

ExBox Ex-e terminal box, retrofit

adaptable to ...Max actuators size S and M and ...Run valve actuators

Subject to change!

| Type | Description | Applications | Installation area | Figure |
|----------------|---|--|-------------------|--------|
| ExBox- 3P | 5 terminals, 2 cable glands | for ExMax-... actuators | Zone 1, 2, 21, 22 | B1 |
| ExBox- Y/S | 5 + 6 terminals, 4 cable glands | for ExMax-...-S... actuators | Zone 1, 2, 21, 22 | B2 |
| | 5 + 6 terminals, 4 cable glands | for ExMax-...-Y actuators | Zone 1, 2, 21, 22 | B2 |
| ExBox- BF | 11 terminals, 3 cable glands | for ExMax-...-BF actuators | Zone 1, 2, 21, 22 | B3 |
| ExBox- 3P /SW | 5 + 6 terminals + 6 terminals, 3 glands + 1 duplex gland | for ExMax... actuators and ExSwitch | Zone 1, 2, 21, 22 | B4 |
| ExBox- Y/S /SW | 5 + 6 terminals + 6 terminals, 5 glands + 1 duplex gland | for ExMax-...-S or ...-SF actuators and ExSwitch | Zone 1, 2, 21, 22 | B5 |
| | 5 + 6 terminals + 6 terminals, 5 glands + 1 duplex gland | for ExMax-...-Y or ...-YF actuators and ExSwitch | Zone 1, 2, 21, 22 | B5 |
| ExBox- BF /SW | 5 + 6 terminals + 6 terminals, 4 glands + 1 duplex gland | for ExMax-...-BF actuators and ExSwitch | Zone 1, 2, 21, 22 | B6 |
| ExBox /SW | 6 terminals, 2 cable glands | for ExSwitch | Zone 1, 2, 21, 22 | B7 |
| ExBox- ... -CT | Types as above with aluminium housing and seawater resistant coating (cable glands brass nickel-plated) | | | |
| ExBox- ... -VA | Types as above with stainless steel housing for aggressive ambient (cable glands brass nickel-plated) | | | |

Product views and applications



Description

ExMax actuators are delivered with 1 m cable. In case of cable connection inside hazardous areas a certificated Ex-e terminal box is required. Terminal boxes type ExBox are specially designed for ExMax actuators for installation in hazardous areas zone 1, 2, 21 and 22.

Important

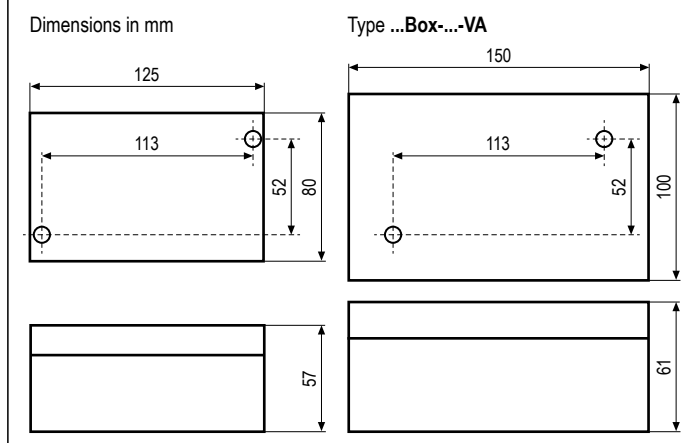
Before opening an Ex-e terminal box the supply voltage of the wiring must be cut.

For actuators with retrofit, external auxiliary switches ...Switch the terminal box ...Box-.../SW must be ordered.

Technical data

| | |
|-------------------------------|--|
| Cable glands | M20 × 1,5 mm plastic PA II2GD Ex-e (for cable diameter Ø 6...13 mm) |
| Cable glands Duplex | M20 × 1,5 mm brass nickel-plated (for cable diameter 2 × Ø 5,5...7,5 mm) |
| Terminals V and Y/S | 4 mm ² II2GD Ex-e (minimum diameter 0,5 mm ²) |
| Terminals SW | 1,5 mm ² II2GD Ex-e |
| PE connection | 2 × 4 mm ² |
| Ambient temperature | -40...+60 °C |
| Types ...-VA: | -40...+50 °C |
| Housing material | Aluminium, powder-coated, or stainless steel 1.4404 / 316L |
| Dimensions (L × W × H) | 125 × 80 × 57 mm |
| Types ...-VA: | 150 × 100 × 61 mm |
| Weight | ~ 750 g aluminium housing, stainless steel ~ 1200 g |

Dimensions



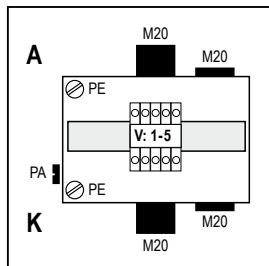
Special solutions and accessories

| | |
|------------|---|
| ...-CT | Types in aluminium housing with seawater resistant coating, parts nickel-plated |
| ...-VA | Types in stainless steel housing |
| MKK-S | Mounting bracket, stainless steel, for ...Box-... on ...Max actuator size S |
| MKK-M | Mounting bracket, stainless steel, for ...Box-... on ...Max actuator size M |
| Kit-S8 Box | 4 cable glands M20 × 1,5 mm Ex-e, brass nickel-plated, Ø 6...13 mm |

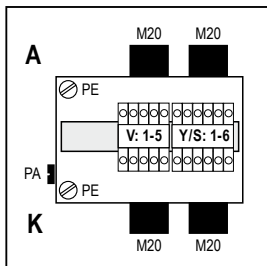


Variants (aluminium housing)

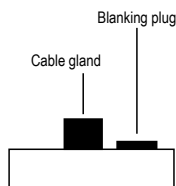
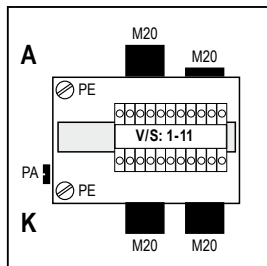
ExBox-3P B1



ExBox-Y/S B2

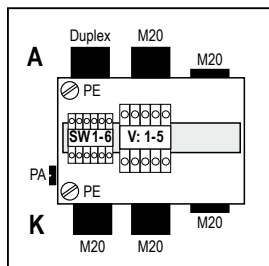


ExBox-BF B3

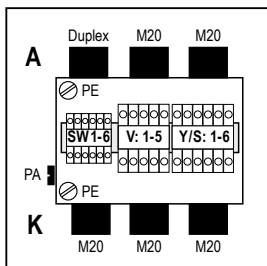


- K** = Supplied by the customer
- A** = Supplied by the actuator
- V** = Terminals for supply / On-off/3-pos. control mode
- Y** = Terminals for continuous control input and feedback signals Y und U
- S** = Terminals for connection of internal auxiliary switches
- SW** = Terminals for connection of external auxiliary switches

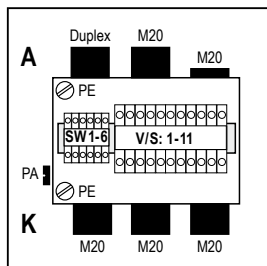
ExBox-3P/SW B4



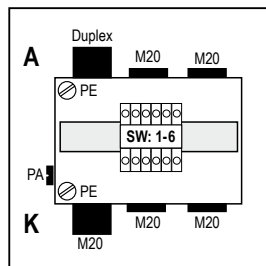
ExBox-Y/S/SW B5



ExBox-BF/SW B6



ExBox/SW B7



Selection guide

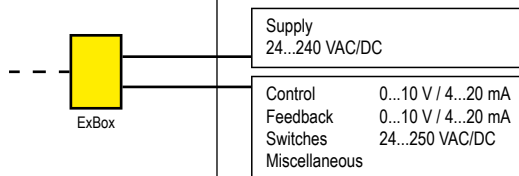
| Adaptable to | ExBox-3P | ExBox-Y/S | ExBox-BF |
|------------------|-------------------------------|------------------------|------------------------|
| ...Max actuators | ExMax- 5.10 | ExMax- 5.10-F | ExMax- 5.10-S |
| | ExMax-15.30 | ExMax-15-F | ExMax- 5.10-SF |
| | ExMax-50.75 | ExMax-30-F | ExMax- 5.10-Y |
| | ExMax-100 | ExMax-50-F | ExMax- 5.10-YF |
| | ExMax-150 | ExMax-60-F | ExMax- 5.10-YF |
| | ExMax-... -F1 | ExMax-... -F3 | ExMax- 5.10-BF |
| ...Run actuators | ExMax-... -R | ExMax-... -SF1 | ExMax-... -SF3 |
| | ExMax-... -R | ExMax-... -SF1 | ExMax-... -SF3 |
| | ExBox-3P / SW | ExBox-Y/S / SW | ExBox-BF / SW |
| | ...Max-... + ...Switch | ...Max-... + ...Switch | ...Max-... + ...Switch |
| | ExBox / SW | | |
| | ...Run-... + ...Switch-R-L | | |
| | ...Run-... -Y + ...Switch-R-L | | |

Installation

Ex area – zone 1, 2, 21, 22



Safe area



- Do not open the cover when circuits are live
- Supply cables must be installed in a fixed position and protected against mechanical damage
- Connect potential earth
- Note ambient temperature
- Close all openings with min. IP66
- Regard all national and international standards, rules and regulations
- For electrical installations design, selection and erection, EN/IEC 60079-14 can be used.
- For electrical installations inspection and maintenance, EN/IEC 60079-17 can be used.

Approbations

ATEX directive 2014/34/EU

...Box with aluminium housing

ATEX certified PTB 05 ATEX 1001

IECEX certified IECEX PTB 12.0010

for gas II 2 G Ex e IIC T6, T5, T4 Gb

for dust II 2 D Ex tb IIIC T85°C, T100°C, T135°C Db IP66

CE identification CE № 0158

EAC certified № TC RU C-DE.Г508.B.01510

...Box with stainless steel housing

ATEX certified PTB 00 ATEX 1052

IECEX certified IECEX PTB 07.0060

for gas II 2 G Ex e IIC T5 Gb

for dust II 2 D Ex tb IIIC T90°C Db

CE identification CE № 0035

Enclosure protection IP66 in acc. with EN 60529