

HXDW-240W SERIES



FEATURES

- Single and Two Phase Ultra Wide Input Range 180~550VAC
- Built-in DC OK Relay Contact
- Built-in Constant Current Limiting Circuit
- Built-in Active PFC Circuit
- Protection: Short Circuit/Overload /Over Voltage/Over Temperature
- High Efficiency 91% and Lower Power Dissipation
- 4 years warranty
- Works on DC Input (254~780VDC) also

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IEC 60950-1:2005
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HXDW-240 series are designed with metal housing and for single or two phase system with wide range from 180V AC to 550 V AC. The series offer DC OK relay contact , built-in constant current limiting circuit and active PFC function (except HXDW-60 & 120) , and operating in wide temperature range. They are suitable for industrial-related applications such as industrial control, semiconductor fabrication equipment, and factory automation etc.

SELECTION GUIDE

Product Model	DC Voltage	Rated Current	Rated Power
HXDW-240-24	24V	10A	240W
HXDW-240-48	48V	5A	240W

INPUT CHARACTERISTICS

Parameter	Units
RATED INPUT	220 ~ 480VAC
INPUT VOLTAGE RANGE	180 ~ 550VAC or 254 ~ 780VDC
FREQUENCY RANGE	47~63Hz
POWER FACTOR (Typ.)	PF≥0.84/400VAC
	PF≥0.84/230VAC
EFFICIENCY (Typ.)	91%
AC CURRENT(Typ.)	1A/400Vac
	2A/230Vac
INRUSH CURRENT(Typ.)	COLD START 50A
LEAKAGE CURRENT	<3.5mA / 530Vac

OUTPUT CHARACTERISTICS

Parameter	Units
RIPPLE & NOISE(MAX.)	150mVp-p
VOLTAGE TOLERANCE	±2.0%
LINE REGULATION	±0.5%
LOAD REGULATION	±1.0%
SETUP, RISE TIME & HOLD TIME	800ms, 150ms/400VAC at full load 1500ms, 150ms/230VAC at full load

FUNCTION

Parameter	Units
DC OK REALY CONTACT RATINGS (max.)	60Vdc/0.3A, 30Vdc/1A, 30Vac/0.5A resistive load

PROTECTION

Parameter	Units	
OVER LOAD	105 ~ 130% rated output power.	
	Protection type : Constant current limiting, unit will shut down after 3 sec., auto-recovery after 1 minute if the fault condition is removed.	
OVER VOLTAGE	24 ~ 28V	HXDW-240-24
	48 ~ 55V	HXDW-240-48
	Protection type : Shut down o/p voltage, auto-recovery after 1 minute if the fault condition is removed.	
OVER TEMPERATURE	90°C±5°C (TSW) detect on heatsink of power switch.	
	Protection type : Shut down o/p voltage, recovers automatically after temperature goes down.	

ENVIRONMENT

Parameter	Units
WORKING TEMP	-30 ~ +70°C (Refer to "Derating Curve")
WORKING HUMIDITY	20 ~ 95% RH non-condensing
STORAGE TEMP, HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH
COLD START	-40°C
TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)
VIBRATION	Component: 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting clip: Compliance to IEC60068-2-6.
MTBF	900K hrs min. Telcordia SR-332 (Bellcore)

SAFETY & EMC

Parameter	Units
SAFETY STANDARDS	BS EN/EN62368-1
WITH STAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC O/P-DC OK: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 BS EN/EN55032, BS EN/EN61000-3-2,-3
EMC IMMUNITY	Compliance to BS EN/EN61000-4-2, 3, 4, 5, 6, 8, 11

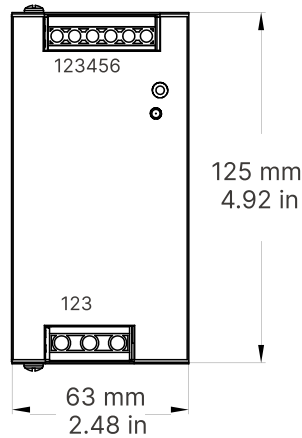
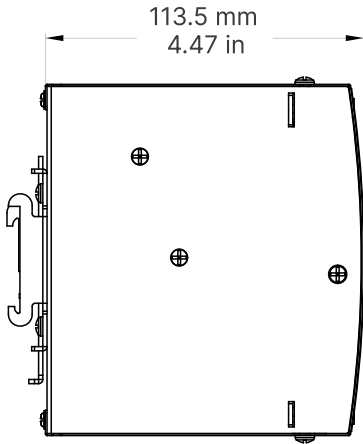
NOTE

1. All parameters NOT specially mentioned are measured at 400VAC input, rated load and 25°C of ambient temperature
2. Ripple&noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
3. Installation clearances: top with 40mm, bottom with 20mm, left and right with 5mm. Increase the space to 10-15mm when the adjacent device is heat source.
4. The ambient temperature derating of 3.5 °C/1000m for operating altitude higher than 2000m(6500ft).
5. 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. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."

DIMENSION, WEIGHT & PACKING

Parameter	Units
Length:	63*113.5*125mm (LxWxH)
Weight:	1kg

MECHANICAL SPECIFICATION



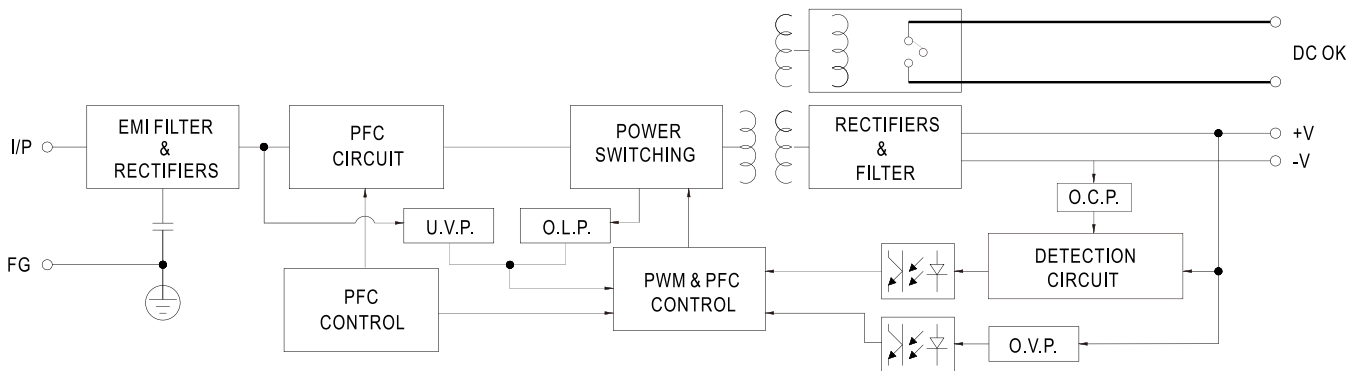
Input

No	Description
1	FG \perp
2	AC/L2
3	AC/L1

Output

No	Description
1,2	Relay Contact
3,4	DC OUTPUT -V
5,6	DC OUTPUT +V

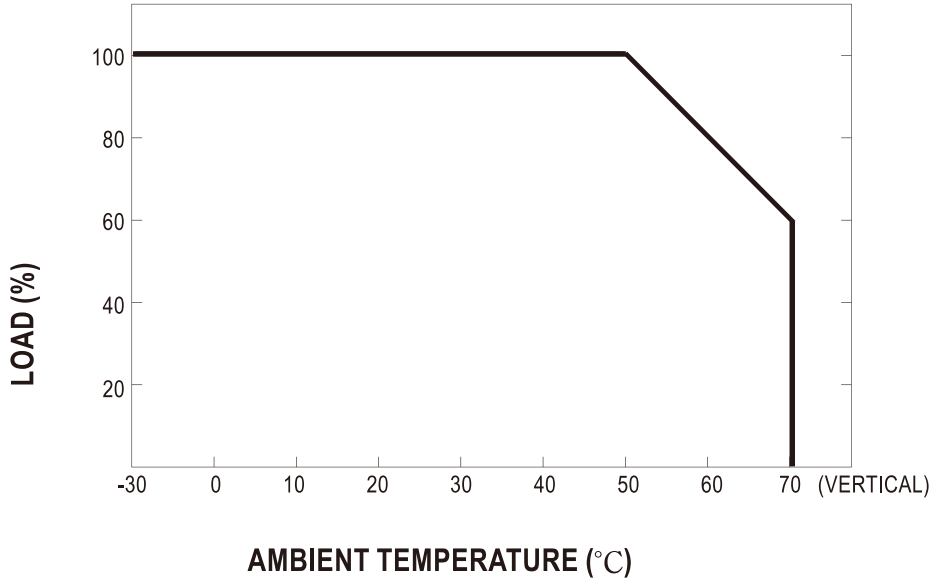
BLOCK DIAGRAM



DC OK RELAY CONTACT

Parameter	Units
CONTACT CLOSE	PSU turns ON /DC OK
CONTACT OPEN	PSU turns OFF /DC FAIL
CONTACT RATINGS (max)	30V/1A resistive load

DERATING CURVE



OUTPUT DERATING VS INPUT VOLTAGE

