

# Single Output Industrial DIN Rail Power Supply Catalog Numbers - ICO-PS15x

02/03/14

Features
Universal AC input/Full range
<b>Protections:</b> Short circuit / Overload / Over voltage
Cooling by free air convection
Can be installed on DIN Rail TS-35/7.5 or 15
Isolation class II
LED indicator for power on
No load power consumption, 0.5W
100% full load burn-in test



Specifications				
Output				
	PS155	PS1512	PS1515	PS1524
<b>DC Voltage</b>	5V	12V	15V	24V
<b>Rated Current</b>	2.4A	1.25A	1A	0.63A
<b>Current Range</b>	0 ~ 2.4A	0 ~ 1.25A	0 ~ 1A	0 ~ 0.63A
<b>Rated Power</b>	12W	15W	15W	15.2W
<b>Ripple &amp; Noise (max.)</b> <sup>2</sup>	80mVp-p	120mVp-p	120mVp-p	150mVp-p
<b>Voltage Adj. Range</b>	4.75 ~ 5.5V	10.8 ~ 13.2V	13.5 ~ 16.5V	21.6 ~ 26.4V
<b>Voltage Tolerance</b> <sup>3</sup>	±2.0%	±1.0%	±1.0%	±1.0%
<b>Line Regulation</b>	±1.0%	±1.0%	±1.0%	±1.0%
<b>Load Regulation</b>	±1.0%	±1.0%	±1.0%	±1.0%
<b>Setup, Rise Time</b> <sup>5</sup>	1000ms, 50ms/230VAC 1000ms, 50ms/115VAC at full load			
<b>Hold Up Time (Typ.)</b>	70ms/230VAC 16ms/115VAC at full load			

Input				
	PS155	PS1512	PS1515	PS1524
<b>Voltage Range</b>	85 ~ 264VAC 120 ~ 370VDC			
<b>Frequency Range</b>	47 ~ 63Hz			
<b>Efficiency (Typ.)</b>	77%	84%	83.5%	85.00%
<b>AC Current (Typ.)</b>	0.88A/115VAC 0.48A/230VAC			
<b>Inrush Current (Typ.)</b>	Cold Start 35A/115VAC 65A/230VAC			

	PS155	PS1512	PS1515	PS1524
<b>Overload (Note 5)</b>	105 ~ 160% rated output power			
	Protection type: Constant current limiting, recovers automatically after fault condition is removed			
<b>Over Voltage</b>	5.75 ~ 6.75V	13.8 ~ 16.2V	17.25 ~ 20.75V	27.6 ~ 32.4V
	Protection type: shut off o/p voltage, clamping the zener diode			

Environment	
<b>Working Temp.</b>	-20 ~ +60°C (Refer to output load derating curve)
<b>Working Humidity</b>	20 ~ 90% RH (non-condensing)
<b>Storage Temp., Humidity</b>	-40 ~ +85°C, 10 ~ 95% RH
<b>Temp. Coefficient</b>	±0.03%/°C (0 ~ 50°C)
<b>Vibration</b>	10 ~ 500Hz, 2G 1; Mounting: Compliance to IEC60068-2-6

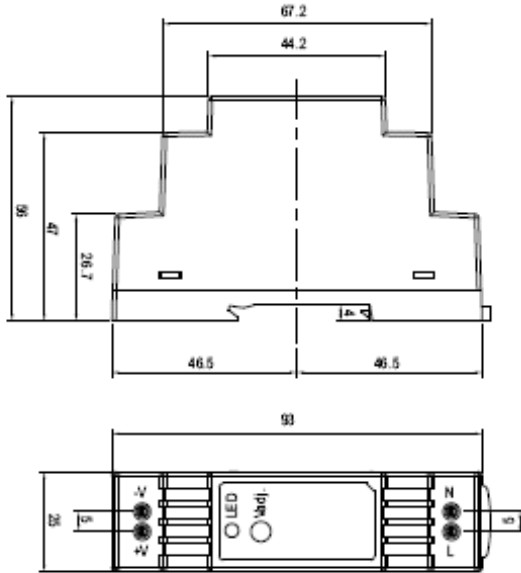
Others	
<b>MTBF</b>	1172.3 K hrs min. MIL-HDBK-217F (25°C)
<b>Dimensions</b>	25 x 93 x 56mm (WxHxD)
<b>Weight</b>	0.1Kg

Safety & EMC (Note 4)	
<b>Safety Standards</b>	UL60950-1, TUV EN60950-1 approved, design refer to EN50178
<b>Withstand Voltage</b>	I/P-O/P:3KVAC
<b>Isolation Resistance</b>	I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH
<b>EMI Conduction &amp; Radiation</b>	Compliance to EN55011, EN55022 (CISPR22), EN61204-3 Class B
<b>Harmonic Current</b>	Compliance to EN61000-3-2,-3
<b>EMS Immunity</b>	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, ENV50204, EN55024, EN61000-6-2, EN61204-3, heavy industry level, criteria A

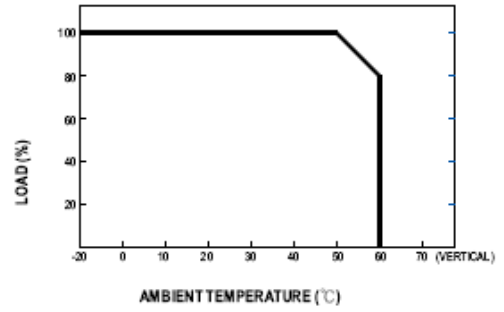
## NOTES:

- All parameters NOT specifically mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
- Ripple & noise are measured at 20MHz of band width by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
- Tolerance: includes set up tolerance, line regulation and load regulation.
- 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.
- Constant current operation region is within 60% ~ 100% rated output voltage. Protection type for short curcut is hiccup mode and will never recover automatically after fault condition is removed.

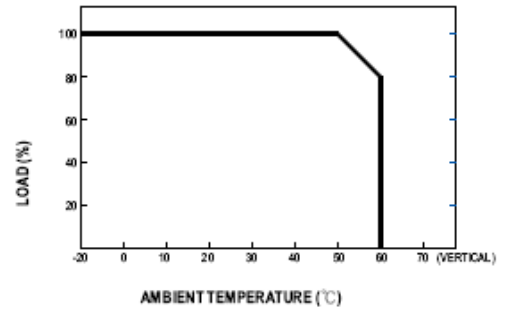
**Mechanical Specification** Unit: mm



**Derating Curve**



**Output Derating vs Input Voltage**



**Block Diagram**

