

200 W
AC/DC
U / CASE
MEDICAL

200 Watt Medical Power

Autoranging Input PM200-Medical-Serie



Besondere Merkmale Features

| | |
|------------------------------|------------------------------------|
| Auto-Ranging Eingang | Autoranging input |
| Hoher Wirkungsgrad | High efficiency |
| 100% Burn-in bei Vollast | 100% burn in @ full-rated load |
| Kompakter Aufbau | Small low profile package |
| Eingebauter EMI-Filter | Built-in EMI filter |
| Überlast- und kurzschlußfest | Overload, short circuit protection |
| Gehäuseversion erhältlich | Boxed version available |
| Mehrfachausgänge | Multiple outputs |
| Hohe MTBF | High MTBF |

Anwendung Application

| | |
|-----------------------|------------------------|
| Medizinische Geräte | Medical equipment |
| Sicherheitssysteme | Safety systems |
| Dentalsysteme | Dental systems |
| MSR | Control equipments |
| Mikroprozessorsysteme | Microprocessor systems |
| Überwachungsanlagen | Monitoring equipments |

Technische Daten Specification

(bei 25°C Umgebungstemperatur) at 25 °C ambient temperature

Eingangsdaten Input Specifications

| | | |
|-------------------------|------------------------------|--|
| Eingangsspannung | Input voltages | 90-130 VAC, 180-264 VAC autoranging |
| Eingangsfrequenz | Input frequency | 47-63 Hz |
| Netzausfallüberbrückung | Hold-up time, nom.conditions | 12 ms min., @110 VAC |
| Einschaltstromstoß | Inrush current | 40 A @230VAC |
| Leckstrom | Leakage current | 150µA max @ 230VAC/50Hz 90µA max @ 115 VAC/60Hz |

Ausgangsdaten Output Specifications

| | | |
|------------------|-------------------|--|
| Leistung | Power | 200 Watt @ 25cfm cooling, 150W U-Version |
| Wirkungsgrad | Efficiency | typ. 70% |
| Ausregelzeit ±1% | Recovery time ±1% | max. 500 µs |
| Restwelligkeit | Ripple and noise | <1%pp max. |

Allgemeine Daten General Specifications

| | | |
|------------------------|------------------------|---|
| Betriebstemperatur | Operating temperature | 0°C...70°C |
| Lagertemperatur | Storage temperature | -40°C...+85°C |
| Leistungsrücknahme | Derating | Derate from 100% @+50°C linearly to 50% @+70°C |
| Isolationsspannungen | Withstand voltage | 4000VAC input to output 1500VAC input to ground 500VAC output to ground |
| Überspannungsschutz | Overvoltage protection | 112-132% of nom. outp. volt on output#1 |
| Überstromschutz | Overcurrent protection | short circuit protected |
| MTBF | MTBF | >450.000 h @25°C MIL-HDBK-217F |
| EMI | EMI | EN 55011 class B, FCC class B |
| Zulassungsbestimmungen | Safety requirements | EN 60601-1, UL 2601-1, CSA C22.2 No.601.1 Medical and dental systems |
| PFD-Signal | PFD-signal | TTL logic high for normal operation |

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Bestell-Information / Order Information

| Modell | Ausgang 1 Output 1 | | | | Ausgang 2 Output 2 | | | | Ausgang 3 Output 3 | | | | Ausgang 4 Output 4 | | | | Max. Output Power Watt |
|-----------|-----------------------|------------------|------------------|-----|-----------------------|------------------|------------------|-----|-----------------------|------------------|------------------|-----|-----------------------|------------------|------------------|-----|------------------------------|
| | V _{nom} | I _{min} | I _{max} | Tol | V _{nom} | I _{min} | I _{max} | Tol | V _{nom} | I _{min} | I _{max} | Tol | V _{nom} | I _{min} | I _{max} | Tol | |
| PM200-10 | 5V | 3.0A | 40A | 2% | (N/A) | | | | (N/A) | | | | (N/A) | | | | 200 |
| PM200-12 | 12V | 1.2A | 16.7A | 2% | (N/A) | | | | (N/A) | | | | (N/A) | | | | 200 |
| PM 200-13 | 15V | 1.0A | 13.4A | 2% | (N/A) | | | | (N/A) | | | | (N/A) | | | | 200 |
| PM200-14 | 24V | 0.6A | 8.4A | 2% | (N/A) | | | | (N/A) | | | | (N/A) | | | | 200 |
| PM 200-16 | 30V | 0.5A | 6.7A | 2% | (N/A) | | | | (N/A) | | | | (N/A) | | | | 200 |
| PM 200-18 | 48V | 0.5A | 4.2A | 2% | (N/A) | | | | (N/A) | | | | (N/A) | | | | 200 |
| PM200-23 | +5V | 3.0A | 30A | 2% | +12V | 0A | 8A | 4% | (N/A) | | | | (N/A) | | | | 200 |
| PM200-24 | +5V | 3.0A | 30A | 2% | +15V | 0A | 6A | 4% | (N/A) | | | | (N/A) | | | | 200 |
| PM200-25 | +5V | 3.0A | 30A | 2% | +24V | 0A | 4A | 4% | (N/A) | | | | (N/A) | | | | 200 |
| PM200-30 | +5V | 3.0A | 30A | 2% | +12V | 0A | 8A | 4% | -5V | 0A | 6A | 4% | (N/A) | | | | 200 |
| PM200-31 | +5V | 3.0A | 30A | 2% | +12V | 0A | 8A | 4% | -12V | 0A | 4A | 4% | (N/A) | | | | 200 |
| PM200-32 | +5V | 3.0A | 30A | 2% | +15V | 0A | 6A | 4% | -15V | 0A | 4A | 4% | (N/A) | | | | 200 |
| PM200-33 | +5V | 3.0A | 30A | 2% | +15V | 0A | 6A | 4% | -12V | 0A | 4A | 4% | (N/A) | | | | 200 |
| PM200-40 | +5V | 3.2A | 30A | 2% | +12V | 0A | 8A | 4% | -12V | 0A | 4A | 4% | +5V | 0A | 6A | 4% | 200 |
| PM200-41 | +5V | 3.0A | 30A | 2% | +15V | 0A | 6A | 4% | -15V | 0A | 4A | 4% | +24V | 0A | 4A | 4% | 200 |
| PM200-42 | +5V | 3.0A | 30A | 2% | +12V | 0A | 8A | 4% | -12V | 0A | 4A | 4% | +12V | 0A | 4A | 4% | 200 |
| PM200-44 | +5V | 3.0A | 30A | 2% | +12V | 0A | 8A | 4% | -15V | 0A | 4A | 4% | +15V | 0A | 4A | 4% | 200 |
| PM200-45 | +5V | 3.0A | 30A | 2% | +12V | 0A | 8A | 4% | -12V | 0A | 4A | 4% | +24V | 0A | 4A | 4% | 200 |

Andere Typen und Spannungen auf Anfrage • Other models and configurations on request.

Vermerk

- Die Dauerleistung darf 150 W ohne Fremdkühlung (B-Version) und 200 W mit Fremdkühlung (C-Version, 25 CFM) nicht übersteigen.
- Wenn die Sense-Anschlüsse nicht genutzt werden muss +Sense mit output#1 und -Sense mit Return auf dem P2-connector verbunden werden.
- Einbau des Netzteils muß gemäß Richtlinien EN 60950 erfolgen.

Remarks

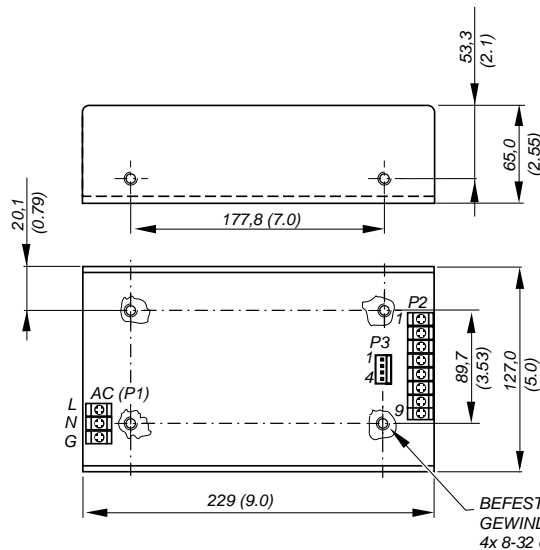
- The maximum continuous output power must not exceed 150 W with convection cooling (version B) and 200 W at 25 CFM (version C).
- When the remote-sense facility is not used, +Sense must be connected to +V and -Sense to return on the P2 connector.
- Installation must meet the requirements of EN 60950.

Mechanik

Mechanical

L×B×H Gehäuse und L-Winkel 229 × 127 × 65 mm GEWICHT/WEIGHT 1,4 kg / 3.08 lbs (B-Version)
 L×W×H Case and L-Bracket 9 × 5 × 2.25 in 1,6 kg / 3.52 lbs(C-Version)
C Gehäuse mit Lüfter integriert **C** case with integrated fan
 example : PM200-10 for U-bracket, PM200-10C for case with fan

PIN-Belegung und Zeichnung / Pin Assignments & Drawing, mm (inch)



OUTPUT CONNECTIONS

| Conn. | PINS | SINGLE | DUAL | TRIPLE | QUAD |
|--------|--------------|---------|---------|---------|------|
| P2 | - Sense | 1, 2 | | | |
| | + Sense | 9 | | | |
| | Out 1 | 6, 7, 8 | 1, 2 | 1, 2 | 1, 2 |
| | Out 2 | | 6 | 6 | 6 |
| | Out 3 | | | 7 | 7 |
| | Out 4 | | | | 9 |
| | Out 4 RETURN | | | | 8 |
| RETURN | 3, 4, 5 | 3, 4, 5 | 3, 4, 5 | 3, 4, 5 | |
| N.C. | | 7, 8, 9 | 8, 9 | | |
| P3 | P.F.D. | 1 | 1 | 1 | 1 |
| | Fan | 4 | 4 | 4 | 4 |
| | RETURN | 2, 3 | 2, 3 | 2, 3 | 2, 3 |

BEFESTIGUNGSLÖCHER (MT'G. HOLES)
 GEWINDEEINSATZ (THREADED INSERT)
 4x 8-32 or/oder M4

max. Toleranz 0,5 (0.02)

Inc. P/N 72-5-03C, output connector P2 is Beau Inc. P/N 72-5-09C. Screws are #6-32 × 0.375 inch.

Connector P3 mates with Molex housing 22-01-1043 and Molex 40445 series crimp terminal.

TTL Logic high for normal operation and low upon loss of input power.

Ausgang 4 ist getrennt und kann als Positiv- oder Negativspannung benutzt werden.

Output 4 is floating and can be connected externally for positive or negative voltage.