



GAS & SPECIALTY SENSORS

CARBON DIOXIDE SENSORS

KCD SERIES

DESCRIPTION

The **Kele KCD Series** was designed to offer an economical, reliable, non-dispersive infrared carbon dioxide sensor. It measures environmental carbon dioxide levels for use in demand-controlled ventilation, air-quality monitoring, and other HVAC applications in accordance with ASHRAE standards. Voltage or milliamp analog output and convenient terminals on the wall mount make installation both simple and trouble-free. The analog output is available in 0-10 VDC or 4-20 mA, over the industry standard 0-2000 ppm CO₂ range. Also has 1000 ohm platinum 385 curve or 10K ohm Either Type II or III sensor options available.



Wall Mount

Duct Mount

FEATURES

- 24 VAC/VDC power
- 0-10 VDC or 4-20 mA output (0-5 VDC on units with temperature option)
- 0-2000 ppm CO₂ range
- Wall-mount and duct versions
- Reverse polarity protected
- Simple push-button calibration
- Factory calibrated
- Temperature option

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SPECIFICATIONS

Supply Voltage	18-28 VAC @ 8 VA, 50/60 Hz, reverse polarity protection or 18-30 VDC @ 330 mA	Temperature	
Accuracy	±3% of reading or ±40 ppm	Thermistor	10,000Ω Type II & III
Signal Output	0-10V (10k min.) or 4-20 mA (600Ω max) (0-5V on Duct or Wall w/ Temp only)	RTD	1,000Ω Platinum 385 curve
Repeatability	±20 ppm	Operating Temperature	31° to 122°F (0° to 50°C)
Measurement Range	0-2000 ppm CO ₂	Operating Humidity	0% to 99% RH (noncondensing)
Sensing Technology	Non-dispersive IR (NDIR)	Dimensions	
Calibration	Push button @ 2000 ppm	Wall	4.5"H x 2.8"W x 1.0"D (11.4 x 7.3 x 2.54 cm)
Calibration Interval	5 years	Duct	4.5"H x 2.8"W x 6.9"D (11.4 x 7.3 x 17.5 cm)
Life Expectancy	10 years typical	Duct probe	1.7" (4.3 cm) diameter. 6.25" (15.9 cm) long
Visual Indication	Green < 1000 ppm, Yellow > 1000 ppm, Red > 2000 ppm	Weight	
Warm Up Time	3 minutes	Wall	0.25 lb (0.11 Kg)
Response Time	<1 minute	Duct	0.5 lb (0.23 Kg)
		Warranty	1 year

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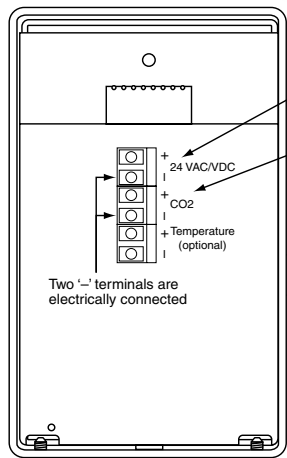
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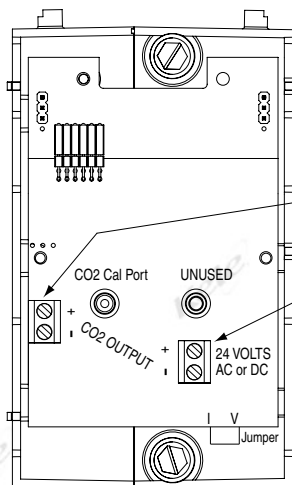
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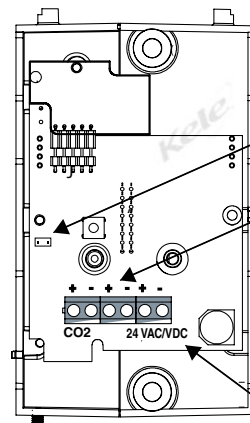
WIRING



Wall Mount



Duct Mount - Without Temp



Duct Mount - With Temp

* Note: On duct units with temperature options, a jumper is provided for 0-5 VDC CO2 output selection.

ORDERING INFORMATION

MODEL	DESCRIPTION
KCD	CO2 sensor
MOUNTING	
W	Wall mount
D	Duct mount
ANALOG OUTPUT	
V	0-10 VDC*
A	4-20 mA
T85	1kΩ 385 curve RTD
T24	10kΩ Type II thermistor
T3	10kΩ Type III thermistor

KCD - W - V - T3 Example: KCD-W-V-T3 Wall-mount CO2 sensor with 0-10 VDC output

* Note: On duct or wall units with temperature options, a jumper is provided for 0-5 VDC CO2 output selection.

ACCESSORIES

- 691-K0A** Control transformer, 120:24 VAC, 40 VA, Class 2
- DCP-1.5-W** Power supply, 24 VAC IN to 24 VDC OUT
- DCPA-1.2** Power supply, 120 VAC In to 24 VAC/24 VDC Out
- GAS-CO2-2000** 2000 ppm carbon dioxide (CO2) in nitrogen (N2), 17L
- UCK-1** Universal calibration kit for non-corrosive gases (N2, CO2, CH4, H2, O2, CO, and refrigerants)