

AZP-M2000-CONO2 Garage Exhaust Control Systems

The AZP-M2000-CONO2 Garage Fan Control Systems have inputs and outputs that can be individually configured for use in various CO /No2 gas sensing applications.

Inputs will accept a variety of common signal types and can be named by the user. Outputs can then act based upon local inputs and/or data received from the network; this allows for enhanced sequencing, flexibility, and functionality within a the garage control system.

Inputs may be configured to gas level in parts per million (PPM)

- Input signals include 10k type 3 thermistor, dry contact, 4-20mA, 0-20mA, 0-5 VDC, 1-5 VDC, 0.5-4.5 VDC
- Configurable names and display options for each input and output
- Configurable scales for pressure and gas inputs accommodates any sensor
- Selectable facets for dry contact inputs
- Outputs can act based on any local input, or on data received from the network
- Various output logic sequences are available: ON/OFF, PI Loop, Direct or Reverse acting, Pulsed
- Outputs can be interlocked with each other
- Operates standalone or can be integrated into a compatible network
- Virtual Outputs available for additional control logic
- Outputs can be configured to maintain a fixed setpoint or a variable setpoint based on a reset curve
- 2 outputs can be linked together with Lead/Lag and Backup capabilities



SPECIFIC FEATURES AVAILABLE IN THE AZP-M2000-CONO2

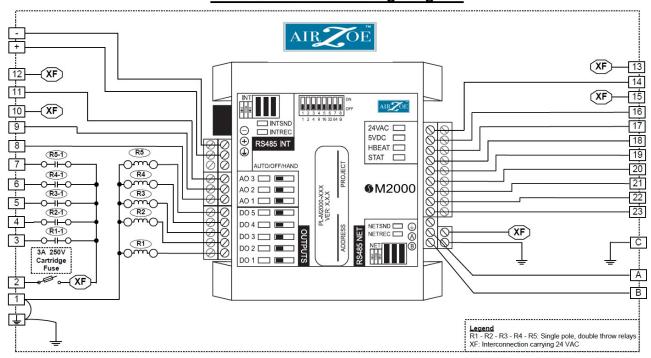
- Internal real-time clock with configurable weekly routines and holiday calendars
- A hand/off/auto switch for each of the eight outputs
- 9 Universal Inputs
- 5 digital outputs and 3 analog outputs equipped with resettable fuses
- For CO/No2 Sensors specify quantity and input thresholds

Options: Variable Frequency Drives, Supply & Exhaust Fans, ECM Fan Motors, Motorized Dampers, Horn / Strobes or other output devices.



AZP-M2000-CONO2 Garage Exhaust Control Systems

Internal Electrical Wiring Diagram



Field Wiring Details

| Terminal | Function | Ratings | Wiring Details |
|----------|---------------------------|--------------------|--|
| Ŧ | GROUND | N/A | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nm |
| 1 | Power Supply Input Common | N/A | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nm |
| 2 | Power Supply Input 24VAC | 24 VAC, 3 A, 60 Hz | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nm |
| 3 | Digital Output 1 | 24 VAC, 300 mA | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nm |
| 4 | Digital Output 2 | 24 VAC, 300 mA | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nm |
| 5 | Digital Output 3 | 24 VAC, 300 mA | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nm |
| 6 | Digital Output 4 | 24 VAC, 300 mA | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nm |
| 7 | Digital Output 5 | 24 VAC, 300 mA | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nm |
| 8 | Analog Output 1 | 0-10VDC, 40 mA | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nm |
| 9 | Analog Output 2 | 0-10VDC, 40 mA | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nm |
| 10 | Power Supply 24VAC | 24 VAC, 8.5 VA | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nm |
| 11 | Analog Output 3 | 0-10VDC, 40 mA | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nm |
| 12 | Power Supply 24VAC | 24 VAC, 5 VA | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nm |
| 13 | Power Supply 24VAC | 24 VAC, 0.03 A | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nm |
| 14 | Analog Output 4 | 5 VDC, 20 mA | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nm |

| Terminal | Function | Rating | Wiring Details |
|----------|-----------------------|----------------|--|
| 15 | Power Supply 24VAC | 24 VAC, 6.7 VA | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nn |
| 16 | Analog Input 8 | 5 VDC, 20 mA | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nn |
| 17 | Analog Input 7 | 5 VDC, 20 mA | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nn |
| 18 | Analog Input 6 | 5 VDC, 20 mA | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nn |
| 19 | Analog Input 5 | 5 VDC, 20 mA | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nn |
| 20 | Analog Input 4 | 5 VDC, 20 mA | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nr |
| 21 | Analog Input 3 | 5 VDC, 20 mA | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nr |
| 22 | Analog Input 2 | 5 VDC, 20 mA | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nr |
| 23 | Analog Input 1 | 5 VDC, 20 mA | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nr |
| + | M2000 RS485 INT A (+) | N/A | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nn |
| 20 | M2000 RS485 INT B (-) | N/A | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nn |
| Α | M2000 RS485 NET A (+) | N/A | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nn |
| В | M2000 RS485 NET B (-) | N/A | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nn |
| С | COMMON | N/A | Use Copper Conductors Only, 105°C/220°F, Maximum Torque Conductor Mounting: 0.5Nn |



AZ-CO / NO2 Input Sensors



The AZ-CMD Series carbon monoxide detector uses an electrochemical sensor to monitor the carbon monoxide level and outputs a field-selectable 4-20 mA , 0-5 or 0-10 Vdc. The sensing range and output may be scaled to either 100, 150, 300, 400 or 500 ppm via the on-board menu. A front panel LCD is standard to ensure easy setup and operation. It is available in either wall/surface or duct mount configurations.

Other standard features include a back light for the LCD, a front panel test switch, status indication and an alarm buzzer. The test function may also be controlled remotely with a digital input signal. The on-board menu allows local configuration of all device parameters.

Optional features include one or two alarm relays and/or RS-485 network communication configured for either ModBus or BACnet protocol.

The **AZ-GDT** Series of gas monitoring sensors monitor levels of carbon monoxide (CO) and/or nitrogen dioxide (NO2) to provide an early warning of elevated concentrations.

The AZ-GDT is available as a standalone CO or NO2, as well as a CO/NO2 dual sensor device.

The dual sensor device is available in 2 configurations: CO/NO2 housed one enclosure or as CO with remote NO2 sensor for mounting at a higher location.

The AZ-GDT gas sensors are encapsulated in field replaceable sensors pods that are located on the bottom of the enclosure. The pod design provides a greater area of gas sampling then that of devices that utilize a single vent hole. Replacement pods come pre-calibrated and ready for installation.

The AZ-GDT is available with either Analog, BACnet or Modbus outputs for communication with a building automation system. Standard features include LCD display for configuration and local display as well as status LED's. Optional features include: 1 or 2 adjustable control/alarm relays, adjustable audible (buzzer) & visual (strobe) alarms as well as various temperature sensor.

The AZ-GDT is housed in an IP65 polycarbonate enclosure with a hinged and gasketed cover that provides ease of installation and access for set up





The AZ-NDD nitrogen dioxide detector uses a superior electrochemical sensor for reliability and accuracy in the most critical applications. The NDD provides a 3-wire sourcing 4-20 mA output as well as an alarm relay with three jumper selectable trip level settings.

Need Temperature, Humidity, Static Pressure, CO2 or other SENSORS? Call D-VAC Sales



AZ-System Output Options

AZ-E510 Compact AC Drives 1/2 HP through 75 HP

Features

- 0.5 to 3 HP (CT), 230V, 50/60Hz, 1-Phase
- 0.5 to 40 HP (CT), 460V, 50/60Hz, 3-Phase
- 1 to 75 HP (CT), 460V, 50/60Hz, 3-Phase
- Parameters Grouped by function
- Built-in PLC Functionality
- PID Process Control Loop
- Built-in Modbus & BACnet Protocols
- 5 Digit Operator's Keypad with Speed Pot
- Digital and Analog Inputs and Outputs have Extremely Fast (~4 msec) Update Time
- Auto Run Mode (Cyclic Operation)
- Power Loss Ride Through
- Automatic Voltage Regulation (AVR)
- Complies with IEC 60018-2-78, UL, cUL, CE, & RoHS



AZ-PYRA Series Flashing Light Sounders **reach a 100 dB (A) nominal sound pressure Level with 5 Joules Flash.** This Signaling Device offers a 180° x 360° visible field with adjustable flash rate and 8 alarm tones. It operates in any climate and can be surface or flushpanel mounted.

Color: Available in Grey or Red Housing

We offer various exhaust & supply fan options for output to fans with VFD compatible or ECM motors. We also have a complete line of motorized dampers that we can add to any system.



AZP-M2000-CONO2 Garage Exhaust Control Systems

Also available:

AZP-M2000 Customized Control Panels and Accessories for CO2/IAQ Control Systems, Static Pressure Control Systems & Temperature & Humidity Control Systems and more!

Standard Panels for Rooftop, Chiller, Boiler, Make Up Air, Heat Pumps and other Equipment