

## PFC UNIVERTER<sup>®</sup> SERIES

375-1000 WATTS 85-265VAC INPUT 3/4" & FULL BRICK POWER FACTOR

### DESCRIPTION

UniVerter PFC modules accept 85-265 VAC (PFC-600, PFC-650) or 170-265 VAC (PFC-1000) and convert it to 380 VDC to power 300VDC input DC-DC converters. Power factor correction meets low harmonic distortion requirements of IEC 1000-3-2 and the European EN55022 emissions specification when used with the Model HH-1199-6 EMI filter. UniVerter modules utilize a boost converter incorporating a solid state series switch for active inrush and short circuit current limiting. The series switch is also used to provide over temperature shutdown with automatic recovery.



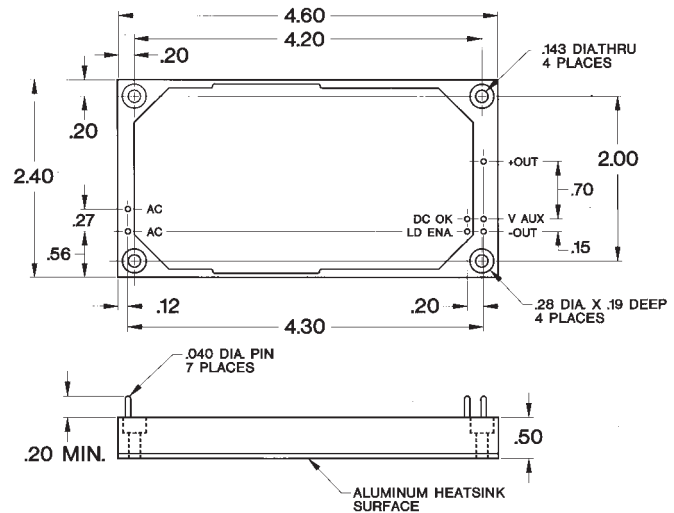
### FEATURES

- 600, 650 & 1000 Watts
- UL/CSA/TUV/CE MARK
- Meets European EN55022 Emissions when used with HH-1199-6 EMI Filter
- Unity Power Factor
- High Efficiency
- Active Inrush Limiting and Short Circuit Protection
- Very Low Harmonic Distortion
- Auxiliary Supply
- Power Fail Warning Via DC OK Signal
- Load Enable Signal to Control DC-DC Converters
- Very Low Thermal Resistance
- Superior Thermal Design
- 100°C Baseplate Operation

### MODEL SELECTION

Model Number	Input Voltage	Output Voltage	Output Power*
PFC-600	85-265VAC	380VDC	600 Watts
PFC-650	85-265VAC	375VDC	650 Watts
PFC-1000	170-265VAC	380VDC	1000 Watts

\* See Derating Specification



## PFC UNIVERTER SERIES SPECIFICATIONS

	PFC-600	PFC-1000
Power (Watts)	600 W	1000 W
	Derate output power linearly below 105 VAC from 600W at 105 VAC to 400W at 85 VAC	Derate output power linearly below 205 VAC from 1000W at 205 VAC to 750W at 170 VAC
Input Range	85-265 VAC	170-265 VAC
Input Frequency	47-63 Hz (operation up to 440Hz is available with reduced specifications)	47-63 Hz (operation up to 440Hz is available with reduced specifications)
Power Factor	.99	.99
Harmonic Distortion	<5% (conforming to IEC 1000-3-2)	<5% (conforming to IEC 1000-3-2)
Output Voltage	380 VDC	380 VDC
Efficiency See Curves on Page 79	90/94 % (120/240 VAC) typical	94 % (240 VAC input)
Inrush Limiting	<15 A peak typical	30 A (max)
Short Circuit Protection	Trip point 1.8 A (Shutdown, automatic recovery after removal of short)	2.8 A (Shutdown, automatic recovery after removal of short)
Thermal Protection	105-110 °C (Shutdown, automatic recovery)	105-110 °C (Shutdown, automatic recovery)
Auxiliary Supply	14 V @ 10 mA	14 V, @10 mA
DC OK Signal	Provides power fail warning when output drops below 355VDC	Provides power fail warning when output drops below 355VDC
Load Enable	Direct interface with MicroVerter, MegaVerter and PicoVerter DC-DC Converter logic on/off pin	Direct interface with MicroVerter MegaVerter and PicoVerter DC-DC Converter logic on/off pin
Operating Temp.	-40 to +100 °C Case	-40 to +100 °C Case
Overvoltage Protection	415 VDC non-shutdown	415 VDC non-shutdown
Safety	UL1950, CSA22.2-234-M90, EN 60950	UL1950, CSA22.2-234-M90, EN 60950
Thermal Resistance (Case To Ambient)	3.3 °C/W	3.3 °C/W
Isolation: Input-Output	Non-isolated	Non-isolated
Input/Output-Case	2500 VDC	2500 VDC

## SYSTEM DIAGRAM

