LINECARD FY18
The merger of Johnson Controls and Tyco brings together best-in-class products, technology and service capabilities across Controls, Fire, Security and HVAC-R to serve various end markets including large institutions, commercial buildings, retail, industrial, small business and residential.

Find additional solutions at www.johnsoncontrols.com and www.tyco.eu
A COMPLETE PRODUCT RANGE TO COVER SOLUTION NEEDS FOR YOUR FACILITIES

Johnson Control’s eCatalog, also known as the “Virtual Branch”, is not only an extensive database of product information but also a point of entry into our organization.

Within the eCatalog you are connected to the cloud and hence stay up-to-date on all new product launches, product selection tool releases and updates, technical documents, eLearning modules and much more. You will reach our products in 3-clicks or less through the use of a powerful search engine and a very easy-to-browse navigation menu. Also, rest assured that access to our network of Sales Representatives and Technical Support teams is directly available for your use. Contact your Johnson Controls’ Sales Representative and request access now.

ENERGY SOLUTIONS

There is focus on reducing carbon footprints and being good stewards of the environment. Customers are being asked to deliver all of that and more with budgets that have never been tighter. We have a long history of partnering with public and private entities to deliver innovative, guaranteed solutions that meet their triple bottom line. Create quality environments. Manage building energy. Maximize energy and water efficiency. Provide clean, renewable energy. And save millions!

SPARE PARTS

For more information contact your local Johnson Controls representative or visit us at www.johnsoncontrols.com
**METASYS® BUILDING MANAGEMENT SYSTEM**

- **METASYS® SERVER**
  - Support of IT standards and technologies, Multi-platform web-based user interface, long-term storage

- **NETWORK AUTOMATION ENGINE**
  - Family of IP connected network supervisory controllers for all sizes of building automation systems

- **NETWORK CONTROL ENGINE**
  - Family of IP connected supervisory controllers with onboard Input/Output (IO) points

- **FIELD EQUIPMENT CONTROLLER**
  - Complete family of BACnet IP and MS/TP field controllers

- **INPUT/OUTPUT MODULES**
  - Scalable family of configurable Input/Output (IO) modules

- **VAV CONTROLLERS**
  - Complete family of programmable controllers suitable for all VAV applications

- **TERMINAL UNIT CONTROLLER**
  - Complete local control of unitary equipment, plus supervisory communication

- **INTEGRATED ROOM CONTROLLER**
  - Complete family of controllers and sensors for HVAC, light and sunblind

- **FIELD USER INTERFACES**
  - Self-configuring local touch screen display or web server user interface options allowing simplified access to equipment or control

- **WIRELESS COMPONENTS**
  - Wireless field busses and room temperature sensing systems designed with the latest wireless technology

**INTEGRATION SOLUTIONS**
Adapts legacy systems, proprietary systems and systems with standard protocols to the current METASYS open system architecture

---

**HVAC CONTROL PRODUCTS**

- **PEAK CONTROLLERS**
  - Family of controllers and accessories specifically designed for Original Equipment Manufacturers (OEMs)

- **TERMINAL UNIT VALVES AND ACTUATORS**
  - Complete offering of valves and actuators for terminal unit applications

- **CONTROL VALVES AND ACTUATORS**
  - Ball, globe and butterfly valves with pneumatic and electric actuators

- **DAMPER ACTUATORS**
  - Spring and non-spring return rotary actuators for air, fire and smoke dampers

- **PLANT SENSORS**
  - Plant Temperature, Humidity, CO₂, Dew point, Delta pressure

- **ROOM SENSORS**
  - Room Temperature, Humidity, CO₂, Passive, Analog and Network models

- **ALL IN ONE ROOM MODULE**
  - Temperature, Humidity and CO₂

- **THERMOSTATS**
  - Line powered Fan Coils thermostats stand-alone, Modbus and BACnet communicating

- **SMART THERMOSTAT**
  - TEC family offers Proportional, ON/OFF, Multistage, autoadaptive controls through thermostats

---

**PRESSURE SWITCHES & THERMOSTATS**

- The pressure switches, thermostats and humidists are designed for refrigeration, cooling, heating, ventilation and air-conditioning applications

- **ELECTRONIC CONTROLS & TRANSDUCERS**
  - The controllers, are designed and provide a high quality long lasting solution for control of any commercial refrigeration unit (cold rooms, display cases, compressor racks,...)

- For use in a variety of applications (pressure, fan speed, temperature, humidity...)

- **WATER VALVES & FLOW CONTROLS**
  - These pressure actuated modulating valves control the quantity of water to a condenser by directly sensing pressure changes in a refrigerant circuit. The mechanical liquid flow switches can be used in liquid lines carrying water, sea water, swimming pool water, ethylene glycol or other liquids

- **ELECTRONIC EXPANSION VALVES**
  - The combination of Quick Response Expansion Valves (QREV) and Precision SuperHeat Controller (PSC) forms an electronically controlled expansion valve that will maximize evaporator efficiency

---

**YORK® FAN COIL UNITS**

- **YFCN / YFCN-ECM**
  - Cooling capacity: 0.7 – 7.6 kW Cased and concealed, horizontal or vertical mounting, EC variable speed motor option

- **LASER & LOW BODY / LASER & LOW BODY - EST**
  - Cooling capacity: 0.7 – 9.5 kW Cased and concealed, horizontal or vertical mounting, EC variable speed motor option

- **YEFB**
  - Cooling capacity: 2.8 – 33.5 kW Horizontal mounting without case

- **YHK / YHK-ECM**
  - Cooling capacity: 1.3 – 11.1 kW Ceiling mounted cassatte, 2 and 4 pipe versions available, EC variable speed motor option

- **YPFC / YPFC-ECM**
  - Cooling capacity: 0.8 – 4.0 kW Ceiling mounted cassatte, 2 and 4 pipe versions available, EC variable speed motor option

- **YHVP / YHVP-ECM**
  - Cooling capacity: 1.17 – 3.81 kW Residential wall mounted, adjustable remote option, EC variable speed motor option

---

**YORK® CLOSE CONTROL AC UNITS**

- **YC-P SERIES**
  - Cooling capacity: 7.7 – 160 kW Brushless DC compressors with inverter technology ad brushless EC motor fans, Upflow or downflow options, R410A

- **YC-G SERIES**
  - Cooling capacity: 43.0 – 183.5 kW Downflow supply, R410A

- **YC-R SERIES**
  - Cooling capacity: 20.6 – 36.2 kW Horizontal supply, R410A

---

**YORK® AIR HANDLING UNITS**

- **YMA ex-Italy**
  - Airflow range: 2,000–180,000 m³/h 2,000Pa Indoor / Outdoor application Factory-packaged controls included with optional VSD

- **YMA ex-Turkey**
  - Airflow range: 2,000–93,000 m³/h 2,000Pa Indoor / Outdoor application Factory-packaged controls included with optional VSD

- **YMB**
  - Airflow range: 500–100,000 m³/h 1,500Pa Indoor / Outdoor application Factory-packaged controls included with optional VSD

- **YBV**
  - Airflow range: 400–4,000 m³/h Indoor application, pre-packaged units with integral heat recovery device and factory packaged controls

---

**CENTRAL PLANT OPTIMIZATION™ (10)**

- **CPU 10**
  - Intelligent algorithms inherent in Metasys® leverage proven best practices and specific equipment efficiency characteristics to serve up to 15% energy versus standard automation

---

**VERASYS™ SMART CONTROL SYSTEM**

- **SMART BUILDING HUB**
  - Web based control system that provides a mobile user interface to smart equipment branded controllers and thermostats

- **SMART EQUIPMENT CONTROLLERS**
  - Family of controllers and accessories specifically designed for HVAC/R equipment optimization

- **TERMINAL UNIT CONTROLLER PLUS**
  - Designed for local complete control of unitary equipment with BACnet supervisory communication

- **SMART THERMOSTAT**
  - Family offers Proportional, ON/OFF, Multi-stage, autoadaptive controls through thermostats

---

**PENNA® REFRIGERATION PRODUCTS**

- **VITALITY SPLIT ROOFTOP**
  - Cooling capacity: 38 – 86 kW Axial fans, Cooling only, Heat pump, Scroll compressors, R410A

- **ACTIVA ROOFTOP**
  - Cooling only, Heat pump, Cooling only + Gas heat, Heat pump + Gas heat, R410A

- **LARGE ACTIVA ROOFTOP**
  - Cooling capacity: 200 – 175 kW Cooling only (+), Heat pump (+) R410A (+) Gas version under development

---

**YORK® ROOFTOP EQUIPMENT**

- **ACTIVA ROOFTOP**
  - Cooling capacity: 23 – 84 kW Cooling only, Heat pump, Cooling only + Gas heat, Heat pump + Gas heat, R410A

- **LASER® ROOFTOP**
  - Cooling capacity: 200 – 175 kW Cooling only (+), Heat pump (+) R410A (+) Gas version under development

---
A COMPLETE PRODUCT RANGE TO COVER SOLUTION NEEDS FOR YOUR FACILITIES

**YORK® CHILLERS**

**AIR-COOLED**
- YMAA: Cooling capacity 45 – 255 kW, DC Inverter technology, Scroll compressors, R410A
- YCME: Cooling capacity 200 – 350 kW, Up to 8 modules, Scroll compressor, R32
- YLAA: Cooling capacity 100 – 250 kW, Variable-speed scroll compressors, R134a and R513a
- YYFA: Cooling capacity 350 – 1,575 kW, Air-Cooled VSD Screw Free Cooling, R410A
- YVWA: Cooling capacity 100 – 250 kW, Variable-speed scroll compressors, R134a and R513a
- YSFA: Cooling capacity 200 – 525 kW, Scroll compressor, R410A
- YMC2 HP: Heating capacity 210 – 675 kW, Screw compressor, R134a
- YLPB: Heating capacity 200 – 327 kW, Scroll compressor, R410A

**WATER-COOLED**
- YMYA/YMRA: Cooling capacity 20 – 150 kW, Scroll compressor, R410A
- YCSE/YCSC: Cooling capacity 200 – 350 kW, Screw compressor, R134a
- YCW/L/YCR/L: Cooling capacity 200 – 350 kW, Scroll compressor, R410A
- YYWA: Cooling capacity 435 – 1,660 kW, Variable-speed screw compressors, R134a and R513a
- YMC: Cooling capacity 750 – 2,800 kW, Variable-speed Centrifugal, Magnetic Bearings, R134a and R513a
- YK: Cooling capacity 800 – 11,250 kW, Centrifugal compressor, R34a and R513a

**YORK® HEAT PUMPS**

**SABROE® HEAT PUMPS**

**SABROE® INDUSTRIAL REFRIGERATION**

**RECIProCATING COMPRESSOR UNITS**
- CMO: Capacity 50 – 190 kW, Fixed or variable speed, Ammonia (R717), hydrocarbons (HC), common HFCs and derived blends
- SMC: Capacity 130 – 1,225 kW, Fixed or variable speed, Ammonia (R717), hydrocarbons (HC), common HFCs and derived blends
- HPC/HPX/HPFX: Heating capacity: 330 – 700 kW, Cooling capacity: 80 – 185 kW, Fixed or variable speed, Ammonia (R717), carbon dioxide (R744), hydrocarbons (HC), common HFCs and derived blends

**SCREW COMPRESSOR UNITS**
- SAB, small: Capacity 120 – 180 kW, Fixed or variable speed, Ammonia (R717), carbon dioxide (R744), hydrocarbons (HC), common HFCs and derived blends
- SAB, large: Capacity 540 – 1,800 kW, Fixed or variable speed, Ammonia (R717), carbon dioxide (R744), hydrocarbons (HC), common HFCs and derived blends

**AIR-COOLED CHILLER**
- SBlight: Cooling capacity: 95 – 400 kW, Screw compressor, variable speed only, Propane (R290)

**WATER-COOLED CHILLERS**
- ChilPAC: Cooling capacity: 100 – 1,400 kW, Recip compressor, fixed or variable speed, Ammonia (R717), carbon dioxide (R744), hydrocarbons (HC), common HFCs and derived blends

**SCREW COMPRESSOR UNITS**
- ComPAC: Cooling capacity: 200 – 2,200 kW, Screw compressor, fixed or variable speed, Ammonia (R717), carbon dioxide (R744), hydrocarbons (HC), common HFCs and derived blends
- PAC recip: Cooling capacity: 50 – 1,400 kW, Recip compressor, fixed or variable speed, Ammonia (R717)

**PAC screw**
- Cooling capacity: 200 – 7,000 kW, Screw compressor, fixed or variable speed, ammonia (R717), carbon dioxide (R744), hydrocarbons (HC), common HFCs and derived blends

**CAPP low-temperature chiller**
- Capacity: 85 – 790 kW, Fixed or variable speed, Ammonia/CO₂ (R717/R744)

**CONTROLS**
- UniBus III: Integrated systems controller for chillers and heat pumps
- Chiller plant controller: Plug-and-play control panel for plant integration of chillers
- ISAC: Monitoring and control interface configuration system for refrigeration installations
- IRIS: Intelligent reporting and documentation system for optimising refrigeration plant performance
VIDEO SURVEILLANCE

AMERICAN DYNAMICS VIDEO MANAGEMENT SYSTEM
Victor is a scalable monitoring solution that enhances video surveillance with access control, fire, intrusion and other systems into one powerful, intuitive interface.

AMERICAN DYNAMICS VIDEODEGE
An extensive range of IP and Hybrid Network Video Recorders with on-board advanced analytics, for proactive video surveillance.

EXAQ TECHNOLOGIES
An IP and Hybrid Network Video recording and management solution, with many integrations and an intuitive, easy to use client application.

HOLIS NVR AND HOLIS HD
A choice of IP or High Definition analogue camera recording systems, with a range of features suited to the small to medium business sector.

IP Cameras
ILLUSTRA CAMERAS
A large range of IP-cameras with three ranges, Essentials, Flex and Pro; cameras to suite most requirements and budgets.

PRO MINI DOME IP CAMERAS
Low light technology and on-board advanced analytics, for mission critical installations.

PRO 12MP FISHEYE IP CAMERAS
Perfect for general surveillance of an area using a single camera.

PRO MICRO IP CAMERA
High definition camera and a separate lens are perfect for ATM machines and discreet installations.

PRO PTZ IP CAMERAS
Easily track suspects and zoom in to take a closer look at events.

FLEX BULLET IP CAMERAS
The latest technology in the Illustra Range giving advanced broadband management and clear crisp picture in 3MP resolution.

FLEX COMPACT IP CAMERAS
A low profile camera for unobtrusive video surveillance in a high resolution.

ESSENTIAL EYEBALL IP CAMERA
A HD resolution camera meeting the fundamental needs of a video surveillance system.

HD Cameras
AMERICAN DYNAMICS HD ANALOGUE BULLET CAMERA
Perfect as an upgrade to a legacy standard definition analogue system.

Accessories
AMERICAN DYNAMICS MONITORS
A Professional level range of monitors designed for 24/7 use.

AMERICAN DYNAMIX MATRIX SWITCHERS
For video walls in control room environments using analogue systems.

AMERICAN DYNAMIX INTELLEX
The first Digital Video Recorder, providing a surveillance solution for customers requiring an analogue system.

INTRUDER ALARMS

ZETADRESS
High security alarm system according to VDE, DIN, VdS, PSz and OVE. Covers all assault- and burglary risks and the requirements of operating surveillance and false alarm systems.

VISONIC
Wireless intruder alarm system for residential and SMB environments. Encrypted transmission of signals and easy to install.

DSC POWER SERIES NEO
Hybrid Intruder alarm system for small medium business environment. Up to 128 zones.

ZETADRESS TOUCHSCREEN CONTROL PANEL
Durable 5.7” touchscreen LED-backlight and intuitive interface. For high security purposes.

TOUCHSCREEN KEYPAD
Used with DSC PowerSeries Neo control panel available as wired and wireless device.

2-WAY REMOTE HANDSET
Remote control for Visionic intruder panel.

MOTION DETECTOR WITH INTEGRATED CAMERA
Detects moving objects in its range. With the camera, these objects can be identified and alarms verified.

REED AND VIBRATION DETECTOR
Any attempt to open a strongroom will cause vibrations that can be used to detect an intrusion.

GLASSBREAK DETECTOR
For glass doors and large windows. It detects the sound of breaking glass.

LSN MOTION DETECTOR
The Tri-Focus-Optics uses three different focal length with high, middle and short range.

LSN GLAS BREAKAGE DETECTOR
LBN bus technology for an efficient installation.

LSN PANIC ALARM BUTTON
To manually trigger an alarm.

OUTDOOR MOTION DETECTOR
Detects moving objects, thus enabling perimeter protection.

MAGNETIC CONTACT FOR DOORS AND WINDOWS
Enables the monitoring of the status of a door by the intruder panel.

INDOOR SIREN
Illuminates people in the building of an alarm.

OUTDOOR SIREN
Illuminates the public, i.e. people outside the building of an alarm.

REPEATER
To expand the coverage of wireless systems.

SMOKE AND GAS DETECTOR
Expands intruder systems with carbon monoxide detection.

CELLULAR UNIVERSAL WIRELESS ALARM COMMUNICATOR

ACCESS CONTROL

C-CURE 9000 SECURITY+EVENT
Powerful and flexible access control and security management systems.

PHYSICAL SECURITY INFORMATION MANAGEMENT
Integrates PSM technologies.

CER
Access control system with on- and offline readers, interactive for middle-sized to big assets.

CONTROLLERS & MODULES
Access control IP-controllers to perform manual and automatic control functions. Modules to connect readers, doors and additional points.

MULTI-TECHNOLOGY READEERS
Multi-protocol, multi-frequency solution.

GO READER MOBILE APP
Reader grants or denies access in the most remote, disconnected areas.

EMERALD™ TS300
Intelligent access terminal with VoIP communication station and remote application.

EMERALD™ TS300F
Multifunctional touch screen access control terminal with fully integrated fingerprint security and VoIP Intercom.

OFFLINE READER
Integration of wireless as well as data-on-cards solutions.

PORTABLE READER S3040
Light but robust portable reader for counting of people in case of evacuation.

RETAIL

SENSOMATIC SYNERGY SERIES
Passage width 2 - 2.5m.

APX ADHESIVE LABEL
AM technology.

HARD TAG
Track inventory while using AM EAS to protect items from theft.

INVENTORY INTELLIGENCE
Solution for inventory control brings clear transparency to product availability.

UHF-RFID-HANDBEADER SCANNER
Reading and describing RFID-labels.

TRAFFIC INTELLIGENCE
ShopperTrack enables retailers and shopping centers to optimize the purchase experience. Increase of profitability through database insights.

CEILING SENSOR
For customer frequency counts. Available in 2.5 to 6mm for heights of 2.4m to 50m.

ADDRESS ALLOCATION DHCP OR STATIC IP-ADRESS

AMERICAN DYNAMICS VIDEOEDGE MANAGMENT SYSTEM
Victor is a scalable monitoring solution that enhances video surveillance with access control, fire, intrusion and other systems into one powerful, intuitive interface.

AMERICAN DYNAMICS VIDEODEGE
An extensive range of IP and Hybrid Network Video Recorders with on-board advanced analytics, for proactive video surveillance.

EXAQ TECHNOLOGIES
An IP and Hybrid Network Video recording and management solution, with many integrations and an intuitive, easy to use client application.

HOLIS NVR AND HOLIS HD
A choice of IP or High Definition analogue camera recording systems, with a range of features suited to the small to medium business sector.

IP Cameras
ILLUSTRA CAMERAS
A large range of IP-cameras with three ranges, Essentials, Flex and Pro; cameras to suite most requirements and budgets.

PRO MINI DOME IP CAMERAS
Low light technology and on-board advanced analytics, for mission critical installations.

PRO 12MP FISHEYE IP CAMERAS
Perfect for general surveillance of an area using a single camera.

PRO MICRO IP CAMERA
High definition camera and a separate lens are perfect for ATM machines and discreet installations.

PRO PTZ IP CAMERAS
Easily track suspects and zoom in to take a closer look at events.

FLEX BULLET IP CAMERAS
The latest technology in the Illustra Range giving advanced broadband management and clear crisp picture in 3MP resolution.

FLEX COMPACT IP CAMERAS
A low profile camera for unobtrusive video surveillance in a high resolution.

ESSENTIAL EYEBALL IP CAMERA
A HD resolution camera meeting the fundamental needs of a video surveillance system.

AMERICAN DYNAMICS HD ANALOGUE BULLET CAMERA
Perfect as an upgrade to a legacy standard definition analogue system.

AMERICAN DYNAMICS MONITORS
A Professional level range of monitors designed for 24/7 use.

AMERICAN DYNAMIX MATRIX SWITCHERS
For video walls in control room environments using analogue systems.

AMERICAN DYNAMIX INTELLEX
The first Digital Video Recorder, providing a surveillance solution for customers requiring an analogue system.

ZETADRESS HIGH SECURITY ALARM SYSTEM
High security alarm system according to VDE, DIN, VdS, PSz and OVE. Covers all assault- and burglary risks and the requirements of operating surveillance and false alarm systems.

VISONIC WIRELESS INTRUDER ALARM SYSTEM
Wireless intruder alarm system for residential and SMB environments. Encrypted transmission of signals and easy to install.

DSC POWER SERIES NEO HYBRID INTRUDER ALARM SYSTEM
Hybrid Intruder alarm system for small medium business environment. Up to 128 zones.

ZETADRESS TOUCHSCREEN CONTROL PANEL
Durable 5.7” touchscreen LED-backlight and intuitive interface. For high security purposes.

TOUCHSCREEN KEYPAD
Used with DSC PowerSeries Neo control panel available as wired and wireless device.

2-WAY REMOTE HANDSET
Remote control for Visionic intruder panel.

MOTION DETECTOR WITH INTEGRATED CAMERA
Detects moving objects in its range. With the camera, these objects can be identified and alarms verified.

REED AND VIBRATION DETECTOR
Any attempt to open a strongroom will cause vibrations that can be used to detect an intrusion.

GLASSBREAK DETECTOR
For glass doors and large windows. It detects the sound of breaking glass.

LSN MOTION DETECTOR
The Tri-Focus-Optics uses three different focal length with high, middle and short range.

LSN GLAS BREAKAGE DETECTOR
LBN bus technology for an efficient installation.

LSN PANIC ALARM BUTTON
To manually trigger an alarm.

OUTDOOR MOTION DETECTOR
Detects moving objects, thus enabling perimeter protection.

MAGNETIC CONTACT FOR DOORS AND WINDOWS
Enables the monitoring of the status of a door by the intruder panel.

INDOOR SIREN
Illuminates people in the building of an alarm.

OUTDOOR SIREN
Illuminates the public, i.e. people outside the building of an alarm.

REPEATER
To expand the coverage of wireless systems.

SMOKE AND GAS DETECTOR
Expands intruder systems with carbon monoxide detection.

CELLULAR UNIVERSAL WIRELESS ALARM COMMUNICATOR

C-CURE 9000 SECURITY+EVENT
Powerful and flexible access control and security management systems.

PHYSICAL SECURITY INFORMATION MANAGEMENT
Integrates PSM technologies.

CER
Access control system with on- and offline readers, interactive for middle-sized to big assets.

CONTROLLERS & MODULES
Access control IP-controllers to perform manual and automatic control functions. Modules to connect readers, doors and additional points.

MULTI-TECHNOLOGY READEERS
Multi-protocol, multi-frequency solution.

GO READER MOBILE APP
Reader grants or denies access in the most remote, disconnected areas.

EMERALD™ TS300
Intelligent access terminal with VoIP communication station and remote application.

EMERALD™ TS300F
Multifunctional touch screen access control terminal with fully integrated fingerprint security and VoIP Intercom.

OFFLINE READER
Integration of wireless as well as data-on-cards solutions.

PORTABLE READER S3040
Light but robust portable reader for counting of people in case of evacuation.

SENSOMATIC SYNERGY SERIES
Passage width 2 – 2.5m.

APX ADHESIVE LABEL
AM technology.

HARD TAG
Track inventory while using AM EAS to protect items from theft.

INVENTORY INTELLIGENCE
Solution for inventory control brings clear transparency to product availability.

UHF-RFID-HANDBEADER SCANNER
Reading and describing RFID-labels.

TRAFFIC INTELLIGENCE
ShopperTrack enables retailers and shopping centers to optimize the purchase experience. Increase of profitability through database insights.

CEILING SENSOR
For customer frequency counts. Available in 2.5 to 6mm for heights of 2.4m to 50m.
**A COMPLETE PRODUCT RANGE TO COVER SOLUTION NEEDS FOR YOUR FACILITIES**

### FIRE DETECTION

**PROFILE FLEXIBLE**
- Fire alarm panel. 4 to 16/12 loops, up to 250 addresses per loop.
- Expansion card slots: up to 6

**GENERATION 6 FIRE DETECTORS**
- Point detectors for heat, smoke, CO concentration or a combination of these criteria

**FLAMEVISION FLAME DETECTORS**
- Infrared technology to detect open flames. Optional with video camera for optical verification

**VESDA ASPANDING SMOKE DETECTOR**
- Analyses air samples extracted through a pipeline network

**LINEAR HEAT DETECTION**
- Uses a sensor cable to detect high temperatures. Thus, they are able to cover extremely long distances

**BEAM SMOKE DETECTORS**
- Forms a photoelectric barrier for smoke, which enables them to protect large areas

**MANUAL CALL POINTS**
- Call points are used to trigger a fire alarm manually

**ALARMING DEVICES**
- In case of fire, the building has to be evacuated, i.e., people have to be informed acoustically and optically by sounders and beacons

**OPTICAL ALARMING DEVICES**
- To inform people optically to leave the premises, beacons and flashing lights are used

### GAS EXTINGUISHING SYSTEMS

**FAST 2000 EXTINGUISHING CONTROL SYSTEM**
- Modular fire detection panel and control panel. Widely redundant, uses the detector lines of the PROFILE panels

**CO2 HIGH-PRESSURE EXTINGUISHING SYSTEM**
- High efficient natural extinguishing agent. Environment-friendly, but toxic. For human safety

**KOTIKA LOW-PRESSURE EXTINGUISHING SYSTEM**
- CO2 is a natural extinguishing agent which combines high efficiency in extinguishing fires with a low price for the agent

**SAPPHIRE™**
- Environment friendly clean-agent system. Fast, effective and without residues

**ACOUSTIC NOZZLE**
- To avoid damaging harddisks in data centers by the noise of the agent which is discharged through the nozzles

**NOZZLES**
- For CO2 systems

### WATER EXTINGUISHING SYSTEMS

**SPRINKLER**
- Wall performing safety element since 1881. Sprinkler ESFR-25 is designed for primarily use as ceiling-only protection of storage applications

**RESIDENTIAL SPRINKLER**
- The unique spray characteristic of these sprinklers makes them an optimised safety element for care homes and private estates

**AQUAMIST® ULF**
- Watermist with droplets in the range of 200–500 µm and a wide range of applications

**AQUAMIST® FOG**
- Very fine droplets in the range of 20–200 µm with its best performance at burning liquids in enclosures, e.g., paint booth

**AQUAMIST® SONIC**
- Droplets with a size of 10–20µm with an extraordinary occlusive energy for water sensible equipment in spaces up to more than 1000m³. True 3-dimensional performance

**SPRAY SYSTEMS**
- Open nozzles for the protection of transformers and storage systems for flammable liquids. Also very common in theatres to substitute the iron curtain

**FOAM SYSTEMS**
- Cooling capacity of 0.8 – 4.0 kW. Ceiling mounted coaxial cassette, 2 and 4 pipe versions available, EC variable speed motor option

**WATER VALVE STATION**
- Various types of valve stations give the operability to sprinklers, foam systems, spray systems and most watermist systems

### GAS EXTINGUISHING SYSTEMS

**TOTAL® MOBILE EXTINGUISHERS**

**WX-FIRE EXTINGUISHERS**
- Fluorine free on a water base. Fire class A

**SX-FIRE EXTINGUISHER**
- Integrated AFFF-foaming agent cartridge. Fire class A and B

**GXN-FIRE EXTINGUISHER**
- ABC-extinguishing powder. Fire class A, B, and C

**COMPRRESSSED AIR FOAM**
- The system consists of air, foam and compressed nitrogen that improves foam quality and extinction effect

**EXTINGUISHING CONTAINERS**
- Individual solution for various extinguishing agents offer flexibility and ease of use

### INTEGRATED SOLUTIONS

**TYCO INTEGRATED SYSTEMS MANAGER**
- This advanced Physical Security Information Management (PSIM+) software connects and correlates all building systems at the operator desk

**VICTOR UNIFIED MANAGEMENT SYSTEM**
- All-in-one integration platform for advanced security solutions combining intelligence, mapping, reporting and event management

### SOLUTIONS FOR DISPATCH CENTERS

**CELLOS**
- Central management of operations planning from alarm reception to documentation

**CEUS**
- Mobile solution for rescue missions to support firefighters

**CEVAS**
- Documentation, quality management, billing and statistics for emergency operations

### CARE COMMUNICATION

**MEDICAL 800®**
- Combination of nursecall and modern telecommunications system protects lives and supports efficient care processes in various care environments

**NURSE CONTROL STATION**
- Desk and wall mounting station units typically display precise call types and calling locations according to preset priorities

**ROOM UNITS**
- Call and communication unit for healthcare workplace. Easy to use, super reliable and anti-microbial protection

**MULTI-COLOUR ROOM SIGNAL LED LIGHTS**
- Energy-saving multicolour LEDs, freely configurable colours and flashing patterns remain easily visible even in daylight and any viewing angle

**HEALTHCARE TAGS**
- Specific active RFID tags to help safeguard medical patients, assisted living residents and staff personnel

**ELPAS - ASSET TRACKING TAG**
- Active RFID transmitter facilitates real-time location awareness

### SERVICE

Johnson Controls has the industry’s largest service network for HVAC, security and life-safety system installation and product support. With more than 12,000 technicians working out of 500 local offices across Europe, Johnson Controls has the know-how, experience and resources to meet all of your facility service needs, including 24/7 proactive monitoring, remote and on-site service and repair, replacement parts and emergency repairs. Our service expertise provides the path to improve energy consumption and sustainability through proven and customised solutions.