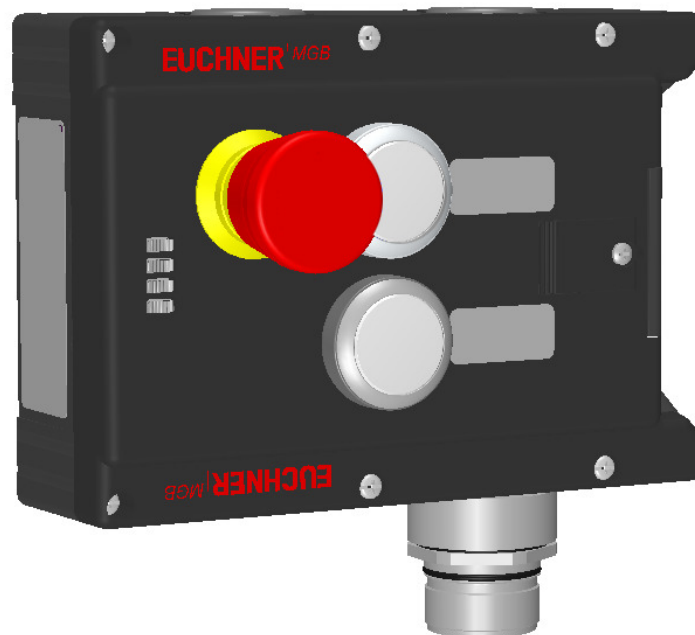


## ITEM 121208 MGB-L1-ARA-AM3A1-S6-R-121208

Description	Technical data	Accessories	Downloads
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### Features

- › Guard locking with guard lock monitoring
- › Can be connected in series with other AR devices (e.g. CES-AR and CET-AR)
- › Emergency stop according to ISO 13850
- › 2 pushbuttons (illuminated)
- › With lens set, 6 pcs.
- › Incl. adhesive labels
- › With plug connector RC26
- › Unicode

### Guard locking type

**MGB-** The locking arm is held in the locked position by spring force and is  
**L1...** unlocked by solenoid force (closed-circuit current principle, mechanically locked).

### Door hinge

A mechanical door stop is permanently integrated into the evaluation module of the MGB. A marking on the stop makes adjustment easier.

## LED indicator

The LED indicator indicates all important system and status information.

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## Monitoring outputs

- OD** ON when the door is closed
  - OT** Bolt tongue inserted in the evaluation module
  - OL** Guard locking solenoid in locked position
  - OI** Diagnostics; there is a fault
- 

## Emergency stop device

- S1** 2 positively driven NC contacts and 1 NO contact (e.g. monitoring contact), emergency stop with turn-to-reset, not illuminated
- 

## Pushbutton

- S2** 1 NO contact, illuminated
  - S3** 1 NO contact, illuminated
- 

## Lens set

The color of the pushbutton can be selected using the lens set included (5 colors). Item no.: 120344 (see Accessories)

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## Adhesive labels

Devices with adhesive labels have pre-formed recesses. The adhesive labels enclosed (standard size 12.5 x 27 mm) can be affixed in these recesses.

## Approvals



## Mechanical values and environment

Housing material	Reinforced plastic; die-cast zinc nickel-plated, stainless steel
Weight	Net 0,75 kg
Ambient temperature	
At $U_B = 24V DC$	-20 ... 55 °C
Degree of protection	IP65
Mechanical life	
In case of use as door stop, and 1 Joule impact energy	$1 \times 10^6$ $0,1 \times 10^6$

Installation position	Door hinge DIN right
Switching frequency	0,25 Hz
Connection	Plug connector RC26 <sup>[1]</sup>
Guard locking principle	Closed-circuit current principle
Locking force $F_{Zh}$	2000 N

### Electrical connection ratings

Utilization category according to EN 60947-5-2	DC-13	24V 200mA <sup>[2]</sup>
Rated insulation voltage $U_i$		30 V
Rated impulse withstand voltage $U_{imp}$		1,5 kV
Degree of contamination (external, according to EN 60947-1)		3
Safety class		III
Discrepancy time		
Between FO1A and FO1B		max.10 ms
Risk time according to EN 60947-5-3		max.350 ms
Transponder coding		Unicode
<b>Power supply <math>U_B</math></b>		
Operating voltage DC	$U_B$	24 V DC -15% ... 10% <sup>[3]</sup>
Current consumption	$I_{UB}$	max.80 mA <sup>[4]</sup>
<b>Power supply <math>U_A</math></b>		
Operating voltage DC	$U_A$	24 V DC -15% ... 10% <sup>[5]</sup>
Current consumption	$I_{UA}$	max.375 mA <sup>[6]</sup>
<b>Safety outputs FO1A, FO1B</b>		
Test pulses		max.1 ms
Test-pulse interval		min.100 ms
Type of output		Semiconductor outputs, p-switching, short circuit-proof
Output voltage		
$U_{FO1A} / U_{FO1B} \text{ HIGH}$		$U_B - 2V \dots U_B \text{ V DC}$ <sup>[7]</sup>
$U_{FO1A} / U_{FO1B} \text{ LOW}$		0 ... 1 V DC
Output current		
Per safety output FO1A / FO1B		1 ... 200 mA
<b>Monitoring outputs OD, OT, OL, OI</b>		
Type of output		Semiconductor outputs, p-switching, short circuit-proof
Output voltage		$U_A - 2V \dots U_A \text{ V DC}$ <sup>[8]</sup>
Output current		max.50 mA
<b>Controls and indicators</b>		
Switching voltage		$U_A \text{ V}$
Switching current		1 ... 10 mA

Breaking capacity	max.0,25 W
Power supply LED	24 V DC
	<b>Emergency stop</b>
Switching voltage	5 ... 24 V
Switching current	1 ... 100 mA
Breaking capacity	max.0,25 W
Power supply LED	24 V DC
	<b>Solenoid control input IMP1, IMP2, IMM</b>
Test pulses	max.5 ms
Test-pulse interval	min.100 ms

## Controls and indicators

Assignment diagram	L1
Control/indicator	
	<b>Position 1</b>
Version	Emergency stop
Special features	With auxiliary contact
Color	
Switching element	2 pos. driven NC + 1NO
Control/indicator	
	<b>Position 2</b>
Version	Illuminated push buttons
Special features	
Color	
Switching element	1NO
Control/indicator	
	<b>Position 3</b>
Version	Illuminated push buttons
Special features	
Color	
Switching element	1NO

## Miscellaneous

Additional feature	Incl. cover set ID. No. 120344
Product version number	V3.0.3
Slide-in label	2 pcs. without marking

## Reliability values acc. to EN ISO 13849-1

	<b>Monitoring of guard locking and the safety guard position</b>
Category	4
Performance Level	PL e

PFH <sub>D</sub>	3.7 x 10 <sup>-9</sup>
	<b>Control of the guard locking</b>
Category	4
Performance Level	PL e
PFH <sub>D</sub>	2.8 x 10 <sup>-9</sup>
	<b>Emergency stop</b>
B10 <sub>D</sub>	Emergency stop 0,065 x 10 <sup>6</sup>

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Mission time	20 y
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[1] X6

[2] Caution: outputs must be protected with a free-wheeling diode in case of inductive loads.

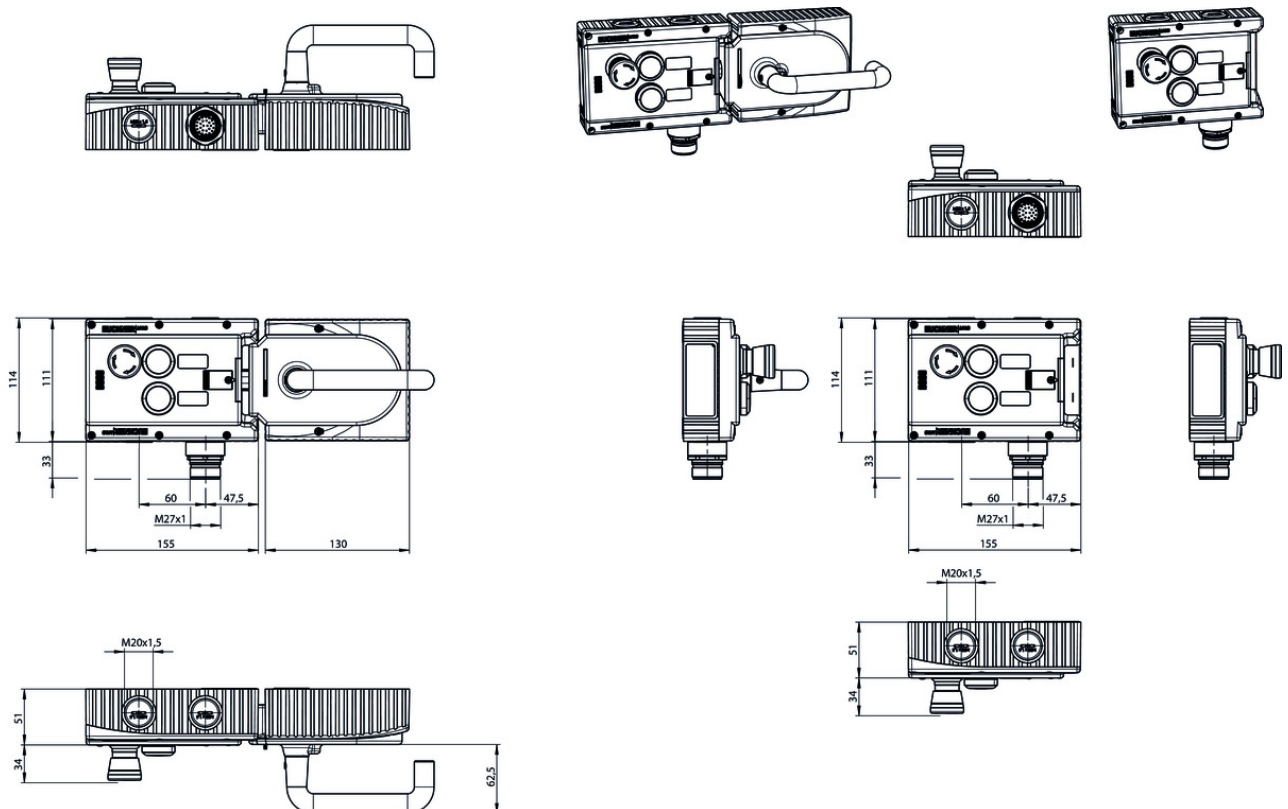
[3, 5] (Reverse polarity protected, regulated, residual ripple <5%, PELV)

[4] (no load on outputs)

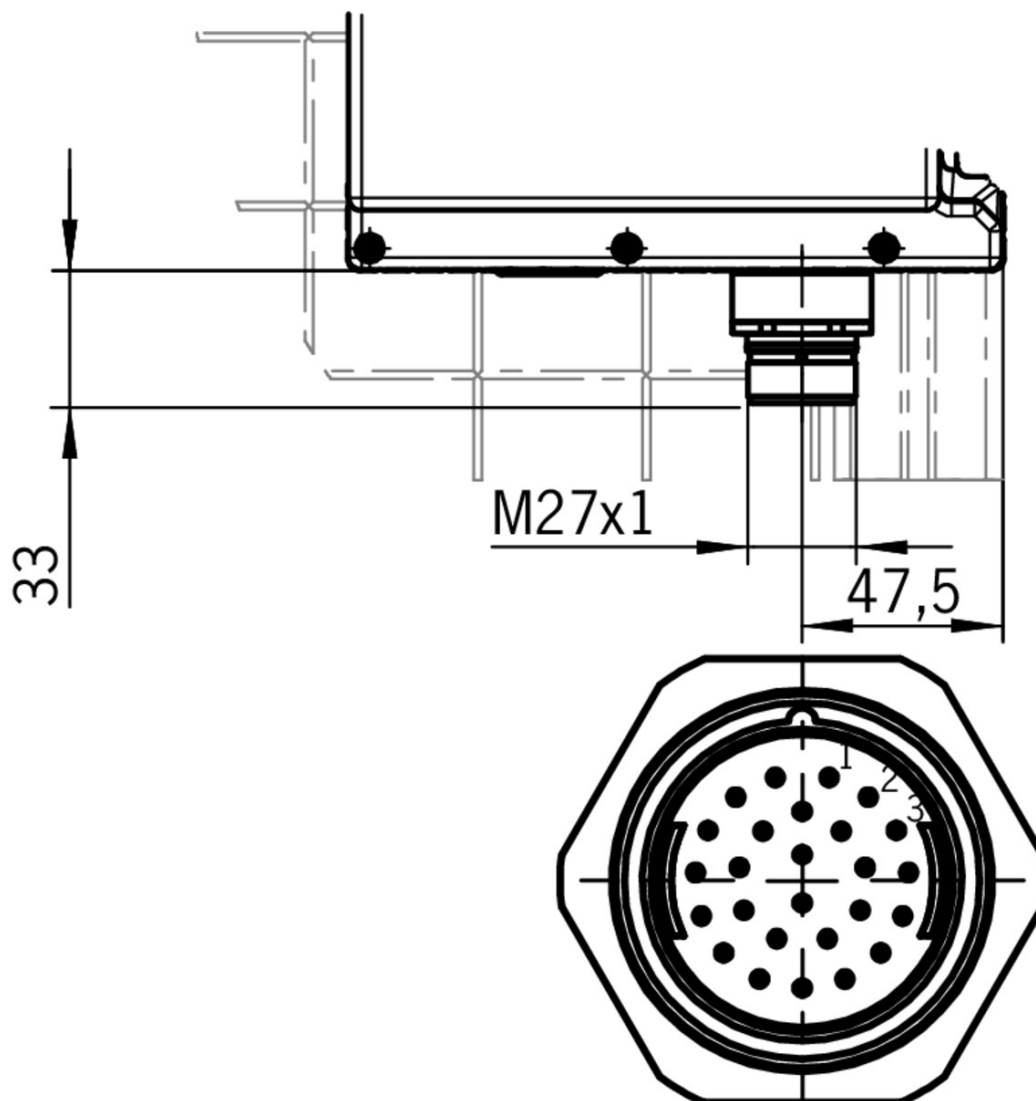
[6] (With energized guard locking solenoid and unloaded outputs OD, OT, OL, OI, +20 °C, 24V)

[7, 8] Value at a switching current of 50mA without taking into account the cable lengths

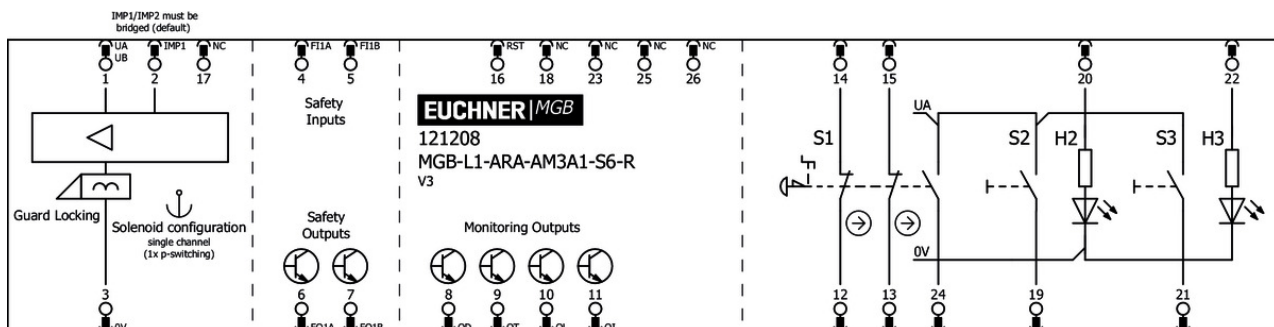
### Dimension drawing



## Dimension drawing



## Plug connector RC26



## Mounting accessories

Mounting plate for evaluation modules MGB-L.-AR.-... and MGB-L.-AP.-...



**109490** MGB-A-MOUNTINGPLATE-L-109490

- Features
  - › Easy and quick mounting (only two screws required)
  - › Quick module replacement

- › Steel, powder-coated
- › Suitable for doors hinged on the right or left

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## Miscellaneous accessories

### ✓ Lens set 5 colors



**120344** AY-SET-LNS-0001-120344

### ✓ Lens set labeled



**120377** AY-SET-LNS-SY01-120377



**125359** AY-SET-LNS-SY02-125359



**126158** AY-SET-LNS-SY03-126158

### ✓ Lens set 6 colors



**120378** AY-SET-LNS-0002-120378

### ✓ Adhesive labels

**114529** MGB-A-PLATESET-NN01-114529

#### ✓ Features

- › Adhesive labels suitable for MGB evaluation modules, bus modules and control modules
- › silver, blank
- › Packaging unit = 10 pcs.

### ✓ Lens set, three colors



**158307** AY-SET-LNS-SY04-158307

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## Connection material

### ✓ Connection cable with plug connector RC26, 26-pin, 1.1m



**114976** C-M27F26-PU01,1-MA-114976

#### ✓ Features

- › M27 female plug (RC26), 26-pin
- › Straight plug connector

- › TPE-U cable
  - › Cable length 1.1 m
  - › With flying lead
  - › Cores numbered, black
- 

▼ Connection cable with plug connector RC26, 26-pin, 2m



**111997** C-M27F26-PU02,0-MA-111997

▼ Features

- › M27 female plug (RC26), 26-pin
  - › Straight plug connector
  - › TPE-U cable
  - › Cable length 2 m
  - › With flying lead
  - › Cores numbered, black
- 

▼ Connection cable with plug connector RC26, 26-pin, 5m



**111998** C-M27F26-PU05,0-MA-111998

▼ Features

- › M27 female plug (RC26), 26-pin
  - › Straight plug connector
  - › TPE-U cable
  - › Cable length 5 m
  - › With flying lead
  - › Cores numbered, black
- 

▼ Connection cable with plug connector RC26, 26-pin, 10m



**111999** C-M27F26-PU10,0-MA-111999

▼ Features

- › M27 female plug (RC26), 26-pin
  - › Straight plug connector
  - › TPE-U cable
  - › Cable length 10 m
  - › With flying lead
  - › Cores numbered, black
- 

▼ Connection cable with plug connector RC26, 26-pin, 20m



**112912** C-M27F26-PU20,0-MA-112912

▼ Features

- › M27 female plug (RC26), 26-pin
  - › Straight plug connector
  - › TPE-U cable
  - › Cable length 20 m
  - › With flying lead
  - › Cores numbered, black
- 

▼ Connection cable with plug connector RC26, 26-pin, 35m



**123829** C-M27F26-PU35,0-MA-123829



- ▼ Features
  - › M27 female plug (RC26), 26-pin
  - › Straight plug connector
  - › TPE-U cable
  - › Cable length 35 m
  - › With flying lead
  - › Cores numbered, black

▼ Connection cable with plug connector RC26, 26-pin, 50m



**123877** C-M27F26-PU50,0-MA-123877

- ▼ Features
  - › M27 female plug (RC26), 26-pin
  - › Straight plug connector
  - › TPE-U cable
  - › Cable length 50 m
  - › With flying lead
  - › Cores numbered, black

## Function expansion

▼ Emergency unlocking for safety system MGB



**112989** MGB-A-EMERGENCYRELEASE-112989

- ▼ Features
  - › Quick emergency unlocking
  - › sealable

## Instructions



















▼ Návod k použití – bezpečnostní systémy MGB-L1...AR.-... / MGB-L2...AR.-... a MGB-L1...AP.-... / MGB-L2...AP.-... od V3.0.0

	Doc. no.	Version	Language	Download
Betriebsanleitung MGB-L1...AR.-... / MGB-L2...AR.-... und MGB-L1...AP.-... / MGB-L2...AP.-... ab V3.0.0	2119167	04-05/18		3.7 MB
Mode d'emploi MGB-L1...AR.-... / MGB-L2...AR.-... et MGB-L1...AP.-... / MGB-L2...AP.-... à partir de V3.0.0	2119167	04-05/18		3.7 MB
Manual de instrucciones MGB-L1...AR.-... / MGB-L2...AR.-... y MGB-L1...AP.-... / MGB-L2...AP.-... V3.0.0 o superior	2119167	04-05/18		3.7 MB
Návod k použití – bezpečnostní systémy MGB-L1...AR.-... / MGB-L2...AR.-... a MGB-L1...AP.-... / MGB-L2...AP.-... od V3.0.0	2119167	04-05/18		4.0 MB

Operating Instructions MGB-L1...AR-... / MGB-L2...AR-... and MGB-L1...AP-... / MGB-L2...AP-... from V3.0.0	2119167	04-05/18		3.7 MB
Istruzioni di impiego MGB-L1...AR-... / MGB-L2...AR-... und MGB-L1...AP-... / MGB-L2...AP-... da V3.0.0	2119167	04-05/18		3.7 MB
Handleiding MGB-L1...AR-... / MGB-L2...AR-... en MGB-L1...AP-... / MGB-L2...AP-... vanaf V3.0.0	2119167	04-05/18		3.7 MB
Instrukcja obsługi MGB-L1...AR-... / MGB-L2...AR-... i MGB-L1...AP-... / MGB-L2...AP-... od V3.0.0	2119167	04-05/18		4.0 MB
Manual de instruções MGB-L1...AR-... / MGB-L2...AR-... e MGB-L1...AP-... / MGB-L2...AP-... a partir de V3.0.0	2119167	04-05/18		3.7 MB
Инструкция по эксплуатации MGB-L1...AR-... / MGB-L2...AR-... и MGB-L1...AP-... / MGB-L2...AP-... с V3.0.0	2119167	04-05/18		4.2 MB
Návod na prevádzku Bezpečnostné systémy MGB-L1...AR-... / MGB-L2...AR-... a MGB-L1...AP-... / MGB-L2...AP-... od V3.0.0	2119167	04-05/18		4.0 MB
Instruktionsbok MGB-L1...AR-... / MGB-L2...AR-... och MGB-L1...AP-... / MGB-L2...AP-... fr. V3.0.0	2119167	04-05/18		3.7 MB
İşletim kılavuzu MGB-L1...AR-... / MGB-L2...AR-... ve MGB-L1...AP-... / MGB-L2...AP-... itibaren V3.0.0	2119167	04-05/18		4.1 MB
操作指示書 安全システム MGB-L1...AR-... / MGB-L2...AR-... および MGB-L1...AP-... / MGB-L2...AP-... V3.0.0以降	2119167	04-05/18		4.1 MB
使用说明书 安全系统 MGB-L1...AR-... / MGB-L2...AR-... 和 MGB-L1...AP-... / MGB-L2...AP-... V3.0.0 以上	2119167	04-05/18		4.1 MB







**Sicherheitsinformation (Teil der Betriebsanleitung Sicherheitssystem MGB-AR/MGB-AP) ab V3.0.0**

	Doc. no.	Version	Language	Download
Sicherheitsinformation (Teil der Betriebsanleitung Sicherheitssystem MGB-AR/MGB-AP) ab V3.0.0	123151	01-02/15		0.6 MB
Información de seguridad (parte del manual de instrucciones Sistema de seguridad MGB-AR/MGB-AP) V3.0.0 o superior				
Information de sécurité (partie du mode d'emploi Système de sécurité MGB-AR/MGB-AP) à partir de V3.0.0				
Informazioni sulla sicurezza (Parte delle istruzioni di impiego Sistema di sicurezza MGB-AR/MGB-AP) da V3.0.0				
Säkerhetsinformation (Del av instruktionsboken Säkerhetssystem MGB-AR/MGB-AP) från V3.0.0				
Safety Information (Part of the Operating Instructions Safety System MGB-AR/MGB-AP) from V3.0.0				

Veiligheidsinformatie (Deel van de handleiding Beveiligingssysteem MGB-AR/MGB-AP) vanaf V3.0.0	123151	01-02/15		 0.2 MB
Informação de segurança (Parte do manual de instruções Sistema de segurança MGB-AR/MGB-AP) a partir de V3.0.0	123151	01-02/15		 0.2 MB
Bezpečnostní informace (součást návodu k použití „Bezpečnostní systém MGB-AR/MGB-AP“) od V3.0.0	123151	01-02/15		 0.2 MB
Informacje o bezpieczeństwie (Część instrukcji obsługi System bezpieczeństwa MGB-AR/MGB-AP) od V3.0.0	123151	01-02/15		 0.2 MB
Информация о безопасности (часть инструкции по эксплуатации Предохранительная система MGB-AR/MGB-AP) с V3.0.0	123151	01-02/15		 0.3 MB
Bezpečnostná informácia (časť návodu na prevádzku Bezpečnostný systém MGB-AR/MGB-AP) od V3.0.0	123151	01-02/15		 0.2 MB
Güvenlik bilgisi (İşletim kılavuzunun parçası emniyet sistemi MGB-AR/MGB-AP) V3.0.0 ve üstü	123151	01-02/15		 0.3 MB
安全信息 (安全系统 MGB-AR/MGB-AP使用说明书的组成部分) V3.0.0以上	123151	01-02/15		 0.3 MB
安全情報 MGB-AR/MGB-AP	123151	01-02/15		 0.6 MB

## Declaration of conformity

### EU-Konformitätserklärung

	Doc. no.	Version	Language	Download
EU-Konformitätserklärung Declaración UE de conformidad Déclaration UE de conformité Dichiarazione di conformità EU declaration of conformity	2123150	08-01/17	    	 0.3 MB