

agneticy Power Factors 4kW to 5.5kW

# Three Phase PFC 400VAC Isolated Front End (IFE)

MODEL	PM33213FH-7P	PM33215FH-7P	PM33216FH-7P
POWER	4000W	5000W	5500W
INPUT	325	to	477VAC
OUTPUTS	DC	DC	CURRENTS
48V	83A	104A	115A
32V	125A	156A	172A
28V	143A	178A	196A
26V	154A	192A	211A
24V	167A	208A	229A



#### THE IDEAL CHOICE FOR:

High-power RF Amplifiers and High-power DTV Transmitters suitable for both U.S. and European operation.

## FEATURES

- Power Factor Corrected (> 0.95)
- 0°C to +50°C at Full Load
- Output Fully Floating
- Overcurrent Protection
- Overvoltage Protection
- Remote Sense
- Overtemperature Protection
- Self-contained Forced Air Cooling

#### SPECIFICATIONS

#### **INPUT**

**RANGE:** 325 to 477 VAC, Three Phase. Configured as Three Lines and a Ground.

FREQUENCY: 47 to 63 Hz.

POWER FACTOR: > 0.95 @ Full Load. EFFICIENCY: 91%.

#### <u>OUTPUT</u>

**ADJUSTMENT RANGE:** +5%/-10% of nominal output voltage.

**POLARITY:** Output is isolated. It may be referenced plus/minus as required.

**REMOTE SENSING:** Compensates for up to 0.5V total loop drop in the output line.

**STATIC REGULATION:** Line: ±0.25% over full line range.

<u>Load</u>:  $\pm 0.25\%$  zero load to full load.

**VOLTAGE STABILITY:**  $\pm 0.1\%$  for 24-hour period after 30-minute warm up.

**TEMP COEFFICIENT:**  $\pm 0.02\%$ /°C from 0°C to +50°C.

P-P RIPPLE AND NOISE: 1% (20 Hz to 50 MHz Bandwidth). MINIMUM LOAD: Not Required. **TURN ON DELAY:** 1 second max from application of AC line.

**OVERCURRENT PROTECTION:** Current Limit Point: 105% to 115% of full load.

**OVERVOLTAGE PROTECTION:** 120% ±5% of nominal. OVP shutdown is latched until the input line is removed for 5 seconds and then reapplied. OVP sensing is done at the output terminals.

#### **ENVIRONMENTAL**

#### **OVERTEMPERATURE PROTECTION:**

Automatically shuts down and latches the unit in the event of an overtemperature condition. After cool down, power must be recycled to restart unit.

AUDIBLE NOISE: 70dBA max at 1 meter.

**TEMPERATURE:** <u>Operating</u>: 0°C to +50°C at full load. <u>Storage</u>: -55°C to +85°C.

HUMIDITY: 20% to 95% non-condensing.

ALTITUDE: <u>Operating</u>: 5,000 feet. Derates to 85% at 10,000 feet. Non-Operating: To 30,000 feet.

VIBRATION: Operating: From 5 to 27 Hz, 0.02 in double amplitude; from 27 Hz to 500 Hz, 0.75G, 3 axes, 3 min per octave sweep, dwell 15 min at resonance. <u>Non-operating</u>: From 5 to 17 Hz, 0.10 in double amplitude, from 17 to 500 Hz, 1.5G peak; 3 axes, 5 min per octave sweep; dwell 15 min at resonance.

**SHOCK:** <u>Operating</u>: 5G, half sine, 11msec, 3 axes. <u>Non-Operating</u>: 15G, half sine, 11msec, 3 axes.

**COOLING:** Forced air, internal fan. Airflow exits at connector end.

**EMI:** Designed to meet Conducted and Radiated: EN55022 Level A.

**SAFETY:** Designed to meet UL1950, CSA22.2 No. 950, and TUV to EN60950.

### TYPICAL OPTIONS

(Complete Option List Available)

(-1C) AC POWER FAIL: Upon loss of AC line, signal goes from low to high before loss of output regulation.

**DIMENSIONS**: 5" x 8" x 14" (127mm x 203mm x 356mm). Exclusive of I/O Connectors.

**MOUNTING**: Mounting holes for 8-32 screws included on the bottom

DC Output: 2 sets of DC Bus Bars. AC Input: Three Phase Terminal Block with 8-32 screws. DB25 connector for options.

WEIGHT: 15 lbs.

and on one side.

(-2T) LOGIC INHIBIT: Less than 0.5 volts will inhibit the supply. Two volts or more or an open circuit will enable the supply. Logic inhibit return should be connected to negative output.

(-8UV) UNDERVOLTAGE DETECT:

Signal pulls low when output drops more than  $15\% \pm 5\%$  of the nominal. There is no upper trip point. Sensing occurs at the output terminals instead of the remote sense leads. High good (LED *on*) and Low bad (LED *off*).

(-33) CURRENT MONITOR: The current monitor signal is referenced to the negative output. It is accurate to within +/-10%, from 10% to 100% load. The analog signal 0V to 5V is proportional to the load when increased from no load to maximum load.

**NOTE:** The option signals (-1C) and (-2T) are floating and referenced to Logic Return. Logic Return should be connected by the customer to the system common.

#### SPECIAL OPTION Intelligent Power Supply



- Built-in microchip controls all power supply & battery parameters, plus stores data on history, operating conditions & address.
- Allows user to program system functions
  & alarms.
- Permits either local monitoring (via RS485 bus) or remote monitoring (via modem).

Cat IFE, 4kW to 5.5kW, Three Phase, 400VAC, 11/8/00

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