

LC-ZEC300-0 Zone Damper and BYP200 Bypass Damper Controllers

Description

The CCS Zone Damper (ZEC300) and Bypass Damper (BYP200) Controllers are components of the Commercial Comfort System (CCS) equipment family. The Zone and Bypass Damper Controllers run a pre-engineered HVAC zoning application and provide the inputs and outputs required for this application. These controllers ship factory-configured, for field installation, on a CCS zone or bypass damper assembly.

The Zone and Bypass Damper Controllers include advanced operating modes and multiple features that ensure occupant comfort. A carbon dioxide (CO₂) demand controlled ventilation (DCV) mode, in the Zone Damper, regulates CO₂ levels within a zone by allowing fresh air into the zone during occupied times. Occupancy sensing capability enables the controller to switch from occupied mode to standby mode based upon the presence of local activity. Standby mode maximizes energy savings by using setpoints that are higher and lower than occupied mode setpoints.

Refer to the *Commercial Comfort System (CCS) Operation Overview Technical Bulletin (LIT-12011617)* for important product application information.



LC-ZEC300-0 Zone Damper and LC-BYP200-0 Bypass Damper Controllers

Selection Chart

Product Code Number	Description
LC-ZEC300-0	Field-Installed, Zone Damper Controller
LC-BYP200-0	Field-Installed, Bypass Damper Controller

Repair Information

If the ZEC300 or BYP200 controller fails to operate within its specifications, replace the unit. For a replacement unit, contact the nearest Johnson Controls® representative.

Technical Specifications

LC-ZEC300-0 and LC-BYP200-0 Controllers	
Product Code Number	LC-ZEC300-0: Field Installed, Zone Damper Controller LC-BYP200-0: Field Installed Bypass Damper Controller
Power Supply Requirement	24 VAC (nominal, 20 VAC minimum/30 VAC maximum), 50 to 60 Hz, Class 2 power supply (North America) or Safety Extra-Low Voltage (SELV) (Europe)
Power Consumption	10 VA (not including external load) VA ratings do not include any power supplied to the peripheral devices connected to Binary Outputs (BOs) or Configurable Outputs (COs), which can consume up to 12 VA for each BO or CO, for a possible total consumption of an additional 60 VA (maximum).
Ambient Conditions	Ambient Operating Conditions: 0 to 50°C (32 to 122°F) Ambient Storage Conditions: -40 to 70°C (-40 to 158°F)
Processor	RX630 32-bit Renesas® microcontroller
Memory	1 MB flash memory and 512 KB Random Access Memory (RAM)
Input and Output Capabilities	1 - Universal Input: Defined as 0-10 VDC, 4-20 mA, 0-600k Ohm, or Binary Dry Contact 3 - Binary Outputs: Defined as 24 VAC Triac (internal power source) 2 - Configurable Outputs: Defined as 0-10 VDC or 24 VAC Triac BO
Analog Input/Analog Output Accuracy	Analog Input: 15-bit resolution on UIs Analog Output: 0-10 VDC ± 200 mV
Mounting	Mounts to damper shaft using single set screw and to duct with single mounting screw
Actuator Rating	4 N•m (35 lb•in) minimum shaft length = 44 (1-3/4 in)
Dimensions (Height x Width x Depth)	165 x 125 x 73 mm (6.5 x 4.92 x 2.9 in.)
Differential Pressure Transducer (BYP200 only)	Range: 1.5 in. to 1.5 in. W.C. Performance Characteristics: Accuracy ±1.3% Full Span Maximum (± .039 in. W.C.) Typical accuracy at zero (null) pressure is ±.02% full scale
Shipping Weight	0.65 kg (1.45 lb)
Compliance	United States: UL Listed, File E107041, CCN PAZX, UL 916, Energy Management Equipment FCC Compliant to CFR47, Part 15, Subpart B, Class A. Canada UL Listed, File E107041, CCN PAZX7, CAN/CSA C22.2 No. 205, Signal Equipment Industry Canada Compliant, ICES-003