

3500/33-01-01

3500/33 16-Channel Relay Output Module

Product identification

Bently Nevada 3500/33-01-01 is a standard sixteen-channel SPDT relay output module for the 3500 System with cNRTLus Class I Division 2 approval.

Parameter	Verified value
Manufacturer	Bently Nevada
Model	3500/33-01-01
Product Family	3500 System
Product Type	16-Channel Relay Module

Technical specifications

Parameter	Verified value
Output module option	01 = Standard 16-channel relay output
Approval option	01 = cNRTLus Class I Division 2
Relay channels	16
Relay type	SPDT
Relay grouping	Four groups of four
Group operating mode	Selectable normally energized or normally de-energized
Power consumption	5.8 W typical
Relay sealing	Epoxy sealed
Arc suppressor	250 Vrms, standard
Contact life	10,000 cycles
Standard relay minimum load	100 mA at 5 VDC
Maximum resistive DC current	5 A
Maximum DC voltage	125 VDC for standard non-hazardous systems
Maximum resistive AC current	5 A
Maximum AC power	1200 VA
Maximum AC voltage	250 VAC
Main module dimensions	241 x 24.4 x 242 mm
Main module weight	0.7 kg (1.6 lb)
I/O module dimensions	241 x 24.4 x 99.1 mm
I/O module weight	0.4 kg (1.0 lb)
Rack space	One full-height front slot plus one full-height rear slot

Product overview

3500/33-01-01 is the standard sixteen-channel relay output configuration for the Bently Nevada 3500 machinery protection system. Each channel is a programmable SPDT relay driven by alarm logic from monitor channels in the rack.

The module organizes the relays into four groups of four, with each group selectable for normally energized or normally de-energized operation. Front-panel indicators report module health, rack communication and individual channel alarm state.

This configuration applies relay logic to shutdown, annunciation and auxiliary control functions in machinery-protection installations. Contact ratings, field voltage, fail-safe philosophy, alarm-drive programming and rear I/O hardware must be verified before commissioning.

Applications

- Drives machinery shutdown circuits from configured 3500 monitor alarms.
- Provides annunciation contacts for control-room or distributed-control-system interfaces.
- Operates auxiliary interlocks and alarm devices within the documented relay ratings.

Relay Operation

- Sixteen SPDT channels are arranged as four groups of four relays.
- Each group is switched for normally energized or normally de-energized behavior.
- Epoxy-sealed contacts include a standard 250 Vrms arc suppressor.

Monitoring & Control

- Alarm Drive logic combines selected monitor conditions into each relay command.
- The channel alarm indicators show which programmed relay output is active.
- TX/RX indication confirms communication with other modules in the 3500 rack.

Safety & Compliance

- The 01 suffix selects cNRTLus Class I Division 2 approval for the exact configuration.
- Hazardous field conductors can remain exposed at the rear terminals during service.
- Disconnect field power before removal and apply contact ratings appropriate to the installed area.

High-risk technical note

3500/33-01-01 can expose hazardous field voltage at the relay terminals; isolate every field source and verify zero energy before rear-I/O work.

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Exact model
3500/33-01-01
3500 System



Manufacturer source

<https://dam.bakerhughes.com/m/5602036bd69f0a2e/original/3500-33-16-Channel-Relay-Module-Datasheet-162301-pdf.pdf>
Source technical meaning is unchanged. This web edition is organized for exact-model identification and quotation support.