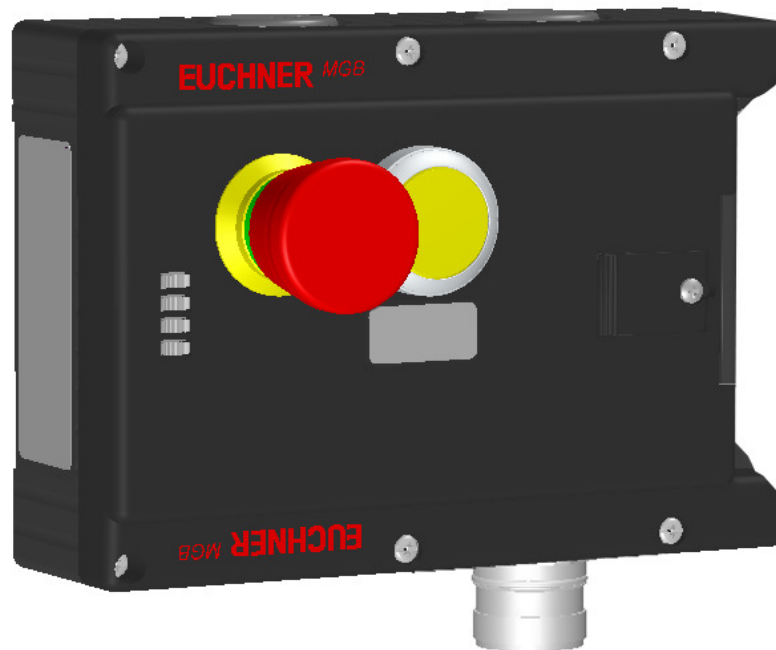


ITEM 114054 MGB-L1-ARA-AF8A1-S1-R-114054

| Description | Technical data | Accessories | Downloads |
|-------------|----------------|-------------|-----------|
|-------------|----------------|-------------|-----------|



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
- › 1 pushbutton (illuminated, ye)
- › incl. adhesive label
- › With plug connector RC18
- › 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.

Monitoring outputs

- OT** Bolt tongue inserted in the evaluation module
- 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, yellow, illuminated

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 | 1×10^6 |
| In case of use as door stop, and 1 Joule impact energy | $0,1 \times 10^6$ |
| Installation position | Door hinge DIN right |
| Switching frequency | 0,25 Hz |
| Connection | Plug connector RC18 [1] |
| 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 [2] |
| 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 |
| Power supply U_B | | |
| Operating voltage DC | U_B | 24 V DC -15% ... 10% [3] |
| Current consumption | I_{UB} | max.80 mA [4] |
| Power supply U_A | | |
| Operating voltage DC | U_A | 24 V DC -15% ... 10% [5] |
| Current consumption | I_{UA} | max.375 mA [6] |
| Safety outputs FO1A, FO1B | | |
| Test pulses | | max.1 ms |
| Test-pulse interval | | min.100 ms |
| Type of output | | Semiconductor outputs, p-switching, short circuit-proof |
| Output voltage | $U_{FO1A} / U_{FO1B} \text{ HIGH}$ $U_{FO1A} / U_{FO1B} \text{ LOW}$ | $U_B - 2V \dots U_B \text{ V DC}$ [7] 0 ... 1 V DC |
| Output current | Per safety output FO1A / FO1B | 1 ... 200 mA |
| Monitoring outputs OD, OT, OL, OI | | |
| Type of output | | Semiconductor outputs, p-switching, short circuit-proof |
| Output voltage | | $U_A - 2V \dots U_A \text{ V DC}$ [8] |
| Output current | | max.50 mA |
| Controls and indicators | | |
| Switching voltage | | $U_A \text{ V}$ |
| Switching current | | 1 ... 10 mA |
| Breaking capacity | | max.0,25 W |
| Power supply LED | | 24 V DC |
| Emergency stop | | |
| Switching voltage | | 5 ... 24 V |
| Switching current | | 1 ... 100 mA |
| Breaking capacity | | max.0,25 W |
| Power supply LED | | 24 V DC |
| Solenoid control input IMP1, IMP2, IMM | | |

| | |
|---------------------|------------|
| Test pulses | max.5 ms |
| Test-pulse interval | min.100 ms |

Controls and indicators

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

Miscellaneous

| | |
|------------------------|-----------------------|
| Product version number | V3.0.3 |
| Slide-in label | 1 pc. without marking |

Reliability values acc. to EN ISO 13849-1

| | |
|-------------------|--|
| | Monitoring of guard locking and the safety guard position |
| Category | 4 |
| Performance Level | PL e |
| PFH _D | 3.7×10^{-9} |
| | Control of the guard locking |
| Category | 4 |
| Performance Level | PL e |
| PFH _D | 2.8×10^{-9} |
| | Emergency stop |
| B10 _D | |
| Emergency stop | $0,065 \times 10^6$ |

| | |
|--------------|------|
| Mission time | 20 y |
|--------------|------|

[1] X6

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

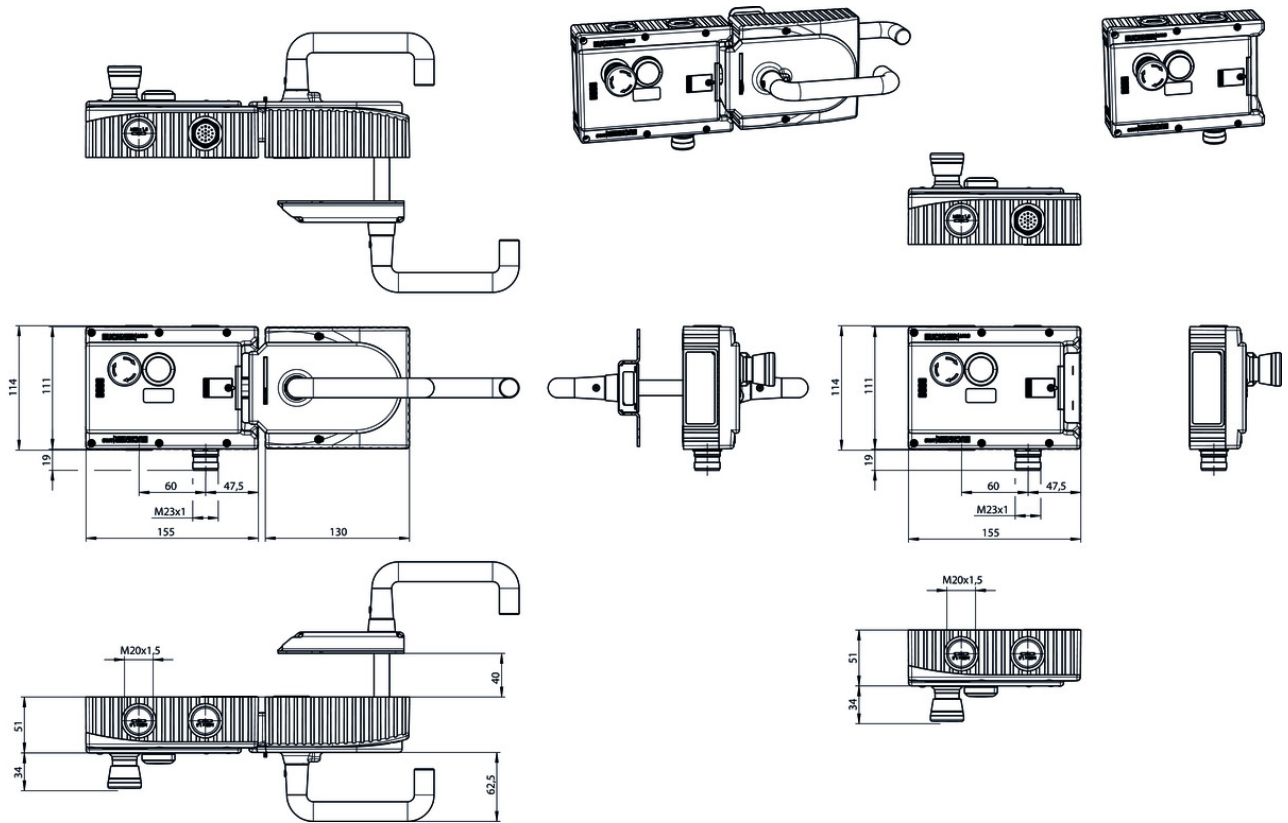
[3, 5] (Reverse polarity protected, regulated, residual ripple <5%, PELV)

[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

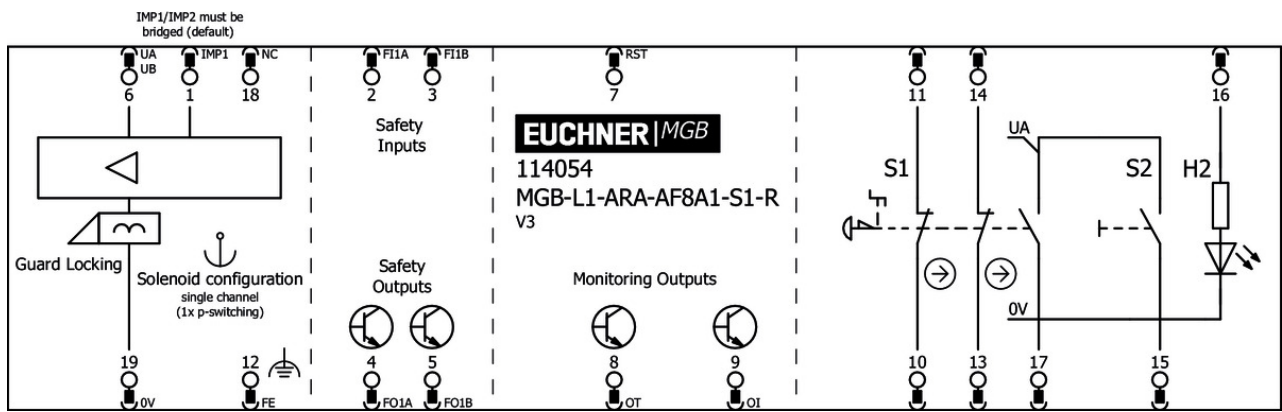
Dimension drawing



Dimension drawing



Plug connector RC18



Connection material

Replacement crimp contacts for female connector RC18 with option C1825

094310 CRIMPKONTAKT BUCHSE RCF-C1825

Features

- › 19 crimp sockets
 - › Conductor cross-section 16 x 0.25 - 0.5 mm² and 3 x 0.75 - 1 mm²
 - › For plug connector RC18..C1825
-

▼ Female plug RC18 straight with option C1825



077025 RC18EF-C1825

▼ Features

- › Plug connector M23, straight
 - › Number of pins: 19-pin with screen bonding clamp
-

▼ Connection cable with plug connector M23 with option C1825, 1.5m, straight



092761 C-M23F19-19XDIFPU01,5-MA-092761

▼ Features

- › M23 plug connector, 18-pin + PE
 - › Straight plug connector
 - › PUR cable
 - › Cable length 1.5 m
 - › With flying lead
 - › Cores color-coded
-

▼ Connection cable with plug connector M23 with option C1825, 3m, straight



092816 C-M23F19-19XDIFPU03,0-MA-092816

▼ Features

- › M23 plug connector, 18-pin + PE
 - › Straight plug connector
 - › PUR cable
 - › Cable length 3 m
 - › With flying lead
 - › Cores color-coded
-

▼ Connection cable with plug connector M23 with option C1825, 6m, straight



077014 C-M23F19-19XDIFPU06,0-MA-077014

▼ Features

- › M23 plug connector, 18-pin + PE
 - › Straight plug connector
 - › PUR cable
 - › Cable length 6 m
 - › With flying lead
 - › Cores color-coded
-

▼ Connection cable with plug connector M23 with option C1825, 8m, straight



077015 C-M23F19-19XDIFPU08,0-MA-077015

▼ Features

- › M23 plug connector, 18-pin + PE
- › Straight plug connector
- › PUR cable
- › Cable length 8 m

- › With flying lead
 - › Cores color-coded
-

▼ Connection cable with plug connector M23 with option C1825, 10m, straight



092898 C-M23F19-19XDIFPU10,0-MA-092898

▼ Features

- › M23 plug connector, 18-pin + PE
 - › Straight plug connector
 - › PUR cable
 - › Cable length 10 m
 - › With flying lead
 - › Cores color-coded
-

▼ Connection cable with plug connector M23 with option C1825, 15m, straight



077016 C-M23F19-19XDIFPU15,0-MA-077016

▼ Features

- › M23 plug connector, 18-pin + PE
 - › Straight plug connector
 - › PUR cable
 - › Cable length 15 m
 - › With flying lead
 - › Cores color-coded
-

▼ Connection cable with plug connector M23 with option C1825, 20m, straight



092726 C-M23F19-19XDIFPU20,0-MA-092726

▼ Features

- › M23 plug connector, 18-pin + PE
 - › Straight plug connector
 - › PUR cable
 - › Cable length 20 m
 - › With flying lead
 - › Cores color-coded
-

▼ Connection cable with plug connector M23 with option C1825, 25m, straight



092727 C-M23F19-19XDIFPU25,0-MA-092727

▼ Features

- › M23 plug connector, 18-pin + PE
 - › Straight plug connector
 - › PUR cable
 - › Cable length 25 m
 - › With flying lead
 - › Cores color-coded
-

▼ Connection cable with plug connector M23 with option C1825, 30m, straight



095993 C-M23F19-19XDIFPU30,0-MA-095993

▼ Features

- › M23 plug connector, 18-pin + PE

- › Straight plug connector
 - › PUR cable
 - › Cable length 30 m
 - › With flying lead
 - › Cores color-coded
-

▼ Connection cable with plug connector M23 with option C1825, 40m, straight



102490 C-M23F19-19XDIFPU40,0-MA-102490

▼ Features

- › M23 plug connector, 18-pin + PE
 - › Straight plug connector
 - › PUR cable
 - › Cable length 40 m
 - › With flying lead
 - › Cores color-coded
-

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

Function expansion

✓ Emergency unlocking for safety system MGB



112989 MGB-A-EMERGENCYRELEASE-112989

✓ Features


- › Quick emergency unlocking
- › sealable















Instructions

✓ Informação de segurança (Parte do manual de instruções Sistema de segurança MGB-AR/MGB-AP) a partir de V3.0.0

| | Doc. no. | Version | Language | Download |
|---|----------|----------|----------------------|----------|
| Sicherheitsinformation (Teil der Betriebsanleitung Sicherheitssystem MGB-AR/MGB-AP) ab V3.0.0 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 | 123151 | 01-02/15 | | 0.6 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 |
| Veiligheidsinformatie (Deel van de handleiding Beveiligingssysteem MGB-AR/MGB-AP) vanaf V3.0.0 | 123151 | 01-02/15 | | 0.2 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 |

| | | | | |
|---|--------|----------|---|--|
| 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 |
| 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 |







 **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 |

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 |