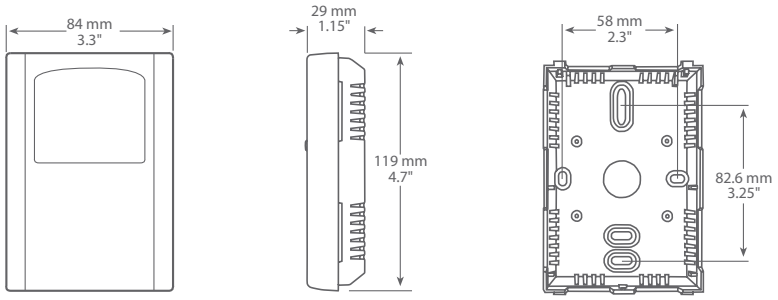
GREYSTONE
ENERGY SYSTEMS INC

ROOM CARBON MONOXIDE DETECTOR



CDD4B1 SERIES

PRODUCT DESCRIPTION

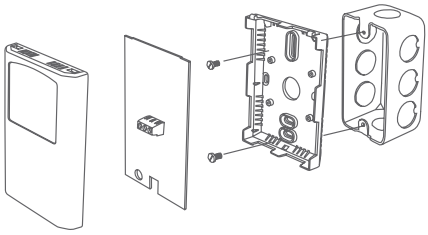
The CDD4B1 series uses a highly accurate and reliable Non-dispersive Infrared (NDIR) sensor in an attractive, low profile enclosure for room applications to monitor CO_2 levels. A linear analog signal output of 4-20 mA, 0-5 or 0-10 Vdc is provided for connection to a building automation system. Optional features such as temperature sensor, manual override and adjustable relay output are available.

TYPICAL INSTALLATION

For complete installation and wiring details, please refer to the product installation instructions.

The CDD4B1 series can be mounted directly to a single gang electrical box or directly to a wall. The backplate includes many mounting hole configurations to allow for mounting on a variety of electrical boxes.

The basic CDD4B1 has a 3 wire configuration with a screw block terminal provided for connection to the Building Automation System.



SPECIFICATIONS

GAS TYPE DETECTED	Carbon Dioxide (CO_2)
SENSOR TYPE	Dual wavelength non-dispersive infrared (NDIR)
SENSOR ACCURACY	±75ppm or 10% of reading (whichever is greater)
MEASUREMENT RANGE	0-20,000ppm standard, programmable span from 2000 - 20,000ppm
PRESSURE DEPENDENCY	< 0.13% of reading per mm Hg
TEMPERATURE DEPENDENCY	0.2% FS per °C
STABILITY	<5% FS over life of sensor (15 years typical)
ALTITUDE CORRECTION	Programmable from 0-5000 ft via keypad
RESPONSE TIME	<2 minutes for 90% step change typical
SENSOR COVERAGE AREA	100m² (1000ft²) typical
POWER SUPPLY	20 - 28 Vdc/ac (non-isolated half-wave rectified)
PROTECTION CIRCUITRY	Reverse voltage and overvoltage protected
OUTPUT SIGNAL TYPE	4-20 mA active (sourcing), 0-5 Vdc or 0-10 Vdc (field selectable)
CONSUMPTIONS	100 mA max @ 24 Vdc, 185 mA max @ 24 Vac (with all options)
OUTPUT DRIVE CAPABILITY	**Current:** 550Ω max **Voltage:** 5 KΩ min
AMBIENT OPERATING RANGE	0 to 50°C (32 to 122°F), 0 to 95 %RH non-condensing
OPTIONAL LCD DISPLAY	**Resolution:** 1ppm CO_2 **Size:** 35mm W x 15mm H (1.4" x 0.6") alpha-numeric 2 line x 8 character **Backlight:** Enable or disable via keypad
OPTIONAL TEMPERATURE SIGNAL	**Type:** Thermistor and RTD (see ordering chart) **Accuracy:** See ordering chart **Output:** 2-wire resistive
OPTIONAL RELAY OUTPUT	**Contact Ratings:** Form A contact (N.O.), 2 Amps @ 140 Vac/30 Vdc **Relay Trip Point:** Programmable 500 - 15,000ppm **Relay Hysteresis:** Programmable 25-500ppm
OPTIONAL OVERRIDE SWITCH	Front panel push-button N.O., SPST, 50 mA @ 12 Vdc
WIRING CONNECTIONS	Screw terminal block (14 to 22 AWG)
ENCLOSURE	White ABS, 84mm W x 119mm H x 29mm D (3.3" x 4.7" x 1.15"), IP30 (NEMA 1)
COUNTRY OF ORIGIN	Canada

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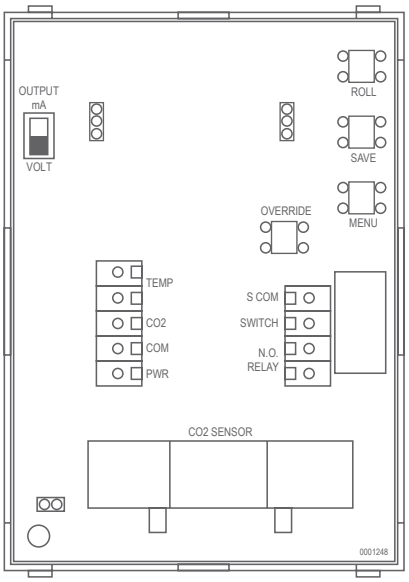
WIRING INFORMATION



TERMINAL	FUNCTION
CO_2	Analog Output
COM	COMMON
PWR	Supply Voltage
TEMP	Resistance Output
RELAY	Digital Output
SWITCH	Digital Output

ORDERING

PRODUCT	**CDD4B1**	Room Carbon Dioxide Sensor
DISPLAY	**00** **01**	Concealed LCD Viewable LCD
OPTIONAL TEMPERATURE SENSOR	**-** **T2** **T5** **T6** **T7** **T8** **T12** **T13** **T14** **T20** **T24** **T59**	None (leave blank) 100 Ω Platinum, IEC 751, 385 Alpha, thin film 1801 Ω NTC Thermistor, ±0.2°C 3000 Ω NTC Thermistor, ±0.2°C 10,000 Ω Type 3, NTC Thermistor, ±0.2°C 2.252K Ω NTC Thermistor, ±0.2°C 1000 Ω Platinum, IEC 751, 385 Alpha, thin film 1000 Ω Nickel, Class B, DIN 43760 10,000 Ω Type 3, NTC Thermistor, ±0.2°C c/w 11,000 shunt resistor 20,000 Ω NTC Thermistor, ±0.2°C 10,000 Ω Type 2, NTC Thermistor, ±0.2°C 10,000 Ω, 25°C, ±1%, B = 3435 ±1% (25/85)
OPTIONAL RELAY	**-** **R**	None (leave blank) Adjustable Relay
OPTIONAL OVERRIDE	**-** **S**	None (leave blank) Override

PART NUMBER

CDD4B1

NOTE: Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.

5-YEAR CALIBRATION GUARANTEE

Based on the results of years of testing of ACLP software, Greystone now offers a 5-year calibration guarantee on all its CDD series wall mount sensors used for CO_2 based ventilation control when operated in an environment that can utilize ACLP software. If the sensor is found to be out of calibration more than 150 PPM as compared to a calibration gas or recently calibrated reference, Greystone will provide a free factory calibration of the sensor if returned to Greystone.

RoHS COMPLIANT

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