



DESCRIPTION

In response to strong customer interest and an increasing number of cooling applications requiring multiple air conditioners on a single cabinet, Kooltronic has developed the KLLC100 Lead-Lag Controller, an option for use with all Kooltronic air conditioners equipped with a 24V relay and external connection (option "D").

This true dual-stage device allows users to control the operation of up to two air conditioners based on either temperature or run-time. For users with fluctuating heat loads, the Lead-Lag Controller will bring the second air conditioner on-line as the heat load increases, and shuts it down as the demand for additional cooling diminishes. It can also be used to distribute the run-time over multiple units, balancing the service life of the air conditioners.

Applications using more than one air conditioner on a cabinet, either for extreme heat load or as a redundant system are becoming more prevalent. Adding a Lead-Lag Controller is an effective solution for users who need to maintain a critical cabinet temperature without interruption or failure.

The Controller features an LED display to indicate which air conditioner is on the run cycle and whether a unit is in the cooling or heating mode, if so equipped. There is also an easy-to-read display panel that provides options to tailor the control of the air conditioners to suit any application. Other standard features include a built-in thermostat with adjustable set-point, deadband and sequencer and a universal mounting plate for simple installation within the cabinet. The Lead-Lag Controller can also be used with Kooltronic's line of Heat Exchangers.

APPROXIMATE WEIGHT

2.2 lbs. [1.0 kg]

SPECIFICATIONS

ELECTRICAL

INPUT

Nominal Voltage: 18-30 VAC
 Frequency: 50/60Hz

OUTPUT

Type: Triac
 Number: Four (4)
 Rating: 2 amps per output @ nom. 24 VAC

OPERATIONAL

HEAT/COOL STAGING

First Stage Heat (H1): deadband setting above thermostat setpoint (C1)
 Second State Heat (H2): 2°F above H1
 First Stage Cool (C1): equal to thermostat setpoint
 Second Stage Cool (C2): 2°F below C1

DEADBAND

Adjustable: 2° to 20°F

SHORT-CYCLE PROTECTION

Stage 1: Three (3) minutes
 State 2: Four (4) minutes

SETPOINT

Adjustable: 55 to 90°F @ C1

ADVANCE SEQUENCER

Pin selectable: Alternates every 1, 3, 7, 15 or 28 days, or fixed
 Manual ADVANCE pushbutton initializes sequence record

MODE MEMORY

On power loss, system 'remembers' which previous mode it was in

TEST MODES

Thermistor bypass calibration mode jumper
 Accelerated test mode jumper

DISPLAY LEDs

Green LEDs: call for COOL (C1 & C2)
 Red LEDs: call for HEAT (H1 & H2)

STANDARD FEATURES

True Dual Stage control

Regulates 1 or 2 air conditioners

Controls units based on temperature and run-time

Second unit can heat or cool only when necessary

Built-in thermostat (adjustable setpoint, deadband and sequencer)

Compact housing

Memory on power loss

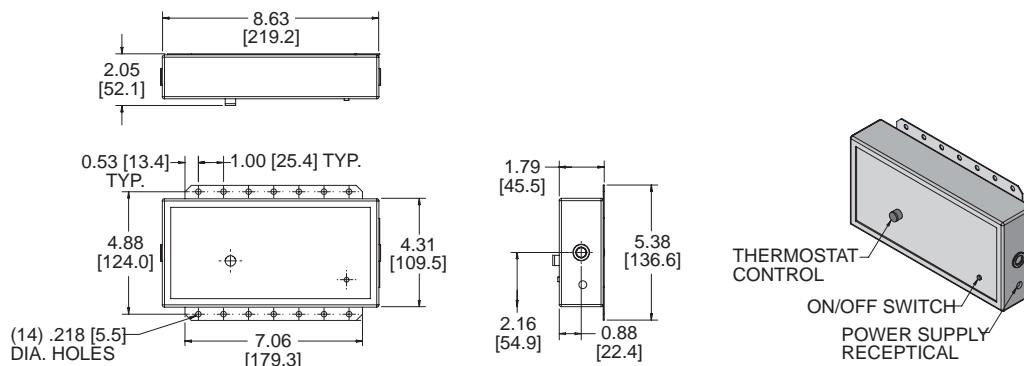
Enables load balancing and redundancy

Manages heating and cooling of both units

Provides Short-Cycle protection

Includes status LEDs

DRAWINGS AND DIMENSIONS inches [metric]



HOW TO ORDER

Specify model number.

Dimensions, inches [mm], are for reference only and subject to change.

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