

3500/32 4 Channel Relay Module

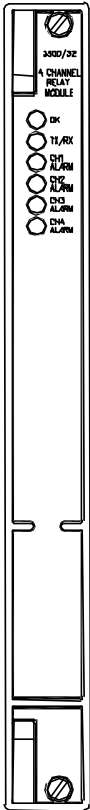
Bently Nevada™ Asset Condition Monitoring

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.



Specifications

Inputs

Power

Consumption:

6 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 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.

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.

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

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)

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

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.).

Rack Space Requirements

Main Module:

1 full-height front slot.

I/O Modules:

1 full-height rear slot.

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

Spares

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

Graphs and Figures

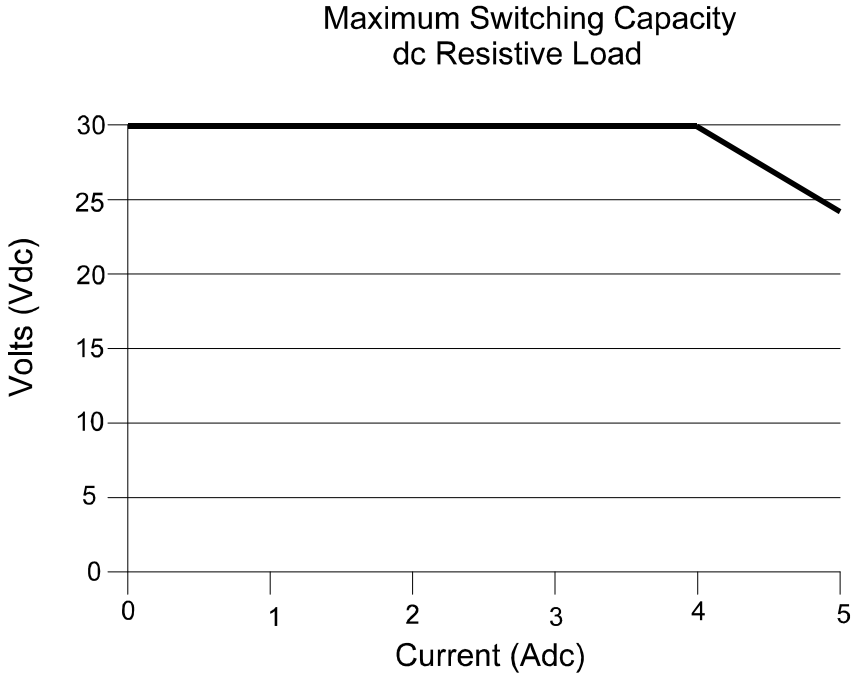


Figure 1

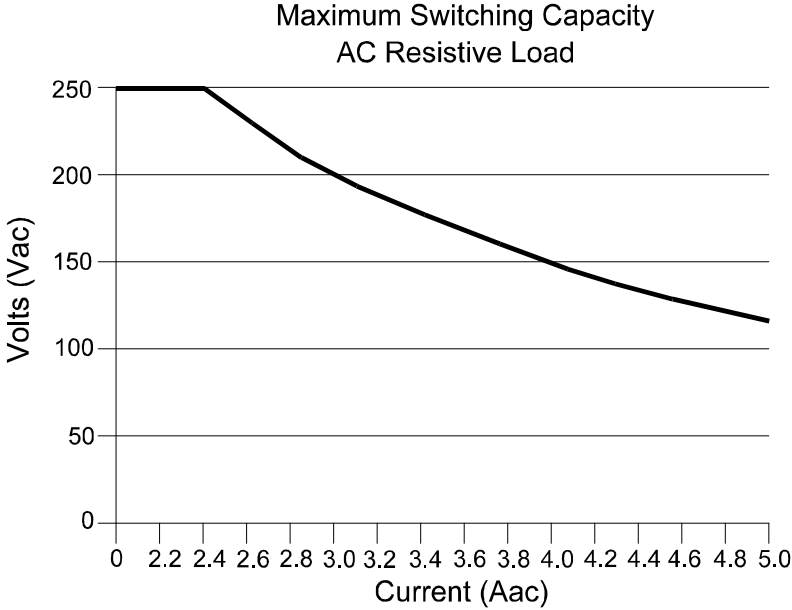


Figure 2

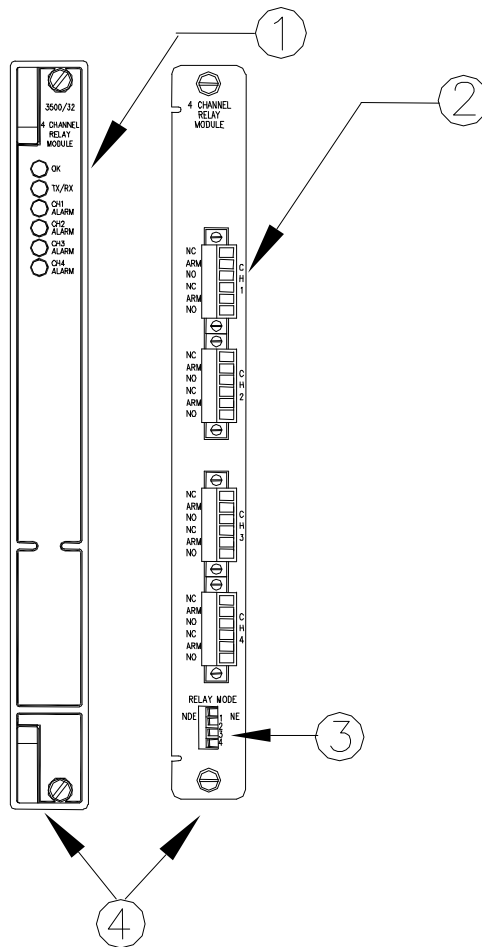


Figure 3: Front and rear view of the 4-Channel Relay Module

- 1) LEDs indicate the status of the relay channels.
- 2) Terminals for connecting relay contacts to external devices.
- 3) Switches that control how the relay contacts work.
- 4) 4 Channel Relay and I/O Modules

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