



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





# Altech Corp.®

Serving the Automation & Control Industry since 1984



**DIN Rail  
Power Supplies**



# DIN Rail Power Supplies

Since 1984, Altech Corporation has grown to become a leading supplier of automation and industrial control components. Headquartered in Flemington, NJ, Altech has an experienced staff of engineering, manufacturing and sales personnel to provide the highest quality products with superior service. This is the Altech Commitment!

In response to a growing market for high power regulated Power Supplies, Altech introduced the new Din Rail mountable power supply line. They are reliable, cost effective, space economical and easy to install and maintain. They are able to handle any industrial process requirement. In addition, you do not need to oversize them; they are designed to work on 100% load capacity. The universal input, power factor correction and many approvals proves that Altech Power Supplies will function worldwide on a wide variety of applications. Wide operation temperature range, high efficiency and many protections make Altech Power supplies your best choice.

Our well trained technical experts welcome the opportunity to answer your technical questions and provide solutions to your automation and control needs. Give us a call or visit [www.altechcorp.com](http://www.altechcorp.com).



## Quality Commitment

Altech's control components meet diverse national and international standards such as UL, NEC, CSA, IEC, VDE and more. Altech provides superior customer service and delivery through Total Quality Management and Continuous Process Improvement. Altech is ISO 9001 approved. We perform these services with honesty and integrity and are committed to achieve these goals.



## Selection Guide .....4-5



### NEW PSC Compact Class 2 Series

- Compact Design and Lightweight
  - Class 2, UL 1310 Recognized
  - Brown-out protection
  - 10W to 480W rated power
  - Universal single phase input
- .....6-35



### PS Industrial Series

- Robust Metal housing
  - UL 508 listed
  - Built in active PFC function
  - 75W to 960W rated power
  - Single and three phase universal input
- .....86-111



### NEW PSA Flex Series (1 Phase)

- Flex power , solid metal housing
  - UL 508 listed
  - 120W to 600W rated power
  - High efficiency with Boost Power
  - Single phase input
- .....36-47



### PS-C and W Series

- Narrow design, small metal housing
  - UL 508 listed
  - 150% pick load capacity
  - 120W to 480W rated power
  - Single and two phase wide input
- .....112-133



### NEW PSB Flex Series (2 & 3 Phase)

- Flex power , solid metal housing
  - UL 508 listed
  - 120W to 600W rated power
  - High efficiency with Boost Power
  - Two and Three phase input
- .....48-57



### NEW CBI DC UPS System

- Fully automated battery care module
  - Three charging modes
  - 12, 24, 36 and 48V DC single outputs
  - 110-230-277 / 230-400-500VAC input
  - System start from battery function
- .....134-155



### PS-S Slim line Series

- Slim Line Design, plastic housing
  - UL 508 listed
  - DC OK contact
  - 10W to 100W rated power
  - Universal single phase input
- .....58-71



### NEW CB Battery Chargers

- Intelligent battery chargers
  - Suitable for most common battery types
  - Adjustable charging current
  - 2 VDC and 24VDC single output
  - 110-220-277 VAC input
- .....155-189



### PS Low Profile Series

- Low profile Design, plastic housing
  - UL 60950-1 Recognized
  - Isolation Class II
  - 10W to 100W rated power
  - Universal single phase input
- .....72-85

### Accessories

- Redundancy diode module
  - UPS controller module
  - Battery holders and enclosures
  - Ultra capacitor modules
- .....190-199

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# Selection Guide

Choose your product from a wide range of features and options, suitable for almost all applications.

	Cat. No.	Rated Current					Universal Input	Switch Select Input	Parallel Option	UL 508 Listed	UL 60950-1 Rec.	UL 1310 Rec.	EN 60950-1	NEC Class 2 Compliant	DC OK	Short Circuit	Overload	Over Voltage	Over Temperature	CB
		VDC	5	12	15	24														
PSC Class 2 Compact	PSC-10xx	-	0.84A	0.67A	0.42A	-														
	PSC-20xx	-	1.7A	1.4A	1A	-														
	PSC-40xx	-	3.4A	2.7A	1.7A	0.85A														
	PSC-60xx	-	4A	5A	2.5A	1.25A														
	PSC-96xx	-	7.5A	6.4A	4A	2A														
	PSC-151xx	-	-	-	6.3A	3.2A														
	PSC-241xx	-	-	-	10A	5A														
	PSC-481xx	-	-	-	20A	10A														
	PSC-RM20	-	-	-	20A	-														
PSA & PSB Flex	SINGLE PHASE																			
	PSA-120xx	-	-	-	5A	-														
	PSA-180xx	-	-	-	7.5A	-														
	PSA-360xx	-	-	-	14A	-														
	PSA-600xx	-	-	-	25A	-														
	TWO (THREE) PHASE																			
	PSB-120xx	-	-	-	5A	-														
	PSB-180xx	-	-	-	7.5A	-														
PSB-360xx	-	-	-	14A	-															
PSB-600xx	-	-	-	25A	-															
PS-S Slimline	SINGLE PHASE																			
	PS-S10xx	2A	0.84A	0.67A	0.42A	-														
	PS-S20xx	3A	1.67A	1.34A	1	-														
	PS-S40xx	6A	3.33A	-	1.7A	0.83A														
	PS-S60xx	10A	5A	-	2.5A	1.25A														
PS-S100xx	-	7.5A	-	4A	2A															
PS Low Profile	SINGLE PHASE																			
	PS-15xx	2.4A	1.25A	1A	0.63A	-														
	PS-30xx	3A	2A	2A	1.5A	-														
	PS-45xx	5A	3.5A	2.8A	2A	-														
	PS-60xx	6.5A	4.5A	4A	2.5A	-														
PS-100xx	-	7.5A	6.5A	4.2A	-															



# Selection Guide

Choose your product from a wide range of features and options, suitable for almost all applications.

	Cat. No.	Output Voltage					Universal Input	Switch Select Input	Parallel Input	UL 508 Listed	UL 60950-1 Rec.	UL 1310 Rec.	EN 60950-1	NEC Class 2 Compliant	DC OK	Short Circuit	Overload	Over Voltage	Over Temperature	CB
		VDC	5	12	15	24														
PS Industrial	SINGLE PHASE	PS-75xx	-	6.3A	-	3.2A	1.6A													
		PS-120xx	-	10A	-	5A	2.5A													
		PSH-120xx	-	-	-	5A	2.5A													
		PSP-240xx	-	-	-	10A	5A													
		PSP-480xx	-	-	-	20A	10A													
		PSP-480Sxx	-	-	-	20A	10A													
	THREE PHASE	PST-240xx	-	-	-	10A	5A													
		PST-480xx	-	-	-	20A	10A													
		PST-960xx	-	-	-	40A	20A													
		PST-960Pxx	-	-	-	40A	20A													
Compact Housing	SINGLE PHASE	PS-C120xx	-	10A	-	5A	2.5A													
		PS-C240xx	-	-	-	10A	5A													
		PSH-C480xx	-	-	-	20A	10A													
		PSP-C480Pxx	-	-	-	20A	10A													
	WIDE VOLTAGE	PSW-120xx	-	10A	-	5A	2.5A													
		PSW-240xx	-	-	-	10A	5A													
		PSW-480Pxx	-	-	-	20	10													
DC-UPS	CBI12xx	-	3-25A	-	-	-														
	CBI24xx	-	-	-	3-20A	-														
	CBI48xx	-	-	-	-	5-10A														
	CBI280 xx		12V/15A 24V/10A MULTI-VOLTAGE		36V/7A 48V/5A MULTI-VOLTAGE															
Battery Charger	CB12xx	-	3-35A	-	-	-														
	CB24xx	-	-	-	3-20A	-														
	CB12245A	-	6 A	-	5 A	-														
Acces.	PS-RDN				21-28V															
	PS-UPS				21-28V															

PSC Class 2 Series  
Compact Housing

PSA Flex Series  
1 Phase

PSB Flex Series  
2 & 3 Phase

PS-S Slim Series  
Plastic Housing

PS Low Profile Series  
Plastic Housing

PS Industrial Series  
1, 2 & 3 Phase

PS C & W Series  
1 and 2 Phase

CB Type  
Battery Chargers

CBI Type  
DC UPS Systems

Accessories

Appendix

- Three Phase Input
- 220V INPUT ONLY
- Wide Range Input
- Selected items, see data sheet
- Special order item / not UL approved.
- DC OK signal



## Compact Single Phase Power Supply (PSC)

ALTECH's Compact DIN rail switching power supply, PSC Series designed for the fast growing demand of DIN rail applications. These 10W to 480W models are enclosed with fully isolated plastic or metal case to prevent users from hazardous shock. The design complies with the compact requirements that the precious space on the industrial rail can be preserved effectively. Featuring up to 94% of efficiency, this series is cooled only by free air convection up to 70°C that significantly increase the reliability and lifetime of the power supply. Another important feature of PSC Series is its low power consumption (<0.75W) This unique characteristic can significantly expand the application of PSC series beyond just heavy industrial field, but can also be implied to dotcom or IT applications that require green power to save the energy and to obey the anticipated government laws in the near future!

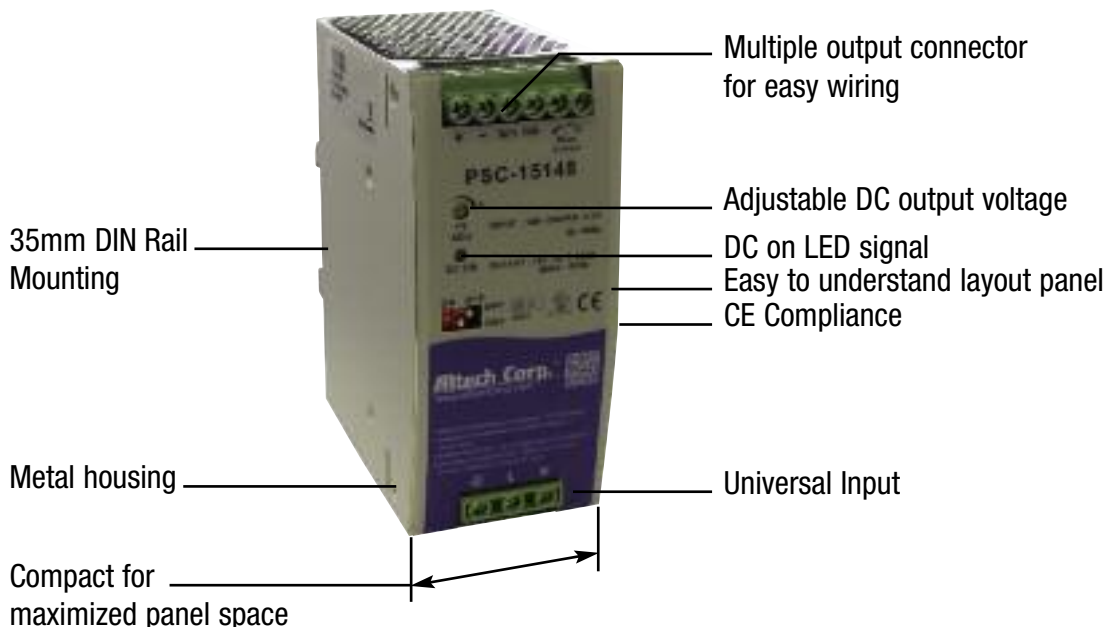
Short circuit protection, overload protection, over voltage protection, and the DC OK signal for monitoring the status of power supply are standard functions for the PSC Series. Typical applications include factory automation, process control, electro-mechanical industry, dotcom and IT.

- Input voltage range: 85-264V AC; 120-370V DC
- AC inrush current (max): Cold start: 20A at 115V AC; 40A at 230V AC
- DC adjustment range:  $\pm 10\%$  rated output voltage
- Overload protection: 105% rated output power
- Over-voltage protection: 115%-150% rated output voltage
- Other protection: Brown out protection
- Setup, rise, time (max): 500ms, 30ms/230V AC  
1000ms, 30ms/115V AC, at full load
- Withstand voltage: I/P-O/P: 3KV AC, I/P-FG:1.5KV AC, O/P-FG:0.5KV AC
- Working temperature: -20 to +70°C (-4° to +158°F), refer to output de-rating curve
- Safety standards: UL508 listed, UL1310 recognized, TUV approved  
EN60950-1 compliant
- EMC standards: EN55022 class B  
EN61000-4-2,3,4,5,6,8,11  
ENV50204; EN55024; EN61000-6-1; EN61204-3;  
Light Industry Level criteria A
- Military Standard MIL-HDBK-217F
- Vibration withstands 2G test
- On/Off Built in remote ON/OFF function (metal case only)

# Compact Single Phase Power Supply (PSC)

## Features:

- Universal AC input/Full range
- Protections: Short circuit / Overload / Overvoltage
- Cooling by free air convection
- DIN rail mountable
- UL1310
- NEC class 2 / LPS compliant (12V,24V,48V only)
- No load power consumption <0.75W
- LED indicator for power on
- 100% full load burn-in test
- DC OK relay contact
- 3 year warranty





# Compact Single Phase Power Supply (PSC)



## 10W Single Output Industrial DIN Rail Power Supply

Cat. No.	Output		Tol. %	Ripple & Noise	Efficiency	NOTES
	V DC	A				
PSC-1012	12V DC	0.84A	±1%	100 mVp-p	81%	
PSC-1015	15V DC	0.67A	±1%	100 mVp-p	81%	
PSC-1024	24V DC	0.42A	±1%	120 mVp-p	81%	



## 20W Single Output Industrial DIN Rail Power Supply

Cat. No.	Output		Tol. %	Ripple & Noise	Efficiency	NOTES
	V DC	A				
PSC-2012	12V DC	1.7A	±1%	100 mVp-p	83%	
PSC-2015	15V DC	1.4A	±1%	100 mVp-p	85%	
PSC-2024	24V DC	1A	±1%	120 mVp-p	86%	



## 40W Single Output Industrial DIN Rail Power Supply

Cat. No.	Output		Tol. %	Ripple & Noise	Efficiency	NOTES
	V DC	A				
PSC-4012	12V DC	3.4A	±1%	100 mVp-p	84%	
PSC-4015	15V DC	2.7A	±1%	100 mVp-p	84%	
PSC-4024	24V DC	1.7A	±1%	120 mVp-p	84%	
PSC-4048	48V DC	0.85A	±1%	180 mVp-p	85%	



## 60W Single Output Industrial DIN Rail Power Supply

Cat. No.	Output		Tol. %	Ripple & Noise	Efficiency	NOTES
	V DC	A				
PSC-6012	12V DC	5A	±1%	100 mVp-p	86%	
PSC-6015	15V DC	4A	±1%	100 mVp-p	87%	
PSC-6024	24V DC	2.5A	±1%	120 mVp-p	87%	
PSC-6048	48V DC	1.25A	±1%	180 mVp-p	88%	



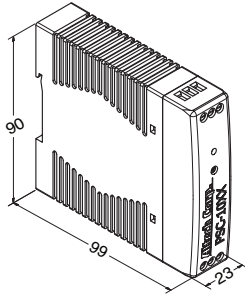
## 96W Single Output Industrial DIN Rail Power Supply

Cat. No.	Output		Tol. %	Ripple & Noise	Efficiency	NOTES
	V DC	A				
PSC-9612*	12V DC	7.5A	±1%	180 mVp-p	87%	
PSC-9615*	15V DC	6.4A	±1%	180 mVp-p	87%	
PSC-9624	24V DC	4A	±1%	180 mVp-p	88%	
PSC-9648	48V DC	2A	±1%	250 mVp-p	87%	

\*Not included in UL file E361915

# SPECIFICATIONS

## PSC-10 Series



### 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

Universal Input: 88-264V AC, 124-370V DC full range;

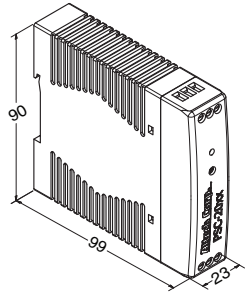
0.23A @ 110V AC; 0.17A @ 230V AC

Connection: Input - 2 poles, Output - 2 poles, single screw terminal

Size (WxHxD): 23x90x99mm (0.9x3.54x3.94 inches)

Packaging: 1/box; 0.29lbs / 0.13Kg

## PSC-20 Series



### 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

Universal Input: 88-264V AC, 124-370V DC full range;

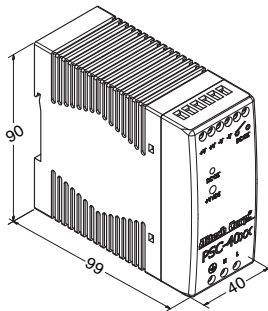
0.45A @ 110V AC; 0.32A @ 230V AC

Connection: Input - 2 poles, Output - 2 poles, single screw terminal

Size (WxHxD): 23x90x99mm (0.9x3.54x3.94 inches)

Packaging: 1/box; 0.32lbs / 0.14Kg

## PSC-40 Series



### 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

Universal Input: 88-264V AC, 124-370V DC full range;

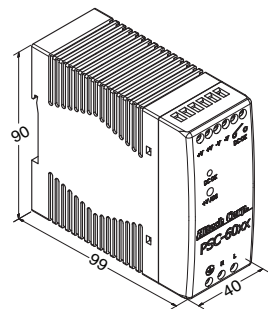
0.8A @ 115V AC, 0.4A @ 230V AC

Connection: Input - 2 poles, Output - 2 poles, double screw terminal

Size (WxHxD): 40x90x99mm (1.57x3.54x3.94 inches)

Packaging: 1/box; 0.63lbs / 0.28Kg

## PSC-60 Series



### 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

Universal Input: 88-264V AC, 124-370V DC full range;

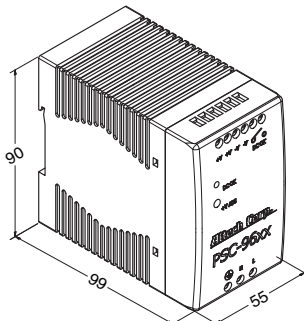
1.3A @ 115V AC, 0.6A @ 230V AC

Connection: Input - 2 poles, Output - 2 poles, double screw terminal

Size (WxHxD): 40x90x99mm (1.57x3.54x3.94 inches)

Packaging: 1/box; 0.67lbs / 0.3Kg

## PSC-96 Series



### 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

Universal Input: 88-264V AC, 124-370V DC full range;

1.1A @ 115V AC, 0.55A @ 230V AC

Connection: Input - 2 poles, Output - 2 poles, double screw terminal

Size (WxHxD): 55x90x99mm (2.17x3.54x3.94 inches)

Packaging: 1/box; 0.9lbs / 0.4Kg





# PSC-10 Series



## Features:

- Universal AC input (88-264V AC)
- Protections: Short Circuit / Overload / Overvoltage
- Brown-out protection
- Installed on DIN rail TS35 / 7.5 or 15
- True DC OK signal 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
- UL1310 Class 2 Power unit / LPS pass
- UL508 (Industrial control equipment) listed

## OUTPUT

## INPUT

## PROTECTION

## ENVIRONMENT

## SAFETY & EMC

## OUTPUT

Cat. No.	PSC-1012	PSC-1015	PSC-1024
DC VOLTAGE	12V	15V	24V
RATED CURRENT	0.84A	0.67A	0.42A
CURRENT RANGE	0~0.84A	0~0.67A	0~0.42A
RATED POWER	10.08W	10.05W	10.08W
RIPPLE & NOISE (max)	100mVp-p	100mVp-p	120mVp-p
Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µF & 47µF parallel capacitor			
VOLTAGE ADJ. RANGE	10.8~13.2V	13.5~16.5V	21.6~26.4V
VOLTAGE TOLERANCE	±1.0%	±1.0%	±1.0%
Tolerance: includes set up tolerance, line regulation and load regulation.			
LINE REGULATION	±1.0%	±1.0%	±1.0%
LOAD REGULATION	±1.0%	±1.0%	±1.0%
SETUP, RISE TIME	< 800ms, < 100ms/230V AC at full load		
HOLD UP TIME (Typ.)	> 32ms / 230V AC; > 16ms / 115V AC at full load		
VOLTAGE RANGE	88V~264VAC; 124V~370VDC Derating may be needed under low input voltages. Please check the derating curve for more details.		
FREQUENCY RANGE	47~63Hz		
EFFICIENCY (Typ.)	81%	81%	81%
AC CURRENT (Typ.)	0.23A/115VAC; 0.17A/230VAC		
INRUSH CURRENT (Typ.)	15A / 115V AC; 30A / 230V AC		
LEAKAGE CURRENT	< 1mA/ 230VAC		
OVERLOAD PROTECTION	> 102% rated output power Protection type: Constant current limiting, recovers automatically after fault condition is removed.		
OVERVOLTAGE PROTECTION	115%~150% rated output voltage Protection type: Latch-off mode.		
OVER TEMPERATURE PROTECTION	Power supply shut down at 70°C constant current limiting / output voltage goes to 0; re-power on to recover		
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, TUV EN60950-1:2006+A11, UL1310 NEC class 2 compliant		
WITHSTAND VOLTAGE	I/P-O/P: 3KVAC (4242DC) I/P-FG: 1.5KVAC (2121DC) 1 minute		
ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG: 100M Ohms/500VDC		
EMI CONDUCTION & RADIATION	EN55022:2006+A1:2007 Class B		
HARMONIC CURRENT	EN61000-3-2:2006 Class A, EN61000-3-3:2008		
EMS IMMUNITY	EN61204-3:2000, EN55024:1998+A1:2001+A2:2003 light industry level, criteria A		
The power supply is considered a component which will installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.			
DC OK Signal	Open collector. Max: 40mA		
MTBF	562.7K hrs MIL-HDBK-217K		
DIMENSION	23x90x99 mm (WxHxD)		
PACKING	0.13Kg/48 pcs. / 7.44Kg		
CONNECTION	I/P 3 poles, O/P: 3 poles screw DIN terminal		
COOLING	Free air convection		
All parameters NOT specially mentioned are measured at 230V AC input, rated load and 25°C of ambient temperature.			

# PSC-10 Series

## Mechanical Specification

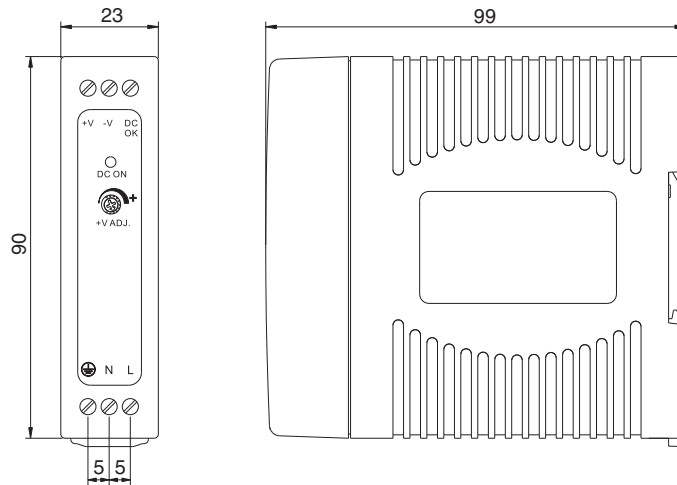
Unit : mm / inch

Terminal Pin. No Assign. (TB1)

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

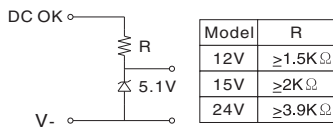
Terminal Pin. No Assign. (TB2)

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

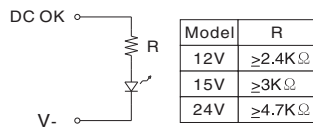


## Application of DC OK Active Signal

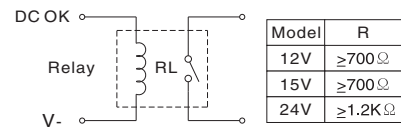
(a)5V signal



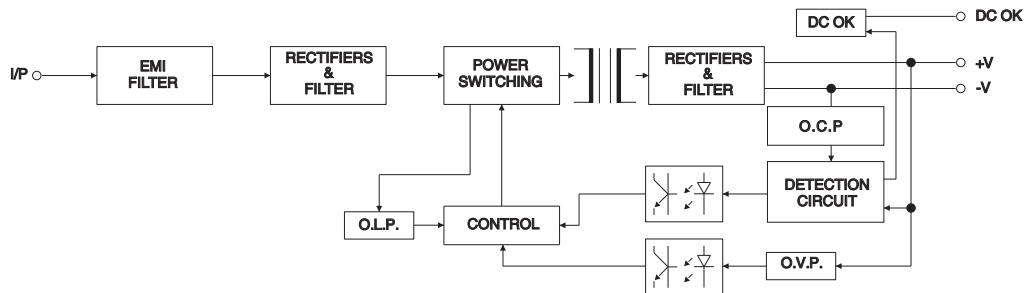
(b)LED



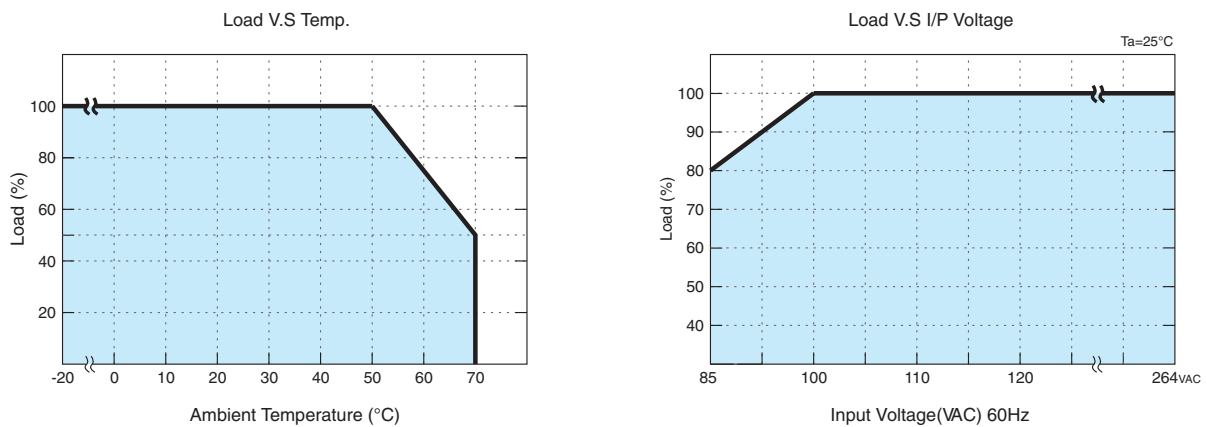
(c)Relay



## Block Diagram



## Derating Curve



Note: All dimensions are in millimeters, to convert to inches multiply by 0.03937.





# PSC-20 Series



## Features:

- Universal AC input (88-264V AC)
- Protections: Short Circuit / Overload / Overvoltage
- Brown-out protection
- Installed on DIN rail TS35 / 7.5 or 15
- True DC OK signal 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
- UL1310 Class 2 Power unit / LPS pass
- UL508 (Industrial control equipment) listed

## OUTPUT

## INPUT

## PROTECTION

## ENVIRONMENT

## SAFETY & EMC

## OUTPUT

Cat. No.	PSC-2012	PSC-2015	PSC-2024
DC VOLTAGE	12V	15V	24V
RATED CURRENT	1.7A	1.4A	1A
CURRENT RANGE	0~1.7A	0~1.4A	0~1A
RATED POWER	20.4W	21W	24W
RIPPLE & NOISE (max)	100mVp-p	100mVp-p	120mVp-p
Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µF & 47µF parallel capacitor			
VOLTAGE ADJ. RANGE	10.8~13.2V	13.5~16.5V	21.6~26.4V
VOLTAGE TOLERANCE	±1.0%	±1.0%	±1.0%
Tolerance: includes set up tolerance, line regulation and load regulation.			
LINE REGULATION	±1.0%	±1.0%	±1.0%
LOAD REGULATION	±1.0%	±1.0%	±1.0%
SETUP, RISE TIME	< 800ms, < 100ms/230V AC at full load		
HOLD UP TIME (Typ.)	> 32ms / 230V AC; > 16ms / 115V AC at full load		
VOLTAGE RANGE	88V~264VAC; 124V~370VDC Derating may be needed under low input voltages. Please check the derating curve for more details.		
FREQUENCY RANGE	47~63Hz		
EFFICIENCY (Typ.)	83%	85%	86%
AC CURRENT (Typ.)	0.45A/115VAC; 0.32A/230VAC		
INRUSH CURRENT (Typ.)	20A / 115V AC; 40A / 230V AC		
LEAKAGE CURRENT	< 1mA/ 230VAC		
OVERLOAD PROTECTION	> 105% rated output power Protection type: Constant current limiting, recovers automatically after fault condition is removed.		
OVERVOLTAGE PROTECTION	115%~150% rated output voltage Protection type: Latch-off mode.		
OVER TEMPERATURE PROTECTION	Power supply shut down at 70°C constant current limiting / output voltage goes to 0; re-power on to recover		
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, TUV EN60950-1:2006+A11, UL1310 NEC class 2 compliant		
WITHSTAND VOLTAGE	I/P-O/P: 4242DC I/P-FG: 2121DC 1 minute		
ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG: 100M Ohms/500VDC		
EMI CONDUCTION & RADIATION	EN55022:2006+A1:2007 Class B		
HARMONIC CURRENT	EN61000-3-2:2006 Class A, EN61000-3-3:2008		
EMS IMMUNITY	EN61204-3:2000, EN55024:1998+A1:2001+A2:2003 light industry level, criteria A		
The power supply is considered a component which will installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.			
DC OK Signal	Open collector. Max: 40mA		
MTBF	120.4K HRS MIL-HDBK-217 (25°C)	131.3K HRS MIL-HDBK-217 (25°C)	125.9K HRS MIL-HDBK-217 (25°C)
DIMENSION	23x90x99 mm (WxHxD)		
PACKING	0.14Kg/48 pcs./7.92Kg		
CONNECTION	I/P 3 poles, O/P: 3 poles screw DIN terminal		
COOLING	Free air convection		
All parameters NOT specially mentioned are measured at 230V AC input, rated load and 25°C of ambient temperature.			

# PSC-20 Series

## Mechanical Specification

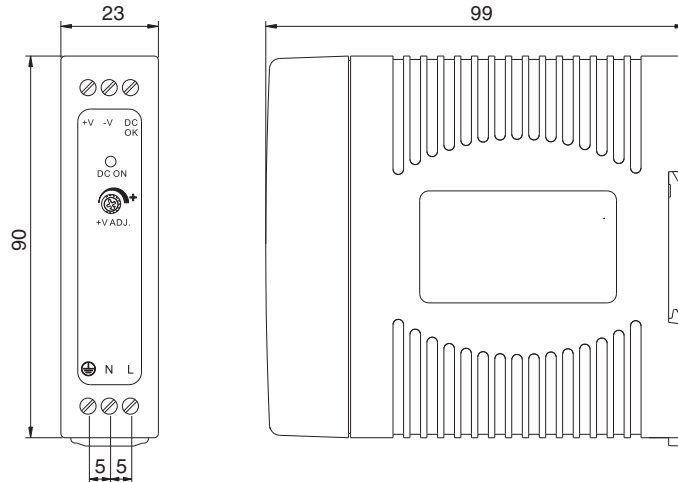
Unit : mm / inch

Terminal Pin. No Assign. (TB1)

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

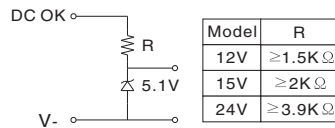
Terminal Pin. No Assign. (TB2)

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

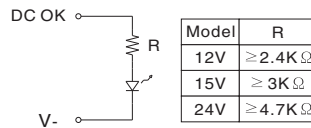


## Application of DC OK Active Signal

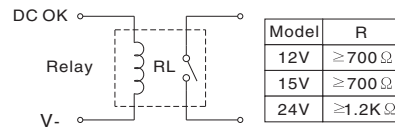
(a) 5V signal



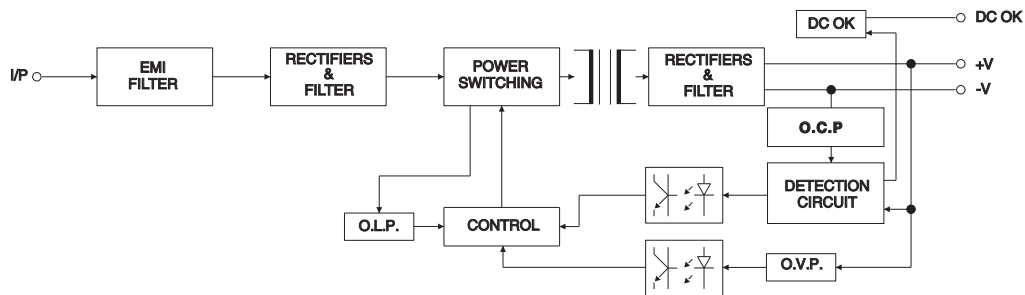
(b) LED



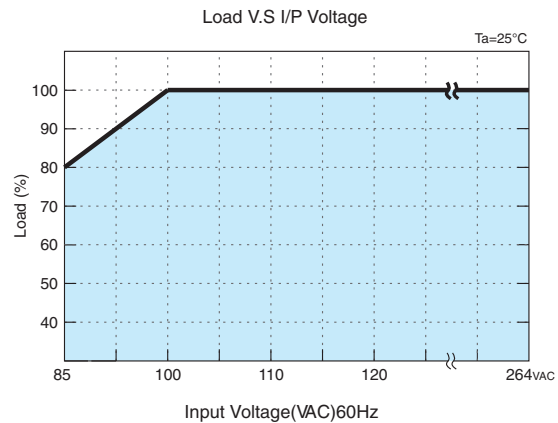
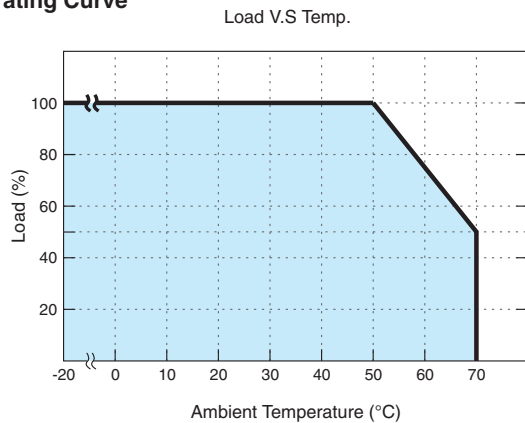
(c) Relay



## Block Diagram



## Derating Curve



Note: All dimensions are in millimeters, to convert to inches multiply by 0.03937.





# PSC-40 Series



## Features:

- Universal AC input (88-264V AC)
- Protections: Short Circuit / Overload / Overvoltage
- Brown-out protection
- Installed on DIN rail TS35 / 7.5 or 15
- True DC OK signal 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
- UL1310 Class 2 Power unit / LPS pass
- UL508 (Industrial control equipment) listed

## OUTPUT

## INPUT

## PROTECTION

## ENVIRONMENT

## SAFETY & EMC

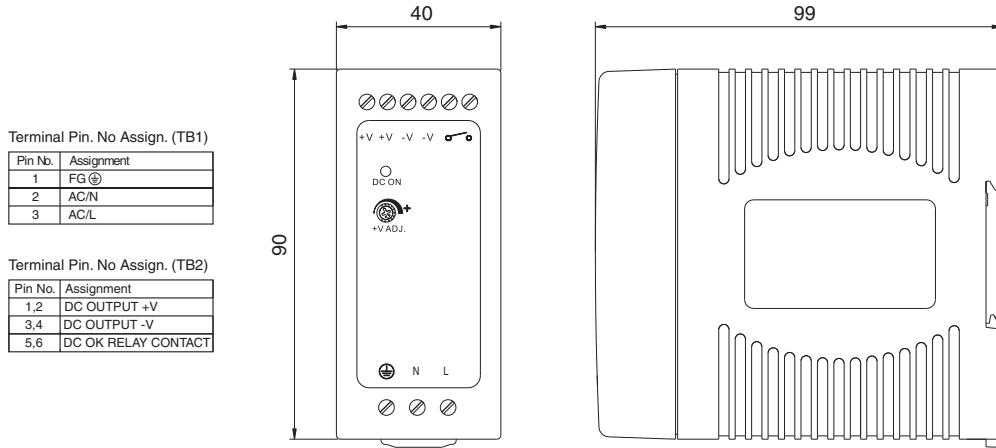
## OUTPUT

Cat. No.	PSC-4012	PSC-4015	PSC-4024	PSC-4048
DC VOLTAGE	12V	15V	24V	48V
RATED CURRENT	3.4A	2.7A	1.7A	0.85A
CURRENT RANGE	0 ~ 3.4A	0 ~ 2.7A	0 ~ 1.7A	0 ~ 0.85A
RATED POWER	40.8W	40.5W	40.8W	40.8W
RIPPLE & NOISE (max)	100mVp-p	100mVp-p	120mVp-p	180mVp-p
Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µF & 47µF parallel capacitor				
VOLTAGE ADJ. RANGE	10.8 ~ 13.2V	13.5 ~ 16.5V	21.6 ~ 26.4V	43.2 ~ 52.8V
VOLTAGE TOLERANCE	±1.0%	±1.0%	±1.0%	±1.0%
Tolerance: includes set up tolerance, line regulation and load regulation.				
LINE REGULATION	±1.0%	±1.0%	±1.0%	±1.0%
LOAD REGULATION	±1.0%	±1.0%	±1.0%	±1.0%
SETUP, RISE TIME	< 800ms, < 50ms / 230VAC at full load			
HOLD UP TIME (Typ.)	> 32ms / 230VAC; >16ms / 115VAC at full load			
VOLTAGE RANGE	88 ~ 264VAC; 124 ~ 370VDC			
Derating may be needed under low input voltages. Please check the derating curve for more details.				
FREQUENCY RANGE	47~63Hz	84%	84%	85%
EFFICIENCY (Typ.)	84%	84%	84%	85%
AC CURRENT (Typ.)	0.8 A / 115VAC; 0.4A / 230VAC			
INRUSH CURRENT (Typ.)	COLD START 30A / 115VAC; 60A / 230VAC			
LEAKAGE CURRENT	< 1mA/ 230VAC			
OVERLOAD PROTECTION	> 105% rated output power Protection type: Constant current limiting, recovers automatically after fault condition is removed.			
OVERVOLTAGE PROTECTION	115% ~ 150% rated output voltage Protection type: latch-off mode			
OVER TEMPERATURE PROTECTION	Power supply shut down at 70°C constant current limiting / output voltage goes to 0; re-power on to recover			
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, TUV EN60950-1:2006+A11, UL1310 NEC class 2 compliant			
WITHSTAND VOLTAGE	I/P-O/P: 4242DC I/P-FG: 2121DC 1 minute			
ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG: 100M Ohms/500VDC			
EMI CONDUCTION & RADIATION	EN55022: 2006 Class B			
HARMONIC CURRENT	EN61000-3-2: 2006 Class A, EN61000-3-3: 1995+A1: 2001+A2: 2005			
EMS IMMUNITY	EN61204-3:2000, EN55024:1998+A1:2001+A2:2003 light industry level, criteria A			
The power supply is considered a component which will installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.				
DC OK Signal	Relay contact (30VDC / 1A, 120VAC / 1A)			
MTBF	947.2K hrs MIL-HDBK-217K			
DIMENSION	40x90x99 mm (WxHxD)			
PACKING	0.28Kg/27 pcs./8.76Kg			
CONNECTION	I/P 3 poles, O/P: 6 poles screw DIN terminal			
COOLING	Free air convection			
All parameters NOT specially mentioned are measured at 230V AC input, rated load and 25°C of ambient temperature.				

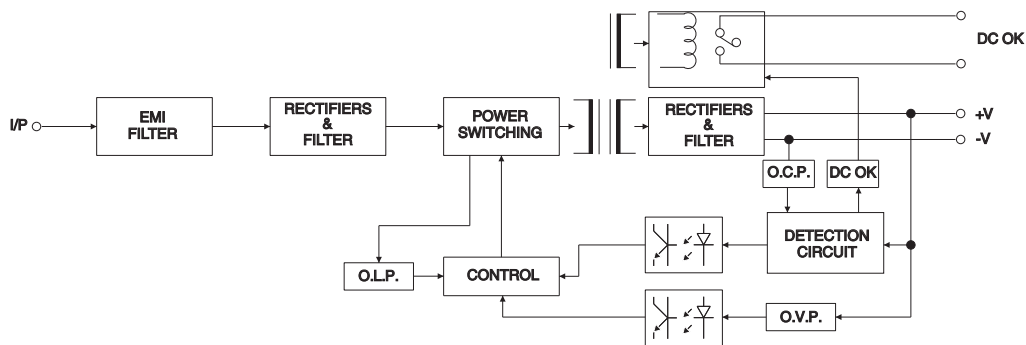
# PSC-40 Series

## Mechanical Specification

Unit : mm / inch



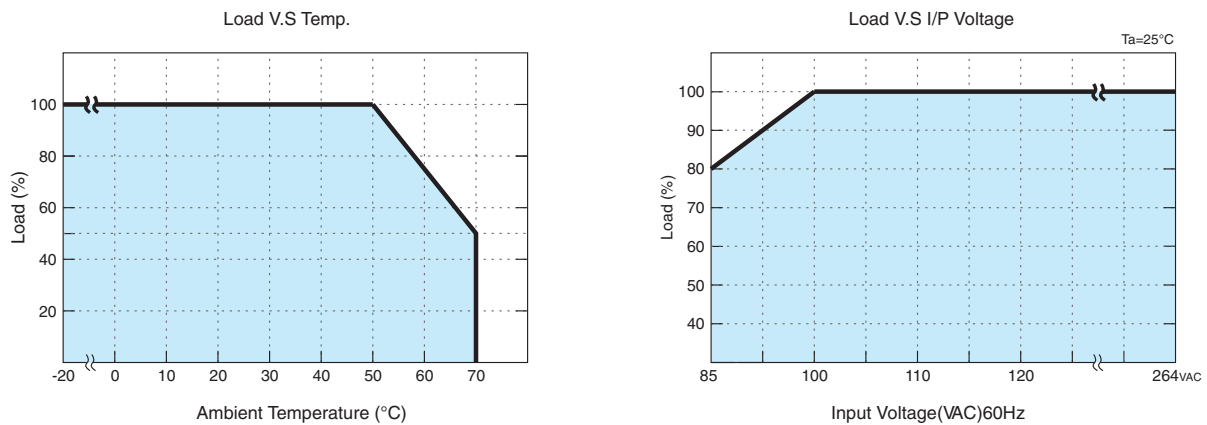
## Block Diagram



## DC OK Relay Contact

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

## Derating Curve



Note: All dimensions are in millimeters, to convert to inches multiply by 0.03937.





# PSC-60 Series



## Features:

- Universal AC input (88-264V AC)
- Protections: Short Circuit / Overload / Overvoltage
- Brown-out protection
- Installed on DIN rail TS35 / 7.5 or 15
- True DC OK signal 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
- UL1310 Class 2 Power unit / LPS pass
- UL508 (Industrial control equipment) listed

## OUTPUT

## INPUT

## PROTECTION

## ENVIRONMENT

## SAFETY & EMC

## OUTPUT

Cat. No.	PSC-6012	PSC-6015	PSC-6024	PSC-6048
DC VOLTAGE	12V	15V	24V	48V
RATED CURRENT	5A	4A	2.5A	1.25A
CURRENT RANGE	0 ~ 5A	0 ~ 4A	0 ~ 2.5A	0 ~ 1.25A
RATED POWER	60W	60W	60W	60W
RIPPLE & NOISE (max)	100mVp-p	100mVp-p	120mVp-p	180mVp-p
VOLTAGE ADJ. RANGE	10.8 ~ 13.2V	13.5 ~ 16.5V	21.6 ~ 26.4V	43.2 ~ 52.8V
VOLTAGE TOLERANCE	±1.0%	±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	< 800ms, < 50ms / 230VAC at full load Length of set up time is measured at sold first start. Turning ON/OFF the power supply may lead to increase of the set up time.			
HOLD UP TIME (Typ.)	> 32ms / 230VAC; >16ms / 115VAC at full load			
VOLTAGE RANGE	88 ~ 264VAC; 124 ~ 370VDC Derating may apply in low input voltage. Please check the derating curve for more details.			
FREQUENCY RANGE	47~63Hz			
EFFICIENCY (Typ.)	86%	87%	87%	88%
AC CURRENT (Typ.)	1.3 A / 115VAC; 0.6A / 230VAC			
INRUSH CURRENT (Typ.)	COLD START 30A / 115VAC; 60A / 230VAC			
LEAKAGE CURRENT	<1mA / 230VAC			
OVER LOAD PROTECTION	> 102% rated output power Protection type: Constant current limiting, recovers automatically after fault condition is removed			
OVER VOLTAGE PROTECTION	115% ~ 150% rated output voltage Protection type: latch-off mode			
OVER TEMPERATURE PROTECTION	Power supply shut down at 70°C constant current limiting / output voltage goes to 0; re-power on to recover			
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, TUV EN60950-1:2006+A11, UL1310 NEC class 2 compliant			
WITHSTAND VOLTAGE	I/P-O/P: 4242DC, I/P-FG: 2121DC 1 minute			
ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG: 100M Ohms/500VDC			
EMI CONDUCTION & RADIATION	EN55022: 2006 Class B			
HARMONIC CURRENT	EN61000-3-2: 2006 Class A, EN61000-3-3: 1995+A1: 2001+A2: 2005			
EMS IMMUNITY	EN61204-3: 2000, EN55024: 1998+A1:2001+A2: 2003 light industry level, criteria A The power supply is considered a component which will installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.			
DC OK Signal	Relay contact (24VDC / 1A, 120VAC / 1A)			
MTBF	944.6K HRS MIL-HDBK-217F			
DIMENSION	40x90x99 mm (WxHxD)			
PACKING	0.3kg; 27pcs / 9.3kg			
CONNECTION	I/P: 3 poles, O/P: 6 poles screw DIN terminal			
COOLING	Free air convection All parameters NOT specially mentioned are measured at 230V AC input, rated load and 25°C of ambient temperature.			

# PSC-60 Series

## Mechanical Specification

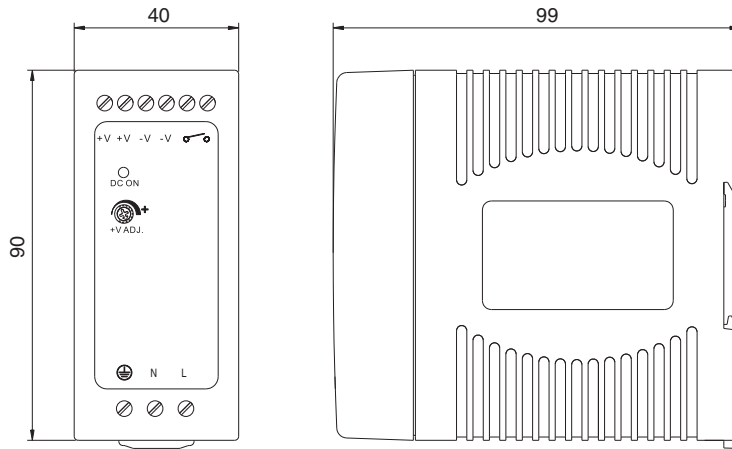
Unit : mm / inch

Terminal Pin. No Assign. (TB1)

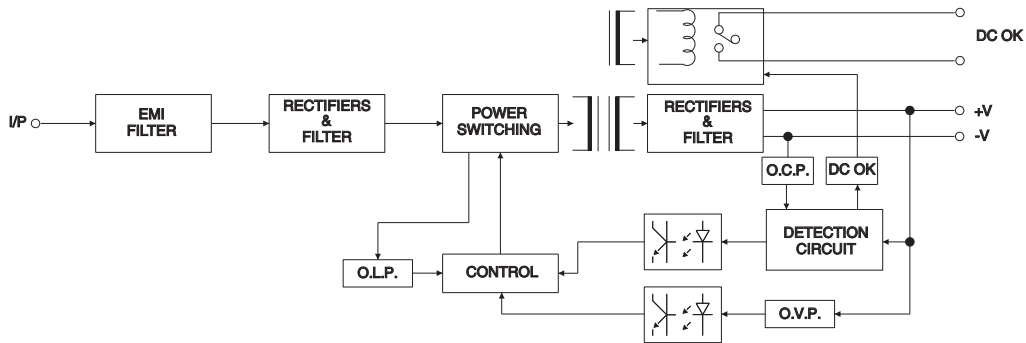
Pin No.	Assignment
1	FG ⊕
2	AC/N
3	AC/L

Terminal Pin. No Assign. (TB2)

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



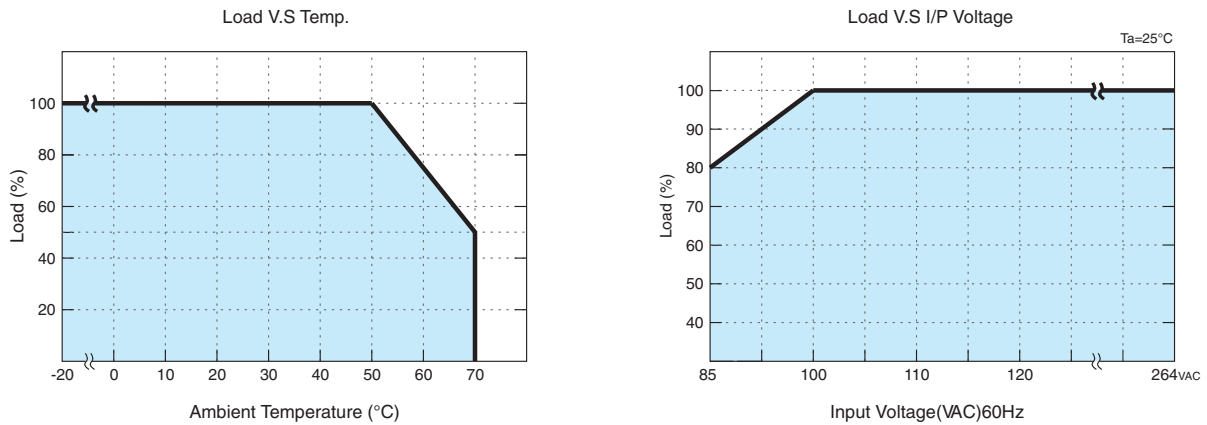
## Block Diagram



## DC OK Relay Contact

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

## Derating Curve



Note: All dimensions are in millimeters, to convert to inches multiply by 0.03937.



# PSC-96 Series



## Features:

- Universal AC input (88-264V AC)
- Protections: Short Circuit / Overload / Overvoltage
- Brown-out protection
- Installed on DIN rail TS35 / 7.5 or 15
- True DC OK signal 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
- UL1310 Class 2 Power unit / LPS pass
- UL508 (Industrial control equipment) listed

## OUTPUT

## INPUT

## PROTECTION

## ENVIRONMENT

## SAFETY & EMC

## OUTPUT

Cat. No.	PSC-9612*	PSC-9615*	PSC-9624	PSC-9648
DC VOLTAGE	12V	15V	24V	48V
RATED CURRENT	7.5A	6.4A	4A	2A
CURRENT RANGE	0 ~ 7.5A	0 ~ 6.4A	0 ~ 4A	0 ~ 2A
RATED POWER	90W	96W	96W	96W
RIPPLE & NOISE (max)	180mVp-p	180mVp-p	180mVp-p	250mVp-p
Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µF & 47µF parallel capacitor				
VOLTAGE ADJ. RANGE	10.8 ~ 13.2V	13.5 ~ 16.5V	21.6 ~ 26.4V	43.2 ~ 52.8V
VOLTAGE TOLERANCE	±1.0%	±1.0%	±1.0%	±1.0%
Tolerance: includes set up tolerance, line regulation and load regulation.				
LINE REGULATION	±1.0%	±1.0%	±1.0%	±1.0%
LOAD REGULATION	±2.0%	±2.0%	±2.0%	±2.0%
SETUP, RISE TIME	< 800ms, < 40ms / 230VAC at full load			
HOLD UP TIME (Typ.)	> 32ms / 230VAC; >16ms / 115VAC at full load			
VOLTAGE RANGE	88 ~ 264VAC; 124 ~ 370VDC Derating may apply in low input voltage. Please check the derating curve for more details.			
FREQUENCY RANGE	47Hz~63Hz			
POWER FACTOR (Typ.)	< 0.92 / 230VAC; < 0.98 / 115VAC at full load			
EFFICIENCY (Typ.)	87%	87%	88%	87%
AC CURRENT (Typ.)	1.1 A / 115VAC; 0.55A / 230VAC			
INRUSH CURRENT (Typ.)	COLD START 30A / 115VAC; 60A / 230VAC			
LEAKAGE CURRENT	<1mA / 230VAC			
OVER LOAD PROTECTION	> 102% rated output power Protection type: Constant current limiting, recovers automatically after fault condition is removed.			
OVER VOLTAGE PROTECTION	115% ~ 150% rated output voltage Protection type: latch-off mode			
OVER TEMPERATURE PROTECTION	90°C ± 10°C (RTH2) detect on heat sink of power transistor Protection type: Shut down overvoltage, re-power on to recover			
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, TUV EN60950-1:2006+A11, UL1310 NEC class 2 compliant			
WITHSTAND VOLTAGE	I/P-O/P: 4242DC I/P-FG: 2121DC 1 minute			
ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG: 100M Ohms/500VDC			
EMI CONDUCTION & RADIATION	EN55022:2006 Class B			
HARMONIC CURRENT	EN61000-3-2:2006 Class A, EN61000-3-3: 1995+A1: 2001+A2: 2005			
EMS IMMUNITY	EN61204-3:2000, EN55024:1998+A1:2001+A2:2003 light industry level, criteria A 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.			
DC OK Signal	Relay contact (24VDC / 1A, 120VAC / 1A)			
MTBF	120.4K Hrs MIL-HDBK-217F			
DIMENSION	55x90x99 mm (WxHxD)			
PACKING	0.4Kg/24 pcs. / 10.8Kg			
CONNECTION	I/P 3 poles, O/P: 6 poles screw DIN terminal			
COOLING	Free air convection			
All parameters NOT specially mentioned are measured at 230V AC input, rated load and 25°C of ambient temperature.				

\*Not included in UL E361935



# PSC-96 Series

## Mechanical Specification

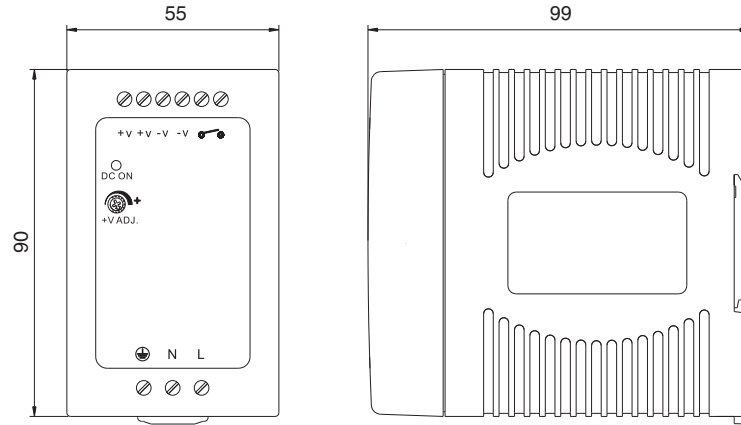
Unit : mm / inch

Terminal Pin. No Assign. (TB1)

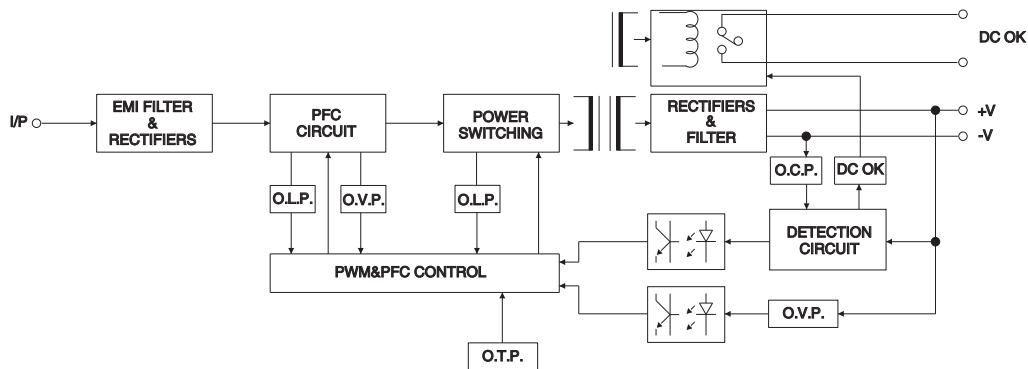
Pin No.	Assignment
1	FG ⊕
2	AC/N
3	AC/L

Terminal Pin. No Assign. (TB2)

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



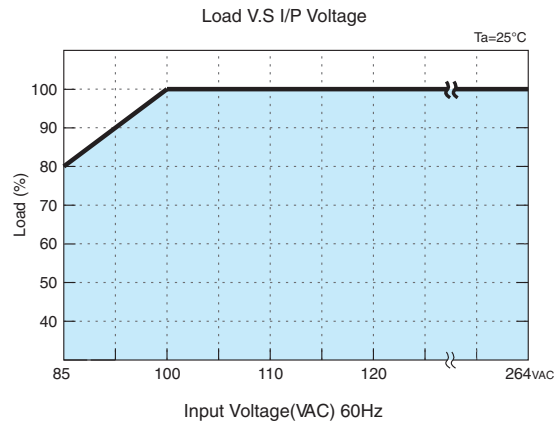
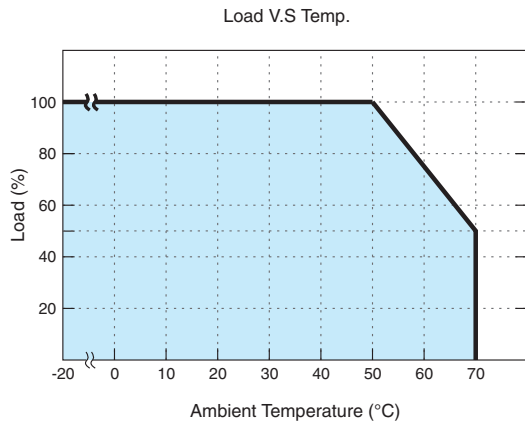
## Block Diagram



## DC OK Relay Contact

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

## Derating Curve



Note: All dimensions are in millimeters, to convert to inches multiply by 0.03937.

# Compact Single Phase Power Supply (PSC)



## Features:

- Universal AC input (88-264V AC)
- Installed on DIN rail TS-35 / 7.5 or 15
- Built-in active PFC function, PF > 0.95
- 150% peak load capability
- 100% full load burn-in test
- Protection: SCP, OLP, OVP, OTP
- Two selectable peak load modes
- Built-in DC OK Relay contact
- Built-in Remote ON / OFF function
- 3 years warranty
- UL 508



## 150W DIN Rail Power Supply

Cat. No.	Phases	Output V DC A	Tol. %	Ripple & Noise	Efficiency	NOTES
PSC-15124	1	24V DC 6.3A	±1%	≤240 mVp-p	≥87%	
PSC-15148	1	48V DC 3.2A	±1%	≤480 mVp-p	≥87%	



## 240W DIN Rail Power Supply

Cat. No.	Phases	Output V DC A	Tol. %	Ripple & Noise	Efficiency	NOTES
PSC-24124	1	24V DC 10A	±1%	≤150 mVp-p	≥91%	
PSC-24148	1	48V DC 5A	±1%	≤300 mVp-p	≥92%	



## 480W DIN Rail Power Supply

Cat. No.	Phases	Output V DC A	Tol. %	Ripple & Noise	Efficiency	NOTES
PSC-48124	1	24V DC 20A	±1%	≤240 mVp-p	≥93%	
PSC-48148	1	48V DC 10A	±1%	≤480 mVp-p	≥94%	



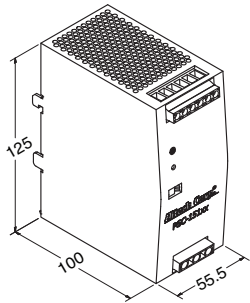
## 20A DIN Rail Redundancy Module

Cat. No.	Phases	Output V DC A	Input VDC	Input A	NOTES
PSC-RM20	1	24V DC 20A	24VDC	2x20A	

\*\*Other output voltages on request.

# SPECIFICATIONS

## PSC-151 Series



Terminal Pin No. Assignment (TB1)

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

Terminal Pin No. Assignment (TB2)

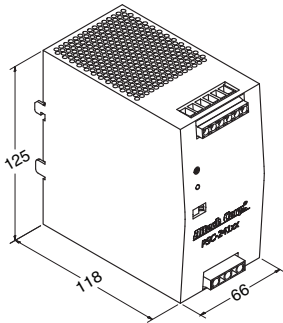
Pin NO.	Assignment
1	DC+
2	DC-
3	INH+
4	INH-
5,6	Relay Contact

Switch No. Assignment

SW NO.	Assignment
SW1	PEAK LOAD SETTING
SW2	REMOTE ON/OFF SETTING

- Universal Input:** 2.0A @ 115VAC / 1.0A @ 230VAC  
**Connection Input:** 2 poles, single screw terminal  
**Connection Output:** 2 poles, single screw terminal  
**Size (WxHxD):** 55.5x12.5x100 mm (2.19x4.92x3.93 in.)  
**Packaging:** 1/box; 0.72kg (1.6 lbs)

## PSC-241 Series



Terminal Pin No. Assignment (TB1)

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

Terminal Pin No. Assignment (TB2)

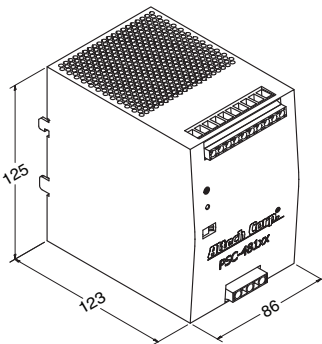
Pin NO.	Assignment
1	DC+
2	DC-
3	INH+
4	INH-
5,6	Relay Contact

Switch No. Assignment

SW NO.	Assignment
SW1	PEAK LOAD SETTING
SW2	REMOTE ON/OFF SETTING

- Universal Input:** 2.6A @ 115VAC / 1.3A @ 230VAC  
**Connection Input:** 2 poles, single screw terminal  
**Connection Output:** 2 poles, single screw terminal  
**Size (WxHxD):** 66x12.5x118 mm (2.6x4.9x4.65 in.)  
**Packaging:** 1/box; 0.9kg (2.0 lbs)

## PSC-481 Series



Terminal Pin No. Assignment (TB1)

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

Terminal Pin No. Assignment (TB2)

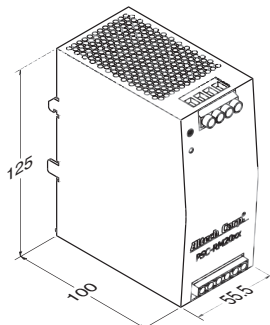
Pin NO.	Assignment
1-3	DC+
4-6	DC-
7	INH+
8	INH-
9,10	DCOK Signal

Switch No. Assignment

SW NO.	Assignment
SW1	PEAK LOAD SETTING
SW2	REMOTE ON/OFF SETTING

- Universal Input:** 5.0A @ 115VAC / 2.5A @ 230VAC  
**Connection Input:** 2 poles, single screw terminal  
**Connection Output:** 2 poles, single screw terminal  
**Size (WxHxD):** 86x12.5x123 mm (3.4x4.9x4.85 in.)  
**Packaging:** 1/box; 1.45kg (3.2 lbs)

## PSC-RM20



Terminal Pin. No Assignment (TB1)

Pin No.	Assignment
1	Vout+
2	Vout-
3,4	Vin-
5	Vin B+
6	Vin A+

Terminal Pin. No Assignment (TB2)

Pin No.	Assignment
1	Alarm B1
2	Alarm B2
3	Alarm A1
4	Alarm A2

- Input:** 2x20A @ 24VDC  
**Connection Input:** 2 poles, single screw terminal  
**Connection Output:** 2 poles, single screw terminal  
**Size (WxHxD):** 55.5x12.5x100 mm (2.19x4.92x3.93 in.)  
**Packaging:** 1/box; 0.72kg (1.6 lbs)





# PSC-151 Series



## Features:

- Universal AC input (88-264V AC)
- Installed on DIN rail TS-35 / 7.5 or 15
- Built-in active PFC function, PF > 0.95
- 150% peak load capability
- 100% full load burn-in test
- Protection: SCP, OLP, OVP, OTP
- Two selectable peak load modes
- Built-in DC OK Relay contact
- Built-in Remote ON / OFF function
- 3 years warranty
- UL 508

## OUTPUT

Cat. No.	PSC-15124	PSC-15148
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DC VOLTAGE	24V	48V
RATED CURRENT	6.3A	3.2A
CURRENT RANGE	0~6.3A	0~3.2A
RATED POWER	150W	150W
PEAK CURRENT	9.45A	4.8A
PEAK POWER	225W (3sec.)	
	3 seconds or 20% duty cycle max. and the average output power should not exceed the rate power.	
RIPPLE & NOISE (max)	240mVp-p	480mVp-p
	Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µF & 47µF parallel capacitor.	
VOLTAGE ADJ. RANGE	-2% ~ +8%	-2% ~ +8%
VOLTAGE TOLERANCE	±1.0%	±1.0%
	Tolerance: includes set up tolerance, line regulation and load regulation.	
LINE REGULATION	±0.5%	±0.5%
LOAD REGULATION	±1.0%	±1.0%
SETUP, RISE TIME	700ms, 30ms / 230VAC / 115VAC at full load	
HOLD UP TIME (Typ.)	16ms / 230VAC; 16ms / 115VAC at full load	

## INPUT

VOLTAGE RANGE	88 ~ 264VAC; 124 ~ 373VDC	
	Derating may apply in low input voltage. Please check the derating curve for more details.	
FREQUENCY RANGE	47 ~ 63Hz	
POWER FACTOR(Typ.)	0.9 / 230VAC; 0.98 / 115VAC at full load	
EFFICIENCY (Typ.)	87%	87%
AC CURRENT (Typ.)	2.0A / 115VAC; 1.0A / 230VAC	
INRUSH CURRENT (Typ.)	33A / 115VAC; 65A / 230VAC	
LEAKAGE CURRENT	<1mA/ 240VAC	

## PROTECTION

OVERLOAD PROTECTION	105% ~ 150% rated output power for 3 sec and then shutdown in O/P with auto-recovery. 150% or greater rated power or short circuit is constant current limiting. If O/P drops to 40% output then it auto-recover 5 times; if fault condition is not removed during auto recovery, the system will shut down and needs to be restarted to recover.	
OVER VOLTAGE	29 ~ 33V	56 ~ 65V
	Protection type: Latch-off mode, repower on to recover.	
OVER TEMPERATURE	95 ±5°C (TSW: detect on heatsink of power diode) Protection type: Shut down o/p voltage, recovers automatically after temperature goes down	

## ENVIRONMENT

WORKING TEMP.	-10 ~ +70°C (Refer to derating curve) Installation clearance: 40mm from top, 20mm from bottom, 5mm from the left and right side are recommended when loaded permanently with full power. In case the adjacent device is a heat source, 15mm clearance is recommended.	
WORKING HUMIDITY	20 ~ 95% 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, 60min. each along X, Y, Z axes	

## SAFETY & EMC

SAFETY STANDARDS	UL 508 / TUV EN 60950-1	
WITHSTAND VOLTAGE	I/P-O/P: 4242VDC, I/P-FG: 2121VDC, O/P-FG: 707VDC, O/P-DC OK: 707VDC	
ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG: >100M Ohms / 500VDC / 25°C / 70% RH	
EMI CONDUCTION & RADIATION	EN55022 (CISPR22) Class B	
HARMONIC CURRENT	EN61000-3-2, -3	
EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204; EN55024; EN61000-6-2; (EN50082-2); EN61204-3; heavy industry level; criteria A, MEET SEMI F47 The power supply is considered a component which will installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.	

## OUTPUT

DC OK RELAY. CONTACT RATINGS (max)	60VDC / 0.3A, 30VDC / 1A, 30VAC / 0.5A resistive load	
MTBF	62.7K HRS (MIL-HDBK-217F)	
DIMENSION	55.5x125.2x99.8 mm (WxHxD)	
PACKING	0.72kg; 12pcs / 12.8kg	
COOLING	Free air convection	
	All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.	

# PSC-151 Series

## Mechanical Specification

Terminal Pin No. Assignment (TB1)

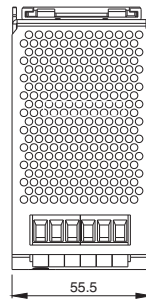
Pin NO.	Assignment
1	FG ⊕
2	AC/L
3	AC/N

Terminal Pin No. Assignment (TB2)

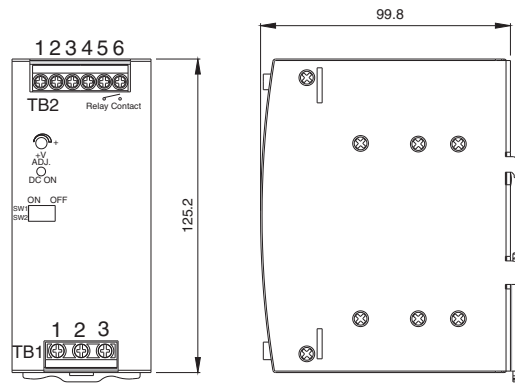
Pin NO.	Assignment
1	DC+
2	DC-
3	INH+
4	INH-
5,6	Relay Contact

Switch No. Assignment

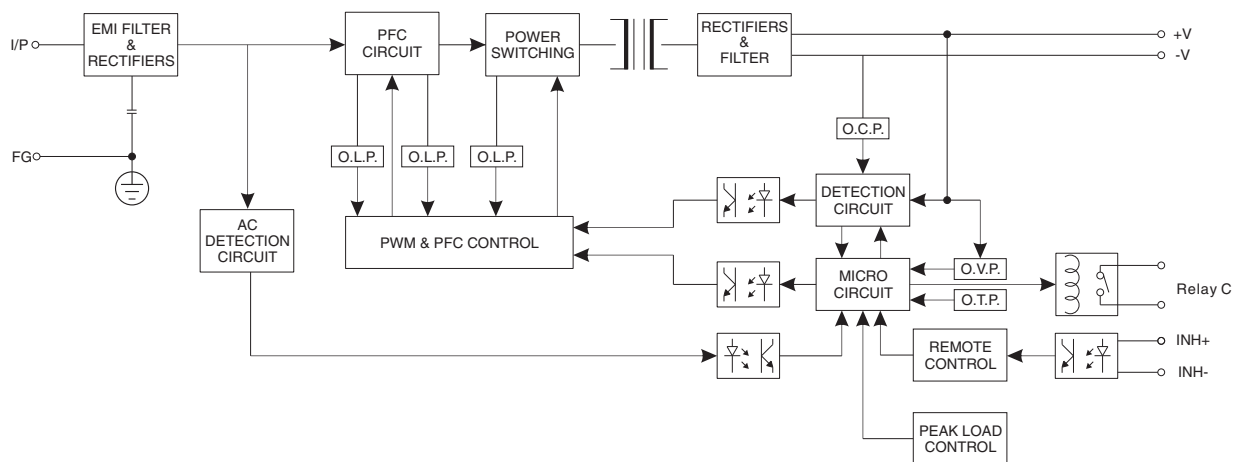
SW NO.	Assignment
SW1	PEAK LOAD SETTING
SW2	REMOTE ON/OFF SETTING



Unit : mm / inch



## Block Diagram



## DC OK Relay Contact

Contact Close	When the output voltage reaches the adjusted output voltage.
Contact Open	When the output voltage drop below 45% rated output voltage.
Contact Ratings(max.)	30V/1A resistive load

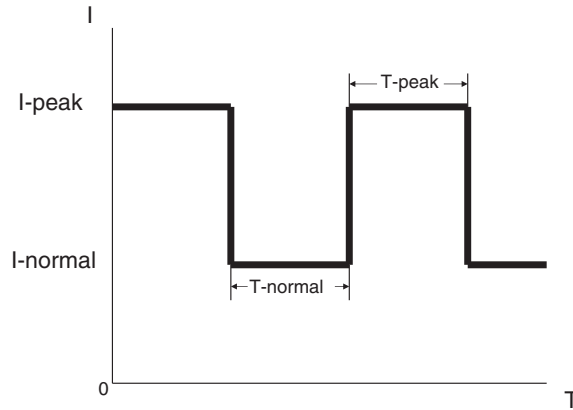
Note: All dimensions are in millimeters, to convert to inches multiply by 0.03937.



# PSC-151 Series

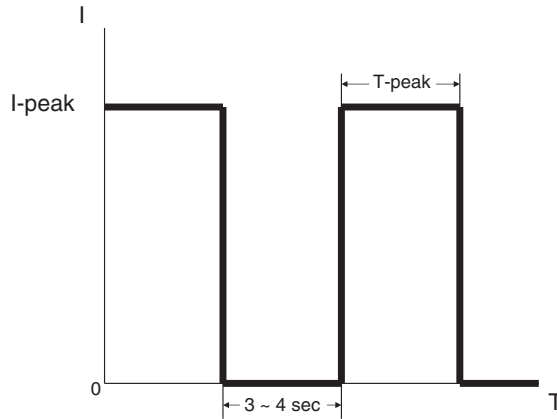


## Peak Load SW1 ON (Mode1) Default setting

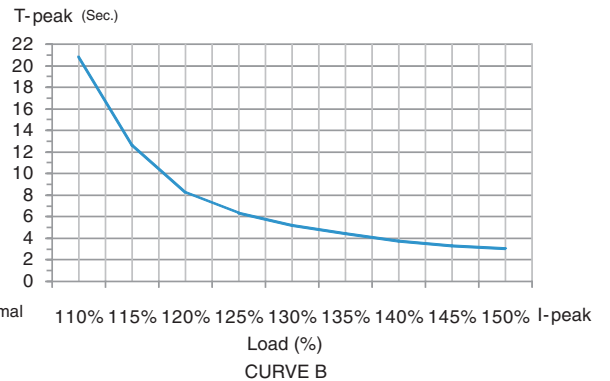
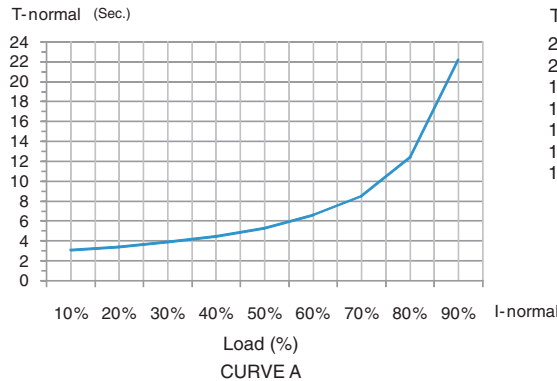


T-peak presents while the unit is working within 110%~150% Rating output power. See curve " B " for the variation in T-peak between output current and holdup time. If T-peak is more than the time setting in curve "B", the output current will drop to the constant current limit (I-normal) that is 105% rating power, meanwhile, I-normal and T-normal will be presenting. See curve "A" for the timing back to I-Peak of T-normal and this Mode can use for easy 2-stage battery charger.

## Peak Load SW2 OFF (Mode2)



T-peak presents while the unit is working within 110%~150% Rating output power. See curve " B " for the variation in T-peak between output current and holdup time. If T-peak is more than the time setting in curve "B", the output current will be shut down for 3~4 sec, then auto-recovery.





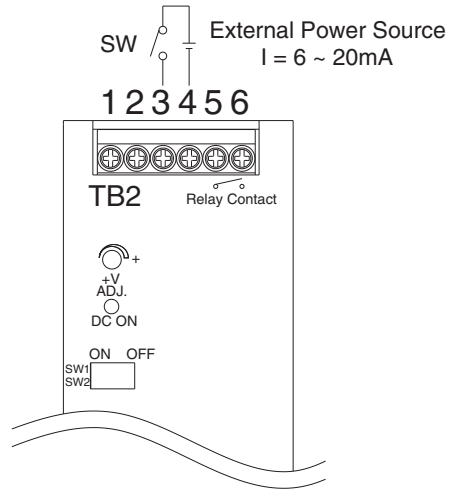
# PSC-151 Series

## Remote ON/OFF

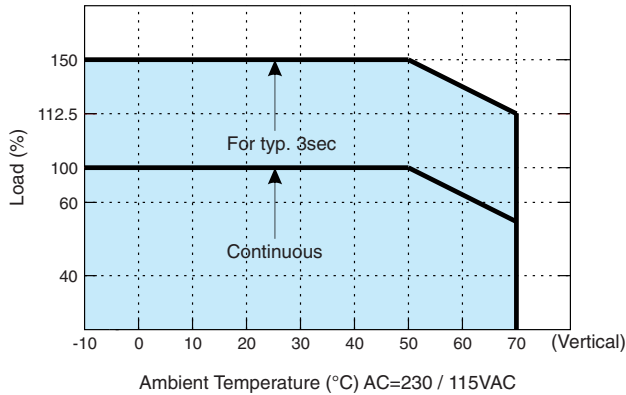
The PSU can be turned ON/OFF by using the "Remote Control" function.

SW2	INH+(3 PIN)/INH-(4 PIN)	Output Status
OFF	SW ON (>2.5V)	ENABLE
OFF	SW OFF (<0.8V)	DISABLE
ON	SW ON (>2.5V)	DISABLE
ON	SW OFF (<0.8V)	ENABLE

(Default Setting)



## Derating Curve



## Output derating VS input Voltage

