

## Ex-control stations - enclosures GHG 44



Type 444 23



Type 448 23



Type 449 23



Type 447 23

### 4 Technical data

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

Marking accd. to 2014/34/EU	⊕ II 2 G Ex de ia/ib m [ia/ib] IIC T6 <sup>1)</sup> ⊕ 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 BK1 07.0023 <sup>1)</sup>
Marking accd. to IECEx	Ex de ia/ib m [ia/ib] IIC T4 .. T6 <sup>1)</sup> Ex tD A21 IP66 T80 °C
Permissible ambient temperature	-20 °C up to +40 °C <sup>1)</sup> -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	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
Components arrangement	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
Components arrangement	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
Components arrangement	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
Components arrangement	distance 40 mm max. 64 mounting areas distance 50 mm max. 45 mounting areas distance 60 mm max. 36 mounting areas

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



Type 447 23



Type 449 23



Type 448 23



Type 444 23

Ordering codes (Code 1)

1. Enclosure	2. Components arrangement/terminals				3. Labels/ padlocking facility	4. Cable glands
	Mounting 1 ... 6	Mounting 7 ... 18	Mounting 19 ... 27	Mounting 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>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

Eaton's Crouse-Hinds series Authorized distributor - kunshan beiyuan electric co.,ltd-csr@ksbyel.com

**Ex-control stations - enclosures GHG 44**



Type 444 23



Type 448 23

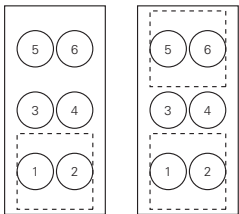
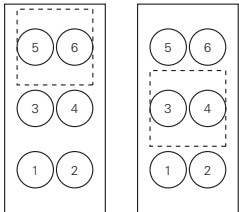


Type 449 23

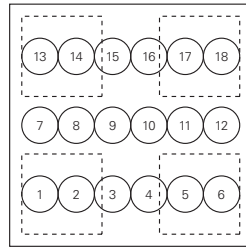
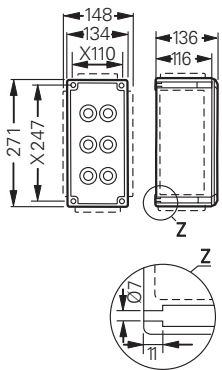


Type 447 23

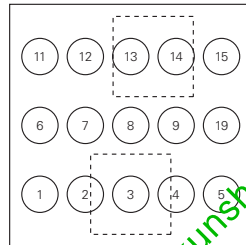
**4 Mounting areas I Dimension drawing**



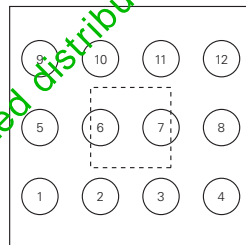
Distance between centres 40, 50 and 60 mm for positioning of built-in components



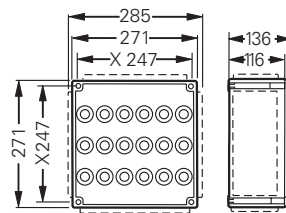
Distance between centres 40 mm



Distance between centres 50 mm



Distance between centres 60 mm



Type 448 23

X = fixing dimension

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

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

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Dimensions in mm



Type 447 23



Type 449 23

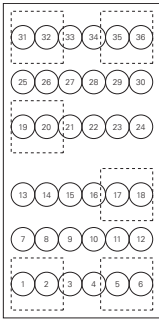


Type 448 23

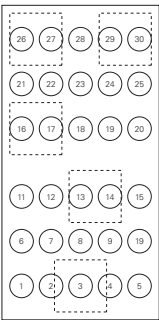


Type 444 23

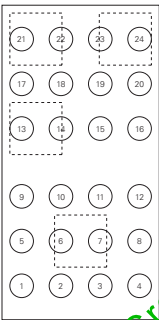
Mounting areas | Dimension drawing



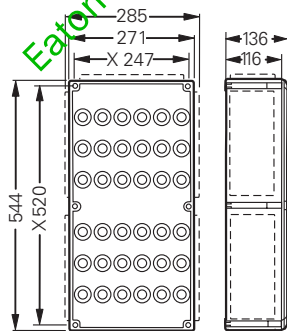
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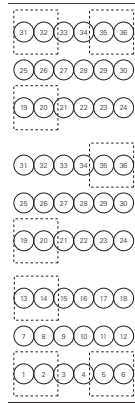
Distance between centres 50 mm



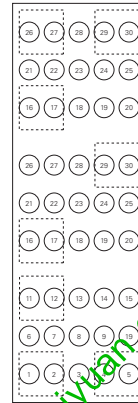
Distance between centres 60 mm



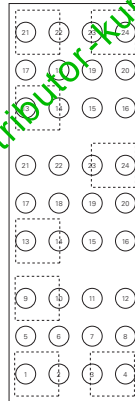
Type 449 23



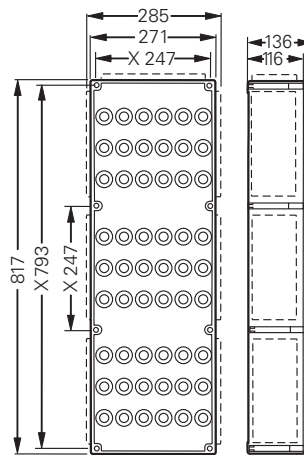
Distance between centres 40 mm



Distance between centres 50 mm



Distance between centres 60 mm



Type 447 23

X = fixing dimension

Eaton's Crouse-Hinds series Authorized distributor: Kunshan Eiyuan electric co.,ltd-csr@ksbyel.com

## 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> ⊕ 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 BK1 07.0023 <sup>1)</sup>
Marking accd. to IECEx	Ex de ia/ib m [ia/ib] IIC T4 .. T6 <sup>1)</sup> Ex tD A21 IP66 T80 °C
Permissible ambient temperature	-20 °C up to +40 °C <sup>1)</sup> -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 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
Components arrangement	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
Components arrangement	distance 40 mm max. 54 mounting areas distance 50 mm max. 45 mounting areas distance 60 mm max. 36 mounting areas

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



Type 447 33



Type 449 33



Type 448 33



Type 444 33

Ordering codes (Code 1)

1. Enclosure	2. Components arrangement/terminals				3. Labels/ padlocking facility	4. Cable glands
	Mounting 1 ... 6	Mounting 7 ... 18	Mounting 19 ... 27	Mounting 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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**Ex-control stations - enclosures GHG 44. 33**



Type 444 33



Type 448 33

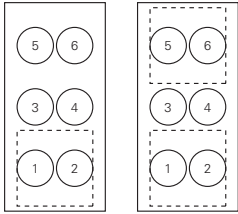
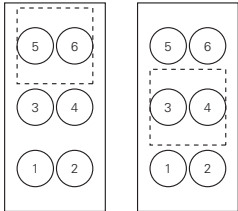


Type 449 33

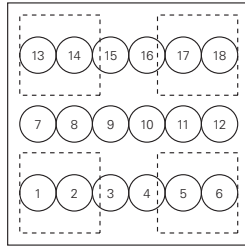
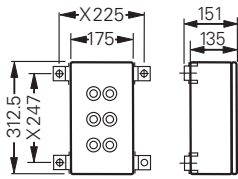


Type 447 33

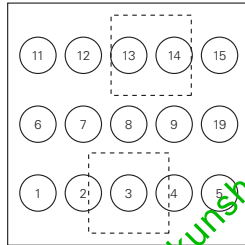
**4 Mounting area I Dimension drawing**



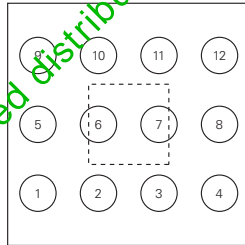
Distance between centres 40, 50 and 60 mm



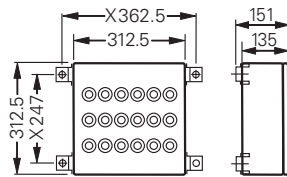
Distance between centres 40 mm



Distance between centres 50 mm



Distance between centres 60 mm



Type 448 33

X = fixing dimension

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

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

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Dimensions in mm



Type 447 33



Type 449 33

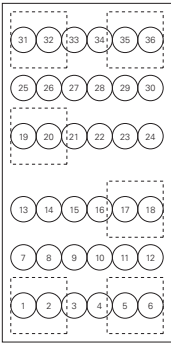


Type 448 33

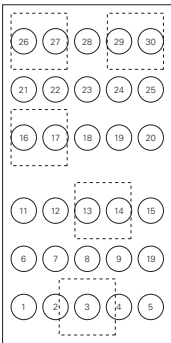


Type 444 33

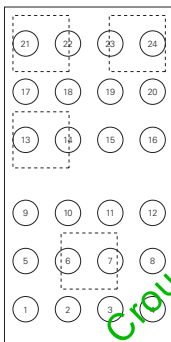
Mounting area | Dimension drawing



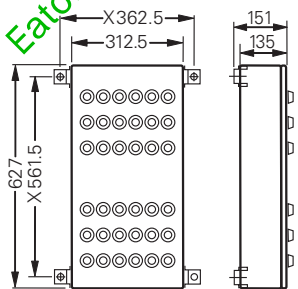
Distance between centres 40 mm



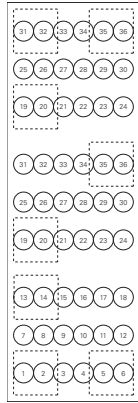
Distance between centres 50 mm



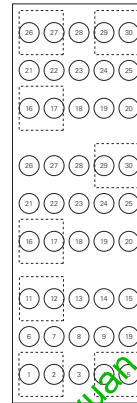
Distance between centres 60 mm



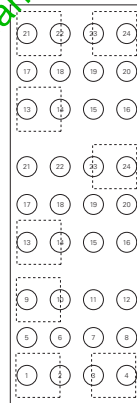
Type 449 33



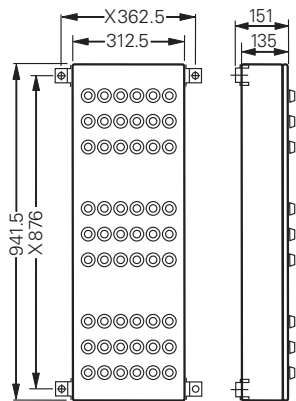
Distance between centres 40 mm



Distance between centres 50 mm



Distance between centres 60 mm



Type 447 33

X = fixing dimension

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