

## At a glance

### Applications



Frost protection



Temperature maintenance



Silos, containers, tanks



Pipelines, valves, pumps

- › Potentially explosive areas
- › Power plants
- › Chemical industry
- › Petrochemical industry
- › Oil and gas industry
- › Pharmaceutical industry
- › Plastics industry

### Advantages

- › No static charging
- › Snap lock makes it possible to close the cover without using a tool
- › Identification plate can be provided by the customer

### Suitable connection

- › Up to 3 heating cables ELSR or ELP
- › Up to 3 heating cables ELKM-AG
- › Up to 2 PT 100
- › 1 supply line

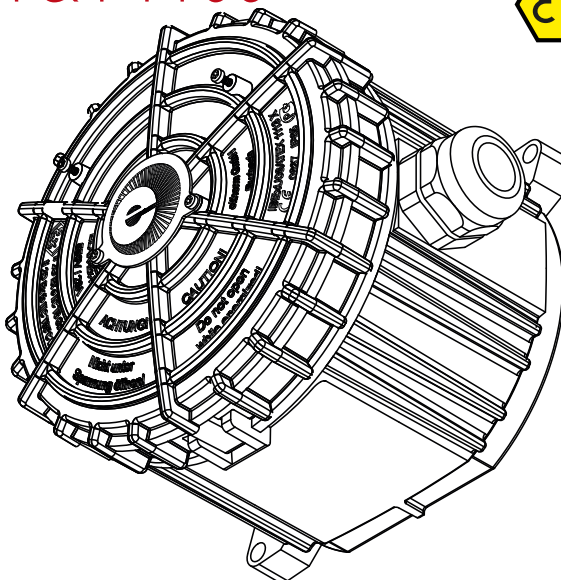
### Approvals



- › IBExU 08 ATEX 1113 X
- › IECEx IBE 16.0001X

# ELAK-Ex-R

## Junction Box for ELSR &ELP & ELKM & PT100



The innovative junction box ELAK-Ex-R is suitable for use in areas subject to explosion hazard and offers many advantages. The cable that is led in does not have to be bent sharply thanks to the shape of the box. This protects the cable against damage. A safety screw connection with enclosed tool prevents the cover from moving. Additional fastening possibilities for identification plates make it possible to label heating circuits reliably in complex systems. Suitable for wall mounting.

## Checklist

### Mounting fixtures for pipe mounting

|            |                                                         |         |
|------------|---------------------------------------------------------|---------|
| EL-VSB 300 | Mounting bracket, adjustable 180 to 300 mm, mat. 1.4301 | 0941085 |
| EL-VSB 400 | Mounting bracket, adjustable 280 to 400 mm, mat. 1.4301 | 0941086 |

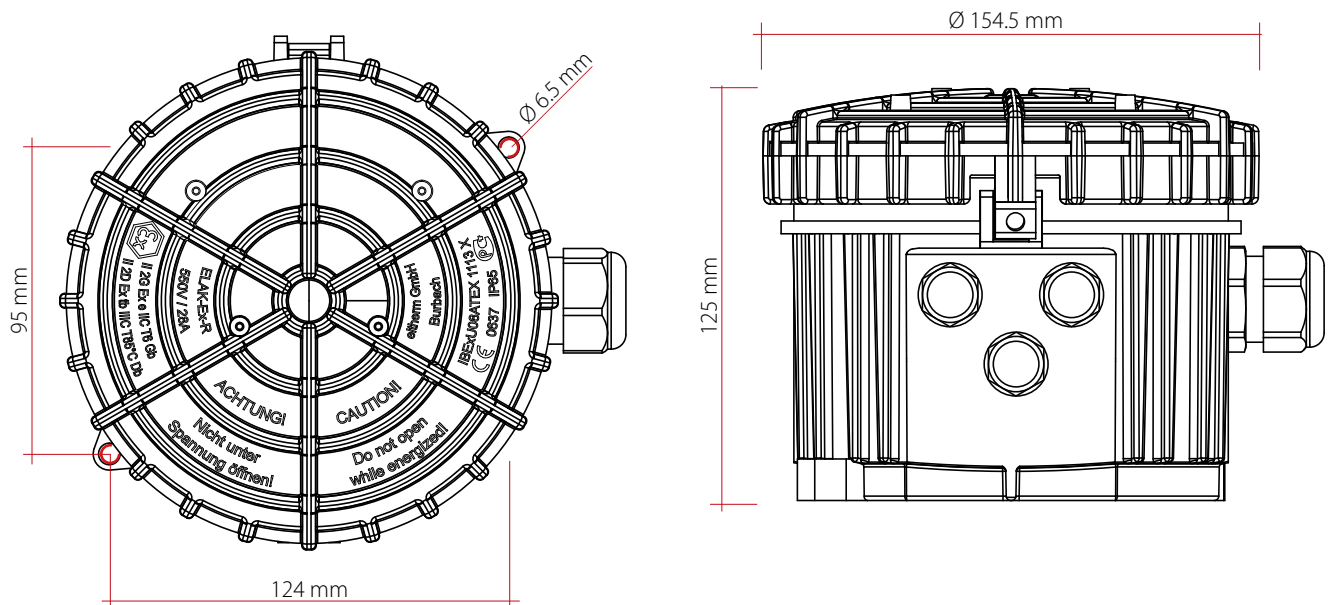
### Assembly accessories for pipelines

|           |                                                   |            |
|-----------|---------------------------------------------------|------------|
| ELB-15.02 | Hose clamp 16-25 mm (DN 15, 1/2"), mat. 1.4301    | 2723001016 |
| ELB-15.04 | Hose clamp 25-40 mm (DN 25, 1"), mat. 1.4301      | 2723001025 |
| ELB-15.06 | Hose clamp 40-60 mm (DN 40, 1.5"), mat. 1.4301    | 2723001040 |
| ELB-15.09 | Hose clamp 70-90 mm (DN 65, 2.5"), mat. 1.4301    | 2723001070 |
| ELB-15.11 | Hose clamp 90-110 mm (DN 80, 3"), mat. 1.4301     | 2723001090 |
| ELB-13V1  | Threaded strapping tape, 11 mm, 30 m, mat. 1.4301 | 2723001010 |
| ELB-13V2  | Turnbuckle 1.4301 (pkg. = 10 pieces), mat. 1.4301 | 0930042    |

## Technical Specifications

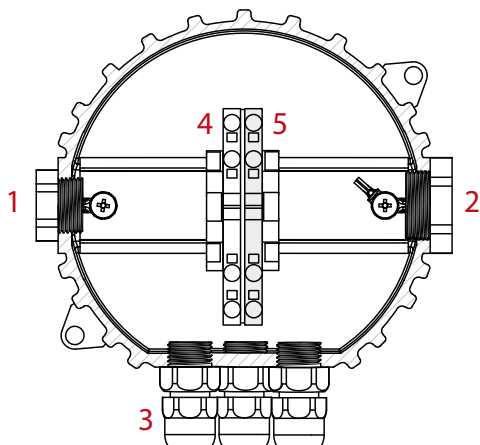
|                           |                                                                           |
|---------------------------|---------------------------------------------------------------------------|
| Operating voltage (max.)  | 550 V                                                                     |
| Nominal current           | Max 28 A                                                                  |
| Ambient temperature       | - 40 °C to +50 °C                                                         |
| Connection cross-section* | Supply line max. 6 mm <sup>2</sup> , (ELAK-Ex-R max. 2.5mm <sup>2</sup> ) |
| Housing material          | Polyamide, black                                                          |
| Dimensions                | (approx.) Ø 154.5 mm, height 125 mm                                       |
| Protection                | IP 65                                                                     |
| Interference immunity     | 7 joules                                                                  |
| Mounting                  | Wall mounting                                                             |
| Weight                    | approx. 0.7 kg                                                            |

\* Connection cross-section (solid or with fine wires without wire end ferrule); terminal heating cable max. 6 mm<sup>2</sup> (AWG12); Terminal temperature sensor max. 2.5 mm<sup>2</sup> (AWG 13)



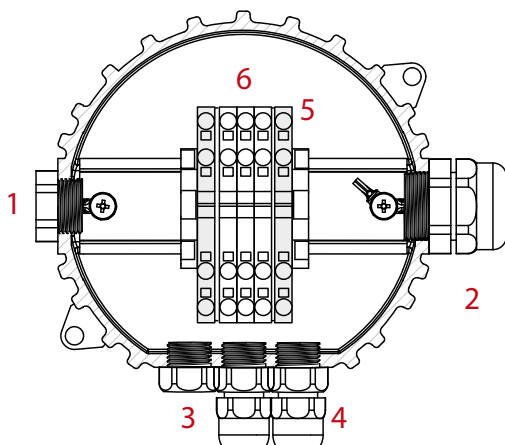
Note: The ELAK-Ex-R system does not include connection and termination sets. Please order these separately according to the Type of heating tape you are using.

## Scope of Delivery



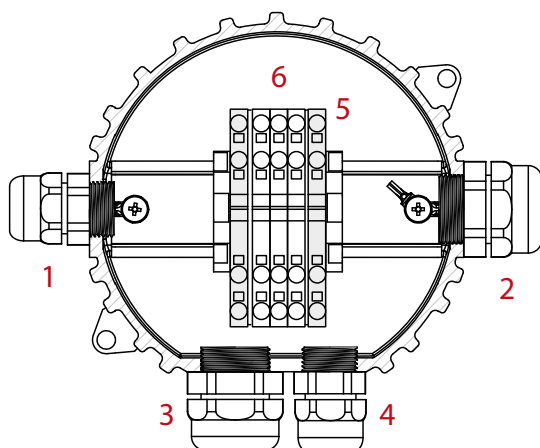
ELAK-Ex-R1

| Pos. | Type                      | Quantity | Clamping range    |
|------|---------------------------|----------|-------------------|
| 1    | Blind plug M20x1,5        | 1        | -                 |
| 2    | Blind plug M25x1,5        | 1        | -                 |
| 3    | Cable gland M16x1,5       | 3        | 4 - 10 mm         |
| 4    | Feed-through terminal     | 1        | 6 mm <sup>2</sup> |
| 5    | Protective earth terminal | 1        | 6 mm <sup>2</sup> |



ELAK-Ex-R2

| Pos. | Type                      | Quantity | Clamping range    |
|------|---------------------------|----------|-------------------|
| 1    | Blind plug M20x1,5        | 1        | -                 |
| 2    | Cable gland M25x1,5       | 1        | 9-13/12-17 mm     |
| 3    | Blind plug M16x1,5        | 1        | -                 |
| 4    | Cable gland M16x1,5       | 2        | 4 - 10 mm         |
| 5    | Protective earth terminal | 2        | 6 mm <sup>2</sup> |
| 6    | Feed-through terminal     | 3        | 6 mm <sup>2</sup> |



ELAK-Ex-R4

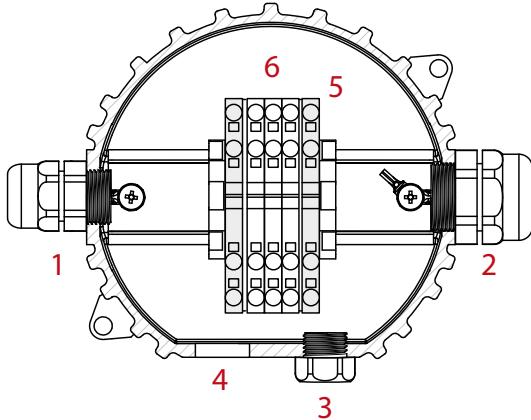
| Pos. | Type                      | Quantity | Clamping range    |
|------|---------------------------|----------|-------------------|
| 1    | Cable gland M20x1,5       | 1        | 9 - 12 mm         |
| 2    | Cable gland M25x1,5       | 1        | 9-13/12-17 mm     |
| 3    | Cable gland M25x1,5       | 1        | 9-13/12-17 mm     |
| 4    | Cable gland M20x1,5       | 1        | 9 - 12 mm-        |
| 5    | Protective earth terminal | 2        | 6 mm <sup>2</sup> |
| 6    | Feed-through terminal     | 3        | 6 mm <sup>2</sup> |

 Clamp for earthing or electrical protection

## Ordering Information

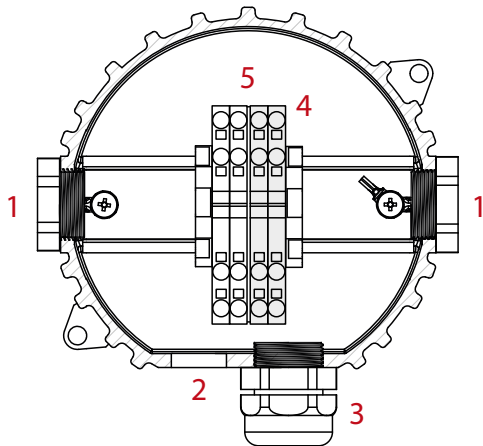
| Type       | Suitable connection                        | Item no. |
|------------|--------------------------------------------|----------|
| ELAK-Ex-R1 | Star point for connection ELKM-AG-**       | 0X80071  |
| ELAK-Ex-R2 | 2 phases or star connection for ELKM-AG-** | 0X80072  |
| ELAK-Ex-R4 | Connection of 1 ELKM-AG-** to EL-CTB       | 0X80074  |

## Scope of Delivery



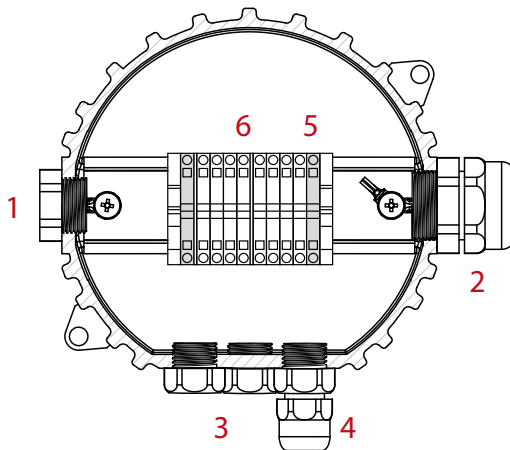
### ELAK-Ex-R5

| Pos. | Type                      | Quantity | Clamping range    |
|------|---------------------------|----------|-------------------|
| 1    | Cable gland M20x1,5       | 1        | 7 - 12 mm         |
| 2    | Cable gland M25x1,5       | 1        | 9-13/12-17 mm     |
| 3    | Blind plug M16x1,5        | 1        | -                 |
| 4    | Drilling M20              | 1        | -                 |
| 5    | Protective earth terminal | 2        | 6 mm <sup>2</sup> |
| 6    | Feed-through terminal     | 3        | 6 mm <sup>2</sup> |



### ELAK-Ex-R7

| Pos. | Type                      | Quantity | Clamping range    |
|------|---------------------------|----------|-------------------|
| 1    | Blind plug M25x1,5        | 2        | -                 |
| 2    | Drilling M25              | 1        | -                 |
| 3    | Cable gland M25x1,5       | 2        | 9-13/12-17 mm     |
| 4    | Protective earth terminal | 2        | 6 mm <sup>2</sup> |
| 5    | Feed-through terminal     | 2        | 6 mm <sup>2</sup> |



### ELAK-Ex-R8 & ELAK-Ex-R8i

| Pos. | Type                      | Quantity | Clamping range      |
|------|---------------------------|----------|---------------------|
| 1    | Blind plug M20x1,5        | 1        | -                   |
| 2    | Cable gland M25x1,5       | 1        | 9 - 17 mm           |
| 3    | Blind plug M16x1,5        | 2        | -                   |
| 4    | Cable gland M16x1,5       | 1        | 6 - 10 mm           |
| 5    | Protective earth terminal | 2        | 2,5 mm <sup>2</sup> |
| 6    | Feed-through terminal     | 8        | 2,5 mm <sup>2</sup> |

■ Clamp for earthing or electrical protection

## Ordering Information

| Type        | Suitable connection                     | Item no.  |
|-------------|-----------------------------------------|-----------|
| ELAK-Ex-R5  | Connection of 1 ELSR + EL-CT            | 0X80075   |
| ELAK-Ex-R7  | Connection of 1 up to 3 ELSR or ELP     | 0X80077   |
| ELAK-Ex-R8  | Connection of 1 or 2 Pt100 sensors      | 0X80078   |
| ELAK-Ex-R8i | Connection of 1 or 2 Pt100 sensors [ib] | 0X80078IB |