



PSC-20 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-2005	PSC-2012	PSC-2015	PSC-2024
DC VOLTAGE	5V	12V	15V	24V
RATED CURRENT	3A	1.67A	1.34A	1.0A
CURRENT RANGE	0-3A	0 ~ 1.67A	0 ~ 1.34A	0 ~ 1.0A
RATED POWER	15W	20 W	20 W	24 W
RIPPLE & NOISE (max)	80mVp-p	120mVp-p	120mVp-p	150mVp-p
VOLTAGE ADJ. RANGE	5-6V	10.8 ~ 13.2V	13.5~ 16.5V	21.6 ~ 26.4V
VOLTAGE TOLERANCE	±2.0%	±1.0%	±1.0%	±1.0%
LINE REGULATION	±2.0%	±1.0%	±1.0%	±1.0%
LOAD REGULATION	±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	85-264VAC / 120-370VDC Derating may be needed under low input voltages. Please check the derating curve for more details.			
FREQUENCY RANGE	47~63Hz			
EFFICIENCY (Typ.)	76%	80%	81%	84%
AC CURRENT (Typ.)	0.33A/115VAC ; 0.21A/230VAC			
INRUSH CURRENT (Typ.)	35A/115V ; 70A/230V			
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	8.4~ 9.5V	15.6 ~ 18V	23.5 ~ 26.4V	31.2 ~ 36V
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	Active signal (See application notes)			
MTBF	200K hrs. min. at full load 25°C ambient temp			
DIMENSION	22.5 x 92 x 100 mm (WxHxD)			
PACKING	0.140Kg each / 0.32 LBs each / 1 piece / 100 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.

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Version 2

Altech Corp.[®]



Mechanical Specification

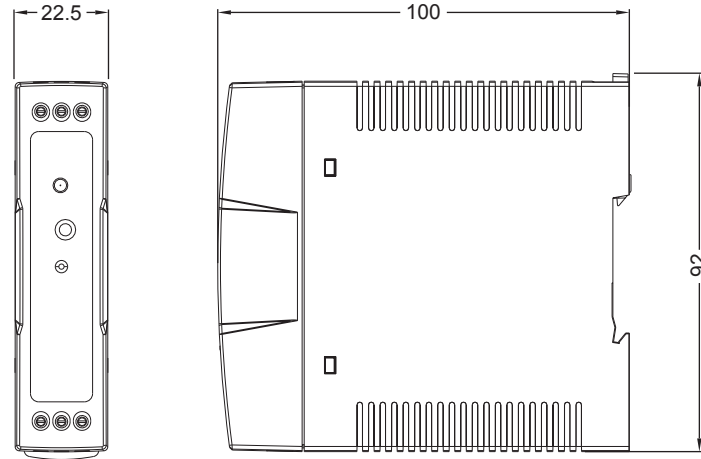
Unit: mm / inch

Terminal Pin. No Assign. (TB1)

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

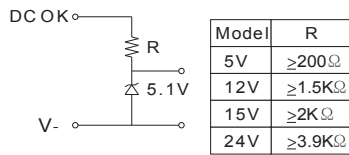
Terminal Pin. No Assign. (TB2)

Pin No.	Assignment
4	DC OUTPUT +V
5	DC OUTPUT -V
6	DC OK SIGNAL

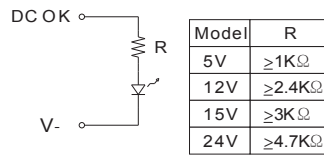


Application of DC OK Active Signal

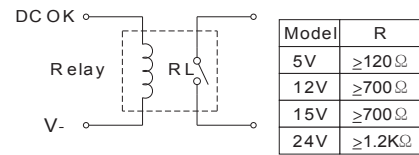
(a) 5V signal



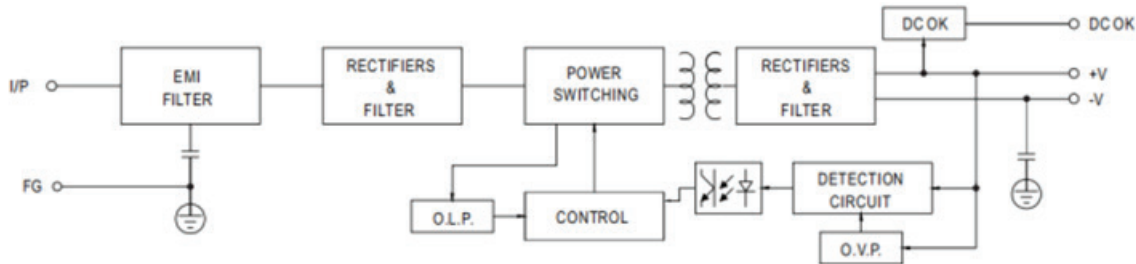
(b) LED



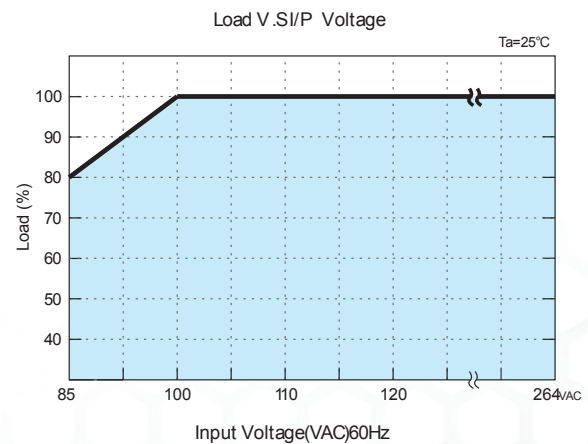
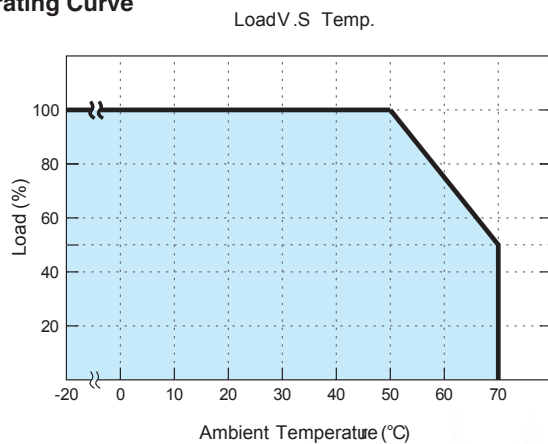
(c) Relay



Block Diagram



Derating Curve



Slimline
single phase

Low Profile
single phase

Industrial Metal Case
single phase

Industrial Metal Case
three phase

High Efficiency
compact housing

Accessories