Tri-Tech Medical Inc.

Medical Gas Master Alarms

Submittal Data Sheet

Project Information

Project Number_____ Approval_____

Features

The Tri-Tech Master Alarm Panel monitors and displays normal and alarm conditions from up to 64 remote medical gas source signals. Pressure switches and DISS union check valve connectors are sold separately.

- Complies with NFPA 99. Made in the U.S.A.
- Self-contained unit – designed for ease of installation and service.
- MCP circuit board available for interface to building management system.
- Microprocessor controlled
- Self-diagnostic and error message display for ease of maintenance.
- Audio and visual alarm indicators
- Bright easy to read L.E.D. displays – clearly visible in both day and night lighting conditions
- Visual (green) indication of normal condition
- Constant display and monitoring of each source alarm signal
- Individual user programmable remote signal alarm points (NC, NO or disabled)
- Dry contacts for remote monitoring of all alarm conditions
- Alarm history display of previous alarm conditions
- Hinged frame with lanyards for easy accessibility
- Three year PC board warranty
- Real time main line gas pressure readout modules available

Specification

The Master Alarm Panel shall be the Tri-Tech Medical Master Alarm Panel. The panel shall be microprocessor controlled and designed to comply with NFPA 99. The panel shall be 100% digital and shall not require re-calibration. The panel shall be able to interface with building management systems with the use of an MCP circuit board. The master alarm panel shall be compatible with the T-Net PC based medical gas information management system. The alarm panel shall be enclosed in a steel box and shall be designed to accept an electrical input range of 120-240 volts AC – 50-60 hertz. The source voltage shall be stepped down with a self-contained transformer. The panel shall contain audible and visual alarm indicators. The audible alarm may be silenced by pressing the alarm silence button, but the visual alarm indicator can only be cancelled by fault correction. The alarm shall detect and filter out transient signals (less than 0.6 seconds). The alarm shall be capable of displaying alarm history for all possible alarm conditions.

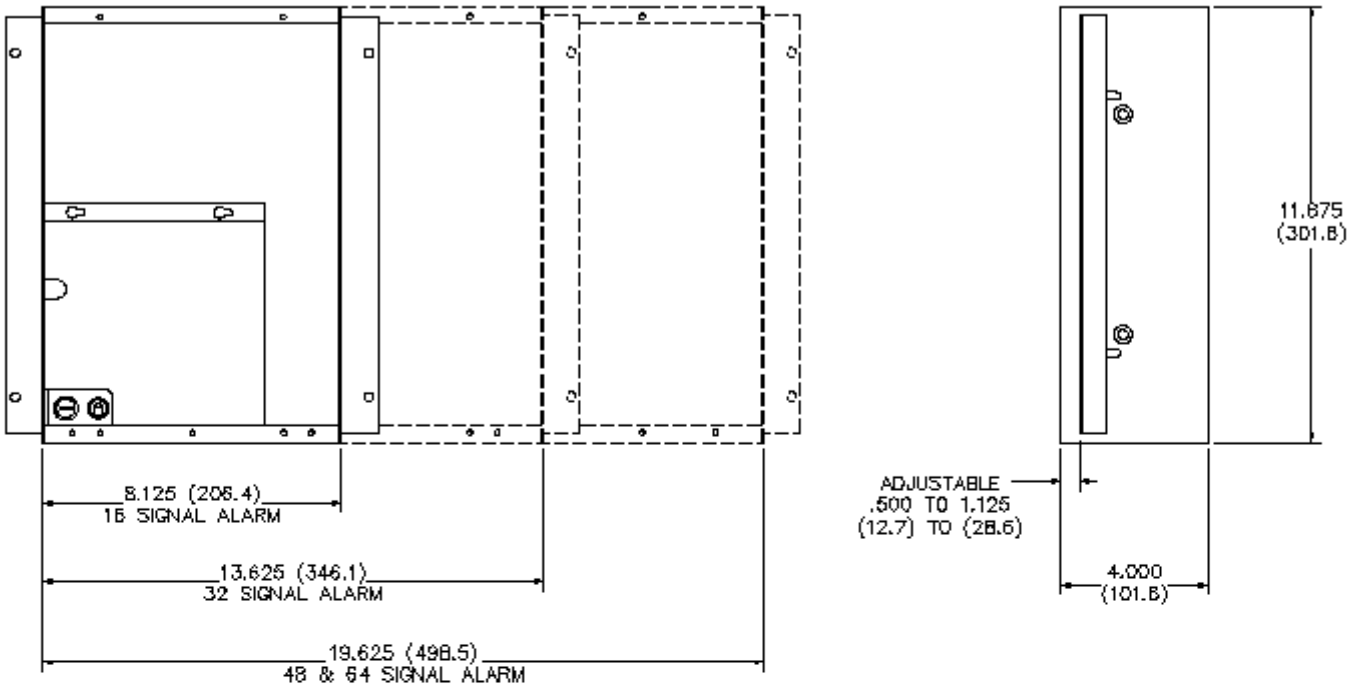
(Master alarm shown above is 16 signals – part # DU16)

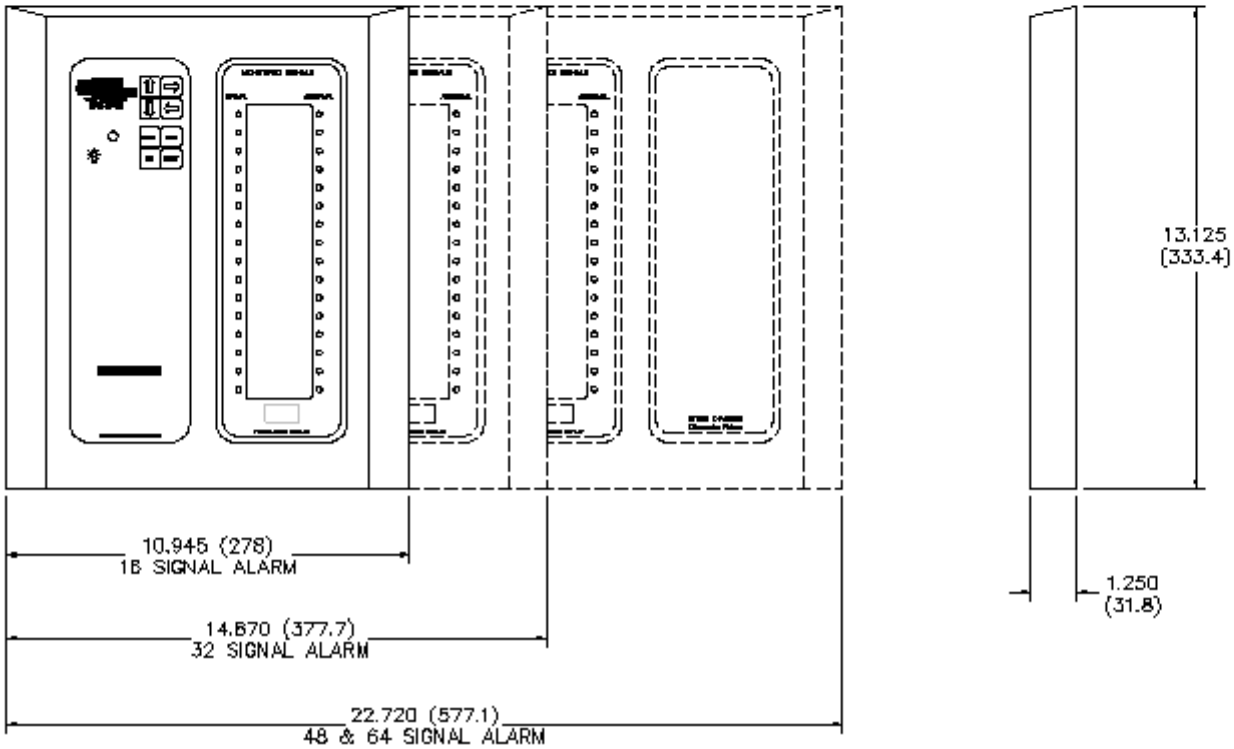
Each source signal module shall monitor 16 signals. The alarm shall be capable of monitoring and displaying up to 64 medical gas source signals in increments of 16 source signals. The alarm is modular and may be initially installed as a smaller unit (i.e. 16 signals) and later expanded to (i.e. 32 signals).

In addition, each 16 signal Master Alarm Module shall incorporate the following features:

- Individual user programmable remote signal alarm points to accept NO or NC signals, or may be disabled. Factory preset to accept Normally Closed signals
- LED indicators (Green) confirms normal status, (Red) indicates abnormal condition
- Each signal easily labeled and positioned to suit any requirement using self adhesive labels provided with the alarm
- A set of dry contacts with relay to trigger an optional remote alarm in the event of an alarm condition

DIMENSIONS – INCHES
(MM)





Tri-Tech Medical Inc.

Medical Gas Alarm System

Ordering Information:

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Label Colors	Area Alarm Gas Services	|Master Remote Signals	Blank Slot for Future Expansion
U = USA (NFPA) C = Canada (CSA)	O = Oxygen V = Medical Vacuum A = Medical Air N = Nitrous Oxide T = Nitrogen C = Carbon Dioxide W = WAGD/EVAC S = AGSS H = Hyperbaric Oxygen U = Utility Air L = Helium I = Instrument Air (USA) Surgical Air (Canada) D = Carbon Dioxide 80 psig M = Gas Mixtures 50 psig P = Gas Mixtures high pressure 180 psig R = Tri-Gas F = Future	16 = 16 points 32 = 32 points 48 = 48 points 64 = 64 points	B = Blank Slot

Examples:

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DU16 = 16 signal Master Alarm, USA colors, 2 slot box
DUOVB = 2 gas Area Alarm – Oxygen, Vacuum and Blank slot, USA colors, 2 slot box
DUOFB = 1 gas Area Alarm – Oxygen, Future and Blank slot, USA colors, 2 slot box
DUOVANT = 5 gas Area – OXY, VAC, AIR, N2O, N2 and Blank slot, USA colors, 2 slot box

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DCOV16B = 2 gas Area – OXY, VAC & 16 signal Master & Blank slot, USA colors, 3 slot box
DU32 = 32 signal Master Alarm, USA colors, 3 slot box
DUOVANTB = 5 gas Area – OXY, VAC, AIR, N2O, N2 and Blank slot, USA colors, 3 slot box
DUOVANTCWMB = 8 gas Area, OXY, VAC, AIR, N2O, N2, CO2, WAGD, Gas Mixture and Blank slot, USA colors, 3 slot box

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DU64 = 64 signal Master, USA colors, 5 slot box
DUOVAB32 = 3 gas Area – OXY, VAC, AIR, Blank slot & 32 signal Master, USA colors, 5 box
DUOVANCTWU32 = 8 gas Area – OXY, VAC, AIR, N2O, CO2, N2, WAGD, Utility Air & 32 signal Master, USA colors, 5 slot box

*Note – Medical Gas Alarms come in one of the three configurations shown above - 2 slots , 3 slots or 5 slots.

See next page for standard alarm configuration example drawings

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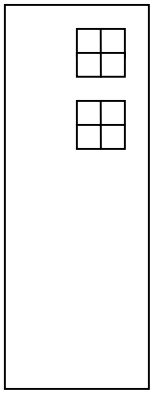
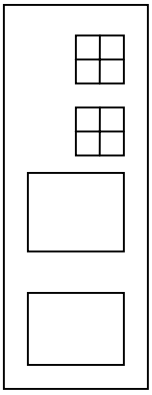
Medical Gas Alarm System

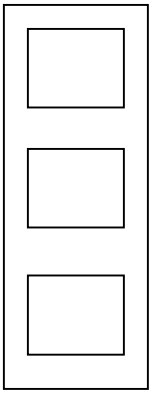
Ordering Information:



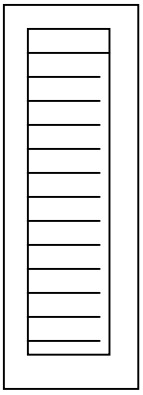
Logic Module With Buzzer



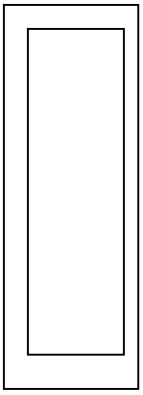
Logic Module With Buzzer & Two Gas (Area Alarm Modules)



Area Alarm Module (Choose 3 letters from chart below – one for each gas service)



Master Alarm Module 16 Signals per module



Blank Module

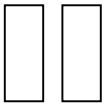
Part Number
DU = USA (NFPA)
DC = Canada (CSA)

Part Number
A = Medical Air
C = Carbon Dioxide
E = EVAC/WAGD
F = Future
H = Hyperbaric Oxygen
N = Nitrous Oxide
O = Oxygen
T = Nitrogen
U = Utility Air
V = Vacuum

Part Number
16 = One 16-signal module
32 = Two 16-signal modules
48 = Three 16-signal modules
64 = Four 16-signal modules

Part Number
B = Blank Module

Examples:



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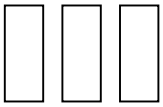
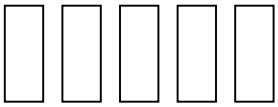


DUOV16B = 2 gas Area Alarm – OXY, VAC & 16 signal Master Alarm and Blank Module
DU32 = 32 signal Master Alarm
DUOVANTB = 5 gas Area Alarm – Oxygen, Vacuum, Air, Nitrous Oxide, Nitrogen and Blank Module



DU64 = 64 signal Master Alarm
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