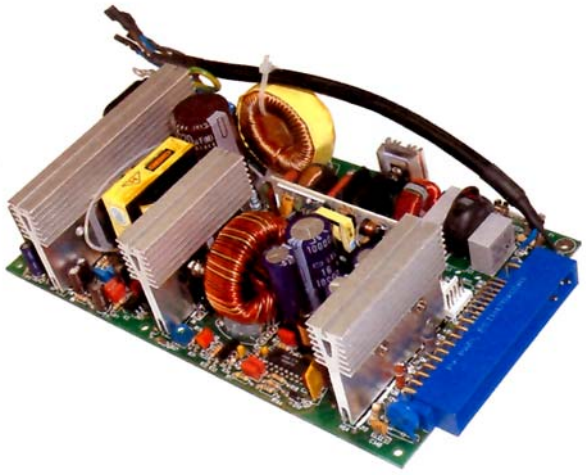
RAID System (Universal)

PFC + 400W
SNP-R403



Description:

The redundancy family with output power from 80W to 450W, meets the needs of Disk Array, RAID system, and Sub-system applicaitons.

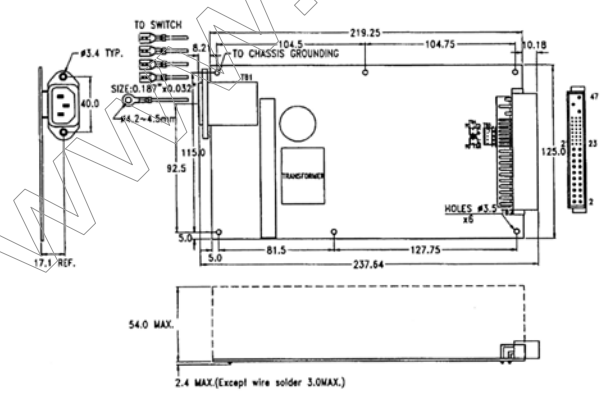
SNP-R403 with Power factor correction solution features hot swap capability and current sharing function for redundant operation that make the best choice for communications and storage data processing system.

General Specifications:

Input voltage ..... 90VAC to 260VAC
Input frequency..... 47Hz to 63Hz
Input current ..... 8A at 115VAC, 4A at 230VAC
Inrush current .... less than 20A at 115VAC cold start, 25°C
Outputs ..... see output table
Efficiency ..... 70% typical
Hold up time ..... > 16ms at norminal line and rated load
Over voltage protection ..... auto recovery
Short circuit protection ..... auto recovery
Over current protection ..... auto recovery
Remote sense ..... +5V sense

Power sharing ..... active sharing, N+1 function
Power good ..... normally high
DC ok ..... present 5V operation ok
Operating temperature (open frame type) ..... 0°C to 50°C
Cooling ..... forced air convection, 60CFM required
Storage temperature ..... - 20°C to +85°C
EMI ..... FCC 20780 "B", EN 55022 "B" with fully metal enclosure
EMS EN61000-4-2,-3,-4,-5
Harmonics EN61000-3-2
PFC ..... > 0.9 at nominal line and rated load
Safety ..... meet UL 60950 CSA 22.2 60950 (cUL) EN60 950

Mechanical Specifications:



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Notes:

1. Dimensions shown in mm (inch) as left. Tolerance specified is ±0.4mm (Excluding cables).
2. Size:
   125 x 219.3 x 57 (mm)
3. Connectors
   AC inlet : meet IEC 320
   Main connector : Positronic PCI H47M4001A1
   Fan connector : Molex 5045-02A or equivalent
   LED connector : Molex 5045-02A or equivalent
4. Pin assignment

TB2

Pin			Pin	
1~6	+12V		38	Remote sense (+)
7~14,23	GND		39	+5Vsb
15~20	+5V		41	Remote sense (-)
21	DC ok		42	Remote ON/OFF
24	PE		44	Power Good
27	PD		45	E
30	PC		46	NC
33	PB		47	NC
35	Power sharing		22,25,26,28,29	NC
36	PA		31,32,34,37,40,43	NC

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www.sicoenergie.com

Output Specifications:

MODEL NO.	OUTPUT RAIL	LOAD				VOLTAGE ACCURACY	RIPPLE NOISE	LINE REG.	LOAD REG.
		MIN.	RATED	MAX.	PEAK				
SNP-R403	+5V	2A	21.5A	30A		+4.9V~+5.1V	50mVpp	±1%	±5%
	+12V	0.5A	24.5A	32A	38A	+11.4V~+12.6V	120mVpp	±1%	±5%
	+5Vsb	0A	1A			+4.9V~+5.5V	100mVpp	±1%	±5%

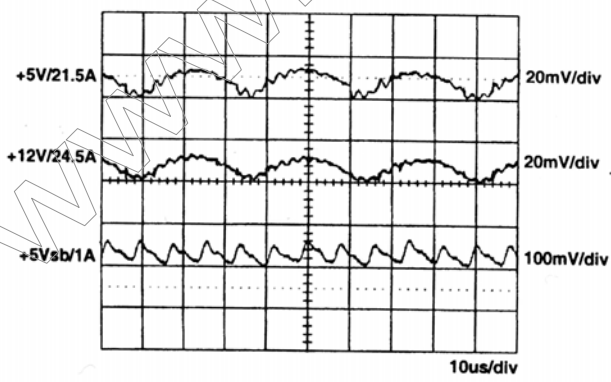
* 5Vsb for DC ON/OFF remote control.

Notes:

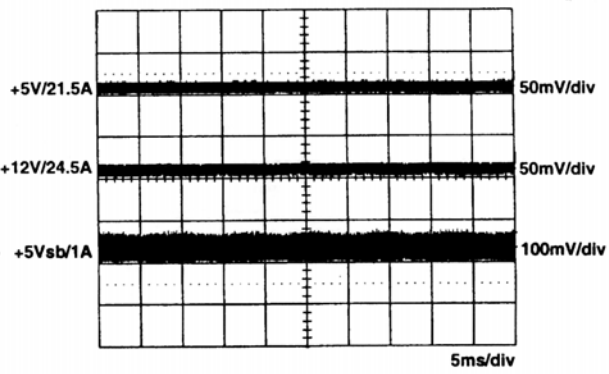
1. The 12V/38A peak can provide up to 15 seconds under +5V at 10A and input at 115VAC. The max. load should be kept within 400W.
2. At factory, all outputs in 60% rated load condition, each output is checked to be within the accuracy range while the main output is setting to within the specified accuracy range at rated load.
3. Line regulation is defined by changing ±10% of input voltage from nominal line at rated load.
4. Load regulation is defined by changing ±40% of measured output load from 60% rated load at another output set to 60% rated load.
5. Ripple & noise is measured by using 15MHz bandwidth limited oscilloscope and terminated each output with a 0.47μF capacitor at rated load and nominal line.
6. Hold up time is measured from the end of the last charging pulse to the time which the +5V output drop down to 4.75V at rated load and nominal line.
7. Efficiency is measured at rated load and nominal line.

Performance:

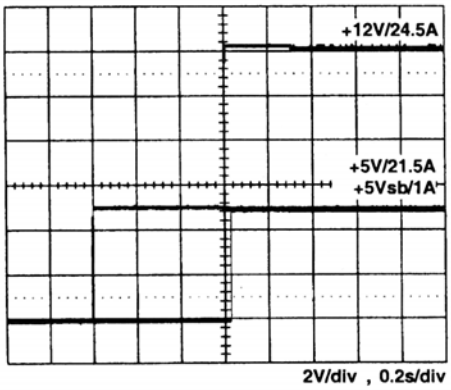
1. Switching frequency ripple



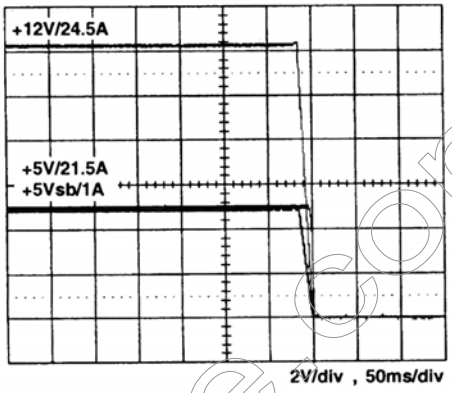
2. Line frequency ripple



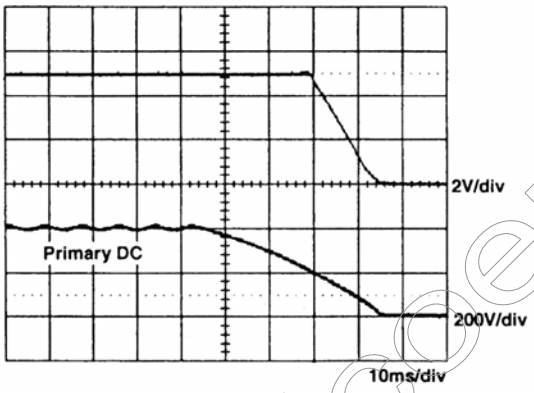
3. Output turn on wave form



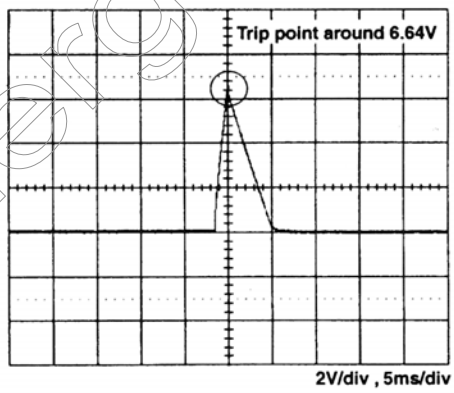
4. Output turn off wave form



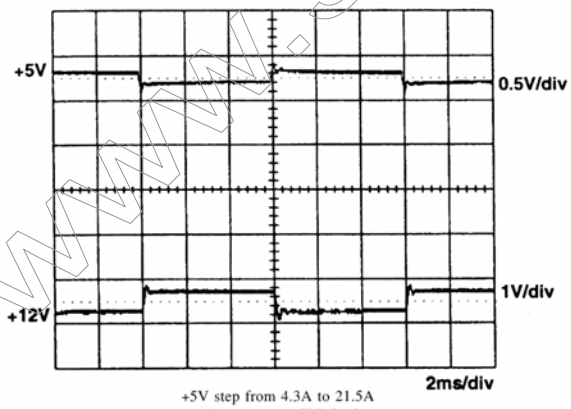
5. Hold up time



6. Over voltage protection

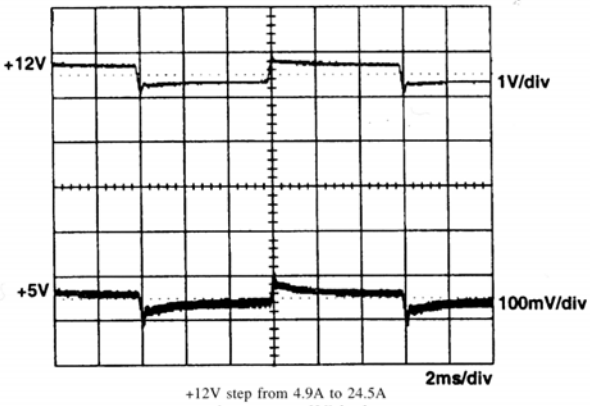


7. +5V step response



+5V step from 4.3A to 21.5A
other output at 60% load

8. +12V step response



+12V step from 4.9A to 24.5A
other output at 60% load

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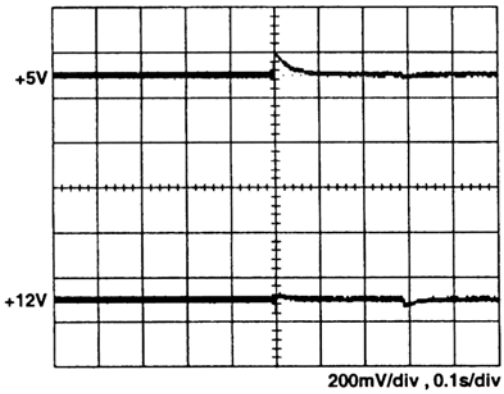
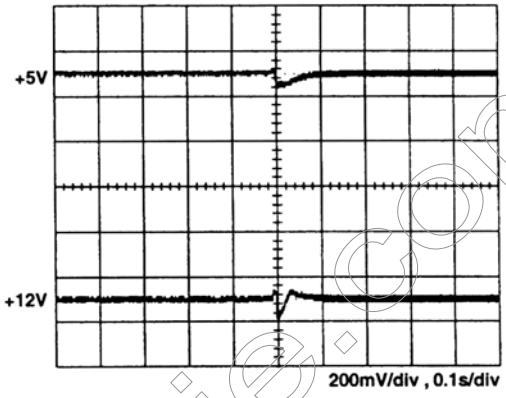
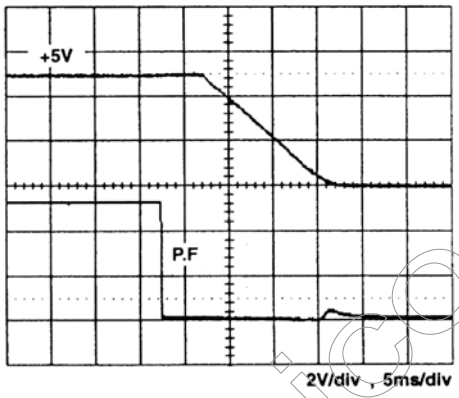
9. Power redundancy (1 --> 2)



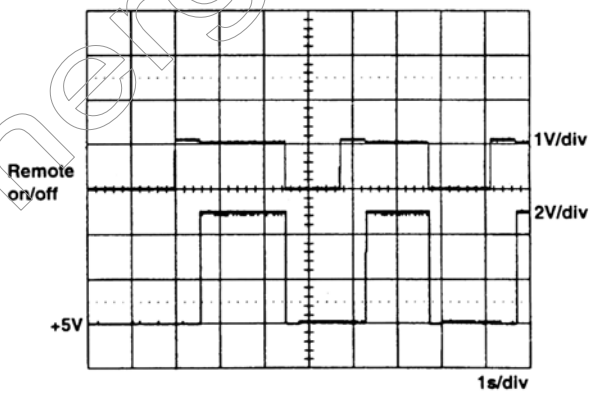
10. Power redundancy (2 --> 1)



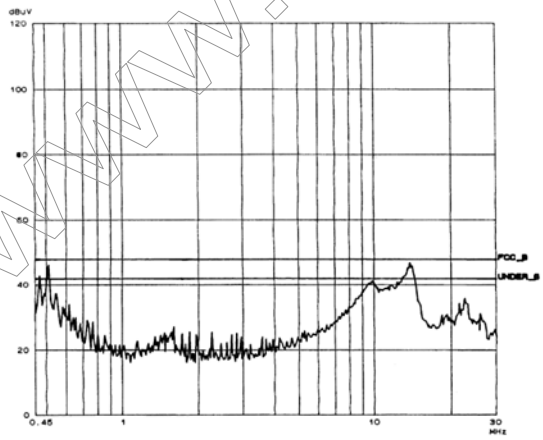
11. Power fail signal



12. Remote ON/OFF



13. FCC B



14. EN55022 "B"