Baseboard Controller Module

ERM-FB

Overview

The Echoflex Baseboard Controller provides temperature control for electrical baseboard heaters or other electrical based heating systems. Using wireless technology to interface with the room's environment eliminates much of the wiring normally needed for this level of control.

The baseboard controller is ideally suited for retrofit applications where little to no control of the temperature may exist. Auto-setback mode is supported when used with an occupancy sensor, keycard switch or a window switch providing energy savings when the room is vacant or an exterior door/ window is left open.

Keycards and occupancy sensors provide feedback on the suite's occupancy state. Window switches can be used to monitor patio doors or windows. When the suite is vacant or has an open window, the baseboard controller will operate in a configurable setback mode. When in setback, the unit continues to operate but with reduced temperature set points.

Should the temperature signal be lost for any reason the controller will default to a configurable on/off cycle, reducing the potential for frozen pipes.

The baseboard controller can receive signals from several temperature sensors, providing a temperature averaging function and control of the space based on set-point parameters.

Wireless sensors and switches provide for quick installation resulting in less disruption for occupants, allowing facilities to start saving energy and money right away.

All Echoflex's wall switches and sensors use energy harvesting for power. These battery-free devices eliminate the maintenance burden of replacing and disposing of batteries.

Features

- Wireless electrical baseboard control
- Supports occupancy and window state set-back operation for energy savings
- Defaults to configurable on/off cycling in the event of loss of temperature signal
- Temperature averaging from multiple sensors
- Local user temperature set point interface support
- Reliable radio reception range of 24 m (80 ft) - commercial office spaces (typical), up to 100m (330 ft) line of sight
- Supports baseboard voltages of 120 or 208VAC
- Near-Cross switching technology for long relay life
- UL508 and CSA 22.2 No.14 listed
- Remote management and reporting for BEMS integration
- Monitors battery free keycard switches, occupancy sensors, and window switches
- Low-cost alternative to running wires around windows and through walls.
- Central command support for centralized control
- Supports commissioning via Simple Tap™ and Garibaldi software

Ordering Information

Description	902 MHz Model	902 MHz PN
Baseboard Controller Module 120 - 210 VAC	ERM-FBU	8189A1132-X-1

echoflex
an ETC Company

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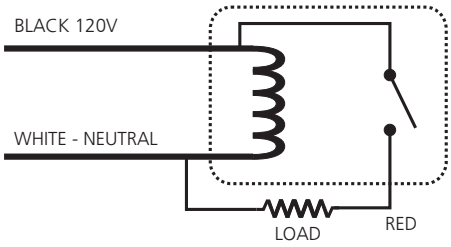
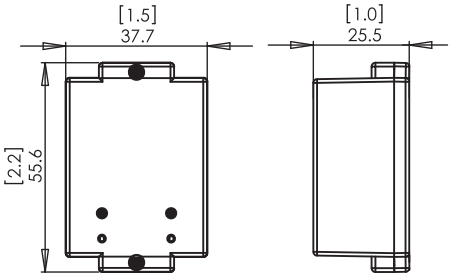
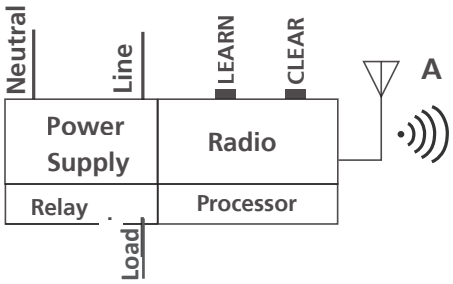
Wiring Diagram



Dimensional Diagram



Block Diagram



Equipment Profiles - Transmits

EEP: A5-11-02	Temperature Controller Output

Power Supply	120 - 210 VAC
Power Consumption	2.5 W max. full load
Outputs	N.O. Relay rating 15A@ 120 - 210 VAC 2 x LEDs, Learn (green) and Power(red)
Inputs	LEARN and CLEAR buttons for sensor assignment
Maximum Load Ratings	15A @ 120-210VAC

Communications

Radio Frequency	902 MHz
Antenna	Integrated whip
Transmission Range	24 m (80 ft) - commercial office spaces (typical), up to 100m (330 ft) line of sight

Mechanical Specifications

Operating Temperature	-10 °C to 40 °C (14 °F to 104 °F) ambient
Relative Humidity	5% to 95% RH (non-condensing)
Weight	60 g (2.2 oz)
Dimensions	56 x 38 x 26 mm (2.2 x 1.5 x 1.0")

Agency Listing & Compliance

Safety

ETL Listed Component

Conforms to UL Standard 508

Certified to CAN/CSA Std. C22.2 No.14

Radio Frequency

FCC Part 15.231 - Remote Control Transmitter

IC RSS-210

Specifications are subject to change without notification. | Simple Tap is a trademarks of Echoflex Solutions, Inc.

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