



■ Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC fan
- CH3,4 are isolated from other outputs and the polarity can be reversed
- No minimum load requirement for CH2,3,4
- All output can be adjustable from -5~+10%
- With power good and fail signal output
- Built-in remote ON-OFF control
- Fixed switching frequency at 100KHz
- 3 years warranty



SPECIFICATION

| MODEL | | QP-375-5A | | | | QP-375-5B | | | | QP-375-5C | | | |
|-----------------------|--|---|--------------|--------------|--------------|-----------------------------|--------------|--------------|---------|-------------|--------------|--------------|--------------|
| OUTPUT | OUTPUT NUMBER | CH1 | CH2 | CH3 | CH4 | CH1 | CH2 | CH3 | CH4 | CH1 | CH2 | CH3 | CH4 |
| | DC VOLTAGE | +5V | +12V | 12V | 12V | +5V | +12V | 12V | 5V | +5V | +12V | 15V | 15V |
| | RATED CURRENT | 30A | 10A | 6A | 3A | 30A | 10A | 6A | 3A | 30A | 9A | 4A | 4A |
| | CURRENT RANGE | 3.5 ~ 40A | 0 ~ 16A | 0 ~ 6A | 0 ~ 3A | 3.5 ~ 40A | 0 ~ 16A | 0 ~ 6A | 0 ~ 3A | 3.5 ~ 40A | 0 ~ 16A | 0 ~ 4A | 0 ~ 4A |
| | RATED POWER(max.) | 378W | | | | 357W | | | | 378W | | | |
| | RIPPLE & NOISE (max.) Note.2 | 100mVp-p | 150mVp-p | 150mVp-p | 50mVp-p | 100mVp-p | 120mVp-p | 120mVp-p | 50mVp-p | 100mVp-p | 150mVp-p | 150mVp-p | 240mVp-p |
| | VOLTAGE ADJ. RANGE | 4.75 ~ 5.5V | 11.4 ~ 13.2V | 11.4 ~ 13.2V | 11.4 ~ 13.2V | 4.75 ~ 5.5V | 11.4 ~ 13.2V | 11.4 ~ 13.2V | ----- | 4.75 ~ 5.5V | 11.4 ~ 13.2V | 14.3 ~ 16.5V | 14.3 ~ 16.5V |
| | VOLTAGE TOLERANCE Note.3 | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% |
| | LINE REGULATION | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| | LOAD REGULATION | ±0.8% | ±0.8% | ±0.8% | ±0.8% | ±0.8% | ±0.8% | ±0.8% | ±0.8% | ±0.8% | ±0.8% | ±0.8% | ±0.8% |
| | SETUP, RISE TIME | 800ms, 50ms at full load | | | | | | | | | | | |
| HOLD UP TIME (Typ.) | 36ms at full load | | | | | | | | | | | | |
| INPUT | VOLTAGE RANGE Note.6 | 85 ~ 264VAC | | 120 ~ 370VDC | | | | | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | | | | | |
| | POWER FACTOR (Typ.) | PF>0.95/230VAC | | | | PF>0.98/115VAC at full load | | | | | | | |
| | EFFICIENCY (Typ.) | 77% | | | | | 77% | | | | 77% | | |
| | AC CURRENT (Typ.) | 6A/115VAC | | 3A/230VAC | | | | | | | | | |
| | INRUSH CURRENT (Typ.) | COLD START 45A | | | | | | | | | | | |
| | LEAKAGE CURRENT | <2mA / 240VAC | | | | | | | | | | | |
| PROTECTION | OVERLOAD | 105 ~ 135% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | | | | | | | | |
| | OVER VOLTAGE | CH1:5.75 ~ 6.75V Protection type : Shut down o/p voltage, re-power on to recover | | | | | | | | | | | |
| | OVER TEMPERATURE | Shut down o/p voltage, recovers automatically after temperature goes down | | | | | | | | | | | |
| FUNCTION | POWER GOOD / POWER FAIL(OPTIONAL) | 10ms/1ms | | | | | | | | | | | |
| | REMOTE CONTROL | RC+/RC-:0 ~ 0.8V POWER ON; 4V ~ 10V POWER OFF | | | | | | | | | | | |
| ENVIRONMENT | WORKING TEMP. | -10 ~ +60°C (Refer to "Derating Curve") | | | | | | | | | | | |
| | WORKING HUMIDITY | 20 ~ 90% RH non-condensing | | | | | | | | | | | |
| | STORAGE TEMP., HUMIDITY | -20 ~ +85°C, 10 ~ 95% RH non-condensing | | | | | | | | | | | |
| | TEMP. COEFFICIENT | ±0.03%/°C (0~50°C) | | | | | | | | | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes | | | | | | | | | | | |
| SAFETY & EMC (Note 7) | SAFETY STANDARDS | UL60950-1, TUV EN60950-1 approved | | | | | | | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC | | | | | | | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH | | | | | | | | | | | |
| | EMC EMISSION | Compliance to EN61000-3-2,-3 | | | | | | | | | | | |
| | EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A | | | | | | | | | | | |
| OTHERS | MTBF | 75.9K hrs min. MIL-HDBK-217F (25°C) | | | | | | | | | | | |
| | DIMENSION | 280*127*63.5mm (L*W*H) | | | | | | | | | | | |
| | PACKING | 2.4Kg; 6pcs/14.8Kg/0.89CUFT | | | | | | | | | | | |
| NOTE | <ol style="list-style-type: none"> 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. Peak current can not exceed 60 sec. 5. Isolated CH3 & CH4 maybe series connected or can be used as positive or negative outputs. 6. Derating may be needed under low input voltages. Please check the derating curve for more details. 7. 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." (as available on http://www.meanwell.com) 8. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft). | | | | | | | | | | | | |



375W Quad Output with PFC Function

QP-375 series



■ Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC fan
- CH3,4 are isolated from other outputs and the polarity can be reversed
- No minimum load requirement for CH2,3,4
- All output can be adjustable from -5~+10%
- With power good and fail signal output
- Built-in remote ON-OFF control
- Fixed switching frequency at 100KHz
- 3 years warranty

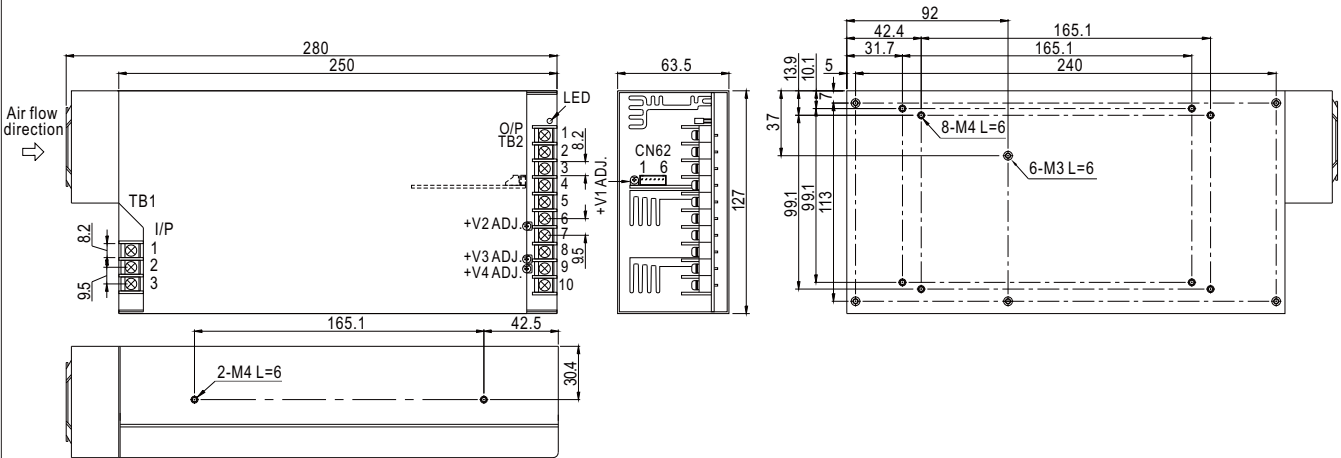


SPECIFICATION

| MODEL | | QP-375-5D | | | | QP-375-5E | | | | |
|-----------------------|--|---|--------------|--------------|-----------------------------|-------------|--------------|--------------|--------------|--|
| OUTPUT | OUTPUT NUMBER | CH1 | CH2 | CH3 | CH4 | CH1 | CH2 | CH3 | CH4 | |
| | DC VOLTAGE | +5V | +12V | 12V | 24V | +5V | +12V | 24V | 24V | |
| | RATED CURRENT | 30A | 9A | 4A | 3A | 30A | 9A | 3A | 2A | |
| | CURRENT RANGE | 3.5 ~ 40A | 0 ~ 16A | 0 ~ 6A | 0 ~ 3A | 3.5 ~ 40A | 0 ~ 16A | 0 ~ 4A | 0 ~ 3A | |
| | RATED POWER(max.) | 378W | | | | 378W | | | | |
| | RIPPLE & NOISE (max.) Note.2 | 100mVp-p | 120mVp-p | 120mVp-p | 240mVp-p | 100mVp-p | 120mVp-p | 120mVp-p | 240mVp-p | |
| | VOLTAGE ADJ. RANGE | 4.75 ~ 5.5V | 11.4 ~ 13.2V | 11.4 ~ 13.2V | 22.8 ~ 26.4V | 4.75 ~ 5.5V | 11.4 ~ 13.2V | 22.8 ~ 26.4V | 22.8 ~ 26.4V | |
| | VOLTAGE TOLERANCE Note.3 | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | |
| | LINE REGULATION | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | |
| | LOAD REGULATION | ±0.8% | ±0.8% | ±0.8% | ±0.8% | ±0.8% | ±0.8% | ±0.8% | ±0.8% | |
| SETUP, RISE TIME | 800ms, 50ms at full load | | | | | | | | | |
| HOLD UP TIME (Typ.) | 36ms at full load | | | | | | | | | |
| INPUT | VOLTAGE RANGE Note.6 | 85 ~ 264VAC | | 120 ~ 370VDC | | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | | |
| | POWER FACTOR (Typ.) | PF>0.95/230VAC | | | PF>0.98/115VAC at full load | | | | | |
| | EFFICIENCY (Typ.) | 78% | | | | | 78% | | | |
| | AC CURRENT (Typ.) | 6A/115VAC | | 3A/230VAC | | | | | | |
| | INRUSH CURRENT (Typ.) | COLD START 45A | | | | | | | | |
| | LEAKAGE CURRENT | <2mA / 240VAC | | | | | | | | |
| PROTECTION | OVERLOAD | 105 ~ 135% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | | | | | |
| | OVER VOLTAGE | CH1: 5.75 ~ 6.75V Protection type : Shut down o/p voltage, re-power on to recover | | | | | | | | |
| | OVER TEMPERATURE | Shut down o/p voltage, recovers automatically after temperature goes down | | | | | | | | |
| FUNCTION | POWER GOOD / POWER FAIL(OPTIONAL) | 10ms/1ms | | | | | | | | |
| | REMOTE CONTROL | RC+/RC-: 0 ~ 0.8V POWER ON; 4V ~ 10V POWER OFF | | | | | | | | |
| ENVIRONMENT | WORKING TEMP. | -10 ~ +60°C (Refer to "Derating Curve") | | | | | | | | |
| | WORKING HUMIDITY | 20 ~ 90% RH non-condensing | | | | | | | | |
| | STORAGE TEMP., HUMIDITY | -20 ~ +85°C, 10 ~ 95% RH non-condensing | | | | | | | | |
| | TEMP. COEFFICIENT | ±0.03%/°C (0~50°C) | | | | | | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes | | | | | | | | |
| SAFETY & EMC (Note 7) | SAFETY STANDARDS | UL60950-1, TUV EN60950-1 approved | | | | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P: 3KVAC I/P-FG: 1.5KVAC O/P-FG: 0.5KVAC | | | | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG: 100M Ohms / 500VDC / 25°C / 70% RH | | | | | | | | |
| | EMC EMISSION | Compliance to EN61000-3-2, -3 | | | | | | | | |
| | EMC IMMUNITY | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024, light industry level, criteria A | | | | | | | | |
| OTHERS | MTBF | 75.9K hrs min. MIL-HDBK-217F (25°C) | | | | | | | | |
| | DIMENSION | 280*127*63.5mm (L*W*H) | | | | | | | | |
| | PACKING | 2.4Kg; 6pcs/14.8Kg/0.89CUFT | | | | | | | | |
| NOTE | <ol style="list-style-type: none"> 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. Peak current can not exceed 60 sec. 5. Isolated CH3 & CH4 maybe series connected or can be used as positive or negative outputs. 6. Derating may be needed under low input voltages. Please check the derating curve for more details. 7. 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." (as available on http://www.meanwell.com) 8. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft). | | | | | | | | | |

Mechanical Specification

Case No. 927A Unit:mm



AC Input Terminal Pin No. Assignment

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

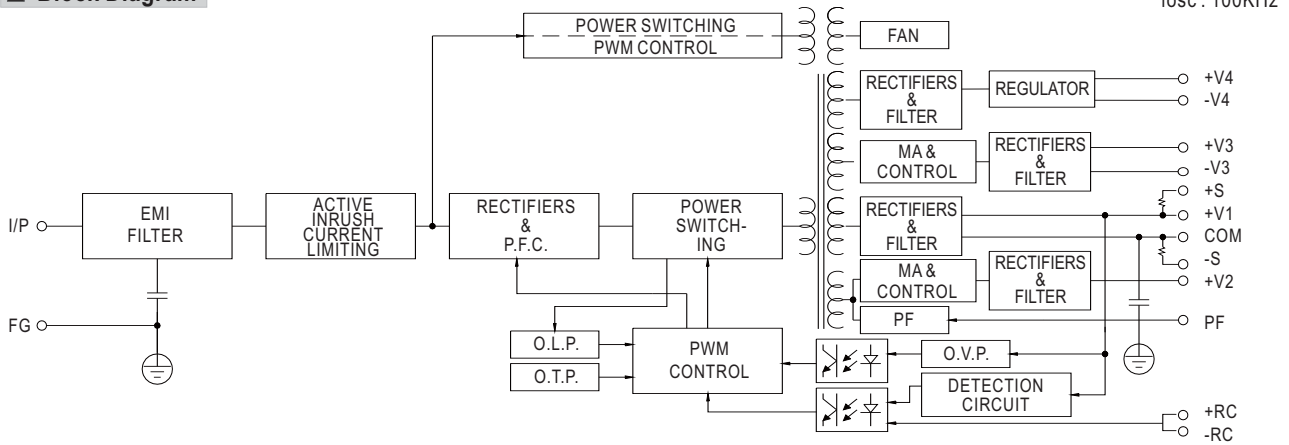
DC Output Terminal Pin No. Assignment

| Pin No. | Assignment | Pin No. | Assignment |
|---------|----------------|---------|------------|
| 1,2 | +V1 | 8 | -V3 |
| 3,4,5 | COM(V1 and V2) | 9 | +V4 |
| 6 | +V2 | 10 | -V4 |
| 7 | +V3 | | |

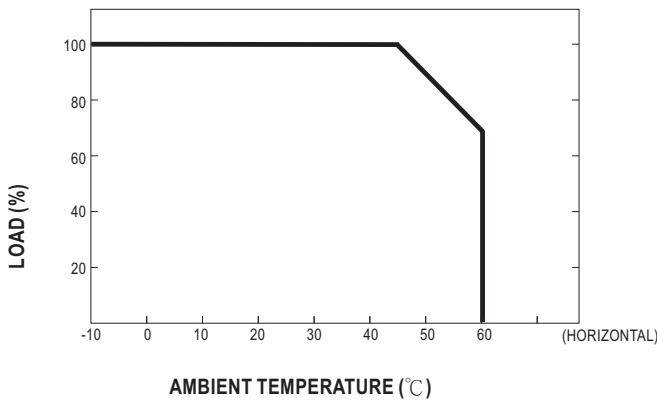
CN62 Pin No. Assignment : JST S6B-XH or equivalent

| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------------------------|-----------------------|---------------------------------|
| 1 | PF(Power good / Fail signal) | JST XHP or equivalent | JST SXH-001T-P0.6 or equivalent |
| 2 | GND | | |
| 3 | RS- | | |
| 4 | RS+ | | |
| 5 | RC- | | |
| 6 | RC+ | | |

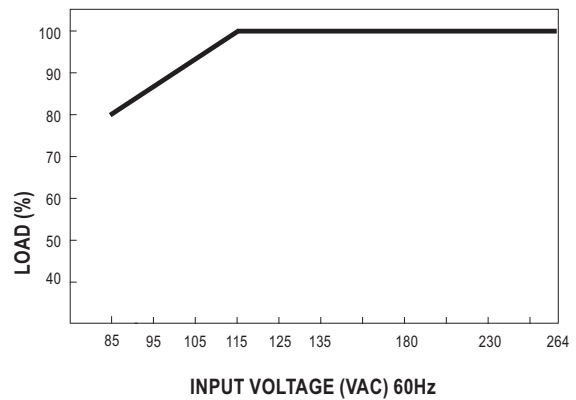
Block Diagram



Derating Curve



Output Derating VS Input Voltage





■ Features :

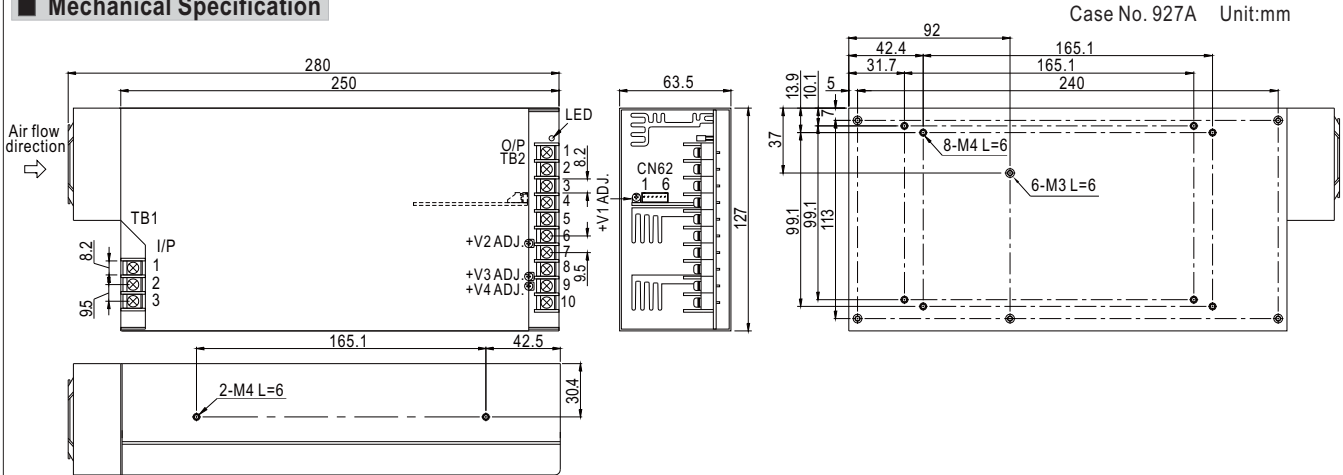
- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC fan
- CH3,4 are isolated from other outputs and the polarity can be reversed
- No minimum load requirement for CH2,3,4
- All output can be adjustable from -5~+10%
- With power good and fail signal output
- Built-in remote ON-OFF control
- Fixed switching frequency at 100KHz
- 3 years warranty



SPECIFICATION

| MODEL | | QP-375-24B | | | | QP-375-24C | | | | |
|-----------------------|--|---|------------|-----------------------------|--------------|--------------|------------|--------------|--------------|--|
| OUTPUT | OUTPUT NUMBER | CH1 | CH2 | CH3 | CH4 | CH1 | CH2 | CH3 | CH4 | |
| | DC VOLTAGE | +24V | +5V | 12V | 12V | +24V | +5V | 15V | 15V | |
| | RATED CURRENT | 10A | 10A | 4A | 4A | 10A | 10A | 4A | 4A | |
| | CURRENT RANGE | 1 ~ 10A | 0 ~ 16A | 0 ~ 4A | 0 ~ 4A | 1 ~ 10A | 0 ~ 10A | 0 ~ 4A | 0 ~ 4A | |
| | RATED POWER(max.) | 386W | | | | 410W | | | | |
| | RIPPLE & NOISE (max.) Note.2 | 240mVp-p | 50mVp-p | 120mVp-p | 120mVp-p | 240mVp-p | 50mVp-p | 150mVp-p | 150mVp-p | |
| | VOLTAGE ADJ. RANGE | 21.6 ~ 26.4V | 4.5 ~ 5.5V | 10.8 ~ 13.2V | 10.8 ~ 13.2V | 21.6 ~ 26.4V | 4.5 ~ 5.5V | 13.5 ~ 16.5V | 13.5 ~ 16.5V | |
| | VOLTAGE TOLERANCE Note.3 | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | |
| | LINE REGULATION | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | |
| | LOAD REGULATION | ±0.8% | ±0.8% | ±0.8% | ±0.8% | ±0.8% | ±0.8% | ±0.8% | ±0.8% | |
| | SETUP, RISE TIME | 800ms, 50ms at full load | | | | | | | | |
| HOLD UP TIME (Typ.) | 36ms at full load | | | | | | | | | |
| INPUT | VOLTAGE RANGE Note.6 | 85 ~ 264VAC | | 120 ~ 370VDC | | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | | |
| | POWER FACTOR (Typ.) | PF>0.95/230VAC | | PF>0.98/115VAC at full load | | | | | | |
| | EFFICIENCY (Typ.) | 78% | | | | | 80% | | | |
| | AC CURRENT (Typ.) | 6A/115VAC | | 3A/230VAC | | | | | | |
| | INRUSH CURRENT (Typ.) | COLD START 45A | | | | | | | | |
| | LEAKAGE CURRENT | <2mA / 240VAC | | | | | | | | |
| PROTECTION | OVERLOAD | 105 ~ 135% rated output power Protection type : Hiccup mode, recovers automatically after condition is removed | | | | | | | | |
| | OVER VOLTAGE | CH1:27.6 ~ 32.4V Protection type : Shut down o/p voltage, re-power on to recover | | | | | | | | |
| | OVER TEMPERATURE | Shut down o/p voltage, recovers automatically after temperature goes down | | | | | | | | |
| FUNCTION | POWER GOOD / POWER FAIL(OPTIONAL) | 10ms/1ms | | | | | | | | |
| | REMOTE CONTROL | RC+/RC-:0 ~ 0.8V POWER ON; 4V ~ 10V POWER OFF | | | | | | | | |
| ENVIRONMENT | WORKING TEMP. | -10 ~ +60°C (Refer to "Derating Curve") | | | | | | | | |
| | WORKING HUMIDITY | 20 ~ 90% RH non-condensing | | | | | | | | |
| | STORAGE TEMP., HUMIDITY | -20 ~ +85°C, 10 ~ 95% RH non-condensing | | | | | | | | |
| | TEMP. COEFFICIENT | ±0.03%/°C (0~50°C) | | | | | | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes | | | | | | | | |
| SAFETY & EMC (Note 7) | SAFETY STANDARDS | UL60950-1, TUV EN60950-1 approved | | | | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC | | | | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH | | | | | | | | |
| | EMC EMISSION | Compliance to EN61000-3-2,-3 | | | | | | | | |
| | EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A | | | | | | | | |
| OTHERS | MTBF | 75.9K hrs min. MIL-HDBK-217F (25°C) | | | | | | | | |
| | DIMENSION | 280*127*63.5mm (L*W*H) | | | | | | | | |
| | PACKING | 2.4Kg; 6pcs/14.8Kg/0.89CUFT | | | | | | | | |
| NOTE | <ol style="list-style-type: none"> 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. Peak current can not exceed 60 sec. 5. Isolated CH3 & CH4 maybe series connected or can be used as positive or negative outputs. 6. Derating may be needed under low input voltages. Please check the derating curve for more details. 7. 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." (as available on http://www.meanwell.com) 8. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft). | | | | | | | | | |

Mechanical Specification



AC Input Terminal Pin No. Assignment

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

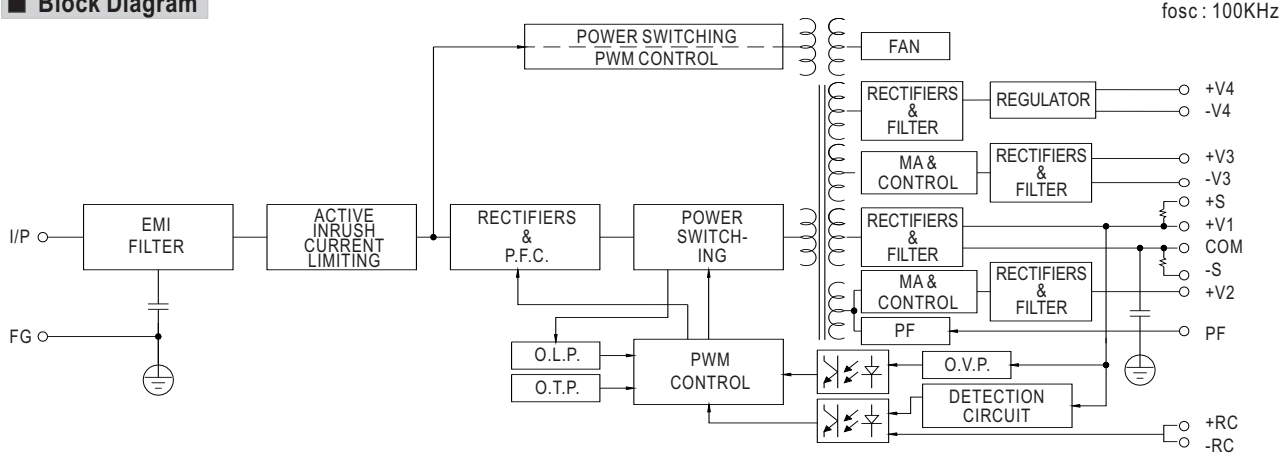
DC Output Terminal Pin No. Assignment

| Pin No. | Assignment | Pin No. | Assignment |
|---------|----------------|---------|------------|
| 1,2 | +V1 | 8 | -V3 |
| 3,4,5 | COM(V1 and V2) | 9 | +V4 |
| 6 | +V2 | 10 | -V4 |
| 7 | +V3 | | |

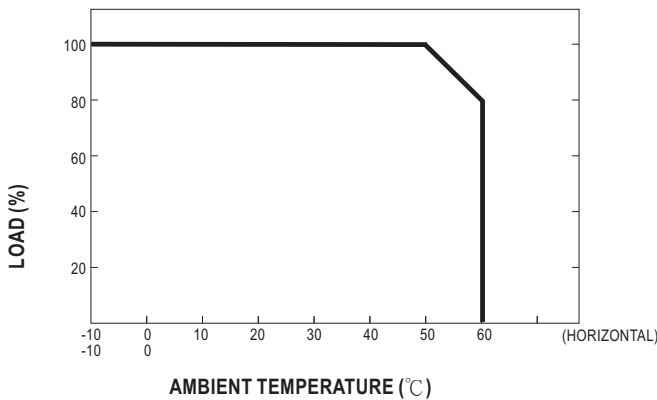
CN62 Pin No. Assignment : JST S6B-XH or equivalent

| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------------------------|-----------------------|---------------------------------|
| 1 | PF(Power good / Fail signal) | JST XHP or equivalent | JST SXH-001T-P0.6 or equivalent |
| 2 | GND | | |
| 3 | RS- | | |
| 4 | RS+ | | |
| 5 | RC- | | |
| 6 | RC+ | | |

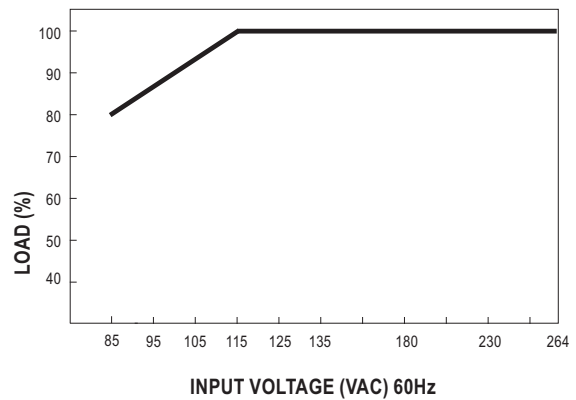
Block Diagram



Derating Curve

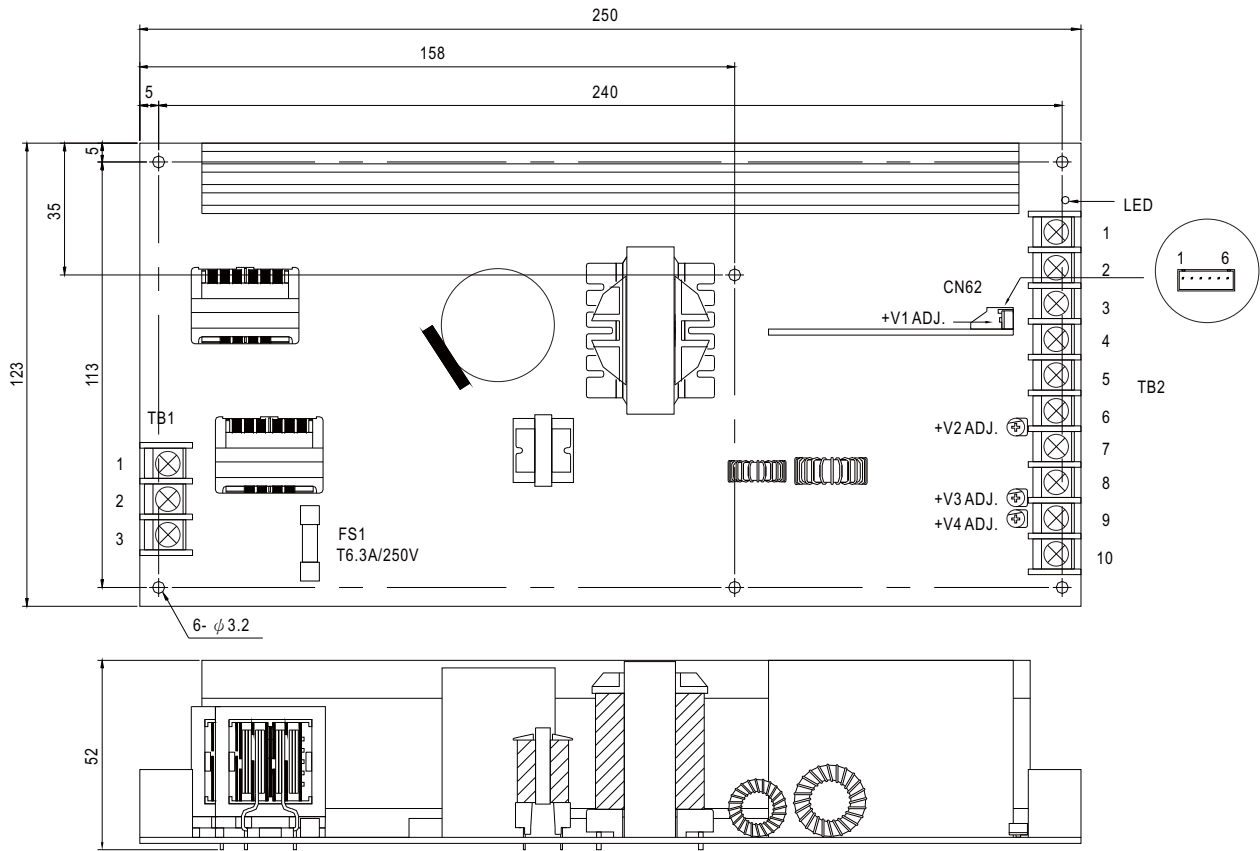


Output Derating VS Input Voltage



Mechanical Specification

Unit:mm



AC Input Terminal Pin No. Assignment

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

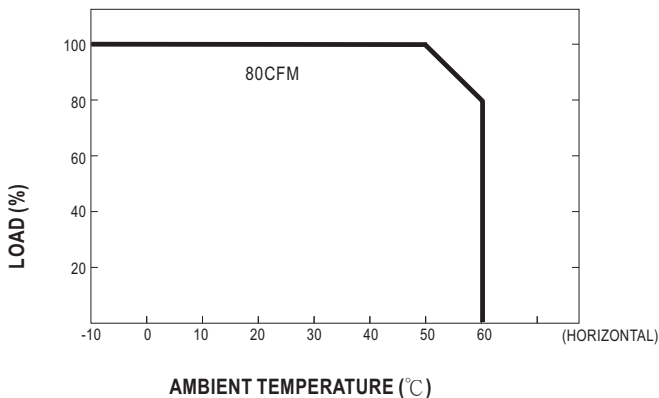
DC Output Terminal Pin No. Assignment

| Pin No. | Assignment | Pin No. | Assignment |
|---------|----------------|---------|------------|
| 1,2 | +V1 | 8 | -V3 |
| 3,4,5 | COM(V1 and V2) | 9 | +V4 |
| 6 | +V2 | 10 | -V4 |
| 7 | +V3 | | |

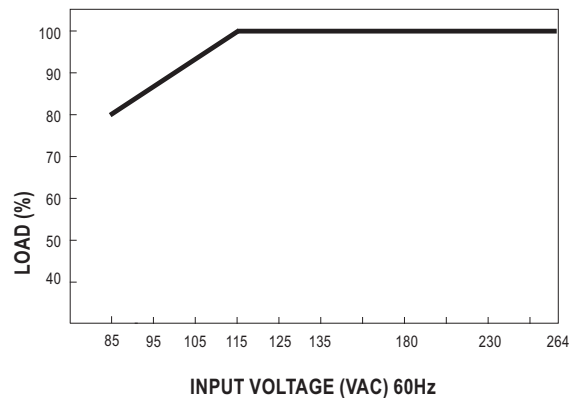
CN62 Pin No. Assignment : JST S6B-XH or equivalent

| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------------------------|-----------------------|---------------------------------|
| 1 | PF(Power good / Fail signal) | JST XHP or equivalent | JST SXH-001T-P0.6 or equivalent |
| 2 | GND | | |
| 3 | RS- | | |
| 4 | RS+ | | |
| 5 | RC- | | |
| 6 | RC+ | | |

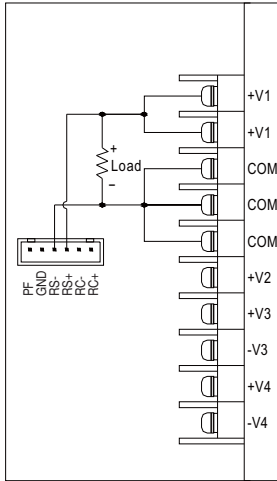
Derating Curve



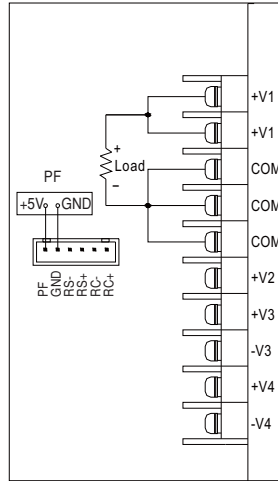
Output Derating VS Input Voltage



Control terminal instruction manual

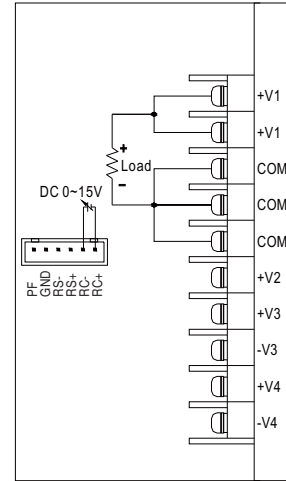


Remote Sensing



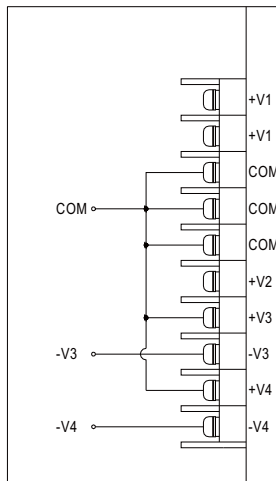
Power Fail Signal

PF Signal is the voltage difference between "GND" and "PF" pin output

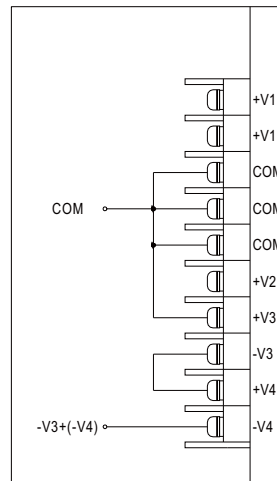


Power Fail Signal

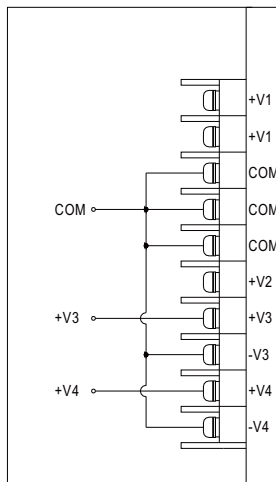
Power ON: When VRC+,RC=0 ~ 0.8V or Open
Power OFF: When VRC+,RC=4 ~ 10V



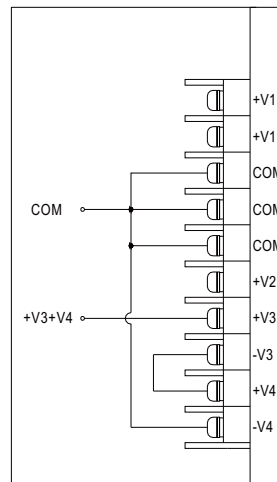
V3, V4 All Negative(-)



V3 Puls Negative(-)



V3, V4 All Positive(+)



V3 Plus V4 Positive(+)