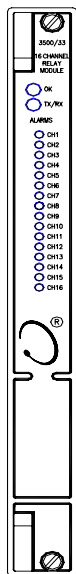


Specifications and Ordering Information

**3500/33 16-Channel Relay Module**



**Description**

The 16-Channel Relay Module is a full-height module that provides 16 relay outputs. Any number of 16-Channel Relay Modules can be placed in any of the slots to the right of the Rack Interface Module. Each output of the 16-Channel Relay Module can be independently programmed to perform needed voting logic.

Each relay utilized on the 16-Channel Relay Module includes "Alarm Drive Logic". The Alarm Drive Logic is programmed using AND and OR logic, and can utilize alarming inputs (alerts and dangers), Not-OK, or individual PPLs from any monitor channel or any combination of monitor channels in the rack. This Alarm Drive Logic is programmed using the 3500 Rack Configuration Software to meet the specific needs of the application.

**Note:** Triple Modular Redundant (TMR) applications require the use of the 3500/34 TMR Relay Module. Consult Bently Nevada Specification and Ordering Information part number 141534-01 for details.

**Specifications**

**Inputs**

*Power Consumption:* 5.8 Watts typical.

**Outputs**

*OK LED:* Illuminated when module is functioning properly.

*TX/RX LED:* Transmit and Receive. Flashes to indicate proper communications between this module and other modules within the rack.

*CH ALARM LED:* Illuminated to indicate that the Relay Channel is in an alarm state.

*Relays*

*Type:* Single-pole, double-throw (SPDT) relays.

*Environmental Sealing* Epoxy-sealed.

*Arc Suppressor* 250 Vrms, installed as standard.

*Contact Life* 100,000 cycles @ 5 A, 24 Vdc or 240 Vac.

*Operation* Four groups of four channels are switch selectable for Normally De-energized or Normally Energized.

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## Environmental Limits

*Operating Temperature:* -30°C to +65°C  
(-22°F to +150°F).

*Storage Temperature:* -40°C to +85°C  
(-40°F to +185°F).

*Humidity:* 95%, non-condensing.

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## CE Mark Directives

### EMC Directives:

*EN50081-2:* Radiated Emissions  
EN 55011, Class A

Conducted Emissions  
EN 55011, Class A

*EN50082-2:* Electrostatic Discharge  
EN 61000-4-2, Criteria B

Radiated Susceptibility  
ENV 50140, Criteria A

Conducted Susceptibility  
ENV 50141, Criteria A

Electrical Fast Transient  
EN 61000-4-4, Criteria B

Surge Capability  
EN 61000-4-5, Criteria B

Magnetic Field  
EN 61000-4-8, Criteria A

Power Supply Dip  
EN 61000-4-11, Criteria B

Radio Telephone  
ENV 50204, Criteria B

### Low Voltage Directives:

Safety Requirements  
EN 61010-1

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## Hazardous Area Approvals

*CSA/NRTL/C:* Class I, Division 2, Groups A through D.

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## Contact Ratings

### Resistive load:

*Max switched power:* dc: 160 W  
ac: 1500 VA

*Minimum switched current:* 100mA @ 12 Vdc

*Max switched current:* 6 A

*Max switched voltage:* dc: 300 Vdc  
ac: 400 Vac

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## Physical

### Main Module:

*Dimensions (Height x Width x Depth):* 241 mm x 24.4 mm x 242 mm  
(9.50 in x 0.96 in x 9.52 in).

*Weight:* 0.7 kg (1.6 lbs.).

### I/O Module:

*Dimensions (Height x Width x Depth):* 241 mm x 24.4 mm x 99.1 mm  
(9.50 in x 0.96 in x 3.90 in).

*Weight:* 0.4 kg (1.0 lbs.).

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## Rack Space Requirements

*Main Module:* 1 full-height front slot.

*I/O Modules:* 1 full-height rear slot.

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## Ordering Considerations

- The 3500/33 requires 3500 Rack Configuration software, version 3.3 or later
  - The 3500/33 requires 3500 Data Acquisition software, version 2.40 or later
  - The 3500/33 requires 3500 Data Display software, version 1.40 or later
  - When used with a 3500/93 LCD Display module, the 3500/93 will require firmware revision P or later.
  - When used with a 3500/94 VGA Display module, the 3500/94 will require firmware revision C or later.
- 

## Ordering Information

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### 3500 16-Channel Relay Module

3500/33 -AXX-BXX

#### Option Descriptions

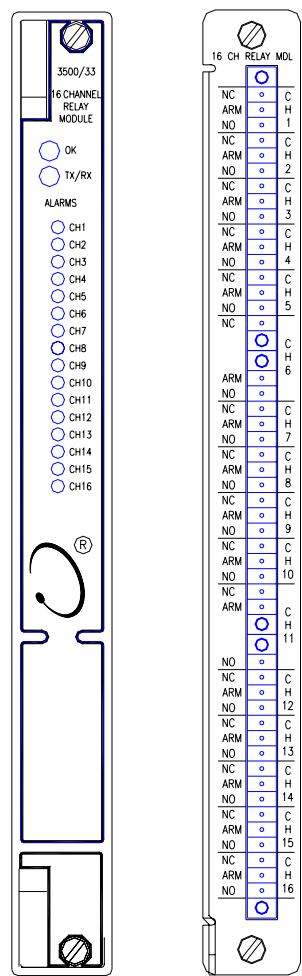
<i>A: Output Module</i>	<b>0 1</b>	16-Channel Relay Output Module
<i>B: Agency Approval Option</i>	<b>0 0</b>	None
	<b>0 1</b>	CSA/NRTL/C

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#### Spares

149986-01	Spare 16-Channel Relay Control Module
149992-01	Spare 16-Channel Relay Output Module
04425545	Grounding Wrist Strap (single use)
162291-01	16-Channel Relay Module Manual
00580453	Connector Header, Internal Termination, 16-position, Green

Figures and Tables



Front and rear view of the 16-Channel Relay Module

All data is subject to change without notice

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