



## Features:

- Universal AC input/Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- UL 508(industrial control equipment)approved
- Isolation class  ${\rm I\hspace{-.1em}I}$
- LED indicator for power on
- 100% full load burn-in test
- 3 years warranty

## **SPECIFICATION**



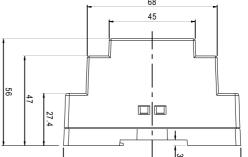
MODEL		DR-60-5	DR-60-12	DR-60-15	DR-60-24		
OUTPUT	DC VOLTAGE	5V	12V	15V	24V		
	RATED CURRENT	6.5A	4.5A	4A	2.5A		
	CURRENT RANGE	0 ~ 6.5A	0 ~ 4.5A	0 ~ 4A	0 ~ 2.5A		
	RATED POWER	32.5W	54W	60W	60W		
	RIPPLE & NOISE (max.) Note.2	80mVp-p	120mVp-p	120mVp-p	150mVp-p		
	VOLTAGE ADJ. RANGE	4.75 ~ 5.5V	11.1 ~ 13.2V	13.5 ~ 16.5V	21.6 ~ 26.4V		
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%	±1.0%		
	LINE REGULATION	±1.0%	±1.0%	±1.0%	±1.0%		
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±1.0%		
	SETUP, RISE TIME	100ms, 30ms/230VAC 200ms, 30ms/115VAC at full load					
	HOLD UP TIME (Typ.)	100ms/230VAC 23ms/115VAC at full load					
INPUT	VOLTAGE RANGE	88 ~ 264VAC 124 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz					
	EFFICIENCY (Typ.)	76%	82%	83%	84%		
	AC CURRENT (Typ.)	1.2A/115VAC 0.8A/230VA	1.2A/115VAC 0.8A/230VAC				
	INRUSH CURRENT (Typ.)	COLD START 18A/115VAC 36A/230VAC					
PROTECTION	OVERLOAD	105 ~ 160% rated output power					
		Protection type: Constant current limiting, recovers automatically after fault condition is removed					
PROTECTION	OVER VOLTAGE	5.75 ~ 6.75V	13.8 ~ 16.2V	17.25 ~ 20.25V	27.6 ~ 32.4V		
		Protection type : Shut down o/p voltage, re-power on to recover					
ENVIRONMENT	WORKING TEMP.	-20 ~ +60°C (Refer to output load 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)					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6					
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 approved, Design refer to EN50178					
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC					
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms/500VDC					
	EMI CONDUCTION & RADIATION	Compliance to EN55011,EN55022 (CISPR22) Class B					
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3					
	EMS IMMUNITY	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, ENV50204, EN55024, EN61000-6-2, EN61204-3, heavy industry level, criteria A					
OTHERS	MTBF	216.2K hrs min. MIL-HDBK-217F (25°C)					
	DIMENSION	78*93*56mm (W*H*D)					
	PACKING	0.3Kg; 48pcs/15.4Kg/1.02CUFT					
NOTE	<ol> <li>Ripple &amp; noise are measure</li> <li>Tolerance : includes set up</li> </ol>	Il parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.  Ipple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.  Includes set up tolerance, line regulation and load regulation.  In power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets MC directives.					

46.5



## ■ Mechanical Specification

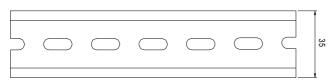
Case No.918B Unit:mm



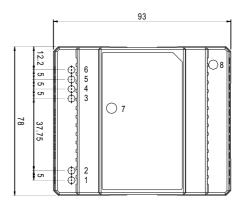
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Terminal Pin No. Assignment

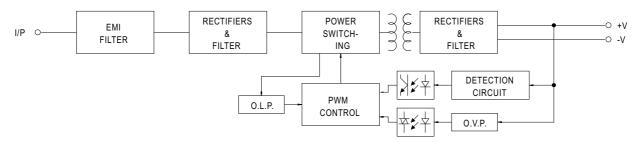
Pin No.	Assignment	Pin No.	Assignment
1	AC/N	5,6	-V
2	AC/L	7	LED
3,4	+V	8	+V ADJ.



ADMISSIBLE DIN-RAIL:TS35/7.5 OR TS35/15



## **■** Block Diagram



# **■** Derating Curve

