

# 3500/32 4 Channel Relay Module

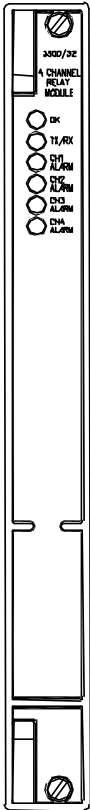
Bently Nevada™ Asset Condition Monitoring

## Description

The 4-Channel Relay Module is a full-height module that provides four relay outputs. Any number of 4-Channel Relay Modules can be placed in any of the slots to the right of the Rack Interface Module. Each output of the 4-Channel Relay Module can be independently programmed to perform needed voting logic.

Each relay utilized on the 4-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) from any monitor channel or any combination of monitor channels in the rack. This Alarm Drive Logic programming uses 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.



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## Specifications

### Inputs

#### Power

#### Consumption:

6 watts typical.

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### 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 when the Relay Channel is in an alarm state.

### Relays

#### Type:

Two single-pole, double-throw (SPDT) relays connected in a double-pole, double-throw (DPDT) configuration.

### Environmental Sealing

Epoxy-sealed.

### Arc

#### Suppressor

250 Vrms, installed as standard.

### Contact Life

100,000 cycles @ 5 A, 24 Vdc or 120 Vac.

### Operation

Each channel is 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:

#### IEC61000-6-4

*Radiated Emissions*

EN 55011, Class A

*Conducted Emissions*

EN 55011, Class A

#### IEC61000-6-2

*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

##### Approval Option (01)

Class I, Div 2  
Groups A, B, C, D  
T4 @ Ta = -20 °C to +65 °C  
(-4 °F to +150 °F)

Certification Number  
CSA 150268-1002151 (LR 26744)

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#### Contact Ratings

##### Resistive load:

##### Max switched power:

dc: 120 W  
ac: 600 VA

##### Minimum switched current:

10mA @ 5 Vdc

##### Max switched current:

5 A

##### Max switched voltage:

dc: 30 Vdc  
ac: 250 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 lb.).

##### 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 lb.).

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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 Information

##### 3500 4-Channel Relay Module

##### 3500/32 -AXX-BXX

##### A: Output Module

**01** 4-Channel Relay I/O Module

##### B: Agency Approval Option

**00** None

**01** CSA/NRTL/C

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**Spares**

<b>125712-01</b>	Spare 4-Channel Relay Module	<b>04400037</b>	IC Removal Tool
<b>125720-01</b>	Spare 4-Channel Relay I/O Module	<b>00580436</b>	Connector Header, Internal Termination, 6-position, Green
<b>04425545</b>	Grounding Wrist Strap (single use)		
<b>132319-01</b>	Firmware IC	<b>129771-01</b>	4-Channel Relay Module Manual