

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

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

Weblinks

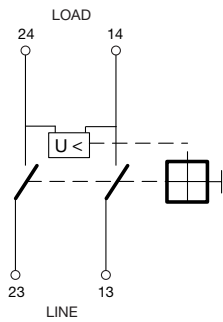
Approvals: <http://www.schurter.com/approvals>
RoHS: <http://www.schurter.com/rohs>

Technical Data

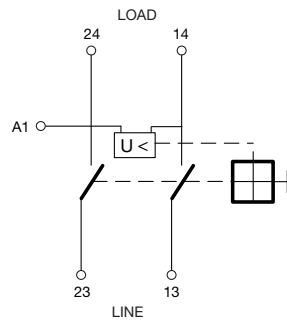
Rated voltage	AC 240 V / 50/60 Hz AC 230 V / 50/60 Hz AC 120 V / 60 Hz AC 115 V / 50/60 Hz
Rated current	16 A (AC-1) 14.5 A (AC-3) 10 A (1.5 HP)
Conditional short circuit Capacity I_{nc} Fuse	AC 2000 A @ PC 1 CB 16 A, char. B
Dielectric strength	50 Hz: 1500 V Impulse: 2500 V
Overvoltage category	II
Method 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 Storage	–10 °C ... +60 °C –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: Terminals side:	Rocker types IP 40 Push button types IP 54 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

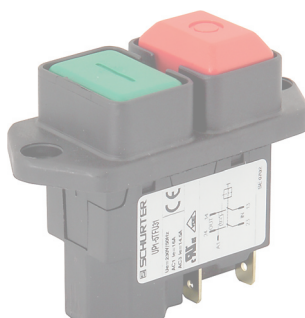
Protection Covers



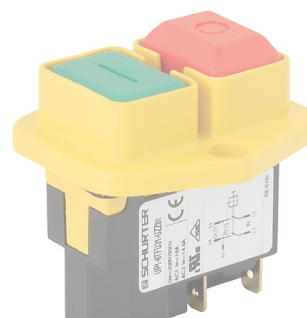
UP1-1WF ...



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 ...

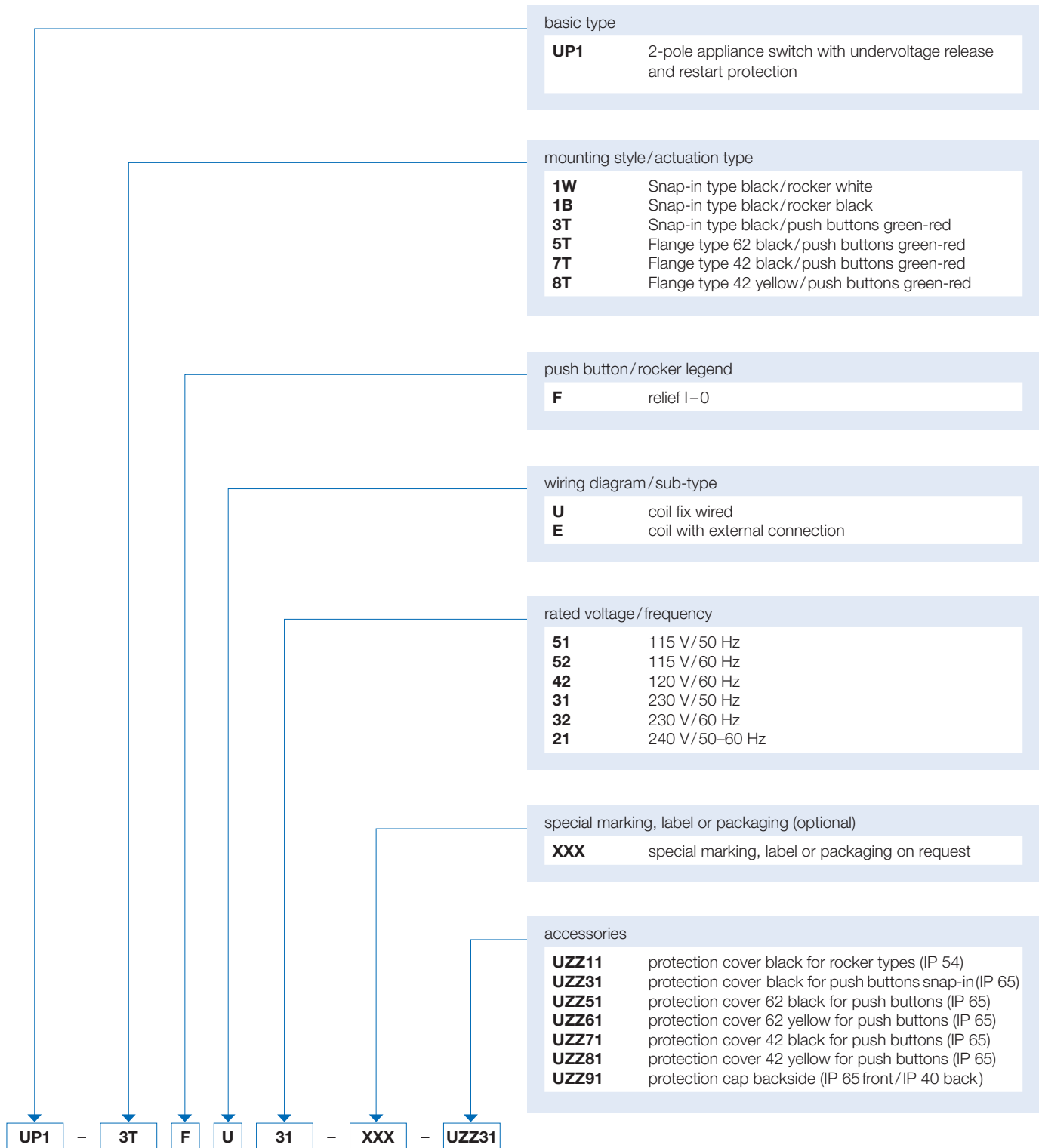


UZZ81
IP 65 for types UP1-7TF ...
or UP1-8TF ...



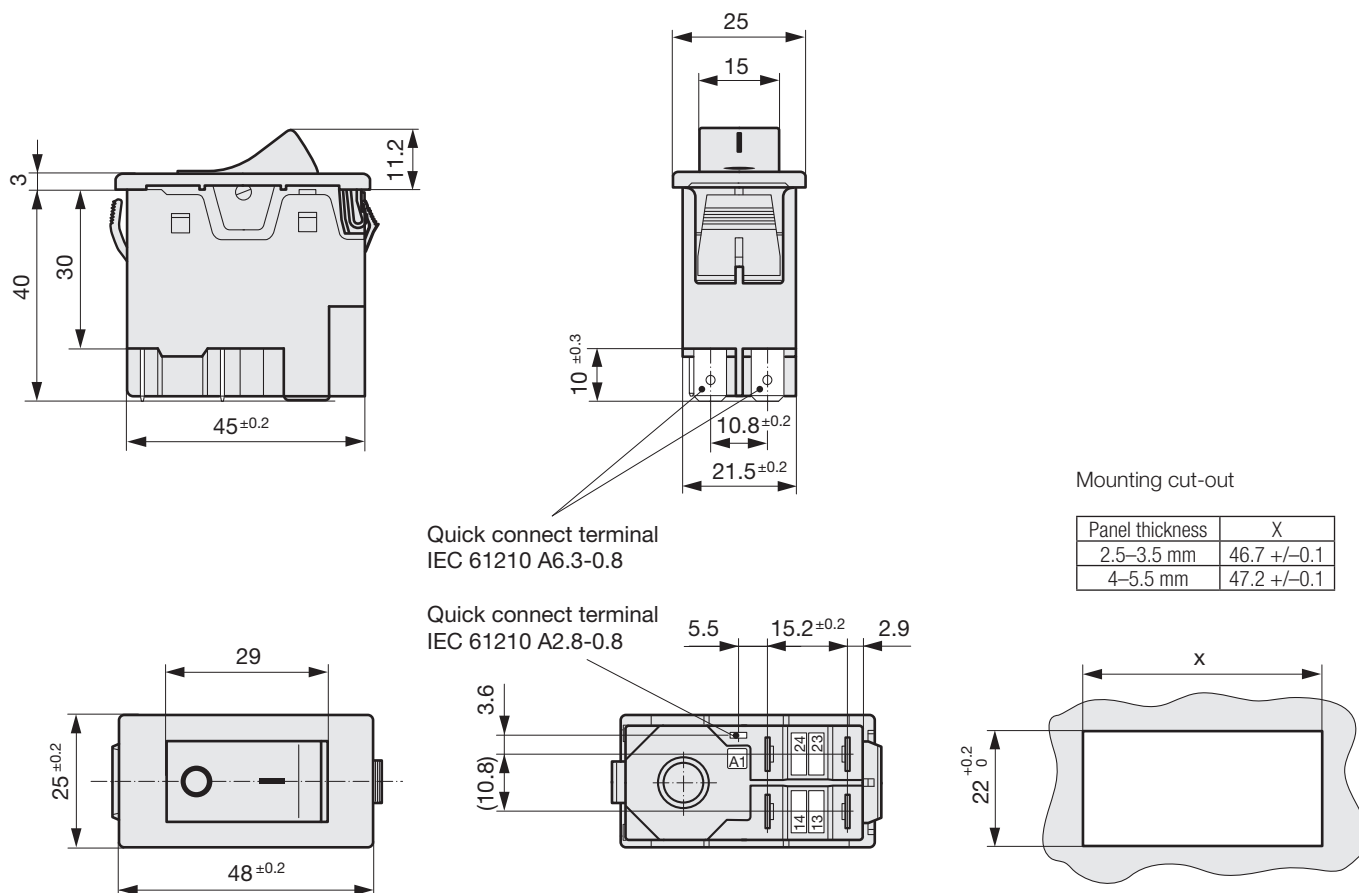
UZZ91
Frontside IP 65, backside IP 40,
for types UP1-7TF ...
or UP1-8TF ...

Order Code

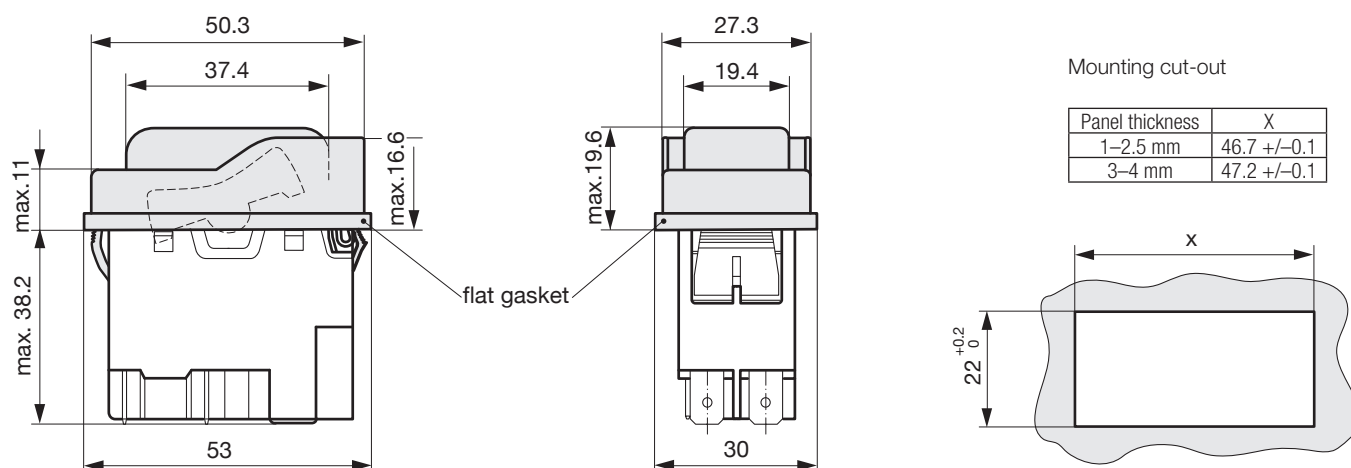


Dimensions

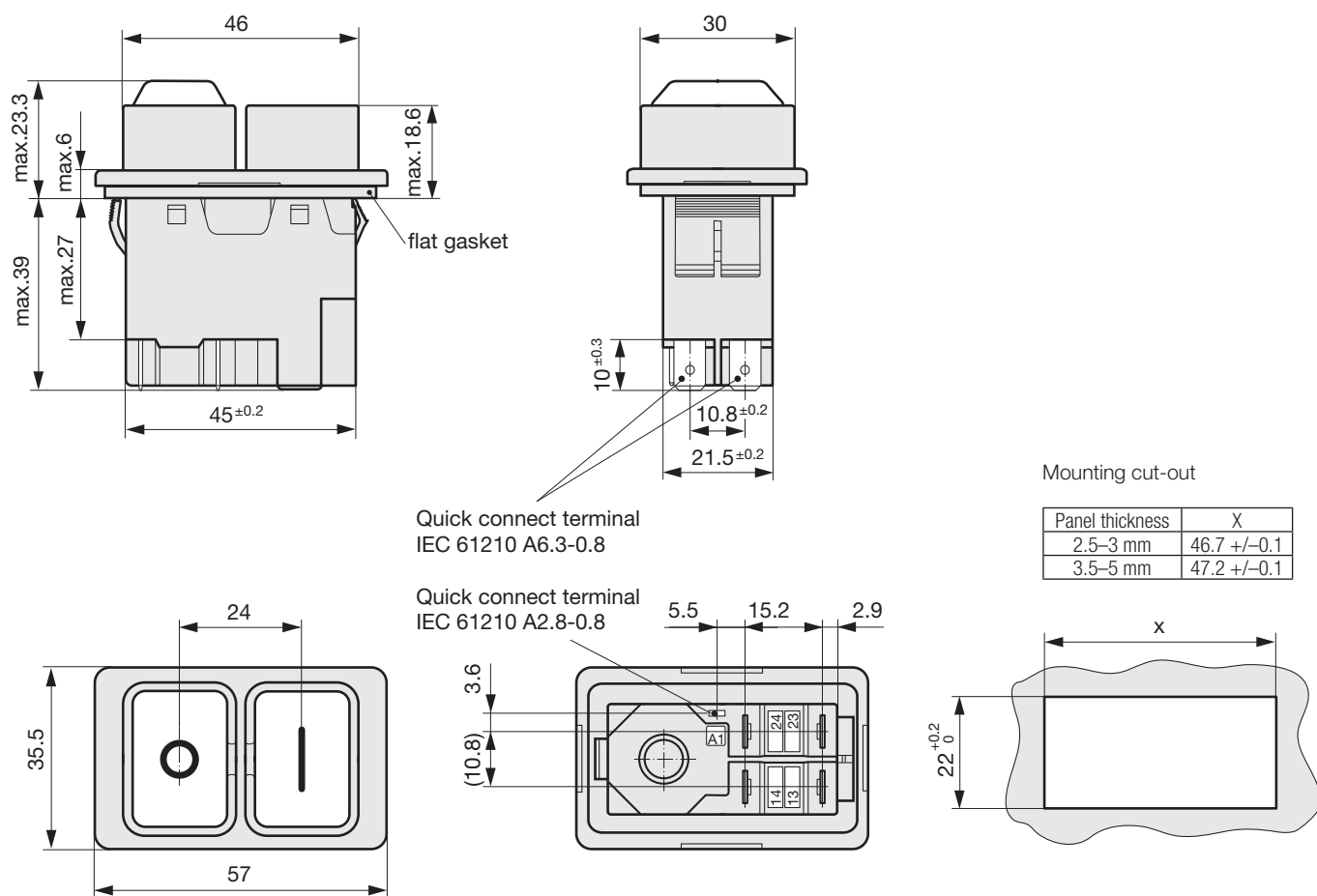
UP1-1WF...



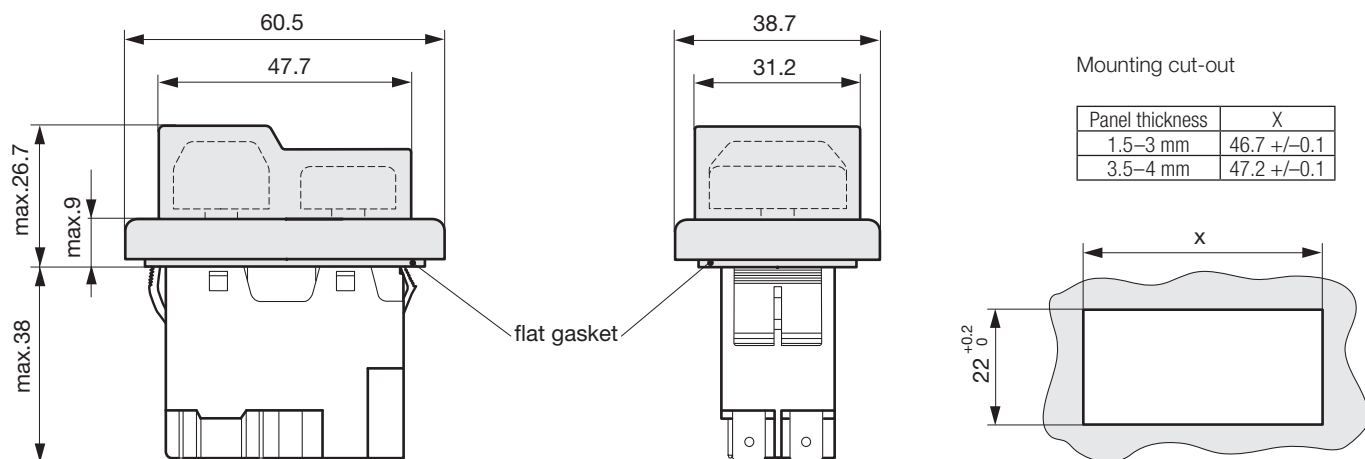
UP1-1WF... with UZZ11



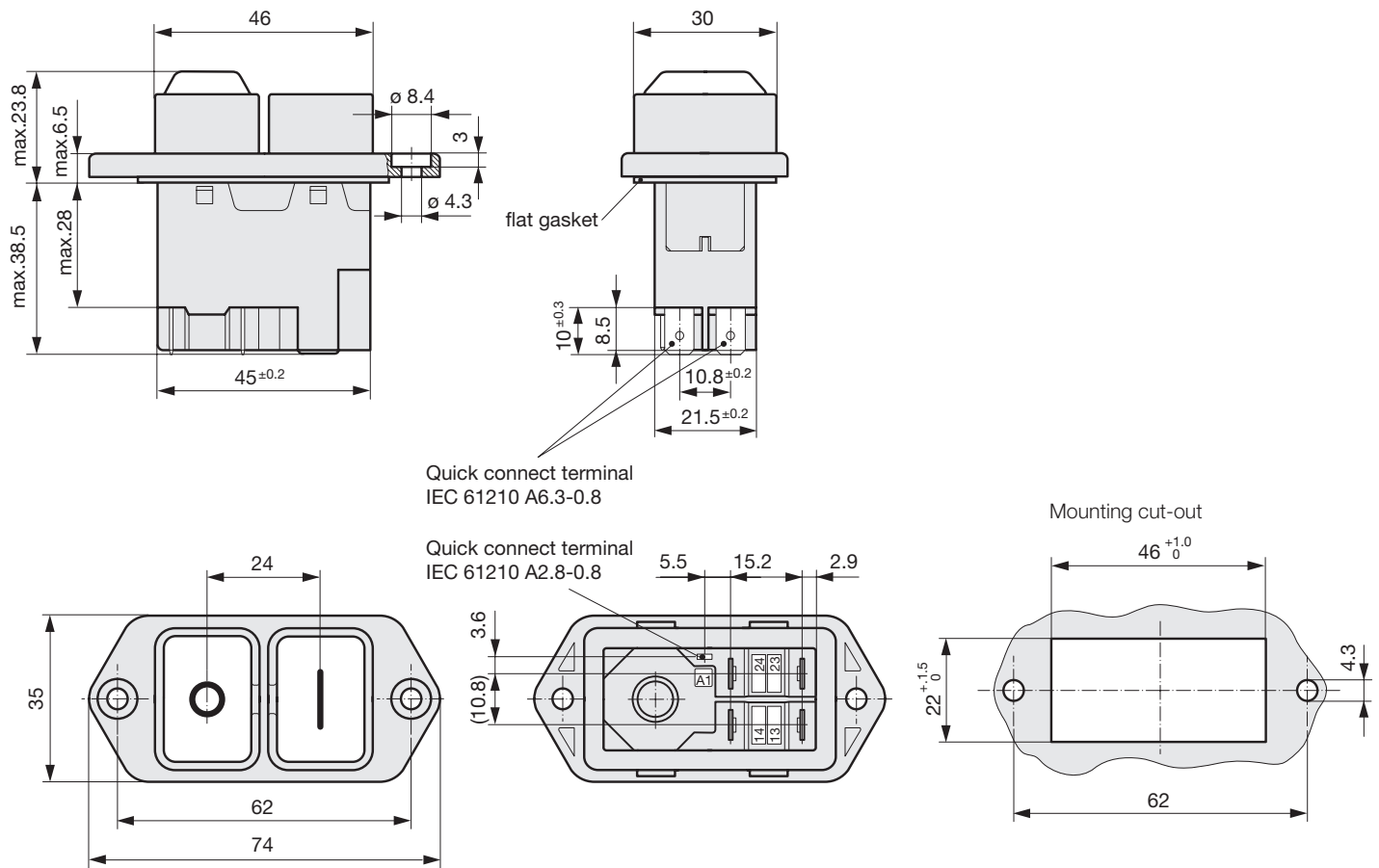
UP1-3TF...



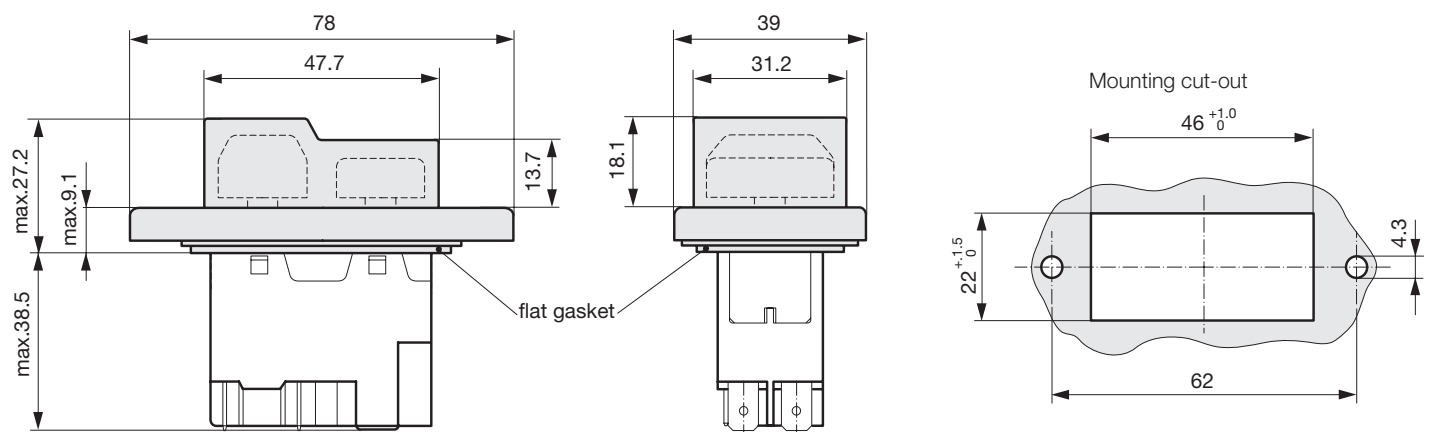
UP1-3TF... with UZZ31



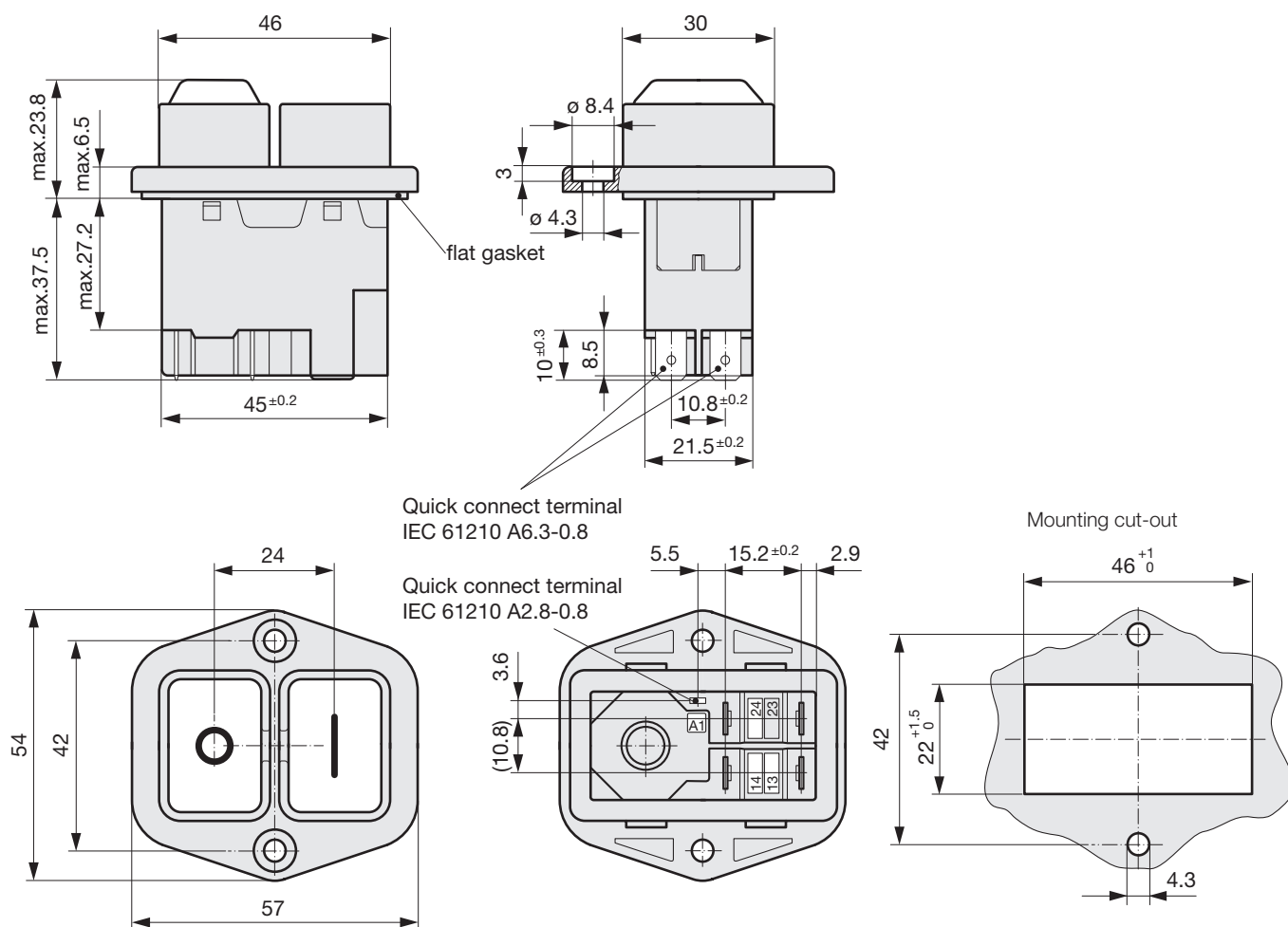
UP1-5TF...



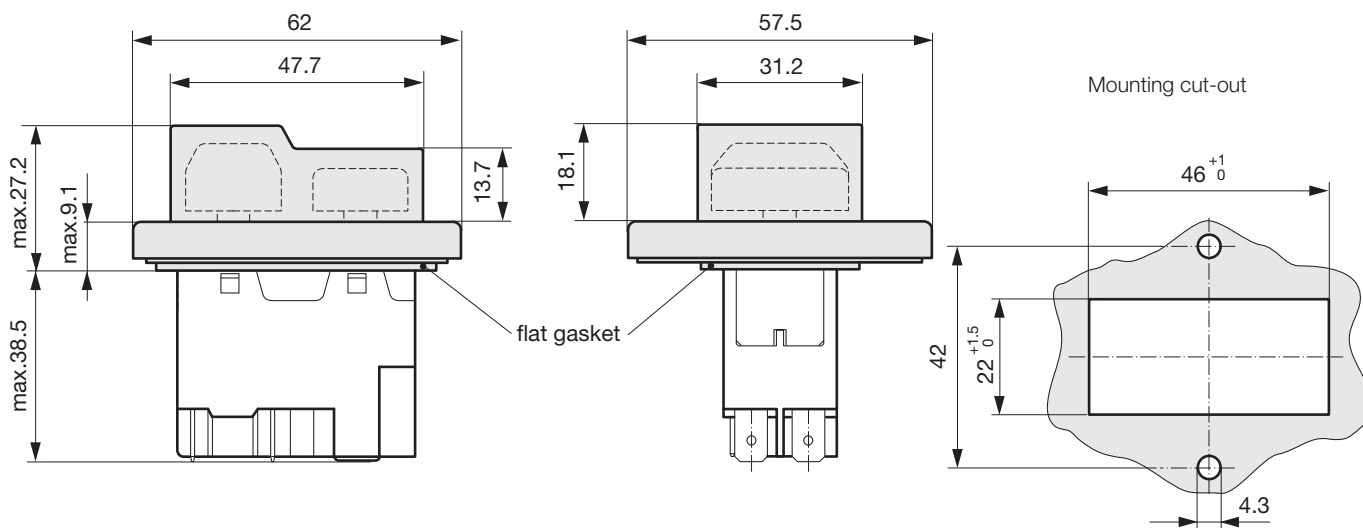
UP1-5TF... with UZZ51/UZZ61



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



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



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

