

## **30W DIN RAIL SINGLE OUTPUT POWER SUPPLY**

## Single Output Switching Power Supply HDR-30-24



- Features
- -Ultra slim design with 35mm (2SU)width
- -Universal input 85~264VAC (277VAC operational)
- -No load power consumption<0.3W
- -Isolation class II
- -Protections: Short circuit / Overload / Over voltage
- -Cooling by free air convection
- DIN rail TS-35/7.5 or 15 mountable
- -Colling by free air convection



MODEL		HDR-30-24		
OUTPUT	DC VOLTAGE	24V		
	RATED CURRENT	1.5A		
	CURRENT RANGE	0 ~ 1.5A		
	RATED POWER	36W		
	RIPPLE & NOISE (max.) Note.2	150mVp-p		
	VOLTAGE ADJ. RANGE	21.6 ~ 29V		
	VOLTAGE TOLERANCE Note.3	±1.0%		
	LINE REGULATION	±1.0%		
	LOAD REGULATION	±1.0%		
	SETUP, RISE TIME	500ms, 50ms/230VAC 500ms, 50ms/115VAC at full load		
	HOLD UP TIME (Typ.)	30ms/230VAC 12ms/115VAC at full load		
INPUT	VOLTAGE RANGE	85 ~ 264VAC (277VAC operational) 120 ~ 370VDC (390VDC operational)		
	FREQUENCY RANGE	47 ~ 63Hz		
	EFFICIENCY (Typ.)	89%		
	AC CURRENT (Typ.)	0.88A/115VAC 0.48A/230VAC		
	INRUSH CURRENT (Typ.)	COLD START 25A/115VAC 45A/230VAC		
PROTECTION	OVERLOAD Note	105 ~ 160% rated output power		
		Protection type : Constant current limiting, recovers automatically after fault condition is removed		
	OVER VOLTAGE	30 ~ 36V		
		Protection type : Shut down o/p voltage, re-power on to recover		
ENVIRONMENT	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")		
	WORKING HUMIDITY	20 ~ 90% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH non-condensing		
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C) RH non-condensing		
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6		
	OPERATING ALTITUDE	2000 meters		

		III;According to EN61558, EN50178,EN60664-1, EN62477-1;altitude up to 2000 meters				
	SAFETY STANDARDS	UL60950-1, UL508, TUV EN61558-2-16, IEC60950-1, EAC TP TC 004, BSMI CNS14336-1 approved; Design refer to TUV EN60950-1				
	WITHSTAND VOLTAGE	I/P-O/P:4KVAC				
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH				
	EMC EMISSION	Parameter	Standard	Test Level / Note		
		Conducted	EN55032(CISPR32), CNS13438	Class B		
SAFETY &		Radiated	EN55032(CISPR32), CNS13438	Class B		
EMC (Note 5)		Harmonic Current	EN61000-3-2	Class A		
		Voltage Flicker	EN61000-3-3			
[	EMC IMMUNITY	EN55024, EN55035, EN61000-6-2, EN61204-3				
		Parameter	Standard	Test Level /Note		
		ESD	EN61000-4-2	Level 3, 8KV air; Level 2, 4KV contact, criteria A		
		Radiated Susceptibility	EN61000-4-3	Level 3, criteria A		
		EFT/Burest	EN61000-4-4	Level 3, criteria A		
		Surge	EN61000-4-5	Level 4,2KV/L-N, criteria A		
		Conducted	EN61000-4-6	Level 3, criteria A		
		Magnetic Field	EN61000-4-8	Level 4, criteria A		
		Voltage Dips and interruptions	EN61000-4-11	<ul> <li>&gt; 95% dip 0.5 periods, 30% dip 25 periods,</li> <li>&gt; 95% interruptions 250 periods</li> </ul>		
	MTBF	968.1K hrs min. MIL-HDBK-217F (25°C)				
OTHERS	DIMENSION	35*90*54.5mm (W*H*D)				
	PACKING	0.12Kg;96pcs/12.5Kg/1.04CUFT				
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>Constant current limiting operating within 50%~100% rated output voltage; protection type for short circuit is hiccup mode, it will recover automatically after fault condition is removed.</li> <li>The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives. For guidance on how to perform these EMS tests, please refer to "EMI testing of component power supplies."</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 grapted than 2000m (6500f)</li> </ol>					