Eltek Fire & Safety by Honeywell

PRODUCT CATALOGUE 2010

Marine Fire Detection and Alarm Systems

Product catalogue 2010 - Index

Objective, Vision and Values

Protection of life and property
We have one overriding principle: Our products offer customised solutions and maximum safety according to marine rules and regulations. Our fire alarm systems, which are based on standard modules, may be delivered as stand alone systems or communicate in integrated networks.

Solid Company and strong Brand recognition
The Norwegian company Honeywell Life Safety AS, located in Drammen, is today one of the leading manufacturer and supplier to international marine and offshore applications with its **Eltek Fire & Safety** branded Fire Detection and Alarm System. With more than 40 years experience with development, production and deliveries out of Norway, **Eltek Fire & Safety,** is positioned as a solid and well known brand strongly represented worldwide with its portfolio of marine approved Fire Detection and Alarm Systems.

Sales
Our products are distributed through a worldwide network of dedicated partners, agents and/or distributors, offering our global operating customers local support and technical know how. Please contact our local partner in your region for prices, contact information is found on the Eltek by Honeywell marine WEB site (www.eltek-fs.com).

Engineering
Our marine engineering department provides tailor-made solutions based on customer inputs, class requirements and system design. The demand for safety, reliability and user friendliness is always considered. This requires know-how built up during decades through our engagement in the marine market.

Field Service
Honeywell Life Safety AS is represented worldwide through a network of highly skilled and authorized partners providing system sales, system design, commissioning, service and after sales support to ship owners and ship yards. On-site service is also provided by a dedicated team of Field Service Engineers ready to travel on short notice to any regions of the world.

International Technical Support Team
Our International Technical Support Team has necessary skills and product knowledge to provide efficient and professional support to our customers. The Technical Support Team consists of product specialists providing technical support to our professional partners and works closely with the R&D team to obtain necessary expertise.

For online support your find *TechZone* on our webpage www.eltek-fs.com which is an internet service for the distribution of technical publications and other information. As a VIP-member you will get access to publications concerning installation, service guidelines, operation, trouble- shooting, other technical documents and the opportunity to download software.

Benefits

Benefits for ship-owners and crew onboard

- Effective and easy operation through graphical user management software
- False alarm tolerant detectors through unique technology
- Failure safe with integrated isolator in each detector and manual callpoint
- GA sound directly distributed in all cabins and public areas through the detectors
- Less spare parts needed
- Less weight for larger systems such as for the passenger segment
- Easy maintenance for crew onboard
- World-wide service network
- On-line technical assistance through TCP/IP communication

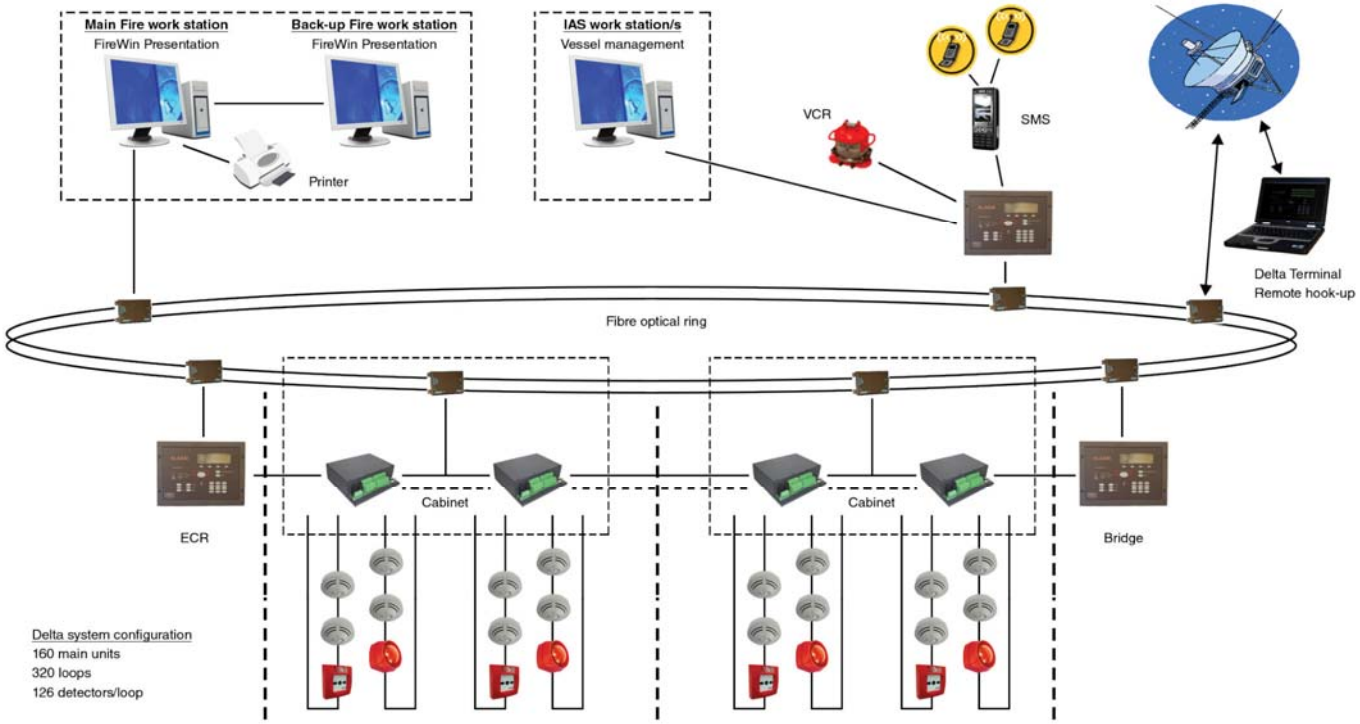
Benefits for installation companies/shipyards

- Decentralizes Detection and Alarm Modules means less cabling, easier installation and higher security level
- One detector type covering the complete vessel
- One common base for all IQ8 detectors
- GA signalling distribution through integrated detector sounder instead of traditional bells and/or embedded in the PA system, meaning
    - Huge cost saving installations
    - Less cabling to pull, less man-hours
- Fewer types of products to install
- Less spare part needed
- Efficient commissioning through dedicated Windows based commissioning tool
- High-end technical support
- Log-in web pages for downloading of updates and various technical documentation
- Reception of our periodical technical bulletins submittals
- Possibilities for in-depth technical training

Marine approvals

Our products for marine applications are approved by the major classification societies; hence both our production is evaluated and subsequently our deliveries are suited for the environmental conditions that might occur onboard. Please check our internet site for more information on the type approvals for our Marine products.

Delta System Topology



By choosing an Eltek Fire & Safety branded Fire Detection and Alarm Solution from Honeywell Life Safety you obtain a system with increased safety focus, reduced installation cost, easy maintenance, less spare parts and a solution which compliance with the various requirements for fire system applications. From the same basic modules we provide customised system solutions to suit your needs.

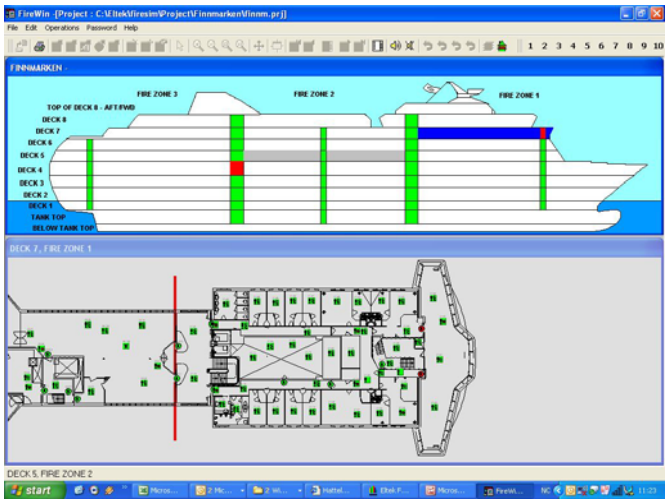
The embedded DELTA Technology has the unique features you would find in all the Eltek Fire & Safety branded Fire Detection and Alarm System. Self-developed, cutting-edge technology offers users unsurpassed safety with flexibility for future upgrading and expansion. The system philosophy enables communication between different products and platforms. The result is maximum safety, greater user friendliness and maximal overall economy. The Delta System support both Esser and Apollo detector loop protocols.

Our products for marine applications are approved by the major classification societies; hence both our production is evaluated and subsequently our deliveries are suited for the environmental conditions that might occur onboard. Please check our internet site for more information on the type approvals for our Marine products.

FireWin Presentation

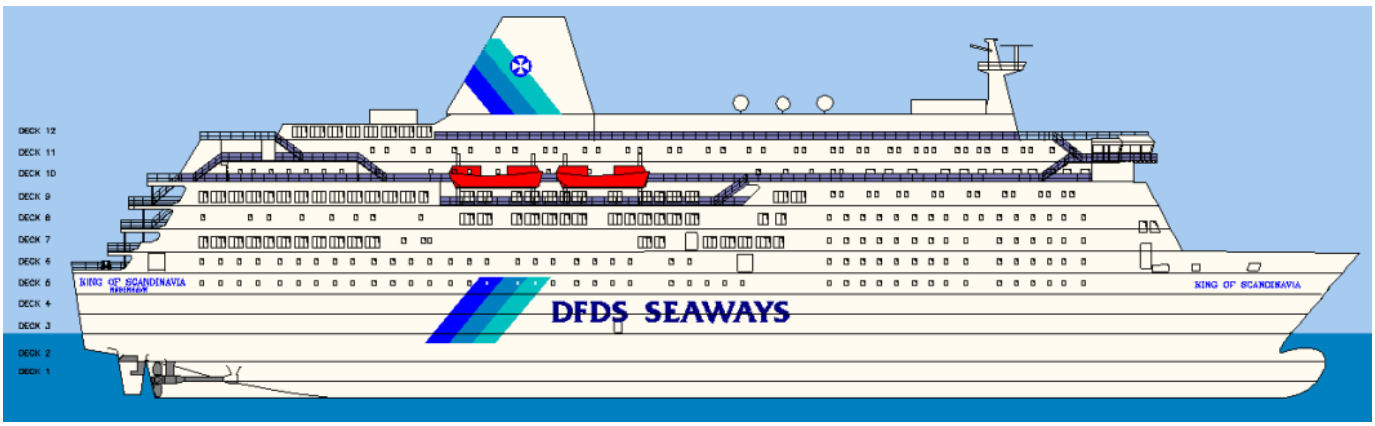
System Management and Graphical Control

Our Delta FireWin Presentation software is a marine approved Windows application designed to display the status of fire detection devices and fire doors in the protected areas on the vessel. The application enables you to operate the Delta Fire Detection and Alarm System directly from a computer. The information is visualized through a LCD monitor or a network of LCD monitors installed in the vessels control room, bridge, communication centre etc.



Efficient alarm organization

Graphics of deck plans showing detectors, manual call points and fire doors making a visual indication of a fire situation onboard the vessels. By means of these indications it is possible to follow the course of a fire situation and therefore to give valuable information for the crew onboard to take corrective actions. Control and operation of the vessels fire detection system is achieved by using a keyboard and mouse and is visualized through a marine approved LDC Monitor.



Terms and Abbreviations

Delta Technology:
An expression covering Eltek Fire & Safety branded modular Fire Detection and Alarm Systems - EN54 compatible and marine approved system components utilizing the latest technology in network systems and alarm signal evaluation.

Delta Compact:
Eltek Fire & Safety' branded Fire Alarm Panel, featuring in one cabinet the following modules as standard: Delta OP, Delta DA and batteries.

Delta Operating Panel (OP):
Eltek Fire & Safety branded operating panel used as the main control and display-unit with possibilities for complete control of the Delta Fire Detection and Alarm system.

Delta Detection & Alarm Module (DA):
Eltek Fire & Safety branded Detection and Alarm Module ready to be configured as an addressable or conventional Fire Detection and Alarm System. The module has connections for detector loops, alarm and control circuits and communication ports. The DA module is also equipped with built-in power supply and charging units.

Delta NET:
Fire Alarm Network where Delta Modules communicate via 2 two wire cables, where one is used as an Emergency Alarm Line (Hard Wire) and the other as an eBus.

eBus:
LON based bus for multi-master network communication between the Delta Modules. The eBus network is based on intelligent control nodes (eNodes) that communicate with each other via eComm.

eComm:
Proprietary communication protocol for Delta Modules connected to the multi-master and eBus network.

eNode:
This Communication Unit is used for connecting other products such as a PC to the Delta Fire Detection and Alarm Systems. The eNode is also used as an interface unit for other fire alarm modules connected to the multi-master eBus network, or if you need to connect the Delta System Modules in a redundant network (double eBus network)

Emergency Alarm Line (Hard Wire):
To avoid loss of alarm signals due to a communication fault in the alarm system network, the DELTA modules have built-in electronics for hardware detection of fire alarms (emergency alarm). To fulfil the requirements of EN 54 in a network system a separate two wire connection should be installed between the DA modules and the main OP.

Conventional Systems

OPERATOR PANELS FOR CONVENTIONAL SYSTEMS		
Data:	**Description:**	**Notes:**
 **Art. no. 251261.1**	**Delta OP Flush Mounted w/eBus** The flush-mounted version of the Delta OP only protrudes 5 mm above its surroundings. The Delta OP conforms to the requirements for operating-units in fire-alarm networks stated in NS-EN-54.2. **Features:** graphic display, output for programmable control of 64 LED's, Incorporates communication port for eBus or RS 485. input for direct PC programming of connected units **Communication:** Slave/master on RS 485 and network, eBus on RS 232 and external communication on RS 232 with provision for hook-up to printer, PC, beeper etc.. NMEA 0183 to VDR.	
 **Art. no. 251157.1**	**Delta OP Wall Mounted w/eBus** The operating panel is primarily used as an operating unit in Delta network system. The Delta OP meets the NS-EN-54.2. **Features:** graphic display, output for programmable control of 64 LED's, Incorporates communication port for eBus or RS 485. Input for direct PC programming of connected units **Communication:** Slave/master on RS 485 and network, eBus on RS 232 and external communication on RS 232 with provision for hook-up to printer, PC, beeper etc.. NMEA 0183 to VDR.	
 **Art. no. 251242**	**Delta OP Marine w/eBus** **NEW** small and elegant operating panel for recess mounting into consoles. Protrudes 10 mm above its surroundings. The Delta OP small conforms to the requirements for operating-units in fire-alarm networks **Communication:** Slave/master on RS 485 and network, eBus on RS 232 and external communication on RS 232 with provision for hook-up to printer, PC, beeper etc.. NMEA 0183 to VDR.	
 **Art. no. 251241**	**Delta Repeater Marine w/eBus** **NEW** small and elegant repeater panel for recess mounting. Protrudes 10 mm above its surroundings. The panel shows the same information as the main operating panel. Only muting of local buzzer is active on this panel. **Communication:** Slave/master on RS 485 and network, eBus on RS 232 and external communication on RS 232 with provision for hook-up to printer, PC, beeper etc	**NEW!**

Conventional Systems

DELTA COMPACT CONTROL PANELS - CONVENTIONAL

Data:	Description:	Notes:
 **Art. no. 251808.100**	**Delta Compact 5 Zones* w/eBus Conventional** The Delta Compact is a centralised fire detection and alarm control unit that complies with EN 54.2 and EN 54.4. The unit consists of DELTA OP control panel, DELTA DA module (incl. power-supply), eBus and batteries for emergency operation Features: 5 loops, 3 monitored voltage outputs (e.g. alarm circuits), 2 voltage-free relay outputs 1 monitored multi-function output. * May be configured for 8 zones at the sacrifice of sounder outputs	

DELTA SUB PANELS, DECENTRALIZED - CONVENTIONAL

Data:	Description:	Notes:
 **Art. no. 251072.5**	**Delta Sub Panel 5 Zones* w/eBus Conventional** The Delta unit is a decentralized fire detection and alarm control unit that complies with EN 54.2 and EN 54.4. The unit may be used together with the DELTA OP or as either a stand alone control unit in a network. The Delta unit consist of a Delta DA module (incl. power-supply), eBus and batteries. Features: 5 zones, 4 monitored voltage outputs (e.g. alarm circuits), 2 voltage-free relay outputs Supplied with built-in batteries for emergency operation. * May be configured for 8 zones at the sacrifice of sounder outputs	
 **Art. no. 251073.10**	**Delta Sub Panel 10 Zones* w/eBus Conventional** The Delta unit is a decentralized fire detection and alarm control unit that complies with EN 54.2 and EN 54.4. The unit may be used together with the DELTA OP or as either a stand alone control unit in a network. The Delta unit consist of a Delta DA module (incl. power-supply), eBus and batteries. Features: 10 zones, 4 monitored voltage outputs (e.g. alarm circuits), 2 voltage-free relay outputs Supplied with built-in batteries for emergency operation. * May be configured for 16 zones at the sacrifice of sounder outputs	
 **Art. no. 251245.2**	**Delta DA Marine 5 Zones w/eBus Conventional** Cost-effective detection and alarm-module for decentralised solutions. Fully meets EN 54.2 requirements regarding fail-safe networks. The Delta DA is operated via the Delta OP panel. Features: 5 conventional zones*, 4 monitored voltage outputs (e.g. alarm-bell circuits), 2 voltage-free relay outputs 1 eBus (LON-kit) * May be configured for 8 zones at the sacrifice of sounder outputs	

DETECTORS – CONVENTIONAL RANGE		
Data:	**Description:**	**Notes:**
 **Art. no. 251604.08**	**Orbis Optical Smoke Detector** Photo-electric detection of light scattered by smoke particles over a wide range of angles. The optical arrangement comprises an infra-red emitter with a prism and a photo-diode at 90° to the light beam with a wide field of view. The detector's microprocessor uses algorithms to process the sensor readings.	
 **Art. no. 251604.09**	**Orbis Multisensor Smoke Detector** Photo-electric detection of light scattered by smoke particles over a wide range of angles. The optical arrangement comprises an infra-red emitter with a prism and a photo-diode at 90° to the light beam with a wide field of view. The detector's microprocessor uses algorithms to process the sensor readings. The heat sensing element increases the sensitivity of the detector as the temperature rises.	
 **Art. no. 251604.02**	**Orbis Heat Detector A1R for maximum application temp: 50°C** Are temperatures in excess of 50°C likely in normal operation? *NO* Does the room have a maximum temperature greater than 50°C? *NO* Are sudden increases in heat likely in normal operations? *NO* If your application is as above, your choice should be: A1R	
 **Art. no. 251604.03**	**Orbis Heat Detector A2S for maximum application temp: 50°C** Are temperatures in excess of 50°C likely in normal operation? *NO* Does the room have a maximum temperature greater than 50°C? *NO* Are sudden increases in heat likely in normal operations? *YES* Is the detector likely to be at or below freezing (0°C) in normal operation: *NO* If your application is as above, your choice should be: A2S	
 **Art. no. 251604.04**	**Orbis Heat Detector BR for maximum application temp: 65°C** Are temperatures in excess of of 65°C likely in normal operation? *NO* Does the room have a maximum temperature greater than 50°C? *YES* Are sudden increases in heat likely in normal operations? *NO* If your application is as above, your choice should be: BR	

DETECTORS – CONVENTIONAL RANGE

Data:	Description:	Notes:
 **Art. no. 251604.05**	**Orbis Heat Detector BS for maximum application temp: 65°C** Are temperatures in excess of 65°C likely in normal operation? *NO* Does the room have a maximum temperature greater than 50°C? *YES* Are sudden increases in heat likely in normal operations? *YES* If your application is as above, your choice should be: BS	
 **Art. no. 251604.07**	**Orbis Heat Detector CS for maximum application temp: 80°C** Are temperatures in excess of 65°C likely in normal operation? *YES* Are sudden increases in heat likely in normal operations? *YES* If your application is as above, your choice should be: CS	

BASES FOR CONVENTIONAL ORBIS DETECTORS

Data:	Description:	Notes:
 **Art. no. 251604**	**Orbis Detectors Base** • Operating Voltage: 10 – 33 VDC • Alarm current: 30 – 45 µA • Weight: 60g • Material: White polycarbonate	
 **Art. no. 251604.01**	**Orbis Detector Base with relay** • Operating Voltage: 10 – 33 VDC • Alarm current: 7mA at 24 VDC • Contact: NO / NC • Weight: 60g • Material: White polycarbonate	
 **Art. no. 235562**	**Orbis/XP95 Back Box for watertight applications** • IP 65 • Internal dia: 100,5mm • Useful internal depth: 30mm • Material: Polycarbonate • Weight. 100g • Supplied with: 2x self tapping 4,2x16 screws, gasket, 3xPG16 glands, 1xPG16 plug.	

MANUAL CALL POINTS CONVENTIONAL SYSTEMS		
Data:	**Description:**	**List price:**
 **Art. no. 251615** **Art. no. 251437 (Frame)** **Art. no. 243037 (Back Box)**	**Manual Call Point, 680 ohm** Manual Call Point complete with Back Box for in-door use. With built-in 680K resistor. Unbreakable glass as standard. Note: Mounting Frame (251437) can be used in flush mounted application. Not mandatory.	
 **Art. no. 251617**	**Manual Call Point IP 67** Sealed Manual Call Point. Resistor Kit included (220, 470, 680, 1K8). 1 pcs Cable Gland The Cable of PG16STR type (06-12 mm) is enclosed in the package. PG16ST (09-14mm) glands can be ordered on article#: 10764.	
 **Art. No. 25615.10**	**Protection Cover** Cover for manual call point (fit article# 251615)	
 **Art. No. 243200**	**Glas for Conventional MCP** Glas for 241615 and 251617 (KAC type MCP)	

Addressable Systems

OPERATOR PANELS FOR ADDRESSABLE SYSTEMS		
Data:	**Description:**	**Notes:**
 **Art. no. 251261.1**	**Delta OP Flush Mounted w/eBus** The flush-mounted version of the Delta OP only protrudes 5 mm above its surroundings. The Delta OP conforms to the requirements for operating-units in fire-alarm networks stated in NS-EN-54.2. **Features:** graphic display, output for programmable control of 64 LED's, Incorporates communication port for eBus or RS 485. input for direct PC programming of connected units **Communication:** Slave/master on RS 485 and network, eBus on RS 232 and external communication on RS 232 with provision for hook-up to printer, PC, beeper etc.. NMEA 0183 to VDR.	
 **Art. no. 251157.1**	**Delta OP Wall Mounted w/eBus** The operating panel is primarily used as an operating unit in Delta network system. The Delta OP meets the NS-EN-54.2. **Features:** graphic display, output for programmable control of 64 LED's, Incorporates communication port for eBus or RS 485. Input for direct PC programming of connected units **Communication:** Slave/master on RS 485 and network, eBus on RS 232 and external communication on RS 232 with provision for hook-up to printer, PC, beeper etc.. NMEA 0183 to VDR.	
 **Art. no. 251242**	**Delta OP Mini Flush Mounted w/eBus** **NEW** small and elegant operating panel for recess mounting into consoles. Protrudes 10 mm above its surroundings. The Delta OP small conforms to the requirements for operating-units in fire-alarm networks **Communication:** Slave/master on RS 485 and network, eBus on RS 232 and external communication on RS 232 with provision for hook-up to printer, PC, beeper etc.. NMEA 0183 to VDR.	
 **Art. no. 251241**	**Delta Repeater Marine w/eBus** **NEW** small and elegant repeater panel for recess mounting. Protrudes 10 mm above its surroundings. The panel shows the same information as the main operating panel. Only muting of local buzzer is active on this panel. **Communication:** Slave/master on RS 485 and network, eBus on RS 232 and external communication on RS 232 with provision for hook-up to printer, PC, beeper etc.	**NEW!**

Addressable Systems

DELTA COMPACT CONTROL PANELS - ADDRESSABLE

Data:	Description:	Notes:
 **Art. no. 251062.100**	**Delta Compact 2 Loops w/eBus Addressable** The Delta Compact is a centralised fire detection and alarm control unit that complies with EN 54.2 and EN 54.4. The unit consists of DELTA OP control panel, DELTA DA module (incl. power-supply), eBus and batteries for emergency operation. Features: 2 loops, 3 monitored voltage outputs (e.g. alarm circuits), 2 voltage-free relay outputs 1 monitored multi-function output.	

DELTA SUB PANELS, DECENTRALIZED – ADDRESSABLE

Data:	Description:	Notes:
 **Art. no. 251809.2**	**Delta Quad Sub Panel 2 Loops w/eBus Addressable** The Delta unit is a decentralized fire detection and alarm control unit that complies with EN 54.2 and EN 54.4. The unit may be used together with the DELTA OP or as either a stand alone control unit in a network. The Delta unit consist of a Delta DA module (incl. power-supply), eBus and batteries. Features: 2 analogue loops, 3 monitored voltage outputs (e.g. alarm circuits), 2 voltage-free relay outputs 1 monitored multi-function output. Supplied with built-in batteries for emergency operation..	
 **Art. no. 251809.4**	**Delta Quad Sub Panel 4 Loops w/eBus Addressable** The Delta unit is a decentralized fire detection and alarm control unit that complies with EN 54.2 and EN 54.4. The unit may be used together with the DELTA OP or as either a stand alone control unit in a network. The Delta unit consist of a Delta DA module (incl. power-supply), eBus and batteries. Features: 4 analogue loops, 6 monitored voltage outputs (e.g. alarm circuits), 4 voltage-free relay outputs 2 monitored multi-function output. Supplied with built-in batteries for emergency operation.	
 **Art. no. 251800.21**	**Delta DA Quad Marine 2 Loops w/eBus Addressable** Cost-effective detection and alarm-module for decentralised solutions. Fully meets EN 54.2 requirements regarding fail-safe networks. The Delta DA is operated via the Delta OP panel. Features: 2 analogue loops, 3 monitored voltage outputs (e.g. alarm-bell circuits), 2 voltage-free relay outputs 1 monitored multi-function output. 1 eBus (LON-kit)	

DETECTORS – IQ8QUAD RANGE

IQ8QUAD – THE MOST ADVANCED DETECTOR RANGE

The new and unique IQ8Quad detector generation combines unique detection technology with high class design and set new standards in terms of appearance, safety and effectiveness. The IQ8Quad Detector range provides security you need by implementing detection, optical alarm, acoustical alarm and voice alarm embedded in one housing. IQ8QUAD is by far the most advanced detector range in the marine market. All versions are equipped with a 360 degree visual alarm indicator and non volatile memory log for all events.

- **ONE DETECTOR TYPE COVERING THE COMPLETE VESSEL**
  IQ8Quad can be fitted in all spaces onboard the vessel (except freezer and sauna): cabins, galley, scullery, smoking lounges, engine rooms and casings, car decks etc. Using IQ8QUAD all over will make installation of detectors much faster and misplaced detectors during the installation work will not be a problem. Another benefit is less spare parts needed.

- **ENHANCED SECURITY BY REDUCTION OF FALSE ALARMS TO A MINIMUM**
  IQ8Quad is the only detector in the marine market with two built-in optical smoke sensors as well as an additional heat detector sensor evaluation for detecting everything from smouldering fires to open fires with consistent response performance. The O2T detector can reliably recognize false variables and thus minimizes the risk of false alarms**.** All detectors have built in isolator providing fault tolerant detection loop system.

- **GENERAL ALARM SIGNAL DISTRIBUTED THROUGH FIRE DETECTORS**
  IQ8Quad detectors with integrated sounder (92dB) is the only detector on the market allowing the General Alarm Signal (GA) to be distributed through an addressable alarm device loop. By removing the GA Signal from the PA system you gain costs save since double loudspeaker circuits in the cabins is not longer required.

- **INTEGRATED OPTICAL FLASH**
  IQ8 Quad detectors with integrated flash for dark and noisy areas such as machinery spaces, thruster rooms etc. will achieve a higher security level for the crew in such areas.

- **FASTER and EASIER INSTALLATION SAVES COST**
  Since the IQ8Quad is a detector, sounder and flasher in one single housing, installation time is much shorter than traditionally installations using three separate components. By selecting a detector from the IQ8Quad Detector range only one component needs to be installed in each location. Also the base is common.

DETECTORS – IQ8QUAD RANGE

Data:	Description:	Notes:
 **Art. no. 802371. MAR**	**IQ8 Optical Smoke Detector, type O** Automatic point-type fire detector with built-in scatter sensor with processor-controlled signal processing and decentralised intelligence. Suitable for the early detection of smouldering fires. Features: -wide angle optical chamber with signal processing for fast and reliable smoke detection	
 **Art. no. 802374.MAR**	**IQ8 Multisensor, type O^2T** Multisensor detector with two built-in optical smoke sensors with different scattered light angles as well as additional heat detector sensor evaluation for detecting everything from smouldering fires to open fires with consistent response behaviour. Particle identification to ensure reduction of deceptive alarms caused, for instance, by water vapour or dust. Features: - detection using the forward and backward scatter principle - advanced dual chamber signal processing for unparalleled false alarm rejection	
 **Art. no. 802375**	**IQ8 Multisensor Optical Smoke and Heat, Type OT^{blue}** Multisensor detector with built-in optical smoke and heat detector to ensure preventive fire detection. The detector uses blue light and is meant to replace the traditionally used Ione detector. Through combined scattered light, temperature and gas evaluation, the early detection of everything from smouldering fires to open fires is guaranteed. Features: - wide angle optical chamber with signal processing for fast and reliable smoke detection - optical system based on blue light increases particle detection bandwidth and response	
 **Art. no. 802473**	**IQ8 Multisensor, Type OTG** Multisensor detector with built-in optical smoke detector, heat sensor as well as a built-in sensor for detecting carbon monoxide to ensure preventive fire detection. Through combined scattered light, temperature and gas evaluation, the early detection of everything from smouldering fires to open fires is guaranteed. Features: - wide angle optical chamber with signal processing for fast and reliable smoke detection - CO detection element contributes to faster response to glowing fire starts.	
 **Art. no. 802171**	**IQ8 Fixed Heat Detector, type T_{max}** Heat detector with integrated limit value actuation (60°C) for the detection of fires with slowly rising temperature. Detector with processor-controlled signal processing and decentralised intelligence. Features: - constant response behaviour for detecting slowly and quickly rising temperatures	
 **Art. no. 802271**	**IQ8 Rate-of-Rise Heat Detector, type T** Heat detector with fast semiconductor sensor to guarantee safe detection of fires with quickly rising temperature. The detector is also fitted with integrated limit value actuation (60°C) for the detection of fires with slowly rising temperature. Detector with processor-controlled signal processing and decentralised intelligence. Features: - ROR feature ensures fast response to slowly and quickly rising temperatures	

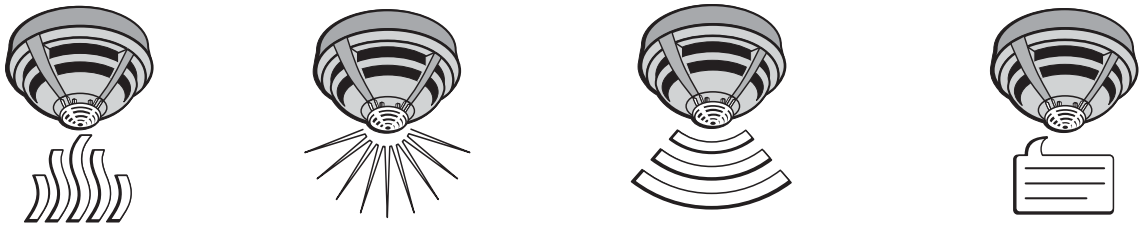
DETECTORS – IQ8QUAD RANGE WITH INTEGRATED ALARM DEVICES

IQ8QUAD WITH INTEGRATED ALARM DEVICES

The IQ8Quad smoke detectors with built-in alarm device incorporate up to 4 different functionalities depending on the type of detector:

- fire detection as per EN 54-7
- integrated heat sensor as per EN 54-5
- optical alarm via flash LED
- acoustic alarm via sounder as per as per EN 54-3
- speech alarm messages, not used in marine applications.

Detection	Optical alarm	Acoustic alarm	Voice alarm



- **ALARM SIGNALING**
  The alarm signaling function is activated by the control panel. No further short address needs to be allocated. It is programmed with the FireWin Explorer commissioning and configuration application.

- **ALARM TONE PROGRAMMING**
  For detectors with alarm tone function with up to five language options, up to 4 signals can be programmed. Two signals are reserved for alarm signaling and evacuation in the case of fire. Two further signals can be programmed for other events. Each signal can consist of up to four signal components, enabling one signal to be programmed as a DIN tone combined with subsequent speech messages in three different languages. Alarm tones can be chosen from a table of 20 tones, including GA signal for marine systems

- **SOUND LEVEL PROGRAMMING**

  The sound level [dB(A)] can be set to eight levels, from approximately 64dB (A) to approximately 92dB (A).

DETECTORS – IQ8QUAD RANGE WITH INTEGRATED ALARM DEVICES		
Data:	**Description:**	**Notes:**
 **Art. no. 802383**	**IQ8QUAD Multisensor with integrated flash, type O2T/F** Multisensor detector with two built-in optical smoke sensors with different scattered light angles as well as additional heat detector sensor evaluation for detecting everything from smouldering fires to open fires with consistent response behaviour. Smoke signal identification to ensure smoke classification and reduction of deceptive alarms caused, for instance, by water vapour or dust Features: -detection using the forward and backward scatter principle -loop powered optical alarm signalling device -advanced dual chamber signal processing for unparalleled false alarm rejection -integrated optical alarm device	
 **Art. no. 802384.MAR**	**IQ8QUAD Multisensor with integrated sounder, type O2T/So** Multisensor detector with two built-in optical smoke sensors with different scattered light angles as well as additional heat detector sensor evaluation for detecting everything from smouldering fires to open fires with consistent response behaviour. Smoke signal identification to ensure smoke classification and reduction of deceptive alarms caused, for instance, by water vapour or dust. Features: -detection using the forward and backward scatter principle -loop powered optical alarm signalling device -advanced dual chamber signal processing for unparalleled false alarm rejection -integrated optical alarm device -soft-start mode for protection against sudden exposure to acoustic alarm signalling	**NEW!**
 **Art. no. 802385.MAR**	**IQ8QUAD Multisensor w/ Sounder, flash and speech, type O²T/FSp** Multisensor detector with two built-in optical smoke sensors with different scattered light angles as well as additional heat detector sensor evaluation for detecting everything from smouldering fires to open fires with consistent response behaviour. The detector is provided with a built-in loop isolator and a built-in, bus supplied optical and acoustic alarm signalling device. Smoke sensor signal identification to ensure smoke classification and reduction of deceptive alarms caused, for instance, by water vapour or dust. Features -soft-start mode for optimum protection against sudden exposure to acoustic alarm --detection using the forward and backward scatter principle -loop powered optical alarm signalling device -advanced dual chamber signal processing for unparalleled false alarm rejection -integrated optical and acoustical alarm device	**NEW!**

BASES FOR ADDRESSABLE IQ8QUAD DETECTORS		
Data:	**Description:**	**Notes:**
 **Art. no. 805590**	**IQ8 base** Standard detector base for IQ8 / IQ8QUAD detectors.	
 **Art. no. 805591**	**IQ8 base with relay, Normally Open (NO)** Detector base with relay contact output for the IQ8 detectors range. Contact: floating NO. *Note: Not to be used with IQ8QUAD detectors with integrated alarm device*	
 **Art. no. 805591.01**	**IQ8 base with relay, Normally Closed (NC)** Detector base with relay contact output for the IQ8 detectors range. Contact: floating NC. *Note: Not to be used with IQ8QUAD detectors with integrated alarm device*	
 **Art. no. 805572**	**IQ8 base, sealed** Detector base for watertight installations applicable for the IQ8 detectors range. To be used in machinery spaces and similar areas were there may be humid and wet conditions. IP rating: 65 Requires art. no. 805590, 805591 or 805591.01 to complete the base. *Note: 3 pcs of Cable gland PG18STR type (6 –12mm) are included with the base. Cable gland PG16ST type (9 -14 mm) can be ordered as art.no.:10764*	
 **Art. no. 805571**	**IQ8 base adapter flush mounting** Adapter for installation in ceilings etc. Require art. no. 805590, 805591 or 805591.01 to complete the base	
 **Art. no. 251657**	**IQ8 base adapter flush mounting, Stainless Steel Version** IQ8 Base Adapter for flush mounting in polished stainless steel for recess installation of IQ8 detectors. The adapter is supplied with springs for fixing the box in false ceilings and cable entry in the bottom with rubber grommet.	**NEW!**

Addressable Systems

MANUAL CALL POINTS FOR ADDRESSABLE SYSTEMS		
Data:	**Description:**	**Notes:**
 **Art. no. 804971.MAR**	**Manual call point w/isolator** • Ingress protection: IP43 (IP55 with hinged cover art no.:704965) • Voltage rating: 8 – 42 VDC (for 12VDC supply) • Rated voltage: 19VDC • Alarm current: Typical 9mA, pulsed	**NEW!**
 **Art. no. 704980**	**Surface mounting box for manual call point** To be used together with art.no 804971	
 **Art. no. 259561.10**	**Surface mounting box for manual call point, IP55** To be used together with art.no 804971, includes 2 pcs cable glands.	
Art. no. 704965	**Hinged Cover for manual call point** Transparent plastic cover to be used together with art.no 804971 for IP55 application	
 **Art. no. 704967**	**Mounting Frame for IQ8 Manual Call Point** Mounting Frame can be used in flush mounted application. Not mandatory.	
 **Art. no. 704960.MAR**	**Spare Glass for IQ8 Manual Call Point** Spare Glass for manual call point. Units of 10 pcs.	
 **Art. no. 704966**	**Test Key for IQ8 Manual Call Point** Test Key for manual call point.	
 **Art. no. 761694**	**Manual call point w/isolator for outdoor use.** • Ingress protection: IP66 • Voltage rating: 8 – 42 VDC • Size (WxHxD, mm) 135x135x61 • Ambient temp, -20^{0}C to + 70^{0}C • Weight aprox. 0,475kg	

Addressable Systems

I/O and ADDRESS UNITS

Data:	Description:	Notes:
 **Art. no. 805864**	**Technical Alarm Module, 1 input/1 output** • IP rating: IP54 • Loop powered • Output: 1 relay NC/NO • Alarm indicator: LED 5 mm, red • For Closed In Alarm, Freezer and Sauna detectors	
 **Art. no. 804869**	**Technical Alarm Module (DIN-rail mounted), 1 input** The technical alarm module is a bus device of the fire alarm system for recognition, transmission and individual display of technical alarms. Each module includes an integrated loop isolator, which opens in case of loop short circuit to isolate the part of the loop between two loop isolators. A single wire break does not affect the loop and all devices remain in operation. The module does not require external voltage supply, as voltage is supplied by the field bus..	
 **Art. no. 808610.10**	**Address Unit: 12 Relays** The 12 relay Address Unit has 12 relay outputs that can be configured as NO or NC. The unit is loop driven and do not need any external voltage supply. The unit is delivered without enclosure. Maximum programmable outputs on a Delta DA module are 256. • IP54 when fitted in housing art.no.788650 • Current consumption: <100µA (with 19VDC) • Outputs: 12 relays, potential free (NO/NC)	
 **Art. no. 808630.10**	**Esser Refurbishment Address Unit, 4 IN / 2 OUT** The Esser Refurbishment Address Unit is a I/0 unit allowing conventional fire detectors and manual call points to be connected to the addressable loops through the 4 zone inputs. It is possible to configure voltage of all 4 zones to 12, 18 or 24 VDC via the internal DC / DC module. The unit require 12 VDC external power supply. Can also be supplied from the 24 VDC 1A auxiliary output on the Delta DA by using a DC/DC converter (article#: 10597). The total power consumption on the addressable detector loop has to be considered. • IP65 when fitted in housing art.no. 251576 • Operating Voltage: 10,5V DC – 13,8V DC (external power supply required) • Conventional loop voltage: 12, 18 or 24 VDC • Current consumption: <250µA (with 19VDC) • Outputs: 2 relays, Inputs: 4 conventional zones	
 **Art. no. 788650 (IP54) left** **Art. no. 251576 (IP65) right** **Art. no. 259546 (Mounting kit for art. no. 251576)**	**Enclosures for I/O and address units;** • 788611, 808610, 808613, 808617 and 808630 • IP rating: 54 (art. no. **788650)** and 65 (art. no. 251576) • 4 x PG 13,5mm cable glands (only for 251576) Note: Requires art. no. 259546 to complete the IP65 enclosure	
 **Art. no. 251595**	**Enclosure for Technical Alarm Module, p/n 804869** Supplied with DIN rail for mounting the Technical Alarm Module. Up to 5 units can be installed in one box • IP rating: 55 • 6 x PG 13,5mm cable glands • Size: 11x15x15 cm.	**NEW!**

Equipment for Special Applications

CONVENTIONAL HEAT DETECTORS FOR SAUNA, GALLEY and COLD STORE		
Data:	**Description:**	**Notes:**
 **Art. no. 242963**	**Heat Detector Sealed SW-1K, FS129- 145°C, IP67** • Supply Voltage: 12-30 VDC • Temperature: -40 - +140 °C • Humidity: 0-99% • Power Consumption: 0 mA	
 **Art. no. 242963.02**	**Heat Detector Sealed SW-1K, BS 84 - 100°C, IP67** • Supply Voltage: 12-30 VDC • Temperature: -40 - +140 °C • Humidity: 0-99% • Power Consumption: 0 mA	
 **Art. no. 242963.01**	**Heat Detector Sealed SW-1K, A2S 54 - 70°C, IP67** • Supply Voltage: 12-30 VDC • Temperature: -40 - +60 °C • Humidity: 0-99% • Power Consumption: 0 mA	
 **Art. no. 805864**	**Esser Address Unit 1 in/1 out IP54** An address module to be used when connection article# 242923 and 242963.01 to a Delta Esser System.	

4-20 mA INTERFACE FOR DELTA APOLLO SYSTEM		
Data:	**Description:**	**List price:**
 **Art. no. 235580.003**	**I/O Unit for connecting 4-20 mA devices** Interface between external 4-20 mA devices and addressable Delta Apollo detector loop. • 20 pcs per addressable loop Note: Has to be used together with Delta DA Apollo (**Art. no. 251244.1)**	

Equipment for Special Applications

CONVENTIONAL FLAME DETECTORS

Data:	Description:	Notes:
 **Art. no. 243019.100**	**Conventional IR flame detector 601F- M** The 601F-M is a full featured solar blind flame detector for enclosed use and boasts a high degree of false alarm immunity. The 601F-M is designed for connection to a conventional zone of point type fire detectors that may include any mix of detection technologies. Supplied complete with base and back box. Features: Unlike UV and UV/IR detection, not blinded by oil mist in machinery spaces Reduces cabling, no interface required No additional power source required Easy installation, uses a common plug in base for smoke and heat detectors	
 **Art. no. 233005**	**Conventional UV flame detector NS- DUV** The NS-DUV is a conventional UV flame detector for general purpose applications It senses the ultra violet rays emitted by flames. Since the detector is very sensitive to UV-rays it has an advanced alarm algorithm and special consideration has been given to reduce false alarms. The flame detector is very suitable for use in harsh environments. Thanks to its very wide viewing angle one NS-DUV can cover a large area. When the detector is in alarm condition, a red LED on the detector is lit. It is lit until the alarm has been reset at the fire alarm panel. Supplied complete with base and back box. Features: Supervising angle 100º Current in stby: 0,12mA Operating temperature -25ºC to +70ºC Ambient humidity 0 to 95% RH	**NEW!**
 **Art. no. 251811.10**	**Address unit for conventional detector 230 VAC/12 VDC** • Supply Voltage: 230 VAC • Alarm resistor: 470ohm/2W • Quiescent current pr zone: 6mA • Battery back up iuncluded The unit consists of a 230VAC/12VDC converter and the refurbishment transponder unit art no 808630.	
 **Art. no. 251813.11**	**Address unit for conventional detector 24 VDC/12 VDC** • Supply Voltage: 24 VDC • Alarm resistor: 470ohm/2W • Quiescent current pr zone: 6mA • Battery back up NOT included. The 24VDC input shall have back up battery supply. The unit consists of a 24VDC/12VDC converter and the refurbishment transponder unit art no 808630.	

DELTA LOGIC CONTROLLER

Data:	Description:	Notes:
 **Art. no. 251850**	**Delta Logic Controller** The Delta Logic Controller allows even more complex sectioning in the Delta architecture. A logical expression can be built with logical AND and OR blocks with up to 3 inputs and a NOT block with one input. As inputs you will have alarm, pre-alarm, isolation and fault messages from systems, loops, detectors and transponders (I/O) available in addition to outputs from other logical expressions and timers. The logical expressions can be programmed by using the Windows based configuration application Firewin Explorer.	

Equipment for EX Applications

Electrical Equipment in Hazardous Areas

Hazardous areas are common in some areas in vessels, petroleum and chemical engineering plants and in factories processing and storing gases, solvents, paints and other volatile substances. Electrical equipment for use in these areas needs to be designed so that it cannot ignite an explosive mixture, not only in normal operation but also in fault conditions. There are a number of methods available to achieve this, such as: *Oil Immersion - Pressurized Apparatus - Powder Filling - Flameproof Enclosures - Intrinsic Safety*. The two last methods are in most common use today.

Flameproof Enclosures (Exd)

Flameproof equipment is contained in a box so strong that an internal explosion will neither damage the box nor be transmitted outside the box. The surface must remain cool enough not to ignite the explosive mixture. When flameproof equipment is interconnected, flameproof wiring must be used. This method is most valuable when high power levels are unavoidable, like lighting luminaries etc. In a fire alarm system such detectors may be beam-, aspirating-, and some flame detectors. You do not use Ex barriers with flameproof equipment. The wiring to Exd products has to be shielded. Flameproof equipment is not acceptable for areas in which an explosive gas/air mixture may be continuously present or present for long periods, zone 0, and they must be powered down before opening and servicing.

Intrinsic Safety (Exi)

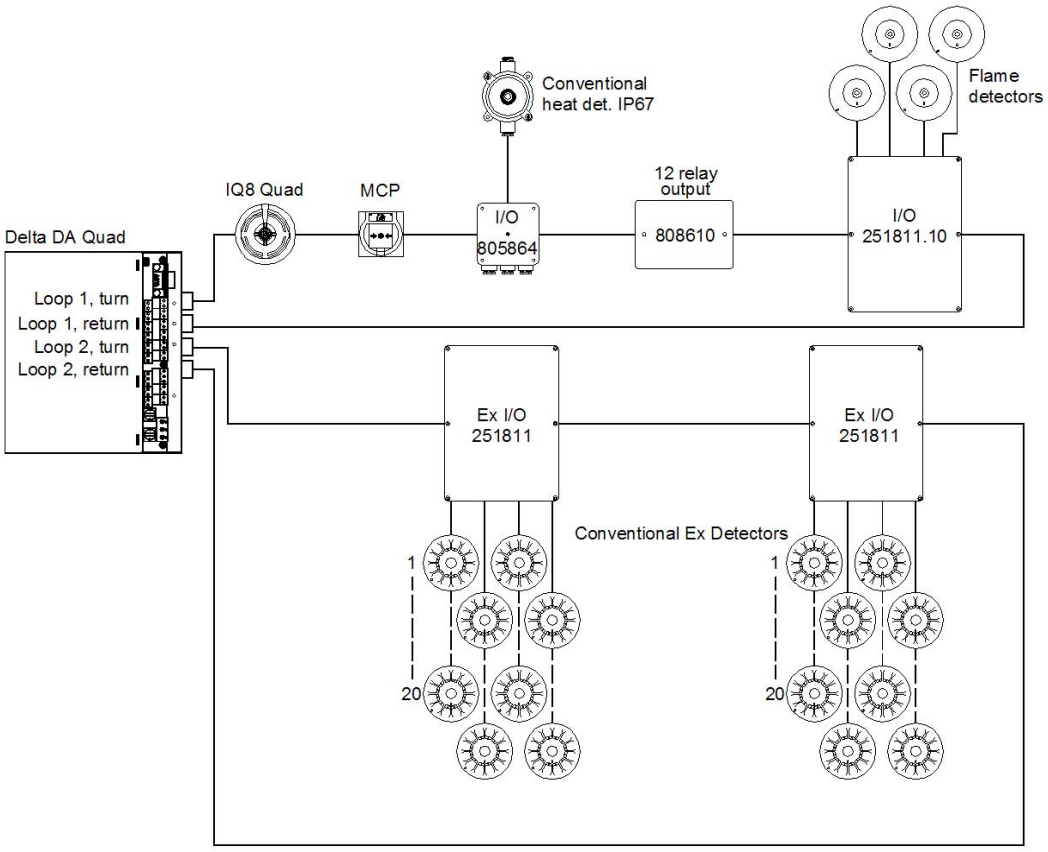
For this reason fire detectors are normally made intrinsically safe (IS) rather than flameproof. In a IS installation the complete circuit after the zener or isolator barriers are considered safe, not only the detectors. The barriers will limit the available power to a level below that needed for ignition. Therefore only equipment able to store or generate electrical energy needs to be certified. Products containing only passive elements, such as MCP's etc. may be considered as Simple Apparatus and can be installed directly in the IS circuit. IS equipment operates at such low power and with such small amounts of stored energy that it is incapable of causing ignition:

- in normal conditions
- with a single fault — for «*ib*» *classification*
- with any combination of two faults — for «*ia*» *classification*

In any of these conditions, every component must remain cool enough to not ignite the gases for which it is approved. The I.S. technique restricts the useful power to about 1W, which is sufficient for most modern instrumentation. It is also safe for personnel, since the voltages are low and it allows field equipment to be maintained and calibrated «live», without the need to obtain a *gas-free certificate*.

EX Equipment – Standard Solution

CONVENTIONAL EX DETECTORS FOR DELTA QUAD SYSTEMS – TOPOLOGY DRAWING



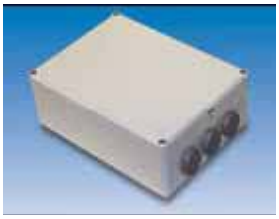
Conventional EX devices are connected to the Delta Quad Fire Detection System through an Address Unit for EX Detectors (article# 251811). The Address Unit need external power and can be delivered as a 230 VAC version with internal battery backup or as a 24 VDC versions. Conventional EX detectors and manual call points can be connected to the addressable loops on a Delta Quad Fire Detection and Alarm Modules (DA) through 4 zone inputs available on the Address Unit. A maximum of 20 pcs EX Detectors can be connected to each of the 4 zones.

For applications to be installed in zone 1 or zone 2 a Zener Barrier must be used. The Zener Barrier separates intrinsically safe circuits from non-intrinsically safe circuits outside the hazardous area (EX area). The Address Unit is delivered with 1 pcs Zener Barrier as standard and additional 3 pcs of Zener Barriers (article# 07099) has to be ordered separately if all 4 zones are in use.

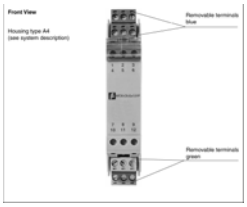
For F&G application where a larger number of EX detectors is needed we recommend to use addressable EX detectors and please refer to the addressable EX Detector chapter in this manual for further description.

CONVENTIONAL EX FIRE DETECTORS and BASES – ORBIS RANGE		
Data:	**Description:**	**Notes:**
 **Art. no. 234921**	**Orbis IS Heat Detector A1R** **Rate of Rise, Maximum Application Temp: 50°C** The Orbis IS Heat Detector monitors temperature by using a single thermistor network which provides a voltage output proportional to the external air temperature. The Orbis range incorporates several heat detector classes to suit a wide range if operating conditions. Heat detectors can be used for applications where smoke detectors are unsuitable and are ideal for environments that are dirty or smoky under normal conditions	
 **Art. no. 234922**	**Orbis IS Heat Detector A2S** **Static, Maximum Application Temp: 50°C** The Orbis IS Heat Detector monitors temperature by using a single thermistor network which provides a voltage output proportional to the external air temperature. The Orbis range incorporates several heat detector classes to suit a wide range if operating conditions. Heat detectors can be used for applications where smoke detectors are unsuitable and are ideal for environments that are dirty or smoky under normal conditions	
 **Art. no. 234924**	**Orbis IS Optical Smoke Detector Conventional** • Supply Voltage: 16 – 28 VDC • Alarm current: 48mA typical • Quiescent current: 100µA typical • Alarm indication. LED red	
 **Art. no. 234925**	**Orbis IS Multi Detector Conventional** • Supply Voltage: 16 – 28 VDC • Alarm current: 48mA typical • Quiescent current: 100µA typical • Alarm indication. LED red	
 **Art. No. 234923**	**Base Ex** • To be used together with detectors Orbis EX Detectors.	
 **Art. no. 235562**	**Orbis/XP95 base, for watertight applications** • IP 65 Detector base for watertight installations applicable for the Orbis detectors range. To be used in machinery spaces and similar areas were there may be humid and wet conditions.	

EX Equipment – Standard Solution

CONVENTIONAL EX FLAME DETECTORS		
Data:	**Description:**	**Notes:**
 **Art. no. 243019.200 (delivered compete with sealed base)**	**601FEx-M Conventional Flame Detector Intrinsically Safe** The 601F-M is a full featured solar blind flame detector for enclosed use and boasts a high degree of false alarm immunity. The 601FEx-M is an intrinsically safe version intended for use in hazardous atmospheres and must be connected via a suitable isolator or shunt diode safety barrier in a certified Intrinsically Safe system. • Unlike UV and UV/IR detectors, it is not blinded by oil mist in machinery spaces • Reduces cabling, no interface required • No additional power source required • Easy installation, uses a common plug in base for smoke and heat detectors	
 **Art. no:** **233006.01 (Triple IR)**	**Sharp Eye 40/40I Triple IR Flame Detector** An encapsulated detector for especially difficult surroundings and Ex-classified areas. Typical applications are oil installations, refineries, loading/unloading areas for inflammable liquids, hangars etc.. The 40/40I Triple IR (IR3) Flame Detector detects fuel and gas fires at long distances with the highest immunity to false alarms. The 40/40I IR3 can detect a 1ft2 (0.1m2) gasoline pan fire at 215 ft (65m) in less than 5 seconds. • Explosion-proof design: Eex(d) • Detector housing in aluminum or stainless steel. • 4-20mA output signal (0 – 20 mA stepped) • High Reliability - MTBF - minimum 150,000 hours • Immune against all known types of fault alarm • HART Protocol for maintenance and asset management • RS-485, Modbus Compatible • Relays (3) for Alarm, Fault and Auxiliary	
ZENER BARRIER FOR CONVENTIONAL SYSTEMS		
 **Art. no. 235525**	**Zener barrier in box for Ex detectors on conventional zones** This Zener Barrier is used when conventional EX Detectors are connected directly to the conventional zones on the Delta Detection and Alarm Module (Delta DA)	

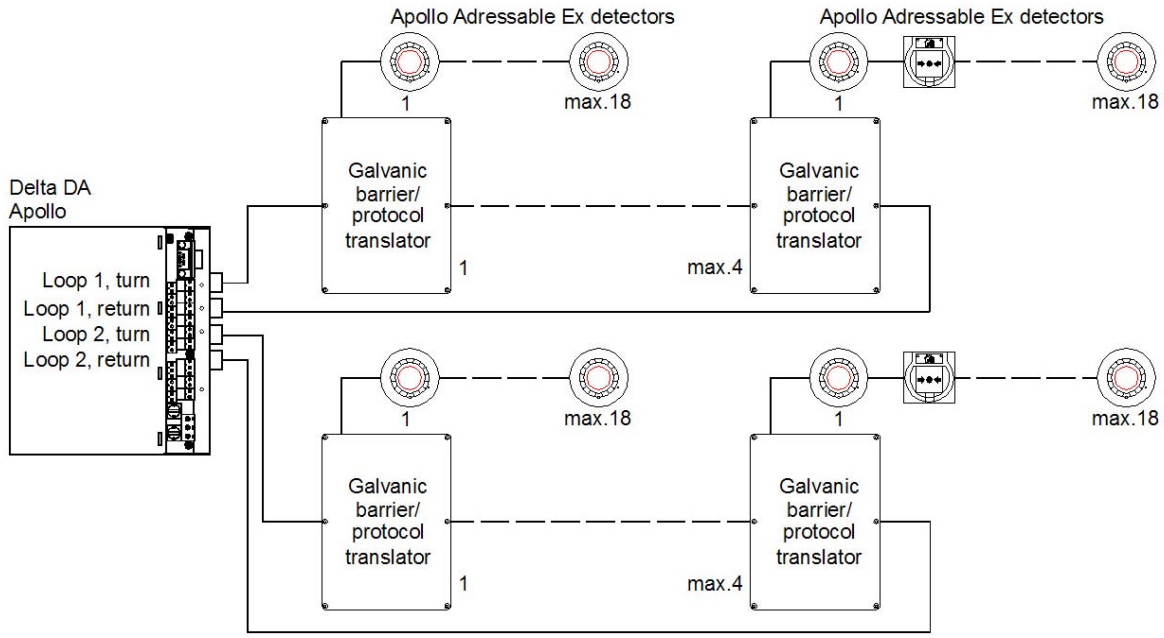
EX Equipment – Standard Solution

I/O UNITS FOR CONVENTIONAL EX DETECTORS		
Data:	**Description:**	**Notes:**
 **Art. no. 251811**	**Address Unit for conventional Ex detectors 230 VAC/12 VDC** • Supply Voltage: 230 VAC • Alarm current: 470R/2W • Quiescent current pr zone: 6mA • 1 input for EX detectors which includes zener barrier (art. No: 07099) • 3 inputs which requires additional zener barrier art. No: 07099 • Battery back-up included *Note: To be installed in non-Ex area*	
 **Art. no. 251813.10**	**Address Unit for conventional Ex detectors 24 VDC/12 VDC** • Supply Voltage: 24VDC • Alarm current: 470R/2W • Quiescent current pr zone: 6mA • 1 input for EX detectors which includes zener barrier (art. No: 07099) • 3 inputs which requires additional zener barrier art. No: 07099 • Battery back-up NOT included. The 24VDC input shall have back up battery supply. *Note: To be installed in non-Ex area*	
 **Art. no. 07099**	**Isolator Barrier: KFD0-CS-Ex1.51P** • IP rating: IP20 • Supply: Loop powered, 0.2 W • Rated voltage: 4 - 35VDC • Current: 0-40 mA • EEx ia IIC • Safety parameter 28V/ 300Ohm • EMC acc. to NAMUR NE 21 • Temp. -20 to +60 *Note: To be mounted inside art. no. 251811 for extra conventional Ex loop, if needed*	

CONVENTIONAL EX MANUAL CALL POINTS		
Data:	**Description:**	**Notes:**
 **Art. no 251561**	**Manual call point EXi MEDC type** The MEDC style Manual Call Point is recommended for heavy duty applications. • Conventional • IP rating: 66	
 **Art. no. 251617**	**Manual call point KAC type** • Conventional • IP rating: 66 • For use in IS circuits as Simple Apparatus Sealed Manual Call Point. Resistor Kit included (220, 470, 680, 1K8). 1 pcs Cable Gland The Cable of PG16STR type (06-12 mm) is enclosed in the package. PG16ST (09-14mm) glands can be ordered on article#: 10764.	

EX Equipment - Addressable

ADDRESSABLE XP95 INTRINSICALLY SAFE DETECTORS – TOPOLOGY DRAWING

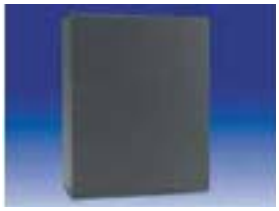
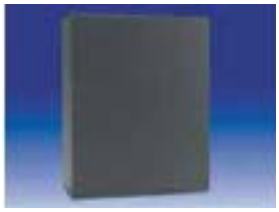


The addressable XP95 Intrinsically Safe (IS) Detectors are a development of the well-established intelligent XP95 range of detectors. They feature all the benefits of the standard range, but are developed specifically for use in hazardous areas. The XP95 IS detectors are connected to the Delta Fire Detection System through Delta Apollo Detection and Alarm Modules (DA Apollo) available as separate DA's or as 2 loops or 4 loops SUB Panels.

Addressable XP95 IS detectors and addressable XP95 IS MCP's is connected to the loop through Protocol Translators and Galvanic Barriers (ref attached drawing). A total number of 4 pcs Protocol Translators/channels can be connected to each loop providing a total of 72 (18 pcs per spur) IS detectors per loop. The maximum spur capacitance is 70 nF.

For safe areas we recommend to use the IQ8 Quad Detector range together with Delta Quad Detection and Alarm Modules. The Delta Quad DA Modules can be mixed with the Delta Apollo DA Modules on the same Delta Network.

EX Equipment - Addressable

DELTA SYSTEM COMPONENTS FOR DELTA APOLLO SYSTEMS		
Data:	**Description:**	**Price NOK:**
 **Art. no. 251244.1**	**Delta DA Marine Apollo Addressable w/eBus** Cost-effective Detection and Alarm Module for decentralised solutions. Communicate with Apollo detectors and fully meets EN 54.2 requirements regarding fail-safe networks. The Delta DA is operated via the Delta OP panel and is designed for hook-up to other Delta DA modules. Delta DA is equipped with a communications output for direct hook-up (via a LON-kit) to other Delta Units Features: ▪ 2 analogue Apollo loops ▪ 126 detectors per loop ▪ 3 monitored voltage outputs (e.g. alarm-bell circuits), ▪ 2 voltage-free relay outputs ▪ 1 monitored multi-function output. ▪ 1 eBus (LON-kit) Approvals: **Complies with EN54.2 and EN54.4**	
 **Art. no. 251072**	**Delta Apollo Sub Panel 2 loops w/eBus** This unit is a decentralized Detection and Alarm Module for Apollo detectors and complies with EN 54.2 and EN 54.4. The unit may be used together with the DELTA OP or as a stand alone Detection and Alarm Module in a network. The Delta Decentralized DA consists of a Delta DA module, Power Supply, eBus communication and batteries. Features: ▪ 2 analogue Apollo loops ▪ 126 detectors per loop ▪ 3 monitored voltage outputs (e.g. alarm circuits), ▪ 2 voltage-free relay outputs ▪ 1 monitored multi-function output. Supplied with built-in batteries for 72 hours of emergency operation. Approvals: **Complies with EN54.2 and EN54.4**	
 **Art. no: 251073**	**Delta Apollo Sub Panel 4 loops w/eBus** This unit is a decentralized Detection and Alarm Module for Apollo Detectors and complies with EN 54.2 and EN 54.4. The unit may be used together with the DELTA OP or as a stand alone Detection and Alarm Module in a network. The Delta Decentralized DA consists of two Delta DA module, Power Supply, eBus communication and batteries. Features: ▪ 4 analogue Apollo loops ▪ 126 detectors per loop ▪ 3 monitored voltage outputs (e.g. alarm circuits), ▪ 2 voltage-free relay outputs ▪ 1 monitored multi-function output. Supplied with built-in batteries for 72 hours of emergency operation. Approvals: **Complies with EN54.2 and EN54.4**	

EX Equipment - Addressable

ADDRESSABLE IS XP95 DETECTORS AND MCP FOR DELTA APOLLO SYSTEMS		
Data:	**Description:**	**List price:**
 **Art. no. 235135.03**	**XP95 IS Ionisation Smoke Detector** The XP95 IS ionisation Smoke detector uses a low activity radioactive foil to detect fires by irradiating the air in the smoke cambers and causing a current flow. If smoke enters the chamber the current flow is reduced leading to an alarm. Responds well to fast-burning, flaming fires. Minimal effects from temperature, humidity, atmospheric pressure and wind. NB! Restriction on handling and shipping of ionisation smoke detectors apply in several countries including EU	
 **Art. no. 235136.03**	**XP95 IS Optical Smoke Detector** The XP95 Optical IS Smoke Detector works using the light scatter principle and is ideal for applications where slow-burning or smouldering fires are likely. Well suited for escapes routs and are unaffected by wind or atmospheric pressure.	
 **Art. no. 235137.03**	**XP95 IS Heat Detector** The XP95 IS Heat detector operates by measuring heat levels with a single thermistor network which gives a count output proportional to the external air temperature. Ideal for environments that are dirty or smoky under normal conditions.	
 **Art. no. 235134**	**XP95 IS Mounting Base** The XP95 IS Mounting Base has been designed to accept only IS products. This ensures that standard detectors inadvertently be fitted into an intrinsically safe system. **For IP65 base use pt. no. 235562**	
 **Art. no. 235562**	**XP95/Discovery base, for watertight applications** • IP 65 Detector base for watertight installations applicable for the XP95 and Discovery detectors range. To be used in machinery spaces and similar areas were there may be humid and wet conditions.	

EX Equipment - Addressable

ADDRESSABLE IS XP95 DETECTORS AND MCP FOR DELTA APOLLO SYSTEMS

Data:	Description:	List price:
 **Art. no 235133**	**XP95 Manual Call Point EXi, KAC Type** • IP rating: 67	
 **Art. no. 235125**	**XP95 Manual Call Point EXi, MEDC Type** The MEDC style Manual Call Point is recommended for heavy duty applications • Addressable • IP rating 66	

PROTOCOL TRANSLATOR and GALVANIC BARRIER FOR DELTA APOLLO SYSTEMS

Data:	Description:	List price:
 **Art. No:** **235131 (1 channel)** **235132 (2 channels)**	**Galvanic Barrier** The Galvanic Barrier and Protocol Translator are installed in the safe area ensuring of communication between control equipment and field devices and safety within the limits of BASEEFA approval.	
 **Art. No:** **235138 (1 channel)** **235139 (2 channels)**	**Protocol Translator** The Protocol Translator and Galvanic Barrierare installed in the safe area ensuring of communication between control equipment and field devices and safety within the limits of BASEEFA approval.	
 **Art. no.** **235150** **235150.001 (w/Isolator)**	**EX Connection Unit (235131 + 235138)** The EX Connection Unit is containing 1 pcs Galvanic Barrier (235131) and 1 pcs Protocol Translator (235138). The unit is used to connect Apollo XP95 IS Detectors to addressable Apollo DA's. The unit has to be placed outside the EX area. The EX Connection Unit can also be delivered with built in Isolator to protect the rest of the detector loop if short circuit occurs on the EX-loop. A total number of 4 EX Connection Units with up to 20 pcs EX detectors per unit can be connected to a Apollo detector loop. • IP rating: IP44	

Addressable Flame Detectors

ADDRESSABLE FLAME DETECTORS FOR DELTA APOLLO SYSTEM

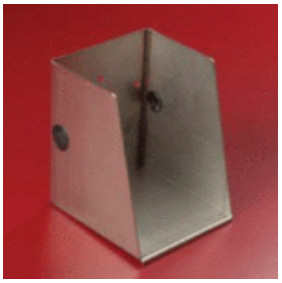
Data:	Description:	Notes:
 **Art. no. 233009**	**Addressable UV Flame Detector 55000-027MAR (for Apollo System)** The detector is sensitive to ultraviolet radiation emitted by flames during combustion. Since it requires only UV radiation the detector responds even to stationary flames with no flicker like cigarette lighters and blue gas flames. The detector is set to respond to ultraviolet radiation (185−260nm) emitted by almost all flames, including those invisible to the naked. The detector has a single UV sensor with a narrow spectral response in order to discriminate between flames and most spurious sources of radiation and is designed for internal fully enclosed areas. *Caution: The detector will also detect electrical discharges from lightning or arc welding.* • Loop powered • Sensitive to stationary flames and hydrogen fires • Sensitivity The UV flame detector is designed to operate to Class 1 performance as defined in EN54: Part 10. The detector will, therefore, detect a flame of approximately 0.1m² or a clear flame of 0.25m² at 25m. • Field of view The IR^3 flame detector has a viewing angle of view of approximately 90° • Sensitivity setting The sensitivity switch is available and is used to set the sensitivity of the UV flame detector to Class 1 or Class 3. • Environmental data Operating temperature –40°C to +70°C Relative humidity 95% (no condensation) IP rating 66	**NEW!** **From Q2 2010**
 **Art. no. 233008**	**Addressable UV/ IR^2 Flame Detector 55000-028MAR (for Apollo System)** The detector is sensitive to ultraviolet and low-frequency, flickering infra-red radiation emitted by flames during combustion. Since it requires both UV and IR radiation the detector can operate in applications where a basic single UV or single IR detector would be inappropriate. The detector is set to respond to ultraviolet (185−260nm) and low-frequency flickering infra-red (0.75−2.7µm) radiation at 1−15Hz in order to detect all flickering flames, including those invisible to the naked eye, e.g. those emitted by hydrogen fires. The detector has one UV and two IR sensors responding to different wavelengths in order to discriminate between flames and spurious sources of radiation. False alarms due to electrical discharges from lightning or arc welding and flickering sunlight are minimised by combining the UV/IR signals. • Loop powered • Sensitivity The UV/IR^2 flame detector is designed to operate to Class 1 performance as defined in EN54: Part 10. The detector will, therefore, detect a yellow flickering flame of approximately 0.1m² or a clear flame of 0.25m² at 25m. • Field of view The IR^3 flame detector has a viewing angle of view of approximately 90° • Sensitivity setting The sensitivity switch is available and is used to set the sensitivity of the flame detector to Class 1 or Class 3. • Environmental data Operating temperature –40°C to +70°C Relative humidity 95% (no condensation) IP rating 66 Current 2.2mA	**NEW!** **From Q2 2010**

Addressable Flame Detectors

ADDRESSABLE FLAME DETECTORS FOR DELTA APOLLO SYSTEM

Data:	Description:	Notes:
 **Art. no. 233007**	**Addressable IR^3 Flame Detector 55000-029MAR (for Apollo System)** The detector is sensitive to low-frequency, flickering infra-red radiation emitted by flames during combustion. Since it responds to flickering radiation the detector can operate even if the lens is contaminated by a layer of oil, dust, water-vapour or ice. The detector is set to respond to low-frequency radiation at 1−15Hz (0.75−2.7µm) in order to detect all flickering flames, including those invisible to the naked eye, e.g. those emitted by hydrogen fires. The detector has three IR sensors that respond to different IR wavelengths in order to discriminate between flames and spurious sources of radiation. False alarms due to factors such as flickering sunlight are avoided by a combination of filters and signal processing techniques. • Loop powered • Sensitivity The IR^3 flame detector is designed to operate to Class 1 performance as defined in EN54: Part 10. The detector will, therefore, detect a yellow flickering flame of approximately 0.1m² or a clear flame of 0.25m² at 25m. • Field of view The IR^3 flame detector has a viewing angle of view of approximately 90° • Sensitivity setting The sensitivity switch is available and is used to set the sensitivity of the flame detector to Class 1 or Class 3. • Environmental data Operating temperature –40°C to +70°C Relative humidity 95% (no condensation) IP rating 66 Current 2.5mA	**NEW!** **From Q2 2010**
 **Art. no. 235101** **Art. no. 235140 (key card)** **Art. no. 235128 w/isolator** **Art. no. 235101.001 w/relay**	**Base for Apollo Flame Detectors** The detectors fits any XP95 or Discovery base and would normally be wall or ceiling mounted preferably on an adjustable bracket to adjust the angle of view. The detectors are automatically coded when they are mounted onto the base. A replaceable plastic key contains a code that tells the detector where it is placed in the sequence of numbers. This means that the detector can be replaced without addressing the detector itself.	
 **Art. no. 233010**	**Flame Detector Bracket** The Flame Detector Bracket is an optional accessory for the Intelligent Flame Detectors. It is a stainless steel mounting bracket adjustable in two axis. • Allows flame detector to be adjusted to the desired angle according to the monitored area or object	**NEW!** **From Q2 2010**

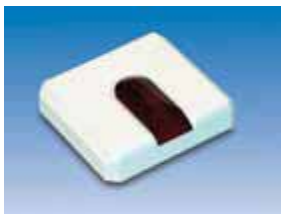
Addressable Flame Detectors

ADDRESSABLE FLAME DETECTORS FOR DELTA APOLLO SYSTEM		
Data:	**Description:**	**Notes:**
 **Art. no. 233011**	**Flame Detector Weather Shield** The Flame Detector Weather Shield protects the device from inclement conditions. • Protects against water ingress • Protects sensor from direct sunlight	**NEW!** **From Q2 2010**
 **Art. no. 233012**	**Flame Detector Tester Kit for Apollo Flame Detectors** • The Flame Sensor Test Kit is a tool which is designed to test flame detectors without the need of real flames. • Mimics the characteristics of real flames	**NEW!** **From Q2 2010**

Alarm Devices

ALARM DEVICES - ACOUSTICAL		
Data:	**Description:**	**Notes:**
 **Art. no. 243104.01**	**Alarm bell: MBF-6EV** • Diameter: 150 mm • IP rating: 23 • Sound output: 98,8 dB(A) • Voltage rating: 20,4 – 27,6 VDC • High reliability, long life unit. • Current consumption: 11mA	
 **Art. no. 243108.01**	**Alarm-bell: MBA6-BBX4** • Diameter: 150 mm • IP rating: 55 • Sound output: 100,1 dB(A) • Voltage rating: 20,4 – 27,6 VDC • High reliability, long life unit. • Current consumption: 12mA	
 **Art. no. 243120**	**Acoustic alarm** • Diameter: 92 mm • IP rating: 65* • Sound output: Based on the chosen 32 tones (87 - 111dB) • Voltage rating: 15 – 28VDC • Current consumption: 7 - 27mA • Alarm circuits must have constant voltage **Sealed base must be used, see below*	
 **Art. no. 235312**	**Sealed base** To be used for siren art no.: 243120 to obtain IP65 for the alarm unit	
 **Art. no. 251516**	**Acoustic alarm** • IP rating: 65 • Sound output: 105 dB(A) • Current consumption: 30-50mA • Alarm circuits must have constant voltage	
 **Art. no. 251424 (as kit)** **Art. no. 251364 (horn)** **Art. nr 254026 (solenoid)**	**Typhoon Air horn w/solenoid valve 24VDC** • Diameter: 135 mm • IP rating: Watertight • Sound output: 115 - 130 dB(A) • Air driven	

Alarm Devices

ALARM DEVICES – OPTICAL		
Data:	**Description:**	**Notes:**
 **Art. no. 251517**	**Sounder/Beacon** • 103dBA • Red light • Current consumption: 30 - 50mA • Alarm circuits must have constant voltage • IP rating 67	
 **Art. no. 251584**	**Beacon XL** • Red light • 10 joule • 24V • Current consumption: 700mA • Alarm circuits must have constant voltage • IP rating 65	
 **Art. no. 243118**	**Beacon** • Red light • 5 joule • IP rating: 55 • Voltage rating: 20..28 VDC • Current consumption: 300mA Alarm circuits must have constant voltage	
 **Art. no. 781814**	**Parallel Lamp, Esser** 3 LED Esser Parallel Lamp with optical lens. Can also be used together with addressable Apollo detectors (R+/R-)	

Alarm Devices

LOOP POWERED ALARM DEVICES

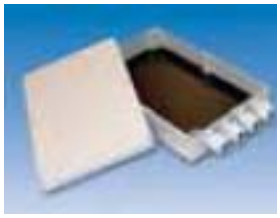
IQ8Alarm devices. General features, sounder

Addressable, completely bus supplied and short circuit / open circuit resilient alarm signaling device in compliance with EN 54-3 with up to 20 different programmable signaling tones including DIN tone in accordance with DIN 33404 Part 3 for acoustic alarm signaling. The volume can be set to 8 different levels. Its flat design enables optimum adaptation to the environments. It is made of shock and scratch resistant plastic. Optionally, bases 806201 and 806202 with side cable entry and weatherproof protection can be installed. Each device have a built-in isolator. Load factor 3. Ambient temperature -10 to +50°C. Approval: VdS (EN54)

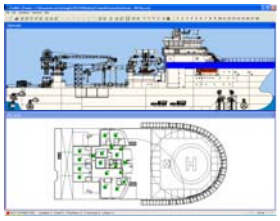
Data:	Description:	Notes:
 **Art. no. 807205.01**	**IQ8Alarm sounder, white** Acoustic alarm signaling: Acoustic pressure up to 99 dB(A) @ 1 m Volume programmable in 8 steps via tools 8000 20 different signaling tones, including DIN tone	
 **Art. no. 807206.01**	**IQ8Alarm sounder, red** Acoustic alarm signaling: Acoustic pressure up to 99 dB(A) @ 1 m Volume programmable in 8 steps via tools 8000 20 different signaling tones, including DIN tone	
 **Art. no. 807372.MAR**	**IQ8Alarm, sound and optical, red** Acoustic alarm signaling: Acoustic pressure up to 99 dB(A) @ 1 m Volume programmable in 8 steps via tools 8000 20 different signaling tones, including DIN tone Optical alarm signaling: intensity equivalent to 3W Xenon flash light Light intensity: max. 3.87cd effective, max. 24cd peak. Fixed flash rate of aprox. 1Hz. The unit also has an optional speech function	**NEW!**
 **Art. no. 806202.01**	**Base IP 65 for IQ8Alarm, red** Base, red, for IQ8Alarm devices. Ingress protection IP 65 and surface mount cable entry. Prepared with three knock-outs connected wit an earth continuity bar.	

Alarm Devices

EX ALARM DEVICES		
Data:	**Description:**	**List price:**
 **Art. no. 251589**	**Alarm siren DB7 EExia** • IP rating: 65 • Sound output: 103dB • Voltage rating: 24VDC • Alarm current: 14mA	
 **Art. no. 251506**	**Isolator Barrier for Exi Alarm Devices** To be used on the on the alarm output when connecting Exia Alarm Devices	
 **Art. no. 251594**	**Hazardous Area Xenon Warning Beacon** • ATEX classification Eex d IIC T5 Ta. -50 to +55°C T100ºC • Light output 5 Joule Xenon : 1Hz (60 FPM) (5 Ws). • Haz. areas Zone 1, 2, 21 & 22 Gas Groups IIC IIB & IIA • IP 66 • Weight 2,45kg • Voltage rating 24VDC (20-28VDC) • Current 270mA • Supplied with two glands for cable entries.	

EQUIPMENT FOR DOOR CONTROL AND MONITORING		
Data:	**Description:**	**List price:**
 **Art. no. 235580**	**I/O Unit for Door Monitoring/Control** Used as addressable units between conventional signals (on/off) and analogue detector loops with Apollo protocol. I/O unit with 3 NO/NC relay outputs and 3 digital inputs to be used for door monitoring and control. • 20 pcs per addressable loop Note: Has to be used together with Delta DA Apollo (**Art. no. 251244.1)**	
 **Art. no. 251576** **Art. no. 259546 (Mounting kit for art. no. 251576)**	**Watertight enclosure for I/O and address units;** • IP rating: 65 • 4 x PG 13,5mm cable glands Requires art. no. 259546 to complete the enclosure	
 **Art. no. 251244.1**	**Delta Addressable DA Apollo Marine w/eBus** Cost-effective Detection and Alarm Module for decentralised solutions. Communicate with Apollo devices and fully meets EN 54.2 requirements regarding fail-safe networks. The Delta DA is operated via the Delta OP panel and is designed for hook-up to other Delta DA modules. Delta DA is equipped with a communications output for direct hook-up (via a LON-kit) to other Delta Units Features: ▪ 2 analogue Apollo loops ▪ 126 detectors per loop ▪ 3 monitored voltage outputs (e.g. alarm-bell circuits), ▪ 2 voltage-free relay outputs ▪ 1 monitored multi-function output. ▪ 1 eBus (LON-kit) Approvals: **Complies with EN54.2 and EN54.4**	
 **Art. no. 251072**	**Delta Apollo Sub Panel 2 loops w/eBus** This unit is a decentralized Detection and Alarm Module for Apollo detectors and complies with EN 54.2 and EN 54.4. The unit may be used together with the DELTA OP or as a stand alone Detection and Alarm Module in a network. The Delta Decentralized DA consists of a Delta DA module, Power Supply, eBus communication and batteries. Features: ▪ 2 analogue Apollo loops ▪ 126 detectors per loop ▪ 3 monitored voltage outputs (e.g. alarm circuits), ▪ 2 voltage-free relay outputs ▪ 1 monitored multi-function output. Supplied with built-in batteries for 72 hours of emergency operation. Approvals: **Complies with EN54.2 and EN54.4**	

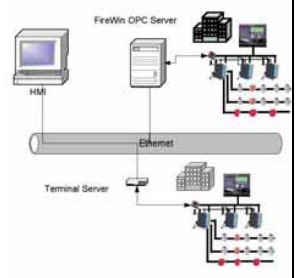
Management and Presentation Tools

FIREWIN PRESENTATION SOFTWARE		
Data:	**Description:**	**Notes:**
 **Art. no. 234676.002**	**FireWin presentation. Network / client one user licence** FireWin is a marine approved Windows-program that can be set up in the vessels control room, bride, communication centre etc. Via this program all the normal functions of the Delta OP can be accessed. Graphics of deck plans showing detectors and fire doors etc. are fed into the system. This then gives a visual indication of the detector giving an alarm signal or those that are non-operative. By means of these indications it is possible to follow the course of a fire situation and therefore to give value added information in order for the crew onboard to take corrective actions.	
Art. no. 234676.02	**FireWin Network / client user licence** Additional user licence for the FireWin server Note: Max 5 client applications/PC in one Delta network	
Art. no. 234676.03	**FireWin per. point/address from 1…500** FireWin programming for systems with less than 500 addresses	
Art. no. 234676.04	**FireWin per. point/address from 501…1000** FireWin programming for systems from 500 addresses and up to 1000.	
Art. no. 234676.05	**FireWin per. point/address from 1001…** FireWin programming for systems from 1000 addresses and upwards.	

Management and Presentation Tools

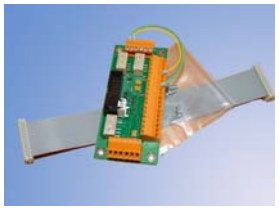
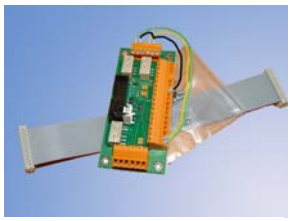
FIREWIN PRESENTATION HARDWARE		
Data:	**Description:**	**Notes:**
 **Art. no. 251457.01**	**Workstation** Art no.: 251457 - Marine approved PC type HT B06xM STD-y1 • uDOC Flash Disk(1GB to 4GB option) • 2.5" SATA HDD, 5400RPM (Option) • 2 x PCI Slots (Half Length Profile) • 10/100Mbps & 10/100/1000Mbps • 1 x FireWire, 2 x RS232, 4 x PS/2 • 4 x USB, 1 x RGB OUT, Audio Out • 115/230V (200W)	
 **19" Art. no. 251458.02** **17" Art. no. 251458.03**	Art no.: 251458 - Marine approved LCD monitors for recess mounting in bridge or control consoles. **TFT - 17.0 or 19" inch** Optimal Resolution @ Hz: **1280 x 1024 @ 60 Hz** Power Supply: **24 VDC or 115/230 VAC**	
 **Art. No. 251081**	**PC FireWin Embedded Micro Box** Small PC for use in the Delta network. Windows XP operator system is implemented.	
 **Art. No. 251030.005**	**Keyboard and mouse for PC** USB wired keyboard and mouse for the PC's.	
 **Art. no. 251029**	**Galvanic isolator – RS 232** To be used when connecting PC or other external equipment to the Delta Modules via RS232. The Galvanic Isolator is used to avoid earth fault when connection external units to the Delta System and will also provide over voltage protection for both systems. Need 24 VDC supply voltage. 9 meter cable to be used between the fire alarm panel and the Galvanic Isolator is included.	
 **Art. no. 251264**	**MIMIC Panel** Customized mimic fire alarm panel, price on request based on customers specifications. LED driver: Art. No.: 08594 Cable from Delta OP to hardware Mimic panel: Art. No.:30892.1 Terminal block for connection of cable: Art. No.: 16508	

Management and Presentation Tools

MANAGEMENT SOFTWARE		
Data:	**Description:**	**Notes:**
 **Art. no:** **251414 (SW Application)** **251414.01 (Clients)**	**FireWin Publisher** FireWin Publisher is application to be used together with Firewin Presentation and makes it possible to publish alarm status on WEB. When an alarm or pre-alarm situation occurs, the Firewin Publisher automatically distributes the alarm status to all PC's in a network that have Firewin Publisher installed.	
 **Art. no: 251524**	**Delta Terminal** Eltek Fire & Safety's Delta Terminal is a Windows application that can be installed on laptops, PC's or PDA.s and makes it possible to remotely control and operate Delta fire Alarm Systems through Internet/intranet. This application gives you a unique possibility to remotely monitor and control Delta Fire Alarm installation.	
Art. no: 251557	**FireWin OnSite Editor** FireWin OnSite Editor is a Windows application that makes it possible for the end-users to edit their customer specific fire alarm messages used on Delta Panels.	
 **Art. no:** **251504 (OPC Application)** **251504.1 (100 addresses)** **251404.2 (1000 addresses)**	**FireWin OPC Server Application** Firewin OPC Application is used to connect the Eltek Delta Fire Alarm System to an OPC-Client. The OPC Application has to be installed on a PC and connected to the Delta Systems eBus through an eNode (article# 235762). The eNode is connected to the PC RS232 port and the maximum cable length is 15 meter.	

NETWORK and COMMUNICATION MODULES		
Data:	**Description:**	**Notes:**
 **Art. no. 235762**	**eNode** This communication unit is used for connecting other products such as a FireWin PC to the Delta fire alarm systems. The eNode is also used as an interface unit for other fire alarm modules connected to the multi-master eBus network, or if you need to connect the Delta System Modules in a redundant network. In this case you connect the eNode to the RS232 port on the Delta DA's. With this configuration the Delta DA's will send the system information both directly on the eBus and through the RS232 port. If one of the communication lines fails you will still have communication on the other. Note: If you are connecting the eNode to a PC or laptop an RS232 cable has to be ordered with reference to article#: 255750.006. If you are using eNode to connect the Delta System in a redundant network you need to order a dedicated cable to be used between the eNode and the Delta DA. Please refer to article#: 255750.010	
 **Art. no. 251611.01**	**Delta Communication Interface** This unit is based on a Delta OP but without display and keypad. Used as a communication interface for voice alarm, SMS communication or as an interface between the Delta System and other alarm devices. The Delta Communication IF is equipped with 7 digital inputs.	
 **Art. no.** **242671.060 multi mode** **242671.065 single mode**	**Fibre Optic Modem for eBus communication, Westermo** A fiber-optic modem for transmission of eBus data via optic fibers. The modem is connected directly to the Delta Modules via eBus. External 24V DC supply voltage is required. This allows the user to build either a bus- or redundant ring topology through fibre. A distance of 5 km can be achieved by using Multi Mode fiber (standard version). The transmission distance can be up to 24 km by using a Single Mode fiber (available on request).	
 **Art. no. 259530**	**Modem, eBus through TCP/IP** This modem makes it possible for eBus communication between Delta Units through Internet. The Delta System is connected to the TCP/IP Modem through a eNode (article# 235762) • Line in: RCA 2 Vpp • Serial Interface: RS232 • Network Interface: RJ45 10/100 Mbit Eterneth TCP/IP, UDP, ICMP, DHCP, Auto IP • Power 9-24 VDC, 4W	

Accessories

ACCESSORIES		
Data:	**Description:**	**Notes:**
 **Art. no. 251406** **Art. no. 243037 (Back Box)**	**General Alarm Button** • Switch: On/off • IP rating: IP42 • Max Voltage: 230VAC 50Hz • Operating temp: -25…55°C	
 **Art. no. 251373.1**	**Kit for muting the Fire Alarm** The kit consists of a printed circuit board and a cable. When the kit is installed inside the DELTA OP it enables an input from the PA system to mute the fire alarm system.	
 **Art. no. 235685.100**	**Manual isolating timer unit** This unit is used locally to start/stop a predefined time limited function of one or more detectors or other equipment via a multifunction (macro) embedded in the Delta OP.	
 **Art. no. 251373.3**	**Delta OP multi function input Card for Timer Unit** Interface PCB located in the Delta OP receiving input from the isolating unit art.no 235685.100.	
 **Art. no. 243210**	**DOOR RETAINER: GPT/AG W/Release button** • Holding power: 420 Nm • IP rating: 40 • Power rating: 21 – 30 VDC • Push button for release	

Accessories

ACCESSORIES		
Data:	**Description:**	**Notes:**
 **Art. no. 805588**	**Dust cover IQ8** To be fitted on the IQ8 addressable detector range for dust protection. Packing unit: 50 pcs.	
 **Art. no. 805589**	**Dust cover IQ8 QUAD** To be fitted on the IQ8 QUAD addressable detector range for dust protection. Packing unit: 50 pcs.	
 **Art. no. 242772** **Art. no. 235750.005 (cable)**	**Dot Matrix Printer** Special configured dot matrix printer for connection to the RS232 port on a Delta OP. The printer is pre-configured to fit the Delta Alarm System and a 9 meter printer cable (article# 235750.005) is included.	
 **Art. no. 259542**	**Dot Matrix PRINTER for “built in solutions”** Special configured dot matrix printer for built-in-solutions. The printer is connected to the RS232 port on a Delta OP. The printer is also pre-configured to fit the Delta Alarm System and a 9 meter printer cable (article# 235750.005) is included. Paper: Art no.: 10463.001. Must be ordered separately.	

Accessories

DETECTOR LABELS		
Data:	**Description:**	**Notes:**
Art. no. 259525.01	**Labels detector no.01.001-01.126**	
Art. no. 259525.02	**Labels detector no. 02.001-02.126**	
Art. no. 259525.03	**Labels detector no. 03.001-03.126**	
Art. no. 259525.04	**Labels detector no. 04.001-04.126**	
Art. no. 259525.05	**Labels detector no. 05.001-05.126**	
Art. no. 259525.06	**Labels detector no. 06.001-06.126**	
Art. no. 259525.07	**Labels detector no. 07.001-07.126**	
Art. no. 259525.08	**Labels detector no. 08.001-08.126**	
Art. no. 259525.09	**Labels detector no. 09.001-09.126**	
Art. no. 259525.10	**Labels detector no.10.001-10.126**	
Art. no. 259525.11	**Labels detector no.11.001-14.126**	
Art. no. 259525.15	**Labels detector no.15.001-20.126**	
Art. no. 259525.21	**Labels detector no.21.001-30.126**	
Art. no. 259525.31	**Labels detector no.31.001-40.126**	
Art. no. 259525.41	**Labels detector no.41.001-50.126**	
Art. no. 259525.51	**Labels detector no.51.001-70.126**	
Art. no. 259525.71	**Labels detector no.71.001-100.126**	

Installation and Service Equipments

COMMISSIONING and SERVICE/SUPPORT TOOLS		
Data:	**Description:**	**Notes:**
 **Art. no. 251454**	**Eltek detector programmer** ELTEK programming hand held tool for setting addresses for the IQ8 / IQ8QUAD detectors. The tool is recommended to be kept onboard for easy programming if a detector is to be replaced.	
 **Art. No. 789860**	**Esser Tools 8000, starter kit** The Tools 8000 is a PC application allowing you to configure and read status of the IQ8 Quad Detectors. The Tools 8000 can be used for a range of tasks, supporting the entire life cycle of the system – from installation to regular preventive maintenance. The kit contains the Tools 8000 application and a I/F to be used when connection the laptop or PC to a single detector or a detector loop.	
Art. no. 235750.006	**RS232 Cable eNode – PC** The cable between the FireWin PC and the eNode. Galvanic isolator is included in the cable. Cable length: 9 metre	
Art. no. 235750.010	**RS232 Cable, eNode – Delta DA** If you are using the eNode to connect the Delta System in a redundant network this cable has to be used between the eNode and the Delta DA (ref. description for the eNote)	
Art. no. 235750	**RS232 Cable Laptop – Delta OP** Cable between a laptop and the Delta OP for hook up locally regarding configurations, parameter settings and/or uploading new software version in the Delta system.	
 **Art. no. 245030 (printer)** **Art. no. 30893.3 (cable)** **Art. no. 245031 (paper)**	**Service Printer** To be connected to the RS232 com port on the Delta OP. Used for service and commissioning purpose. Cable is not included and has to be ordered separately.	

Installation and Service Equipments

TEST EQUIPMENT		
Data:	**Description:**	**List price:**
  **Art. no. 251613 (Starter Kit)** **Art. no. 251613. 02 (Rod)** **Art. no. 251613.01 (Head)**	**Smoke detector test starter kit** The test starter kit includes a test rod (article# 251613.02) and a test head (article# 251613.01).	
  **Smoke: Art. no. 10325** **CO: Art. no. 10325.01**	**Test gas**	
 **Art. no. 805580**	**Eltek detector remover for IQ8QUAD detectors** Detector removal tool for the IQ8QUAD detector range when height is an issue for cleaning or replacing a detector. Used together with test rod article# 251316.  	
 **Art. no. 251613.05** **Art. no. 251613.06 (gas)**	**Eltek heat detector tester** Test device for testing of all types of heat detectors. Gas bottle has to be ordered separately (article# 251613.06).	
 **Art. no. 251660**	**Flame Detector Test Kit for 601 series IR Flame detectors. p/n 243019.100 and 243019.200** T110 Infra-Red Test Source with T110 Adaptor for 601F/801F Detector	

Worldwide Distribution Network and Service

The Eltek Fire and Safety brand is represented worldwide trough a network of highly skilled and authorized partners providing systems sales, system design, commissioning, service and after sales support to ship owners and ship yards. On-site service is also provided by a dedicated team of Field Service Engineers ready to travel on short notice to any regions of the world. Service performed by authorized personnel mean that quality is maintained year after year and guarantees that repairs and service is performed in accordance with manufactures specifications.

Honeywell Life Safety AS

Lierstranda Industriområde, P.O. Box 3514, 3007 Drammen, Norway

Customer support: +47 815 44 045 · nordic.support@honeywell.com · nordic.orders@honeywell.com

Internet: www.eltek-fs.com	Phone: +47 32 24 48 00	Fax: +47 32 24 48 01