

# DR-45 Series

45W Single Output Industrial DIN Rail Power Supply



Case No: 8012CB  
93 x 78 x 67mm

## Features

- Universal AC input / Full range
- Protections: Short Circuit / Overload / Over voltage / Over Temperature
- Can be installed on DIN rail TS-35/7.5 or 15
- UL508 (industrial control equipment) approved
- Cooling by free air convection
- LED indicator for power on
- 100% full load burn-in test
- Fix switching frequency at 100KHz
- 3 years warranty



## Specification

INPUT	Voltage	85V~264VAC 120~370VDC			
	Frequency	47 ~ 63 Hz			
	Efficiency	72%	77%	77%	80%
	AC Current (Typ.)	1.5A/115VAC 0.75A/230VAC			
	Inrush Current (Typ.)	Cold start 28A/115VAC 56A/230VAC			
	Leakage Current	<1mA/240VAC			
OUTPUT	MODEL No.	DR-45-5	DR-45-12	DR-45-15	DR-45-24
	Voltage	5V	12V	15V	24V
	Rated Current	5A	3.5A	2.8A	2A
	Current Range	0~5A	0~3.5A	0~2.8A	0~2A
	Rated Power	25W	42W	42W	48W
	Ripple Noise MAX.	100mVp-p	200mVp-p	240mVp-p	480mVp-p
	Voltage Adjustment Range	4.75 ~ 5.5V	10.8 ~ 13.2V	13.5 ~ 16.5V	21.6 ~ 26.4V
	Voltage Tolerance	± 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	800ms, 60ms/230VAC at full load			
	Holdup Time (Typ.)	60ms/230VAC at full load			
	Over Load	105 ~ 150% 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 off o/p voltage, clamping by zener diode			
	Over Temperature	Tj 135°C typically (U1) detect on heat sink of power transistor Protection Type: Shut down o/p voltage, re-power on to recover			
ENVIRONMENT	Working Temperature	-10~+50°C (Refer to "Derating Curve")			
	Working Humidity	20~90% RH non-condensing			
	Storage Temp., Humidity	-20~ +85°C, 10~95%RH			
	Temp. Co-efficient	±0.03% / °C (0~50°C)			
	Vibration	10~500Hz, 2G 10min./1cycle, period for 60 min. each along X, Y, Z axes; Mounting: compliance to IEC60068-2-6			
SAFETY & EMC	Safety Standards	UL508, TUV EN60950-1 approved			
	Withstand Voltage	I/P-O/P:3KVAC I/P-FG:2.0KVAC O/P-FG:0.5KVAC			
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500Vdc/25°C/70% RH			
	EMC Emission	Compliance to EN55011, EN55032 (CISPR32), EN61000-3-2,-3			
	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2, (EN50082-2), Heavy industry level, criteria A			
OTHERS	M.T.B.F.	364.6K hrs min. MIL-HDBK-217F (25°C)			
	Packaging	0.31Kg; 48pcs/17.5Kg/1.3CUFT			

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple and noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. The power supply is considered as a component which will be installed with final equipment. The final equipment must re-confirmed that it still meets EMC Directives.

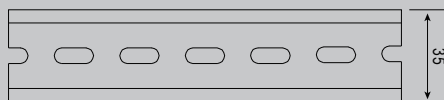
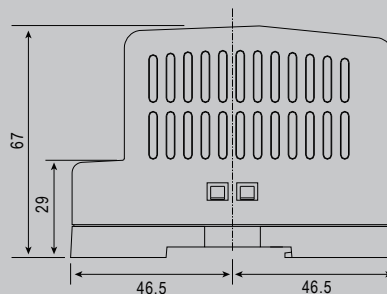
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## Mechanical Specification

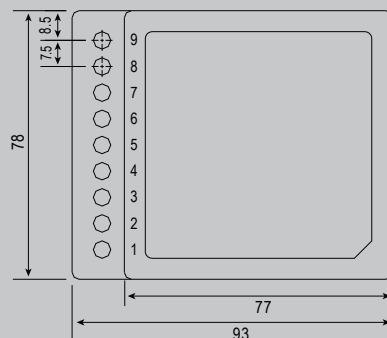
Unit: mm Case No. 918A



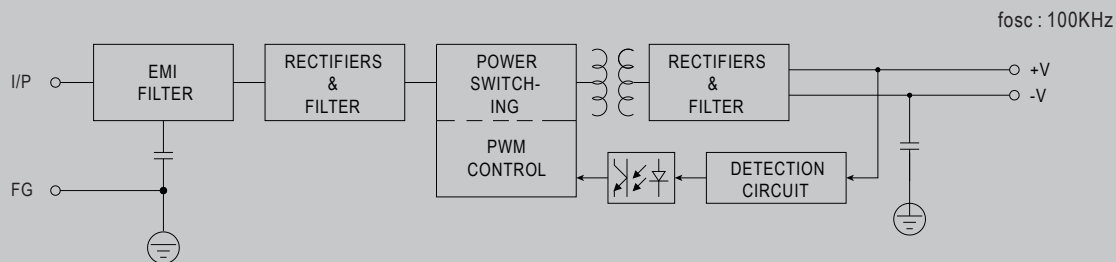
Install DIN rail TS35/7.5 or TS35/15

### Terminal Pin No. Assignment

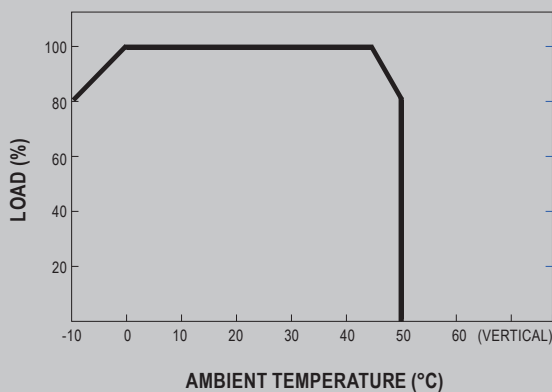
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	6,7	DC OUTPUT+V
2	AC/N	8	LED
3	FG ⊕	9	+VADJ.
4,5	DC OUTPUT -V		



## Block Diagram



## Derating Curve



## Output Derating VS Input Voltage

