

Power Factor Correction Module

1200 Watts max • 85-265VAC Input
385V Output

The PFC Power Factor Correction modules are part of Astec's family of advanced high density modular power supply components. Featuring high reliability and convenient control and monitoring functions, these modules are designed to reduce product development time and enhance system performance. The PFC works over all typical line voltages used worldwide, and provides unity power factor with very low levels of harmonic distortion in line current.



SPECIAL FEATURES

- Unity power factor
- High efficiency: up to 95%
- Universal input voltage and frequency range
- Up to 1200W output power
- Parallelable with current sharing within 3%
- <10% harmonic distortion conforming to IEC555-2
- 85°C baseplate operating temperature (no derating)
- Power fail warning signal
- PLD feature
- Enable output to control AMPSS® DC/DC converters

ENVIRONMENTAL

Operating Temperature (baseplate):
-20° to +85°C

Storage Temperature: -40° to 105°C

Overtemperature Shutdown:
90°C typical

MTBF: > 1 million hours

SAFETY

- UL UL1950
- CSA CSA22.2-234M90
CSA22.2-950
- VDE VDE0805/EN60950

FILE NUMBERS

- UL E132002
- CSA LR53982C
- VDE 11774-3336-1250

ELECTRICAL SPECIFICATIONS

Input

- Input Voltage 85 to 265 VAC
- Input Frequency 50/60 Hz
- Efficiency 92% typical, (V₁ = 115 VAC); 94% typical, (V₁ = 230 VAC)
- Total Harmonic Distortion 10% max (V₁ = 115 or 230VAC)
- Power Factor 0.99 typical, (I_o = 2A); 0.97 typical, (I_o = 1A)

Control

- Power Fail Warning (PFW) Direct drive output to opto-isolator
- PFW Adjust Input 203 to 343 VDC linear programming by voltage or resistor

DC/DC Module

- Enable Output Direct drive output to opto-isolator
- PFC Enable Input TTL compatible (low to enable)
- Clock Input (external sync) 3.3V to 5.5Vp-p @ 1MHz ± 10%
- Clock Output (internal clock) 4.5Vp-p typical @ 1MHz ± 2%
- Temp Monitor Output 10mV/°K, 2.73V = 0°C
- Current Monitor Output 0 to 1.25mA

Output

- Output Voltage 385V typical, (I_o = 2A); 393V typical, (I_o = 0A)
- Current Share Accuracy 3% typical, (I_o = 1.6A)
- Overshoot protection 417V typical
- Power Limit 1200W @ 230 VAC; 750W @ 115 VAC

ORDERING INFORMATION

Doc. No.**	Model Number	Notes
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- 1213 APA100-101 For paralleling the total input current must be < 16A rms
- 1213 APA100-102 Designed for paralleling where the total input current > 16A rms requires external negative rail rectifiers

Warranty: 1 year

Please refer to the AMPSS® Catalog for more complete information.

