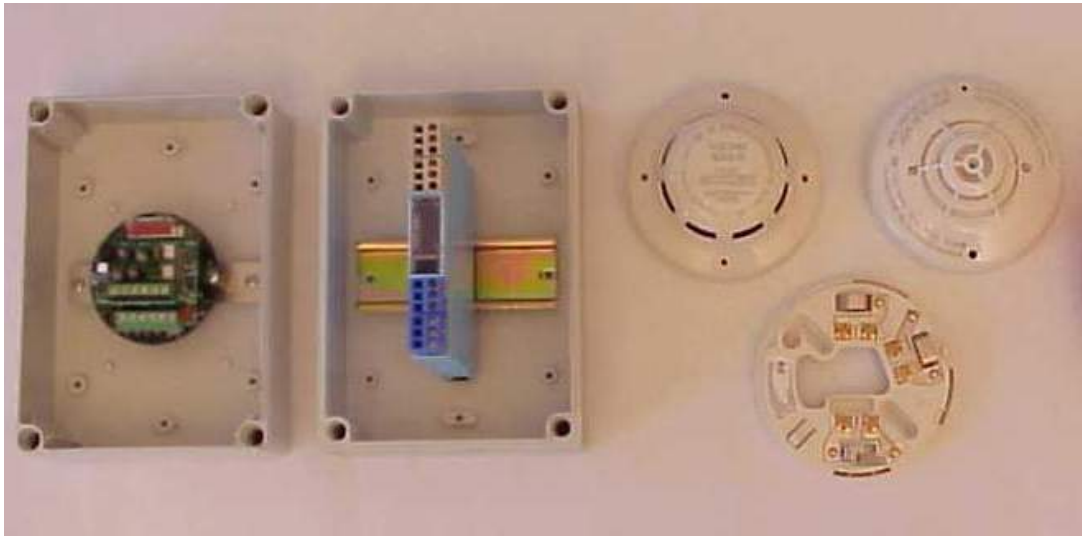


## Fire alarm system EBL512 Units for Hazardous (Ex) areas



- Approved **Intrinsically Safe** interface, isolator & detectors

### General

In hazardous (Ex) areas, **Intrinsically Safe** (IS) and approved products are required. To the COM loop is connected an Addressable IS zone line interface to which, via a Galvanic isolator, the intrinsically safe detectors are connected.

### Addressable IS zone interface 2821

The interface is connected to a COM loop. It has one zone line input. A DIL-switch is used for the COM loop address setting. Ext. power supply 24 V DC (30 mA) is required. The interface is mounted in a waterproof box (IP66/67). Supplied with four compression glands for the cable entries.

### Galvanic isolator MTL5061

The isolator is used to connect the IS detectors and manual call points to the IS zone interface zone line input. Up to 20 units can be used on the zone line and an end-of-line resistor is to be connected in the last unit. The isolator has two in and outputs (Channel 1 & 2) and is mounted in a waterproof box (IP66/67). Supplied with four compression glands for the cable entries and two 10K e-o-l resistors for system EBL512.

### IS mounting base YBN-R/4 IS

In the base could be plugged a conventional IS smoke or heat detector.

The base has terminals for the zone line (in/out) and for an external indicator (LED).

### IS smoke detector SLR-E-IS

A conventional IS photoelectric (optical) smoke detector, to be plugged in the IS mounting base. The detector has two built-in LEDs to indicate that the detector has generated fire alarm.

### IS heat detector DCD-1E-IS

A conventional IS Rate of Rise heat detector, fixed temperature 60°C (class A1), to be plugged in the IS mounting base. The detector has two built-in LEDs to indicate that the detector has generated fire alarm.

### Product applications

The units are used in the system EBL512.

Connections, etc. according to dwg 512-55.

| Type numbers |  |
|--------------|--|
| 2821         | Addressable IS zone interface (incl. waterproof box & four compr. glands)              |
| MTL5061      | Galvanic isolator (incl. waterproof box & four compression glands) <sup>1</sup> (2820) |
| YBN-R / 4 IS | Intrinsically safe mounting base (2812)  |
| SLR-E-IS     | Intrinsically safe photoelectric smoke detector (2810)                                 |
| DCD-1E-IS    | Intrinsically safe heat detector (2811)  |

| Technical data   |                                |  |                                 |  |  |  |
|--|--------------------------------|--|---------------------------------|--|--|--|
|  | IS zone interface              | Galvanic isolator                        | Base                            | Smoke detector   | Heat detector  |  |
| Voltage (V DC)<br>allowed<br>nominal                           | 12-30<br>24                    | 6-35<br>24                               | 15-30<br>24                     | 15-30<br>24  | 15-30<br>24  |  |
| Current consumpt. at nom. volt.<br>quiescent<br>active         | 3<br>6<br>from the<br>COM loop | <400µA<br>1-40mA                         | n/a                             | 50 µA<br>max. 50<br>mA                                     | 35 µA<br>max. 50<br>mA   |  |
| Current consumpt. at nom. volt.<br>from ext. power supply (mA) | ≤ 30                           | n/a                                      | n/a                             | n/a  | n/a  |  |
| Ambient temperature (°C)<br>operating<br>storage               | -20 to +40<br>-40 to +70       | -20 to +60                               | -10 to +55<br>-30 to +70        | -10 to +55<br>-30 to +70                                   | -10 to +55<br>-30 to +70   |  |
| Ambient humidity (% RH)  | max. 90<br>non cond.           | max. 95<br>non cond.                     | max. 95<br>non cond.<br>at 40°C | max. 95<br>non cond.<br>at 40°C                            | max. 95<br>non cond.<br>at 40°C                                      |  |
| Ingress Protection rating                                      | IP66/67<br>(the box)           | IP66/67<br>(the box)                     | IP22 <sup>2</sup>               | IP22 <sup>2</sup>  | IP22 <sup>2</sup>  |  |
| Size<br>h (mm)   | 175x125x<br>75                 | 175x125x<br>150                          | Ø=100x<br>15                    | Ø=100x<br>46 (incl.<br>base)                               | Ø=100x<br>46 (incl.<br>base)   |  |
| Weight (g)   | ~133                           | ~650                                     | 50                              | 115  | 95   |  |
| Construction / Colour  | Polycarbonate /<br>grey        | Polycarbonate /<br>grey (RAL<br>7035)    | ABS /<br>Ivory<br>white         | ABS /<br>Ivory<br>white                                    | Polycarbonate /<br>Ivory<br>white                                    |  |
| Approvals, except CE.<br>BASEEFA                               | n/a                            | EEx ia IIC<br>T <sub>amb</sub> =<br>60°C | n/a                             | EEx ia IIC<br>T5, T <sub>amb</sub> =<br>50°C<br><br>EN54-7 | II 1 G<br>EEx ia IIC<br>T5, T <sub>amb</sub> =<br>55°C<br><br>EN54-5 |  |
| Zone classification <sup>2</sup>                               |                                |  | n/a                             | Zone 0, 1<br>or 2  | Category<br>1, incl.<br>lower<br>categories                          |  |

**NOTE!** Regarding current consumption for active detectors: All EBL equipment have a current limitation.

<sup>1</sup> Two end-of-line resistors (10K) are included for system EBL512. Each has a body surface area > 230 mm<sup>2</sup> and has to be connected in the last unit on the zone line.

<sup>2</sup> IP rating not tested. Producer's estimation: IP43.

<sup>3</sup> Regarding zone classification: Zone 0 = Category 1, Zone 1 = Category 2 and Zone 2 = Category 3.

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

| Product Leaflet | Date of issue | Revision / Date of revision |
|-----------------|---------------|-----------------------------|
| MEW00198        | 2001-10-26    | 6 / 2007-01-29              |