SecuriSens d-LIST

Product Catalogue 2015

SECURITON

For your safety

Content

Introduction

SecuriSens d-LIST heat detectors, where all other detectors reach their limits.

Dust, heat, smoke, exhaust fumes and other interference factors have a significant impact on detecting fires when using conventional fire detectors. However, it is exactly under such difficult conditions that the fire risk is so great and it is vital to ensure quick and reliable detection – such as in tunnels, industrial facilities, power plants and car parks.

With the SecuriSens d-LIST line-type heat detectors, Securiton provides systems that can enable the rapid localisation of a fire – even when used in harsh, aggressive environments.

Safety in industrial facilities – the SecuriSens d-LIST.

The SecuriSens d-LIST line-type heat detector with SEC 15 sensor cable is ideally suited to applications with small monitoring areas. Two sensor cables with a maximum length of 250 metres each can be connected to the SCU 800 (sensor control unit) and put into operation at the touch of a button – and all without special aids or advance knowledge of the system. The monitoring system with a maximum of two sets of 99 sensors can be universally integrated in fire alarm systems and also offers mobile application possibilities. Several SCU 800 units can be networked easily for monitoring larger areas. The d-LIST system can also be expanded with individual temperature sensors in metal housings for monitoring critical areas such as drive units on conveyor belts and escalators, among others.

Outstanding flexibility – because every object needs individual protection.

The spacing between sensors can be freely selected, and it is even possible to combine different sensor spacing distances. You can see where the sensors are located according to the markings on the outer sheathing of the sensor cable. Another highlight (and one that is absolutely unique on the market) is the problem-free branching of the cable harnesses. External individual sensors in metal housings are available for special applications and can be easily connected to the SecuriSens d-LIST system. Different sensor cable areas can be connected together with one signal cable.

Product

The descriptions and technical data included in this catalogue are up-to-date at the time of release. We reserve the right to make alterations to them, particularly where justified by technological advancements. The illustrated products may also differ visually from the products supplied as a result of continuous further development of products.

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How to read the catalogue

Example of a typical entry for an item

Type & Article Number

Please quote this number when making an enquiry or ordering

Cable clamp CLIC 15

CLIC 15

62-8000304-00-00

Cable clamp for SEC 15
100 pieces per packaging unit

Technical data

Material:	Polyamid, halogen free
Weight:	5 g
Colour:	Grey RAL 7035

Illustration

Description and technical data

1. Processor Units

SCU 800-03   **62-2000545-00-00**

SCU 800/16   **62-2000546-00-00**

The sensor control unit SCU 800 is the central supervisory element for the d-LIST-system.

It provides up to two d-LIST sensor cables with power, performs the cyclic addressing of the connected sensors every 10 seconds, acquires the temperature values measured by each sensor and evaluates the data with reference to various criteria.

A fire alarm is generated if either a given maximum threshold is exceeded, or if an increase in temperature takes place within a certain time (differential evaluation). The two thresholds (set-points) can be set individually for each of the attached sensor cables.

The measurement resolution of 0,1° gives the system a high sensitivity. The tried and tested algorithms used in the evaluation eliminate false alarms due to natural temperature variations.

Technical data

Switching voltage:	48 VDC / 32 VAC max.
Switching current:	250 mA max.
Input:	5 VDC reset input, galvanically isolated
Continuous operating temperature:	-10°C .. +60°C
Power supply:	21 – 29 VDC
Power consumption:	1 – 29 VDC
Dimensions:	260 x 150 x 90 mm
Housing material:	aluminium
Weight:	SCU800-03: 1,9 Kg SCU800/16: 2,3 Kg
Outputs:	SCU800-03: 2 relays (1 per cable) SCU800/16: 16 zonal relays

Spare Parts:

Description	Type	Art. No.
Accessories cable glands	SCU 800 Acc	62-4000415-00-00
Accessories blind plugs	SCU 800 Plug	62-4000439-00-00
Accessories connectors	SCU 800 Con	62-4000416-00-00

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Lcon Master   62-2000353-00-00

Central control and display unit as master for d-LIST sensor cable systems, with alphanumeric LCD display and operation buttons, a potential-free change-over contact for buzzer fault/alarm each, operating voltage: 24 VDC; mounted in 19" unit rack, for cabinet mounting:

Technical data

Operating voltage:	24 VDC
Operating temperature:	-5 °C ... +70 °C,
Power supply:	9,5 V … 36 V DC
Current draw at 24 V DC:	175 mA (Normal) 212 mA (Alarm)
Power consumption:	Max. 5 W
Relay output:	1 Relay each for alarm pre-alarm and frost-alarm 1 Relay for fault (= active without power)
Switching Voltage:	48 V DC / 32 V AC max.
Switching current:	250 mA max. (resistive load)
Input:	1 x external reset (5 V … 36 V DC)
Dimensions(WxHxD):	482,6 x 43,6 x 315,5 mm
Resembling a 19":	1U case and 400 mm depth
Case material:	Aluminium
Weight:	2,6 kg

Remote Display Unit

RDU 316   62-2000493-00-00

Alphanumerical remote display, coloured background, 3 lines, 16 characters each, with menu-keys and common LEDs; RS 485 interface to communicate with a maximum of 31 SCU 800 control units; allow the identification of a sensor number in case of alarm
- stores all messages incl. date & time
- indicates messages with unit and sensor number, alarm zone
- test mode, which gives the status of the sensors
- clear text display in various languages

Technical data

Current consumption 24V:	40 mA (Normal) 100 mA (Alarm)
Power supply:	10.... 36 V DC

Protection class:	IP 66
Ambient temperature:	0 °C … +60 °C
Dimensions (HxWxD):	110 x 140 x 60 mm
Case material:	glass-fiber reinforced polycarbonate

2. Cable d-LIST

| Sensor Cable | | | |

SEC 15/01	sensor distance 1m	**62-2000360-00-00**
SEC 15/02	sensor distance 2m	**62-2000367-00-00**
SEC 15/03	sensor distance 3m	**62-2000372-00-00**
SEC 15/04	sensor distance 4m	**62-2000374-00-00**
SEC 15/05	sensor distance 5m	**62-2000376-00-00**

The cable is able to measure temperatures from -40°C to +85°C (for short periods +120°C) with a resolution of 0,1° Celsius.
Cable structure:
- Hybrid circuits mounted on a 2 core flat flexible cable
- Filling material with strain relief, which secures the cable in case of fire
- Aluminium shield
- Halogenfree cable sheath; flame retardent and non-corrosive, with sensor marking

Technical data

Operating temperature:	-40 °C … +85 °C up to +120 °C short term
Measuring temperature:	-55 °C … +120 °C
Cable diameter:	Typ. 15 mm
Flat conductor resistance:	Typ. 85 Ω / km (single conductor)
Sheath material: HM4 mixture, halogen free, flame retardan	
Weight:	Typ. 0,45 kg / m
Colour:	Grey

3. Single Sensor d-LIST

External Sensor rectangular			
ESD-A5-EL-01	1m		**62-2000343-00-00**
ESD-A5-EL-05	5m		**62-2000346-00-00**
ESD-A5-EL-10	10m		**62-2000499-00-00**

Stainless steel sensor A5 for use with the d-LIST-System, whereby all sensors are connected in parallel via standard terminals. These sensors can be used together with SEC15 sensor cable and the control unit SCU800.

Technical data

Design:	rectangular 8 mm
Measuring range:	-55°C...+120°C
Sensor material:	Stainless steel

External Sensor round			
ESD-A5-RL-01	1m		**62-2000347-00-00**
ESD-A5-RL-05	5m		**62-2000350-00-00**
ESD-A5-RL-10	10m		**62-2000498-00-00**

Stainless steel sensor A5 for use with the d-LIST-System, whereby all sensors are connected in parallel via standard terminals. These sensors can be used together with SEC15 sensor cable and the control unit SCU800.

Technical data

Design:	round 8 mm
Measuring range:	-55°C...+120°C
Sensor material:	Stainless steel

4. Accessories d-LIST

Cable clamp CLIC 15

CLIC 15   62-8000304-00-00

Cable clamp for SEC 15
100 pieces per packaging unit

Technical data

Material:	Polyamid, halogen free
Weight:	5 g
Colour:	Grey RAL 7035

Fixing clamp MDC

MDC   62-8000344-00-00

Pipe clamp for SEC 15 with locking clip

Technical data

Material:	Stainless steel
Weight:	10 g

Cable clamp MDJ

MDJ   62-8000349-00-00

Stainless steel clamp

Technical data

Material:	Stainless steel
Weight:	100 g

Fixing element for messenger cables

FEMC 270   62-8000384-00-00

Cable fastener for line mounting

Stainless steel cable tie

FECT 201-A4   62-8000360-00-00

Protection for MDJ clamp and line mounting fastener in the event of a fire

Connection Cable

CC 15   62-8000345-00-00

LISTEC supply cable 1x2x0.8, shielded, JE-H(ST)H E30, for an SEC 15 sensor cable.
If it is not possible to connect the sensor cable directly to the sensor control unit SCU800, the connection cable CC15 can connect sensor control unit and sensor cable via the connection box.

Technical data

Colour:	red

![SECURITON logo]

Connection Box

CBO 5-SEC   62-2000300-00-00

Connection unit for one or two temperature sensor cable SEC15 including an universal connection module UCM.
If it is not possible to connect the sensor cable directly to the sensor control unit SCU800, the connection cable CC15 can connect sensor control unit and sensor cable via the connection box. In the box the connection cable and the sensor cable are linked together via the connection module UCM. If short transmission lines are linked the universal connection module has the possibility to activate adaptation resistors.

Technical data

Operating temperature:	-35°C ... +60°C (short period +80°C)
Resistance to impact:	IK 08 according DIN 5012 / VDE 0470 part 100
Material:	glass-fibre reinforced, polycarbonat
Protection class:	IP 66
Dimensions:(LxWxH):	130 x 130 x 75 mm

Spare Parts:

Description	Type	Art. No.
Accessory Bag	CBO 5-SEC Acc	62-4000409-00-00

Connection Box

CBO 5-ESD-T   62-2000530-00-00

Connection unit for up to eight external sensors ESD or four single sensors and one LIST-cable SEC15. The external sensors can be connected to the SEC15 sensor cable bus via the connection box. It is possible to connect up to eight single sensors to the bus or four sensors and a sensor cable. Every connection has an adaption resistance. This can be activated, if needed, for example for short adaptation
resistors.

Technical data

Operating temperature:	-35°C ... +60°C (short period +80°C)
Resistance to impact:	IK 08 according DIN 5012 / VDE 0470 part 100
Material:	glass-fibre reinforced, polycarbonat
Protection class:	IP 66
Dimensions:(LxWxH):	130 x 130 x 75 mm

Spare Parts:

Description	Type	Art. No.
Accessory Bag	CBO 5-ESD-T Acc	62-4000422-00-00

Fitted cable

SEC 15 fit box

62-3000354-00-00

Sensor cable with termination cap, CLB2 and shield connector.

Fitted cable

SEC 15 fit con

62-3000351-00-00

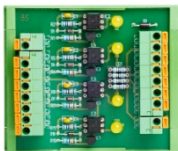Sensor cable pre-fabrication with plug, 3-pin and termination cap.

Connector

SECcon 15-Cf

62-8000403-00-00

Coupling with socket, 3-pin

Optical Input Module

OIM 15

62-4000208-00-00

The Optical Input Module OIM15 provides an interface from external switches to the d-LIST-System. It is possible to record and evaluate input information at the same time in one measurement cycle. Each OIM-Module has 4 inputs to use. These inputs are isolated via optical couplers from the SEC15-system. An external voltage is necessary to activate the optical couplers.
➔Please order firmware ES8D1 OIM with it.

Technical data

Inputs:	Electrical switches on internal terminal blocks, galvanically isolated via optical couplers
Operating voltage:	24V DC
Switching voltage:	18V... 31.9V DC, < 18V with different line resistor
Operating temperature:	0°C... +40°C
Dimensions(LxWxH):	68mm x 82mm x 40mm
Weight:	0.076 kg
Installation:	rail mounted

Firmware SW-PROM ES8D1 OIM

ES8D1 OIM

62-4000300-00-00

This Firmware must be ordered to operate the OIM 15

Configuration software

LISTp800

62-2000488-00-00

The LIST p800 configuration software was specially developed for the operation and programming of the SecuriSens d-LIST system.

Dongle (USB) for LISTp800

CM-USB KEYRING

62-4000450-00-00

Registration Dongle for LIST p800

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USB / RS 485 converter

USB-RS485   62-0000312-00-00

USB / RS 485 cable for connection between SCU 800 and
PC.

Connection Cable

VK232-S8-PC-03   62-4000172-00-00

RS 232 cable for connection between SCU 800 and PC.

Crimping tool

CLCT   62-8000347-00-00

LIST crimping tool for 2-and 4-core flat cable connectors.

LIST cable cutter

Cutter SEC   62-0000427-00-00

Cable scissors for SEC sensor cable

Service case

SC 15/20   62-2000432-00-00

Service case with tool for repair and connection of sensor
cable.

Content:

Article	Quantity
Tool case	1
Manual SCU800/SEC 15	1
LIST-Crimping tool, adjusted	1
Cable cutter	1
Cable knife	1
Cable-stripping tool	1
Selection of 6 screwdrivers	1
Size 3 electronic screwdriver	1
Electronic side cutter	1
Side cutter	1
Multigrip pliers	1
Combination pliers	1
Clincher male CLS2	15
Clincher female CLB2	15
Clincher strain relief CLVS	15
Shield connector SEC 15	10
End cap END 15	2
Clamp Clic 15	10
CCM modul SEC 150-A	1
UCM-SEC	1
Sleeve SEC 15	2
Isolating tape	1
Tape to vulcanize	1

5. ATEX components d-LIST

Ex-proof enclosure

CAB 800-ex
62-2000284-00-00

Ex housing, pre-mounted with mounting plate, terminal block, earthing rail and screw-junction pieces, for holding a SCU 800-03 cable terminal processor (only housing)

ATEX Marker for sensor cable

Label SEC 15 Atex
62-7000002-00-00

Identification and conformity certificate for SEC 15 sensor cable for use in zone 2 and 22.

ATEX Marker for external sensor

Label ESD Atex
62-7000003-00-00

Identification and conformity certificate for ESD individual sensor for use in zone 2 and 22.

External sensor

ESD-Atex-A4-RL-01	1m	62-2000507-00-00
ESD-Atex-A4-RL-05	5m	62-2000511-00-00
ESD-Atex-A4-RL-10	10m	62-2000512-00-00

External sensor round stainless steel sensor in A4 to connected to the d-LIST Line Type Heat Detector via suitably certified connection boxes.

Technical data

Design:	Round
Thread:	M 20 x 1,5
Ambient temperature Ta:	-20°C ...+40°C
Sensor barrel:	Stainless steel A4 (WSt. 1.4401)
Cable sheath:	FEP
Approvals:	EX II 1/2 G Ex d IIC T6, T5, T4 EX II 1/2 D Ex tD A20/21 IP65, 85°C, 100°C, 135°C

Ex proof connection box

CBO 05-Ex
62-2000283-00-00

Connection box for sensor cable SEC 15 and external sensors ESD in potentially explosive atmospheres (Zone 2 and 22).

Spare Parts:

Description	Type	Art. No.
Accessory Bag	CBO 5-Ex Acc	62-4000424-00-00

6. Spare Parts d-LIST

Main board	
SCI 800 LP	**62-4000189-00-00**
Main board for SCU 800-03 / SCU 800/16 For repair only	

LED-indication board	
IB 800 LP	**62-4000192-00-00**
LED-board with group indication for SCU 800 For repair only	

Relay Card	
REL 800/16 LP	**62-4000225-00-00**
Relay card with 16 potential-free change-over contacts for SCU 800	

Housing	
SCU 800 Case	**62-4000440-00-00**
End caps pre-mounted, incl. front foil, housing covering strips & cover holder; with Securiton front foil.	

Shield Connector		
SCON 15/0	(with ring connector)	**62-4000315-00-00**
SCON 15/1	(with Pin)	**62-4000316-00-00**
Shield connectors for connecting sensor cables.		

Flat Cable Connector	
CLB 2	**62-8000315-00-00**
Ribbon cable crimping connector, 2-core, socket 100 pieces per packaging unit	

Clincher Strain Relief	
CLVP	**62-8000320-00-00**
For locking a CLB clincher with pin plug 100 pieces per packaging unit	

End device	
END	**62-8000503-00-00**
End cap for sensor cable SEC 15	

Repair-set

N15 Repair   **62-2000396-00-00**

Shrink sleeve with ribbon cable connection, shield
connector, plug and socket, and sealing material.
For connecting two SEC 15 cables

Universal connection module

UCM-ESD   **62-4000258-00-00**

Connection module for up to 8 External sensors ESD
respectively, 4 external sensors and one sensor cable
SEC15 (CBO 5-ESD; CBO 5-ESD-T)

Universal connection module

UCM-SEC   **62-4000259-00-00**

Connection module for up to two sensor cabes SEC
15(CBO 5-SEC)

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7. Services

SecuriSens LIST Commissioning Europe	
Commission EU	**11-5000001-01-01**
Commissioning support fee for projects within Europe.	

SecuriSens LIST Commissioning Overseas	
Commission OvS	**11-5000002-01-01**
Commissioning support fee for projects at Overseas.	

8. Product Type Index

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