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

01 Function and selected configuration

Product function

Bently Nevada 1900/65A-01-01-03-00-01 combines local display access with digital supervisory reporting, so machine-condition values, status and event information can be integrated alongside relay and analog outputs.

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 Modbus communication. 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
Communications	Modbus over Ethernet and configurable RS232/RS485 serial

The Modbus Gateway makes static variables, status, event-list information and time/date information available to a supervisory system. The serial interface can be configured for RS232 or RS485; network and receiver settings must agree.

1900/65A-01-01-03-00-01 / 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	Ethernet and RS232/RS485

The display, power and mounting selections are specific to 1900/65A-01-01-03-00-01. 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-01-01-03-00-01 / 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.

Digital supervisory reporting

Transfer measurements, status and events through the configured Modbus interface.

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 Modbus communication. 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 can a supervisory system retrieve from 1900/65A-01-01-03-00-01?

Modbus provides access to static variables, monitor status, event-list information and time/date information. Engineer the receiver mapping for the required data rather than treating all registers as equivalent measurements.

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

04 Engineering selection decisions

Which communication paths carry Modbus data from 1900/65A-01-01-03-00-01?

The gateway supports Ethernet and a serial port configurable for RS232 or RS485. The selected electrical interface and communication settings must match the receiving system.

How should event time be coordinated for 1900/65A-01-01-03-00-01?

The monitor time counter uses a reference supplied through the Modbus master. Include time/date synchronization in commissioning so the event sequence can be compared with supervisory-system records.

How is local viewing preserved in the enclosed 1900/65A-01-01-03-00-01 configuration?

The build combines an attached display with a fiberglass NEMA 4X/IP66 housing and window door. Maintain the housing seals and cable entries when arranging local access.

Which settings deserve separate checks when replacing 1900/65A-01-01-03-00-01?

Retain sensor processing, relay expressions, recorder assignments and the Modbus interface configuration. Verify host mapping and event-time synchronization as well as the local display and measured values.

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-01-01-03-00-01 / Configuration boundary and references

05 Configuration boundary and references

Lifecycle and support

The current manufacturing and OEM support stages for 1900/65A-01-01-03-00-01 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 330730-080-00-00
- Bently Nevada 330730-080-03-05
- Bently Nevada 330780-90-00

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

Product enquiries