



# PSC-40 Series

Version 2



## Features:

- Universal AC input (90-264V AC)
- Protections: Short Circuit / Overload / Overvoltage
- Installed on DIN rail TS35 / 7.5 or 15
- DC OK relay output
- All wiring 105°C long life electrolytic capacitors
- High operation temperature up to 70°C
- Withstands 2G vibration test
- High efficiency, long life and high reliability
- 3 year warranty
- NEC Class 2 compliant
- UL508 (Industrial control equipment) listed

### OUTPUT

### INPUT

### PROTECTION

### ENVIRONMENT

### SAFETY & EMC

### OTHERS

### NOTES

Cat. No.	PSC-4005	PSC-4012	PSC-4015	PSC-4024	PSC-4048
DC VOLTAGE	5V	12V	15V	24V	48V
RATED CURRENT	7A	3.33A	2.5A	1.7A	0.83A
CURRENT RANGE	0-7A	0 ~ 3.33A	0 ~ 2.5A	0 ~ 1.7A	0 ~ 0.83A
RATED POWER	35W	40 W	40 W	40 W	40 W
RIPPLE & NOISE (max)	80mVp-P	120mVp-p	120mVp-p	150mVp-p	200mVp-p
VOLTAGE ADJ. RANGE	5-6V	10.8 ~ 16.2V	13.5~ 16.5V	23.02 ~ 29.98V	43.2 ~ 52.8V
VOLTAGE TOLERANCE	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%
LINE REGULATION	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%
LOAD REGULATION	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
SETUP, RISE TIME	< 500ms, <30ms/230VAC; 1000ms/115VAC at full load				
HOLD UP TIME (Typ.)	> 30ms/115VAC at full load				
VOLTAGE RANGE	90-264 VAC Derating may be needed under low input voltages. Please check the derating curve for more details.				
FREQUENCY RANGE	47~63Hz				
EFFICIENCY (Typ.)	78%	86%	86%	88%	88%
AC CURRENT (Typ.)	1.1A/115VAC 0.7A/230VAC				
INRUSH CURRENT (Typ.)	COLD START 30A / 115VAC; 60A / 230VAC				
LEAKAGE CURRENT	< 0.25mA/240VAC				
OVERLOAD PROTECTION	>105%-150% Rated Output Power Protection type: Hiccup Mode- recovers automatically after fault condition is removed				
OVERVOLTAGE PROTECTION	6.25 ~ 7.25V	15.6 ~ 18V	19.5 ~ 22.5V	31.2 ~ 36V	57.6 ~64.8V
OVER TEMPERATURE PROTECTION	Shut down o/p voltage, re-power on to recover				
OVER CURRENT	110%-180%				
WORKING TEMP.	-20 ~ +70°C (Refer to output load 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	10 ~ 500Hz, 2G 10min. / 1cycle, 60 min. each long X,Y, Z axes				
SAFETY STANDARDS	UL508, BS/EN62368-1, NEC Class 2 Compliant				
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				
EMI CONDUCTION & RADIATION	BS/EN55032 (CISPR32) Class B				
HARMONIC CURRENT	BS/EN61000-3-2,-3, , EAC TP TC 020				
EMS IMMUNITY	BS/EN61204-3 Class B, CNS13438 Class B				
DC OK Signal	Relay contact (30VDC / 1A, 120VAC / 1A)				
MTBF	200K hrs. min. at full load 25°C ambient temp				
DIMENSION	40 x 92 x 100 mm (WxHxD)				
PACKING	0.28Kg/27 pcs./8.76Kg / 1piece / 50 pieces per CTN				
CONNECTION	I/P 3 poles, O/P: 6 poles screw DIN terminal				
COOLING	Free air convection				

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. Tolerance : includes set up tolerance, 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. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."
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.
6. The ambient temperature de-rating of 3.5°C /1000m

For the latest on Altech Power Supplies please visit [www.altechcorp.com/power](http://www.altechcorp.com/power).

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Version 2

**Altech Corp.**<sup>®</sup>



## Mechanical Specification

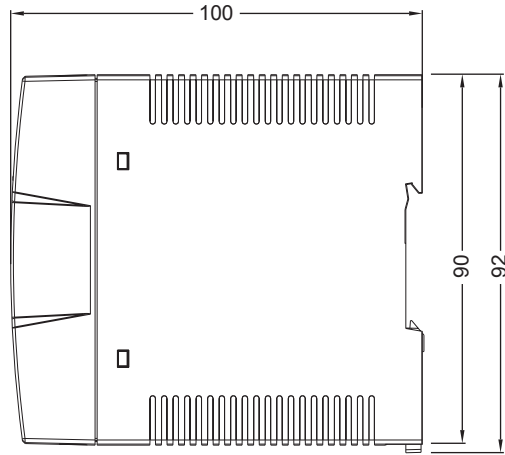
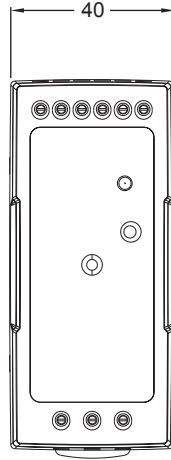
Unit :mm / inch

Terminal Pin. No Assign. (TB1)

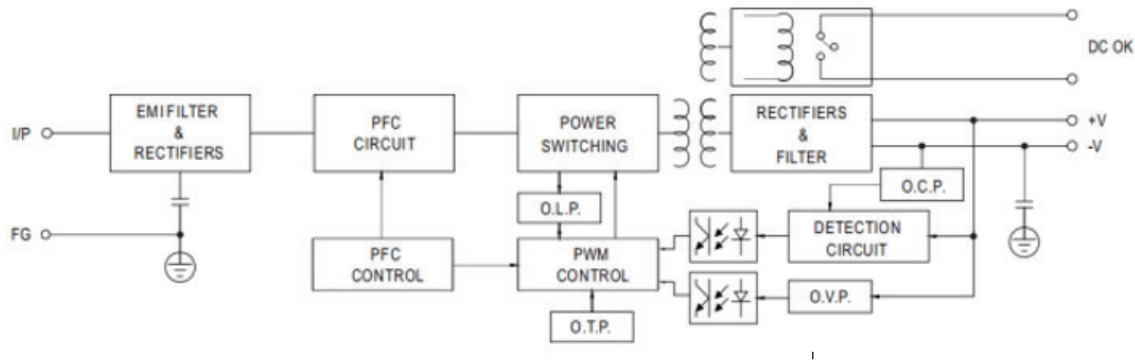
Pin No.	Assignment
1	FG ⊕
2	AC/N
3	AC/L

Terminal Pin. No Assign. (TB2)

Pin No.	Assignment
1,2	DC OUTPUT +V
3,4	DC OUTPUT -V
5,6	DC OK RELAY CONTACT



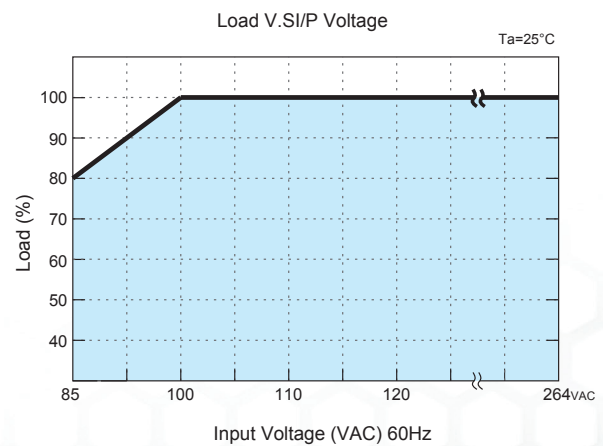
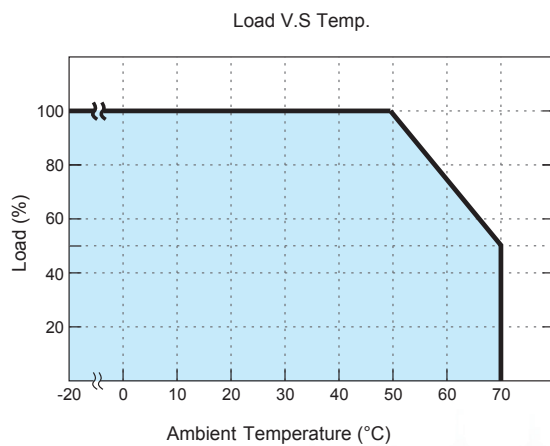
## Block Diagram



## DC OK Relay Contact

Contact Close	When the output voltage reaches the adjusted output voltage
Contact Ratings(max.)	When the output voltage drop below 90%rated output voltage
Contact Open	30V / 1A resistive load

## Derating Curve



Slimline  
single phase

Low Profile  
single phase

Industrial Metal Case  
single phase

Industrial Metal Case  
three phase

High Efficiency  
compact housing

Accessories