

## **MEAN WELL**

## SWITCHING POWER SUPPLY ISO-9001 CERTIFIED MANUFACTURER

## DR-45 SERIES

.LOW COST, HIGH RELIABILITY .105°C OUTPUT CAPACITOR .INTERNATIONAL AC INPUT RANGE .COMPACT SIZE, LIGHT WEIGHT
.100% FULL LOAD BURN-IN TEST
.BUILT IN EMI FILTER, LOW RIPPLE NOISE

.HIGH EFFICIENCY, LOW WORKING TEMPERATURE
.SOFT-START CIRCUIT, LIMITING AC SURGE CURRENT
.SHORT CIRCUIT, OVERLOAD, OVER VOLTAGE PROTECTED



MODEL	DR-4505	DR-4512	DR-4515	DR-4524	
SPECIFICATION					
DC OUTPUT VOLTAGE	5V	12V	15V	24V	
OUTPUT V. TOLERANCE	±2%	±1%	±1%	±1%	
OUTPUT RATED CURRENT	5A	3.5A	2.8A	2A	
OUTPUT CURRENT RANGE	0-5A	0-3.5A	0-2.8A	0-2A	
RIPPLE & NOISE	100mVp-p	200mVp-p	240mVp-p	480mVp-p	
LINE REGULATION	±1%	±1%	±1%	±1%	
LOAD REGULATION	±1%	±1%	±1%	±1%	
DC OUTPUT POWER	25W	42W	42W	48W	
EFFICIENCY	72%	77%	77%	80%	
DC VOLTAGE ADJ.	+10 ,-5%		±10%		
INPUT VOLTAGE RANGE	85~264VAC 47~63Hz; 1	85~264VAC 47~63Hz; 120~370VDC			
AC CURRENT	1.5A/115V 0.75A/230V	1.5A/115V 0.75A/230V			
INRUSH CURRENT	COLD START 30A/115	COLD START 30A/115V 60A/230V			
LEAKAGE CURRENT	<1mA/240VAC	<1mA/240VAC			
OVERLOAD PROTECTION	105% ~150% TYPE:CO	105% ~150% TYPE:CONSTANT CURRENT LIMITING RESET:AUTO RECOVERY			
OVER VOLTAGE PROTECTION	115% ~135%				
OVER TEMP. PROTECTION	Tj 135°C TYPICALLY POWER SHUTDOWN				
TEMP. COEFFICIENT	±0.03% / °C (0-50°C)				
SETUP, RISE, HOLD UP TIME	800ms;60ms; 50ms/230	800ms;60ms; 50ms/230V			
VIBRATION	10~500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES				
WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC			
ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:500VDC / 100M Ohms				
WORKING TEMP., HUMIDITY	-10°C~+50°C(REFER 1	-10°C-+50°C(REFER TO OUTPUT DERATING CURVE), 20%-90% RH			
STORAGE TEMP., HUMIDITY	-20°C~+85°C, 10%~95	-20°C~+85°C, 10%~95% RH			
DIMENSION	93*78*67mm	93°78°67mm			
WEIGHT	0.4Kgs	0.4Kgs			
SAFETY STANDARDS	TUV EN60950, UL508 APPROVED				
EMC STANDARDS	CISPR22 (EN55022) CL	CISPR22 (EN55022) CLASS B, EN61000-4-2,3,4,5,6,8,11; ENV50204, EN61000-3-2,-3, EN50082-2			

NOTE: 1.ALL PARAMETERS ARE SPECIFIED AT 230VAC INPUT, RATED LOAD, 25° C 70% RH. AMBIENT.

2.TOLERANCE: INCLUDE SET UP TOLERANCE, LINE REGULATION, LOAD REGULATION.

3.RIPPLE & NOISE ARE MEASURED AT 20MHz BY USING A 12" TWISTED PAIR TERMINATED WITH A 0.1uF & 47uF CAPACITOR.

 $4. {\tt LINE} \ {\tt REGULATION} \ {\tt IS} \ {\tt MEASURED} \ {\tt FROM} \ {\tt LOW} \ {\tt LINE} \ {\tt TO} \ {\tt HIGH} \ {\tt LINE} \ {\tt AT} \ {\tt RATED} \ {\tt LOAD}.$ 

5.LOAD REGULATION IS MEASURED FROM 0% TO 100% RATED LOAD.

2002-09-11

## DR-45 SERIES **BLOCK DIAGRAM** RECTIFIERS & FILTER POWER SWITCH-**RECTIFIERS EMI I/P** ∽ & FILTER **FILTER** ING **PWM** DETECTION CIRCUIT CONTROL FG o fosc: 100KHz OUTPUT DERATING STATIC CHARACTERISTICS MODEL: DR-4524 350 UTPUT OUTPUT VOLTAGE (V) 32 100 28 80 24 250 LOAD (%) 200 🖥 60 20 150 Fi 16 40 100 3 12 50 0 20 20 30 40 50 60 (VERTICAL) 70 80 100 120 140 160 180 200 220 240 260 AMBIENT TEMP. (℃) INPUT VOLTAGE (V) 60Hz DIMENSION:mm **⊠ TERMINAL PIN NO. ASSIGNMENT** ☑PIN 1,2: AC INPUT ☑ PIN 3 : FG ⊕ ⊠PIN 4,5: DC OUTPUT -V ⊠PIN 6,7: DC OUTPUT +V 46.5 46.5 ⊠PIN 8 : LED ⊠PIN 9 : +V ADJ. **⊠** INSTALL DIN RAIL TS35/7.5 OR TS35/15



