

# Operating Instructions

MEW00509

Revision 2

## ***Fire Alarm System EBL128 V1.0.x***

Author:	Jan Pettersson	Date of issue: 2006-04-03	Date of rev: 2006-08-31
---------	----------------	---------------------------	-------------------------

This page has deliberately been left blank.

# Table of contents

---

<b>1</b>	<b>Introduction</b>	<b>5</b>
<b>2</b>	<b>Definitions / Explanations</b>	<b>7</b>
2.1	PEWF&STE AB	7
2.2	Alarm point	7
2.2.1	Smoke detector	7
2.2.2	Sensor	7
2.2.3	Analog detector	7
2.2.4	(Analog) Sensor Base (ASB)	7
2.2.5	Conventional detector	7
2.2.6	Conventional Detector Base (CDB)	7
2.2.7	Addressable	7
2.2.8	Old detector	8
2.2.9	Conventional zone line	8
2.2.10	Addressable zone interface	8
2.3	Output unit	8
2.4	Output / Control output	8
2.5	Short circuit isolator	8
2.6	Display unit	8
2.7	COM loop	8
2.8	Control Unit (C.U.) / C.I.E.	8
2.9	Fire Brigade Panel (FBP)	8
2.10	Control panel (CP)	9
2.11	LED	9
2.12	External Indicator (LED)	9
2.13	Display / LCD	9
2.14	Door open / Key switch	9
2.15	SSD / Site Specific Data	9
2.16	S/W / Software / System program	9
<b>3</b>	<b>Overview</b>	<b>10</b>
3.1	The EBL128 c.i.e.	10
3.2	S/W versions	10
3.3	Documents	10
3.4	Applications	10
3.5	PC S/W	10
<b>4</b>	<b>Control &amp; Indicating Equipment</b>	<b>11</b>
<b>5</b>	<b>LED indicators and push buttons</b>	<b>13</b>
<b>6</b>	<b>Normal operation</b>	<b>17</b>
6.1	The display in EBL128	17
<b>7</b>	<b>Access levels</b>	<b>18</b>
7.1	Access level 1	18
7.2	Access level 2A	18

---

7.3	Access level 2B	19
7.4	Access level 3A	20
7.5	Access level 3B	20
7.6	Access level 4	21
<b>8</b>	<b>"Silence Alarm devices"</b>	<b>22</b>
8.1	Disable / Re-enable alarm devices	22
<b>9</b>	<b>"Silence buzzer"</b>	<b>23</b>
<b>10</b>	<b>Disable / Re-enable all control, extinguishing and ventilation outputs</b>	<b>24</b>
<b>11</b>	<b>Evacuate, LED Test, Alert Annunciation Acknowledge and Disable</b>	<b>25</b>
11.1	Evacuate	25
11.2	LED Test	25
11.3	Alert Annunciation Acknowledge	25
11.4	Disable	25
<b>12</b>	<b>Door open</b>	<b>26</b>
12.1	LED "Door open"	26
12.2	Outputs for routing equipment (Fire brigade tx and Fault tx)	26
12.3	Silence buzzer	26
<b>13</b>	<b>Technical address / Presentation number</b>	<b>27</b>
13.1	Technical address for COM loop units	27
13.2	Presentation number	27
<b>14</b>	<b>Alarm types</b>	<b>28</b>
14.1	Pre-warning	28
14.2	Fire alarm	29
14.2.1	Fire alarm menu (X1-X9)	31
14.2.2	Alert Annunciation alarm (AA alarm)	34
14.2.3	Co-incident alarm (two-unit / -zone dependence)	35
14.3	Heavy smoke alarm / Heavy heat alarm	35
14.4	Key cabinet alarm	37
14.4.1	Key cabinet opened before a fire alarm	37
14.4.2	Key cabinet opened in conjunction with a fire alarm	37
14.4.3	Key cabinet alarm, Danish (DBI) convention	37
<b>15</b>	<b>Alarm reset</b>	<b>38</b>
15.1	Pre-warning reset	38
15.2	Fire alarm reset	38
15.2.1	Multiple reset	38
15.2.2	Single encapsulated reset	38
15.2.3	Alert Annunciation	39
15.2.4	Co-incident alarm	39
15.3	Heavy smoke / heat alarm reset	40
15.4	Key cabinet alarm reset	40
<b>16</b>	<b>Fault</b>	<b>41</b>

---

---

16.1	Fault messages	42
16.2	Fault acknowledge	52
<b>17</b>	<b>Commissioning an EBL128</b>	<b>53</b>
<b>18</b>	<b>SSD programming &amp; download</b>	<b>54</b>
18.1	SSD programming	54
18.2	Auto generating SSD	54
18.3	SSD download	54
18.4	Download of Alarm texts	55
<b>19</b>	<b>Software (S/W) download</b>	<b>56</b>
19.1	Download of S/W in EBL128 (c.i.e.)	56
19.2	Earlier S/W version download	57
19.3	S/W download in Display Units	57
<b>20</b>	<b>Restart</b>	<b>58</b>
20.1	Boot menu	60
<b>21</b>	<b>Access</b>	<b>62</b>
<b>22</b>	<b>Perform monthly test (H1)</b>	<b>63</b>
<b>23</b>	<b>Disable or re-enable (H2)</b>	<b>65</b>
23.1	Disable zone (H2/B1)	65
23.2	Disable zone / address (H2/B2)	67
23.3	Disable output (H2/B3)	68
23.4	Disable all control, extinguishing, ventilation and alarm device outputs (H2/B4)	69
23.5	Re-enable zone (H2/B5)	70
23.6	Re-enable zone / address (H2/B6)	71
23.7	Re-enable output (H2/B7)	72
23.8	Re-enable all control, extinguishing, ventilation or alarm device outputs (H2/B8)	74
23.9	Disable or re-enable outputs for routing equipment (H2/B9)	75
23.10	De-activate alert annunciation function (H2/B10)	76
<b>24</b>	<b>Set calendar and clock (H3)</b>	<b>77</b>
<b>25</b>	<b>Present system status on display (H4)</b>	<b>78</b>
25.1	Disablement (H4/U1)	78
25.2	Disablement by time channel (H4/U2)	79
25.3	Sensor values (H4/U3)	80
25.3.1	Reset of a week average sensor value	82
25.4	Sensors activating SERVICE signal (H4/U4)	83
25.5	Event log (H4/U5)	84
25.6	Show configuration (H4/U6)	85
<b>26</b>	<b>Service (H5)</b>	<b>86</b>
26.1	Access code for service and maintenance	87
	Disconnect / Re-connect COM loop (H5/A1)	88
26.2	Disconnect / Re-connect zone line (H5/A2)	89
26.3	Calibration of supervised outputs (H5/A3)	90

---

26.4	Sensitive fault detection mode (H5/A4)	91
26.5	Service mode for COM-loop (H5/A5)	92
26.6	Show information about Site Specific Data (H5/A6)	94
26.7	Display current consumption on COM loop (H5/A7)	95
26.8	Display statistics for COM loop (H5/A8)	96
26.9	Activate address setting mode for DU (H5/A9)	97
<b>27</b>	<b>Acknowledge FAULTS (H6)</b>	<b>98</b>
<b>28</b>	<b>Perform ZONE TEST (test mode) (H7)</b>	<b>99</b>
<b>29</b>	<b>Maintenance (H8)</b>	<b>101</b>
29.1	Access code for service and maintenance	101
29.2	Acknowledge SERVICE signal (H8/S1)	102
29.3	Clear weekly average (H8/S2)	103
29.4	Test alarm devices (H8/S3)	104
29.5	Safe shut down of control unit (H8/S4)	105
29.6	Activate address in alarm mode (H8/S5)	106
29.7	Change access code for service and maintenance (H8/S6)	108
29.8	Change access code for PC-communication (H8/S7)	109
<b>30</b>	<b>Interlocking outputs and inputs (H9)</b>	<b>110</b>
30.1	Activated interlocking outputs/inputs (H9/C1)	110
30.2	Activate interlocking output (H9/C2)	111
30.3	Reset interlocking output (H9/C3)	112
30.4	Disable interlocking output (H9/C4)	113
30.5	Re-enable interlocking output (H9/C5)	114
<b>31</b>	<b>Change access code for daily duties (H10)</b>	<b>115</b>
<b>32</b>	<b>Annual control</b>	<b>116</b>
<b>33</b>	<b>Battery maintenance</b>	<b>117</b>
<b>34</b>	<b>How to avoid unnecessary (nuisance) fire alarms</b>	<b>118</b>
<b>35</b>	<b>Revision history</b>	<b>120</b>

# 1 Introduction

---

**EBL128 Operating Instructions** is a document<sup>1</sup> with information of special interest for the **end user** and the **fire brigade personnel**, as well as **service / commissioning engineers**, who should read this document in conjunction with the EBL128 Planning Instructions, since most of the information in one of the documents is not found in the other document and vice versa.

A Product Leaflet and the EBL128 drawings<sup>2</sup>, according to the valid Table of drawings, are also available.

Due to continual development and improvement, different S/W versions are to be found. This document is valid for **S/W version 1.0.x**. On the date of the document is x=3.

EBL128 is produced for many countries, accordingly the look, the texts, the functions, etc. might vary.

## Products

Consists of one or more parts (H/W) according to a **Product Parts List**. A product has:

- a **type number** (e.g. **4550**)
- an **article number**, often = the type no. but sometimes is a country code added (e.g. **4550SE**)
- a **product name** (e.g. **EBL128 Control & Indicating Equipment, 128 addresses**)

## H/W

A H/W (e.g. a printed circuit board) has:

- a **type number** (e.g. **1556**)
- an **article number**, often = the type no. but sometimes is a country code added (e.g. **1556SE**)
- a **product name** (e.g. **Main Board 128 addr.**)
- a **p.c.b. number** (e.g. **9261-3A**) and can also have a configuration (e.g. **CFG: 1**) and a revision (e.g. **REV: 2**)
- sometimes a S/W

## S/W

A S/W has:

- a **version number** (e.g. **V1.0** or **V1.0.x**)
- sometimes additional information, such as **Convention** (different functions / facilities), **Language**, etc.

---

<sup>1</sup> File name: K:\PRO\FIRE\128\Doc\V1.0.x\MEW00509.doc

<sup>2</sup> Dimensions & overviews, connection diagrams, etc.

### **PC S/W**

A PC S/W is a program used for programming, commissioning, etc. It has a **version number**.



## 2 Definitions / Explanations

---

Definitions / explanations / abbreviations / etc. frequently used or not explained elsewhere in the document.

### 2.1 PEWF&STE AB

Panasonic Electric Works Fire & Security Technology Europe AB

### 2.2 Alarm point

Unit, which can generate a fire alarm in EBL128, i.e. a sensor, a conventional detector, a manual call point, etc.

#### 2.2.1 Smoke detector

Two types of analog and conventional smoke detectors are available: photo electric (optical) and ionization.

#### 2.2.2 Sensor

Sensor = Analog detector

#### 2.2.3 Analog detector

Contains an A/D-converter. EBL128 pick up the digital values ("sensor values") for each detector individually. All evaluations and "decisions" are then made in EBL128. Analog detectors are addressable – an address setting tool is used. An analog detector has to be plugged in an ASB.

#### 2.2.4 (Analog) Sensor Base (ASB)

A sensor is plugged in an ASB, which is connected to a COM loop (see below).

#### 2.2.5 Conventional detector

Detector with two states, normal or fire alarm. The detector contains a closing contact and a series alarm resistor. Some types are plugged in a **CDB** (see below) but some types are water proof and are not plugged in any base.

(Conventional detectors are normally plugged in a **CDB** (see below) and connected to a conventional zone line with end-of-line device.)

#### 2.2.6 Conventional Detector Base (CDB)

A conventional detector is plugged in a CDB and connected to a conventional zone line input.

#### 2.2.7 Addressable

A unit with a built-in address device (e.g. a manual call point). Each unit is individually identified, handled and indicated in EBL128

(The unit can consequently be an I/O unit, to which one or more conventional "alarm points" can be connected on the zone line.)

- 2.2.8 Old detector**  
Conventional detector with a closing contact (short circuit; no alarm resistor), or detector with two breaking contacts.
- 2.2.9 Conventional zone line**  
Zone line input on an I/O unit, intended for one or more conventional alarm points. End-of-line dive in the last alarm point.
- 2.2.10 Addressable zone interface**  
Unit with a zone line input, intended for one or more conventional alarm points. End-of-line device in the last alarm point.
- 2.3 Output unit**  
Addressable unit with programmable control outputs (e.g. an I/O unit). To be connected to a COM loop (see below).
- 2.4 Output / Control output**  
Defined or programmable function. Relay or (supervised / monitored) voltage output, in EBL128 or an output unit.
- 2.5 Short circuit isolator**  
Addressable unit for automatic disconnection of a part of a COM loop (see below) in case of a short circuit on the loop.
- 2.6 Display unit**  
Unit for fire alarm presentation (incl. alarm texts, if programmed). Connected to an RS485 line.
- 2.7 COM loop**  
Loop = a cable with two wires, to which all the addressable MFSTech units can be connected. It starts in EBL128 and it returns back to EBL128
- 2.8 Control Unit (C.U.) / C.I.E.**  
Control Unit = C.U. = Control and Indicating Equipment = A unit, e.g. **EBL128**, to which the alarm points are connected. Indicates fire alarm, fault condition, etc. on the front, i.e. the Fire Brigade & Control Panel (see below).
- 2.9 Fire Brigade Panel (FBP)**  
The Fire Brigade Panel is a part of the EBL128 front, intended for fire alarm presentation, etc. for the fire brigade personnel. A separate unit; an **external FBP**, can also be connected to EBL128  
  
In the ext. FBP a printer can be included.
-

## **2.10 Control panel (CP)**

The Control Panel is a part of the EBL128 front, intended for the building occupier, service personnel, etc. to "communicate" with EBL128

## **2.11 LED**

LED (Light Emitting Diode) = Yellow, green or red optical indicator ("lamp").

## **2.12 External Indicator (LED)**

A unit with an LED. Connected to an ASB, CDB or a detector with a built-in LED, for external indication. Lit when the built-in LED is lit.

## **2.13 Display / LCD**

LCD (Liquid Crystal Display) = Display for presentation of fire alarms, fault messages, etc. Normally alphanumeric characters and backlight.

## **2.14 Door open / Key switch**

A door / key switch, which has to be activated in order to get access to the push buttons on the front. Indicated by the LED "Door open".

## **2.15 SSD / Site Specific Data**

This data is unique for each installation. All alarm points, presentation numbers, alarm texts, programmable outputs, etc. are programmed (configured) in the PC program **Win128** and has to be downloaded in EBL128.

## **2.16 S/W / Software / System program**

The S/W makes the microprocessor in EBL128 work. It is factory downloaded but a new version can be downloaded on site.

## 3 Overview

---

### 3.1 The EBL128 c.i.e.

EBL128 is a microprocessor controlled intelligent fire alarm c.i.e. intended for analog addressable smoke and heat detectors. Also conventional detectors and manual call points can be used. Programmable inputs, control outputs and I/O units are available. Up to 128 addresses can be connected to EBL128.

EBL128 is fully compliant with the European standard **EN54 parts 2 and 4** and the front is fully **SS3654** compliant.

### 3.2 S/W versions

Due to continual development and improvement, different S/W versions can be found. You can update the S/W in EBL128 on site.

### 3.3 Documents

The following documents are available:

- Planning instructions
- Drawings
- Operating instructions

Normally information that is found in one document is not to be found in another document, i.e. the documents complement each other. Also a Product Leaflet is available: <http://www.mfstech.com/news.html>

### 3.4 Applications

**EBL128** is intended for small and medium installations. The intelligent c.i.e. offer the system designer and end user a technically sophisticated range of facilities and functions. Programming and commissioning is very easy via the PC S/W **Win128**.

### 3.5 PC S/W

**Win128** is used for programming and commissioning, i.e. to:

- create / download / upload (backup) the site specific data (SSD)
- download new S/W version / settings / conventions / configurations / EBL128 data / etc.
- create / download the alarm texts shown in the display in EBL128 / ext. FBP and/or AA units.

Win128 shall have the same version number as the EBL128 S/W version number, e.g. **1.0.x**. Only x may be different. Old SSD files can be used with a newer EBL128 S/W version. Open and save the old SSD file in the new Win128 version before the download. If a backup is required, use the same Win128 version as the EBL128 version.

## 4 Control & Indicating Equipment



Figure 1. The EBL128 Control & Indicating Equipment (4550).

Depending on country, convention, configuration, etc. the look, language and functions might vary. Figure 1 shows an EBL128 with a Swedish front. EBL128 is housed in a grey metal cabinet. The door has a Plexiglas ahead of the front, see Figure 1. A key is required to open the door to get full access to the push buttons on the front, i.e. the **Fire Brigade Panel (FBP)** and the **Control Panel (CP)**.

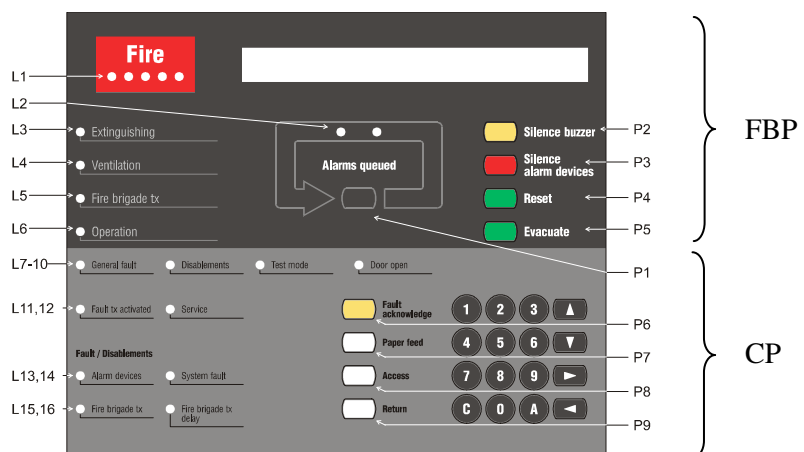


Figure 2. The EBL128 front. The look might vary depending on the country (language) configuration, etc. (shown here is a front with English texts). See also chapter "LED indicators and push buttons", page 13.

The fire brigade personnel can use the FBP to see which alarm point / zone having activated the fire alarm(s). In the display (LCD, 2x40 alphanumeric characters), the information displayed on the first row is depending on how many alarm points / zones having activated fire alarm (and also convention). On the second row is, for the activated alarm point / zone, an alarm text shown, if programmed. See chapter "Fire alarm", page 29.

Required fire brigade personnel manoeuvres are performed via the FBP in EBL128 or via external FBPs 1826 / 1828.

The CP is used to "communicate" with EBL128, e.g. for commissioning, monthly tests and maintenance. Access codes for different access levels are required. A keypad is used to get access to the menu tree, i.e. the main and sub menus for the different manoeuvres, etc. The CP holds several system status LEDs.

## 5 LED indicators and push buttons

LEDs and push buttons can vary according to configuration / convention / country / language.

See also Figure 2, page 11.

LED indicators on the Fire Brigade Panel (FBP)		
LED indicator		Indicating
L1	Fire (5 red)	Fire alarm (also pre-warning, heavy smoke/heat alarm, key cabinet alarm & co-incident alarm <sup>3</sup> )
L2	Alarms queued (2 red)	More than one unit / zone have generated fire alarm.
L3	Extinguishing (red)	Output(s) for extinguishing equipment activated.
L4	Ventilation (yellow)	Output(s) for fire/smoke ventilation equipment activated.
L5	Fire brigade tx (red)	Output for fire brigade tx (routing equipment) and/or corresponding programmable output(s) (i.e. type 4 = routing equipment) activated. <sup>4</sup>
		Test of routing equipment in progress (see menu H1).
L6	Operation (green)	Power on, i.e. the power supply (rectifier and/or battery are connected and working properly).

(FBP push buttons on next page)

<sup>3</sup> Co-incident alarm = two-unit-dependent alarm.

<sup>4</sup> L5 can be programmed to indicate when its normal trigger condition is met or when a programmable input is activated (e.g. L5 can be turned on when an input is activated by a Fire brigade tx output).

Push buttons on the Fire Brigade Panel (FBP)		
Push button		Operation/function
P1	Alarms queued (black)	Used, when LEDs "Alarms queued" (L2) are lit, to scroll/browse through the queued alarms (zones).
P2	Silence buzzer (yellow)	Used to silence the buzzer in EBL128
P3	Silence Alarm devices (red)	Used to silence the sounders (i.e. to "reset" outputs for alarm devices).
P4	Reset (green)	Used to reset the fire alarm(s). <sup>5</sup> Has to be pressed for > 0.5 sec.
P5	Evacuate (green) <sup>6</sup>	Used to activate the sounders (i.e. the outputs for alarm devices).
	Led test (green) <sup>7</sup>	Used to activate all LEDs on the front for a short while
	Alert Annunciation Acknowledge (green) <sup>8</sup>	Used to acknowledge alert annunciation signal
	Disable (yellow) <sup>9</sup>	Used to disables all zones in alarm state

(CP LED indicators on next page)

<sup>5</sup> **Multiple reset** (Default): All fire alarms will be reset simultaneously.

**Single encapsulated reset:** The fire alarm displayed in the LCD (first row to the left) will be reset. When more than one fire alarm is activated (LEDs "Alarms queued" are lit) each fire alarm has to be individually reset. The encapsulation function is described in chapter "Single encapsulated reset", page 38.

**NOTE (1)!** When "Multiple reset" is used, encapsulated reset can be done by pressing "Reset" (P4) and 0.1 sec. later also press "Alarms queued" (P1) and hold them pressed for > 0.5 sec. The fire alarm displayed in the LCD (first row to the left) will be encapsulated **or** the points in alarm status within one zone will be encapsulated **or** the whole zone (conventional) will be encapsulated.

**NOTE (2)!** When "Single encapsulated reset" is used, you can make a "Multiple reset" by pressing "Reset" (P4) and 0.1 sec. later also press "A" (in the keypad) and hold them pressed for > 0.5 sec.

<sup>6</sup> "Evacuate" is only valid in the "Belgian" and "Ukrainian" conventions.

<sup>7</sup> "LED test" is only valid in the "Czech" convention.

<sup>8</sup> "Alert Annunciation Acknowledge" is only valid in the "Polish" convention.

<sup>9</sup> "Disable" is only valid in the "Australian" convention.



LED indicators on the Control Panel (CP)		
LED indicator		Indicating
L7	General fault (yellow)	Fault(s), i.e. not acknowledged fault(s) and/or acknowledged but not corrected fault(s).
L8	Disabling (yellow)	Something is disabled / disconnected via a menu or automatically via "Single encapsulated reset" <sup>5</sup> .
L9	Test mode (yellow)	One or more zones are in "test mode".
L10	Door open (yellow)	A door is open (in EBL128 or an ext. FBP). <sup>10</sup>
L11	Fault tx activated (yellow)	One or more not acknowledged faults. Output for fault tx (routing equipment) is also activated, if not disabled before. ----- Test of routing equipment in progress (see menu H1).
L12	Service (yellow)	One or more sensors have reached the service level. See menu H4/U6.
L13	<b>Fault / Disabling</b> Alarm devices (yellow)	One or more outputs (type 3 = alarm device) are <u>disabled</u> . <b>Blinking:</b> One or more supervised outputs (type 3 = alarm device) have generated <u>fault(s)</u> . <sup>11</sup>
L14	System fault (yellow)	EBL128 is not running (because of S/W / CPU / memory fault). <sup>12</sup>
L15	<b>Fault / Disabling</b> Fire brigade tx (yellow)	Output for fire brigade tx (routing equipment) is <u>disabled</u> via menu (H2/B3) or via an open door. <sup>10</sup> <b>Blinking:</b> Routing equipment power supply output <sup>13</sup> or one or more supervised outputs (type 4 = routing equipment) have generated <u>fault(s)</u> . <sup>14</sup>
L16	Fire brigade tx delay (yellow)	The alert annunciation function is enabled, i.e. the time channel controlling this function is "on". <sup>15</sup>

<sup>10</sup> See also chapter "Door open", page 26.

<sup>11</sup> This is also valid when EBL128 has no "contact" with a unit with such an output, e.g. a 3377, 3378, 3361, etc.

<sup>12</sup> The LED is turned on during restart and stays on for restart code other than 00 and 03 until the fault is acknowledged.

<sup>13</sup> Main board terminal block "J1:11-12".

<sup>14</sup> This is also valid when EBL128 has no "contact" with a unit with such an output, e.g. an I/O unit 3361, etc.

<sup>15</sup> The Alert Annunciation function is described in the EBL128 Planning Instructions, chapter "Alert annunciation". The LED "L16" will be "on" if the AA function is enabled for at least one alarm point / zone. Normally is only one time channel used for this function but two or more channels can be used. The AA function can, as an alternative, be continuously "on".

<b>Push buttons / Keypad on the Control Panel (CP)</b>		
<b>Key/push button</b>		<b>Operation/function</b>
P6	<b>Fault acknowledge</b> (yellow)	Used to acknowledge the faults shown in menu H6. Also used to acknowledge SERVICE signal, see menu H8/S1.
P7	<b>Paper feed</b> (white)	Not used in EBL128.
P8	<b>Access</b> (white)	Used to log on, i.e. to get access to the menu tree (via an access code) to carry out disablements, etc. In conjunction with fire alarm, some information is available and some actions are possible to perform via the "Fire alarm menu" (X1-X9) without log on, see chapter "Fire alarm", page 29.
P9	<b>Return</b> (white)	Used to stop input of data, leave a menu ("one step up") and to log off.
	1 – 9 and 0	Numeric keys for the figures 0-9.
	C	Used to <b>clear</b> /delete just written data.
	A	Used to <b>accept</b> a menu and accept input of data.
	← → ↑ ↓	Left / right keys are used to move the cursor in a menu. Up / down keys are used to scroll between the menus.

## 6 Normal operation

---

When EBL128 is in normal operation, i.e. no fire alarms and normally no faults, no disablements, no service signal, no zones in test mode, no activated interlocking in / outputs and/or no open doors, only the LED "Operation" (L6) is to be lit.

### 6.1 The display in EBL128

The display will in normal operation show the following information:

```
*** EBL128 ***  
Date: YYYY-MM-DD      Time: hh:mm:ss
```

**YYYY** = Year, e.g. 2005    **MM** = Month, 02    **DD** = Day, e.g. 28

**hh** = hours, e.g. 21    **mm** = minutes, e.g. 45    **ss** = seconds, e.g. 45

The above information might be replaced with some other information. The type of information and the priority order are as follows:

1. Fire alarms<sup>16</sup>
2. Co-incidence alarms
3. Pre-warnings
4. Evacuate information (only valid in some conventions)
5. Faults (not acknowledged)
6. Disablements
7. Zones in Test mode
8. Interlocking inputs / outputs active

#### **NOTE!**

The different type of alarms, faults, etc. are described in other parts of this document.

---

<sup>16</sup> Fire alarm have a "log off function", i.e. if a menu window is open when a fire alarm is activated, an automatic menu log off will take place and the fire alarm will be presented in the display instead.

Some information is available and some actions are possible to perform via the "Fire alarm menu" (X1-X9), see chapter "Fire alarm", page 29.

## 7 Access levels

EBL128 has five access levels for different kind of users.

Access level	Required action	Users	Action
1	None (Door closed).	Anybody.	Scroll / browse through the queued alarms
2A	Fire brigade key.	Fire brigade personnel.	Fire alarm handling
2B	Fire brigade key + access code for level 2B (or 3A).	Building occupier.	Installation handling (daily duties), e.g. monthly tests, disablements, etc.
3A	Fire brigade key + access code for level 3A.	Service / maintenance personnel.	Service, maintenance.
3B	PC (Win128) connected + PC access code for level 3B.	Service / maintenance / commissioning engineer.	Service, maintenance, commissioning the system, etc. via Win128.
4	PC (Win128) connected + PC access code for level 3B.	Service / maintenance / commissioning engineer.	Service, maintenance, commissioning the system, etc. via Win128.

The access codes can be changed. To change a code you have to know the valid code or use a code for a higher access level.

### 7.1 Access level 1

With the door closed, **anybody** has access to the push button "Alarms queued" (P1) to scroll / browse through the queued alarms.

### 7.2 Access level 2A

When the door has been opened / the fire brigade key switch has been activated (LED "Door open" is lit), **the fire brigade personnel** have access to the push buttons / keypad to:

(P2) Silence the buzzer in EBL128
(P3) Silence the alarm devices (sounders) in the system.
(P4) Reset fire alarm(s).
(P5) Evacuate (start the sounders). <sup>17</sup>
(P7) Paper feed (not used in EBL128).
(P8) Access, in conjunction with a fire alarm: <b>The fire brigade</b>

<sup>17</sup> Only valid in the "Belgian" convention. See chapter "LED indicators and push buttons", page 13, for explanation of use in other conventions.

**personnel** can use "P8" (without any access code) to get access to the menu X1-X9), i.e. to scroll through all the fire alarms (see all point alarms), etc.

### 7.3

#### Access level 2B

When the door has been opened / the fire brigade key switch has been activated (LED "Door open" is lit), **the building occupier** has access like in access level 2A and after access code for level 2B (or 3A) the following menus:

H1 Perform monthly test.
H2 Disable or re-enable.
B1 Disable zone
B2 Disable zone / address
B3 Disable output
B4 Disable all control, ventilation, exting or alarm devices outputs
B5 Re-enable zone
B6 Re-enable zone / address
B7 Re-enable output
B8 Re-enable all control, ventil, exting or alarm devices outputs
B9 Disable / Re-enable outputs for routing equipment
B10 De-activate alert annunciation function
H3 Set calendar and clock.
H4 Present system status on display.
U1 Disablement
U2 Disablement by time channel.
U3 Show values.
U4 Sensors activating SERVICE signal
U5 Show event log
U6 Show configuration
H6 Acknowledge FAULTS.
H7 Perform ZONE TEST (Test mode).
H9 Interlocking outputs and inputs
C1 Activated interlocking outputs/inputs
C2 Activate interlocking output
C3 Reset interlocking output

C4 Disable interlocking output
C5 Re-enable interlocking output
H10 Change access code for daily duties (access level 2B).

## 7.4 Access level 3A

When the door has been opened / the fire brigade key switch has been activated (LED "Door open" is lit), **the service / maintenance personnel** have access like in access level 2A and 2B and after access code for level 3A<sup>18</sup> the following menus:

H5 Service
A1 Disconnect / Re-connect COM loop
A2 Disconnect/Re-connect zone line input
A3 Calibration of supervised outputs
A4 Sensitive fault detection mode
A5 Service mode for COM-loop
A6 Show information about site specific data
A7 Display current consumption on COM loop
A8 Display statistics for COM loop
A9 Activate address setting mode for DU
H8 Maintenance
S1 Acknowledge SERVICE signal.
S2 Clear weekly average.
S3 Test alarm devices.
S4 Safe shut down of control unit.
S5 Activate address in alarm mode.
S6 Change access code for service and maintenance (access level 3A).
S7 Change access code for PC-communication.

## 7.5 Access level 3B

Used by Service / maintenance / commissioning engineers when a PC (i.e. **Win128**) is to be connected to EBL128 for backup / download of site specific data.

<sup>18</sup> If the code for access level 3A has already been used to logon to access level 2B, a new logon to access level 3A is not required.

Connect the PC and logon to EBL128 from the PC.

## 7.6 **Access level 4**

Used by Service / maintenance / commissioning engineers when a PC (i.e. **Win128**) is to be connected to EBL128 for download of new S/W / settings / configurations / C.U. data, on-line status checking, etc.

Connect the PC and logon to EBL128 from the PC.

## 8 "Silence Alarm devices"

---

In EBL128, on the FBP, there is a push button (P3) "Silence Alarm devices".

If the push button "Silence Alarm devices" is pressed during a pre-warning, a fire alarm or a Co-incidence alarm, the following will happen:

- LEDs "Fire" (L1) and "Alarms queued" (L2)<sup>19</sup> changes from blinking (0.4 / 0.4) to steady (continuous).
- Activated outputs<sup>20</sup>, programmed for sounders (type 3 = alarm devices), will be silenced.

In case of a new alarm, or if the push button "Silence Alarm devices" is pressed again, the sounders will automatically sound again and the LEDs "Fire" and "Alarms queued" starts blinking.

**NOTE!** This is also valid for Pre-warning and Co-incidence alarm.

### 8.1 Disable / Re-enable alarm devices

All outputs<sup>20</sup> programmed for sounders (type 3 = alarm devices) can via menu H2/B4 be collectively disabled. This is indicated by LED "Disablements" (L8) and LED **Fault / Disablements** "Alarm devices" (L13) steady (continuous).

**NOTE!** They will remain disabled until they are re-enabled again via menu H2/B8.

See also chapter "Disable all control, extinguishing, ventilation and alarm device outputs (H2/B4)", page 69.

---

<sup>19</sup> When more than one fire alarm is activated.

<sup>20</sup> Including Addressable siren 3377 and Addressable sounder base 3378.



## 9 "Silence buzzer"

---

The **buzzer** in EBL128 will sound for:

- pre-warning (0.8 / 5 sec.)
- co-incident alarm: When only one **zone / address** (alarm point) is in alarm status (0.8 / 5 sec.)
- fire alarm (0.4 / 0.4 sec.)
- fault (continuous)
- disablements and faults (2 sec. directly after the door to EBL128 is closed.)
- activated interlocking input (0.8 / 0.8 sec.), if this option is selected via Win128.

**Press "Silence buzzer" (P2) to silence the buzzer.**

In case of a new alarm or if the push button "Silence buzzer" is pressed again, the buzzer will automatically sound again.<sup>21</sup>

**NOTE!** This is also valid for pre-warning, co-incident alarm, etc.

### **Silence buzzer by open door**

In Win128 can the function "Silence Buzzer by Door Switch" be selected. The buzzer will then be turned off as long as the EBL128 door is open. (This function is a violation to the EN54-2 standard.)

---

<sup>21</sup> Not valid if the buzzer is silenced by the open door.

## **10 Disable / Re-enable all control, extinguishing and ventilation outputs**

---

All control outputs programmed as type:

0 = control (general)

1 = fire ventilation

2 = extinguishing system

... can via menu H2/B4 be collectively disabled. This is indicated by the LED "Disablements" (L8).

They will remain disabled until they are re-enabled again via menu H2/B8.

See also chapter "Disable all control, extinguishing, ventilation and alarm device outputs (H2/B4)", page 69.

# 11 Evacuate, LED Test, Alert Annunciation Acknowledge and Disable

---

- This function is only valid in some conventions.
- A front with the push button (P5) is required.

## 11.1 Evacuate

When the push button "Evacuate" (P5) is pressed, all outputs programmed for sounders (type 3 = alarm devices)<sup>20</sup> will be collectively turned ON steady (continuous). This is indicated by the following information in the EBL128 display:

```
Evacuate in progress
```

The sounders will remain ON until they are turned OFF by pressing the push button "Evacuate" (P5) again.

**NOTE!** The alarm devices (sounders) will in this case be activated steady (continuous) irrespective of the fact that the outputs can be set to something else for fire alarm (e.g. intermittent).

## 11.2 LED Test

When the push button "LED Test" (P5) is pressed, all LEDs on the front, the LCD back light and all LCD pixels are lit.

## 11.3 Alert Annunciation Acknowledge

The button "Alert Annunciation Acknowledge" (P5) has the same function as the Acknowledge button on an AA unit 1735 / 1736.

## 11.4 Disable

When the push button "Disable" (P5) is pressed, all zones in fire condition will be disabled.

## 12 Door open

---

A special key is used to open the EBL128 door to get access to the front, see chapter "Access levels", page 18. The same type of key is also used to open the ext. FBP door / the key switch. Door open is indicated by LED "Door open" (L10)<sup>22</sup>.

### 12.1 LED "Door open"

Valid for the door in EBL128 or an external FBP connected to EBL128: Door open in EBL128 is indicated by LED "Door open" in EBL128 and all ext. FBPs connected to EBL128. Door open in an ext. FBP is indicated by LED "Door open" in EBL128 and all ext. FBPs connected to EBL128.

### 12.2 Outputs for routing equipment (Fire brigade tx and Fault tx)

In Win128 the following can be programmed:

- **Disable by door in the control unit:** Door open in EBL128 will disable the output(s) for routing equipment (Fire brigade and fault tx).

Disabled outputs for routing equipment are indicated by the LED "Disabling" (L8) and "**Fault / Disabling** Fire brigade tx" (L15) and listed in menu H4/U1.

In the display is shown:

```
Fire alarm routing disabled  
(by open door in CU)
```

### 12.3 Silence buzzer

In Win128 the following can be programmed:

- **Silence buzzer by door switch:** The buzzer will be turned off as long as the EBL128 door is open.

(This function is a violation to the EN54-2 standard.)

---

<sup>22</sup> In the ext. FBP 1828: when the key is turned to the "position open / access".

## 13 Technical address / Presentation number

---

### 13.1 Technical address for COM loop units

The technical address in EBL128 is used when programming (via Win128) all units connected to the COM loop.

The technical address is also used to identify which unit has generated a fault.

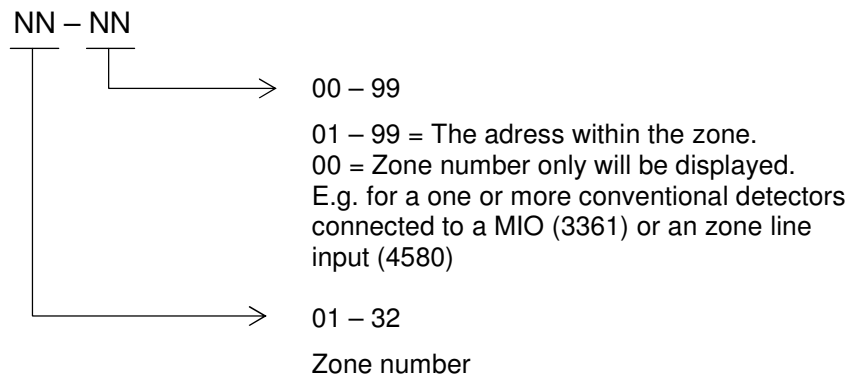
The technical address is equal to the address that is set in each unit connected to the COM loop.

Regarding the Address setting tool 3314: Addresses 001 – 127 can be set (not 000).

### 13.2 Presentation number

For each fire alarm point / zone line input, a presentation number, NN-NN, has to be programmed. The presentation number is shown in the display in EBL128 and in Ext. FBP 1826 / 1828, Alert Annunciation unit 1735 / 1736 and Ext. Presentation unit 1728, to identify the point / zone generating a fire alarm. It is also used to disable / re-enable fire alarm points / zones and in control conditions / expressions to activate the programmable outputs.

Together with the presentation number, an alarm text with up to 40 alphanumeric characters can be displayed (if programmed via Win128).



**NOTE!** Only the zone numbers **01-32** can be used.

## 14 Alarm types

In case of a fire, analog detectors (sensors), conventional smoke and/or heat detectors, manual call points and programmable inputs can generate **fire alarm**. If somebody illegally breaks into a key cabinet, this will also generate a "fire alarm" (a key cabinet alarm).<sup>23</sup>

The analog detectors can also generate other type of "alarms", i.e. **Pre-warning, Heavy smoke alarm / Heavy heat alarm** and a two-unit / -zone dependent alarm point / zone can generate a **Co-incident alarm**.<sup>24</sup>

EBL128 can handle and present up to 128 fire alarms (alarm points and/or zones). Zone numbers 01-32 can be used and in each zone the alarm point (address) numbers 01-99 can be used. The fire alarms will be shown in the EBL128 display and in Ext. FBP 1826 / 1828, Alert Annunciation unit 1735 / 1736 and Ext. Presentation unit 1728.

### 14.1 Pre-warning

An analog detector will generate a pre-warning for a lower alarm level than the fire alarm level.<sup>25</sup> Pre-warning can be used when an early alarm and/or an early action is required (e.g. a "soft" computer shut down). Normal alarm devices, routing equipment, etc. will not be activated.

In case of a pre-warning, the following will happen:

- The buzzer in EBL128 sounds 0.8 sec. each 5<sup>th</sup> sec. (0.8 / 5 sec.).
- LEDs "Fire" (L1) are blinking (0.4 / 0.4 sec.).
- Outputs programmed for pre-warning are activated.<sup>26</sup>
- On the first row in the EBL128 display, the presentation number (zone-address) is shown (for the first pre-warning).
- On the second row, an alarm text (= the fire alarm message) will be shown (if programmed).

Example; pre-warning zone 12, address 45 (within zone 12):

```
Pre-warning detector 12-45
(alarm text)
```

Example; pre-warning zone 12:

```
Pre-warning zone 12
(alarm text)
```

<sup>23</sup> This is done via a programmable input.

<sup>24</sup> This function is normally used only for smoke detectors.

<sup>25</sup> See EBL128 Planning Instructions. Any programmable input can also be used to activate a pre-warning.

<sup>26</sup> Outputs programmed for General pre-warning and outputs programmed for the activated pre-warning(s).

LEDs "Alarms queued" (L2) blinking are indicating more than one pre-warning and they will be automatically scrolled (each 5<sup>th</sup> second).

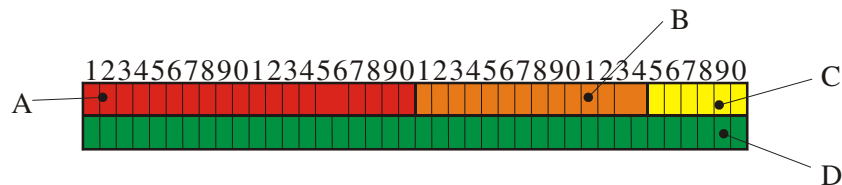
Pre-warning is automatically reset see chapter "Alarm reset", page 38.

## 14.2 Fire alarm

128 alarms (points or zones) can be presented in the EBL128 display. See also chapter "The display in EBL128", page 17. According to the EN54-2 standard, in case of a fire alarm, the following will happen:

- The buzzer in EBL128 sounds 0.4 sec. each 0.4<sup>th</sup> sec. (0.4 / 0.4 sec.).
- LEDs "Fire" (L1) are blinking (0.4 / 0.4 sec.).
- Output for routing equipment (Fire brigade tx).
- Outputs for fire alarm are activated.<sup>27</sup>
- In the EBL128 display (and ext. FBP display), the fire alarm(s) will be presented. See below.

Fire alarm presentation in the EBL128 display:



- A: Field for the **first alarm point or zone** in alarm.  
By **scrolling** each alarm will be shown in this field.
- B: Field for **the most recent zone** in alarm.
- C: Field for total **number of zones** in alarm.
- D: Field for alarm text. (User definable.)

Comments to the different fields:

### The information in the field A:

**NNN** ZONE-ADDR **ZZ-AA**

or

**NNN** ZONE **ZZ**

**NNN** = a serial number for the displayed alarm, i.e. 001 for the first activated alarm (**ZZ-AA**), 002 for the second alarm and so on.

**ZZ** = zone number 01 – 32. **AA** = address 01 – 99

### The information in the field B:

LAST ZONE **zz**

<sup>27</sup> Outputs programmed for General fire alarm and outputs programmed for the activated fire alarm(s).

**zz** = zone number 01 – 32 for the most recent zone in alarm.  
Displayed also if only one alarm point is in alarm.

The information in the field C:

No. **nn**

**nn** = 01 – 32 = the total number of **zones (not alarm points)** in alarm.

The information in the field D:

A user definable alarm text (max. 40 characters) for the alarm displayed in the field "A".

**Some Fire alarm examples:**

**One alarm point (e.g. detector 12-45)**

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01  
"Alarm text for 12-45"
```

**One zone (e.g. zone 14; a conventional zone line input)**

```
001 ZONE 14 LAST ZONE 14 No. 01  
"Alarm text for zone 14"
```

**More than one alarm point in one zone (e.g. detectors 12-45 & -46)**

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01  
"Alarm text for 12-45"
```

The LED:s "Alarms queued" (L2) are indicating that more than one alarm point is in alarm. Press the button "Alarms queued" (P1) to see the other alarm:

```
002 ZONE-ADDR 12-46 LAST ZONE 12 No. 01  
"Alarm text for 12-46"
```

**One alarm point in two zones (e.g. detectors 12-45 & 13-02)**

```
001 ZONE-ADDR 12-45 LAST ZONE 13 No. 02  
"Alarm text for 12-45"
```

The LED:s "Alarms queued" (L2) are indicating that more than one alarm point is in alarm. Press the button "Alarms queued" (P1) to see the other alarm:

```
002 ZONE-ADDR 13-02 LAST ZONE 13 No. 02  
"Alarm text for 13-02"
```

**More than one alarm point / zone**



LED:s "**Alarms queued**" (L2) are blinking (0.4 / 0.4 sec.), indicating more than one fire alarm.<sup>28</sup> To scroll through the alarms, use the push button "**Scroll**" (P1). The fire alarms are stored in a circular buffer and when scrolling from the last to the first alarm, the LEDs "Alarms queued" will be turned off for approx. three seconds.

When the "Scroll" button has been used the first alarm will be automatically displayed again after 20 seconds.

If an ext. FBP 1826 with a built-in printer is connected, the printer will print each fire alarm<sup>29</sup>, e.g.:

```
*** Fire Alarm ***  
ZONE-ADDR: 12-45 Time HH.MM Date MM-DD  
Alarm text for 12-45
```

or

```
*** Fire Alarm ***  
ZONE: 14 Time HH.MM Date MM-DD  
Alarm text for zone 14
```

Reset of the fire alarms, see chapter "Alarm reset", page 38.

## 14.2.1 Fire alarm menu (X1-X9)

During the fire alarm presentation, a special fire alarm menu can be used. (If this menu / option is excluded, via Win128, it is a violation to the EN54-2 standard).

Fire alarms can be displayed via this menu but first of all it can be used to display faults and disablements in the system.

Alarm points, zones, control outputs and alarm devices can also be disabled / re-enabled via this menu.

During the fire alarm presentation press button "Access"<sup>30</sup> and **the alarm text** will be replaced with the following:

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01  
Display alarms ACCEPT? X1
```

"A", "↓", "↑", "→", "←" and "Return" can be used like in the normal menu tree, see chapter "Access", page 62. The original presentation (the alarm text) will be automatically displayed again approx. 20 seconds after the push buttons "A", "↓", "↑", "→", "←" or "Return" are no longer used.

Press "A" or scroll ("↓", "↑") to the wanted menu and press "A".

<sup>28</sup> Up to 128 alarms can be presented in the display. Alarm = ZONE and/or ZONE-ADDRESS.

<sup>29</sup> The alarms will be printed like they are presented in the display, i.e. as an alarm point (ZZ-AA) or a zone (ZZ) and alarm text if programmed.

<sup>30</sup> Access code is **not** required.

### 14.2.1.1 Display alarms (X1)

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01
Display alarms ACCEPT? X1
```

Press "A"

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01
ZONE-ADDR: 12-45 001 of 003
```

First row: Explanations in chapter "Fire alarm", page 29.

Second row: All fire alarms (up to 128 alarms) will be displayed one at a time in chronological order, i.e. the first alarm (001) will be the same alarm as displayed on the first row.

**001 of 003** = alarm number one of three alarms in the system is displayed to the left.

One alarm is an alarm point (ZZ-AA) or a zone (ZZ).

Press "↓" (to see the next alarm).

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01
ZONE-ADDR: 12-46 002 of 003
```

**002 of 003** = alarm number two of three alarms in the system is displayed to the left.

Press "↓" (to see the next alarm).

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01
ZONE-ADDR: 12-47 003 of 003
```

**003 of 003** = alarm number three of three alarms in the system is displayed to the left.

### 14.2.1.2 Display faults (X2)

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01
Display faults ACCEPT? X2
```

Press "A"

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01
FAULT: Battery not connected CU
```

Only the fault message for the fault respectively, will be displayed here, not date, time and "status" information.

Press "↓" (to see the next fault).

### 14.2.1.3 Display disablements (X3)

**NOTE!** Also zones in "Test mode" will be displayed via this menu.

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01
Display disablements ACCEPT? X3
```

Press "A"

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01  
Zone XX address XX disabled
```

Press "↓" (to see the next disablement).

**NOTE!** After all disablements will zones in "Test mode" be displayed.

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01  
Zone in TEST MODE: 01 02 03 04
```

#### 14.2.1.4

##### Disable zone (X4)

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01  
Disable zone ACCEPT? X4
```

Press "A"

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01  
Disable zone: 00 ACCEPT?
```

Write a zone number (01 – 32) and press "A". If more zones are to be disabled, repeat the procedure.

#### 14.2.1.5

##### Disable zone / address (X5)

This function is useful e.g. for a manual call point not to continue to generate alarms because of a broken glass.

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01  
Disable zone / address ACCEPT? X5
```

Press "A". E.g.:

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01  
Disable zone: 00 Address: 00 ACCEPT?
```

Write a zone-address and press "A". If more zone-addresses are to be disabled, repeat the procedure.

#### 14.2.1.6

##### Re-enable zone (X6)

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01  
Re-enable zone ACCEPT? X6
```

Press "A". E.g.:

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01  
Re-enable zone: ZZ ACCEPT?
```

This is a list of disabled zones. Scroll to or write the wanted zone number and press "A". If more zones are to be re-enabled, repeat the procedure.

### 14.2.1.7 Re-enable zone / address (X7)

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01
Re-enable zone / address ACCEPT? X7
```

Press "A". E.g.:

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01
Re-enable zone: ZZ Address: 00 ACCEPT?
```

This is a list of disabled zone-addresses. Scroll to or write the wanted zone-address and press "A". If more zone-addresses are to be re-enabled, repeat the procedure.

### 14.2.1.8 Disable / Re-enable control (X8)

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01
Disable/Re-enable control ACCEPT? X8
```

Press "A". E.g.:

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01
Dis(=0) or re-en(=1) control? 1 ACCEPT?
```

To disable, press "0" and "A". (To re-enable, press "1" and "A"). For more information, see chapter "Disable all control, extinguishing, ventilation and alarm device outputs (H2/B4), page 69.

### 14.2.1.9 Disable / Re-enable alarm devices (X9)

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01
Disable/Re-enable alarm dev. ACCEPT? X9
```

Press "A". E.g.:

```
001 ZONE-ADDR 12-45 LAST ZONE 12 No. 01
Dis(=0) or re-en(=1) alarm dev?1 ACCEPT?
```

To disable, press "0" and "A". (To re-enable, press "1" and "A"). For more information, see chapter "Re-enable all control, extinguishing, ventilation or alarm device outputs (H2/B8), page 74.

## 14.2.2 Alert Annunciation alarm (AA alarm)

Indications, actions etc. as for a normal fire alarm **except that EBL128 output for routing equipment (Fire brigade tx) will not be activated directly**. An AA alarm is indicated by the LED "Fire brigade tx delay" (L16). The AA alarm has to be acknowledged within an acknowledge time and reset within an investigation time, otherwise will the output for routing equipment (Fire brigade tx) be activated. See EBL128 Planning Instructions for more information regarding the AA function. Acknowledgement<sup>31</sup> and reset of the AA

---

<sup>31</sup> In "Polish" (CNBOP) convention, the push button "Evacuate" (P5) can be used for "AA Acknowledge".

alarm can be done on an **AA** unit 1735 / 1736 (or an **AA** controller 1740). See also chapter "Alarm reset", page 38.

### 14.2.3 Co-incident alarm (two-unit / -zone dependence)

When only one two-unit dependent alarm point, (i.e. one **zone – address**) is in alarm status<sup>32</sup> or when only one two-zone dependent zone is in alarm status<sup>33</sup>, the LEDs "Fire" (L1) are blinking (0.4 / 0.4 sec.), the buzzer sounds (0.8 / 5 sec.) and there is a **Co-incident alarm** presentation in the display.

Co-incident alarm detector ZZ/AA

or

Co-incident alarm zone ZZ

If there are Co-incident alarms generated in other zones, the LEDs "Alarms queued" (L2) are blinking and the Co-incident alarms will be automatically scrolled (each 5<sup>th</sup> second).

Co-incident alarm is automatically reset (i.e. when the alarm point / zone is no longer in alarm status), see chapter "Alarm reset", page 38.

## 14.3 Heavy smoke alarm / Heavy heat alarm

An analog detector generates heavy smoke / heat alarm for a higher alarm level<sup>34</sup> than the fire alarm level, i.e. fire alarm is already activated by the same detector.

Heavy smoke / heat alarm is a confirmation on that the smoke or heat is increasing and can be used for special actions, e.g. activation of smoke ventilation, etc.

In case of a heavy smoke / heat alarm, the following will happen:

- Outputs programmed for heavy smoke / heat alarm are activated.<sup>35</sup>
- If an ext. FBP with a built-in printer (1826) is connected, the printer will print<sup>36</sup> each heavy smoke / heat alarm, e.g.:

---

<sup>32</sup> If two or more two-unit dependent alarm points (zone - addresses) in the same zone are in alarm status at the same time, normal fire alarms will be activated in EBL128. See also EBL128 Planning Instructions.

<sup>33</sup> If two or more two-zone dependent zones in the same group are in alarm status at the same time, normal fire alarms will be activated in EBL128. See also EBL128 Planning Instructions.

<sup>34</sup> See EBL128 Planning Instructions.

<sup>35</sup> General heavy smoke / heat alarm and individual alarm points / zones.

<sup>36</sup> The alarms will be printed like they are presented in the display, i.e. as ZONE-ADDR or ZONE.

```
*** Heavy smoke ***  
ZONE-ADDR: 12-45 Time HH.MM Date MM-DD  
Alarm text for 12-45
```

or

```
*** Heavy smoke ***  
ZONE: 14 Time HH.MM Date MM-DD  
Alarm text for zone 12
```

```
*** Heavy heat ***  
ZONE-ADDR: 12-45 Time HH.MM Date MM-DD  
Alarm text for 12-45
```

or

```
*** Heavy heat ***  
ZONE: 14 Time HH.MM Date MM-DD  
Alarm text for zone 14
```

Heavy smoke / heat alarm will be reset when the fire alarm respectively is reset, see chapter "Alarm reset", page 38.

## 14.4 Key cabinet alarm

One programmable input<sup>37</sup> can be used to connect a key cabinet.  
The fire brigade uses a key cabinet to store a key to the building.

**NOTE! In the Danish (DBI) convention the key cabinet alarm function is a little different, see below.**

### 14.4.1 Key cabinet opened before a fire alarm

If the key cabinet is opened before a fire alarm (e.g. if somebody illegally breaks into the key cabinet), a key cabinet alarm, i.e. a "fire alarm" will be generated.

Example; Key cabinet alarm:

```
ZONE: KE                               No. 01  
Alarm from key cabinet
```

It will be printed like a normal fire alarm if an ext. FBP with printer is available, see chapter "Fire alarm", page 29.

Key cabinet alarm is reset like a normal fire alarm, see chapter "Fire alarm reset, page 38.

This alarm will also generate a fault message, see chapter "Key cabinet alarm reset", page 40. It is indicated by LED "Fault" (L8).

**NOTE!** The "Fault tx" output will not be activated by this fault.

### 14.4.2 Key cabinet opened in conjunction with a fire alarm

The fire brigade personnel can open the key cabinet if a fire alarm already is activated in EBL128. In this case there will be **no** key cabinet alarm or fault generated when the key cabinet is opened.

#### 14.4.2.1 Restoring the key after a fire alarm

When **all** fire alarms are reset (see chapter "Alarm reset", page 38), the key has to be restored in the key cabinet **within 5 minutes**. If not, a fault will be generated, see chapter "Key cabinet alarm reset", page 40.

### 14.4.3 Key cabinet alarm, Danish (DBI) convention

**NOTE! Only valid for the Danish (DBI) convention.**

When the key cabinet is opened, the "Fault tx" output will be activated and a "key cabinet fault" will be generated:

```
FAULT: Key cabinet  
Date: MM-DD   Time: HH:MM
```

(In Danish: "FEJL: Nøgleskab")

When this fault is acknowledged (see chapter "Acknowledge FAULTS (H6)", page 98), there is a 5 minutes delay before a new "key cabinet fault" can be generated again.

---

<sup>37</sup> Input I0 or COM loop I/O unit 3361 can be used.

## 15 Alarm reset

---

### 15.1 Pre-warning reset

Pre-warning is automatically reset.

### 15.2 Fire alarm reset

**NOTE!** The detectors having activated the fire alarms shall, after reset, be inspected, tested and replaced when required.

One of the following alarm reset alternatives is valid. This is selected via Win128. "Multiple reset" is default.

#### 15.2.1 Multiple reset

All the fire alarms will be reset by pressing "Reset" (P3). (According to the EN54-2 standard).

**NOTE!** The push button has to be pressed in for min. 0.5 sec.

**When all fire alarms are reset**, LEDs "Fire" (L1) and "Alarms queued" (L2) are turned OFF and the display is empty.<sup>38</sup>

All outputs (for fire alarm) have also been reset, i.e. de-activated.

If a key cabinet is installed, the key (to the building) has to be put back into the key cabinet **within 5 minutes**. If not, a fault will be generated and a fault message will be shown in the display, see chapter "Key cabinet alarm reset, page 40.

#### 15.2.2 Single encapsulated reset

This function, set in Win128, is a violation to the EN54-2 standard.)<sup>39</sup>

##### Fire alarm reset

Each fire alarm has to be reset one by one.

Press "Reset" (P3) to reset the fire alarm, shown in the display, on the first row to the left

**NOTE!** The push button has to be pressed in for min. 0.5 sec.

Output(s) programmed for this fire alarm will also be reset, i.e. de-activated.

If more than one fire alarm is activated (i.e. if LED:s "Alarms queued" (L2) are lit) the next fire alarm in the queue is now shown in the display, on the first row to the left. It has to be reset the same way as the first one.

---

<sup>38</sup> If there is a fault condition (e.g. caused by the fire), a fault message will now be shown in the display.

<sup>39</sup> When "Single encapsulated reset" is used, you can make a "Multiple reset" by pressing "Reset" (P4) and 0.1 sec. later also press "A" (in the keypad) and hold them pressed for > 0.5 sec.



**When all fire alarms are reset**, LED:s "Fire" (L1) and "Alarms queued" (L2) are turned OFF and the display is empty.<sup>38</sup>

All outputs (for fire alarm) are now also reset, i.e. de-activated.

If a key cabinet is installed, the key (to the building) has to be put back into the key cabinet **within 5 minutes**. If not, a fault will be generated and a fault message will be shown in the display, see chapter "Key cabinet alarm reset, page 40.

### **Encapsulation function**

Normally if an alarm point or zone is reset while still in alarm status<sup>40</sup>, it will activate a new fire alarm within 20 seconds. (According to the EN54-2 standard.)

When "Single encapsulated reset" is performed, an alarm point or zone still in alarm status will not activate a new fire alarm. It becomes encapsulated, i.e. automatically disabled and has to be re-enabled via menu H2/B4 or B5 before it can activate a new fire alarm again.

LED "Disables" (L8) is indicating that one or more zones / alarm points have been encapsulated (automatically disabled).

#### **NOTE!**

When "Multiple reset" is used, encapsulated reset can be done by pressing "Reset" (P4) and 0.1 sec. later also press "Alarms queued" (P1) and hold them pressed for > 0.5 sec. The fire alarm displayed in the LCD (first row to the left) will be encapsulated **or** the whole zone (conventional) will be encapsulated.

## **15.2.3 Alert Annunciation**

Regarding the function, see chapter "Alert Annunciation alarm (AA alarm)", page 34 and EBL128 Planning Instructions, chapter "Alert Annunciation".

Reset of the **AA** alarm can be done via push button "Reset" on an **AA** unit 1735 / 1736 (an **AA** controller 1740) or in EBL128. **AA** alarms will be reset all at a time.

**NOTE!** Reset via an external unit is only possible during the investigation time and only **AA** alarm(s) can be reset, not normal fire alarms.

## **15.2.4 Co-incident alarm**

Co-incident alarm is automatically reset (i.e. when the alarm point is no longer in alarm status). See also chapter "Co-incident alarm (two-unit / -zone dependence)", page 35.

---

<sup>40</sup> E.g. a manual call point with a broken glass.

### 15.3 Heavy smoke / heat alarm reset

If a heavy smoke / heat alarm has been activated, it will be reset at the same time as the corresponding fire alarm is reset. Also the output(s) will be reset, i.e. de-activated.

### 15.4 Key cabinet alarm reset

Not valid for the Danish (DBI) convention, see chapter "Key cabinet alarm, Danish (DBI) convention", page 37.

After reset of the key cabinet alarm ("fire alarm"), a fault message is shown in the display to inform the user that the key cabinet has been opened.

```
FAULT: Key cabinet  
Date: MM-DD Time: HH:MM
```

If the key cabinet is closed again, the "status" information "Serviced" is added.

```
FAULT: Key cabinet  
Date: MM-DD Time: HH:MM Serviced
```

This key cabinet fault message is to be acknowledged the same way as a "normal" fault, see chapter "Fault acknowledge", page 52.

When the key cabinet fault is acknowledged, the LED "General fault" (L7) will be turned OFF (if the key cabinet is closed and if there are no other faults in the system).

## 16 Fault

---

In case of a fault condition, the following has happened / will happen in EBL128:

- The buzzer in EBL128 sounds steady (continuous).
- Output "R1" for routing equipment (Fault tx) is activated.
- Programmable output for general fault is activated
- Programmable output for general charge fault is activated if it is a charge fault.
- LED "Fault tx activated" (L11) is turned ON.
- LED "General fault" (L7) is turned ON.
- LEDs "**Fault / Disables** Alarm devices" (L13), "System fault" (L14) and/or "**Fault / Disables** Fire brigade tx" (L15) might be turned ON as well (depending on the type of fault).
- A fault message incl. date and time is shown in the display.

Example of a fault message:

```
FAULT: No reply xx-xx →  
Date: MM-DD Time: HH:MM
```

Press "→" to see the technical address:

```
FAULT: No reply techn. address xxx ←  
Date: MM-DD Time: HH:MM
```

Press "←" to see the zone-address:

- If more than one fault is activated, the text: "**More faults**" is added after the time.
- If a fault has been corrected before it has been acknowledged, the "status" text: "**Serviced**" is added after the time.
- Fire alarm presentation has higher priority than the fault messages. During fire alarm presentation the faults can be shown via the special fire alarm menu X2, see page 32.

All faults are latched and have to be acknowledged, which is done via menu H6 (see page 98). In this menu (H6) can up to 100 faults be listed:

- Not corrected and not acknowledged faults
- Not corrected but acknowledged faults
- Corrected (serviced) but not acknowledged faults

If a fault can not be corrected, it is important to contact service personnel / engineer immediately.

### NOTE!

As a warning, faults (and disablements) are also indicated by a 2-sec. beep when an open c.i.e. door is being closed.

## 16.1 Fault messages

Below follows a list of all fault messages, in alphabetical order:

**FAULT: 24 V for external equipment**

The output is turned off because the current output limit is exceeded.

**FAULT: 24 V for routing equipment**

The output is turned off because the current output limit is exceeded. Also indicated by LED "L15" blinking.

**FAULT: 24 V output, techn address xxx**

This is valid for an external power supply (e.g. 3366) connected on the COM loop. The output might be turned off. The current output limit is exceeded.

**FAULT: AAU x**

AAU=1735 / 1736 (Alert Annunciation Unit)

The unit is programmed as another type of unit than the SSD says or fault in the unit.

**FAULT: Battery**

- Batteries (2 x 12 V) are missing or not correctly connected.
- Fuse F2 on the main board is blown.
- Another battery fuse is blown (e.g. if the batteries are placed outside EBL128).

**FAULT: Battery charging**

The battery charging function is not working all right. The main board 4556 may have to be replaced.

**FAULT: Battery, techn address xxx**

This is valid for an external power supply (e.g. 3366) connected on the COM loop.

- Batteries (2 x 12 V) are missing or not correctly connected.
- Battery fuse is blown.

**FAULT: Cables mixed COM-loop**

The two wires L (SA) and C (SB) have been mixed (alternated). Check so that the wire connections are correct (according to drawing 128-21).

**FAULT: Charging ext. power supply**

The fault is to be found in the external power supply equipment. A fault output is connected to a programmable input in the EBL128 system. Check the input as well.

**FAULT: Charging, techn addr xxx**

This is valid for an external power supply (e.g. 3366) connected on the COM loop.

The battery charging function is not working all right. The charger board (3367) may have to be replaced.

**FAULT: Checksum system program**

A fault in the EBL128 S/W. This is very serious. Call for service personnel / engineer immediately.

**FAULT: Cut-off SCI n <-> SCI n**

**This fault is indicating a cut-off (break) on the loop or that the COM loop voltage is too low at the end of the loop (i.e. < 12 V DC).**

SCI n <->SCI n describes between which Short Circuit Isolators (SCI:s) the cut-off is located.

n = A, B, 0, 1, 2, 3, 4, 5, 6 or 7. A & B is the built-in isolator in the EBL128 A-direction and B-direction respectively, i.e. if no SCI (4370) is used the information will always be: SCI A <-> SCI B.

If one SCI (4370 no. 0) is used, the information will be:

SCI A <-> SCI 0 or SCI 0 <-> SCI B

...and so on.

If it is a single break (cut-off) on the loop there will be no other fault messages.

If there are several breaks on the loop the message shows the last isolator before the break in the A-direction (incl. the following isolator). There will also be a "FAULT: No reply ....." message for each unit that EBL128 can not find and "FAULT: Several faults ...".

**NOTE!** Each 10<sup>th</sup> minute a new attempt is made to communicate in the A-direction only.

When the breaks are repaired (corrected) the communication

automatically returns to communicate in the A-direction only.<sup>41</sup>

FAULT: Earth fault (minus)

FAULT: Earth fault (plus)

Earth fault is detected. The system voltage is normally 24 V DC. +24 V to earth is normally 12.5 V. 0 V to earth is normally 11.5 V. Voltage to earth < 3.4 V = Earth fault (minus). Voltage to earth > 18.3 V = Earth fault (plus). Check all cables (for damage, etc.). The function can not be guaranteed. Call for service personnel/engineer.

FAULT: Earth fault, techn address xxx

This is valid for an external power supply (e.g. 3366) connected on the COM loop. Check all cables connected to the unit.

FAULT: EPU x

EPU=1728. (Ext. Presentation Unit)

The unit is programmed as another type of unit than the SSD says or a faulty unit.

FAULT: Expansion board x

Valid for the 8 zones exp. board 4580 and the 8 relays exp. board 4581 mounted in the c.i.e. (EBL128).

Internal fault on the board and it has probably to be replaced.

FAULT: External fuses

The fault is to be found in the external power supply (blown fuses, etc.). A fault output is connected to a programmable input in the EBL128 system. Check the input as well.

FAULT: External power supply

The fault is to be found in the external power supply. A fault output is connected to a programmable input in the EBL128 system. Check the

---

<sup>41</sup> The fault has to be acknowledged and it can last up to 10 minutes before the communication returns to communicate in the A-direction only.

input as well.

**FAULT: Factory settings**

The fault has to do with the battery charging accuracy. The main board has to be replaced relatively soon in order to keep the batteries fully charged.

**FAULT: FBP x**

FBP=1826 / 1828 (Ext. Fire Brigade Panel)

The ext. FBP is programmed as another type of unit than the SSD says or a faulty unit.

**FAULT: Fuse on COM-loop**

The fuse is not replaceable. More components might also be broken. The main board has to be replaced.

**FAULT: High current consumption in CU**

EBL128 current consumption, including battery charging, is over 1.8 A, and because of this, the battery charging is turned off. Normally this fault only appears when starting up / expanding an EBL128.

**FAULT: Interlocking input AA/PP**

An interlocking input is not activated within the time set for fault activation (5-255 seconds). The time is counted from the activation of the output (in the interlocking combination, area / point).

**FAULT: Key cabinet**

The key cabinet has been opened without a prior fire alarm (i.e. somebody has opened the key cabinet illegally).

or

The key cabinet has not been closed within 5 minutes after reset of all fire alarms.

**FAULT: Loop unit xx-xx**



Press "→" to see the technical address.

FAULT: Loop unit techn. address xxx ←

The communication with the unit is not all right, i.e. the unit is out of order / faulty.

For detector types 33xx / 43xx (in NORMAL mode): The built-in self verification function has reported a fault status.

FAULT: Low battery capacity

Battery voltage < 21.9 V. The battery is presumably too old.

FAULT: Low mains

- Mains voltage below 187 V AC. Blown fuse (230 V AC) or no voltage.
- Rectifier voltage below 21 V DC. Fuse F1 on the main board might be blown.

FAULT: Low voltage

System voltage < 21 V DC.

FAULT: Low voltage, techn address xxx

This is valid for an external power supply (e.g. 3366) connected on the COM loop. The power output is turned off because the unit's internal voltage is < 19 V DC.

FAULT: Mains

- Loss of mains, i.e. no 230 V AC (the fault is activated after 1-300 minutes).<sup>42</sup>
- Blown fuse (230 V AC).

FAULT: Mains, external power supply

Loss of mains, i.e. no 230 V AC to the ext. power supply equipment (the fault is activated after 1-300 minutes).<sup>42</sup> Check 230 V AC fuses. A fault output is connected to a programmable input in the EBL128 system. Check the input as well.

---

<sup>42</sup> The time is programmable in Win128. Max. 30 min. according to the EN54-2 standard. Default value depending convention.



FAULT: Mains, techn address xxx

This is valid for an external power supply (e.g. 3366) connected on the COM loop.

- Loss of mains, i.e. no 230 V AC in the loop unit (the fault is activated after 1-300 minutes).<sup>43</sup>
- Blown fuse (230 V AC).

FAULT: No reply xx-xx →

Press "→" to see the technical address.

FAULT: No reply techn. address xxx ←

In spite of communication in both directions (COM loop A-direction and B-direction), the unit can not be found.

- Check the unit's address (with the programming tool 3314).
- Faulty unit.
- Detector might be removed (un-plugged) from its base.
- Double break or short-circuit on the COM loop.  
(**Note!** There will also be a fault message "FAULT: Cut-off loop...." or "FAULT: Short-circuit loop....").

FAULT: No reply AAU x

AAU=1735 / 1736. (Alert Annunciation Unit)

EBL128 can not communicate with the unit. Check / edit the address and the S/W mode in the unit (or edit the SSD).

FAULT: No reply EPU x

EPU=1728. (Ext. Presentation Unit)

EBL128 can not communicate with the unit. Check / edit the address and the S/W mode in the unit (or edit the SSD).

FAULT: No reply, expansion board x

Valid for the 8 zones exp. board 4580 and the 8 relays exp. board 4581 mounted in the c.i.e. (EBL128).

EBL128 can not communicate with the board. Check / edit the address. Check the ribbon cable / connections.

<sup>43</sup> The time is programmable in Win128. Max. 30 min. according to the EN54-2 standard. Default value depending convention.

**FAULT: No reply FBP x**

FBP=1826 / 1828. (Ext. Fire Brigade Panel)

EBL128 can not communicate with the unit. Check / edit the address and the S/W mode in the unit (or edit the SSD).

**FAULT: Read/write site data (SSW)**

Some external influence has caused a fault in the SSW (the data that is changed during operation, i.e. sensor values, access codes, etc.). This is very serious. Call for service personnel / engineer immediately.

**FAULT: Restart, code xx addr yyyyyyyyyyy**

C.i.e. (EBL128) restart has occurred. See also page 58.

- xx=00: Power up Restart. (Power supply connected)**
- xx=01: Watchdog Reset.
- xx=02: Accidental jump to reset vector.
- xx=03: Restart after SSD / Software / text file download**
- xx=04-19: Unexpected interrupt.
- xx=20: S/W monitoring fault

**NOTE!**

**xx=00 and 03 are normal.** Only acknowledge the "fault".  
xx=01, 02 or 04-20 appearing often: call for service personnel / engineer.  
yy...y = memory address (before restart). Write down the address and inform the service personnel/engineer.

**FAULT: Several faults on COM-loop**

Two breaks (cut-offs) **or** two short-circuits **or** one break + one short-circuit on the loop.

First correct the presented fault and the next fault will be presented.

**FAULT: Short-circuit, internal COM-loop**

Short-circuit on the connection (ribbon cable) to or between the expansion boards (458x) in the c.i.e. (EBL128).

**FAULT: Short-circuit SCI n <-> SCI n**

SCI **n** <-> SCI **n** describes between which Short Circuit Isolators (SCI:s) the short-circuit is located.

**n** = A, B, 0, 1, 2, 3, 4, 5, 6 or 7. A & B is the built-in isolator in the EBL128 A-direction and B-direction respectively, i.e. if no SCI (4370) is used the information will always be: SCI **A** <-> SCI **B**. If one SCI (4370 no. 0) is used, the information will be: SCI **A** <-> SCI **0** or SCI **0** <-> SCI **B** ...and so on.

There will also be a "FAULT: No reply ....." message for each unit that EBL128 can not find.

If there are several short-circuits on the loop the message shows the last isolator before the break in the A-direction (incl. the following isolator). There will also be shown "FAULT: Several faults ...".

**NOTE!** Each 10<sup>th</sup> minute a new attempt is made to communicate in the A-direction only.

When the short-circuits are repaired (corrected) the communication automatically returns to communicate in the A-direction only.<sup>44</sup>

**FAULT: Site specific data (SSD)**

The Site Specific Data (SSD) is not downloaded correctly (a checksum fault, etc.). A new SSD download (via Win128) is required. If the fault can not corrected it is very serious. Call for service personnel / engineer immediately.

**FAULT: Site specific data (SSD), AAU x**

AAU=1735 / 1736 (Alert Annunciation Unit)

There is no SSD (Site Specific Data) downloaded to the unit or something is wrong in the downloaded SSD.

**FAULT: Site specific data (SSD), EPU x**

EPU=1728 (Ext. Presentation Unit)

There is no SSD (Site Specific Data) downloaded to the unit or something is wrong in the downloaded SSD.

**FAULT: Site specific data (SSD), FBP x**

<sup>44</sup> The fault has to be acknowledged and it can last up to 10 minutes before the communication returns to communicate in the A-direction only.

FBP=1826 / 1828 (Ext. Fire Brigade Panel)

There is no SSD (Site Specific Data) downloaded to the unit or something is wrong in the downloaded SSD.

**FAULT: Output Sx**

This is valid for the EBL128 voltage outputs S0 and S1.

If the output is programmed for sounders (type 3 = alarm devices), it is also indicated by LED "**Fault / Disablements** Alarm devices" (L13) blinking.

If the output is programmed for fire brigade tx (type 4 = routing equipment), it is also indicated by LED "**Fault / Disablements** Fire brigade tx" (L15) blinking.

- Calibration not performed via menu H5/A3.
- Short-circuit / break on the connected cable / equipment.
- Connected equipment might be "stolen".
- End-of-line capacitor(s) missing or not correct value (see drawing 128-22).

**NOTE!** The calibrated value has to be in the range 470 nF – 5 x 470 nF (2350 nF).

**FAULT: Output x, techn addr xxx**

This is valid for COM loop output unit outputs.

If the output is programmed for sounders (type 3 = alarm devices), it is also indicated by LED "**Fault / Disablements** Alarm devices" (L13) blinking.

If the output is programmed for fire brigade tx (type 4 = routing equipment), it is also indicated by LED "**Fault / Disablements** Fire brigade tx" (L15) blinking.

- Calibration not performed via menu H5/A3.
- Short-circuit / break on the connected cable / equipment.
- Connected equipment might be "stolen".
- End-of-line capacitor(s) missing or not correct value (see drawing 128-28).

**NOTE!** The calibrated value has to be in the range 470 nF – 5 x 470 nF (2350 nF).

**FAULT: Wrong type, expansion board x**

Valid for the 8 zones exp. board 4580 and the 8 relays exp. board 4581 mounted in the c.i.e. (EBL128).

The board is not the same type as programmed in the SSD. Change the programming (via Win128) **or** the board.

FAULT: Wrong type of unit xx-xx

Press "→" to see the technical address.

FAULT: Wrong type of unit t.addr xxx

The unit is not the same type as programmed in the SSD. Change the programming (via Win128) **or** the unit.

FAULT: Zone line input xx-xx

Press "→" to see the technical address or the expansion board (4580) number and input number.

FAULT: Zone line input t.addr xxx

FAULT: Zone line input x exp board x

**a.** Valid for the Multi purpose I/O unit 3361, connected on the COM loop, monitored zone line input Z: Break on the zone line or wrong / no end-of-line capacitor / short-circuit (if not programmed for fire alarm at short-circuit).

**b.** Valid for the 8 zones exp. board 4580, mounted in the c.i.e. (EBL128): Break on the zone line, wrong / no end-of-line capacitor / short-circuit (if not programmed for fire alarm at short-circuit). .

(User programmable fault text; External fault)

A programmable input is used for an external fault to be presented in EBL128 with a fault message.

## 16.2 Fault acknowledge

The LEDs "Fault tx activated" (L11) and "General fault" (L7) are turned ON.

(LEDs "**Fault / Disabling**s Alarm devices" (L13), "System fault" (L14) and/or "**Fault / Disabling**s Fire brigade tx" (L15) might be turned ON as well.

Output for routing equipment (Fault tx) is activated.

Output for general fault is activated.

Output for general charge fault might be activated.

A fault message, date and time, is shown in the EBL128 display.

After the time might be shown "**More faults**" = more than one fault is generated.

After the time might be shown "**Serviced**" = the fault is already serviced / corrected.

- Login, according to chapter "Access", page 62.
- Use **menu H6** (access code for level 2B required) for fault acknowledge, see chapter "Acknowledge FAULTS (H6)", page 98. Menu H6 is a list showing a maximum of 100 faults (not acknowledged faults and/or acknowledged but not corrected faults). The first fault in the list is the most recent fault. When a fault is acknowledged and corrected it will be removed from the list (and a new fault can be shown, if there are more than 100). Corrected faults are shown in the event log (menu H4/U5).
- All faults have to be individually acknowledged one by one (push button "Fault acknowledge" (P6)). Use ↑ or ↓ keys to scroll.
- If a fault has been serviced / corrected before it has been acknowledged, the text "**Serviced**" is added after the time. It still has to be acknowledged.
- When a fault is corrected and acknowledged, it will disappear from the list (H6).
- When **all** faults have been acknowledged, the LED "Fault tx activated" (L11) will be turned off and output for routing equipment (Fault tx) is "reset" (as in normal operation).
- As long as there are faults (not acknowledged faults and/or acknowledged but not corrected faults) the LED "General fault" (L7) will be lit and general fault (and maybe general charge fault) output(s) are activated.

---

## 17 Commissioning an EBL128

---

Before you connect any power to EBL128 all other cable connections shall be made. Check, once more, that the connections are correct.

1. Remove the rectifier (power supply) fuse (F1) and the battery fuse (F2) on the main board (or the fuse between the batteries).
2. Connect the batteries to the main board.
3. Connect the rectifier to the mains (230 V AC).
4. Put back the rectifier fuse (F1) on the main board.<sup>45</sup>
5. Put back the battery fuse.
6. LED "Operation" (L6) indicates that the 24 V DC power supply (rectifier and/or battery) is okay.
7. An automatic restart will now take place (see chapter "Restart", page 58).
8. The site specific data (SSD) is now to be downloaded, see chapter "SSD programming & download", page 54.

See also chapter "Calibration of supervised outputs (H5/A3)", page 90.

---

<sup>45</sup> If a lot of units (especially units with high internal capacitance) are connected to EBL128, the total momentary inrush current consumption for these units might be too high for the power supply's electronic short circuit protection and EBL128 will not start working properly. In such a case, put back the battery fuse before the rectifier fuse (i.e. the batteries have to be reasonably charged) or temporarily disconnect some of the units in order to reduce the current consumption while EBL128 is powered.

## 18 SSD programming & download

The Site Specific Data (SSD) for an installation is created (programmed) via the PC program **Win128**, which also is used to download the SSD into the EBL128 c.i.e. and/or 1728, 1735 / 1736 & 1826 / 1828 units. The SSD will be saved in a file named **xxxxx.Win128**.<sup>46</sup>

### 18.1 SSD programming

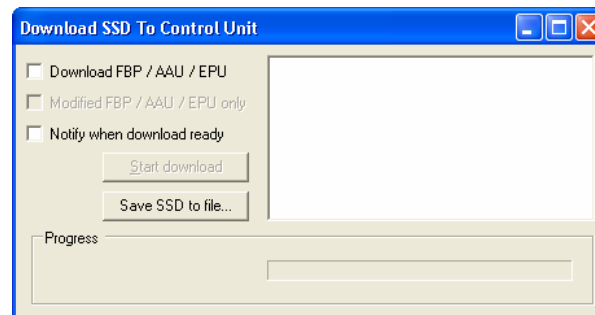
The SSD programming can be made "in your office" and afterwards be downloaded to EBL128 on site.

### 18.2 Auto generating SSD

If you are on site, the **Auto generate** function can be used to create the SSD. Open a new installation in Win128, connect the PC to the RS232 connector J3 in EBL128 (on the main board) and log on.<sup>47</sup> In "Tools" menu select "Auto generate...". The COM loop units<sup>48</sup> and the FBP/AAU units connected to EBL128, will now be identified and listed in Win128, i.e. the SSD will be auto generated with default settings for all units. Save the installation (SSD). The SSD can be downloaded (see below) to EBL128 directly or be edited before the download.

### 18.3 SSD download

The PC with Win128 has to be connected to the RS232 connector J3 in EBL128 (on the main board). Open the wanted installation (xxxxx.Win128) and log on to EBL128.<sup>47</sup> In "Tools" menu select "Download SSD..." to open the dialog box.



Mark the required checkbox(es). Click "Start download". Information will be shown in the dialog box (progress bar) and in the display in EBL128:

<sup>46</sup> **xxxxx** = A suitable name of the installation.

<sup>47</sup> Access code for level 4 shall be entered via the PC (i.e. via Win128).

<sup>48</sup> Each unit have to be running i.e. be connected, power supplied and the address, mode etc. have to be set. **NOTE!** During this check the COM loop will be disconnected (disabled) and no alarms or faults can be activated. Disconnected COM loop is indicated by the LED "Disablements" (L8).



```
Download in progress.....  
.....
```

When the download is completed in a correct way, the following text message will be shown:

```
Download completed successfully.  
Control unit will now restart
```

Now, an automatic warm restart will take place (see chapter "Restart", page 58).

If the download was not completed or incorrect, the following text message will be shown:

```
Checksum fault in downloaded data.  
Control unit will now restart
```

Now, an automatic warm restart will take place (see chapter "Restart", page 58).

After the restart another text message will be shown in the display:

```
FAULT: Site specific data (SSD)  
Date: MM-DD Time: HH:MM
```

This text message means that the SSD have not been downloaded correctly, i.e. try to download the SSD once more.

## 18.4 Download of Alarm texts

When a fire alarm is activated (i.e. an addressable alarm point), the presentation number (Zone - Address) is shown on the first row in the EBL128 display and in any ext. FBP display.<sup>49</sup> On the second row is a user definable alarm text shown, if programmed. See also chapter "Fire alarm", page 29.

Each alarm point can have a unique text message. When several alarms are activated (in one or more zones) and only the zone numbers are shown, each zone can have a unique text message.

Each zone line input can have a unique text message.

The alarm texts will be printed out if an ext. FBP 1826 with a printer is connected.

All alarm texts, up to 40 alphanumeric characters each, are created and downloaded via **Win128**. See Planning Instructions, chapter "Alarm texts".

See also the Win128 help chapters (help topics), e.g. "Download" and the "Display unit menu" respectively.

---

<sup>49</sup> Also valid for the Ext. Presentation unit 1728 and the Alert Annunciation units 1735 / 1736.

## 19 Software (S/W) download

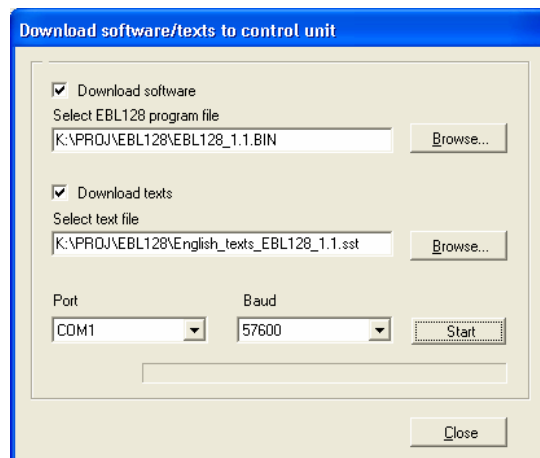
The latest version of the EBL128 software<sup>50</sup> is factory downloaded before the delivery. Due to continual development and improvement, different S/W versions can be found. A new S/W version can be downloaded via Win128, on site. The valid S/W version can be read in menu H3 or via Win128.

See also the Win128 help chapter (help topic) "Download Software".

### 19.1 Download of S/W in EBL128 (c.i.e.)

To download new software (S/W), a PC and **Win128** are used. Before download, the PC has to be connected to the RS232 connector J3 in EBL128 (on the main board).

1. Start Win128. Log on to EBL128. In the "Tools" menu select "Download Software..." to open the dialog box and do the required settings, i.e. mark the checkbox "Download software", select the path and the S/W file, e.g. EBL128\_V.V.bin. (V.V = version number, e.g. 1.1.)  
If also a text file<sup>51</sup> shall be downloaded do not forget to mark the checkbox "Download texts" and select the path and the text file, e.g. English\_texts\_EBL128\_V.V.sst).

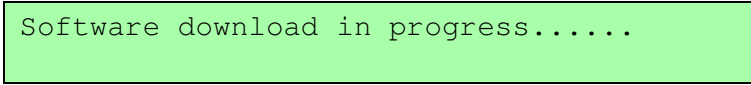


2. Select "Port" (on the PC) and baud rate. (If the download is not successful it might depend on to high baud rate.)
3. Start the download, i.e. click "Start". The download status is indicated in the progress bar. LED "Operation" (L6) will be turned off. LED "General fault" (L7) is indicating that EBL128 is in the so called "Boot mode". LEDs "Alarms queued" (L2) are

<sup>50</sup> Makes the microprocessor work.

<sup>51</sup> Normally a new text file will come together with a new S/W file. **NOTE!** Only a text file can be downloaded. If so, do not mark the checkbox "Download software".

indicating the Flash memory programming. In the EBL128 display is the following information shown:



Software download in progress.....

4. To the left of the progress bar is a "% indicator". It will show approx. 90 % when the download is ready and EBL128 will automatically do a restart.
5. After the restart the "% indicator" will show 100 %. Close the dialog box. Regarding the restart, see also chapter "Restart", page 58.
6. LED "Operation" (L6) will be turned on and LED "General fault" (L7) and LEDs "Alarms queued" (L2) will be turned off.

## 19.2 Earlier S/W version download

For some reason it might be required to download an earlier S/W version. The procedure is the same as for a new S/W.

## 19.3 S/W download in Display Units

New S/W for the 1728, 1735 / 1736 & 1826 / 1828 units can also be downloaded via Win128. The PC has to be connected to the RS232 connector "J2" in the unit respectively.

See the Win128 help chapter (help topic) "Display unit menu" and the "**Technical Description**" for the unit respectively.

## 20 Restart

---

A restart will delete or not delete the data in EBL128. Here follows an explanation of the different data, abbreviations and a table showing how the data respectively is affected (**cold** or **warm restart**).

**FF** = Fire alarms and **F**aults.

**D** = **D**isablements

**FFD** = Fire alarms, **F**aults and **D**isablements.

**SSW** = Sensor values, access codes, supervised output calibration values, log buffers and in some conventions the alarm counter.

**SSD** = **S**ite **S**pecific **D**ata, i.e. all the installation programming created and downloaded via Win128.

**S/W** = Software, i.e. the EBL128 system program.

**WASV** = **W**eek **A**verage **S**ensor **V**alues

**Safe shut down of control unit** (menu H8/S4) will save the SSW data (except the week average sensor values) in a Flash ROM **before you power off EBL128**. Before the first "Safe shut down" this memory is empty. After each "Safe shut down" the latest SSW data is saved. When EBL128 is powered up, the RAM (working memory) will, after the restart, read the SSW data saved in the Flash ROM.

**NOTE!** After any restart a new week average sensor value will be calculated within two minutes, for all the analog smoke detectors.<sup>52</sup> Thereafter a new average sensor value will be calculated each week.

Here follows a table describing different reset alternatives and how the data respectively is affected:

---

<sup>52</sup> During these two minutes all fire alarms from analog smoke detectors will be suppressed.

Action	Data, etc. which will be <u>deleted</u>	Data, etc. which will be <u>not deleted</u>	Restart code
<b>Power down</b> <sup>53</sup> and then <b>power up</b> again. ("Cold restart")	SSW FFD, WASV	SSD, S/W	00
<b>Via menu H8/S4</b> Safe shut down of control unit. ("Cold restart")	FFD, WASV	SSD, S/W, SSW	00 alt. 03
<b>Automatically</b> after <u>download of site specific data (SSD)</u> via a PC & Win128. (" <b>Warm restart</b> ")	FF, WASV	SSD, S/W, SSW D <sup>54</sup>	03
<b>Automatically</b> after <u>download of S/W or text file</u> via a PC & Win128. ("Cold restart")	FFD, WASV	SSD, S/W, SSW	00 alt. 03
<b>Automatically</b> due to <u>external disturbance</u> . <sup>55</sup> ("Cold restart")	FFD, WASV	SSD, S/W, SSW	01, 02 alt. 04-20

**NOTE!** During the restart, the Fault tx output will be "activated", the supervised 24 V DC outputs S0-S1 will be not supervised and S0-S1 programmed as normally high will be low for a few seconds.

During the "restart", no fire alarm can be activated and the buzzer will sound until the following text messages is show in the display:

```
*** EBL128 ***
Checking program memory.....
```

And for a second (if everything is all right, else see Memory fault below):

```
Booting.....
```

A **fault** is now generated and the following text message will be shown in the display:

```
FAULT: Restart code xx addr yyyy
Date: MM-DD Time: HH:MM
```

<sup>53</sup> Both rectifier and battery disconnected.

<sup>54</sup> All alarm points, zones, units, outputs, COM loop etc. that were disabled (disconnected) before a **warm restart** will remain disabled after the restart provided it was not removed in the new downloaded SSD. If removed, this disablement will be terminated.

<sup>55</sup> If this happens often, call for service personnel / engineer.

Regarding code **xx** and **yyyy**, see page 48. This fault is also indicated by LEDs "Fault tx activated" (L11) and "General fault" (L7).

After the fault is acknowledged (via menu H6), the LEDs will be turned OFF if there are no other faults.

After a "cold restart", required disablements have to be done.

#### Memory fault

In case of a fault in the S/W (system program) the following text message will be shown in the display:

```
Memory fault in program area: xxx
```

This is also indicated by LED "System fault" (L14) and the buzzer sounds steady (continuous). The Fault tx output is "activated".

A new download of the S/W (system program) is required.

**NOTE!** After **SSD download** (see chapter "SSD programming & download", page 54), the following messages might be shown:

```
Checksum fault in downloaded data.  
Control unit will now restart
```

```
FAULT: Restart code 03 addr yyyy  
Date: MM-DD Time: HH:MM Serviced
```

```
FAULT: Site specific data (SSD)  
Date: MM-DD Time: HH:MM
```

The last one means that the SSD have **not** been (correctly) downloaded. A new SSD download has to be performed.

## 20.1 Boot menu

The Boot menu should be used by **authorised personnel only!**

**NOTE!** Vital data can be erased via this menu.

The Boot menu is opened as follows:

Perform a "cold restart", i.e. Power down / power up EBL128:

The following text messages will be shown in the EBL128 display:

```
*** EBL128 ***  
Checking program memory.....
```

And after that, for a second:

```
Booting.....
```

When the text "Booting....." appears, press "**Access**" and 0.1 sec. later also press "**1**" and the **Boot menu** will be shown:

1:Restart, 2:Erase memory

Press "**1**" to perform a restart (you will also leave the Boot menu).

Press "**2**" to open the Erase memory menu, see below.

The Erase memory menu:

1 = SSD, 2 = SSW, 3 = Texts

Press "**1**" to erase the SSD memory.

Press "**2**" to erase the SSW memory.

Press "**3**" to erase the texts memory.

"Erasing SSD", "Erasing SSW" and "Erasing texts" respectively will be shown and then the Erase memory menu will be shown again.

Press "**Return**" to go back to the Boot menu.

**NOTE!** After erasing the SSW, perform a "Power down / power up" restart directly.

**NOTE!** All other alternatives are strictly forbidden to use. These are only for use at trouble shooting controlled by Panasonic personal.

## 21 Access

To use the key pad in EBL128 (to get access to the menu tree), it is necessary to log on with an access code for level 2B or 3A.

See also chapter "Access levels", page 18.

Open the EBL128 door (= level 2A), press the "Access" button (P8) and continue as follows:

Action	Text in display	Comments
"Access"	Access code: _	
Enter code for level 2B or 3A (four digits).	Access code: ****	The digits are replaced (****) in the display.
	NO ACCESS!	Wrong access code was entered. Try again.
	Perform monthly test ACCEPT? H1	Correct access code was entered. Menu H1 is shown. Press "A" to accept (to perform monthly test) <b>or</b> scroll / jump to the next menu (H2-H10).

### Explanations:

**Action** (in the table) = use push button / key (e.g. signed "Access").

**Text in display** (in the table) = what is shown in the display in EBL128 (c.i.e.).

**Comments** (in the table) = Comments to the text in the "Action" and "Text in display" columns.

Use "↑" and "↓" to scroll between the main menus H1-H10.  
 Use "A" to accept.

Some main menus have sub menus. Use "↑" and "↓" to scroll between the sub menus (e.g. B1-B10). Use "A" to accept.

**NOTE!** The menus are circular, i.e. if you scroll with "↓" and the last menu is reached, the first menu comes up next. It is also possible to make "quick jumps" within each menu, e.g. in menu H1 press "6" for a quick jump to menu H6. ("0" = menu H10).

Instead of a menu identification (e.g. B1), the letter L can be shown, which means that it is a List. Use "↑" and "↓" to scroll in the list.

If ← or → is shown in a menu, use "←" or "→" to get more information.

Use "←" and "→" to move the cursor in a menu.

Use "Return" to return from a sub menu to the main menu (H1-H10).

Use "Return" to log off from a main menu (H1-H10).

There will be an automatic log off 60 minutes after the last action (i.e. if the key pad / push buttons have not been used for 60 min.).



## 22 Perform monthly test (H1)

EBL128 and the installation shall be tested on a regular basis. If one twelfth of the alarm points are tested each month, the whole installation will be tested after one year.

In test mode, only the alarm points are tested, i.e. no outputs (no sounders) will be activated during the test. (Alarm devices can be tested via menu H8/S3.)

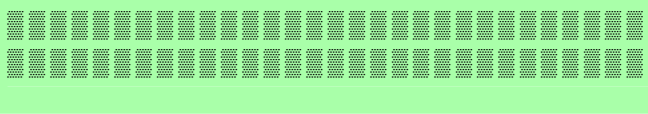
If a real fire alarm is activated by **an alarm point not in test mode**, the normal fire alarm functions will be activated, i.e. fire alarm presentation, outputs (sounders) activated, routing equipment (fire brigade tx) activated, etc. **but the zone(s) in test mode will remain in test mode until the test mode is ended.** During the fire alarm the zone(s) in test mode can be displayed via menu X3, see chapter "Display disablements (X3)", page 32.

See also chapter "The display in EBL128", page 17.

**NOTE!** If the EBL128 door is left open, the output(s) for routing equipment (fire brigade tx) might be disabled (if set so in Win128).

There will be an automatic ending of the test mode one hour after the latest tested alarm point / zone.

See also chapter "Perform ZONE TEST (test mode) (H7)", page 99.

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
	Perform monthly test ACCEPT? H1	
"A"	Check that all LEDs light up! ACCEPT	
"A"		The buzzer (in EBL128) sounds and all dots in the display are shown for 3 seconds.
	Zone to be set in TEST MODE: <u>?</u> ? ?? ?? ?? Start test: ACCEPT	NOTE! In Danish (DBI) convention, only one zone.
Write zone numbers (e.g. 01, 02, 03, 04)	Zone to be set in TEST MODE: 01 02 03 04 Start test: ACCEPT	Press "A" to start the test mode.
"A"	Zones are set in test mode wait....	LED "Test mode" (L9) will light up.
	Zone in TEST MODE: 01 02 03 04 End test: ACCEPT	Perform the tests.

**The zone(s) will stay in test mode until the test mode is ended but after 60 minutes or if you press**

<p>"Return" two times, you will be logged out from menu H1.</p> <p>Perform the test as quickly as possible, since the output(s) for routing equipment (fire brigade tx) are disabled (also the parts of the zones in test mode, not visible for the test personnel, are disabled).</p> <p>In order to shorten the testing time, any time delay for the detectors / zones in test mode will be "disabled", i.e. fire alarm will be detected faster than normally.</p> <p>In the tested alarm point, the LED will light up, and the LEDs "Fire" (L1) in EBL128 will light up, about ten seconds, then the alarm point will be automatically reset.</p> <p>A detector in test mode will <u>not</u> be able to activate fault.</p>		
After 60 minutes or "Return" "Return"	Zones in test mode: 01, 02, 03, 04  NOTE! See chapter "The display in EBL128", page 17 regarding priority order.	You are no longer in menu H1 but still in test mode.
(When required: "Access", "code")  "A"	Zone in TEST MODE: 01 02 03 04      End test: ACCEPT	Press "A" to end the test mode.
"A"	Test of routing equipment? <u>0</u> (1 = Yes, 0 = No)      ACCEPT	The LED "Test mode" is turned OFF.
<p>Some national regulations also require a <u>routine test of the routing equipment</u>. Press "A" for no test or press "1" and "A" to start such a test. The following will happen:</p> <ul style="list-style-type: none"> <li>• EBL128 "Fault tx" output will be de-activated<sup>56</sup>, indicated by the LED "Fault tx activated" (L11). A 60 seconds count-down starts.</li> <li>• After 30 seconds, EBL128 "Fire brigade tx" output (and corresponding programmable outputs type 4 = routing equipment) will be activated as well, indicated by the LED "Fire brigade tx" (L15).</li> <li>• After another 30 seconds, the test will be ended and all the outputs and LEDs will return to "normal".</li> </ul>		
"1", "A"	Test of routing equipment in progress. nn seconds left.	"nn" starts at 60 and will count down to 00.
	Monthly test is completed! ACCEPT	
"A"	Perform monthly test ACCEPT? H1	Scroll or press "Return" to log off.

<sup>56</sup> **NOTE!** This output is activated in normal state.

## 23 Disable or re-enable (H2)

---

A whole zone, one or more alarm points within a zone and/or control outputs can be disabled via menus H2/B1-B3. This possibility can be used when a temporary disablement is wanted (e.g. craftsmen working in the premises, etc.).

A disabled alarm point will not activate Pre-warning, fire alarm or fault.

Addressable manual call points can be disabled when required but shall normally not be disabled.

**NOTE!** When a whole zone is disabled also the addressable manual call points will be disabled.

- **Zones 01-32** can be disabled via menu H2/B1.
- **All alarm points** (zone / address) can be **individually** disabled via menu H2/B2.
- **All outputs** can be **individually** disabled via menu H2/B3. Disabled output will stay in (or return to) the normal condition for the output respectively.

**NOTE!**

- **All Interlocking outputs** can be **individually** disabled via menu H9/C4.
- The **COM loop** can be disabled via menu H5/A1.
- A **zone line input** can be disabled via menu H5/A2.

**Don't forget to re-enable** (via menus H2/B4-B9) or use automatic re-enablement for zones and alarm points.

Disablements are indicated by LED "Disablements" (L8) and are also shown in the display<sup>57</sup>. An example:

A screenshot of a display with a light green background. The text 'Zone 01 is disabled' is on the left, and 'More...' is on the right.

**More...** is indicating two or more disablements.

Disablements (and faults) are indicated by a 2-sec. beep when an open EBL128 door is being closed.

### 23.1 Disable zone (H2/B1)

When a whole zone is disabled, all alarm points within the zone are disabled including the addressable manual call points.

All zones can be disabled. Disabled zones are listed in menu H4/U1.

Disabled zones can be automatically re-enabled or they have to be re-enabled via menu H2/B5.

---

<sup>57</sup> See chapter "The display in EBL128", page 17 regarding priority order.

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H2.	Disable or re-enable  ACCEPT? H2	
"A"	Disable zone  ACCEPT? B1	
"A"	Disable zone: <u>00</u>  ACCEPT?	
Write zone number (e.g. 01)	Disable zone: 01  ACCEPT?	Press "A" to accept.
"A"	Automatic re-enabling: <u>0</u> (0=No, 1=Yes) Time: HH:MM  (Default is current time + 3 hours)  ACCEPT?	Press "1" for aut. re-enabling and accept or change the time (max. 24 hours). Press "A" to accept. LED "Disablenents" (L8) will light up.
"A"	Disable zone: <u>00</u>  ACCEPT?	If more disablements shall be done, continue like above. If not, press "Return" to menu B1. Scroll or press "Return" to menu H2. Scroll or press "Return" to log off.

## 23.2 Disable zone / address (H2/B2)

All addressable alarm points (also addressable manual call points), connected to the COM loop, can be individually disabled.

Disabled alarm points (zone – address) are listed in menu H4/U1.

Disabled alarm points (zone – address) can be automatically re-enabled or they have to be re-enabled via menu H2/B6.

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H2.	Disable or re-enable ACCEPT? H2	
"A"	Disable zone ACCEPT? B1	
Scroll to menu B2.	Disable zone / address ACCEPT? B2	
"A"	Disable zone: <u>00</u> Address: 00 ACCEPT?	
Write zone number and address (e.g. 01 - 01)	Disable zone: 01 Address: 01 ACCEPT?	Press "A" to accept.
"A"	Automatic re-enabling: <u>0</u> (0=No, 1=Yes) Time: HH:MM ACCEPT? <i>(Default is current time + 3 hours)</i>	Press "1" for aut. re-enabling and accept or change the time (max. 24 hours). Press "A" to accept. LED "Disablesments" (L8) will light up.
"A"	Disable zone: <u>00</u> Address: 00 ACCEPT?	If more disablesments shall be done, continue like above. If not, press "Return" to menu B2. Scroll or press "Return" to menu H2. Scroll or press "Return" to log off.

## 23.3 Disable output (H2/B3)

Control outputs can be individually disabled. Disabled output will stay in (or return to) the normal condition for the output respectively.

Disabled outputs are listed in menu H4/U1.

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H2.	Disable or re-enable ACCEPT? H2	
"A"	Disable zone ACCEPT? B1	
Scroll to menu B3.	Disable output ACCEPT? B3	
"A"	Disable output: Type: <u>0</u> 0=Loop unit 1=S 2=R0 3=RE ACCEPT?	Press: "0"=MIO (3361) or ASI (3377) or ASB (3378) or AOU (3364) "1"=C.i.e. output S0-S1 "2"=C.i.e. output R0 "3"=C.i.e. exp. board relay output. <sup>58</sup> Press "A" to accept.
"A" Depending on the chosen type, 0, 1, 2 or 3 the following will be shown:	Disable technical address <u>000</u> output 0 ACCEPT? Disable <u>S0</u> ACCEPT? Disable R0 ACCEPT? Disable relay board <u>0</u> output 0 ACCEPT?	Regarding the ASI (3377) & ASB (3378) unit outputs: 0=high priority 1=low priority Write the data. Press "A" to accept. LED "Disablesments" (L8) will light up.
"A"	Disable output: Type: <u>0</u> 0=Loop unit 1=S 2=R0 3=RE ACCEPT?	If more disablesments shall be done, continue like above. If not, press "Return" to menu B3. Scroll or press "Return" to menu H2. Scroll or press "Return" to log off.

<sup>58</sup> Relay board 0-1. Relay output 0-7.

## 23.4 Disable all control, extinguishing, ventilation and alarm device outputs (H2/B4)

Outputs programmed as type 0 = control (general), type 1 = fire ventilation, type 2 = extinguishing system and type 3 = alarm devices can for the type respectively be disabled all at the same time. **Disabled output** means that even if the control expression (trigger condition) for the output respectively is fulfilled, the output will not be activated. Disabled outputs are shown in menu H4/U1.

**The outputs will be disabled until re-enabled again** (via H2/B8).

**NOTE!** This function for alarm devices is **not** the same as push button "Silence alarm devices" (P3), see chapter "Silence Alarm devices", page 22. This function has higher priority than "Silence alarm devices".

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H2.	Disable or re-enable ACCEPT? H2	
"A"	Disable zone ACCEPT? B1	
Scroll to menu B4.	Disable all control, exting, ventilation or alarm device outputs ACCEPT? B4	
"A"	Disable type of output: <u>0</u> 0=control 1=exting 2=ventilation 3=alarm      ACCEPT?	Press: "0"=control output "1"=extinguishing output "2"=ventilation output "3"=alarm devise output. Press "A" to accept.
"A" Depending on the chosen type, 0, 1, 2 or 3 the following will be shown:	Disable all control outputs ACCEPT?	Press "A" to accept. LED "Disablesments" (L8) will light up. If type 3 = alarm devices are disabled also the LED <b>"Fault / Disablesments Alarm devices"</b> (L13) will light up.
	Disable all extinguishing outputs ACCEPT?	
	Disable all ventilation outputs ACCEPT?	
	Disable all alarm device outputs ACCEPT?	
"A"	Disable type of output: <u>0</u> 0=control 1=exting 2=ventilation 3=alarm      ACCEPT?	Press "0", "1", "2" or "3" and press "A" to accept or "Return" to menu B4.
"Return"	Disable all control, exting, ventilation or alarm device outputs ACCEPT? B4	Scroll or press "Return" to menu H2. Scroll or press "Return" to log off.

## 23.5 Re-enable zone (H2/B5)

Disabled zones are listed in menu H4/U1.

Re-enabling via this menu has higher priority than automatic re-enabling.

Zones disabled via the "Encapsulation function", see chapter "Single encapsulated reset" page 38, have to be re-enabled via this menu before they can activate a new alarm.

When all zones have been re-enabled, the LED "Disables" (L8) will be turned OFF, if there are no other disablements.

**NOTE!** It is not possible to collectively re-enable a number of alarm points that have been individually disabled via menu H2/B2.

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H2.	Disable or re-enable ACCEPT? H2	
"A"	Disable zone ACCEPT? B1	
Scroll to menu B5.	Re-enable zone ACCEPT? B5	
"A"	Re-enable zone: 00 ACCEPT? L	If there are no zones to re-enable, menu B5 will be shown again. L=a list in which you can scroll. If it's the correct zone to re-enable, press "A" to accept. If not, scroll or write the wanted zone and press "A" to accept.
"A"	Re-enable zone ACCEPT? B5	If more re-enablements shall be done, continue like above. If not, scroll or press "Return" to menu H2. Scroll or press "Return" to log off.



## 23.6 Re-enable zone / address (H2/B6)

Disabled alarm points (zone – address) are listed in menu H4/U1.

Re-enabling via this menu has higher priority than automatic re-enabling.

Alarm points disabled via the "Encapsulation function", see chapter "Single encapsulated reset" page 38, have to be re-enabled via this menu before they can activate a new alarm.

When all alarm points have been re-enabled, the LED "Disablesments" (L8) will be turned OFF, if there are no other disablesments.

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H2:	Disable or re-enable ACCEPT? H2	
"A"	Disable zone ACCEPT? B1	
Scroll to menu B6.	Re-enable zone / address ACCEPT? B6	
"A"	Re-enable zone: <u>00</u> Address: 00 ACCEPT? L	If there are no zone - addresses to re-enable, menu B6 will be shown again. L=a list in which you can scroll. If it's the correct zone - address to re-enable, press "A" to accept. If not, scroll or write the wanted zone - address and press "A" to accept.
"A"	Re-enable zone / address ACCEPT? B6	If more re-enabements shall be done, continue like above. If not, scroll or press "Return" to menu H2. Scroll or press "Return" to log off.

## 23.7 Re-enable output (H2/B7)

Disabled outputs are listed in menu H4/U1.

When all outputs have been re-enabled, the LED "Disablesments" (L8) will be turned OFF, if there are no other disablesments.

When all outputs type 3 = alarm devices have been re-enabled, the LED "**Fault / Disablesments Alarm devices**" (L13) will be turned OFF.

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H2.	Disable or re-enable ACCEPT? H2	
"A"	Disable zone ACCEPT? B1	
Scroll to menu B7.	Re-enable output ACCEPT? B7	
"A"	Re-enable output: <u>0</u> 0=Loop unit 1=S 2=R0 3=RE ACCEPT?	Press: "0"=MIO (3361) or ASI (3377) or ASB (3378) or AOU (3364) "1"=C.i.e. output S0-S1 "2"=C.i.e. output R0 "3"=C.i.e. exp. board relay output. <sup>59</sup> Press "A" to accept.
"A" Depending on the chosen type, 0, 1, 2 or 3 the following will be shown:	Re-enable technical address <u>000</u> output <u>0</u> ACCEPT? L Re-enable <u>S0</u> ACCEPT? L Re-enable <u>R0</u> ACCEPT? L Re-enable relay board <u>0</u> output <u>0</u> ACCEPT? L	If there are no outputs to re-enable, menu B7 will be shown again. L=a list in which you can scroll. Regarding the ASI (3377) & ASB (3378) unit outputs: 0=high priority 1=low priority If it's the correct output to re-enable, press "A" to accept. If not, scroll or write the wanted output and press "A" to accept.

<sup>59</sup> Relay board 0-1. Relay output 0-7.

"A"	Re-enable output: <u>0</u> 0=Loop unit 1=S 2=R0 3=RE      ACCEPT?	If more re-enablements shall be done, continue like above. If not, press "Return" to menu B7. Scroll or press "Return" to menu H2. Scroll or press "Return" to log off.
-----	--	---

## 23.8 Re-enable all control, extinguishing, ventilation or alarm device outputs (H2/B8)

Disabled outputs are listed in menu H4/U1.

When all outputs have been re-enabled, the LED "Disablesments" (L8) will be turned OFF, if there are no other disablesments.

When all outputs type 3 = alarm devices have been re-enabled, the LED "**Fault / Disablesments** Alarm devices" (L13) will be turned OFF.

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H2.	Disable or re-enable ACCEPT? H2	
"A"	Disable zone ACCEPT? B1	
Scroll to menu B8.	Re-enable all control, exting, ventil or alarm device outputs ACCEPT? B8	
"A"	Re-enable type of output: <u>0</u> 0=control 1=exting 2=ventilation 3=alarm ACCEPT?	Press: "0"=control output "1"=extinguishing output "2"=ventilation output "3"=alarm devise output. Press "A" to accept.
"A" Depending on the chosen type, 0, 1, 2 or 3 the following will be shown:	Re-enable all control outputs ACCEPT?	Press "A" to accept. LED "Disablesments" (L8) will turned off. If type 3 = alarm devices are re-enabled also the LED " <b>Fault / Disablesments</b> Alarm devices" (L13) will be turned off.
	Re-enable all extinguishing outputs ACCEPT?	
	Re-enable all ventilation outputs ACCEPT?	
	Re-enable all alarm device outputs ACCEPT?	
"A"	Re-enable type of output: <u>0</u> 0=control 1=exting 2=ventilation 3=alarm ACCEPT?	Press "0", "1", "2" or "3" and press "A" to accept or "Return" to menu B4.
"Return"	Re-enable all control, exting, ventil or alarm device outputs ACCEPT? B8	Scroll or press "Return" to menu H2. Scroll or press "Return" to log off.

## 23.9 Disable or re-enable outputs for routing equipment (H2/B9)

Disabled outputs are listed in menu H4/U1.

Outputs for routing equipment (fire brigade tx / fault tx) can be disabled and re-enabled via this menu. Disabled output will stay disabled, until re-enabled again via this menu. Can be useful during an installation and test period, when only local alarms are required.

Disabled output is indicated by LEDs "Disabling" (L8) and "**Fault / Disabling** Fire brigade tx" (L15).

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H2.	Disable or re-enable ACCEPT? H2	
"A"	Disable zone ACCEPT? B1	
Scroll to menu B9	Disable or re-enable outputs for routing equipment ACCEPT? B9	
"A"	Routing equipment for FIRE:1, FAULT:1 (1=enabled, 0=disabled) ACCEPT?	To move the cursor, press "→". Edit and/or press "A" to accept.
"A"	Disable or re-enable outputs for routing equipment ACCEPT? B9	Scroll or press "Return" to return to H2. Scroll or press "Return" to log off.

## 23.10 De-activate alert annunciation function (H2/B10)

### Normal function (1):

For alarm points / zones programmed for Alert Annunciation (via Win128) is normally the AA function enabled via a time channel, e.g. enabled daytime (during working hours) and disabled night time. As an alternative, the AA function can be continuously enabled.

### Off (0)

Via this menu (H2/B10) it is possible to de-activate (disable) the AA function, i.e. the AA function will be disabled for the alarm points / zones programmed for Alert Annunciation in spite of the time channel is "on" or if they are programmed to be continuously enabled.

The AA function will stay de-activated (disabled) until re-activated (re-enabled) again via this menu.

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H2.	Disable or re-enable ACCEPT? H2	
"A"	Disable zone ACCEPT? B1	
Scroll to menu B10.	De-activate alert annunciation function ACCEPT? B10	
"A"	Alert annunciation function? <u>1</u> (1 = Normal, 0 = Off) ACCEPT?	Write "0" or "1" and press "A" to accept.
"A"	De-activate alert annunciation function ACCEPT? B10	Scroll or press "Return" to menu H2. Scroll or press "Return" to log off.

## 24 Set calendar and clock (H3)

When required, the clock can be corrected, so that the "time stamps" for fire alarms, faults, etc. will be correct.

**NOTE!** The RTC component has no built-in battery, i.e. if EBL128 is out of power (no mains and no battery backup), the date, day of the week and time have to be set when EBL128 is powered-up again.

In this menu is also the S/W (system program) version shown.

**NOTE!** The information shown in the display will be saved when you press "A". **If you don't want to change anything** (e.g. if you only want to see the S/W version), **press "Return"** instead of "A" **to return to menu H3.**

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H3.	Set calendar and clock ACCEPT? H3	
"A"	Date: YY-MM-DD Time: hh:mm:ss Weekday:W (1=M, 7=S) VER:vvvvvvvvvvvvv	Here is the S/W version shown (e.g. VER: 1.0).  The time shown is the time when "A" was pressed (in menu H3). When required, edit the date, time and/or weekday. Press "A". <u>The "clock" starts again from the date, time, etc. shown in the display.</u> <b><u>NOTE! Press "Return" (instead of "A") to return to menu H3 if no changes are to be done.</u></b>
"A" or "Return"	Set calendar and clock ACCEPT? H3	Scroll or press "Return" to log off.

## 25 Present system status on display (H4)

### 25.1 Disablement (H4/U1)

A list of all disablements (done via menu H2/Bx).

**NOTE!** Disablements by time channel(s) are listed in menu H4/U2.

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H4.	Present system status on display ACCEPT? H4	
"A"	Disablement U1	Press "A" for presentation in the display.
"A"	<p><i>When "A" is pressed, the disablements will be shown in the display. Some examples:</i></p> <p>Zone XX address XX disabled<sup>60</sup> L</p> <p>or</p> <p>Zone XX is disabled<sup>60</sup> L</p>	L = a list in which you can scroll. If there are no disablements and if "Return" is pressed, menu U1 will be shown again.
"Return"	Disablement U1	Scroll or press "Return" to menu H4. Scroll or press "Return" to log off.

<sup>60</sup> On this row can also be shown adding information, e.g.:

- Automatic re-enablement HH:MM
- (by open door in CU)



## 25.2 Disablement by time channel (H4/U2)

A list of all disablements by time channel(s).

**NOTE!** Other disablements are listed in menu H4/U1.

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H4.	Present system status on display ACCEPT? H4	
"A"	Disablement U1	
Scroll to menu U2.	Disablement by time channel U2	Press "A" for presentation in the display.
"A"	<i>When "A" is pressed, the disablements will be shown in the display, e.g:</i> Zone XX address XX disabled (by time channel) L	L = a list in which you can scroll. If there are no disablements and if "Return" is pressed, menu U2 will be shown again.
"Return"	Disablement by time channel U2	Scroll or press "Return" to menu H4. Scroll or press "Return" to log off.

When scrolling in the list the message "No more zone/addresses disabled by time channel found in the system" can be shown.

## 25.3 Sensor values (H4/U3)

The very first week average sensor value is calculated within 2 minutes after SSD download & restart. During these 2 minutes, fire alarm from analog smoke detectors are suppressed and the sensor value "000" will be shown.

The "Performance factor" and "Min. / Max." values are updated each night (00:00), i.e. the values shown are from the previous day.

		Text in display	Comments
"Access"			According to chapter "Access", see page 62.
Scroll to menu H4.		Present system status on display ACCEPT? H4	
"A"		Disablement U1	
Scroll to menu U3.		Sensor values U3	Press "A" to accept.
"A"		Start Sensor : <u>0</u> 0-00	Write the presentation number and/or press "A" to accept.
E.g: "01-01"  Depending on the type, the following will be shown (examples):	"A"	<b>Type 4301:</b> Sensor: 01-01 (technical address 001) Momentary: XX.X%/m Weekly: XX.X%/m	This is a list in which you can scroll or use "→" to see the next information window for the selected sensor. Press "Return" back to "Start Sensor...". Scroll or write a new presentation number or press "Return" to menu U3. <b>NOTE!</b> XX.X%/m = XX.X % obscuration per meter". Perf. Factor: see below this table. nnnnnn = algorithm short name, see separate table, page 81.
	"→"	Sensor: 01-01 Min: XX.X%/m Perf Factor: X.XX%/m Max: XX.X%/m	
	"→"	Sensor: 01-01 Current algorithm: nnnnnn	
	"A"	<b>Type 3308/3309:</b> Sensor: 01-02 (technical address 002) Momentary: XX°C Min: XX°C Max: XX°C	
	"→"	Sensor: 01-02 Current algorithm: nnnnnn	
	"A"	<b>Type 4300:</b> Sensor: 01-03 (technical address 003) Momentary: XX.X%/m Weekly: XX.X%/m	
	"→"	Sensor: 01-03 Min: XX.X%/m Perf Factor: X.XX%/m Max: XX.X%/m	
	"→"	Sensor: 01-03 Current algorithm: nnnnnn	

	"→"	Sensor: 01-03 (technical address 003) Momentary: XX°C Min: XX°C Max: XX°C	
	"→"	Sensor: 01-03 Current algorithm: nnnnnn	
"Return"		Start Sensor : 00-00	Write the presentation number and/or press "A" to accept or press "Return" to menu U3.
"Return"		Sensor values U3	Scroll or press "Return" to menu H4. Scroll or press "Return" to log off.

When scrolling the message "Please Wait...." might be shown for "a second" and "No more sensors found in the system" (before lowest and after highest possible number respectively).

**Perf. Factor** = Performance factor:

**Low** (min. 0) = The detector is mounted in a "stable" environment.

**High** (max. 2.55) = The detector is mounted in an "unstable" environment.

See also Planning Instructions, chapter "Performance factor".

Table showing the algorithms and the shortenings respectively:

Algorithm	Short name (nnnnn) <sup>61</sup>
<b>Normal sensitivity &amp; Normal detection (15 s)</b>	<b>N-15</b>
High sensitivity & Normal detection (15 s)	H-15
Low sensitivity & Normal detection (15 s)	L-15 <sup>62</sup>
Normal sensitivity & Slow detection (35 s)	N-35 <sup>62</sup>
High sensitivity & Slow detection (35 s)	H-35 <sup>62</sup>
Low sensitivity & Slow detection (35 s)	L-35 <sup>62</sup>
<b>Heat algorithm, Class A1</b>	<b>A1</b>
Heat algorithm, Class A2 (S)	A2
Heat algorithm, Class B (S)	B
Decision algorithm	Dec <sup>63</sup>

Default is **N-15** and **A1** respectively.

<sup>61</sup> If some other short name is wanted, it can be changed in Win128. Up to six characters can be used. In the DBI (Danish) convention, up to five characters.

<sup>62</sup> Low sensitivity and/or slow detection (35 s) might not fulfil the EN54-7 specifications.

<sup>63</sup> Analog multi detector 4300 only.

### **25.3.1 Reset of a week average sensor value**

If a sensor (analog smoke detector) is replaced without having generated SERVICE signal, its week average sensor value has to be set to the default value. If not, the new / clean sensor will inherit the old sensor's week average sensor value.

It is possible to clear the week average sensor value for each sensor individually, see chapter "Clear weekly average (H8/S2)", page 103. See also chapter "Acknowledge SERVICE signal (H8/S1)", page 102.

**NOTE!** Authorised service personnel only, must do the reset to default value. Used incorrectly it can cause nuisance fire alarms.

## 25.4 Sensors activating SERVICE signal (H4/U4)

Service signal is indicated by LED "Service" (L12). The week average sensor value is over the service level respectively for one or more sensors. (Regarding the service signal levels, see Planning Instructions, chapter "Service signal".

Menu H4/U4 is a list of the sensor(s) activating service signal.

**NOTE!** Service signal is only information that a sensor has to be cleaned / replaced soon. The service signal has to be acknowledged, see chapter "Acknowledge SERVICE signal (H8/S1)", page 102.

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H4.	Present system status on display ACCEPT? H4	
"A"	Disablement U1	
Scroll to menu U4.	Sensors activating SERVICE signal U4	Press "A" to accept.
"A"	Sensor : ZZ-AA (technical address aaa) needs service L	L = a list in which you can scroll. Press "Return" to menu U4. (If there are no sensors in the list, menu U4 will be shown again.)
"Return"	Sensors activating SERVICE signal U4	Scroll or press "Return" to menu H4. Scroll or press "Return" to log off.

## 25.5 Event log (H4/U5)

This is a list of the latest events in EBL128. The event list can also be read via Win128.

**NOTE!** The event logging is disabled as long as menu H4/U5 is open.

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H4.	Present system status on display ACCEPT? H4	
"A"	Disablement U1	
Scroll to menu U5.	Event log U5	Press "A" to accept.
"A"	<p><i>When "A" is pressed, an event will be shown in the display, e.g:</i></p> <p>FIRE ALARM zone 12 address 45 MM-DD HH:MM X</p> <p>or</p> <p>FIRE ALARM zone 32 Many alarms in zone<sup>64</sup> MM-DD HH:MM X</p>	<p>The most recent event will be shown, i.e. use "↑" to scroll upwards in the list. Press "Return" to menu U5.</p> <p>X = 0 = EBL128                      X = 1 = Win128                      X = 2 = Web128</p>
"Return"	Show event log U5	Scroll or press "Return" to menu H4. Scroll or press "Return" to log off.

<sup>64</sup> More than one alarm point in zone 32 have activated fire alarm.

## 25.6 Show configuration (H4/U6)

Menu H4/U6 can be used to see the settings (done via Win128).

**Language** The language for the texts shown in the EBL128 display. The text (language) file (nnnn.sst) is selected and downloaded via the Win128 menu "Download software/texts to control unit" dialog box.<sup>65</sup>

**Convention** Because of country specific functions, etc. different conventions have to be used. The default convention is selected the first time Win128 is opened but can, if required, be changed in the "Win128 Settings" dialog box).<sup>66</sup>

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H4.	Present system status on display ACCEPT? H4	
"A"	Disablement U1	
Scroll to menu U6.	Show configuration U6	Press "A" to accept.
"A"	Language:nnnnnnnnnn Conv.:cccccccccc	Press "Return" to menu U6.
"Return"	Show configuration U6	Scroll or press "Return" to menu H4. Scroll or press "Return" to log off.

<sup>65</sup> In order to present all language specific characters correct, also the "Control unit language" has to be set to the correct language. This is done in the "Win128 settings" dialog box.

<sup>66</sup> To set (change) the convention in Win128, Level 2 has to be selected and to do this a password is required.

## 26 Service (H5)

---

When commissioning an installation (at power-up etc.) and by maintenance (programming etc.), menu H5 can be used to get certain information and help.

Only authorised personnel have access to the level 3A menus. Access code for level 3A is required.

Via a PC<sup>67</sup> and Win128 (+ access code 3B for levels 3B and 4) you can:

- download / upload (backup) Site Specific Data (SSD)
- download new S/W, text file, settings, configuration, etc.
- create and download the alarm texts shown in the display in EBL128 / ext. FBP / AAU / EPU.

---

<sup>67</sup> Connected to the "D" connector J3 (RS232) on the main board.

---



## 26.1 Access code for service and maintenance

Access code to level 3A is required.

If logon to level 2B was made with level 3A code, no code is required here.

Action	Text in display	Comments
"Access"		According to chapter "Access", page 62
	Perform monthly test ACCEPT? H1	
Scroll to menu H5	Service ACCEPT? H5	
"A"	Access code service and maintenance (Level 3): _	If logon was made with code for level 3A, no code is needed.
Enter code for level 3A (four digits)	Access code service and maintenance (Level 3): ****	The digits are replaced (****) in the display
	NO ACCESS!	Wrong access code was entered. Try again.
	Disconnect / Re-connect COM loop ACCEPT? A1	Correct access code was entered. Sub menu H5/A1 is shown. Press "A" to accept, scroll or press "Return" to menu H5.

## Disconnect / Re-connect COM loop (H5/A1)

To avoid damage on the units and EBL128 during physical connection / disconnection of loop units, it is highly recommended to have the loop disconnected (disabled), i.e. the loop is voltage free (dead).

Disconnected (disabled) loop is indicated by LED "Disablesments" and is listed in menu H4/U1.

**NOTE!** When you disconnect and re-connect the COM loop, all the statistics shown in menu H5/A8 will be erased and set to "0".

Action	Text in display	Comments
"Access"		According to chapter "Access code for service and maintenance", see page 87.
	Disconnect / Re-connect COM loop ACCEPT? A1	
"A"	Disconnect (=0) or Re-connect (=1) COM loop? <u>1</u> ACCEPT?	
E.g. "0", "A"	Disconnect / Re-connect COM loop ACCEPT? A1	Scroll or press "Return" to H5. Scroll or press "Return" to log off.

## 26.2 Disconnect / Re-connect zone line (H5/A2)

To avoid damage on the units and EBL128 during physical connection / disconnection of units, it is highly recommended to have the zone line disconnected (disabled), i.e. voltage free (dead).

Disconnected (disabled) zone line is indicated by LED "Disables" and is listed in menu H4/U1.

Action	Text in display	Comments
"Access"		According to chapter "Access code for service and maintenance", see page 87.
	Disconnect / Re-connect COM loop ACCEPT? A1	
Scroll to menu A2	Disconnect / Re-connect zone line ACCEPT? A2	
"A"	Disconnect (=0) or Re-connect (=1) COM loop? <u>1</u> ACCEPT?	Write "0" or "1" and press "A" to accept.
Depending on if "0" or "1" is chosen, one of the following will be shown:	Disconnect zone line board <u>0</u> input 0 ACCEPT?	Write the 4580 board no. (0-3) and the zone line input no. (0-7). Press "A" to accept.
	Re-connect zone line board <u>0</u> input 0 ACCEPT?	
	Disconnect (=0) or Re-connect (=1) COM loop? <u>1</u> ACCEPT?	Write "0" or "1" and press "A" to accept or press "Return" menu A1.
"A"	Disconnect / Re-connect zone line ACCEPT? A2	Scroll or press "Return" to H5. Scroll or press "Return" to log off.

## 26.3 Calibration of supervised outputs (H5/A3)

The voltage outputs (S0-S1 in EBL128 and VO0-VO1 in 3364) are supervised / monitored.

When all the units (sounders, etc.) have been connected, including required capacitors<sup>68</sup> and when the SSD download is ready, a calibration has to be done.

Function: If the actual value differs from the calibrated value  $\pm$  a small tolerance or if the calibrated value is outside the calibration range 470nF – 5x470nF, a fault will be generated.

### NOTE!

Each output's logic is programmable (via Win128) to be normally low (default) or normally high (24V). Only outputs programmed to be normally low, can be supervised / monitored.

Action	Text in display	Comments
"Access"		According to chapter "Access code for service and maintenance", see page 87.
	Disconnect / Re-connect COM loop ACCEPT? A1	
Scroll to menu A3	Calibration of supervised outputs ACCEPT? A3	
"A"	Calibration in progress Please wait.....	
	Calibration of supervised outputs ACCEPT? A3	Calibration is ready. Scroll or press "Return" to H5. Scroll or press "Return" to log off.

**NOTE!** After the calibration it is recommended to do a "Safe shutdown of control unit" (see menu H8/S4). This will save the SSW data (e.g. the calibration values) in a Flash ROM (see page 58).

<sup>68</sup> An end-of-line capacitor (470nF) in the last unit or a capacitor (470nF) in up to five units. As an alternative, an output can (via Win128) be set to not supervised.

## 26.4 Sensitive fault detection mode (H5/A4)

"Sensitive fault detection mode" means that the time delay is reduced for all type of faults, which makes it possible find faults during the commissioning instead of later.

**NOTE!** Don't forget to turn this mode off after the commissioning.

Action	Text in display	Comments
"Access"		According to chapter "Access code for service and maintenance", see page 87.
	Disconnect / Re-connect COM loop ACCEPT? A1	
Scroll to menu A4	Sensitive fault detection mode ACCEPT? A4	
"A"	Sensitive fault detection mode: <u>0</u> (0 = off, 1 = on)	Press "A" or "1" and "A" to accept. ON is indicated by LED "Fault tx activated" (L11) and the "Fault" output for routing equipment. This mode is ON until turned OFF in this menu (A4).
E.g. "1", "A"	Sensitive fault detection mode ACCEPT? A4	Scroll or press "Return" to H5. Scroll or press "Return" to log off.

**NOTE!** Don't forget to turn this mode off after the commissioning.

## 26.5 Service mode for COM-loop (H5/A5)

This mode can be used when commissioning an installation and by maintenance. The COM loop communication (polling) will be turned off but there will still be voltage (24 V DC) on the loop in the A-direction only, in the B-direction only **or** in both directions at the same time, depending on if 1, 2 or 3 is selected in this menu.

A volt meter can be used, e.g. to check the voltage / voltage drop on different places on the loop. It is recommended to do this check also when EBL128 is power supplied via the backup battery only, since the voltage can be up to 3 V lower (compared with when it is power supplied via the rectifier, i.e. via 230 V AC) due to the battery condition, backup duration, etc.

**NOTE!** If short-circuit is detected on the loop when in service mode, the loop will be disabled and a fault message will be displayed:

```
FAULT: SHORT CIRCUIT SCI A <-> SCI B
```

...independent of where on the loop the short-circuit is situated.

Action	Text in display	Comments
"Access"		According to chapter "Access code for service and maintenance", see page 87.
	Disconnect / Re-connect COM loop ACCEPT? A1	
Scroll to menu A5	Service mode for COM-loop ACCEPT? A5	Press "A" to accept.
"A"	Service mode for COM-loop: <u>0</u> 0=Off 1=A-dir 2=B-dir 3=Both ACCEPT?	Press: 0=Service mode is off. 1=Voltage in A-direction. 2=Voltage in B-direction. 3=Voltage in both directions. 1, 2 or 3 selected is indicated by LED "Disablements" (L8)
E.g. "1", "A"	Service mode for COM-loop: <u>1</u> 0=Off 1=A-dir 2=B-dir 3=Both ACCEPT?	The communication is now turned off on the COM

		loop but there is still voltage in the A-direction. This state will last until another alternative is selected or the service mode is turned off. <sup>69</sup>
E.g. "0", "A"	Service mode for COM-loop ACCEPT? A5	Scroll or press "Return" to H5. Scroll or press "Return" to log off.

---

<sup>69</sup> The service mode can also be turned off via menu H5/A1, i.e. Re-connect (=1) COM loop.

## 26.6 Show information about Site Specific Data (H5/A6)

Information about the latest downloaded Site Specific Data (SSD) is shown. New SSD can be downloaded via a PC and Win128.

Action	Text in display	Comments
"Access"		According to chapter "Access code for service and maintenance", see page 87.
	Disconnect / Re-connect COM loop ACCEPT? A1	
Scroll to menu A6	Show information about site specific data ACCEPT? A6	
"A"	Name: xx <sup>70</sup> Downloaded: YY-MM-DD hh:mm ACCEPT?	YY=year, MM=month, DD=day.  hh=hour, mm=minute
"A"	Show information about site specific data ACCEPT? A6	Scroll or press "Return" to H5. Scroll or press "Return" to log off.

<sup>70</sup> As written in the field "Name" in the Win128 dialog box "Control Unit Properties". If there is no SSD downloaded to EBL128 the following text message will be shown: "No SSD downloaded".



## 26.7 Display current consumption on COM loop (H5/A7)

An average current consumption value can be displayed for the COM loop.

**NOTE!** No or very small current consumption will not be presented correctly / precisely.

Action	Text in display	Comments
"Access"		According to chapter "Access code for service and maintenance", see page 87.
	Disconnect / Re-connect COM loop ACCEPT? A1	
Scroll to menu A7	Display current consumption on COM loop ACCEPT? A7	
"A"	Wait.....	
	Current consumption on COM-loop is xxxx mA	The accuracy is $\pm 5$ mA.
"Return"	Display current consumption on COM loop ACCEPT? A7	Scroll or press "Return" to H5. Scroll or press "Return" to log off.

## 26.8 Display statistics for COM loop (H5/A8)

The statistics can be used during commissioning, service, etc.

**Pollings** are the number of pollings ("questions") sent out by EBL128 to the units connected on the COM loop.

**Parity** is the received number of parity faults and % parity faults in relation to the pollings.

**Bit length** is the received number of bit length faults and % bit length faults in relation to the pollings.

**No. of bits** is the number of bit faults and % bit faults in relation to the pollings. (Bit fault / incomplete answer.)

The **Parity**, **Bit length** and **No. of bits** values shall normally be "0" or as close to "0" as possible. If not, there are some communication problems that have to be investigated. Check the COM loop connections and the loop units. Check so that the COM loop cable is not placed too close to high voltage cables, etc. that might cause communication disturbance / problems.

**NOTE!** All values are set to "0" after a restart and when you re-connect the COM loop (via menu H5/A1).

Action	Text in display	Comments
"Access"		According to chapter "Access code for service and maintenance", see page 87.
	Disconnect / Re-connect COM loop ACCEPT? A1	
Scroll to menu A8	Display statistics for COM loop ACCEPT? A8	
"A"	Wait.....	
	Pollings 1234567 Parity 000000 00.0% No reply 000000 00.0% -->	<sup>71</sup> Press "→" to go forward.
	Bit length 000000 00.0% <-- No. of bits 000000 00.0%	Press "←" to go back. or press "A" to menu A8.
"A"	Display statistics for COM loop ACCEPT? A8	Scroll or press "Return" to H5. Scroll or press "Return" to log off.

<sup>71</sup> **Note!** The values are not updated continuously, i.e. the shown values were valid when "A" was pressed in menu A8. To see the new actual values, go back to menu A8 and then press "A" again. Normally only the "Pollings" value should be changed.

## 26.9 Activate address setting mode for DU (H5/A9)

This function can be used by commissioning / service engineer to activate the address setting mode in the following Display Units connected to the RS485 interface in EBL128:

- Ext. Presentation unit (EPU) 1728
- Alert Annunciation unit (AAU) 1735 / 1736
- Ext. Fire Brigade Panel (FBP) 1826 / 1828

A specific unit or all units can be activated for address setting.

**NOTE!** The units have to be in operation and in quiescent condition, i.e. the units have to have an address set already.

Action	Text in display	Comments
"Access"		According to chapter "Access code for service and maintenance", see page 87.
	Disconnect / Re-connect COM loop ACCEPT? A1	
Scroll to menu A9	Activate address setting mode for DU ACCEPT? A9	
"A"	Activate address setting mode for DU <u>0</u> (9 = All) ACCEPT?	Write the unit's address. 9 = All units. Press "A" to accept.
"A"	Activate address setting mode for DU ACCEPT? A9	Scroll or press "Return" to H5. Scroll or press "Return" to log off.

The address has thereafter to be edited in the unit respectively.

## 27 Acknowledge FAULTS (H6)

Regarding fault indication, etc., see chapter "Fault", page 41.

All faults are latched, i.e. all faults have to be acknowledged. See also chapter "Fault acknowledge", page 52.

All fault events are stored in the event log and can be listed. See also chapter "Event log (H4/U5)", page 84.

In this menu (H6) are up to 100 faults listed:

- Not corrected and not acknowledged faults
- Not corrected but acknowledged faults
- Corrected (serviced) but not acknowledged faults

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H6.	Acknowledge FAULTS  ACCEPT? H6	
"A"	FAULT: XXXXXXXXXXXXXXXXXXXXXXXX Date: MM-DD Time: HH:MM See comments	This is a list in which you can scroll. <u>The first fault in the list is the most recent fault.</u> If a fault is corrected, the text: <b>Serviced</b> is shown. To acknowledge the fault shown in the display, press "Fault acknowledge" (P6).
"Fault acknowledge"	FAULT: XXXXXXXXXXXXXXXXXXXXXXXX Date: MM-DD Time: HH:MM Acknowledged	The fault is now <b>Acknowledged</b> . When the fault is <b>corrected</b> it will be removed from the list. <sup>72</sup> Scroll in the list e.g. to acknowledge more faults or press "Return" to menu H6.
"Return"	Acknowledge FAULTS  ACCEPT? H6	Scroll or press "Return" to log off.

<sup>72</sup> When the list is empty, i.e. when all faults are acknowledged and corrected, you will automatically return to menu H6:

## 28 Perform ZONE TEST (test mode) (H7)

Normally, zones are tested during the monthly test via menu H1, see page 63. Via menu H7 it is possible to perform the zone test solely. In test mode, only the alarm points are tested, i.e. no outputs (no sounders) will be activated during the test. (Alarm devices can be tested via menu H8/S3.)

If a real fire alarm is activated by **an alarm point not in test mode**, the normal fire alarm functions will be activated, i.e. fire alarm presentation, outputs (sounders) activated, routing equipment (fire brigade tx) activated, etc. **but the zone(s) in test mode will remain in test mode until the test mode is ended.** During the fire alarm the zone(s) in test mode can be displayed via menu X3, see chapter "Display disablements (X3)", page 32.

See also chapter "The display in EBL128", page 17.

There will be an automatic ending of the test mode one hour after the latest tested alarm point / zone.

**NOTE!** If the door in EBL128 is left open, the output(s) for routing equipment (fire brigade tx) might be disabled (if set so in Win128).

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H7.	Perform ZONE TEST ACCEPT? H7	
"A"	Zone to be set in TEST MODE: ?? ?? ?? ?? Start test: ACCEPT	NOTE! In Danish (DBI) convention, only one zone.
Write zone numbers (e.g. 01, 02, 03, 04).	Zone to be set in TEST MODE: 01 02 03 04 Start test: ACCEPT	Press "A" to start the test mode.
"A"	Zones are set in test mode wait...	LED "Test mode" (L9) will light up.
	Zone in TEST MODE: 01 02 03 04 End test: ACCEPT	Perform the tests.

**The zone(s) will stay in test mode until the test mode is ended** but after 60 minutes or if you press "Return" two times you will be out-logged from menu H7.

Perform the test as quickly as possible, since the output(s) for routing equipment (fire brigade tx) are disabled (also the parts of the zones in test mode, not visible for the test personnel, are disabled).

In order to shorten the testing time, any time delay for the detectors / zones in test mode will be "disabled", i.e. fire alarm will be detected faster than normally.

In the tested alarm point, the LED will light up, and the LED:s "Fire" (L1) in EBL128 will light up, about ten

<p>seconds, then the alarm point will be automatically reset.                  A sensor in test mode will <u>not</u> be able to activate fault.</p>		
<p>After 60 minutes <b>or</b>                  "Return"                  "Return"</p>	<p>Zones in test mode: 01, 02, 03, 04</p> <p>NOTE! See chapter "The display in EBL128", page 17 regarding priority order.</p>	<p>You are now out-logged from menu H7 but the zones are still in test mode.</p>
<p>(When required:                  "Access", "code")                  Scroll to menu H7,                  "A"</p>	<p>Zone in TEST MODE:                  01 02 03 04      End test: ACCEPT</p>	<p>Press "A" to end the test mode.</p>
<p>"A"</p>	<p>Perform ZONE TEST</p> <p>ACCEPT? H7</p>	<p>The LED "Test mode" is turned OFF.                  If more zones are to be tested, continue as above.                  If not, scroll or press "Return" to log off.</p>

## 29 Maintenance (H8)

### 29.1 Access code for service and maintenance

Access code to level 3A is required.

If log on to level 2B was made with code for level 3A, no code is required here.

Action	Text in display	Comments
"Access"		According to chapter "Access", page 62
	Perform monthly test ACCEPT? H1	
Scroll to menu H8	Maintenance ACCEPT? H8	
"A"	Access code service and maintenance (Level 3): _	If log on was made with code for level 3A, no code is needed.
Enter code for level 3A (four digits)	Access code service and maintenance (Level 3): ****	The digits are replaced (****) in the display
	NO ACCESS!	Wrong access code was entered. Try again.
	Acknowledge SERVICE signal ACCEPT? S1	Correct access code was entered. Sub menu H8/S1 is shown. Press "A" to accept, scroll or press "Return" to menu H8.

## 29.2 Acknowledge SERVICE signal (H8/S1)

See chapter "Sensors activating SERVICE signal (H4/U4)", page 83.

When a sensor (analog smoke detector) that has generated SERVICE signal is acknowledged, the sensor will be given a default sensor value as for a new / clean sensor, i.e. **first** replace the sensor **then** acknowledge the service signal **as soon as possible**.

The very first week average sensor value after the SERVICE signal is acknowledged will be calculated within one hour. Thereafter a new week average sensor value will be calculated each week.

**NOTE!** If a sensor is replaced without activating service signal, it has to be reset to the default sensor value via menu H8/S2, see chapter "Clear weekly average (H8/S2)", page 103.

Action	Text in display	Comments
"Access"		According to chapter "Access code for service and maintenance", see page 101.
	Acknowledge SERVICE signal ACCEPT? S1	
"A"	Sensor : xx-xx (technical address xxx) needs service L	If there are no sensors to acknowledge, menu S1 will be shown again. L = a list in which you can scroll. If it is the correct sensor to acknowledge, press "Fault acknowledge". If not, scroll or write the wanted sensor and press "Fault acknowledge" <b>or</b> press "Return" to S1.
"Fault acknowledge"	<i>The service signal for that sensor is now acknowledged and the next sensor will be shown in the display.</i> Sensor : yy-yy (technical address yyy) needs service L	If more service signal acknowledgements shall be done, continue like above. If not, press "Return" to menu S1.
"Return"	Acknowledge SERVICE signal ACCEPT? S1	Scroll or press "Return" to menu H8. Scroll or press "Return" to log off.

LED "Service" (L12) will be turned off when all sensors have been acknowledged.



## 29.3 Clear weekly average (H8/S2)

If a sensor (analog smoke detector) is replaced without having generated SERVICE signal, its week average sensor value has to be cleared and set to a default value. If not, the new / clean sensor will inherit the old sensor's value. The week average sensor value has to be cleared for each replaced sensor individually. **First** replace the sensor **then** clear the week average sensor value **as soon as possible**.

The very first week average sensor value after clearing will be calculated within one hour. Thereafter a new average sensor value will be calculated each week.

**NOTE!** Authorised service personnel only, must use this menu. Used incorrectly it can cause nuisance fire alarms from a sensor or no fire alarm at all.

Action	Text in display	Comments
"Access"		According to chapter "Access code for service and maintenance", see page 101.
	Acknowledge SERVICE signal ACCEPT? S1	
Scroll to menu S2.	Clear weekly average ACCEPT? S2	
"A"	Enter zone-Address to clear: 00-00 ACCEPT?	Write the wanted zone-address and/or press "A" to accept.
"A"	Clear weekly average ACCEPT? S2	Scroll or press "Return" to return to menu H8. Scroll or press "Return" to log off.

## 29.4 Test alarm devices (H8/S3)

The programmable outputs<sup>73</sup> of type "Alarm device" can be collectively activated via this sub menu (S3), which makes it possible to test the alarm devices without to much disturbance on site.

The test can not be started if fire alarm is already activated in EBL128

When the test starts, the alarm devices will sound for approx. 5 seconds, be silent for approx. 25 seconds, sound for approx. 5 seconds and so on.<sup>74</sup>

**NOTE!** Also disabled (and silenced) alarm devices will be tested.

Action	Text in display	Comments
"Access"		According to chapter "Access code for service and maintenance", see page 101.
	Acknowledge SERVICE signal ACCEPT? S1	
Scroll to menu S3.	Test alarm devices ACCEPT? S3	
"A"	Test alarm devices ? <u>0</u> (1=Start test, 0=Stop test) ACCEPT?	Write "1" or "0" and press "A" to accept.
E.g. "1", "A"	Test alarm devices ACCEPT? S3	The test will now continue until stopped via this sub menu (S3) or automatically after one hour or if a fire alarm is activated.
"A"	Test alarm devices ? <u>1</u> (1=Start test, 0=Stop test) ACCEPT?	
"0", "A"	Test alarm devices ACCEPT? S3	Scroll or press "Return" to return to menu H8. Scroll or press "Return" to log off.

<sup>73</sup> Including Addressable siren 3377 and Addressable sounder base 3378.

<sup>74</sup> The output activation will be steady (continuous). For the alarm devices 3377 and 3378, the tone with the highest priority level (and type "alarm device") will be automatically selected.

## 29.5 Safe shut down of control unit (H8/S4)

**It's not recommended** to power down EBL128 without first doing a safe shut down. Safe shut down will save the SSW in a Flash memory and also put the CPU at rest.<sup>75</sup> See also chapter "Restart", page 58.

**It's recommended** to do a safe shut down after commissioning the installation and after calibration of supervised outputs, change of access code etc.

**NOTE!** By restart and power down, the Fault tx relay, which is powered in quiescent/normal state, will be powerless, i.e. the relay contacts will alternate.

Action	Text in display	Comments
"Access"		According to chapter "Access code for service and maintenance", see page 101.
	Acknowledge SERVICE signal ACCEPT? S1	
Scroll to menu S4.	Safe shut down of control unit ACCEPT? S4	
"A"	For safe shut down control unit press ACCEPT	
"A"	Control unit ready for power down. To restart without power down press ACCEPT.	The SSW is now saved, the CPU is at rest and the CU is ready to be powered down. <b>NOTE!</b> If you change your mind regarding power down, press "A" to restart the CU ( <u>or</u> wait 5 min. for an aut. restart). When the CU is powered up again there will be a restart.
Power down – up <u>or</u> "A" <u>or</u> after 5 min.	Normal restart indication, see page 58  FAULT: Restart code 0x addr 0 Date: mm-dd Time: hh:mm Serviced	After the restart / power up there will be a fault, which has to be acknowledged, see chapter "Acknowledge FAULTS (H6)", page 98. Restart = code 03) / power up = code 00.

<sup>75</sup> All LEDs, incl. "Operation" (L6), will be turned off as well as the communication on the COM loop, RS232 / -485 serial lines and the input "I0".

## 29.6 Activate address in alarm mode (H8/S5)

One alarm point (zone-address), not a whole zone, can be manually activated, i.e. be set in alarm status.

**NOTE!** All outputs, standard and programmable, which would have been activated by a real fire alarm from the same alarm point, will be activated by this "manually activated" alarm as well.

Action	Text in display	Comments
"Access"		According to chapter "Access code for service and maintenance", see page 101.
	Acknowledge SERVICE signal ACCEPT? S1	
Scroll to menu S5.	Activate address in alarm mode ACCEPT? S5	
"A"	Select zone: 00 address: 00 ACCEPT?	
Write the zone and address.	Select zone: 12 address: 45 ACCEPT?	Press "A" to accept / activate the fire alarm.
"A"	POINT: 12-45 No.: 001 Alarm text, if programmed	Normal fire alarm presentation in the EBL128 / FBP display. If more alarm points have to be set in alarm status, press "Return" to select another zone - address and continue as above.
"Return"	Select zone: 00 address: 00 ACCEPT?	
Write the zone and address.	Select zone: 12 address: 34 ACCEPT?	Press "A" to accept / start the fire alarm.
"A"	POINT: 12-45 LAST: 12-34 No.: 002 Alrm text, if programmed	

What happens by reset of the fire alarm(s) is depending on:

- a) if you still are in menu H8/S5 and single encapsulated reset is used
- b) if you still are in menu H8/S5 and multiple reset is used **or** if you are logged out (by pressing "Return" two times **or** automatically after 10 minutes).

Alternative a) "Reset"	Activate address in alarm mode ACCEPT? S5	Scroll or press "Return" to menu H8. Scroll or press "Return" to log off.
---------------------------	--	---

Alternative b) "Reset"	(Blank)	
---------------------------	---------	--

**NOTE!**

Multiple reset is default.<sup>76</sup>

By Single encapsulated reset each point has to be reset individually.

See also chapter "Alarm reset", page 38.

---

<sup>76</sup> Alarm reset is selected via Win128, "Control Unit Properties", tab "Advanced".

## 29.7 Change access code for service and maintenance (H8/S6)

For security reasons, the default code should be changed.

Action	Text in display	Comments
"Access"		According to chapter "Access code for service and maintenance", see page 101.
	Acknowledge SERVICE signal ACCEPT? S1	
Scroll to menu S6.	Change access code for service and maintenance (Level 3) ACCEPT? S6	
"A"	Access code: _ New code:                      Verify:	
Enter the old code, the new code and the new code again.	Access code: **** New code: ****                      Verify: ****	The digits are replaced (****) in the display.
	Incorrect access code, NO change	Wrong access code was entered. Try again.
	Change access code for service and maintenance (Level 3) ACCEPT? S6	Correct access code was entered. The access code is now changed and the sub menu H8/S6 is shown. Scroll or press "Return" to menu H8. Scroll or press "Return" to log off.

**NOTE!** After change of access code it is recommended do a "Safe shutdown" of EBL128 (see menu H8/S4). This will save the SSW data (e.g. the new code) in a Flash ROM (see page 58).

## 29.8 Change access code for PC-communication (H8/S7)

As a protection against unauthorised personnel programming the system (via Win128), an access code 3B (for levels 3B and 4) for PC-connection is required. For security reasons, the default code should be changed.

**NOTE!** This code requires eight (8) digits.

Action	Text in display	Comments
"Access"		According to chapter "Access code for service and maintenance", see page 101.
	Acknowledge SERVICE signal ACCEPT? S1	
Scroll to menu S7	Change access code for PC-communication ACCEPT? S7	
"A"	Access code: _ New code: ***** Verify: *****	The digits are replaced (*****) in the display.
	Incorrect access code, NO change	Wrong access code was entered. Try again.
	Change access code for PC-communication ACCEPT? S7	Correct access code was entered. The access code is now changed and the sub menu H8/S7 is shown. Scroll or press "Return" to menu H8. Scroll or press "Return" to log off.

**NOTE!** After change of access code it is recommended do a "Safe shutdown" of EBL128 (see menu H8/S4). This will save the SSW data (e.g. the new code) in a Flash ROM (see page 58).

## 30 Interlocking outputs and inputs (H9)

### 30.1 Activated interlocking outputs/inputs (H9/C1)

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H9.	Interlocking outputs and inputs ACCEPT? H9	
"A"	Activated interlocking outputs/inputs ACCEPT? C1	
"A" Depending on activated output and/or input, the following will be shown:	Output AA/PP activated at HH:MM Alarm text (if progr.) ----- Output AA/PP act HH:MM, input act HH:MM Alarm text (if progr.) ----- Input AA/PP activated at HH:MM Alarm text (if progr.)	This is a list in which you can scroll.  AA = interlocking combination Area PP = interlocking combination Point (within the area).  Press "Return" to menu C1.
"Return"	Activated interlocking outputs/inputs ACCEPT? C1	Scroll or press "Return" to menu H9. Scroll or press "Return" to log off.



## 30.2 Activate interlocking output (H9/C2)

The output in each interlocking combination (area / point) can be manually activated via this menu. The corresponding interlocking input will be "monitored" in the same way as if the output was activated by its control expression.

Reset has to be performed via menu H9/C3.

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H9.	Interlocking outputs and inputs ACCEPT? H9	
"A"	Activated interlocking outputs/inputs ACCEPT? C1	
Scroll to menu C2.	Activate interlocking output ACCEPT? C2	
"A"	Activate interlocking output area 00 point 00 ACCEPT?	
Write the area and point, e.g.: "01", "01"	Activate interlocking output area 01 point 01 ACCEPT?	Press "A" to accept and/or "Return" to menu C2.
"A"	Activate interlocking output ACCEPT? C2	Scroll or press "Return" to menu H9. Scroll or press "Return" to log off.

### 30.3 Reset interlocking output (H9/C3)

All activated interlocking outputs are listed in this menu.

Interlocking output activated via its control expression and with latching output selected (in Win128): The output has to be reset via this sub menu (C3).

Interlocking output activated via its control expression and with latching output not selected: The output can be reset via this sub menu (C3).

Interlocking output activated via menu H9/C2: The output has to be reset via this sub menu (C3).

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H9.	Interlocking outputs and inputs ACCEPT? H9	
"A"	Activated interlocking outputs/inputs ACCEPT? C1	
Scroll to menu C3.	Reset interlocking output ACCEPT? C3	
"A"	Reset interlocking output area 00 point 00 ACCEPT?	This is a list in which you can scroll. If there are no activated outputs, menu C3 will be shown again.  Press "A" (for reset) or "Return" (no reset) to menu C3.
"A" or "Return"	Reset interlocking output ACCEPT? C3	Scroll or press "Return" to menu H9. Scroll or press "Return" to log off.

## 30.4 Disable interlocking output (H9/C4)

Interlocking outputs (Type = Interlocking) will be disabled via this menu but not via menu H2/B3.

The "Interlocking Combination" (Area / Point) is to be entered to disable the output. If "00/00" is entered, **all** interlocking outputs will be disabled at the same time.

All interlocking outputs can be disabled.

Disabled interlocking outputs are listed in menu H4/U1.

The LED "Disables" (L8) is also indicating one or more disabled interlocking outputs.

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H9.	Interlocking outputs and inputs ACCEPT? H9	
"A"	Activated interlocking outputs/inputs ACCEPT? C1	
Scroll to menu C4.	Disable interlocking output ACCEPT? C4	
"A"	Disable interlocking output area 00 point 00 ACCEPT?	
Write the area and point, e.g.: "01", "01"	Disable interlocking output area 01 point 01 ACCEPT?	Press "A" to accept and/or "Return" to menu C4.
"A"	Disable interlocking output ACCEPT? C4	Scroll or press "Return" to menu H9. Scroll or press "Return" to log off.

## 30.5 Re-enable interlocking output (H9/C5)

Disabled interlocking outputs are listed in menu H4/U1.

Interlocking outputs (Type = Interlocking) will be re-enabled via this menu but not via menu H2/B7.

If "00/00" is entered, **all** interlocking outputs, disabled via "00/00" in menu H9/C4, will be re-enabled at the same time.

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H9.	Interlocking outputs and inputs ACCEPT? H9	
"A"	Activated interlocking outputs/inputs ACCEPT? C1	
Scroll to menu C5.	Re-enable interlocking output ACCEPT? C5	
"A"	Re-enable interlocking output area 00 point 00 ACCEPT?	This is a list in which you can scroll. If there are no disabled outputs, menu C5 will be shown again.  Press "A" (for re-enable) or "Return" (not re-enable) to menu C5.
"A" or "Return"	Re-enable interlocking output ACCEPT? C5	Scroll or press "Return" to menu H9. Scroll or press "Return" to log off.

## 31 Change access code for daily duties (H10)

For security reasons, the default code should be changed.

Action	Text in display	Comments
"Access"		According to chapter "Access", see page 62.
Scroll to menu H10.	Change access code for daily duties (Level 2B) ACCEPT? H10	
"A"	Access code: _ New code:                      Verify:	
Enter the old code, the new code and the new code again.	Access code: **** New code: ****                      Verify: ****	The digits are replaced (****) in the display.
	Incorrect access code, NO change	Wrong access code was entered. Try again.
	Change access code for daily duties (Level 2B) ACCEPT? H10	Correct access code was entered. The access code is now changed and the menu H10 is shown. Scroll or press "Return" to log off.

**NOTE!** After change of access code it is recommended do a "Safe shutdown" of EBL128 (see menu H8/S4). This will save the SSW data (e.g. the new code) in a Flash ROM (see page 58).

---

## 32 Annual control

---

The building occupier is highly recommended, once a year, to do some tests, beside the monthly tests. To avoid the Fault tx output to be activated, it can be disabled via menu H2/B9 (or via an open door, see chapter "Door open", page 26.).

Regarding the fault condition, see chapters "Fault", page 41 and "Fault messages", page 42.

**NOTE!** Most faults have a time delay.

EBL128 should be tested as follows:

- Perform monthly test (menu H1).
- Remove the battery fuse "F2" on the main board 4556. The following fault message is to be shown:

```
FAULT: Battery not connected CU
```

- Put back the fuse and acknowledge the fault (Menu H6).
- Check the manual call point glasses. Take required measures. Use the manual call point alarm test key to activate some fire alarms.
- Check that the control outputs that should be activated really are activated according to programmed control expressions?
- Reset the fire alarms.

## **33 Battery maintenance**

---

The batteries (2 x 12 V, 15-18 Ah) are placed inside EBL128. (Larger batteries have to be placed outside.)

EBL128 supervises the batteries and a fault will be activated if something goes wrong.

They are rechargeable sealed Lead-Acid batteries and maintenance-free but the producer's instructions are always to be followed.

The ambient temperature affects the battery capacity, self discharge and life span. It should if possible not be higher than normal room temperature. For highest safety, batteries used in a fire alarm installation should never be older than four years.

## 34 How to avoid unnecessary (nuisance) fire alarms

---

We all realise, when life, buildings, production facilities, etc. shall be saved, it is of utmost importance that an initial fire is detected as soon as possible. That's why more and more automatic fire alarm systems are installed.

In an automatic fire alarm installation, especially if smoke detectors (sensors) are used, everybody in the building needs to be informed how to avoid so called unnecessary (nuisance) fire alarms.

To avoid trouble and unnecessary expenses there are a couple of things to bear in mind. Here are some advice and tips.

### **Tobacco smoke**

The detectors (sensors) can not sense the difference between "smoke" and "smoke". They can not separate tobacco smoke from smoke from a fire. Intensive tobacco smoking in connection with bad ventilation can cause a fire alarm.

### **Welding, grinding, cutting, sawing & drilling**

This kind of jobs cause smoke.

### **Carpet welding**

Welding of plastic carpets causes a smoke that can be almost invisible, but it still influences the smoke detectors (sensors).

### **Cooking fumes, toasting & candles**

It is not only "normal smoke" that influences smoke detectors (sensors). It is all kinds of "combustion products", caused by cooking (frying/grilling), toasting, etc. Warning! Be careful when there are smoke detectors (sensors) near such activity.

### **Special environments**

Certain premises and environments can influence smoke detectors (sensors) and cause alarms. It can be ions (from plastics), flour dust, oil haze, aerosols, strong perfumes, strong ventilation, insecticides, disinfecting sprays, etc. If many odd and unnecessary alarms occur, the environment must be examined and perhaps other detector types have to be chosen.

### **Steam / hot air**

Smoke and heat detectors are influenced by steam and hot air, e.g. from an oven, dry-blower, heater, etc.



### **Exhausts**

Exhausts from cars / trucks, lift trucks, lawn mowers, etc. influences smoke detectors (sensors). If windows and doors are open, exhausts can "slip in" that way.

### **Lack of maintenance**

Smoke detectors (sensors) are influenced by their environment and become "dirty". In an analog system (like EBL128) a Service signal is given when it is time to clean or exchange the smoke detectors (sensors). The alternative is to exchange detectors at even intervals, to be on the safe side.

### **Change in activities or wrong choice of detector**

If the activities in the premises are altered, the detector choice might also need altering. Due to special environments, see above, an inappropriate detector type might have been chosen from the beginning and thus cause unnecessary alarms.

### **Miscellaneous**

Choosing another type of detector, e.g. a multi detector (with both heat and smoke detection), can solve certain problems. Note that the coverage area can be different for different types of detectors.

It is however not always the best action to change detector type. Here is a list of other actions, programmed via Win128, which can be used:

- Another alarm algorithm can be used, e.g. during working hours.
- Co-incident (two units) fire alarm activation can be used.
- In an installation with addressable detectors / sensors (e.g. EBL128), the affected detectors can be individually disabled (or whole zones) when the work is in progress. Bear in mind that the smoke spreads, and consideration must be taken to adjacent detectors/zones. Disablements can be done automatically via a time channel (built-in or external) or via menu (H2/B1-B3). Automatic re-enabling can be used.
- If there is an alarm organisation for the on site personnel, the alert annunciation function can be used.
- Pre-warning can be used.

## **35**      **Revision history**

---

### **Revision 1**

Information added / revised in the following chapters / paragraphs:

14.2, 14.2.1.3, 16.1, 17, 22, 26.2, 26.5 and 28.

### **Revision 2**

Information added / revised in the following chapters / paragraphs:

7, 2.3, 7.4, 7.5, 7.6, 21, 26, 26.1, 29.1, and 29.8.



This page has deliberately been left blank.

## **Panasonic ideas for life**

---

Panasonic Electric Works Fire & Security Technology Europe AB

Citadellsvägen 23, SE-211 18 Malmö, Sweden

Tel: +46 (0)40 697 70 00 • Fax: +46 (0)40 697 70 99

info@mfstech.com • [www.panasonic-fire-security.com](http://www.panasonic-fire-security.com)

