RHENXV
Your Vision, Our Solutions

Switch Mode Power Supply 150W

HXE-150 SERIES

FEATURES

- Universal AC Input/ Full Range
- High Operating Temperature up to 70 °C
- Protection: Short Circuit/Overload/Over Voltage
- Cooling by free air convection
- Higher Efficiency / Low Power Dissipation
- 4 Years Warranty

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

UK CA CE RoHS

HXE 150 series are designed with lower pole housing and for wide range AC input from 90VAC to 264VAC.In addition to the high efficiency, Delivering an extremely low no load power consumption. The design of metallic mesh case enhances the heat dissipation. The good performance can be used for industrial automation & control systems, varied equipments etc.

SELECTION GUIDE

Product model	DC Voltage	Rated Current	Rated Power	Max. Capacitive Load (μF)
HXE-150-12	12V	12.5A	150W	1000uF
HXE-150-15	15V	10A	150W	5000uF
HXE-150-24	24V	6.5A	156W	2400uF
HXE-150-36	36V	4.3A	154.8W	1200uF
HXE-150-48	48V	3.3A	158.4W	600uF

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INPUT CHARACTERISTICS

Parameter	Units	Model
RATED INPUT VOLTAGE	100-240VAC	
VOLTAGE RANGE	90-264VAC/120-373VDC	
FREQUENCY RANGE	50/60Hz	
AVERAGE EFFICIENCY(115/230VAC)	87.5%	HXE-150-12
	89%	HXE-150-15
	89%	HXE-150-24
	89%	HXE-150-36
	90%	HXE-150-48
AC CURRENT(Typ.)	3A/115VAC	
	1.7A/230VAC	
INRUSH CURRENT(Typ.)	COLD START 30A/115VAC,50A/230VAC	
LEAKAGE CURRENT	<0.75mA/240VAC	

OUTPUT CHARACTERISTICS

Parameter	Units	Model
RIPPLE & NOSE(max.)	150mVp-p	HXE-150-12
	150mVp-p	HXE-150-15
	200mVp-p	HXE-150-24
	200mVp-p	HXE-150-36
	200mVp-p	HXE-150-48
VOLTAGE TOLERANCE	±1.0%	
LINE REGULATION	±0.5%	

Parameter	Units	Model
LOAD REGULATION	±0.5%	
SETUP TIME	500ms at full load	
RISE TIME	30ms at full load	
HOLD UP TIME (Typ.)	40ms/230VAC at full load	
	35ms/115VAC at full load	

PROTECTION

Parameter	Units
SHORT CIRCUIT	Protection type: Hiccup mode, recovers automatically after fault condition is removed
OVER LOAD	110%-150% Rated Output Power
	Protection type: Hiccup mode, recovers automatically after fault condition is removed
OVER VOLTAGE	5V:4.5~6.75V
	12V:10.2~13.8V
	15V:13.5~18V
	24V:21.6~28.8V
	36V:32.4~39.6V
	48V:43.2~52.8V
	Protection type: Shut down o/p voltage, re-power on to recover

ENVIRONMENT

Parameter	Units
WORKING TEMP	-30°C to +70 °C (Refer to "Derating Curve")
Working Humidity	20~90% RH Non-Condensing
STORAGE TEMP, HUMIDITY	~40°C~+85°C, 10~95% RH non-condensing
TEMP COEFFICIENT	±0.03%/°C(0~50°C)
SAFETY PROTECTION	CLASS I
VIBRATION	10~500Hz, 5G 10min./1 cycle,60 min. each along X,Y,Z axes
OVER VOLTAGE CATEGORY	III; According to BS EN/EN61558, BS EN/EN50178, altitude up to 2000 meters
MTBF	558.2Khrs min. MIL-HDBK-217F(25°C)

SAFETY & EMC

Parameter	Units
SAFETY STANDARDS	BS EN/EN62368-1, BS EN/EN60335-1, BS EN/EN61558-1
WITH STAND VOLTAGE	I/P-O/P:4KVAC/min, I/P-PE:2KVAC/min, O/P-FG:1.25KVAC/min
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(CISPR32)Class B BSEN/EN61000-3-2,-3,ClassA
EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,perf. CriteriaA BS EN/EN61000-4-11,perf.CriteriaA,BS EN/EN55035

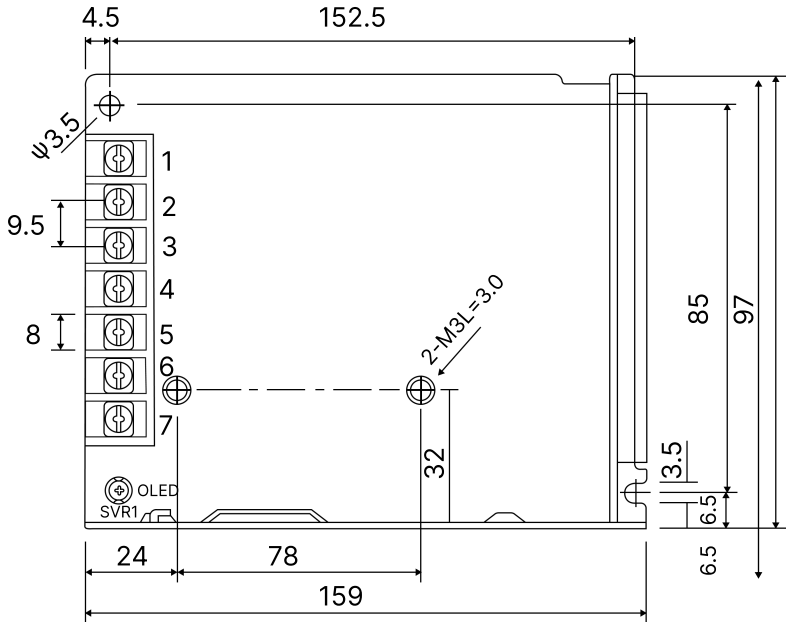
NOTE

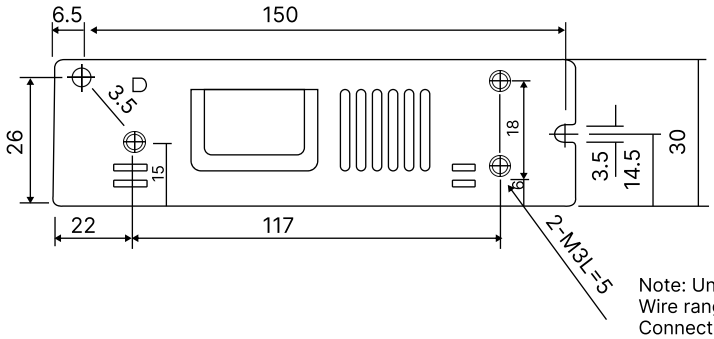
1. All parameters NOT specially mentioned are measured at 115/230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.
4. Line regulation is measured from low line to highline at rated load.
5. Load regulation is measured from 0% to 100% rated load.
6. Length of set up time is measured at cold first start. Turning ON/OFF the power supply very quickly may lead to increase of the set up time.
7. The ambient temperature derating of 5°C/1000m is needed for operating altitude greater than 2000m(6500ft).
8. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives.
9. The out case needs to be connected to the earth, of system when the terminal equipment in operating

DIMENSION, WEIGHT & PACKING

Parameter	Units
Length:	159*87*30mm (LxWxH)
Weight:	480g
Carton Size:	36×31.5×17.5CM
	14.17×12.40×6.89in
Master Carton Quantities:	30pcs/Carton

DIMENSIONS AND INSTALLATION





Note: Unit: mm[inc]
Wire range: 22-12AWG
Connector tightening torque: M3.5,0.8N-m
General tolerances:+1.00[+0.039]

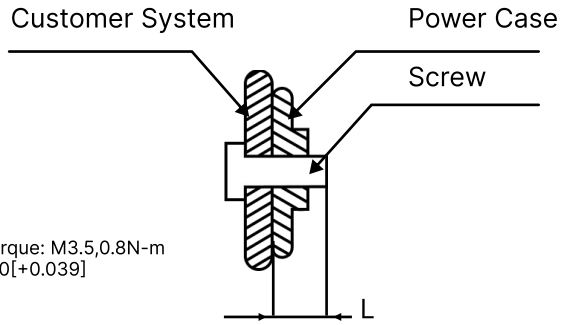
Input

No.	Description
1	AC/L
2	AC/N
3	PE ⏚

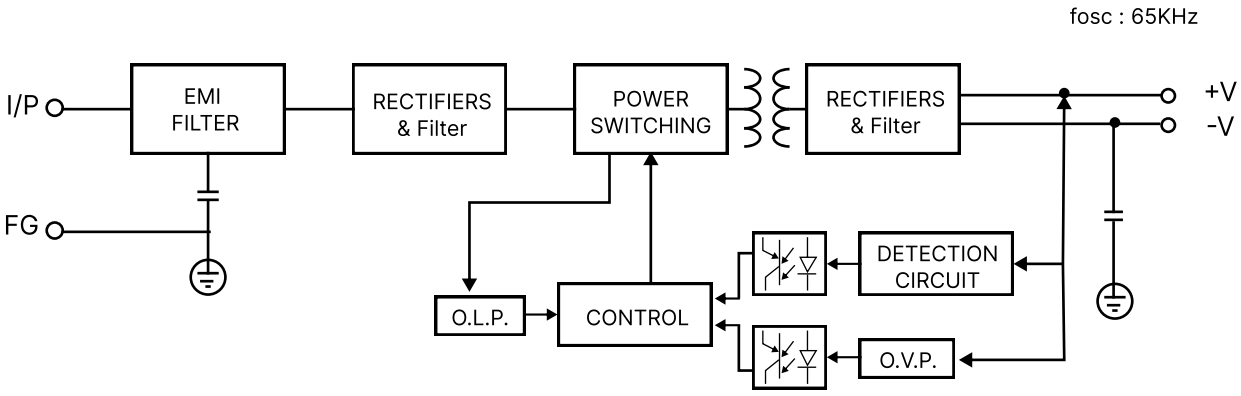
Output

No.	Description
4,5	DC OUTPUT-V
6,7	DC OUTPUT+V

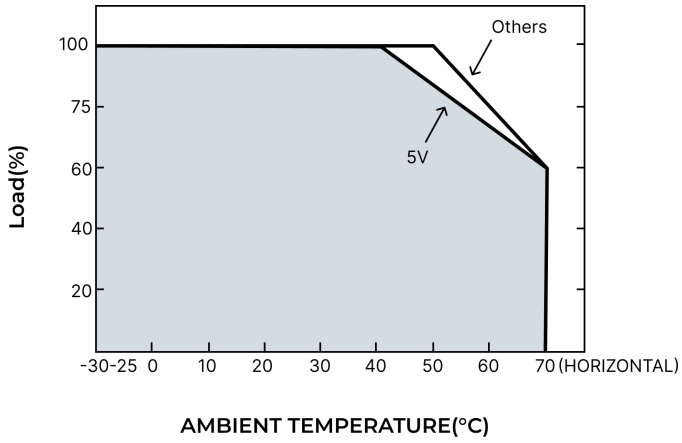
Screw Spec.	L(max)	Torque(max)
M3	5mm	0.4N-m
M3	3mm	0.4N-m



BLOCK DIAGRAM



DERATING CURVE



OUTPUT DERATING VS INPUT VOLTAGE CURVES