



# 2500 Series Compact System



## 2500C-8-IDO-120V Discrete Output Module



### DESCRIPTION

The 2500C-8-IDO-120V Module outputs a wide range of AC voltage signals. It is designed to provide 8 solid state output circuits to switch on or off external devices such as pilot lamps, motor starters or solenoids using a 120VAC external source. Front panel LEDs provide visual indication for output and fuse status.

### FEATURES

- Single wide module
- 8 individually isolated channels
- Each channel is individually fused
- Sourcing or sinking Outputs
- Channel On/Off Status Indication
- Blown fuse indication and reporting for each channel
- Uses CTI's 2500C-32F Connector
- Module supports hot swapping

#### 2500C-8-IDO-120V Default Shipment Settings

|                |            |
|----------------|------------|
| Operation Mode | NA         |
| Logon          | 8X /8Y     |
| Output Range   | 79-132 VAC |

#### Output Specifications

|                                     |  |
|-------------------------------------|--|
| Outputs per module                  | 8  |
| Module Logon                        | 8X /8Y                                   |
| Output Voltage Range                | 79-132 VAC                               |
| Maximum Output current per channel  | 1 A @ 45°C<br>.625A @ 60°C               |
| Maximum Surge Current               | 3A for 15 sec                            |
| Total Module Current                | 8 A @ 45°C<br>5A @ 60°C                  |
| "ON" State Voltage Drop             | NA                                       |
| "OFF" State Leakage Current         | 750µA @ 120VAC                           |
| Turn ON Time                        | 1/2 AC cycle                             |
| Turn OFF Time                       | 1/2 AC cycle                             |
| Fusing                              | 8 fuses                                  |
| Fuses:<br>8 Field Replaceable Fuses | 2.0 amp, 250V<br>Type Schurter 0034.0904 |

|                                |   |
|--------------------------------|---|
| Module Size                    | Single wide module  |
| Connector                      | 2500C-32F   |
| Backplane Power (MAX)          | 1.09 watts  |
| Input ESD Protection           | IEC 1000-4-2 Level 4  |
| Isolation                      | 1500 VDC Channel to Backplane<br>300 VAC Channel to Channel |
| Shipping Dimensions and Weight | 223.84mm x 109.86mm x 34.93mm,<br>0.234kg                   |
| Operating Temperature Range    | 0°C to 60°C (32°F to 140°F)                                 |
| Storage Temperature Range      | -40°C to 85°C (-40°F to 185°F)                              |
| Relative Humidity              | 5% to 95% (non-condensing)                                  |
| Agency Approvals Pending       | UL, ULC, UL Class 1, Div 2, CE                              |



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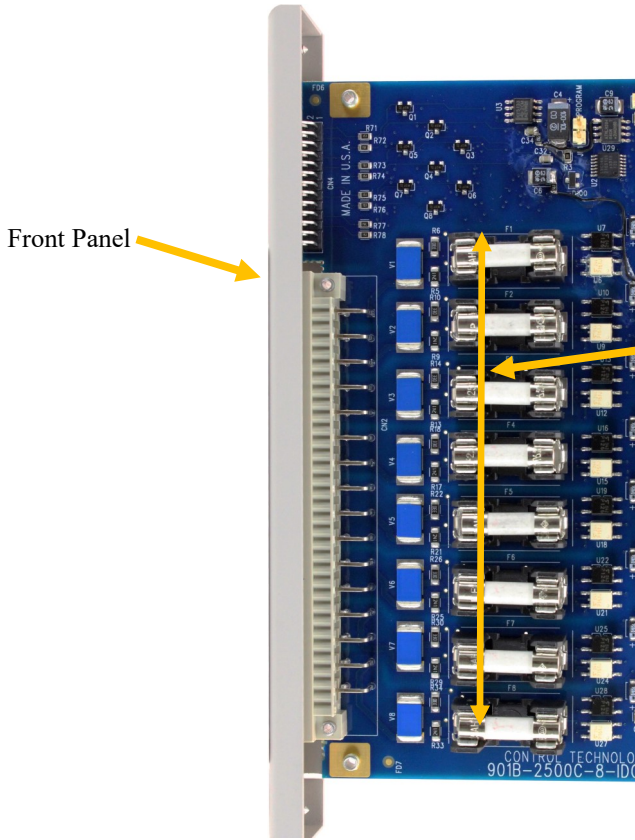




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## 2500C-8-IDO-120V Discrete Output Module



Front Panel

Channel 1 thru 8 Fuses

**Note:** All 8 Channels are individually fused.

**Blown Fuse Operation Overview..**  
Blown Fuse detection works when the Output Channel is wired and the output is turned on. If the fuse is blown the LED will turn ON and the associated X address will equal 1. If the Output Channel is turned off the LED indicator will turn OFF and the associated Blown Fuse Bit will equal 0 . The module does not Latch the Blown Fuse Input so the user application should trap for the reported Blown Fuse Bit while the Output is turned ON. This will allow logging and notification of the blown fuse event to your HMI stations and other reporting devices. Blown Fuse reporting on this module is for each channel.

**Channel ON/OFF Status LED**  
LED is illuminated BLUE when the output is turned ON.



**Blown Fuse LED**  
The Blown Fuse LED is illuminated when the Module detects a Blown Fuse.



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## 2500C-8-IDO-120V Discrete Output Module

|           |        |     |  |     |      |           |
|-----------|--------|-----|--|-----|------|-----------|
| Channel 1 | Output | A1  |  | B1  | 120V | Channel 1 |
|           |        | A2  |  | B2  |      |           |
| Channel 2 | Output | A3  |  | B3  | 120V | Channel 2 |
|           |        | A4  |  | B4  |      |           |
| Channel 3 | Output | A5  |  | B5  | 120V | Channel 3 |
|           |        | A6  |  | B6  |      |           |
| Channel 4 | Output | A7  |  | B7  | 120V | Channel 4 |
|           |        | A8  |  | B8  |      |           |
| Channel 5 | Output | A9  |  | B9  | 120V | Channel 5 |
|           |        | A10 |  | B10 |      |           |
| Channel 6 | Output | A11 |  | B11 | 120V | Channel 6 |
|           |        | A12 |  | B12 |      |           |
| Channel 7 | Output | A13 |  | B13 | 120V | Channel 7 |
|           |        | A14 |  | B14 |      |           |
| Channel 8 | Output | A15 |  | B15 | 120V | Channel 8 |
|           |        | A16 |  | B16 |      |           |

**2500-8-IDO-120V Wiring Connector**

**Note:**

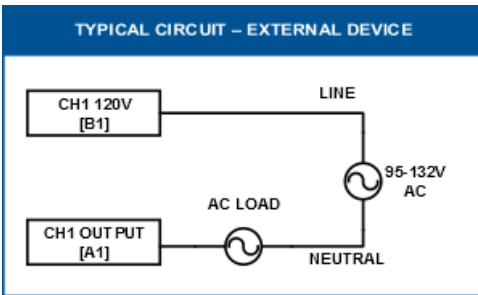
The 2500C-8-IDO-120V Discrete Output Modules use CTI Wiring Connector 2500C-32F. Please see the wiring connector specification table below. This connector is ordered separately from the module.

### 2500C-32F Specifications

|                              |              |
|------------------------------|--------------|
| Connector Style              | Removable    |
| Number of Wiring Connections | 32 point     |
| Wire Gauge                   | 14 to 22AWG  |
| Screw Torque Value           | 5.22 lb-in   |
| Current Rating               | 6A @ 300VAC  |
| Insulation Stripping Length  | 0.24"<br>6mm |

### Connector Material

|                        |                       |
|------------------------|-----------------------|
| Body:                  | Polycarbonate UL 94V0 |
| Screw :                | M3 Zinc plated Steel  |
| Cage Clamp             | Nickel Plated Brass   |
| Socket Contact Spring: | Tin Plated Bronze     |
| Retaining Screw:       | M3 Zinc Plated Steel  |



### 2500C-8-IDO-24V PLC Log on 8X/8Y

|                         |      |      |      |      |      |      |      |                |    |    |    |    |    |    |    |
|-------------------------|------|------|------|------|------|------|------|----------------|----|----|----|----|----|----|----|
| Blown Fuse Reporting 8X |      |      |      |      |      |      |      | Blown Fuse = 1 |    |    |    |    |    |    |    |
| CH 1                    | CH 2 | CH 3 | CH 4 | CH 5 | CH 6 | CH 7 | CH 8 | X1             | X2 | X3 | X4 | X5 | X6 | X7 | X8 |
| Output Channel 8Y       |      |      |      |      |      |      |      | OFF = 0 ON = 1 |    |    |    |    |    |    |    |
| Y9                      | Y10  | Y11  | Y12  | Y13  | Y14  | Y15  | Y16  |                |    |    |    |    |    |    |    |



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