System 1700
Conventional
Fire Controller Range

Features

- Expandable in 4 zone increments
- Customised by module selection - uniquely flexible
- Integral battery and charger
- Simple controls
- Local and remote displays
- Easy installation and extension
- Selective sounder operation
- All circuits fault monitored
- Remote signalling output
- Designed for fire alarm systems specified to BS5839: Part 1:1988
- Proven exceptionally reliable worldwide
Introduction
A uniquely flexible series of basic fire controllers. Covering 4 or more zones of fire detection and suitable for cost effective protection in a wide range of building types. Detection, display, alarm, and extinguishing control, can be tailored to meet any need.

Technical Information

General
System 1700 consists of 14 standard modules, selectively assembled in one of 5 housings which can be flush mounted using the appropriate kit - to meet any specific customer requirement within the designed capacity.

These units can be configured to provide fire detection with local display, remote display, extinguishing control or any combination of these functions with integral power units and secondary batteries or from separate 24vDC power supplies. Alarm sounder outputs can be commaned or pre-programmed for specific building sectors.

Conventional style monitored detector zones, each consisting of up to 20 standard ADT flame, smoke or heat detectors or callpoints. Remote display or control are driven by a multiplex transmitter/receiver system on a single pair cable. Each transmitter can feed up to 4 receivers, at a distance of up to 1Km.

Display legends are replaceable. Standard legend is English or on the reverse Arabic/English, but blanks are available to suit other customer requirements.

Alarm Module with Display is the central control unit driving the sounders and auxiliaries. The display indicates Power On, Fire or Fault, and has push-button switches for Evacuate, Silence, Reset and Lamp Test enabled by a key-switch. The module also has the integral sounder.

Integral Power Modules There are two versions available: 1.5A or 3.0A suitable for powering the system and recharging integral sealed lead-acid batteries. The power modules are available to suit 110vAC or 240vAC mains supply.

External Power Interface Module is fitted internally and monitors a suitable 24vDC supply. The module monitors the external power supply for any fault condition signalled. The module should be used with an external power supply when Nickel-Cadmium batteries are specified.

4 or 8 Zone Module with Display provides the power to each detection zone which respond to four conditions, open-circuit fault, quiescent, alarm or short-circuit fault. Individual indication is given for either Alarm or Fault. Each zone has a corresponding output which is energised in an alarm condition and is suitable for driving zonal relays and/or auxiliary modules i.e. multiplexed repeater.

Multiple Output Module allows a single output or groups of outputs to be activated in response to a single input. The module provides up to 16 outputs with 8 inputs, or conversely each module can provide up to 8 outputs with 16 inputs.

Relay Module is mounted internally and has 4 heavy duty relays each with a single changeover contact (rated 5A 30vDC). The relays are normally energised from the individual zone outputs of the zone module.

Sector Sounder Module allows up to 4 groups of sounders to be activated in a pre-programmed response from up to 10 zones of detection. Each group can be programmed to respond in either pulsing or continuous output. Each output is fused 1A 24vDC.

Sounder Booster Module allows for extra power to be supplied to a sounder circuit. It is normally used when large numbers of sounders are required in one circuit or where long distances create volt-drop problems. Additional current is 1.5A.

Multiplex Transmitter Module transmits up to 16 independent signals plus common alarm or fault to up to 4 multiplex receiver modules at remote locations over a pair of signal wires (max length 1 Km).

Multiplex Receiver Module receives and codes the signals from a multiplex transmitter module. The outputs can be used to drive either a Repeater display module, Mimic indicators etc.
Repeat Display Module displays the information from the Multiplex receiver module. The Remote Alarm display provides indication of Fire, Fault, and Power On together with Silence and Lamp Test facilities. The Repeater Display module provides up to 16 Fire indications.

Extinguishing Module and Display provides complete control of a gaseous extinguishing system. The input commands are taken from the coincident zonal outputs. The module also has an independent Manual Release facility and has indicators for Manual-Automatic mode, Gas Released and Disabled conditions together with a key switch for mode selection. The module has facilities for extensive electrical fault monitoring, cylinder pressure monitoring, and an adjustable time-delay before gas release.

Coincidence Module is designed to activate one or both relays in response to an alarm condition from up to eight zonal outputs. This module is primarily used in conjunction with the extinguishing module, but may also be used for other applications.
Technical Information

**Mechanical**

<table>
<thead>
<tr>
<th>Housing</th>
<th>Dimensions (mm)</th>
<th>Weight (Kg)</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Aperture</td>
<td>180 336 125</td>
<td>4</td>
<td>1H 1</td>
</tr>
<tr>
<td>2 Aperture</td>
<td>354 336 133</td>
<td>5</td>
<td>2H 2</td>
</tr>
<tr>
<td>3 Aperture</td>
<td>354 430 193</td>
<td>7</td>
<td>1V + 2H 4</td>
</tr>
<tr>
<td>5 Aperture</td>
<td>354 637 193</td>
<td>9.5</td>
<td>1V + 4H 6</td>
</tr>
<tr>
<td>8 Aperture</td>
<td>760 531 233</td>
<td>14.5</td>
<td>8H 10</td>
</tr>
<tr>
<td>12 Aperture</td>
<td>1050 700 235</td>
<td>30</td>
<td>12H 18</td>
</tr>
</tbody>
</table>

(Weight excludes electronics)  

Note: 2 half size modules can be fitted into one module space.

**Electrical**

- **Inputs:**
  - Power Supply Module 110 or 240 v AC ±10%, 50/60Hz, Single Phase (power consumption 200VA max) 28v dc 5A max from suitable power supply unit i.e. “C2400” series
  - Power Interface Module 28v dc 5A max from suitable power supply unit i.e. “C2400” series

- **Outputs:**
  - Common Sounders 2 outputs rated, 28v dc (Max 2.5A Total)
  - Sector Sounders 4 outputs rated 1A, 28v dc
  - Common Fire 3 sets volt-free changeover contacts (rated 1A 28v dc)
  - Common Alarm 1 set volt-free changeover contacts (rated 1A 28v dc)
  - Zone Alarm Switched 100mA
  - Extinguishing Sounder 600mA (max)
  - Extinguishing Actuator 1.5A continuous or 4A non-continuous
  - Extinguishing Receiver Switched 100mA

**Environmental**

- Operating Temp Range: -10°C to +55°C
- Storage Temperature: -20°C to +65°C
- Relative Humidity: up to 95% non-condensing
- Enclosure to: IP44