Single Output Industrial DIN Rail Power Supply
Catalog Numbers - ICO-PSH15*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
Isolation class II
LED indicator for power on
No load power consumption <0.3W
100% full load burn-in test

Specifications

Output

Model	ICO-PSH1505	ICO-PSH1512	ICO-PSH1515	ICO-PSH1524
DC Voltage	5V	12V	15V	24V
Rated Current	2.4A	1.25A	1A	0.63A
Current Range	0~2.4A	0~1.25A	0~1A	0~0.63A
Rated Power	12W	15W	15W	15.2W
Ripple & Noise (max.) (Note 2)	80mVp-p	120mVp-p	120mVp-p	150mVp-p
Voltage Adj. Range	4.5~5.5V	10.8~13.8V	13.5~18V	21.6~29V
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	2000ms, 80ms/230VAC 2000ms, 80ms/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.)	80%	85%	85.5%	86.00%
AC Current (Typ.)	0.5A/115VAC 0.25A/230VAC			
Inrush Current (Typ.)	Cold Start 25A/115VAC 45A/230VAC			

Protection

Overload (Note 4)	110~145% rated output power			
	Protection type: Constant current limiting, recovers automatically after fault is removed			
Over Voltage	5.75~6.75V	14.~16.2V	18.8~22.5V	30~36V
	Protection type: shut off o/p voltage, clamping by zener diode			

Environment	
Working Temp	-30~+70°C (Refer to derating 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 10min/1cycle, period for 60 min. each along X,Y,Z axes; Mounting: Compliance to IEC60068-2-6
Operating Altitude	2000 meters
Over Voltage Category	III; According to EN61558, EN50178, EN60664-1, EN62477-1; altitude up to 2000 meters

Others	
MTBF	1166K hrs min. MIL-HDBK-217F (25°C)
Dimension	17.5 x 90 x 54.5mm (WxHxD)
Packing	78g;160 pcs/13.5Kg/1.19CUFT

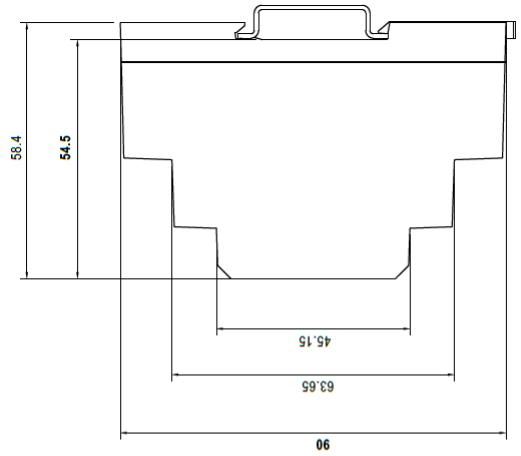
Safety & EMC (Note 5)	
Safety Standards	UL60950-1, UL508, TUV EN61558-2-16, IEC60950-1 approved; Design refer to TUV EN60950-1
Withstand Voltage	I/P-O/P:4KVAC
Isolation Resistance	I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH
EMC Conduction & Radiation	Compliance to EN55032 (CISPR32) EN55022 , Class B
Harmonic Current	Compliance to EN61000-3-2, Class A
EMS Immunity	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55035, EN55024, EN61000-6-2, EN61204-3

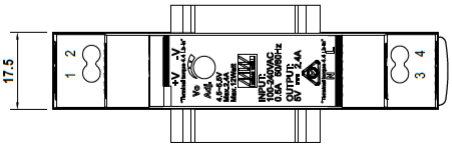
NOTES:

1. All parameters NOT specifically 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. 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 the EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."

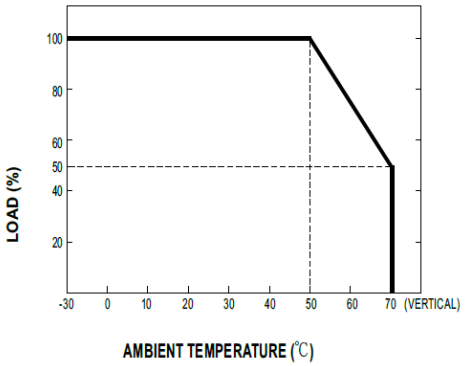
Mechanical Specification

Unit: mm

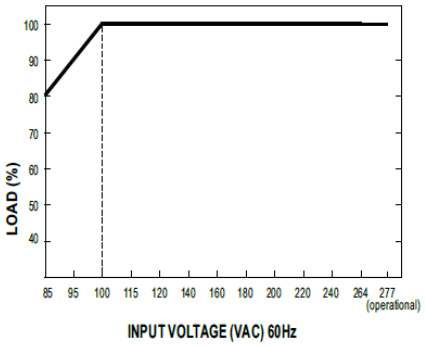




Derating Curve



Output Derating vs Input Voltage



Block Diagram