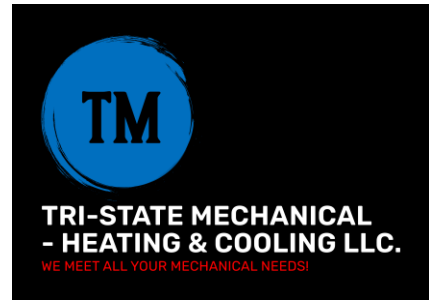


Approved



SUBMITTAL COVER PAGE

Project #: C2023-1014

Project Name: Enterprise Rental – Fields Ertel

Construction Manager: Derek Inc.

Architect: D.R. Brooks Architect

Engineer: Hal-pe Associates

Reference: Exhaust Fans & CO2

Spec. #: N/A

Drawing #: H-2

Manufacturer: S&P

Supplier: Corken Steel Products

Contact Person Name & #: JD Raphael 859-291-4664

Print Name: Larry Sawyer

Date#: 5/25/23

X Approved Spec # N/A

Approved As Noted

Rejected

Revise and Resubmit

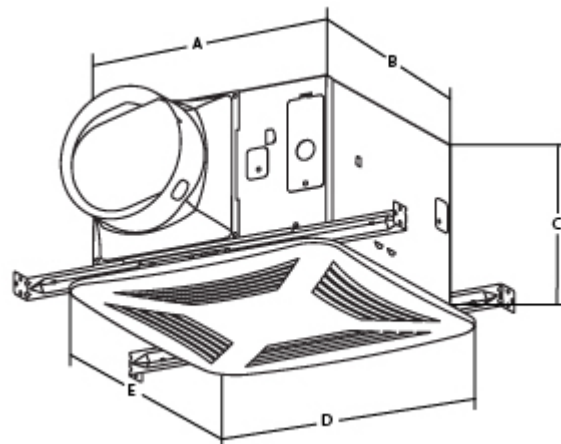
Sign Name: Larry Sawyer



S&P USA

| | |
|----------|-------------------------|
| Qty: | 1 |
| Tag: | EF-1 |
| Project: | Enterprise Fields Ertle |

Optimizer Version 2.0
Printed: 2023-05-26



PC110XP - 0.3 Sones

AC Motor Standard Models: Premium CHOICE Series

STANDARD FEATURES:

- Robust steel housing • Forward curved centrifugal wheel • Attractive and sturdy grille
- cETLus listed • AMCA Air, Sound, and FEI Licensed (except PC50XP) • HVI certified • Thermally protected motor • PC50XP includes 4" duct connector with built-in backdraft damper • PC80X(P) & PC110X(P) includes 4" and 6" duct connector with built-in backdraft damper • PC150(XP) includes 6" duct connector with built-in backdraft damper • 5 Year Warranty

Performance

| Flow (CFM) | SP (in W.G.) | Nominal RPM | Max Power | Max Amps | Sones |
|------------|--------------|-------------|--------------|----------|-------|
| | | | (W/HP) | | |
| 89 | .25 | 930 | 29.83 / 0.04 | 0.35 | - |

Altitude (Feet): 0 Temperature (Fahrenheit): 70 Density (Lb/Ft3): .075

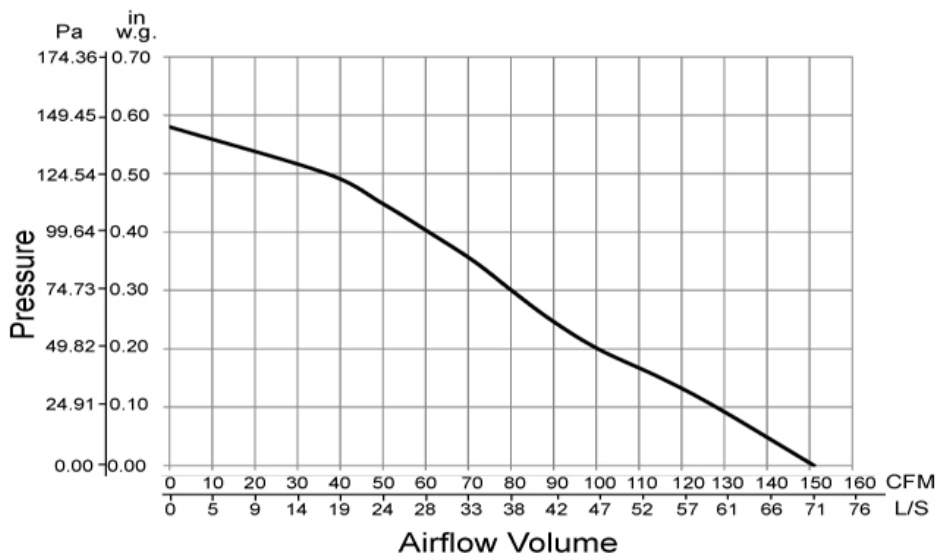
Motor Information:

| |
|---------------|
| Volts/PH/Hz |
| 115V/1PH/60HZ |

| Dimensions (Inches) | | | | | | | | | |
|---------------------|-------|---|-------|---|------|---|-------|---|-------|
| A | 11.38 | B | 10.50 | C | 7.75 | D | 14.00 | E | 13.00 |
| F | G | H | I | J | K | L | M | N | O |
| P | Q | R | S | T | U | V | W | X | Y |

Note: Accessories may effect dimensions shown.

Avg. Shipping Weight (Lbs)*: 10
*Includes fan, motor, and packaging.





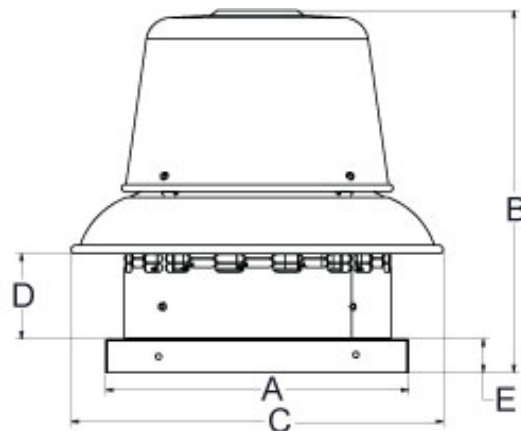
S&P USA

Qty: 1
 Tag: ef-2
 Project: Enterprise Fields Ertle
 Optimizer Version 2.0
 Printed: 2023-05-26

SDBDe8

Centrifugal Downblast Roof Exhausters with EC Motors (Ecowatt®)

STANDARD FEATURES:
 AMCA Air, Sound, and FEI Licensed • UL and/or CSA Label - Electrical Reliability • Aluminum Birdscreen & Standard Disconnect • Electronically Commutated Motor (ECM) Standard • Motor comes standard with mounted potentiometer with digital readout for easy speed adjustment • Motor Isolators Reduce Vibration and Sound • Deep Spun Inlet-Optimum Air and Sound Performance • Conduit Chase - Ease of Electrical Connection • Centrifugal Wheel - Non-Overloading Backward Inclined Blades for Maximum Efficiency. • 5 Year Fan and 1 Year Motor Warranty



$\text{Damper OD} = F \cdot \text{Roof Opening} = G \cdot \text{Curb OD} = H$

Performance

| Fan RPM | Flow (CFM) | SP (in W.G.) | Power (HP) | FEP Actual (kW) | FEI | SE | TE | FPM (TS) | FPM (OV) |
|---------|------------|--------------|------------|-----------------|------|-----|-----|----------|----------|
| 1654 | 600 | .5 | .102 | 0.13 | 1.67 | 46% | 51% | 4438 | 876 |

Altitude (Feet): n/a Temperature (Fahrenheit): n/a Density (Lb/Ft3): .075

Motor Information: (Wired for 115V)

| HP | RPM | Volts/PH/Hz | Enclosure | Efficiency | Mounted |
|------|------|-------------------------|-----------------|------------|---------|
| .333 | 1750 | 115V/208V-230V/1PH/60HZ | OPEN DRIP PROOF | STANDARD | YES |

Sound Power Levels - Octave Bands

| LwA | dBA | Sones | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-----|-----|-------|----|----|----|----|----|----|----|----|
| 72 | 60 | 9.5 | 71 | 64 | 68 | 73 | 64 | 59 | 57 | 51 |

| Dimensions (Inches) | | | | | | | | | |
|---------------------|-------|---|-------|---|-------|---|------|---|------|
| A | 18.00 | B | 20.50 | C | 22.31 | D | 4.13 | E | 2.00 |
| F | 12.00 | G | 13.50 | H | 16.50 | I | | J | |
| K | | L | | M | | N | | O | |
| P | | Q | | R | | S | | T | |
| U | | V | | W | | X | | Y | |

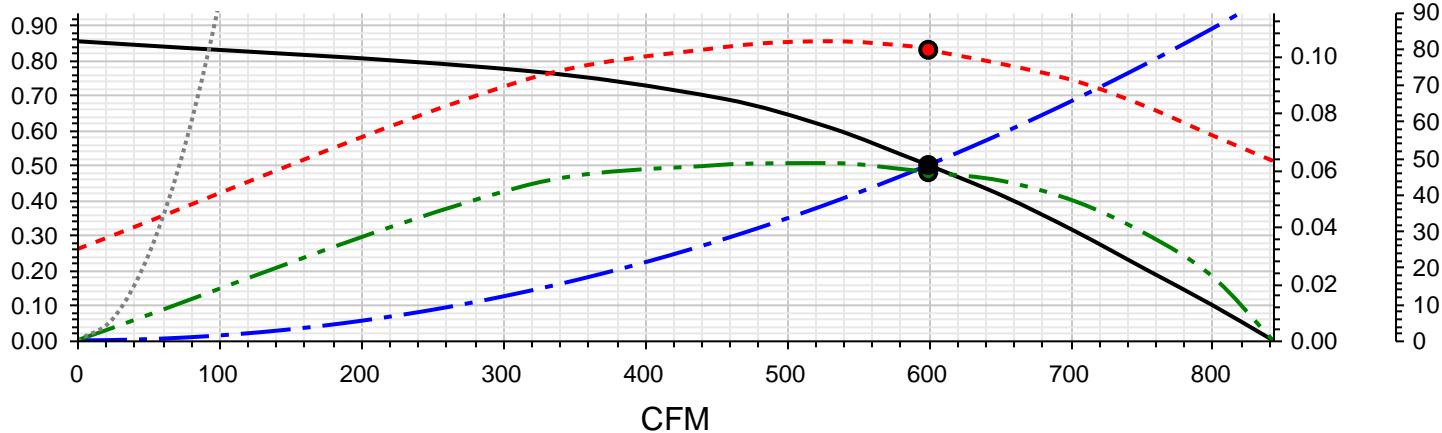
Note: Accessories may effect dimensions shown.

Avg. Shipping Weight (Lbs)*: 42

*Includes fan, motor, and packaging.



in W.G.



———— Fan Curve - - - - System Curve - - - - Horsepower - - - - Static Efficiency Stall Curve

Accessories:

MOUNT & WIRE DISCONNECT FOR RED/LPD • EXTERNAL POTENTIOMETER SPEED CONTROL LOOSE • 12 X 12 AUTO EXHAUST DAMPER • 16-1/2" SQ GALV RF CURB 12" HIGH W.D.T. • LABEL UL/CUL 705 LISTED POWER VENT (709J)



S&P USA

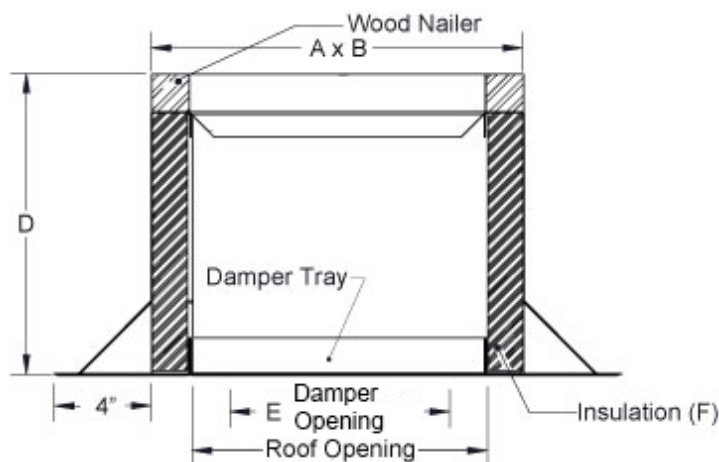
Project: Enterprise Fields Ertle

CURB TYPE: GRF

Model Description: GALVANIZED ROOF CURB

STANDARD FEATURES:

GALVANIZED STEEL CONSTRUCTION • CONTINUOUSLY WELDED CORNERS •



OPTIONS: (as noted below*)

| | |
|---|--------------|
| 1 | DAMPER SHELF |
|---|--------------|

Dimensions(Inches)

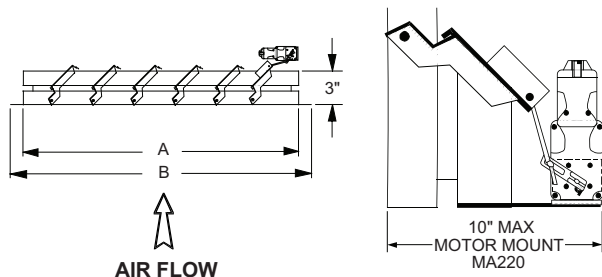
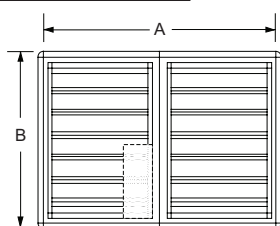
| Tag | Qty | Description | Material Gauge | A | B | C | D (ht) | Damper OD (E) | Roof Opening | Options* | Rise/Run | Insulation (F) | Raised Cant |
|------|-----|-------------|----------------|------|------|-----|--------|---------------|--------------|----------|----------|----------------|-------------|
| ef-2 | 1 | GRF 16.5 | 18 | 16.5 | 16.5 | 1.5 | 12 | 10.5 X 10.5 | 13.5 X 13.5 | 1 | n/a | 1.5 | n/a |



BACKDRAFT DAMPER FOR SDB, SDBD, SDBDe, STXB, STXD, & STXDe CENTRIFUGAL EXHAUST FANS

| FAN SIZE | DAMPER | | | | OPTIONAL MOTOR |
|-------------------|-------------|-------|---------|---------|----------------|
| | PART NUMBER | MODEL | "A" SQ. | "B" SQ. | |
| 6-10 | 411012 | 411 | 12 | - | 411611 |
| 12-14 | 411014 | 411 | 14 | - | 411611 |
| 15-16 | 411018 | 411 | 18 | - | 411611 |
| 18-22 | 411024 | 411 | 24 | - | 411611 |
| 24-27 | 411030 | 411 | 30 | - | 411611 |
| 30-36 | 611036 | 611 | 36 | - | 411611 |
| 42-48 (UP TO 3HP) | 611048 | 611 | 48 | - | 411611 |
| 42-48 (5-10HP) | S3GA47RF | S3G | 47 | 49.50 | MA220 |

Model S3G



For low velocity (CFM) field adjustment a spring tension may be required to ensure that damper blades open completely.

| MODEL S3G STANDARD SPECIFICATIONS: | |
|------------------------------------|--|
| Maximum Face Velocity | 3000 fpm |
| Temperature Limits | -40°F to 200°F |
| Frame | 20 gauge galvanized steel |
| Blades | .025 thick aluminum |
| Seals | Extruded vinyl mechanically locked into blades |
| Axles | Stainless steel |
| Linkage | Stainless steel pins, galvanized steel tie bar |
| Finish | Mill |

CAUTION: Motor kits are not suitable for use in explosive or flammable areas or airflows.

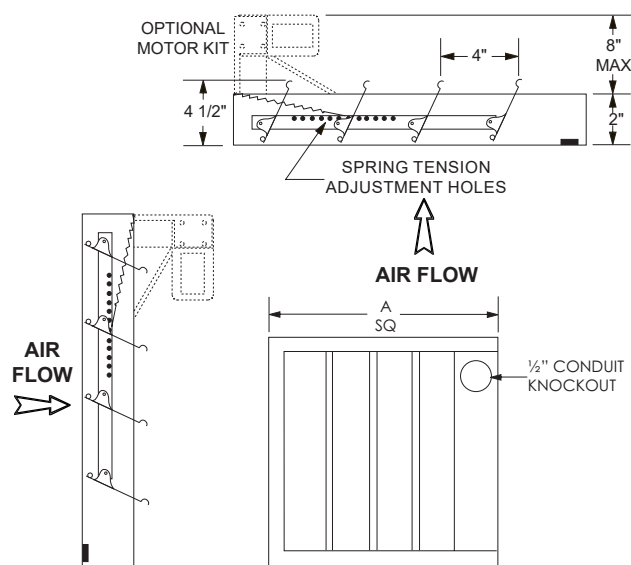
For all supply applications, a motor kit is recommended.

NOTES:

- (1) Do not mount fan less than 12 inches from the shutter.
- (2) Motors available in 24V, 120V, & 240V.
- (3) Dampers shipped in individual cartons.
- (4) Motors and mounting hardware ship separately.
- (5) Multiple section assemblies may require bracing to support the weight of the assembly and to hold against system pressure. **BRACING SUPPLIED BY OTHERS.**

Subject to change unless approved in submittal by S&P
S-SeriesDamper_Submittal-v.2_0319

Models 411 & 611



For low velocity (CFM) field adjustment a spring tension may be required to ensure that damper blades open completely.

| MODELS 411 & 611 STANDARD SPECIFICATIONS: | | |
|---|---|-------------|
| Maximum Face Velocity | 2250 fpm | |
| Frame | Galvanized steel, 2" deep | |
| Blades | 26 gauge mill finish aluminum | |
| Seals | Felt between adjacent blades | |
| Axles | Stainless steel rivet at all pivot points | |
| Counter Balance | Adjustable spring tension | |
| Finish | Mill | |
| Max Temp | Damper 250°F | Motor 130°F |

CAUTION: Motor kits are not suitable for use in explosive or flammable areas or airflows.

NOTES:

- (1) Units are undersized 1/4" to fit in square ducts.
- (2) Motors available in 24V, 120V, & 240V.
- (3) Do not mount fan less than 1/3 diameter of the fan from the damper.
- (4) Dampers shipped in individual cartons.
- (5) Motor kits ship loose for field installation.

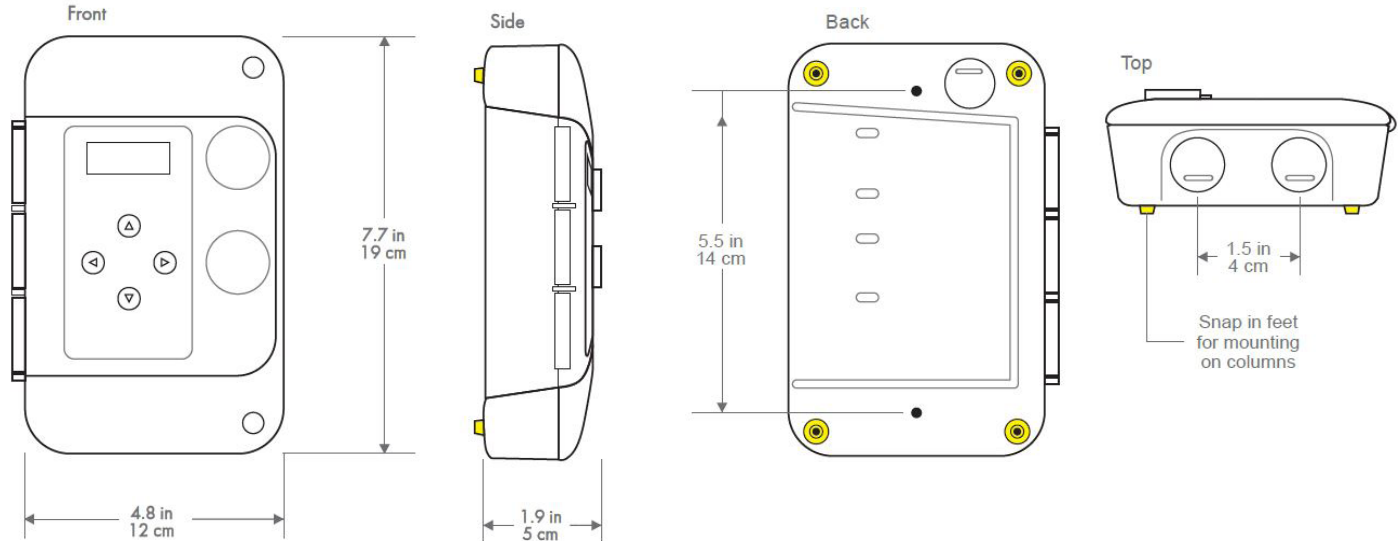


MODEL 6002 and 6002-14B Gas Detector (2 Relays)

FEATURES

- Stand-alone operation with 1 or 2 adjustable alarm relays, indicators and strobe
- BTL listed Smart Sensor
- BACnet MS/TP RS485 interface
- CAN network interface for master-slave operation or central control
- Pre-calibrated plug-and-play sensor modules
- Impact resistant water resistant enclosure

DIMENSIONS



SPECIFICATIONS

- Supply 24 vac 50/60 hz (17-28 vac) 0.21 amps, 5 va
- Operating temperature -20 °C to 50 °C (-4 °F to 122 °F)
- Operating humidity 15-90% RH, non-condensing
- For indoor use
- Flame resistant Polycarbonate ABS enclosure rated UL94, V0, 5VB, and 5VA
- Relays (1 or 2) SPDT, 5 amp @ 125 vac, non-inductive On delay: 0-999 seconds (16 minutes) Off delay: 0-999 seconds (16 minutes)

USER INTERFACE

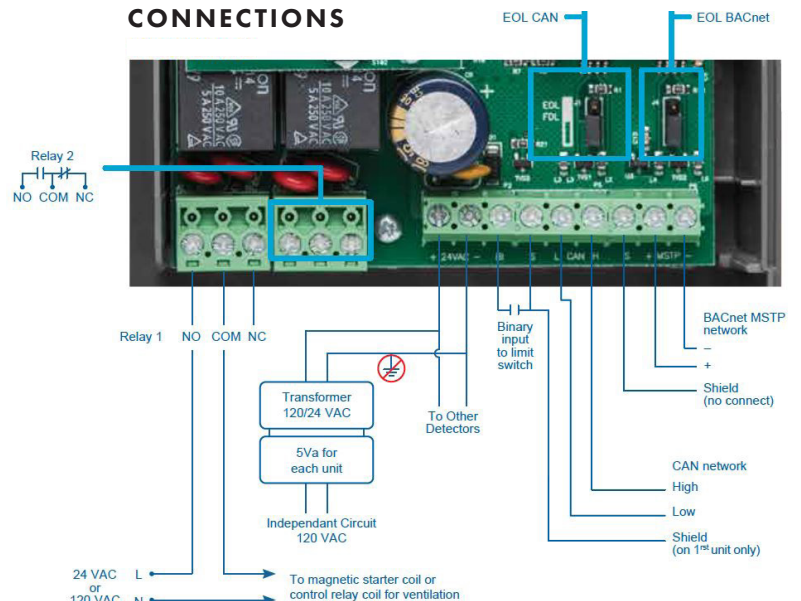
- Back lit LCD display shows gas concentration, user settings, calibration controls
- Red LED alarm indicators, level 1 and 2
- High intensity white LED strobe on level 3
- Audible alarm, 85 db at 1 meter
- 4 pushbutton user keypad
- Password control for settings

APPLICATIONS

- Vehicle Emissions
- Combustible Gases
- Refrigeration Gas Leak Detection
- Industrial Health and Safety

- Standards: Conforms to UL61010-1, CSA C22.2 61010-1-12, ANSI/ISA 61010-1, CSA C22.2 no. 205-12
- Weight : 420 grams, 0.93 lb
- Enclosure ABS UL-94-V0, UL-94 - 5VA, NEMA 4
- Electrical conduit entries: 0.875 inch, two on top, two on bottom, one in rear
- Diffusion type sampling

CONNECTIONS





MODEL 6002-A and 6002-14A

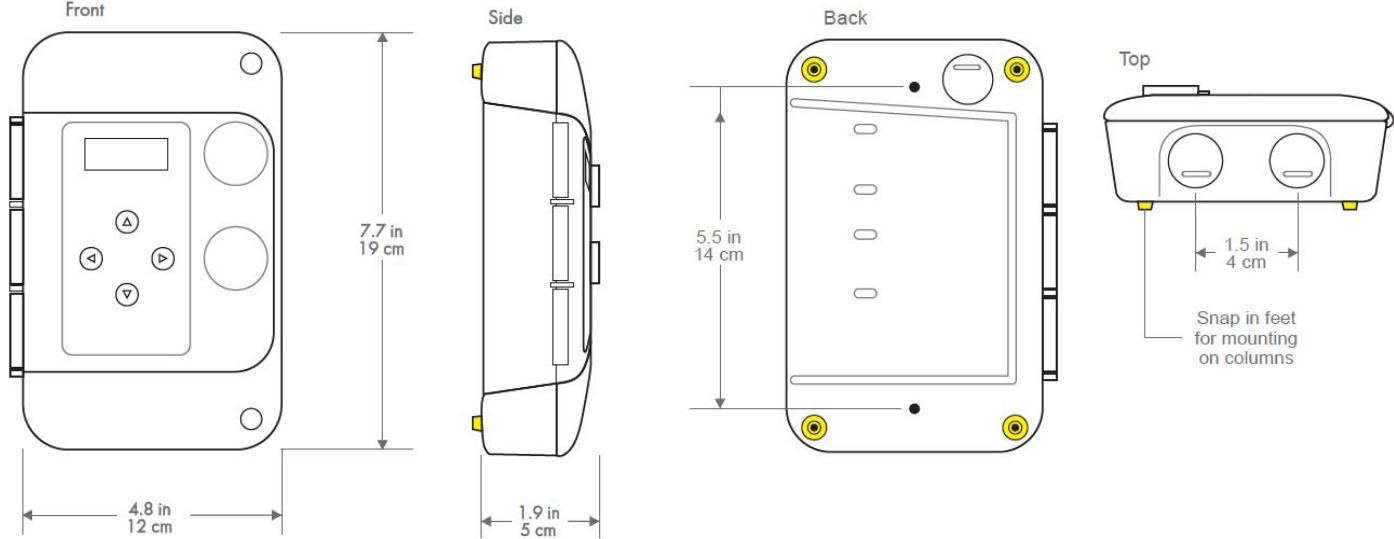
Gas Detector

(1 Relay and 2X 4-20 mA signal or 2-10V signal)

FEATURES

- Stand-alone operation with 1 or 2 adjustable alarm relays, indicators and strobe
- BTL listed Smart Sensor
- BACnet MS/TP RS485 interface
- CAN network interface for master-slave operation or central control
- Pre-calibrated plug-and-play sensor modules
- Impact resistant water resistant enclosure

DIMENSIONS



SPECIFICATIONS

- Supply 24 vac 50/60 hz (17-28 vac) 0.21 amps, 5 va
- Operating temperature -20 °C to 50 °C (-4 °F to 122 °F)
- Operating humidity 15-90% RH, non-condensing
- For indoor use
- Flame resistant Polycarbonate ABS enclosure rated UL94, V0, 5VB, and 5VA
- Relays (1 or 2) SPDT, 5 amp @ 125 vac, non-inductive On delay: 0-999 seconds (16 minutes) Off delay: 0-999 seconds (16 minutes)
- Standards: Conforms to UL61010-1, CSA C22.2 61010-1-12, ANSI/ISA 61010-1, CSA C22.2 no. 205-12
- Weight : 420 grams, 0.93 lb
- Enclosure ABS UL-94-V0, UL-94 - 5VA, NEMA 4
- Electrical conduit entries: 0.875 inch, two on top, two on bottom, one in rear
- Diffusion type sampling
- A models have analog outputs: 2 X 4-20mA or 2-10V

USER INTERFACE

- Back lit LCD display shows gas concentration, user settings, calibration controls
- Red LED alarm indicators, level 1 and 2
- High intensity white LED strobe on level 3
- Audible alarm, 85 db at 1 meter
- 4 pushbutton user keypad
- Password control for settings

APPLICATIONS

- Vehicle Emissions
- Combustible Gases
- Refrigeration Gas Leak Detection
- Industrial Health and Safety

CONNECTIONS

