Your Vision, Our Solutions

Switch Mode Power Supply

25W

HXE-25 SERIES



FEATURES

- Universal AC Input/ Full Range
- Protections: Short circuit /Overload /Over voltage
- High efficiency up to 89%
- No load power consumption<0.5W
- High operating temperature up to 70°C
- LED indicator for power on
- 4 years warranty

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

HXE25 series power supplies use advanced switching power supply technology and provide stable DC output to meet the power requirements of various devices. They have multiple protective functions, such as short circuit, over load and over voltage protection, ensuring the safe operation of power supplies and devices. Their natural air - cooling heat dissipation method effectively reduces temperature during operation, thus prolonging the service life.

SELECTION GUIDE

Product model	DC Voltage	Rated Current	Rated Power	Max Capacitive Load
HXE-25-3.3	3.3V	6A	19.8W	10000uF
HXE-25-05	5V	5A	25W	8000uF
HXE-25-12	12V	2.1A	25.2W	1500uF
HXE-25-15	15V	1.7A	25.5W	1000uF
HXE-25-24	24V	1.1A	26.4W	750uF
HXE-25-48	48V	0.57A	27.36W	220uF

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INPUT CHARACTERISTICS

Parameter	Units
RATED VOLTAGE RANGE	100-240VAC
VOLTAGE RANGE	90-264VAC/127-430VDC
FREQUENCY RANGE	47/63Hz
NO LOAD POWER CONSUMPTION	<0.1W
POWER FACTOR(TYP.)	>0.7/230VAC at full load
	>0.75/115VAC at full load
AC CURRENT(Typ.)	0.6A/115VAC
	0.2A/230VAC
INRUSH CURRENT(Typ.)	Cold Start 45A/240us at 230VAC 50Hz
LEAKAGE CURRENT	<2mA/240VAC

OUTPUT CHARACTERISTICS

Parameter	Units	Model
RIPPLE & NOSE(MAX.)	80mVp-p	HXE-25-3.3
	80mVp-p	HXE-25-05
	120mVp-p	HXE-25-12
	120mVp-p	HXE-25-15
	120mVp-p	HXE-25-24
	200mVp-p	HXE-25-48
SETUP,RISE,HOLD UP TIME	1.8s,23ms,80ms/230VAC(at full load)	
	4.0s,80ms,14ms/115VAC(at full load)	

Parameter	Units	Model
VOLTAGE TOLERANCE	±2.0%	HXE-25-3.3
	±2.0%	HXE-25-05
	±1.0%	HXE-25-12
	±1.0%	HXE-25-15
	±1.0%	HXE-25-24
	±1.0%	HXE-25-48
LINE REGULATION	±0.5%	HXE-25-3.3
	±0.5%	HXE-25-05
	±0.3%	HXE-25-12
	±0.3%	HXE-25-15
	±0.3%	HXE-25-24
	±0.3%	HXE-25-48
LOAD REGULATION	±1.0%	HXE-25-3.3
	±1.0%	HXE-25-05
	±0.5%	HXE-25-12
	±0.5%	HXE-25-15
	±0.5%	HXE-25-24
	±0.5%	HXE-25-48

PROTECTION

Parameter	Units
SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed
OVER LOAD	110~140%Rated Output Power
	Hiccup mode, recovers automatically after fault condition is removed.
OVER VOLTAGE	115~135%Rated Output Voltage
	Shut down o/p voltage, re-power on to recover.

ENVIRONMENT

Parameter	Units
WORKING TEMP	-20 ~ +70°C(Please refer to "Derating Curve"section)
WORKING HUMIDITY	20 ~ 95%RH Non-condensing
STORAGE TEMP, HUMIDITY	-40 ~ +85°C,10 ~ 95%RH Non-condensing
TEMP COEFFICIENT	±0.03%/(0 ~ 50°C) on load output
VIBRATION	Component: 10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes
SAFETY PROTECTION	Class I
OVER VOLTAGE CATEGORY	Class II/ According to EN62368-1;altitude up to 2000 meters
MTBF	356.4Khrs min. MIL-HDBK-217F(25°C)

SAFETY & EMC

Parameter	Units
SAFETY STANDARDS	EN62368-1 approved
WITHSTAND VOLTAGE	I/P-O/P:3KVAC/1min I/P-FG:2KVAC/1min O/P-FG:0.5KVAC/1min
ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH
EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32) Class B,BS EN/EN55035
	BS EN/EN61000-3-2 Class A-D,BS EN/EN61000-3-3
EMC IMMUNITY	Compliance to BS EN/EN61000-4-11 Criteria B, BS EN/ EN61000-4-2,3,4,5,6,8 Criteria A

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Note

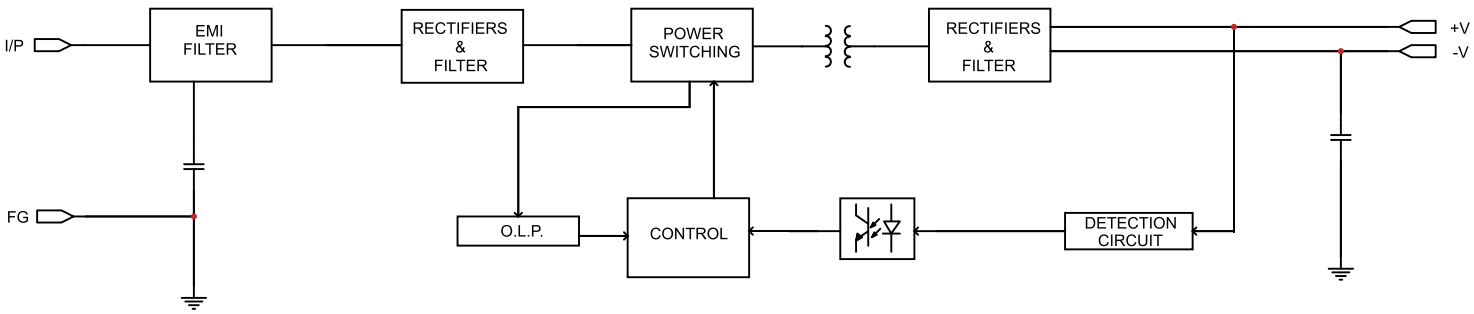
1. All parameters NOT specially mentioned are measured at 115/230VAC input, rated load and 25°C of ambient temperature
2. Ripple&noise are measured at 20MHz of bandwidth by using a 12” twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor
3. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.
4. .Derating may be needed under low input voltages. Please check the derating curve for more details.
5. Strongly recommended that external output capacitance should not exceed 10000uF(Only for the models with output voltage 5/12V)
6. The ambient temperature derating of 3.5 °C/1000m with fanless models and of 5 °C/1000m with fan models for operating altitude higher than 2000m(6500ft).

DIMENSION, WEIGHT & PACKING

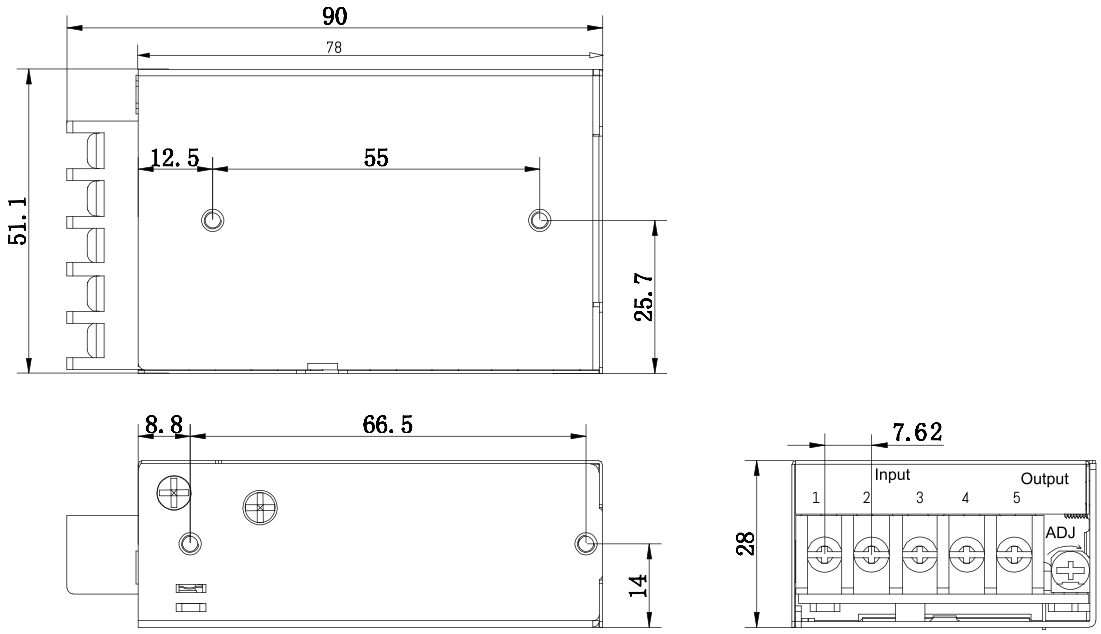
Parameter	Units
SIZE:	78* 51*28 mm (LxWxH)
WEIGHT:	140g/pcs
CARTON SIZE:	32.5 × 22.5 × 20.5 cm
MASTER CARTON QUANTITIES:	100 per box

BLOCK DIAGRAM

fosc : 60KHz



DIMENSIONS AND INSTALLATION



Terminal pin No.Assignment

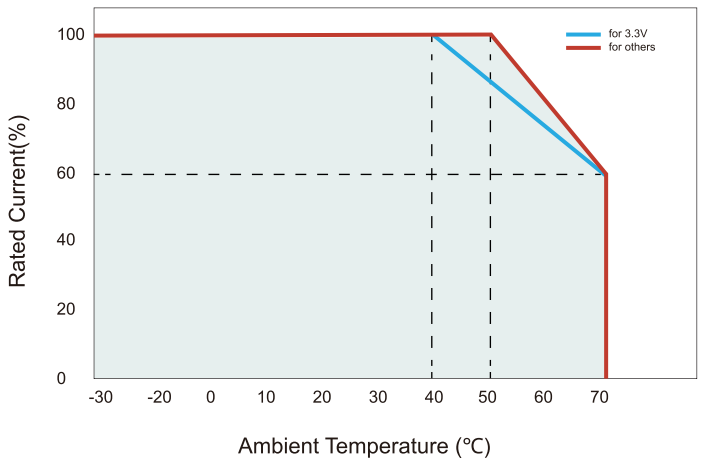
Pin No.	Assignment	Terminal	Max mounting torque
1	AC/L	B762C-03-05P-KC	0.8N-m
2	AC/N		
3	⏚		

Terminal pin No.Assignment

Pin No.	Assignment	Terminal	Max mounting torque
4	-V	B762C-03-05P-KC	0.8N-m
5	+V		

ENGINEERING DATA

Derating Curve



Static Characteristics

