Single Ouptut Industrial DIN Rail Power Supply
Catalog Numbers - ICO-PS40*x*

02/03/14

Features
Universal AC input/Full range
Protections: Short circuit / Overload / Over voltage
Cooling by free air convection
Can be installed on DIN Rail TS-35/7.5 or 15
Built in DC OK Active signal Relay contact rating 30V/1A resistive (max.)
ICO-PS4024 is NEC class 2 / LPS compliant
LED indicator for power on
100% full load burn-in test

Specifications

Output

	ICO-PS4005	ICO-PS4012	ICO-PS4024	ICO-PS4048
DC Voltage/Rated Current	5V / 6A	12V / 3.33A	24V / 1.7A	48V / 0.83A
Current Range / Rated Power	0 ~ 6A / 30W	0 ~ 3.33A / 40W	0 ~ 1.7A / 40.8W	0 ~ 0.83A / 39.8W
Ripple & Noise (max.) Note 2	80mVp-p	120mVp-p	150mVp-p	200mVp-p
Voltage Adj. Range	5 ~ 6V	12 ~ 15V	24 ~ 30V	48 ~ 56V
Voltage Tolerance	±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 (Note 5)	500ms, 30ms/230VAC 1000ms, 30ms/115VAC at full load			
Hold Up Time (Typ.)	50ms/230VAC 20ms/115VAC at full load			

Input

	ICO-PS4005	ICO-PS4012	ICO-PS4024	ICO-PS4048
Voltage Range	85 ~ 264VAC 120 ~ 370VDC			
Frequency Range	47 ~ 63Hz			
Efficiency (Typ.)	78%	86%	88%	88.00%
AC Current (Typ.)	1.1A/115VAC 0.7A/230VAC			
Inrush Current (Typ.)	Cold Start 30A/115VAC 60A/230VAC			
Leakage Current	<1mA/240VAC			

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Protection				
	ICO-PS4005	**ICO-PS4012**	**ICO-PS4024**	**ICO-PS4048**
Overload	105 ~ 150% rated output power			
	Protection type : Constant current limiting, recovers automatically after fault condition is removed			
Over Voltage	6.25 ~ 7.25V	15.6 ~ 18V	31.2 ~ 36V	57.6 ~ 64.8V
	Protection type : Shut down o/p voltage, re-power on to recover			

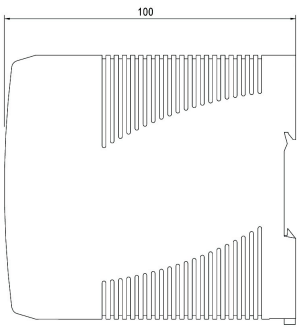
Function	
DC Signal OK	Relay contact rating(max.): 30V/1A resistive

Environment	
Working Temp.	-20 ~ +70°C(Refer to "Derating Curve)
Working Humidity	20 ~ 90%RH non-condensing
Storage Temp., Humidity	-40 ~ +85°C, 10 ~ 95% RH
Temp. Coefficient	±0.03%/°C (0 ~ 50°C)
Vibration	Component: 10 ~ 500Hz, 2G; Mounting: Compliance to IEC60068-2-6

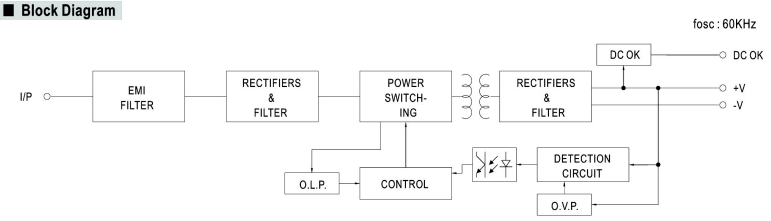
Safety & EMC (Note 4)	
Safety Standards	UL508, UL60950-1, TUV EN60950-1 approved
Withstand Voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC
Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:>100M Ohms / 500VDC / 25°C / 70% RH
EMC Emission	Compliance to EN55011, EN55022 (CISPR22), EN61204-3, Class B EN61000-3-2,-3
EMC Immunity	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024, EN61000-6-2, EN61204-3, heavy industry level, criteria A

Others	
MTBF	301.7K hrs min. MIL-HDBK-217F (25°C)
Dimension	40 x 90 x 100mm (WxHxD)
Weight	0.3Kg

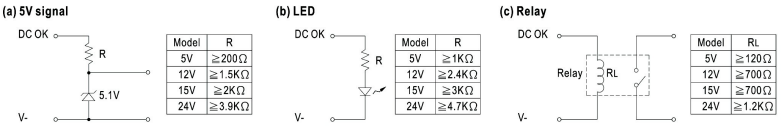
Unit:mm



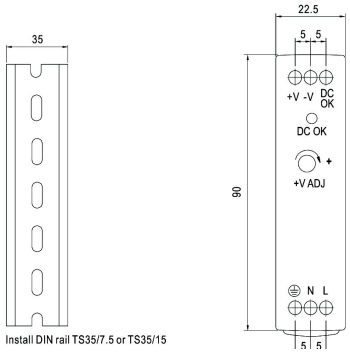
■ Block Diagram



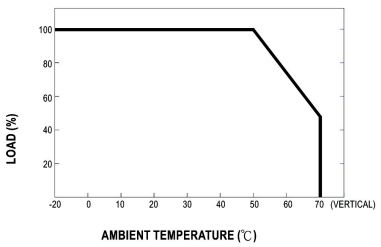
■ Application of DC OK Active Signal



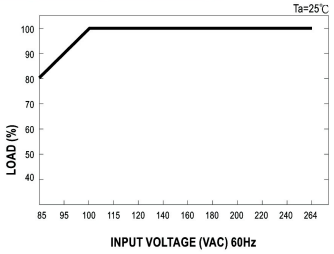
■ Mechanical Specification



■ Derating Curve



■ Output Derating VS Input Voltage



Notes:

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 ambient temperature.

2. Ripple & noise are measured at 20MHz of bandwith by using a 12” twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.

3. Tolerance: includes set up tolerence, line regulation and load regulation.

4. 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.

5. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.