



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

OTHERS

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 is 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.			



Mechanical Specification

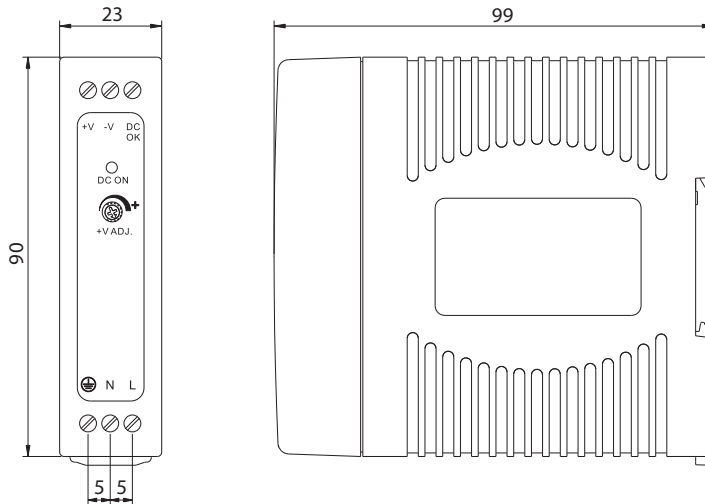
Unit : mm / inch

Terminal Pin. No Assign. (TB1)

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

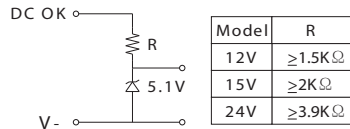
Terminal Pin. No Assign. (TB2)

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

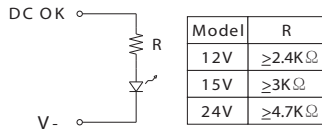


Application of DC OK Active Signal

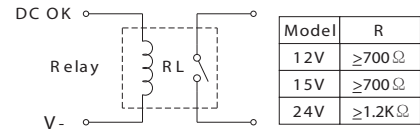
(a) 5V signal



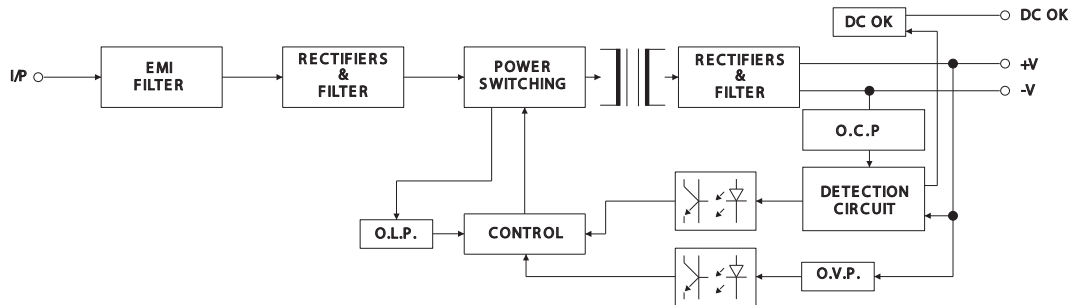
(b) LED



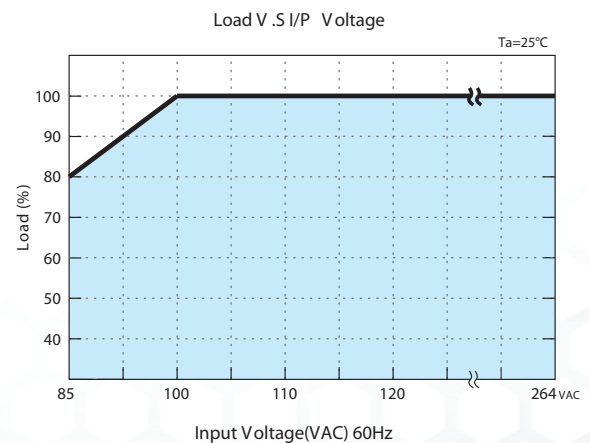
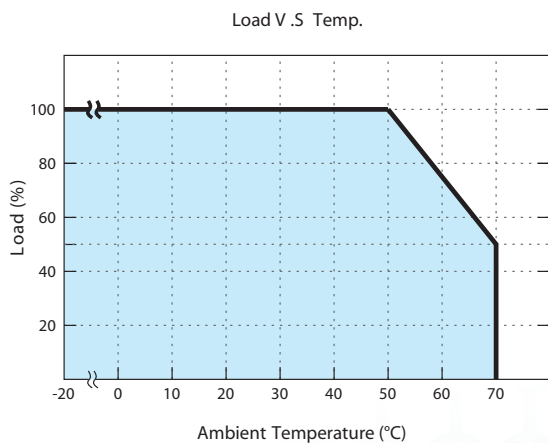
(c) Relay



Block Diagram



Derating Curve





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

OTHERS

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 is 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.			



Mechanical Specification

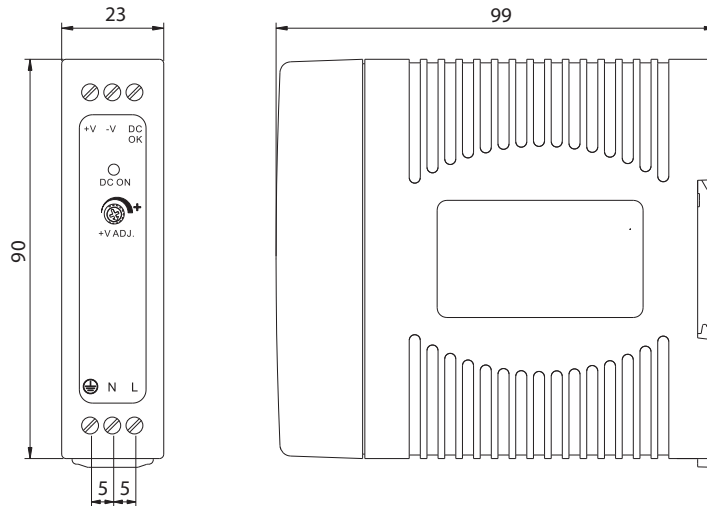
Unit : mm / inch

Terminal Pin. No Assign. (TB1)

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

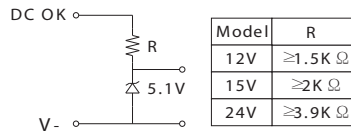
Terminal Pin. No Assign. (TB2)

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

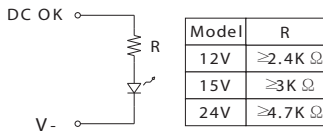


Application of DC OK Active Signal

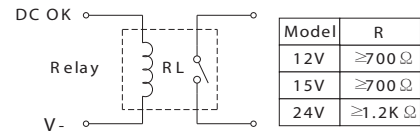
(a) 5V signal



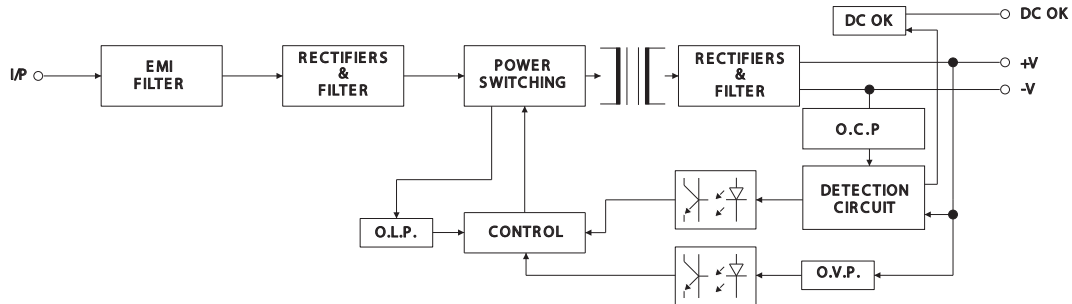
(b) LED



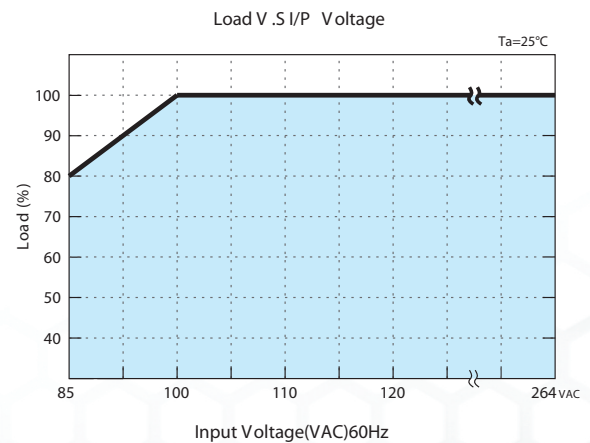
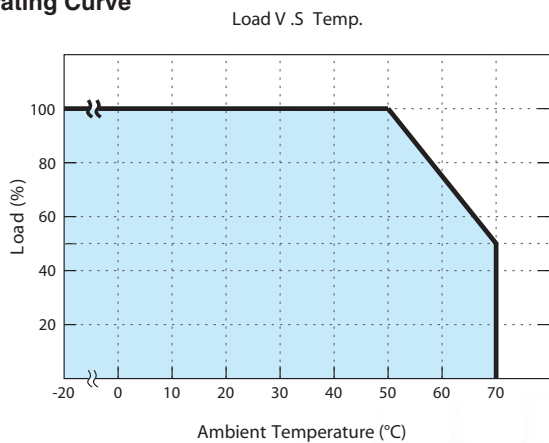
(c) Relay



Block Diagram



Derating Curve





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

OTHERS

Cat. No.	PSC-4012	PSC-4015	PSC-4024	PSC-4048
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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			
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 is 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.



Mechanical Specification

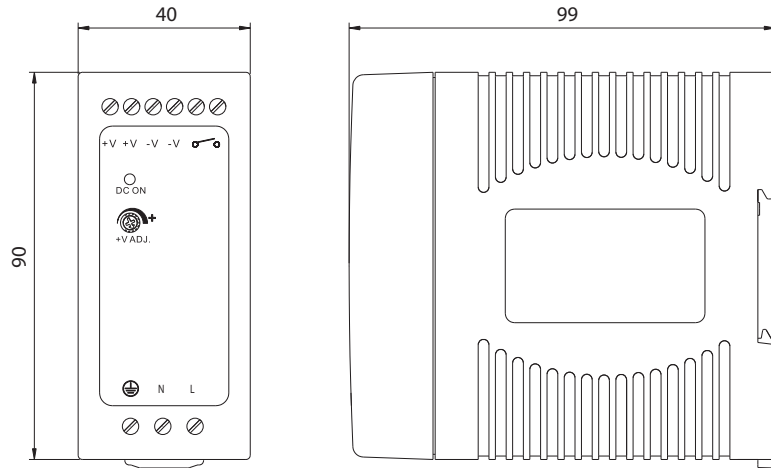
Unit : mm / inch

Terminal Pin. No Assign. (TB1)

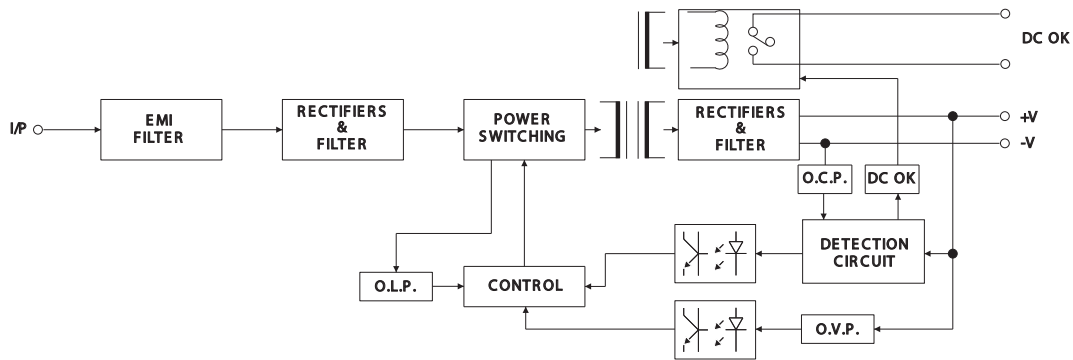
Pin No.	Assignment
1	FG ⊕
2	AC/N
3	AC/L

Terminal Pin. No Assign. (TB2)

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



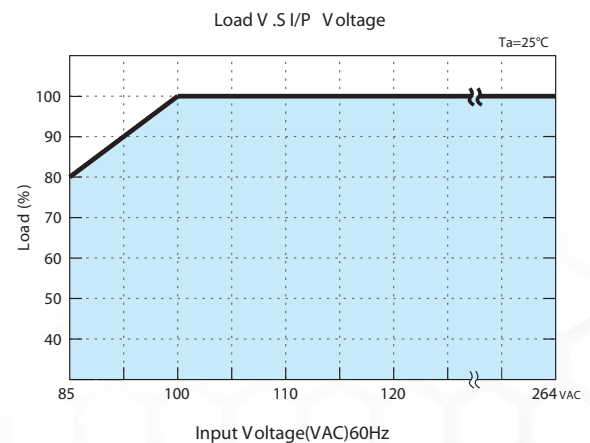
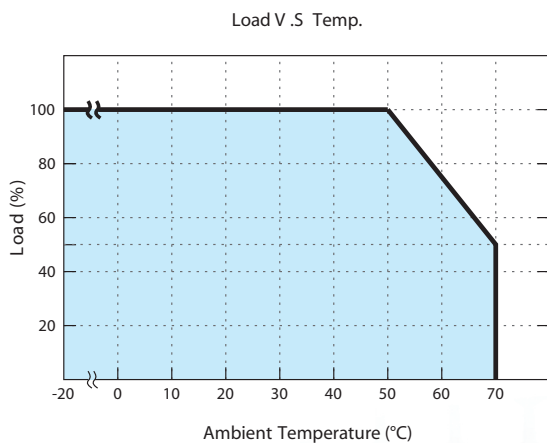
Block Diagram



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





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

OTHERS

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 1minute			
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 is 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.			



Mechanical Specification

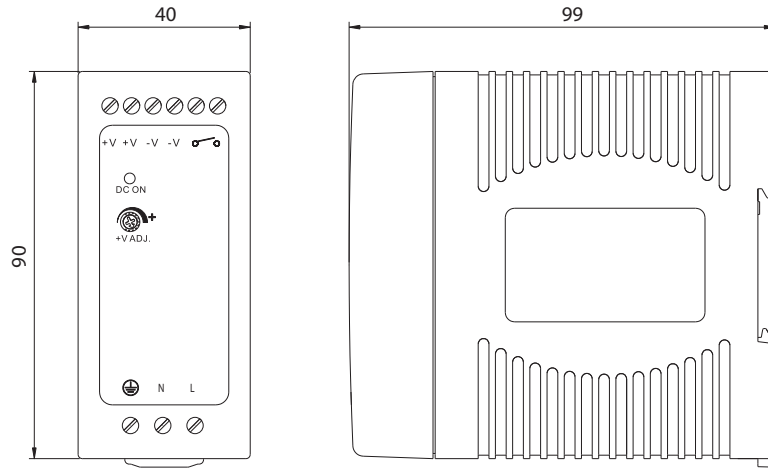
Unit : mm / inch

Terminal Pin. No Assign. (TB1)

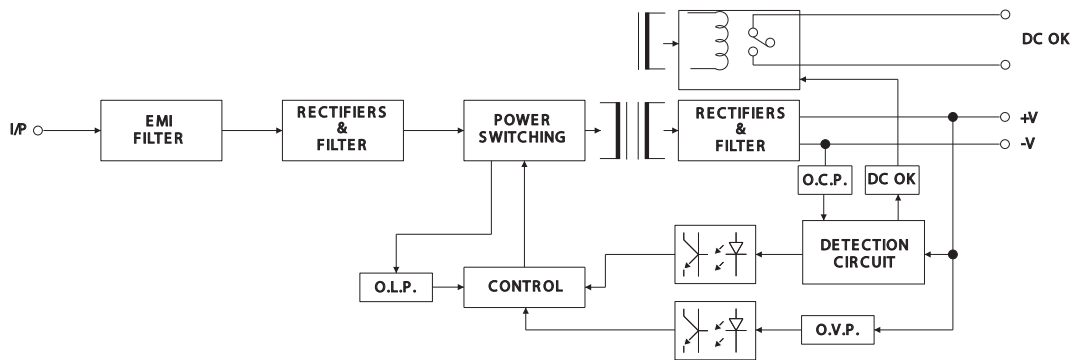
Pin No.	Assignment
1	FG ⊕
2	AC/N
3	AC/L

Terminal Pin. No Assign. (TB2)

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



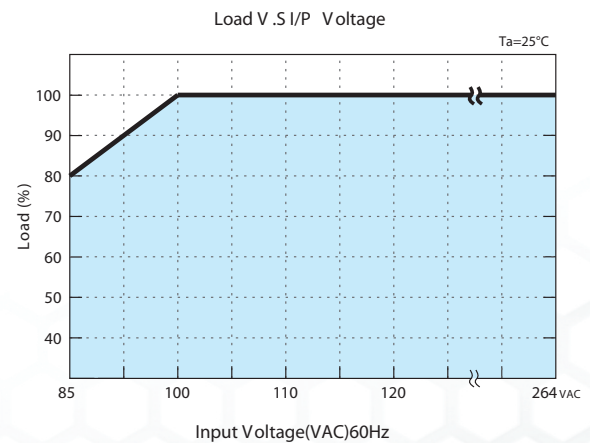
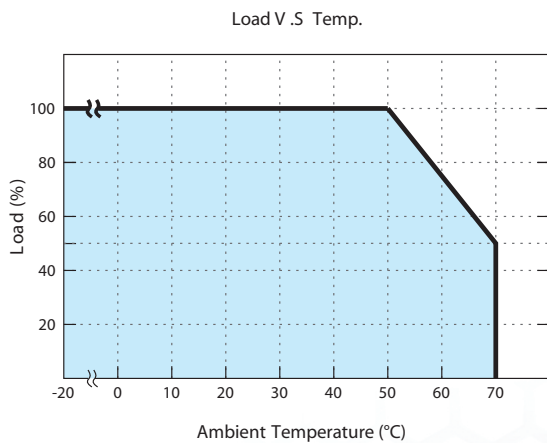
Block Diagram



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





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

OTHERS

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



Mechanical Specification

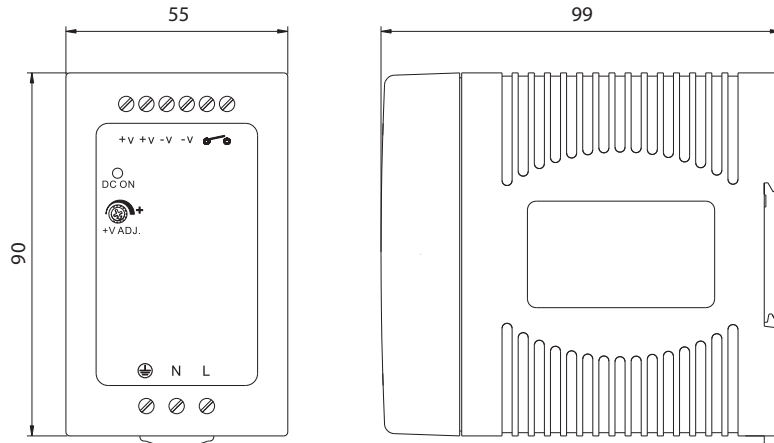
Unit : mm / inch

Terminal Pin. No Assign. (TB1)

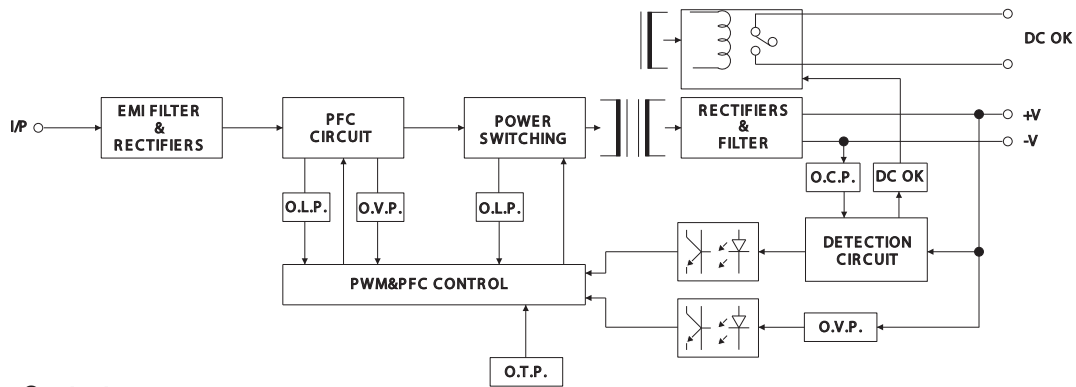
Pin No.	Assignment
1	FG ⊕
2	AC/N
3	AC/L

Terminal Pin. No Assign. (TB2)

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



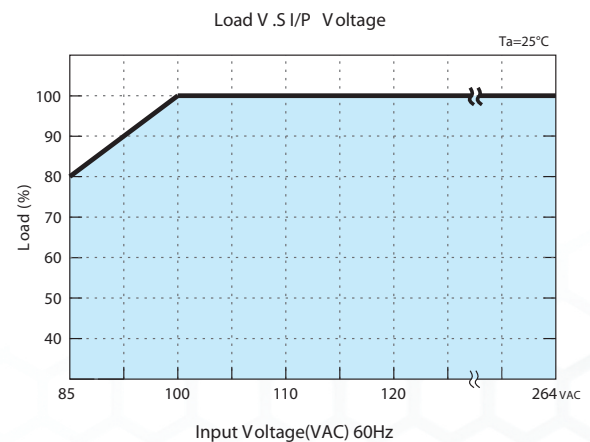
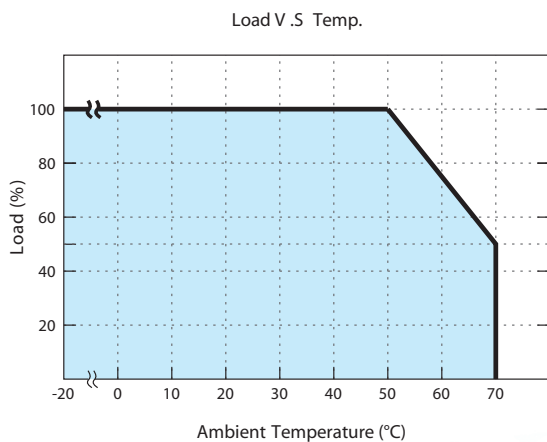
Block Diagram



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





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

INPUT

PROTECTION

ENVIRONMENT

SAFETY & EMC

OTHERS

Cat. No.	PSC-15124	PSC-15148
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 Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µF & 47µF parallel capacitor.	480mVp-p
VOLTAGE ADJ. RANGE	-2% ~ +8%	-2% ~ +8%
VOLTAGE TOLERANCE	±1.0% Tolerance: includes set up tolerance, line regulation and load regulation.	±1.0%
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	
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.)	2.6A / 115VAC; 1.3A / 230VAC	
INRUSH CURRENT (Typ.)	33A / 115VAC; 65A / 230VAC	
LEAKAGE CURRENT	<1mA/ 240VAC	
OVERLOAD	Normally works within 105% ~ 150% rated output power for more than 3sec and then shutdown O/P voltage with auto-recovery, > 150% rated power or short circuit is constant current limiting, if o/p drop to 40% rating output voltage then shutdown and auto-recover 5 time, if fault condition not remove in this 5 time, the system well be shutdown and re-power on to recover.	
OVER VOLTAGE	29 ~ 33V	56 ~ 65V
OVER TEMPERATURE	Protection type: Latch-off mode, repower on to recover. 95 ±5°C (TSW: detect on heatsink of power diode) Protection type: Shut down o/p voltage, recovers automatically after temperature goes down	
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 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	
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	0.9kg; 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.



Mechanical Drawings

Unit : mm / inch

Terminal Pin No. Assignment (TB1)

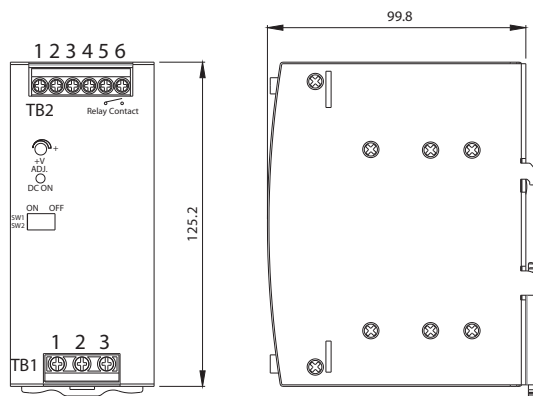
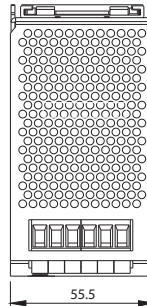
Pin NO.	Assignment
1	FG ⊕
2	AC/L
3	AC/N

Terminal Pin No. Assignment (TB2)

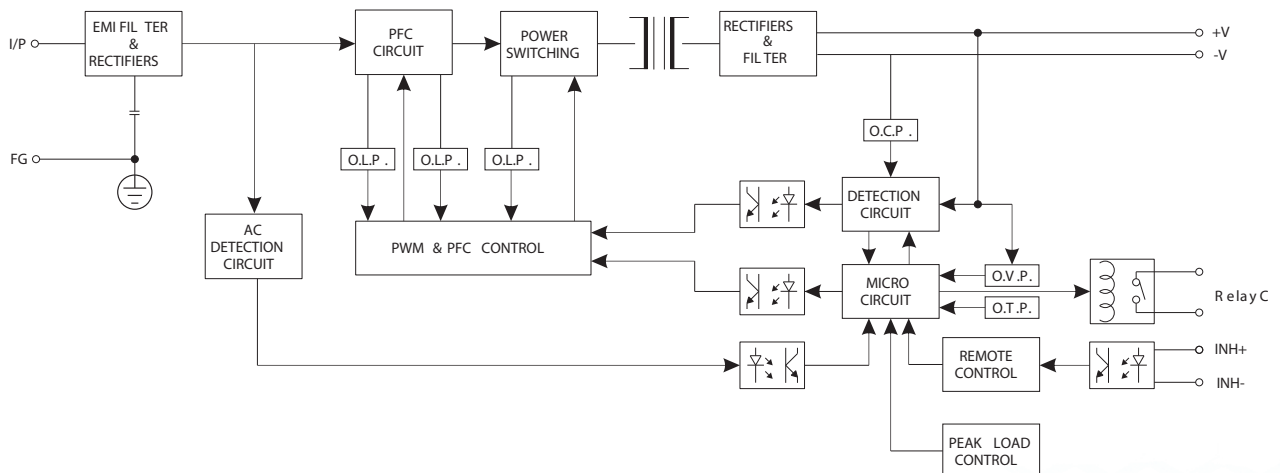
Pin NO.	Assignment
1	DC+
2	DC-
3	INH+
4	INH-
5,6	Relay Contact

Switch No. Assignment

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



Block Diagram



DC OK Relay Contact

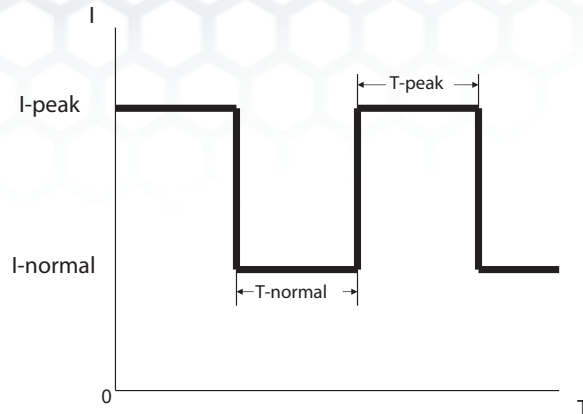
Contact Close	When the output voltage reaches the adjusted output voltage.
Contact Open	When the output voltage drop below 45% rated output voltage.
Contact Ratings(max.)	30V/1A resistive load



PSC-151 Series

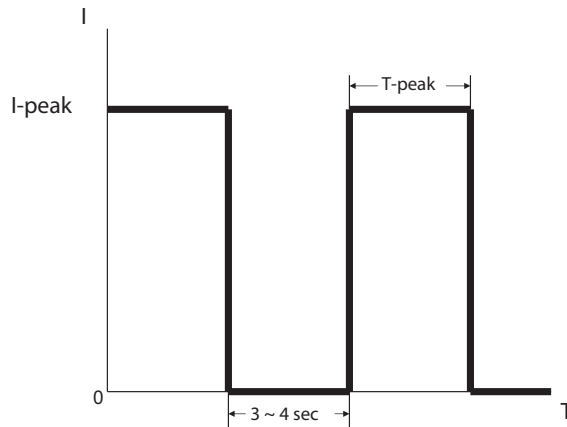


Peak Load SW1 ON (Mode1) Default setting



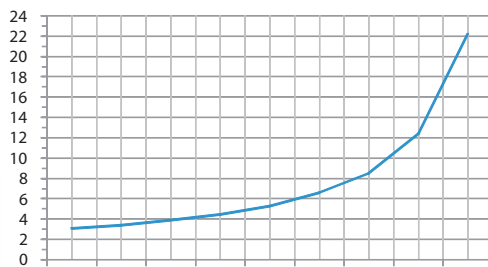
T-peak presents while the unit is working within 110%~150% Rating output power. See curve " B " for the variation in T-peak between output current and holdup time. If T-peak is more than the time setting in curve "B", the output current will drop to the constant current limit (I-normal) that is 105% 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)



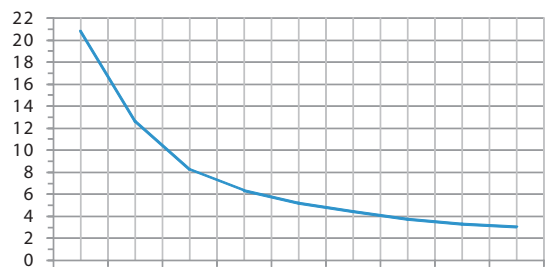
T-peak presents while the unit is working within 110%~150% Rating output power. See curve " B " for the variation in T-peak between output current and holdup time. If T-peak is more than the time setting in curve "B", the output current will be shut down for 3~4 sec, then auto-recovery.

T-normal (Sec.)



10% 20% 30% 40% 50% 60% 70% 80% 90% I-normal
Load (%)
CURVE A

T-peak (Sec.)



110% 115% 120% 125% 130% 135% 140% 145% 150% I-peak
Load (%)
CURVE B

PSC-151 Series

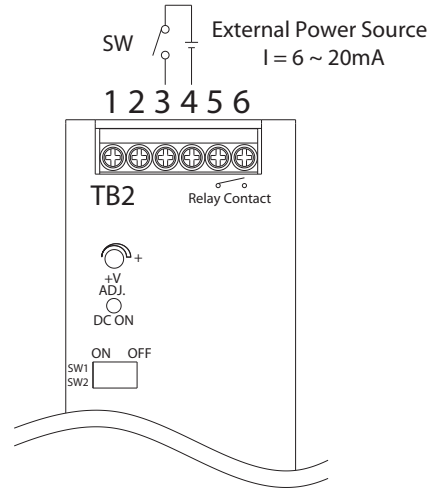


Remote ON/OFF

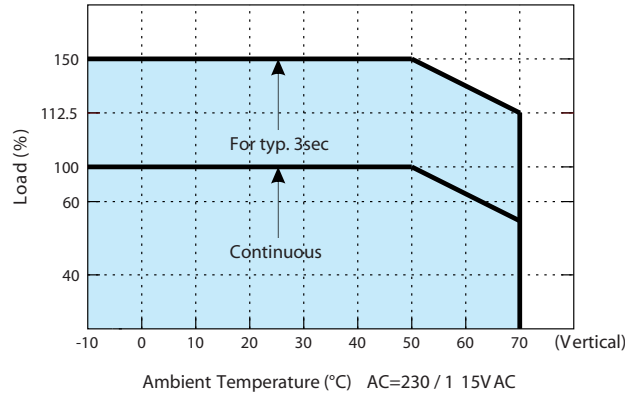
The PSU can be turned ON/OFF by using the "Remote Control" function.

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

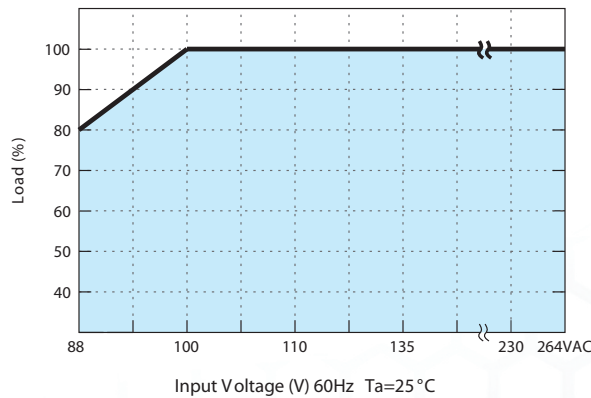
(De fault Setting)



Derating Curve



Output derating VS input coltage





PSC-241 Series



Features:

- Universal AC input (88-264V AC)
- High efficiency 92% and low power dissipation
- 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-24124	PSC-24148
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DC VOLTAGE	24V	48V
RATED CURRENT	10A	5A
CURRENT RANGE	0~10A	0~5A
RATED POWER	240W	240W
PEAK CURRENT	15A	7.5A
PEAK POWER	360W (3sec.) Two selectable peak load modes 3 seconds or 20% duty cycle Max. The average output power should not exceed the rate power.	
RIPPLE & NOISE (max)	150mVp-p Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µF & 47µF parallel capacitor.	300mVp-p
VOLTAGE ADJ. RANGE	-2% ~ +8%	-2% ~ +8%
VOLTAGE TOLERANCE	±1.0% Tolerance: includes set up tolerance, line regulation and load regulation.	±1.0%
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.)	20ms / 230VAC; 20ms / 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.)	0.96 / 230VAC; 0.96 / 115VAC at full load	
EFFICIENCY (Typ.)	91%	92%
AC CURRENT (Typ.)	2.6A / 115VAC; 1.3A / 230VAC	
INRUSH CURRENT (Typ.)	33A / 115VAC; 65A / 230VAC	
LEAKAGE CURRENT	<1mA/ 240VAC	

PROTECTION

OVERLOAD	>150% rated power or short circuit is constant current limiting. if o/p drop to 40% rating output voltage then shutdown and auto-recover 5 time, if fault condition not remove in this 5 time, the system will be shutdown and re-power on to recover.	
OVER VOLTAGE	28 ~ 33V Protection type: Shut down O/P voltage with auto-recovery	56 ~ 65V
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.	-25 ~ +70°C (Refer to output load derating curve) Installation clearances: 40mm on top, 20mm on the bottom, 5mm on 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, 60 min. each long X,Y, Z axes	

SAFETY & EMC

SAFETY STANDARDS	UL508, TUV EN60950-1	
WITHSTAND VOLTAGE	I/P-O/P: 4242VDC I/P-FG2121VDC O/P-F/G: 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	EN55022:2006 Class B	
HARMONIC CURRENT	EN61000-3-2: 2006 Class A, ENG1000-3-3: 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 is still meets EMC directives.	

OTHERS

DC OK RELAY CONTACT RATINGS (max)	60VDC / 0.3A, 30VDC / 1A, 30VAC / 0.5A resistive load	
MTBF	57K HRS (MIL-HDBK-217F)	
DIMENSION	65.8x125.2x117.7 mm (WxHxD)	
PACKING	0.9kg; 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.	



Mechanical Drawings

Unit : mm / inch

Terminal Pin No. Assignment (TB1)

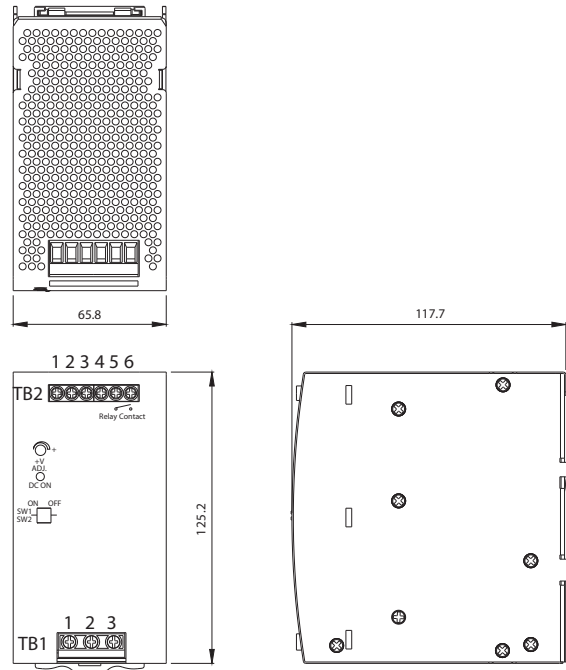
Pin NO.	Assignment
1	FG ⊕
2	AC/L
3	AC/N

Terminal Pin No. Assignment (TB2)

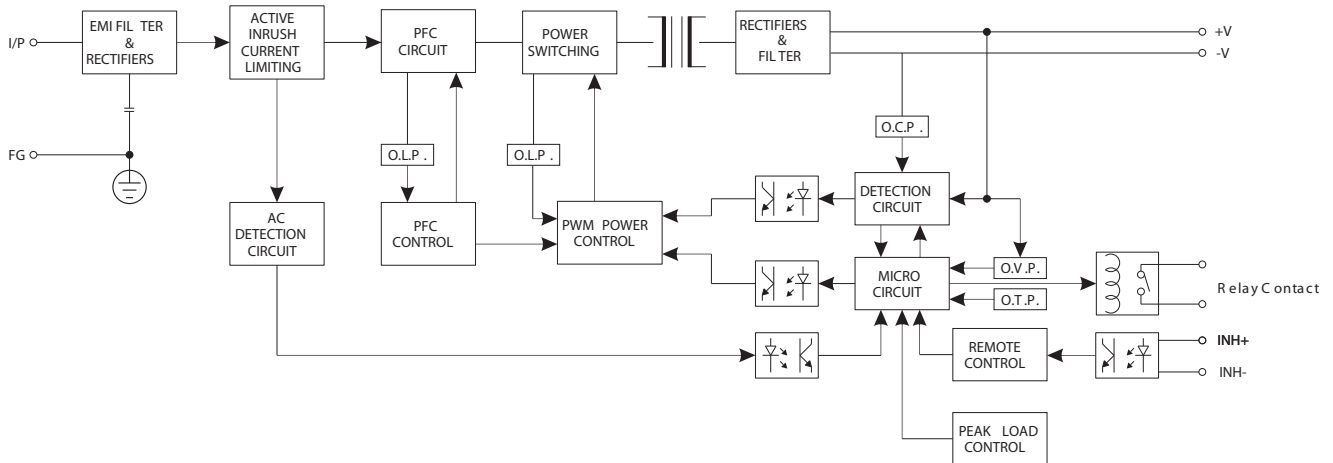
Pin NO.	Assignment
1	DC+
2	DC-
3	INH+
4	INH-
5,6	Relay Contact

Switch No. Assignment

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



Block Diagram



DC OK Relay Contact

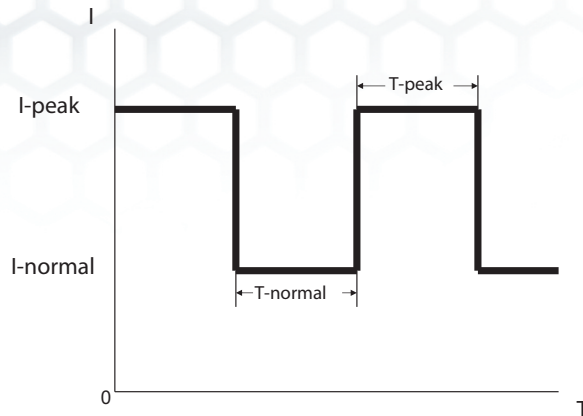
Contact Close	When the output voltage reaches the adjusted output voltage.
Contact Open	When the output voltage drop below 45% rated output voltage.
Contact Ratings(max.)	30V/1A resistive load



PSC-241 Series

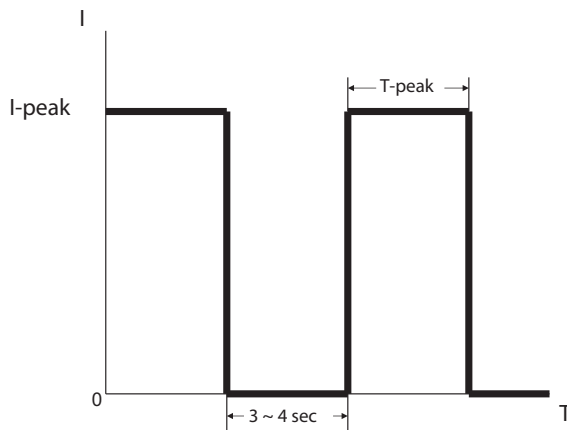


Peak Load SW1 ON (Mode1) Default setting



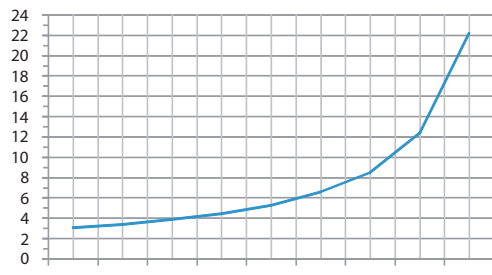
T-peak presents while the unit is working within 110%~150% Rating output power. See curve " B " for the variation in T-peak between output current and holdup time. If T-peak is more than the time setting in curve "B", the output current will drop to the constant current limit (I-normal) that is 105% 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)



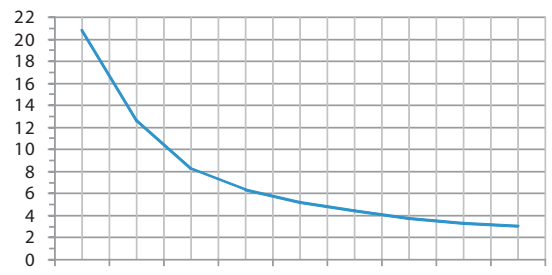
T-peak presents while the unit is working within 110%~150% Rating output power. See curve " B " for the variation in T-peak between output current and holdup time. If T-peak is more than the time setting in curve "B", the output current will be shut down for 3~4 sec, then auto-recovery.

T-normal (Sec.)



10% 20% 30% 40% 50% 60% 70% 80% 90% I-normal
Load (%)
CURVE A

T-peak (Sec.)



110% 115% 120% 125% 130% 135% 140% 145% 150% I-peak
Load (%)
CURVE B

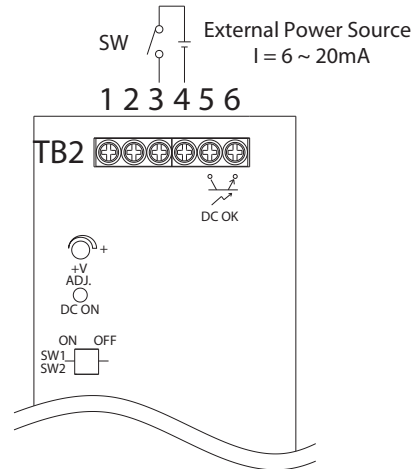


Remote ON/OFF

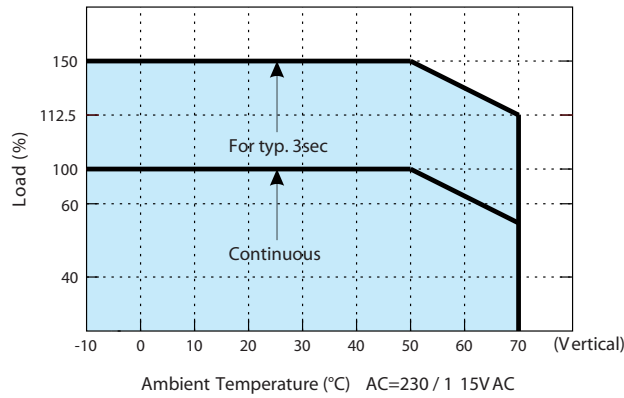
The PSU can be turned ON/OFF by using the "Remote Control" function.

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

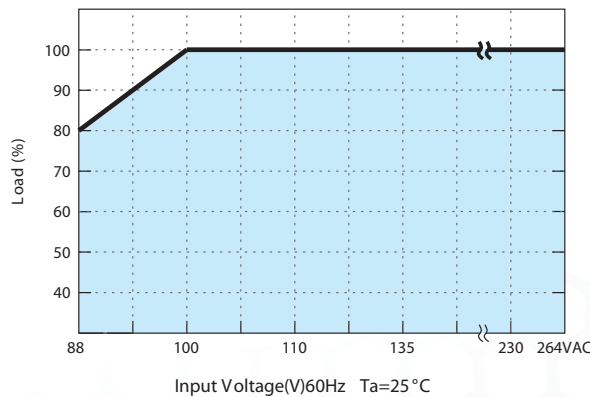
(Default Setting)



Derating Curve



Output derating VS input voltage





PSC-481 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
- Protection: SCP, OLP, OVP, OTP
- Two selectable peak load modes
- Built-in DC OK (Open Collector Signal)
- Built-in Remote ON / OFF function
- 3 years warranty
- UL 508

OUTPUT

Cat. No.	PSC-48124	PSC-48148
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DC VOLTAGE	24V	48V
RATED CURRENT	20A	10A
CURRENT RANGE	0~20A	0~10A
RATED POWER	480W	480W
PEAK CURRENT	30A	15A
PEAK POWER	720W (3sec.) Two selectable peak load modes 3 seconds or 20% duty cycle Max. 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	-5% ~ +5%	
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	800ms, 100ms / 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.)	0.96 / 230VAC / 115VAC at full load	
EFFICIENCY (Typ.)	93%	94%
AC CURRENT (Typ.)	5.0A / 115VAC; 2.5A / 230VAC	
IMRUSH CURRENT (Typ.)	33A / 115VAC; 65A / 230VAC	
LEAKAGE CURRENT	< 1mA / 240VAC	

PROTECTION

OVERLOAD	Hiccup mode: when the rated output power is within 105% ~ 150% for more than 3secs. Constant current limit: > 150% rated power / short circuit Auto-recovery: If O/P drop to 40% of the rated output voltage, PSU will shut down and auto-recover 5times (If fault condition remains after 5times recovery, PSU will shut down. User must re-power on to recover)	
OVER VOLTAGE	29 ~ 33V	56 ~ 65V
	Protection type: Latch-off mode.	
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.	-20 ~ +70°C (Refer to output load derating curve) Installation clearance: 40mm from top, 20mm 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, 60 min. each long X,Y, Z axes	

SAFETY & EMC

SAFETY STANDARDS	UL 508 / 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	EN 55022 (CISPR22), EN 61000-6-3	
HARMONIC CURRENT	EN61000-3-2, -3-3	
EMS IMMUNITY	IEC 61000-4-2, 3, 4, 5, 6, 8, 11; EN 61000-6-1; EN 61204-3	
	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.	

OTHERS

DC OK RELAY CONTACT RATINGS (max)	60VDC / 0.3A, 30VDC / 1A, 30VAC / 0.5A resistive load	
DIMENSION	86.3x124.8x123.4 mm (WxHxD)	
PACKING	1.45kg; 8pcs / 12kg	
	All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.	

PSC-481 Series



Slimline
single phase

Low Profile
single phase

Industrial Metal Case
single phase

Industrial Metal Case
three phase

High Efficiency
compact housing

Accessories

Mechanical Drawings

Unit : mm / inch

Terminal Pin No. Assignment (TB1)

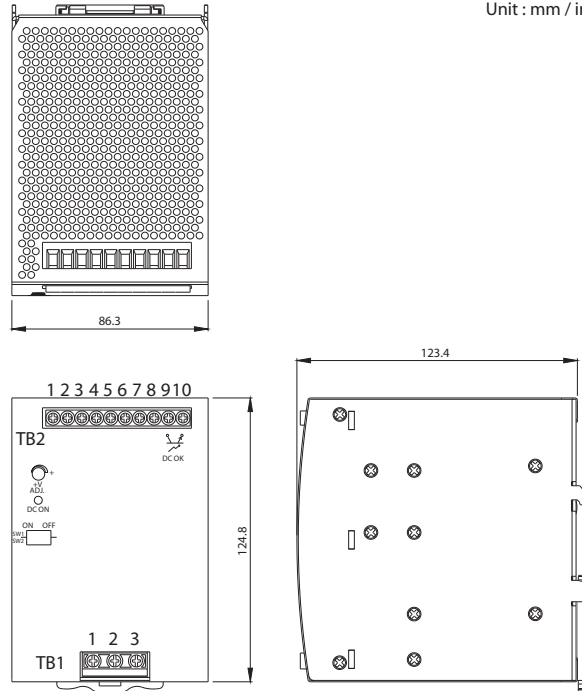
Pin NO.	Assignment
1	FG ⊕
2	AC/L
3	AC/N

Terminal Pin No. Assignment (TB2)

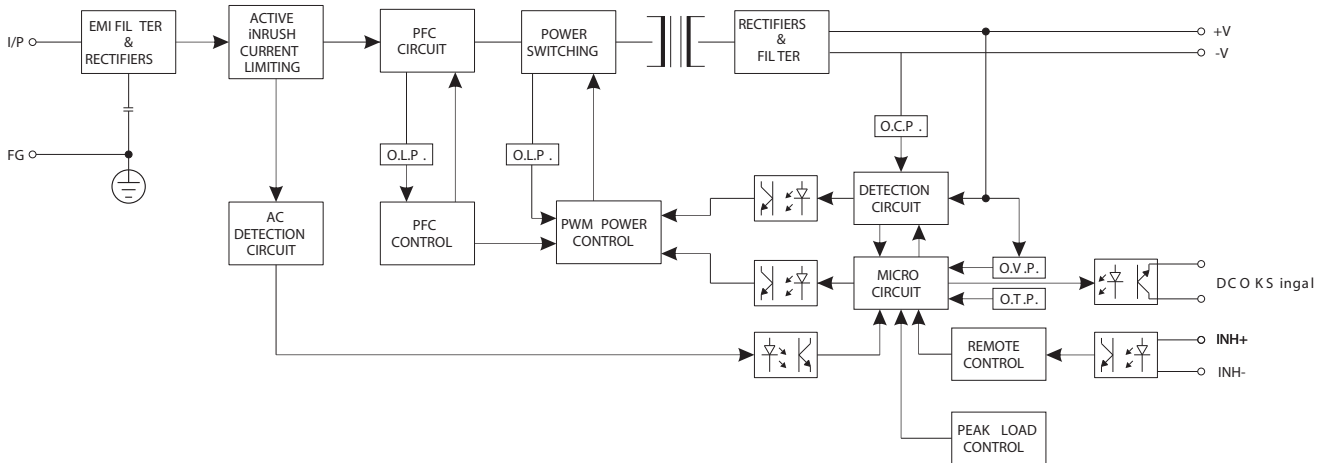
Pin NO.	Assignment
1-3	DC+
4-6	DC-
7	INH+
8	INH-
9,10	DC OK Singal

Switch No. Assignment

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



Block Diagram



DC OK Relay Contact

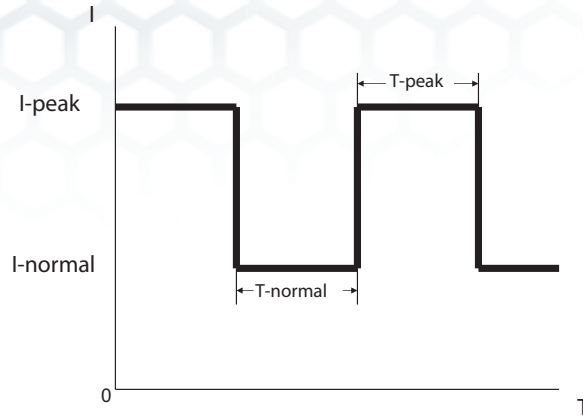
Contact Ratings(max.)	CTR : MIN. 50% at $I_f = 5mA, V_{ce} = 5V$
Isolation V oltag	Between input and output V iso = 3750V rms



PSC-481 Series

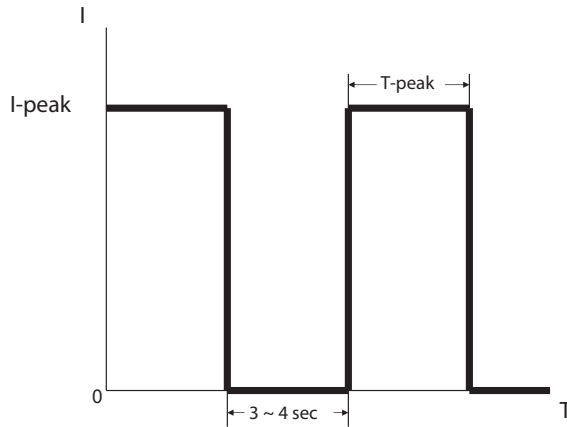


Peak Load SW1 ON (Mode1) Default setting



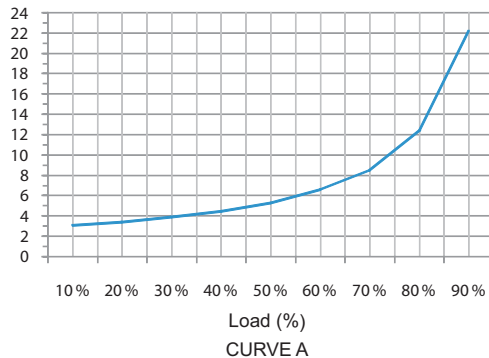
T-peak presents while the unit is working within 110%~150% Rating output power. See curve " B " for the variation in T-peak between output current and holdup time. If T-peak is more than the time setting in curve "B", the output current will drop to the constant current limit (I-normal) that is 105% 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)

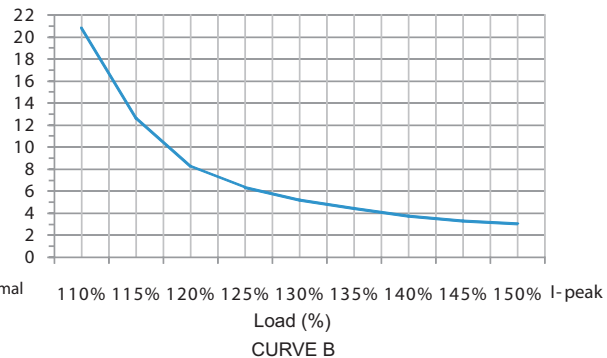


T-peak presents while the unit is working within 110%~150% Rating output power. See curve " B " for the variation in T-peak between output current and holdup time. If T-peak is more than the time setting in curve "B", the output current will be shut down for 3~4 sec, then auto-recovery.

T-normal (Sec.)



T-peak (Sec.)



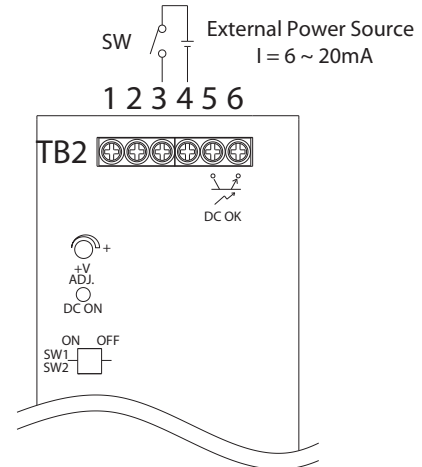


Remote ON/OFF

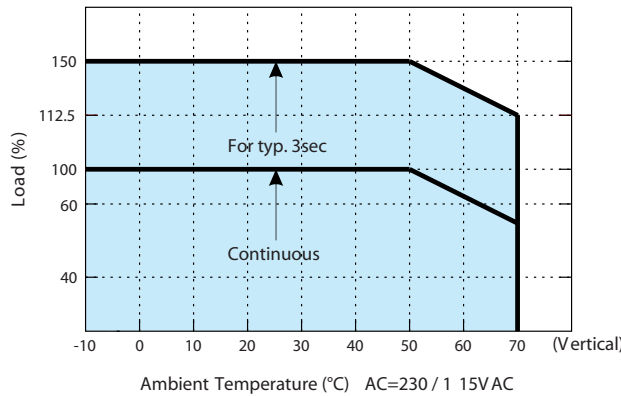
The PSU can be turned ON/OFF by using the "Remote Control" function.

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 5 etting)



Derating Curve



Output derating VS input coltage

