

Redundant AC Power Module







LifeSafety Power, Inc. | PH 888.577.2898 | TechSupport@LifeSafetyPower.com

TABLE OF CONTENTS

Description	
Electrical Ratings2	
Regulatory Information	
Mounting the AC Helix Module	
AC Helix Module Overview3	
Connecting the AC Helix Module4	

DESCRIPTION

The AH1 and AH2 AC Helix modules allow connection of two independent AC sources to a power system, providing AC redundancy. In the event of loss of one AC source, the AC Helix module will automatically switch to the secondary AC power source, providing enhanced system uptime in mission-critical applications.

ELECTRICAL RATINGS

Parameter	Specification
Primary AC Source Voltage	100 - 240VAC
Secondary AC Source Voltage	100 - 240VAC
Primary AC Source Current	10A max
Secondary AC Source Current	10A max
AC Output Voltage	100 - 240VAC
AC Output Current	10A max
DC Supply Voltage	12 - 26VDC
DC Supply Current	100mA max
Operating Temperature	0 - 49C
Operating Humidity (non-condensing)	0 - 95%

REGULATORY INFORMATION

The equipment discussed within this manual has been tested to the following standards:

- UL294, UL603, UL1076
- ULC S318, ULC S319
- CSA C22.2 #205



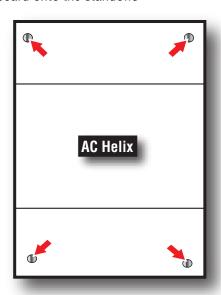
ORDERING

Part Number	Description
AH1	AC Helix Module (120V Calibration)
AH2	AC Helix Module (230V Calibration)

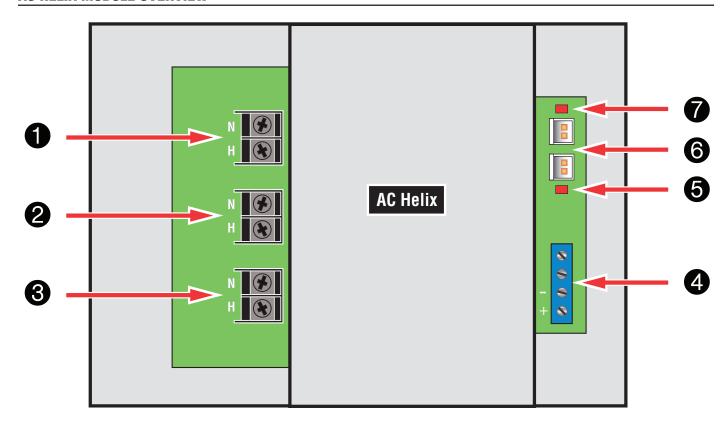
MOUNTING THE AC HELIX MODULE

Mounting of the board to an enclosure is via the four snap-in standoffs supplied.

- 1. Locate the appropriate mounting holes in the enclosure and snap the standoffs into the holes.
- 2. Align the board mounting holes with the standoffs (be sure the PC board is properly oriented) and snap the board onto the standoffs



AC HELIX MODULE OVERVIEW



Secondary AC Input

This is the secondary AC input for the AC Helix. If the primary AC source is compromised, the output will be supplied by the secondary input. The terminals are labeled with H and N for Hot and Neutral. A suitable ground connection must be made to the case of the AC Helix and the device being powered.

Primary AC Input

This is the primary AC input for the AC Helix. This input normally supplies the output of the AC Helix. If this input of compromised, the output will switch to the secondary input. The terminals are labeled with H and N for Hot and Neutral. A suitable ground connection must be made to the case of the AC Helix and the device being powered.

3 AC Output

This is the output of the AC Helix. This output should connect to the AC input of the device being powered. Note that this output voltage will match the voltage of the input being used. The terminals are labeled with H and N for Hot and Neutral. A suitable ground connection must be made to the case of the AC Helix and the device being powered.

4 DC Power Input Connection

The AC Helix requires DC power for proper operation, which is supplied to the + and - terminals of this connector. The voltage supplied must be between 12 and 26VDC. The S1 and S2 terminals are for future use and should be left disconnected.

6 Primary AC Indicator (RED)

This LED indicates the presence of AC power on the Primary AC Input. AC is present when this LED is lit.

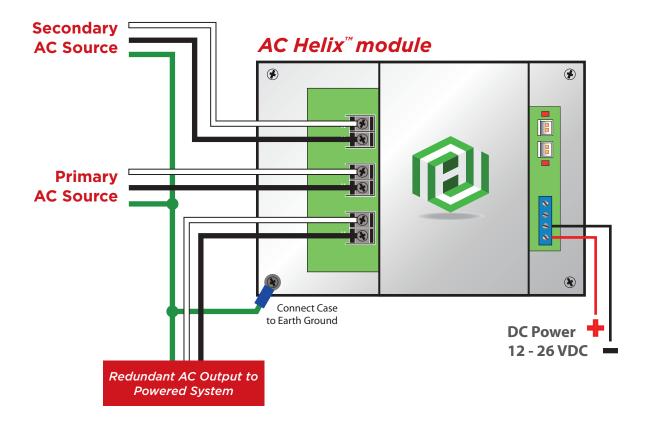
6 External AC Indicator Connections

These connectors are for external LEDs to indicate presence of the Primary (PRI) and Secondary (SEC) AC voltages. These external LEDs will follow the Primary and Secondary AC Indicators. See #5 and #7.

7 Secondary AC Indicator (RED)

This LED indicates the presence of AC power on the Secondary AC Input. AC is present when this LED is lit.

CONNECTING THE AC HELIX MODULE



P03-071 Rev A01 04/19

© 2019 LifeSafety Power, Inc. All rights reserved

LifeSafety Power Inc. 899 E. Park Avenue Libertyville, IL 60048 USA www.lifesafetypower.com Phone (888) 577-2898 info1@lifesafetypower.com

IMPORTANT

All information, including illustrations, is believed to be reliable. Users, however, should independently evaluate the suitability of each product for their particular application. LifeSafety Power makes no warranties as to the accuracy or completeness of the information, and disclaims any liability regarding its use. LifeSafety Power's only obligations are those in the LifeSafety Power Standard Terms and Conditions of Sale for this product, and in no case will LifeSafety Power or its distributors be liable for any incidental, indirect, or consequential damages arising from the sale, resale, use, or misuse of the product. Specifications are subject to change without notice. In addition, LifeSafety Power reserves the right to make changes—without notification to Buyer—to processing or materials that do not affect compliance with any applicable specification.