POWER SUPPLY



6U 8HP 400Wt

CPCI DC/DC



Partnumber: D575.00410

Key figures:

406Wt 6U 8HP Eurocard package

Wide operating temperature range of -40° C to +70° C

Hot swappable

Active current charing

Internal or-ing diodes for N+1 redundancy

EMI meet EN 55022/ FCC class A

Fully compliant with PIGMG / CE marking compliance



General specification:

Storage temperature: -40° C to +85° C

Operating temperature: - 40° C to +70° C with 600LFM air flow (siehe Note 3)

Derate linearly from 100% power at +50° C to 50% power at +70° C (refer to derating curve)

Cooling: At least 20CFM(600 LFM) moving air is required to achieve full rating power 406W in a confined area

Power Density: 3,66 Watts/ Cubic Inch (max.)

Efficiency: Typ. 81,8 %

Switching Frequency: 120K Hz Circuit Topology: Forward circuit

Transient Response: Peak transient less than 250mV and recovers within 3mS after 25% load change

Safety Standard: IEC 60950-1 Class I

Construction: Eurocard 3U 8HP 160mm; CompactPCI format, Front Panel with Extractor handle

NOTE:

- 1) All measurement are at nominal input, full load and +25°C unless otherwise specifications.
- 2) Tantalum capacitors connected to system is suggested for bettering Ripple&Noise against operating temperature from -40°C to +0°C
- 3) A warm-up time 3 minutes is required to maintain VO3 +12V within specific spec. After cold start at temperature from -40°C to +0°C
- 4) Due to requests in market and advances in technology, specifications subject to change without notification

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ELECTRICAL SPECIFICATION

INPUT SPECIFICATION

Input Voltage: Typ. 18-36Vdc, nominal input 24Vdc

Under Voltage Shutdown: Installed Soft Start: Installed

Input Connector: Positronic 47-pin PCIH47M400A1

Inrush Current: 56,5A (peak) at 36Vdc

Input Current: 19,7A at nominal input 24Vdc (Full load)

Dielectric Withstand: Meet IEC 60950-1 regulation

EMI: Meet CISPR EN 55022 Class A

Remote ON/OFF: Available at [INH#] & [EN#] pins

Power Fail Signal: Available at [FAL#] pin

Thermal Protection (OTP): Installed NTC for thermal sensor at [DEG#] pin

Status LED: <Green> means valid input voltage <Amber> means a critical fault

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart
Output Current: See Ratings Chart
Output Power: Max. 406 Watt

Output Connector: Positronic 47-pin PCIH47M400A1

Line Regulation: Typ. 0,5%

Load Regulation: Typ. VO1and VO2 \pm 1,5%; VO3 \pm 3%; VO3 \pm 5% Total Regulation: Typ. VO1and VO2 \pm 2%; VO3 \pm 4%; VO3 \pm 5% Noise & Ripple: Typ. 1% peak to peak or 50mV, whichever is greater

OVP: Built-in at all outputs (Latch)
Adjustability: Available for all outputs

Output Trim: Electrical trim available at VO1/VO2.[ADJ #]

Remote Sensing: Available at VO1, VO2 & VO3

Hot-Swap: Available

N+1 Redundancy: Installed with internal OR-ing diodes, all outputs for N+1 redundancy operation

Current Sharing: Active current sharing at VO1, VO2 & VO3

Power OK Signal:

DC OK Signal:

Over Current Protection(OCP):

Overload Protection (OLP):

Available for all outputs
Installed at each rail
Fully protected

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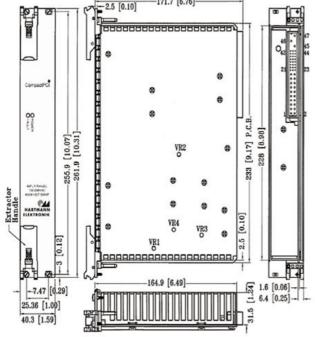
Output Voltage / Current Ratings Chart

MAIN +VO1 @★ ⊙#≡				AUX. +VO2 @★ ⊙#≡				AUX. +VO3 ▲@★ ⊙#≡				AUX. –VO4 ▲@★ ⊙							
Min	Тур	Volt	Мах	폱	Min	Тур	Volt	Max	Pk	Min	Тур	Volt	Мах	퐀	Min	Тур	Volt	Мах	퐀
90 V	33A	+ 5V	50A	50A	0A	33A	+3,3V	50A	50A	0A	7A	+12V	10A	10A	0A	2A	-12V	4A	5A

Symbol: "★" OVP built-in. "@" Adjustable. "#" Remote sensing. "≡" Active Load Sharing. "⊙" Installed with Or-ing diode. "▲"Magnetic Amplifier. "•" Installed with Post-regulator.

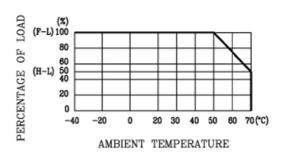
Remark: Peak load less than 60sec. with duty cycle <10%.

Max. load is the continuous operating load of each rail. But the max. load of each rail can't be drawn from all outputs at the same time. Total max. power of VO1 and VO2 should be less than 350W



Mechanical dimensions: mm (inches) Weight: 1,67 kg (3,68lb.)

DERATING CURVE



Input & Output connectors pin assignment

]	DC INPUT		STATUS/CONTROL							
ASSIGNMENT	+Vin	-Vin	G	EN#	DEG#	INH#	FAL#				
CNTR &PIN#	46	47	45	27	38	39	42				
	QUAD OUTPUT										
ASSIGNMENT	VO1	VO1S+	VO1S-	VO1Adj.	VOIC.S.	VO2	VO2S+				
CNTR &PIN#	1,2, 3,4	30	34	29	35	13,14, 15,16, 17,18	33				
ASSIGNMENT	VO2Adj.	VO2C.S.	VO3	VO3S+	VO3C.S	VO4	DC COM				
CNTR &PIN#	32	41	20	36	44	21	5,6,7,8,9 10,11,12 19,24				

For the details of safety approval, please consult the factory