Carbon Monoxide (CO) Single-Point Gas Detection System

Wall-mounted gas monitor with built-in carbon monoxide (CO) sensor.

accepts one analog remote device such as a secondary gas sensor,

DESCRIPTION

temperature or humidity sensor.

Specifications subject to change without notice, I USA 160712 | Page 1 of 5 CONTROLS

SPC3-1112

SPC3-1112 Specifications subject to change without notice. I USA 160712 | Page 2 of 5 CONTROLS SPECIFICATION Type of Control (Cont...) Dimensions (H x W x D) 5.12 x 5.12 x 2.95 in. Digital input One (1); can be assigned to any (130 x 130 x 75 mm) relay (R1, R2). 3 holes for 1/2 in, conduit for wall application Remote audio/visual alarm reset (surface) mounting and 1 hole on or override function Relay outputs back side of base plate for single (R1, R2) (1) SPDT (R1), and (1) gang electrical box mounting Wire connection Terminal blocks, w/ status LEDs or SPST-NO (R2), screw type for lead wire Wire size iumper selectable Min. 24 AWG (0.25 mm²) Contact rating 30 VAC/VDC, 0.5 A, max. Max 14 AWG (2.5 mm²) - each stage level (S1-S4) Assignable to any relay Wire distance Max. loop resistance 450 Ω sensor fall-safe Assignable to any stage level (= wire distance plus controller Time delay switching Selectable for make and brake of input resistance) each sensor point (SP1 to SP2) 0.6 lbs (0.3 kg) 0-9,999 seconds Approvals / Listings Analog output One (1), NRTL Perf. Tested & Certified - unit rating (0)4-20 mA, load < 500 Ω : Conforms to STD ANSI/UL 2075 (0)2-10 VDC, load > 50K Ω; City of Los Angeles iumper selectable: polarity protected, VDI 2053, C-No. 418791 assignable to low, high or EMC-Compliance 2004/108/EWG averaging of sensor inputs LVD 73/23/EWG VDC switched output One (1) 24 VDC, 50 mA max - relays (R1-R2) UL Recognized, E41515 Audible alarm 83 db @ unit, enabled or CSA, C22.2 No. 0, No. 14 disabled, selectable; assignable (File No. LR31928) to stage level S1, S2, S3 or S4 UL Listed, E208470 Alarm acknowledgment Menu-driven and system reset CSA Certified, E208470 function for latched relays Two years material and User Interface workmanship, 12 months normal Refer to illustration "Keypad User Keypad type exposure for sensor element Interface" Touch buttons Four (4) Status LED's Four (4), for system on, stage status, and fallure Digital display Liquid Crystal Display (LCD) two lines, 16 characters per line, 1 digit resolution - unit display Menu selectable, per sensor: ppm, %v/v, %LEL, °F or % RH Environmental Permissible ambient 14°F to 122°F (-10°C to 50°C) working temperature - storage temperature 23°F to 86°F (-5°C to 30°C) 15 to 95% RH, non-condensing humidity - working pressure Atmospheric ± 10% Physical Enclosure (panel) Polycarbonate, material UL 94-HB, fire-retardant - conformity UL 50 standards - color Light gray - protection NEMA 4X (IP65) installation Wall (surface) mounted, or single gang electrical box relevant. 12700 Stowe Drive, Suite 100, Poway, CA 92064 | Ph: (858) 578.7887 & (888) GO.INTEC | relevantsolutions.com/inteccontrols CITY OF LOS ANGELES BOARD OF BUILDING AND SAFETY CALIFORNIA COMMISSIONERS BUILDING AND SAFETY 201 NORTH FIGUEROA STREET VAN AMBATIELOS LOS ANGELES, CA 90012 E. FELICIA BRANNON VICE-PRESIDENT FRANK M. BUSH GENERAL MANAGER JOSELYN GEAGA-ROSENTHAI SUPERINTENDENT OF BUILDING **GEORGE HOVAGUIMIAN ERIC GARCETTI** JAVIER NUNEZ OSAMA YOUNAN, P.E. **EXECUTIVE OFFICER** Intec Controls, Inc. RESEARCH REPORT NO.: 930467 12700 Stowe Dr. Suite#100 Date: January 1, 2018 Poway, CA 92064 Expires: January 1, 2019 Attn: Charles Gulotta GENERAL APPROVAL - Renewal - Single and Multi Station Carbon Monoxide Detection Systems -Manufactured by Intec Controls, Inc. **MODELS** LGC2-04, MGC2-04/08/12/16/20/24, DGC5, SPC2-1110, SPC3-1112 DT-1110, DT5-1110, DT5-1112, AT1110, LC-1112 - Rated 24VAC, 60HZ, 0.5 Ampere This approval is for fire, shock, and electrical hazards only and does not address those aspects of detection of gases the device is designed or calibrated to detect. CONDITIONS OF APPROVAL The installation and use of the carbon monoxide detection system is approved when the following provisions are The Controllers shall be plainly and permanently marked in letter heights not smaller than 1/8 inch on a

Manufacturer's name.

Model designation,

Serial Number,

Intec Controls, Inc.

Electrical rating, in Volts, Amperes and Frequency,

"For Carbon Monoxide Detection Only.",

"For Indoor / Dry Installations ONLY.",

"NOT SUITABLE FOR HAZARDOUS LOCATIONS".

"For use with Intec Controls, Inc. Carbon Monoxide Sensors ONLY",

"The installation of this CO Detection System shall be based on the conditions of approval in Research Report

#930467. Not valid if RR is not current. For a copy of the RR visit www.LADBS.org or call 213-482-6721"

AN EQUAL EMPLOYMENT OPPORTUNITY - AFFIRMATIVE ACTION EMPLOYER

LGC2-04, MGC2-04/08/12/16/20/24, DGC5, SPC2-1110, SPC3-1112

relevant. 12700 Słowe Drive. Suite 100, Poway, CA 92064 | Ph; (858) 578.7887 & (888) GO.INTEC | relevantsolutions.com/inteccontrols Intec Controls, Inc. Carbon Monoxide Detection System The Sensors shall be plainly and permanently marked on a contrasting background where readily visible The installation of the Carbon Monoxide detection system shall comply with the applicable provisions of Plans for the installation of the Carbon Monoxide detection system shall be submitted to and approved by The performance and sensitivity of the Carbon Monoxide detection system must be evaluated, tested and An electrical permit shall be obtained prior to installation or relocation of this equipment in the City of 8. The installation and performance of this Carbon Monoxide detection system shall comply with the

with the following:

Los Angeles.

California Title-24 Part 6.

City Electrical Testing Laboratory.

Manufacturer's name.

"Carbon Monoxide Sensor"

"For use with Intec Controls, Inc. Controllers ONLY."

the Los Angeles City Codes (Building, Electrical, Mechanical and Fire).

the Mechanical Plan Check and the Electrical Plan Check prior to each installation.

personnel in accordance with the manufacturer's instructions.

listed by an approved recognized (NRTL) testing agency.

date, in accordance with the manufacturer's instructions.

Chapter 3 and Article 725 of the National Electrical Code.

The audible device shall have a different tone from life safety devices.

otherwise approved by the Los Angeles City Electrical Testing Laboratory.

14. A copy of this conditional approval letter shall be made available at each installation site.

Model designation.

Electrical rating, Manufactured date. Intec Controls, Inc.

"This CO Sensor must be replaced within 5 years of the manufactured date."

24VAC, 60HZ, 1/2 Amp

The Carbon Monoxide detection system shall be installed, calibrated, and maintained by qualified

applicable provisions of the Los Angeles City Codes (Building, Electrical, Mechanical & Fire) and

11. The Carbon Monoxide detection system shall be serviced by qualified personnel at least once a year and it shall always be in optimum operating condition. The building owner shall maintain all service records

and make them available to the Department of Building and Safety for inspection when requested.

12. A part, when replaced, shall be of the identical original approved manufactured part and rating, unless

13. This approval shall be void if the product is modified without prior authorization from the Los Angeles

15. The installation of the Carbon Monoxide detection system with the Class I wiring shall comply with

This Carbon Monoxide sensor shall be replaced by qualified personnel within 5 years of the manufactured

DT-1110, DT5-1110, DT5-1112, AT1110, LC-1112

SPC3-1112 Specifications subject to change without notice. I USA 160712 I Page 3 of 5 CONTROLS ORDERING INFORMATION SPC3-1112 - 2 00 D US Add optional "D" for RS-485/DGC communications in lieu of analog output; omit for standard models **Enclosures** Trip/Setpoints Wall NEMA 4X 00 Factory set (for built-in sensor): Stage (S1 to S4) S1 = Low alarm @ 25 ppm CO (Relay R1) S2 = High alarm @ 25 ppm CO (Relay R2) S3 = Audible alarm @ 100 ppm CO (built-in Horn) S4 = Remote alarm @ 100 ppm CO (24 VDC switched output) 2 = Standard enclosure 01 | Special request Standard control system, ordering part number: SPC3 - 1112 - 200 US, configuration includes: Digital, programmable controller with menu-driven keypad user interface, LCD & LEDs. 24 VAC/VDC, 50/60 Hz NEMA 4X enclosure Built-In: (1) CO sensor/transmitter (1) Horn, audible alarm (1) 4-20 mA, for remote sensor Outputs: (2) Relays, 30 VAC/VDC, 0.5 A max.; 1-SPDT (R1) and 1-SPST-NO/NC (R2), jumper selectable (1) Switched 24 VDC, 50 mA max. (1) (0)4-20 mA or (0)2-10 VDC,

SPC3-1112 Specifications subject to change without notice. I USA 160712 | Page 4 of 5 CONTROLS **USER INTERFACE & CONTROLLER** Keypad User Interface System Operation All programming is made via the keypad user interface in combination with the display screen. Security is provided via two password levels. The lower level password (1234) allows to override or to reset system status functions. The upper level INTEC Controls password (9001) allows all programming and override functions. SPC3 Main Page Display After powered on, displays INTEC and part number and changes to sensor reading display unless a system error occurs; then the error is displayed. Alarm 1 Flashes when any stage level setpoint is exceeded; steady when any relay output Main Menu Displays headings of "System Errors", "Stage Status" is in manual override operation "Relay Status", "Sensor Readings", "Relay Setup", Flashes when high alarm stage 2 or multiple "SP (Sensor Point) Setup", and "System Setup". alarm stage level setpoints are exceeded; steady when any relay output is in manual - Sub Menu "System Errors" override operation Displays errors, reset corrected errors, and historical error O Fallure
"Yellow LED" Flashes when system or sensor falls - Sub Menu "Stage Status" Power "Green LED" Steady when power is ON Displays status of each "SP" sensor point, stage level/setpoint Exit programming mode and saves settings; return to previous level or menu - Sub Menu "Relay Status" Displays status and manual control of each output relay. Enter Main Menus; scrolls through Main Menus - Sub Menu "Sensor Readings" and Sub Menus; Increase or decrease a value The current and mean/average values are displayed for each "SP" sensor point with sensing type and engineering unit Navigates through menus on the same level; moves cursor when inputing data (ppm. %v/v. %LEL, °F, %RH). Enter Sub Menus: accepts and stores data: - Sub Menu "Relay Setup" silence horn (if assigned) Enter and/or change parameters of each relay. Assign de-energized or energized normal operation Select steady or flashing function Main Page & Main Menu Select horn function INTEC Controls Select latching or non-latching mode SPC3 Select digital input usage, and assign to any output relay Set delay ON/OFF time - Sub Menu "SP Setup" System Errors Enter and/or change parameters of each sensor point. Activate sensor point Select sensor point type (gas, temperature, humidity) Select measuring range Select sensor signal Stage Status Select stage/setpoint 1 to 4 Select hysteresis Set delay ON/OFF time Select current or mean/average value Relay Status Assign sensor point fault to stage level setoping Assign setopint 1 to 4 to any output relay Assign to analog output - Sub Menu "System Setup" Sensor Readings Enter and/or change system parameters. Select service mode Display software version Set maintenance after days Relay Setup Select service phone number Select averaging function, time and overlay, of any SP Set maintenance period days Change customer password Set fallure relay Select power ON time Select analog output function relevant: 12700 Stowe Drive, Suite 100, Poway, CA 92064 | Ph: (858) 578,7887 & (888) GO.INTEC | relevantsolutions.com/inteccontrols

Carbon Monoxide Detection System

Intec Controls, Inc.

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DISCUSSION The product covered in this Research Report is a Carbon Monoxide (CO) Detection System for use in nonhazardous locations such as commercial buildings and parking garages. The detection system monitors the carbon monoxide level in the surrounding air.

When the CO level exceeds allowable values, set by California Title-24 Part 6 and OSHA, the CO detection system, activates the building's ventilation system. If the concentration of CO rises above the recommended upper limits set by California Title-24 Part 6 and OSHA, an audible and visual alarm will be activated.

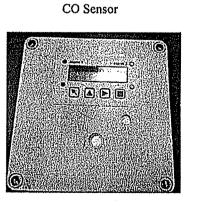
An on-board microcomputer supervises and verifies the operation of the system and displays the status to the indicator lights. If a malfunction occurs, the ventilation system is activated and a fault warning signal is activated. When this system is installed in accordance with the provisions of this General Approval, it should meet the

minimum safety standards of the Los Angeles City Electrical Code. For this General Approval to be valid on any installation in the City of Los Angeles, an engineer or inspector of

the Department of Building and Safety may make a determination that all conditions of the General Approval required to provide equivalency have been met.

This General Approval is in accordance with Section 93.0303 of the Electrical Code pertaining to "New Materials and Methods of Construction", and does not waive the requirements of the City of Los Angeles Building Code. This General Approval is neither a product endorsement nor a certification of function of accuracy of the

PICTURES



CO Controller

APPROVED BY:

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REVISIONS BY

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Date 08 - 28 - 2020

Drawn T.L. Job # F20-1139