Bently Nevada 1900/65A-01-01-03-00-00

01 Function and selected configuration

Product function

Bently Nevada 1900/65A-01-01-03-00-00 combines local measurement visibility with a windowed protective enclosure, allowing condition-monitoring values to be reviewed without relying on a networked operator station.

Selected configuration

110-220 V AC, 50-60 Hz through an external supply, attached display without a separate display cable, fiberglass NEMA 4X/IP66 weatherproof housing with a window door, no agency-approval option and no Modbus option. The attached display provides channel readings and access to minor settings. Full channel processing, relay logic and recorder assignments are configured with a PC; the approved configuration is retained in non-volatile memory.

Functional path

4 transducer + 4 temperature inputs	Configured variables	Alarm and relay logic	Relays / 4-20 mA outputs

Measurement inputs	Four transducer channels plus four temperature channels
Local access	Attached display; PC configuration through Ethernet
Protective outputs	Six programmable relays and four 4-20 mA recorders

The final 00 selection omits Modbus. Ethernet remains available for configuration transfer, while the four recorder outputs provide independently assigned analog variables to receiving equipment.

1900/65A-01-01-03-00-00 / Technical operating envelope

02 Technical operating envelope

Supply configuration	110-220 V AC, 50-60 Hz through an external supply
Display	Attached; no separate cable
Mounting / enclosure	fiberglass NEMA 4X/IP66 weatherproof housing with a window door
Monitor-side operating current	0.35 A typical; 1.0 A maximum
Monitor-side operating power	8.5 W typical; 14 W maximum
Transducer inputs	4; acceleration, velocity, radial vibration, thrust, position or speed
Temperature inputs	4; E/J/K/T thermocouples or 2-/3-wire RTDs
Relay outputs	6 SPDT; programmable logic

Maximum relay operands	50 per relay
Recorder outputs	4 x 4-20 mA; configurable channel/variable
Maximum recorder loop resistance	600 ohms
Recorder update interval	100 ms
Configuration retention	Non-volatile memory
Configuration interface	Built-in Ethernet
Modbus	Not included

The display, power and mounting selections are specific to 1900/65A-01-01-03-00-00. The external AC supply and enclosure must be assessed as part of the installed assembly; monitor-only ratings do not establish every enclosure or mains rating.

Buffered signal access

Unscaled transducer outputs have 550 ohms impedance and at least 40 kHz bandwidth. The display adds selectable buffered access.

Recorder behavior

Accuracy is 2% across operating temperature. A configurable 2 mA +/-10% clamp indicates Not OK or bypass.

1900/65A-01-01-03-00-00 / System integration and applications

03 System integration and applications

Local condition display

Read configured channel values at the machine-monitoring position using the attached display.

Combined thermal and vibration monitoring

Pair compatible bearing-temperature circuits with the selected vibration measurements.

Programmable protection contacts

Use reviewed relay expressions to combine warning, danger and channel-health states.

Analog trend recording

Send selected variables to recording or control inputs using four independently assigned current loops.

System and supply context

110-220 V AC, 50-60 Hz through an external supply, attached display without a separate display cable, fiberglass NEMA 4X/IP66 weatherproof housing with a window door, no agency-approval option and no Modbus option. Sensors and external receiver circuits are selected to match the configured input and output channels.

Application boundary

Suitable general-purpose machines may combine vibration, temperature and discrete protection. The examples describe integration roles, not preconfigured alarm settings or a universal machine-protection design.

What does the window-door enclosure add to 1900/65A-01-01-03-00-00?

The CC03 option specifies a fiberglass NEMA 4X/IP66 weatherproof housing with a window door. The completed installation must preserve closure, seals and suitable cable entries.

1900/65A-01-01-03-00-00 / Engineering selection decisions

04 Engineering selection decisions

Can 1900/65A-01-01-03-00-00 be connected directly to an arbitrary AC terminal?

The selected AC option is 110-220 V AC at 50-60 Hz through an external power supply. Use that supply and its approved wiring; do not apply mains voltage to monitor-side DC terminals.

Which controls are available at the attached display of 1900/65A-01-01-03-00-00?

The display provides channel information and minor setting access. Use PC configuration software for the complete channel, relay and recorder setup; an attached display is not a full substitute for that workflow.

Why can a relay remain latched after a measurement returns to normal on 1900/65A-01-01-03-00-00?

A relay configured for latching requires a reset after its initiating condition clears. Verify the logic state and reset path; a reset cannot correct an active sensor fault.

Can 1900/65A-01-01-03-00-00 send event records to a DCS over Modbus?

This final-00 build omits the Modbus option. Its configuration Ethernet connection and attached display do not establish Modbus event reporting.

Check output assignments	Match each recorder variable and full scale to the receiving input.
Prove voting logic	Test normal, alarm, Not OK, bypass and reset behavior against the approved logic.

1900/65A-01-01-03-00-00 / Configuration boundary and references

05 Configuration boundary and references

Lifecycle and support

The current manufacturing and OEM support stages for 1900/65A-01-01-03-00-00 require confirmation from Bently Nevada. Apter Power availability is confirmed separately.

Replacement assessment

Retain all five configuration options, channel settings, relay voting and recorder assignments when evaluating a replacement monitor.

Document roles

Use the original manufacturer excerpt for its preserved technical tables and drawings. This product brief explains configuration and selection boundaries. The independent installation guide organizes preparation, connection, testing and handover. It does not replace the applicable manufacturer installation instructions.

Technical basis

1900/65A General Purpose Equipment Monitor, 173401 Rev. AC.

Related product navigation

- Bently Nevada 330730-080-02-00
- Bently Nevada 330730-080-00-05
- Bently Nevada 330780-50-00

These are related references, not confirmed substitutes or an automatically approved assembly.

Product enquiries