

2531 32-Point Form-A Relay Output Module



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 \pm 10%
600 mA (all outputs ON)
Fuses: field replaceable, channel and unit
32, 5 amp, 250V, 1, 1 amp, 250V,
Littelfuse #215.005 Littelfuse #217.001
Schurter #0001.2511 Schurter #034.1516
Connector: Removable
Wire Gauge: 14 - 22 AWG
Module Size: Single-wide
Operating Temperature:
0° to 60°C (normal locations)
0° to 50°C (Class 1 Div 2 locations)
Storage Temperature: -40° to 85°C
(-40° to 185°F)
Relative Humidity: 5% to 95%
(non-condensing)
Agency Approvals:
UL, UL-Canada, CE, Class 1 Div 2
Shipping Weight: 1.5 lb. (0.68 Kg)

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.

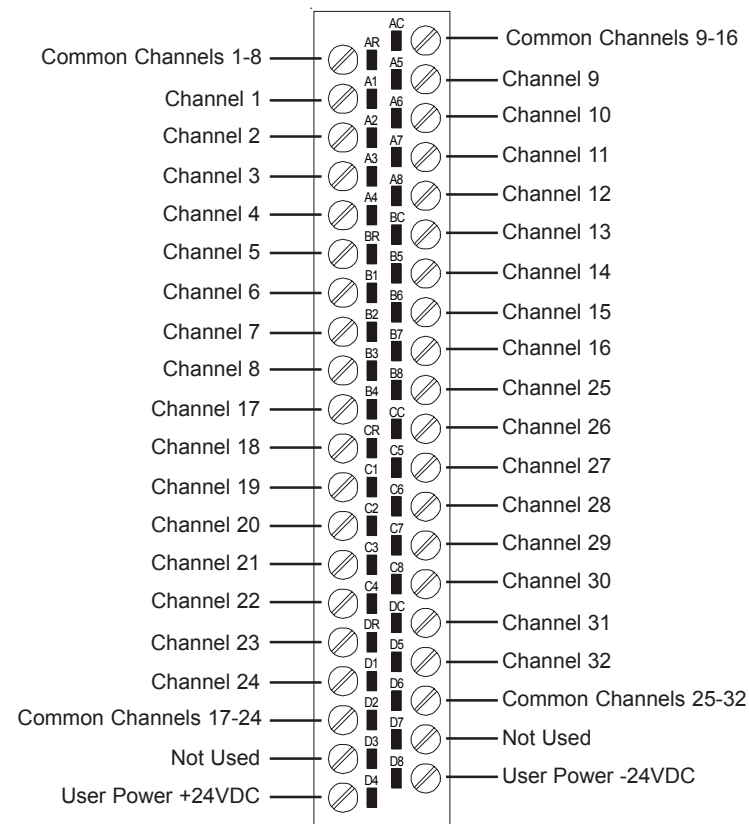
Features

- * 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

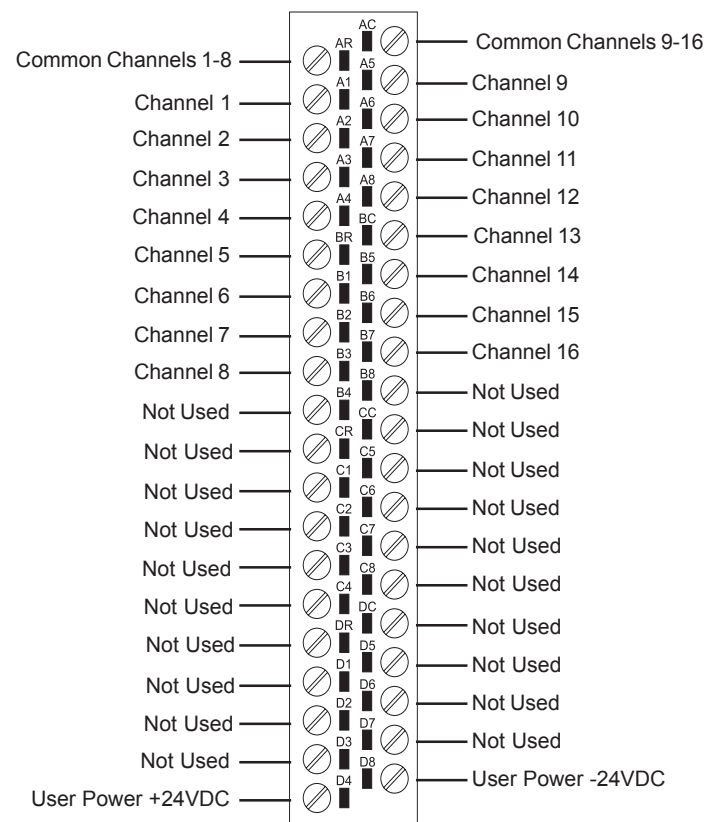


Control Technology Inc.

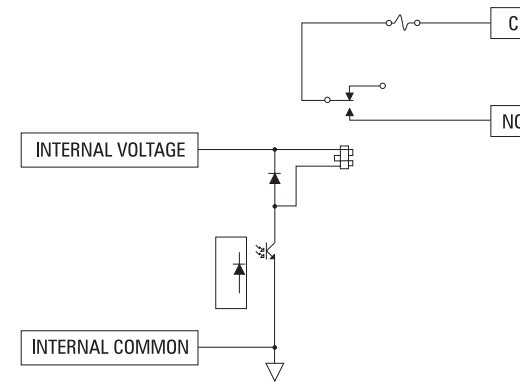
5734 Middlebrook Pike, Knoxville, TN 37921-5962
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2531 32-Point Mode 8 Outputs / Common Wiring Connector



2531 16-Point Mode 8 Outputs / Common Wiring Connector



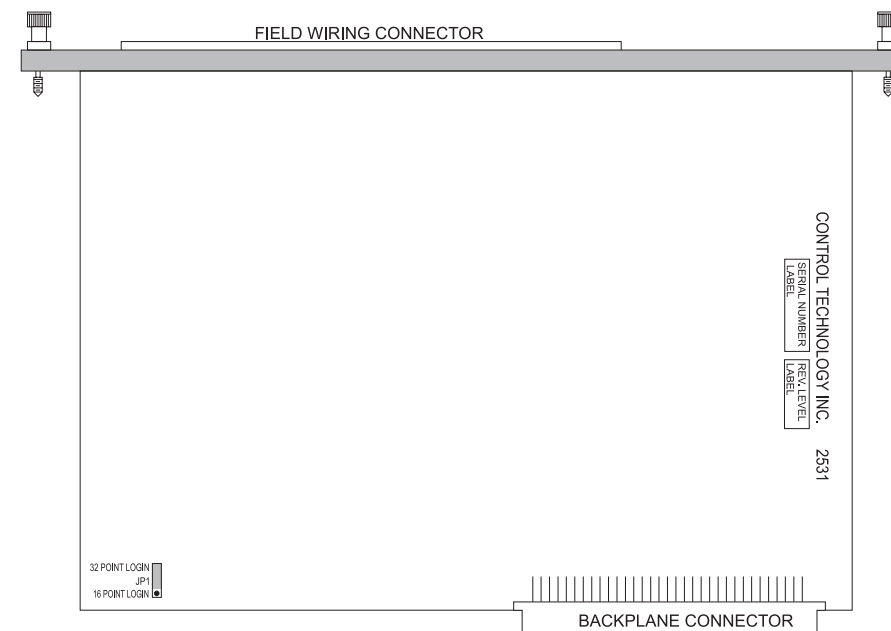
Typical Internal Circuit

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

WARNING:
Remove field wiring connector before changing jumper setting.

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.



Jumper Configuration Location