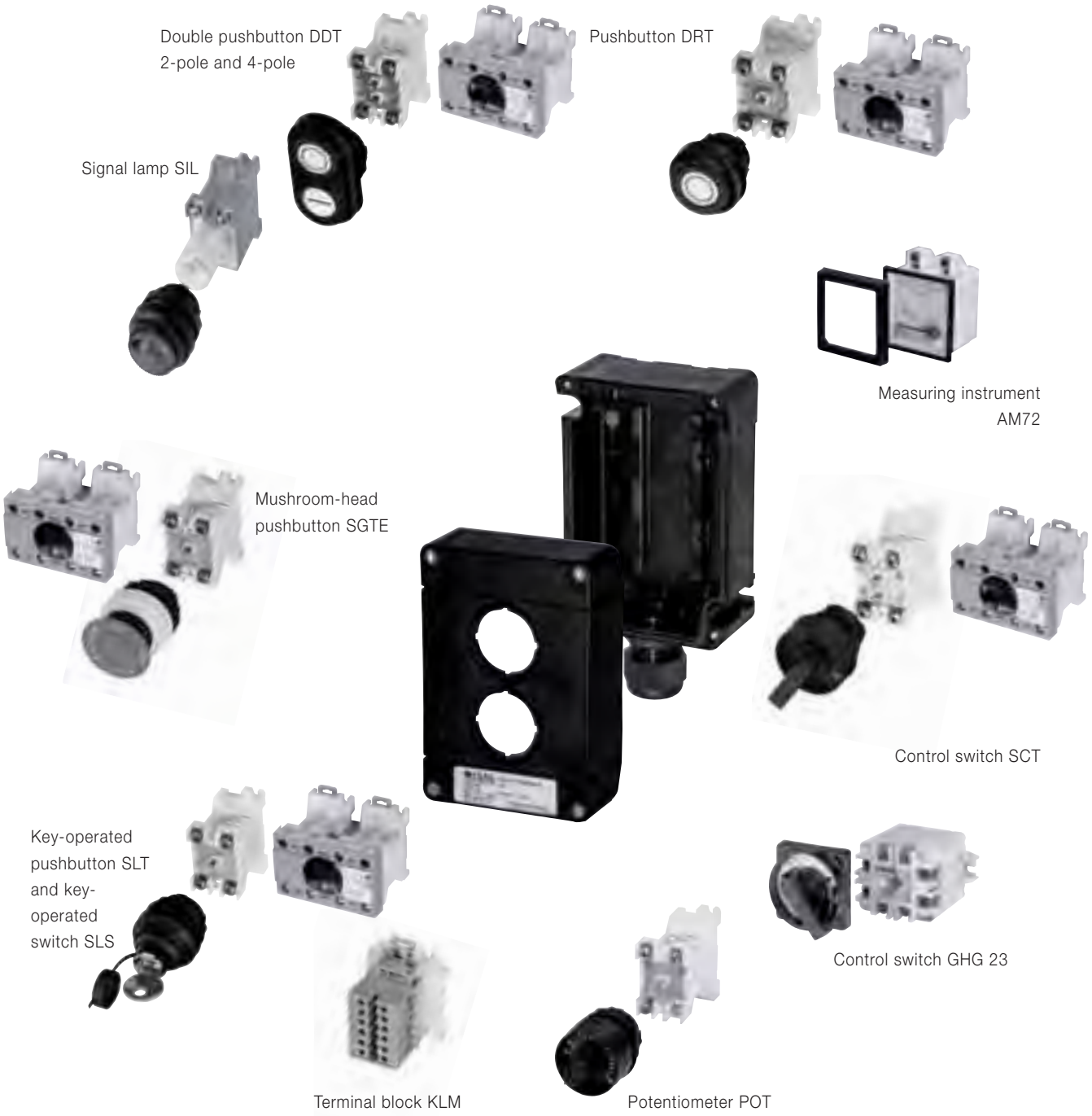
Customised control stations, covered by type examination certificates, can be individually combined from CEAG's numerous built-in components.

A coding system for these components with unique designations can be used for planning, selection and ordering. The sum of the code numbers designates a complete control station.

For the selection of control units and components, please see page 9.34 pp.

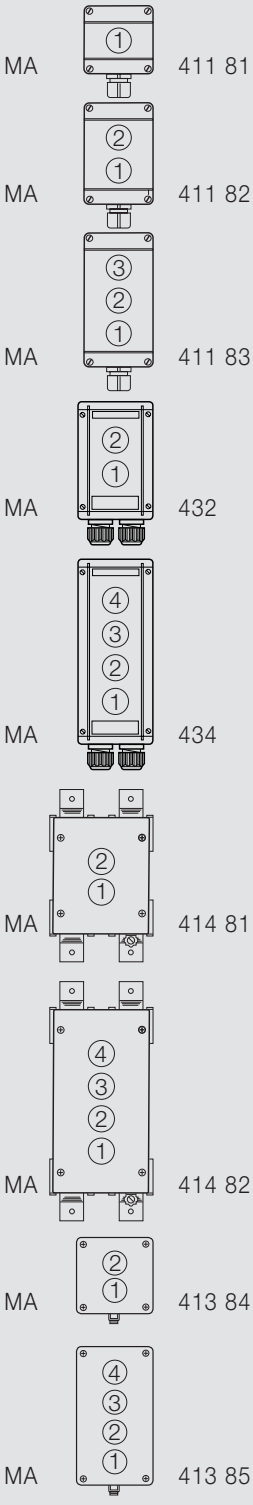


## Order Code for Individual Control Units

Individual control units can be defined by 4 groups of components:
1. Empty Enclosure
2. Components per mounting area
3. Accessories
4. Cable glands

### Code 1: Empty Enclosure

Code for enclosure

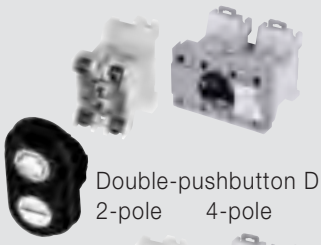



### Code 2: Components per mounting area (max. 4)

| A | C | D(1) | (D2) | E | F | |
|---|---|---|---|---|---|---|
| ☐☐☐☐ | ☐☐ | ☐☐☐ | ☐☐☐ | ☐☐ | ☐ | Mounting area 1 MA1 |
| ☐☐☐☐ | ☐☐ | ☐☐☐ | ☐☐☐ | ☐☐ | ☐ | Mounting area 2 MA2 |
| ☐☐☐☐ | ☐☐ | ☐☐☐ | ☐☐☐ | ☐☐ | ☐ | Mounting area 3 MA3 |
| ☐☐☐☐ | ☐☐ | ☐☐☐ | ☐☐☐ | ☐☐ | ☐ | Mounting area 4 MA4 |

Pushbutton DRT
2-pole 4-pole

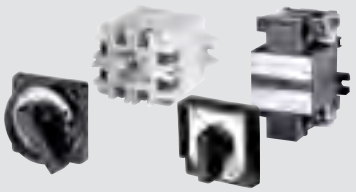
Signal lamp
SIL



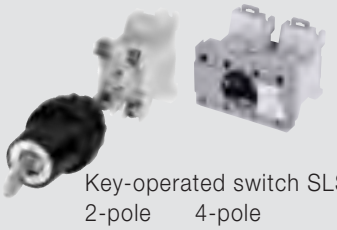
Double-pushbutton DDT
2-pole 4-pole

Potentiometer
POT

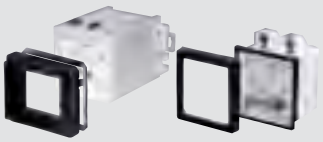
Key-operated pushbutton SLT
2-pole 4-pole



Control switch
Ex 23 Ex 29



Key-operated switch SLS
2-pole 4-pole



Measuring instrument
AM 45 AM 72

Mushroom-head pushbutton
SGTE SGT

Terminal block
KLM

Example: Enclosure Type 434,
Pushbutton (MA4),
Signal lamp (MA3)
Emergency stop
Mushroom head pushbutton (MA2)
Double pushbutton (MA1)

Code 1: 434..
Code 2 MA4: DRT 14 001
Code 2 MA3: SIL 1 10
Code 2 MA2 SGTE 13 1 1 2
Code 2 MA1: DDT15 001 007

Code 3 MA1: ZUB 19
Code 3 MA2: ZUB 19
Code 3 MA3: ZUB 02
Code 3 MA4: --
Code 4: GEH 1 GK M25 2

## Code 3: Labels and locking facilities

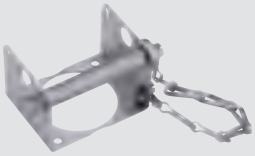
A □□□□□ B □..... C □□□□□ Mounting area 1 MA1

A □□□□□ B □..... C □□□□□ Mounting area 2 MA2

A □□□□□ B □..... C □□□□□ Mounting area 3 MA3

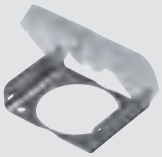
A □□□□□ B □..... C □□□□□ Mounting area 4 MA4

Label with holder
ZUB 20

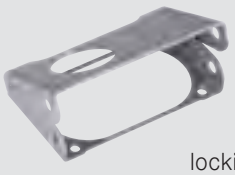


locking facility
ZUB 14

locking facility with hammer
ZUB 05



locking facility
ZUB 22



locking facility double pushbutton
ZUB 17

## Code 4: Cable entries and flanges

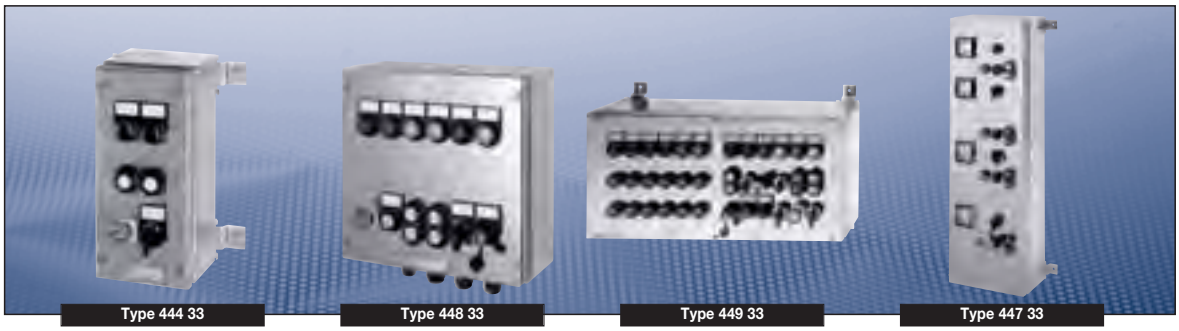
A □□□ B □ C □□ D □□□ E □

Metal flange plate
FLM

plastic cable gland
GK

plastic trumpet-shaped
cable gland TR


position for
drilling/gland




## Technical data

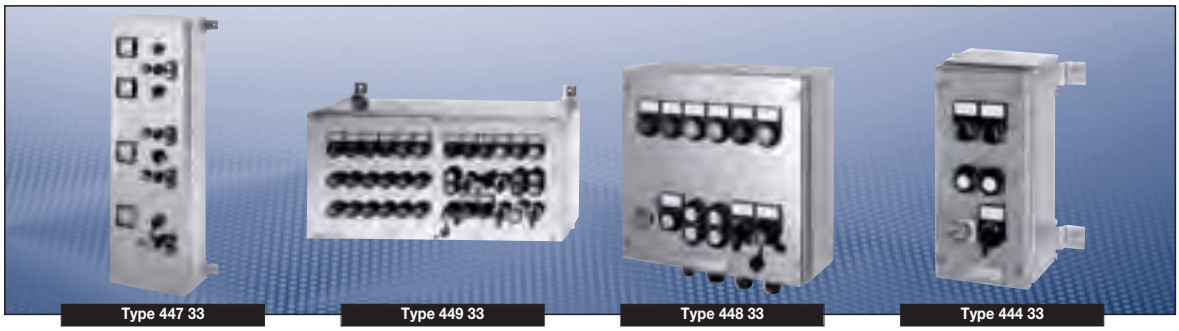
| Ex-Control stations Type 444, 448, 449, and 447 stainless steel for individual configuration | |
|---|---|
| Marking to 94/9/EC | ⟨Ex⟩ II 2 G Ex de ia/ib m [ia/ib] IIC T6<br>⟨Ex⟩ II 2 D Ex tD A21 IP66/IP65 T80 °C |
| EC-Type Examination Certificate | PTB 99 ATEX 1044 |
| IECEx Certificate of conformity | IECEx BKI 07.0023 |
| Marking accd. to IECEx | Ex de ia/ib m [ia/ib] IIC T4 .. T6<br>Ex tD A21 IP66 T80 °C |
| Permissible ambient temperature | –20 °C to +40 °C<br>–55 °C to +55 °C (option) |
| Rated voltage | 690 V AC |
| Rated current | 40 A |
| Connecting terminals | see technical data for built-in components |
| PE-connection terminals | 2 x 4 mm² |
| Insulation class | I |
| Degree of protection accd. 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 | |
| Mounting arrangements | 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 | |
| Mounting arrangements | distance 40 mm | max. 18 mounting areas |
| | distance 50 mm | max. 15 mounting areas |
| | 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 | |
| Mounting arrangements | distance 40 mm | max. 36 mounting areas |
| | distance 50 mm | max. 30 mounting areas |
| | 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 | |
| Mounting arrangements | distance 40 mm | max. 54 mounting areas |
| | distance 50 mm | max. 45 mounting areas |
| | distance 60 mm | max. 36 mounting areas |




## Ordering codes (Code 1)

| 1. Empty enclosure | 2. Components arrangement/Terminals | | | | 3. Labels/Locking devices | 4. Cable glands |
|---|---|---|---|---|---|---|
| | Mounting area 1 ... 6 | Mounting area 7 ... 18 | Mounting area 19 ... 36 | Mounting area 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 |

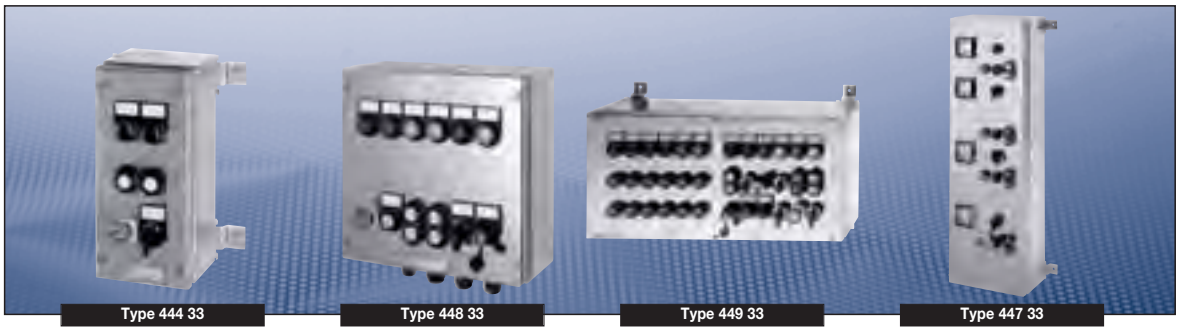
## Possible components (Code 1)

| Component | Code |
|---|---|
| Pushbutton (2-pole or 4-pole[1]) | DRT |
| Double pushbutton (2-pole or 4-pole[1]) | DDT |
| Key-operated pushbutton (2-pole or 4-pole[1]) | SLT |
| Key switch (2-pole or 4-pole[1]) | SLS |
| Mushroom-head pushbutton (2-pole or 4-pole[1]) | SGT |
| Control switch (2-pole or 4-pole[1]) | SCT |
| Signal lamp | SIL |
| Potentiometer | POT |

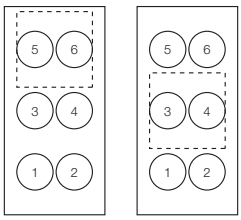
| Component | Code |
|---|---|
| Measuring instrument | AM72[1] |
| Measuring instrument | AM45 |
| Blanking element | BLV |
| Control switch | GHG 23[1] |
| Control switch | GHG 29[1] |
| Terminal (4 mm²) | KLM ... A[2] |
| Terminal block (4 mm²) | KLM ... B |

[1] 2 mounting areas are needed

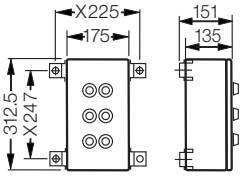
[2] Terminal blocks and PE-terminals are attached to terminal rail under the fold-out mounting frame



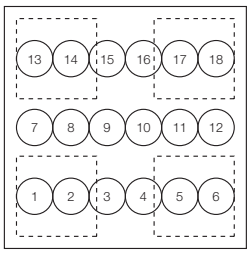

## Mounting area | Dimension drawing



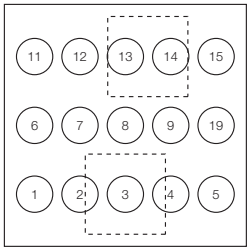

**Distance between centres 40, 50 and 60 mm**



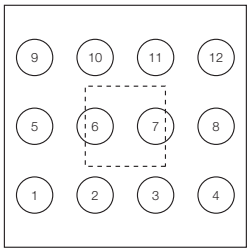

**Type 444 33**



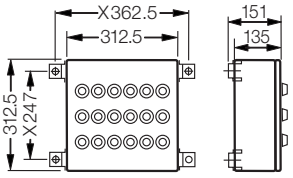

**Distance between centres 40 mm**




**Distance between centres 50 mm**



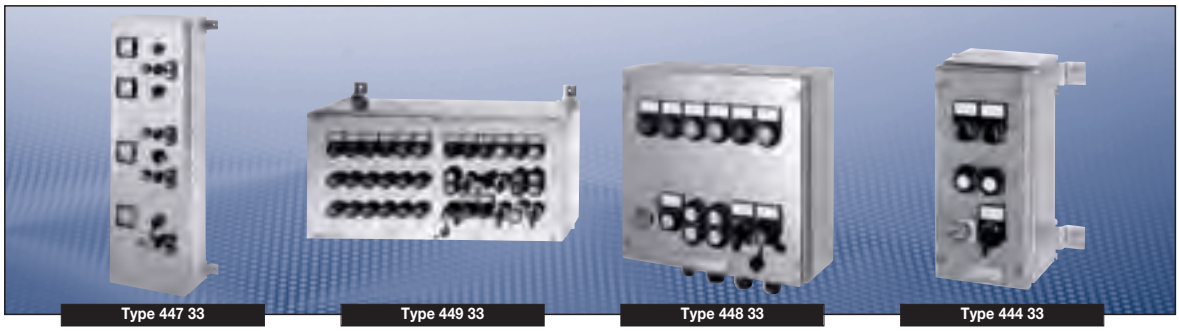

**Distance between centres 60 mm**



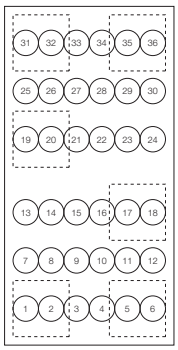

**Type 448 33**

**X = fixing dimension**

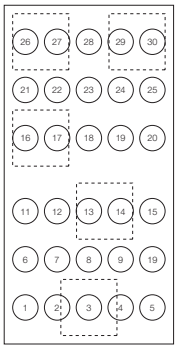
Dimensions in mm



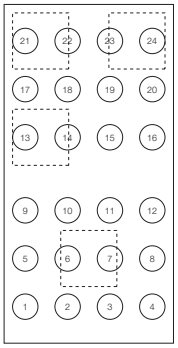

## Mounting area | Dimension drawing



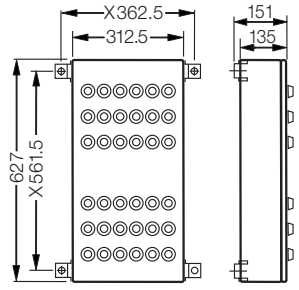
Distance between centres 40 mm



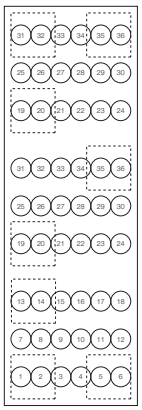
Distance between centres 50 mm

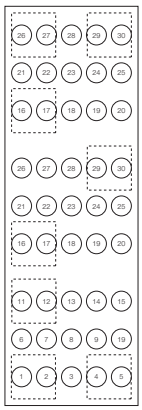


Distance between centres 60 mm

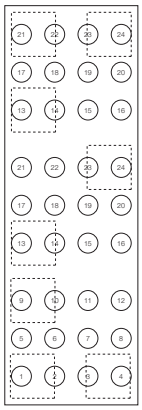



Type 449 33

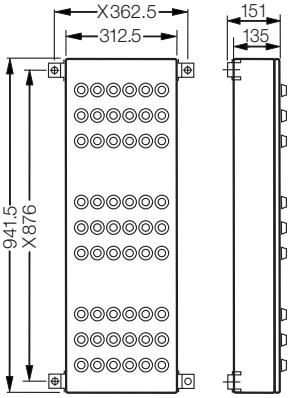




Distance between centres
40 mm 50 mm



Distance between centres 60 mm




Type 447 33

X = fixing dimension

Dimensions in mm