Single Output Industrial DIN Rail Power Supply
Catalog Numbers - ICO-PSH30*x*

08/21/18

Features
Universal input 85~264VAC (277VAC operational)
Protections: Short circuit / Overload / Over voltage
Cooling by free air convection
Din rail TS-35/7.5 or 15 mountable
DC output voltage adjustable
Over voltage category III
Isolation class II
LED indicator for power on
3 year warranty

Specifications

Output

Model	ICO-PSH3005	ICO-PSH3012	ICO-PSH3024	ICO-PSH3048
DC Voltage	5V	12V	24V	48V
Rated Current	3A	2A	1.5A	0.75A
Ripple & Noise (max.) Note 2	80mVp-p	120mVp-p	150mVp-p	240mVp-p
Current Range	0~3A	0~2A	0~1.5A	0~0.75A
Rated Power	15W	24W	36W	36W
Voltage Adj. Range	4.5~5.5V	10.8~13.8V	21.6~29V	43.2~55.2V
Voltage Tolerance Note 3	±2.0%	±1.0%	±1.0%	±1.0%
Line Regulation	±1.0%	±1.0%	±1.0%	±1.0%
Load Regulation	±1.0%	±1.0%	±1.0%	±1.0%
Setup, Rise Time	500ms, 50ms/230VAC 500ms, 50ms/115VAC at full load			
Hold Up Time (Typ.)	30ms/230VAC 12ms/115VAC at full load			

Input

Voltage Range	85~264VAC (277VAC operational) 120~370VDC (390VDC operational)			
Frequency Range	47~63Hz			
Efficiency (Typ.)	82%	88%	89%	90.00%
AC Current (Typ.)	0.88A/115VAC 0.48A/230VAC			
Inrush Current (Typ.)	Cold Start 25A/115VAC 45A/230VAC			

Protection				
Model	**ICO-PSH3005**	**ICO-PSH3012**	**ICO-PSH3024**	**ICO-PSH3048**
Overload Note 4	105~160% rated output power			
	Protection type : Constant current limiting, recovers automatically after fault condition is removed			
Over Voltage	5.75~7.25V	15~18V	30~36V	57.6~67.2V
	Protection type : Shut down o/p voltage, re-power on to recover			

Function	
DC Signal OK	Relay contact rating(max.): 30V/1A resistive

Environment	
Working Temp	-30~+70°C (Refer to "De-rating Curve)
Working Humidity	20~90% RH (non condensing)
Storage Temp, Humidity	-40~+85°C, 10~95% RH (non condensing)
Temp. Coefficient	±0.03%/°C (0~50°C) RH (non condensing)
Vibration	10~500Hz, 2G; 10 min./1cycle, period for 60 min. each along X,Y,Z axes; Mounting: Compliance to IEC60068-2-6
Operating Altitude	2000 meters
Over Voltage Cat.	III; According to EN61558, EN50178, EN60664-1, EN62477-1

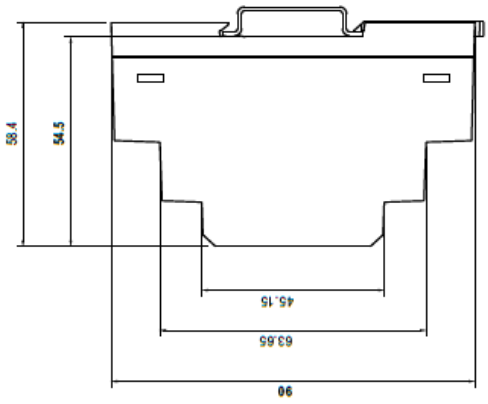
Safety & EMC (Note 5)	
Safety Standards	UL60950-1, UL508, TUV EN61558-2-16, IEC60950-1 approved; Design refer to TUV EN60950-1
Withstand Voltage	I/P-O/P:4KVAC
Isolation Resistance	I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH
EMC Emission	Compliance to EN550322 Class B (CISPR22), EN61000-3-2 Class A, EN61000-3-3
EMC Immunity	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024, EN55035, EN61000-6-2, EN61204-3

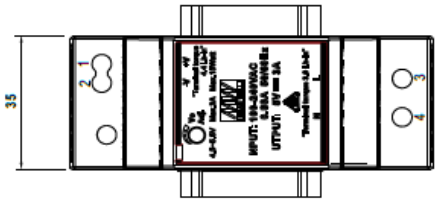
Others	
MTBF	968.1K hrs min. MIL-HDBK-217F (25°C)
Dimension	35 x 90 x 54.5mm (WxHxD)
Packing	0.12Kg; 96 pcs/12.5Kg/1.04CUFT

Notes:

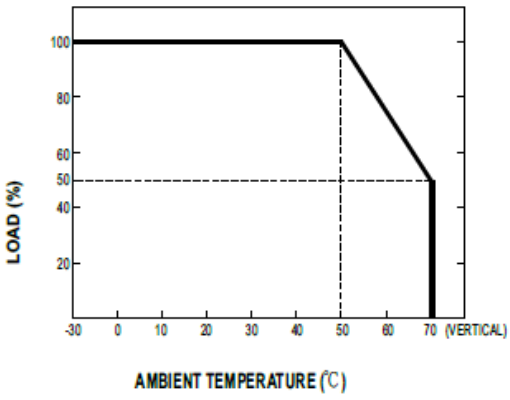
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25ºC of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. Constant current limiting operation within 50%-100% rated output voltage; protection type for short circuit is hiccup mode and will recover automatically after fault condition is removed.
5. The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies.

Mechanical Specification

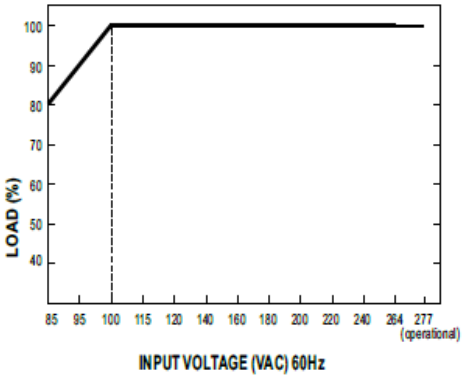




Derating Curve



Output Derating VS Input Voltage



Block Diagram