VESDA-E VEA UL Power Supplies



The VESDA-E VEA Power Supplies are capable of providing operating power for the VESDA-E VEA detector including battery backup. It provides 24 volt operating power to the VEA unit as well as battery charging function that supervises and maintains the standby batteries.

Installation

The VESDA-E VEA Power Supplies are designed to power the VESDA-E VEA Detector Base Unit plus up to two (2) VESDA-E VEA Detector StaX plus up to three (3) VESDA-E VEA Relay StaX. Depending on the model number they convert 120VAC or 230VAC input to 24VDC nominal output. These power supplies are intended for use in applications requiring UL and ULC for fire protection signalling.

The units must be installed in accordance with the National Electric Code (NEC), the National Fire Code (NFPA72), and all other applicable local codes necessary for compliance with the local authority having jurisdiction.

Space is provided in the VPS-VEA-115UL and VPS-VEA-230UL power supply cabinet for up to two 36AH batteries. For a larger standby capacity, use additional battery enclosures as per local electrical and fire codes.

Refer to Installation Instructions for VEA Power Supplies (Document 29843) for details installation instructions.

Fault Reporting

A Power Supply Fault indicator is provided via a dry relay contact (Form C), which changes state due to the following conditions:

- AC input loss
- Low AC input voltage (Brown-out)
- · Loss of battery voltage
- · A short circuit of the battery leads
- A short circuit of any of the DC power outputs

Features

- Input 120 VAC and 230 VAC
- Output: 27 VDC/2.8A Continuous, 27 VDC/5 A Alarm
- Filtered and electronically regulated output
- · AC fail supervision
- Low AC (brown-out) supervision
- Battery supervision
- Built-in charger for sealed lead acid or gel-type batteries
- Automatic switch over to standby battery when AC fails
- AC input LED indicator

Listings/ Approvals

- UL
- UL 1481 listed
- ULC-S527
- CSFM



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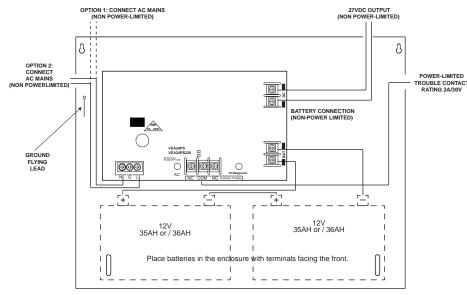
Power Supply Capacity & Recommended Battery Requirements

Battery requirements and recommendations for typical power supply loads		
VESDA-E VEA Configuration	Power Supply/ Alarm Load	24 hours of standby operation and 30 minutes of alarm
Base Configuration 1 x VEA-040-A00/A10 + 1 x VER-A40-040-STX	1A/1.8A	24V/35AH or 36AH
Add 1 x VEA-020/040-STX + 1 x VER-A40-040-STX to the Base Configuration	1.9A/3.4A	24V/70AH or 72AH
Add 2 x VEA-020/040-STX + 2 x VER-A40-040-STX to the Base Configuration	2.8A/5A	24V/105AH or 108AH

For use with the Listed VESDA-E VEA Detector Base Units and VESDA-E VEA Detector Stacks

Note 1: VEA power supply must be confirmed with a battery calculation compliant with local fire protection codes and standards.

Note 2: Above recommendations are based on standard battery sizes, to facilitate the calculation of exact back up battery size, refer to the Battery Calculator (Document 21062), available from Xtralis Partner Extranet (www.xtralis.com).



Keep power-limited wiring separate from non power-limited. Use minimum 0.25" spacing

Specifications

Components

The VPS-VEA-115 UL and VPS-VEA-230UL consist of two main components: the mounting enclosure and the main circuit board. It uses two backup batteries (supplied separately).

Note: The VESDA-E VEA Power Supply uses sealed acid, 12VDC, 35/36 Amp/hour batteries.

VPS-VEA-115UL - 120VAC/2.0A/60Hz VPS-VEA-230UL - 230VAC/1.0A/50Hz.

Output

27VDC/2.8A Continuous

27VDC/5A Alarm

Maximum charging current

Max. AMP/HOUR capacity battery for charging 108AH.

Dimensions (WHD)

438 mm x 330 mm x 142 mm (17.25 in. x 13 in. x 5.6 in.)

Weight

5.9Kg (13lbs) without batteries

Operating Temperature

Power supply ambient: 0 °C to 49 °C (32 °F to 120 °F)

Humidity

10 - 95%RH, non-condensing

Trouble Relay

Common trouble relay rated 2A @ 30VDC

(Form C: NO/NC)

During normal operation, the power supply Fault Reporting Relay is energized.

Cable Access

3/4" knockouts in various positions

Cable Termination

Screw terminal blocks

30-12 AWG

Ordering Information

P/N	Description	Requirements
VPS-VEA-115UL	Power Supply	Input voltage: 120VAC
VPS-VEA-230UL	Power Supply	Input voltage: 230VAC

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