HXDT-240W SERIES

FEATURES

- 3-Phase 340~550VAC Wide Range Input (2-phase operation possible)
- Protection: Short Circuit/Overload /Over Voltage/Over Temperature
- Built-in Constant Current Limiting Circuit
- Full Power Between -30~+60°C
- Built-in Active PFC Function
- DC OK Relay Contact
- High Efficiency 92% and Low Power Dissipation
- 4 Years Warranty
- Works on DC Input (450~850VDC) also

IS 13252 (Part 1) 2010/
IEC 60950-1:2005
R-62006220
www.bis.gov.in

HXDT-240 series are designed with metal housing and for three phase system with wide range from 340VAC To 550VAC. The series offer built-in constant current limiting circuit and active PFC function, 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
HXDT-240-24	24V	10A	240W
HXDT-240-48	48V	5A	240W

INPUT CHARACTERISTICS

Parameter	Units
RATED INPUT (Certified Voltage)	Three-Phase 380~ 480VAC (Dual phase operation possible in connecting L1,L3,FG or L2,L3,FG) or 480 ~ 850VDC
INPUT VOLTAGE RANGE	340 ~ 550VAC/450 ~ 850VDC
FREQUENCY RANGE	47~63Hz
POWER FACTOR (Typ.)	PF≥0.53/400VAC at full load
	PF≥0.52/500VAC at full load
EFFICIENCY (Typ.)	92%
AC CURRENT(Typ.)	0.69A/400VAC
	0.6A/500VAC
INRUSH CURRENT(Typ.)	COLD START 50A
LEAKAGE CURRENT	<2mA / 530VAC

OUTPUT CHARACTERISTICS

Parameter	Units	
RIPPLE & NOSE(MAX.)	100mVp-p	HXDT-240-24
	120mVp-p	HXDT-240-48
VOLTAGE TOLERANCE	±1.0%	
LINE REGULATION	±0.5%	
LOAD REGULATION	±1.0%	
SETUP,RISE TIME	2000ms, 60ms/400VAC at full load	
	1500ms, 60ms/500VAC at full load	
HOLD UP TIME (Typ.)	20ms / 400VAC at full load	
	40ms / 500VAC at full load	

PROTECTION

Parameter	Units	Model
OVER LOAD	105 ~ 130% rated output power	
	protection type : Constant current limiting, unit will hiccup after 3 sec	
	re-power on to recover	
OVER VOLTAGE	30~36V	HXDT-240-24
	56~65V	HXDT-240-48
	protection type : Hiccup mode, recovers automatically after fault condition is removed.	
OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down.	

FUNCTION

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

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 non-condensing
COLD START	-40°C-40°C
TEMP. COEFFICIENT	±0.05%/ °C (0 ~ 60 °C)
VIBRATION	Component:10 ~ 500Hz, 2G 10min./1cYcle, 60min. each along
	X,Y, Z axes; Mounting: Compliance to IEC60068-2-6
OPERATING ALTITUDE	5000 meters
OVERVOLTAGE CATEGORY	Class III; According to EN61558, EN50178, EN60664-1, EN62477-1, EN60204-1; altitude up to 2000 meters
MTBF	1500k hrs min.TelcordiaSR-332(Bellcore)

SAFETY & EMC

Parameter	Units
SAFETY STANDARDS	BS EN/EN61010-1
WITHSTAND 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	BS EN/EN55032(CISPR32)
EMC IMMUNITY	BS EN/EN61000-4-2, 3, 4, 5, 6, 8

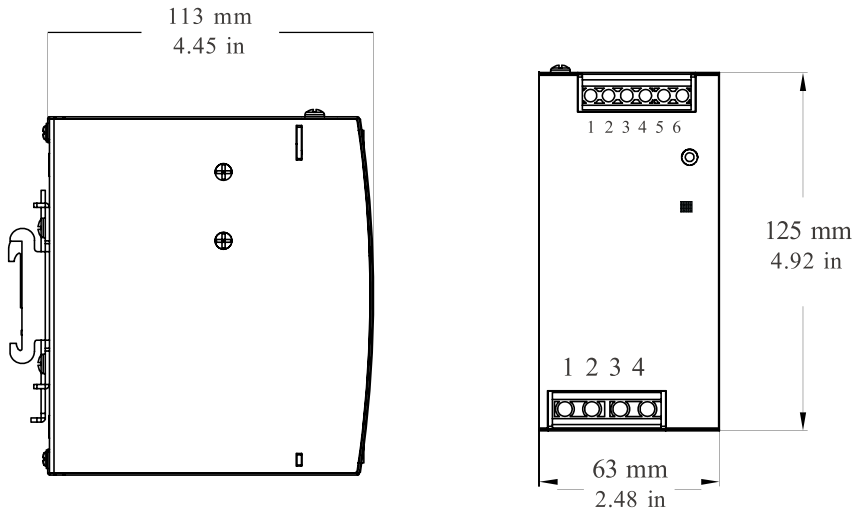
NOTE

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
SIZE:	63*113*125mm (LxWxH)
WEIGHT:	1kg
CARTON SIZE	52.5 X 33 X 17.5 CM
	20.7 X 13 X 6.9 in
MASTER CARTON QUANTITIES:	10pcs/ Carton

MECHANICAL SPECIFICATION



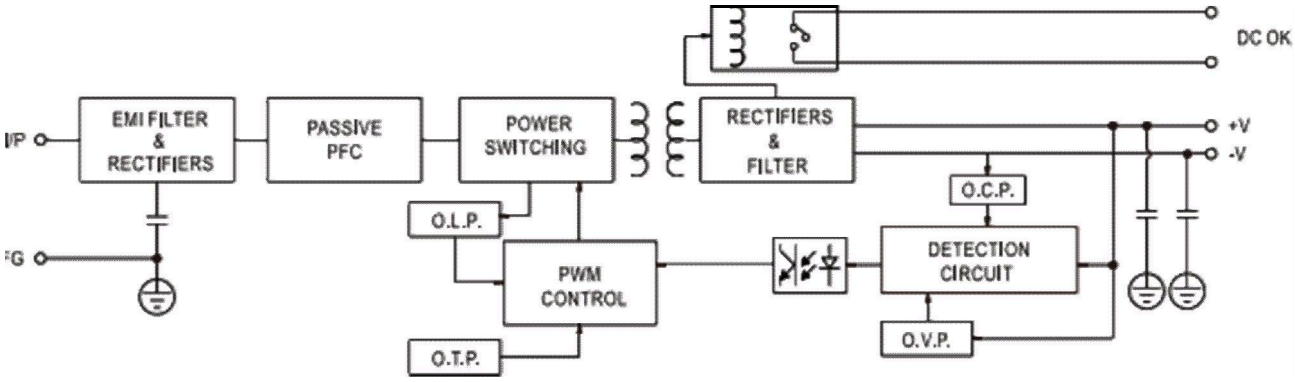
Input

No	Description
1	AC/L1
2	AC/L2 or DC -
3	AC/L3 or DC +
4	FG ⏚

Output

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

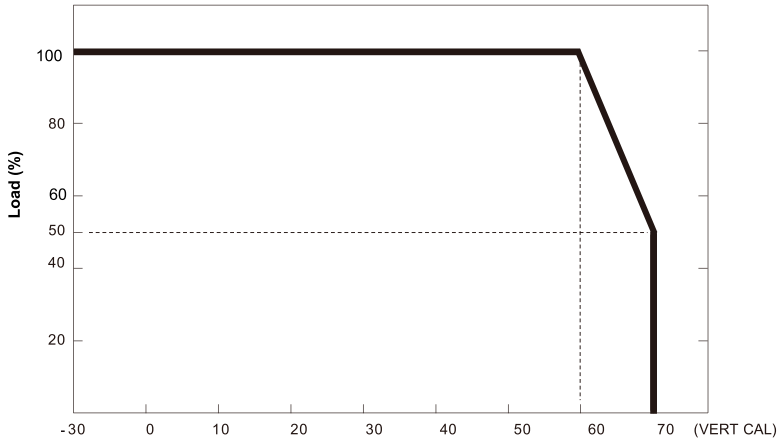
BLOCK DIAGRAM



DC OK RELAY CONTACT

Parameter	Units
CONTACT CLOSE	PSU turns ON /DC OK
CONTACT OPEN	PSU turns OFF /DC FAIL
CONTACT RATINGS (max)	30VDC/1A, 30VAC/0.5A resistive load

DERATING CURVE



OUTPUT DERATING VS INPUT VOLTAGE