

IP 66



- Enclosures made of glass-fibre reinforced polyester resin
 - 4 basic enclosure sizes
 - Alone or in various combinations of merged set
 - Equipped with built-in devices
- ⇒ Control devices
- ⇒ Indicating lamps
- ⇒ Pushbuttons
- ⇒ Control switches
- ⇒ Ammeters

SKX 12 ... SKX 15



CONSTRUCTION

Enclosure: polyester plastic reinforced with glass fiber, color - black
Cover: with integrated thermoplastic elastomer gasket, closes with four M5/M6 stainless steel screws.

TECHNICAL DATA

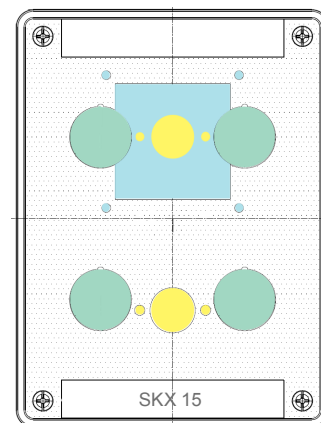
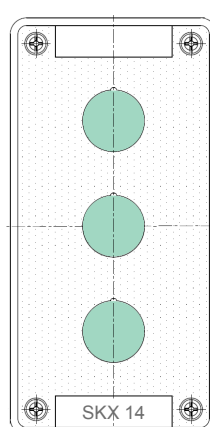
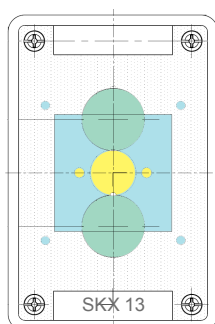
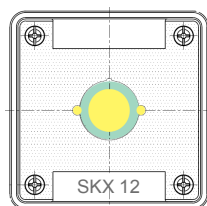
Certificate:	EXA 17 ATEX 0080X EAC RU C-HR.AB24.B.03291
Marking:	0722
Apparatus category:	II 2GD, IM2
Marking of explosion protection:	Ex db eb IIC T6 Gb Ex db eb mb IIC T6 Gb Ex eb IIC T6 Gb Ex ia/ib IIC T6 Gb Ex tb IIIC T80°C Db Ex db eb I Mb Ex db eb mb I Mb Ex eb I Mb Ex ia/ib/ I Mb
Ambient temperature ATEX: EAC:	-20°C ≤ T _a ≤ +40°C / +50°C / +55°C -50°C ≤ T _a ≤ +50°C
Degree of protection:	IP 66 category 1
Resistance to shock:	IK 08
Protection class :	I (protective earthing)
Rated voltage:	630 V AC (with mantle terminals block SL5, SL8 U _i = 400V AC)
Thermal current I _{the} :	16 A max. at T _{amb} -20°C ÷ +40°C 10 A max. at T _{amb} -20°C ÷ +50°C
PE terminals (inside of the enclosure):	max. 2x4 mm ² +2x2,5 mm ² , 3x4 mm ² , 2x6 mm ²
Weight (only GRP boxes):	SKX 12 0.5 kg SKX 13 0,7 kg SKX 14 1.0 kg SKX 15 1.0 kg

MOUNTING

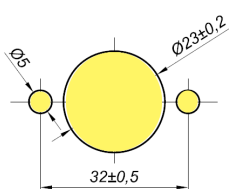
With screw kit through the housing holes $\phi 6$ mm at the peaks the rectangle:

SKX 12: 75 x 50 mm
SKX 13: 75 x 100 mm
SKX 14: 75 x 150 mm
SKX 15/15H: 125 x 150 mm

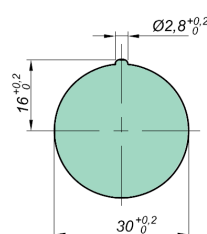
Possible combinations and layout of indicators and actuators components



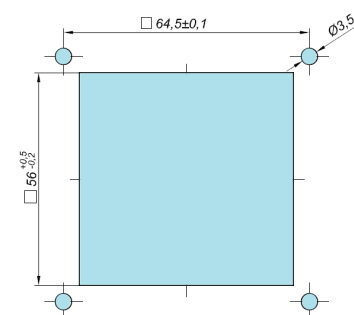
* mounting proposals and dimensions



Switch actuator SMO 17/
Switch mounting

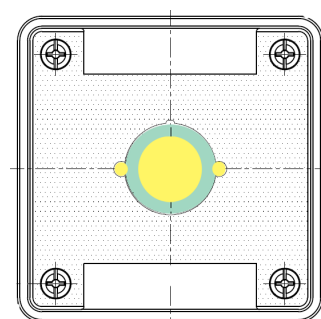
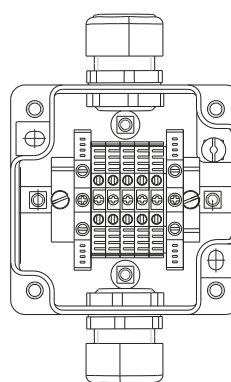
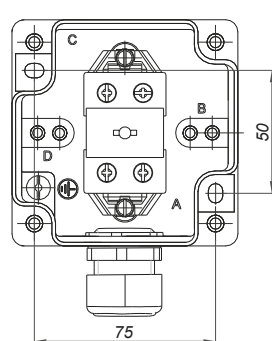
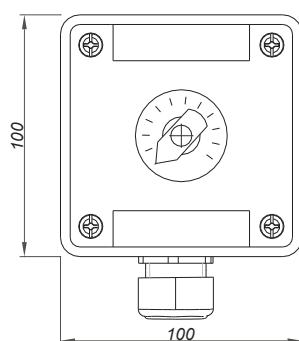
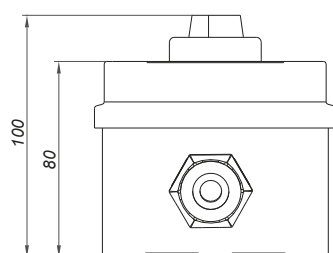


Pushbutton actuator SPO 01/
Front element of signal lamp SPO 02/
Pushbutton, signal lamp and potentiometer mounting



Front element of measuring instrument
(AM, VM) SAM 72
Measuring instrument mounting AM, VM

Enclosure type SKX 12

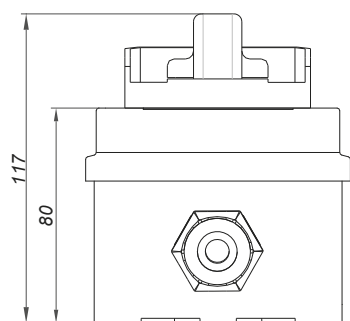


Max. No. of cable glands

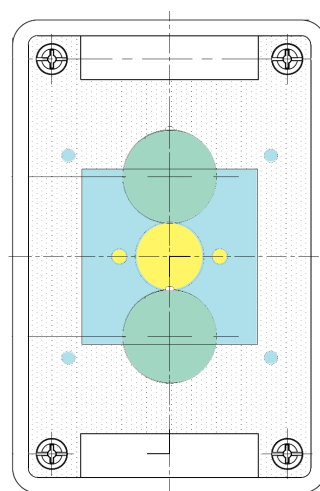
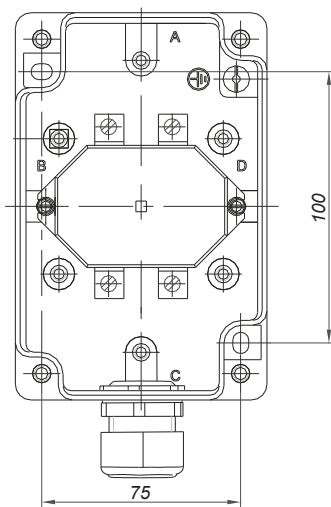
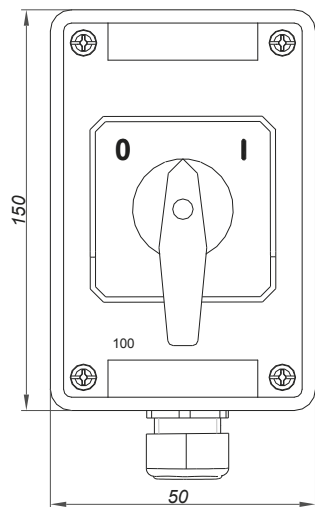
cable gland side	M16	M20	M25
A-C	2	2	1
B-D	1	1	1

All technical data is relevant at the time of print.

Enclosure type SKX 13



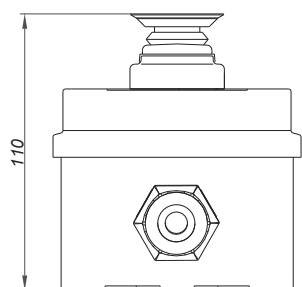
Control unit SKX 13/10
Switch SMS 03/1, switch actuator SMO 17/1,
cable gland SPU 25



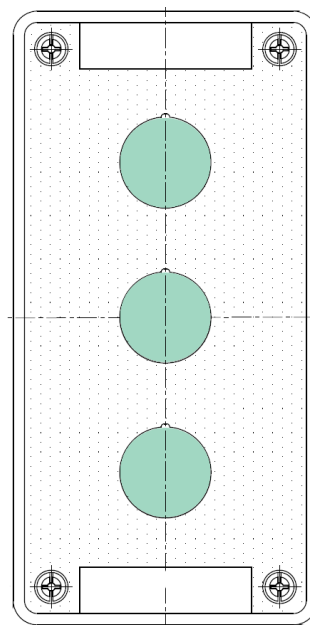
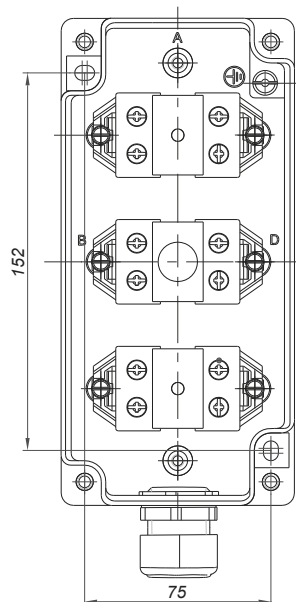
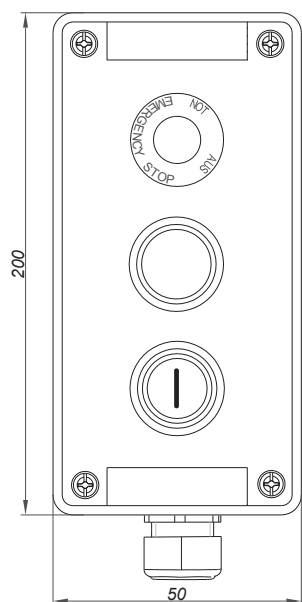
Max. No. of cable glands

cable gland side	M16	M20	M25
A-C	2	2	1
B-D	4	3	2

Enclosure type SKX 14



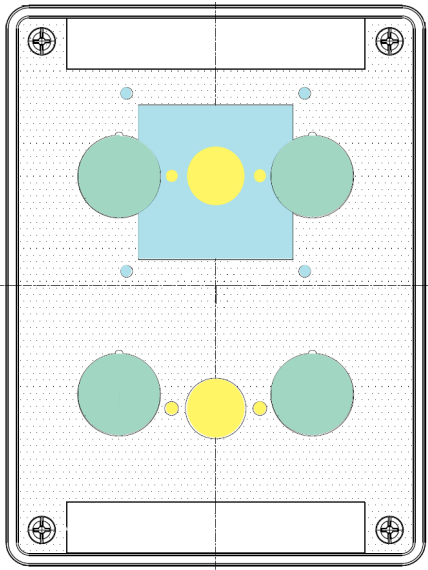
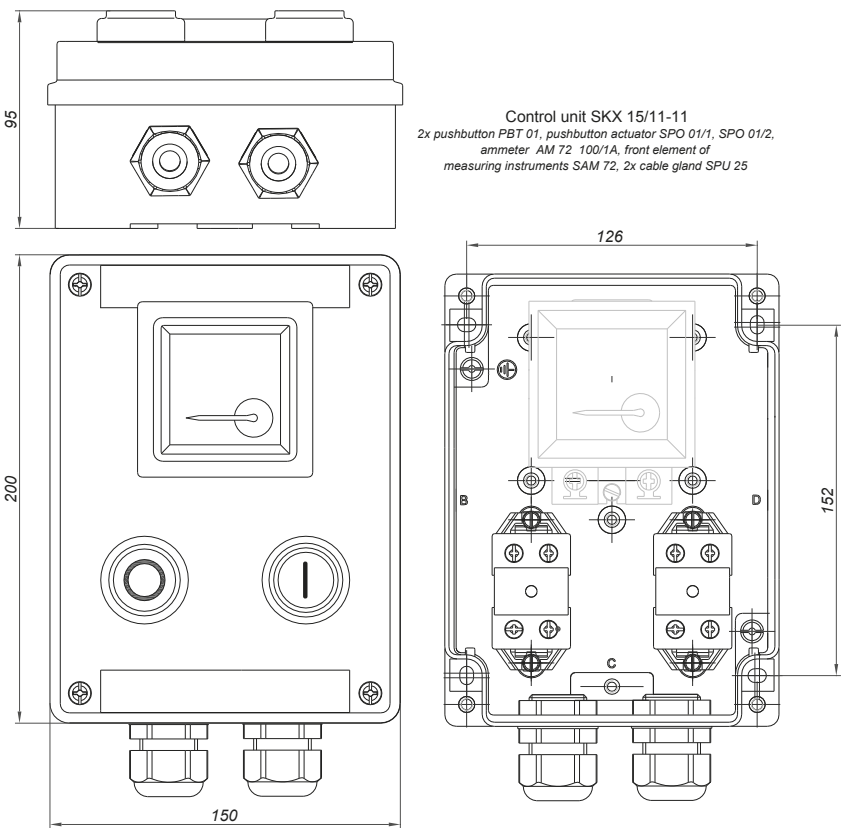
Control unit SKX 14/MSRU
2x pushbutton PBT 01, pushbutton actuator SPO 01/1,
mushroom-head pushbutton actuator,
1x signal lamp SLP 01, front element SPO 02/02
cable gland SPU 25



Max. No. of cable glands

cable gland side	M16	M20	M25	M32
A-C	2	2	1	1
B-D	6	4	3	2

Enclosure type SKX 15

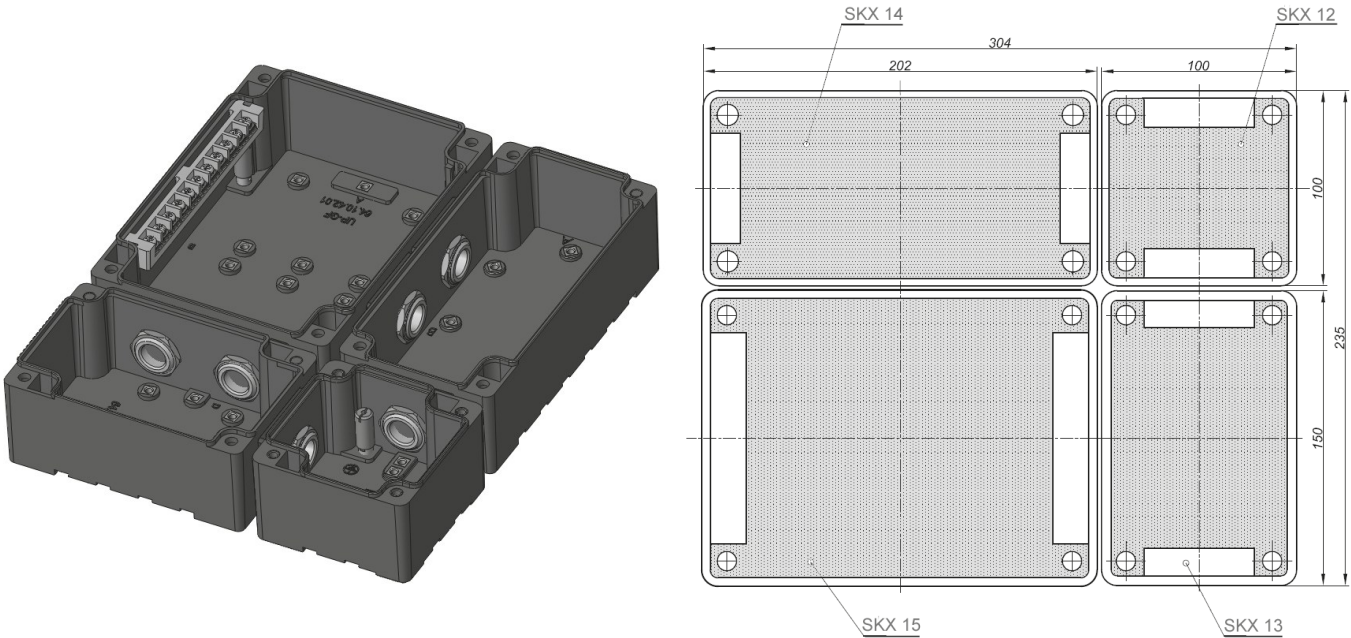


Max. No. of cable glands					
cable gland side	M16	M20	M25	M32	M40
A-C	4	3	2	2	1
B-D	6	4	3	2	2

* with built-in N/PE busbar

cable gland side	M16	M20	M25	M32	M40
A-C	4	3	2	2	1
B-D	5	3	3	-	-

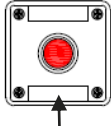
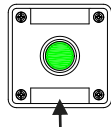
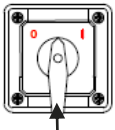
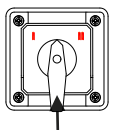
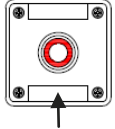
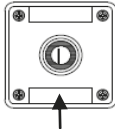
Various combinations of merged set (combination) of SKX enclosures



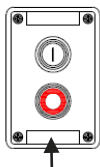
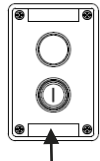
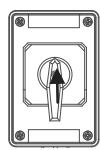
MODEL CODE

The program consists of serial control units and control units according to customer's request.

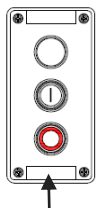
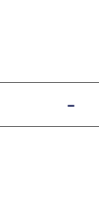
SKX 12/..

Type	Build-in components and actuator / indicator	Overview
SKX 12/1	Signal lamp SLP - red SPO 02/1 - cable gland SPU 25	
SKX 12/2	Signal lamp SLP - green SPO 02/2 - cable gland SPU 25	
SKX 12/3	Signal lamp SLP - white SPO 02/4 - cable gland SPU 25	-
SKX 12/21	Control switch SMS 03/1 - switch actuator SMO 17/1 - cable gland SPU 25	
SKX 12/22	Serial switch SMS 03/8 - switch actuator SMO 17/5 - cable gland SPU 25	0 - I - II - III
SKX 12/23	Control switch SMS 03/6 - switch actuator SMO 17/2 - cable gland SPU 25	
SKX 12/31	Pushbutton PBT 01 - Key-operated mushroom-head pushbutton actuator GHG 410 1906 R0005 - cable gland SPU 25	-
SKX 12/32	Pushbutton PBT 01 - pushbutton actuator SPO 01/1 - cable gland SPU 25	
SKX 12/33	Pushbutton PBT 01 - pushbutton actuator SPO 01/2 - cable gland SPU 25	
SKX 12/34	Pushbutton PBT 01 - Mushroom-head pushbutton actuator GHG 410 1905 R0005 - cable gland SPU 25	-
SKX 12/35	Pushbutton PBT 01 - Mushroom-head pushbutton actuator GHG 410 1906 R0005 with protector - 2x cable gland SPU 20	-
SKX 12/36	Pushbutton PBT 011 - Key-operated pushbutton GHG 410 1906 R0005 - 2x cable gland SPU 20	-
SKX 12/37	Potentiometer GHG 4101901 R0193 - GHG 410 1944 R0010 - cable gland SPU 25	-
SKX 12/62	5x4 mm2 EURO 4/35 grey on rail TH 35-7,5 - 2x SPU 25	-
SKX 12/63	5x4 mm2 EURO 4/35 blue on rail TH 35-7,5 - 2x SPU 25 blue	-

SKX 13/..

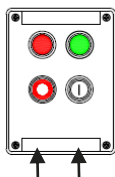
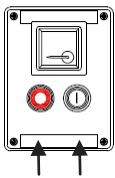
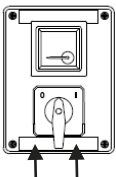
Type	Build-in components and actuator / indicator	Overview
SKX 13/1	2x pushbutton PBT 01 - SPO 01/1 - SPO 01/2 - cable gland SPU 25	
SKX 13/11	Pushbutton PBT 01 - SPO 01/1 - Signal lamp SLP - Front element of signal lamp SPO 02/2 - cable gland SPU 25	
SKX 13/21	Mantle terminals SL8 - 6x cable gland SPU 25	-
SKX 13/71	Switch GHG 23. ...R.... (Ex 23 4 024) - switch actuator SMO 17/2 - cable gland SPU 25	-
SKX 13/72	Switch GHG 23. ...R.... (Ex 23 8 067) - switch actuator SMO 17/1 - cable gland SPU 25	-
SKX 13/10	Switch SMS 03/1 - switch actuator SMO 17/1 - cable gland SPU 25	
SKX 13/20	SMS 03/4 - SMO 17/2 - SPU 25	
SKX 13/30	SMS 03/5 - SMO 17/2 - SPU 25	
SKX 13/40	SMS 03/6 - SMO 17/2 - SPU 25	
SKX 13/60	SMS 03/3 - SMO 17/3 - SPU 25	
SKX 13/70	SMS 03/2 - SMO 17/1 - SPU 25	
SKX 13/80	SMS 03/7 - SMO 17/1 - SPU 25	
SKX 13/100	SMS 03/8 - SMO 17/5 - SPU 25	
SKX 13/110	SMS 03/9 - SMO 17/1 - SPU 25	
SKX 13/120	SMS 03/11 - SMO 17/2 - SPU 25	

SKX 14/..

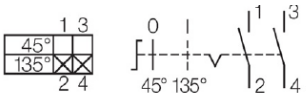
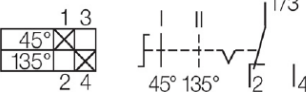
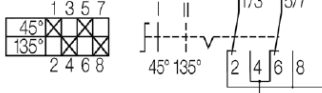
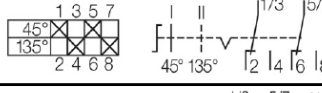
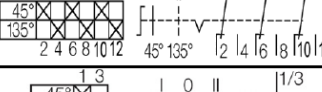
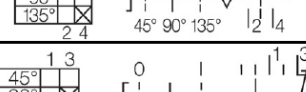
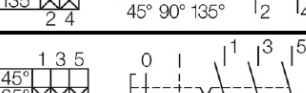
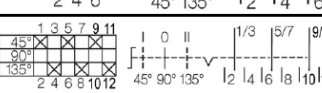
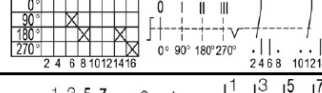
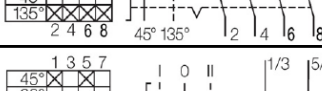
Type	Build-in components and actuator / indicator	Overview
SKX 14/1	2x pushbutton PBT 01 - SPO 01/1 - SPO 01/2 - Signal lamp SLP - SPO 02/2 - cable gland SPU 25	
SKX 14/11	3x pushbutton PBT 01 - pushbutton actuator SPO 01/1 - SPO 01/2 - SPO 01/3 - cable gland SPU 25	
SKX 14/21	Mantle terminals SL 8 - 8x cable gland SPU 25	
SKX 14/22	3x signal lamp SLP front element of signal lamp SPO 02/1 - SPO 02/2 - SPO 02/3 - cable gland SPU 25	
SKX 14/31	3x pushbutton PBT 01 - pushbutton actuator SPO 01/1 - SPO 01/2 Mushroom-head pushbutton actuator GHG 410 1906 R0005 - cable gland SPU 25	

SKX 12 ... SKX 15

SKX 15/..

Type	Build-in components and actuator / indicator	Overview
SKX 15/1	2x pushbutton PBT 01 - SPO 01/1 - SPO 01/2 - 2x signal lamp SLP - 02/1 - SPO 02/2 - 2x cable gland SPU 25	
SKX 15/11-11	2x pushbutton PBT 01 - pushbutton actuator SPO 01/1 - SPO 01/2 - ammeter AM 72 100/1A - 2x cable gland SPU 25	
SKX 15/11-12	2xPBT 01 - SPO 01/1 - SPO 01/2 - AM 72 50/1 A - 2xSPU 25	
SKX 15/11-21	2xPBT 01 - SPO 01/1 - SPO 01/2 - AM 72 100/5 A - 2xSPU 25	
SKX 15/11-22	2xPBT 01 - SPO 01/1 - SPO 01/2 - AM 72 50/1 A - 2xSPU 25	
SKX 15/21-11	Switch GHG 23. .R.. - switch actuator SMO 17/1 - ammeter AM 72 100/1 A - 2x uvodnica SPU 25	
SKX 15/21-12	Switch GHG 23. ...R... - switch actuator SMO 17/1 - ammeter AM 72 100/1 A - 2x uvodnica SPU 25	
SKX 15/21-21	Switch GHG 23. ...R.... - Switch actuator SMO 17/1 - ammeter AM 72 100/5 A - 2x uvodnica SPU 25	
SKX 15/21-22	Switch GHG 23. ...R.... - switch actuator SMO 17/1 - ammeter AM 72 50/5 A - 2x cable gland SPU 25	
SKX 15/34	4x pushbutton PBT/1 - 2xSPO 01/1 - 2xSPO 01/2 - 2x cable gland SPU 25	-
SKX 15/41	Switch SMS 03/1 - 2x terminal EURO E16-25 - 2x cable gland SPU 25	-
SKX 15/50	Switch SMS 03/12 - SMO 17/2 - cable gland SPU 25	-
SKX 15/90	Switch SMS 03/10 - SMO 17/3 - cable gland SPU 25	-
SKX 15/51	Switch SMS 03/9 - SMO 17/1 - 2x pushbutton PBT/1 - SPO 01/1 - SPO01/2 - 2x cable gland SPU 25	-
SKX 15/61	Switch GHG 23. ...R.... (Ex 23 4 024) - SMO 17/2 - 5x terminal EURO E4 - cable gland SPU 25	-
SKX 15/62	Switch GHG 23. ...R.... (Ex 23 8 067) - SMO 17/1 - 5x terminal EURO E4 - cable gland SPU 25	-
SKX 15/65	4x mantle terminals SL5 - 8x cable gland SPU 25	-

BUILD-IN COMPONENTS

Description, type	Schema / type	Overview
Control switch SMS 03/. II 2G I M2 Ex de I/IIC Gb Mb •Rated voltage: 630 V AC •Rated current: 16 A •Terminals: 2,5 mm ²		SMS 03/1
		SMS 03/4
		SMS 03/5
		SMS 03/6
		SMS 03/12
		SMS 03/3
		SMS 03/2
		SMS 03/7
		SMS 03/10
		SMS 03/8
		SMS 03/9
		SMS 03/11



BUILD-IN COMPONENTS

Description, type

Schema

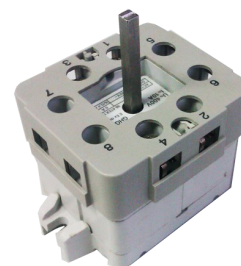
Overview

Control switch
GHG 23.

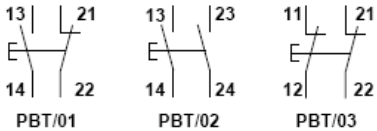
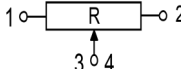
II 2GD Ex de IIC

- Rated voltage: 690 V AC
- Rated current : 10 A
- Terminals: 2,5 mm²

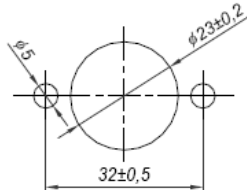
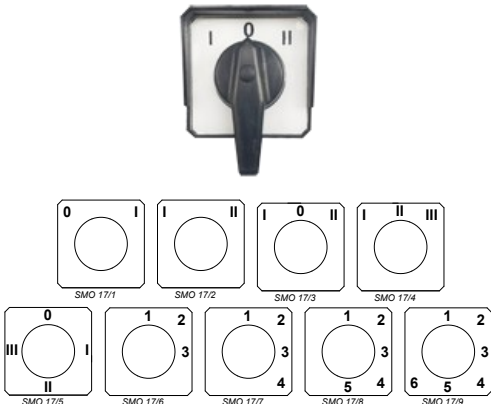
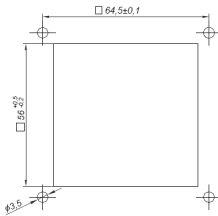
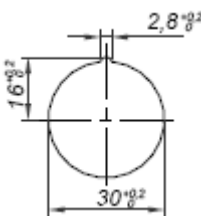
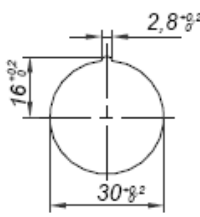
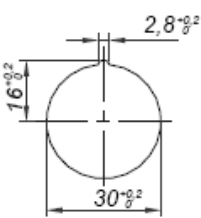
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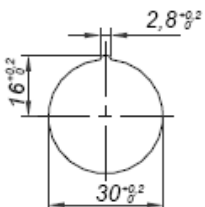
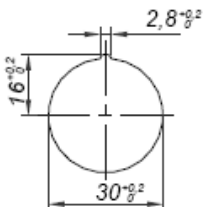
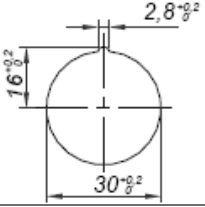
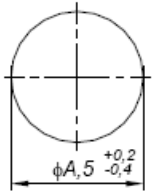
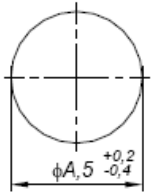
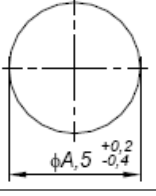
BUILD-IN COMPONENTS

Description, type	Schema	Overview
Pushbutton PBT/. - Rated voltage: 630V AC - Rated current: 16A - Terminals: 2,5 mm²		
Signal lamp SLP - Rated voltage: 12-250 V AC/DC - Max. current: 20-8 mA - Terminals: 2,5 mm²		
Potentionmeter PBT/POT - Rated voltage: 315 V AC/DC - Rated power: 1W - Scale: 0-100% / 270° - Tolerance: ±20% - Characteristic: linear - Terminals: 2,5 mm²	 Resistance R: 1,0 kΩ 2,2 kΩ 4,7 kΩ 10 kΩ 470 kΩ	
Measuring instruments AM 72, VM 72 - Measuring range: AM: n/1 A, 0-20 mA, 0-25 A direct 4-20 mA VM: n/1A, 6-415V, 6-660 V - Scale: according to customer demand - Terminals: 1,5 - 4 mm²	-	
Mantle terminals SL5, SL8 - Rated voltage: 400 V - Rated current: 16 A AC - Terminals: 4 mm² - Max. No. of wire under one clamp: 2x4mm² + 2x2,5mm², 3x4mm²	-	
Terminals TH 35-7.5 5 terminals 4mm² 2 terminals 16mm² - Rated voltage: 690 V AC - Rated current: 16 A	-	
N/PE busbar (only for SKX 15) 11x max. 2x4mm²	-	

ACTUATORS AND INDICATORS

Description, type	Mounting	Overview																						
Switch actuator SMO 17/. II 2G II 2D I M2 Ex e I/IIC Gb Mb Ex t IIIC Db																								
Front element of measuring instruments SAM 72 II 2G II 2D I M2 Ex e I/IIC Gb Mb Ex t IIIC Db																								
Puschbitton actuator SPO 01/. II 2G II 2D I M2 Ex e I/IIC Gb Mb Ex t IIIC Db		 <table><tr><th colspan="2">Type SPO 01/.</th></tr><tr><td>SPO 01/01</td><td>0</td></tr><tr><td>SPO 01/02</td><td>I</td></tr><tr><td>SPO 01/03</td><td>II</td></tr><tr><td>SPO 01/04</td><td>RED</td></tr><tr><td>SPO 01/05</td><td>GREEN</td></tr><tr><td>SPO 01/06</td><td>WHITE</td></tr><tr><td>SPO 01/07</td><td>START</td></tr><tr><td>SPO 01/08</td><td>STOP</td></tr><tr><td>SPO 01/09</td><td>ON</td></tr><tr><td>SPO 01/10</td><td>OFF</td></tr></table>	Type SPO 01/.		SPO 01/01	0	SPO 01/02	I	SPO 01/03	II	SPO 01/04	RED	SPO 01/05	GREEN	SPO 01/06	WHITE	SPO 01/07	START	SPO 01/08	STOP	SPO 01/09	ON	SPO 01/10	OFF
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Front element of signal lamp SPO 02/. II 2G II 2D I M2 Ex e I/IIC Gb Mb Ex t IIIC Db		 <table><tr><th colspan="2">Type SPO 02/.</th></tr><tr><td>SPO 02/01</td><td>RED</td></tr><tr><td>SPO 02/02</td><td>GREEN</td></tr><tr><td>SPO 02/03</td><td>YELLOW</td></tr><tr><td>SPO 02/04</td><td>TRANSPARENT</td></tr></table>	Type SPO 02/.		SPO 02/01	RED	SPO 02/02	GREEN	SPO 02/03	YELLOW	SPO 02/04	TRANSPARENT												
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Key-operated pushbutton actuator GHG 410 1904 R0012 II 2GD Ex e II IP66																								

BUILD-IN COMPONENTS

Description, type	Mounting	Overview
Mushroom-head pushbutton actuator GHG 418 815 ..R.. (EMERGENCY-STOP) II 2GD Ex e II IP66		
Key-operated mushroom-head pushbutton actuator GHG 418 815 ..R.. (EMERGENCY-STOP) II 2GD Ex e II IP66		
Potentiometer actuator GHG 410 1944 R0010 II 2GD Ex e II IP66		
Cable gland SPU ISO 16 - ISO 40 II 2G II 2D Ex e I/IIC Gb Ex t IIIC Db		
Cable gland for armoured cable SPU A ISO 16 - ISO 40 II 2G II 2D Ex e I/IIC Gb Ex t IIIC Db		
Plug SPC .. ISO 16 - ISO M40 II 2G II 2D Ex e I/IIC Gb Ex t IIIC Db		
Connection part SKX	