

Zone / Room Temperature Controllers



DB-EZN

DESCRIPTION

Electronic heating and cooling room thermostat with adjustable dead band settings.

APPLICATION

Control and monitor room temperature of heating, ventilation, and air conditioning equipment.



FEATURES

- Heating and Cooling outputs
- Two SPDT relays
- LED status indicators for heating/cooling
- Adjustable dead band
- Executive room housing

certified
ISO 9001

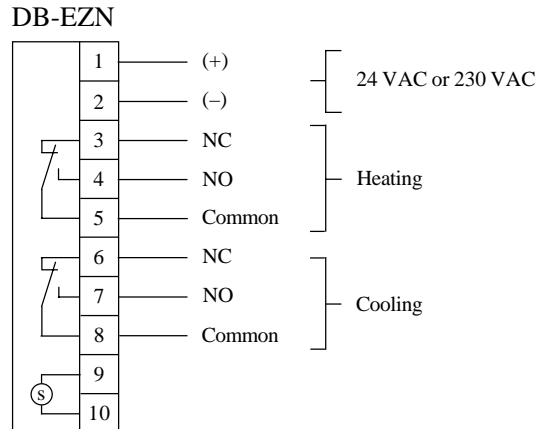
SPECIFICATIONS

Power supply	24 VAC, +/- 10 %, 50 to 60 Hz 230 VAC, +/- 13 %, 50 to 60 Hz
Power consumption	1 VA
Type of operation	Two-position control, heating and cooling stage
Outputs	(2) relays SPDT, 230 VAC, 4 (1) A
Relay differential switching	0.9°F (0.5°K), fixed
Operating status LED display	(2), heating = red, and cooling = green
Dead band	0.9°F to 10.8°F (0.5°K to 6.0°K), adjustable
Control range	43°F to 86°F (6°C to 30°C)
Setpoint adjustment	External dial knob
Sensing element	PTC 2000 ohm, built-in
Permissible ambient temperature range	
- Working	32°F to 104°F (0°C to 40°C)
- Storage	32°F to 104°F (0°C to 40°C)
Permissible ambient humidity range	10 to 90 % RH, non-condensing
Wire	
- Connection	Screw type for lead wire
- Size	Maximum 15 AWG (1.5 mm ²)
Housing	
- Material	ABS, fire retardant
- Color	White
- Protection	NEMA 1 (IP 30)
- Dimensions	4.5 x 2.8 x 1.4 x in. (115 x 70 x 35 mm)
Installation	Wall mounted
Shipping weight	0.33 lb (0.15 kg)

Part Numbers

24 VAC, °F scale, built-in sensor DB-EZN/24-US

WIRING DIAGRAM



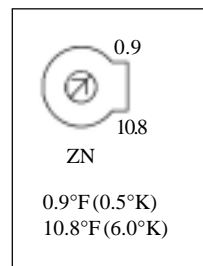
ADJUSTMENT OF DEAD BAND

Dead band

Adjust the internal ZN pot to the desired dead band span.

To verify the span:

Measure the actual room temperature (Tactual). Put external setpoint dial knob into position of Tactual. Both operating heating/cooling status LEDs shall be off. Move setpoint dial knob equally in either direction until LEDs have switched on. This differential (dead band span) is readable on the setpoint knob scale.



Adj. Pot on PC Board

ZN = Zone Neutral / Dead Band
 0.9°F to 10.8°F (0.5°K to 6.0°K)