIL-HDBK-217F (25°C)				
	DIMENSION	159*97*30mm (L*W*H)				
	PACKING	0.48Kg ; 30pcs/15.4Kg/0.75CUFT				
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. 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." (as available on https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf)</p> <p>8. The ambient temperature derating of 5°C/100m is needed for operating altitude greater than 2000m (6500ft).</p> <p>9. Some model may not have the BIS logo, please contact your MEAN WELL sales for more information.</p> <p>※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx</p>					

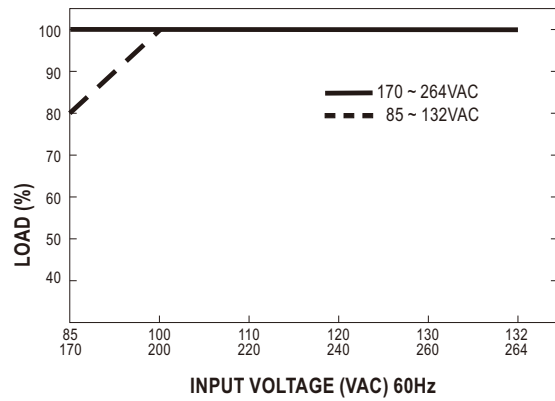
■ Block Diagram



■ Derating Curve

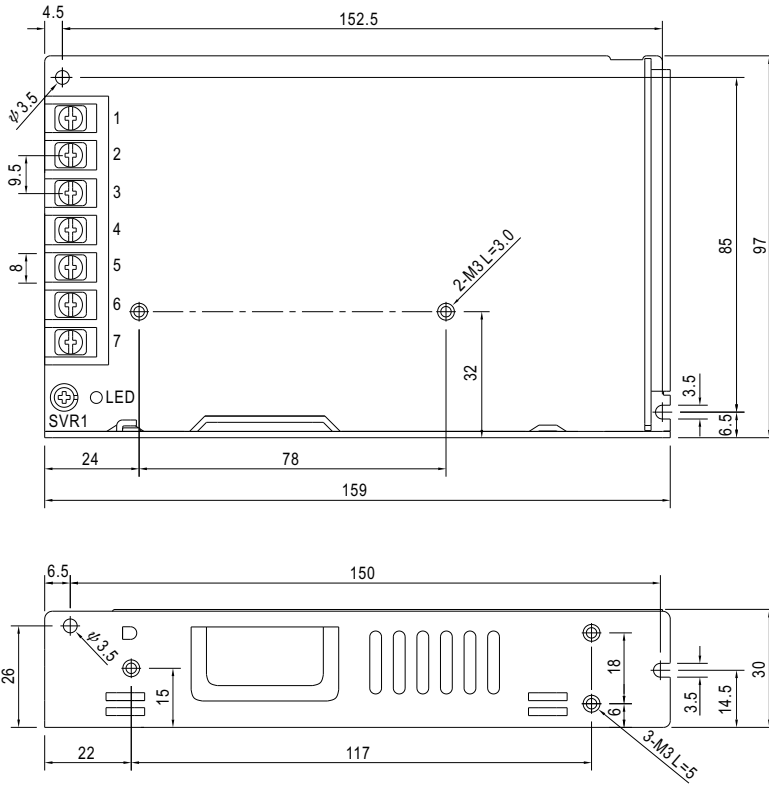


■ Static Characteristics



■ Mechanical Specification

Case No.241A Unit:mm



Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4,5	DC OUTPUT -V
2	AC/N	6,7	DC OUTPUT +V
3	FG \perp		

■ Installation Manual

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