T1200-C Conventional Panel Range

Fire Detection

Benefits

- Allows very early detection of accommodation fires with significantly reduced false alarms when used with Tyco's unique heat enhanced Compensated Carbon Monoxide (CCO) Detector.
- Configurable Detection Zones allowing zones to be configured for any or all of the following: Latching or Non Latching Fire Indication, Normal or Intrinsically Safe zones and monitoring of machinery space zones.
- Crew Alert Mode: - Manages Alarm Annunciation.
- Pre-configured for immediate use.

Features

- Console or Bulkhead mountable. Developed for use in vessels which require up to 32 zones of fire detection.
- Range includes a separate Water Mist Panel
- Integrated Serial Voyage Data Recorder output module on 16 and 32 Zone Panels.
- Discrimination between Automatic Fire Detectors and Manual Alarm Call points to provide the appropriate response.
- Marine Approved Muster Alarm.
- Text label Inserts for Controls and Indicators in customer supplied language.
- Extensive configuration options using simple onboard DIL switches and links.
- Installation costs reduced by being able to connect Intrinsically Safe (I.S.) and non I.S. devices on the same zone.
- Separate battery box.

Developed and manufactured in the United Kingdom the T1200-C range of Conventional Panels from Tyco is a powerful yet user friendly series of Control Panels. The range is fully approved by all major Marine Authorities and takes advantage of the very latest technological advancements both in terms of design and manufacturing to the latest European, Marine and Asian standards.

T1200-C Conventional Panel Range

Fire Detection

Detection Options

Optical Detector
An excellent all round detector suited to all applications.

High Performance Optical (HPO) Detector
A direct replacement for the Ion Chamber Smoke Detector.

Flame Detector
Used where there is a risk of large flaming fires
e.g. Machinery Spaces.

Enhanced Compensated Carbon Monoxide (CCO) Detector
The best detector for early warning without false alarms, used in life threatening applications e.g. Cabins, Public Spaces etc.

Heat Detector
Used where smoke detectors cannot be used e.g. Galleys, Laundries, Drying Rooms etc.

Fault Finding Features

The following fault finding indications are available:

General Fault
Any Fault Condition.

Power Supply Fault
Mains or standby power supply/charger fault.

System Fault
Micro Controller or memory fault.

Earth Fault
Positive or Negative Power Supply Earth Fault.

Fuse Fault
Auxiliary Supply Fuse Failure.

Repeater Fault
Repeater Fault or Repeater communications failure.

Sounder Fault
Any Sounder Fault.

Fire Protection Fault
Fault on the Fire Protection Output. **

Fire Output Fault
Fault on the Fire Output. **

Fault Output Fault
Fault on the Fault Output. **

Ease of Installation

The following features are provided to ease installation:

• Designed for one man installation.

• Reversible enclosure for bottom or top cable entry.

• Factory configured to work straight out of the box.

• Integral Serial VDR output on 16 and 32 Zone Panels.

• Integral Muster Alarm.

Service

Service is available from the network of Tyco Marine Offices situated in all major ports around the world. (www.tycomarine.com)

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Fire Detection

Overview of Operation (Ease of Use)

Alarm Acceptance
Turn the Access Control key switch to position "I" to unlock the controls. Press the "Silence Alarms/Resound" button once only to silence the Fire Alarm Sounders. To silence the buzzer press the "Silence Buzzer" button.

Panel Reset
Turn the Access Control key switch to position "I" to unlock the controls, press the "Reset" button.

Zone Isolation
Turn the Access Control key switch to position "I" to unlock the controls. Press the "Select ON/OFF" button to enter the select mode, use the select ⅴ button to move the pulsed cursor indication down through the LEDs until it pulses the required zone LED. Press the "Disable" button to disable the selected zone.

Sounder Isolation
Turn the Access Control key switch to position "I" to unlock the controls, Press the "Select ON/OFF" button to enter the select mode, use the select ⅄ button to move the pulsed cursor indication up through the LEDs until it pulses the Sounder Fault/ Disabled and Sounder Test LEDs. Press the "Disable" button to disable the sounders.

One Man Zone Test
Turn the Access Control key switch to position "I" to unlock the controls, Press the "Select ON/OFF" button to enter the select mode, use the select ⅴ button to move the pulsed cursor indication down through the LEDs until it pulses the required Zone LED. Press the "Test" Button to activate the test condition on the selected zone.

One Man Sounder Test
Turn the Access Control key switch to position "I" to unlock the controls, Press the "Select ON/OFF" button to enter the select mode, use the select ⅄ button to move the pulsed cursor indication up through the LEDs until it pulses the Sounder Fault/ Disabled and Sounder Test LEDs. Press the" Test" button to start the Sounder Test.

Technical Information

Enclosure Material:
Mild Steel Zinc Plated & Passivated + Polyester Powder Coated.

Controller Range
T1216-C Console/Bulkhead Mount 16 Zone Controller 110 - 230VAC + 10% / -15% 50 - 60Hz + /- 5%.

T1216W-C Console/Bulkhead Mount 16 Zone Water Mist Panel 110 - 230VAC + 10% / -15% 50 - 60Hz + /- 5%.

T1232-C Console/Bulkhead Mount 32 Zone Controller 110 - 230VAC + 10% / -15% 50 - 60Hz + /- 5%.

T1200B-C Bulkhead Mount Battery Box suitable for 2 x 17Ah SLA Batteries.

T1200E-C Console/Bulkhead Mount Expansion Box.

T1216R-C Console/Bulkhead Mount 16 Zone DC Repeater 19.6 to 28.4Vdc.

T1232R-C Console/Bulkhead Mount 32 Zone DC Repeater 19.6 to 28.4Vdc.

Options
A1466 Relay Output Module.

C1631 Repeater Interface Module.

C1633 8 - Way LED Driver Output Module.

C1634 8 - Way Relay Output Module.

C1635 8 - Way Monitored Output Module.

C1665 Muster Interface Module.

Please refer to the following datasheets:-

PSF123UM - Series 600 Conventional Fire Detector Range.

PSF132UM - 601F-M & 601FEX-M Conventional Infra Red Flame Detectors.

PSF122UM - M600EX Intrinsically Safe Fire Detector Range.

PSF036UM - MCP Series Call points.

REPEATER

PLUG-IN REPEATER SERIAL PORT (OPTION)
MAXIMUM NUMBER OF REPEATERS = 5

PLUG-IN MUSTER INTERFACE
OPTIONAL FOR REPEATERS

MUSTER ALARM

MIMICS / PLANT / MACHINERY SHUTDOWN, FIRE DOOR VENTILATION CLOSE / ADDITIONAL SOUNDER CIRCUITS

8 WAY O/P MODULES (IN DEDICATED
ENCLOSURE, ABUTTED TO FIRE PANEL)

UP TO 32 ZONES (MAXIMUM OF 20
SMOKE DETECTORS PER ZONE) BUT
LIMITED TO 512 DEVICES PER PANEL

UP TO 32 ZONES OF FIRE DETECTION

ZONAL FIRE OUTPUTS
- OPEN COLLECTOR 4 OFF

ZONAL FIRE OUTPUTS

REMOTE SILENCE / RESET

REMOTE ALARM SILENCE, RESET I/Ps

SOUNDER OUTPUTS 4 @ 1.0A

MULTIPLE SOUNDER OUTPUTS

OPEN COLLECTOR OUTPUTS

OPEN COLLECTOR OUTPUTS:
ALARM DISABLEMENT ACTIVE
BUZZER ACTIVE

MAXIMUM AUXILLARY DC SUPPLY O/P 1.0A

AUXILARY DC OUTPUT

SAFETY MANAGEMENT SYSTEM / SHUTDOWN DAMPERS / FIRE DOORS ETC / MONITORING REMOTE RELAYS

1) RESET RELAY*
2) FIRE ALARM ROUTING O/P*
3) FIRE PROTECTION EQUIPMENT O/P*
4) FAIL-SAFE FAULT ROUTING
   WARNING O/P*

* RELAY 1: 1 X 1AMP 30Vdc C/O VOLT FREE
   RELAYS 2,3 & 4 ARE LINK CONFIGURED:
   TYPE 1 - FAULT MONITORED AND POWERED
   TYPE 2 - VOLT FREE C/O RATED 1A AT 30Vdc

MARINE VOYAGE DATA RECORDER
O/P MODULE. C/O RELAY CONTACTS
30Vdc 1AMP & SERIAL OUTPUT RS422
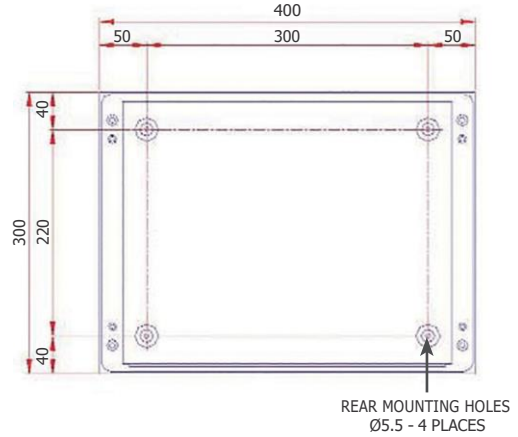
VDR OUTPUT

Mounting Arrangements (all dimensions in mm)

T1216W-C 16 Zone Water Mist Panel
T1232-C 32 Zone AC Controller
T1232R-C 32 Zone DC Repeater
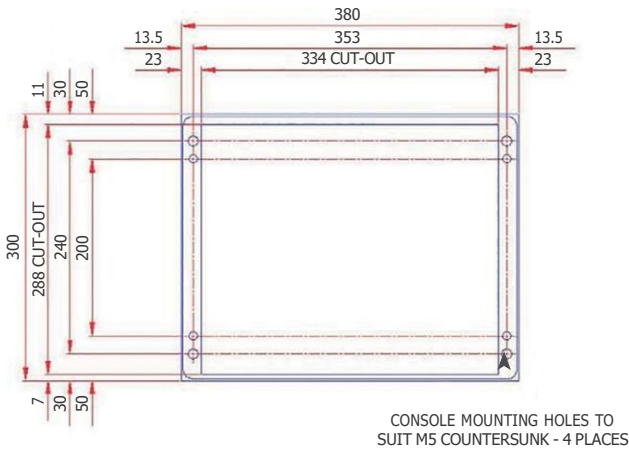T1200E-C Expansion Box

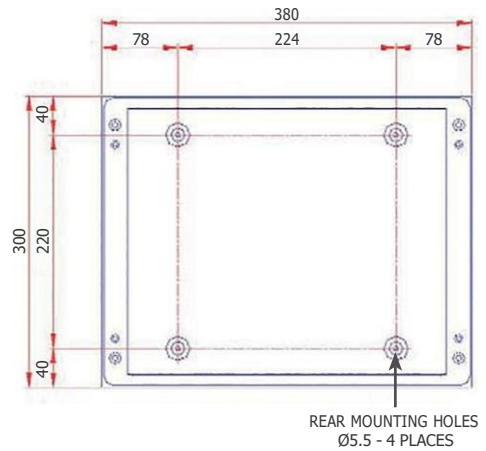**Console Mount**   **Bulkhead Mount**

CONSOLE MOUNTING HOLES TO
SUIT M5 COUNTERSUNK - 4 PLACES

REAR MOUNTING HOLES
Ø5.5 - 4 PLACES
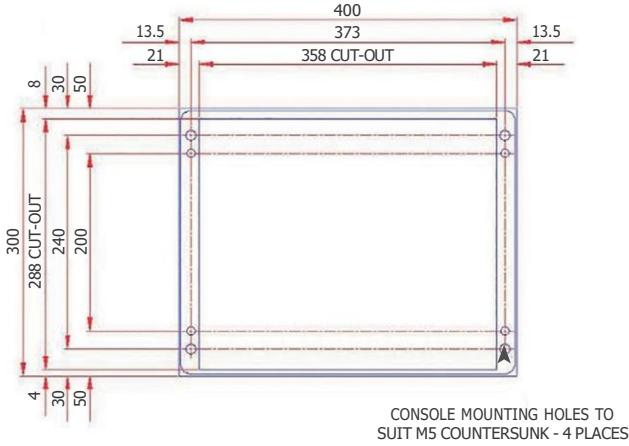
T1216-C 16 Zone AC Controller
T1216R-C 16 Zone DC Repeater

Console Mount   **Bulkhead Mount**

CONSOLE MOUNTING HOLES TO
SUIT M5 COUNTERSUNK - 4 PLACES

REAR MOUNTING HOLES
Ø5.5 - 4 PLACES

T1200B-C Battery Box

Bulkhead Mount

REAR MOUNTING HOLES