



EN Operating instructions.pages 1 to 8
Translation of the original operating instructions

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1. About this document

1.1 Function

This operating instructions manual provides all the information you need for the mounting, set-up and commissioning to ensure the safe operation and disassembly of the switchgear. The operating instructions must be available in a legible condition and a complete version in the vicinity of the device.

1.2 Target group: authorised qualified personnel

All operations described in this operating instructions manual must be carried out by trained specialist personnel, authorised by the plant operator only.

Please make sure that you have read and understood these operating instructions and that you know all applicable legislations regarding occupational safety and accident prevention prior to installation and putting the component into operation.

The machine builder must carefully select the harmonised standards to be complied with as well as other technical specifications for the selection, mounting and integration of the components.

1.3 Explanation of the symbols used



Information, hint, note:
This symbol is used for identifying useful additional information.



Caution: Failure to comply with this warning notice could lead to failures or malfunctions.
Warning: Failure to comply with this warning notice could lead to physical injury and/or damage to the machine.

1.4 General safety instructions

The user must observe the safety instructions in this operating instructions manual, the country-specific installation standards as well as all prevailing safety regulations and accident prevention rules.



Further technical information can be found in the Schmersal catalogues or in the online catalogue on the Internet: www.schmersal.net.

The information contained in this operating instructions manual is provided without liability and is subject to technical modifications.

There are no residual risks, provided that the safety instructions as well as the instructions regarding mounting, commissioning, operation and maintenance are observed.

1.5 Warning about misuse



In case of inadequate or improper use or manipulations of the component, personal hazards or damage to machinery or plant components cannot be excluded. The relevant requirements of the standard EN 1088 must be observed.

1.6 Exclusion of liability

We shall accept no liability for damages and malfunctions resulting from defective mounting or failure to comply with this operating instructions manual. The manufacturer shall accept no liability for damages resulting from the use of unauthorised spare parts or accessories.

For safety reasons, invasive work on the device as well as arbitrary repairs, conversions and modifications to the device are strictly forbidden; the manufacturer shall accept no liability for damages resulting from such invasive work, arbitrary repairs, conversions and/or modifications to the device.

2. Product description

2.1 Ordering code

This operating instructions manual applies to the following types:

AZ/AZM 200-B30-①TA②③-④

No.	Option	Description
①	L	Door hinge on left-hand side
	R	Door hinge on right-hand side
②	G1	with doorhandle
	G2	with rotating knob
③	P1	with emergency exit
	P20	with emergency exit metal
	P25	with emergency exit inset handle
④		without lockout tag
	SZ	with lockout tag



Only if the information described in this operating instructions manual are realised correctly, the safety function and therefore the compliance of the entire system with the Machinery Directive is maintained.

2.2 Special versions

For special versions, which are not listed in the order code below 2.1, these specifications apply accordingly, provided that they correspond to the standard version.

2.3 Destination and use

In conjunction with the solenoid interlock or switch, the actuator unit is suitable for hinged and sliding safety guards. The safety guard can be opened and closed from outside by turning the door-handle.

The actuator is pulled into the actuator unit by a spring. The actuator unit with emergency exit is used to open the safety guard inside the hazardous area. By actuating the emergency exit, the safety guard can be opened from within the hazardous area without the need for unlocking the solenoid interlock. The safety guard cannot be locked from inside.

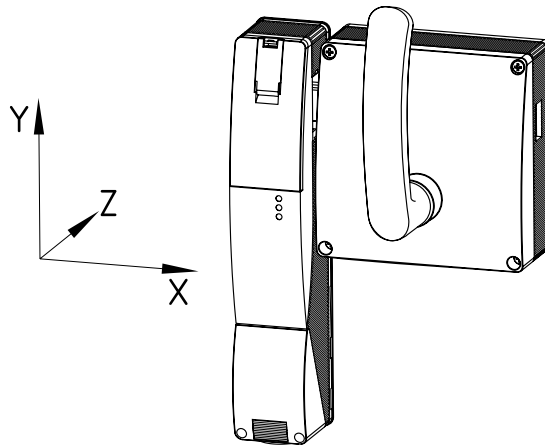
On accessible protective equipment, the lockout tag prevents persons from being inadvertently being trapped. When entering the hazardous area, each member of the operating or service team fixes a lock to the lockout tag to prevent the locking of the safety guard and therefore any inadvertent machine start.

Actuator unit play

X = ± 1.5 mm

Y = ± 5.0 mm

Z = ± 1.0 mm



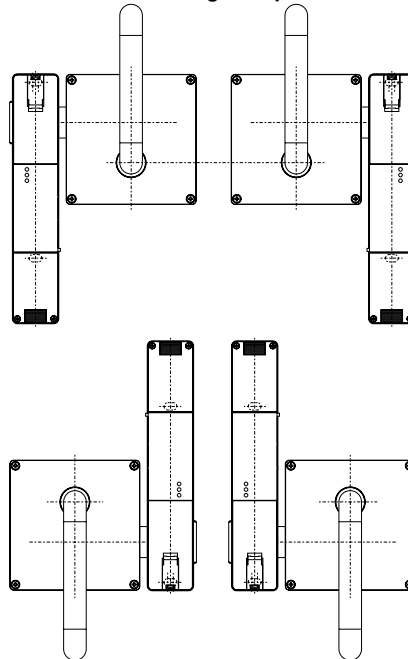
3. Mounting

3.1 General mounting instructions

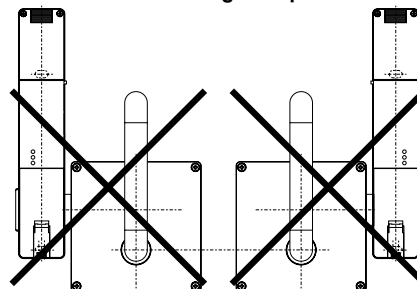


The fitting may only be carried out by authorised personnel.

Admissible mounting set-up



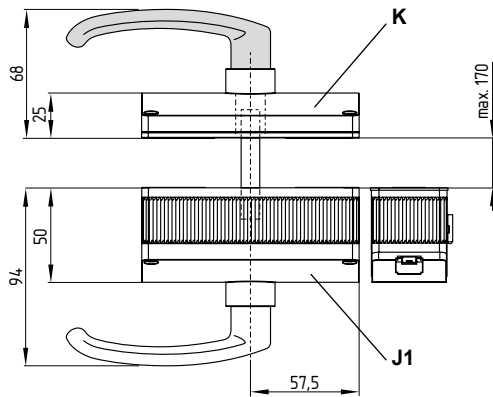
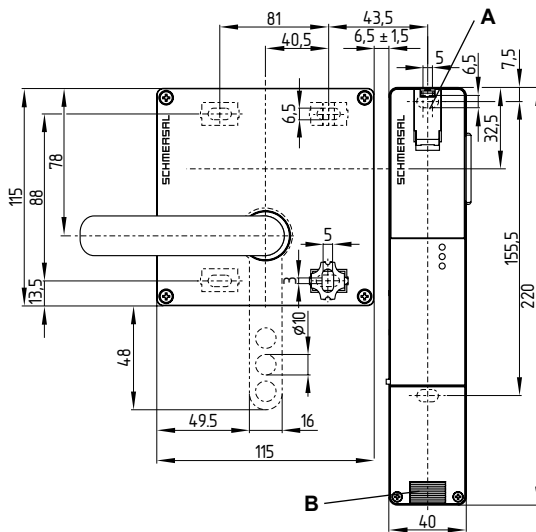
Inadmissible mounting set-up



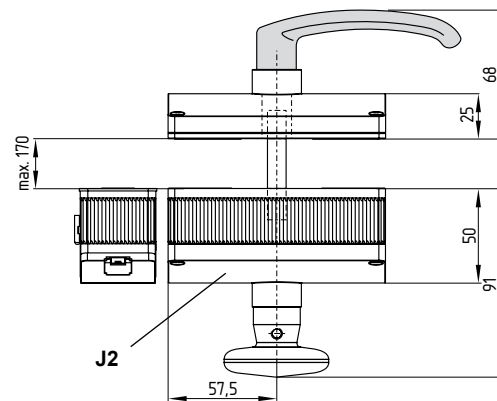
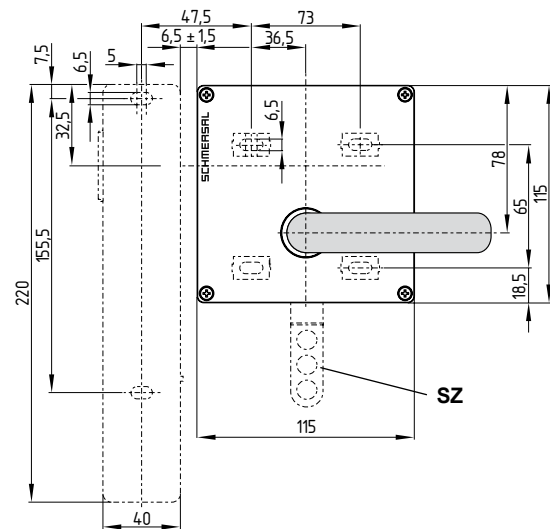
3.2 Dimensions

All measurements in mm.

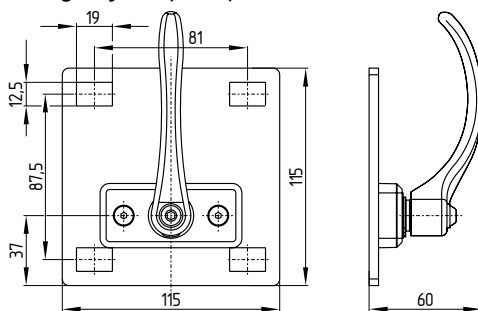
AZM 200 with actuator unit



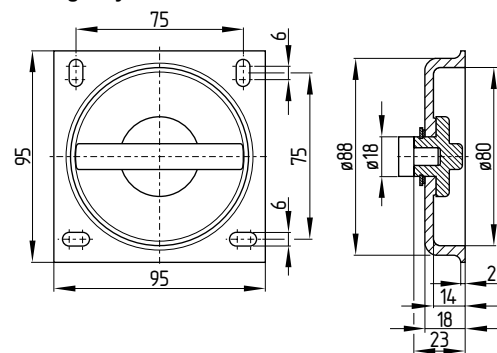
Emergency exit P1



Emergency exit (metal) P20



Emergency exit inset handle P25



Legend

- A = Manual release behind flap
- B = Cable entry M20 x 1.5
- J1 = Actuator unit with door-handle G1
- J2 = Actuator unit with rotating knob G2
- K = Emergency exit P1
- SZ = Lockout tag

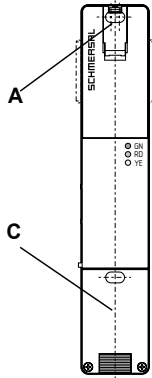
3.3 Sequence of the steps

Step 1

- Unscrew cover **C** for the wiring compartment and open flap **A** manual release

To be observed

- Actuation of the manual release by triangular key

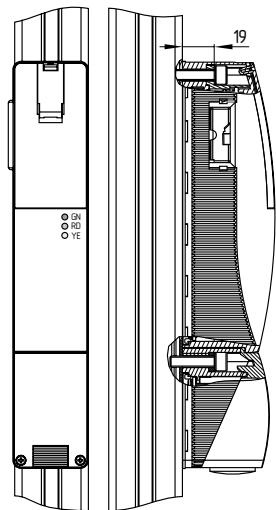


Step 2

- The AZ/AZM enclosure must be flush-mounted with the doorpost

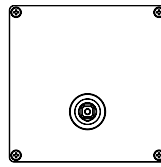
To be observed:

- Screws DIN 912-M6
- Max. torque for solenoid interlock = 8 Nm, cover screw = 0.7...1 Nm (Torx T10)
- Wall thickness of the device 19 mm
- Washers DIN 125-6.4 (included in delivery)
- For applications with strong vibrations, please observe the screws are correctly secured.



Step 3

- Unscrew the cover of the actuator unit

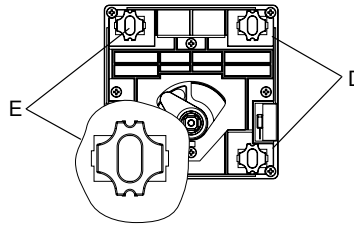


Step 4

- Insert sliding blocks as shown (included in delivery)

To be observed:

- Observe the alignment (notch) of the sliding blocks
E = LHS door hinge
D = RHS door hinge

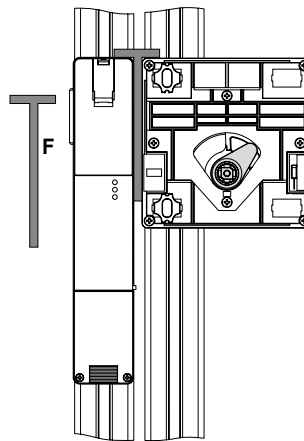


Step 5

- Fit the actuator unit to the doorpost by means of the spacer (F)

To be observed:

- Actuator unit completely retracted
- Distance between solenoid interlock and actuator unit 6.5 ± 1.5 mm
- Screws DIN 912-M6
- Torque MA = 8 Nm
- Wall thickness of the device 8 mm (see step 11)
- Washers DIN 125-6.4 (included in delivery)
- For applications with strong vibrations, please observe a proper securing of the screws

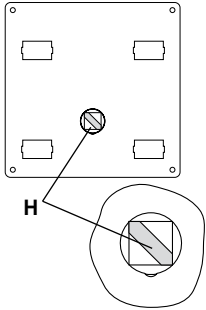


Step 12 - Mounting emergency exit P1

- Insert square tube **H** in the rear-side of the actuator unit (position of the chamfer as shown, when actuator unit **G1** is actuated)

To be observed

- Insert chamfer of the square into the emergency exit either the cut side of the square into the actuator unit *Fluchtentriegelung*

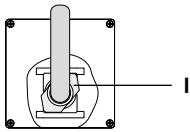


Step 13 - Mounting emergency exit P1

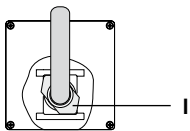
- Fit the cover and the handle onto the emergency exit **P1**

To be observed

- Position of the driving shaft **I** as shown, when actuator unit *ieG1* is actuated
- Functional test of the emergency exit handle: it should be possible to open the safety guard from inside the hazardous area; it should not be possible to lock the safety guard from inside. The emergency exit handle must be in the upright position when closed.
- After the assembly of the emergency exit P1, proceed with step 17



For left hinged door



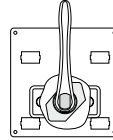
For right hinged door

Step 14 - Mounting emergency exit P20

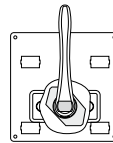
- Fit emergency exit **P20** to the door

To be observed

- Observe the position of the slotted hole
- Actuator completely inserted into the actuator unit **J**
- Emergency exit **P20** parallel to actuator unit **J**
- Screws DIN 912-M6
- Torque MA = 8 Nm
- Wall thickness of the device 8 mm
- Washers Ø 6.4 DIN 125 (included in delivery)
- For applications with strong vibrations, please observe a proper securing of the screws
- After the assembly of the emergency exit P20, proceed with step 17



For left hinged door



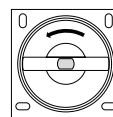
For right hinged door

Step 15 - Mounting emergency exit P25

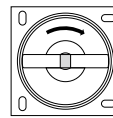
- Fit emergency exit **P25** to the door

To be observed

- Observe the position of the slotted hole
- Actuator completely inserted into the actuator unit **J**
- *Fluchtentriegelung P25* parallel zur Betätigereinheit **J**
- Screws DIN 912-M6
- Torque MA = 8 Nm
- Wall thickness of the device 8 mm
- For applications with strong vibrations, please observe a proper securing of the screws
- After the assembly of the emergency exit P25, proceed with step 17



For left hinged door



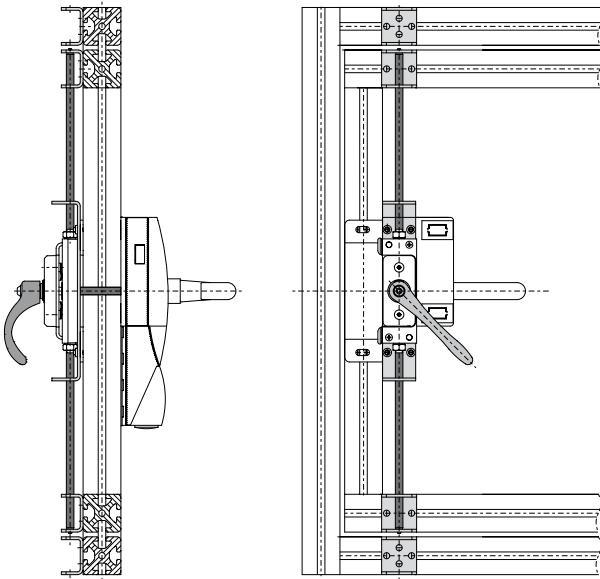
For right hinged door

Step 16 - Mounting of the P30 or P31 locking rod

Fit the locking rod without emergency exit P30 either with emergency exit P31

To be observed:

see mounting instructions AZ/AZM 200-B30-P30/P31



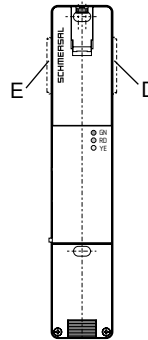
Step 17

- Clip the dust-proof flap in the unused side

To be observed:

D = For left hinged door

E = For right hinged door

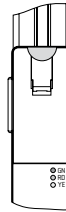


Step 18


- Seal the cover of the manual release **A**

To be observed:

After being put into operation, the manual release must be secured by installing the seal, which is included in delivery.



4.1 Set-up checklist



Checklist

Set-up and maintenance

Checking of the AZ/AZM 200 safety door-handle system
During the set-up and the regular maintenance of the machine, the following items of the safety door-handle system, consisting of the AZ or AZM 200, the corresponding actuator unit and the emergency exit, must be checked and inspected by a professional:

1. Fixation:
All fixing screws installed and tightened with the specified torque

2. Distance:
Distance 6.5 ± 1.5 mm mm between AZ/AZM 200 and actuator unit observed.

3. Emergency exit handle:
After locking, the proper closing of the door must be checked. It should be possible to open the safety guard inside the hazardous area; it should not be possible to lock the safety guard from inside. The emergency exit handle must be in a vertical condition in the closed condition.

4. Sticker emergency exit handle (included in delivery):
The sticker is visibly attached.

5. Dust shield cap:
Check tight fitting of the dust-proof flap

6. Functional testing:
The enabling signal is only transmitted to the safety circuit, if the actuator unit is within range of the solenoid interlock and locked.

LED	Status	
green	Operating voltage	
yellow	Actuator inserted (and locked for AZM 200)	
flashes yellow	Actuator inserted and not locked (only for AZM 200)	
red	Error	

7. Cover for manual release:
Cover is sealed (only for AZM 200)

Date / Signature:

K. A. Schmersal GmbH & Co. KG
Industrielle Sicherheitssysteme
Möddinghofe 30, D - 42279 Wuppertal
Postfach 24 02 63, D - 42232 Wuppertal

Phone: +49 - (0)2 02 - 64 74 - 0
Telefax +49 - (0)2 02 - 64 74 - 1 00
E-Mail: info@schmersal.com
Internet: <http://www.schmersal.com>