# **Factory Installed Smoke Detector**

Specification Sheet For Factory Installed smoke detect

: 48/50PG, PM, PD 03-28 48/50TC 04-30, 48/50HC 04-28 50TGQ 04-24, 59HCQ 04-12

## GENERAL DATA

General DATA
Type: Teldrier SuperDuct, 4-wire Photoelectric Sensing delector and control module
The Camier facing installed snacke detector system comprises a fosie-wire controller and one or two seasons (Retine
Air and/or Supply Air, 1) is primary function in 16 what own the conflop unit in order to prevent smoke from
circulating discignant the building. It is not to be used as a life saving device. Factory installed snocke detectors
require to additional snappling tubes to be field installed.

### SYSTEM DESCRIPTION

CHSDTIEST001A00

IMPORTANT: Read these instructions completely before attempting to install the accessory Remote Magnetic Test/Reset Station.

SAFETY CONSIDERATIONS

lastallation and servicing of air-conditioning equipment can be hazardous due to system pressure and electrical components. Culty cainett and qualified persumed should install, repair, or service this equipment. Untrained persumed van perform book maintenance functions such as cleaning and epitacing air filters. All other operations must be performed by trained service personnel. When working on air conditioning equipment,

observe precautions in the literature, on taes, and on labels attached to or shipped with the unit and other safety

precontons that may apply.

Follow all safety codes. Wear safety glasses, protective clothing, and work gloves. Use queuching cloth for brazing operations, there for extinguisher available. Read these instructions theroughly and follow all warnings or custions included in literature and attached to the unit. Consult local building codes, the current echions of the National Electrical Code (NEC) NTPA 70. In Canada refer

to the current editions of the Canadian electrical Code

Recognize safety information. This is the safety-alert symbol A. When you see this symbol on the unit and in

symbol 182. When you see has symbol to the indicate and in instructions or manuals, be alert to the potential for personal injury. Understand these signal words; DANGER. WARNING, and CAUTION. These words are used with the safery-alert symbol. DANGER identifies the most se-

the soury-area symbol. Detectar hazards use that so, to construct the white will result in severe personal injury or death. WARNING signifies hazards which could result in personal injury or death. CAUTION is used to identify unsafe practices which may result in minor personal injury or product and property damage. Note: is used to high

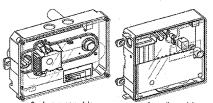
precautions that may apply.

CSA C22.1.

a in a LEM-METHON.
Controller - The controller includes a controller housing, a printed circuit board, and an earily semovable clear plastic cover for access to the multiple tennional connections and relay contacts for connection to fire alarm system RVAC controls, and other auxiliary functions. A remote test/reset/visual alarm station can be connected to the controller.

Detectors - The detector includes a plastic housing, a printed circuit board, a clear plastic cover, an exhaust tube, and a sampling rube. The exhaust of the and sampling rube are attached during factory installation. The sampling rube varies in length depending on the issue of the roofing mult. The clear plastic cover permits visual ingestions without having to disastemble the sensor. The cover forms an airtight chamber around the sensing electronics.

For installations using two detectors, the controller does not differentiate which detector signals as alarm or trouble condition. A rapid change in environmental conditions, such as smoke, cruss the asserts or signal as allarm state but dust and debris accumulated over time does not. When the sensor's ability to compensate for environmental changes has reached in limit (100% dirty), the sensor signals a twoble condition. Are in introduced to the duct smoke detector's sensor glandar through a sampling tube that extends into the TNAC dist and it directed back into the variation system thought as exhaunt to the. The difference in air pressure between the two below pulls that sampled extends the state of the state



**Installation Instructions** 

# **GUIDE SPECIFICATIONS**

System Specifications:

System Type:
Separate controller and detector modules Four Wire Controller and Detector Photoelectric Sensing Environmental compensation with differ sensing for reliable, stable, and drift-free

sensitivity

Deerating environment:

Temperature = 20° to 158°F (-29° to 70° C)

Humidity = 10% to 93% RH, non-condensi

### Table 1 - Controller Terminal Connections Terminal Name

Number	
1	AUX (-)
2	Reset
3	SUPV Contact COM
4	Alarm Contact COM
5	Alarm Contact NO
6	AUX 1 Contact COM
7	AUX 2 Contact NO
8	AUX 2 Contact NC
9 -	24V AC/DC In (+)
10	24V AC/DC in (-)
11	Not used
12	Multi-Shuldown
13	SUPV Contact NO
14	SUPV Contact NC
15	REM Alarm LED Out
16	AUX 1 Contact NC
17	AUX 1 Contact NO
18	AUX 2 Contact COM
19	18 VDC Output (+)
26	18VDC Output (-)
TB3-1	Not Used
TB3-2	Not Used
N	AC Neutral
L	ACLine

Turn to the Experts

panel
Two Form-C auxiliary alarm relays for interface with reoftop

I not not construct a state property and the construction with recording unit or offer engineers (routhe) relay to continuit the operation of the Trouble LED on a remote test/reset station

Capable of direct connection to two individual detector modules

Can be wired to up to 14 other duct anoke detectors for mulipple fan shutdown applications

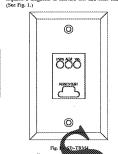
High voltage terminals:	12-22 AGW
All others:	14-22 AGW
Operating voltages:	20-29 VAC, 50/60 Hz
, , ,	120 VAC. 50/60 Hz.
	220/240 VAC, 50/60 Hz
Operating current:	
20-29VDC:	175 mA
24VAC:	500 mA at 50/60 Hz
120VAC:	100 mA, 50 Hz
	75 mA at 60 Hz
220/240 VAC:	53 mA at 50 Hz
	40 mA at 60 My

Form C 10A at 30 VDC,

Form C 2.0A at 30 VDC (resistive)

# GENERAL

The SD-TRM4 Remote Test/Reset Station is used with the SuperDuct\* four-wire duct snoke detector. Each remote test/reset station provides a green LED to indicate power, a red LED to indicate alarms, and a yellow LED to indicate the power is a red LED to indicate the state of the SD-TRM4.



Power (graen)
Clear lams
14 to 22 AWG
10 5. max
Included in controller specificafeor
Superfluct \* Four-Wire Smoke
Delectors

Operating Environmen

# Failure to follow this caution may result in personal

CUT HAZARD

▲ WARNING

siture to follow this warning could result is ersonal injury or death.

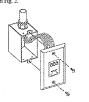
ELECTRICAL SHOCK HAZARD

# REMOTE TEST/RESET STATION

TESTS



INSTALLATION



WIRING Wire the remote test/reset station to the four-wire controller as shown in Fig. 3.

# 

EDWARDS SB-SJ SD SEMSOR CARBIER HKSSZTOON SEMSOR

EDWARDS SD-SJ SD SEMSOR CARRIER HKSOZTGO1 SEMSOR

( TB1 ) CAT 5 TB4

[8] <u>CAT 1</u> T32

EDWARDS SD-CJ CONTROLLER CARRIER HK2821001 CONTROLLER

ALARM INITIATION CONTACTS E21

-(18) -(9)

-(1)-----(

SUPERVISION RELAY CONTACTS [3]

---(18)-Fo MAIL COMING!

flelp PONER SEPPLY 120/208/230/480

CRSDHMSBOOTAND IS BEIRG INSTALLED WITH THIS INSTRUCTION

DIAGRAM FOR CONNECTION OF DUCT

TO FEST STATION AND ALARM/STROBE EDWARDS Installation Instructions for the 6536-G5 Horn/Strobe Description Connect the hom/strobe wire leads and terminals (Figure 2). The hom and strobe are connected together at the factory. The 6536-G5 is an audible/visual signal UL Listed for general purpose signaling applications. NOTE: To connect the from and strobe to different circuits, loosen the terminals, remove the two wires and cap of with wite mits. A qualified electrician familiar with National Electrical Code and local code requirements must install this product. Failure to Eilbur the safer georathics in this instruction sheet could result WARNING WARNING The 6536-G5 horn/strobe (Figure 1) can be mounted gang 2" x 4" (51 mm x 102 mm) electrical box, doub) (102 mm x 102 mm) electrical box, or standard 4" x 102 mm) junction box with a plaster ring. Perform regularly scheduled testing at least twice a year or more often as dictated by local authorities having jurisdiction. Sogh 24V AC or 24V DC Pozer Steens

Floure 2. Connecting the Hurn and Strobe

DUCT DETECTOR - TEST STATION - ALARM/STROBE



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M3 of 3

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DATE: REVISION