

Power Supply 3300/10



Reliable power for up to 36 channels

The 3300 Power Supply delivers reliable, regulated power for up to 12 monitors and their associated transducers. The 3300/10 Power Supply has been specifically designed to supply continuous power to a 3300 rotating machinery protection system, whether the rack contains 1 or 36 channels. Because of its heavy-duty design, a second Power Supply in the same rack is never required.

The Power Supply is installed in the left-most location (position 1) in a 3300 rack and converts 115 Vac or 220 Vac into dc voltages used by the monitors installed in the rack. Primary voltage operation can be selected for 110 or 220 Vac by simply moving a cable from one connector to another and replacing one external fuse. No special tools or other component changes are required.

The application of positive retention type connectors for primary voltage level selection makes the Power Supply more reliable than those which use selection switches. Also, this type of selection allows you to use your 3300 Systems in hazardous areas and applications where agency approvals are required.

Flexible

The Power Supply can accommodate transducer output voltage for -24 Vdc or -18 Vdc. This allows you to use Bently Nevada's reliable probes and Proximity® with your 3300 System.

Complete

The Power Supply is equipped with a line noise filter as standard. This filter is especially important in power generation plants or other locations where the primary power is susceptible to line noise. In most other systems, line noise must be eliminated by an (often expensive) external filter, which also requires external wiring. The 3300 Power Supply, with its built-in line noise filter, ensures reliable long-term operation.

The Power Supply Input Module contains the system *OK relay*, which is single-pole, double-throw and may be selected for epoxy- or hermetically-



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sealed. The OK relay is connected via the System Monitor to the OK circuits of all monitors in the rack. These circuits monitor the operating condition of each transducer. Any transducer failure or field wiring fault will be annunciated by the OK relay. The OK relay function is normally energized, which provides the added capability of an annunciation in the event of primary power loss.

WARNING

Because of the above benefits, we strongly recommend connection of an external annunciator to the OK relay terminals.

The Power Supply rear panel is a double-wide module, which also is common to the System Monitor. It provides the terminals for connecting the primary power, Rack Inhibit control, Trip Multiply control, Remote Alarm Reset control and two Keyphasor® transducers. These functions are described in detail in the System Monitor Product Data Sheet (L3301). The rear panel also provides the computer-ready connections for a Bently Nevada Communications Processor, the optional Serial Interface for communication with Programmable Logic Controllers, Process Control Computers, Distributed Control

Systems and the terminals for the OK relay contacts.

Several different options are available. The Power Input Module provides many important connections for the Keyphasor, internal or external safety zone barriers, barrier ground options or Serial Interface.

Convenient, plug-in instrument modules

All components of a 3300 System can be removed and installed using only a screwdriver. No soldering iron is required to interchange rack parts. This provides you easy access to the various parts, thus saving valuable time.

Specifications

INPUTS

Power: 95 to 125 Vac, single phase, 50 to 60 Hz, at 1.0 A maximum, or 190 to 250 Vac single phase, 50 to 60 Hz, at 0.5 A maximum. User-selectable by connection to positive retention socket.

Primary Power Surge at Power-up: 26 A peak, or 12 A rms for one cycle.

Fuse Rating: 95 to 125 Vac: 1.5 A slow blow; 190 to 250 Vac: 0.75 A slow blow.

OUTPUTS

Transducer Power (internal to rack): User-programmable -24 Vdc, +0%, -2.5%; or -18 Vdc, +0%, -2%; transducer voltages are overload protected, per channel, on the individual monitor circuit boards.

OK RELAY

Location: Behind the Power Supply, at the Power Supply Input Module.

Type: Single-pole, double-throw (SPDT).

Environmental Sealing: Optional epoxy- or hermetically-sealed.

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Contact Ratings (resistive load):

Epoxy-Sealed: 5 A at 28 Vdc; 5 A at 120/220 Vac, 50/60 Hz.

Hermetically-Sealed: 5 A at 28 Vdc; 5 A at 120 Vac, 50/60 Hz; 3 A at 220 Vac, 50/60 Hz.

Ratings for systems requiring agency approval: 5 A at 28 Vdc; 5 A at 120 Vac, 50/60 Hz.

Contact Life: 10,000 cycles minimum at rated load.

Operation: normally energized

ENVIRONMENTAL LIMITS

Temperature Range:

Operation: +32°F to +149°F (0°C to +65°C).

Storage: -40°F to +185°F (-40°C to +85°C).

Relative Humidity: To 95% noncondensing.

PHYSICAL

Space Requirements: One rack position. Installs only in position one (left-most position, next to System Monitor).

Weight: 2 lbs. (1 kg).

Ordering Information

Power Supply

A B C
3300/10 - □□ - □□ - □□

Option Description

A □□ **Input Voltage Option** ①

01 95-125 Vac 50/60 Hz

02 190-250 Vac 50/60 Hz

B □□ **Power Input Module Option**

02 Standard, Hermetic OK Relay

06 Serial Interface, Hermetic OK Relay

08 Keyphasor Internal Barrier, Hermetic OK Relay

12 Serial Interface Barrier Ground, Hermetic OK Relay

C □□ **Agency Approval Option** ②

00 Not Required

01 CSA

02 Pending British Approval

03 Factory Mutual

Field-Programmable Option

This option is field-programmable via plug-in jumpers. Solid square indicates option as shipped from factory.

Transducer Output Voltage

■ -24 Vdc

□ -18 Vdc

① *Input Voltage Option is field-programmable. Ordering information only determines how the unit is shipped from the factory.*

② *Agency Approval Option 02 requires OK Relay Option 02 (Hermetically-Sealed)*