

GAS & SPECIALTY SENSORS

CO2 TRANSMITTER 045, 050 SENSEAIR SERIES



DESCRIPTION

The **aSENSE™ Model 045** and **eSENSE™ Model 050** CO2 transmitters from SenseAir utilize the latest NDIR technology to accurately and reliably measure indoor levels of CO2. The **aSENSE™ Model 045** is a digital low-cost transmitter. It measures both CO2 concentration and temperature in the ambient air and can transmit data to a BAS system or controller. The **aSENSE™ Model 045** is a key component for climate control of buildings and other processes. The **eSENSE™ Model 050** is a new simple, low cost, state-of-the-art, infrared and maintenance-free carbon dioxide transmitter for room or duct applications. The **eSENSE™ Model 050** measures the carbon dioxide concentration in the ambient air up to 2000 ppm and transforms the data into an analogue output. Both the **aSENSE™** and the **eSENSE™** help you save money by decreasing your energy consumption while creating a healthier indoor climate.



045-8-0370-F



045-8-0341-F

FEATURES

- **ABC logic needs no calibration**
- **Five-year warranty**
- **Platinum EQC coatings, unique to SenseAir products**
- **SenseAir track-individual serial number for every unit**
- **ISO 9001 & 14001 certified**



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SPECIFICATIONS	
Supply Voltage	24 VAC @ 3 VA ± 20%, 50/60 Hz; 24 VDC @ 125 mA ± 20 %
Accuracy	
aSense	±1% of measurement range
eSense	±30 ppm ±3% of reading
Signal Output	
aSense	
Output 1	0-10V models: CO2 0-10 VDC or 0/4-20 mA (500 ohms); 0-5V models CO2 0-5 VDC or 0/4-20 mA (500 ohms)
Output 2	0-10V models: Temperature 0-10 VDC or 0/4-20 mA (500 ohms); 0-5V models Temperature 0-5 VDC or 0/4-20 mA (500 ohms)
eSense	
Output 1	0-10V models: CO2 0-10 VDC; 0-5V models CO2 0-5 VDC
Output 2	2-10V models: CO2 2-10 VDC or 4-20 mA @ 500Ω; 0-5V models CO2 0-5 VDC or 4-20 mA @ 500Ω
Measurement Range	CO2 0 to 2000 ppm, CO2 0-2000 ppm, Temperature -4 to 140°F (-20 to 60°C)
Sensing Technology	Non-dispersive infrared (NDIR) with
Calibration	ABC logic Not Needed
Visual Indication	4 Digits, 7 segments LCD
Warm Up Time	≤1 minute (@ full spec ≤15 minutes)
Relay Output	
aSense	SPDT 50 VAC @ 1 A; 24 VDC @ 1 A (100 ppm DIF)
eSense	No relay available
Operating Temperature	32° to 122°F (0° to 50°C)
Operating Humidity	0 to 95% RH (non condensing)
Dimensions	
Wall	
aSense	4.74"H x 3.22"W x 1.18"D (120 x 82 x 30 mm)
eSense	5.11"H x 3.35"W x 1.18"D (130 x 85 x 30 mm)
Duct	5.6"H x 3.3"W x 1.8"D (14.2 x 8.4 x 4.6 cm)
Weight	
Wall	0.32 lbs (0.15 Kg)
Duct	0.90 lbs (0.41 Kg)
Approvals	CE, RoHS
Warranty	5 Years

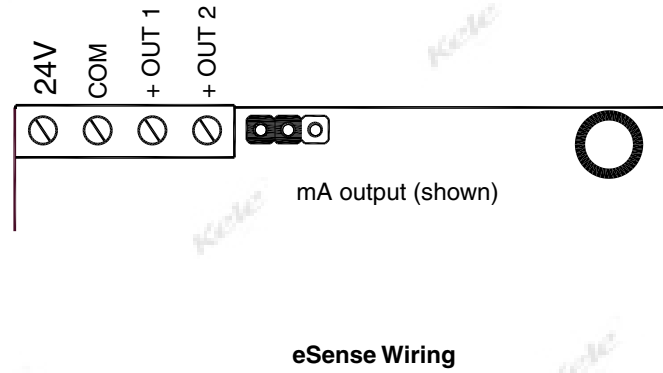
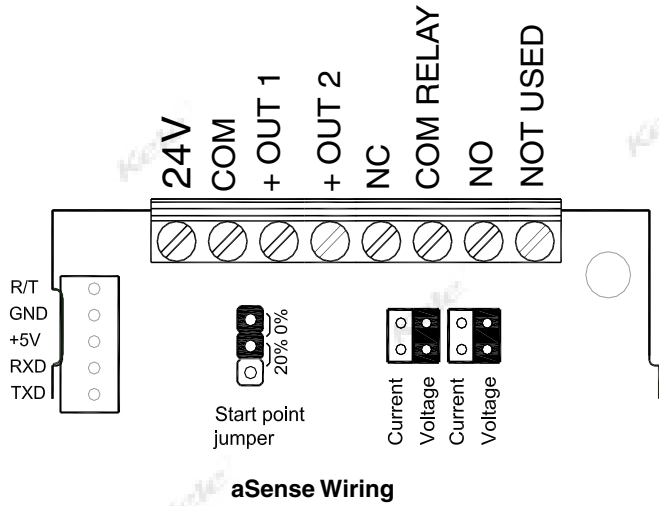


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CO2 TRANSMITTER

045, 050 SENSEAIR SERIES

WIRING



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ORDERING INFORMATION

- 040-8-0049
- 045-8-0340-F
- 045-8-0341-F
- 045-8-0342-F
- 045-8-0343-F
- 045-8-0370-F
- 045-8-0371-F
- 045-8-0372-F
- 045-8-0373-F
- 050-8-0140
- 050-8-0141
- 050-8-0142
- 050-8-0143
- 050-8-0158
- 050-8-0159
- 050-8-0160
- 050-8-0161

RELATED PRODUCTS

- aSense outside air sensor without heater
- aSense wall relay 0 -10V CO2 & Temperature sensor, relay
- aSense wall relay 0 -10V display CO2 & Temperature sensor, relay
- aSense wall relay 0 -5V CO2 & Temperature sensor, relay
- aSense wall relay 0 -5V display CO2 & Temperature sensor, relay
- aSense duct relay 0 -10V CO2 & Temperature sensor, relay
- aSense duct relay 0 -10V display CO2 & Temperature sensor, relay
- aSense duct relay 0 -5V CO2 & Temperature sensor, relay
- aSense duct relay 0 -5V display CO2 & Temperature sensor, relay
- eSense wall 0 -10V CO2 sensor
- eSense wall 0 -10V display CO2 sensor
- eSense wall 0 -5V CO2 sensor
- eSense wall 0 -5V display CO2 sensor
- eSense duct 0 -10V CO2 sensor
- eSense duct 0 -10V display CO2 sensor
- eSense duct 0 -5V CO2 sensor
- eSense duct 0 -5V display CO2 sensor

ACCESSORIES

- 691-K0A
- DCP-1.5-W
- DCPA-1.2

- Control transformer, 120:24 VAC, 40 VA, Class 2
- Power supply, 24 VAC IN to 24 VDC OUT
- Power supply, 120 VAC IN to 24 VAC/24 VDC OUT