



### ■ Features :

- \*Universal AC input/Full range
- \*Protections: Short circuit / Overload / Over voltage / Over temperature
- \*Cooling by free air convection
- \*Can be installed on DIN rail TS-35/7.5 or 15
- \*UL 508(industrial control equipment)approved
- \*LED indicator for power on
- \*100% full load burn-in test
- \*Fix switching frequency at 100KHz
- '3 years warranty

### **SPECIFICATION**

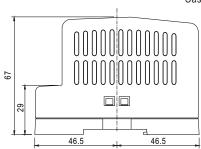


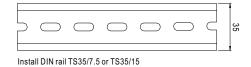
MODEL		DR-4505	DR-4512	DR-4515	DR-4524		
	DC VOLTAGE	5V	12V	15V	24V		
	RATED CURRENT	5A	3.5A	2.8A	2A		
	CURRENT RANGE	0 ~ 5A	0~3.5A	0~2.8A	0 ~ 2A		
	RATED POWER	25W	42W	42W	48W		
	RIPPLE & NOISE (max.) Note.2	100mVp-p	200mVp-p	240mVp-p	480mVp-p		
OUTPUT	VOLTAGE ADJ. RANGE	4.75 ~ 5.5V	10.8 ~ 13.2V	13.5 ~ 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	800ms, 60ms/230VAC at full load					
	HOLD UP TIME (Typ.)	60ms/230VAC at full load					
	VOLTAGE RANGE	85 ~ 264VAC 120 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz					
INDUT	EFFICIENCY (Typ.)	72%	77%	77%	80%		
INPUT	AC CURRENT (Typ.)	1.5A/115VAC 0.75A/230VAC					
	INRUSH CURRENT (Typ.)	COLD START 28A/115VAC 56A/230VAC					
	LEAKAGE CURRENT	<1mA / 240VAC					
	OVERLOAD	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		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					
	WORKING TEMP.	-10 ~ +50°C (Refer to "Derating Curve")					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-20 ~ +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 STANDARDS	UL508, TUV EN60950-1, EAC TP TC 004 approved					
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2.0KVAC O/P-FG:0.5KVAC					
EMC	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25 \( \textstyle / 70\% \) RH					
(Note 4)	EMC EMISSION	Compliance to EN55011,EN55032 (CISPR32), EN61000-3-2,-3, EAC TP TC 020					
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2 (EN50082-2), heavy industry level, criteria A, EAC TP TC 020					
OTHERS	MTBF	364.6K hrs min. MIL-HDBK-217F (25°C)					
	DIMENSION	93*78*67mm (L*W*H)					
	PACKING	0.31Kg; 48pcs/17.5Kg/1.3CUF1	•				
NOTE	<ol> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>Tolerance: includes set up tolerance, line regulation and load regulation.</li> <li>The 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 EMC directives.</li> <li>The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft)</li> </ol>						



# ■ Mechanical Specification

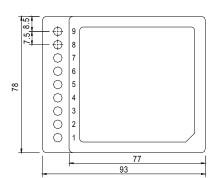
Case No. 918A Unit:mm





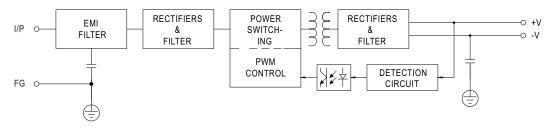
Terminal Pin No. Assignment

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



# ■ Block Diagram

fosc: 100KHz



### ■ Derating Curve

# ■ Static Characteristics (24V)

