

LIST Fire Detection System Components

1 Control Units for LIST sensor cable

Types of power supply:

/24 24 V DC, galvanically decoupled
/230 230 V AC
/230/4h 230 V AC, UPS for 4h
/230/72h 230 V AC, UPS for 72h

Standard features:

Change-over contacts for common alarm and failure
Reset Input
19"-Sub-rack, 3HU

Extent of delivery:

Connection cables for all rear-panel sockets.
Operating manual
Technical documentation

1.1 Series 2000

for 2.500 m sensor cable with max. 312 sensors
alphanumerical LCD-display (2x20 characters),
6 function keys

Options:

Change-over contacts for 32 alarm sections max.
Rear panel module with RS-232-interface port, incl.
built-in opto-coupler

1.1.1	SCU 2000/24	Sensor Control Unit
1.1.2	SCU 2000/230	Sensor Control Unit
1.1.3	SCU 2000/230/4h	Sensor Control Unit
1.1.4	SCU 2000/230/72h	Sensor Control Unit

1.2 Series 3000

for 2.500 m sensor cable
with max. 1024 sensors (temperature measuring),
with max. 312 sensors (fire detection)
alphanumerical LCD-display (2x40 characters),
12 function keys, numerical keyboard,
serial interface port RS232

Options:

Change-over contacts for 32 alarm sections max.,
Printer interface port CENTRONICS,
Opto-coupler for serial port,
SW-protocols for PLCs and fire terminal stations,
Change-over contacts for pre- and low-temp.- alarm

1.2.1	SCU 3000/24	Sensor Control Unit
1.2.2	SCU 3000/230	Sensor Control Unit
1.2.3	SCU 3000/230//4h	Sensor Control Unit
1.2.4	SCU 3000/230/72h	Sensor Control Unit

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1.3 Series 4000, Master / Slave Systems

Master Control Unit for max. 8 slave-units,
alphanumerical LCD-display (2x40 characters)
12 funktionkeys, numerical keyboard
serial interface port RS232

Slave Unit for 2.500 m sensor cable, with max. 312
sensors,
operation via master control unit
LED displays for common messages

Options: Change-over contacts for 32 alarm sections max. (SCM/SCS),
Printer interface port CENTRONICS (SCM),
SW-protocols for PLCs and fire terminal stations
(SCM),
Change-over contacts for pre- and low-temp.- alarm
(SCM/SCS),
Line driver for distances > 4.000m

1.3.1	SCM 4000/24	Sensor Control Master
1.3.2	SCM 4000/230	Sensor Control Master
1.3.3	SCM 4000/230/4h	Sensor Control Master
1.3.4	SCM 4000/230/72h	Sensor Control Master
1.3.5	SCS 4010/24	Sensor Control Slave
1.3.6	SCS 4010/230	Sensor Control Slave
1.3.7	SCS 4010/230/4h	Sensor Control Slave
1.3.8	SCS 4010/230/72h	Sensor Control Slave

**LIST Fire Detection System
Components**

- 2 Options for Control Units**
- 2.1 REL 3000/UT**
Relay card with floating pre-alarm and under-temperature change-over contacts
- 2.2 REL 3000/B Bus Card**
Motherboard for the insertion of two relay cards (REL 3000/8 or REL 3000/16) into a control unit
- 2.3 REL 3000/8 Relay Card**
Relay card with 8 floating change-over contacts, prerequisite: REL 3000/B)
- 2.4 REL 3000/16 Relay Card**
Relay card with 16 floating change-over contacts, prerequisite: REL 3000/B)
- 2.5 PRC 3000 Printer Interface**
CENTRONICS printer interface, (SCU 3000, SCM 4000)
- 2.6 OPC 3000 Optocoupler**
Opto-coupler for the serial interface, built into the unit (SCU 3000)
- 2.7 RP 2000/232 Rear Panel**
Rear panel module with RS-232-interface port , incl. built-in opto-coupler (SCU 2000)
- 2.8 TM 3000 Telephone Modem**
Built-in modem for remote access, with TAE-N plug
- 2.9 LD 4000 Line Driver**
Line driver for distances greater than 4000m between SCM 4000 and SCS 4010. Complete set for one SCS 4010.
- 2.10 Software protocol**
Protocols for the connection to PLCs (e.g. SAT, Siemens) or to fire alarm stations (e.g. Bosch-Telecom, Zettler), available on request

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- 3 Sensor Cable**
Measuring range: -40°...+85°C (+120° short period)
Resolution: 0,1°
FRNC, halogen-free cable jacket
- 3.1 SEC 20/08 -sensor spacing 8m, incl. MDP 20**Sensor Cable**
3.2 SEC 20/04 - sensor spacing 4 m, incl. MDP 10**Sensor Cable**
3.3 SEC 20/03 - sensor spacing 3 m, incl. MDP 10**Sensor Cable**
3.4 SEC 20/02 - sensor spacing 2 m, incl. MDP 10**Sensor Cable**
3.5 SEC 20/01 - sensor spacing 1 m, incl. MDP 10**Sensor Cable**
3.6 SEC 20/x **Sensor Cable**
custom sensor spacing on request
3.7 LIST Hybrid external- **Sensor Hybrid**
- 4 Connection Boxes**
- 4.1 **Series 10, thermoplast housing, IP 65**
incl. one connection module **CCM**
(EBO 10 without connection module)
- 4.1.1 **CBO 10/0 Connection Box**
Interconnection of two sensor cables
- 4.1.2 **CBO 10/1 Connection Box**
Connection for one sensor cable
- 4.1.3 **CBO 10/2 Connection Box**
Connection for two sensor cables
- 4.1.4 **EBO 10/1 End Box**
End box (instead of end cap)
- 4.2 **Series 20, polyester housing, IP 65**
Glass fibre re-inforced material for higher
mechanical demands, with one (/0 and /1) resp. two
(/2 and /3) connection modules
- 4.2.1 **CBO 20/0 Interconnection of two sensor cables Connection Box**
4.2.2 **CBO 20/1 -for one sensor cable Connection Box**
4.2.3 **CBO 20/2 -for two sensor cables Connection Box**
4.2.3 **CBO 20/3 -for three sensor cables Connection Box**
4.2.4 **EBO 20/1 End Box**
End box (instead of end cap)
- 4.3 **Series 20-ex, polyester housing, IP 65**
for EX-zones
- 4.3.1 **CBO 20/1-ex -for one sensor cable Connection Box**
4.3.2 **CBO 20/2-ex -for two sensor cables Connection Box**
- 5 Connection Modules**
- 5.1 **CCM 3000 Connecting Module**
Connection module with over-voltage protection
- 5.2 **ASM 3000 -autom. switching module Switching Module**
5.3 **OIM 3000 Input Module**
Input module reads on-/off-state, galvanically
decoupled
- 5.4 **ZB 3000 Zener Barriers**
Set of 4 Zener barriers for the connection and
protection of sensor cable in EX-zones.
- 6 Installation Material**
- 6.1 **CAB 19/9 19" Cabinet**
19" 9U wall-mounted cabinet, built-up to house one
Sensor Control Unit, includes: glass door, swing
frame, standard terminal block;
- 6.2 **CAB 19/12 19" Cabinet**
19" 12U wall-mounted cabinet, built-up to house two
Sensor Control Units, includes: glass door, swing
frame, standard terminal block;

