Telkoor Power Supplies Ltd.

Fit Power Limited

Electrical Specification for:

CPCI-3U-DC-200W/24V

200W, 24V DC Input 3U CompactPCI Power Supply

With coating and Gluing

Telkoor Part Number:

900-3011-10-C

CUSTOMER: ARRIS	**SIZE**		**CAGE CODE**	S5417	**DWG. NO.**	3011-10-C-DOC-10		**REV**	A
	SCALE			**RELEASE DATE**	13/03/08	**SHEET**	1	**OF**	7

REVISION HISTORY					
Rev Level	**Rev Date**	**Change Made**	**Reason for Change**	**Effective**	**Approved By**
A	13/03/2008	Specification Release		13/03/2008	S. Sadot

Approvals		
	Name	**Date**
Written by:	**S. Sadot**	**13/3/08**
Engineering:	**M.Heller**	**13/3/08**
Sales & Marketing:	**B. Steinfeld**	**13/3/08**
Management:	**Y. Ben Ami**	**13/3/08**

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Input:

Input Voltage:	18-36Vdc
Inrush Current:	16A max. @ 24Vdc
Efficiency	Full rated load 81% @ 24Vdc
Input Protection:	Non-User Serviceable Fuse

Output Voltages & Currents:

Output	*Output Voltage*	*Adjustment Range*	*Output Current*	*Min Load*
V1	+5V	4.8 ± 5.4	25A	0
V2	+3.3V	3.1 ± 3.5	36A	0
V3	+12V	0	3A	0
V4	-12V	0	0.5A	0

Note: 1) Maximum output power at any combination within this table is 200W

Output Power:	200W with 250LFM forced air cooling
Line Regulation:	±0.5%
Load Regulation:	
V1, V2	±1%
V3, V4	±4%
Ripple & Noise	20 MHz bandwidth measured across 1uF ceramic and 120uF electrolytic. Capacitor in paralleled.
V1, V2	60mV p-p
V3 & V4	120mV p-p
Overload & Short Circuit Protection	Fully protected against output overload and short circuit. Automatic recovery upon removal of overload condition
V1 & V2	135% max
V3 & V4	150% max
Initial Set Point Tolerance:	±1%
Overshoot & Undershoot:	0% at turn ON
Turn On Delay:	1 sec. Maximum.
Rise Time	30mSec from 10% to 90% of its final value.
Over-voltage Protection:	110 to 130% with latched shut down (V1, V2, V3)
Temperature Protection:	System shutdown due to excessive internal temperature, automatic reset

Monitoring Command & Control

Remote Sense	Available on V1 & V2. Maximum voltage compensation for cable losses 200mV
Inhibit (INH#)	TTL –compatible signal inhibited with GND or TTL "0"
Enable (EN#)	Contact closure to external ground to start unit. On shortest pin (last make, first break)
Power Fail (FAL#)	TTL compatible signal, open collector active low signal. Indicates one or more outputs below 90% of specified rate.
Current Share	Accuracy of current share ±10% between units with up to 6 parallel units. Single wire current share on V1 & V2 for 50% to 100% load.
Hot Swap	Internal O-ring Diode
Over Temperature Warning (DEG#)	Open collector active low 10ºC before power supply shut down.
I2C - Option	I²C Passive data: s/n, model no., revision, and/or user defined data

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: -20ºC to +55ºC full load with 250LFM Forced Air Cooling and de-rating linearly above 55ºC by 2.5% per ºC power supply turns to ON at -40ºC and will operate according the Spec after few minutes of operation (ripples)
Storage Temperature	-40ºC to +85ºC
Humidity	Up to 95% RH non-condensing.
Shock:	Peak acceleration 20GPK max.
Vibration	Random vibration, 10Hz to 500Hz, 3 axis 1.9GRMS max.
Altitude	Operation 6K ft Non operation 40K ft.
MTBF	300,000 hours per Bellcore standard B332 Gb 30ºC

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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
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
Power frequency magnetic field	EN61000-4-8 3A/m

Dielectric Withstand

Input to Case:	1500VDC.
Input to Output:	1500VDC
Output to Case:	100VDC.

Mechanical Dimensions

Size	5.07"H X 1.60"W X 6.40"D 128.7mm x 40.6mm x 162.5mm)
Weight	800 gr.

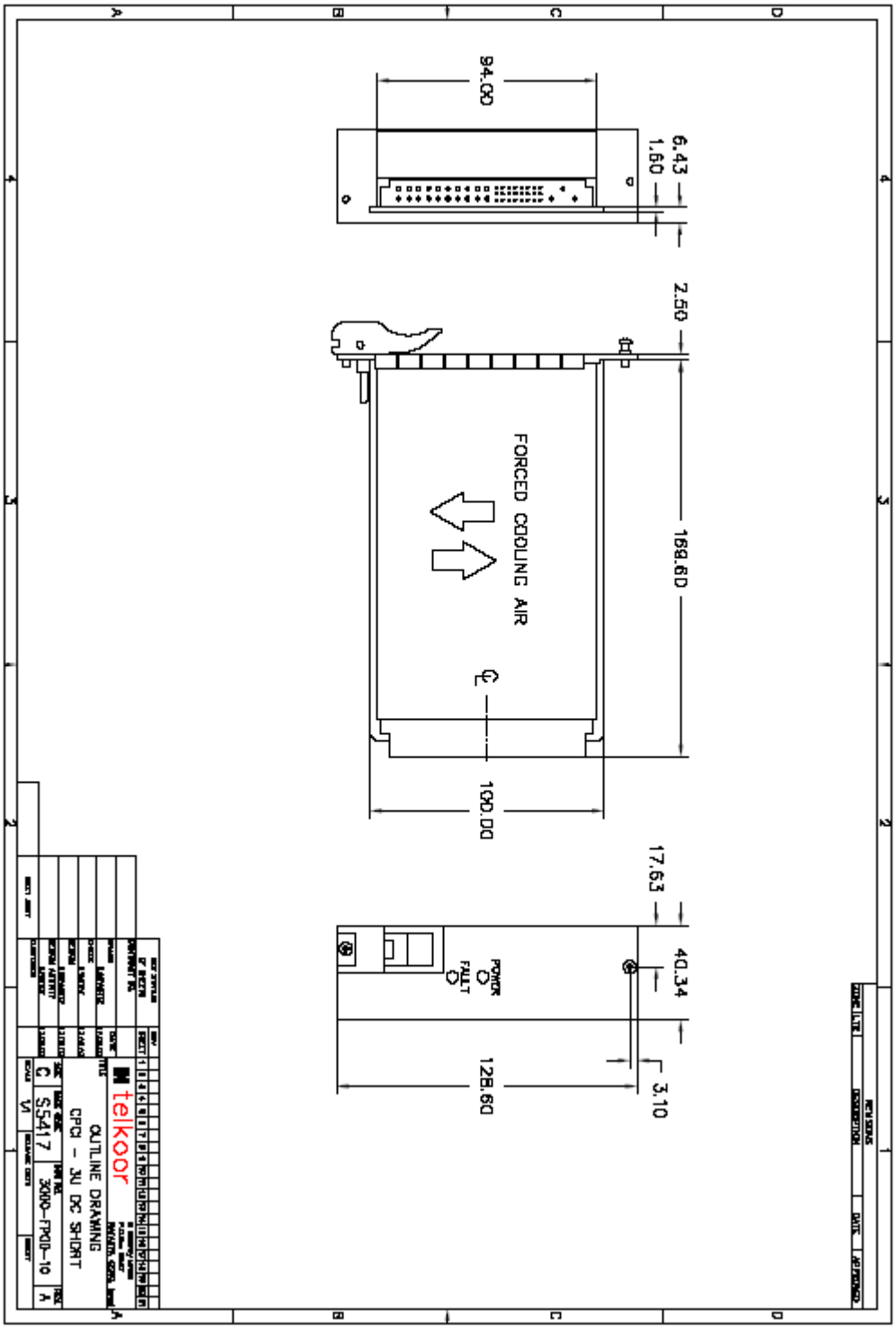
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INPUT/OUTPUT CONNECTOR - Positronic-PCIH47M400A1/AA
PIN ASSIGNMENT

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	DC Positive	DC Input
47	Long	DC Negative	DC Input

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Outline Drawing:



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