

HXDN-75W SERIES



FEATURES

- DC O/P Voltage Adjustable
- Protections: Short circuit/Overload/Over voltage/Over temperature
- High efficiency and low power dissipation
- Installation: DIN Rail TS-35/7.5 & 15
- Universal AC Input:90-264V
- Built-in DC OK relay contact
- Free Air Convection Design
- 4 Years Warranty
- Works on DC Input (120~370VDC) also

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



HXDN-75 is a metal case power family designed with slim housing and for full range AC input from 90 VAC To 264VAC. The series are single phase power supply, providing adjustable DC output voltage. They have high efficiency and operate in wide temperature range. The series can widely used for industrial automation & control systems, varied equipments etc.

SELECTION GUIDE

Product Model	DC Voltage	Rated Current(max)	Rated Power
HXDN-75-12	12V	6.3A	75.6W
HXDN-75-24	24V	3.2A	76.8W
HXDN-75-48	48V	1.6A	76.8W

INPUT CHARACTERISTICS

Parameter	Units	Model
NOMINAL INPUT VOLTAGE	100-240 VAC	
VOLTAGE RANGE	90~264VAC,120~370VDC	
FREQUENCY RANGE	47~63Hz	
EFFICIENCY(TYP.)	85.5%	HXDN-75-12
	88%	HXDN-75-24
	88%	HXDN-75-48
No Load Power Consumption	0.7W max.	
AC CURRENT(TYP.)	1.45A/115VAC	
	0.9A/230VAC	
INRUSH CURRENT(TYP.)	20A/115VAC, Cold Start	
	35A/230VAC, Cold Start	
LEAKAGE CURRENT	2mA max.	
START-UP WITH CAPACITION LOADS	700 μ F min.	

OUTPUT CHARACTERISTICS

Parameter	Units	Model
RIPPLE & NOISE(MAX.)	100mVp-p	HXDN-75-12
	120mVp-p	HXDN-75-24
	150mVp-p	HXDN-75-48
VOLTAGE TOLERANCE	\pm 2.0%	
LINE REGULATION	\pm 0.5%	

Parameter	Units	Model
LOAD REGULATION	±1.0%	
SET-UP, RISE & HOLD UP TIME	2000ms max. / 60ms max. / 12ms Typ. 115VAC at full load	
	1200ms max. / 60ms max. / 60ms Typ. 230VAC at full load	
VOLTAGE ADJ. RANGE	12~14V	HXDN-75-12
	24~28V	HXDN-75-24
	48~55V	HXDN-75-48

PROTECTION

Parameter	Units	Model
OVER LOAD	105 ~ 150% rated output power	
	Protection Type: Hiccup mode, recovers automatically after fault condition is removed	
OVER VOLTAGE	14 ~ 17V	HXDN-75-12
	29 ~ 33V	HXDN-75-24
	56 ~ 65V	HXDN-75-48
	Protection Type : Shut down o/p voltage, re-power to recover	
INTERNAL FUSE AT L PIN	F5 A /250V	
SHORT CIRCUIT	Protection Type: Hiccup mode, recovers automatically after fault condition is removed	

FUNCTION

Parameter	Units
DC OK Relay Contact Ratings(max)	60VDC/0.3A, 30VDC/1A, 30VAC/0.5A resistive load

ENVIRONMENT

Parameter	Units
WORKING TEMP	-20 ~ +70 °C (Refer to "Derating curve")
START-UP TESTED TEMP.	-30°C (full load max.)
WORKING HUMIDITY	20 ~ 95% RH non-condensing
STORAGE TEMP., HUMIDITY	-40 ~ +85 °C, 10 ~ 95% RH
MTBF	Conducted by Parts Stress Analysis Prediction
	298.3K hrs min. MIL-HDBK-217F (25°C)
TEMP. COEFFICIENT	±0.03%/ °C (0 ~ 50 °C)
VIBRATION	Component:10 ~ 500Hz, 2G 10min./1cycle, 60min
	Each along X,Y,Z axes; Mounting: compliance to IEC60068-2-6
OVER VOLTAGE CATEGORY	Class II
POLLUTION DEGREE	2

SAFETY AND ELECTROMAGNETIC COMPATIBILITY

Parameter	Units
SAFETY STANDARDS	BS/EN62368-1
WITH STAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG: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, BS EN/EN55035, BS
	EN/EN61000-6-2(BS EN/EN50082-2)

NOTE

1. All parameters NOT specially mentioned at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured from peak to peak with bandwidth limit of 20MHz (0.1uF and 47uF/50V parallel capacitor under DC output full load, AC nominal input 25°C).
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. Derating may be needed under low input voltage .Please check the derating curve for more details.
5. The ambient temperature derating of 3.5°C/1000m for operating altitude higher than 2000m(6500ft).

MECHANICAL & PACKING

Parameter	Units
Housing material	Aluminium / steel
Dimensions(HXWXD)	125×32×100.5mm(4.92×1.26×3.96inch)
Weight	0.5kg
Connection Method	Input & Output, Screw connection
Terminal	Input 4 pins / Output 3 pins
Wire	Input 24-12AWG / 0.2-2.5mm ²
	Output 24-12AWG / 0.2-2.5mm ²
Stripping length	Input 7-8mm, Output 7-8mm
Tightening torque	Input 0.4Nm, Output 0.4Nm
Mounting Rail	Standard TS35 DIN Rail in accordance with EN60715
Inner box	1pcs / box, 14.7 * 5.6 * 14cm / 5.79 * 2.2 * 5.51in
Outer carton	20pcs/carton, 31.5 * 30 * 30cm / 12.4 * 11.81 * 11.81in

DRAWING AND LABEL

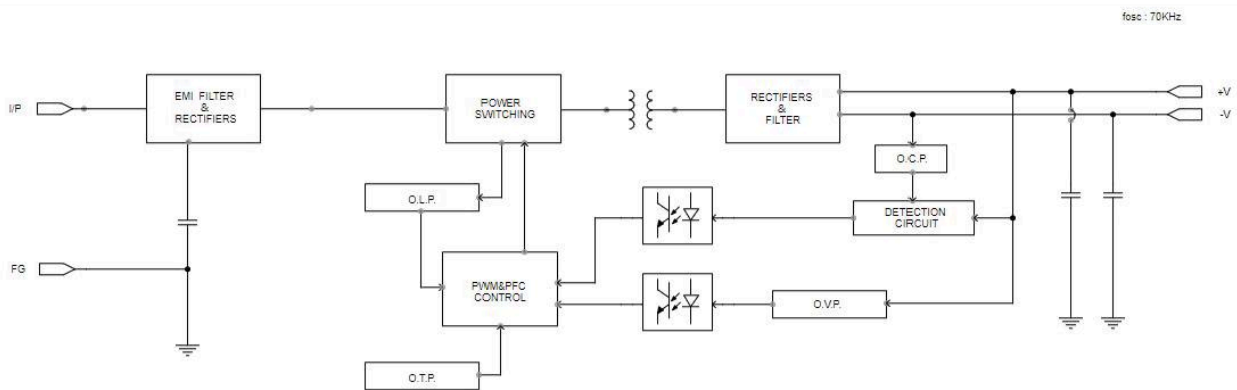
Terminal Pin No Assignment (TB1)

Pin No	Assignment
1	FG
2	AC/N or DC-
3	AC/L or DC+

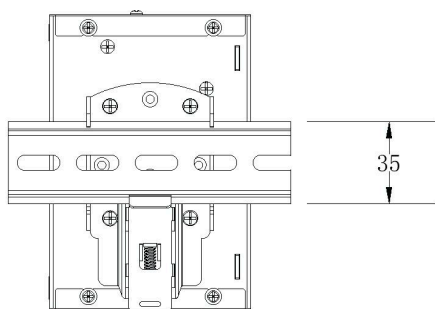
Terminal Pin No Assignment (TB2)

Pin No	Assignment
1,2	DC OUTPUT -V
3,4	DC OUTPUT +V

BLOCK DIAGRAM

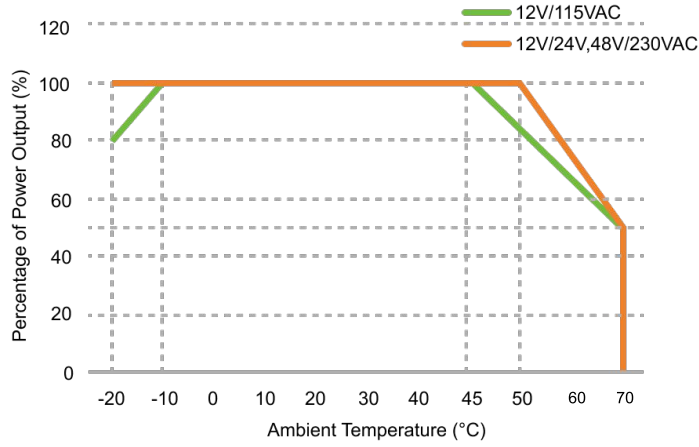


INSTALLATION INSTRUCTION



ADMISSIBLE DIN-RAIL: TS35/7.5 OR TS35/15
(For reference only. Not included with unit.)

DERATING CURVE



OUTPUT DERATING VS INPUT VOLTAGE

