ZigBee Load Control Receiver LCR-6200Z

The LCR-6200Z Load Control Receiver employs the utilities' AMI system with ZigBee modules to reliably and securely control customer loads. The LCR-6200Z is designed specifically for air conditioning Demand Response programs.

Overview

The LCR-6200Z is a pre-wired, single relay, small footprint solution designed in collaboration with installation contractors to minimize total deployment costs. The LCR-6200Z is an advanced load control switch. TrueCycle for maximizing demand reductions and customer comfort. Data logging functionality allows for measurement and verification.

Features

The LCR-6200Z includes the following features:

- Available with TrueCycle for the optimization of air conditioner cycling
- Data logging provides compressor runtime and shedtime
- Remotely upgradeable firmware
- Installation does **not** require any special test equipment or programming

Load Control Commands

The LCR 6200Z switch is used to control remote electric loads and is activated by commands sent through the ZigBee communication module. The LCR 6200Z load control switch is available with one low current relay, a small box enlosure.







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Intelligent Cycling

TrueCycle allows intelligent air conditioner cycling control for homes with oversized air condition units.

TrueCycle adjusts to the home's hourly runtime profile, balancing demand reduction and customer comfort on a home-by-home, hourby-hour basis.

Fail-Safe Operation

The condition of the receiver is continually monitored. If an abnormality is detected, the microprocessor resets and the loads are returned to their normal state.

LED Indicators and Operation

The LCR6200Z switch LED indicator guides are as follows:

Load status - RED

- LED off: load is not being controlled; appliance can run
- LED on: load is being controlled; appliance cannot run

Network status - YELLOW

- LED off: No ZigBee network
- LED blinking: Scanning for ZigBee network
- LED on: ZigBee radio is connected to ZigBee network

Opt out status - GREEN

- LED off: switch is out of service or power disconnected
- LED on: switch is in service and ready to receive control messages

IN/OUT of Service Commands

Receivers may be deactivated. This feature improves customer service by reducing customer complaints and saves significant dollars by minimizing service calls.

Data Logging

The data log stores compressor runtime and compressor shed time. This information can be downloaded using Eaton field tools.

Cold Load Pickup

To minimize feeder in-rush following power outages, the LCR-6200Z includes a cold load pickup feature that can be individually enabled or disabled for each load.

Necessary Components

These components are necessary for load control communications:

- Utility Demand Response Management System (DRMS)
- Utility ZigBee meter
- LCR-6200Z

FC IC Utility ZigBee meter

Utility DRMS

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Specifications

Communications

ZigBee communication module

Operating requirements

Power Source: 120 to 240 VAC at 50/60 Hz Temperature: -40°F to +140°F (-40°C to +60°C) Humidity:0% to 95% non-condensing

Relay control

Low power: Form C (SPDT) non-latching Maximum rating: Low current relay = 2 A at 120 VAC

Housing

NEMA 4X rated, UV-stabilized polycarbonate plastic. Rain-tight per UL916.

Box dimensions (including mounting tabs) 5.95 in. H x 9.25 in. W x 3.23 in. D (15.11 cm H x 23.50 cm W x 8.20 cm D)

Distance between the mounting holes 8.25 inches (20.96 cm)

FCC and IC identification numbers

FCC ID: Y86-62020X31 IC ID: 6766C-62020X31

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