

4000 Watt +27V or -54V Rectifier Module

Features:

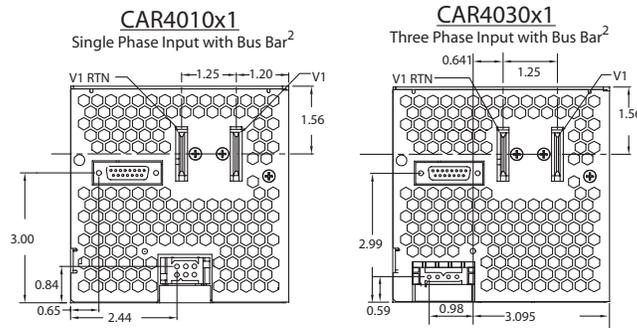
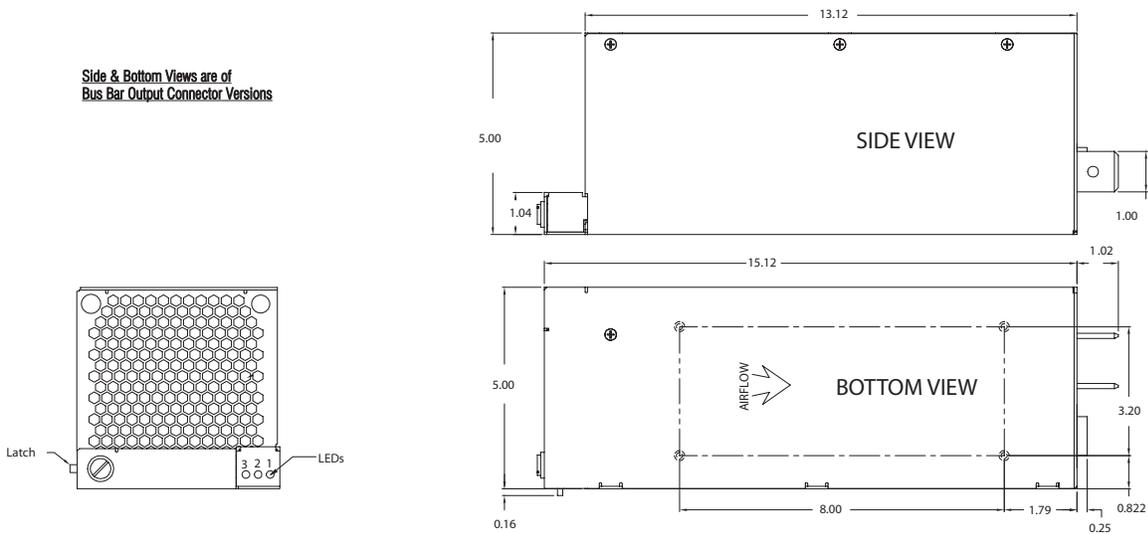
- Hot-swap N+1 Redundancy
- Single phase or Three phase Input
- Power Factor Correction
- Over Voltage, Over Current and Thermal Protection
- Visual LED Indicators
- 19" 3U High / 3-Bay Power Shelf
- International Safety Approvals



FEATURES	BENEFITS	KEY MARKET SEGMENTS & APPLICATIONS
No minimum load requirements	Eliminates the need for preload on system backplane	<ul style="list-style-type: none"> ■ Wireless/Cellular ■ Energy Systems ■ Central Office Switching ■ PCS Installations ■ Bulk power front ends for distributed power architecture
Modular design	Easy insertion and extraction during hot swap	
Single phase or three phase inputs	One stop shopping, breadth of line	
Constant current characteristics	Better suited for battery charging applications	

SPECIFICATIONS	CAR4010K1T	CAR4010L1TN	CAR4030K1T	CAR4030L1TN
Input Voltage Range	Single Phase Input / 180-264 VAC / 47-63 Hz		Three Phase Input / 180-264 VAC / 47-63 Hz	
Input Current	25.5Amax		15A per phase max.	
Inrush Current	50Amax		50A max (per phase)	
Input Fuse	Single Fuse 30A 3AG		Single Fuse per Phase 20A 3AG	
Power Factor	0.99		0.95	
Efficiency	89% Typical @ 230 VAC		89% Typical @ 230 VAC	
Output Voltage & Current	+27 VDC @ 148A	-54 VDC @ 74A	+27 VDC @ 148A	-54 VDC @ 74A
Adjust Range (Trim Pot)	+20~29 V	-40 ~ -58V	+20~29 V	-40 ~ -58V
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			
Shock & Vibration	NEBS Compliant to IEC68-2-27 & MIL-STD-810E, Telcodia GR-63-CORE, GR-487-CORE			
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 otherwise specified. This product is qualified for use in OEM equipment and is not appropriate for stand-alone operation. The information contained within this specification is believed to be true and correct at the time of publication, however, Cherokee International accepts no responsibility for consequences arising from printing errors or inaccuracies. The information and specifications contained herein are subject to change without notice.

OUTLINE DRAWING:


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

OUTPUT BUS BARS 2			
-54 Vout	BB3	-Vout	
	BB2	RETURN	
+27 Vout	BB2	+Vout	
	BB3	RETURN	

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

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

MATING CONNECTORS	
1) AMP 205205-2 Housing with 205090-1 Pins	
2) Positronics PLC24F4BNOA1/AA Housing with FC114N2 pins	
3) Positronics PLB06F000 Housing with FC114N2 pins	
4) Positronics PLA04F8000 Housing with FC114N2 pins	
Output Bus Bars Mate with Eicon Part Number 538-17-00100	

PART NUMBER DEFINITION GUIDE

CAR 40 xx xx x x xx - 1A

- Series:** 40=4000W
- Power:** 10 = 1Ø, 30 = 3Ø
- Input Phase:** K1=24V, L1=48V
- Output V:** Blank = Front End, T = Rectifier
- Type:** Blank = Positive, N = Negative
- Rev.:** Blank = Non-Compliant, Y0 = 5 of 6 Compliant, Z0 = 6 of 6 Compliant
- RoHS Compliance**
- Output Connector:** Blank = Bus Bar, H = Positronic
- Polarity**

Examples:

CAR4010L1TN-Z01A: 4000W / -54V Rectifier / Single Phase AC Input / 6 of 6 RoHS Compliant

CAR4030L1TNH-Z01A: 4000W / -54V Rectifier / 3-Phase AC Input / Positronic Connector / 6 of 6 RoHS Compliant

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