

3500/15E Power Supply

Bently Nevada* Asset Condition Monitoring



Description

The 3500 Encore Power Supplies are full height modules and must be installed in the specially designed slots on the left side of the rack. The 3500 Encore power supply works with the existing Power Input Module and transformer or DC input board within existing 3300 racks.

The 3500 Encore Power Supplies accept a wide range of input voltages and converts them to voltages acceptable for use by other 3500 Encore modules. Three Power Supply versions are available with the 3500 Encore Series Machinery Protection System as follows:

- AC (110/230VAC)
- Low Voltage DC (24VDC)
- High Voltage DC (125VDC)



Specifications

Inputs

Voltage Options:

Voltage AC

The voltage range is based on a changeable soldered jumper and the fuse located on the Power Input Module.

Input Voltage

95 to 125 Vac

Or

190 to 250 Vac

Input Frequency

47 to 63 Hz

Low Voltage DC

This option uses the Low Voltage DC Power Supply and the Low Voltage DC Power Input Module (PIM).

Input voltage:

20 to 34 Vdc

High Voltage DC

This option uses the High Voltage DC Power Supply and the High Voltage DC Power Input Module (PIM).

Input Voltage

88 to 140 Vdc

Full Rack Current Draw:

Low Voltage AC

4.5 A rms (maximum).

High Voltage AC

2.3 A rms (maximum).

Low Voltage DC

7.5 A (maximum)

High Voltage DC

1.9 A (maximum)

Outputs

Front Panel LEDs

Supply OK LED:

Indicates when the power supply is operating properly.

Environmental Limits

Operating Temperature:

-20 °C to +65 °C (-4 °F to +150 °F).

Storage Temperature:

-30 °C to +85 °C (-22 °F to +185 °F).

Humidity:

95%, non-condensing.

CE Mark Directives

EMC Directive:

Declaration of Conformity

287885

EN61000-6-4

Radiated Emissions

CISPR 16-2-3

Conducted Emissions

CISPR 16-2-1

EN61000-4-2

Electrostatic Discharge

IEC 61000-4-2, Criteria B (I/O's excluded in 3300 system retro fit).

EN61000-6-2

Radiated Immunity

IEC 61000-4-3, Criteria A

Conducted Immunity

IEC 61000-4-6, Criteria A

Electrical Fast Transient

IEC 61000-4-4, Criteria B

Surge Capability

IEC 61000-4-5, Criteria B

Magnetic Field

IEC 61000-4-8, Criteria A

Power Supply Dip

IEC 61000-4-11, Criteria B

CE Mark Low-Voltage Directive

Declaration of Conformity

287885

Safety Requirements

EN61010-01

Hazardous Area Approvals

CSA/NRTL/C:

Approval Option (01)

Class 1, Div 2

Groups A, B, C, D

T4A @ Ta = -20°C to +60°C

(-4 °F to +140 °F)

T4 @ Ta = -20 °C to +65 °C

(-4 °F to +150 °F)

Note: When installed as a retrofit monitor for a 3300 System, hazardous area approval is valid only if the existing 3300 System has the same type of approval.

For further certification and approvals information please visit the following website:

www.ge-mcs.com/bently

Physical

Power Supply Module

Dimensions (Height x Width x Depth):

228 mm x 46 mm x 289 mm
(8.97 in x 1.82 in x 11.39 in).

Weight:

1.45 kg (3.20 lb.).

Rack Space Requirements

Power Supply Module:

1 full-height front slot, located on the left side of the rack.

Installation & Planning Information

Maximum Loading:

The maximum loading for the power supply is based on the transformer or DC input board located in the back of the rack (behind the Power Input Module).

Replacing a 3300/10 AC Supply

The 3300/10 AC transformer (79867-01) that remains in service after an Encore upgrade will support the 3500/23E TDI and up to 8 monitors in any combination of 3500/42E, /50E, /61E or /67E.

When a 3500/45E Position Monitor is in the rack then the maximum number of monitors in the rack (including /45E's) is de-rated to 7, of which no more than 4 may be 3500/45E Position Monitors.

Note: Upgraded Encore racks with a full 8 monitors or those with a full 7 monitors (including a 3500/45E) must be supplied with 300 ft/min air cooling in order for operation at +55°C or greater.

Replacing a 3300/12 AC Power Supply

The 3300/12 AC transformer (147262-01) that remains in service after an Encore upgrade will support the 3500/23E TDI and up to 10 monitors in any combination of 3500/42E, /50E, /61E or /67E but no more than 5 of the 10 can be 3500/45E Position Monitors

Replacing a 3300/14 or 3300/11 DC Power Supply

The 3300 DC power input board that remains in service after an Encore upgrade will support up to a maximum of 12 monitors in a rack of which no more than 6 may be 3500/45E Position Monitors.

Note: The Encore DC supply will support a full 14 Position rack as long as there are 6 or fewer 3500/45E Position Monitors.

B: Agency Approval Option

- 00** None
- 01** CSA/NRTL/C Class 1, Div 2

Note: For installation as a retrofit monitor for a 3300 System, Agency Approval Option B01 should be ordered only if the existing 3300 System has the same type of approvals. Installation of a retrofit monitor in a system without approvals will invalidate the approvals of the monitor.

Ordering Information

3500/15E-AXX-BXX

A: Power Supply Type

- 01** AC 110/230VAC
- 02** DC Low Voltage 24VDC
- 03** DC High Voltage 125VDC

Spares

285688-01

AC Power Supply Module

285689-01

Low Voltage DC Power Supply Module

285689-02

High Voltage DC Power Supply Module

287549-01

Power Supply Operations and Maintenance Manual

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