



# NEW from Altech® Slimline DIN Rail Power Supplies

**Ratings:** 10, 20, 48, 60 & 96W

**Outputs:** 5, 12, 15, 24, 48V DC

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



PSC-10  
PSC-20



PSC-96



PSC-40  
PSC-60

3-year  
Warranty

# Altech Corp.®

Your Source for Automation & Control Components

AltechCorp.com/power  
908.806.9400





# PSC-10 Series

Version 2



## Features:

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

## OUTPUT

## INPUT

## PROTECTION

## ENVIRONMENT

## SAFETY & EMC

## OTHERS

## NOTES

| Cat. No.                    | PSC-1005                                                                                                                     | PSC-1012     | PSC-1015     | PSC-1024     |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------|--------------|--------------|--------------|
| DC VOLTAGE                  | 5V                                                                                                                           | 12V          | 15V          | 24V          |
| RATED CURRENT               | 2A                                                                                                                           | 1.0A         | 0.67A        | 0.42A        |
| CURRENT RANGE               | 0-2.0A                                                                                                                       | 0 ~ 1.0A     | 0 ~ 0.67A    | 0 ~ 0.42A    |
| RATED POWER                 | 10W                                                                                                                          | 12 W         | 10 W         | 12 W         |
| RIPPLE & NOISE (max)        | 80mVp-P                                                                                                                      | 120mVp-p     | 150mVp-p     | 150mVp-p     |
| VOLTAGE ADJ. RANGE          | 5-6V                                                                                                                         | 10.8 ~ 13.2V | 13.5~ 16.5V  | 21.6 ~ 26.4V |
| VOLTAGE TOLERANCE           | ±2.0%                                                                                                                        | ±1.0%        | ±1.0%        | ±1.0%        |
| LINE REGULATION             | ±1.0%                                                                                                                        | ±1.0%        | ±1.0%        | ±1.0%        |
| LOAD REGULATION             | ±5.0%                                                                                                                        | ±3.0%        | ±3.0%        | ±2.0%        |
| SETUP, RISE TIME            | < 500ms, <30ms/230VAC; 1000ms/115VAC at full load                                                                            |              |              |              |
| HOLD UP TIME (Typ.)         | > 30ms/115VAC at full load                                                                                                   |              |              |              |
| VOLTAGE RANGE               | 85-264VAC / 120-370VDC<br>Derating may be needed under low input voltages. Please check the derating curve for more details. |              |              |              |
| FREQUENCY RANGE             | 47~63Hz                                                                                                                      |              |              |              |
| EFFICIENCY (Typ.)           | 77%                                                                                                                          | 81%          | 81%          | 84%          |
| AC CURRENT (Typ.)           | 0.33A/115VAC ; 0.21A/230VAC                                                                                                  |              |              |              |
| INRUSH CURRENT (Typ.)       | 35A/115V ; 70A/230V                                                                                                          |              |              |              |
| LEAKAGE CURRENT             | < 0.25mA/240VAC                                                                                                              |              |              |              |
| OVERLOAD PROTECTION         | >105%-150% Rated Output Power<br>Protection type: Hiccup Mode- recovers automatically after fault condition is removed       |              |              |              |
| OVERVOLTAGE PROTECTION      | 6.25~ 7.25V                                                                                                                  | 15.6 ~ 18V   | 19.5 ~ 22.5V | 31.2 ~ 36V   |
| OVER TEMPERATURE PROTECTION | Shut down o/p voltage, re-power on to recover                                                                                |              |              |              |
| OVER CURRENT                | 110%-180%                                                                                                                    |              |              |              |
| WORKING TEMP.               | -20 ~ +70°C (Refer to output load derating curve)                                                                            |              |              |              |
| WORKING HUMIDITY            | 20 ~ 90% RH non-condensing                                                                                                   |              |              |              |
| STORAGE TEMP. / HUMIDITY    | -40 ~ +85°C; 10 ~ 95% RH                                                                                                     |              |              |              |
| TEMP. COEFFICIENT           | ±0.03% / °C (0 ~ 50°C)                                                                                                       |              |              |              |
| VIBRATION                   | 10 ~ 500Hz, 2G 10min. / 1cycle, 60 min. each long X,Y, Z axes                                                                |              |              |              |
| SAFETY STANDARDS            | UL508, BS/EN62368-1, NEC Class 2 Compliant                                                                                   |              |              |              |
| WITHSTAND VOLTAGE           | I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC                                                                                    |              |              |              |
| ISOLATION RESISTANCE        | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH                                                                   |              |              |              |
| EMI CONDUCTION & RADIATION  | BS/EN55032 (CISPR32) Class B                                                                                                 |              |              |              |
| HARMONIC CURRENT            | BS/EN61000-3-2,-3, , EAC TP TC 020                                                                                           |              |              |              |
| EMS IMMUNITY                | BS/EN61204-3 Class B, CNS13438 Class B                                                                                       |              |              |              |
| DC OK Signal                | Active signal (See application notes)                                                                                        |              |              |              |
| MTBF                        | 200K hrs. min. at full load 25°C ambient temp                                                                                |              |              |              |
| DIMENSION                   | 22.5 x 92 x 100 mm (WxHxD)                                                                                                   |              |              |              |
| PACKING                     | 0.140Kg each / 0.32 LBs each / 1 piece / 100 pieces per CTN                                                                  |              |              |              |
| CONNECTION                  | I/P 3 poles, O/P: 6 poles screw DIN terminal                                                                                 |              |              |              |
| COOLING                     | Free air convection                                                                                                          |              |              |              |

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.
4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."
5. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.
6. The ambient temperature de-rating of 3.5°C /1000m

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

# PSC-10 Series

Version 2



Altech Corp.®

## Mechanical Specification

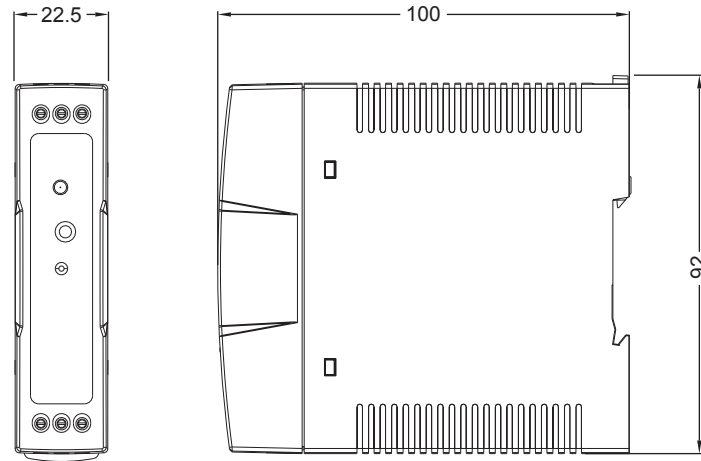
Unit: mm / inch

Terminal Pin. No Assign. (TB1)

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

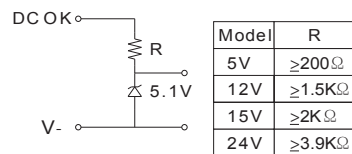
Terminal Pin. No Assign. (TB2)

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

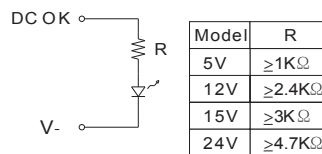


## Application of DC OK Active Signal

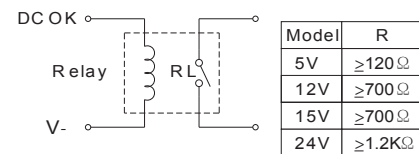
(a) 5V signal



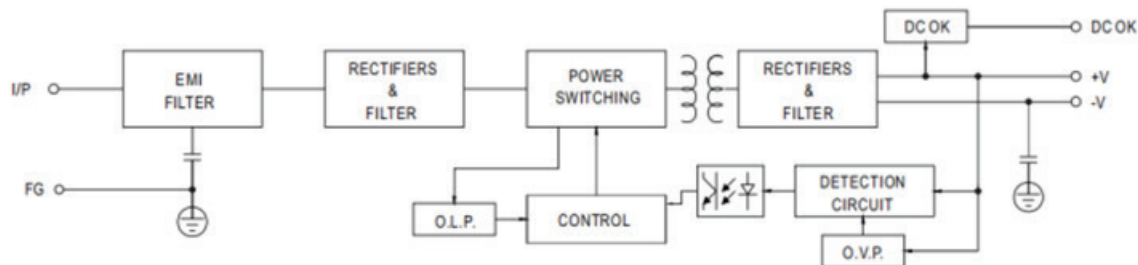
(b) LED



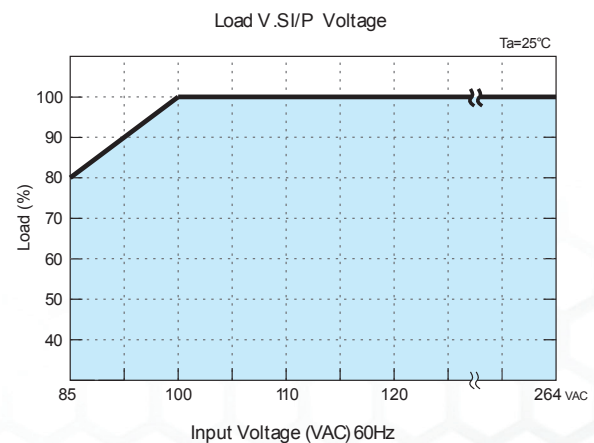
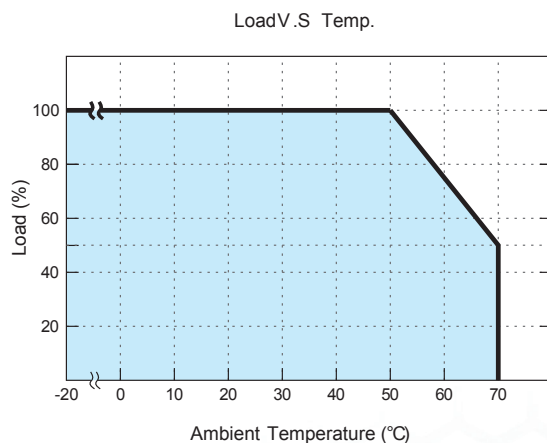
(c) Relay



## Block Diagram



## Derating Curve



Slimline  
single phase

Low Profile  
single phase

Industrial Metal Case  
single phase

Industrial Metal Case  
three phase

High Efficiency  
compact housing

Accessories



# PSC-20 Series

Version 2



## Features:

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

## OUTPUT

## INPUT

## PROTECTION

## ENVIRONMENT

## SAFETY & EMC

## OTHERS

## NOTES

| Cat. No.                    | PSC-2005                                                                                                                     | PSC-2012     | PSC-2015     | PSC-2024     |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------|--------------|--------------|--------------|
| DC VOLTAGE                  | 5V                                                                                                                           | 12V          | 15V          | 24V          |
| RATED CURRENT               | 3A                                                                                                                           | 1.67A        | 1.34A        | 1.0A         |
| CURRENT RANGE               | 0-3A                                                                                                                         | 0 ~ 1.67A    | 0 ~ 1.34A    | 0 ~ 1.0A     |
| RATED POWER                 | 15W                                                                                                                          | 20 W         | 20 W         | 24 W         |
| RIPPLE & NOISE (max)        | 80mVp-P                                                                                                                      | 120mVp-p     | 120mVp-p     | 150mVp-p     |
| VOLTAGE ADJ. RANGE          | 5-6V                                                                                                                         | 10.8 ~ 13.2V | 13.5~ 16.5V  | 21.6 ~ 26.4V |
| VOLTAGE TOLERANCE           | ±2.0%                                                                                                                        | ±1.0%        | ±1.0%        | ±1.0%        |
| LINE REGULATION             | ±2.0%                                                                                                                        | ±1.0%        | ±1.0%        | ±1.0%        |
| LOAD REGULATION             | ±1.0%                                                                                                                        | ±1.0%        | ±1.0%        | ±1.0%        |
| SETUP, RISE TIME            | < 500ms, <30ms/230VAC; 1000ms/115VAC at full load                                                                            |              |              |              |
| HOLD UP TIME (Typ.)         | > 30ms/115VAC at full load                                                                                                   |              |              |              |
| VOLTAGE RANGE               | 85-264VAC / 120-370VDC<br>Derating may be needed under low input voltages. Please check the derating curve for more details. |              |              |              |
| FREQUENCY RANGE             | 47~63Hz                                                                                                                      |              |              |              |
| EFFICIENCY (Typ.)           | 76%                                                                                                                          | 80%          | 81%          | 84%          |
| AC CURRENT (Typ.)           | 0.33A/115VAC ; 0.21A/230VAC                                                                                                  |              |              |              |
| INRUSH CURRENT (Typ.)       | 35A/115V ; 70A/230V                                                                                                          |              |              |              |
| LEAKAGE CURRENT             | < 0.25mA/240VAC                                                                                                              |              |              |              |
| OVERLOAD PROTECTION         | >105%-150% Rated Output Power<br>Protection type: Hiccup Mode- recovers automatically after fault condition is removed       |              |              |              |
| OVERVOLTAGE PROTECTION      | 8.4~ 9.5V                                                                                                                    | 15.6 ~ 18V   | 23.5 ~ 26.4V | 31.2 ~ 36V   |
| OVER TEMPERATURE PROTECTION | Shut down o/p voltage, re-power on to recover                                                                                |              |              |              |
| OVER CURRENT                | 110%-180%                                                                                                                    |              |              |              |
| WORKING TEMP.               | -20 ~ +70°C (Refer to output load derating curve)                                                                            |              |              |              |
| WORKING HUMIDITY            | 20 ~ 90% RH non-condensing                                                                                                   |              |              |              |
| STORAGE TEMP. / HUMIDITY    | -40 ~ +85°C; 10 ~ 95% RH                                                                                                     |              |              |              |
| TEMP. COEFFICIENT           | ±0.03% / °C (0 ~ 50°C)                                                                                                       |              |              |              |
| VIBRATION                   | 10 ~ 500Hz, 2G 10min. / 1cycle, 60 min. each long X,Y, Z axes                                                                |              |              |              |
| SAFETY STANDARDS            | UL508, BS/EN62368-1, NEC Class 2 Compliant                                                                                   |              |              |              |
| WITHSTAND VOLTAGE           | I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC                                                                                    |              |              |              |
| ISOLATION RESISTANCE        | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH                                                                   |              |              |              |
| EMI CONDUCTION & RADIATION  | BS/EN55032 (CISPR32) Class B                                                                                                 |              |              |              |
| HARMONIC CURRENT            | BS/EN61000-3-2,-3, , EAC TP TC 020                                                                                           |              |              |              |
| EMS IMMUNITY                | BS/EN61204-3 Class B, CNS13438 Class B                                                                                       |              |              |              |
| DC OK Signal                | Active signal (See application notes)                                                                                        |              |              |              |
| MTBF                        | 200K hrs. min. at full load 25°C ambient temp                                                                                |              |              |              |
| DIMENSION                   | 22.5 x 92 x 100 mm (WxHxD)                                                                                                   |              |              |              |
| PACKING                     | 0.140Kg each / 0.32 LBs each / 1 piece / 100 pieces per CTN                                                                  |              |              |              |
| CONNECTION                  | I/P 3 poles, O/P: 6 poles screw DIN terminal                                                                                 |              |              |              |
| COOLING                     | Free air convection                                                                                                          |              |              |              |

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.
4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."
5. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.
6. The ambient temperature de-rating of 3.5°C /1000m

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# PSC-20 Series

Version 2



E205412

Altech Corp.®

## Mechanical Specification

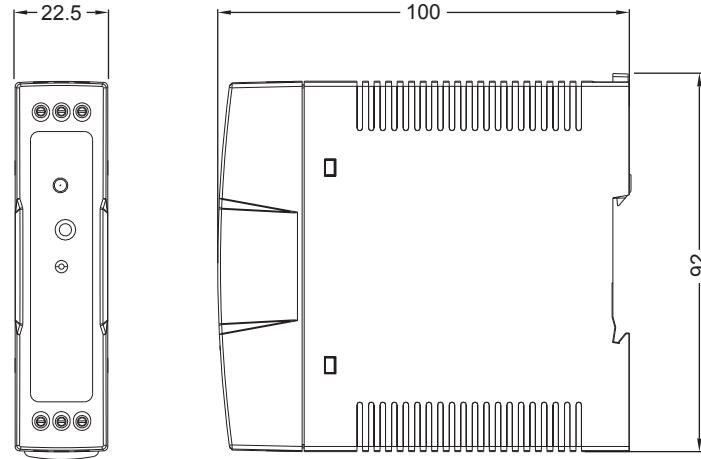
Unit: mm / inch

Terminal Pin. No Assign. (TB1)

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

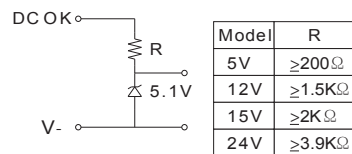
Terminal Pin. No Assign. (TB2)

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

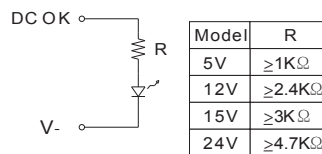


## Application of DC OK Active Signal

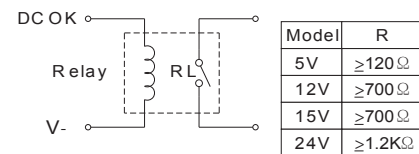
(a) 5V signal



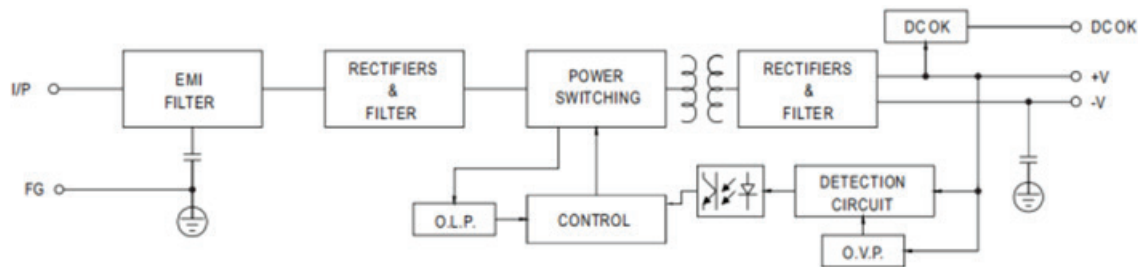
(b) LED



(c) Relay

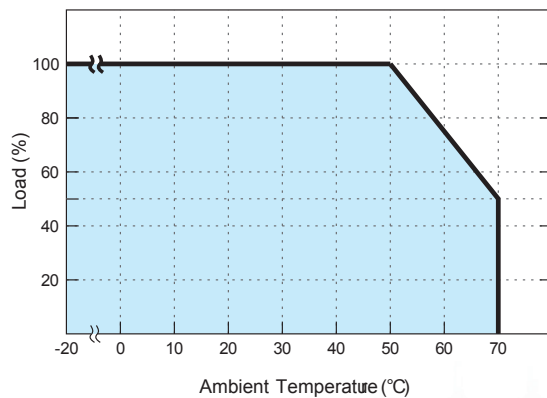


## Block Diagram

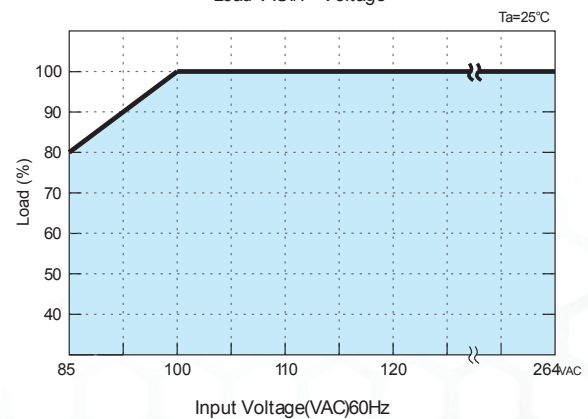


## Derating Curve

Load V.S Temp.



Load V.S I/P Voltage



Slimline  
single phase

Low Profile  
single phase

Industrial Metal Case  
single phase

Industrial Metal Case  
three phase

High Efficiency  
compact housing

Accessories



# PSC-40 Series

Version 2



## Features:

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

## OUTPUT

## INPUT

## PROTECTION

## ENVIRONMENT

## SAFETY & EMC

## OTHERS

## NOTES

| Cat. No.                    | PSC-4005                                                                                                               | PSC-4012     | PSC-4015     | PSC-4024       | PSC-4048     |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------|--------------|--------------|----------------|--------------|
| DC VOLTAGE                  | 5V                                                                                                                     | 12V          | 15V          | 24V            | 48V          |
| RATED CURRENT               | 7A                                                                                                                     | 3.33A        | 2.5A         | 1.7A           | 0.83A        |
| CURRENT RANGE               | 0-7A                                                                                                                   | 0 ~ 3.33A    | 0 ~ 2.5A     | 0 ~ 1.7A       | 0 ~ 0.83A    |
| RATED POWER                 | 35W                                                                                                                    | 40 W         | 40 W         | 40 W           | 40 W         |
| RIPPLE & NOISE (max)        | 80mVp-P                                                                                                                | 120mVp-p     | 120mVp-p     | 150mVp-p       | 200mVp-p     |
| VOLTAGE ADJ. RANGE          | 5-6V                                                                                                                   | 10.8 ~ 16.2V | 13.5~ 16.5V  | 23.02 ~ 29.98V | 43.2 ~ 52.8V |
| VOLTAGE TOLERANCE           | ±2.0%                                                                                                                  | ±1.0%        | ±1.0%        | ±1.0%          | ±1.0%        |
| LINE REGULATION             | ±2.0%                                                                                                                  | ±1.0%        | ±1.0%        | ±1.0%          | ±1.0%        |
| LOAD REGULATION             | ±1.0%                                                                                                                  | ±1.0%        | ±1.0%        | ±1.0%          | ±1.0%        |
| SETUP, RISE TIME            | < 500ms, <30ms/230VAC; 1000ms/115VAC at full load                                                                      |              |              |                |              |
| HOLD UP TIME (Typ.)         | > 30ms/115VAC at full load                                                                                             |              |              |                |              |
| VOLTAGE RANGE               | 90-264 VAC<br>Derating may be needed under low input voltages. Please check the derating curve for more details.       |              |              |                |              |
| FREQUENCY RANGE             | 47~63Hz                                                                                                                |              |              |                |              |
| EFFICIENCY (Typ.)           | 78%                                                                                                                    | 86%          | 86%          | 88%            | 88%          |
| AC CURRENT (Typ.)           | 1.1A/115VAC 0.7A/230VAC                                                                                                |              |              |                |              |
| INRUSH CURRENT (Typ.)       | COLD START 30A / 115VAC; 60A / 230VAC                                                                                  |              |              |                |              |
| LEAKAGE CURRENT             | < 0.25mA/240VAC                                                                                                        |              |              |                |              |
| OVERLOAD PROTECTION         | >105%-150% Rated Output Power<br>Protection type: Hiccup Mode- recovers automatically after fault condition is removed |              |              |                |              |
| OVERVOLTAGE PROTECTION      | 6.25 ~ 7.25V                                                                                                           | 15.6 ~ 18V   | 19.5 ~ 22.5V | 31.2 ~ 36V     | 57.6 ~64.8V  |
| OVER TEMPERATURE PROTECTION | Shut down o/p voltage, re-power on to recover                                                                          |              |              |                |              |
| OVER CURRENT                | 110%-180%                                                                                                              |              |              |                |              |
| WORKING TEMP.               | -20 ~ +70°C (Refer to output load derating curve)                                                                      |              |              |                |              |
| WORKING HUMIDITY            | 20 ~ 90% RH non-condensing                                                                                             |              |              |                |              |
| STORAGE TEMP. / HUMIDITY    | -40 ~ +85°C; 10 ~ 95% RH                                                                                               |              |              |                |              |
| TEMP. COEFFICIENT           | ±0.03% / °C (0 ~ 50°C)                                                                                                 |              |              |                |              |
| VIBRATION                   | 10 ~ 500Hz, 2G 10min. / 1cycle, 60 min. each long X,Y, Z axes                                                          |              |              |                |              |
| SAFETY STANDARDS            | UL508, BS/EN62368-1, NEC Class 2 Compliant                                                                             |              |              |                |              |
| WITHSTAND VOLTAGE           | I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC                                                                              |              |              |                |              |
| ISOLATION RESISTANCE        | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH                                                             |              |              |                |              |
| EMI CONDUCTION & RADIATION  | BS/EN55032 (CISPR32) Class B                                                                                           |              |              |                |              |
| HARMONIC CURRENT            | BS/EN61000-3-2,-3, , EAC TP TC 020                                                                                     |              |              |                |              |
| EMS IMMUNITY                | BS/EN61204-3 Class B, CNS13438 Class B                                                                                 |              |              |                |              |
| DC OK Signal                | Relay contact (30VDC / 1A, 120VAC / 1A)                                                                                |              |              |                |              |
| MTBF                        | 200K hrs. min. at full load 25°C ambient temp                                                                          |              |              |                |              |
| DIMENSION                   | 40 x 92 x 100 mm (WxHxD)                                                                                               |              |              |                |              |
| PACKING                     | 0.28Kg/27 pcs./8.76Kg / 1piece / 50 pieces per CTN                                                                     |              |              |                |              |
| CONNECTION                  | I/P 3 poles, O/P: 6 poles screw DIN terminal                                                                           |              |              |                |              |
| COOLING                     | Free air convection                                                                                                    |              |              |                |              |

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.
4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."
5. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.
6. The ambient temperature de-rating of 3.5°C /1000m

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



# PSC-40 Series

Version 2



E205412

**Altech Corp.**

## Mechanical Specification

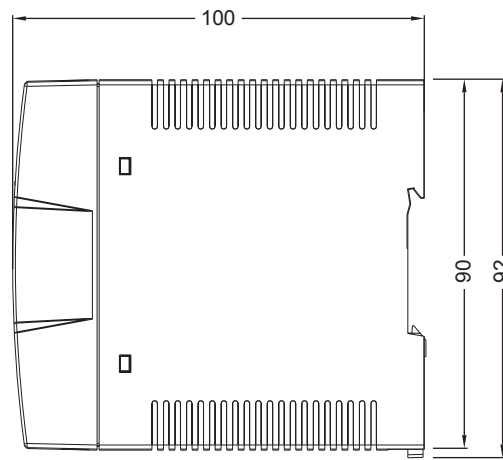
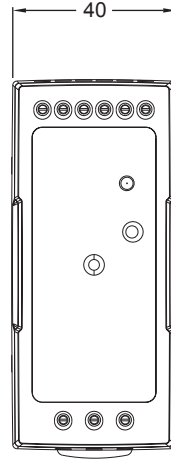
Unit :mm / inch

Terminal Pin. No Assign. (TB1)

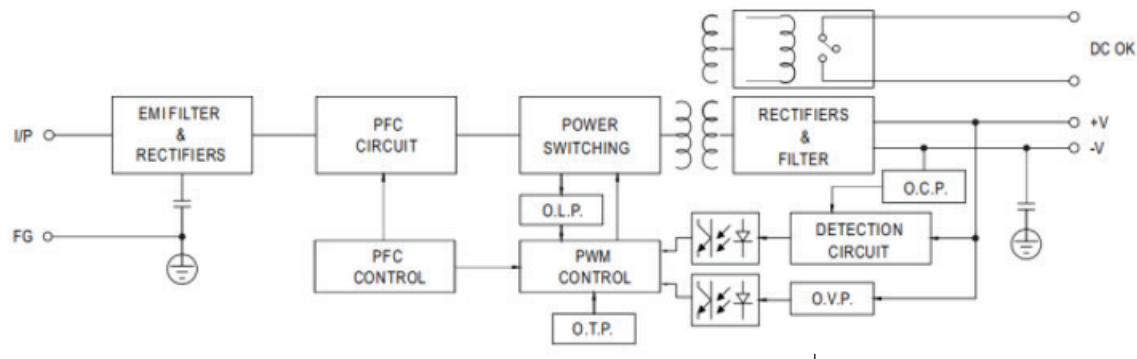
| Pin No. | Assignment |
|---------|------------|
| 1       | FG Ⓢ       |
| 2       | AC/N       |
| 3       | AC/L       |

Terminal Pin. No Assign. (TB2)

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



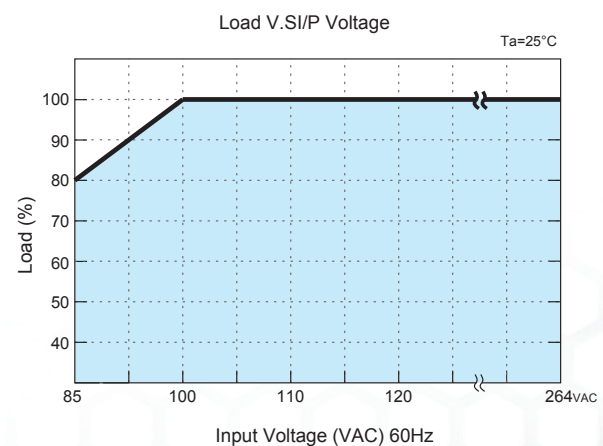
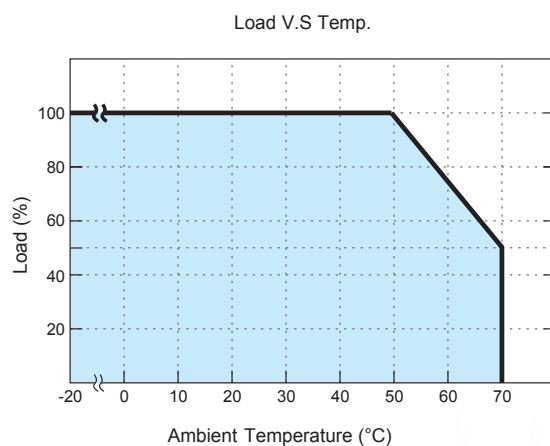
## Block Diagram



## DC OK Relay Contact

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

## Derating Curve



Slimline  
single phase

Low Profile  
single phase

Industrial Metal Case  
single phase

Industrial Metal Case  
three phase

High Efficiency  
compact housing

Accessories



# PSC-60 Series

Version 2



E205412

## Features:

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

## OUTPUT

## INPUT

## PROTECTION

## ENVIRONMENT

## SAFETY & EMC

## OTHERS

## NOTES

| Cat. No.                    | PSC-6005                                                                                                               | PSC-6012     | PSC-6015     | PSC-6024     | PSC-6048      |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------|--------------|--------------|--------------|---------------|
| DC VOLTAGE                  | 5V                                                                                                                     | 12V          | 15V          | 24V          | 48V           |
| RATED CURRENT               | 10A                                                                                                                    | 5A           | 4A           | 2.5A         | 1.25A         |
| CURRENT RANGE               | 0-10A                                                                                                                  | 0 ~ 5A       | 0 ~ 4A       | 0 ~ 2.5A     | 0 ~ 1.25A     |
| RATED POWER                 | 50W                                                                                                                    | 60 W         | 60 W         | 60 W         | 60 W          |
| RIPPLE & NOISE (max)        | 80mVp-P                                                                                                                | 120mVp-p     | 120mVp-p     | 150mVp-p     | 200mVp-p      |
| VOLTAGE ADJ. RANGE          | 5-6V                                                                                                                   | 10.8 ~ 16.2V | 13.5~ 16.5V  | 21.6 ~ 26.4V | 39.12 ~ 49.2V |
| VOLTAGE TOLERANCE           | ±2.0%                                                                                                                  | ±1.0%        | ±1.0%        | ±1.0%        | ±1.0%         |
| LINE REGULATION             | ±2.0%                                                                                                                  | ±1.0%        | ±1.0%        | ±1.0%        | ±1.0%         |
| LOAD REGULATION             | ±1.0%                                                                                                                  | ±1.0%        | ±1.0%        | ±1.0%        | ±1.0%         |
| SETUP, RISE TIME            | < 500ms, <30ms/230VAC; 1000ms/115VAC at full load                                                                      |              |              |              |               |
| HOLD UP TIME (Typ.)         | > 30ms/115VAC at full load                                                                                             |              |              |              |               |
| VOLTAGE RANGE               | 90-264 VAC<br>Derating may be needed under low input voltages. Please check the derating curve for more details.       |              |              |              |               |
| FREQUENCY RANGE             | 47~63Hz                                                                                                                |              |              |              |               |
| EFFICIENCY (Typ.)           | 78%                                                                                                                    | 86%          | 86%          | 88%          | 88%           |
| AC CURRENT (Typ.)           | 1.1A/115VAC 0.7A/230VAC                                                                                                |              |              |              |               |
| INRUSH CURRENT (Typ.)       | COLD START 30A / 115VAC; 60A / 230VAC                                                                                  |              |              |              |               |
| LEAKAGE CURRENT             | < 0.25mA/240VAC                                                                                                        |              |              |              |               |
| OVERLOAD PROTECTION         | >105%-150% Rated Output Power<br>Protection type: Hiccup Mode- recovers automatically after fault condition is removed |              |              |              |               |
| OVERVOLTAGE PROTECTION      | 9.15~ 12.7V                                                                                                            | 15.6 ~ 18V   | 19.5 ~ 22.5V | 31.2 ~ 36V   | 57.6 ~64.8V   |
| OVER TEMPERATURE PROTECTION | Shut down o/p voltage, re-power on to recover                                                                          |              |              |              |               |
| OVER CURRENT                | 110%-180%                                                                                                              |              |              |              |               |
| WORKING TEMP.               | -20 ~ +70°C (Refer to output load derating curve)                                                                      |              |              |              |               |
| WORKING HUMIDITY            | 20 ~ 90% RH non-condensing                                                                                             |              |              |              |               |
| STORAGE TEMP. / HUMIDITY    | -40 ~ +85°C; 10 ~ 95% RH                                                                                               |              |              |              |               |
| TEMP. COEFFICIENT           | ±0.03% / °C (0 ~ 50°C)                                                                                                 |              |              |              |               |
| VIBRATION                   | 10 ~ 500Hz, 2G 10min. / 1cycle, 60 min. each long X,Y, Z axes                                                          |              |              |              |               |
| SAFETY STANDARDS            | UL508, BS/EN62368-1, NEC Class 2 Compliant                                                                             |              |              |              |               |
| WITHSTAND VOLTAGE           | I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC                                                                              |              |              |              |               |
| ISOLATION RESISTANCE        | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH                                                             |              |              |              |               |
| EMI CONDUCTION & RADIATION  | BS/EN55032 (CISPR32) Class B                                                                                           |              |              |              |               |
| HARMONIC CURRENT            | BS/EN61000-3-2,-3, , EAC TP TC 020                                                                                     |              |              |              |               |
| EMS IMMUNITY                | BS/EN61204-3 Class B, CNS13438 Class B                                                                                 |              |              |              |               |
| DC OK Signal                | Relay contact (30VDC / 1A, 120VAC / 1A)                                                                                |              |              |              |               |
| MTBF                        | 200K hrs. min. at full load 25°C ambient temp                                                                          |              |              |              |               |
| DIMENSION                   | 40 x 92 x 100 mm (WxHxD)                                                                                               |              |              |              |               |
| PACKING                     | 0.28Kg/27 pcs./8.76Kg / 1piece / 50 pieces per CTN                                                                     |              |              |              |               |
| CONNECTION                  | I/P 3 poles, O/P: 6 poles screw DIN terminal                                                                           |              |              |              |               |
| COOLING                     | Free air convection                                                                                                    |              |              |              |               |

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.
4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."
5. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.
6. The ambient temperature de-rating of 3.5°C /1000m

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# PSC-60 Series

Version 2



E205412

**Altech Corp.**

## Mechanical Specification

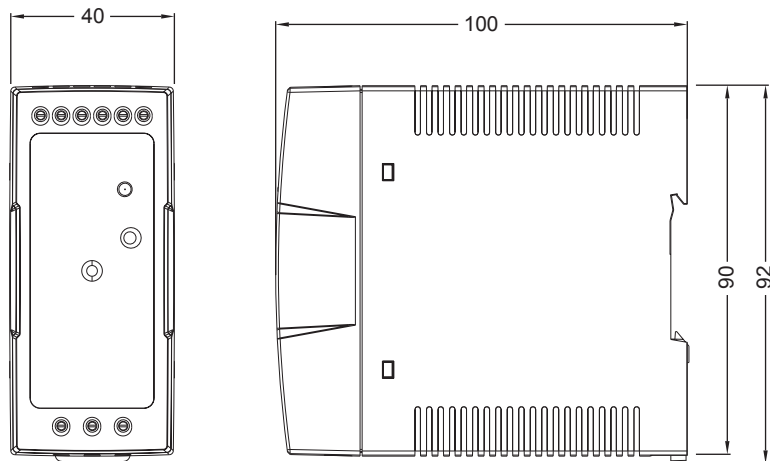
Unit:mm / inch

Terminal Pin. No Assign. (TB1)

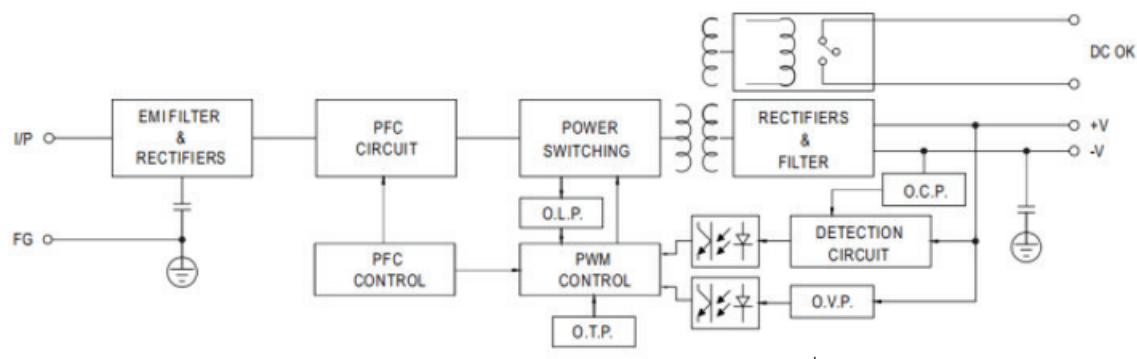
| Pin No. | Assignment |
|---------|------------|
| 1       | FG ⊕       |
| 2       | AC/N       |
| 3       | AC/L       |

Terminal Pin. No Assign. (TB2)

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



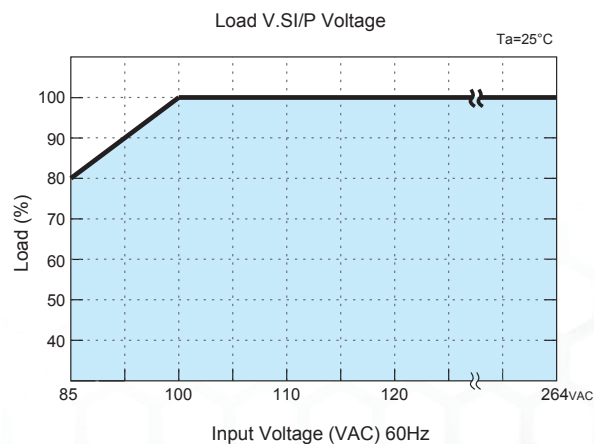
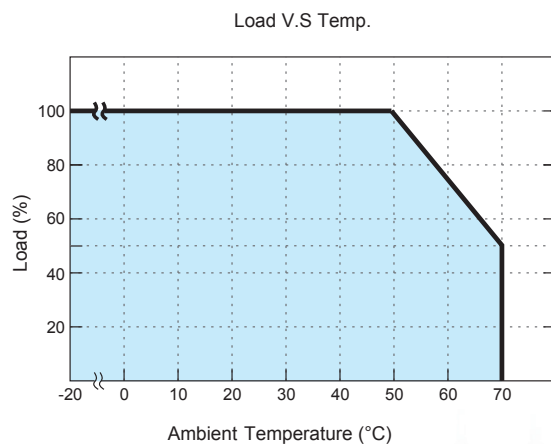
## Block Diagram



## DC OK Relay Contact

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

## Derating Curve



Slimline  
single phase

Low Profile  
single phase

Industrial Metal Case  
single phase

Industrial Metal Case  
three phase

High Efficiency  
compact housing

Accessories



# PSC-96 Series

## Version 2



### Features:

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

### OUTPUT

### INPUT

### PROTECTION

### ENVIRONMENT

### SAFETY & EMC

### OTHERS

### NOTES

| Cat. No.                    | PSC-9612                                                                                                                     | PSC-9615     | PSC-9624       | PSC-9648     |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------|--------------|----------------|--------------|
| DC VOLTAGE                  | 12V                                                                                                                          | 15V          | 24V            | 48V          |
| RATED CURRENT               | 7.5A                                                                                                                         | 6A           | 4A             | 2A           |
| CURRENT RANGE               | 0 ~ 7.5A                                                                                                                     | 0 ~ 6.0A     | 0 ~ 4.0A       | 0 ~ 2.0A     |
| RATED POWER                 | 90 W                                                                                                                         | 90 W         | 96 W           | 96 W         |
| RIPPLE & NOISE (max)        | 120mVp-p                                                                                                                     | 120mVp-p     | 150mVp-p       | 200mVp-p     |
| VOLTAGE ADJ. RANGE          | 5.2 ~ 15.25V                                                                                                                 | 13.5 ~ 16.5V | 22.48 ~ 30.37V | 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            | < 500ms, <30ms/230VAC; 1000ms/115VAC at full load                                                                            |              |                |              |
| HOLD UP TIME (Typ.)         | > 30ms/115VAC at full load                                                                                                   |              |                |              |
| VOLTAGE RANGE               | 85-264VAC / 120-370VDC<br>Derating may be needed under low input voltages. Please check the derating curve for more details. |              |                |              |
| FREQUENCY RANGE             | 47~63Hz                                                                                                                      |              |                |              |
| EFFICIENCY (Typ.)           | 83%                                                                                                                          | 86%          | 88%            | 88%          |
| AC CURRENT (Typ.)           | 1.3A/115VAC 0.8A/230VAC                                                                                                      |              |                |              |
| INRUSH CURRENT (Typ.)       | COLD START 30A / 115VAC; 60A / 230VAC                                                                                        |              |                |              |
| LEAKAGE CURRENT             | < 0.25mA/240VAC                                                                                                              |              |                |              |
| OVERLOAD PROTECTION         | >105%-150% Rated Output Power<br>Protection type: Hiccup Mode- recovers automatically after fault condition is removed       |              |                |              |
| OVERVOLTAGE PROTECTION      | 19.5 ~ 21.6V                                                                                                                 | 19.5 ~ 22.5V | 31.2 ~ 36V     | 57.6 ~ 64.8V |
| OVER TEMPERATURE PROTECTION | Protection type : Shut down o/p voltage, re-power on to recover                                                              |              |                |              |
| OVER CURRENT                | Shut down o/p voltage, re-power on to recover<br>110%-180%                                                                   |              |                |              |
| WORKING TEMP.               | -20 ~ +70°C (Refer to output load derating curve)                                                                            |              |                |              |
| WORKING HUMIDITY            | 20 ~ 90% RH non-condensing                                                                                                   |              |                |              |
| STORAGE TEMP. / HUMIDITY    | -40 ~ +85°C; 10 ~ 95% RH                                                                                                     |              |                |              |
| TEMP. COEFFICIENT           | ±0.03% / °C (0 ~ 50°C)                                                                                                       |              |                |              |
| VIBRATION                   | 10 ~ 500Hz, 2G 10min. / 1cycle, 60 min. each long X,Y, Z axes                                                                |              |                |              |
| SAFETY STANDARDS            | UL508, BS/EN62368-1, NEC Class 2 Compliant                                                                                   |              |                |              |
| WITHSTAND VOLTAGE           | I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC                                                                                    |              |                |              |
| ISOLATION RESISTANCE        | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH                                                                   |              |                |              |
| EMI CONDUCTION & RADIATION  | BS/EN55032 (CISPR32) Class B                                                                                                 |              |                |              |
| HARMONIC CURRENT            | BS/EN61000-3-2, -3, , EAC TP TC 020                                                                                          |              |                |              |
| EMS IMMUNITY                | BS/EN61204-3 Class B, CNS13438 Class B                                                                                       |              |                |              |
| DC OK Signal                | Relay contact (30VDC / 1A, 120VAC / 1A)                                                                                      |              |                |              |
| MTBF                        | 200K hrs. min. at full load 25°C ambient temp                                                                                |              |                |              |
| DIMENSION                   | 55 x 92 x 100 mm (WxHxD)                                                                                                     |              |                |              |
| PACKING                     | 0.40Kg each / 0.9 LBs each / 1 piece / 40 pieces per CTN                                                                     |              |                |              |
| CONNECTION                  | I/P 3 poles, O/P: 6 poles screw DIN terminal                                                                                 |              |                |              |
| COOLING                     | Free air convection                                                                                                          |              |                |              |

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.
4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."
5. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.
6. The ambient temperature de-rating of 3.5°C /1000m

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# PSC-96 Series

Version 2



**Altech Corp.**

## Mechanical Specification

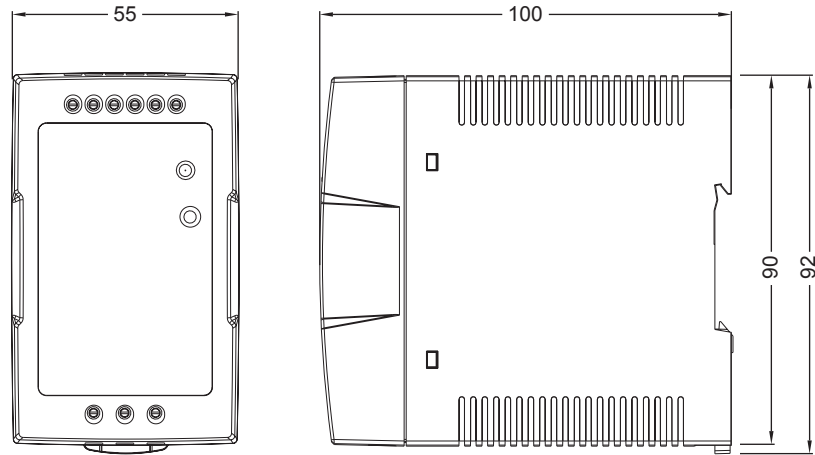
Unit: mm / inch

Terminal Pin. No Assign. (TB1)

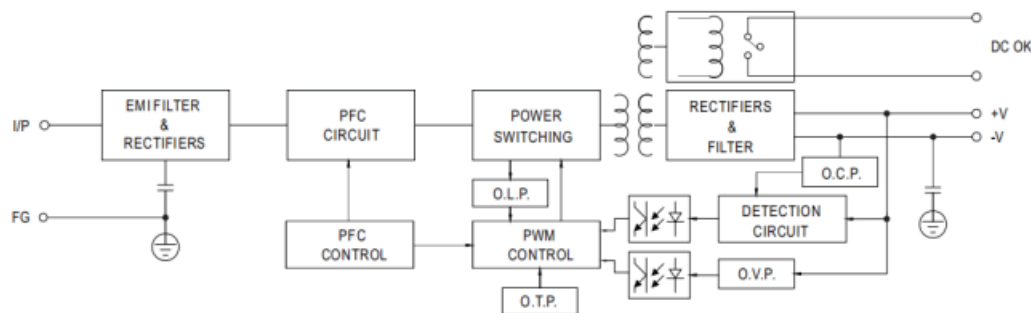
| Pin No. | Assignment |
|---------|------------|
| 1       | FG ⊕       |
| 2       | AC/N       |
| 3       | AC/L       |

Terminal Pin. No Assign. (TB2)

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



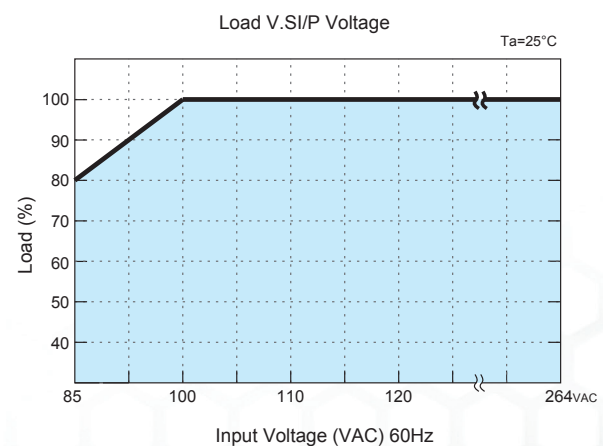
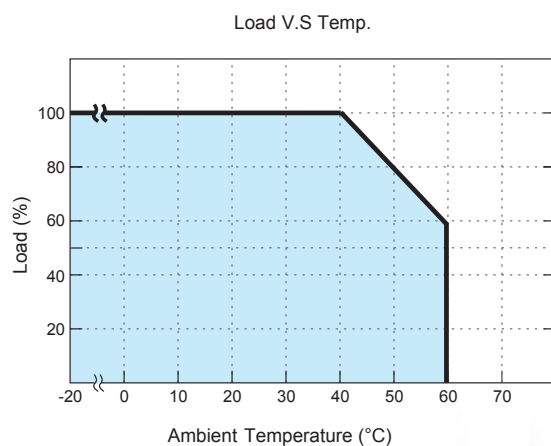
## Block Diagram



## DC OK Relay Contact

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

## Derating Curve



Slimline  
single phase

Low Profile  
single phase

Industrial Metal Case  
single phase

Industrial Metal Case  
three phase

High Efficiency  
compact housing

Accessories

| Series         | Cat Number | Rated Current |       |       |       |       | Universal Input | Switch Select Input | Parallel Option | UL 508 Listed | UL 60950-1 Rec. | UL 62368-1 Rec. | EN 60950-1 | EN 62368-1 | DC OK | Short Circuit | Overload | Over Voltage | Over Temperature | CB |
|----------------|------------|---------------|-------|-------|-------|-------|-----------------|---------------------|-----------------|---------------|-----------------|-----------------|------------|------------|-------|---------------|----------|--------------|------------------|----|
|                |            | 5V            | 12V   | 15V   | 24V   | 48V   |                 |                     |                 |               |                 |                 |            |            |       |               |          |              |                  |    |
| PS Low Profile |            |               |       |       |       |       |                 |                     |                 |               |                 |                 |            |            |       |               |          |              |                  |    |
| SINGLE PHASE   | PSD-15xx   | 2A            | 1.25A | 1A    | 0.63A | 0.32A |                 |                     |                 |               |                 |                 |            |            | LED   |               |          |              |                  |    |
|                | PSD-30xx   | 3A            | 2A    | 2A    | 1A    | 0.6A  |                 |                     |                 |               |                 |                 |            |            | LED   |               |          |              |                  |    |
|                | PSD-60xx   | 4.5A          | 4.5A  | 4A    | 2.5A  | 1.25A |                 |                     |                 |               |                 |                 |            |            | LED   |               |          |              |                  |    |
|                | PSD-100xx  | —             | 7.1A  | 6.13A | 3.8A  | 2.1A  |                 |                     |                 |               |                 |                 |            |            | LED   |               |          |              |                  |    |

|              |           |   |   |   |      |   |  |  |  |  |  |  |  |  |        |  |  |  |  |  |
|--------------|-----------|---|---|---|------|---|--|--|--|--|--|--|--|--|--------|--|--|--|--|--|
| SINGLE PHASE | PSA-120xx | — | — | — | 5A   | — |  |  |  |  |  |  |  |  | LED/RC |  |  |  |  |  |
|              | PSA-180xx | — | — | — | 7.5A | — |  |  |  |  |  |  |  |  | LED/RC |  |  |  |  |  |
|              | PSA-360xx | — | — | — | 14A  | — |  |  |  |  |  |  |  |  | LED/RC |  |  |  |  |  |
|              | PSA-600xx | — | — | — | 25A  | — |  |  |  |  |  |  |  |  | LED/RC |  |  |  |  |  |

|                   |           |   |   |   |      |   |  |  |  |  |  |  |  |  |        |  |  |  |  |  |
|-------------------|-----------|---|---|---|------|---|--|--|--|--|--|--|--|--|--------|--|--|--|--|--|
| TWO (THREE) PHASE | PSB-120xx | — | — | — | 5A   | — |  |  |  |  |  |  |  |  | LED/RC |  |  |  |  |  |
|                   | PSB-180xx | — | — | — | 7.5A | — |  |  |  |  |  |  |  |  | LED/RC |  |  |  |  |  |
|                   | PSB-360xx | — | — | — | 14A  | — |  |  |  |  |  |  |  |  | LED/RC |  |  |  |  |  |
|                   | PSB-600xx | — | — | — | 25A  | — |  |  |  |  |  |  |  |  | LED/RC |  |  |  |  |  |

#### PS-S Slimline

|              |           |     |       |       |       |       |  |  |  |  |  |  |  |  |        |  |  |  |  |  |
|--------------|-----------|-----|-------|-------|-------|-------|--|--|--|--|--|--|--|--|--------|--|--|--|--|--|
| SINGLE PHASE | PS-S10xx  | 2A  | 0.84A | 0.67A | 0.42A | —     |  |  |  |  |  |  |  |  | LED/C  |  |  |  |  |  |
|              | PS-S20xx  | 3A  | 1.67A | 1.34A | 1     | —     |  |  |  |  |  |  |  |  | LED/C  |  |  |  |  |  |
|              | PS-S40xx  | 6A  | 3.33A | —     | 1.7A  | 0.83A |  |  |  |  |  |  |  |  | LED/RC |  |  |  |  |  |
|              | PS-S60xx  | 10A | 5A    | —     | 2.5A  | 1.25A |  |  |  |  |  |  |  |  | LED/RC |  |  |  |  |  |
|              | PS-S100xx | —   | 7.5A  | —     | 4A    | 2A    |  |  |  |  |  |  |  |  | LED/RC |  |  |  |  |  |

#### PS Ultra Compact

|              |           |   |       |   |      |      |  |  |  |  |  |  |  |  |        |  |  |  |  |  |
|--------------|-----------|---|-------|---|------|------|--|--|--|--|--|--|--|--|--------|--|--|--|--|--|
| SINGLE PHASE | PSC-75xx  | — | 6.3A  | — | 3.2A | 1.6A |  |  |  |  |  |  |  |  | LED/RC |  |  |  |  |  |
|              | PSC-120xx | — | 8.33A | — | 5A   | 2.5A |  |  |  |  |  |  |  |  | LED/RC |  |  |  |  |  |
|              | PSC-240xx | — | —     | — | 10A  | 5A   |  |  |  |  |  |  |  |  | LED/RC |  |  |  |  |  |
|              | PSC-480xx | — | —     | — | 20A  | 10A  |  |  |  |  |  |  |  |  | LED/RC |  |  |  |  |  |

#### PS Compact

|              |            |   |     |   |     |      |  |  |  |  |  |  |  |  |        |  |  |  |  |  |
|--------------|------------|---|-----|---|-----|------|--|--|--|--|--|--|--|--|--------|--|--|--|--|--|
| SINGLE PHASE | PSC-U120xx | — | 10A | — | 5A  | 2.5A |  |  |  |  |  |  |  |  | LED    |  |  |  |  |  |
| WIDE VOLTAGE | PSW-120xx  | — | 10A | — | 5A  | 2.5A |  |  |  |  |  |  |  |  | LED/RC |  |  |  |  |  |
|              | PSW-240xx  | — | —   | — | 10A | 5A   |  |  |  |  |  |  |  |  | LED/RC |  |  |  |  |  |
|              | PSW-480Pxx | — | —   | — | 20A | 10A  |  |  |  |  |  |  |  |  | LED/RC |  |  |  |  |  |

#### DC-UPS

|  |          |   |                 |   |   |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|----------|---|-----------------|---|---|-------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  | CBI12xx  | — | 3-25A           | — | — | —     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | CBI24xx  | — | —               | — | — | 5-10A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | CBI48xx  | — |                 |   |   |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | CBI280xx | — | 12V/15A/24V/10A |   |   |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

#### Battery Charger

|  |          |   |       |   |       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|----------|---|-------|---|-------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  | CB12xx   | — | 3-25A | — | —     | — |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | CB24xx   | — | —     | — | 3-20A | — |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | CB12245A | — | 6A    | — | 5A    | — |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

#### Accessories

|  |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--------|--------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  | PS-RDN | 21-28V |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | PS-UPS | 21-28V |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Battery Backup Enclosures with VRLA Batteries

Battery Housing Without Batteries

Battery Holders

Ultra Capacitor Modules

Three Phase Input

220V INPUT ONLY

Wide Range Input

Selected items, see data sheet

Special order item / not UL approved

DC OK signal