

# 2531 32-Point Form-A Relay Output Module





## Description

The 2531 32-Point Form-A Relay Output Module provides 16 or 32 Form-A outputs isolated in groups of eight for the CTI 2500 Series® or Simatic® 505 I/O base. The module uses relay output circuits to switch on or off external devices such as pilot lamps, motor starters, or solenoids. The 2531 is designed to switch externally supplied 15 to 240 VAC and 15 to 30 VDC. The internal logic signals are isolated from the external outputs to 2100 VDC.

### **Features**

- CTI 2500 Series® or Simatic® 505 base format
- 16 or 32 Form A relay outputs
- Replaces Siemens® 505-4932 with no rewiring
- Isolated 3000 VDC group-to-group
- Isolation in groups of 8
- Wide 15-240 VAC and 15-30 VDC output range
- 4.0 Amps per output
- Individually fused outputs

# **Specifications**

Outputs per module: 16 or 32 Isolation: 2100 VDC channel-to-backplane 3000 VDC group-to-group Output voltage: 15 - 240 VAC 15 - 30 VDC Indicators: 32 individual LEDs Maximum output current: 4A per point (resistive) 8A per group (resistive) Switching rate: 5 ops/sec (no load), 0.5 ops/sec (rated load) Type of contact: Form A Type of outputs: Individually fused Minimum contact load: 10mA @ 5 VDC **Contact life:** @ full rated current, 4A = 400,000 cycles @ 2A = 1,000,000 cycles **Backplane Power: 1.7 Watts** User Power Supply: 24VDC +10% 600 mA (all outputs ON)

▲ Fuses: field replaceable for each channel. The module uses 32, 5 amp, 250V, 1 amp, 250V, Littelfuse #215.005 Littelfuse #217.001 Schurter #0001.2511 Schurter #034.1516 Connector: Removable 2500-40F required for new installations. The connector is ordered separately. Wire Gauge: 14 - 22 AWG Module Size: Single-wide Agency Approvals: UL, UL-Canada, CE, Class 1 Div 2 Shipping Weight: 1.5 lb. (0.68 Kg)

#### **Additional Product Information:**

On CTI's Website you will find links to the 2500 Series Std Environmental Specifications and the UL Agency Certificates of Compliance .

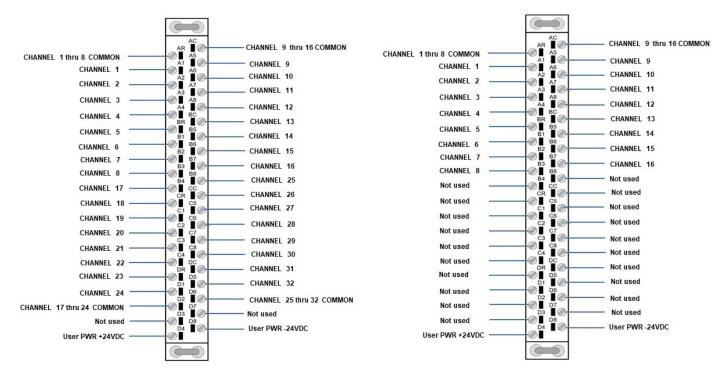
#### ROCK SOLID PERFORMANCE. TIMELESS COMPATIBILITY.



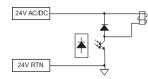
# Control Technology Inc.

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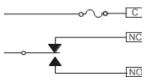
# 2531 32-Point Form-A Relay Output Module



#### 2531 32-Point Mode 8 Outputs/ **Common Wiring Connector**



#### 2531 16-Point Mode 8 Outputs/ **Common Wiring Connector**



CAUTION – Non-Hazardous Areas/Hazardous Areas	
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WARNING – EXPLOSION HAZARD. DO NOT	AVERTISSEMENT – RISQUE D'EXPLOSION. NE
REMOVE OR REPLACE WHILE CIRCUIT IS LIVE	PAS RETIRER NI REMPLACER PENDANT QUE LE
UNLESS THE AREA IS FREE OF IGNITIBLE	CIRCUIT EST SOUS TENSION À MOINS QUE
CONCENTRATIONS.	L'EMPLACEMENT NE SOIT EXEMPT DE

**Typical Internal Circuit** 

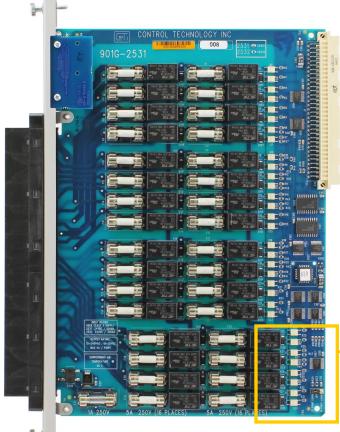
CONCENTRATIONS INFLAMMABLES. WARNING - EXPLOSION HAZARD. DO NOT AVERTISSEMENT - RISQUE D'EXPLOSION. NE REMOVE OR REPLACE FUSE WHEN ENER-PAS RETIRER NI REMPLACER UN FUSIBLE SI L'APPAREILLAGE EST SOUS TENSION.

Turn off power to the system before replacing fuses either in power supplies or IO modules. Refer to Product Bulletin or Installation and Operation Guide for specific information on the correct fuse for replacement. If there are any questions please contact CTI support. Fuses should only be replaced by qualified technicians.

#### **ROCK SOLID PERFORMANCE. TIMELESS COMPATIBILITY.**

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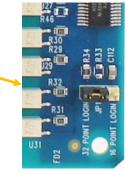
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**Jumper Configuration Location** 

#### 32/16 Point Login Configuration Explanation

As shipped the 2531 is in the 32-point login mode so that all 32 points are operational. However, the option exists to enable the module to login as a 16-point form-A relay output module. To do so requires the movement of a single jumper, JP1, from the shipped 32-point login to 16-point login. Once enabled, only channels 1-16 are active, and LED indications are shown on the left column LEDs on the front panel. Note that in 16-Point mode, the 2531 is NOT a direct wiring replacement for the Siemens® 505-4916. If you need such a direct replacement, use the CTI 2532 16-point Relay Output Module. Please see the picture below for the jumper location.



#### WARNING:

The module must not be inserted into the I/O rack while rack power is applied.

### NOTE:

Remove field wiring connector before changing jumper selection.

#### **ROCK SOLID PERFORMANCE. TIMELESS COMPATIBILITY.**