

IP 66



- Enclosures made of glass-fibre reinforced polyester resin
- 4 basic enclosure sizes
- Version with or without hinged door upon customer's requirements
- Alone or in various combinations of merged set
- Equipped with built-in devices:
  - ⇒ Control devices
  - ⇒ Indicating lamps
  - ⇒ Pushbuttons
  - ⇒ Control switches
  - ⇒ Ammeters



### 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

|                                                |                                                                                                                                    |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>Certificate:</b>                            | FIDI 19 ATEX 0051X<br>EAC RU C-HR.HB07.B.00269/20                                                                                  |
| <b>Marking:</b>                                | 0722                                                                                                                               |
| <b>Apparatus category:</b>                     | II 2GD<br>I M2                                                                                                                     |
| <b>Marking of explosion protection:</b>        | Ex db eb ia/ib mb IIC T6 Gb<br>Ex db eb ia/ib mb I Mb<br>Ex tb IIIC T80°C Db                                                       |
| <b>Ambient temperature:</b>                    | -20°C ≤ T <sub>a</sub> ≤ +40°C / +50°C / +55°C [ATEX]<br>-50°C / -40°C / -20°C ≤ T <sub>a</sub> ≤ +40°C / +50°C / +55°C [EAC]      |
| <b>Degree of protection:</b>                   | IP 66 category 1 for II 2GD<br>IP 64 category 1 for I M2                                                                           |
| <b>Resistance to shock:</b>                    | IK 08                                                                                                                              |
| <b>Protection class :</b>                      | I (protective earthing)                                                                                                            |
| <b>Rated voltage:</b>                          | 630 V AC (with mantle terminals block SL5, SL8 Ui = 400 VAC)                                                                       |
| <b>Thermal current I<sub>the</sub> :</b>       | 16 A max. at T <sub>a</sub> -20°C ÷ +40°C<br>10 A max. at T <sub>a</sub> -20°C ÷ +50°C<br>7 A max. at T <sub>a</sub> -20°C ÷ +55°C |
| <b>PE terminals (inside of the enclosure):</b> | max. 2x4 mm <sup>2</sup> + 2x2,5 mm <sup>2</sup> , 3x4 mm <sup>2</sup> , 2x6 mm <sup>2</sup>                                       |
| <b>Weight (only GRP boxes):</b>                | SKX 12 ..... 0.5 kg<br>SKX 13 ..... 0,7 kg<br>SKX 14 ..... 1.0 kg<br>SKX 15 ..... 1.0 kg                                           |

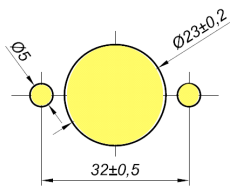
### MOUNTING

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

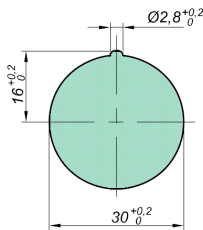
SKX 12: 75 x 50 mm  
SKX 13: 75 x 100 mm  
SKX 14: 75 x 150 mm  
SKX 15/15H: 125 x 150 mm

Possible combinations and layout of indicators and actuators components

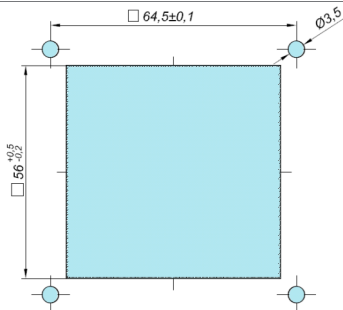
\* mounting proposals and dimensions



Switch actuator SMO 17/.  
Switch mounting

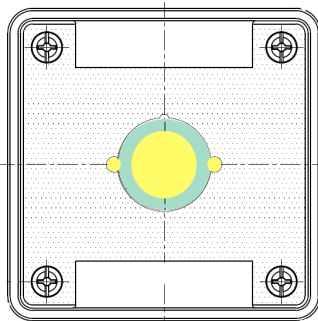
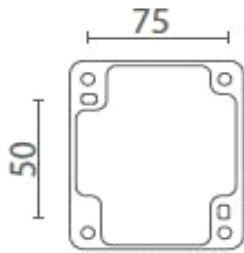
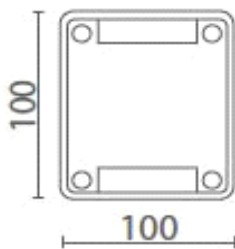
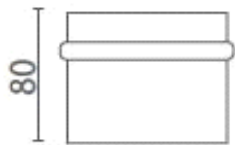


Pushbutton actuator SPO 01/.  
Front element of signal lamp SPO 02/.  
Pushbutton, signal lamp and potentiometer mounting



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

Enclosure type SKX 12



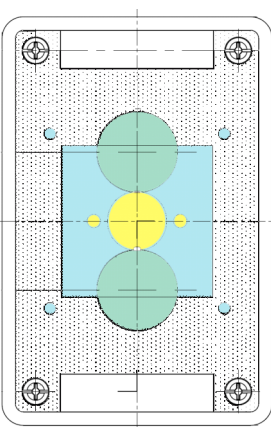
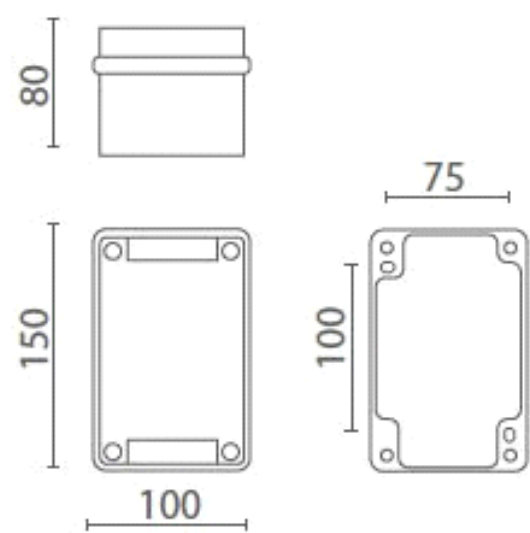
| Max. No. of cable glands (for plastic cable glands) |     |     |     |
|-----------------------------------------------------|-----|-----|-----|
| cable gland side                                    | M16 | M20 | M25 |
| A-C                                                 | 2   | 2   | 1   |
| B-D                                                 | 2   | 2   | 1   |



All technical data is relevant at the time of print.

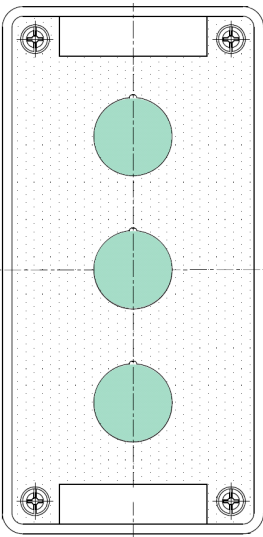
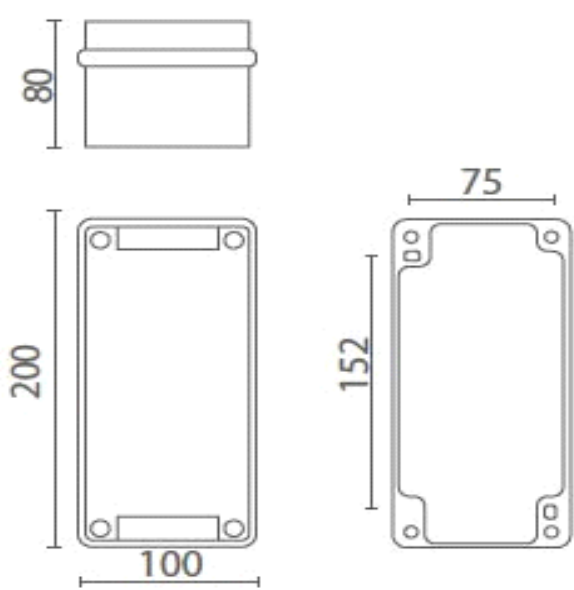
# SKX 12 ... SKX 15

## Enclosure type SKX 13



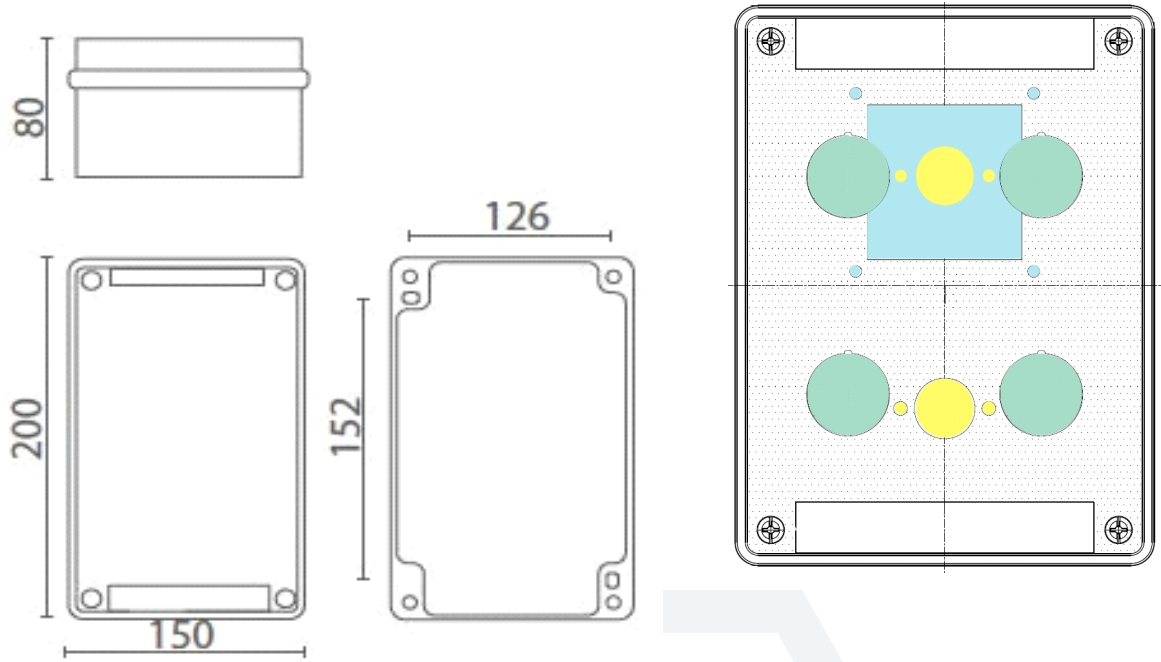
| Max. No. of cable glands (for plastic cable glands) |     |     |     |
|-----------------------------------------------------|-----|-----|-----|
| cable gland side                                    | M16 | M20 | M25 |
| A-C                                                 | 2   | 2   | 1   |
| B-D                                                 | 4   | 3   | 2   |

## Enclosure type SKX 14



| Max. No. of cable glands (for plastic 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

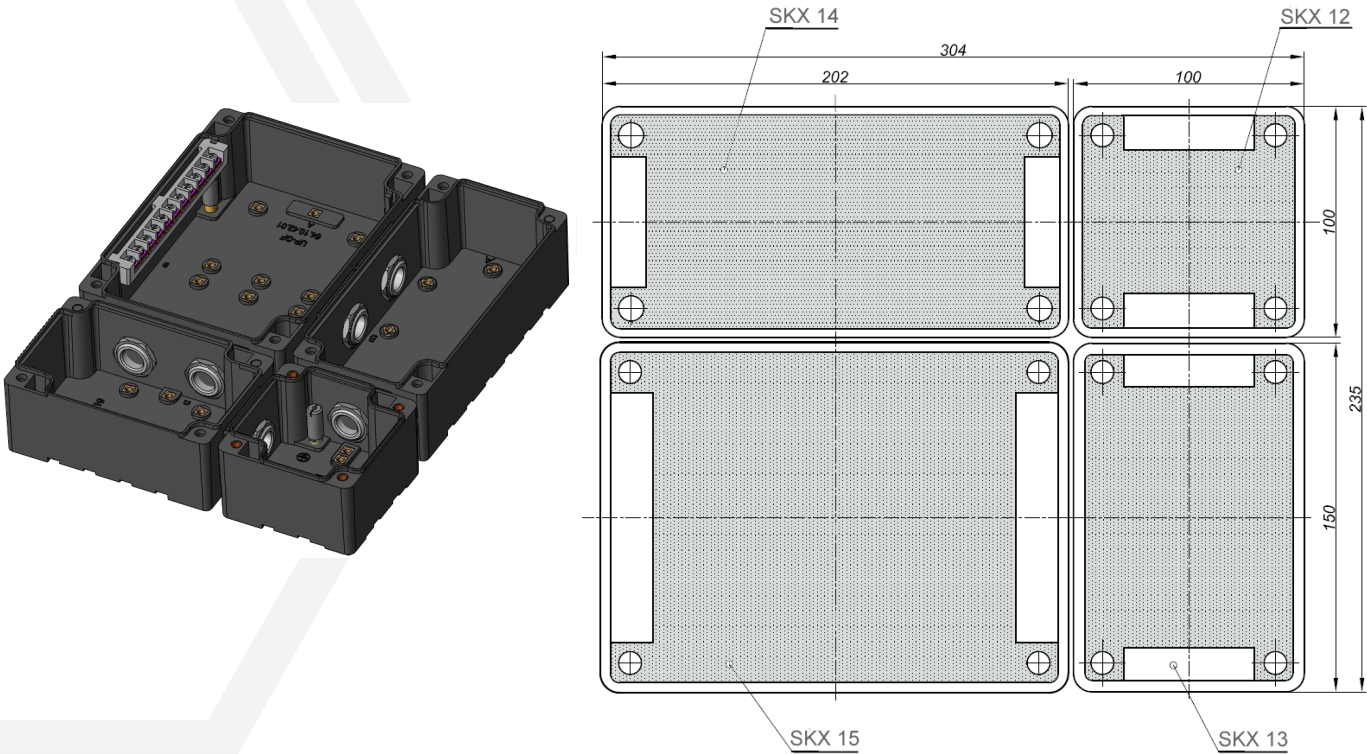


| Max. No. of cable glands (for plastic cable glands) |     |     |     |     |
|-----------------------------------------------------|-----|-----|-----|-----|
| cable gland side                                    | M16 | M20 | M25 | M32 |
| A-C                                                 | 4   | 3   | 2   | 1   |
| B-D                                                 | 6   | 4   | 3   | 2   |

\* with built-in N/PE busbar

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

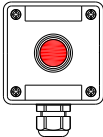
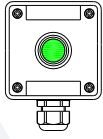
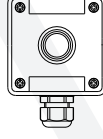
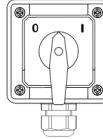
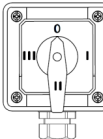
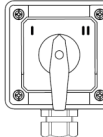
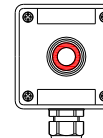
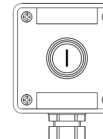
Various combinations of merged set (combination) of SKX enclosures

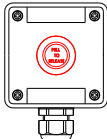
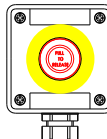
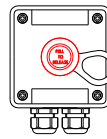
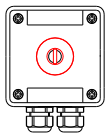
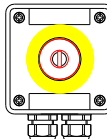
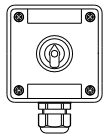
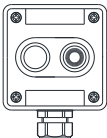
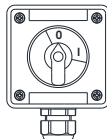
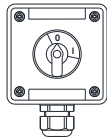


## MODEL CODE

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

## SKX 12/..

| Type        | Built-in components and actuator / indicator                                                                                            | Overview                                                                              |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| SKX 12/1    | Signal lamp SLP - red SPO 02/1<br>- cable gland SPU 25                                                                                  |    |
| SKX 12/2    | Signal lamp SLP - green SPO 02/2<br>- cable gland SPU 25                                                                                |    |
| SKX 12/3    | Signal lamp SLP - white SPO 02/4<br>- cable gland SPU 25                                                                                |    |
| SKX 12/21   | Control switch SMS 03/1 - switch actuator SMO 17/1<br>- cable gland SPU 25                                                              |   |
| SKX 12/22   | Serial switch SMS 03/8 - switch actuator SMO 17/5<br>- cable gland SPU 25                                                               |  |
| SKX 12/23   | Control switch SMS 03/4 - switch actuator SMO 17/2<br>- cable gland SPU 25                                                              |  |
| SKX 12/31   | Pushbutton PBT 01 (1NO+1NC) - Key-operated mushroom head pushbutton actuator<br>- cable gland SPU 25                                    |  |
| SKX 12/31-1 | Pushbutton PBT 01 (1NO+1NC) - Key-operated mushroom head pushbutton actuator with accidental contact protection<br>- cable gland SPU 25 |  |
| SKX 12/32   | Pushbutton PBT 01 (1NO+1NC) - pushbutton actuator SPO 01/1<br>- cable gland SPU 25                                                      |  |
| SKX 12/33   | Pushbutton PBT 01 (1NO+1NC) - pushbutton actuator SPO 01/2<br>- cable gland SPU 25                                                      |  |

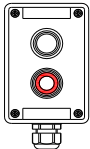
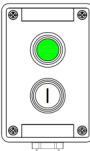
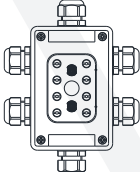
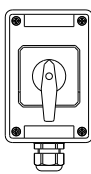
| Type        | Built-in components and actuator / indicator                                                                               | Overview                                                                              |
|-------------|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| SKX 12/34   | Pushbutton PBT 01 (1NO+1NC) - Mushroom-head pushbutton actuator<br>- cable gland SPU 25                                    |    |
| SKX 12/34-1 | Pushbutton PBT 01 (1NO+1NC) - Mushroom-head pushbutton actuator with accidental contact protection<br>- cable gland SPU 25 |    |
| SKX 12/35   | Pushbutton PBT 01 (1NO+1NC) - Mushroom-head pushbutton actuator with protector<br>- 2x cable gland M20                     |    |
| SKX 12/36   | Pushbutton PBT 01 (1NO+1NC) - Key-operated pushbutton<br>- 2x cable gland M20                                              |    |
| SKX 12/36-1 | Pushbutton PBT 01 (1NO+1NC) - Key-operated pushbutton with accidental contact protection<br>- 2x cable gland M20           |   |
| SKX 12/37   | Potentiometer<br>- cable gland SPU 25                                                                                      |  |
| SKX 12/40   | Control switch - pushbutton actuator with two axes<br>1NO / 1NC<br>- cable gland SPU 25                                    |  |
| SKX 12/41   | Control switch - pushbutton rotational actuator (large)<br>- cable gland SPU 25                                            |  |
| SKX 12/42   | Control switch - pushbutton rotational actuator (small)<br>- cable gland SPU 25                                            |  |

# SKX 12 ... SKX 15

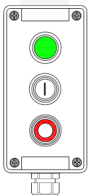
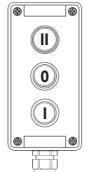
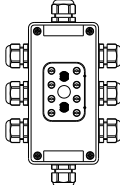
## MODEL CODE

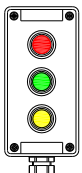
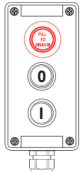
The program consists of serial control units and control units tailored to customer's request.

### SKX 13/..

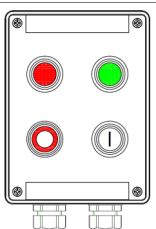
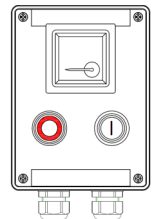
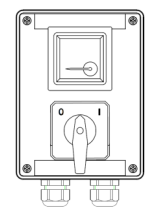
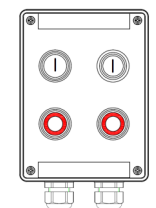
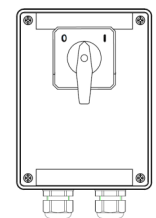
| Type       | Built-in components and actuator / indicator                                                                                | Overview                                                                              |
|------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| SKX 13/1   | 2x pushbutton PBT 01 (1NO+1NC) - SPO 01/1 - SPO 01/2<br>- cable gland SPU 25                                                |    |
| SKX 13/11  | Pushbutton PBT 01 (1NO+1NC) - SPO 01/2 - Signal lamp SLP<br>- Front element of signal lamp SPO 02/2<br>- cable gland SPU 25 |    |
| SKX 13/21  | Mantle terminals SL 8<br>- 6x cable gland SPU 25                                                                            |    |
| SKX 13/10  | Switch SMS 03/1 - switch actuator SMO 17/1<br>- 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 17/3 - SPU 25                                                                                               |                                                                                       |

### SKX 14/..

| Type      | Built-in components and actuator / indicator                                                                                  | Overview                                                                              |
|-----------|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| SKX 14/1  | 2x pushbutton PBT 01 (1NO+1NC) - SPO 01/1 - SPO 01/2 -<br>Signal lamp SLP - SPO 02/2<br>- cable gland SPU 25                  |  |
| SKX 14/11 | 3x pushbutton PBT 01 (1NO+1 NC)<br>- pushbutton actuator SPO 01/1 - SPO 01/2 - SPO 01/3<br>• cable gland SPU 25<br>I - 0 - II |  |
| SKX 14/21 | Mantle terminals SL 8<br>- 8x cable gland SPU 25                                                                              |  |

| Type      | Built-in components and actuator / indicator                                                                                                               | Overview                                                                            |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SKX 14/22 | 3x signal lamp SLP<br>front element of signal lamp<br>SPO 02/1 - SPO 02/2 - SPO 02/3<br>- cable gland SPU 25                                               |  |
| SKX 14/31 | 3x pushbutton PBT 01 (1NO+1NC) - pushbutton actuator<br>SPO 01/1 - SPO 01/2<br>Mushroom-head pushbutton actuator - cable gland SPU 25<br><b>I - 0 - EM</b> |  |

## SKX 15/..

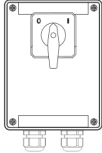
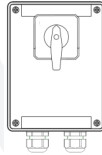
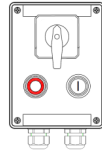
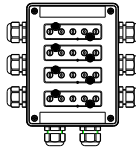
| Type      | Built-in components and actuator / indicator                                                                                                                                 | Overview                                                                              |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| SKX 15/1  | 2x pushbutton PBT 01 (1NO+1NC) - SPO 01/1 - SPO 01/2<br>- 2x signal lamp SLP - 02/1 - SPO 02/2<br>- 2x cable gland SPU 25                                                    |   |
| SKX 15/11 | 2x pushbutton PBT 01 (1NO+1NC)<br>- pushbutton actuator SPO 01/1 - SPO 01/2<br>- ammeter AM 72 with scale created according to customer's request<br>- 2x cable gland SPU 25 |  |
| SKX 15/21 | - switch SMS 03/2<br>- switch actuator SMO 17/1<br>- ammeter AM 72 with scale created according to customer's request<br>- 2x cable gland SPU 25                             |  |
| SKX 15/34 | 4x pushbutton PBT 01 (1NO+1NC) - 2xSPO 01/1 - 2xSPO 01/2<br>- 2x cable gland SPU 25                                                                                          |  |
| SKX 15/41 | - switch SMS 03/7<br>- switch actuator SMO 17/1<br>- 2x max. 16 mm <sup>2</sup> feed through terminal blocks<br>- 2x cable gland SPU 25                                      |  |

# SKX 12 ... SKX 15

MODEL CODE

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

SKX 15/..

| Type      | Built-in components and actuator / indicator                                                                          | Overview                                                                              |
|-----------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| SKX 15/50 | Switch SMS 03/12 - SMO 17/2<br>- 2x cable gland SPU 25                                                                |    |
| SKX 15/90 | Switch SMS 03/10 - SMO 17/3 I-O-II<br>- 2x cable gland SPU 25                                                         |    |
| SKX 15/51 | Switch SMS 03/11 - SMO 17/3 I-O-II<br>- 2x pushbutton PBT/01 (1NO+1NC) - SPO 01/1 - SPO 01/2<br>2x cable gland SPU 25 |    |
| SKX 15/65 | 4x mantle terminals SL5 (max. 4x4 mm2 per terminal)<br>- 8x cable gland SPU 25                                        |  |

Example: **Ex control units SKX 15/MSRU** (with PBT-F fuse)

