

SMX POWER

3005 Avenida Simi, Simi Valley, CA 93063
TEL: (805) 582-2804 FAX: (805) 582-2308
www.smxpower.com

100 WATT SINGLE OUTPUT SWITCHING POWER SUPPLY WRD100-SX-SP SERIES



1) INPUT

VOLTAGE	AC INPUT: 85V (MIN.) ~ 264V (MAX.) DC INPUT: 120V(MIN.) ~ 375V(MAX.) UNIVERSAL FULL RANGE, SINGLE PHASE
FREQUENCY	47~63Hz.
CURRENT	1.8A MAX. AT 100V AC INPUT, FULL LOAD CONDITION
INRUSH CURRENT	30A MAX. AT 115V AC INPUT, FULL LOAD CONDITION. 60A MAX. AT 230V AC INPUT, FULL LOAD CONDITION. * COLD START, AT 25 °C AMBIENT.
LEAKAGE CURRENT	1.5mA MAX. AT 264V AC INPUT.

2) DC OUTPUT

MODEL NO.	WRD100-12SX-SP	WRD100-15SX-SP	WRD100-18SX-SP
VOLTAGE	12 V	15 V	18 V
MIN. LOAD	0 A	0 A	0 A
MAX. LOAD	9.8 A	7.84 A	5.5 A
REGULATION	±1 %	±1 %	±1 %
RIPPLE & NOISE (MAX.)	120 mV	150 mV	180 mV
EFFICIENCY (TYP.)	78 %	78 %	78 %
OVP	13.8 V ~ 17.5 V	17.3 V ~ 21.0 V	20.7 V ~ 25.2 V
OUTPUT POWER	100 W		
MODEL NO.	WRD100-24SX-SP	WRD100-28SX-SP	WRD100-48SX-SP
VOLTAGE	24 V	28 V	48 V
MIN. LOAD	0 A	0 A	0 A
MAX. LOAD	4.9 A	3.6 A	2.1 A
REGULATION	±1 %	±1 %	±1 %
RIPPLE & NOISE (MAX.)	240 mV	280 mV	300 mV
EFFICIENCY (TYP.)	80 %	80 %	82 %
OVP	27.6 V ~ 33.6 V	32.2 V ~ 39.2 V	55.2 V ~ 67.2 V
OUTPUT POWER	100W		

3)ELECTRONIC CHARACTERISTICS

RISE TIME	20mS MAX.
HOLD UP TIME	16.7mS MIN. TEST CONDITION AT 115V AC INPUT. 80mS MIN. TEST CONDITION AT 230V AC INPUT.
SETUP TIME	3Sec MAX. TEST CONDITION AT 115V AC INPUT. 1Sec MAX. TEST CONDITION AT 230V AC INPUT.
SHORT CIRCUIT PROTECTION	WHEN OUTPUT SHORT TO GROUND, THE POWER SUPPLY WILL SHUTDOWN AND AUTO RECOVERY WHEN SHORT CIRCUIT CONDITION HAS BEEN REMOVED.
OVER LOAD PROTECTION	WHEN OUTPUT POWER OVER 105% TO 180% OF RATED LOAD, THE POWER SUPPLY WILL SHUTDOWN AND AUTO RECOVERY WHEN FAULT CONDITION HAS BEEN REMOVED.
OUTPUT VOLTAGE ADJUSTMENT:	±10% OF RATED VOLTAGE.

4)PHYSICAL ENVIRONMENT (AMBIENT)

TEMPERATURE RANGE	
OPERATING TEMPERATURE RANGE	0 ~ 70 °C
DERATING FACTOR	42°C ~ 70°C : 2.0%/°C
STORAGE	-10 TO +75 °C
HUMIDITY	
OPERATION	20% TO 85% RH. (NON CONDENSING)
STORAGE AND SHIPPING	10% TO 95% RH. (NON CONDENSING)

5)COOLING

NATURAL COOLING.

6)SAFETY

THIS PRODUCT IS DESIGN TO COMPLY WITH THE FOLLOWING STANDARDS:

1. UL 1950 3rd EDITION (1998) APPROVED. (E 129733)
2. CSA C22.2 NO.950-95 3rd EDITION (1998) APPROVED BY UL.
3. TUV EN 60950: 1992+A1+A2+A3+A4+A11 (1997) APPROVED. (R 3-50003818)
4. IEC 60950:1991+A1+A2+A3+A4 (1996) APPROVED.
5. EMKO-TSE (74-SEC) 207/94 APPROVED.

7)EMC

THIS PRODUCT IS DESIGN TO COMPLY WITH THE FOLLOWING STANDARDS:

7.1) EMI:

- FCC CFR 47 PART 15 SUBPART J , CLASS B LIMIT
- EN 50081-1:1997 EMISSION STANDARD
EN 55022: 1997 CLASS B LIMIT
- CNS 13438 CLASS B.

7.2) EMS:

EN 50082-1 (1997) IMMUNITY STANDARD:

- EN 61000-4-2: 1995 ELECTROSTATIC DISCHARGE STANDARD
- EN 61000-4-3: 1996 RADIATED RF STANDARD.
- EN 61000-4-4: 1995 FAST TRANSIENT/BURST STANDARD
- EN 61000-4-5: 1995 LIGHTNING SURGE STANDARD.
- EN 61000-4-6: 1996 CONDUCTED RF STANDARD.
- EN 61000-4-8: 1993 POWER FREQ. MAG. FIELD STANDARD..
- EN 61000-4-11:1994 VOLTAGE DIP & INTERRUPT STANDARD.

8)M.T.B.F.

300K HOURS APPROXIMATELY, ACCORDING TO MIL-HDBK-217F AT 25°C ENVIRONMENT

9)MECHANICAL DATA

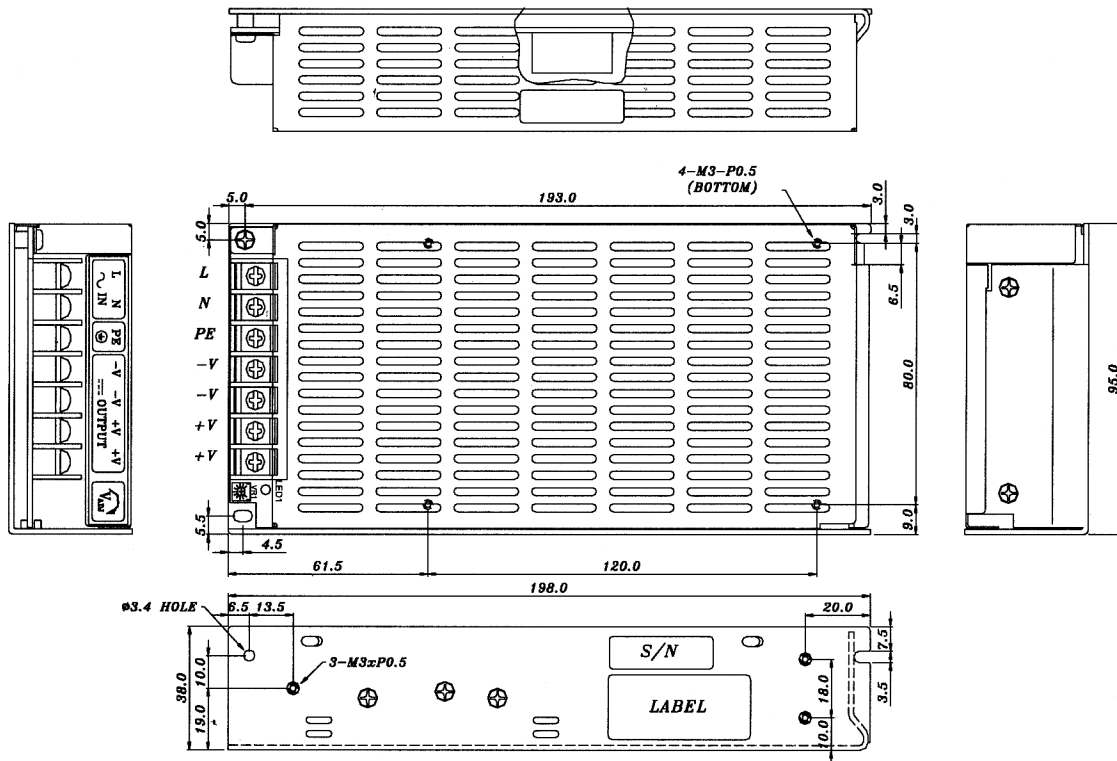
OUTLINE DIMENSION: W 95 ×D 198 ×H 38 mm

MATERIAL: COVER 0.6mm SPCC.

CHASIS 1.6mm NATURAL ALUMINUM

TERMINAL BLOCK: 7P, PITCH 9.5 mm.(STANDARD)

UNIT: mm.



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