ACCESSORIES

| VOLTAGE SELECTOR INSERTS | 2 |
|--------------------------------|---|
| | |
| FUSE DRAWER "EXTRA-SAFE" | 3 |
| | |
| CONNECTION WITH STRANDED CABLE | 4 |
| | |
| BOWDEN CABLE | 5 |
| | |
| INSULATING COVER | 6 |
| | |
| CORD RETAINING KITS | 7 |

Voltage selector inserts for Power Entry Modules, types KE, CE, KG, CG





Order Numbers for voltage selector insert for Power Entry Modules, types KE, CE, KG, CG

| 1,2 | 1 without | 2 | 3 | 4 | | - |
|-----|---|--|---|---|---|--|
| 1,2 | without | | | | | |
| -1 | | marking | | | | |
| I | 100 | 120 | 220 | 240 | 20 100 120 | |
| 2 | 110 | | | 220 | | |
| 2 | 115 | | | 230 | | |
| 1 | 100 | 115 | | 230 | 15 100 115 | (|
| | | | | | | |
| 3 | without | marking | | | | |
| 3 | 130 | 110 | 240 | 220 | 20 110 110 | 50 50 |
| 3 | | 110 | 240 | 220 | 20 110 110 | |
| 3 | 150 | 110 | | 220 | | |
| 4 | without | marking | | | | |
| 4 | | 520 | 011 | | | |
| 4 | | 115 | 230 | | | |
| 4 | | 530 | 011 | | | |
| | 2 1 3 3 3 3 3 4 4 4 4 | 2 115 1 100 3 without 3 130 3 130 3 150 4 without 4 4 | 2 115 1 100 115 3 without marking 3 130 110 3 150 110 3 150 110 4 without marking 4 077 4 115 | 2 115 1 100 115 3 without marking 3 130 110 240 3 150 110 240 3 150 110 240 3 150 110 240 4 without marking 4 4 072 011 4 115 230 | 2 115 230 1 100 115 230 3 without marking 3 130 110 240 220 3 130 110 240 220 220 3 150 110 220 220 3 150 110 220 4 without marking 4 027 011 4 115 230 115 115 | 2 115 230 1 100 115 230 3 without marking 3 3 100 110 240 220 3 110 240 220 20 3 110 240 220 20 3 110 240 220 20 3 150 110 220 20 4 without marking 4 072 011 4 115 230 10 100 |

Other voltage markings on request

Fuse drawer «Extra-Safe» for Power Entry Modules, types KE, CE, KG, CG





Order Numbers

| for fuses 5 x 20 mm | | | for fuses 6,3 x 32 mm | | |
|---------------------|-----------|---|-----------------------|-----------|---|
| | | 2-pole with shorting bar in the neutral side | | | 2-pole with shorting bar in the neutral side |
| 1-pole | 2-pole | | 1-pole | 2-pole | |
| 4305.0006 | 4305.0001 | 4305.0021 | 4305.0016 | 4305.0011 | 4305.0026 |
| | | | | | |

Order Numbers fuse drawer (Fingergrip and Extra-Safe) (to types KEA, KEA-Print, KFA, KM)

| Voltage markings | for types | Туре | | | 1-pole + spare | 2-pole with shorting |
|--------------------------|---------------------------|------------|--------------|--------------|----------------|-------------------------|
| | | | 1-pole | 2-pole | fuse case | bar in the neutral side |
| | | | | | | |
| «XX» see table 1 | KEA, KFA | Fingergrip | 4301.1214.XX | 4301.1014.XX | 4301.2814.XX | 4301.3536.XX |
| «XX» | | Extra-Safe | 4301.1224.XX | 4301.1024.XX | 4301.2824.XX | 4301.3537.XX |
| without voltage selector | KEA, KEA-Print, KFA (KM*) | Fingergrip | 4301.1405 | 4301.1401 | 4301.1409 | 4301.1413 |
| without voltage selector | KEA, KEA-Print, KFA (KM*) | Extra-Safe | 4301.1407 | 4301.1403 | 4301.1411 | 4301.1415 |
| * only 1-/2-pole | | | | | | |

| Table 1 | | | | | Table 1 | | | | |
|---------|---------|--------------|----------|-----|---------|-----------|--------------|----------|-----|
| Index | Voltage | markings/ter | minal no | | Index | Voltage n | narkings/ter | minal no | |
| ХХ | 1 | 2 | 3 | 4 | XX | 1 | 2 | 3 | 4 |
| 01 | 110 | 150 | 220 | - | 13 | 115 | 220 | 240 | _ |
| 02 | 120 | - | 240 | - | 14 | - | _ | - | - |
| 03 | 110 | _ | 220 | - | 15 | 100 | 120 | 220 | - |
| 04 | 115 | _ | 220 | - | 16 | 50 Hz | - | 60 Hz | - |
| 05 | 110 | _ | 230 | - | 17 | 220 | - | 110 | - |
| 06 | 115 | _ | 230 | - | 18 | 110 | 240 | 220 | - |
| 07 | 100 | 110 | 220 | 240 | 19 | 117 | 220 | 240 | - |
| 08 | 100 | 120 | 220 | 240 | 20 | 100 | 110 | 127 | 230 |
| 09 | 110 | - | 117 | - | 21 | 110 | 120 | 220 | - |
| 10 | 220 | - | 240 | - | 22 | 110 | 220 | 230 | - |
| 11 | 120 | 220 | 240 | - | 23 | 100 | 115 | 220 | 240 |
| 12 | 110 | 220 | 240 | - | 24 | 115 | 230 | 240 | - |

Other versions on request:

for protection class II

KEA with solder terminals

- Fuse drawer with other voltage values

Order Numbers for fuse drawer (Fingergrip and Extra-Safe) (to types KEC, KFC, KD, CD)

| Voltage markings Terminal no. | Туре | 5 x 20 mm | | 2-pole with shorting bar in | 6,3 x 32 mm | | 2-pole with shorting bar in |
|----------------------------------|------------|--------------|--------------|--------------------------------|--------------|--------------|-----------------------------|
| 1 2 3 4 KEC 3 4 5 6 KD | | 1-pole | 2-pole | the neutral side | 1-pole | 2-pole | the neutral side |
| «YY» see following table | Fingergrip | 4303.2114.YY | 4303.2014.YY | 4303.2036.YY | 4303.2614.YY | 4303.2514.YY | 4303.2536.YY |
| «YY» | Extra-Safe | 4303.2124.YY | 4303.2024.YY | 4303.2037.YY | 4303.2624.YY | 4303.2524.YY | 4303.2537.YY |
| without voltage selector | Fingergrip | 4303.2406 | 4303.2401 | 4303.2411 | 4303.2906 | 4303.2901 | 4303.2911 |
| without voltage selector | Extra-Safe | 4303.2408 | 4303.2403 | 4303.2413 | 4303.2908 | 4303.2903 | 4303.2913 |

| Index | Voltage markings/terminal no | | | | | | |
|-------|------------------------------|-----|-------|-----|-----|--|--|
| | 1 | 2 | 3 | 4 | KEC | | |
| YY | 3 | 4 | 5 | 6 | KD | | |
| 00 | - | - | - | - | | | |
| 01 | 100 | 120 | 220 | 240 | | | |
| 02 | 110 | 150 | 220 | - | | | |
| 03 | 110 | - | 220 | - | | | |
| 04 | 110 | 220 | 240 | - | | | |
| 05 | 115 | - | 230 | - | | | |
| 06 | 117 | 220 | 240 | - | | | |
| 07 | 100 | 117 | 220 | - | | | |
| 08 | 110 V | - | 220 V | - | | | |
| 09 | 220 | - | 240 | - | | | |
| 10 | 115 | 220 | 240 | - | | | |
| 11 | 110 | 120 | 220 | 240 | | | |

| Index | Voltage markings/terminal no | | | | | |
|-------|------------------------------|-----|-----|-----|-----|--|
| | 1 | 2 | 3 | 4 | KEC | |
| YY | 3 | 4 | 5 | 6 | KD | |
| 12 | 115 | 230 | 240 | - | | |
| 13 | 100 | 110 | 220 | 240 | | |
| 14 | 100 | 117 | 220 | 240 | | |
| 15 | 100 | 115 | 230 | - | | |
| 16 | 100 | 120 | 230 | 240 | | |
| 17 | 115 | 120 | 230 | 240 | | |
| 18 | 115 | - | 240 | - | | |
| 19 | 220 | 120 | 240 | 230 | | |
| 20 | 100 | 120 | 230 | - | | |
| 21 | 100 | - | 220 | - | | |
| 22 | 100 | 120 | 220 | 230 | | |
| 23 | 100 | 110 | 120 | - | | |

Other versions on request:

- for protection class II

- Fuse drawer with other voltage values

Accessory connection with stranded cable for KE, CE and KG, CG (wiring of voltage selector)



Quick connect terminals 4,8 x 0,8 mm

5

0881.0076 (length = 70 mm) 0881.0077 (length = 100 mm)

Tap 4,8 x 0,8 mm

0881.0074 (length = 70 mm) 0881.0075 (length = 100 mm) The connection with stranded cable has to be mounted by customer. Stand = 1,5 mm

Attention: To guarantee the minimum air and creeping distances, use taps

only for terminal 3 / 4 or N for KE, CE 2 / 3 / 4 or N for KG, CG (concerns voltage selector system 1, 2 and 3).

Order Numbers for connection with stranded cable

| Power entry | Voltage selector | Voltage selector | Voltage selector |
|---------------|------------------------|------------------------|------------------------|
| modules type | System No. 1 | System No. 2 and 3 | System No. 4 |
| KE, CE 1-pole | 0881.0075 | 0881.0074 | 0881.0076 |
| | 0881.0076 | 0881.0075 | 0881.0077 |
| KE, CE 2-pole | 0881.0074 0881.0076 | 2x 0881.0074 | 2x 0881.0076 |
| KG, CG 1-pole | 0881.0075 0881.0076 | 0881.0074 0881.0075 | 0881.0076 0881.0077 |
| KG, CG 2-pole | 0881.0074 0881.0076 | 2x 0881.0074 | 2x 0881.0076 |

BOWDEN CABLE for type KD/KG, CD/CG Order details and description

How to specify length of

Bowden cable:

- **R** Mounting parallel to direction of actuation
- B1 Actuating part
- B2 Power entry module

Dimensions in mm (center of mounting hole [B1], outer surface to center of mounting hole [B2], outer surface)

| 11 a/ b/ 0/ |
|-------------|
|-------------|

| S Mounting 90° to direction of actuation |
|---|
|---|

- B1 Actuating part
- B2 Power entry module

Dimensions in mm (center of mounting hole [B1], outer surface to center of mounting hole [B2], outer surface)

| â | - 1 | 1. / | - / |
|---|-----|------|-----|
| S | a / | N 0 | C / |

Ordering example

The following 3 positions are necessary to place an order:

| 1. Order No. | |
|---------------------|---------------------|
| socket | KD14.4199.151 |
| 2. Order No. | |
| fuse drawer | 4303.2024.03 |
| 3. Bowden cable | |
| (type of mounting / | |
| dimensions in mm) | *R a/200 b/180 c/40 |

* The Order No. for a customer specific Bowden cable you'll get with the acknowledgment.

Delivery time for a customer specific Bowden cable sample approx. 2 weeks.

Standard Bowden cable sample, Order No. 0886.0101, ex stock

Bowden cable assembly instruction

Drop Bowden barrel into seat of switch



Slide clamp around cable



Bowden cable locked into assembly



Type R





Percent increase in actuation force



All of these losses and resulting inefficiencies can be reduced by the equipment designer through minimizing the total degress of bend in the assembly. Because of the number of variables effecting proper

operation of any remotely actuated switch assembly, it is important that the ordering instructions be used to determine proper cable length and to provide samples for customer approval. Consult figure for minimum information required to describe cable

The remote actuator cable assembly consists of a wire cable inside

Identifying a proper routing of the cable assembly is important. Deviations from line to line placement will require bends in the cable

Frictional losses are increases in actuation force due to losses in the

assembly. Lost motion is an undesirable difference between the in-

Backlash is caused by the wire cable moving inside the casing with the change in direction of motion. It is the function of clearance between the wire cable and casing, plus the number of degrees of bend in the cable assembly. Deflection of the cable assembly, while

This is especially true in those applications of cable assemblies with

The principle element of lost motion is backlash and deflection.

usually low, can be minimized by anchoring the casing.

long lengths and/or large degrees of bend in the system.

with resulting losses in the overall assembly. These inefficiencies

assembly application.

Remote Actuator Technology

of a plastic insulated spiral wire casing.

show up as friction losses and lost motion.

put end of the assembly and the output end.





Insulating cover

The terminals of the Schurter appliance couplers can be protected against unintentional contact by the use of an insulation cover.

They are made of flexible thermoplastic (UL 94V-0, black) and can be easily mounted from the rear to the corresponding appliance couplers.

| Order Numbers | |
|---------------|--|
| | suitable for |
| 0859.0047 | KEA (without KEA-Print) |
| | KEB1, DC11, 6200, 6202, 6205, 6220, 4721, 4723, 4793, 4798, 6600-3, 6600-4, 4707, C20F |
| 0859.0048 | 6100-3, 6100-4, 6102-3, 6102-5, |
| | 5110, FGS, KFS, KFX |
| 0859.0072 | KEC, KFC, FKH, FKI, FKHD, FKID |
| 0859.0074 | KD, 5145, 6145 |
| 0859.0075 | KEB2, KFB2, 0723, 4797, DC12, |
| | KFB1, 4719, KFA, 5200, 5220 |
| 0859.0076 | KE, KM, KMF, EC11, EC12 |
| 0859.0077 | CD |
| 0859.0108 | CE, EC12 |
| 0859.0109 | CG, KG, EF11, DF12, DF11 |
| 0859.0086 | 8843-FL, 8843-FLR |

Cover GSF1

Order Number

0098.0078

Cord retaining kits

For protection against loosening or accidental disconnection of the plug connector. Can also be mounted later.

The correct kit type (A-M) for each combination of fixed and free components is shown in the selection chart on page 172. The corresponding Order No. for each kit type is shown in the smaller chart.

Horizontal flanged components are secured to the panel using the kit supplied. Vertical flanged or snap-in components require additional drilling for the cord retaining kit as shown in the diagrams below.

Each cord retaining kit consists of:

- 1 Stainless steel retaining clip
- 2 Nickel plated brass pillars
- 2 Nickel plated brass nuts
- 2 Nickel plated beryllium copper crinkle washers

| Order Numbers | Kit type |
|---------------|----------|
| 4700.0001 | A |
| 4700.0002 | В |
| 4700.0003 | С |
| 4700.0004 | D |
| 4700.0005 | E |
| 4700.0006 | F |
| 4700.0007 | G |
| 4700.0008 | Н |
| 4700.0009 | J |
| 4700.0010 | К |
| 4700.0011 | L |
| 4700.0012 | M |





Cut-aways or countersinks on pillars to face inwards.

Accessories

Cord retaining kits Selection Chart

| Appliance inlet or outlet Plug or con- nector for ca- ble | KEA snap-in | KEA / KFA screw-on | KEB I / DC 11 / DC 12 snap-in | KEB I / KFB I / DC 11 / DC 12 screw-on | KEB II / KFB II | KEC / KFC | KD / CD | KE / CE | KG / CG | KFS / KFX | FELCOM / 54/64 | 4707 | 4721 screw-on | 472x snap-in | 4752 | 4754 / 4758 | 4793 | 4798 screw-on / C20F | 5110 screw-on | 5200 screw-on | 5220 screw-on | 6100 screw-on | 6100 snap-in | 6110 screw-on | 6110 snap-in | 6200 screw-on | 6200 snap-in | 6220 screw-on | 6220 snap-in | 6600 screw-on | 6600 snap-in | 0723 | KM | EC, EF, EG |
|---|-------------|--------------------|-------------------------------|--|-----------------|-----------|---------|---------|---------|-----------|----------------|------|---------------|--------------|------|-------------|------|----------------------|---------------|---------------|---------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|------|----|------------|
| 4781.0000 4781.0100 4782.0000 4782.0100 | А | В | А | В | А | А | A | A | А | С | А | в | | | | Н | | | С | В | В | С | A | С | A | В | A | В | A | | | | A | |
| 4732.0000 | | | | | | | | | | | Е | | D | Ε | Ε | Е | | | | | | | | | | | | | | D | Е | | | |
| 4735.0000 | | | | | | | | | | | G | | F | G | G | G | | | | | | | | | | | | | | F | G | | | |
| 4795.0000 | | | | | <u> </u> | | | | | | | | | | | | L | K | | | | | | | | | | | | | | | | М |
| 4796.0000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | J | | |





 $\begin{array}{c}
\downarrow \\
16,1 \\
\uparrow \\
36,0 \\
\end{array} \circ 3,4 / Typical$

Additional drilling for Kit A



Additional drilling for Kits E and G when used with 472x and 6600 snap-in



Additional drilling for Kit L