



Fire alarm system EBL128, V2.0 4550

- **EBL128**, an intelligent analog addressable fire alarm system for up to 255 addresses
- Auto generation of the Site Specific Data for easier c.i.e. programming

Analog addressable system

EBL128 is an intelligent, analog and addressable **Control and Indicating Equipment for fire detection and fire alarm systems for buildings**, which conforms to the EN54-2 and the EN54-4 standards. It meets the most stringent requirements in order to secure real fire alarms and to reduce nuisance alarms.

Features / functions

A user-friendly PC software **EBLWin** is used to create, edit, download and upload (backup) the Site Specific Data (SSD).

An **SSD Auto generation function** is included in EBLWin. The units that are connected to EBL128 can be identified and the SSD can be auto generated with default settings and be edited before the download.

Some other features / functions:

- **Compensation for contamination**, i.e. analog smoke detectors have constant sensitivity in spite of any contamination. A **Service signal** will be given when a detector has to be replaced.
- **Advanced alarm algorithms** are used to filter the nuisance alarms from the real fire alarms and one algorithm is used for detection of smouldering fires.
- **User related functions**, e.g. Test mode, Disablements, Alert Annunciation, Fire door closing, Interlocking combinations of outputs & inputs, Time channels, Coincidence alarm, User definable text message for each alarm point, etc.
- **Programmable inputs and outputs**. In the c.i.e. and/or via I/O units on the COM loop. A large number of trigger conditions are available.

- **Outputs for routing equipment**. Fire alarm, Fault and Power supply.
- **Socket** for an optional RS485 transceiver component, i.e. an interface for up to eight Display Units (Ext. Fire Brigade Panel, Ext. Presentation Unit and/or Alert Annunciation Unit).
- **Interface (RS232)** for a PC (EBLWin)
- **Interface (RS232)** and power supply for Web-server 1598.

Optional RS485 transceiver 4552, provides an interface for up to eight Display Units.

Up to four optional expansion boards 4580, 4581 and 4583, mounted in an Exp. board holder (incl. connection cable) 4551.

Up to 255 addresses

The EBL128 c.i.e. has one COM loop for connection of the loop units (address 001-255). Each loop unit uses one address.

Some **loop units** that can be connected:

- Analog heat & smoke detectors
- Addressable manual call points (with short circuit isolator)
- Addressable short circuit isolators
- Addressable input and output units (to which e.g. conventional detectors and manual call points can be connected)
- Addressable sirens (with short circuit isolator) & sounder bases
- Addressable external power supply units

Miscellaneous

The cabinet has a space for two sealed Lead-Acid batteries (2x12 V, 16-18 Ah).

EBL128 is intended for indoor use and in dry premises.

Type numbers

4550	EBL128 c.i.e. (255 addresses). Batteries are not included.
4552	RS485 transceiver component, for up to eight Display Units, i.e. Ext. Fire Brigade Panels 1826 / 1828, Ext. Presentation Unit 1728 and/or Alert Annunciation Units 1735 / 1736.
4551	Expansion board holder, incl. conn. cable. (For 4580, 4581 & 4583 exp. boards.)
4580	8 zones expansion board (8 zone line inputs for conventional detectors). Max. 4.
4581	8 relays expansion board (8 programmable relay outputs). Max. 4.
4583	Inputs and outputs expansion board (3 outputs & 5 inputs). 4583DE valid for the German market (for connection of special German equipment). Max. 2.
4513	Cabinet for drawings. (Similar to the EBL128 cabinet.)
4568	Frame for built-in installation.

In total, max. 4 expansion boards 458x.

The 4580 board can be used to connect *conventional* detectors and manual call points to EBL128. End-of-line capacitor (470 nF) in the last alarm point on each zone line.

More information is available in the EBL128 Planning Instructions & Operating Instructions.

Technical data

Voltage	
primary (V AC)	230
secondary (V DC)	
normal	24
by battery backup	21.6 - 28
Current consumption (mA)	Depending on connected units, etc. See EBL128 Planning Instructions.
Ambient temperature (°C)	
Operating	-5 to +40
storage	-30 to +60
Ambient humidity (% RH)	max. 95, non condensing
Ingress Protection rating (estimated)	IP32
Inputs	1 COM loop for 255 addresses
	1 programmable input. NO / NC (R>20K = open circuit). Max. 2 mA. Alt. supervised, normally high resistance (3K3) or low (680R).
Outputs	1 programmable supervised voltage output (24 V DC, max. 500 mA)
	1 programmable supervised voltage output (24 V DC, max. 200 mA)
	1 programmable relay output. ¹ Default set for routing equipment (Fire brigade tx).
	1 non-programmable relay output. ¹ For routing equipment (Fault tx).
	Power supply (24 V DC, max. 200 mA) for routing equipment
	Power supply (24 V DC, max. 500 mA) for external equipment (Web-server, up to 8 ext. FBPs, etc.) Web-server requires approx. 65 mA.
Interfaces	RS232 ("D" connector) for a PC (EBLWin)
	RS232 for a Web-server 1598
	Socket for an optional RS485 transceiver component.
Size H x W x D (mm)	511 x 416 x 123
Weight (kg)	12.2 (Excl. Batteries)
Colour (metal cabinet)	Aluminium & light grey (NCS S1500-N, PMS Cool Grey 2)
Approvals	CE EC certificate no. 0786-CPD-20971 EN54-2:1997 / A1:2006, EN54-4:1997 / A2:2006 The Swedish front conforms to SS3654.

Note! All voltages are nominal. For more information see EBL128 Planning Instructions.

¹ Relay contacts: max. 1 A @ 30 V DC.

All technical features and data are subject to changes without notice, resulting from continuous development and improvement.

Product Leaflet	Date of issue	Revision / Date of revision
MEW00503	2006-04-04	6 / 2014-05-23