

Model X40-8-N4X



Model X40-N7



Model X40-N1P

# 3M<sup>™</sup> Detcon<sup>™</sup> Model X40

# Integrated Alarm & Control System

# **Description**

Model X40 is a low power alarm and control system designed to monitor multiple gas detection sensors and/or a wide range of other field devices. The versatile control system is designed to receive and supervise inputs using either 4-20mA DC or Serial RS-485 Modbus™ and is available in two packages: Model X40-8 and Model X40-32. Both packages function as a Modbus™ Master and can be customized and expanded based on individual application needs using the stackable din-rail mounted I/O modules. All I/O modules are individually addressable and operate on 11.5-30VDC. The X40-8 provides power for up to eight field devices and can house up to six 4-channel I/O modules. The Model X40-32 provides power for up to 32 field devices and can house up to 12 4-channel I/O modules. The I/O modules available for use with the Model X40 include a 4-channel 4-20mA input module (DA-4), a 4-alarm relay output module (RL-4), a 4-channel 4-20mA output module (AO-4), and a 4-relay contact input module (DI-4). The modules can be mounted within the main system enclosure or installed remotely to simplify field wiring.

The Model X40 is completely field programmable using a small handheld magnet and offers advanced technology with intuitive, embedded intelligence. The control system displays real-time readings and field device status on a backlit LCD screen. During normal operation, the screen displays the alarm status and current reading (i.e., channel number, gas type, and gas concentration) for up to eight field devices simultaneously. The display is sequential and during normal operation it auto cycles through each of the active channel screens. Among the system's unique features is a wireless option that can be used with RXT-320 SmartWireless® transceivers. Enclosure options include: NEMA 4X, NEMA 1 panel mount, and NEMA 7.

# **Features**

- 8 to 32 channel capacity
- Backlit LCD screen display
- Analog or RS-485 input options
- Easy intuitive field configuration
- Wire or distributed I/O
- Extensive event data logging
- SmartWireless® capable

# **Applications**

- Oil and gas drilling rigs
- Oil and gas production sites
- Offshore production platforms
- Wastewater treatment plants
- Food and beverage processing
- Pulp and paper mills
- Refining and petrochemical









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#### SYSTEM SPECIFICATIONS

#### **System Capacity**

Model X40-32-N1P: Up to 32 field devices Model X40-8-N4X: Up to 8 field devices Model X40-32-N4X: Up to 32 field devices Model X40-32-N7: Up to 32 field devices (analog or serial)

#### Indicators 11/8" by 53/4" backlit LCD

Alarm status LEDs

### **Display Accuracy**

±1% of full scale value

#### **Input Options**

Analog 4-20 mA DC RS-485 Modbus™ \*(Only compatible with other Detcon products) Relay Contacts

#### **Output Options**

4-20 mA DC RS-485 Modbus™ Relay Contacts

#### **Safety Approvals**

CE Marking (Models X40-N4X & X40-SS)

#### Warranty

One Year

#### **ENVIRONMENTAL SPECIFICATIONS**

## **Operating Temperature Range**

-4°F to + 158°F, -20°C to + 70°C

## **Storage Temperature Range**

-40°F to + 185°F, -40°C to + 85°C

# **Operating Humidity Range**

0-99% RH non-condensing

Specifications subject to change without notice

## MECHANICAL SPECIFICATIONS

#### **Dimensions**

Model X40-32-N1P: 10.5"W x 8"H x 12"D Model X40-8-N4X: 12"W x 14"H x 7.75"D Model X40-32-N4X: 16"W x 17.85"H x 9.5"D Model X40-32-N7: 11"W x 9.15"H x 2.75"D

# Weight

Model X40-32-N1P: 10 lbs Model X40-8-N4X: 10 lbs Model X40-32-N4X: 20 lbs Model X40-32-N7: 10 lbs

# **ELECTRICAL OPTIONS**

#### **Power Input**

115-230 VAC\* or 11.5-30 VDC \* Option for Model X40-32-N7

## **Power Consumption**

<0.25 Watt

(I/O module power consumption not included) (Field device power consumption not included)

#### **Electrical Classification**

Model X40-32-N1P: NEMA 1 Panel Mount

Model X40-8-N4X: NEMA 4X Corrosion resistant weatherproof Model X40-32-N4X: NEMA 4X Corrosion resistant weatherproof Model X40-32-N7: NEMA 7 Class I; Division 1, Group C, D

# **Order Guide**

PN 95P-X32000-000 Model X40-32-N1P, General purpose panel mount hardware assembly 110/220 VAC, 24 VDC power supply

(up to 32 active channels).

PN 954-X08000-000 Model X40-8-N4X, Wall mount ABS weatherproof enclosure 110/220 VAC, 24 VDC power supply

(up to 8 active channels).

PN 954-X32000-000 Model X40-32-N4X, Wall mount ABS weatherproof enclosure 110/220 VAC, 24 VDC power supply

(up to 32 active channels).

PN 957-X32000-000 Model X40-32-N7, Div 1 weatherproof enclosure 24 VDC power\* for use in distributed I/O installations only

(up to 32 active channels).

\*110/220 VAC, 24 VDC power supply optional. Addressable I/O modules sold seperately.

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