

BENTLY NEVADA

149992-02

Installation & Commissioning Guide

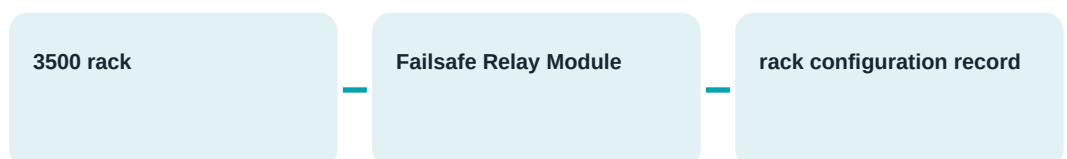
Bently Nevada 149992-02 is the failsafe 16-channel relay output module for the 3500/33 relay platform.

FAMILY 3500/33 16-Channel Relay Module

DOCUMENT Installation & Commissioning Guide

SOURCE 162301 Rev. AC

SYSTEM FLOW



SELECTED RELATED PRODUCTS

01	Bently Nevada 330909-00-25-10...	OPEN	02	Bently Nevada 330908-21-35-10...	OPEN
03	Bently Nevada 330905-0-25-05-0...	OPEN	04	Bently Nevada 330903-00-07-10...	OPEN
05	Bently Nevada 330903-00-07-10...	OPEN	06	Bently Nevada 330162-03-45-45...	OPEN

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149992-02

Exact-model identity and parameters

Complete model	149992-02	Logic arrangement	Independently programmable voting
Manufacturer	Bently Nevada	Alarm drive logic	AND or OR logic
Product family	3500/33 16-Channel Relay Module	Relay grouping	Four groups of four
Ordering identity	149992-02	Group state selection	Normally de-energized or normally energized
Output option	Failsafe relay output	Relay sealing	Epoxy sealed
Relay channels	16	Typical power consumption	5.8 W
Module format	Full-height 3500 module	Published contact life	10,000 cycles at rated load
Relay contact form	Single-pole double-throw (SPDT)	Companion control module	149986-01

EVIDENCE BOUNDARY

Match every 149992-02 output to the approved 3500/33 logic and field circuit; do not substitute the standard-output option for the failsafe module.

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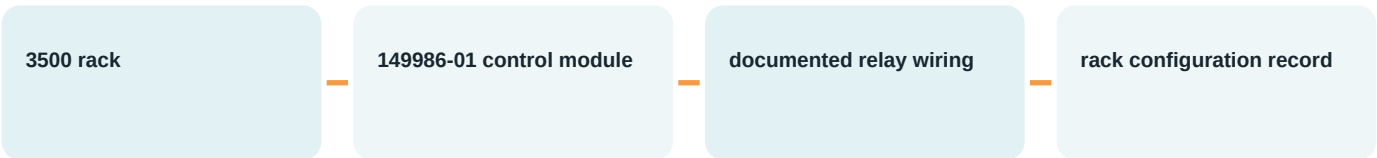
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System role and engineering applications

ROLE 1 Provides sixteen relay outputs	ROLE 2 Uses independently programmable voting logic
ROLE 3 Supports AND or OR alarm-drive logic	ROLE 4 Implements the failsafe output option

SIGNAL / SERVICE PATH



Machine protection annunciation Routes configured 3500 alarm states to sixteen external relay circuits.	Failsafe output architecture Uses the -02 output option where de-energized behavior is part of the approved design.
Voting-logic output Combines rack alarm inputs through independently programmed AND or OR logic.	Controlled relay renewal Preserves contact assignment, group state and companion-module configuration.

Field-work sequence and acceptance controls

01 Confirm 149992-02 and every assigned relay circuit before work Confirm 149992-02 and every assigned relay circuit before work.	02 Place connected trips, alarms and machine processes in a safe maintenance state Place connected trips, alarms and machine processes in a safe maintenance state.
03 Isolate relay loads and rack energy before disconnecting field wiring Isolate relay loads and rack energy before disconnecting field wiring.	04 Record all sixteen contact assignments and their normal states Record all sixteen contact assignments and their normal states.
05 Protect the module connectors and observe grounded ESD controls Protect the module connectors and observe grounded ESD controls.	06 Verify the 149986-01 companion module and rack slot pairing Verify the 149986-01 companion module and rack slot pairing.
07 Restore circuits in a controlled sequence and review channel diagnostics Restore circuits in a controlled sequence and review channel diagnostics.	08 Exercise each required relay path and retain the acceptance record Exercise each required relay path and retain the acceptance record.

RELATED SERVICE REFERENCES

01 Bently Nevada 86691-00750-0435-15 OPEN	02 Bently Nevada 200350-02-00-01 OPEN
03 Bently Nevada 21500-00-12-10-02 OPEN	

ACCEPTANCE RECORD

Retain the final 149992-02 identity, connection, configuration, diagnostic and controlled-response result.

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Model-specific questions and decisions

1 What distinguishes Bently Nevada 149992-02 from the standard 3500/33 output module?

The -02 identity denotes the failsafe relay output option.

2 How many outputs does Bently Nevada 149992-02 provide?

It provides sixteen independently configured relay outputs.

3 Which contact form is used by Bently Nevada 149992-02?

Each output uses a single-pole double-throw relay contact.

4 How can alarm inputs drive Bently Nevada 149992-02?

The 3500/33 configuration can apply AND or OR logic to the assigned alarm drives.

5 How are Bently Nevada 149992-02 relays organized?

The sixteen relays are arranged as four groups of four with selectable energized behavior.

6 Which control module accompanies Bently Nevada 149992-02?

The companion 3500/33 control module is 149986-01.

7 What must be recorded before changing Bently Nevada 149992-02?

Capture output mapping, normal state, voting expression, field terminals and rack slot.

8 What proves successful commissioning of Bently Nevada 149992-02?

A controlled test should demonstrate each required relay response without unintended trip action.

RELATED MODEL REFERENCES

01	Bently Nevada 21500-00-32-05-02	OPEN	02	Bently Nevada 330851-04-000-040-10-01-00	OPEN
03	Bently Nevada 330881-28-05-050-03-02	OPEN			

SOURCE IDENTIFIER

Baker Hughes 3500/33 16-Channel Relay Module Datasheet | 162301 Rev. AC

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Related products and document navigation

These links are navigation aids to other Apter Power product pages. They are not technical evidence for this product.

01	Bently Nevada 21504-00-48-10-02	OPEN	02	Bently Nevada 129525-0050-02	OPEN
03	Bently Nevada 102044-00-32-10-02	OPEN	04	Bently Nevada 21000-11-05-00-085-03-02	OPEN
05	Bently Nevada 21000-15-10-00-166-03-02	OPEN	06	Bently Nevada 21000-28-05-00-070-01-02	OPEN
07	Bently Nevada 84661-55	OPEN	08	Bently Nevada 330880-00-00-000-03-02	OPEN
09	Bently Nevada 330101-00-60-90-01-05	OPEN	10	Bently Nevada 330104-11-25-10-02-00	OPEN
11	Bently Nevada 330102-04-25-10-02-00	OPEN	12	Bently Nevada 330910-00-07-05-02-CN	OPEN

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