



DESCRIPTION

The **Kele Model CD-A** represents a new level of economy in reliable non-dispersive infrared carbon dioxide sensors. It measures environmental carbon dioxide levels for use in demand-controlled ventilation, air-quality monitoring, and other HVAC applications in accordance with ASHRAE standards. Fully isolated analog outputs and a convenient center wiring terminal make installation both simple and trouble-free. The analog output is jumper-selectable, 4-20 mA or 0-10 VDC, over the industry standard 0-2000 ppm CO₂ range. Models are also available with an optional LCD display and/or control relay with adjustable setpoint.

FEATURES

- 24 VAC/VDC power
- 0-10 VDC or 4-20 mA analog output, jumper selectable
- 0-5000 ppm CO₂ range
- Wall-mount and duct-sampling versions
- Isolation of output and power
- Compact, attractive enclosure
- Optional control relay with adjustable setpoint
- Simple single-point calibration
- Optional LCD display
- Factory calibrated



CD-AW-LCD



CD-AD-LCD



Duct Probe Assembly
(included with above)

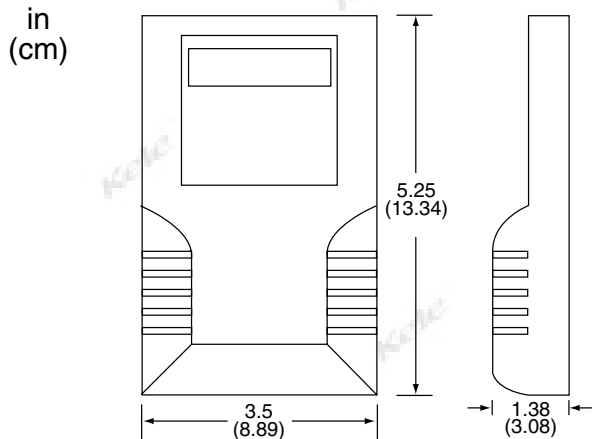
SPECIFICATIONS	
Supply Voltage	20-30 VAC @ 2.5 VA or 18-30 VDC @ 104 mA
Accuracy	±5% of reading or ±75 ppm, whichever is greater Max drift (per year) ±75 ppm Repeatability ±20 ppm
Signal Output	0-10 VDC (factory setting) 4-20 mA (field selectable), 500Ω max
Measurement Range	0-2000 ppm (0-5000 fixed selectable)
Sensing Technology	Non-dispersive infrared (NDIR)
Calibration Interval	Five years, Span only (automatic electronic zero adjustment)
Life Expectancy	10 years typical
Visual Indication	0.35" LCD (0.88 cm), 4 digit
Warm Up Time	3 minutes
Response Time	Less than 1 min
Deadband	50 ppm (alarm)
Relay Setpoint	1000 ppm (field adjustable 700-1300 ppm)
Relay Output	N.O. (N.C. field selectable), 2A @ 24 VAC, (40 ppm DIF)
Operating Temperature	32° to 122°F (0° to 50°C)
Operating Humidity	0% to 90% RH noncondensing
Dimensions	
Wall	5.2"H x 3.2"W x 1.4"D (13.2 x 8.1 x 3.6 cm)
Duct	5.2"H x 3.2"W x 3.4"D (13.2 x 8.1 x 8.6 cm)
Weight	
Wall	0.61 lb (0.27 Kg)
Duct	1.35 lb (0.61 Kg)
Warranty	1 year



GAS & SPECIALTY SENSORS

CARBON DIOXIDE SENSORS CD-A SERIES

DIMENSIONS

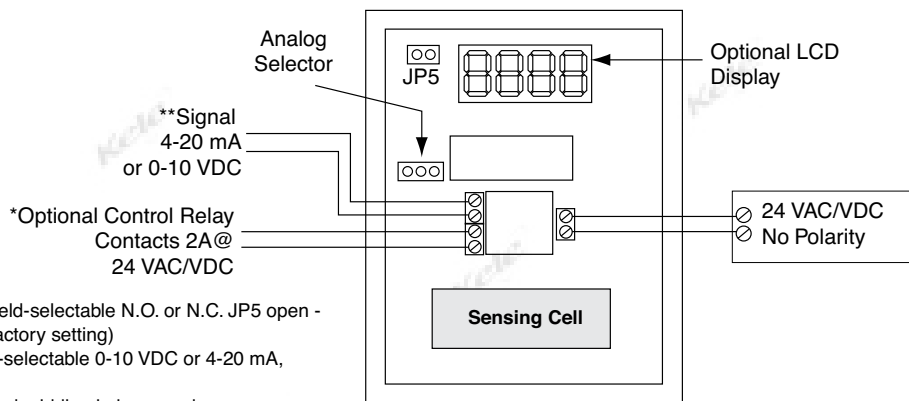


INSTALLATION

The wall-mounted **CD-AW** must be placed in an area that is representative of the entire conditioned space. Recommended mounting height is 4' to 6' (1.22 to 1.83m) above the floor. Avoid drafts for locations where occupants may routinely breathe toward the sensor.

The duct-sampling style **CD-AD** requires a minimum air velocity of 400 fpm (3 m/s). Complete installation and configuration instructions are included with each unit shipped.

WIRING



* Relay contacts are field-selectable N.O. or N.C. JP5 open - N.C. closed - N.O. (factory setting)

** Output signal is field-selectable 0-10 VDC or 4-20 mA, fully isolated.

Voltage - outboard and middle pin jumpered
Current - inboard and middle pin jumpered

ORDERING INFORMATION

MODEL	DESCRIPTION
CD-AW	CO ₂ wall mount sensor with analog output
CD-AW-LCD	CO ₂ wall mount sensor with analog output, with LCD display
CD-AW-R	CO ₂ wall mount sensor with analog output, with relay
CD-AW-R-LCD	CO ₂ wall mount sensor with analog output, with LCD display and relay
CD-AD	CO ₂ duct mount sensor with analog output
CD-AD-LCD	CO ₂ duct mount sensor with analog output, with LCD display
CD-AD-R	CO ₂ duct mount sensor with analog output, with relay
CD-AD-R-LCD	CO ₂ duct mount sensor with analog output, with LCD display and relay

MODEL	RELATED PRODUCTS
UCK-1	Universal calibration kit for non-corrosive gases (N ₂ , CO ₂ , CH ₄ , H ₂ , O ₂ , CO, and refrigerants)
GAS-CO2-1000	1000 ppm carbon dioxide (CO ₂) in nitrogen (N ₂), 17L
89-0018-00	Replacement filter for CD-AD duct probe

MODEL	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