

# enteliZONE®

## eZ-440R4-230

### Description

The eZ-440R4-230 is a native BACnet® controller optimized for zone terminal unit applications available in both configurable and fully programmable versions. The controller is line-powered with a built-in 24 VAC inverter providing field power for low voltage peripheral devices such as sensors and valves. Line voltage rated relay outputs allow direct switching of line loads, such as fan motors.

The eZ-440R4-230 communicates using BACnet MS/TP on its RS-485 main LAN port. It also has a RS-485 subLAN port for the optional addition of an enteliZONE or a BACstat® smart network sensor.



### Application

The combination of line-rated relays, universal low voltage inputs and outputs ensures the eZ-440R4-230 has the I/O flexibility to cover a wide range of terminal unit applications and configurations.

The eZ-440R4-230 includes built-in fan coil algorithm that is easy to configure for typical applications. The eZ-440R4-230 is a fully programmable model that allows you to either create your own completely custom zone programs or modify the built-in algorithm's behavior.

### Features

- ▶ Line voltage rated relays allows direct switching of fan motor loads
- ▶ Universal line power input with built-in 24 VAC inverter removes need for local control transformer
- ▶ Local scheduling, trending, and alarming support
- ▶ Built-in configurable algorithms for quick setup and commissioning
- ▶ Optional programmable feature allows customization for non-standard sequences or repurposing spare I/O
- ▶ Universal outputs provide flexibility for any combination of analog, binary, or floating output stages
- ▶ Firmware upgrade and database load / save over the network
- ▶ RS-485 subLAN supports up to 4 DNS or eZNS LINKnet network sensors

### Specifications

#### BACnet Device Profile

BACnet Application Specific Controller (B-ASC)

#### Inputs

4 Universal Inputs (12-bit), software configurable for:

- 0-5 VDC
- 0-10 VDC
- 10 kΩ Thermistor
- Dry Contact (using 10 kΩ Thermistor jumper setting)

#### Outputs

3 relays, jumper-selectable for 3-speed fan interlocked or independent relay control

- 250 VAC: 5 A General Purpose
- 120 VAC: 4.4 FLA / 26.4 LRA
- 240 VAC: 2.2 FLA / 13.2 LRA
- 277 VAC: 1.8 FLA / 10.8 LRA

1 SPST NO Auxiliary Relay  
277 VAC, 10 A (resistive)

4 Universal Outputs, software configurable for:

- Analog 0-10 VDC @ 5 mA max
- 24 VAC TRIAC @ 9 VA max (total for Power out and all TRIACs)

#### Mounting

35 mm DIN rail or screw mount

#### Device Addressing

Set via DIP switches or software setup

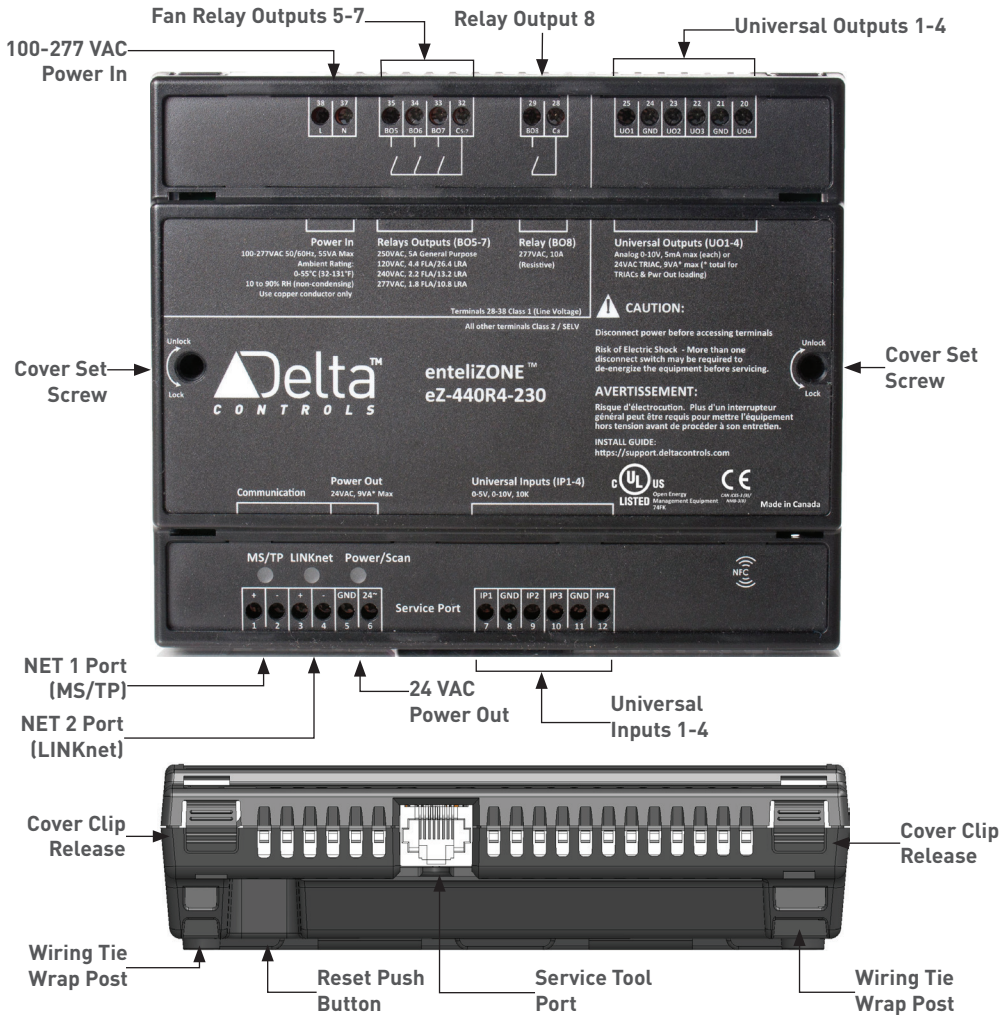
#### Connectors

Screw-type terminal connectors on baseplate  
Terminals 28-38 Class 1  
All other terminals Class 2 / SELV

#### Wiring Class

NEC Class 1 (Relay and power terminals 28-38)  
NEC Class 2 (All other terminals)

## eZ-440R4-230: Board Layout Diagram



### Specifications (Continued)

**Power In**  
100-277 VAC, 50/60 Hz @ 55 VA max

**Power Out**  
24 VAC @ 9 VA max (total for Power out and TRIAC output loading)

**Technology**  
ARM Cortex M3 CPU

**Communication Ports**  
Main LAN (NET1)  
BACnet MS/TP @ 38400 or 76800 bps (default)

SubLAN (NET2)  
Delta LINKnet @ 76800 bps (max 4 DNS or eZNS network sensors on LINKnet)

Near Field Communication (NFC) tag

**Ambient**  
32° to 131°F [0° to 55°C]  
10 to 90% RH (non-condensing)

**Dimensions**  
5.9 x 4.9 x 1.6 in. (15.0 x 12.5 x 4.0 cm)

**Weight**  
0.730 lb (331 g)

**Enclosure Protection Rating**  
IP30

**Compliance**  
CE  
FCC

**Listings**  
C-UL Listed  
UL 916 Listed  
UL 61010 Listed  
BTL Listed

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Published July 2016

Subject to change without notice.

### Ordering

Order according to the following product numbers:

eZ-440R4-230	enteliZONE Configurable Controller—100-277 VAC input power, 24 VAC inverter, 4 universal inputs, 4 universal outputs and 4 relay outputs
eZP-440R4-230	enteliZONE Programmable Controller—100-277 VAC input power, 24 VAC inverter, 4 universal inputs, 4 universal outputs and 4 relay outputs

### Accessories

eZ-TRM-CVR	enteliZONE terminal cover
eZNS-T100	enteliZONE Network Sensor with multiple display, button and input sensor options