

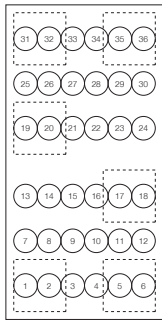
Typ 447 23

Typ 449 23

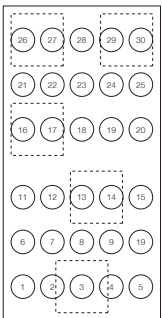
Typ 448 23

Typ 444 23

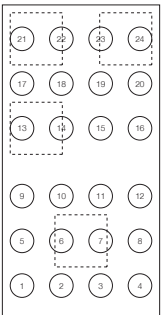
Einbaufelder | Maßzeichnungen



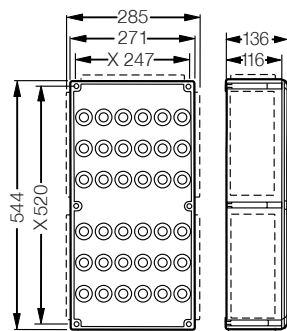
Rastermaß 40 mm



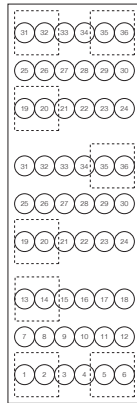
Rastermaß 50 mm



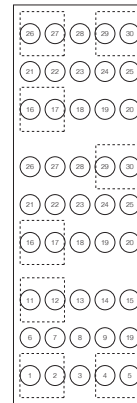
Rastermaß 60 mm



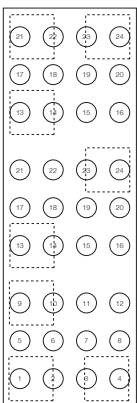
Typ 449 23



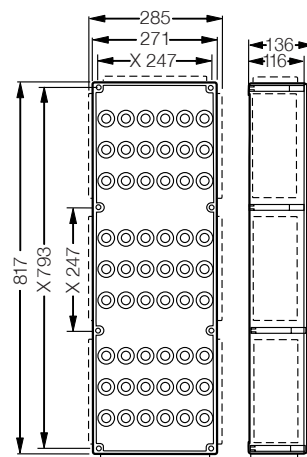
Rastermaß 40 mm



Rastermaß 50 mm



Rastermaß 60 mm



Typ 447 23

X = Befestigungsmaße

Maßangaben in mm

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.

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Double pushbutton DDT
2-pole and 4-pole

Pushbutton DRT

Signal lamp SIL

Measuring instrument
AM72

Mushroom-head
pushbutton SGTE

Control switch SCT

Key-operated
pushbutton SLT
and key-
operated
switch SLS

Control switch GHG 23

Terminal block KLM











Potentiometer POT

| 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			①						411 81
MA			① ②						411 82
MA			① ② ③						411 83
MA			① ②						432
MA			① ② ③ ④						434
MA			① ②						414 81
MA			① ② ③ ④						414 82
MA			① ②						413 84
MA			① ② ③ ④						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
		
Key-operated switch SLS 2-pole	4-pole	Measuring instrument AM 45
		
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

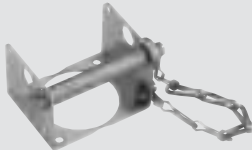
Code 3 MA1: ZUB 19
 Code 3 MA2: ZUB 19
 Code 3 MA3: ZUB 02
 Code 3 MA4: --
 Code 4: GEH 1 GK M25 2

Code 3: Lables and locking facilities

A	B	C	Mounting area 1 MA1
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
A	B	C	Mounting area 2 MA2
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
A	B	C	Mounting area 3 MA3
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
A	B	C	Mounting area 4 MA4
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



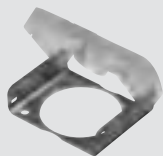
Label with holder
ZUB 20



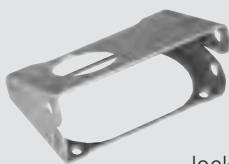
locking facility
ZUB 14



locking facility with hammer
ZUB 05



locking facility
ZUB 12



locking facility double pushbutton
ZUB 17

Code 4: Cable entries and flanges

A	B	C	D	E
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



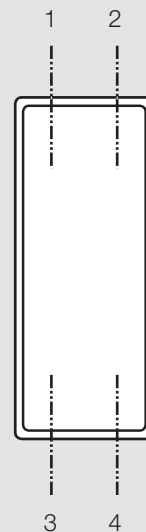
Metal flange plate
FLM



plastic cable gland
GK

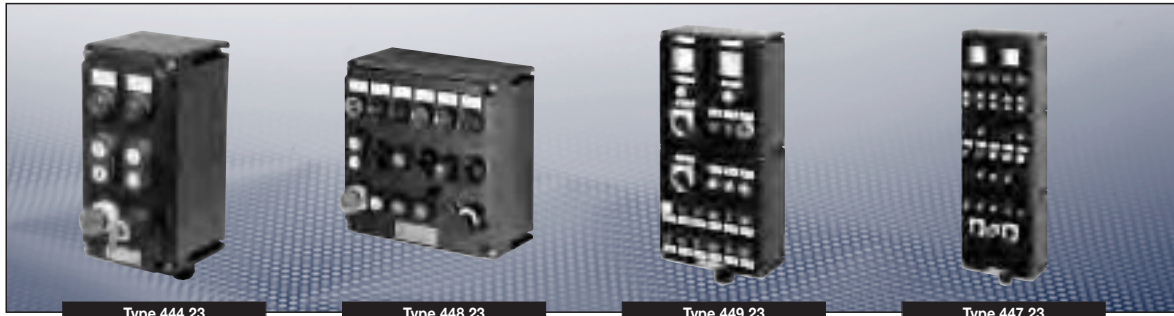


plastic trumpet-shaped
cable gland TR



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	Ex II 2 G Ex de ia/ib m [ia/ib] IIC T6 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 ²
Insulation class	I
Degree of protection accd. EN 60529	IP66 (standard) IP65 (measuring instrument or double pushbutton)
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

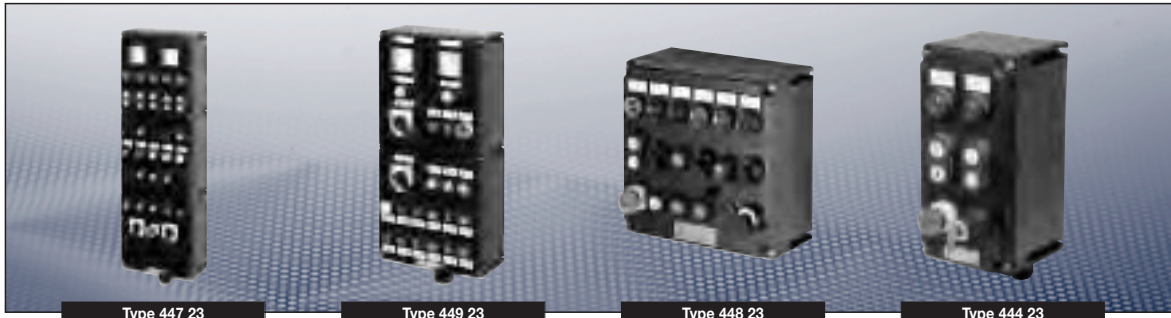
Connecting terminals	max. 30 terminals UT 4
Dimensions (L x W x H)	271 x 271 x 136 mm
Weight (empty)	2.5 kg with mounting framework
Mounting arrangements	distance 40 mm max. 18 mounting areas distance 50 mm max. 15 mounting areas distance 60 mm max. 12 mounting areas

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

¹⁾ 2 mounting areas are needed

²⁾ Serial terminals and PE-Terminal are mounted on a rail below the hinged frame

| Ex-control stations |



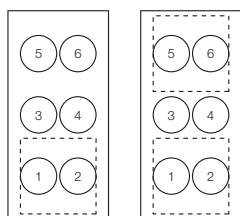
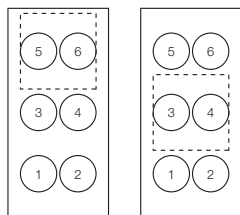
Type 444 23

Type 448 23

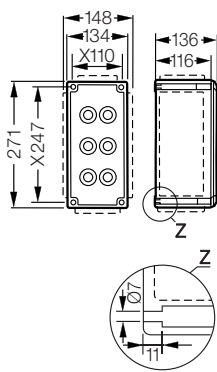
Type 449 23

Type 447 23

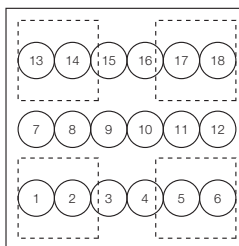
Mounting areas | Dimension drawing



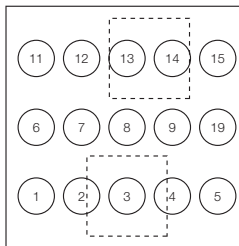
Distance between centres 40, 50 and 60 mm for positioning of built-in components



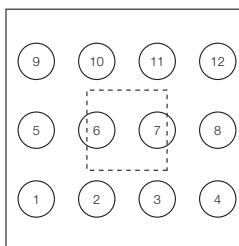
Type 444 23



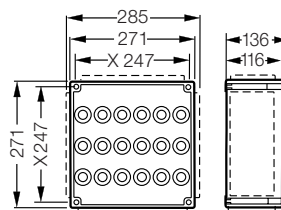
Distance between centres 40 mm



Distance between centres 50 mm



Distance between centres 60 mm

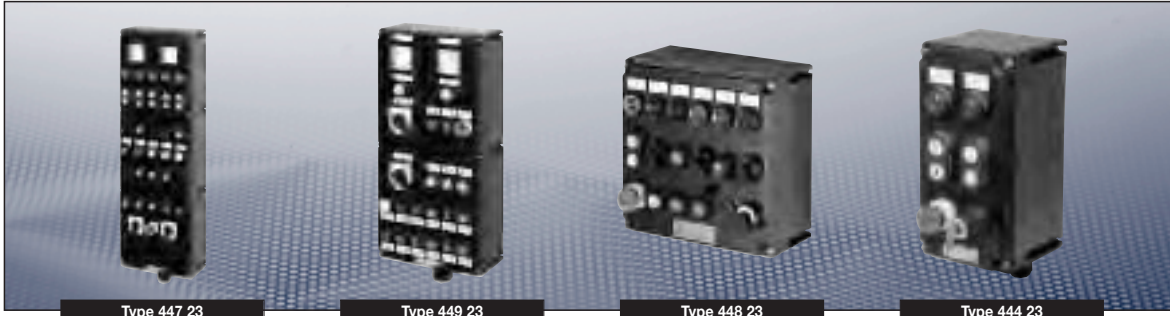


Type 448 23

X = fixing dimension

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Dimensions in mm



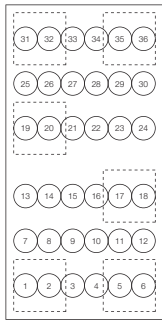
Type 447 23

Type 449 23

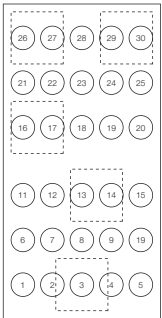
Type 448 23

Type 444 23

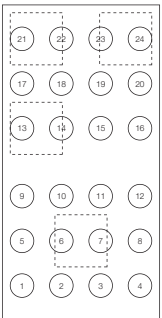
Mounting areas | Dimension drawing



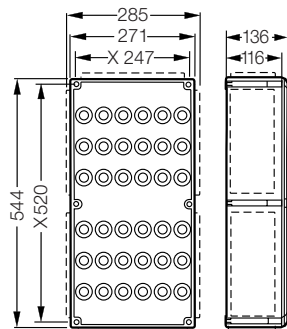
Distance between centres 40 mm



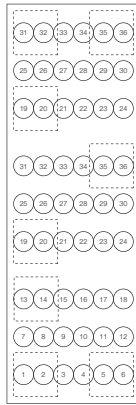
Distance between centres 50 mm



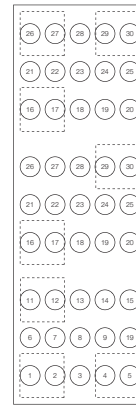
Distance between centres 60 mm



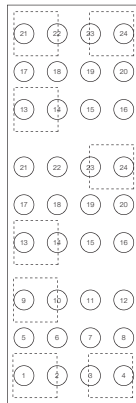
Type 449 23



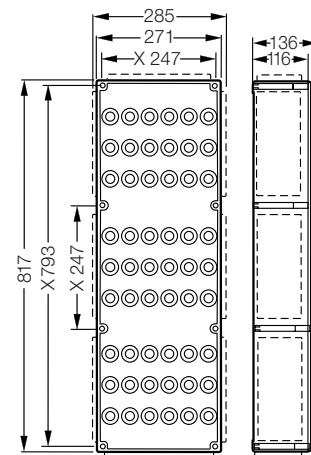
Distance between centres 40 mm



Distance between centres 50 mm



Distance between centres 60 mm



Type 447 23

X = fixing dimension

Dimensions in mm