

Specifications and Ordering Information

3500/32 4-Channel Relay Module



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 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 Bentley 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 to indicate that 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:

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

Hazardous Area Approvals

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

Contact Ratings

Resistive load:

Max switched power: **dc:** 120 W
ac: 600 VA

Minimum switched current: 100mA @ 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 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.).

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

Option Descriptions

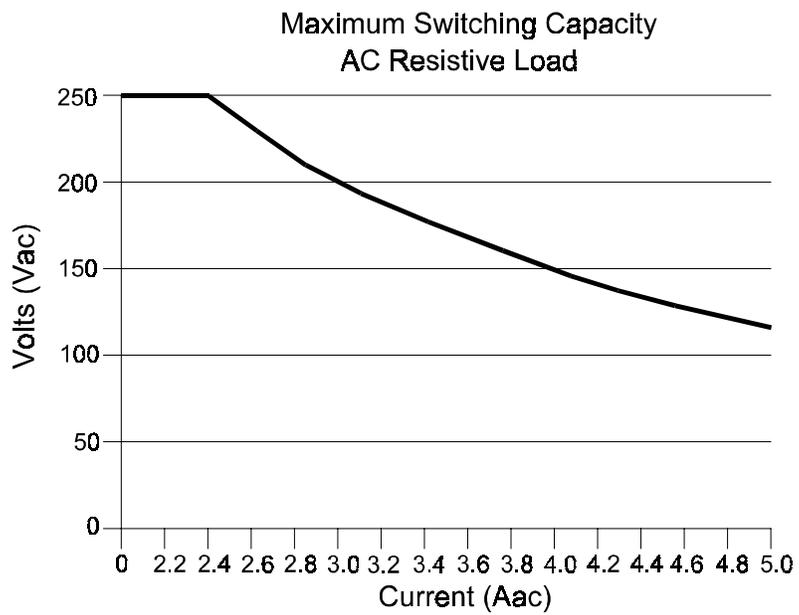
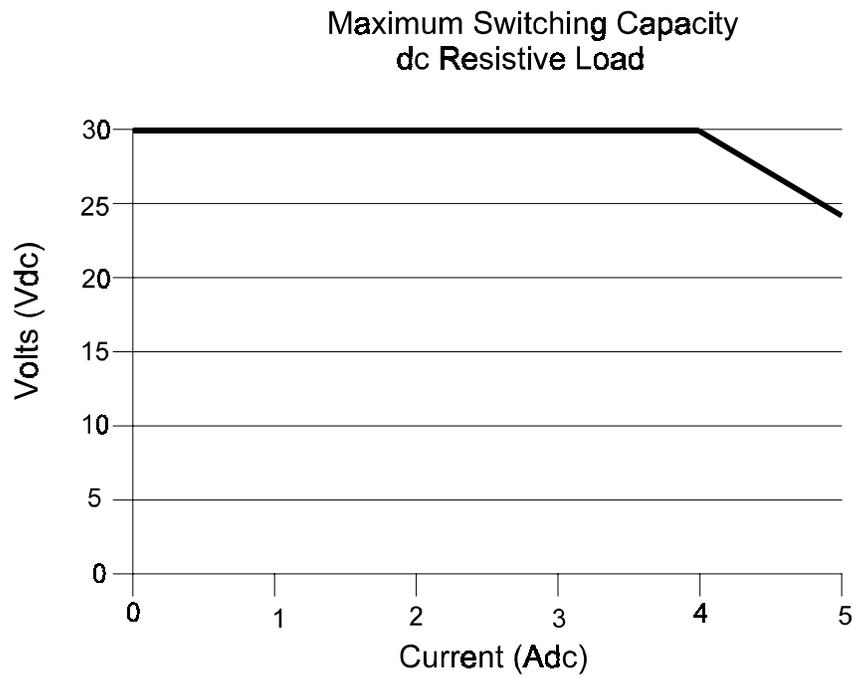
A: Output Module **0 1** 4-Channel Relay I/O
Module

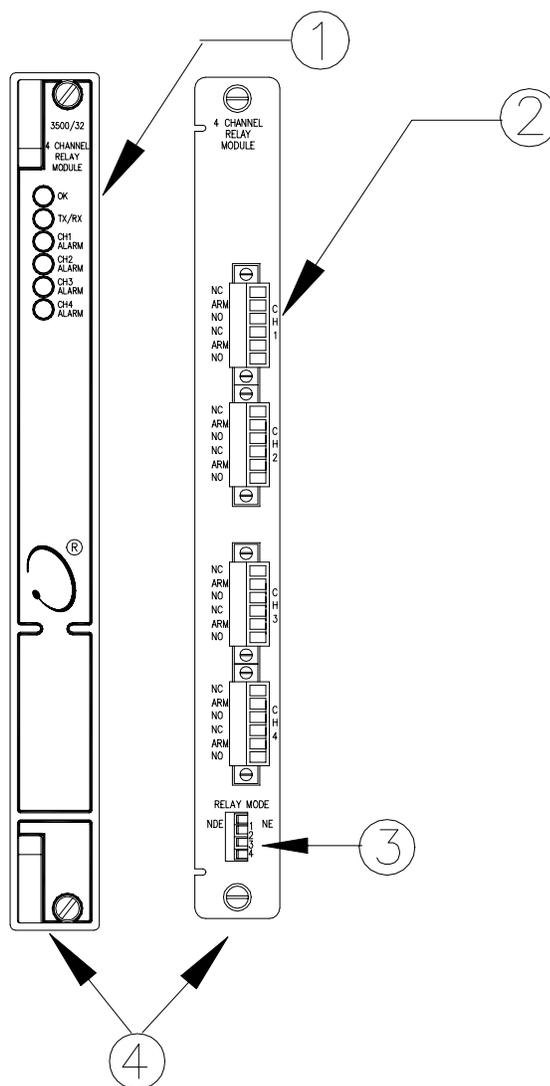
B: Agency Approval Option **0 0** None
0 1 CSA/NRTL/C

Spares

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

Figures and Tables





- 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

Front and rear view of the 4-Channel Relay Module

All data is subject to change without notice

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