LX-HPUL-1

LX Series Heat Pump Unit Controller

Description

The LX Series application-specific controller family includes the Fan Coil Unit (FCUL), Rooftop Unit (RTUL), Heat Pump Unit (HPUL), and Unit Ventilator (UVL) controllers.

The LX Series application-specific controllers can be configured in FX Workbench with easy-to-use wizards. The wizards are designed to simplify complex programming and sequencing methods by prompting the user for the necessary configuration data. The controllers automatically select the operation sequence from the wizard input and output configuration and from the network variables.

The LX Series application-specific controller family is built to meet rigorous quality standards. The complete family of controllers is designed for use with any LONWORKS® network open and interoperable system.

Features

- LONWORKS network compliant and certified - complies with LONMARK® Interoperability guidelines Version 3.4. The controllers are based on Echelon® LONWORKS technology for peer-to-peer communication between controllers. Each controller qualifies for the LONMARK Functional Profile for each application.
- ability to link spare Input/Output (I/O) points to other controllers on the network; stand-alone unit or part of a network system - provides great network flexibility and interaction.
- variable speed fan controlling - offers greater control options.

Repair Information

If the LX Series Heat Pump Unit controller fails to operate within its specifications, replace the unit. For a replacement, contact the nearest Johnson Controls® representative.

LX Series Heat Pump Unit Controller (LX-HPUL-1)

Selection Chart

Code Number	Description
LX-HPUL-1	Heat Pump Unit Controller: 6 Universal Inputs, 5 Triac Outputs, 2 Analog Outputs

Technical Specifications

Product	LX Series Heat Pump Unit Controller (LX-HPUL-1)
Power	Voltage: 24 VAC, ± 15%, 50/60HZ or 24 VAC (must be powered by a 24 VAC, Class 2 power supply) Typical Consumption: 6 VA Maximum Consumption: 15 VA Protection: 1.35 A Auto-Reset Fuse
Environmental	Operating Temperature: 0°C to 70°C, 32°F to 158°F Relative Humidity: 0 to 90% noncondensing	Storage Temperature: -20°C to 70°C, -4°F to 158°F
General	Processor: Neuron® 3150®; 8 bit; 10MHZ Memory: Flash 64K (APB application and configuration properties) Communication: LonTalk® Protocol Media Channel: TP/FT-10, 78 Kbps Transceiver: Echelon® Free Topology Transceiver (FT-X1)	Enclosure: Material: ABS PA-765A Dimensions: 144.8 x 119.4 x 50.8 mm (5.7 x 4.7 x 50.8 in.) Shipping Weight: 0.77 lb (0.35 kg)

Inputs	Number: 6 Universal Software Configurable
	 Digital: Dry Contact
	 Voltage: 0 to 10 VDC, Accuracy ±0.5% Current: 4-20 mA with 500 ohm external resistor
	 Input Resolution: 12-bit analog/digital converter
		Resistor: Thermistor Type 2, Type 3, 10k ohm
		   Range -40 to 125°C; -40 to 257°F
		   Resolution: 0.1°C; 0.18°F
		   Min/Max linear configuration
		   Potentiometer:
		 Up to 16 point translation table configuration

Outputs	Number: 7
	   5 Digital: Triac 1.0 A at 24 VAC External Power Supply
	   2 Tri-mode Analog: 0-10 VDC (linear), PWM or digital 0-12 VDC
	     60 mA maximum at 12 VDC (60°C; 140°F)
	     Maximum load 200 ohm
	     Auto reset fuse: 60 mA at 60°C; 140°F; 100 mA at 20°C; 68°F
	 Analog Output Resolution: 8-bit digital/analog converter	