ST
SAFE TECH

التكنولوجيا الآمنة للتجارة

لأنـظـمـة الأمـن والسـلامـة

SAFETY & SECURITY SYSTEMS

توريد المواد .

نظام الإنذار المبكر عن الحريق ونظام الحماية .

نظام مكافحة الحريق .

أنظمة الأمن والتحكم بدخول المنشآت و المباني .

أنظمة النداء ونظام الدوائر التلفزيونية المغلقة .

التجهيزات والمواد الكهربائية والإلكترونية.

المولدات الكهربائية.

نظام الكشف عن تسرب الغاز والمياة .

الأشغال الميكانيكية للبناء والمرافق العامة

Material Supply

Fire Detection & Protection System.

Fire Fighting System.

Access Control & Premises Security Systems.

Public Address & CCTV System

Electrical and Electronic Component.

Generators.

Gas and Water Leak Detection System.

Mechanical Works for Building and Public Facilities

Intruduction

SAFE TECH EST. *Founded in the year of 2010, Safe Tech Est. is a company of fire safety and security system. It recognized as a leading fire protection and emergency systems company, providing a wide range of service with fully qualified and independently licensed team of fire technicians to the kingdom of Saudi Arabia*

We did the various projects executed by Safe Tech Est. In both the private and government sectors throughout the Nation. These projects include residential buildings, commercial construction for example (schools, institute, hospitals, malls, sports stadiums, etc.), industrial manufacturing plants, power generation stations, and oil and gas facilities. As we are providing a total fire protection systems. Safe Tech Est. undertakes turnkey projects from design, supply, installation, testing and commissioning of various systems like fire detection, fire alarm, fire suppression, and fire fighting systems which our customers find it very convenient to have all their system requirements provided by Safe Tech Est.

The mission of Safe Tech Est. is to authorize customer to secure business, property and there life's by providing high excellence of quality and advanced fire protection system and using the knowledge of world rank manufacturing processes through best engineering procedure and expand it to kingdom of Saudi Arabia

We will focus on our aim into market sectors that we serve best in "fire safety and security system" and in doing so bring added values to our customers by providing them an "superior Quality and Timely Service at a reasonable Price".

تأسست **مؤسسة التكنولوجيا الآمنة** في عام 2010 وهي مؤسسة تعمل في مجـــال الأمن والسلامة من الحريق حيث توفر مجموعة واسعة من الخدمات بواسطة فريق مؤهل و معتمد من الجهات المختصة من مهندسين وتقنيين وفنيين في جميع أنحاء المملكة العربية السعودية.

لقد نفذت مؤسسة التكنولوجيا الآمنة مجموعة من المشاريع في القطاعين الحكومي والخاص على حد سواء في جميع أنحاء المملكة العربية السعودية. حيث تم تنفيذ هذه المشاريع في المباني السكنية والتجارية كالمدارس والمعاهد والمستشفيات ومراكز التسوق و الملاعب الرياضية ...الخ كما امتدت مشاريعنا للمنشئآت الصناعية كمحطات توليد الطاقة الكهربائية ومنشئآت النفط والغاز والمصانع. كما نقوم بتوفير مجموعة الحماية من الحريق لمشاريعنا المنفذة بأقصى معايير الجودة من خلال أفضل الإجراءات الهندسية والتقنية وذلك ابتداء من إختيار المواد مروراً بالتصميم والتثبيت والمعايرة وانتهاءً بالإختبار والتدقيق لمختلف أنواع النظم مثل نظام الكشف والحماية من الحريق ونظام إنذار الحريق ونظام مكافحة الحريق . وما يجدر ذكره أن جميع عملاءنا مسرورين للتعامل معنا وذلك مما توفره مؤسسة التكنولوجيا الآمنة من متطلبات ومعايير عالية في جميع الأنظمة.

مهمتنا تأمين منشئآت عملاءنا وحياتهم من خلال توفير تميز عال في الجودة ونظم متطورة للوقاية من الحريق واستخدام المعرفة في عمليات التصنيع والتثبيت من خلال أفضل الإجراءات الهندسية ليمتد ويشمل جميع مناطق المملكة العربية السعودية.

هدفنا خدمة عملاءنا في جميع قطاعات سوق العمل وتقديم الجودة العالية لأنظمة الأمن والسلامة من جميع أنحاء العالم وصقلها بالعمل الهندسي المتميز في وقت مناسب وبقيمة تنافسية.

بسم الله الرحمن الرحيم

الرقـــم : ....

التاريخ : ٧٥٠/دف

المشفوعات : ١٤٣٨/١/٣٠هـ

المملكة العربية السعودية
وزارة الداخلية
المديرية العامة للدفاع المدني

الإدارة العامة للدفاع المدني بمدينة الرياض

إدارة السلامة بمدينة الرياض

تصريح مزاولة النشاط الآتي:

التصنيف	نوع النشاط
فئة (د)	تركيب وصيانة أنظمة الإطفاء
فئة (ج)	تركيب وصيانة أنظمة الإنذار

مؤسسة التكنلوجيا الآمنه للتجارة	اسم الشركة / المؤسسة
الملز	الموقع
٤٧٢٦٤٢٢	الهاتف

١ –

٢ –

٣ –

أسماء المهندسين المعتمدين:-

١ – احمد محمد نور احمد   (مهندس كهربائي)

٢ – سيضيق آل اكبر مانقلته   (مهندس ميكانيكي)

٤ – ملاحظات:-

- هذا التصريح ساري المفعول لمدة <u>ستة شهور</u> فقط .
- في حال وجود أي ملاحظات على (المؤسسة/الشركة) يتم اشعار إدارة السلامة بالإدارة العامة للدفاع المدني بمدينة الرياض على الفاكس (٤٦٤٧٧٣٥).
- هذا التصريح يقدم لمراكز الدفاع المدني بالرياض فقط .

الختم

مدير إدارة السلامة بمدينة الرياض

عقيد

سليمان عبدالعزيز المبيريك

حجم المشروع المسموح بتنفيذه	فئة التصنيف لنظام الإنذار	حجم المشروع المسموح بتنفيذه	فئة التصنيف لنظام الإطفاء
نظام يدوي + نظام تلقائي على ان لا تزيد مناطق الحريق عن خمس مناطق أو عدد ثلاث دائرة تناظرية(Analog circuit)	ج	ان لا تزيد المساحة المحمية بالمركبات عن(٢٠٠٠م٢) + خراطيم الإطفاء + فوهات جافة	د
نظام يدوي + نظام تلقائي على ان لا تزيد مناطق الحريق عن عشرة مناطق أو عدد ستة دائرة تناظرية (Analog circuit)	ب	لا تزيد المساحة المحمية بالمركبات عن(٦٠٠٠ م٢) + جميع أنظمة المكافحة الأخرى	ج
جميع أنواع الأنظمة	١	لا تزيد المساحة المحمية بالمركبات عن(١٠٠٠٠ م٢) + جميع أنظمة المكافحة الأخرى	ب
		جميع المشاريع + جميع أنظمة المكافحة الأخرى	١

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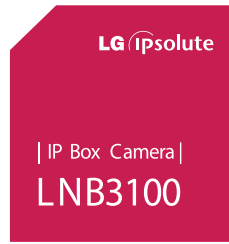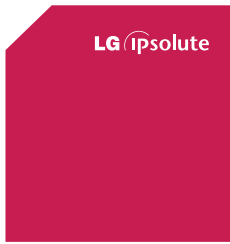|		
Simplex	Fire Alarm System	**THORN SECURITY**
GENT by Honeywell	Fire Alarm System	**sigma XT**
BT BT Cables	Cables	**BELDEN** SENDING ALL THE RIGHT SIGNALS
KENNEDY VALVE a DIVISION OF MCWANE	Gate Valves	**Mueller Co.**
tyco Fire Protection Products	Fm 200 Extinguishing System	**FirePro.**
YUASA	Batteries	
Ansul ex	kitchen Hood System	
GRUNDFOS	Pumpset	**CLARKE** Fire Protection Products, Inc.
GLOBE FIRE SPRINKLER CORPORATION	Fire Fighting Equipment	
HEBA Heba Fire Fighting	Fire Extingusher	
Panasonic Security Systems	CCTV Camera System	
LG Life's Good	CCTV Camera System	**Honeywell**

LG

Life's Good

LG SECURITY SYSTEM

LG ipsolute

1.3 Megapixel IP Box Camera

| IP Box Camera |
LNB3100

FEATURES

• 6.08 mm (1/3 type) CMOS
• 30 fps @ 1,280 x 1,024
• Min. Illumination
  - Color : 0.3 Lux @ F1.2
  - B/W : 0.005 Lux @ F1.2
• H.264 (High Profile Supported) / MJPEG
• 80dB of Wide Dynamic Detection
• ICR Day & Night • 2D + 3D DNR
• Dynamic Profile (Up to 7)
• Region Of Interest Streaming
• Video Analytics Embedded
• LG Ipsolute VMS, Mobile App
• Micro SD Slot • Alarm In / Out
• Audio In / Out • PoE / DC12V
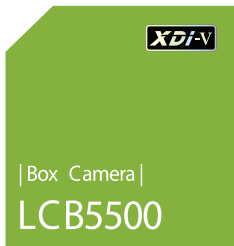• 68.4(W) x 61.5(H) x 131.5(D) mm
• 365 g

FEATURES

• 6.08 mm (1/3 type) CMOS
• 30 fps @ 1,280 x 1,024
• Min. Illumination
  - Color : 0.3 Lux @ F1.2
  - B/W : 0.3 Lux @ F1.2
• H.264 (High Profile Supported) / MJPEG
• 80dB of Wide Dynamic Detection
• Digital Day & Night
• 2D + 3D DNR
• Dynamic Profile (Up to 7)
• Region Of Interest Streaming
• LG Ipsolute VMS, Mobile App
• Micro SD Slot
• PoE / DC12V
• 68.4(W) x 61.5(H) x 131.5(D) mm
• 357 g

ANALOG CAMERA

L

6mm CCD High Resolution Box Camera
700 TVL(B/W), WDR, ICR Day & Night

| Box Camera |
LCB5500

XDi-V

6mm CCD High Resolution Box Camera
700 TVL(B/W), ICR Day & Night

| Box Camera |
LCB5300

XDi-V

FEATURES

• 6 mm (1/3 Type) Super HAD CCD II
• 520k / 610k Pixels (NTSC / PAL)
• 650TVL @ Color / 700TVL @ B/W
• Minimum Illumination :
  - Color : 0.0001 Lux @ Sens-up x512, F1.2
  - B/W : 0.00001 Lux @ Sens-up x512, F1.2
• 2D + 3D DNR
• WDR
• ICR Day & Night
• 14 Privacy Zone Masking
• Motion Detection (8 Zones)
• RS-485, Coaxial Communication
• DC 12V / AC 24V
• 64(W) x 54(H) x 121.5(D) mm
• 360 g

FEATURES

• 6 mm (1/3 Type) Exview HAD CCD II
• 520k / 610k Pixels (NTSC / PAL)
• 650TVL @ Color / 700TVL @ B/W
• Minimum Illumination :
  - Color : 0.0001 Lux @ Sens-up x512, F1.2
  - B/W : 0.000001 Lux @ Sens-up x512, F1.2
• 2D + 3D DNR
• ICR Day & Night
• 14 Privacy Zone Masking
• Motion Detection (8 Zones)
• RS-485, Coaxial Communication
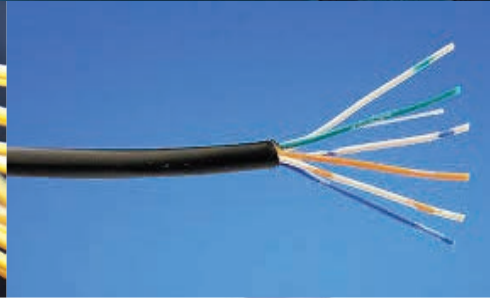• DC 12V / AC 24V
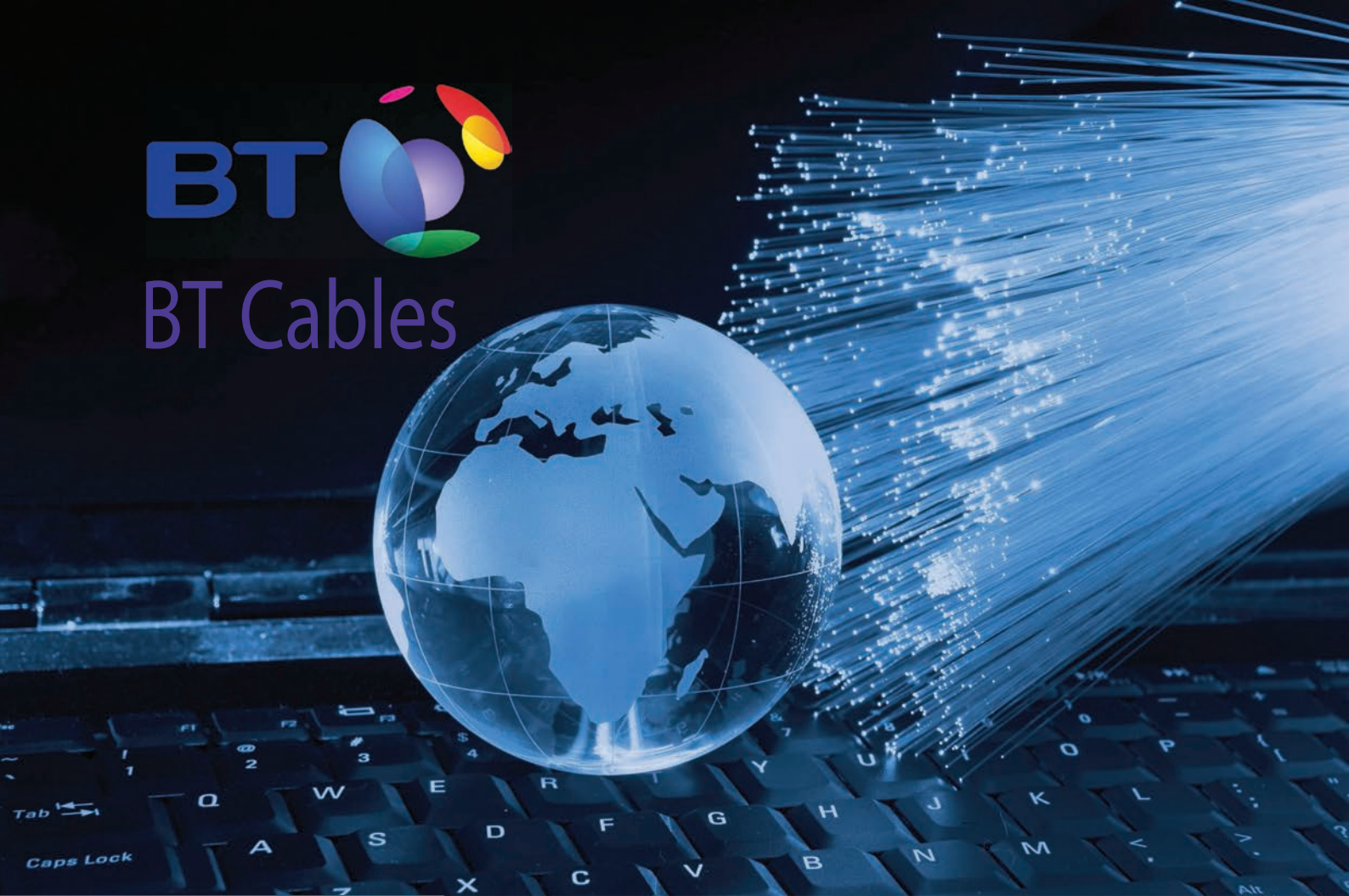• 64(W) x 54(H) x 121.5(D) mm
• 360 g

St SAFE TECH

BT Cables

CATEGORY 6

BT Cables
A subsidiary of BT

www.btcables.com

Belden

BELDEN
SENDING ALL THE RIGHT SIGNALS

ST
SAFE TECH

NP Baureihe – *Series*

Ventilgesteuerte Bleiakkumulatoren
Valve Regulated Lead-Acid Batteries

YUASA BATTERY (EUROPE) GmbH

YUASA

Campus Style Network Multiple Connectivity Options

Simplex

Central Security Office Building Simplex 4100ES NVCC Network Voice Command Centre

Handwire Fibre or TCP/ IP connectivity

Administration Building

Optional BMS Interface

Bacnet TCP/IP

TCP/IP Command Line Interface

LAN

CCUVE/ 4100MB

CCU3/ E/4100

CCU3/E/HUB

Client/ Server Graphic Command Centre

MODBUS Master

XL Graphic Client/Server OPC Alarm and Event Server

Library

Conventional Panel

Network & Audio Riser in one single mode fibre

Arts Building

Science Building

Caretaker Acommodation

LAN

One single mode fibre 32 km between nodes

Remote Client Graphic Command Centre

NSI Network System Integrator

Staff Accommodation

Sports Pavilion

Alarms (Fire & Security) / Troubles / Supervisory
Maintenance / Emergency Paging / Dispatch Aid

ST SAFE TECH

Simplex®

UL, ULC Listed; FM Approved*

Fire Control Panels
4010ES
Addressable Fire Detection and Control
Basic Panel Modules and Accessories

Features

Basic System includes:

- Capacity for up to 1000 addressable devices, up to 127 VESDA SLI points, up to 2000 points of Annunciation and up to 20 internal and external card addresses
- Color-coded operator interface with membrane keypad includes 2 x 40 Super-twist LCD display, 3 programmable control keys and 6 programmable LEDs
- CPU assembly includes dedicated compact flash memory for on-site system information storage and convenient Ethernet service port access
- 8 Amp power supply with up to 2 Amps of Auxiliary power and battery charger capacity for up to 110 Ah batteries (UL) or up to 50 Ah batteries (ULC) (33 Ah max in single bay control cabinet, 50 Ah max with 4100-0650 battery shelf in two bay control cabinet)
- 4 on-board Class A or B 3 Amp NACs and one programmable auxiliary relay output rated for 2 Amps @ 32 VDC
- Class A or B Two-loop Isolated IDNet™ Communications (IDNet+) supports up to 248 addressable and analog sensing devices on non-twisted, non-shielded wiring
- Remote annunciator module support via RUI (remote unit interface) communications port, either Class B (Style 4) or Class X (Style 7) Pathway operation
- 48 LED panel mount annunciation provides 40 Red and 8 Yellow pluggable LEDs (select models), optional LED kits are available for custom LED configurations
- Available with InfoAlarm™ Command Center expanded content user interface (two bay cabinet required)

Optional MSS and Door Mount Modules include:

- City Connect (with or without disconnect switches), Alarm Relay Module

Optional Block Space Modules include:

- Fire Alarm Network Interface Card for 4120/4100 Peer-to-Peer network communications, supports either Class B or Class X (Style 7) Pathway operation
- Ethernet connectivity options include Building Network Interface Module (BNIC) and SafeLINC Internet Interface
- Dual RS-232 Module (for printer, PC annunciator or third party interface)
- VESDA® Air Aspiration High Level Interface
- Serial DACT
- 8 Zone IDC Modules Class A or B
- 4 Point Auxiliary Relay Module
- Physical Bridge Network Modules
- Additional IDNet+ and MX Loop addressable device modules

4010ES Fire Alarm Control Panel
with or without LED Annunciation

Compatible with Simplex® remotely located:

- 4003EC Small Voice Panels
- 4009 IDNet NAC Extenders
- 4009 TrueAlert Addressable Controllers and TrueAlert Power Supplies (TPS)
- 4081 110Ah Battery Chargers
- 4100-7400 Series Graphic Annunciators
- 4190 PC Annunciator
- 4190 Fiber Modems and Physical Bridges
- 4606-9102 Remote LCD Annunciator and 4100-9400 Series Remote InfoAlarm Command Centers
- IP communicator compatibility

4010ES Agency Listing:

- UL Std. 864, Fire Detection and Control (UOJZ), and Smoke Control Service (UUKL)
- UL Std. 2017, Process Management Equipment (QVAX)
- UL Std. 1076, Proprietary Alarm Units-Burglar (APOU)
- UL Std. 1730, Smoke Detector Monitor (UULH)
- ULC Std. S527-99

VIGILON CONTROL PANEL

A one to four loop panel accommodating up to 200 devices per loop. Up to 31 panels may be connected in a secure network.

LCD display allows clear indication of fire or fault location.

Site specific fire plans can be programmed to meet the evacuation needs of the building.

Vigilon Control Panel

Technical Specification

Type	Control panel
Max No of Loops	4
Loop Capacity	200
Batteries	4 x 12V @ 12AH
Battery Standby	24 hours standby + 30 minutes alarm upgradeable to 72 hours
Approx Weight	16.2 Kg
Ambient Temperature	0°C to 45°C
Relevant Standard	BS 5839: Part 4 + EN54 Part 2 + 4
Cable Entry	Top and rear knockins
Approvals	LPC approval to BS 5839: Part 4

	A	B	C
Control Panel	408	539	151
Battery Box	382	309	112

Dimensions (mm)

ORDER CODES

EN 54 Contr ol Panels
(For BS 5839 versions add the suffix -V+3 e.g. VIG-1NET-V+3)

1 Loop	VIG1
2 Loop	VIG2
3 Loop	VIG3
4 Loop	VIG4
1 Loop, Networkable	VIG-1NET
2 Loop, Networkable	VIG-2NET
3 Loop, Networkable	VIG-3NET
4 Loop, Networkable	VIG-4NET

Note: Control panels require a first fix, VIG1-ST-FIX

GENT

SAFE TECH

GENT
by Honeywell
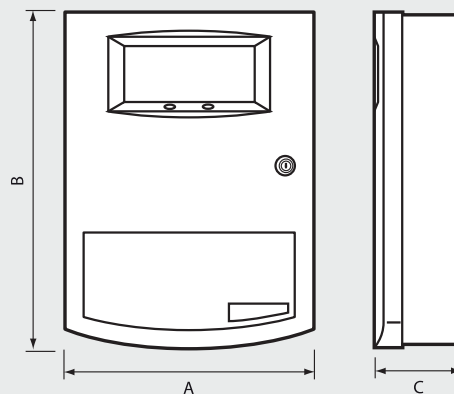
Xenex control panel

The Xenex panel complies fully with the European standard EN 54 Parts 4 & 2 and can be used on installations meeting BS 1-5839.

Each panel contains its own integral power supply and battery support for up to eight alarm sounder circuits, two auxiliary relay contacts, a zone disablement facility and a one man test and commission facility, all simplifying system design, installation and commissioning.
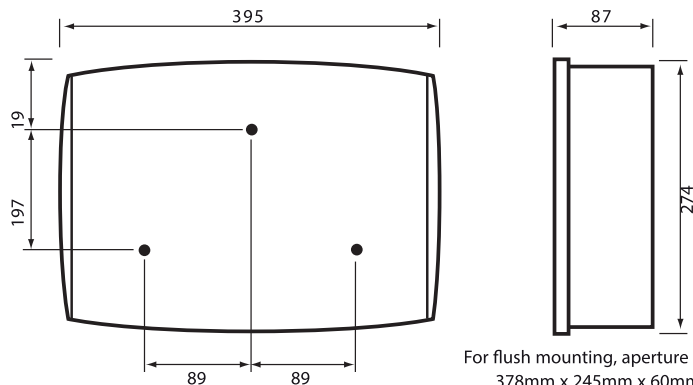
Xenex Control Panel

TECHNICAL SPECIFICATION					
No. of Zones	8*1	2	4	8	Zone Repeat
Maximum Load per Zone	3mA	3mA	3mA	3mA	N/A
No. of Sounder Circuits	2	2	4	8	N/A
Max. Sounder Circuit Load	0.5A per circuit Total load not to exceed 1A				N/A
Batteries (seperate)	2 x 12V, 2.1 Ah			2 x 12V, 2.8 Ah	2 x 12V, 2.1 Ah
Battery Standby	72 hours plus 0.5 hours alarm load				72 hours
Aux. Relay Contacts	1 N/O and 1 N/C pair, 1A at 24V				N/A
Approx Weight (with batteries)	5.8 Kg	5.8 Kg	5.8 Kg	6.2 Kg	5.8 Kg
Relevant Standard	EN 54 Parts 2 & 4				
Approvals	LPCB approved to EN54: Parts 2 & 4				
Cable Entry	13 Top and 13 Rear				
Cable Type	BS 6387, 2 core, min 1.5mm^2 CSA				
Class Change Facility	Via normally open push button switch located no more than 100m from panel				N/A
Operating Temperature	Indoor, 0 - 40ºC				

Note: Maximum of 8 ,1 zone repeat panel per system.
Note: For maximum system loading table see page 20.

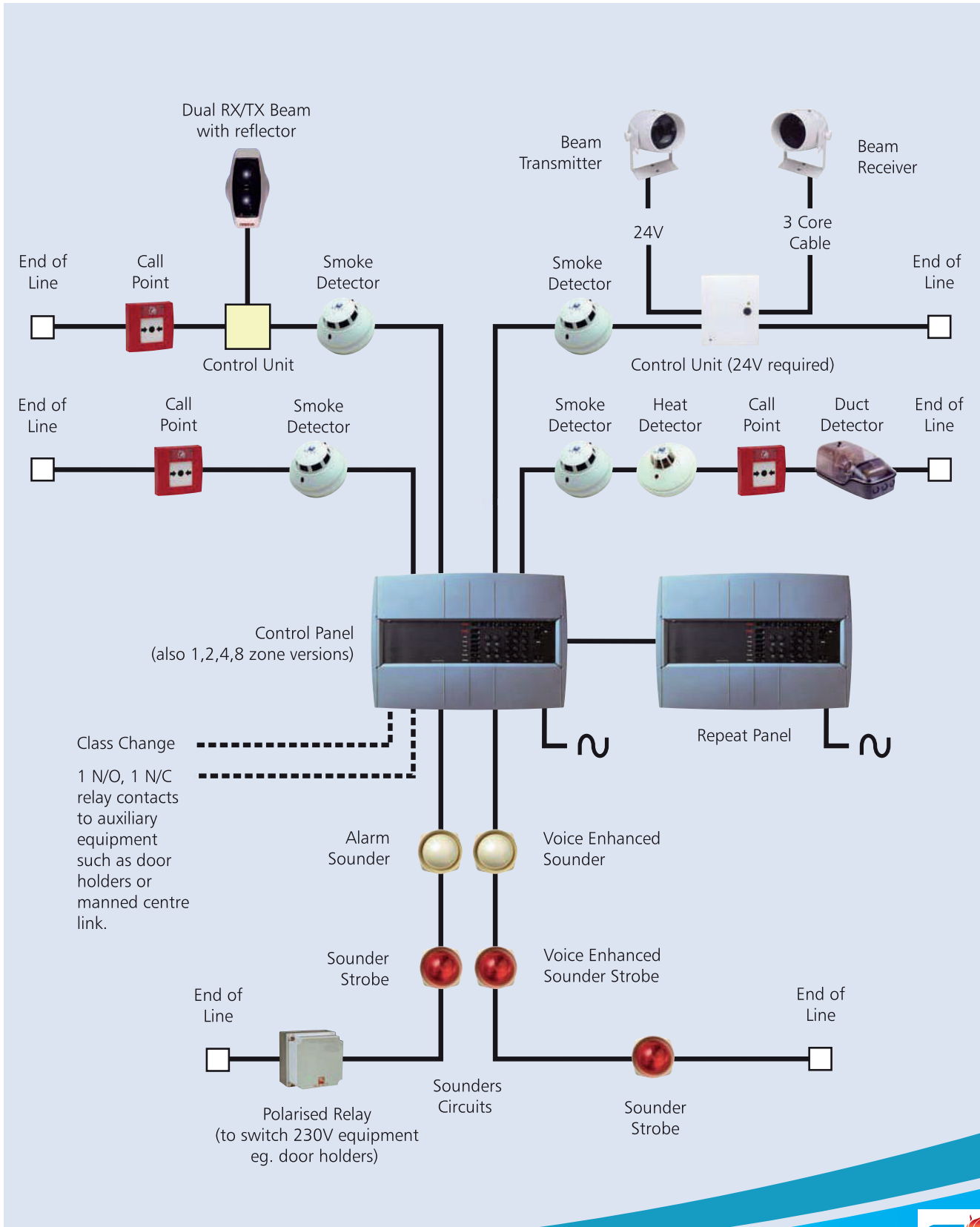Dimensions of all panels (inc Repeat panel) (mm)

395

87

19

197

274

89   89

For flush mounting, aperture size
378mm x 245mm x 60mm

(Batteries to be ordered seperatly)

SAFE TECH

Dual RX/TX Beam
with reflector

Beam
Transmitter

Beam
Receiver

24V

3 Core
Cable

End of
Line

Call
Point

Smoke
Detector

Smoke
Detector

End of
Line

Control Unit

Control Unit (24V required)

End of
Line

Call
Point

Smoke
Detector

Smoke
Detector

Heat
Detector

Call
Point

Duct
Detector

End of
Line

Control Panel
(also 1,2,4,8 zone versions)

Repeat Panel

Class Change

1 N/O, 1 N/C
relay contacts
to auxiliary
equipment
such as door
holders or
manned centre
link.

Alarm
Sounder

Voice Enhanced
Sounder

Sounder
Strobe

Voice Enhanced
Sounder Strobe

End of
Line

End of
Line

Polarised Relay
(to switch 230V equipment
eg. door holders)

Sounders
Circuits

Sounder
Strobe

SAFE TECH

Tyco MX Technology

Tyco MX Technology brings together the latest fire detection technology from around the world into a comprehensive international range of fire detection systems. *Tyco MX Technology* can be used to provide cost effective solutions on small fire detection systems whilst also providing the features and functions required on very large commercial and industrial sites.

Features
- *MX VIRTUAL* multi-sensor detectors
- *MX DIGITAL* robust & reliable high speed loop protocol
- Rapid response to fire conditions and very low false alarms through:
    - *MX FASTLOGIC* detection algorithms
    - *MX HPO* detection algorithms
    - *MX CCO* fire detection

MX Technology

Tyco MX Technology is being made available on a wide range of internationally approved panels and systems available from Tyco companies world-wide including:

- *MINERVA MX PANELS*
- *MINERVA MARINE T2000 PANELS*
- *ZETTLER EXPERT PANELS*
- *MINERVA SOLO PANELS*

THORN SECURITY

MX Detection Panels

Tyco MX detection panels use all the features of Tyco MX Technology to provide the latest fire detection technology meeting the latest worldwide standards in cost-effective, expandable packages.

Tyco MX detection pan

- MX VIRTUAL Multi-sensor detectors
- MX DIGITAL high speed reliable digital protocol
- MX FASTLOGIC fuzzy logic smoke detection algorithms
- MX CCO universal carbon monoxide fire detection algorithms

Tyco MX detection panels provide modular cost effective solutions:

- Networked panels from 1 to 792 detection loops
- Powerful central loop processing functions
- Powerful and modular user interface
- MX REMOTE diagnostics and service functions
- MX GRAPH graphical user interfaces
- Designer and modular housing options

Tyco MX detection panels provide long term fire detection solutions including upgrade paths from earlier panel models and a long term develop-ment strategy providing future upgrade paths.

Tyco MX detection panels include:

- MINERVA MX for EN54 LPCB approved systems
- ZETTLER EXPERT for EN54 LPCB & VdS approved systems
- MINERVA EXPERT T2000 for Marine approved systems

Tyco MX detection panels include a powerful user interface:

- 640 Character display
- Displays first alarm and most recent alarm
- Permanently displays systems status including number of alarms, number of faults, number of isolated points
- Scroll function allows details of all events and status to be easily viewed
- Displays temperature, CO level and smoke level at point in alarm

for emergency procedures

Tyco MX panels include advanced manager and engineer functions including:

- Menu driven
- Multi-level password protected
- Viewing 3000 event log
- Detailed fault reporting
- Isolate by point, zone or sector
- Viewing and printing status
- Viewing and printing isolated points
- Manual and automatic walk test and reporting functions
- Viewing and printing maintenance reports
- Extensive diagnostic functions including simulation and force outputs
- Text and configuration changes/Automatic battery test
- Detector service functions

Tyco MX detection panels include very powerful event/action programming including:

- Seamless network wide event/action
- 240 x 240 Output map and output sequencing algorithms
- Over 1500 event/action groups for the most complex applications
- Templates for fast programming of standard applications including:
  - EN54/BS5839
  - EN54/VdS
  - EN54 Marine
- User defined templates
- Time, date and special day programming
- Wide range of co-incidence, double knock and delay functions

SAFE TECH

![Globe Fire Sprinkler Corporation logo]

QUICK RESPONSE
AUTOMATIC SPRINKLERS
GL SERIES
UPRIGHT • PENDENT
VERTICAL SIDEWALL
HORIZONTAL SIDEWALL
CONVENTIONAL (OLD STYLE)

## DESCRIPTION AND OPERATION

The Globe Quick Response GL Series Sprinklers are a low profile yet durable design which utilizes a 3mm frangible glass ampule as the thermosensitive element. This provides sprinkler operation approximately six times faster than ordinary sprinklers. While the Quick Response Sprinkler provides an aesthetically pleasing appearance, it can be installed wherever standard spray sprinklers are specified when allowed by the applicable standards. It offers the additional feature of greatly increased safety to life and is available in various styles, orifices, temperature ratings and finishes to meet many varying design requirements. Quick Response Sprinklers should be used advisedly and under the direction of approving authorities having jurisdiction.

The heart of Globe's GL Series sprinkler proven actuating assembly is a hermetically sealed frangible glass ampule that contains a precisely measured amount of fluid. When heat is absorbed, the liquid within the bulb expands increasing the internal pressure. At the prescribed temperature the internal pressure within the ampule exceeds the strength of the glass causing the glass to shatter. This results in water discharge which is distributed in an approved pattern depending upon the deflector style used.

QUICK RESPONSE
UPRIGHT   CONVENTIONAL

QUICK RESPONSE
PENDENT   VERTICAL SIDEWALL

QUICK RESPONSE

TECHNICAL DATA
- See reverse side for Approvals and Specifications.
- Temperature Ratings - 135°F (57°C), 155°F (68°C), 175°F (79°C), 200°F (93°C), 286°F (141°C)
- Water Working Pressure Rating - 175 psi (12 Bars)
- Factory tested hydrostatically to 500 psi (34 Bars)
- Maximum low temperature glass bulb rating is -67°F (-55°C)
- Frame - bronze • Deflector - brass • Screw - brass
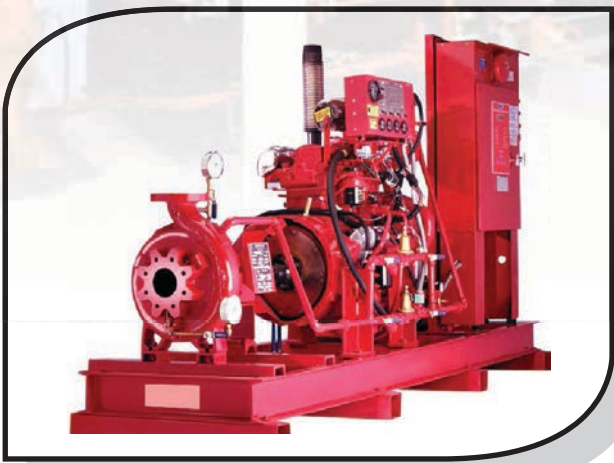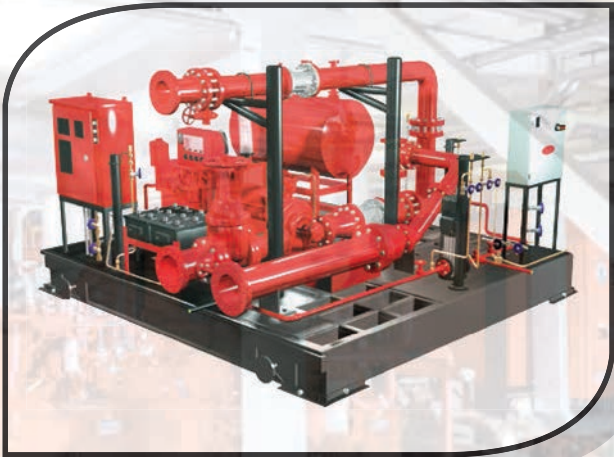- Bulb seat - copper • Spring - nickel alloy • Seal - teflon

ALARM VALVE
MODEL H-1
GLOBE FIRE SPRINKLER CORP.
STANDISH, MICHIGAN U.S.A.
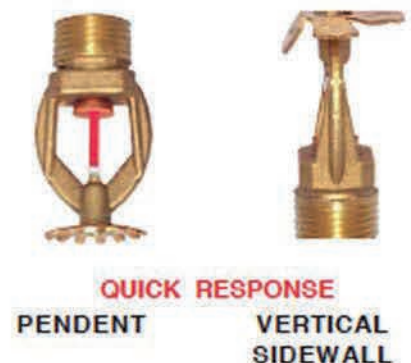
FIRE FIHGTUING PUMP SETS

GRUNDFOS

Choosing Fire Extinguishers

Identify the type of materials in the area

Class A : SOLIDS such as paper, wood, plastic etc
Class B : FLAMMABLE LIQUIDS such as paraffin, petrol, oil etc
Class C : FLAMMABLE GASES such as propane, butane, methane etc
Class D : METALS such as aluminium , magnesium , titanium etc
Class E : Fires involving ELECTRICAL APPARATUS
Class F : Cooking OIL & FAT etc

Types of fire extinguisher

Water fire extinguishers :

The cheapest and most widely used **Fire extinguishers.**
Used for class A fires. Not suitable For Class B (Liquid) fires,
or where electricity is involved.

Foam Fire extinguishers :

More expensive than water, but more versatile. Used for Classes A & B fires.
Foam spray Extinguishers are not recommended for fires involving electricity,
but are safer than water If inadvertently sprayed into live electrical apparatus.

Dry powder fire extinguishers :

Often termed the 'multi-purpose' extinguisher, as it can be used on classes A, B & C
fires. Best for running liquid fires (Classes B). Will efficiently extinguish Class C gas
fires, BUTBEWARE, IT CAN BE DANGEROUS TO EXTINGUISH A GAS FIRE
WITHOUT FIRST ISOLATING THE GAS SUPPLY. Special powders are available
for class D metal fires.

**Warning: When used indoors, powder can obscure vision or damage
goods andmachinery. It is also very messy.**

CO2 fire extinguishers:

Carbon dioxide is ideal for fires involving electrical apparatus, and will also extinguish
class B Liquid fires, but has NO POST FIRE SECURITY and the fire could re-ignite

Wet Chemical
Specialist extinguisher for class F fires

For metal fires: A specialist fire extinguisher for use on Class D fires – metal fires
such as sodium,Lithium, Manganese and aluminium when in the form of swarf or turnings.

Colour coding

Prior to 1st jan 1997, the code of practice for fire extinguishers in the UK was BS 5423,
Which advised the colour coding of fire extinguishers as follows :

Water – Red

Foam – Cream

Dry Powder – Blue   **Carbon dioxide (CO2) – Black**

Halon – green (now 'illegal' except for few exceptions such as the police, armed services and Aircraft)

New extingushers should conform to BS EN 3, which requires that the entire body of the
extinguisher be coloured red. A zone of colour of up to 5% of the external area can be
used to identify the contents using the old colour coding shown above.

PORTABLE EXTINGUSHERS

SAFE TECH

Fire Hose Cabinets

Fire Hose cabinets - VH 600S

Manufactured in accordance with highest technical
and international standards. Such products can be used
different industrial & power plants, residential,
commercial buldings, hospitals and schools
that require protection from class A & B fires.

Fire Hose cabinets - VH 600

Manufactured in accordance with highest technical
standards and international qualification.
Such products can be used different industrial & power plants,
residential,commercial hospital bulding and other
installation that require protection from class A & B fires.

Foam Cabinets - VH 9000

Volcano foam - water cabinets Model VH-9000 are
characterized by its perfomance for attacking
class A&B fires, Effectively used gas stations,
petrochemical plants, industrial premises,
warehouses, car parking, paint factories and
any situations requiring foam protection.

St
SAFE TECH

- Pre-engineered and pre-installed from factory
- Globally cost efficient and totally respectful of the products
- Available for hoods, ventilated ceilings and front cooking solutions
- Low pH Agent and proven design
- Aesthetically pleasing
- UL Listed (complying with UL 300)
- ULC Listed (complying with ULC/ORD-C1254.6)
- Complying with NFPA* 17A, NFPA* 96, LPCB LPS 1223 and CE Marked

In today's commercial kitchens, higher temperature cooking oils and high efficiency appliances (with a slow cooling down) such as deep-fat fryers have combined to make fire suppression more challenging than in past years. All the more challenging so the risk clearly identified concerning the deep fat fryers is associated to one less known: there are more kitchen fires starting from stoves or ranges, which are not equipped with heat safety switches contrarily to fryers. All the more challenging so the cooking fires natural behaviour is to spread the all building throughout the kitchen exhaust ductwork. The need to protect people and property from fire is crucial.

Halton's selected Ansul °R102-™ fire suppression system. It is an automatic, pre-engineered system, designed specifically for professional kitchens to protect the ventilation systems associated with cooking equipment.

Its heart lies in its ability to quickly detect and suppress fires. Ansul °R102-™ uses an advanced extinguishing agent to ensure rapid flame knock-down and vapour securement.

The integration by Halton of Ansul °R102- ™ system in Halton's products provides a cost efficient global solution, from the design of the ventilation systems to the fire suppression system. The factory pre-installation is a guarantee of efficiency and respect of both products.

Fire Protection for Restaurants and Hospitality

Cafes and cafeterias. Delis and diners. Fast food chains and food courts. ANSUL ° fire suppression systems and portable extinguishers protect more types of cooking equipment for more customers than any other brand. Our passion for protection is what fuels product innovation and application methods to protect your valued employees, customers and livelihood.

Knock down kitchen fires fast

The ANSUL R102- system incorporates flexible design with an extremely effective ANSULEX Low pH Liquid Fire Suppressant to quickly knock down flames, cool hot surfaces and generate a tough vapor-securing blanket. With Appliance-Specific and Overlapping design options, the R102- system is designed to detect and suppress fire in various types of cooking and ventilating equipment such as fryers, griddles, range tops, broilers, char-broilers, woks, hoods, ducts, plenums, filters and grease extraction devices.

Attack fires with the exclusive fire suppression hybrid

The PIRANHA fire suppression system employs the best firefighting attributes of two agents. The system attacks fire using the knockdown and securing capabilities of PRX Liquid Fire Suppressant. Water follows, quickly cooling the cooking media and further helping to prevent reflash. This automatic, pre-engineered, fixed system is designed to detect and suppress fire in various types of cooking and ventilating equipment such as fryers, griddles, range tops, broilers, char-broilers, woks, hoods, ducts, plenums, filters and grease extraction devices.

R102- Fire Suppression System

Top choice for commercial cooking fire protection

- Cools grease and surrounding cooking surfaces
- Rapid flame knockdown
- Helps prevent reflash
- Color-coded, fusible-link detectors
- Aesthetic design complements kitchen decor
- Five-year limited warranty
- Non-corrosive agent
- UL/ULC listed and CE marked

Two design options available

- Customized appliance-specific de   - sign
- Overlapping "suppression zone" coverage

Today's high-temperature, high-efficiency cooking appliances, plus the use of hotter burning vegetable oils, poses a greater fire suppression challenge than in the past.
ANSUL ® R102- Restaurant Fire Suppression Systems meet the challenge and are the top choice of food service kitchens worldwide.

Knock Down Kitchen Fires Fast
The R102- system incorporates a flexible design with an extremely effective ANSULEX Low pH   Liquid Agent that quickly knocks down flames and cools hot surfaces while generating a tough vapor-securing blanket that helps prevent reflash.

The R102- system is designed to protect cooking equipment such as various types of fryers, griddles, range tops, broilers, char-broilers and woks. It also detects and suppresses fire in ventilating equipment including hoods, ducts, plenums and auxiliary grease extraction devices.

Two Options for Flexible Protection
The appliance-specific design is one of the two protection options available with the R102- restaurant fire suppression system. The most efficient fire protection is accomplished when nozzles are selected and aimed at specific hazard areas on each appliance. This method typically provides the most economical use of liquid agent, reducing the size or quantity of storage tanks and associated hardware.

Overlapping appliance protection is flexible and simple. Nozzles are arranged in a straight line, providing overlapping agent discharge patterns where appliances can be protected, even if they are replaced or rearranged under the hood.

Sigma XT
Extinguishant
Control Panel

FirePro.

"The FirePro complete
system solutions,
bespoke service
and superior quality
provide a measurable
advantage."

CAME

AUTOMATIC GATES

CAME Barrier System

G2500,G40000 & G5600

G8000

G12000

CAME Sliding Gate System

BX 400-800kg

bk 1200-2200kg

bk 3500kg

CAME Swing Gate System

ATI 3000-5024

Ferni F1000-F1100

Frog-A,Frog-AV & Frog-A24

St SAFE TECH

Benefits

// Colourless, odourless, non-contaminating gaseous fire protection

// Designed to protect critical assets and processes without consequential damage

// Safe to use in occupied areas

// Tried and tested through thousands of installations around the world

// Quality & technical/ service support

Applications

// Computer suites and data centres

// Offshore oil/gas exploration and production facilities

// Telecommunications centres

// Power generation

// Marine

// Museums and archives

// Data storage

Fast, effective fire protection for critical assets & processes

Full list of international approvals

Tried & trusted technology

Clean & safe solutions

FM-200®

Proven in thousands of successful installations worldwide

Protecting your most valuable assets

Extensively tested, FM-200 systems are proven safe for use in occupied areas. They are designed using bespoke software, which accurately calculates the amount of FM-200 required for the protected space. The target concentration of FM-200 in an identified protected volume is matched to international standards, which themselves are the result of extensive and repeated fire tests, to match design to fire protection performance.

tyco

SAFE TECH
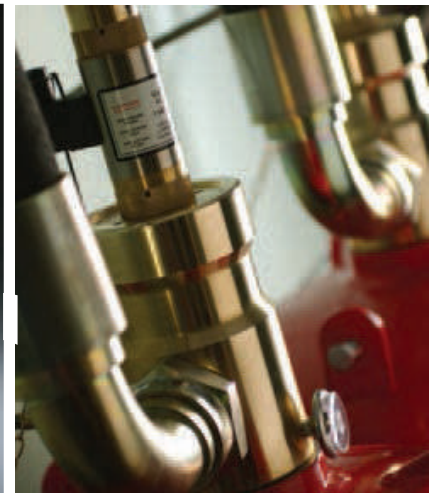
COLOR VIDEO DOOR PHONE

CDV-71BQ/BQS

HI-TECH COLOR TFT LCD 7" MONITOR CONNECTABLE WITH 4 CAMERAS, 2 MONITORS & HANDSET, WITH BUILT-IN MEMORY 68 IMAGES

CDV-72BE/CDT180

HI-TECH COLOR TFT LCD 7" MONITOR CONNECTABLE WITH 4 CAMERAS, HANDSET AND WIRELESS DUCT PHONE, WITH BUILT-IN MEMORY 128 IMAGESOPTIONAL,AUDIO WIRELESS DUCT PHONE CONNECTABLE WITH MONITOR MODEL CDV-72BE

CDV-73BE

HI-TECH COLOR TFT LCD 7" MONITOR CONNECTABLE WITH 2 DOOR CAMERAS, 2 MONITORS AND 2 HANDSETS

CDV-43Q

CDV-43N

4.3" WIDE TFT COLOR LCD (LED BACK LIGHT) MONITOR, PAL/NTSC CONVERTIBLE, CONNECTABLE WITH 2 DOOR CAMERAS, 2 MONITORS AND 2 HANDSETS.

4.3" WIDE TFT COLOR LCD (LED BACK LIGHT) HAND-FREE MONITOR, PAL/NTSC CONVERTIBLE, CONNECTABLE WITH 2 DOOR CAMERAS, 2 MONITORS AND 2 HANDSETS

CDV70 A/ 71AM, CDV-70P/PM & CDV-50 A/51AM

CDV-50 A / 51 AM

5"/7" COLOR TFT LCD MONITOR CONNECTABLE WITH 2 CAMERAS, 2 MONITORS AND 2 INTERPHONES
OPTIONAL:
BUILT-IN MEMORY (128 CUTS)

COLOR VIDEO DOOR PHONE

CDV-35A/DRC-4MC

COLOR VIDEO DOOR PHONE KIT INCLUDING COLOR DOOR CAMERA AND 3.5" COLOR TFT LCD MONITOR CONNECTABLE WITH 2 CAMERA, 2 MONITOR & HANDSET

CDV-35H/DRC-4MC

COLOR VIDEO DOOR PHONE KIT INCLUDES COLOR DOOR CAMERA AND 3.5" COLOR TFT LCD MONITOR W/SPEAKER CONNECTABLE WITH 2 CAMERA, 2 MONITORS & HANDSET

CDV-50N/DRC-4MC

COLOR VIDEO DOOR PHONE KIT INCLUDES COLOR DOOR CAMERA AND 5" COLOR TFT LCD MONITOR CONNECTABLE WITH 2 CAMERAS, 2 MONITORS AND 2 INTERPHONES

CDV-70K/DRC-4MC

COLOR VIDEO DOOR PHONE KIT INCLUDES COLOR DOOR CAMERA AND 7" COLOR TFT LCD MONITOR CONNECTABLE WITH 2 CAMERAS, 2 MONITORS AND 2 INTERPHONES.

CDV-4CAN

1/3" COLOR CCD DOOR CAMERA W/ALUMINUM CASE 1 APARTMENT

DRC-4CPN2   DRC-4CGN

1/3" Color CCD door camera (pin hole) 1 apartment

DRC-4DC

1/3" Color CCD door camera water proof & external impact resistant

CDV-50 A / 51 AM

1/3" Color CCD door camera w/aluminum case, PAL/NTSC Convertible, 2,4,6,8,10, 12,14,16 Apartment.

Door Frames for use as a component in fire door assemblies that meet the requirements of UL10C:

Three sided steel frame with or without transoms (single swing or pair).

Door Frames for use as a component in fire door assemblies that meet the requirements of UL10B (neutral pressure):

Three sided frames with or without transom (single swing or pair).

FIRE DOOR AND FIRE WINDOW FRAMES CERTIFIED FOR CANADA

Door frames: Welded three sided single frames for use in 3/4, 1-1/2, 3 hr locations. Maximum size of frame: 1200 mm in width and 2261 mm in height.

Door frames:

Welded three sided pair type frames for use in ¾, 1-$\frac{1}{2}$, 3 hr locations. Maximum frame size is 2313 mm in width and 2269 mm in height.

Exit

SWINGING-TYPE FIRE DOORS

Max Rating	Opening Type
2 Hr	Single or Pair With Astragal, Single Point Lock/ Flush Bolts, Single Rim/ Mortise Fire Exit Hardware, Door with Automatic Louver, Max 100 in² Glazing
3 Hr	Single with Single Point Lock/Rim, Mortise Fire Exit Hardware 450°F Temperature Rise
1Hr	Single with Single Point Lock/Rim, Mortise Fire Exit Hardware 450°F Temp Rise DoorPair with Astragal Single Point Lock, Mortise Fire Exit Hardware, Flush Bolts / Vertical Rod Fire Exit Hardware 450°F Temp Rise Door

GRANDING FINGER PRINT

The access control system, MA300, is special for outdoor use fingerprint access control product, combined such as fingerprint recognition algorithm, optical sensors, embedded design technology, and software application, etc.. MA300 is IP based protect, waterproof and dust proof.

FEATURES :
❖ Composite algorithm system with high speed operating
❖ Standalone or network environment
❖ Built-in serial and Ethernet ports
❖ Tamper-proofs switch and alarm outputs
❖ Request-to-exit and alarm outputs
❖ Saves data during power outage
❖ With strong seal appearance, anti-dust, IP65 protection

SPECIFICATIONS :

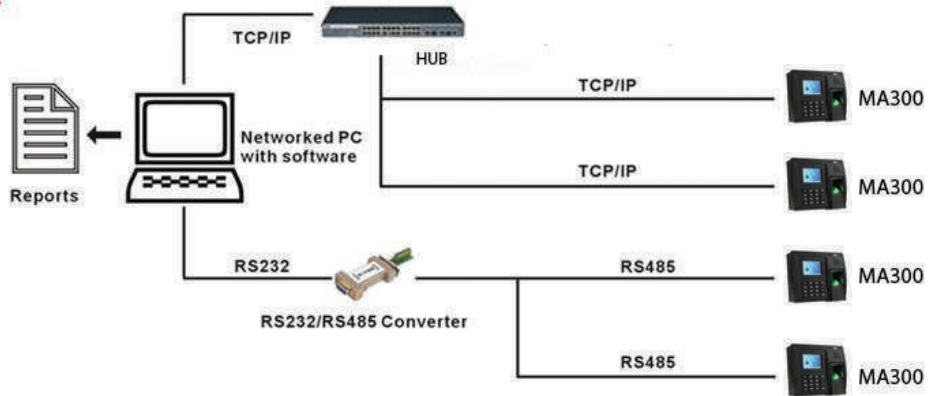| Display/Speaker	Language
LCD Display: N/A	Multi Language, English, French, Spanish, Arabic,
Speaker: Voice Prompt (language can be selected)	etc., for more than 40 languages can be selected
Technical Specifications Capacity	Environment
Fingerprint capacity: 1,000; ID Card: 10,000	Operation temperature: 0℃ ~ 45℃
Log capacity: 30,000	Operation humidity: 20% ~ 80%
Verification/Identification	Verification/Identification
Verification speed(1:1): ≤0.5s	FRR: ≤0.01%
Identification speed(1:N): ≤1s	FAR: ≤0.0001%
Power Supply	Machine Size
Power: 110/220VAC ~ 12VDC (PS-3A is optional item)	73(L)*148(W)*35(H)mm
Communication	Attendance status
TCP/IP, RS232/485, USB/Host, Wiegand In, Wiegand Out	N/A
Standand Function	Customize Function
IP65, outdoor waterproof fingerprint access control built-in ID card; Audio prompt for enrollment and deletion of the users, audio-visual indications for acceptance and rejection of valid/invalid fingers; Tamper-proofs switch and alarm outputs, request-to-exit and alarm contacts	Mifare reader

GRANDING FINGER PRINT

Standalone

Exit Button — Electric lock — MA300 — Flash disk — PC — Reports

Inside — Outside

Network

TCP/IP — HUB

Networked PC with software — Reports

TCP/IP — MA300
TCP/IP — MA300
RS232 — RS232/RS485 Converter — RS485 — MA300
RS485 — MA300

St
SAFE TECH

SAFETY & SECURITY SYSTEMS

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Kingdom Of Saudi Arabia