

## HXE-15 SERIES

### FEATURES

- Universal AC input/ Full range
- Leakage Current: <2mA
- No load power consumption<0.5W
- Extremely low leakage current
- Protection: Over load/Over voltage/Short circuit/ Over Temperature
- Withstand voltage : 3KV
- Class I isolation level
- Over voltage class III (designed to meet EN61558)
- 4 years warranty



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



HXE15 series are designed with lower pole housing ,adopting the input of 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-15-05	5V	3A	15W	2400uF
HXE-15-12	12V	1.3A	15W	1800uF
HXE-15-24	24V	0.625A	15W	600uF
HXE-15-48	48V	0.313A	15W	300uF

## INPUT CHARACTERISTICS

Parameter	Units	Model
INPUT VOLTAGE	90-305VAC/127-430VDC	
FREQUENCY RANGE	47-63 HZ	
AVERAGE EFFICIENCY(115/230VAC)	75%	HXE-15-05
	79%	HXE-15-12
	80%	HXE-15-24
	81%	HXE-15-48
AC CURRENT(Typ.)	0.35A/115VAC 0.25A/230VAC	
INRUSH CURRENT(Typ.)	Cold start 65A. at 230 VAC/50Hz, full load	
LEAKAGE CURRENT	<2mA/240VAC	

## OUTPUT CHARACTERISTICS

Parameter	Units	Model
RIPPLE & NOSE(max.)	75mVp-p	HXE-15-05
	120mVp-p	HXE-15-12
	200mVp-p	HXE-15-24
	200mVp-p	HXE-15-48
VOLTAGE TOLERANCE	±2.0%	HXE-15-05
	±1.0%	HXE-15-12
	±1.0%	HXE-15-24
	±1.0%	HXE-15-48
LINE REGULATION	±0.5%	
LOAD REGULATION:	±1.5%	HXE-15-05
	±0.5%	HXE-15-12
	±0.5%	HXE-15-24
	±0.5%	HXE-15-48

Parameter	Units
SETUP TIME	1000ms/115VAC at full load
	500ms/230VAC at full load
RISE TIME	30ms/115VAC at full load
	30ms/230VAC at full load
HOLD UP TIME (Typ.)	20ms/115VAC at full load
	70ms/230VAC at full load

## PROTECTION

Parameter	Units
SHORT CIRCUIT	Protection type: hiccup mode, recovers automatically after fault condition is removed.
OVER VOLTAGE	5V:5.75 ~ 6.75V
	12V:13.8 ~ 16.2V
	24V:27.6 ~ 32.4V
	48V:55.2 ~ 64.8V
OVER LOAD	Above 105% rated output power Protection type: Hiccup mode, recovers automatically after fault condition is removed
OVER TEMPERATURE:	Shut down o/p voltage , re-power on to recover

## ENVIRONMENT

Parameter	Units
WORKING TEMP	-20°C to + 60°C (Refer to "Derating Curve")
STORAGE TEMP.:	-40 ~ 85°C
STORAGE TEMP, HUMIDITY	10 ~ 95% RH, 20 ~ 95% RH non-condensing
MTBF	600Khrs min. MIL-HDBK-217F(25°C)

## SAFETY & EMC

Parameter	Units
SAFETY STANDARDS	TUV BS EN/EN62368-1, IEC60950-1:20
WITHSTAND VOLTAGE	I/P-O/P:3KV AC I/P-FG:2KV AC O/P-FG:0.5KV AC
ISOLATION RESISTANCE	I/P-O/P , I/P-FG , O/P-FG:100M OHMS /500VDC /25 /70% RH
EMC EMISSION	COMPLIANCE TO BS EN/EN55032 (CISPR32) CLASS B, BS EN/EN61000-3-2, -3 CLASS A, GB9254 CLASS B
EMC IMMUNITY	EN/EN61000-4-2, 11 PERF. CRITERIA B; EN/EN61000-4-3,4,5,6,8 PERF. CRITERIAA ; BS EN/EN55035

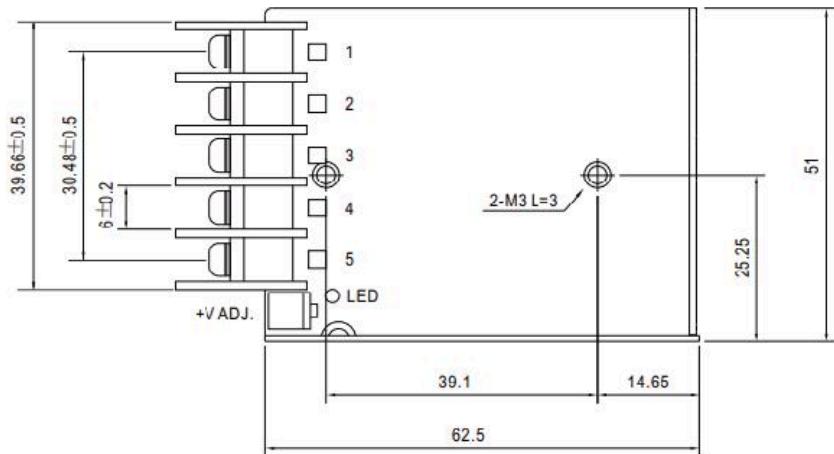
## Note

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
SIZE	62.5*51*28mm (LxWxH)
WEIGHT:	130g
MASTER CARTON QUANTITIES:	100 PCS/CTN

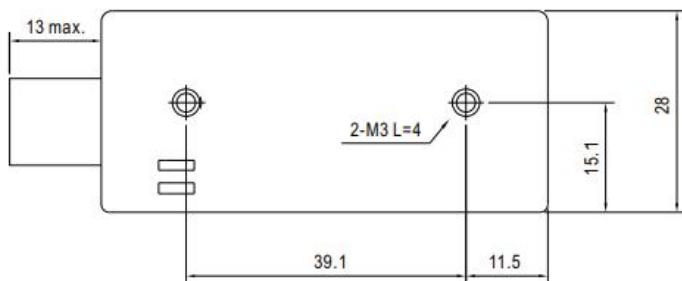
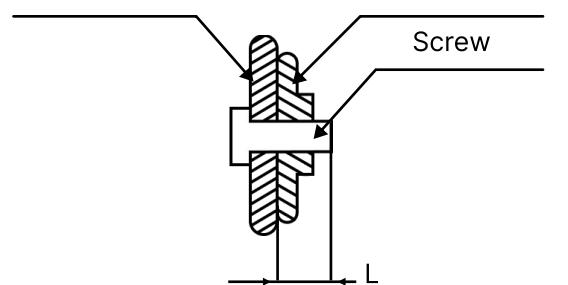
## DIMENSIONS AND INSTALLATION


**Input**

No.	Description
1	AC/L
2	AC/N
3	FG ±

**Output**

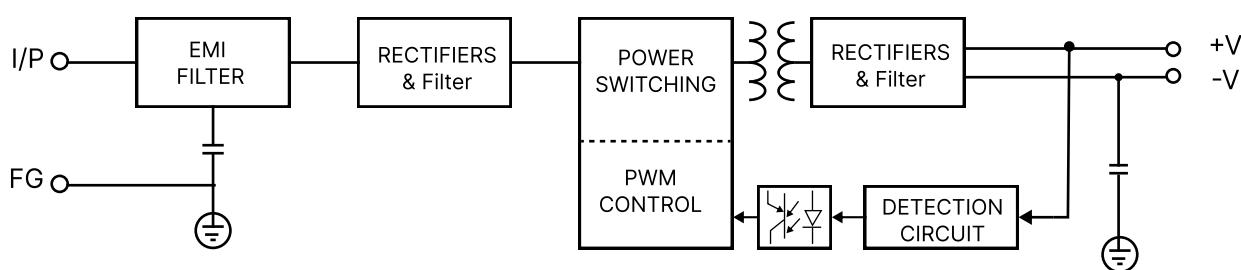
No.	Description
4	DC OUTPUT-V
5	DC OUTPUT+V


**Customer System**


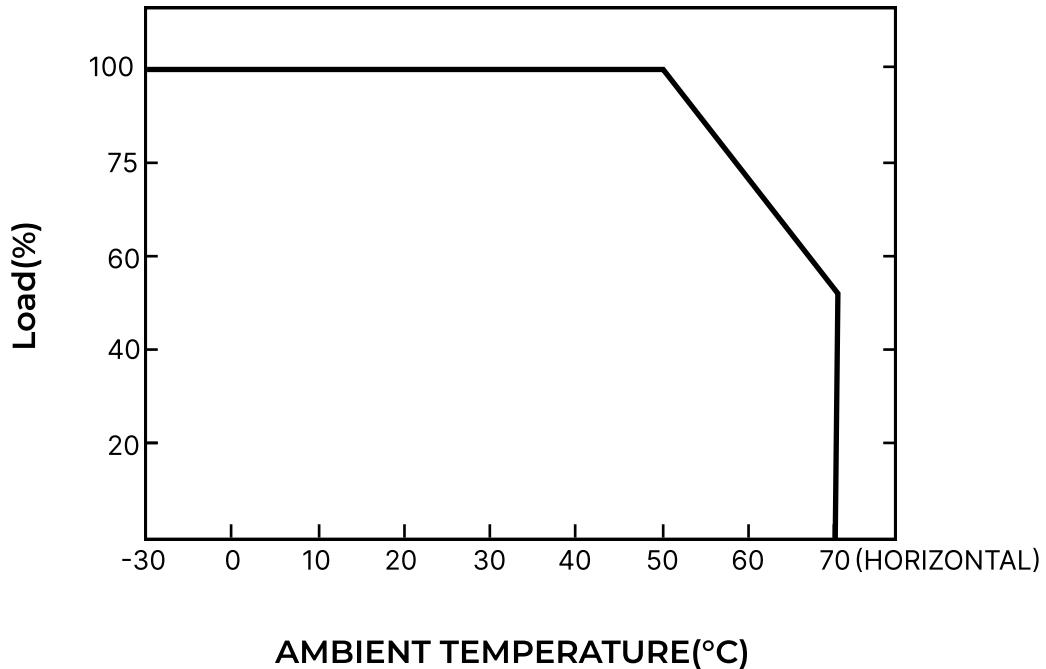
Note: Unit: mm[inc]  
Wire range: 22-12AWG  
Connector tightening torque: M3.5,0.8N·m  
General tolerances:+1.00[+0.039]

## BLOCK DIAGRAM

fosc : 132 KHz



## DERATING CURVE



## OUTPUT DERATING VS INPUT VOLTAGE CURVES

