

LRS-600 series







Features

- MEANWELL Patent Number : ZL202220241473.0
- · AC input range selectable by switch
- Withstand 300VAC surge input for 5 second
- Protections: Short circuit / Overload / Over voltage / Over temperature
- · Forced air cooling
- · Built-in cooling Fan ON-OFF control
- 1U low profile
- · Withstand 5G vibration test
- High operating temperature up to $65^\circ C$
- Operating altitude up to 5000 meters (Note.10)
- · 3 years warranty
- MTBF>1KK hrs

Description

LRS-600 series is a 600W single-output enclosed type power supply with 41mm of low profile design. Adopting the input of 115VAC or 230VAC (select by switch), the entire series provides an output voltage line of 5V, 12V, 15V, 24V, 27V, 36V and 48V. In addition to the high efficiency up to 92%, with the built-in long life fan LRS-600 can work under $-20 \sim +65^{\circ}C$ with full load. LRS-600 has the complete protection functions and 5G anti-vibration capability; It is complied with complete international safety regulations. LRS-600 series serves as a high price-to-performance power supply solution for various industrial applications.





Applications

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

GTIN CODE

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



SPECIFICATION

		LRS-600-5	LRS-600-12	LRS-600-15	LRS-600-24	LRS-600-27	LRS-600-36	LRS-600-48	
	DC VOLTAGE	5V	12V	15V	24V	27V	36V	48V	
OUTPUT	RATED CURRENT	100A	50A	40A	25A	22.2A	16.6A	12.5A	
	CURRENT RANGE	0~100A	0~50A	0~40A	0~25A	0~22.2A	0~16.6A	0~12.5A	
		500W	600W	600W		599.4W	597.6W	600W	
					600W				
	RIPPLE & NOISE (max.) Note.2		200mVp-p	200mVp-p	240mVp-p	270mVp-p	360mVp-p	360mVp-p	
	VOLTAGE ADJ. RANGE Note.3		11.4 ~ 13.2V	14.25 ~ 16.5V	22.8 ~ 26.4V	25.65 ~ 29.7V	34.2 ~ 39.6V	45.6 ~ 52.8	
	VOLTAGE TOLERANCE Note.4	±2.0%	±1.5%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	LINE REGULATION Note.5	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	LOAD REGULATION Note.6	±2.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	$\pm 0.5\%$	
	SETUP, RISE TIME Note.7	1300ms, 50ms/230VAC 1300ms,50ms/115VAC at full load							
	HOLD UP TIME (Typ.)	20ms/230VAC 16ms/115VAC at full load							
INPUT	VOLTAGE RANGE Note.8	90 ~ 132VAC / 180 ~ 264VAC by switch 255 ~ 370VDC (swith on 230VAC)							
	FREQUENCY RANGE	47 ~ 63Hz	-			,			
	EFFICIENCY (Typ.)	86%	90%	90%	91%	91%	92%	92%	
		12A/115VAC	7.5A/230VAC		3170	5170	0270	52 /0	
	AC CURRENT (Typ.)								
	INRUSH CURRENT (Typ.)	35A/115VAC 60A/230VAC							
	LEAKAGE CURRENT	<2mA / 240VAC							
	OVER LOAD		ed output power						
				ill shutdown after					
PROTECTION		5.75~6.75V	13.8 ~ 16.2V	18 ~ 21V	27.6 ~ 32.4V	31~36.5V	41.4 ~ 48.6V	55.2 ~ 64.8∨	
(Note.9)	OVER VOLIAGE	Protection type : Shut down o/p voltage, re-power on to recover							
	OVER TEMPERATURE	Shut down o/p voltage, re-power on to recover							
	FAN ON/OFF CONTROL (Typ.)	RTH3 \ge 50°C FAN ON, ≤40°C FAN OFF							
	WORKING TEMP.	-20 ~ +65°C (Refer to "Derating Curve")							
		$20 \sim 90\%$ RH non-condensing							
	STORAGE TEMP., HUMIDITY								
	TEMP. COEFFICIENT	±0.03%/°C (0~50°C)							
	VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes							
	OVER VOLTAGE CATEGORY	$^{ m III:}$ According to EN61558, EN50178, EN60664-1, EN62477-1; altitude up to 2000 meters							
			U LINU 1550, LINU		.,, ., ., .,				
	SAFETY STANDARDS	BS IEC/UL 62 2005(NOTE 1	368-1, EAC TP 3),BSMI CNS15	TC 004, KC6236 5598-1,GB 4943 1/2.16, AS/NZS	68-1(except for .1,BS EN/EN6	,	52(Part1):2010		
	SAFETY STANDARDS	BS IEC/UL 62 2005(NOTE 1 Designed by A	368-1, EAC TP 3),BSMI CNS15 AS/NZS 61558.1	TC 004, KC6236 5598-1,GB 4943	58-1(except for .1,BS EN/EN6 52368.1	,	52(Part1):2010		
	SAFETY STANDARDS	BS IEC/UL 62 2005(NOTE 1 Designed by A I/P-O/P:3.75KV	368-1, EAC TP 3),BSMI CNS15 \S/NZS 61558.1 /AC I/P-FG:2K	TC 004, KC6236 5598-1,GB 4943 1/2.16, AS/NZS VAC O/P-FG:0	58-1(except for .1,BS EN/EN6 52368.1 5KVAC	,	52(Part1):2010		
SAFETY	SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE	BS IEC/UL 62 2005(NOTE 1 Designed by A I/P-O/P:3.75KV I/P-O/P, I/P-FG	368-1, EAC TP 3),BSMI CNS15 S/NZS 61558.1 /AC I/P-FG:2K , O/P-FG:100M (TC 004, KC6236 5598-1,GB 4943 1/2.16, AS/NZS VAC 0/P-FG:0 Dhms/500VDC / 2	58-1(except for .1,BS EN/EN6 52368.1 .5KVAC 5°C/ 70% RH	1558-1,BS EN/E	52(Part1):2010		
SAFETY	SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION	BS IEC/UL 62 2005(NOTE 1 Designed by A I/P-O/P: 3.75KV I/P-O/P, I/P-FG Compliance to	368-1, EAC TP 3),BSMI CNS18 (S/NZS 61558.1 (AC I/P-FG:2K , O/P-FG:100M (EAC TP TC 020	TC 004, KC6236 5598-1, GB 4943 1/2.16, AS/NZS 0 VAC 0/P-FG:0 Dhms/500VDC / 2 , BSMI CNS1593	68-1(except for .1,BS EN/EN6 62368.1 .5KVAC 5°C/70% RH 6,KC KSC 9832	1558-1,BS EN/E	52(Part1):2010		
SAFETY	SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC IMMUNITY	BS IEC/UL 62 2005(NOTE 1 Designed by <i>P</i> I/P-O/P:3.75KV I/P-O/P, I/P-FG Compliance to Compliance to	368-1, EAC TP 3),BSMI CNS15 (S/NZS 61558.1 (AC I/P-FG:2K , O/P-FG:100M C EAC TP TC 020 EAC TP TC 020	TC 004, KC6236 5598-1, GB 4943 1/2.16, AS/NZS 0 VAC 0/P-FG:0 Dhms/500VDC / 2 , BSMI CNS1593 ,KC KSC 9832, k	68-1(except for .1,BS EN/EN6 62368.1 .5KVAC 5°C/70% RH 6,KC KSC 9832 (SC 9835	1558-1,BS EN/E , KSC 9835	52(Part1):2010 N61558-2-16		
SAFETY	SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC IMMUNITY MTBF	BS IEC/UL 62 2005(NOTE 1 Designed by A I/P-O/P:3.75KV I/P-O/P, I/P-FG Compliance to Compliance to 1533.4K hrs mi	368-1, EAC TP 3),BSMI CNS18 (S/NZS 61558.1 (AC I/P-FG:2K , O/P-FG:100M (EAC TP TC 020 EAC TP TC 020 n. Telcordia SR-	TC 004, KC6236 5598-1, GB 4943 1/2.16, AS/NZS 0 VAC 0/P-FG:0 Dhms/500VDC / 2 , BSMI CNS1593 ,KC KSC 9832, k	68-1(except for .1,BS EN/EN6 62368.1 .5KVAC 5°C/70% RH 6,KC KSC 9832	1558-1,BS EN/E , KSC 9835	52(Part1):2010 N61558-2-16		
SAFETY	SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC IMMUNITY MTBF DIMENSION	BS IEC/UL 62 2005(NOTE 1 Designed by A I/P-O/P:3.75KV I/P-O/P, I/P-FG Compliance to Compliance to 1533.4K hrs mi 225*124*41mm	368-1, EAC TP 3),BSMI CNS18 (S/NZS 61558.1 (AC I/P-FG:2K , O/P-FG:100M (EAC TP TC 020 EAC TP TC 020 n. Telcordia SR- n (L*W*H)	TC 004, KC6236 5598-1,GB 4943 1/2.16,AS/NZS VAC 0/P-FG:0 Dhms/500VDC / 2 ,BSMI CNS1593 ,KC KSC 9832, k 332(Bellcore) ;	68-1(except for .1,BS EN/EN6 62368.1 .5KVAC 5°C/70% RH 6,KC KSC 9832 (SC 9835	1558-1,BS EN/E , KSC 9835	52(Part1):2010 N61558-2-16		
SAFETY	SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING 1. All parameters NOT spe	BS IEC/UL 62 2005(NOTE 1 Designed by A I/P-O/P:3.75KV I/P-O/P, I/P-FG Compliance to 1533.4K hrs mi 225*124*41mm 0.95Kg/12pcs/ cially mentioned	368-1, EAC TP 3),BSMI CNS18 (S/NZS 61558.1 (AC I/P-FG:2K , O/P-FG:100M (EAC TP TC 020 EAC TP TC 020 n. Telcordia SR- n (L*W*H) 12.4Kg/0.77CUF I are measured a	TC 004, KC6236 5598-1,GB 4943 1/2.16, AS/NZS 1 VAC 0/P-FG:0 Dhms/500VDC / 2 , BSMI CNS1593 ,KC KSC 9832, k 332(Bellcore) ; T at 230VAC input,	68-1 (except for .1,BS EN/EN6 62368.1 .5KVAC 5°C/70% RH 6,KC KSC 9832 (SC 9835 301.7K hrs min rated load and 2	1558-1,BS EN/E , KSC 9835 n. MIL-HDBK-2 25°C of ambient t	52(Part1):2010 :N61558-2-16 217F (25°C) temperature.	approved,	
SAFETY	SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING 1. All parameters NOT spe 2. Ripple & noise are meas 3. Voltage adjustment can If the voltage adjustment can If the voltage adjustment tan 2. Load regulation is measu 3. Load regulation is measu 4. Tolerance : includes set 5. Line regulation is measu 6. Load regulation is measu 7. Length of set up time is 8. Derating may be needec 9. Once protections are trig 10. The ambient temperatu 11. This power supply does under the following cond a) the end-devices is us b) the end-devices is us b) the end-devices is us c) the power supply is: - installed in end-device - belong to part of a I Exception: Power supplies used witt a) professional equipment	BS IEC/UL 62 2005(NOTE 1 Designed by A I/P-O/P:3.75KV I/P-O/P; I/P-FG Compliance to Compliance to 1533.4K hrs mi 225*124*41mn 0.95Kg/12pcs/ cially mentionec sured at 20MHz only be operate is performed ou up tolerance, lir red from low linured from 0% to measured at cod under low inpu- gered, 4min(Ty) re derating of 5 s not meet the h itions: sed within the Et innnected to public ces with average ighting system hin the following nt with a total ra	368-1, EAC TP 3),BSMI CNS18 (S/NZS 61558.1 (AC I/P-FG:2K , O/P-FG:100M (EAC TP TC 020 EAC TP TC 020 EAC TP TC 020 n. Telcordia SR- n (L*W*H) 12.4Kg/0.77CUF I are measured a of bandwidth by d within the input tiside this range, he regulation and e to high line at in 100% rated loa d start. Turning it voltages. Pleas p.) of cold down °C/1000m is nee harmonic current uropean Union, a ic mains supply e or continuous g end-devices do ted input power	TC 004, KC6236 5598-1, GB 4943 1/2.16, AS/NZS 1 VAC 0/P-FG:0 Dhms/500VDC / 2 , BSMI CNS1593 ,KC KSC 9832, k 332(Bellcore) ; T at 230VAC input, using a 12" twisis trange of 100~1; it may cause ab load regulation. rated load. d. the power supply se refer to "Static - time is required k ded for operating requirements our and with 220Vac or g input power great not need to fulfill greater than 1000	58-1 (except for 1,BS EN/EN6 52368.1 5KVAC 5°C/70% RH 6,KC KSC 9832 301.7K hrs mir rated load and 2 rated load and 2 and pair-wire terr 20VAC or 200-2 hormal output. on/off frequently Characteristics" before restart. 1 altitude greater lined by EN6100 reater rated non ter than 75W, or EN61000-3-2 DW;	 1558-1, BS EN/E KSC 9835 MIL-HDBK-2 25°C of ambient ininated with a 0.40VAC. y may lead to increase than 2000m(650 00-3-2. Please do ininal voltage, and final voltage, and final	52(Part1):2010 ENG1558-2-16 217F (25°C) temperature. 1uf & 47uf para prease of the se is. 200ft). p not use this p	approved,	
SAFETY	SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING 1. All parameters NOT spe 2. Ripple & noise are meas 3. Voltage adjustment can if the voltage adjustment 4. Tolerance : includes set 5. Line regulation is measu 6. Load regulation is measu 7. Length of set up time is 8. Derating may be needed 9. Once protections are trig 10. The ambient temperatu 11. This power supply does under the following cond a) the end-devices is us b) the end-devic	BS IEC/UL 62 2005(NOTE 1 Designed by A I/P-O/P:3.75KV I/P-O/P, I/P-FG Compliance to Compliance to 1533.4K hrs mi 225*124*41mm 0.95Kg/12pcs// cially mentionec sured at 20MHz only be operate is performed ou up tolerance, lir red from low lin ured from 0% to measured at co under low inpu- gered, 4min(Ty) re derating of 5 s not meet the h ititions: sed within the Et nnnected to public ces with average ighting system hin the following th with a total ra ed heating elem	368-1, EAC TP 3),BSMI CNS15 (S/NZS 61558.1 (AC I/P-FG:2K , O/P-FG:100M (C EAC TP TC 020 EAC TP TC 020 EAC TP TC 020 n. Telcordia SR- n (L*W*H) 12.4Kg/0.77CUF I are measured a of bandwidth by d within the input tisde this range, the regulation and e to high line at the 100% rated load Id start. Turning tt voltages. Pleas 0, of cold down (C/1000m is need armonic current uropean Union, a ic mains supply the or continuous g end-devices do ted input power ents with a rated	TC 004, KC6236 5598-1, GB 4943 1/2.16, AS/NZS 1 VAC 0/P-FG:0 Dhms/500VDC / 2 , BSMI CNS1593 ,KC KSC 9832, k 332(Bellcore) ; T at 230VAC input, using a 12" twist it range of 100-12 it may cause ab load regulation. rated load. d. the power supply se refer to "Static time is required I ded for operating requirements our and with 220Vac or g input power greaa not need to fulfill greater than 1000 I power less than	58-1 (except for 1,BS EN/EN6 52368.1 5KVAC 5°C/70% RH 6,KC KSC 9832 301.7K hrs min rated load and 2 ed pair-wire terr 20VAC or 200-2 normal output. on/off frequently Characteristics" before restart. altitude greater lined by EN6100 reater rated non ter than 75W, or EN61000-3-2 JW; or equal to 200	 ISS8-1, BS EN/E KSC 9835 MIL-HDBK-2 25°C of ambient ininated with a 0.40VAC. y may lead to increase the sections for detail than 2000m(650 20-3-2. Please do ninal voltage, and r W 	52(Part1):2010 IN61558-2-16 217F (25°C) temperature. 1uf & 47uf para prease of the se ils. 20ft). 50 not use this p	approved,	



600W Single Output Switching Power Supply

LRS-600 series

Block Diagram



For 5V model, the output current states 100A on label when input voltage > 110Vac, and states 90A when input voltage < 110Vac, please refer to label for detail



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