



Sample image

## Datasheet

**Article number:** 70022095

**Designation:** KG125.T103/D-A070.STM

**Description:** Switch

|                                                                                                                                                              |                          |                          |                                                                    |              |                           |                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------------------------------------------|--------------|---------------------------|--------------------------|
| IEC 60947-3 EN 60947-3, VDE 0660 Teil 107                                                                                                                    |                          |                          |                                                                    |              |                           |                          |
| Rated insulation voltage Ui                                                                                                                                  |                          |                          |                                                                    |              |                           |                          |
| Voltage (V) AC / DC                                                                                                                                          |                          |                          |                                                                    |              |                           |                          |
| 1000 AC                                                                                                                                                      |                          |                          |                                                                    |              |                           |                          |
| Rated uninterrupted current Iu/Ith                                                                                                                           |                          |                          |                                                                    |              |                           |                          |
| Current (A)                                                                                                                                                  | Ambient temperature (°C) | Peak temperature (°C)    | additional requirements                                            |              |                           |                          |
| 125                                                                                                                                                          | 50                       | 55                       | Ambient temperature +50°C during 24 hours with peaks up to +55°C   |              |                           |                          |
| Rated operational current Ie                                                                                                                                 |                          |                          |                                                                    |              |                           |                          |
| Utilization category                                                                                                                                         |                          | Voltage (V)              |                                                                    | Current (A)  |                           |                          |
| AC-32A                                                                                                                                                       |                          | 20 - 400                 |                                                                    | 125          |                           |                          |
| Rated operational power                                                                                                                                      |                          |                          |                                                                    |              |                           |                          |
| Utilization category                                                                                                                                         | Voltage (V)              | No. of phases            | No. of poles                                                       | Power (kW)   |                           |                          |
| AC-3                                                                                                                                                         | 220 - 240                | 3                        | 3                                                                  | 22           |                           |                          |
| AC-3                                                                                                                                                         | 380 - 440                | 3                        | 3                                                                  | 37           |                           |                          |
| AC-3                                                                                                                                                         | 660 - 690                | 3                        | 3                                                                  | 30           |                           |                          |
| AC-23A                                                                                                                                                       | 220 - 240                | 3                        | 3                                                                  | 30           |                           |                          |
| AC-23A                                                                                                                                                       | 380 - 440                | 3                        | 3                                                                  | 45           |                           |                          |
| AC-23A                                                                                                                                                       | 660 - 690                | 3                        | 3                                                                  | 37           |                           |                          |
| Max. Fuse rating IEC                                                                                                                                         |                          |                          |                                                                    |              |                           |                          |
| Fuse characteristic                                                                                                                                          |                          | No. of Fuses             |                                                                    | Current (A)  |                           |                          |
| gG                                                                                                                                                           |                          | 1                        |                                                                    | 125          |                           |                          |
| UL60947-4-1 , UL508                                                                                                                                          |                          |                          |                                                                    |              |                           |                          |
| Nominal Voltage                                                                                                                                              |                          |                          |                                                                    |              |                           |                          |
| Voltage (V) AC / DC                                                                                                                                          |                          |                          |                                                                    |              |                           |                          |
| 600 AC                                                                                                                                                       |                          |                          |                                                                    |              |                           |                          |
| Rated insulation voltage Ui                                                                                                                                  |                          |                          |                                                                    |              |                           |                          |
| Voltage (V) AC / DC                                                                                                                                          |                          |                          |                                                                    |              |                           |                          |
| 600 AC                                                                                                                                                       |                          |                          |                                                                    |              |                           |                          |
| Rated thermal current                                                                                                                                        |                          |                          |                                                                    |              |                           |                          |
| Current (A)                                                                                                                                                  |                          | Ambient temperature (°C) | Additional Text                                                    |              |                           |                          |
| 150                                                                                                                                                          |                          | 0 - 40                   | ON-OFF switch (Valid when connected with wire rated for 75°C)      |              |                           |                          |
| 125                                                                                                                                                          |                          | 0 - 40                   | Change over switch (Valid when connected with wire rated for 75°C) |              |                           |                          |
| Horsepower rating                                                                                                                                            |                          |                          |                                                                    |              |                           |                          |
| Across-the-Line Motor Starting                                                                                                                               |                          | Voltage (V)              | No. of phases                                                      | No. of poles | Power (HP)                | Ambient temperature [°C] |
| DOL                                                                                                                                                          |                          | 110 - 120                | 1                                                                  | 2            | 7,50                      | 40                       |
| DOL                                                                                                                                                          |                          | 220 - 240                | 1                                                                  | 2            | 20                        | 40                       |
| DOL                                                                                                                                                          |                          | 277 - 277                | 1                                                                  | 2            | 20                        | 40                       |
| DOL                                                                                                                                                          |                          | 440 - 480                | 1                                                                  | 2            | 35                        | 40                       |
| DOL                                                                                                                                                          |                          | 550 - 600                | 1                                                                  | 2            | 35                        | 40                       |
| DOL                                                                                                                                                          |                          | 110 - 120                | 3                                                                  | 3            | 15                        | 40                       |
| DOL                                                                                                                                                          |                          | 220 - 240                | 3                                                                  | 3            | 30                        | 40                       |
| DOL                                                                                                                                                          |                          | 440 - 480                | 3                                                                  | 3            | 60                        | 40                       |
| DOL                                                                                                                                                          |                          | 550 - 600                | 3                                                                  | 3            | 60                        | 40                       |
| SCCR / Max. fuse rating                                                                                                                                      |                          |                          |                                                                    |              |                           |                          |
| Conditions of acceptability                                                                                                                                  |                          |                          |                                                                    |              |                           |                          |
| This device is suitable for use on circuits capable of delivering not more than 10kA rms symmetrical amperes, 600V ac max. when protected by Type RK1 fuses. |                          |                          |                                                                    |              |                           |                          |
| Suitable for use on a circuit capable of delivering not more than 65000 rms symmetrical amperes at 600V max., when protected by 300A Class J fuses.          |                          |                          |                                                                    |              |                           |                          |
| Temp. rating of wire                                                                                                                                         |                          |                          |                                                                    |              |                           |                          |
| Temperature rating (°C)                                                                                                                                      |                          | Current (A)              |                                                                    |              | Text                      |                          |
| 75                                                                                                                                                           |                          | --                       |                                                                    |              | --                        |                          |
| General Use                                                                                                                                                  |                          |                          |                                                                    |              |                           |                          |
| AC / DC                                                                                                                                                      | Voltage (V)              | Current (A)              | No. of phases                                                      | No. of poles | No. of contacts in series |                          |
| AC                                                                                                                                                           | 277                      | 125                      | 1                                                                  | 1            | 1                         |                          |
| AC                                                                                                                                                           | 277                      | 150                      | 1                                                                  | 1            | 1                         |                          |
| AC                                                                                                                                                           | 600                      | 150                      | 1                                                                  | 2            | 1                         |                          |
| AC                                                                                                                                                           | 600                      | 150                      | 3                                                                  | 3            | 1                         |                          |
| AC double-throw function                                                                                                                                     | 600                      | 125                      | 1                                                                  | 2            | 1                         |                          |
| AC double-throw function                                                                                                                                     | 600                      | 125                      | 3                                                                  | 3            | 1                         |                          |

## General Information

### Text

- The operating handle and position indicating means to be used with these manual motor controllers should be provided from the manufacturer, or the operating handle and position indicating means to be used should have been previously evaluated in combination with the manual motor controllers.

## CSA

### Nominal Voltage

Voltage (V) AC / DC

600 AC

### Rated insulation voltage Ui

Voltage (V) AC / DC

600 AC

### Rated thermal current

Current (A)

150

Ambient temperature (°C) Additional Text

0 - 40 --

### Horsepower rating

#### Across-the-Line Motor Starting

|     | Voltage (V) | No. of phases | No. of poles | Power (HP) | Ambient temperature [°C] |
|-----|-------------|---------------|--------------|------------|--------------------------|
| DOL | 110 - 120   | 1             | 2            | 7,50       | 40                       |
| DOL | 220 - 240   | 1             | 2            | 20         | 40                       |
| DOL | 277 - 277   | 1             | 2            | 20         | 40                       |
| DOL | 440 - 480   | 1             | 2            | 35         | 40                       |
| DOL | 550 - 600   | 1             | 2            | 35         | 40                       |
| DOL | 110 - 120   | 3             | 3            | 15         | 40                       |
| DOL | 220 - 240   | 3             | 3            | 30         | 40                       |
| DOL | 440 - 480   | 3             | 3            | 60         | 40                       |
| DOL | 550 - 600   | 3             | 3            | 60         | 40                       |

### Temp. rating of wire

Temperature rating (°C)

75

Current (A) Text

--

### General Use

| AC / DC | Voltage (V) | Current (A) | No. of phases | No. of poles | No. of contacts in series |
|---------|-------------|-------------|---------------|--------------|---------------------------|
| AC      | 277         | 150         | 1             | 1            | 1                         |
| AC      | 600         | 150         | 1             | 2            | 1                         |
| AC      | 600         | 150         | 3             | 3            | 1                         |

## GENERAL TECHNICAL INFORMATION

### Size of conductor

| composition of conductor                          | Min. / Max. value | No. of conductor per terminal | Cross section (mm²) or (AWG/kcmil) | Material of the wire |
|---------------------------------------------------|-------------------|-------------------------------|------------------------------------|----------------------|
| solid wire                                        | Min.              | 1                             | 6mm²                               | Copper               |
| flexible wire                                     | Max.              | 1                             | 70mm²                              | Copper               |
| flexible wire                                     | Min.              | 1                             | 16mm²                              | Copper               |
| flexible wire                                     | Max.              | 1                             | AWG 2/0                            | Copper               |
| Single-core or stranded wire                      | Max.              | 1                             | 95mm²                              | Copper               |
| Single-core or stranded wire                      | Max.              | 1                             | AWG 3/0                            | Copper               |
| flexible wire with sleeve                         | Max.              | 1                             | 70mm²                              | Copper               |
| flexible wire with ferrule according to DIN 46228 | Min.              | 1                             | 10mm²                              | Copper               |

### Stripping length

Length (mm) --

18

### Recommended screw driver

#### Type of screw driver

Hex key

Value

5

### Tightening torque of screws

tightening torque (Nm)

14

tightening torque (lb-in)

125

### Approbations

#### Specification

EAC

CE marking

UK Directives

CSA C.22.2 No.14

GB/T14048.3

### General Information

#### Text

- EMC Note: This device is suitable for use in environment A and B.

- Do not lubricate or treat contacts.

- Switches may only be mounted, connected and set into operation by qualified persons according to the accepted rules of technology.

- Use copper wire only. Do not coat the wire end with tin.

- Terminals with factory fitted jumper links are tightened during production. Take care during installation to ensure factory fitted links are not lost by undoing both sides of linked terminals. After wiring, all terminal screws must be tightened to recommended torque specifications.



## Waste Electrical & Electronic Equipment (WEEE)

| Picture name                                                                     | Description                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Do not throw in the trash as care must be taken to ensure environmentally sound disposal and recycling. Please either use an environmentally friendly waste disposal company; return to the supplier for disposal; or return direct to the manufacturer, Kraus & Naimer. You can find local Kraus & Naimer offices at <a href="http://www.krausnaimer.com">www.krausnaimer.com</a> |

## Proposition 65

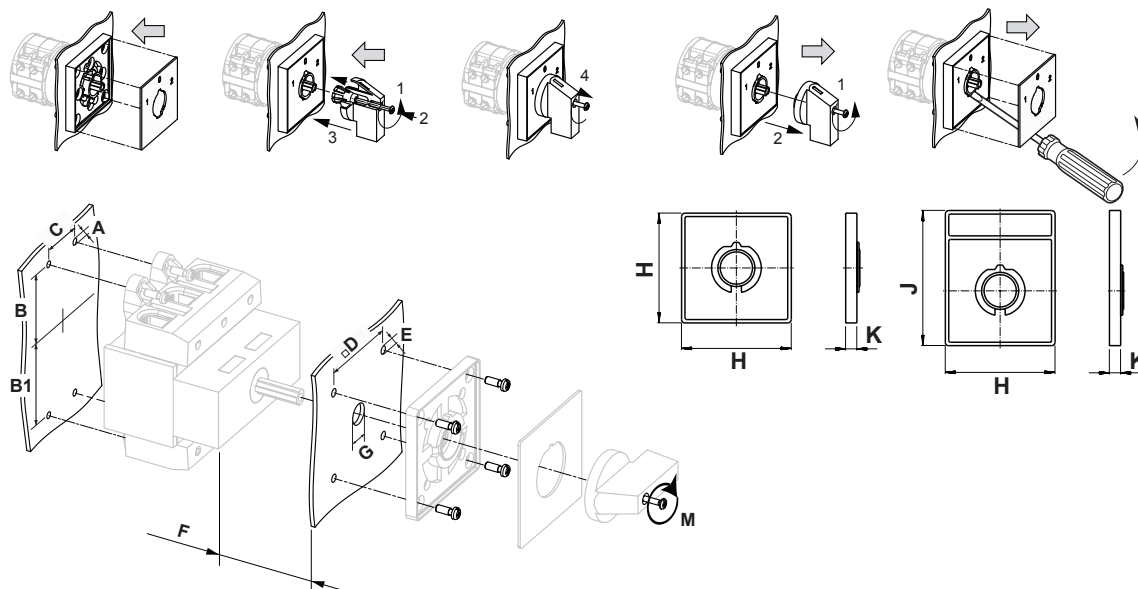
| Picture name                                                                     | Description                                                                                                                                                                                                                             |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | WARNING: This product can expose you to chemicals including nickel and lead, which is known to the State of California to cause cancer. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> . |

Classification Contact: Rigid contact bridge

Classification Contact Mat: Silver

Classification Terminal: Screw terminal

## Mounting-VE

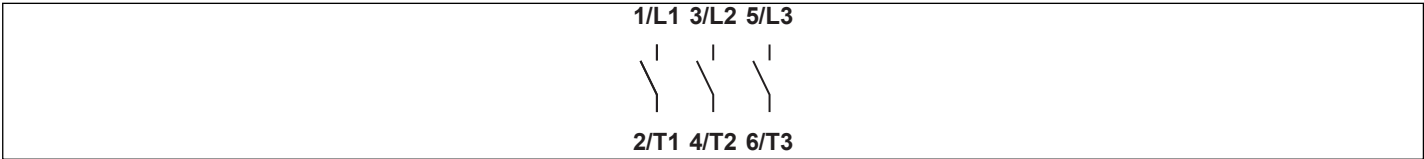


| IP - Code front side |   | IP40             |
|----------------------|---|------------------|
| Stages               |   | 1,00 - 5,00      |
| A                    | Ø | 6,40 mm          |
| B                    | H | 59,00 - 61,00 mm |
| B1                   | H | 59,00 - 61,00 mm |
| C                    | H | 36,00 mm         |
| D                    | □ | 68,00 mm         |
| E                    | Ø | 6,00 mm          |
| F                    | H | <= 16,00 mm      |
| G                    | Ø | 13,00 - 17,00 mm |
| H                    | H | 88,00 mm         |
| J                    | H | 124,00 mm        |
| K                    | H | 8,50 mm          |
| M                    | ⌀ | 1,20 Nm          |



Wiring diagram

KG125.T303.VE



## Switch program

KG125.T303.VE



Kraus & Naimer

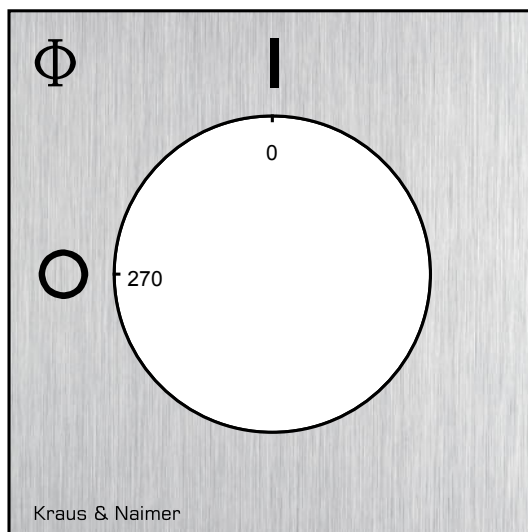
KG125
T303
Page 1 of 1

| Face Plate                                                                        |      |      |      |      |   |    |    |    |    |
|-----------------------------------------------------------------------------------|------|------|------|------|---|----|----|----|----|
|  | 1/L1 | 3/L2 | 5/L3 |      |   |    |    |    |    |
|                                                                                   | 1    | 3    | 5    | 7    | 9 | 11 | 13 | 15 |    |
|  |      |      |      |      |   |    |    |    |    |
| Switching Angle                                                                   | 90   | 2    | 4    | 6    | 8 | 10 | 12 | 14 | 16 |
| Total switching Angle                                                             | 90   | 2/T1 | 4/T2 | 6/T3 |   |    |    |    |    |
| 0                                                                                 | 270  |      |      |      |   |    |    |    |    |
|                                                                                   |      |      |      |      |   |    |    |    |    |
| 1                                                                                 | 0    | ■    | ■    | ■    |   |    |    |    |    |
|                                                                                   |      |      |      |      |   |    |    |    |    |
|                                                                                   | 90   |      |      |      |   |    |    |    |    |
|                                                                                   |      |      |      |      |   |    |    |    |    |
|                                                                                   | 180  |      |      |      |   |    |    |    |    |
|                                                                                   |      |      |      |      |   |    |    |    |    |
|                                                                                   |      |      |      |      |   |    |    |    |    |
|                                                                                   |      |      |      |      |   |    |    |    |    |

Version: 84

## Face plate

S1.F456/A10.M1H



## PADLOCK DEVICE

**Designation:** S2.V845/A11/B12

**Face plate and handle unit:** "A" face plate/alu, frame/black, handle/black, locking push rod/red

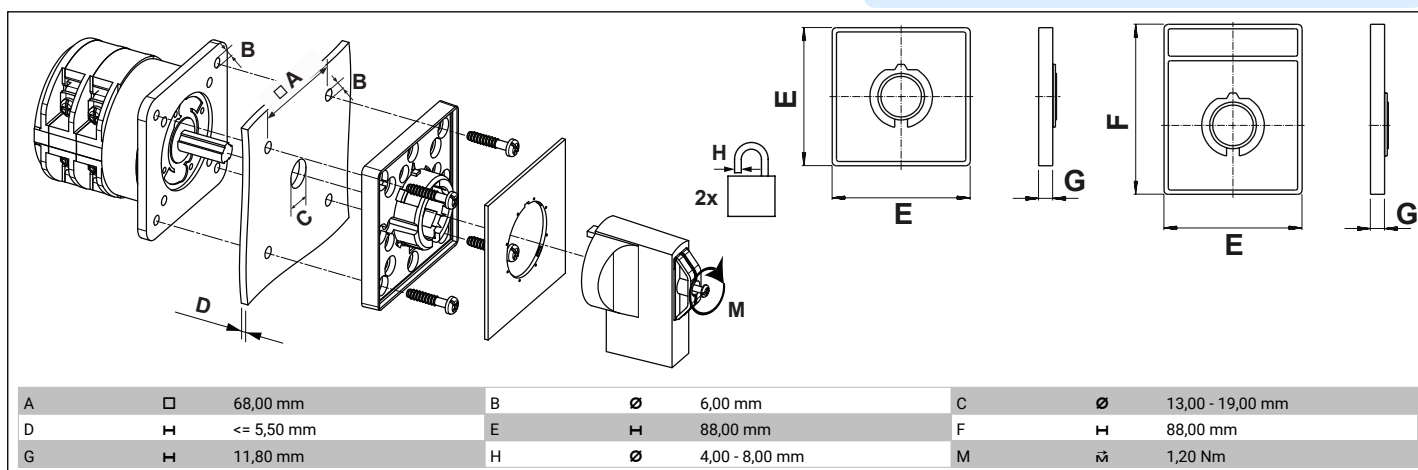
**Locking position:** "1" at 270°+90° - knockouts every 45°

**Angular displacement:** "1" 1 x 90°

**Type of mounting:** "B" for type of mounting VE

**Type of version:** "1" for same switch size

**Switch type:** "2" for KA-, KG- and KH(R)-switches





Sample image

## STANDARD DOOR CLUTCH

with shaft extension/asymmetric profile (with arresting screw)

**Designation:** S2.M280E/B21S-EF

**Type of interlock:** "B2" with protected profile and interlock by door clutch

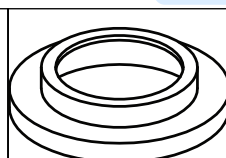
**Shaft length:** "1" 60 - 90 mm

**Application:** "S" for type of mounting VE

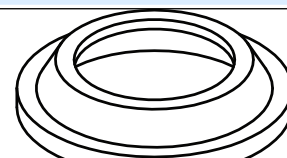
**Type of version:** "-EF" splash proof (IP66/67)



|   |            |   |           |   |                    |
|---|------------|---|-----------|---|--------------------|
| A | □ 68,00 mm | B | ∅ 6,00 mm | C | ∅ 26,00 - 30,00 mm |
| D | H 5,50 mm  |   |           |   |                    |



**S2D V840 10**



**S3D V840 10**

If S2 V840D or S2/S3 V845 will be applied with M280D, M280E or M280F, separately delivered parts S2D V840 10 resp. S3D V840 10 are not needed.



|   |                |  |  |
|---|----------------|--|--|
| Z | H >= 110,00 mm |  |  |
|---|----------------|--|--|



M  $\vec{M}$  0,80 Nm

1. Loosen the screw
2. Move shaft
3. Tighten the screw



Sample image

## AUXILIARY CONTACTS

for KG125-KG317 - ON/OFF Switches

**Designation:** K3A.M510B/11A-B

**Number of NO-contacts:** "1" total number of NO/NC-contacts max. 8 contacts

**Number of NC-contacts:** "1" total number of NC/NO-contacts max. 8 contacts

**Version:** "A" Standard (silver)

**Type of mounting:** "-B" for type of mounting VE

### IEC 60947-3 EN 60947-3, VDE 0660 Teil 107

#### Rated insulation voltage Ui

Voltage (V) AC / DC  
690 AC

#### Rated uninterrupted current Iu/Ith

| Current (A) | Ambient temperature (°C) | Peak temperature (°C) | additional requirements                                          |
|-------------|--------------------------|-----------------------|------------------------------------------------------------------|
| 16          | 55                       | 60                    | Ambient temperature +55°C during 24 hours with peaks up to +60°C |

#### Rated operational current Ie

| Utilization category | Voltage (V) | Current (A) |
|----------------------|-------------|-------------|
| AC-15                | 110 - 120   | 6           |
| AC-15                | 220 - 240   | 5           |
| AC-15                | 380 - 440   | 4           |
| AC-15                | 500         | 1,50        |
| AC-21A               | 20 - 690    | 16          |

#### Max. Fuse rating IEC

| Fuse characteristic | No. of Fuses | Current (A) |
|---------------------|--------------|-------------|
| gG                  | 1            | 16          |

### UL60947-4-1, UL508

#### Nominal Voltage

Voltage (V) AC / DC  
600 AC

#### Rated insulation voltage Ui

Voltage (V) AC / DC  
600 AC

#### Rated thermal current

| Current (A) | Ambient temperature (°C) | Additional Text |
|-------------|--------------------------|-----------------|
| 10          | 0 - 40                   | -               |

#### Pilot duty rating code

Duty Code  
A600

#### Temp. rating of wire

| Temperature rating (°C) | Current (A) | Text |
|-------------------------|-------------|------|
| 75                      | -           | -    |

#### General Use

| AC / DC | Voltage (V) | Current (A) | No. of phases | No. of poles | No. of contacts in series |
|---------|-------------|-------------|---------------|--------------|---------------------------|
| AC      | 600         | 10          | 1             | 1            | 1                         |

### GENERAL TECHNICAL INFORMATION

#### Size of conductor

| composition of conductor                          | Min. / Max. value | No. of conductor per terminal | Cross section (mm²) or (AWG/kcmil) | Material of the wire |
|---------------------------------------------------|-------------------|-------------------------------|------------------------------------|----------------------|
| solid wire                                        | Min.              | 1                             | 0.5mm²                             | Copper               |
| solid wire                                        | Min.              | 2                             | 0.5mm²                             | Copper               |
| flexible wire                                     | Min.              | 1                             | 0.75mm²                            | Copper               |
| flexible wire                                     | Min.              | 2                             | 0.75mm²                            | Copper               |
| flexible wire                                     | Max.              | 2                             | 2.5mm²                             | Copper               |
| flexible wire                                     | Max.              | 2                             | AWG 14                             | Copper               |
| Single-core or stranded wire                      | Max.              | 2                             | AWG 12                             | Copper               |
| Single-core or stranded wire                      | Max.              | 2                             | 2.5mm²                             | Copper               |
| flexible wire with ferrule according to DIN 46228 | Max.              | 2                             | 2.5mm²                             | Copper               |
| flexible wire with ferrule according to DIN 46228 | Min.              | 1                             | 0.5mm²                             | Copper               |
| flexible wire with ferrule according to DIN 46228 | Min.              | 2                             | 0.5mm²                             | Copper               |

#### Stripping length

Length (mm) --



#### Recommended screw driver

| Type of screw driver                   | Value |
|----------------------------------------|-------|
| Slot screwdriver according to DIN 5264 | 0,8x4 |

|                                                                                                                                                                                                                                                                        |                        |                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------|
| Recommended screw driver                                                                                                                                                                                                                                               |                        |                           |
| Type of screw driver                                                                                                                                                                                                                                                   | Value                  |                           |
| Cross Screwdriver                                                                                                                                                                                                                                                      | PH1                    |                           |
| Tightening torque of screws                                                                                                                                                                                                                                            |                        |                           |
|                                                                                                                                                                                                                                                                        | tightening torque (Nm) | tightening torque (lb-in) |
|                                                                                                                                                                                                                                                                        | 0,60                   | 5                         |
| Approbations                                                                                                                                                                                                                                                           |                        |                           |
| Specification                                                                                                                                                                                                                                                          | Marking                |                           |
| EAC                                                                                                                                                                                                                                                                    |                        |                           |
| General Information                                                                                                                                                                                                                                                    |                        |                           |
| Text                                                                                                                                                                                                                                                                   |                        |                           |
| <div>- Do not lubricate or treat contacts.</div> <div>- Switches may only be mounted, connected and set into operation by qualified persons according to the accepted rules of technology.</div> <div>- Use copper wire only. Do not coat the wire end with tin.</div> |                        |                           |
| <div>13 21</div> <div></div> <div>14 22</div>                                                                                                                                          |                        |                           |