

Undervoltage protection switch, rocker or push button actuated, 2-pole



UP1-1WF...



UP1-3TF...



UP1-5TF...



UP1-8TF...



Description

- 2-pole switch with undervoltage release and restart protection
- Remote trip version
- Rocker and push button types
- Snap-in or screw-on version
- Protection covers for IP 54 or IP 65

Approvals

IEC 60947-4-1
UL 508
CSA 22.2 No. 14-95

References

- Last order Date: **31.03.2014**
- Availability: On request
- This type is Phase-Out without alternate type.

Applications

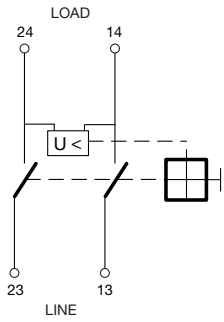
- Electric power tools such as circular saw, band saw, band grinder, miter-box saw, drilling machine, stone/masonry saw
- Chain grinder
- Floor grinder
- Floor cleaning equipments
- Concrete mixers

Technical Data

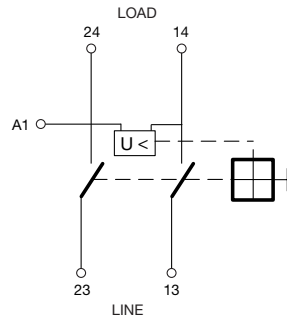
| | |
|---|---|
| Rated voltage | AC 240 V / 50/60 Hz AC 230 V / 50/60 Hz AC 120 V / 60 Hz AC 115 V / 50/60 Hz |
| Rated current | 16 A (AC-1) 14.5 A (AC-3) 10 A (1.5 HP) |
| Conditional short circuit Capacity I_{nc} | AC 2000 A @ PC 1 |
| Fuse | CB 16 A, char. B |
| Dielectric strength | 50 Hz: 1500 V Impulse: 2500 V |
| Oversvoltage category | II |
| Method of operation | Switch type (S) |
| Mode of tripping | Undervoltage release (UV) |
| - Manual ON: | 35% ... 85% U_n (and higher) |
| - Automatic release: | 35% ... 70% U_n (and lower) |
| Type of tripping | Non-trip-free |

| | |
|-------------------------|---|
| Endurance | 50 000 cycles mechanical 50 000 cycles 16 A / AC-1 50 000 cycles 10 A / AC-3 35 000 cycles 14.5 A / AC-3 |
| Ambient temperature | |
| Operation | -10 °C ... +60 °C |
| Storage | -20 °C ... +80 °C |
| Resistance to vibration | IEC 60068-2-6, Test Fc 10 ... 60 Hz: 0.75 mm 60 ... 500 Hz: 10 G |
| Shock resistance | IEC 60068-2-27, Test Ea 30 G/18 ms (half-sine) |
| Degree of protection: | |
| Accessible range: | Rocker types IP 40 Push button types IP 54 |
| Terminals side: | IP 00 |

Wiring Diagram





Sub-type U
coil fix wired



Sub-type E
coil with external connection
for remote trip release

Approvals

| Relay wiring | AC voltage [V] | Frequency [Hz] |  IEC 60947-4-1 |  UL 508 CSA 22.2 No. 14-95 |
|---------------------|-------------------|-------------------|--|---|
| Type U | 115 | 50 | • | • |
| Type U | 115 | 60 | • | • |
| Type U | 120 | 60 | • | • |
| Type U | 230 | 50 | • | • |
| Type U | 230 | 60 | • | • |
| Type U | 240 | 50-60 | • | • |
| Type E, remote trip | 115 | 50 | • | • |
| Type E, remote trip | 115 | 60 | • | • |
| Type E, remote trip | 120 | 60 | • | • |
| Type E, remote trip | 230 | 50 | • | • |
| Type E, remote trip | 230 | 60 | • | • |
| Type E, remote trip | 240 | 50-60 | • | • |

Actual information about approvals can be found on: www.schurter.com/approvals

Preference Types

| Actuation | Mounting | Remote trip | Voltage [V] | Frequency [Hz] | Cover IP 54 | Cover IP 65 | Order Code | Part Number |
|-------------|----------|-------------|----------------|-------------------|----------------|----------------|------------------|----------------|
| Rocker | Snap-in | | 230 | 50 | | | UP1-1WFU31 | 4431.1001 |
| Rocker | Snap-in | | 230 | 50 | • | | UP1-1WFU31-UZZ11 | 4431.1010 |
| Rocker | Snap-in | • | 230 | 50 | | | UP1-1WFE31 | 4431.1004 |
| Rocker | Snap-in | | 120 | 60 | | | UP1-1WFU42 | 4431.1003 |
| Rocker | Snap-in | | 120 | 60 | • | | UP1-1WFU42-UZZ11 | 4431.1036 |
| Rocker | Snap-in | | 115 | 50 | | | UP1-1WFU51 | 4431.1002 |
| Rocker | Snap-in | | 115 | 50 | • | | UP1-1WFU51-UZZ11 | 4431.1031 |
| Rocker | Snap-in | | 115 | 60 | • | | UP1-1WFU52-UZZ11 | 4431.1012 |
| Push button | Snap-in | | 230 | 50 | | | UP1-3TFU31 | 4431.1009 |
| Push button | Snap-in | | 230 | 50 | | • | UP1-3TFU31-UZZ31 | 4431.1011 |
| Push button | Snap-in | • | 230 | 50 | | • | UP1-3TFE31-UZZ31 | 4431.1007 |
| Push button | Snap-in | | 120 | 60 | | • | UP1-3TFU42-UZZ31 | 4431.1035 |
| Push button | Snap-in | | 115 | 50 | | • | UP1-3TFU51-UZZ31 | 4431.1032 |
| Push button | Snap-in | | 115 | 60 | | • | UP1-3TFU52-UZZ31 | 4431.1015 |
| Push button | Flange | | 230 | 50 | | | UP1-5TFU31 | 4431.1005 |
| Push button | Flange | | 230 | 50 | | • | UP1-5TFU31-UZZ51 | 4431.1024 |
| Push button | Flange | • | 230 | 50 | | | UP1-5TFE31 | 4431.1016 |
| Push button | Flange | • | 230 | 50 | | • | UP1-5TFE31-UZZ61 | 4431.1034 |
| Push button | Flange | | 120 | 60 | | | UP1-5TFU42 | 4431.1030 |
| Push button | Flange | | 115 | 60 | | | UP1-5TFU52 | 4431.1006 |
| Push button | Flange | | 115 | 60 | | • | UP1-5TFU52-UZZ51 | 4431.1025 |
| Push button | Flange | | 230 | 50 | | | UP1-8TFU31 | 4431.1041 |
| Push button | Flange | | 230 | 50 | | • | UP1-8TFU31-UZZ81 | 4431.1013 |
| Push button | Flange | | 115 | 60 | | • | UP1-8TFU52-UZZ81 | 4431.1014 |

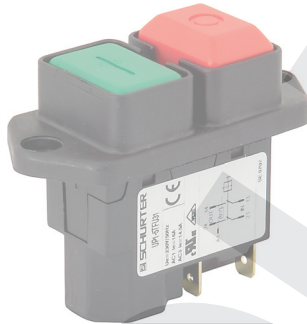
Protection Covers



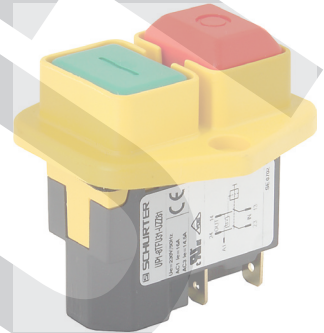
UP1-1WF ...



UP1-3TF ...



UP1-5TF ...



UP1-7/8TF ...



UZZ11
IP 54 for types UP1-1WF ...
(factory mounted)



UZZ31
IP 65 for types UP1-3TF ...
(factory mounted)



UZZ51
IP 65 for types UP1-5TF ...



UZZ71
IP 65 for types UP1-7TF ...
or UP1-8TF ...



UZZ61
IP 65 for types UP1-5TF ...

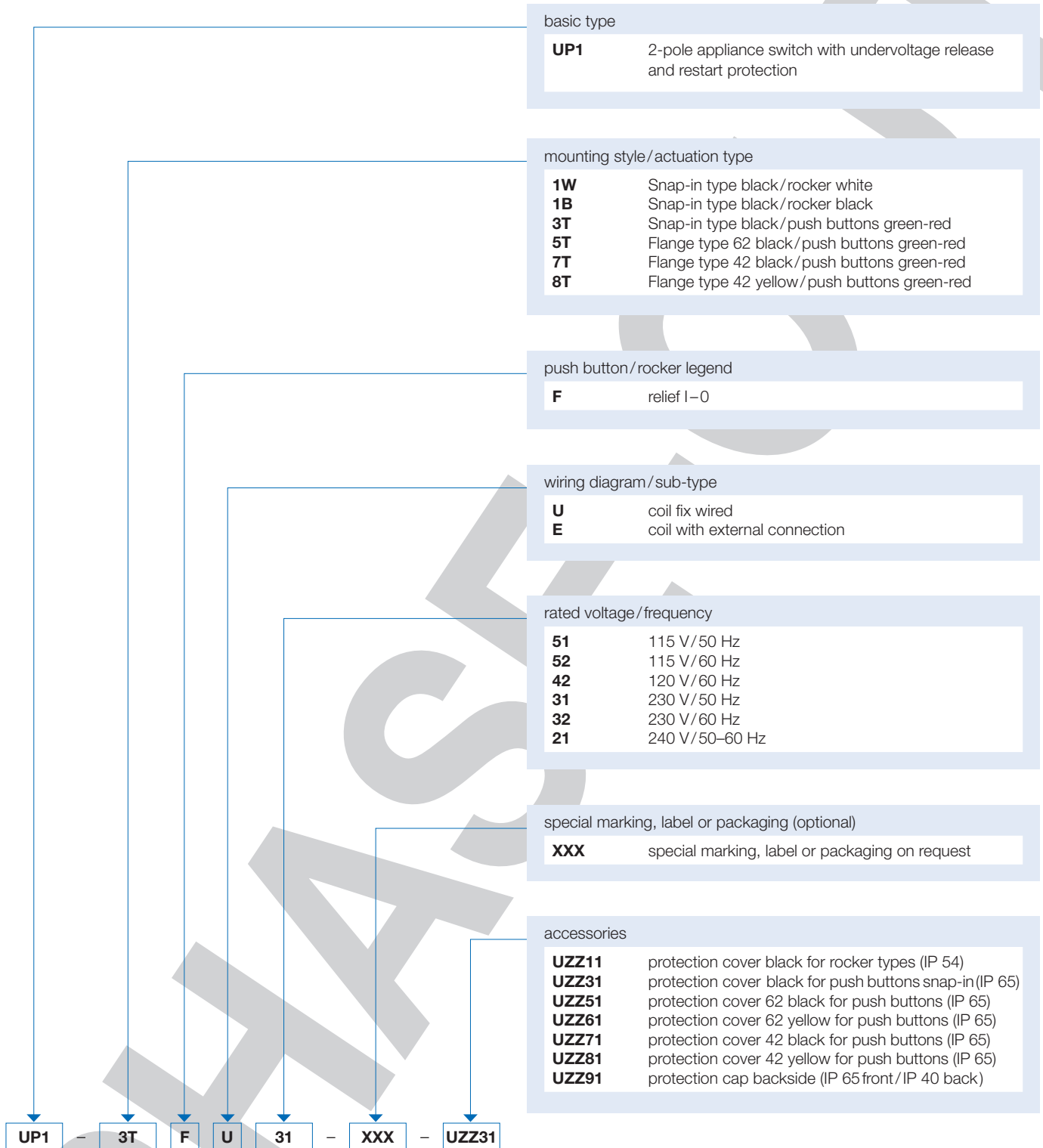


UZZ81
IP 65 for types UP1-7TF ...
or UP1-8TF ...



UZZ91
Frontside IP 65, backside IP 40,
for types UP1-7TF ...
or UP1-8TF ...

Order Code



basic type

UP1 2-pole appliance switch with undervoltage release and restart protection

mounting style/actuation type

1W Snap-in type black/rocker white
1B Snap-in type black/rocker black
3T Snap-in type black/push buttons green-red
5T Flange type 62 black/push buttons green-red
7T Flange type 42 black/push buttons green-red
8T Flange type 42 yellow/push buttons green-red

push button/rocker legend

F relief I-0

wiring diagram/sub-type

U coil fix wired
E coil with external connection

rated voltage/frequency

51 115 V/50 Hz
52 115 V/60 Hz
42 120 V/60 Hz
31 230 V/50 Hz
32 230 V/60 Hz
21 240 V/50-60 Hz

special marking, label or packaging (optional)

XXX special marking, label or packaging on request

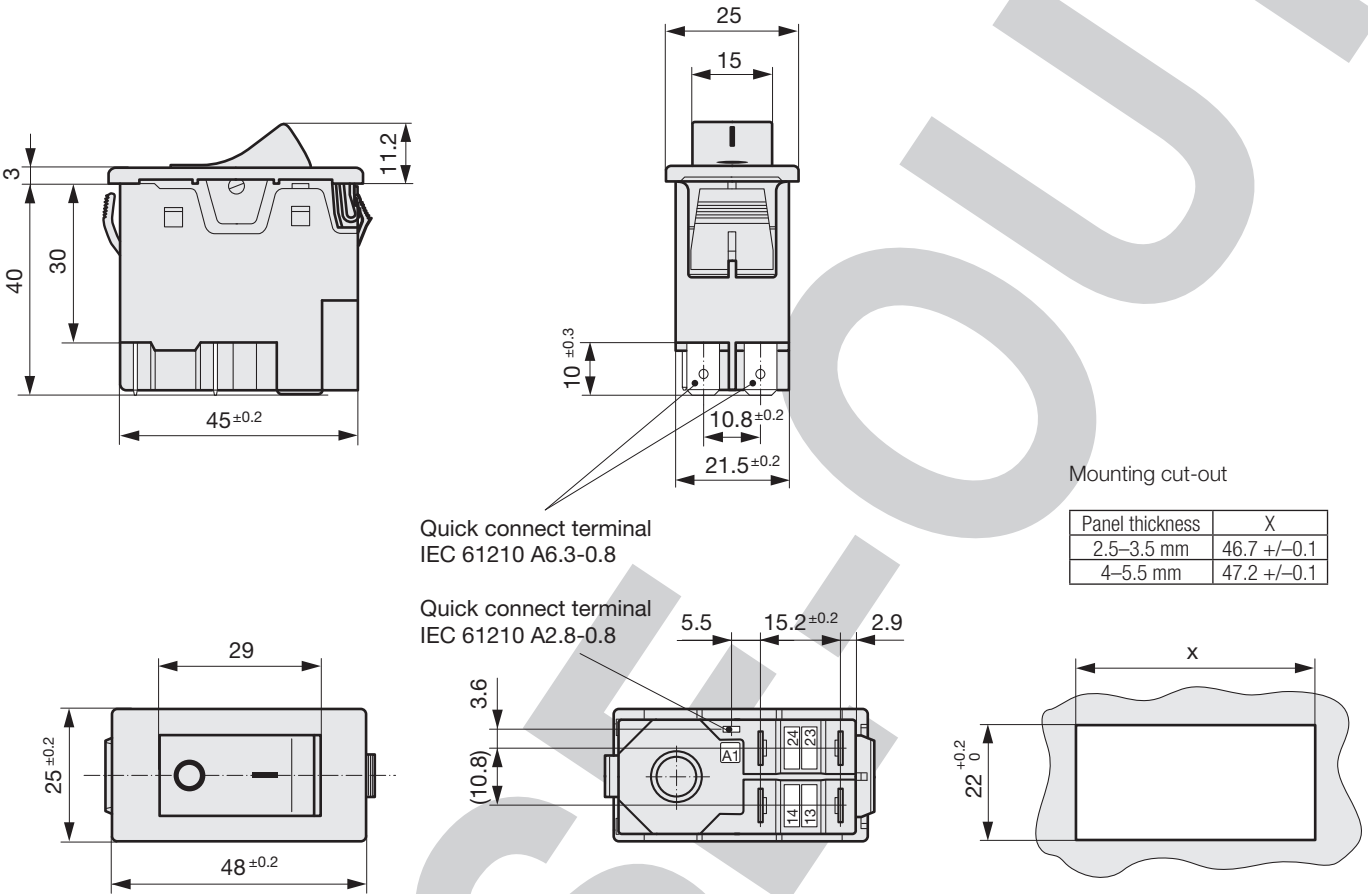
accessories

UZZ11 protection cover black for rocker types (IP 54)
UZZ31 protection cover black for push buttons snap-in (IP 65)
UZZ51 protection cover 62 black for push buttons (IP 65)
UZZ61 protection cover 62 yellow for push buttons (IP 65)
UZZ71 protection cover 42 black for push buttons (IP 65)
UZZ81 protection cover 42 yellow for push buttons (IP 65)
UZZ91 protection cap backside (IP 65 front/IP 40 back)

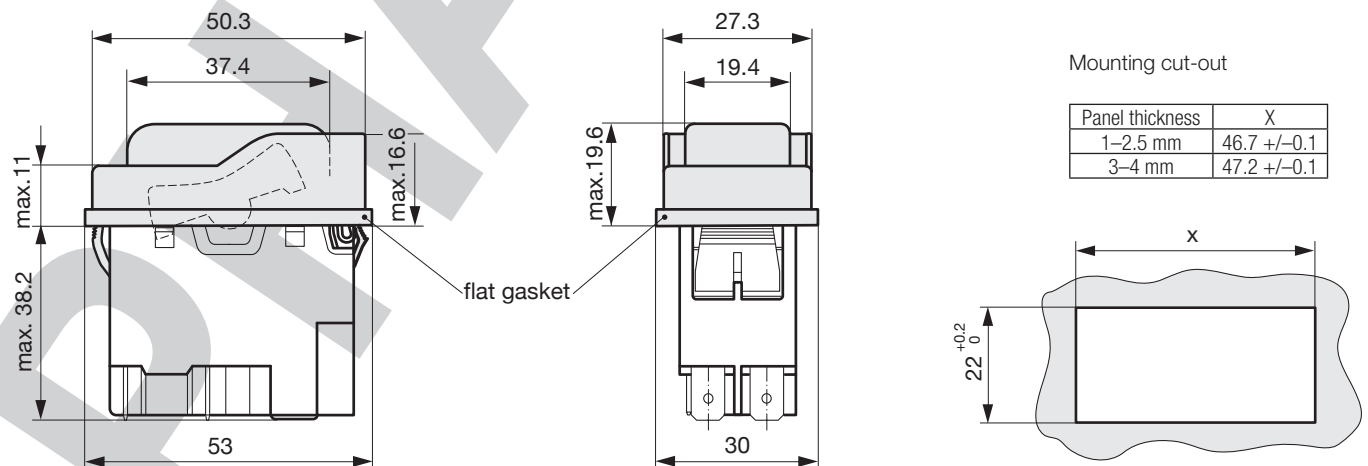
UP1 - 3T - F - U - 31 - XXX - UZZ31

Dimensions

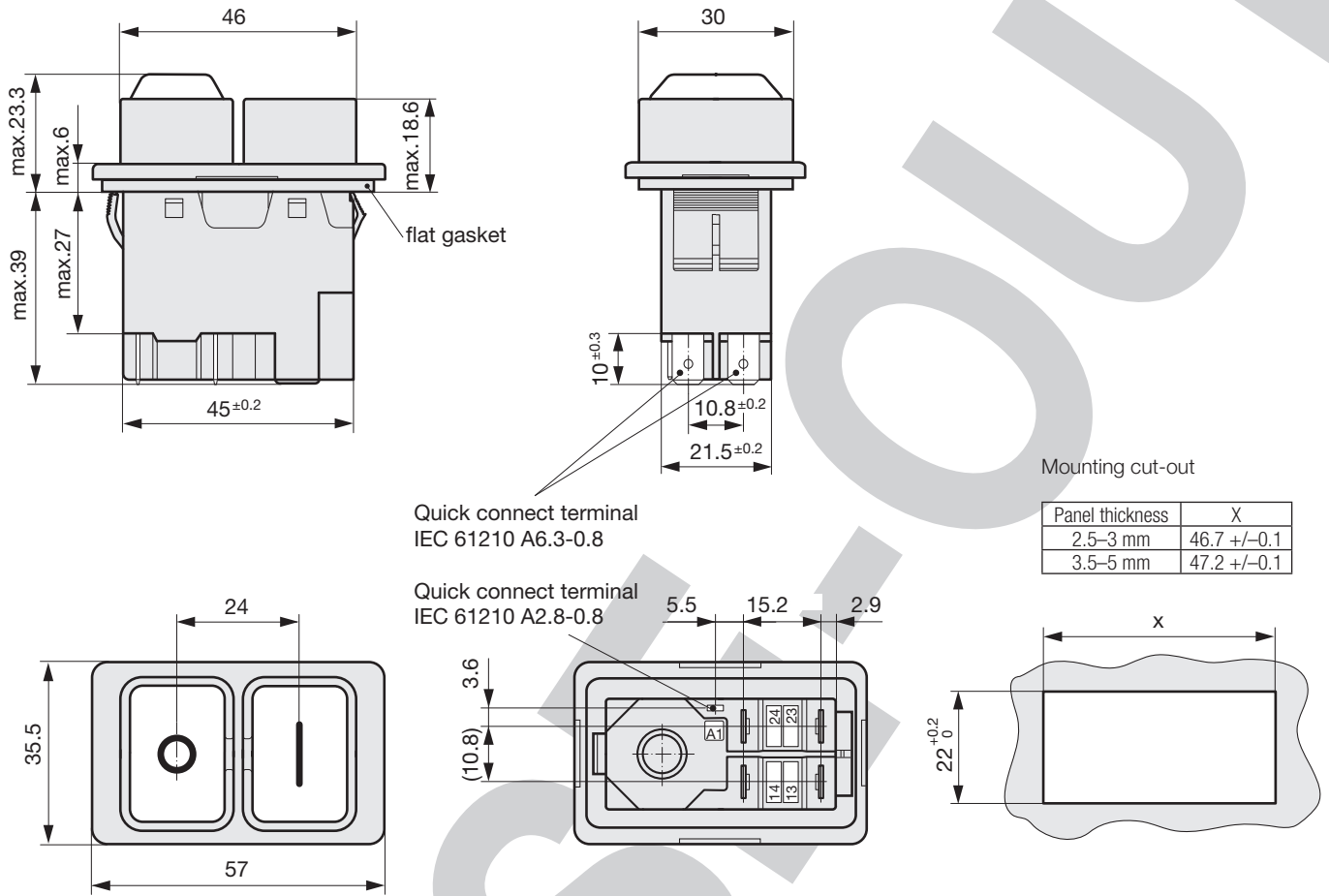
UP1-1WF...



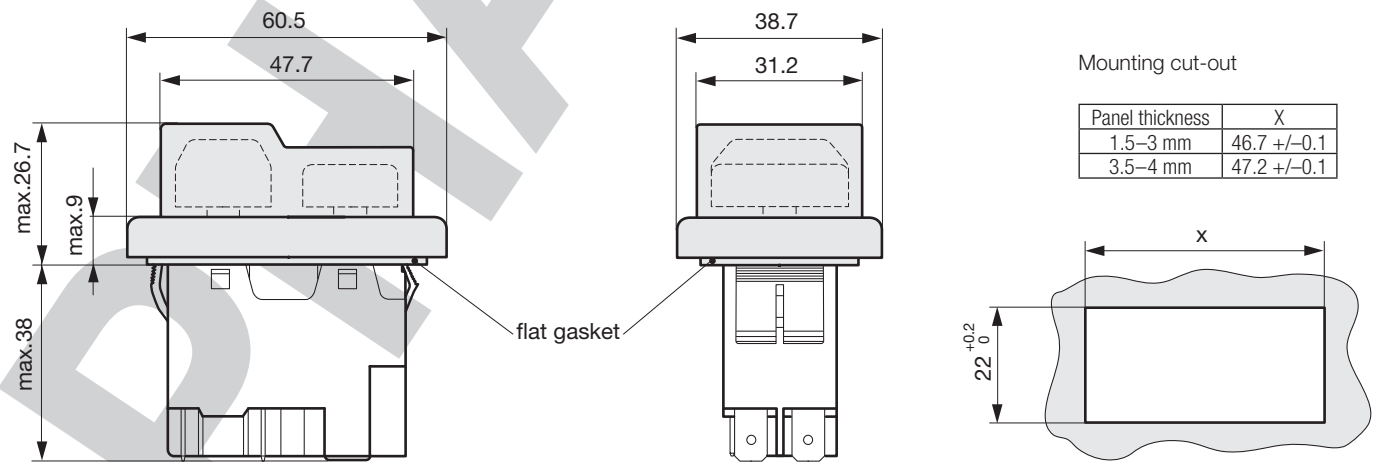
UP1-1WF... with UZZ11



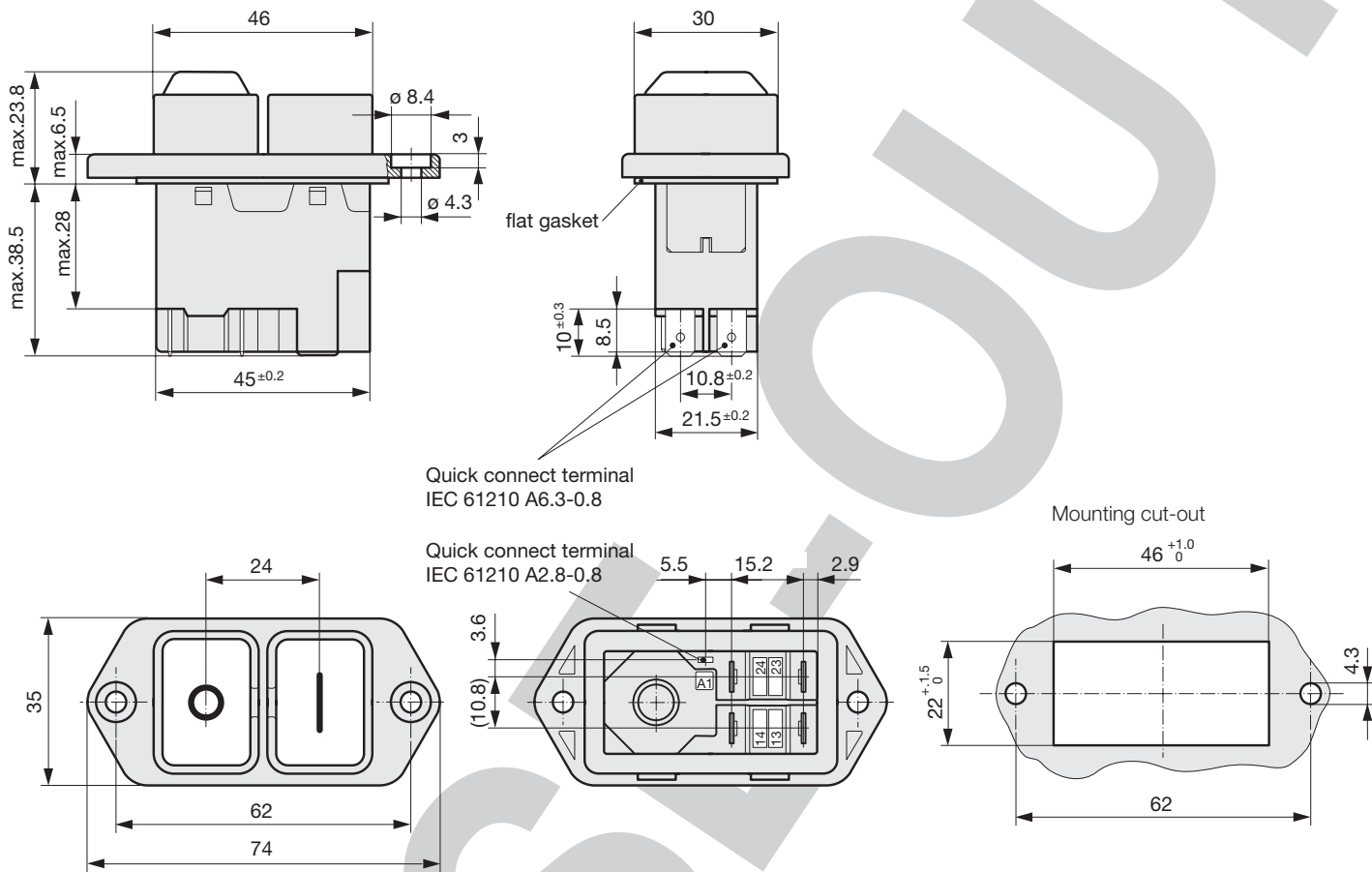
UP1-3TF...



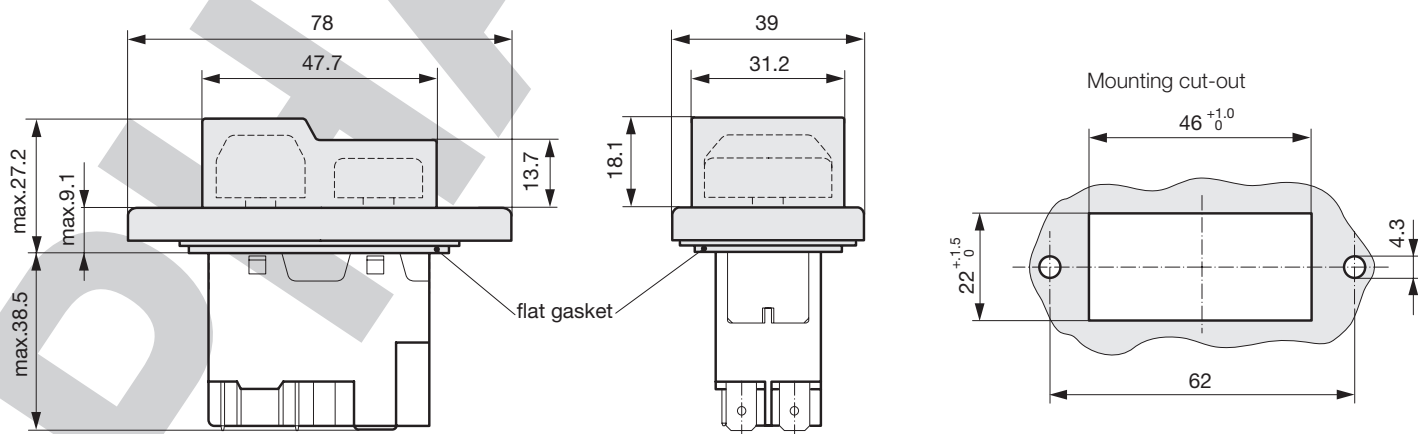
UP1-3TF... with UZZ31



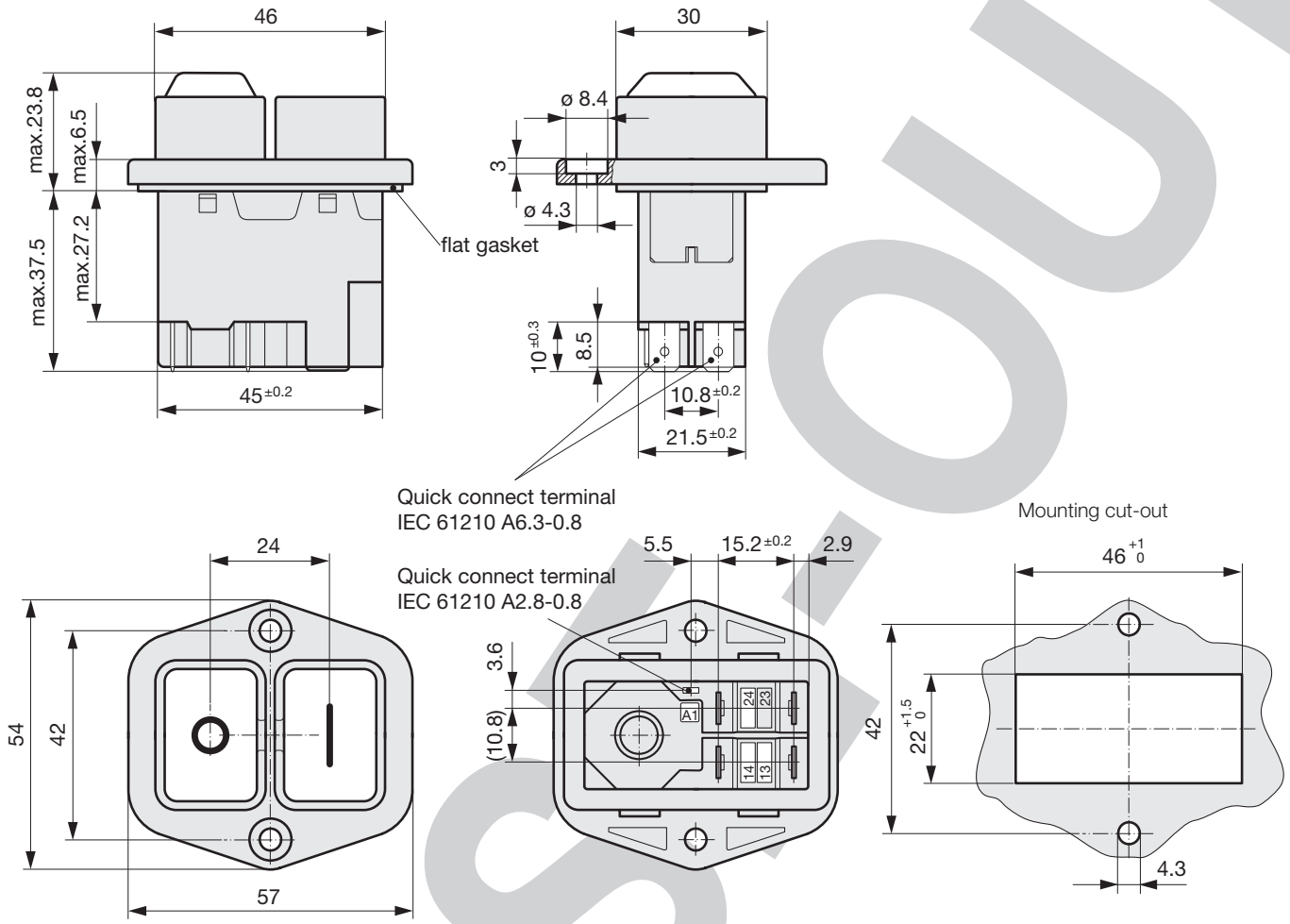
UP1-5TF...



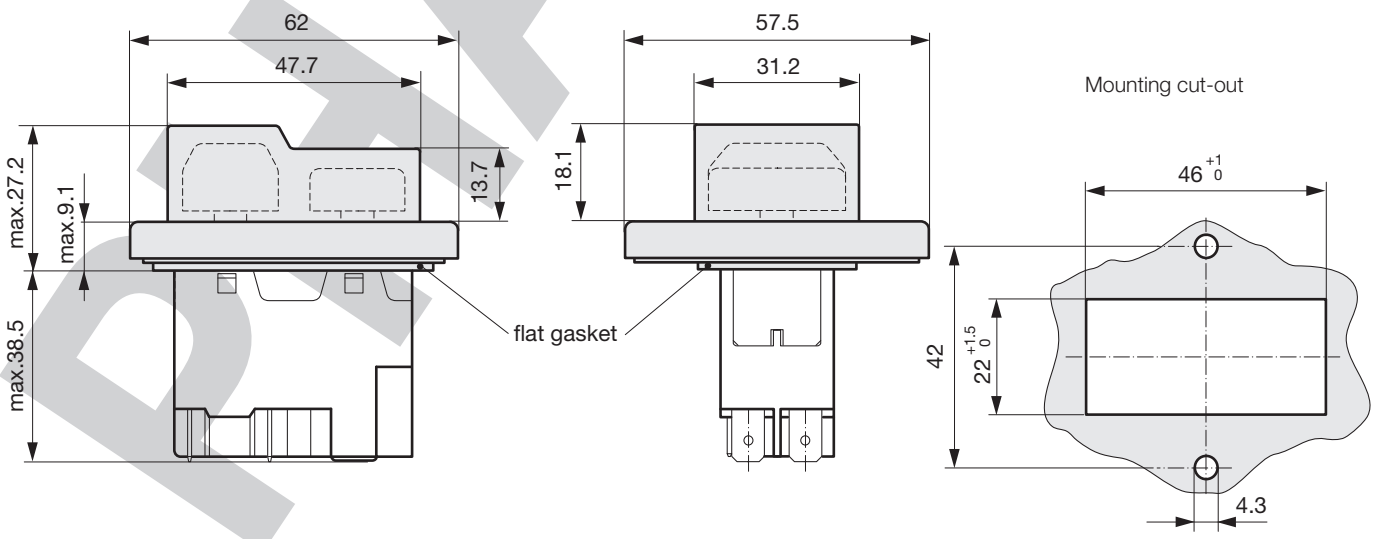
UP1-5TF... with UZZ51/UZZ61



UP1-7TF ... /UP1-8TF ...



UP1-7TF ... /UP1-8TF ... with UZZ71/UZZ81



UP1-7TF... /UP1-8TF... with UZZ91

