



Extinguishant Control Panels

Sigma **XT** Sigma **XT+** Sigma **ZXT** Syncro **XT+**

Protection of people, building and assets from a fire is a paramount concern to any organisation. Keeping a site safe is not the only priority but with the risk of physical damage and financial loss resulting from a fire, there is also the risk to operational performance and reputation, so a reliable and responsive fire system is required that can respond rapidly to any situation.

For many businesses such as data centres, museums and heritage sites, the right protection not only needs to protect your investment but also ensure uninterrupted business operations.

Early warning fire extinguishant systems and detection technology can detect a fire and automatically release a fire suppression agent to eliminate fire within seconds. Stopping a fire within the first few moments can reduce or avoid damage to equipment and assets and subsequent loss of operational productivity.

Globally established, Kentec, a leading manufacturer of life-critical control systems, has a range of extinguishing control panels which play a key role in protecting vitally important information and assets.

Sigma ZXT Extinguishant Control Panel

A development of its proven Sigma XT range, the Sigma ZXT provides controls and indications for a single-area extinguishing release system, enabling targeted extinguishing that limits damage and reduces costs. Three conventional detection zones provide the alarm 'trigger' required to activate the release of extinguishant, and the system can be configured to release the extinguishant on an alarm from any single zone or combination of multiple zones.

The system, compliant with EN12094-1, can also be configured to provide two extinguishing outputs, either working together as common outputs or as main and reserve outputs. The latter results in the connection to two sets of extinguishing gas cylinders, which enables the customer to return a system to a functional state, quickly, following a release.

The Sigma ZXT has an event log which records event data from the panel such as alarms, faults, configuration changes etc. along with a time and date stamp. This historical visibility is critical for diagnostics, identifying the cause of alarms and faults, as well as reasons for activations. Up to 1000 events can be stored within the panel which can be viewed through the LCD or can be downloaded and saved using Kentec's LE2 software.



A sophisticated, dynamic LCD, which supplements the LED status indicators, provides detailed information on panel status including fault conditions, alarm conditions and extinguishing release countdown. If dynamic mode is chosen, the display changes colour in relation to the panel status, providing immediate and clear visibility of status conditions. These are as follows:

White – Normal condition

Red – Fire condition, Released condition

Red flashing – During countdown to the released condition

Yellow – Fault condition, Disabled condition and Test condition

Green – Access level 2

Turquoise – Access level 3

While not in dynamic mode, the LCD will be white regardless of status.

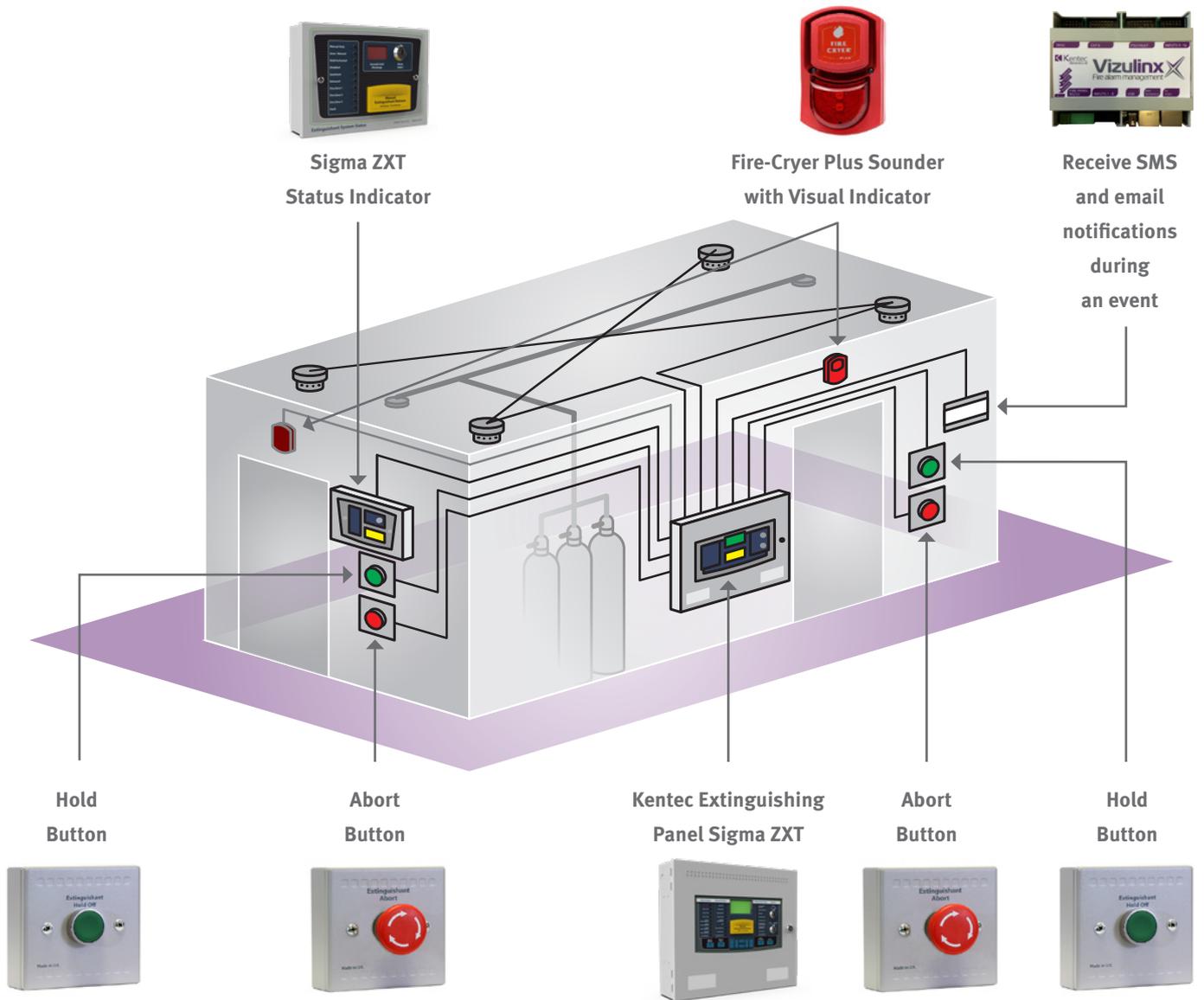
To compliment the Sigma ZXT a range of status indicators which match the look of the Sigma ZXT panel fascia. Status units can be located at any access point to the risk area notifying approaching persons of system status, as well as providing optional Auto/Manual key switches and Manual Release pushbuttons.

Sigma ZXT Features

- > Single area extinguishing panel
- > Dual extinguishing outputs
- > Event log
- > Dynamic LCD Display
- > Compatible with I.S. barriers
- > Non-latching zone input option to receive signals from other systems such as aspirating equipment
- > Countdown timer displays time remaining until release
- > Supports up to seven, four-wire status indicators
- > Sigma ZXT status units
- > Compatible with SI status units
- > Larger enclosure option is available
- > Approved and certified to EN12094-1, EN54-2 and EN54-4



Application Diagram



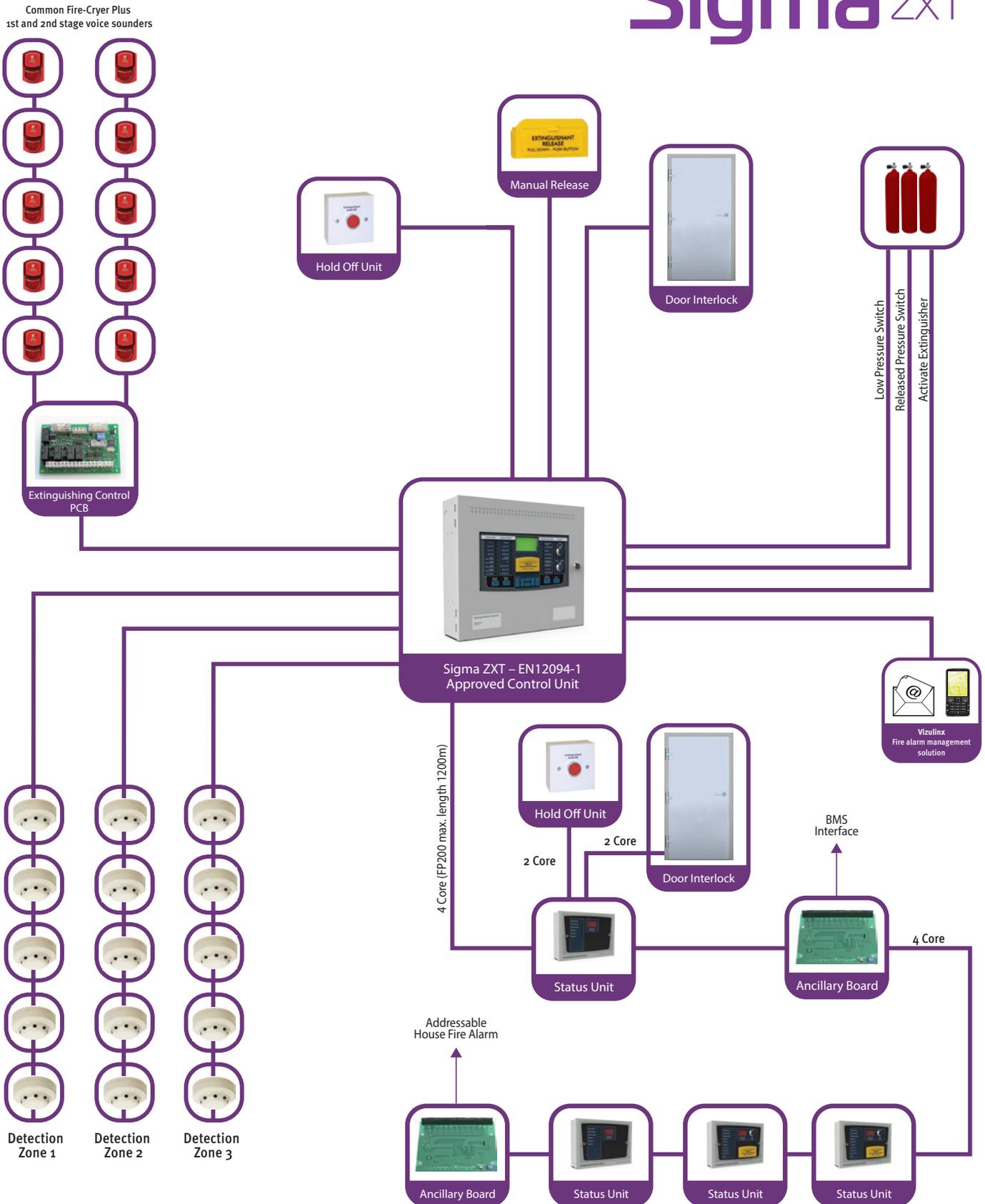
Applications

The Sigma ZXT is particularly suitable for the following applications:

- > Archive Rooms
- > Datacentres
- > Energy Centres
- > Factories
- > Generators
- > Industrial Units
- > Marine
- > Printing and Machine Protection
- > Switch Rooms
- > Telecomm Rooms
- > Tunnels
- > Waste Recycling

Network Diagram

Sigma ZXT



Sigma XT Extinguishant Control Panel

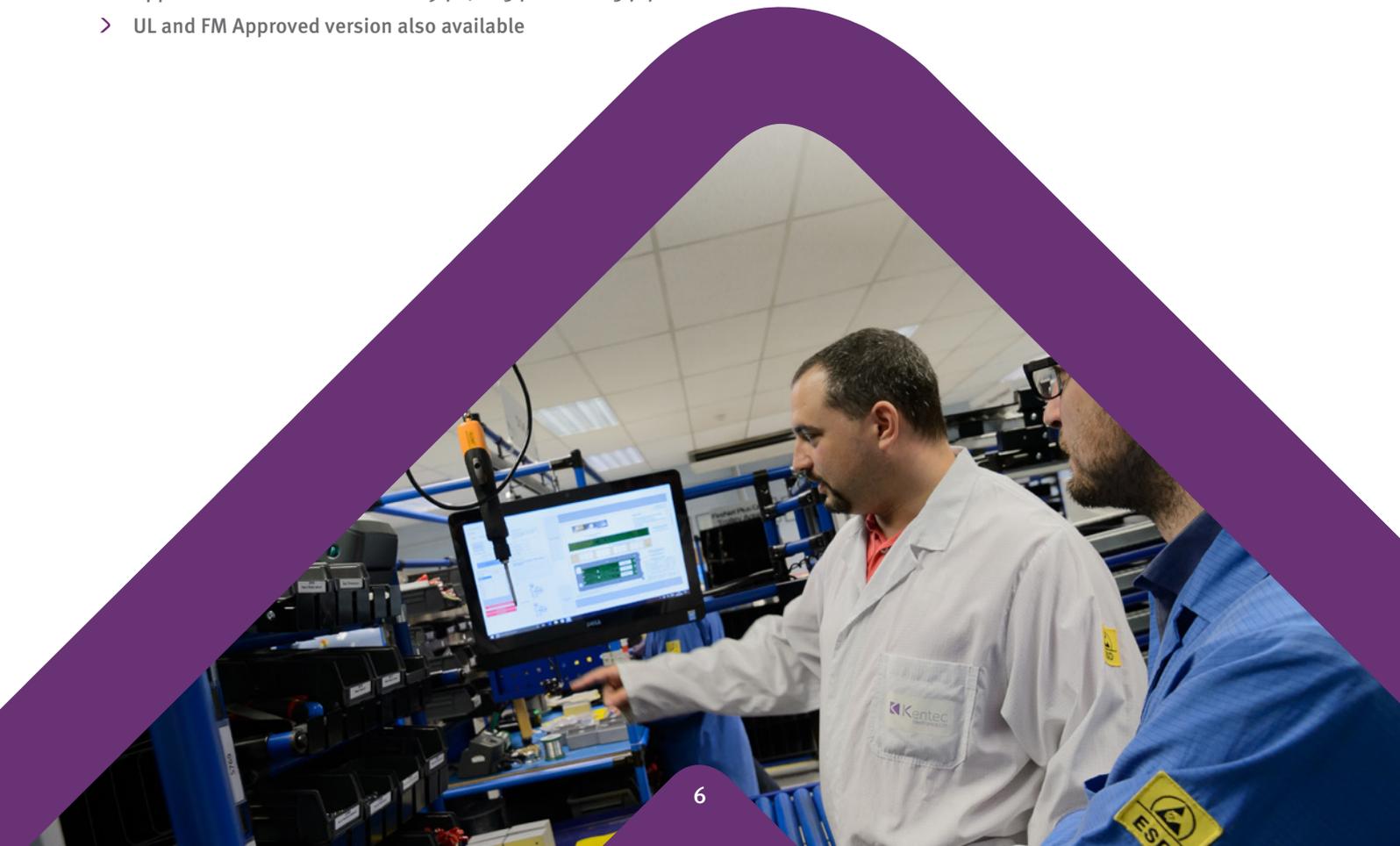
The industry-leading Sigma XT extinguishant releasing panel provides outstanding value and performance for all small to medium fixed firefighting installations.

With three detection zones as standard, extinguishant release can be configured to activate from any combination of detection zone inputs.

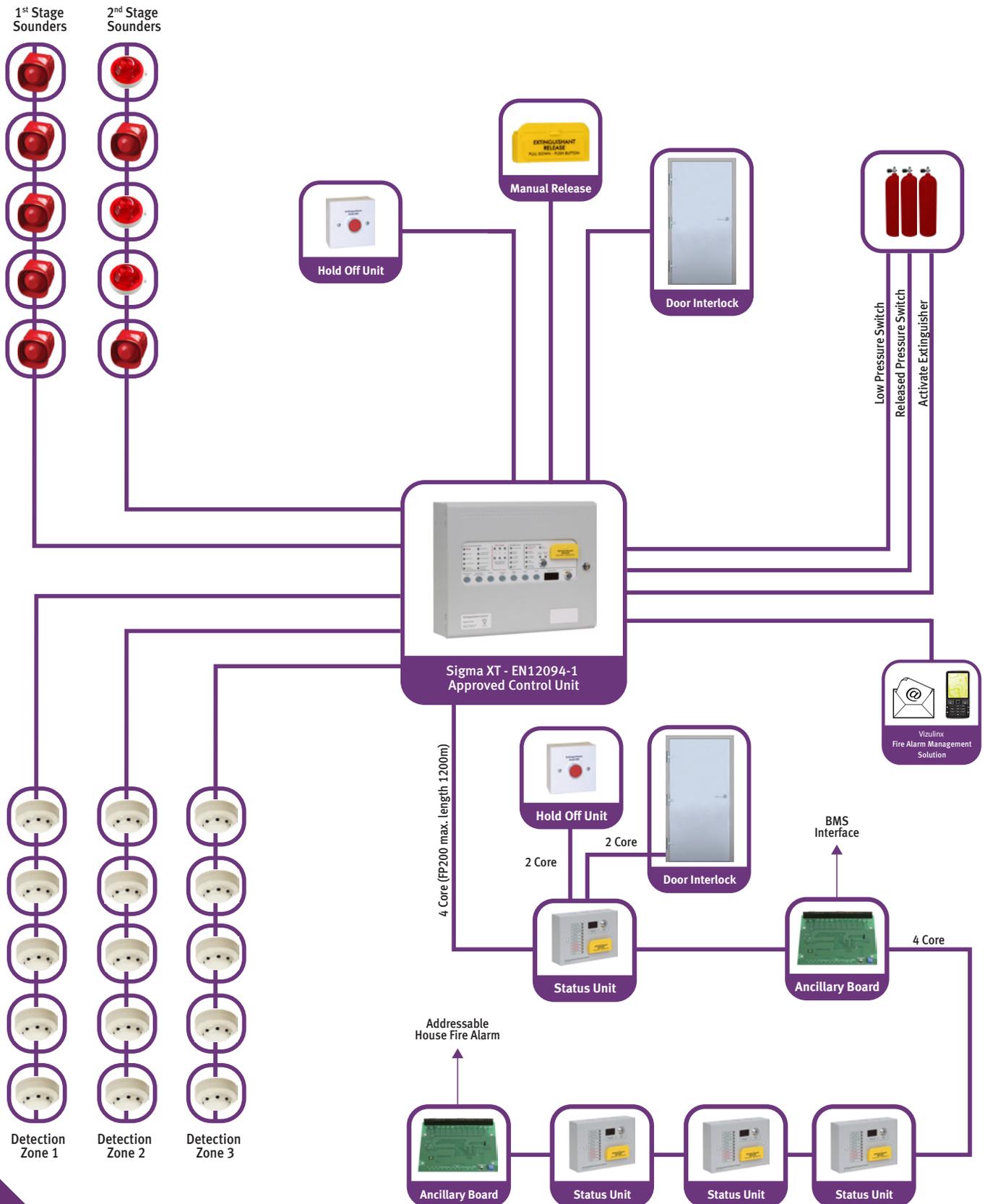
Sigma XT panels are robust and easy to install, with all the electronics mounted on a single, easily removable, steel plate.

Sigma XT Features

- > Any single zone or any combinations of zones can be configured to release
- > Configurable first stage sounder delays
- > Configurable detection delays
- > Zero time delay upon manual release option
- > Compatible with I.S. barriers
- > Non-latching zone input option to receive signals from other systems such as aspirating equipment
- > Countdown timer displays time remaining until release
- > Supports up to seven, four-wire status indicators
- > Approved and certified to EN12094-1, EN54-2 and EN54-4
- > UL and FM Approved version also available



Sigma XT Connection Diagram



Sigma XT+ Multi-Area Extinguishant Control Panel

The Sigma XT+ range combines Sigma CP conventional fire detection from two to eight zones with highly configurable extinguishing control modules. It provides an integrated control solution for extinguishing systems with up to four protected areas.

The fire detection section connects to the extinguishant control modules via a serial link which enables secure, bi-directional transfer of data. Sigma XT+ modules may be mounted remotely in separate enclosures and connected to Sigma CP panels via this serial interface to provide central fire detection and control with distributed extinguishing systems.

Sigma XT+ modules may also be mounted separately from fire detection and control equipment and activated by addressable output modules or volt-free contacts from other systems via two monitored activation inputs.

Sigma XT+ Features

- › Two, four or eight detection zones
- › One to four extinguishant areas
- › Dual extinguishant outputs for each area (configurable as Main/Reserve)
- › First and second stage sounder outputs for each area
- › First and second stage volt-free changeover contacts for each area
- › Released volt-free contact per area
- › Fault volt-free contact per area
- › Programmable extinguishant delays
- › Programmable output duration
- › Countdown indicator shows time until release in seconds
- › Mode select and manual release controls per area
- › Monitored remote manual release input, Abort input & Hold input
- › Approved and certified to EN12094-1, EN54-2 and EN54-4



Syncro XT+ Multi-Area Addressable Extinguishant Control Panel

Syncro XT+ multi area addressable control panel enables extinguishing systems to use all the features and benefits of the more sophisticated detection techniques provided by addressable fire detectors, as well as the other benefits of analogue addressable systems, such as control of loop connected sounders, beacons and input/output modules. With up to 16 zones of addressable detection over one or two loops it ensures every detector can contribute to the extinguishant release.

The Syncro XT+ has up to four extinguishing areas and two releasing outputs per area which can be controlled via simple coincidence detection or via more complex cause and effects configured by the Loop Explorer configuration programme. Each extinguishant area features a comprehensive set of inputs and outputs and is configurable via the Loop Explorer configuration programme.

All extinguishant areas may have up to seven serially connected Sigma Si status indication and control units, or ancillary relay boards connected via a four-core cable. With the addition of a Syncro network card, Syncro XT+ control panels can be networked to provide scalable extinguishing systems for all sizes of installation.

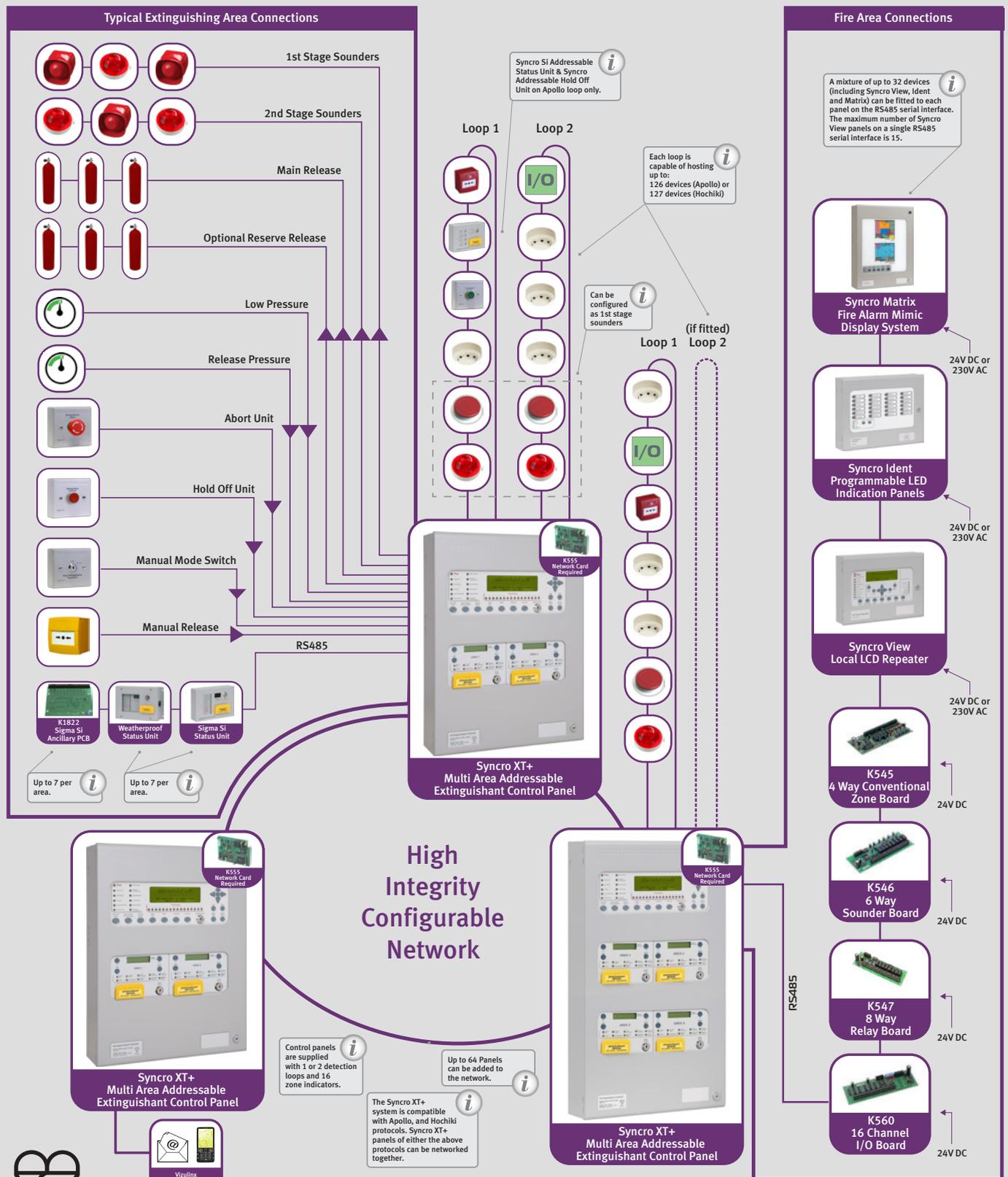
Syncro XT+ features

- > Up to four extinguishant areas (custom build options are available)
- > Dual extinguishant outputs for each area (configurable as main/reserve)
- > First and second stage sounder outputs for each area
- > First and second stage volt-free changeover contacts for each area
- > Released volt-free contact per area
- > Fault volt-free contact per area
- > Programmable extinguishant delays
- > Programmable output duration
- > Countdown indicator shows time until release in seconds
- > Mode select and manual release controls per area
- > Serial connections for Sigma Si status units and ancillary boards (K588)
- > Approved and certified to EN12094-1, EN54-2 and EN54-4



Syncro XT+ Network Diagram

The Syncro XT+ Multi Area Addressable Fire Alarm Control Panels are Approved to EN12094-1, EN54-2 and EN54-4 - KM 96761



BS-EN12094-1
KM 96761



Sigma Si Extinguishant Status Units & Hold-Off Unit

Status Units

Sigma Si is a range of system status indicator units for use with Kentec Sigma XT, Sigma XT+ and Syncro XT+ extinguishant releasing control panels.

The Sigma Si range of status indicators provide detailed status information for Sigma XT and Sigma XT+ extinguishant release control equipment.



Status Unit Features

- > High brightness LEDs
- > Detailed indication of the status of the control panel
- > Monitored data connection
- > Countdown timer displays time remaining until release
- > Manual only, automatic and manual mode
- > Remote auto/manual door interlock input (monitored)
- > Remote hold input (monitored)
- > Internal fault diagnosis indicators
- > Weatherproof IP65 versions available
- > Certified compliant with BS EN12094-1 when used with Sigma XT control equipment



Hold-Off Units

Sigma Si Hold-Off units are available with red or green actuators (BS 7273-1 recommends white with red button) and are mounted in a single gang, surface mounting enclosure. For flush mounting, the enclosure may be discarded and the unit mounted to a standard UK single gang electrical back box. The unit has a durable, shrouded push button to prevent accidental operation and a simple two-wire connection to Sigma XT, Sigma XT+, Syncro XT+ or Sigma Si status units is required.

Sigma Si Hold-Off units are fitted with normally open and normally closed contacts to allow operation with monitored and unmonitored systems.

Warning Signs

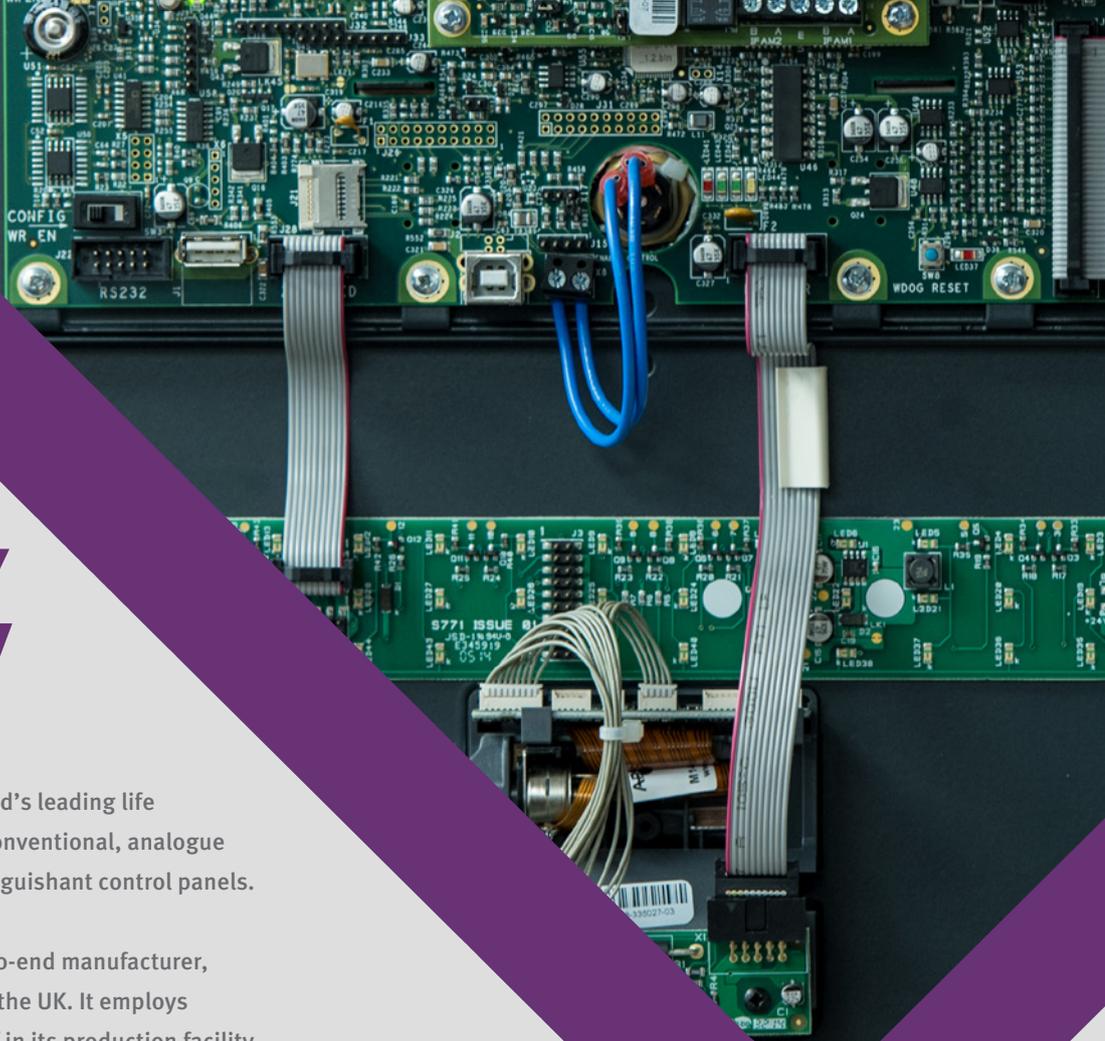
Powered by a nominal 24V DC supply, the illuminated warning signs use LED technology to provide a high reliability, high brightness, audio/visual warning indication unit to supplement mandatory alarm warnings.

The brightness of the sign remains constant over its entire operating range of 15 to 30 volts DC due to the unique 'power boost' circuitry employed. This ensures that even with a system running on depleted batteries, all signs remain at full intensity.

A range of standard text signs are available, including automatic/manual mode, manual only mode, automatic model only, and extinguishant system activated. All signs have fully customised text and different languages are easily accommodated. The large display panel is backlight with high intensity white LEDs to provide a high contrast indication in a range of different colours.

A split-level function allows the top and bottom halves of the sign to be illuminated independently via separate inputs or by reversing the supply voltage allowing two stage messages to be displayed if required.

The internal buzzer can be enabled or disabled via configuration switches and it can be silenced via a two-wire remote input. The metal enclosure is slimline and attractively finished in a durable, neutral epoxy powder coat.



Company Overview

Kentec Electronics is one of the world's leading life safety solutions manufacturers of conventional, analogue addressable fire detection and extinguishant control panels.

Founded in 1985, Kentec is an end-to-end manufacturer, with everything sold being made in the UK. It employs approximately 230 members of staff in its production facility, head office and research and development department.

In addition to design and manufacture, Kentec provides technical support specified to the local standards and customer requirements of over 90 countries worldwide. With a commitment to meeting the needs of individual national markets, Kentec has achieved a global reputation, resulting in its life safety systems being installed in numerous prestigious sites across the world.

Kentec manufactures products approved to EN54, EN12094, UL, FM, NFPA and marine classification societies.



Units 25-27
Fawkes Avenue
Questor Dartford
Kent DA1 1JQ, England

+44 (0)1322 222121
+44 (0)1322 291794
sales@kentec.co.uk
www.kentec.co.uk

This briefing is intended as general guidance and is not a substitute for detailed advice in specific circumstances. Although great care has been taken in the compilation and preparation of this edition to ensure accuracy, Kentec cannot in any circumstances accept responsibility for errors, omissions or advice given or for any losses arising from reliance upon information contained in this publication.