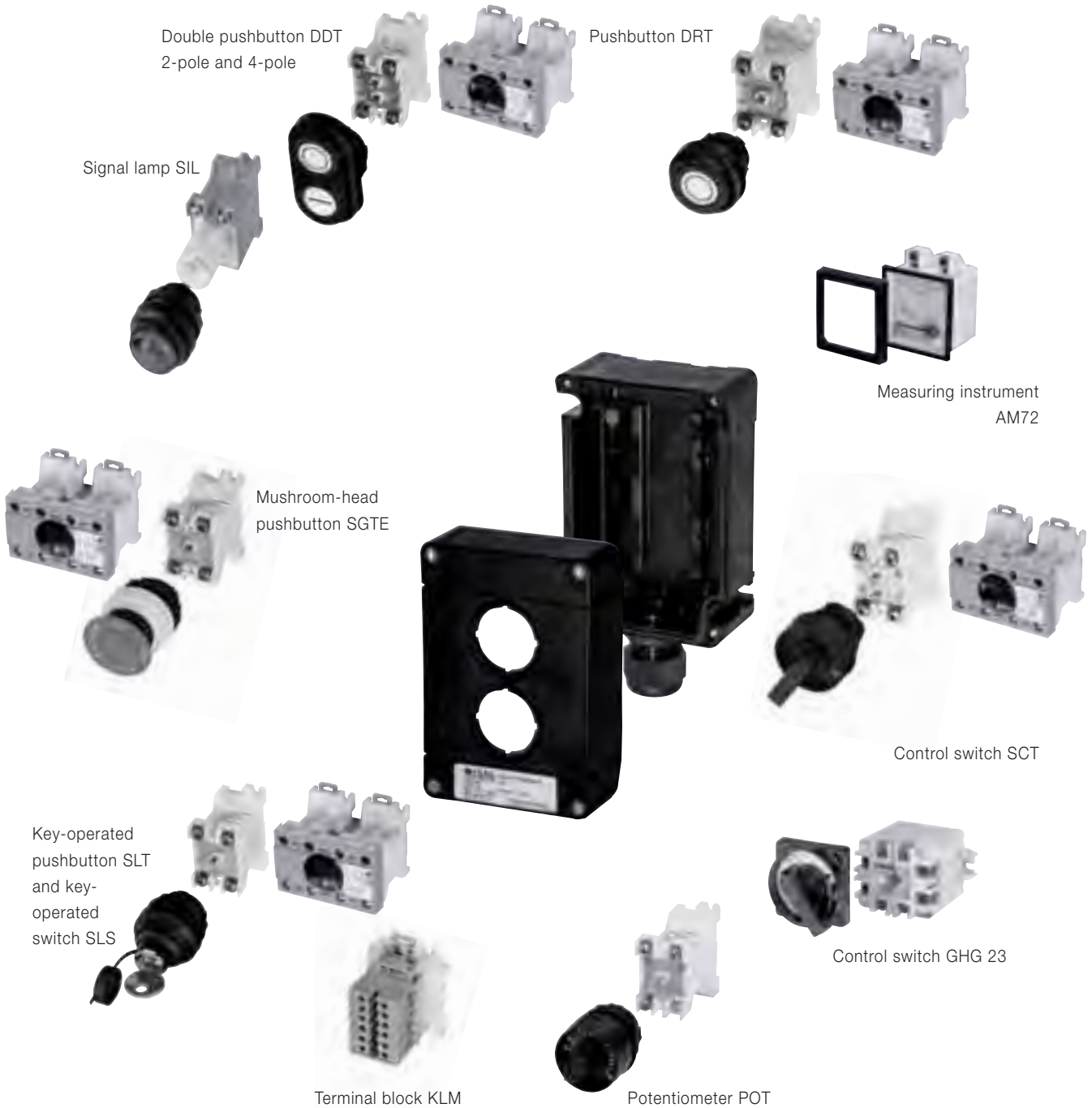


Customised control stations, covered by type examination certificates, can be individually combined from CEAG's numerous built-in components.

ordering. The sum of the code numbers designates a complete control station.

A coding system for these components with unique designations can be used for planning, selection and

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



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12

**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

MA		411 81
MA		411 82
MA		411 83
MA		432
MA		434
MA		414 81
MA		414 82
MA		413 84
MA		413 85

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

A	C	D(1)	(D2)	E	F	Mounting area 1
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MA1
A	C	D(1)	(D2)	E	F	Mounting area 2
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MA2
A	C	D(1)	(D2)	E	F	Mounting area 3
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MA3
A	C	D(1)	(D2)	E	F	Mounting area 4
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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
<input type="text"/>	<input type="text"/>	<input type="text"/>	
A	B	C	Mounting area 2 MA2
<input type="text"/>	<input type="text"/>	<input type="text"/>	
A	B	C	Mounting area 3 MA3
<input type="text"/>	<input type="text"/>	<input type="text"/>	
A	B	C	Mounting area 4 MA4
<input type="text"/>	<input type="text"/>	<input type="text"/>	



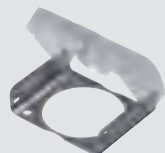
Label with holder  
ZUB 20



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
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>



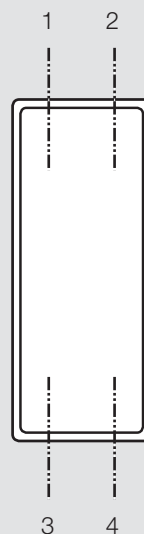
Metal flange plate  
FLM



plastic cable gland  
GK

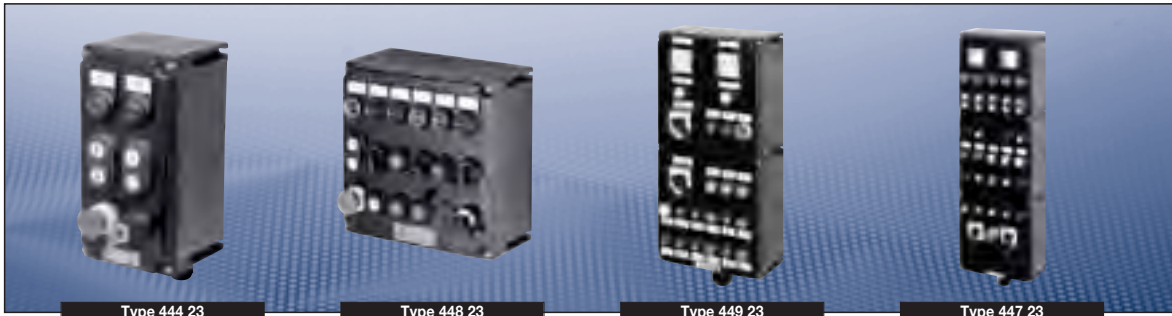


plastic trumpet-shaped  
cable gland TR



position for  
drilling/gland

## Ex-control stations



## Technical data

Ex-Control stations Type 444, 448, 449, and 447 for individual configuration	
Marking to 94/9/EC	$\text{Ex}$ II 2 G Ex de ia/ib m [ia/ib] IIC T6 $\text{Ex}$ II 2 D Ex tD A21 IP66/IP65 T80 °C
EC-Type Examination Certificate	PTB 99 ATEX 1044
IECEX Certificate of conformity	IECEX BK1 07.0023
Marking accd. to IECEx	Ex de ia/ib m [ia/ib] IIC T4 .. T6 Ex tD A21 IP66 T80 °C
Permissible ambient temperature	-20 °C to +40 °C -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 mm <sup>2</sup>
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	glass-fibre reinforced polyester
Enclosure colour	black

### Type 444 23

Connecting terminals	max. 20 terminals UT 4
Dimensions (L x W x H)	271 x 134 x 136 mm
Weight (empty)	1.5 kg with mounting framework
Mounting arrangements	6 mounting areas

### Type 448 23

Connecting terminals	max. 30 terminals UT 4
Dimensions (L x W x H)	271 x 271 x 136 mm
Weight (empty)	2.5 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 23

Connecting terminals	max. 60 terminals UT 4
Dimensions (L x W x H)	544 x 271 x 136 mm
Weight (empty)	4.5 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 23

Connecting terminals	max. 90 terminals UT 4
Dimensions (L x W x H)	817 x 271 x 136 mm
Weight (empty)	6.5 kg with mounting framework
Mounting arrangements	distance 40 mm      max. 64 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 23	X	-	-	-	X	X
448 23	X	X	-	-	X	X
449 23	X	X	X	-	X	X
447 23	X	X	X	X	X	X

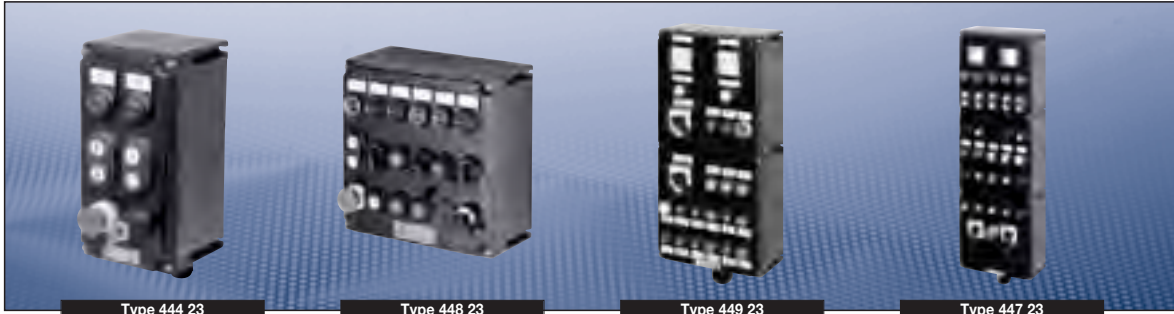
Possible components (Code 1)

Component	Code	Component	Code
Pushbutton (2-pole or 4-pole <sup>1)</sup> )	DRT	Measuring instrument	AM72 <sup>1)</sup>
Double pushbutton (2-pole or 4-pole <sup>1)</sup> )	DDT	Measuring instrument	AM45
Key-operated pushbutton (2-pole or 4-pole <sup>1)</sup> )	SLT	Signal lamp	SIL
Key switch (2-pole or 4-pole <sup>1)</sup> )	SLS	Potentiometer	POT
Control switch (2-pole or 4-pole <sup>1)</sup> )	SCT	Serial terminals (4 mm <sup>2</sup> )	KLM...A <sup>2)</sup>
Mushroom-head pushbutton (2-pole or 4-pole <sup>1)</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

**Ex-control stations**



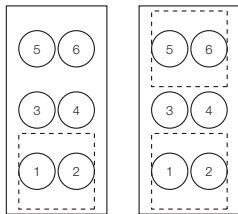
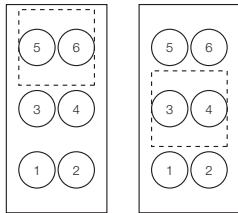
Type 444 23

Type 448 23

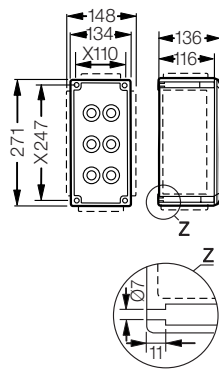
Type 449 23

Type 447 23

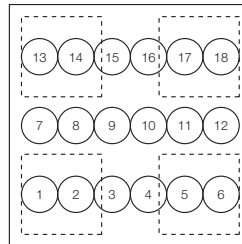
**Mounting areas | Dimension drawing**



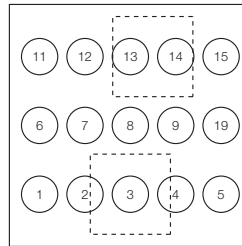
Distance between centres 40, 50 and 60 mm for positioning of built-in components



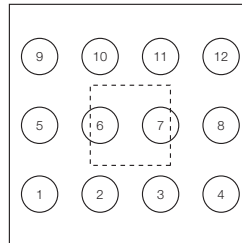
Type 444 23



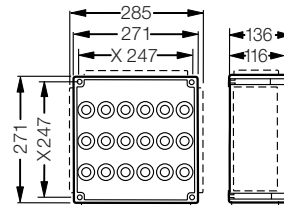
Distance between centres 40 mm



Distance between centres 50 mm



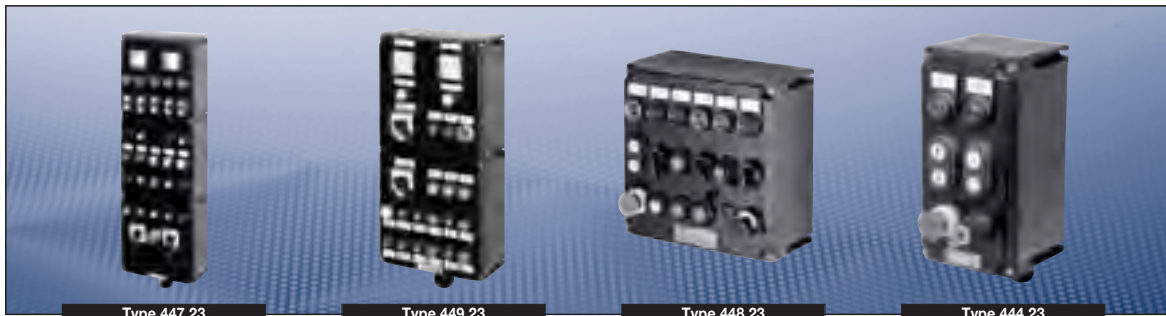
Distance between centres 60 mm



Type 448 23

X = fixing dimension

Dimensions in mm



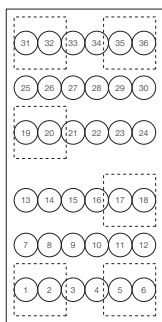
Type 447 23

Type 449 23

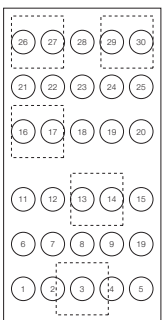
Type 448 23

Type 444 23

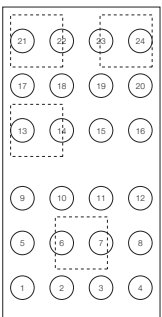
Mounting areas | Dimension drawing



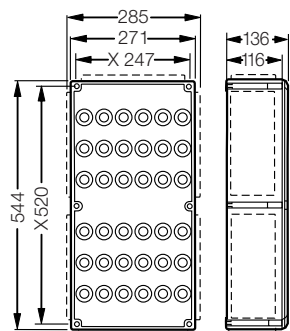
Distance between centres 40 mm



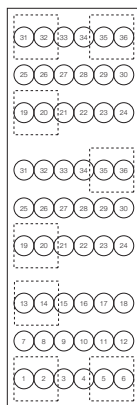
Distance between centres 50 mm



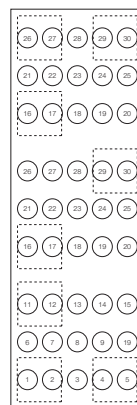
Distance between centres 60 mm



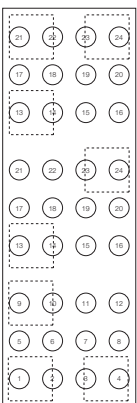
Type 449 23



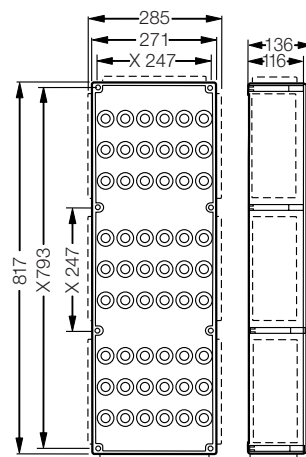
Distance between centres 40 mm



Distance between centres 50 mm



Distance between centres 60 mm



Type 447 23

X = fixing dimension

Dimensions in mm