RHENXV
Your Vision, Our Solutions

AC-DC CONVERTERS

45 WATTS

ACO45W-xxVMU

CE Report RoHS 3 YEARS WARRANTY

FEATURES

- Operating temperature range -40°C To +70°C
- Wide input range (85-264VAC)
- Size 76.2 × 50.8 × 28mm, 3"x 2"
- No load power consumption<0.3W
- 100% high temperature aging and testing
- Protection type: short circuit/over load/over voltage
- 4000V isolation voltage
- Medical Level Safety Certification (Level 2xMOPP Protection)
- 3 years warranty

MODEL NUMBERING

ACO45W-xxVMU

- Series
- Wattage
- Output Voltage
- Packaging form

SELECTION GUIDE

Product Model	Input Voltage	Rated Power (W)	Output Voltage (V)	Output Current (A)
ACO45W-05VMU	90-264VAC 100-370VDC	40	5	8
ACO45W-12VMU		45	12	3.75
ACO45W-15VMU		45	15	3
ACO45W-24VMU		45	24	1.875
ACO45W-36VMU		45	36	1.25
ACO45W-48VMU		45	48	0.94

INPUT CHARACTERISTICS

Parameter	Units	Model
Input Voltage	85-264VAC	
	100-370VDC	
AC Current (Typ.)	1.0A Max/115VAC 0.55A Max/230VAC	
Nominal Voltage	100-240VAC	
Inrush Current (Typ.)	Cold boot 40A/115VAC 60A/230VAC at full load	
Leakage Current	≤100μA/240VAC	
Average Efficiency (Typ.)	84%	ACO45W-05VMU
	88%	ACO45W-12VMU
	88%	ACO45W-15VMU
	88%	ACO45W-24VMU
	90%	ACO45W-36VMU
	90%	ACO45W-48VMU

OUTPUT CHARACTERISTICS

Parameter	Units	Model
Voltage Tolerance	±1.0%	
Line Regulation	±1.0%	
Load Regulation	±1.0%	
Setup, Rise Time (Typ.)	2000ms, 50ms/230VAC at full load	
Hold Up Time (Typ.)	16ms/230VAC at full load	
Ripple & Noise (Max.)	75 mVp-p	ACO45W-05VMU, ACO45W-12VMU, ACO45W-15VMU
	80 mVp-p	ACO45W-24VMU
	100 mVp-p	ACO45W-36VMU, ACO45W-48VMU

Voltage Adjustable Range (V)	Voltage	5VDC	12VDC	15VDC	24VDC	36VDC	48VDC
	Range	4.5-5.5	11.8-13.3	13.7-16.3	22.9-25.8	32.4-39.6	45-53.2

PROTECTION CHARACTERISTICS

Parameter	Units						
Over Load	≥110% load, self-recovery after trouble shooting						
Short Circuit	Hiccup mode, self-recovery after trouble shooting						
Over Voltage	Shut-off output						
	Voltage	5VDC	12VDC	15VDC	24VDC	36VDC	48VDC
	Range	≤7.5V	≤16V	≤20V	≤30V	≤48V	≤60V

GENERAL CHARACTERISTICS

Parameter	Units
Working Temperature	-40°C to +70°C (Refer to "Derating curve")
Working Humidity	10-85%RH
Storage Temperature, Humidity	-40°C To +85°C, 10 ~ 95%RH Non-condensing
Temperature Coefficient	0.03%/ (0-50°C)
Vibration	10-500Hz, 2G, 10min./1cycle, 60min.each along X, Y, Z axes
MTBF	165K hrs min. MIL-HDBK-217F (25°C)

SAFETY CHARACTERISTICS

Parameter	Units
Safety Standards	EN/EN62368-1，IEC62368-1
Isolation Voltage	I/P-O/P：4.0kVAC
Isolation Resistance	I/P-O/P：＞100M Ohms/500VDC 25°C 70% RH

EMC CHARACTERISTICS

Parameter	Category	Content
EMI	CE	EN55011，EN55032 (CISPR32) CLASS B
	RE	EN55011，EN55032 (CISPR32) CLASS B

Parameter	Category	Content
EMC	ESD	IEC/EN 61000-4-2 level 4 Contact ±8kV/Air ±15kV
	RF	IEC/EN 61000-4-3 level 4 lev3
	EFT	IEC/EN 61000-4-4 level 4 4kV
	Surge	IEC/EN 61000-4-5 level 4 2kV

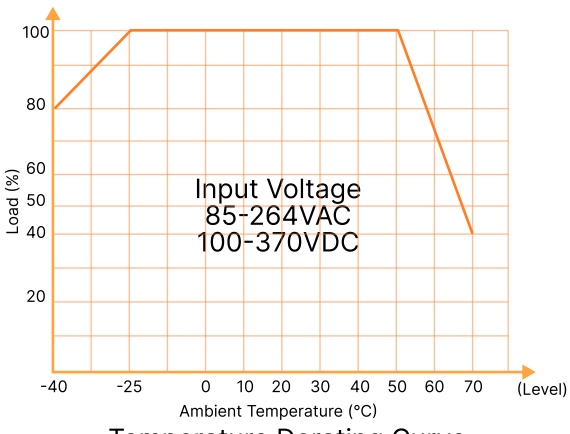
DIMENSION, WEIGHT & PACKING

Parameter	Units
Dimension (LxWxH)	76.2 × 50.8 × 28mm
Weight	99g
Package	9 PCS/Box 16 Box/Carton
Carton Size	360 × 300× 250mm

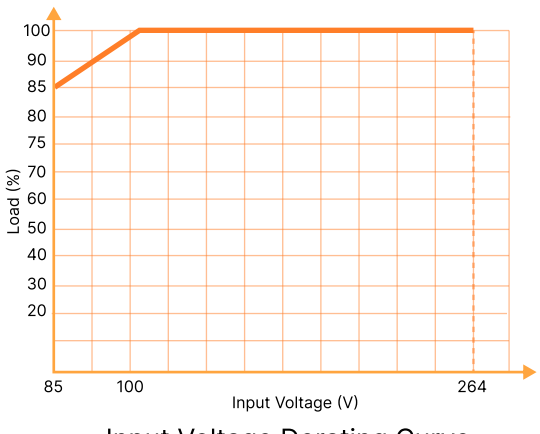
NOTE

1. All parameters not specially mentioned, are measured when TA=25°C, humidity<75%, input nominal voltage and output rated load.
2. Measurement method of ripple & noise: Parallel line test method shall be adopted. Meanwhile, 0.1uF high-frequency ceramic capacitor and one 47uF electrolytic capacitor shall be connected in parallel at the terminal for measurement under 20Mhz bandwidth.
3. The power supply is regarded as a component in the system, and electromagnetic compatibility shall be confirmed in combination with the terminal equipment.

PRODUCT CHARACTERISTIC CURVE



Temperature Derating Curve



Input Voltage Derating Curve

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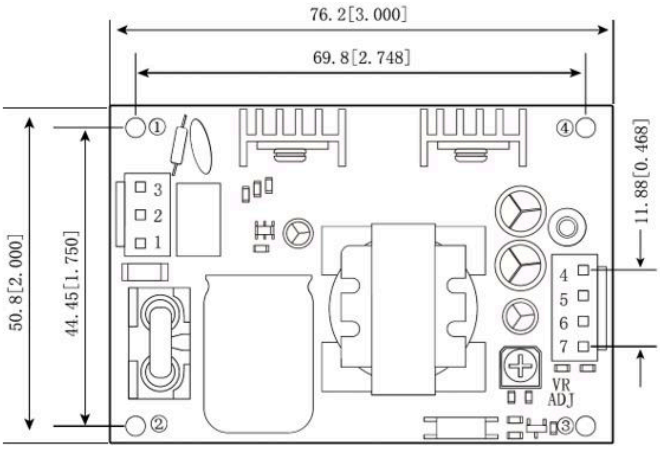
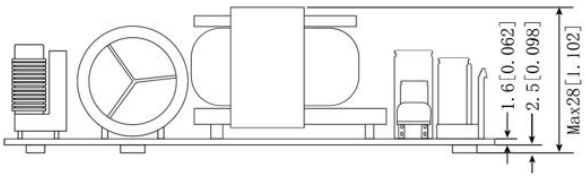
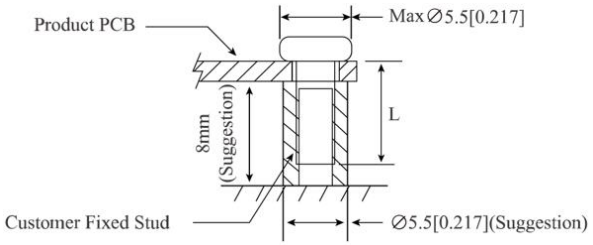
DIMENSIONS AND INSTALLATION





Pin Menthod			
Connector	Pin	Function	Customer Connection End
CN1	1	AC(N)	Connector: JST VHR Connector Terminals: JST SVH-21T-P1.1 Or Equivalent Products
	2	No Pin	
	3	AC(L)	
CN2	4/5	+Vo	Connector:JST VHR Connector Terminals: JST SVH-21T-P1.1 Or Equivalent Products
	5/7	-Vo	

Installation location	Screw Specifications	L (Suggestion)	Torque (max)
①-④	M3	6mm	0.4N·m



Note:

1. Unit size: mm [inch] Unmarked tolerances: ±0.5mm
2. CLASS I system: Mounting holes marked with ⏚ must be connected to safety earth
3. CLASS II system: Unnecessary to connect with safety earth