



**Electrical
Specification for:**

CPCI - 6U - AC - 700W

**Telkoor Part
Number:**

900-7202-0000

| | | | | | | | |
|-------------------|-------|-----------|--------------|------------|--------------|-----|------|
| CUSTOMER: GENERAL | SIZE | CAGE CODE | S5417 | DWG. NO. | 7202-DOC1-10 | REV | A |
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| REVISION HISTORY | | | | | |
|------------------|------------|-----------------------|-------------------|------------|-------------|
| Rev Level | Rev Date | Change Made | Reason for Change | Effective | Approved By |
| A | 26/05/2016 | Specification Release | | 26/05/2016 | S. Sadot |
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| Approvals | | |
|--------------------|----------|------------|
| | Name | Date |
| Written by: | S. Sadot | 26/05/2016 |
| Engineering: | S. Sadot | 26/05/2016 |
| Sales & Marketing: | H. Liber | 26/05/2016 |
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Input:

Input Voltage: 85 - 264Vac, auto range, single phase
 Frequency: 47-63Hz
 Inrush Current: 50 A maximum at 230Vac
 Power Factor: 0.98 typical at 230Vac, full load
 0.99 typical at 115Vac, full load
 Efficiency >80% at 230Vac, full load rated power
 >76% at 120Vac, full load rated power
 Input Protection: Internal Line Fuse: IEC type, 10A 250Vac slow blow.
 Brown – Out: 75 to 300Vac for 50Msec

Output Voltages & Currents:

| Output | Output Voltage | Adjustment Range | Output Current | Min Load |
|--------|----------------|------------------|----------------|----------|
| V1 | +5V | 4.8 ± 5.4 | 65A | 0 |
| V2 | +3.3V | 3.1 ± 3.5 | 80A | 0 |
| V3 | +12V | 0 | 12A | 0.1 |
| V4 | -12V | 0 | 1.5 | 0 |

Note: Maximum output power at any combination within this table is 700W

Output Power: 700W with 300LFM forced air cooling
 Line Regulation: ±1%
 Load Regulation:
 V1,V2 ±1%
 V3 12V±0.6
 V4 -12V±0.6 With minimum load of 10A on the 3.3V output
 Ripple & Noise 20 MHz bandwidth measured across 1uF ceramic and 120uF electrolytic.
 Capacitor paralleled
 V1 100mV p-p
 V2 60mV p-p
 V3 & V4 120mV p-p
 Overload & Short Circuit Protection Auto Recovery
 V1 & V2 130% max
 V3 & V4 200% max
 Initial Set Point Tolerance: ±1%
 Overshoot & Undershoot: 0% at turn ON
 Turn On Delay: 1 sec. Maximum.
 Over-voltage Protection: 110 to 130% with latched shut down
 Temperature Protection: System shutdown due to excessive internal temperature, automatic reset

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Monitoring Command & Control

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|---------------------------------|--|
| Remote Sense | Available on V1 & V2. Total voltage compensation for cable losses with respect to the main output 300mV |
| Inhibit (INH#) | Inhibited with GND or TTL "0" – Pulled up to internal +12V Aux supply |
| Enable (EN#) | Contact closure to external ground to start unit. On shortest pin (last make, first break) |
| Power Fail (FAL#) | Open collector - Active low signal .Indicates one or more outputs below 90% of specified rate. |
| Current Share | Accuracy of shared current $\pm 10\%$ with up to 6 parallel units. Single wire current share on V1 & V2 for 50% to 100% load |
| Hot Swap | Internal O-ring Diode FET's |
| Over Temperature Warning (DEG#) | Open collector active low about 10°C before power supply shut down. |
| I2C | Option |

Operation Status Indicators

| | |
|------------------|---|
| Input Voltage OK | Green LED - Indicates when mains input voltage is present. |
| Output Failure | Red LED - Indicates one or more outputs below 90% of specified rate. |

Environmental Specification:

| | |
|------------------------|---|
| Operating Temperature: | Operation: -20°C to +55°C full load with 300LFM Forced Air Cooling and de-rating linearly above 55°C by 2.5% per °C This Power Supply will turn on at -40 °C |
| Storage Temperature | -40°C to +85°C |
| Humidity: | Up to 95% RH non-condensing. |
| Shock: | Peak acceleration 10GPK max. |
| Vibration: | Random vibration, 10Hz to 500Hz, 3 axis 1.9GRMS max. |
| Altitude | Operation 6K ft Non operation 40K ft. |
| MTBF | 400,000 hours per Bellcore standard B332 Gb 30°C |

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Safety Regulatory & EMC Specifications:

Fully compliance to PICMG 2.11 CompactPCI Specification
Safety Agency Compliance UL 60950 , EN-60950, CE - MARK
Harmonics EN61000-3-2
Voltage Fluctuation EN61000-4-3
ESD susceptibility EN61000-4-2 level 4 8KV air
Conducted & radiated emission EN55022/CISPR22 Class B with an external TBD line filter
Surge EN6100 -4-5 level 3 line-to-line 1KV line to chassis 2KV
Radiated susceptibility EN61000-4-3 level 3 10V/m
EFT/Burst EN61000-4-4 level 3 ±2KV
Conducted disturbance EN61000-4-6 level 2 3Vrms
RoHS In full compliance with the RoHS directive # 2002/69/EC

Dielectric Withstand:

Input to Case: 2200VDC.
Input to Output: 4200VDC
Output to Case: 50VDC.

Mechanical Dimensions

Size 10.14"H X 1.60"W X 6.40"D (261.9mm x 40.34mm x 169.4mm)
Weight 1500 gr.

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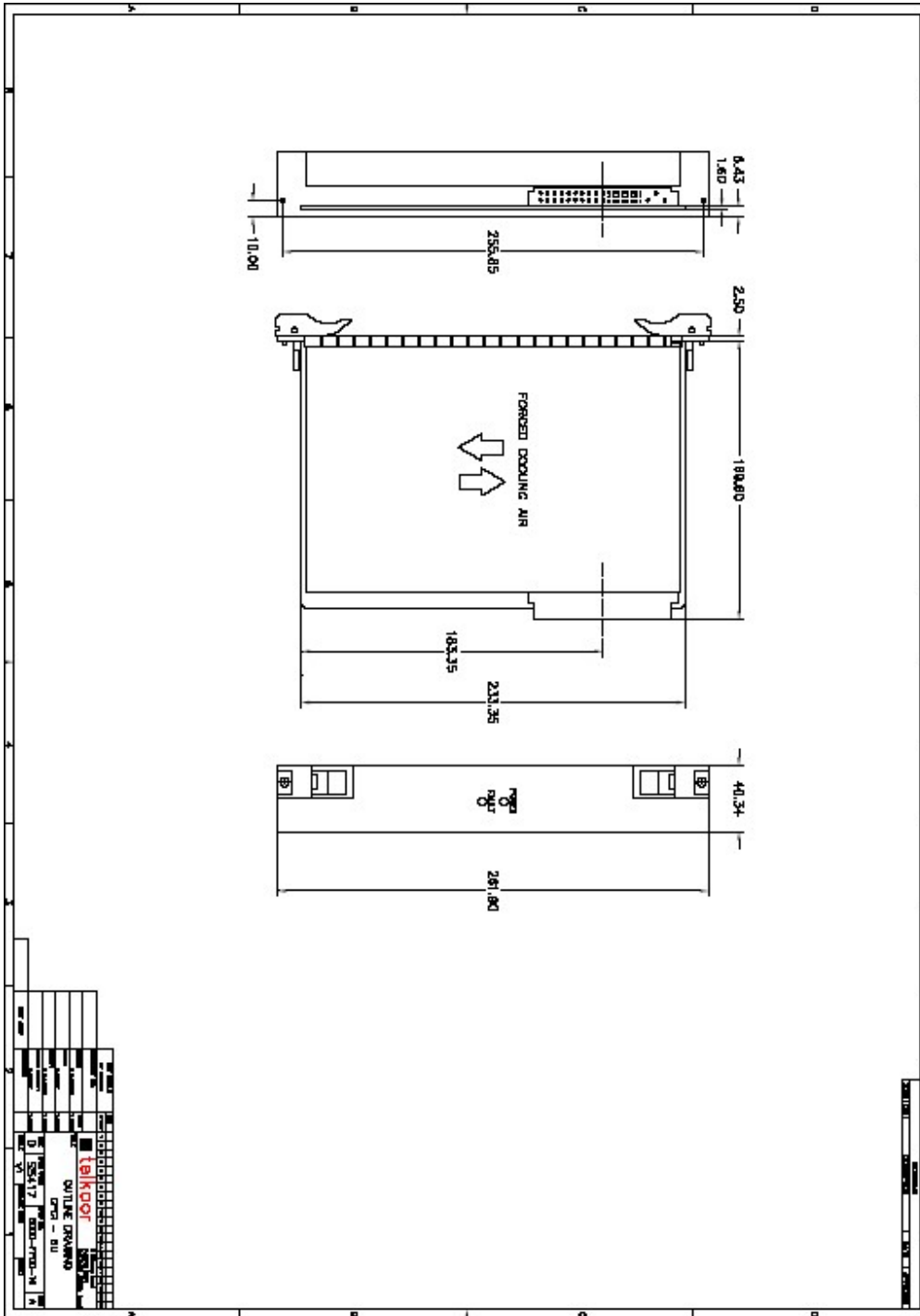
OUTPUT CONNECTOR - Positronic-PCIH47M400A1/AA
PIN ASSIGNMENT

| Pin | Pin Type | Signal Name. | Description |
|-------|----------|--------------|-------------------------------|
| 1-4 | Normal | V1 | V1 Output |
| 5-12 | Normal | RTN | V1 and V2 Return |
| 13-18 | Normal | V2 | V2 Output |
| 19 | Normal | RTN | V3 Return |
| 20 | Normal | V3 | V3 Output |
| 21 | Normal | V4 | V4 Output |
| 22 | Normal | RTN | Signal Return |
| 23 | Normal | RTN | Signal Return |
| 24 | Normal | RTN | V4 Return |
| 25 | Normal | GA-0 | Geographic ADD-0 (option) |
| 26 | Normal | Reverse | Reverse |
| 27 | Short | EN# | Enable |
| 28 | Normal | GA-1 | Geographic ADD-1 (option) |
| 29 | Normal | NC | Not Connected |
| 30 | Normal | V1 Sense | V1 Remote Sense |
| 31 | Normal | GA-2 | Geographic ADD-2 (option) |
| 32 | Normal | NC | Not Connected |
| 33 | Normal | V2 Sense | V2 Remote Sense |
| 34 | Normal | S RTN | Sense Return |
| 35 | Normal | V1 Share | V1 Current Share |
| 36 | Normal | NC | Not Connected |
| 37 | Normal | IPMB_SCL | System Manager Bus (option) |
| 38 | Normal | DEG# | Degrade Signal |
| 39 | Normal | INH# | Open – ON Low - OFF |
| 40 | Normal | IPMB_SDA | System Manager Bus (option) |
| 41 | Normal | V2 Share | V2 Current Share |
| 42 | Normal | FAL# | Fail Signal |
| 43 | Normal | IPMB_PWR | Power–System Manager (option) |
| 44 | Normal | NC | Not Connected |
| 45 | Long | Chassis GND | Chassis GND |
| 46 | Long | AC Neutral | AC input Neutral |
| 47 | Long | AC Line | AC Input Line |

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Outline Drawing:



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