

HDX-310-DC

HOT SWAP - 300 WATTS - 1U HIGH

ONE TO FOUR OUTPUTS - 18-40VDC INPUT

Dual High Current Outputs, Standard Models of 3.3Vdc/80Amps and 5Vdc/40Amps
I²C OPTION FOR IPMI COMPATIBILITY



FEATURES:

- Size: 1.6" x 5" x 11" in Size
- Low Profile - Only 1.6" high!
- N+1 Redundant and Hot Swap
- Meets EN55022 Level A / FCC Class A
- No Additional Cooling Required up to 50 °C †
- Wide Range Input (18-40 VDC), Transients to 75Vdc for 2 sec.
- 'Zero' Wire Current Share
- Remote Sense On V1, V2, V3 Outputs
- Integral LED Status Indicators
- Greater than 90,000 Hrs MTBF (500,000 Hrs in Redundancy)
- (See model HDX-600-P for AC input version)

	OUTPUT VOLTAGE (VDC)	OUTPUT AMPERES (MAX)	OUTPUT POWER (WATTS)
+V1	2 to 48	80	300
+V2	1.5 to 48	40	300
+V3	5 to 24	12/15pk	240
- V4	5 to 24	4	72

*V1 & V3 Combined current must not exceed 80A.

† Power Varies with Temperature. Consult Factory for Rating Curves.

HDX-310-DC SERIES - 300 WATT COMPACT SIZE

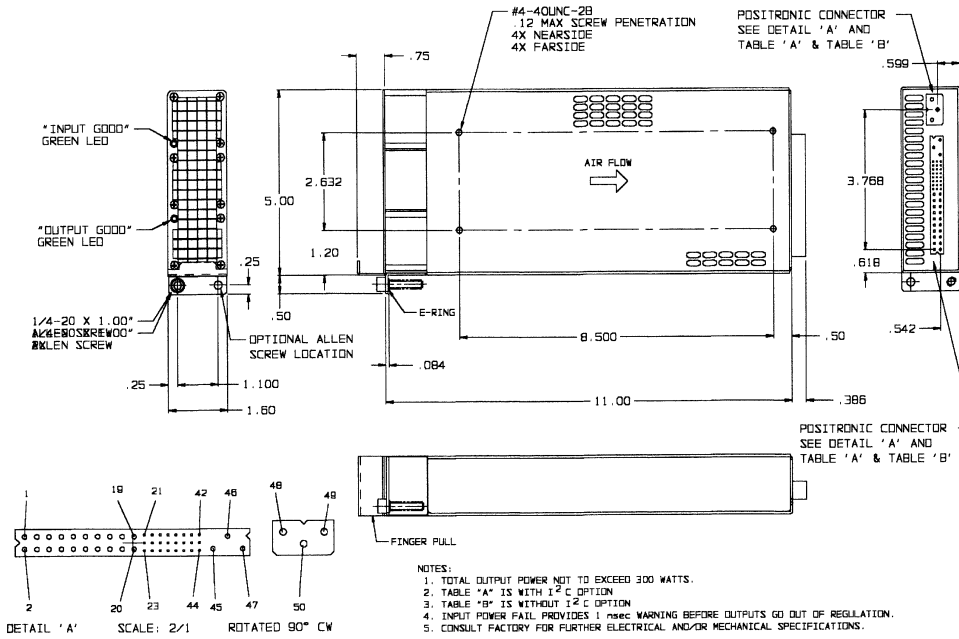


TABLE 'A' WITH I ² C OPTION			TABLE 'B' WITHOUT I ² C OPTION		
POSITRONIC P/N PCI47M400A1	PIN NO.	SIGNAL	POSITRONIC P/N PLB-3W3M400A1	PIN NO.	SIGNAL
	1	+V1 OUT		1	+V1 OUT
	2	+V1 OUT		2	+V1 OUT
	3	+V1 OUT		3	+V1 OUT
	4	+V1 OUT		4	+V1 OUT
	5	+V1 OUT		5	+V1 OUT
	6	+V1 OUT		6	+V1 OUT
	7	V1 & V2 RTN		7	V1 & V2 RTN
	8	V1 & V2 RTN		8	V1 & V2 RTN
	9	V1 & V2 RTN		9	V1 & V2 RTN
	10	V1 & V2 RTN		10	V1 & V2 RTN
	11	V1 & V2 RTN		11	V1 & V2 RTN
	12	V1 & V2 RTN		12	V1 & V2 RTN
	13	V1 & V2 RTN		13	V1 & V2 RTN
	14	+V2 OUT		14	+V2 OUT
	15	+V2 OUT		15	+V2 OUT
	16	+V2 OUT		16	+V2 OUT
	17	+V2 OUT		17	+V2 OUT
	18	+V2 OUT		18	+V2 OUT
	19	V3 RTN		19	V3 RTN
	20	+V3 OUT		20	+V3 OUT
	21	V4 OUT		21	V4 OUT
	22	SIGNAL GROUND		22	SIGNAL GROUND
	23	N/C		23	N/C
	24	V4 RTN		24	V4 RTN
	25	GO		25	SPARE
	26	N/C		26	N/C
	27	ENABLE		27	ENABLE
	28	GAI		28	SPARE
	29	N/C		29	N/C
	30	+V1 SENSE		30	+V1 SENSE
	31	-V1 SENSE		31	-V1 SENSE
	32	N/C		32	N/C
	33	+V2 SENSE		33	+V2 SENSE
	34	-V2 SENSE		34	-V2 SENSE
	35	N/C		35	N/C
	36	+V3 SENSE		36	+V3 SENSE
	37	-V3 SENSE		37	-V3 SENSE
	38	SOA		38	OUTPUT POWER GOOD
	39	INHIBIT		39	INHIBIT
	40	SCLK		40	OVERTEMP WARNING
	41	N/C		41	N/C
	42	N/C		42	N/C
	43	INTERRUPT		43	SPARE
	44	N/C		44	N/C
	45	CHASSIS GROUND		45	CHASSIS GROUND
	46	N/C		46	N/C
	47	N/C		47	N/C
POSITRONIC P/N PLB-3W3M400A1 (MODIFIED)	PIN NO.	SIGNAL	POSITRONIC P/N PLB-3W3M400A1 (MODIFIED)	PIN NO.	SIGNAL
	48	+DC INPUT		48	+DC INPUT
	49	-DC INPUT		49	-DC INPUT
	50	CHASSIS GROUND		50	CHASSIS GROUND

Nominal Input Voltage	24 VDC, 18A max.
Operational Input Voltage Range	18-40 VDC, transients to 75Vdc for 2 sec.
Inrush Current	Less than 5 msec. 25 amperes @ 28VDC
Fusing	30 Ampere, 125 VDC, Internal ceramic body fuse.
Hold up time	1msec minimum after loss of DC Input at full load and any input.
Efficiency	68% typical
Turn on time	1 sec max. from power up. All output voltages come up within 10msec of each other.
Line and Load Regulation	±2% over DC input range and 0 to 100% load change.
Minimum Load	A 5% minimum load required on V1.
Ripple & Noise	Through 20MHz 1% max. or 100mV whichever is greater for all outputs, peak to peak, with coaxial probe and 0.1uF/10uF capacitors at the connector.
Transient Response	Output maximum excursion of ± 4% for 25% load step. Recovery less than 300 µsec.
Overshoot/Undershoot	No turn-on or turn-off overshoot.
Output Isolation	Isolated from chassis ground, 50Vdc.
Input/Output Isolation	1500 VDC from input to both chassis/outputs. SELV construction.
Reverse Voltage	Protected against reverse voltage to supply current rating.
Overshoot Protection	Shutdown at 130% of nominal Vout (V1,V2, V3). Protect-V4 failsafe design. Recycle input power to reset.
Overtemperature Protection	Unit shuts down if overheated. Recycle DC to reset.
Current Limiting	All outputs foldback. Auto recovery.
Paralleling	Two or more supplies can be operated in parallel and will share 5V/3.3V/12V current to within ±10% of each other.

Redundant	Full power N+1 redundant with integral Oring Diodes.
Remote Sense	Compensates for up to 0.5V total distribution voltage drop on the +5V, +3.3V and +12V outputs.
INHIBIT	Open to Run, Contact closure to return, turns off all outputs.
ENABLE	Closed to run. Contact closure to return, turns on all outputs.
Indicators	Green LED indicating Input Good, Green LED indicating output Good.
Output Power Good	Provides logic High signal when V1, V2 are within 90% of their ratings.
Over Temp Warning	Provides a logic High signal at least 1 sec before supply shuts down.
Cooling	Integral fans.
Operating Temperature	-20°C to 50°C operating temperature. 50°C to 75°C, derate 2%/°C. (Power varies with DC input, consult factory for rating curves).
Stability	All outputs ±0.5% for 8 hrs. after 30 minute warm-up. All outputs ±2% during 30 minute warm-up.
Humidity	Up to 95% non-condensing.
Storage Temperature	-40°C to 85°C.
Connector	Positronic Part No. PCI47M400A1, PLB-3W3M400A1
Size	1.6" x 5" x 11" Weight: 4 lbs.
EMC	Meets EN55022 Level A / FCC Class A conducted.
Safety	Meets UL 60950 / CSA C22.2 No. 60950, EN60950.

SERIES BREAKDOWN: HDX-310X1-DC
 where X1= S for Single output, D for Dual output, T for Triple output or Q for Quad output