



Q4C

Toxic, Combustible & Refrigerants

The Q4C is a multi-channel controller display and alarm unit that utilizes digital communications to interface with a maximum of four remote digital transmitter/sensors. This series provides reliable measurement of a wide variety of toxic gases such as CO, NO₂, NH₃, H₂S, SO₂, Refrigerants, and Combustibles. The RS-485 communication is connected via a 4-wire, multidrop daisy chain configuration to reduce the overall installation costs of the system. Alarm setpoints are set through the front keypad or through supplied software that is downloaded to the controller from a PC or laptop computer. Common relay configurations include voting, averaging, delay on actuation and de-actuation, normally or not-normally energized and latching. The audible alarm has three buzzer settings, continuous, intermittent and double-tap intermittent. An additional feature includes 24 VDC transistor outputs for a horn and strobe. Available options include; a four SPDT relay board, an analog output board that features 4-20 mA or 2-10 VDC outputs assignable as averaging or peak mode, and an RS-485 output board to communicate with the M-CONTROLLER forty input controller. Each controller comes standard with a 2 x 8-character backlit display, key pad, software CD and interface cable.



SPECIFICATIONS

| | |
|----------------------------|--|
| Input Power | 24V +/- 4V AC or DC |
| Fuse | F1: 4A slo-blo. F2: 1A very fast |
| Enclosure | NEMA 4X Type General Purpose |
| Enclosure Material | ABS plastic |
| Temperature | Industrial -20° to +50° C (-4° to +122° F) |
| Humidity | Continuous 5 to 95% RH, non-condensing Intermittent 0 to 99% RH, non-condensing |
| Input Types | RS-485 digital port for up to 4 QEL transmitter/sensors RS-232 programming port using RJ-11 connector |
| Output Ports | RS-485 to host M-CONTROLLER RS-232 programming port using RJ-11 connector 4-20 mA signals scalable |
| LED Status Lights | TX/RX Relay 1 Relay 2 Relay 3 Relay 4 |
| Recommended Cable | Power: Twisted shielded pair Communication (RS-485) - Belden 9841 or equivalent twisted shielded pair, 120 ohm |
| Panel Controls | 4 tactile and audible keypad |
| Audio Indicator | 24 VDC transistor outputs, buzzer, strobe, horn |
| Relay Outputs | 4 SPDT rated 10 Amps resistive 250 VAC/30 VDC |
| Relay Assignment | Independent, individually set to one or all transmitter/sensors |
| Time Delays | Individually set, make, break, average, and voting, 0 to 59 minutes |
| LCD Digital Display | 2 x 8 back-lit LCD displaying transmitter address, gas type, concentration and alarm status |
| Display Scroll Rate | Adjustable: 1 - 9 seconds |
| Power Supply Output | 24V supplied externally through controller |
| Product Dimensions | 7" X 4.7" X 3.5" (180 X 120 X 90 mm) |

ORDERING

Select one Relay Board (A), one Analog Board (B) & one RS-485 Board (C) **NOTE*** There is a maximum of two option boards only.

| A Relay Board | B Analog Board | C RS-485 Board |
|---|---|--|
| <input type="radio"/> 0 (No Relay Board) (Default) | <input type="radio"/> 0 (No Analog Board) (Default) | <input type="radio"/> 0 (No RS-485 Board) (Default) |
| <input type="radio"/> R (4 X SPDT, 10 Amps) | <input type="radio"/> T (Isolated 4-20mA or 2-10 VDC Output) | <input type="radio"/> 4 (Isolated to Communicate with M-Controller) |

BUILD PART NUMBER

After completing (A), (B) & (C) from the above table, fill in the Part Number Table below. The "Sensor Series" is a factory default. An example part number is offered.

| | | | | | |
|------------------------------|---|---------------------------------|------------------|------------------|------------------|
| Q4C | - | X | - | - | - |
| <small>SENSOR SERIES</small> | | <small>FACTORY PROVIDED</small> | <small>A</small> | <small>B</small> | <small>C</small> |

EXAMPLE: Q4C - X - R - T