

## Ex-control stations - enclosures GHG 44. 33



Type 444 33



Type 448 33



Type 449 33



Type 447 33

### 4 Technical data

#### Ex-control stations Typ 444, 448, 449, and 447 stainless steel for individual configuration

|                                              |                                                                                            |
|----------------------------------------------|--------------------------------------------------------------------------------------------|
| Marking accd. to 2014/34/EU                  | Ⓢ II 2 G Ex de ia/ib m [ia/ib] IIC T6 <sup>1)</sup><br>Ⓢ II 2 D Ex tD A21 IP66/IP65 T80 °C |
| EC-Type Examination Certificate              | PTB 99 ATEX 1044 <sup>1)</sup>                                                             |
| IECEx Certificate of Conformity              | IECEx BKI 07.0023 <sup>1)</sup>                                                            |
| Marking accd. to IECEx                       | Ex de ia/ib m [ia/ib] IIC T4 .. T6 <sup>1)</sup><br>Ex tD A21 IP66 T80 °C                  |
| Permissible ambient temperature              | -20 °C up to +40 °C <sup>1)</sup><br>-55 °C up to +55 °C (option)                          |
| Rated voltage                                | 690 V AC                                                                                   |
| Rated current                                | 40 A                                                                                       |
| Connecting terminals                         | see technical data for built-in components                                                 |
| PE-Connecting terminals                      | 2 x 4 mm <sup>2</sup>                                                                      |
| Protection class                             | I                                                                                          |
| Degree of protection accd. to EN 60529       | IP66 (standard)                                                                            |
| Cable glands/Gland plates/Enclosure drilling | as ordered accd. to manufacturer's specification                                           |
| Enclosure material                           | Stainless steel AISI 316 L                                                                 |
| Enclosure colour                             | polished                                                                                   |

#### Type 444 33

|                        |                                |
|------------------------|--------------------------------|
| Connecting terminals   | max. 20 terminals UT 4         |
| Dimensions (L x W x H) | 312.5 x 175 x 135 mm           |
| Weight (empty)         | 3.5 kg with mounting framework |
| Components arrangement | 6 mounting areas               |

#### Type 448 33

|                        |                                                                                                                         |
|------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Connecting terminals   | max. 30 terminals UT 4                                                                                                  |
| Dimensions (L x W x H) | 312.5 x 312.5 x 135 mm                                                                                                  |
| Weight (empty)         | 7.5 kg with mounting framework                                                                                          |
| Components arrangement | distance 40 mm max. 18 mounting areas<br>distance 50 mm max. 15 mounting areas<br>distance 60 mm max. 12 mounting areas |

#### Type 449 33

|                        |                                                                                                                         |
|------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Connecting terminals   | max. 60 terminals UT 4                                                                                                  |
| Dimensions (L x W x H) | 627 x 312.5 x 135 mm                                                                                                    |
| Weight (empty)         | 11.5 kg with mounting framework                                                                                         |
| Components arrangement | distance 40 mm max. 36 mounting areas<br>distance 50 mm max. 30 mounting areas<br>distance 60 mm max. 24 mounting areas |

#### Type 447 33

|                        |                                                                                                                         |
|------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Connecting terminals   | max. 90 terminals UT 4                                                                                                  |
| Dimensions (L x W x H) | 941.5 x 312.5 x 135 mm                                                                                                  |
| Weight (empty)         | 16.5 kg with mounting framework                                                                                         |
| Components arrangement | distance 40 mm max. 54 mounting areas<br>distance 50 mm max. 45 mounting areas<br>distance 60 mm max. 36 mounting areas |

<sup>1)</sup> Data for ready configured product



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## Ordering codes (Code 1)

| 1. Enclosure | 2. Components arrangement/terminals |                      |                       |                       | 3. Labels/<br>padlocking facility | 4. Cable glands |
|--------------|-------------------------------------|----------------------|-----------------------|-----------------------|-----------------------------------|-----------------|
|              | Mounting<br>1 ... 6                 | Mounting<br>7 ... 18 | Mounting<br>19 ... 27 | Mounting<br>37 ... 64 |                                   |                 |
| 444 33       | X                                   | –                    | –                     | –                     | X                                 | X               |
| 448 33       | X                                   | X                    | –                     | –                     | X                                 | X               |
| 449 33       | X                                   | X                    | X                     | –                     | X                                 | X               |
| 447 33       | X                                   | X                    | X                     | X                     | X                                 | X               |

## Possible components (Code 1)

| Component                                                  | Code                 | Component                           | Code                    |
|------------------------------------------------------------|----------------------|-------------------------------------|-------------------------|
| Pushbutton (2-pole or 4-pole <sup>2)</sup> )               | DRT                  | Measuring instrument                | AM72 <sup>1)</sup>      |
| Double pushbutton (2-pole or 4-pole <sup>2)</sup> )        | DDT                  | Measuring instrument                | AM45                    |
| Key-operated pushbutton (2-pole or 4-pole <sup>2)</sup> )  | SLT                  | Signal lamp                         | SIL                     |
| Key-operated switch (2-pole or 4-pole <sup>2)</sup> )      | SLS                  | Potentiometer                       | POT                     |
| Control switch (2-pole or 4-pole <sup>2)</sup> )           | SCT                  | Terminal block (4 mm <sup>2</sup> ) | KLM ... A <sup>2)</sup> |
| Mushroom-head pushbutton (2-pole or 4-pole <sup>2)</sup> ) | SGT                  | Terminal block (4 mm <sup>2</sup> ) | KLM ... B               |
| Control switch                                             | GHG 23 <sup>1)</sup> | Blanking element                    | BLV                     |

<sup>1)</sup> 2 mounting areas are needed<sup>2)</sup> Serial terminals and PE-Terminal are mounted on a rail below the hinged frame

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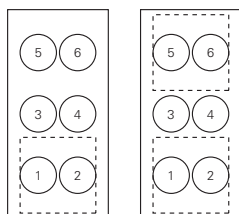
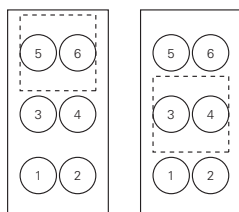


Type 449 33

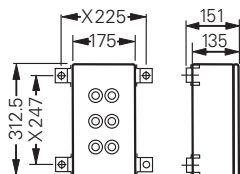


Type 447 33

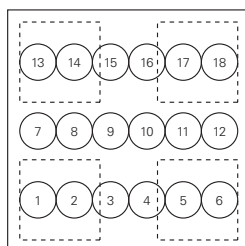
### 4 Mounting area I Dimension drawing



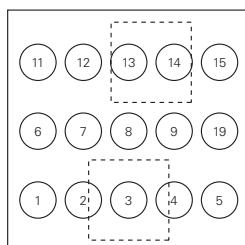
Distance between centres  
40, 50 and 60 mm



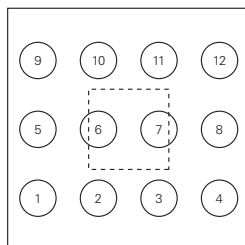
Type 444 33



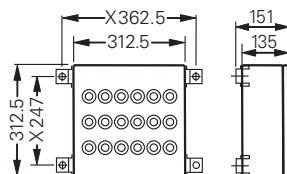
Distance between centres 40 mm



Distance between centres 50 mm



Distance between centres 60 mm



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X = fixing dimension

= mounting space for switch, pushbutton (2-pole) or signal lamp

= mounting space for switch, pushbutton (4-pole) ampere- or voltmeter

Dimensions in mm



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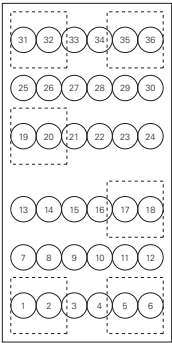


Type 448 33

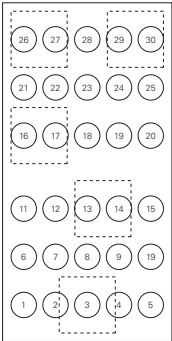


Type 444 33

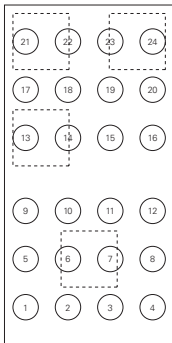
Mounting area | Dimension drawing



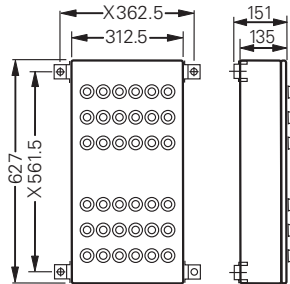
Distance between centres 40 mm



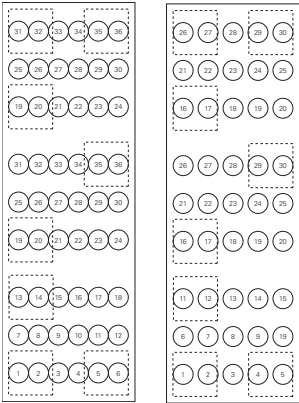
Distance between centres 50 mm



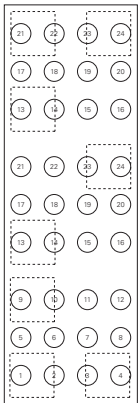
Distance between centres 60 mm



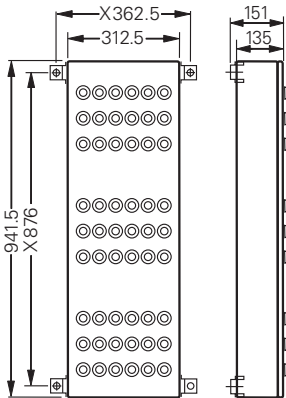
Type 449 33



Distance between centres 40 mm 50 mm



Distance between centres 60 mm



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X = fixing dimension