

CES-AZ-AES-02B (ORDER NO. 104775)

Evaluation unit CES-AZ-AES-02B (for 2 read heads)

- ▶ 2 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



Description

Unicode evaluation

Each actuator is highly coded (unicode). The evaluation unit detects only actuators that have 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, O2 Monitoring outputs (semiconductor)

DIA Diagnostic output

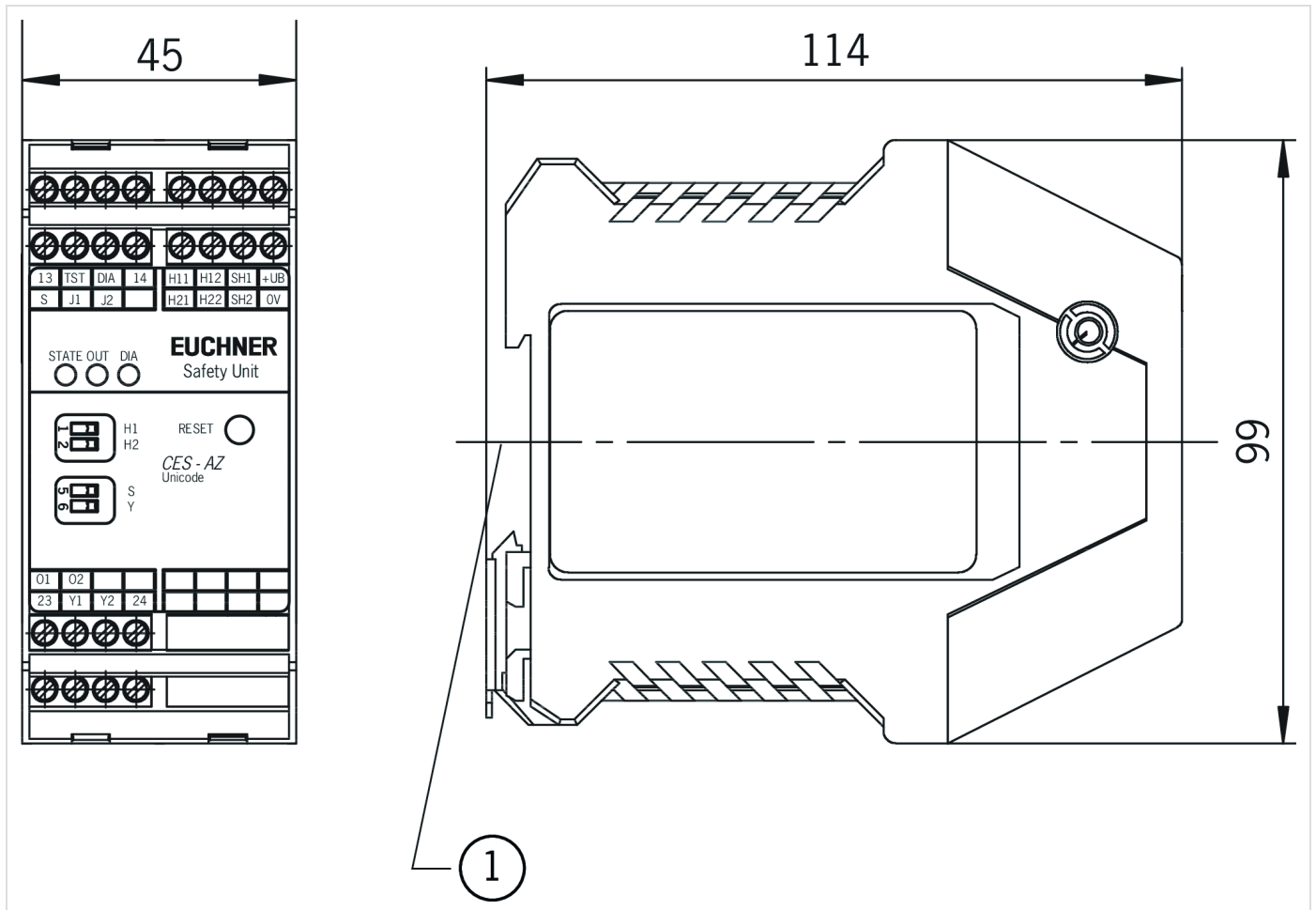
Y1, Y2 Feedback loop

J1, J2 Teach-in input

S Start button connection (monitoring of the falling edge)

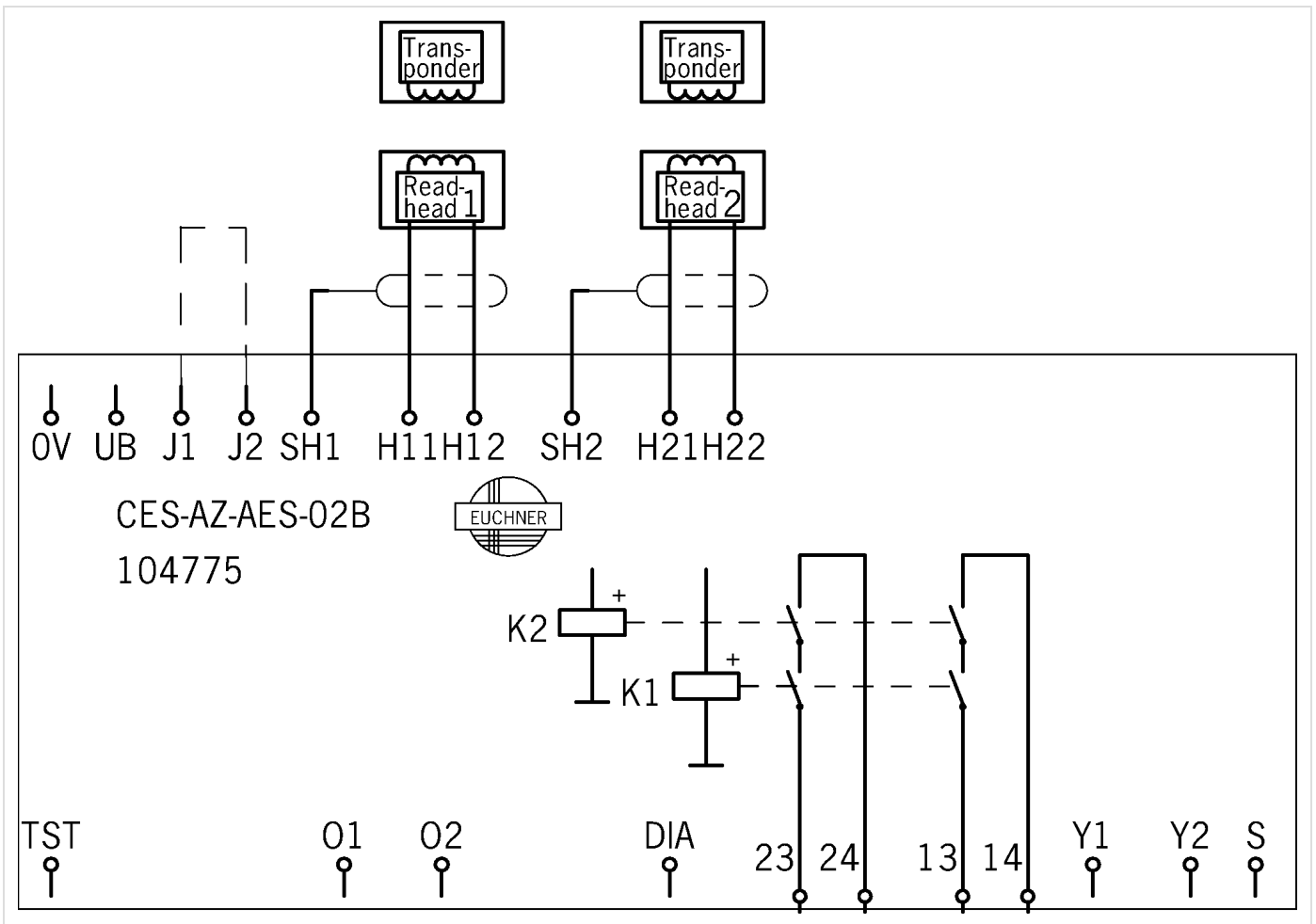
Important: The plug-in connection terminals are not included and must be ordered separately.

Dimension drawings



1 suitable for 35 mm mounting rail according to EN 60715

Connection examples



Technical data

Approvals



Work area

Repeat accuracy R

according to EN 60947-5-2 max. 10 %

Controls and indicators

LED indicator

Safety contacts status

Status LED

Diagnostics LED

Electrical connection ratings

Connection cross-section	
(plug-in screw/spring terminals)	0.25 ... 2.5 mm ²
Current consumption	
(with relay energized)	150 mA (without taking into account the load currents at the monitoring outputs)
Fusing	
external (operating voltage U _B)	0.25 ... 8 A
Operating voltage DC	
U _B	21 ... 24 ... 27 V DC regulated, residual ripple < 5%
EMC protection requirements	
	according to EN 60947-5-3
Current via feedback loop	
	5 ... 8 ... 10 mA
Degree of contamination (external, according to EN 60947-1)	
	2
permissible resistance in feedback loop	
	max. 600 Ω
Inputs: start button S, test input TST	
Input voltage	
HIGH	15 ... U _B V DC
LOW	0 ... 2 V DC
Input current	
HIGH	5 ... 8 ... 10 mA
Monitoring outputs: diagnostics DIA, door monitoring outputs O1,O2	
Output type	
	Semiconductor output, p-switching, short circuit-proof
Output current	
	max. 20 mA
Output voltage	
	0.8 x U _B ... U _B V DC
Safety contacts 13/14, 23/24	
Output type	
	Relay contacts, floating
Fusing	
external (safety circuit) according to EN 60269-1	6 AgG or 6 A circuit breaker (characteristic B or C)
rated conditional short-circuit current	100 A
Rated insulation voltage U _i	250 V
Rated impulse withstand voltage U _{imp}	4 kV
Discrepancy time	
(between the operating points of both relays)	max. 25 ms
Switching current	
at switching voltage AC/DC 5 ... 30 V	10 ... 6000 mA
at switching voltage AC/DC 21 ... 60 V	1 ... 300 mA
at switching voltage AC 5 ... 230 V	10 ... 2000 mA
Utilization category	
AC-12	60 V 0.3 A
AC-12	30 V 6 A
DC-12	60 V 0.3 A
AC-15	230 V 2 A
DC-13	24 V 3 A
DC-12	30 V 6 A
Switching load	
according to c UL us	Class 2 max. 30 V AC / Class 2 max. 60 V DC; 120 V AC 3 A / 240 V AC 1.5 A

Mechanical values and environment

Number of read heads	max. 2 read heads can be connected	
Connection	plug-in connection terminals, coded (Terminals not included)	
Degree of protection	IP20	
Ready delay	10 ... 12 s (After the operating voltage is switched on, the relay outputs are switched off and the door monitoring outputs are set to LOW level during the ready delay. For visual indication of the delay, the green STATE LED flashes at a frequency of approx. 15 Hz.)	
Material	Housing	Plastic PA6.6
Switching frequency	max. 0.25 Hz (In case of monitoring with feedback loop, the actuators must remain outside the actuating range, e.g. with a door open, until the feedback loop is closed.)	
Reaction time		
after change in the actuation status, 1 active actuator	max. 210 ms (Corresponds to the risk time according to EN 60947-5-3. This is the maximum OFF time 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 OFF time can increase to max. 430 ms. After a brief actuation of < 0.4 s, the switch-on delay can increase to max. 3 s if this is followed immediately by further actuation.)	
Start button actuating duration (for Manual Start operating mode)	min. 250 ms	
Start button response delay (for Manual start operating mode)	200 ... 300 ms	
after change in the actuation status, 2 active actuators	max. 290 ms (Corresponds to the risk time according to EN 60947-5-3. This is the maximum OFF time 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 OFF time can increase to max. 430 ms. After a brief actuation of < 0.4 s, the switch-on delay can increase to max. 3 s if this is followed immediately by further actuation.)	
Atmospheric humidity	not condensing	max. 80 % rH
Mounting distance	laterally to the neighboring device	min. 10 mm (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. This distance enables the heat from the evaluation unit to dissipate.)
Mounting type	Mounting rail 35 mm according to DIN EN 60715 TH35	
Ambient temperature	at $U_B = 24V$ DC	-20 ... +55 °C
Dwell time	min. 3 s (The dwell time is the time that the actuator must be outside the actuating range.)	
	Safety contacts 13/14, 23/24	
Number of safety contacts	2 Relay with internally monitored contacts	
Mechanical life	Operating cycles (relay)	10 x 10 ⁶

Reliability values acc. to EN ISO 13849-1

Diagnostic Coverage (DC)	99 %
Number of switching cycles	
	≤ 0.1 A at 24 V DC max. 760000 1/y
	≤ 1 A at 24 V DC max. 153000 1/y
	≤ 3 A at 24 V DC max. 34600 1/y
Mission time	20 y (This value is dependent on the number of switching cycles and the switching current.)
Monitoring of the guard position	
Category	4 (This value is dependent on the number of switching cycles and the switching current.)
Performance Level	PL e (This value is dependent on the number of switching cycles and the switching current.)
PFH _D	1.9×10^{-8} (This value is dependent on the number of switching cycles and the switching current.)

Miscellaneous

The following applies to the approval according to UL Operation only with UL Class 2 power supply or equivalent measures

In combination with read head CES-A-LNA-SC-077715, CES-A-LNA-05P-077806, CES-A-LNA-10P-077807, CES-A-LNA-05V-071845, CES-A-LNA-10V-071846, CES-A-LNA-15V-071847, CES-A-LNA-25V-071975, CES-A-LNA-15P-084682, CES-A-LCA-10V

Mounting distance

neighboring read heads	min. 50 mm (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. This distance enables the heat from the evaluation unit to dissipate.)
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In combination with read head CES-A-LNA-SC-077715, CES-A-LNA-05P-077806, CES-A-LNA-10P-077807, CES-A-LNA-05V-071845, CES-A-LNA-10V-071846, CES-A-LNA-15V-071847, CES-A-LNA-25V-071975, CES-A-LNA-15P-084682, CES-A-LCA-10V and actuator CES-A-BDA-20

Actuator distance s

Minimum distance for side approach direction	min. 4 mm (on mounting in non-metallic environment)
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Assured operating distances s_{ao}

with center offset $m=0$	min. 11 mm (on mounting in non-metallic environment)
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Assured release distance s_{ar}	max. 33 mm
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Operating distance

with center offset $m=0$	16 mm (on mounting in non-metallic environment)
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Switching hysteresis	0.5 ... 2 mm (on mounting in non-metallic environment)
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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

Mounting distance

neighboring read heads	min. 160 mm (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. This distance enables the heat from the evaluation unit to dissipate.)
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In combination with read head CES-A-LMN-SC and actuator CES-A-BBA-071840

Assured operating distances s_{ao}

with center offset $m=0$	min. 5 mm (This value applies to surface installation of the read head in metal and non-metallic installation of the actuator.)
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Assured release distance s_{ar}

with center offset $m=0$	max. 25 mm (This value applies to surface installation of the read head in metal and non-metallic installation of the actuator.)
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Operating distance

with center offset $m=0$	8 mm A distance of $s = 3$ mm must be maintained for a side approach direction. (This value applies to surface installation of the read head in metal and non-metallic installation of the actuator.)
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Switching hysteresis

with center offset $m=0$	1 ... 1.8 mm (These values apply to surface installation of the read head in metal and non-metallic installation of the actuator.)
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In combination with read head CES-A-LSP-05V-104966, CES-A-LSP-10V-104967, CES-A-LSP-SB-104969, CES-A-LSP-15V-106271 and actuator CES-A-BSP-104970

Assured operating distances s_{ao}

with center offset $m=0$	min. 10 mm (These values apply to installation of the read head and the actuator in an aluminum profile 45 x 45 mm.)
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Assured release distance s_{ar}

max. 45 mm

Operating distance

with center offset $m=0$	20 mm (These values apply to installation of the read head and the actuator in an aluminum profile 45 x 45 mm.)
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Switching hysteresis

1 ... 4 mm
(These values apply to installation of the read head and the actuator in an aluminum profile 45 x 45 mm.)

In combination with read head CES-A-LMN-SC and actuator CES-A-BDA-20

Assured operating distances s_{ao}

with center offset $m=0$	min. 6 mm (This value applies to surface installation of the read head in metal and non-metallic installation of the actuator.)
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Assured release distance s_{ar}

with center offset $m=0$	max. 26 mm (This value applies to surface installation of the read head in metal and non-metallic installation of the actuator.)
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Operating distance

with center offset $m=0$	9 mm A distance of $s = 4$ mm must be maintained for a side approach direction. (This value applies to surface installation of the read head in metal and non-metallic installation of the actuator.)
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Switching hysteresis

with center offset $m=0$	1 ... 1.8 mm (These values apply to surface installation of the read head in metal and non-metallic installation of the actuator.)
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In combination with read head CES-A-LNA-SC-077715, CES-A-LNA-05P-077806, CES-A-LNA-10P-077807, CES-A-LNA-05V-071845, CES-A-LNA-10V-071846, CES-A-LNA-15V-071847, CES-A-LNA-25V-071975, CES-A-LNA-15P-084682, CES-A-LCA-10V and actuator CES-A-BDA-18-156935

Actuator distance s

Minimum distance for side approach direction	min. 5 mm
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Assured operating distances s_{ao}

with center offset $m=0$	min. 10 mm (These values apply to surface installation of the read head and the actuator.)
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Assured release distance s_{ar}	max. 32 mm
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Operating distance

with center offset $m=0$	16 mm (These values apply to surface installation of the read head and the actuator.)
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Switching hysteresis

with center offset $m=0$	0.5 ... 1.4 mm (These values apply to surface installation of the read head and the actuator.)
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In combination with read head CES-A-LMN-SC

Mounting distance

neighboring read heads	min. 20 mm (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. This distance enables the heat from the evaluation unit to dissipate.)
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In combination with read head CES-A-LNA-SC-077715, CES-A-LNA-05P-077806, CES-A-LNA-10P-077807, CES-A-LNA-05V-071845, CES-A-LNA-10V-071846, CES-A-LNA-15V-071847, CES-A-LNA-25V-071975, CES-A-LNA-15P-084682, CES-A-LCA-10V and actuator CES-A-BBA-071840, CES-A-BCA

Actuator distance s	
Minimum distance for side approach direction	min. 3 mm
Assured operating distances s_{ao}	
with center offset $m=0$	min. 10 mm (These values apply to surface installation of the read head and the actuator.)
Assured release distance s_{ar}	max. 26 mm
Operating distance	
with center offset $m=0$	15 mm (These values apply to surface installation of the read head and the actuator.)
Switching hysteresis	0.5 ... 2 mm (These values apply to surface installation of the read head and the actuator.)

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

Assured operating distances s_{ao}	
in z direction (with center offset $x,y=0$), in x direction (with center offset $y,z=0$)	min. 10 mm (These values apply to surface installation of the read head and the actuator.)
Assured release distance s_{ar}	
in x or z direction	max. 50 mm
in y direction	max. 100 mm
Operating distance	
in z direction (with center offset $x,y=0$), in x direction (with center offset $y,z=0$)	15 mm (These values apply to surface installation of the read head and the actuator.)
Switching hysteresis	1 ... 4 mm (These values apply to surface installation of the read head and the actuator.)

In combination with read head CES-A-LMN-SC and actuator CES-A-BMB

Actuator distance s	
Minimum distance	min. 1.2 mm
Assured operating distances s_{ao}	
with center offset $m=0$	min. 3.5 mm (These values apply to surface installation of the read head in steel.)
Assured release distance s_{ar}	max. 10 mm
Operating distance	
with center offset $m=0$	5 mm (These values apply to surface installation of the read head in steel.)
Switching hysteresis	0.1 ... 0.3 mm (These values apply to surface installation of the read head in steel.)

In combination with read head CES-A-LQA-SC

Mounting distance	
neighboring read heads	min. 80 mm (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. This distance enables the heat from the evaluation unit to dissipate.)

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

Assured operating distances s_{ao}

in z direction (with center offset $x,y=0$), in x direction (with center offset $y,z=0$)	min. 14 mm (These values apply to surface installation of the read head and the actuator.)
Assured release distance s_{ar}	
in y direction	max. 100 mm
in x or z direction	max. 50 mm
Operating distance	
in z direction (with center offset $x,y=0$), in x direction (with center offset $y,z=0$)	19 mm (These values apply to surface installation of the read head and the actuator.)
Switching hysteresis	4 mm (These values apply to surface installation of the read head and the actuator.)

In combination with read head CES-A-LQA-SC and actuator CES-A-BQA

Assured operating distances s_{ao}

for side approach direction (distance in x direction 10 mm)	min. +/- 24 mm (These values apply to surface installation of the read head and the actuator.)
for vertical approach direction (center offset $m=0$)	min. 16 mm (These values apply to surface installation of the read head and the actuator.)
Assured release distance s_{ar}	max. 60 mm
Operating distance	
for side approach direction (distance in x direction 10 mm)	+/- 28 mm (These values apply to surface installation of the read head and the actuator.)
for vertical approach direction (center offset $m=0$)	23 mm (These values apply to surface installation of the read head and the actuator.)
Switching hysteresis	
for side approach direction (distance in x direction 10 mm)	1 ... 1.3 mm (These values apply to surface installation of the read head and the actuator.)
for vertical approach direction (center offset $m=0$)	2 ... 3 mm (These values apply to surface installation of the read head and the actuator.)

In combination with read head CES-A-LQA-SC and actuator CES-A-BBA-071840, CES-A-BCA

Assured operating distances s_{ao}

for side approach direction (distance in x direction 8 mm)	min. +/- 18 mm (These values apply to surface installation of the read head and the actuator.)
for vertical approach direction (center offset $m=0$)	min. 10 mm (These values apply to surface installation of the read head and the actuator.)
Assured release distance s_{ar}	max. 47 mm
Operating distance	
for vertical approach direction (center offset $m=0$)	15 mm (These values apply to surface installation of the read head and the actuator.)
for side approach direction (distance in x direction 8 mm)	+/- 22 mm (These values apply to surface installation of the read head and the actuator.)
Switching hysteresis	
for side approach direction (distance in x direction 8 mm)	1 ... 1.8 mm (These values apply to surface installation of the read head and the actuator.)
for vertical approach direction (center offset $m=0$)	2 ... 3 mm (These values apply to surface installation of the read head and the actuator.)

In combination with read head CES-A-LMN-SC and actuator CES-A-BDA-18-156935

Actuator distance s

Minimum distance for side approach direction	min. 3 mm
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Assured operating distances s_{ao}

with center offset $m=0$	min. 6 mm (These values apply to surface installation of the read head and the actuator.)
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Assured release distance s_{ar}

	max. 21 mm
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Operating distance

with center offset $m=0$	9 mm (These values apply to surface installation of the read head and the actuator.)
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Switching hysteresis

with center offset $m=0$	0.5 ... 1 mm (These values apply to surface installation of the read head and the actuator.)
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Accessories

CEM read heads

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



094800
CEM-A-LE05K-S2

- ▶ 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



102821
CEM-A-LE05K-S1-10P

- ▶ Two safety screws M5x16 included
- ▶ Read head with guard locking without guard lock monitoring
- ▶ Locking force 650 N
- ▶ With remanence
- ▶ With 10 m connecting cable, PUR, for connection to the CES evaluation unit
- ▶ 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

- ▶ 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

- ▶ 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

- ▶ 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

CES read heads

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



088785
CES-A-LCA-10V

- ▶ 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-LMN-SC, M8 plug connector



077790
CES-A-LMN-SC

- ▶ Cylindrical design M12
- ▶ M8 plug connector

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



077715
CES-A-LNA-SC-077715

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

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



077807
CES-A-LNA-10P-077807

- ▶ 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 10 m, PVC



071846
CES-A-LNA-10V-071846

- ▶ 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, PUR



084682
CES-A-LNA-15P-084682

- ▶ 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..., hard-wired encapsulated cable 15 m, PVC



071847
CES-A-LNA-15V-071847

- ▶ 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-071975

- ▶ 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 5 m, PUR



077806
CES-A-LNA-05P-077806

- ▶ 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 5 m, PVC



071845
CES-A-LNA-05V-071845

- ▶ Cube-shaped design 42 x 25 mm
- ▶ Hard-wired encapsulated cable made of PVC



PVC

- ▶ Cable length 5 m
- ▶ Two safety screws M4x14 included

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



106602
CES-A-LNN-05V-106602

- ▶ Cube-shaped design 42 x 25 mm
- ▶ Mounting compatible with series CES-A-LNA/LCA
- ▶ LED for indicating 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

- ▶ Cube-shaped design 42 x 25 mm
- ▶ Mounting compatible with series CES-A-LNA/LCA
- ▶ LED for indicating the door position
- ▶ With plug connector M8

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



095650
CES-A-LQA-SC

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

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



104966
CES-A-LSP-05V-104966

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

CET-AX read heads

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



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

- ▶ Read head with guard locking
- ▶ Locking force up to 6,500 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 (delivery state)

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



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

- ▶ Read head with guard locking
- ▶ Locking force up to 6,500 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 directions A and C (delivery state)

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



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

- ▶ Read head with guard locking
- ▶ Locking force up to 6,500 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 (delivery state)

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



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

- ▶ Read head with guard locking
- ▶ Locking force up to 6,500 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 (delivery state)

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



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

- ▶ Read head with guard locking
- ▶ Locking force up to 6,500 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 (delivery state)

Key adapter CKS



113130
CKS-A-L1B-SC-113130

- ▶ Key adapter with integrated CES read head
- ▶ Suitable for connection to a CES-AZ evaluation unit or CES-FD field unit
- ▶ Simple connection via plug connector M8
- ▶ Front cover: red
- ▶ High degree of protection IP67



158081
CKS-A-L1B-SC-158081

- ▶ LED indicator
- ▶ Key adapter with integrated CES read head
- ▶ Suitable for connection to a CES-AZ evaluation unit or CES-FD field unit
- ▶ Simple connection via plug connector M8
- ▶ Front cover: black
- ▶ High degree of protection IP67
- ▶ LED indicator

Connection material

Connection kit for evaluation units CES-AZ-.ES-02B, screw terminals

104771
CES-EA-TC-AK06-104771

- ▶ Plug-in screw terminals for evaluation units CES-AZ-.ES-02B
- ▶ Coded

Connection kit for evaluation units CES-AZ-.ES-02B, spring terminals

112630
CES-EA-TC-KK06-112630

- ▶ Plug-in spring terminals for evaluation units CES-AZ-.ES-02B
- ▶ Coded

Miscellaneous

Inrush current limiting module PM-SCL



096945
PM-SCL-096945

- ▶ Limitation of switch-on current
- ▶ Suitable for mounting on mounting rail

Contacts

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