resideo

CDS2000A SERIES

CO2 Detector for Indoor Air Quality Monitoring System

CE **RoHS** COMPLIANT

SUMMARY

CDS2000A series is compact and easy-to-install IAQ(Indoor Air Quality) sensor, which is designed for detecting carbon dioxide in the air. This series is optimized to be used with building and house ventilation system and air conditioning system, which maintains acceptable levels of CO2 in the indoor space by controlling the amount of fresh outdoor air.

FEATURES

- High reliability and sensitivity based on non-dispersive infrared(NDIR) technology
- Two types of analog signal (DCV and DCA) output (Selectable)
- Eliminates the need for manual calibration in most applications with ABC logic software
- Optional LCD display and on/off relay output for CO2 limit monitoring
- Optional Modbus communication
- Long term stability and lifetime
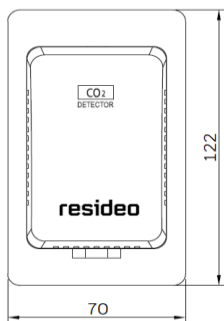- Easy installation
- CE Certification

SPECIFICATIONS

- Gas detected   : Carbon dioxide (CO2)
- Sensing method   : NDIR (Non-dispersive infrared)
- Detect range   : 0 ~ 2,000ppm
- Accuracy   : ±30ppm ±5% of measured value
- Output signal   : 0~10Vdc(default) or 0~20mA (selectable by jumper setting)
                        : Modbus RTU
- Coverage area   : Approximately 100㎡
- Power supply   : 24Vac, 24Vdc±20%, 50/60Hz
- Power consumption   : Max. 2W
- Response time   : Within 120 sec. (90% step)
- Maintenance interval : Not required
- Relay(Alarm) output : SPST relay, normally open, 1A/120Vac, 1A/24Vdc contact rating,
                        : Activated at greater than 1,000ppm, deactivated at less than 900ppm

- Wiring : 3 or 4-line wiring compatible
- Optional Modbus : Hardware 2-wire RS-485
  : Software RTU Mode
- Protection standard : Wall-mount type - IP30
  : Duct-mount type - IP63
- Operating temperature : 0 ~ 50℃
- Operating humidity : 0 ~ 95%RH (non-condensing)
- Storage temperature : -20 ~ 60℃
- Storage humidity : 0 ~ 95%RH (non-condensing)
- Sensor life expectancy : >10 years
- Housing material : Plastic(ABS)
- Accessories : Wall-mount type - Screws(2EA), Quick guide
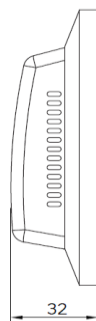 : Duct-mount type - Screws(5EA), Quick guide

MODEL SELECTION

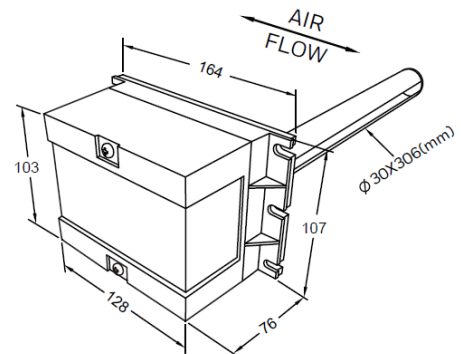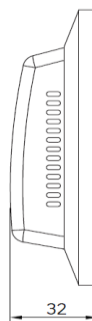| OS #	Description
CDS2000A1000CE	CO2 Detector, Wall-mount type, 0~2,000ppm, 0 ~ 10Vdc / 0~20mAdc output
CDS2000A2000CE	CO2 Detector, Wall-mount type, 0~2,000ppm, LCD, 0 ~ 10Vdc / 0~20mAdc output, Relay output
CDS2000A2000CM	CO2 Detector, Wall-mount type, 0~2,000ppm, LCD, 0 ~ 10Vdc / 0~20mAdc output, Relay output, Modbus output
CDS2000A3000CE	CO2 Detector, Duct-mount type, 0~2,000ppm, 0 ~ 10Vdc / 0~20mAdc output, Relay output
CDS2000A3000CM	CO2 Detector, Duct-mount type, 0~2,000ppm, 0 ~ 10Vdc / 0~20mAdc output, Relay output, Modbus output

DIMENSIONS

CDS2000A1000CE

CDS2000A2000CE
CDS2000A2000CM

CDS2000A3000CE
CDS2000A3000CM