

ACO35W-xxV Series



CE Report

RoHS



FEATURES

- Wide input range (90-264VAC)
- Size 76.2*50.8*30.0mm, 3"*2"
- Protection type: Input under voltage protection, output short circuit, over load, over voltage protection
- Operating temperature range: -40°C to +70°C
- 3000V isolation voltage
- Built-in EMI filter: CLASS B
- Suitable for CLASS II installations
- 100% high temperature burn-in and function test
- 3 years warranty

MODEL NUMBERING

ACO35W-xxV

Series

Output Voltage

Wattage

SELECTION GUIDE

Product Model	Input Voltage	Rated Power (W)	Output Voltage (V)	Output Current (A)
ACO35W-05V	90-264VAC	35	5	7
ACO35W-12V		35	12	2.91
ACO35W-15V		35	15	2.33
ACO35W-24V		35	24	1.45
ACO35W-48V		35	48	0.73

INPUT CHARACTERISTICS

Parameter	Units	
Voltage Range	90-264VAC 120-370VDC	
Current (Typ.)	0.6A MAX/115VAC 0.3A MAX/240VAC	
Inrush Current (Typ.)	Cold boot 40A/115VAC 60A/230VAC at full load	
Leakage Current (Typ.)	<0.75mA/230VAC/60Hz	
Average Efficiency (Typ.)	78%	ACO35W-05V
	88%	ACO35W-12V
	88%	ACO35W-15V
	90%	ACO35W-24V
	90%	ACO35W-48V

OUTPUT CHARACTERISTICS

Parameter	Units					
Voltage Tolerance	±2.0%					
Line Regulation Rate	±1.0%					
Load Regulation Rate	±1.0%					
Setup, Rise Time (Typ.)	1000ms, 30ms/230VAC at full load					
Hold Up Time (Typ.)	30ms/230VAC at full load					
Voltage Adjustable Range (V)	Voltage	5VDC	12VDC	15VDC	24VDC	48VDC
	Range	4.7-5.5	11.3-12.8	13.5-16.5	22-25.7	43.5-50.4

GENERAL CHARACTERISTICS

Parameter	Units					
Input Under Voltage	85 ±10V under voltage protection, 95 ±5V recovery					
Over Load	≥110% load, recovers automatically after fault condition is removed					
Short Circuit	Hiccup mode, recovers automatically after fault condition is removed					
Over Voltage	Shut-off output					
	Voltage	5VDC	12VDC	15VDC	24VDC	48VDC
	Range	≤7.5V	≤16V	≤20V	≤30V	≤63V
Over Temperature	Shut-off output					
Working Temperature	-40°C to +70°C (Refer to "Derating curve")					
Working Humidity	10-85%RH					
Storage Temperature Humidity	-40°C to +105°C					
Temperature Drift 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)					

EMC CHARACTERISTICS

Parameter	Units
Safety Standards	IEC62368, EN62368
Isolation Voltage	I/P-O/P: 3000VAC I/P-FG(CASE): 1500VAC O/P-FG(CASE):500VAC
Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG: >100M Ohms/500VDC 25°C 70% RH
EMC Emission & Immunity	EN55011, EN55032 (CISPR32) CLASSB
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 line to line ±2kV/line to ground ±4kV

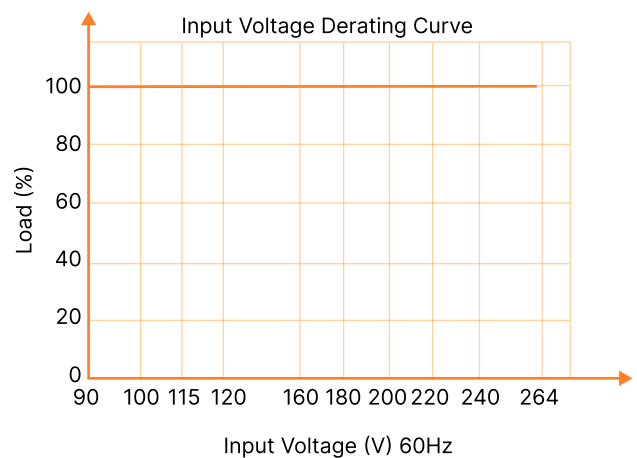
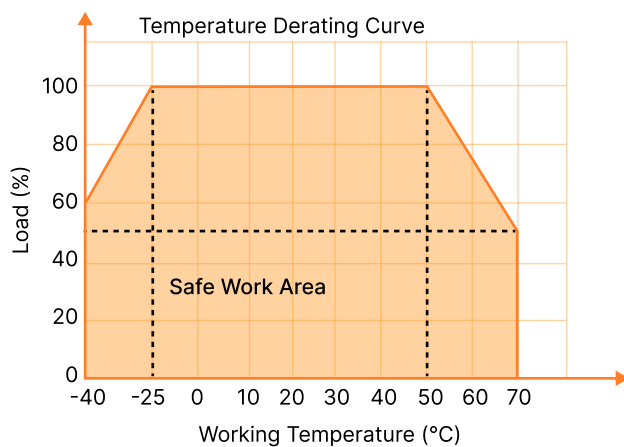
DIMENSION, WEIGHT & PACKING

Parameter	Units
Dimension	76.2 × 50.8 × 27.0 mm
Weight	94g
Package	9 PCS/Box 16 Box/Carton
Carton Size	360 × 300 × 250mm

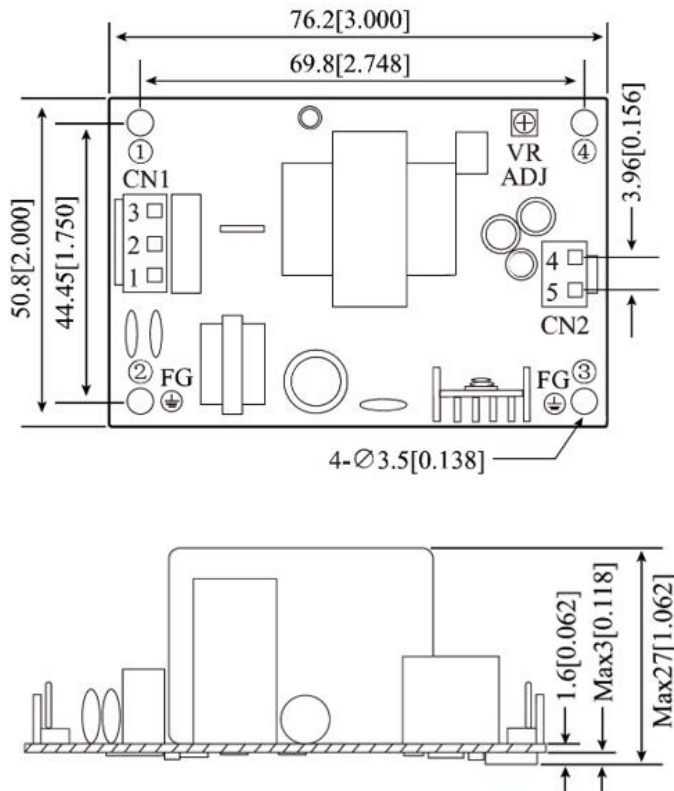
NOTE

1. All parameters not specially mentioned are measured at 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 as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives.

PRODUCT CHARACTERISTIC CURVE



DIMENSIONS AND INSTALLATION

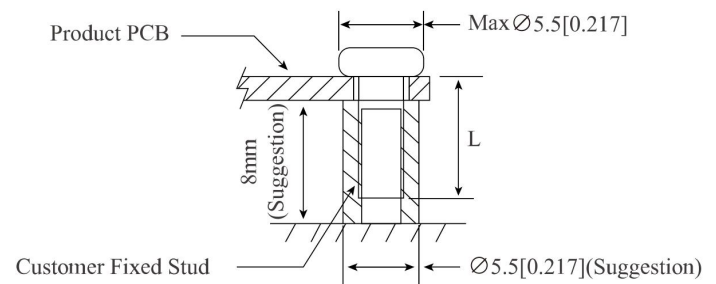


NOTE:

1. Unit size: mm[inch] Unmarked tolerances: $\pm 0.5\text{mm}$
2. CLASS II system: Unnecessary to connect with safety earth

Pin Method			
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	-Vo	Connector: JST VHR Connector Terminals: JST SVH-21T-P1.1 Or Equivalent Products
	5	+Vo	

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



NOTE

1. If the product works under the minimum required load, it cannot guarantee that the performance of the product complies with all the performance indicators in this manual;
2. The maximum capacitive load is tested under the input voltage range and full load condition;
3. Unless otherwise stated, all indexes in this manual are measured at $T_a=25^\circ\text{C}$, humidity $<75\%\text{RH}$, nominal input voltage and rated output load;
4. All index testing methods in this manual are based on the enterprise standards of the company;
5. Our company can provide product customization, specific needs can directly contact our technical staff;
6. RHENXV reserves the right to make changes to the product at any time without notice.