## Product Specifications

## **Power Modules**

Each Tricon chassis is equipped with two Power Modules—either one is fully capable of running the Tricon at full load and rated temperature. Each Power Module can be replaced online. The Power Modules, located on the left side of the chassis, convert line power to DC power appropriate for all Tricon modules. Terminal strips for system grounding, incoming power and hardwired alarms are located on the lower left corner of the backplane. Incoming power should be rated for a minimum of 240 watts per power supply.

The Power Module alarm contacts are actuated when:

• A module is missing from the system

- The hardware configuration conflicts with the control program's logical configuration
- A module fails
- A Main Processor detects a system fault
- Primary power to a Power Module fails
- A Power Module has a "Low Battery" or "Over Temperature" warning

WARNING: Do not use the Model 8312 Power Module in Tricon systems that are located in hazardous locations and must meet ATEX requirements. If you have 230 V line voltage and your system must meet ATEX requirements, use the Model 8311 24 VDC Power Module along with the ATEX-certified 24 VDC power supply from Phoenix Contact (part number: QUINT-PS-100-240AC/24DC/10/EX).





## Power Module Specifications

Isolation	>1,000 VAC or 1,500 VDC, Input to Output		
Input Terminations	Protected by safety cover		
	Accepts three 12-gauge wires (3.310mm <sup>2</sup> ): neutral, hot, and protective earth (chassis ground)		
Over-Temp. Sensor	Temperature warning monitor—trips when internal temp. is greater than 181° F (83°C); this typically occurs at ambient temperature 140°F (60°C) or higher		
Alarm Contacts	Normally open, normally closed and common		
	Each contact supports 120 VAC @ 1 amp		
	Accepts 12-gauge (3.310mm <sup>2</sup> ) wire		
	Protected by safety cover		
Input Power Required	240 watts minimum per Power Module		
Output Power	175 watts at 140°F (60°C)		
Output Voltage	6.5 VDC, $\pm 1\%$ under all operating conditions		
Output Current	27 amps maximum at 140°F (60°C) ambient		

Terminal Strip for Power Module: (located on backplane above the Power Module)



Power Module Model	8310	8311	8312
Chassis Type	Main/Expansion/RXM	Main/Expansion/RXM	Main/Expansion/RXM
Nominal Voltage	120 VAC/VDC	24 VDC	230 VAC
Input VAC @ 47-63 Hz	85–140	n/a	185–285
Input VDC	95–180	22–31	n/a
Fuse Rating and Type	5 amps, time-delay	15 amps, time-delay	2.5 amps, time-delay
Output Hold Time (nominal to 0 volts)	20 ms minimum	2.8 ms minimum	20 ms minimum
Diagnostic Indicators	PASS, FAULT, ALARM, TEMP, BAT LOW	PASS, FAULT, ALARM, TEMP, BAT LOW	PASS, FAULT, ALARM, TEMP, BAT LOW