

CAR4000 SERIES

4000 Watt +24V or +48V Front End Power Supply

Features:

- Hot-swap N+1 Redundancy
- Single phase or Three phase Input
- Power Factor Correction
- Over Voltage, Over Current and Thermal Protection
- Visual LED Indicators
- 19" 3U High / 3-Bay Power Shelf
- International Safety Approvals





		COMPLIANT	C C C T US
FEATURES	BENEFITS	KEY MARKET SEGMENTS & APPLICATIONS	
No minimum load requirements	Eliminates the need for preload on system backplane	Distributed Power	Blade Servers
Modular design	Easy insertion and extraction during hot swap	■ Mid-end servers	Network Equipment
Single phase or three phase inputs	One stop shopping, breadth of line	Network Storage	Test Equipment
Constant current characteristics	Ideal for Network Bus Applications	Storage Area Networks	

Constant current characteristics	ideal for Network bus Applications				
SPECIFICATIONS	CAR4010K1T	CAR4010L1TN	CAR4030K1T	CAR4030L1TN	
Input Voltage Range	Single Phase Input / 18	30-264 VAC / 47-63 Hz	Three Phase Input / 180-264 VAC / 47-63 Hz		
Input Current	25.5Amax		15A per phase max.		
Inrush Current	50A	max	50A max (per phase)		
Input Fuse	Single Fus	e 30A 3AG	Single Fuse per Phase 20A 3AG		
Power Factor	0.	99	0.95		
Efficiency	89% Typical	@ 230 VAC	89% Typical @	Typical @ 230 VAC	
Output Voltage & Current	+24 VDC @ 167A	+48 VDC @ 83A	+24 VDC @ 167A	+48 VDC @ 83A	
Adjust Range (Trim Pot)	21.6~26.4	43.2 ~ 52.8	21.6~26.4	43.2 ~ 52.8	
Over Voltage Protection	+29.5~30.5 VDC	-58.5~59.5 VDC	+29.5~30.5 VDC	-58.5~59.5 VDC	
OVP Protection Type	Recycle AC Input to Reset				
Standby Voltage	5VSB @ 500mA				
Line Regulation	0.5% using remote sense (5% on Stand-by Voltage)				
Load Regulation	0.5% using remote sense (5% on Stand-by Voltage)				
Output Ripple & Noise	<1% (pk-pk)				
Transient Response	3% max deviation 0.50ms recovery time for a 25% load change				
Start-up Time	2 seconds				
Hold-up Time	>20ms at low line				
Overshoot / Undershoot	1% at turn ON/OFF				
Temperature Coefficient	0.02% per °C				
Remote ON/OFF	Logic 1 (TTL High) or open enables unit (ON), Logic 0 (TTL Low) or short shuts unit down (OFF)				
Power Fail Signal	Signal goes low (TTL Low) 2ms before loss output regulation				
Over Current Protection	110-140% V1, 5VSB < 2.5A. Automatic recovery.				
Over Temperature Protection	Automatic shutdown with auto recovery. Thermal shutdown point @ 95°C				
MTBF	300,000 hrs per Bellcore standard				
Output Power Good	TTL High = Power Good, TTL Low = Output out of limits				
LED Indicators	DC Good: Green LED; Temperature OK: Green LED and AC Good: Amber LED				
Operating Temperature	0°C to 50°C at rated output power. Supply derates linearly from 50°C to 65°C at 2.2% per °C				
Cooling	Self contained ball bearing fan				
EMI/EMC	Meets EN61000-3-2, -3 CISPR22 and FCC Part 15 Class A, Bellcore GR-1089-CORE				
Dimensions	15.12 x 5.00 x 5.00" / 384.8 x 127 x 127mm (handle extends additional 1.00" / 25.4mm from faceplate)				
Weight	11.5 pounds / 5.23 kg				
Safety Approvals	UL1950, CSA 22.2 No. 650, TUV EN0950 & CE Mark				
Specifications listed assume 25°C Ambient Operating	Temperature and Full Load Operation unless otherwi	se specified. This product is qualified for use in OEM ed	quipment and is not appropriate for stand-alone operation	The information contained within this specification	

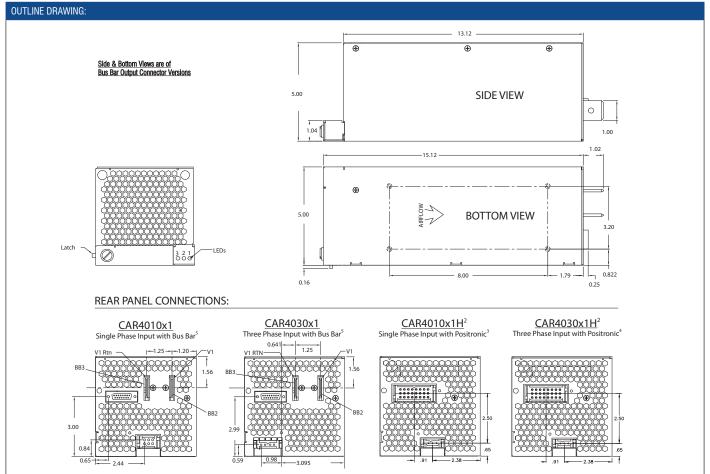
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15-PIN D-SUB CONNECTOR ¹		
1	5 VSB	
2	5VSB RTN	
3	MODULE PRESENT	
4	POWER GOOD	
5	ON/OFF	
6	I SHARE	
7	MOD-ENABLE	
8	OVP TEST POINT	
9	AC FAIL	
10	V PROGRAM	
11	+ REMOTE SENSE	
12	CURRENT MONITOR	
13	TEMPERATURE OK	
14	- REMOTE SENSE	
15	NO CONNECTION	

THREE PHASE AC INPUT ⁴		
1	LINE 1	
2	LINE 2	
3	LINE 3	
4	GROUND	

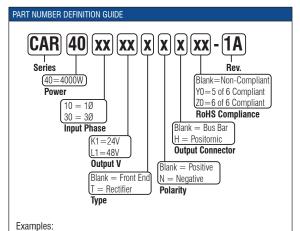
Posit	ronic Output Connector 2
1	V1
2	V1
3	V1
4	V1
5	V1 RETURN
6	V1 RETURN
7	V1 RETURN
8	V1 RETURN
9	V1
10	5VSB RTN
11	MODULE PRESENT
12	MODULE ENABLE
13	CURRENT SHARE
14	ON/OFF
15	OVP
16	V1 RETURN
17	5VSB
18	POWER GOOD
19	AC FAIL
20	MARGIN 1
21	+ SENSE
22	TEMP OK
23	MARGIN 2
24	- SENSE

SINGLE PHASE AC INPUT ³		
1	GROUND	
2	LINE	
3	NEUTRAL	
4	GROUND	
5	LINE	
6	NEUTRAL	

OUTPUT BUS BARS 5		
Vout	BB2	V1
Vout	BB3	RETURN

\dashv	1) AMP 205205-2 Housing with 205090-1 Pins
	2) Positronics PLC24F4BN0A1/AA Housing with FC114N2 pins
_	3) Positronics PLB06F000 Housing with FC114N2 pins
	4) Positronics PLA04F8000 Housing with FC114N2 pins
\dashv	Output Bus Bars Mate with Elcon Part Number 538-17-00100

MATING CONNECTORS



CAR4010L1TN-Z01A: 4000W / +48V Front End / Single Phase AC

CAR4030L1TNH-Z01A: 4000W / +48V Front End / 3-Phase AC Input /

Input / 6 of 6 RoHS Compliant

Positronic Connector / 6 of 6 RoHS Compliant

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