

PFC 200W Single Output power supply

UP200 series

Features :

Universal AC input active PFC

Protections: Short circuit / Over load / Over voltage / Over Temp.

All using 105°C long life electrolytic capacitors

High operation temperature up to 70°C

Power OK signal

U-bracket low profile: 38mm

Free air convection for 200W

High power density 4.7w/in³

Withstand 2G vibration test

100% full load burn-in test.

High efficiency, long life and high reliability

3 years warranty



CB



cULus



SPECIFICATION

| MODEL | | UP-200-12 | UP-200-15 | UP-200-24 | UP-200-48 |
|--------------|---|--|--------------|--------------|--------------|
| INPUT | Voltage and Frequency RANGE ² | 90 ~ 264VAC 47 ~ 63Hz, or 127 ~ 370VDC | | | |
| | AC CURRENT | 2.0A / 115VAC 1.0A / 230VAC | | | |
| | INRUSH CURRENT(Typ.) | Cold start 30A / 115VAC 60A / 230VAC | | | |
| | Power Factor (Typ.) | PF ≥ 0.90 / 230VAC, PF ≥ 0.95 / 115VAC at full load | | | |
| | LEAKAGE CURRENT | < 2mA / 230VAC | | | |
| | EFFICIENCY (Typ.) | 87% | 87% | 88% | 88% |
| OUTPUT | DC VOLTAGE RANGE | 12V | 15V | 24V | 48V |
| | RATED CURRENT | 16.7A | 13.4A | 8.4A | 4.2A |
| | CURRENT RANGE | 0~11A | 0~10A | 0~7.5A | 0~3.2A |
| | RATED POWER | 200.4W | 201W | 201.6W | 200W |
| | VOLTAGE ADJ. RANGE | 10.8 ~ 13.2V | 13.5 ~ 16.5V | 21.6 ~ 26.4V | 43.2 ~ 52.8V |
| | Ripple & Noise (max.) ³ | 120mVp-p | 150mVp-p | 180mVp-p | 250mVp-p |
| | VOLTAGE TOLERANCE ⁴ | ±2.0% | | | |
| | Line Regulation | ±1.0% | | | |
| | Load Regulation | ±2.0% | | | |
| | Setup, Rise Time | <800ms, <40ms at full load | | | |
| | Hold Up Time (Typ.) | >16ms / 115VAC, >32ms / 230Vac at full load | | | |
| PROTECTION | Over Load | > 105% rated output power | | | |
| | Over Voltage | 115% ~ 150% rated output voltage | | | |
| | Over Temperature | 90°C ±5°C | | | |
| ENVIRONMENT | WORKING TEMP. | -20°C ~ +70°C (Refer to output load derating curve) | | | |
| | WORKING HUMIDITY | 20 ~ 90% R.H non-condensing | | | |
| | STORAGE TEMP., HUMIDITY | -40 ~ +85°C 10 ~95% R.H | | | |
| | TEMP. COEFFICIENT | ±0.03%/°C (0 ~ 50°C) | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1 cycle, period for 60 min. Each along X,Y,Z axes | | | |
| SAFETY & EMC | SAFETY STANDARDS | UL 60950-1, 2nd Edition, TUV EN60950-1 : 2006+A11 Approved | | | |
| | WITHSTAND VOLTAGE | I/P - O/P : 4242 DC I/P - FG : 2121 DC 1 minute | | | |
| | ISOLATION RESISTANCE | I/P - O/P, I/P - FG, O/P - FG: 100M Ω / 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 | | | |
| OTHERS | Connection | I/P 5P / 3.96mm pitch, O/P : 4P/9.5mm terminal block with cover or 6Px2 3.96mm pitch(select by user) | | | |
| | Power OK signal | Relay contact 1A / 120Vac - 230Vac | | | |
| | Cooling | Free Air convection | | | |
| | MTBF (MIL-HDBK-217F) | | | | |
| | DIMENSION | 198x68x33mm | | | |
| | PACKING | 0.424kg ; 12Pcs/5.1kg | | | |
| NOTE | <p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47 uf parallel capacitor.</p> <p>3. Tolerance: includes set up tolerance, line regulation and load regulation.</p> <p>4. De-rating may be needed under low input voltages. Please check the de-rating curve for more details.</p> <p>5. 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.</p> | | | | |

PFC 200W Single Output power supply

UP200 series

Unit : mm

Mechanical Specification

MODEL:UP-200C

AC Input Connector (CN1) :
JST B5P-VH or equivalent

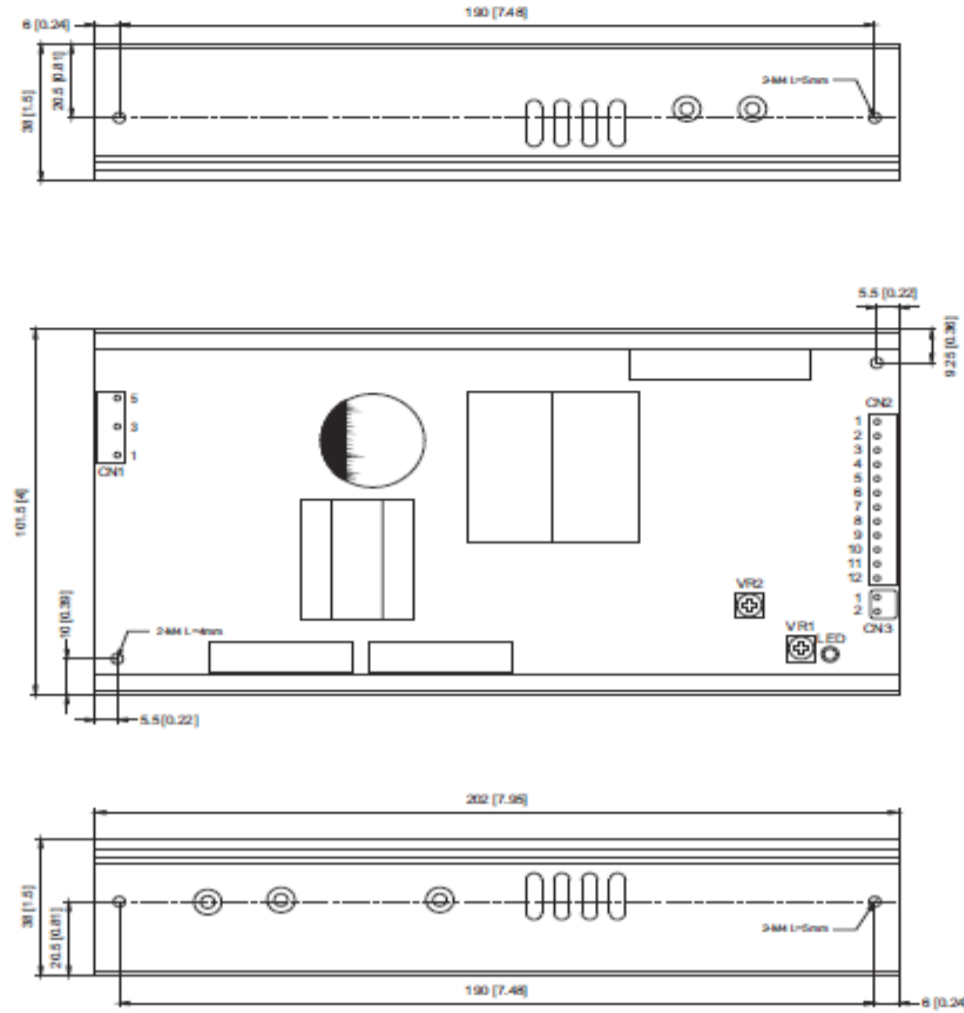
| Pin. No. | Assignment | |
|----------|--------------|------|
| 1 | Ground/Earth | FG |
| 2 | N.C | N.C |
| 3 | Neutral | AC/N |
| 4 | N.C | N.C |
| 5 | Live | AC/L |

DC Output Connector(CN2 for UP-200C):
JST B6P-VH or equivalent

| Pin. No. | Assignment | |
|----------|------------|--------------|
| 1-6 | VO- | Return |
| 7-12 | VO+ | +Main Output |

DC Output Connector(CN3):
JST B2P-VH or equivalent

| Pin. No. | Assignment |
|----------|------------|
| 1 | COM |
| 2 | N.C |



MODEL:UP-200T

AC Input Connector (CN1) :
JST B5P-VH or equivalent

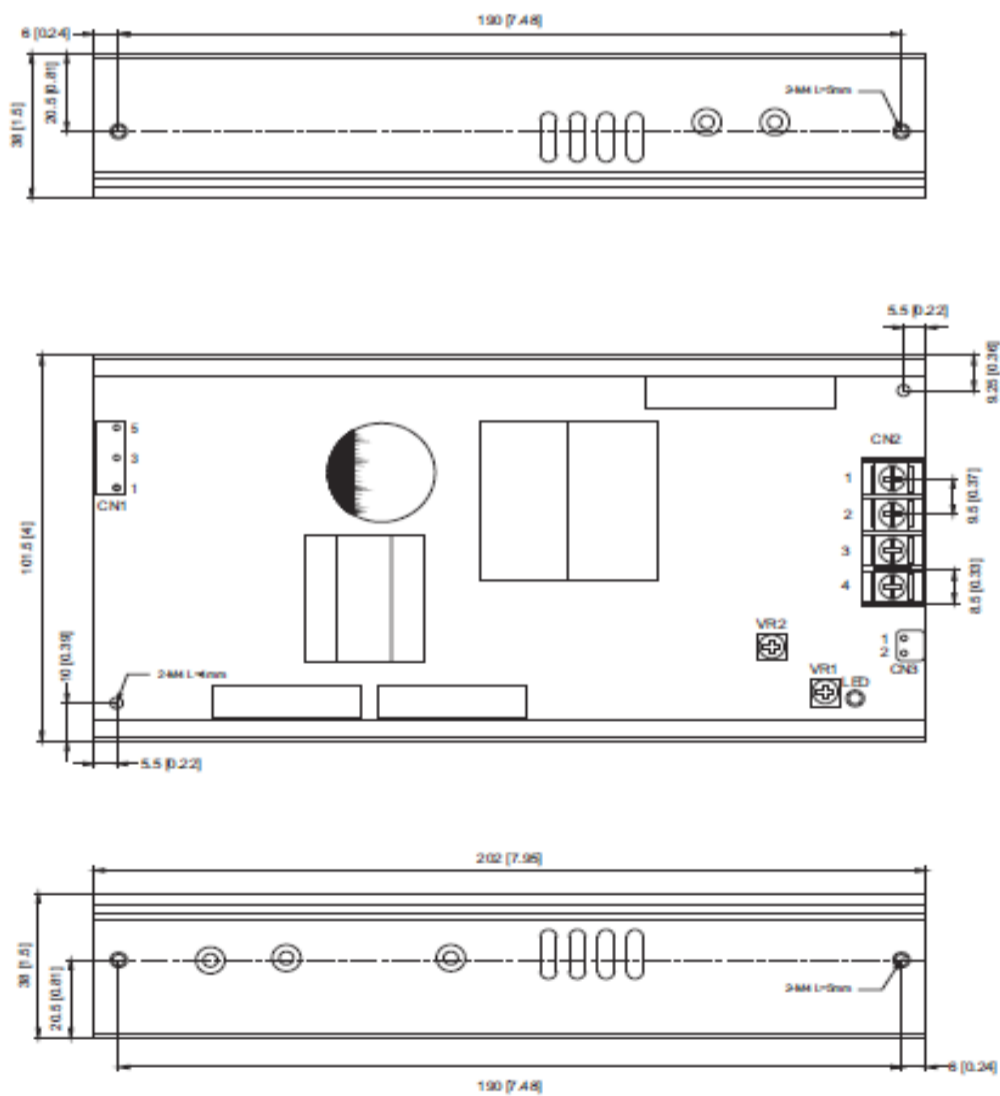
| Pin. No. | Assignment | |
|----------|--------------|--------|
| 1 | Ground/Earth | FG |
| 2 | N.C | NO PIN |
| 3 | Neutral | AC/N |
| 4 | N.C | N.C |
| 5 | Live | AC/L |

DC Output Connector(CN3):
JST B2P-VH or equivalent

| Pin. No. | Assignment |
|----------|------------|
| 1 | COM |
| 2 | N.C |

DC Output Terminal(CN4 for UP-200T):
Pitch 9.5mm:

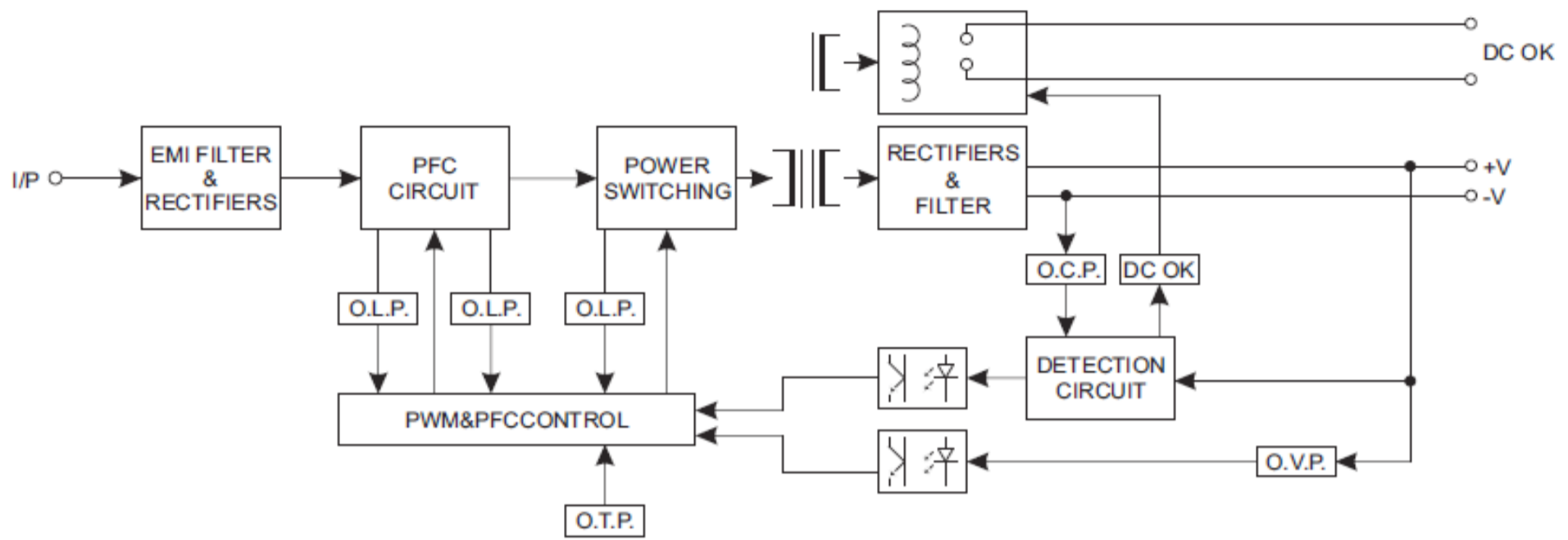
| Pin. No. | Assignment | |
|----------|------------|--------------|
| 1 | VO(-) | Return |
| 2 | VO(-) | Return |
| 3 | VO(+) | +Main Output |
| 4 | VO(+) | +Main Output |



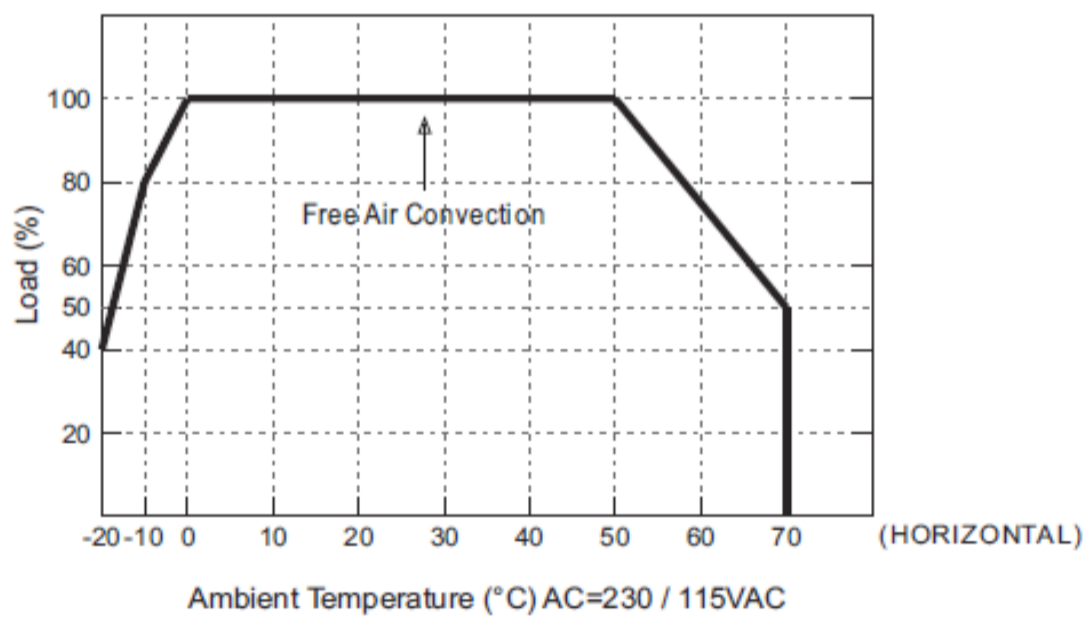
PFC 200W Single Output power supply

UP200 series

Block Diagram



De-rating Curve



Static Characteristics

