

AMIKON TECHNICAL INTELLIGENCE

# Product Data Sheet

## Triconex 8310

## 120 VAC/VDC Power Module

[illegible]

| INPUT       | OUTPUT  | POWER | SOURCE      |
|-------------|---------|-------|-------------|
| 120 VAC/VDC | 6.5 VDC | 175 W | 9720077-012 |

Triconex 8310 converts nominal 120 VAC/VDC line power to the 6.5 VDC supply used by Tricon controller modules. The manufacturer rates its output at 175 W at a 60 degree C ambient temperature measured at the bottom of the chassis.

## 01 VERIFIED PRODUCT PARAMETERS

|                               |                                          |
|-------------------------------|------------------------------------------|
| Recommended input             | 120 VAC/VDC, -15% to +10%                |
| Extended input range          | 85-140 VAC or 95-180 VDC                 |
| Input frequency               | 47-63 Hz                                 |
| Input-to-output isolation     | 1000 VAC or 1500 VDC                     |
| Minimum input source capacity | 240 W per power source                   |
| Typical power factor          | 0.70                                     |
| Typical crest factor          | 2.5                                      |
| Steady-state input current    | 0.75 A typical; 2.75 A maximum           |
| Maximum inrush current        | 18 A for one-half AC cycle at 120 VAC/DC |
| Input fuse                    | 5 A, time-delay                          |

Technical values were verified against Invensys 9700077-012, February 2009.

## 02 ADDITIONAL TECHNICAL DATA

|                           |                                      |
|---------------------------|--------------------------------------|
| Output voltage            | 6.5 VDC, +/-1%                       |
| Output current rating     | 27 A minimum at 60 degrees C ambient |
| Output power rating       | 175 W at 60 degrees C ambient        |
| Zero-input hold-up time   | 20 ms minimum; 80 ms typical         |
| Output over-current limit | 135% typical; automatic restart      |

## 03 SYSTEM ROLE AND APPLICATIONS

Each chassis uses two power modules, either capable of carrying the full load under the documented conditions. Verify source capacity, input range and the secondary supply before replacement; disable the incoming power to the module being removed.

- Convert the documented AC or DC source to the controller supply. Check the recommended input range and source capacity rather than treating the extended range as the normal operating target.
- Periodically verify that each power source can carry the entire system when the other source is disabled. Apply the site-approved proof-test schedule and the relevant module history.
- Before removing one power module, verify the secondary module and active source. Disable the incoming power to the module being removed and follow the manufacturer hazardous-location conditions.

## 04 OFFICIAL INSTALLATION FACTS

- Review the complete power-module replacement procedure and hazardous-location restrictions.
- Verify that the secondary power module has an active source and is performing normally.
- Disable incoming power to the module being removed.
- Use the specified 1/4-inch flat-bladed screwdriver on the retractable fasteners.

## 05 OFFICIAL DOCUMENTATION

Invensys 9700077-012, February 2009

AMIKON PRODUCT SUPPORT

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