

Red5 Series

Red5-EDGE-V100

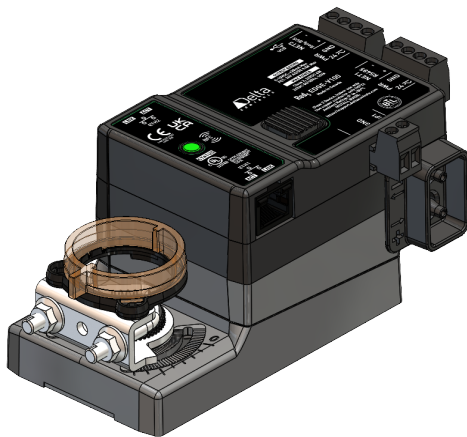
Description

The Red5-EDGE-V100 is a fully integrated, programmable, IoT-based VAV controller that communicates using BACnet/IP, BACnet over Ethernet, or BACnet/SC. It is a native BACnet controller that supports an Ethernet daisy chain with bypass technology, with additional support for Red5BUS expansion. Using the Proviso™ app, you can adjust network settings to streamline the connection and configuration process.

Application

The Red5-EDGE-V100 is a BACnet Building Controller specifically designed for VAV applications. It includes an actuator and differential pressure sensor with integrated housing.

The fully programmable, IoT-based Red5-EDGE-V100 allows GCL+ programs and BACnet objects to be tailored to any VAV application.



Features

- ▶ Native BACnet firmware
- ▶ BACnet/IP, BACnet over Ethernet, BACnet/SC
- ▶ Supports RS-485 subLAN of LINKnet smart network sensors and remote I/O expansion modules
- ▶ Direct-mount housing integrates controller, Belimo actuator, and airflow sensor into a single package for easy, cost effective installation
- ▶ Ethernet daisy chain with bypass
- ▶ Built-in, selectable, editable Guideline 36 databases
- ▶ Network configuration via NFC
- ▶ Fully programmable in GCL+
- ▶ Zero drift differential pressure sensor
- ▶ LED indicator and SCAN status
- ▶ Support for up to 5 Modbus RTU devices
- ▶ USB port
- ▶ Anti-rotation bracket included

Specifications

BACnet Device Profile

BACnet Building Controller (B-BC)

External Inputs

Single 10K input only

Internal Inputs

1 actuator position feedback standard
1 airflow input, differential pressure, 0-2 inH₂O (0-500 Pa)

Belimo Actuator

Integrated Belimo actuator with analog positioning control
5 N·m (45 in·lb) torque

Device Addressing

Software addressed

Connectors

Removable screw-type terminal connectors

Wiring Class

NEC Class 2 / SELV

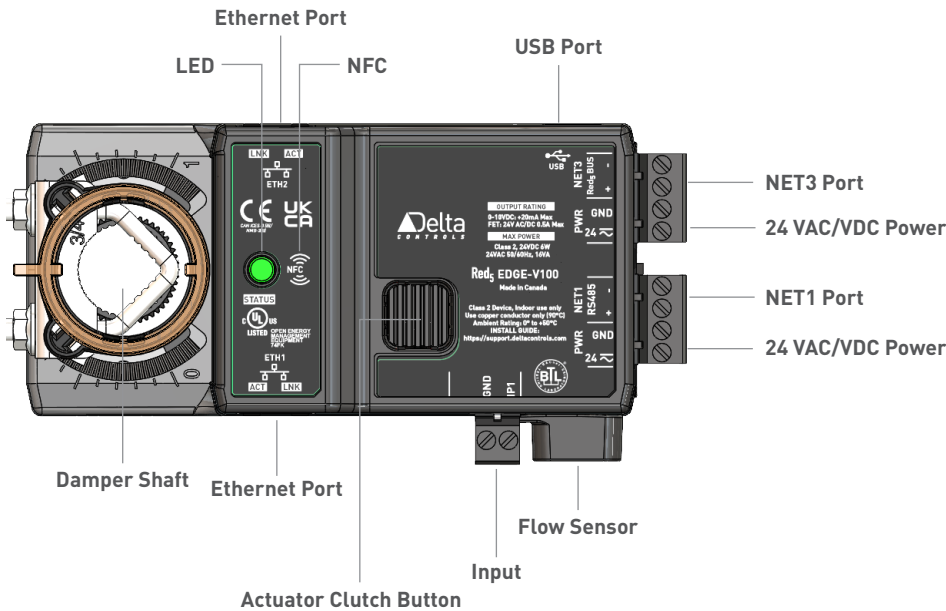
Tubing

Flow sensor tubing must be 4 mm (5/32 in.) inside diameter

Updated December 2024

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Specifications (Continued)

Power

24 VAC, 50/60 Hz @ 16 VA max, 9 VA typ
24 VDC, 6 W max, 3 W typ

Technology

32-bit dual-core Arm® Cortex®-A7
256 MB RAM
4 GB flash memory
24.4 KB GCL+ PG size
20 MB database space

Communications Ports

2 Ethernet (10/100-BaseT) ports with failover bypass
BACnet/IP, BACnet over Ethernet, BACnet/SC

NET1 (RS-485):

LINKnet up to 76800 bps, max 12 LINKnet devices total with no more than 4 DFM-4xx devices
BACnet MS/TP: max 4 devices (1 port only) up to 76800 bps, max
Modbus RTU max 5 devices

NET3 (Red5BUS):

Max 4 remote I/O modules (requires Red5-EXPAND-04); max 2 O3 Hubs

1 USB port

NFC

Ambient

0°C to 50°C (32°F to 122°F)
10% to 90% RH (non-condensing)

Dimensions

158 × 77 × 68 mm (6.22 × 3.03 × 2.68 in.)

Weight

415 g (0.91 lb) excluding anti-rotation bracket

Compliance

CE
FCC

Ordering

Order the Red5-EDGE-V100 application controller according to the following product number:

322148	Programmable, IoT-based VAV controller, Belimo actuator, 1 airflow input, 1 input
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Accessories

Proviso™ App	Provisioning tool for setting up and configuring devices. Download the app from Google Play (Android) or the App Store (iOS).
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Subject to change without notice.