

ITEM 104780 CES-AZ-AES-04B

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



Features

- › Four read heads can be connected
- › 2 safety outputs (relay contacts with 2 internally connected NO contacts per output)
- › Start button and feedback loop can be connected
- › Unicode
- › Plug-in connection terminals
- › Category 4/PL e according to EN ISO 13849-1

Unicode evaluation

Each actuator is unique. The evaluation unit detects only the actuator that has been taught-in. Additional actuators can be taught in. Only the last actuator taught in is detected. New actuators are taught-in by fitting a jumper.

Guard lock monitoring

Evaluation units in the series CES-AZ make it possible to use read heads with integrated guard locking for the protection of personnel during overtraveling machine movements. You will find suitable read heads in the accessories

Category according to EN ISO 13849-1

Due to two redundant safety paths (relay contacts) with 2 internal, monitored normally open contacts per safety path, suitable for:

› Category 4/PL e according to EN ISO 13849-1

Each safety path is independently safe.

LED indicator

STATE Status LED

DIA Diagnostics LED

OUT Safety output status

Additional connections

TST Input for self-test

O1 ... O4 Monitoring outputs (semiconductor)

DIA Diagnostics output

Y1, Y2 Feedback loop

J1, J2 Teach-in input

S Start button connection (monitoring of the falling edge)

Important: The plug-in connection terminals are not included and must be ordered separately.

Approvals



Mechanical values and environment

| | |
|---|---|
| Housing material | Plastic PA6.6 |
| Weight | Net 0,25 kg |
| Ambient temperature | |
| At $U_B = 24V$ DC | -20 ... 55 °C |
| Atmospheric humidity | |
| Not condensing | max.80 % rH |
| Degree of protection | IP20 |
| Mounting method | Mounting rail 35mm according to DIN EN 60715 TH35 |
| Mounting distance | |
| Sideways toward the neighboring device | min.10 mm ^[1] |
| Number of read heads | Max. 4 read heads can be connected |
| Ready delay | 10 ... 12 s ^[2] |
| Reaction time | |
| After change in the actuation status, 1 active actuator | max.210 ms ^[3] |

| | |
|--|---|
| After change in the actuation status, 2 active actuators | max.290 ms [4] |
| After change in the actuation status, 3 active actuators | max.370 ms [5] |
| After change in the actuation status, 4 active actuators | max.450 ms [6] |
| Duration of operation start button (for Manual start operating mode) | min.250 ms |
| Response delay start button (for Manual start operating mode) | 200 ... 300 ms |
| Switching frequency | max.0,25 Hz [7] |
| Dwell time | min.3 s [8] |
| Connection | Plug-in connection terminals, coded [9] |
| Safety contacts 13/14, 23/24 | |
| Number of safety contacts | 2 Relays with internally monitored contacts |
| Mechanical life | |
| Operating cycles (relay) | 10 x 10 ⁶ |

Electrical connection ratings

| | | |
|--|----------------|--|
| Operating voltage DC | U _B | 21 ... 24 ... 27 V DC |
| Current consumption (with relay energized) | | 150 mA [10] |
| Fusing | | |
| External (operating voltage U _B) | | 0,4 ... 8 A |
| EMC protection requirements | | In acc. with EN 60947-5-3 |
| Degree of contamination (external, according to EN 60947-1) | | 2 |
| Connection cross-section (plug-in screw- / springterminals) | | 0,25 ... 2,5 mm ² |
| Current via feedback loop | | 5 ... 8 ... 10 mA |
| permissible resistance in feedback loop | | max.600 Ω |
| Safety contacts 13/14, 23/24 | | |
| Type of output | | Relay contacts, floating |
| Switching current | | |
| At switching voltage AC/DC 21 ... 60 V | | 1 ... 300 mA |
| At switching voltage AC/DC 5 ... 30 V | | 10 ... 6000 mA |
| At switching voltage AC 5 ... 230 V | | 10 ... 2000 mA |
| Fusing | | |
| External (safety circuit) according to EN 60269-1 | | 6 AgG or 6 A circuit breaker (characteristic B or C) |
| Utilization category according to EN 60947-5-1 | | |
| AC-15 | | 230 V 2 A |

| | | |
|---|----------------------|--|
| | DC-13 | 24 V 3 A |
| | AC-12 | 60 V 0.3 A 30 V 6 A |
| | DC-12 | 60 V 0.3 A 30 V 6 A |
| Switching load | | |
| | According to c UL us | Max. AC 30 V, class 2 / max. DC 60 V, class 2 |
| Rated insulation voltage U_i | | 250 V |
| Rated impulse withstand voltage U_{imp} | | max.4 kV |
| Rated conditional short-circuit current | | 100 A |
| Discrepancy time (Between the operating points of both relays) | | max.25 ms |
| | | Monitoring outputs: Diagnostic DIA, door monitoring outputs O1...O4 |
| Type of output | | Semiconductor output, p-switching, short circuit-proof |
| Output voltage | | 0,8 x U_B ... U_B V DC |
| Output current | | max.20 mA |
| | | Inputs: Start button S, test input TST |
| Input current | | |
| | HIGH | 5 ... 8 ... 10 mA |
| Input voltage | | |
| | HIGH | 15 ... U_B V DC |
| | LOW | 0 ... 2 V DC |
| | | STATE LED |
| LED indicator | | Status LED |
| | | LED OUT |
| LED indicator | | Safety contacts status |
| | | DIA LED |
| LED indicator | | Diagnostics LED |

Operating distance

| | |
|--|----------|
| Repeat accuracy R According to EN 60947-5-2 | max.10 % |
|--|----------|

Miscellaneous

| | |
|--|---|
| For the approval according to UL the following applies | Operation only with UL class 2 power supply, or equivalent measures |
|--|---|

Reliability values acc. to EN ISO 13849-1

| | |
|-------------------|--|
| | Monitoring of the safety guard position |
| Category | 4 [11] |
| Performance Level | PL e [12] |

| | |
|----------------------------|-----------------------------|
| PFH _D | 1.9 x 10 ⁻⁸ [13] |
| Diagnostic Coverage (DC) | 99 % |
| Number of switching cycles | |
| ≤ 0.1 A at 24 V DC | max.760000 1/Jahr |
| ≤ 1 A at 24 V DC | max.153000 1/Jahr |
| ≤ 3 A at 24 V DC | max.34600 1/Jahr |
| Mission time | 20 y [14] |

in combination with Read head CES-A-LNA-05V, CES-A-LNA-10V, CES-A-LNA-15V, CES-A-LNA-25V, CES-A-LNA-SC, CES-A-LNA-05P, CES-A-LNA-10P, CES-A-LNA-15P, CES-A-LCA-10V and Actuator CES-A-BBA, CES-A-BCA

Mechanical values and environment

| | |
|------------------------|-----------|
| Mounting distance | |
| Neighboring read heads | min.50 mm |

Operating distance

| | |
|--|-------------------|
| Distance s, actuator | |
| Minimum distance for side approach direction | min.3 mm |
| Switch-on distance | |
| With center offset m=0 | 15 mm [15] |
| Assured switch-off distance S _{ar} | max.26 mm |
| Assured operating distance S _{a0} | |
| With center offset m=0 | min.10 mm [16] |
| Switching hysteresis | 0,5 ... 2 mm [17] |

in combination with Read head CES-A-LNA-05V, CES-A-LNA-10V, CES-A-LNA-15V, CES-A-LNA-25V, CES-A-LNA-SC, CES-A-LNA-05P, CES-A-LNA-10P, CES-A-LNA-15P, CES-A-LCA-10V and Actuator CES-A-BDA-20

Mechanical values and environment

| | |
|------------------------|-----------|
| Mounting distance | |
| Neighboring read heads | min.50 mm |

Operating distance

| | |
|--|-------------------|
| Distance s, actuator | |
| Minimum distance for side approach direction | min.4 mm [18] |
| Switch-on distance | |
| With center offset m=0 | 16 mm [19] |
| Assured switch-off distance S _{ar} | max.33 mm |
| Assured operating distance S _{a0} | |
| With center offset m=0 | min.11 mm [20] |
| Switching hysteresis | 0,5 ... 2 mm [21] |

in combination with Read head CES-A-LMN-SC and Actuator CES-A-BMB

Mechanical values and environment

| | |
|------------------------|-----------|
| Mounting distance | |
| Neighboring read heads | min.20 mm |

Operating distance

| | |
|--------------------------------------|---------------------|
| Distance s, actuator | |
| Minimum distance | min.1,2 mm |
| Switch-on distance | |
| With center offset $m=0$ | 5 mm [22] |
| Assured switch-off distance S_{ar} | max.10 mm |
| Assured operating distance S_{a0} | |
| With center offset $m=0$ | min.3,5 mm [23] |
| Switching hysteresis | 0,1 ... 0,3 mm [24] |

in combination with Read head CES-A-LNA-05V, CES-A-LNA-10V, CES-A-LNA-15V, CES-A-LNA-25V, CES-A-LNA-SC, CES-A-LNA-05P, CES-A-LNA-10P, CES-A-LNA-15P, CES-A-LCA-10V and Actuator CES-A-BDA-18-156935

Mechanical values and environment

| | |
|------------------------|-----------|
| Mounting distance | |
| Neighboring read heads | min.50 mm |

Operating distance

| | |
|--|---------------------|
| Distance s, actuator | |
| Minimum distance for side approach direction | min.5 mm |
| Switch-on distance | |
| With center offset $m=0$ | 16 mm [25] |
| Assured switch-off distance S_{ar} | max.32 mm |
| Assured operating distance S_{a0} | |
| With center offset $m=0$ | min.10 mm [26] |
| Switching hysteresis | |
| With center offset $m=0$ | 0,5 ... 1,4 mm [27] |

in combination with Read head CES-A-LNN-SC-106601, CES-A-LNN-05V-106602, CES-A-LNN-10V-113294, CES-A-LNN-25V-115107 and Actuator CES-A-BBN-106600

Mechanical values and environment

| | |
|------------------------|------------|
| Mounting distance | |
| Neighboring read heads | min.160 mm |

Operating distance

| | |
|--|------------|
| Switch-on distance | |
| In z direction (with center offset $x,y=0$), in x direction (with center offset $y,z=0$) | 15 mm [28] |

| | |
|--|-----------------|
| Assured switch-off distance S_{ar} | |
| In y direction | max.100 mm |
| in x or z direction | max.50 mm |
| Assured operating distance S_{a0} | |
| In z direction (with center offset $x,y=0$), in x direction (with center offset $y,z=0$) | min.10 mm [29] |
| Switching hysteresis | 1 ... 4 mm [30] |

in combination with Read head CES-A-LNN-SC-106601, CES-A-LNN-05V-106602, CES-A-LNN-10V-113294, CES-A-LNN-25V-115107 and Actuator CES-A-BDN-06-104730

Mechanical values and environment

| | |
|------------------------|------------|
| Mounting distance | |
| Neighboring read heads | min.160 mm |

Operating distance

| | |
|--|----------------|
| Switch-on distance | |
| In z direction (with center offset $x,y=0$), in x direction (with center offset $y,z=0$) | 19 mm [31] |
| Assured switch-off distance S_{ar} | |
| In y direction | max.100 mm |
| in x or z direction | max.50 mm |
| Assured operating distance S_{a0} | |
| In z direction (with center offset $x,y=0$), in x direction (with center offset $y,z=0$) | min.14 mm [32] |
| Switching hysteresis | 4 mm [33] |

in combination with Read head CES-A-LSP-05V-104966, CES-A-LSP-10V-104967, CES-A-LSP-25V-104968, CES-A-LSP-SB-104969, CES-A-LSP-15V-106271, CES-A-LSP-20V-106272 and Actuator CES-A-BSP-104970

Operating distance

| | |
|--------------------------------------|-----------------|
| Switch-on distance | |
| With center offset $m=0$ | 20 mm [34] |
| Assured switch-off distance S_{ar} | max.45 mm |
| Assured operating distance S_{a0} | |
| With center offset $m=0$ | min.10 mm [35] |
| Switching hysteresis | 1 ... 4 mm [36] |

in combination with Read head CES-A-LQA-SC and Actuator CES-A-BQA

Mechanical values and environment

| | |
|------------------------|-----------|
| Mounting distance | |
| Neighboring read heads | min.80 mm |

Operating distance

| | |
|---|-----------------------|
| Switch-on distance | |
| For vertical approach direction (center offset $m=0$) | 23 mm [37] |
| For side approach direction (distance in x direction 10 mm) | ± 28 mm [38] |
| Assured switch-off distance S_{ar} | max.60 mm |
| Assured operating distance S_{a0} | |
| For vertical approach direction (center offset $m=0$) | min.16 mm [39] |
| For side approach direction (distance in x direction 10 mm) | min. ± 24 mm [40] |
| Switching hysteresis | |
| For vertical approach direction (center offset $m=0$) | 2 ... 3 mm [41] |
| For side approach direction (distance in x direction 10 mm) | 1 ... 1,3 mm [42] |

in combination with Read head CES-A-LQA-SC and Actuator CES-A-BBA, CES-A-BCA

Mechanical values and environment

| | |
|------------------------|-----------|
| Mounting distance | |
| Neighboring read heads | min.80 mm |

Operating distance

| | |
|--|-----------------------|
| Switch-on distance | |
| For vertical approach direction (center offset $m=0$) | 15 mm [43] |
| For side approach direction (distance in x direction 8 mm) | ± 22 mm [44] |
| Assured switch-off distance S_{ar} | max.47 mm |
| Assured operating distance S_{a0} | |
| For vertical approach direction (center offset $m=0$) | min.10 mm [45] |
| For side approach direction (distance in x direction 8 mm) | min. ± 18 mm [46] |
| Switching hysteresis | |
| For vertical approach direction (center offset $m=0$) | 2 ... 3 mm [47] |
| For side approach direction (distance in x direction 8 mm) | 1 ... 1,8 mm [48] |

in combination with Read head CES-A-LMN-SC and Actuator CES-A-BDA-20

Mechanical values and environment

| | |
|------------------------|-----------|
| Mounting distance | |
| Neighboring read heads | min.20 mm |

Operating distance

| | |
|--------------------|--|
| Switch-on distance | |
|--------------------|--|

| | |
|--------------------------------------|--|
| With center offset $m=0$ | A distance of $s = 4$ mm must be maintained for a side approach direction. 9 mm [49] |
| Assured switch-off distance S_{ar} | |
| With center offset $m=0$ | max.26 mm [50] |
| Assured operating distance S_{a0} | |
| With center offset $m=0$ | min.6 mm [51] |
| Switching hysteresis | |
| With center offset $m=0$ | 1 ... 1,8 mm [52] |

in combination with Read head CES-A-LMN-SC and Actuator CES-A-BBA

Mechanical values and environment

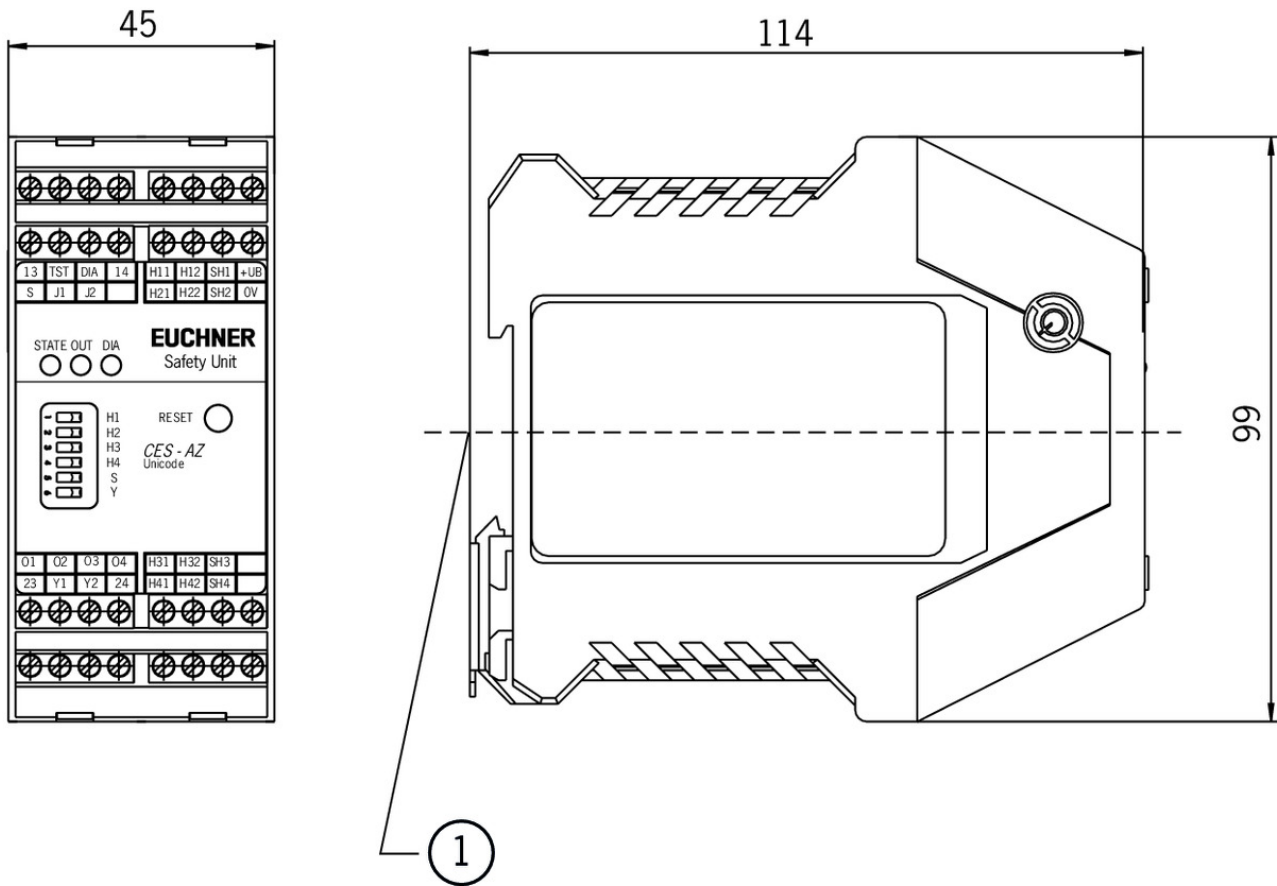
| | |
|------------------------|-----------|
| Mounting distance | |
| Neighboring read heads | min.20 mm |

Operating distance

| | |
|--------------------------------------|--|
| Switch-on distance | |
| With center offset $m=0$ | A distance of $s = 3$ mm must be maintained for a side approach direction. 8 mm [53] |
| Assured switch-off distance S_{ar} | |
| With center offset $m=0$ | max.25 mm [54] |
| Assured operating distance S_{a0} | |
| With center offset $m=0$ | min.5 mm [55] |
| Switching hysteresis | |
| With center offset $m=0$ | 1 ... 1,8 mm [56] |

- [1]** If several evaluation units are mounted side by side in a control cabinet without air circulation (e.g. fan), a minimum distance of 10 mm must be maintained between the evaluation units. The distance enables heat from the evaluation unit to dissipate.
- [2]** After the operating voltage is switched on, the relay outputs are switched off and the door monitoring outputs are set LOW during the ready delay. For the visual indication of the delay, the green STATE LED flashes at a frequency of approx. 15 Hz.
- [3, 4, 5, 6]** Corresponds to the risk time according to EN 60947-5-3. This is the maximum switch-off delay for the safety outputs following removal of the actuator. In case of EMC interference in excess of the requirements in accordance with EN 60947-5-3, the switch-off delay can increase to max. 750 ms. After a brief actuation < 0.8 s, the switch-on delay can increase to max. 3 s if this is followed immediately by further actuation.
- [7]** In case of monitoring with feedback loop, the actuators must remain outside the operating distance, e.g. with a door open, until the feedback circuit is closed.
- [8]** The dwell time is the time that the actuator must be inside or outside the operating distance.
- [9]** Terminals not included
- [10]** Without taking into account the load currents on the monitoring outputs
- [11, 12, 13, 14]** This value is dependent on the number of switching cycles and the switching current.
- [15, 16, 17, 28, 29, 30, 31, 32, 33]** These values apply for the surface installation of the read head and the actuator.
- [18, 19, 20, 21]** On mounting in non-metallic environment
- [22, 23, 24]** These values apply for surface installation of the read head in steel.
- [25, 26, 27, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48]** These values apply for surface installation of the read head and the actuator.
- [34, 35, 36]** These values apply for the installation of the read head and the actuator in an aluminum profile 45 x 45 mm.
- [49, 50, 51, 53, 54, 55]** This value applies for the surface installation of the read head in metal and the non-metallic installation of the actuator.
- [52, 56]** These values apply for the surface installation of the read head in metal and the non-metallic installation of the actuator.

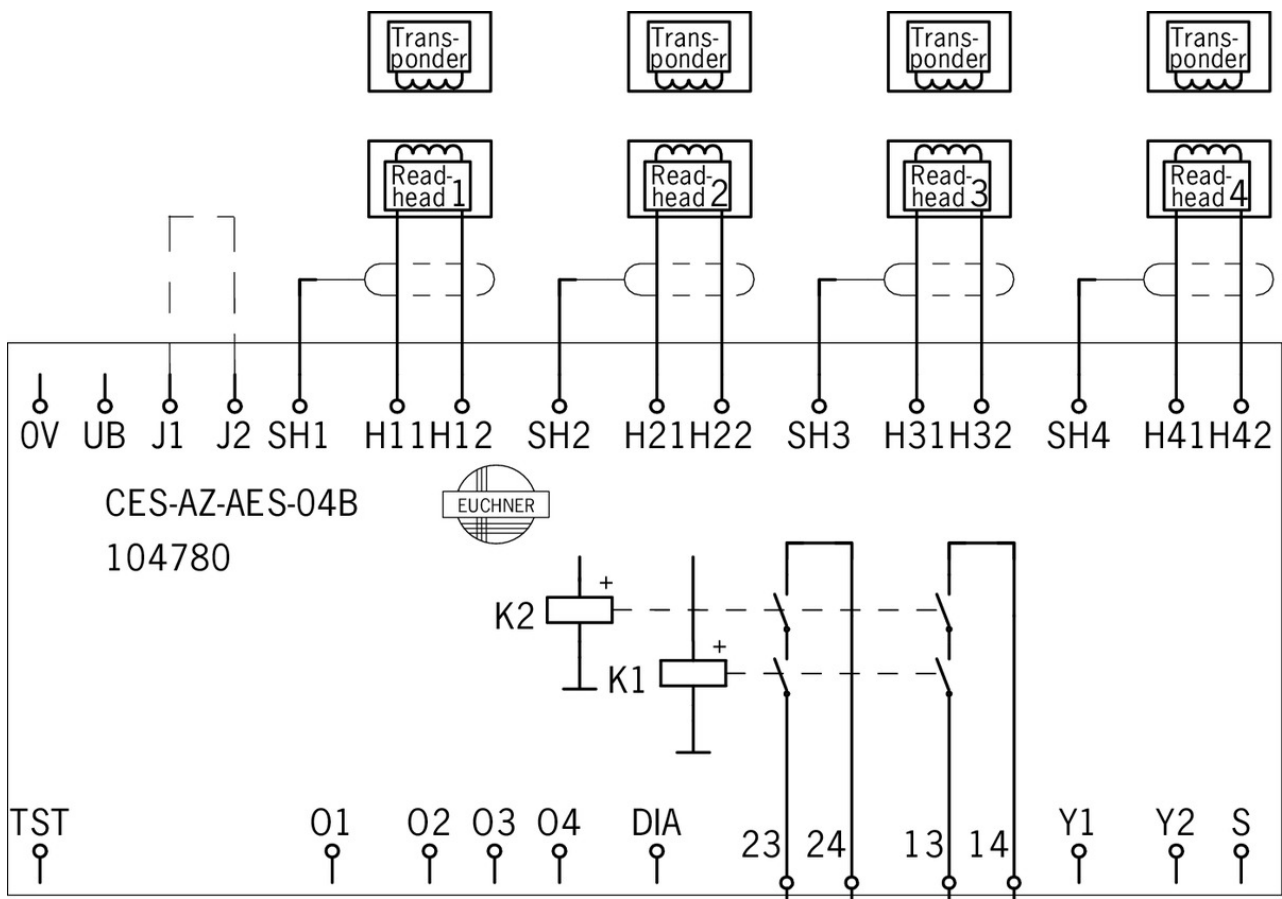
Dimension drawing



Legende

1 Suitable for 35 mm mounting rail according to EN 60715

Block diagram



Additional system components

- Read head CES-A-LNA..., hard-wired encapsulated cable 5 m, PVC



071845 CES-A-LNA-05V

Features

- Cube-shaped design 42 x 25 mm
- Hard-wired encapsulated cable made of PVC
- Cable length 5 m
- Two safety screws M4x14 included



077806 CES-A-LNA-05P

Features

- Cube-shaped design 42 x 25 mm
- Hard-wired encapsulated cable made of PUR
- Cable length 5 m
- Two safety screws M4x14 included

- Read head CES-A-LNA..., hard-wired encapsulated cable 10 m, PVC



071846 CES-A-LNA-10V

Features

- Cube-shaped design 42 x 25 mm
- Hard-wired encapsulated cable made of PVC
- Cable length 10 m

- › Two safety screws M4x14 included
-

▼ Read head CES-A-LNA..., hard-wired encapsulated cable 15 m, PVC



071847 CES-A-LNA-15V

▼ Features

- › Cube-shaped design 42 x 25 mm
 - › Hard-wired encapsulated cable made of PVC
 - › Cable length 15 m
 - › Two safety screws M4x14 included
-

▼ Read head CES-A-LNA..., hard-wired encapsulated cable 25 m, PVC



071975 CES-A-LNA-25V

▼ Features

- › Cube-shaped design 42 x 25 mm
 - › Hard-wired encapsulated cable made of PVC
 - › Cable length 25 m
 - › Two safety screws M4x14 included
-

▼ Read head CES-A-LNA..., hard-wired encapsulated cable 10 m, PUR



077807 CES-A-LNA-10P

▼ Features

- › Cube-shaped design 42 x 25 mm
 - › Hard-wired encapsulated cable made of PUR
 - › Cable length 10 m
 - › Two safety screws M4x14 included
-

▼ Read head CES-A-LNA..., hard-wired encapsulated cable 15 m, PUR



084682 CES-A-LNA-15P

▼ Features

- › Cube-shaped design 42 x 25 mm
 - › Hard-wired encapsulated cable made of PUR
 - › Cable length 15 m
 - › Two safety screws M4x14 included
-

▼ Read head CES-A-LNA-SC, M8 plug connector



077715 CES-A-LNA-SC

▼ Features

- › Cube-shaped design 42 x 25 mm
 - › With plug connector M8
 - › Two safety screws M4x14 included
-

▼ Read head CES-A-LCA..., hard-wired encapsulated cable 10 m, PVC



088785 CES-A-LCA-10V

▼ Features

- › Cube-shaped design 42 x 25 mm
 - › Hard-wired encapsulated cable made of PVC
 - › Cable length 10 m
 - › Two safety screws M4x14 included
-

▼ Read head CES-A-LQA-SC, M8 plug connector



095650 CES-A-LQA-SC

▼ Features

- › Cube-shaped design 50 x 50 mm
 - › M8 plug connector
 - › Two safety screws M4x14 included
-

▼ Read head CES-A-LMN-SC, M8 plug connector



077790 CES-A-LMN-SC

▼ Features

- › Cylindrical design M12
 - › M8 plug connector
-

▼ Read head CEM-A-LE05... with guard locking without guard lock monitoring with remanence



094800 CEM-A-LE05K-S2

▼ Features

- › Read head with guard locking without guard lock monitoring
 - › Locking force 650 N
 - › With remanence
 - › Up to category 4 according to EN ISO 13849-1
 - › Two safety screws M5x16 included
-

▼ Read head CEM-A-LE05... with guard locking without guard lock monitoring without remanence



095792 CEM-A-LE05R-S2

▼ Features

- › Read head with guard locking without guard lock monitoring
 - › Locking force 650 N
 - › Without remanence
 - › Up to category 4 according to EN ISO 13849-1
 - › Two safety screws M5x16 included
-

▼ Read head CEM-A-LH10K-S3 with guard locking without guard lock monitoring with remanence



095170 CEM-A-LH10K-S3

▼ Features

- › Read head with guard locking without guard lock monitoring
 - › Locking force 1000 N
 - › With remanence
 - › Up to category 4 according to EN ISO 13849-1
-

▼ Read head CEM-A-LH10R-S3 with guard locking without guard lock monitoring without

remanence



095793 CEM-A-LH10R-S3

✓ Features

- › Read head with guard locking without guard lock monitoring
 - › Locking force 1000 N
 - › Without remanence
 - › Up to category 4 according to EN ISO 13849-1
-

✓ Read head CET1-AX-..., M12, with guard locking and guard lock monitoring



095735 CET1-AX-LRA-00-50X-SA

✓ Features

- › Read head with guard locking
 - › Locking force up to 6500 N
 - › Up to category 4/PL e according to EN ISO 13849-1
 - › With plug connector M12
 - › 2 LEDs (1 freely configurable)
 - › Approach direction A (default setting on delivery)
-

✓ Read head CET1-AX-... M12, with guard locking and guard lock monitoring, 2 freely configurable LEDs



104062 CET1-AX-LRA-00-50L-SA

✓ Features

- › Read head with guard locking
 - › Locking force up to 6500 N
 - › Up to category 4/PL e according to EN ISO 13849-1
 - › With plug connector M12
 - › 2 LEDs (2 freely configurable)
 - › Approach direction A (default setting on delivery)
-

✓ Read head CET1-AX-... M12, with guard locking and guard lock monitoring, double insertion slide



100399 CET1-AX-LDA-00-50X-SE

✓ Features

- › Read head with guard locking
 - › Locking force up to 6500 N
 - › Up to category 4/PL e according to EN ISO 13849-1
 - › With plug connector M12
 - › 2 LEDs (1 freely configurable)
 - › With double ramp
 - › Approach direction A and C (default setting on delivery)
-

✓ Read head CET1-AX-... M12, with guard locking and guard lock monitoring, escape release



102161 CET1-AX-LRA-00-50F-SA

✓ Features

- › Read head with guard locking
- › Locking force up to 6500 N
- › Up to category 4/PL e according to EN ISO 13849-1
- › With plug connector M12
- › 2 LEDs (1 freely configurable)

- › With escape release, 75 mm long
 - › Approach direction A (default setting on delivery)
-

- ▼ Read head CET1-AX-... M12, with guard locking and guard lock monitoring, escape release, double insertion slide



103750 CET1-AX-LDA-00-50F-SA

▼ Features

- › Read head with guard locking
 - › Locking force up to 6500 N
 - › Up to category 4/PL e according to EN ISO 13849-1
 - › With plug connector M12
 - › 2 LEDs (1 freely configurable)
 - › With escape release, 75 mm long
 - › With double ramp
 - › Approach direction A and C (default setting on delivery)
-

- ▼ Read head CET1-AX-..., 2 plug connectors M8, with guard locking and guard lock monitoring



102988 CET1-AX-LRA-00-50X-SC

▼ Features

- › Read head with guard locking
 - › Locking force up to 6500 N
 - › Up to category 4/PL e according to EN ISO 13849-1
 - › With 2 plug connectors M8
 - › 2 LEDs (1 freely configurable)
 - › Approach direction A (default setting on delivery)
-

- ▼ Read head CET1-AX-..., 2 plug connectors M8, with guard locking and guard lock monitoring, double insertion slide



103444 CET1-AX-LDA-00-50X-SC

▼ Features

- › Read head with guard locking
 - › Locking force up to 6500 N
 - › Up to category 4/PL e according to EN ISO 13849-1
 - › With 2 plug connectors M8
 - › 2 LEDs (1 freely configurable)
 - › With double ramp
 - › Approach direction A and C (default setting on delivery)
-

- ▼ Read head CES-A-LSP-..., hard-wired encapsulated cable 5 m, PVC



104966 CES-A-LSP-05V-104966

▼ Features

- › Optimized for aluminum profile mounting
 - › LED for the indication of the door position
 - › Hard-wired encapsulated cable made of PVC
 - › Cable length 5 m
-

- ▼ Read head CES-A-LSP-..., hard-wired encapsulated cable 10 m, PVC



104967 CES-A-LSP-10V-104967

▼ Features

- › Optimized for aluminum profile mounting
 - › LED for the indication of the door position
 - › Hard-wired encapsulated cable made of PVC
 - › Cable length 10 m
-

▼ Read head CES-A-LSP-..., hard-wired encapsulated cable 15 m, PVC



106271 CES-A-LSP-15V-106271

▼ Features

- › Optimized for aluminum profile mounting
 - › LED for the indication of the door position
 - › Hard-wired encapsulated cable made of PVC
 - › Cable length 15 m
-

▼ Read head CES-A-LSP-SB..., plug connector M5



104969 CES-A-LSP-SB-104969

▼ Features

- › Optimized for aluminum profile mounting
 - › LED for the indication of the door position
 - › M5 plug connector
-

▼ Read head CES-A-LNN-...hard-wired encapsulated cable 5 m, PVC



106602 CES-A-LNN-05V-106602

▼ Features

- › Cube-shaped design 42 x 25 mm
 - › Attachment compatible with series CES-A-LNA/LCA
 - › LED for the indication of the door position
 - › Hard-wired encapsulated cable, PVC
 - › Cable length 5 m
-

▼ Read head CES-A-LNN-SC... M8 plug connector



106601 CES-A-LNN-SC-106601

▼ Features

- › Cube-shaped design 42 x 25 mm
 - › Attachment compatible with series CES-A-LNA/LCA
 - › LED for the indication of the door position
 - › With plug connector M8
-

Connection material

▼ Connection kit for evaluation units CES-AZ-.ES-04B and CES-AR-AES-12, screw terminals

104776 CES-EA-TC-AK08-104776

▼ Features

- › Plug-in screw terminals for evaluation units CES-AZ-.ES-04B and CES-AR-

- AES-12
- › Coded

▼ Connection kit for evaluation units CES-AZ-.ES-04B and CES-AR-AES-12, spring terminals

112629 CES-EA-TC-KK08-112629

▼ Features

- › Plug-in spring terminals for evaluation units CES-AZ-.ES-04B and CES-AR-AES-12
- › Coded

Miscellaneous accessories

▼ Inrush current limiting module PM-SCL



096945 PM-SCL-096945

▼ Features

Very high currents are produced on power up if capacitive loads are switched; these currents cause increased wear on electromagnetic switching contacts. The PM-SCL module limits the inrush current for approx. 100 ms and protects the switching contacts.

Instructions

▼ Návod k použití Bezkontaktní bezpečnostní systém CES-AZ-AES-... (Unicode)

| | Doc. no. | Version | Language | Download |
|--|----------|----------|----------|----------|
| Betriebsanleitung Berührungsloses Sicherheitssystem CES-AZ-AES-... (Unicode) | 2104766 | 10-09/17 | | 1.8 MB |
| Mode d'emploi Système de sécurité sans contact CES-AZ-AES-... (Unicode) | 2104766 | 10-09/17 | | 1.8 MB |
| Manual de instrucciones Sistema de seguridad sin contacto CES-AZ-AES-... (Unicode) | 2104766 | 10-09/17 | | 1.8 MB |
| Návod k použití Bezkontaktní bezpečnostní systém CES-AZ-AES-... (Unicode) | 2104766 | 10-09/17 | | 1.9 MB |
| Operating instructions Non-contact safety system CES-AZ-AES-... (Unicode) | 2104766 | 10-09/17 | | 1.8 MB |
| Istruzioni di impiego Sistema di sicurezza senza contatto CES-AZ-AES-... (Unicode) | 2104766 | 10-09/17 | | 1.8 MB |
| 使用说明书非接触式安全系统 CES-AZ-AES-... (特殊编码) | 2104766 | 10-09/17 | | 2.0 MB |







▼ Sicherheitsinformation und Wartung CES-A.../CES-AZ/CES-FD

Doc. no. **Version** **Language** **Download**

| | | | | |
|--|--------|----------|--|--|
| Sicherheitsinformation und Wartung CES-A.../CES-AZ/CES-FD | 109083 | 07-04/16 |      |  0.5 MB |
| Información de seguridad y mantenimiento CES-A.../CES-AZ/CES-FD | 109083 | 07-04/16 |  |  0.2 MB |
| Information de sécurité et entretien CES-A.../CES-AZ/CES-FD | 109083 | 07-04/16 |  |  0.2 MB |
| Informazioni sulla sicurezza e manutenzione CES-A.../CES-AZ/CES-FD | 109083 | 07-04/16 |  |  0.3 MB |
| Safety Information and Maintenance CES-A.../CES-AZ/CES-FD | | | | |
| Bezpečnostní informace a pokyny k údržbě CES-A.../CES-AZ/CES-FD | | | | |
| Informacje o bezpieczeństwie i konserwacji CES-A.../CES-AZ/CES-FD | | | | |
| 安全信息和维护 CES-A.../CES-AZ/CES-FD | | | | |

Declaration of conformity

EU-Konformitätserklärung

| | Doc. no. | Version | Language | Download |
|-------------------------------|----------|----------|--|--|
| EU-Konformitätserklärung | 2077154 | 34-01/17 |      |  0.5 MB |
| Declaración UE de conformidad | | | | |
| Déclaration UE de conformité | | | | |
| Dichiarazione di conformità | | | | |
| EU declaration of conformity | | | | |

CAD data

CAD data for this item on TraceParts