



## eloProg output expansion 485EPA

The output expansions extend the number of safe OSSD outputs in steps of two or four.

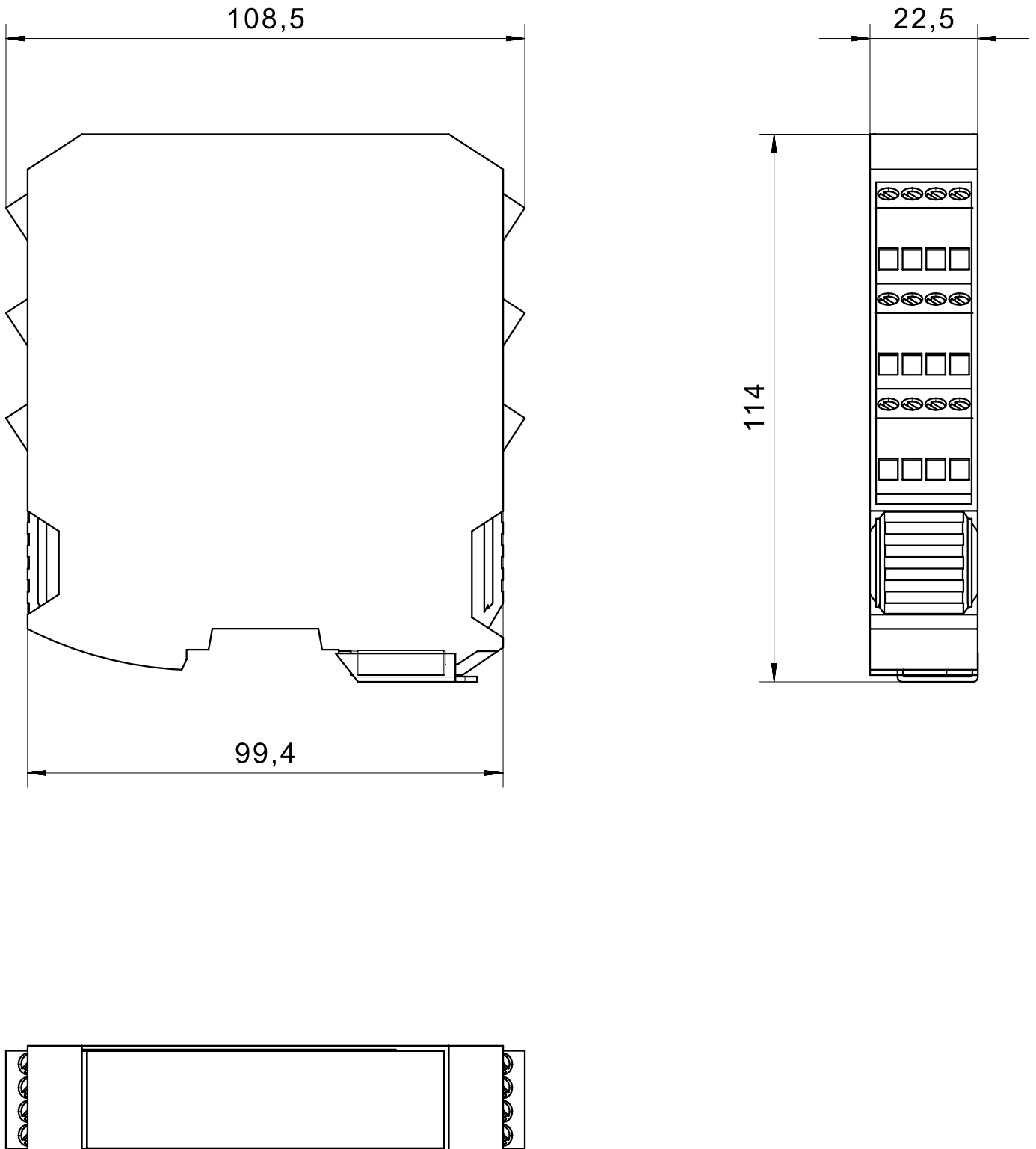
Up to 4 additional expansion units of the same type (e.g. input module) can be connected to the base module. This allows a maximum number of 16 safety outputs.

### Technical specifications

- Up to 4 safe, redundant transistor outputs
- Diagnostics via up to 4 configurable control outputs and LEDs
- Up to 4 EDM inputs for monitoring of downstream contactors or connection of a start push button
- Pre-assembled T-connector (proprietary 5-way bus) for connection to the base module and other expansion modules simplifies wiring and saves space in the switch cabinet

Technical drawing

IMAGE 1/1



**Product options**

IMAGE 1/1

**ORDERING KEY**

|              |          |           |                                    |
|--------------|----------|-----------|------------------------------------|
| <b>485EP</b> | <b>A</b> |           | <b>Module for output expansion</b> |
|              |          | <b>02</b> | <b>2 safe transistor outputs</b>   |
|              |          | <b>04</b> | <b>4 safe transistor outputs</b>   |

### Article characteristics

| Attribute  | 485EPA02                            | 485EPA04                    | 485EPA02S08                 |
|--|-------------------------------------|-----------------------------|-----------------------------|
| Connection to base module                        | proprietary 5-way bus (T-connector) |                             |                             |
| Max. switching voltage at safety output          | 24 V DC                             |                             |                             |
| Max. switching voltage at control output         | 24 V DC                             |                             |                             |
| Max. switching current at safety output          | 0.4 A                               |                             | 2 A                         |
| Max. switching current at control output         | 0.1 A                               |                             |                             |
| Number of configurable electronic safety outputs | 2                                   | 4                           |                             |
| Number of electronic control outputs             | 2                                   | 4                           | 8                           |
| Stop category 0 (STO) nach IEC 61800-5-2         | Depending on the configuration      |                             |                             |
| Stop category 1 (SS1) nach IEC 61800-5-2         | Depending on the configuration      |                             |                             |
| Start function                                   | Depending on the configuration      |                             |                             |
| EDM/start input                                  | Depending on the configuration      |                             |                             |
| Feedback circuit                                 | Depending on the configuration      |                             |                             |
| Operating voltage min.                           | 19.2 V DC                           |                             |                             |
| Operating voltage max.                           | 28.8 V DC                           |                             |                             |
| Power consumption                                | 3 W                                 |                             | 4 W                         |
| LED display                                      | four-coloured                       |                             |                             |
| Response time                                    | in Bericht eP Safety Designer ms    |                             | 12 ms                       |
| PL acc. to EN ISO 13849-1                        | e                                   |                             |                             |
| SIL acc. to IEC 61508                            | 3                                   |                             |                             |
| SIL CL acc. to IEC 62061                         | 3                                   |                             |                             |
| PFHD according to IEC 61508                      | 4,08 x 10 <sup>-9</sup> 1/h         | 5,83 x 10 <sup>-9</sup> 1/h | 8,56 x 10 <sup>-9</sup> 1/h |
| Safe Failure Fraction (SFF) to IEC 61508         | 99.8 %                              |                             | 99.7 %                      |
| Operating life                                   | 20 Tm                               |                             |                             |
| Category acc. to EN ISO 13849-1                  | 4                                   |                             |                             |
| Dimensions                                       | 108 x 22,5 x 114,5 mm (H/B/T)       |                             |                             |
| Housing material                                 | PA                                  |                             |                             |
| Housing colour                                   | Gehäuse schwarz Frontplatte gelb    |                             |                             |

### Article characteristics

| Attribute                       | 485EPA02   | 485EPA04 | 485EPA02S08 |
|---------------------------------|--|----------|-------------|
| Protection class, housing       | IP20 DIN EN 60529                                    |          |             |
| Operating temperature min.      | -10 °C   |          |             |
| Max. operating temperature      | 55 °C  |          |             |
| Min. storage temperature        | -20 °C   |          |             |
| Max. storage temperature        | 85 °C  |          |             |
| Relative humidity               | 10...95 %  |          |             |
| Mounting type                   | Mounting rail  |          |             |
| Weight                          | 170 g  | 185 g    |             |
| Torque for connection terminals | 0.6 N m  |          |             |
| Screw terminals                 | yes  |          |             |
| Pluggable connection terminals  | yes  |          |             |
| Min. connection cross section   | 0.5 mm <sup>2</sup>                                  |          |             |
| Max. connection cross section   | 2.5 mm <sup>2</sup>                                  |          |             |
| Certified in accordance with    | EN ISO 13849-1 IEC 61508 IEC 62061 UL 508 / CSA 22.2 |          |             |
| CE label                        | yes  |          |             |