

**Certificate of constancy of performance****0432-CPR-00099-02**

Version 01

In compliance with Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction products Regulation or CPR), this certificate applies to the construction product

**ECO panic exit devices**

Panic exit devices operated by a horizontal bar for single and double leaf doors in escape routes as detailed and classified on annex 2 with the intended use according to annex 1,

placed on the market under the name or trade mark of

**ECO Schulte GmbH & Co. KG**

Iserlohner Landstraße 89

58706 Menden

Deutschland

and produced in the manufacturing plant(s)

**see annex 1**

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in annex ZA of the standard(s)

**EN 1125:2008**

under **system 1** for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the

**constancy of performance of the construction product.**

This certificate was first issued on 19.06.2015 and will remain valid until 19.06.2020 as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

Dortmund, 02.02.2017



Dr. Krasch  
Head of Certification Body

This Certificate consists of 1 page and 4 annex(es).

This Certificate replaces the Certificate no. 0432-CPR-00099-02 dated 19.06.2015,  
Version 00.



The original of this document was issued in German language.

In case of doubt only the German version is valid.

## ECO panic exit devices

### Manufacturing plants

product	Manufacturing plants
locks	<p>ECO Schulte GmbH &amp; Co. KG Iserlohner Landstraße 117 D-58706 Menden DO 20.1</p> <p>-----</p> <p>ECO Schulte Doorsystem Zhuhai Co., Ltd. No. 31, Zhuhai Free trade Zone Zhuhai, Guangdong P.R. China DO 25.21</p> <p>-----</p> <p>Olso Meccanica Via Loda 575 41018 S. Cecario Sul Panaro (Modena) Italien DO 6.13</p>
bars	<p>ECO Schulte GmbH &amp; Co. KG Iserlohner Landstraße 117 D-58706 Menden DO 30.03, DO 2.17, DO 20.1</p>
Electronic outside handle	<p>SALTO SYSTEMS S.L. Pol. Lanbarren C/Arkotz,9 E-20180 Oiartzun Spanien DO 20.52</p> <p>-----</p> <p>C.Ed. Schulte GmbH Friedrichstraße 243 D-42551 Velbert DO 20.38</p>

# Materialprüfungsamt Nordrhein-Westfalen

Prüfen · Überwachen · Zertifizieren

## ECO panic exit device series GBS 8x

No.	item no.	VS-Type	Function	back-set	distance	forend width	accessories / comment	classification	cmb	bar	DO																				
1	GBS 81 latch	B		55-100 mm	72mm PZ 74mm RZ	≥ 20 mm	diverse strike plates; diverse strike plates for electric strike	<table border="1"> <tr><td>3</td><td>7</td><td>7</td><td>B</td><td>1</td><td>3</td><td>2</td><td>1</td><td>A</td><td>B</td></tr> <tr><td>3</td><td>7</td><td>7</td><td>B</td><td>1</td><td>3</td><td>2</td><td>2</td><td>B</td><td>B</td></tr> </table>	3	7	7	B	1	3	2	1	A	B	3	7	7	B	1	3	2	2	B	B		S1, S2 S3	20.1, 25.21
3	7	7	B	1	3	2	1	A	B																						
3	7	7	B	1	3	2	2	B	B																						
2	GBS 83	A		65 mm	72 mm PZ	24 mm	Strike plate	<table border="1"> <tr><td>3</td><td>7</td><td>6</td><td>B</td><td>1</td><td>3</td><td>2</td><td>1</td><td>A</td><td>A</td></tr> <tr><td>3</td><td>7</td><td>6</td><td>B</td><td>1</td><td>3</td><td>2</td><td>2</td><td>B</td><td>A</td></tr> </table>	3	7	6	B	1	3	2	1	A	A	3	7	6	B	1	3	2	2	B	A	3	S1, S2 S3	6.13
3	7	6	B	1	3	2	1	A	A																						
3	7	6	B	1	3	2	2	B	A																						
3	GBS 84	C		65 mm		24 mm	floor socket, stay bar, switching lock, top strike plate, rod guide	<table border="1"> <tr><td>3</td><td>7</td><td>6</td><td>B</td><td>1</td><td>3</td><td>2</td><td>1</td><td>A</td><td>C</td></tr> <tr><td>3</td><td>7</td><td>6</td><td>B</td><td>1</td><td>3</td><td>2</td><td>2</td><td>B</td><td>C</td></tr> </table>	3	7	6	B	1	3	2	1	A	C	3	7	6	B	1	3	2	2	B	C	2	S1, S2 S3	6.13
3	7	6	B	1	3	2	1	A	C																						
3	7	6	B	1	3	2	2	B	C																						

**For position 1:**

Max. door leaf weight: 400 kg  
 Max. door leaf width: 3500 mm  
 Max door leaf height: 1500 mm

**For position 2 – 3 :**

Max. door leaf weight: 200 kg

## ECO panic exit device series GBS 9x

No.	item no.	VS-Type	Function	back-set	distance	forend width	accessories / comment	classification	cmb	bar	DO
1	GBS 90A <sup>b)</sup>	B	I, III d <sup>c)</sup>	55–65 mm	72mm PZ 74mm RZ	≥ 20 mm	strike plate type R and type C self-locking panic lock strike	3 7 6 B 1 3 2 1 A B		S1, S2	20.1
								3 7 6 B 1 3 2 2 B B		S3	
2	GBS 91A <sup>b)</sup>	B	I, III d <sup>c)</sup>	55–65 mm	72mm PZ 74mm RZ	≥ 20 mm	diverse strike plates; diverse strike plates for electric strike	3 7 6 B 1 3 2 1 A B		S1, S2	20.1, 25.21
								3 7 6 B 1 3 2 2 B B		S3	
3	GBS 92 x <sup>a)</sup>	B	I, III, IV, V	55-100 mm	72mm PZ 74mm RZ	≥ 20 mm	diverse shoot bolt locks, diverse shoot bolt lock safed, with or without rod, switch lock, Latchlock, Ground locking recess, ground sleeve, stone jack, closing plate, Rod guide plate E-opener IST FT 505 IST FT 305/306	3 7 7 B 1 3 2 1 A B	5	S1, S2	20.1
								3 7 7 B 1 3 2 2 B B		S3	
4	GBS 93 x <sup>a)</sup>	A	I, III, IV, V	55-100 mm	72mm PZ 74mm RZ	≥ 20 mm		3 7 7 B 1 3 2 1 A A		S1, S2	20.1
								3 7 7 B 1 3 2 2 B A		S3	
5	GBS 94 x	C	-	65-100 mm		≥ 20 mm		3 7 7 * B 1 3 2 1 A C	4	S1, S2	20.1
								3 7 7 * B 1 3 2 2 B C		S3	

c) – Special Functions GBS 90A and GBS 91A

- 02 Microswitch for monitoring dead bolt or swiching function
- 05 Lever Handle blocking, onesided, electroless open, B\* (swing side) oder G\* (oposite swing side)
- 06 Lever Handle blocking, onesided, electroless blocked, B\* (swing side) oder G\* (oposite swing side)
- 08 24-Volt Model

**For position 1 and 2:**

Max. door leaf weight: 200 kg

**For position 3 – 5:**

Max. door leaf weight: 300 kg  
 Max. door leaf width: 3500 mm  
 Max door leaf height: 1500 mm

## ECO panic exit device series ECO/GBS 1xx

No.	item no.	VS-Type	Function	back-set	distance	forend width	accessories / comment	classification	cmb	bar	DO																				
1	ECO/GBS 109	B		55-100 mm	72mm PZ 74mm RZ	≥ 20 mm	diverse strike plates; diverse strike plates for electric strike	<table border="1"> <tr><td>3</td><td>7</td><td>7</td><td>B</td><td>1</td><td>3</td><td>2</td><td>1</td><td>A</td><td>B</td></tr> <tr><td>3</td><td>7</td><td>7</td><td>B</td><td>1</td><td>3</td><td>2</td><td>2</td><td>B</td><td>B</td></tr> </table>	3	7	7	B	1	3	2	1	A	B	3	7	7	B	1	3	2	2	B	B		S1, S2 S3	20.1
3	7	7	B	1	3	2	1	A	B																						
3	7	7	B	1	3	2	2	B	B																						
2	ECO/GBS 111 <sup>a)</sup>	B	I	55-100 mm	72mm PZ 74mm RZ	≥ 20 mm	diverse strike plates; diverse strike plates for electric strike	<table border="1"> <tr><td>3</td><td>7</td><td>7</td><td>B</td><td>1</td><td>3</td><td>2</td><td>1</td><td>A</td><td>B</td></tr> <tr><td>3</td><td>7</td><td>7</td><td>B</td><td>1</td><td>3</td><td>2</td><td>2</td><td>B</td><td>B</td></tr> </table>	3	7	7	B	1	3	2	1	A	B	3	7	7	B	1	3	2	2	B	B		S1, S2 S3	20.1, 25.21
3	7	7	B	1	3	2		1	A	B																					
3	7	7	B	1	3	2		2	B	B																					
3	ECO/GBS 112 <sup>a)</sup>	B	III	55-100 mm	72mm PZ 74mm RZ	≥ 20 mm		<table border="1"> <tr><td>3</td><td>7</td><td>7</td><td>B</td><td>1</td><td>3</td><td>2</td><td>1</td><td>A</td><td>B</td></tr> <tr><td>3</td><td>7</td><td>7</td><td>B</td><td>1</td><td>3</td><td>2</td><td>2</td><td>B</td><td>B</td></tr> </table>	3	7	7	B	1	3	2	1	A	B	3	7	7	B	1	3	2	2	B	B		S1, S2 S3	
3	7	7	B	1	3	2		1	A	B																					
3	7	7	B	1	3	2	2	B	B																						
4	ECO/GBS 113 <sup>a)</sup>	B	IV	55-100 mm	72mm PZ 74mm RZ	≥ 20 mm	<table border="1"> <tr><td>3</td><td>7</td><td>7</td><td>B</td><td>1</td><td>3</td><td>2</td><td>1</td><td>A</td><td>B</td></tr> <tr><td>3</td><td>7</td><td>7</td><td>B</td><td>1</td><td>3</td><td>2</td><td>2</td><td>B</td><td>B</td></tr> </table>	3	7	7	B	1	3	2	1	A	B	3	7	7	B	1	3	2	2	B	B		S1, S2 S3		
3	7	7	B	1	3	2	1	A	B																						
3	7	7	B	1	3	2	2	B	B																						
5	ECO/GBS 114 <sup>a)</sup>	B	V	55-100 mm	72mm PZ 74mm RZ	≥ 20 mm	<table border="1"> <tr><td>3</td><td>7</td><td>7</td><td>B</td><td>1</td><td>3</td><td>2</td><td>1</td><td>A</td><td>B</td></tr> <tr><td>3</td><td>7</td><td>7</td><td>B</td><td>1</td><td>3</td><td>2</td><td>2</td><td>B</td><td>B</td></tr> </table>	3	7	7	B	1	3	2	1	A	B	3	7	7	B	1	3	2	2	B	B		S1, S2 S3		
3	7	7	B	1	3	2	1	A	B																						
3	7	7	B	1	3	2	2	B	B																						
6	ECO/GBS 121 <sup>a)</sup>	A	I	55-100 mm	72mm PZ 74mm RZ	≥ 20 mm		<table border="1"> <tr><td>3</td><td>7</td><td>7</td><td>B</td><td>1</td><td>3</td><td>2</td><td>1</td><td>A</td><td>A</td></tr> <tr><td>3</td><td>7</td><td>7</td><td>B</td><td>1</td><td>3</td><td>2</td><td>2</td><td>B</td><td>A</td></tr> </table>	3	7	7	B	1	3	2	1	A	A	3	7	7	B	1	3	2	2	B	A	18	S1, S2 S3	20.1
3	7	7	B	1	3	2	1	A	A																						
3	7	7	B	1	3	2	2	B	A																						
7	ECO/GBS 122 <sup>a)</sup>	A	III	55-100 mm	72mm PZ 74mm RZ	≥ 20 mm		<table border="1"> <tr><td>3</td><td>7</td><td>7</td><td>B</td><td>1</td><td>3</td><td>2</td><td>1</td><td>A</td><td>A</td></tr> <tr><td>3</td><td>7</td><td>7</td><td>B</td><td>1</td><td>3</td><td>2</td><td>2</td><td>B</td><td>A</td></tr> </table>	3	7	7	B	1	3	2	1	A	A	3	7	7	B	1	3	2	2	B	A	18	S1, S2 S3	
3	7	7	B	1	3	2	1	A	A																						
3	7	7	B	1	3	2	2	B	A																						
8	ECO/GBS 123 <sup>a)</sup>	A	IV	55-100 mm	72mm PZ 74mm RZ	≥ 20 mm		<table border="1"> <tr><td>3</td><td>7</td><td>7</td><td>B</td><td>1</td><td>3</td><td>2</td><td>1</td><td>A</td><td>A</td></tr> <tr><td>3</td><td>7</td><td>7</td><td>B</td><td>1</td><td>3</td><td>2</td><td>2</td><td>B</td><td>A</td></tr> </table>	3	7	7	B	1	3	2	1	A	A	3	7	7	B	1	3	2	2	B	A	18	S1, S2 S3	
3	7	7	B	1	3	2	1	A	A																						
3	7	7	B	1	3	2	2	B	A																						
9	ECO/GBS 124 <sup>a)</sup>	A	V	55-100 mm	72mm PZ 74mm RZ	≥ 20 mm		<table border="1"> <tr><td>3</td><td>7</td><td>7</td><td>B</td><td>1</td><td>3</td><td>2</td><td>1</td><td>A</td><td>A</td></tr> <tr><td>3</td><td>7</td><td>7</td><td>B</td><td>1</td><td>3</td><td>2</td><td>2</td><td>B</td><td>A</td></tr> </table>	3	7	7	B	1	3	2	1	A	A	3	7	7	B	1	3	2	2	B	A	18	S1, S2 S3	
3	7	7	B	1	3	2	1	A	A																						
3	7	7	B	1	3	2	2	B	A																						

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No.	item no.	VS-Type	Function	back-set	distance	forend width	accessories / comment	classification	cm b	bar	DO
10	ECO/GBS 131 <sup>a)</sup>	B	I	65-100 mm	72mm PZ 74mm RZ	≥ 20 mm		3 7 7 B 1 3 2 1 A B		S1, S2	
								3 7 7 B 1 3 2 2 B B		S3	
11	ECO/GBS 132 <sup>a)</sup>	B	III	65-100 mm	72mm PZ 74mm RZ	≥ 20 mm	diverse strike plates; top shoot bolt; latchlock, striking plate	3 7 7 B 1 3 2 1 A B		S1, S2	
								3 7 7 B 1 3 2 2 B B		S3	
12	ECO/GBS 133 <sup>a)</sup>	B	IV	65-100 mm	72mm PZ 74mm RZ	≥ 20 mm		3 7 7 B 1 3 2 1 A B		S1, S2	
								3 7 7 B 1 3 2 2 B B		S3	
13	ECO/GBS 134 <sup>a)</sup>	B	V	65-100 mm	72mm PZ 74mm RZ	≥ 20 mm		3 7 7 B 1 3 2 1 A B		S1, S2	
								3 7 7 B 1 3 2 2 B B		S3	
14	ECO/GBS 141 <sup>a)</sup>	A	I	65-100 mm	72mm PZ 74mm RZ	≥ 20 mm		3 7 7 B 1 3 2 1 A A	18	S1, S2	20.1
								3 7 7 B 1 3 2 2 B A		S3	
15	ECO/GBS 142 <sup>a)</sup>	A	III	65-100 mm	72mm PZ 74mm RZ	≥ 20 mm	top shoot bolt; latchlock, striking plate	3 7 7 B 1 3 2 1 A A	18	S1, S2	
								3 7 7 B 1 3 2 2 B A		S3	
16	ECO/GBS 143 <sup>a)</sup>	A	IV	65-100 mm	72mm PZ 74mm RZ	≥ 20 mm		3 7 7 B 1 3 2 1 A A	18	S1, S2	
								3 7 7 B 1 3 2 2 B A		S3	
17	ECO/GBS 144 <sup>a)</sup>	A	V	65-100 mm	72mm PZ 74mm RZ	≥ 20 mm		3 7 7 B 1 3 2 1 A A	18	S1, S2	
								3 7 7 B 1 3 2 2 B A		S3	
18	ECO/GBS 150 ECO/GBS 152	C	-	65-100 mm		≥ 20 mm	diverse shoot bolt locks, diverse shoot bolt lock safed, with or without rod, switch lock, Latchlock, Ground locking recess, ground sleeve, stone jack, striking plate, Rod guide plate E-opener IST FT 505 IST FT 305/306	3 7 7 * B 1 3 2 1 A C	6-9, 14-17	S1, S2	
								3 7 7 * B 1 3 2 2 B C		S3	

# Materialprüfungsamt Nordrhein-Westfalen

Prüfen · Überwachen · Zertifizieren

No.	item no.	VS-Type	Function	back-set	distance	forend width	accessories / comment	classification	cmb	bar	DO
19	ECO/GBS 181 <sup>a)</sup>	B	I	60/100 mm		≥ 20 mm	diverse strike plates; diverse strike plates for electric strike	3 7 7 B 1 3 2 1 A B		S1, S2	
								3 7 7 B 1 3 2 2 B B		S3	
20	ECO/GBS 182 <sup>a)</sup>	B	III	60/100 mm		≥ 20 mm		3 7 7 B 1 3 2 1 A B		S1, S2	
								3 7 7 B 1 3 2 2 B B		S3	
21	ECO/GBS 191 <sup>a)</sup>	B	I	65-100 mm	72mm PZ 74mm RZ	≥ 20 mm		3 7 7 B 1 3 2 1 A B		S1, S2	
								3 7 7 B 1 3 2 2 B B		S3	
22	ECO/GBS 192 <sup>a)</sup>	B	III	65-100 mm	72mm PZ 74mm RZ	≥ 20 mm	ECO/GBS 198 Addition latchlock  ECO/GBS 199 Addition latchlock operated by handle	3 7 7 B 1 3 2 1 A B		S1, S2	20.1
								3 7 7 B 1 3 2 2 B B		S3	
23	ECO/GBS 193 <sup>a)</sup>	B	IV	65-100 mm	72mm PZ 74mm RZ	≥ 20 mm	diverse strike plates; diverse strike plates for electric strike	3 7 7 B 1 3 2 1 A B		S1, S2	
								3 7 7 B 1 3 2 2 B B		S3	
24	ECO/GBS 194 <sup>a)</sup>	B	V	65-100 mm	72mm PZ 74mm RZ	≥ 20 mm		3 7 7 B 1 3 2 1 A B		S1, S2	
								3 7 7 B 1 3 2 2 B B		S3	

Max. door leaf weight:  
Max. door leaf width:  
Max door leaf height:

300 kg  
4500 mm  
1500 mm



# Materialprüfungsamt Nordrhein-Westfalen

Prüfen · Überwachen · Zertifizieren

## Legend

- VS-type A            Lock for single and double leaf doors.
- VS-type B            Lock for outside opening single leaf doors.
- VS-type C            Lock for inactive leaves in a double leaf door.
- \*)                      With Type C locks – locks intended exclusively for the inactive leaf of double-leaf doors – only 20.000 test cycles were conducted as proof of Class 7 lasting functionality (2nd mark) in accordance with EN 1125.
- a)                      With lock cylinders (PZ/RZ) as standard or half cylinder locks, the escape door function of the lock is only guaranteed when the key is removed.
- b)                      All lock cylinder designs have no influence on the perfect escape door function (as a special function if desired).
- cmb:                   Shows each matching latch for the other door leaf. Only with latches for double-leaf doors.
- bar:                    Shows the pushbar/tpuchbar with which the latches can be fitted.
- Function I:            One-piece spindle hub, constantly active escape door function.  
It is always possible to use the handle on the inside to open the door. The door can only be opened from the outside using the key in the track cylinder core.
- Function III:           Split spindle hub, constantly active escape door function from the inside.  
It is always possible to use the handle on the inside to open the door. The handle on the outside is either permanently engaged or permanently disengaged using the key. The latch can only be operated from the outside by the key. Once the handle on the inside has been used to open the door, the door can also be opened from the outside until it is relocked manually.
- Function IV:           Split spindle hub, constantly active escape door function from the inside.  
It is always possible to use the handle on the inside to open the door. The handle on the outside is either permanently engaged or permanently disengaged using the key. The latch can only be operated from the outside by the key. Once the handle on the inside has been used to open the door, it cannot be opened by the handle on the outside either.
- Function V:            Split spindle hub, constantly active escape door function from the inside.  
It is always possible to use the handle on the inside to open the door. In the default position, the fitting on the outside is disengaged. It can only be engaged by turning the key to a certain position. Once the key has been removed, the outside fitting is disengaged once again.
- Remark:                In agreement with the terms of the German building regulation legislation, a lock of VS-type B according to DIN EN 1125 (lock for single leaf doors) can be used also in the active leaf of a double leaf door, if:
- a)                      the inactive leaf catch is secured against maloperation, and
- b)                      the passage width of the active leaf is sufficient as escape route width.



**Bars**

no.	item no.	type	code	distance	barlength	tube	leverarm	covercap
S1	ECO EPN 900 III, 45°	A = push bar	30.03	PZ 72 mm RZ 74 mm UG	≤ 1350 mm	stainless steel, steel	stainless steel, steel	stainless steel, plastic
S2	ECO EPN 900 IV, 45°	A = push bar	20.1	PZ 72 mm RZ 74 mm UG	≤ 1350 mm	stainless steel, steel	stainless steel, die-cast zinc	stainless steel, plastic, die-cast zinc
S3	EPN 2000 II	B = touch bar	2.17	PZ 72 mm, RZ 74 mm	≤ 1350 mm	Stainless steel	Stainless steel	Stainless steel



## ECO panic exit devices

### Alternative- & special – equipment

#### 1. Outside door handle

Door handles according to DIN 18273 with valid confirmity certficate can be used as outside door handle.

For the locks with bar combination S1 - S3 the following electronic lever handles can be use:

- Model SALTO XS4 referred to P-120003012 of Fa. SALTO Systems S.L. can be used as outside door handle. Those door handles must have the code DO 20.52.

For the locks with bar combination S2 the following electronic lever handles can be use:

- Model “CES OMEGA FLEX ILS” referred to P-120004824 of Fa. C.Ed. Schulte GmbH.

#### 2. Escape route security

There are no safety concernings by using GFS-door guard “Gfs-Tag-Alarm” with the panic exit devices.

Manufacturer: GfS Gesellschaft für Sicherheitstechnik mbH  
Tempowerkring 15  
21079 Hamburg

**Intended use:**

For use on single and double leaf door in escape routes

Essential characteristic	Requirement clauses EN 1125: 2008	Performance
<p><b>Ability to release</b> (for locked doors on escape routes)</p>	<p>4.2.1 Threshold according to table 1 Release function Design bar Bar projection Intended use for the door Door free movement Door mass and dimensions</p> <p>Access from outside Release forces Security requirement</p>	<p>≤ 1S: passed Type A (touch bar) or type B (push bar): passed w ≤ 100 mm or 150 mm depending on the model Grade A, B or C: passed passed Grade 6: (door mass 200 kg): passed (Dimensions: 1320 mm width, 2520 mm high): passed Grade 7: (door mass 300 kg): passed (Dimensions: 1500 mm width, 3500 mm high): passed</p> <p>passed (≤ 80N, ≤ 220N under pressure): passed (Grade 1, 1000 N) passed</p>
<p><b>Durability of ability to release against aging and degradation</b> (for locked doors on escape routes)</p>	<p>4.2.1 Threshold according to table 1 Corrosion resistance Temperature range Re-engagement force Durability</p> <p>Abuse resistance –Horizontal bar</p> <p>Final examination</p>	<p>passed Grade 3 (96h, ≤ 120N) passed (-10°C to +60°C, ≤ +50%) passed (≤ 50 N) passed (intended use for the door Grade A, B: 200.000 cycles): Grade 7: passed (intended use for the door Grade C: 20.000 cycles, Grade 7) passed</p> <p>(500N, 1000N): passed</p> <p>(Release forces (≤ 80N, ≤ 220N under pressure): passed (Door face gap R ≥ 25mm): passed Door free movement) passed</p>
<p><b>Self-closing ability C</b> (for fire/smoke doors on escape routes)</p>	<p>4.2.1 Threshold according to table 1 Re-engagement force</p>	<p>(≤ 50N) passed</p>
<p><b>Durability of Self closing ability C against aging and degradation</b> (for fire/smoke doors on escape routes)</p>	<p>4.2.1 Threshold according to table 1 Durability</p> <p>Re-engagement force</p>	<p>(intended use for the door Grade A, B: 200.000 cycles, Grade 7): passed (intended use for the door Grade C: 20.000 cycles, Grade 7) passed</p> <p>(≤ 50 N) passed</p>
<p><b>Resistance to fire E (integrity) and I (insulation)</b> (for use on fire doors on escape routes)</p>	<p>4.2.1 Threshold according to table 1, annex B</p>	<p>Grade B: passed</p>
<p><b>Control of dangerous substances</b></p>	<p>4.1.29 Note 2 in ZA.1</p>	<p>According to the manufacturer the materials in the door closer do not contain or release any dangerous substances in excess of maximum levels specified in existing European material standards or any national regulations</p>