# AS-i Safety Monitor in Stainless Steel

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*Automatisierungstechnik*

## AS-i Safety Monitor Generation II

**Emergency stop control device in stainless steel housing**

**2-channel release circuits**

**Meets safety-relevant standards according to EN 954-1 up to category 4/SIL 3**

**LCD display**

**Chip card for storage of configuration data**

CE

### Article no. BW2186: AS-i Safety Monitor Generation II, supports safe AS-i outputs
### Article no. BW2044: AS-i Safety Monitor Generation II, safe AS-i outputs are not supported

The AS-i Safety Monitor in Stainless Steel is an emergency stop control device. It monitors the assigned safety-related AS-i sensors by the configuration software asimon. In case an emergency stop should be required or if a fault occurs, the AS-i safety monitor in its protective mode can switch off the system within a response time of 40 ms at most.

The safety monitor in the second generation offers a stainless steel housing with a LCD display for indication of slave addresses and error messages. The configuration data are stored in the integral EEPROM and they can be overwritten by data stored on the chip card and vice versa.
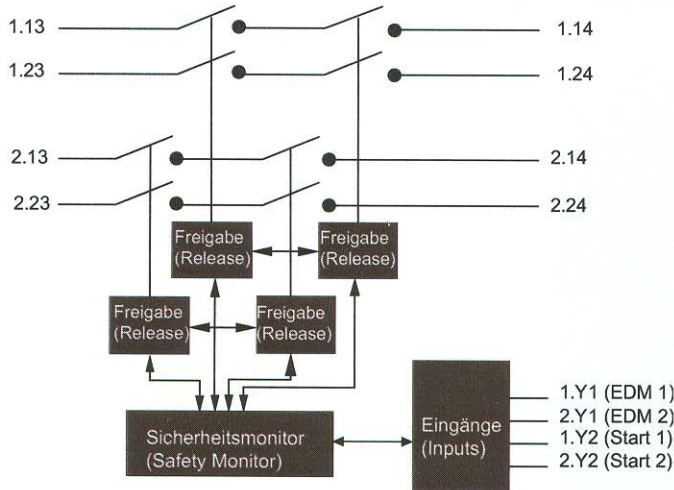
The AS-i Safety Monitor enables the use of sensor-controlled safety components according to EN 954-1 up to category 4/SIL 3. Usage of extensive logic components and formation of AS-i groups is possible, too.

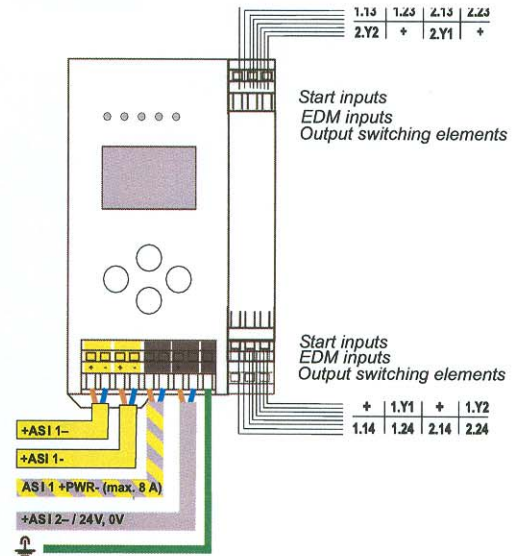| Article no. | BW2044 / BW2186 |
| --- | --- |
| **Safety monitor** | advanced monitor, generation II |
| Release circuit | 2-channel |
| Start delay | < 10 s |
| Respond delay | < 40 ms |
| Baud rate | 19,2 kbaud, no parity, 1 start bit, 1 stop bit, 8 data bits |
| Inputs | 2 x EDM / inputs of external device monitoring circuits 1 and 2<br>2 x Start / start inputs, output circuits 1 and 2<br>switching current statical 4 mA at 24 V, dynamic 30 mA at 24 V (T=100µs) |
| Outputs | 4 x output switching elements, output circuits 1 and 2<br>max. contact load: 3 A AC-15 at 30 V, 3 A DC-13 at 30 V |
| Interface | RS 232, chip card slot |
| **Displays/buttons** | |
| LCD | indication of slave addresses and error messages |
| LED *power* | AS-i voltage OK |
| LED *U AS-i / fault* | communication error on AS-i line / error lock, release circuit active |
| LED *ready* | *LED on:* start-up/restart-disable active<br>*LED flashing:* external test necessary |
| 2 x LEDs *channel 1, channel 2* | contacts of the safety outputs (OSSD) are:<br>*LED off:* open / *LED on:* closed / *LED* flashing: delay time is running at stop category 1 |
| Buttons | 4 |
| **Electrical data** | |
| Operating voltage | 24 V DC (26,5 … 31,6 V out of AS-i) |
| Operating current | approx. 200 mA out of 24 $V_{DC}$ and approx. 45 mA out of AS-i |
| **Standards** | EN 61 000-6-2, EN 61 000-6-4<br>EN 62 061, SIL 3<br>EN 61 508, SIL 3<br>EN 954-1, category 4<br>EN 13 849, performance level e |
| **Housing** | stainless steel |
| Ambient operating temperature | 0°C … +55°C |

| Article no. | BW2044 / BW2186 |
|---|---|
| Storage temperature | -25°C … +85°C |
| Dimensions (L / W / H in mm) | 120 / 85 / 96 |
| Protection category (IEC 60 529) | IP20 |
| Tolerable loading referring to impacts and vibrations | according to EN 61 131-2 |
| Weight | 800 g |

**Safety Monitor block diagram:**

**Connections:**



**Accessories:**
Programming software ASIMON with cable (article no. BW2071)