

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



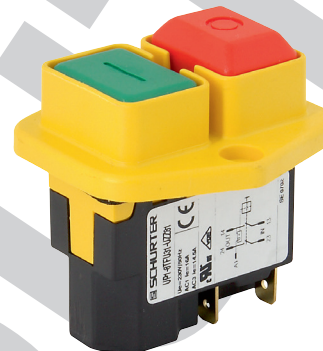
UP1-1WF...



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.

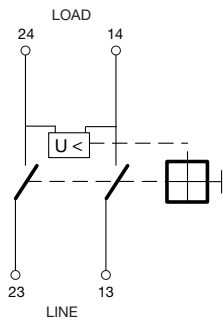
**Applications**

- 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

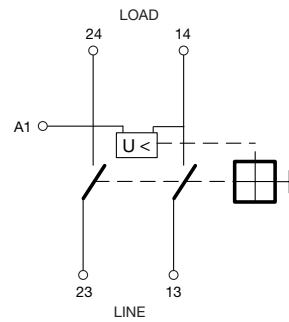
**Technical Data**

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	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
Rated current	16 A (AC-1) 14.5 A (AC-3) 10 A (1.5 HP)	Ambient temperature	
Conditional short circuit Capacity $I_{nc}$	AC 2000 A @ PC 1	Operation	-10 °C ... +60 °C
Fuse	CB 16 A, char. B	Storage	-20 °C ... +80 °C
Dielectric strength	50 Hz: 1500 V Impulse: 2500 V	Resistance to vibration	IEC 60068-2-6, Test Fc 10 ... 60 Hz: 0.75 mm 60 ... 500 Hz: 10 G
Overvoltage category	II	Shock resistance	IEC 60068-2-27, Test Ea 30 G/18 ms (half-sine)
Method of operation	Switch type (S)	Degree of protection:	
Mode of tripping	Undervoltage release (UV)	Accessible range:	Rocker types IP 40 Push button types IP 54
- Manual ON:	35% ... 85% $U_n$ (and higher)	Terminals side:	IP 00
- Automatic release:	35% ... 70% $U_n$ (and lower)		
Type of tripping	Non-trip-free		

## 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](http://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

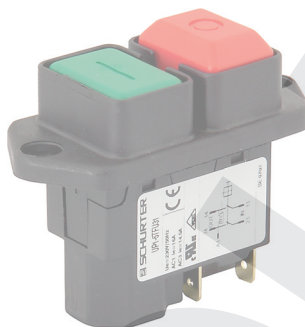
Protection Covers



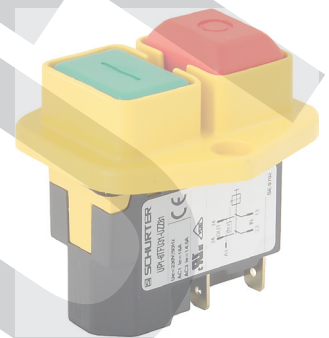
UP1-1WF ...



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 ...

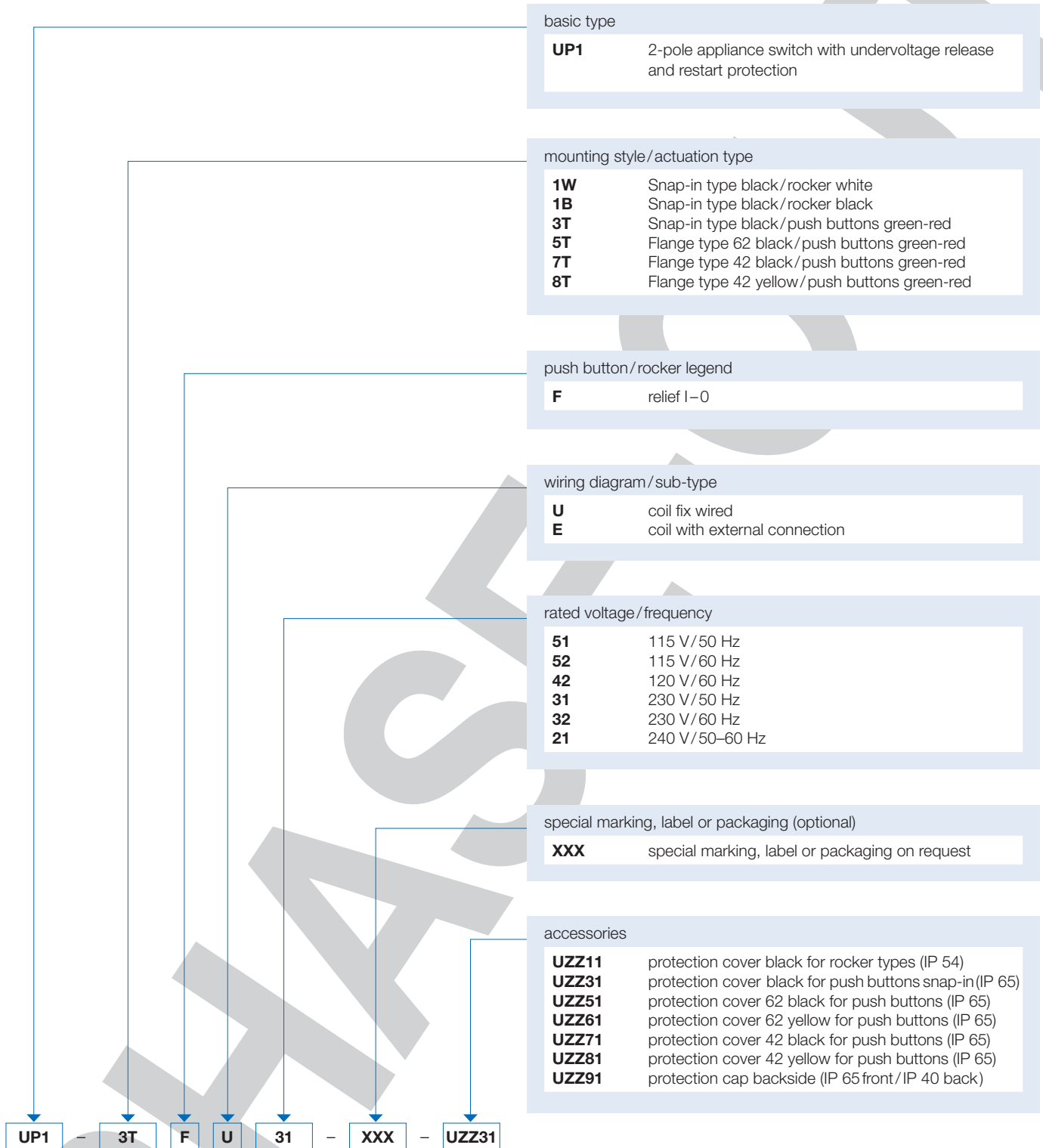


UZZ81  
IP 65 for types UP1-7TF ...  
or UP1-8TF ...



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

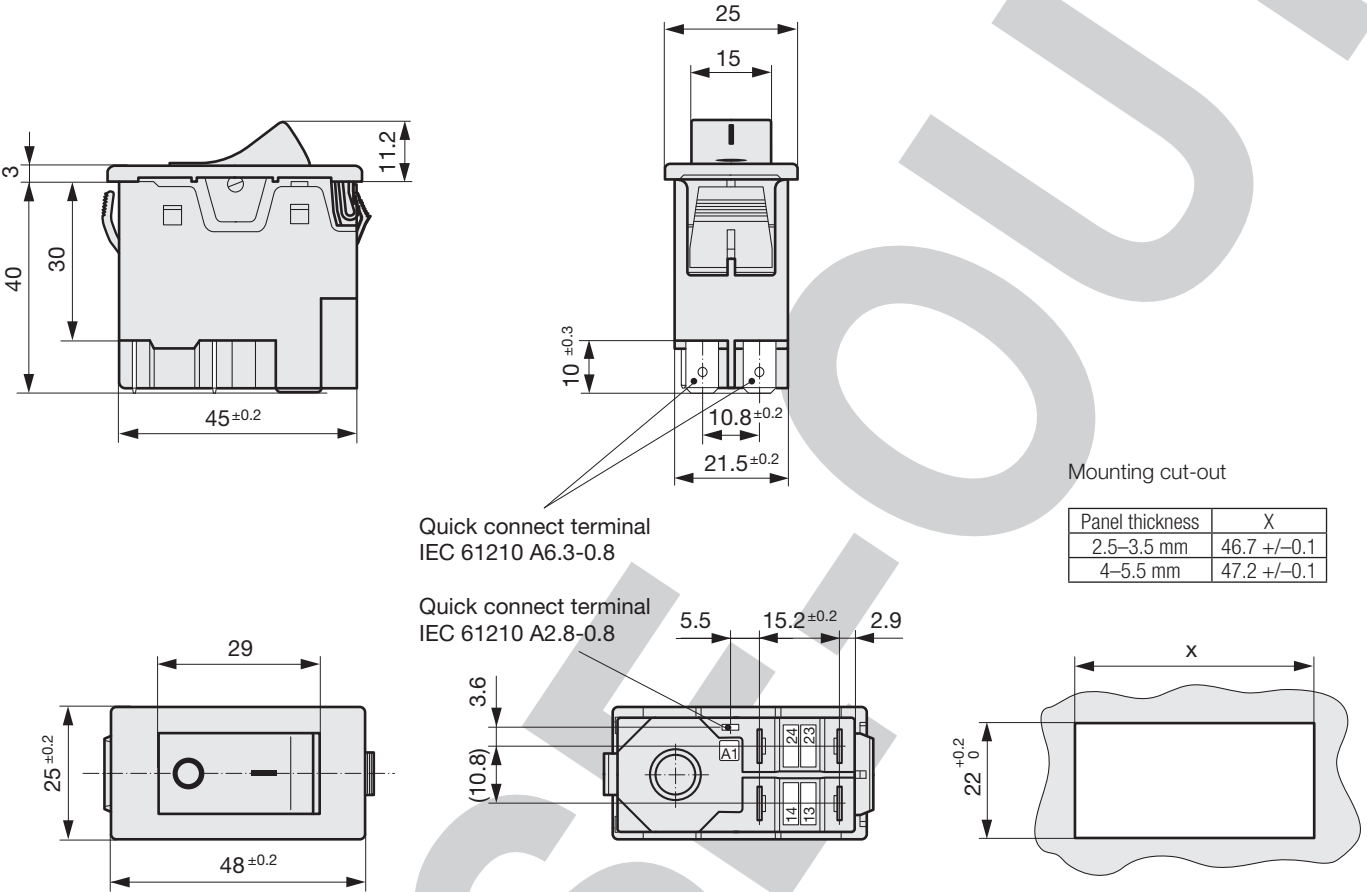
- 31

- XXX

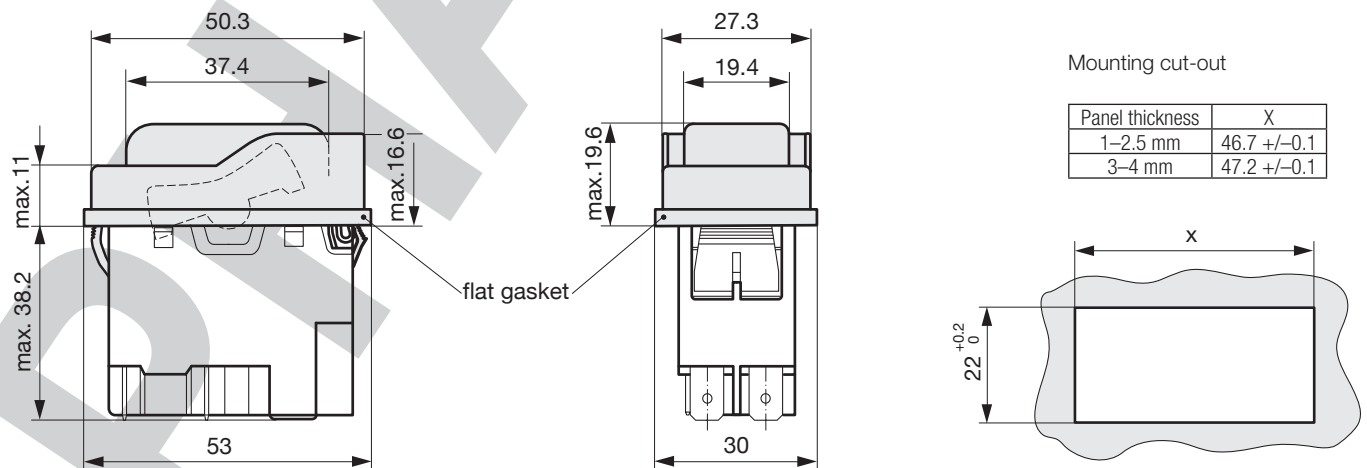
- UZZ31

Dimensions

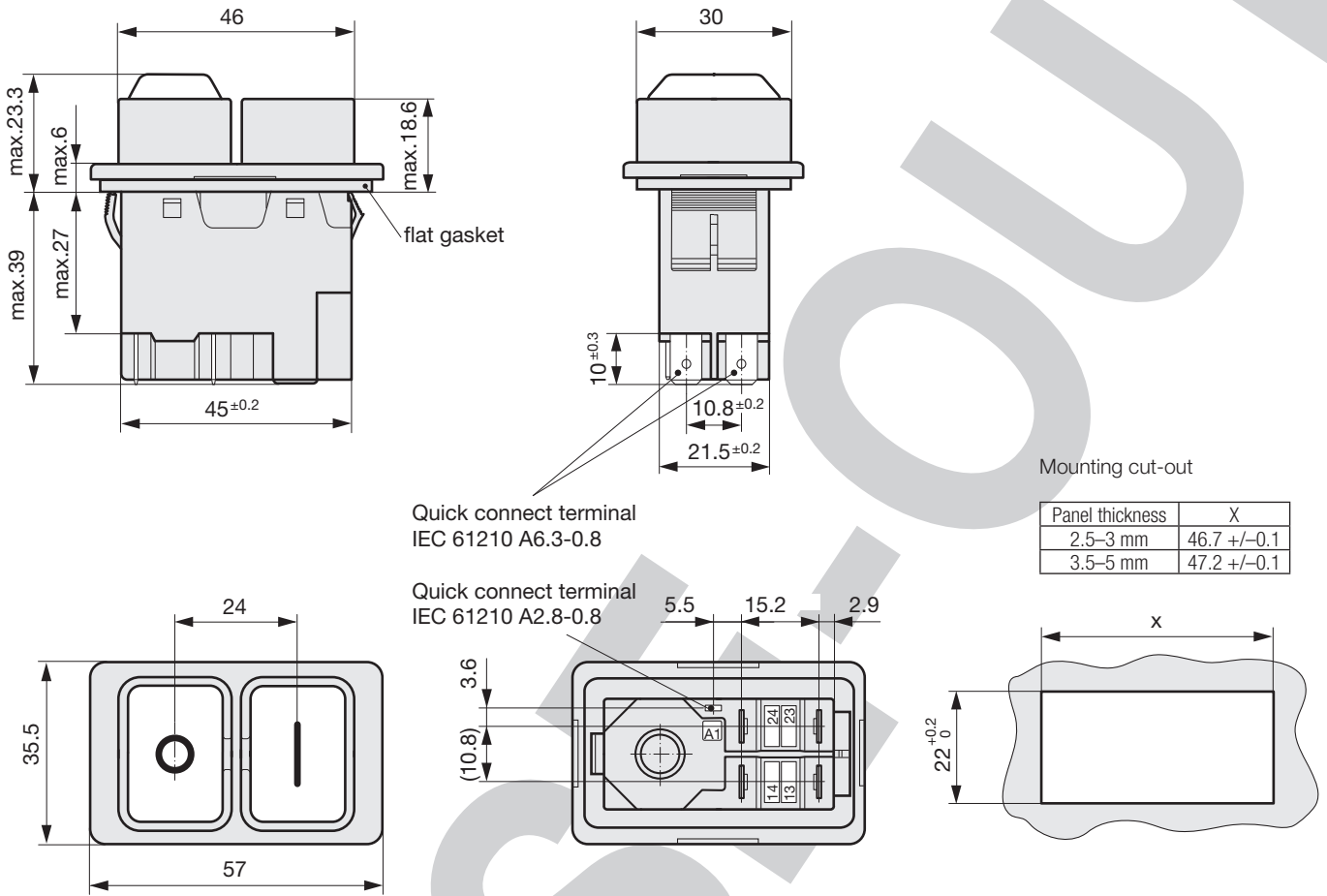
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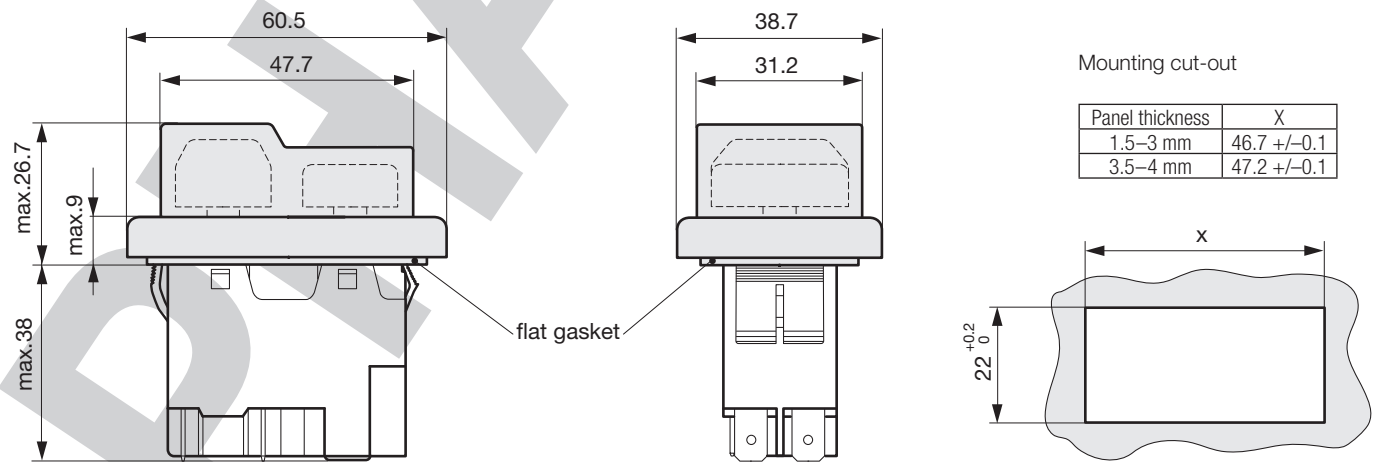
UP1-1WF... with UZZ11



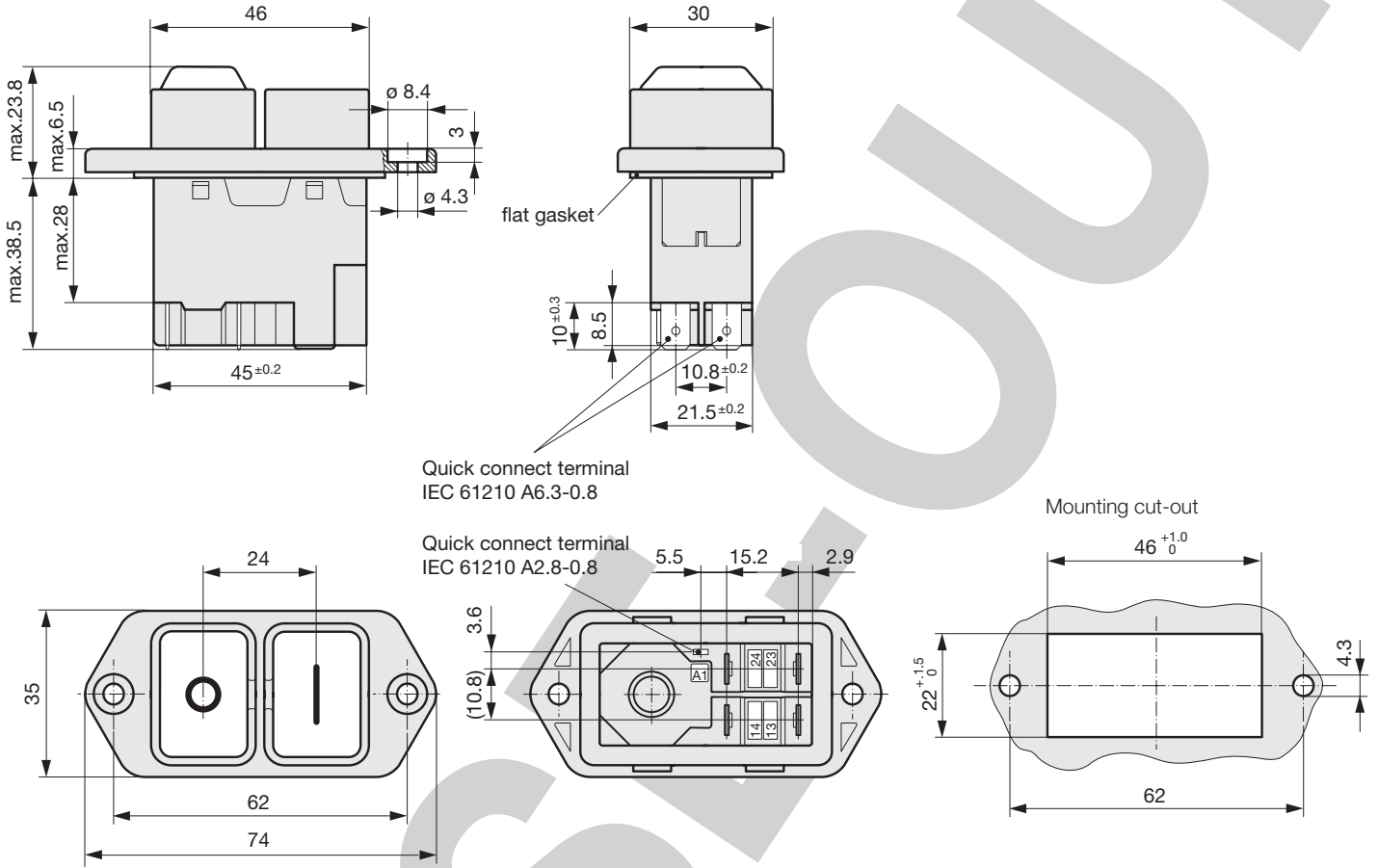
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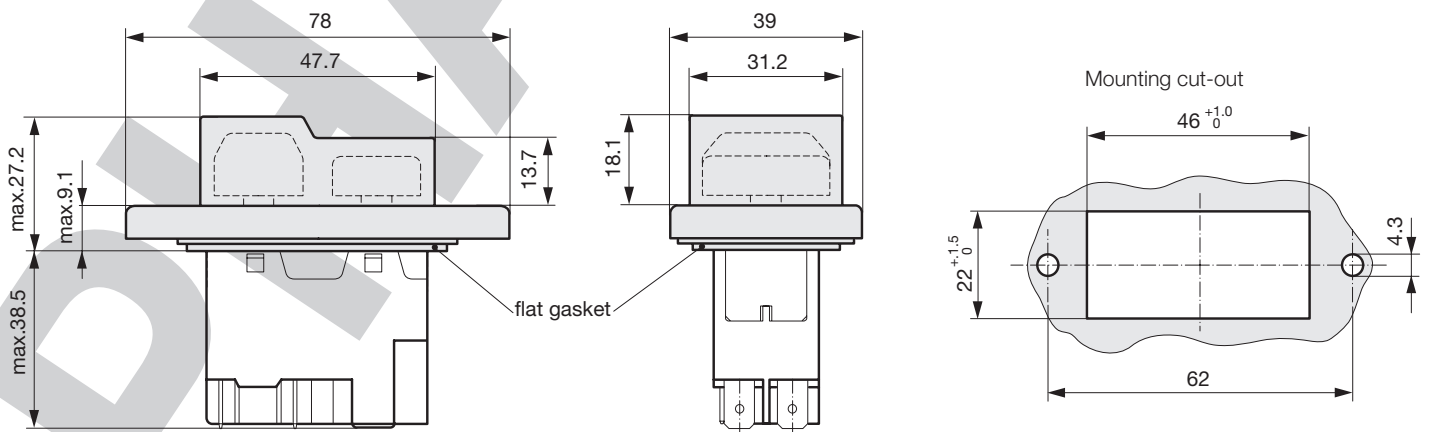
## UP1-3TF... with UZZ31



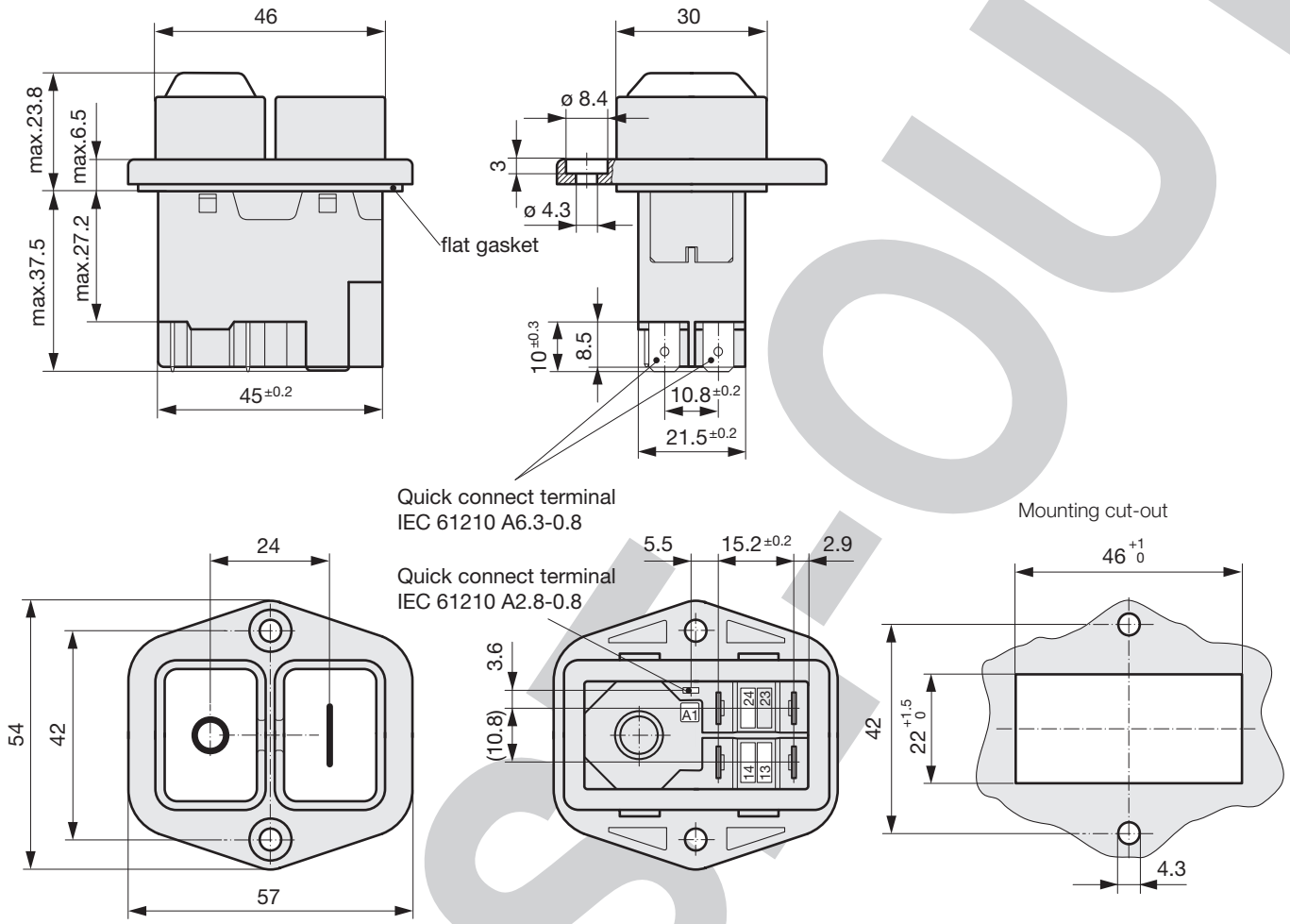
UP1-5TF...



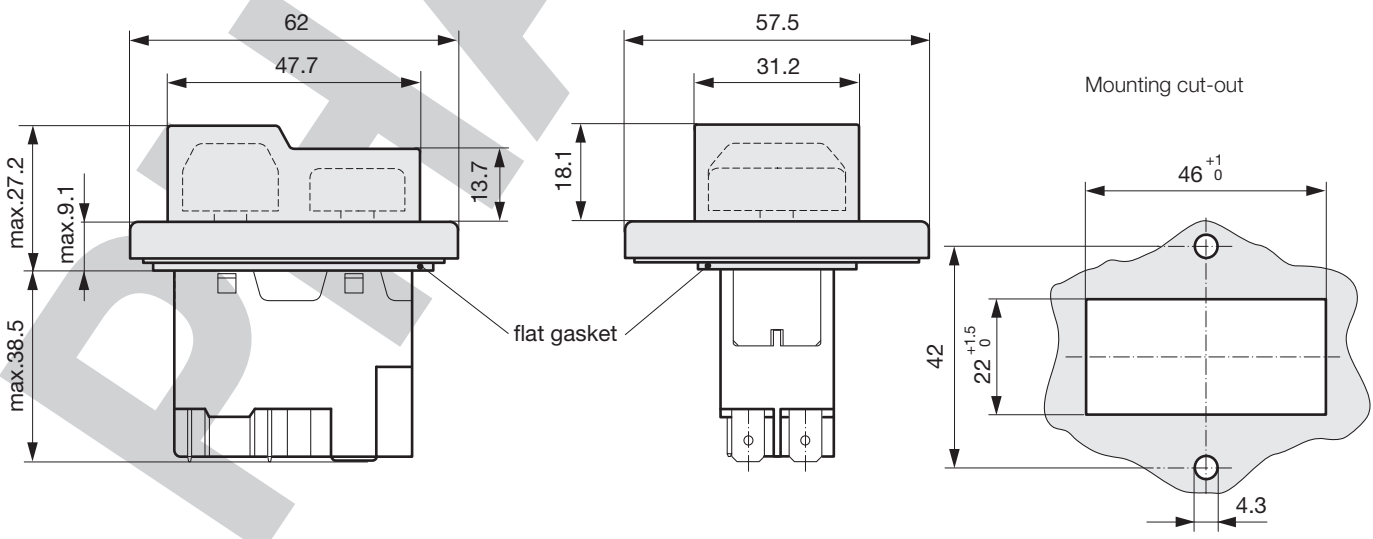
UP1-5TF... with UZZ51/UZZ61



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

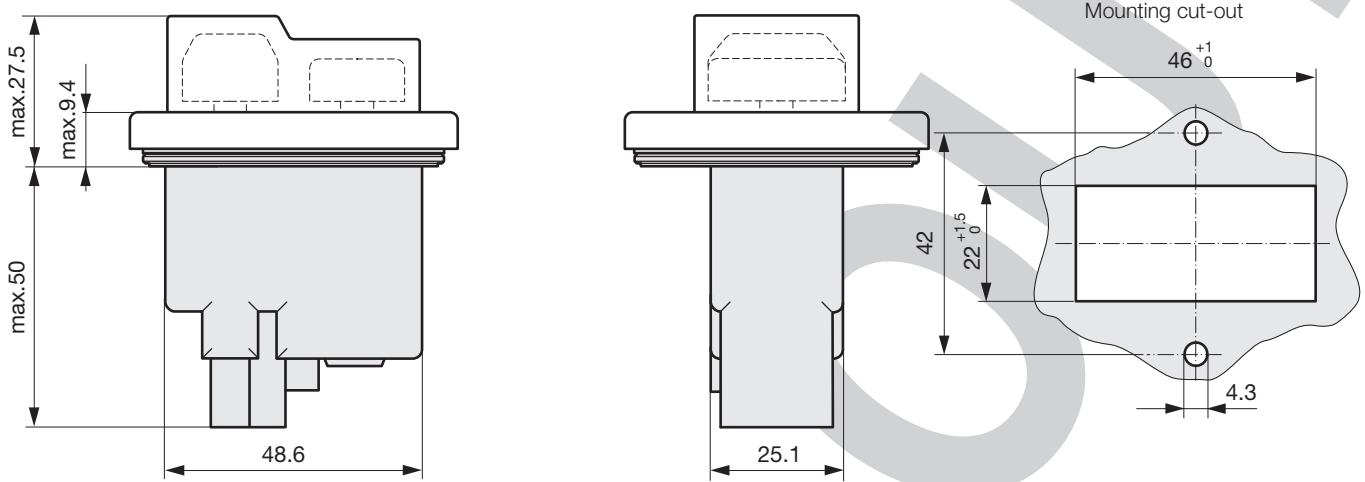


UP1-7TF ... /UP1-8TF ... with UZZ71/UZZ81





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



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