



Fan Coil Controller: eZFC-424R4-24

Description

The eZFC-424R4-24 is a native BACnet® configurable controller optimized for fan coil applications. The eZFC features line voltage relays for direct switching of fan motor loads eliminating the need for external relays.

The eZFC 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 a BACstat smart network sensor.



Application

The eZFC-424R4 covers a wide range of fan coil configurations including multi-speed fan control, 2 pipe or 4 pipe systems with analog, tri-state, binary or thermal valve actuator(s).

The eZFC-424R4 comes pre-loaded with a simple to configure factory algorithm.

Features

- ▶ Native BACnet firmware allows easy integration into any BACnet system
- ▶ Local scheduling, trending and alarming support
- ▶ Easy to configure factory algorithm covering common fan coil configurations
- ▶ 3 interlocked line voltage relays for direct control of multi-speed fans plus 1 line voltage auxiliary relay
- ▶ 4 TRIAC outputs for tri-state, binary or thermal valve actuation
- ▶ 2 Analog outputs for analog valve actuation
- ▶ Service port for convenient field access
- ▶ Firmware upgrade and database load/save over the network
- ▶ Screw or DIN rail mountable

Specifications

BACnet Device Profile

BACnet Application Specific Controller (B-ASC)

Inputs

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

- 0-5VDC
- 0-10VDC
- 10 K Ω Thermistor
- Dry Contact (using 10K setting)

Outputs

3 interlocked relays for fan speed control

- 120VAC: 5.8 FLA / 34.8 LRA
- 240VAC: 2.9FLA / 17.4 LRA
- 277VAC: 2.4 FLA / 14.4 LRA

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

4 TRIAC outputs
24VAC, 0.5A max (each)
(Switching external power)

2 Analog outputs
0-10VDC @ 20mA (each)

Technology

ARM Cortex M3 CPU

Communication Ports

BACnet MS/TP RS-485 Main LAN @ 38400 or 76800 bps (default).

RS-485 Sub Lan:
LINKnet @ 76800 bps (for addition of BACstat smart network sensor)

Device Addressing

Set via DIP switch, or software

eZFC-424R4-24: Board Layout Diagram



Specifications (Continued)

Connectors

Screw-type terminal connectors on baseplate
Relay Terminals 28-35 Class 1
All other Terminals Class 2

Wiring Class

NEC Class 1 (relay terminals 28-35)
NEC Class 2 (all other terminals)

Power

24VAC, 50/60Hz
100VA (15VA excluding power out loading.)

Ambient

0° to 55°C (32° to 131°C)
10—95% RH (non-condensing)

Dimensions

15.0 x 12.5 x 4.0 cm (5.9 x 4.9 x 1.6")

Mounting

35mm DIN rail or screw mount
Enclosure Protection Rating
IP30

Compliance

CE-EMC Directive 89/336/EEC
FCC Class B

Listings

C-UL
UL 916

Ordering

Order according to the following product numbers:

eZFC-424R4-24	enteliZONE Configurable Fan Coil Controller—24VAC power, 4x UI, 2x AO, 4x TRIACs & 4x relay outputs
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Accessories

eZ-TRM-CVR	enteliZONE Terminal Covers
DNS-24L-FAN	BACstat network sensor with temp, LCD display, pushbutton interface, and fan button option
CON-768BT	Bluetooth wireless service tool

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