



# BREAK-OUT SYSTEM FOR SLIDING DOOR ASSEMBLED MANUAL



KBS1E SLIDING DOORS BREAK-OUT SYSTEM

KBS1D SIDE WALLS BREAK-OUT SYSTEM

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#### 1. INTRODUCTION

The break-out systems for sliding doors made from FACE are available in kit, as indicated in the X200 sales list.

This manual provides the instructions to perform the assembly of the KBS1E break-out device for sliding door and KBS1D break-out device for side wall, for Metra frames NC50I or for frames with similar size and of equivalent stability.

#### 1.1 EC MARKING AND EUROPEAN DIRECTIVES

Break-out systems of the sliding doors and side walls are used in automatic doors for escape routes and emergency exits. These automatic doors complete of break-out system, must comply with the European standard EN 16005 and are CE-marked in accordance with the Machinery Directive (2006/42/EC).

Break-out systems of the KBS1E sliding doors and KBS1D side walls, in conjunction with the FACE automation model SL5A and SF50 frame system (corresponding to the NC50I Metra systems), are approved by the Prima Ricerca & Sviluppo S.r.l. laboratory and the test report is available at <a href="https://www.facespa.it">www.facespa.it</a> in Download area.

All data and information contained in this manual have been drawn up and checked with the greatest care. However FACE cannot take any responsibility for eventual errors, omissions or inaccuracies due to technical or illustrative purposes.

FACE reserves the right to make changes and improvements to their products. For this reason, the illustrations and the information appearing in this document are not definitive.

This edition of the manual cancels and replaces all previous versions. In case of modification will be issued a new edition.

## 2. TECHNICAL DATA

Technical data	Sliding door	Side wall
Kit device code	KBS1E, KBS1E11	KBS1D
Maximum Height	Hm = 2400 mm	Hs = 2400 mm
	Note: the measure Hm includes the height of break-	
	out profiles equal to 80 mm.	
Maximum width	Lm = 1100 mm (code KBS1E11)	Ls = 1600 mm
	Lm = 1400 mm (code KBS1E)	
Minimum width	Lm = 600 mm	-
Maximum weight	120 kg x 0,8 m	100 kg
	140 kg	
	120 kg	
	100 kg	
	80 kg	
	60 kg	
	40 kg	
	20 kg	
	0,6 0,7 0,8 0,9 1,0 1,1 1,2 1,3 1,4 m	
Sliding doors fixing to the	Use at least 2 screws per carriage (see ref. A in the	-
carriages	figure).  Add the second upper wheel on each carriage (code	-
Upper wheels on automation carriages	5140), already included in the kit KBS1E and KBS1E11	-
	code (see ref. B in the figure).	
Hinges for the break-out	-	The hinges for the break-out of the
of the side wall		side wall, are not included in the kit
		KBS1D code, but they are part of the frame (see ref. C in the figure).
		frame (see ref. c in the figure).
B		
		©
	A	
80		
<del>                                     </del>		
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	Lm	

## 3. SLIDING DOORS BREAK-OUT SYSTEM

## 3.1 ASSEMBLY PROCEDURE FOR KBS1E KIT

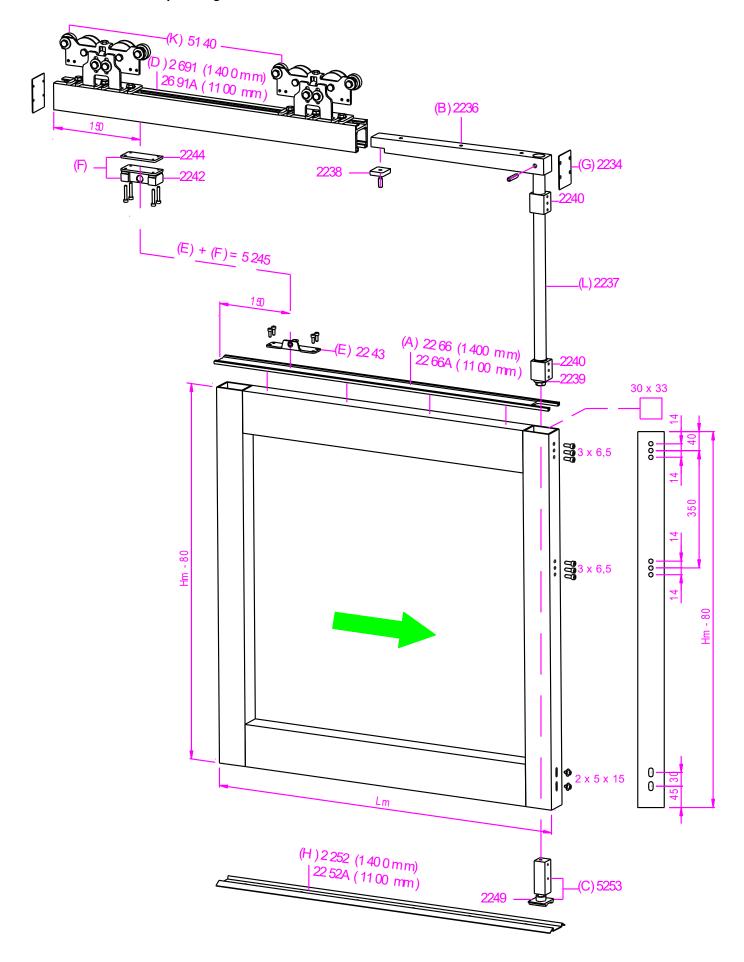
Assemble the components in the kit KBS1E on the sliding door as shown below.

The vertical sizes of the leaf are indicated in Fig. 4. The horizontal sizes of the leaf are indicated in Fig. 6.

Note: the KBS1E kit break-out is designed to be assembled on the sliding doors in which the vertical profile has a minimum chamber of 30 x 33 mm.

Step	Ref.	Description
1	В	Insert the pole (L) into the hinge pole (B) using the 8 x 35 mm elastic pin.
2	-	Make nr.6 holes d.6,5mm, on the vertical profile of leaf for attaching the hinge pole (B), respect the measurements shown in Figure 1.
3	-	Make nr.2 slots d.5x15mm, on the vertical profile of leaf for attaching the lower pin (C), respect the measurements shown in Figure 1.
4	А	Cut profile (A) and their brushes to measure Lm, and secure it at the top of the leaf, by screws not supplied by us.
		Note: in case of doors with 2 leaves, it's preferable to cut the profile few millimetres longer (Lm +2), to cover the gap which is determined in the upper part of the doors closed position.
5	В	Insert the hinge pole (B) in vertical profile and secure with the provided screws, in correspondence of the drilled holes in step 2.
		Note: lubricate the hinge pole before insert.
6	С	Insert the lower pin (C) in vertical profile and secure using the supplied screws, in the slots made in step 3.
7	D	Cut profile (D) and their brushes to measure Lm, insert it into the hinge pole (B) and secure with the provided screws.
		Note: in case of doors with 2 leaves, it's preferable to cut the profile few millimetres longer (Lm +2), to cover the gap which is determined in the upper part of the doors closed position.
8	Е	Secure the coupling pin (E) on the profile (A) at the top of the door, respect the measurements shown in Figure 1.
9	F	Insert the coupling pin (F) on the profile (D), using the provided screws, respect the measurements shown in Figure 1.
10	G	Fix the heads (G) to the profile (D) with the provided screws.

FIGURE 1: KBS1E assembly drawing



# 3.2 INSTALLATION AND ADJUSTMENT PROCEDURE OF THE BREAK-OUT MOBILE LEAF

Step	Ref.	Description
1	Н	Cut the sliding guide (H) to measure Lm (or higher), and attach it to the floor, as shown in the drawings of the various types of door available in this manual, with screws not supplied by us.
2	K	Fix the leaf to the automation carriages, using at least 2 fixing screws, and add the second upper wheel (K) on each carriage.
3	С	Adjust the pressure of the lower pin (C) on the sliding guide (H), as shown in fig. 2.
4	B1	To level any collapse of the break-out leaf, proceed as shown in fig. 2 and as indicated below:
		- Loosen the B2 and B3 screws,
		- Tighten the B1 screw until you get the levelling of leaf,
		- Tighten the B2 and B3 screws.
5	F	Adjust the force necessary for the break-out of the leaf, as shown in fig. 2.
		- To increase/reduce the manual force to break-out leaf, tighten/loosen the screw on the side of the coupling pin (F);
		- if you want to further reduce the manual force to break out leaf, you can increase the measurement of 150 mm to fixing the coupling pin (E) and (F).
		Note: verify that the force required to break-out every door does not exceed the value of 220N, as required by the EN 16005 European standard.
6	-	Fix the PH3 photocell on wall at the top, through the KPH1E support, so that the break-out of the leaf is detected by the photocell, as indicated in Figure 6.
7	-	Make the electrical connections of the PH3 photocell to the electronic control 5CB01, as shown in Figure 3.
8	J	Apply on the leaf, in a visible location and in the direction of the break-out, the label supplied indicating the emergency exit, as illustrated in Figure 2.

FIGURE 2: KBS1E adjustments

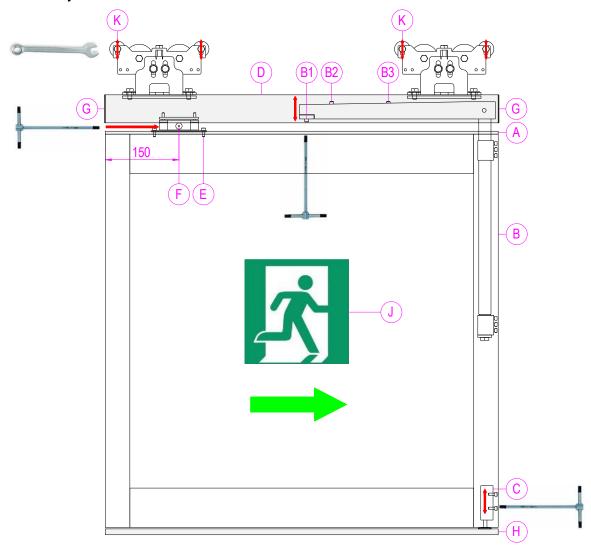


FIGURE 3: Electrical connection of PH3 photocell and 5CB01 electronic control

Menu setting: ADV > STG1 = STOP.

Connect the emitter, using the black cable supplied to the terminals of electronic control as follow:

blue wire = terminal 0

brown wire = terminal 1

black wire = do not connect

Connect the receiver, using the grey cable supplied to the terminals of electronic control as follow:

blue wire = terminal 0

brown wire = terminal 1

black wire = terminal G1 (remove 1-G1 jumper)

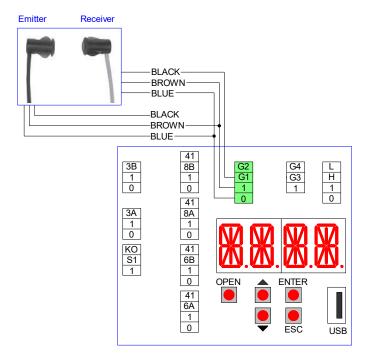


FIGURE 4: KBS1E vertical sizes

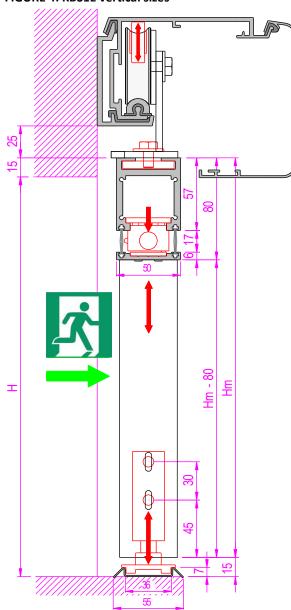
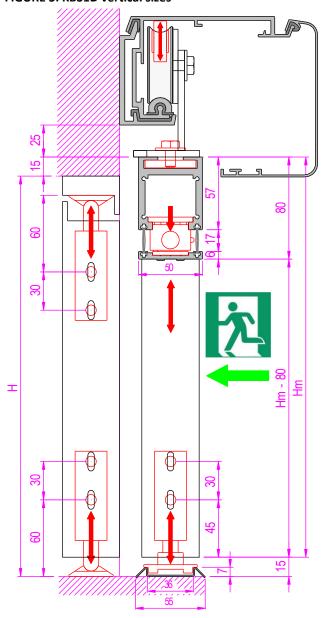
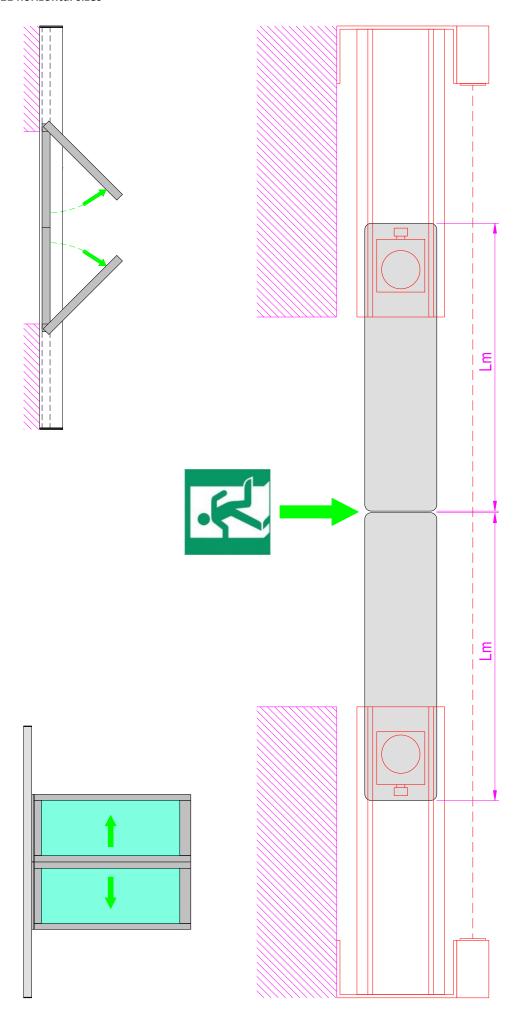
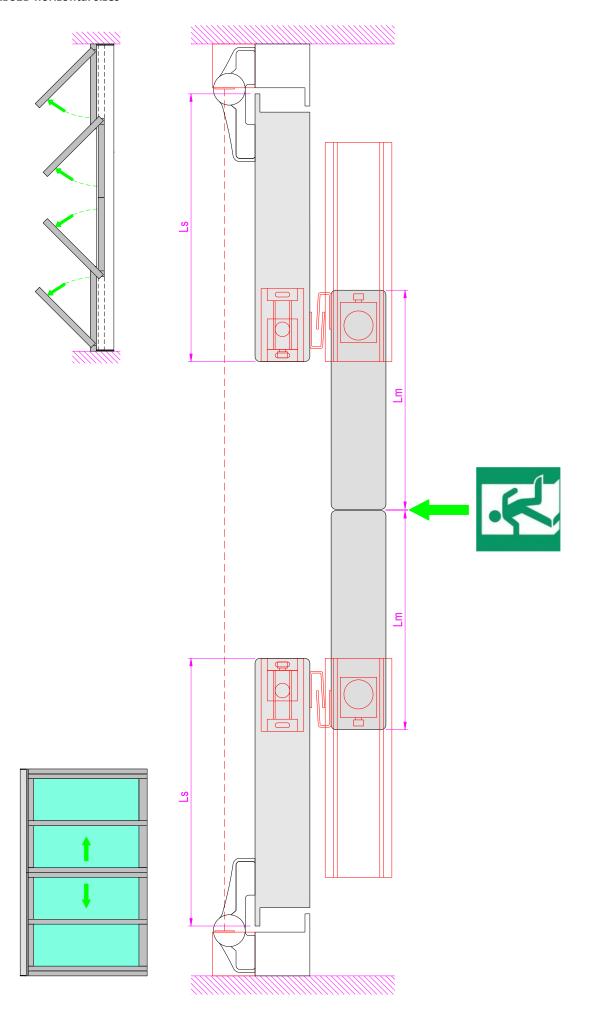


FIGURE 5: KBS1D vertical sizes







## 4. SIDE WALLS BREAK-OUT SYSTEM

## **4.1 ASSEMBLY PROCEDURE FOR KBS1D KIT**

Assemble the components in the kit KBS1D on the side wall as shown below.

The vertical size of the leaf are indicated in Fig. 5. The horizontal size of the leaf are indicated in Fig. 7.

Note: The KBS1D break-out kit is designed to be assembled on side walls provided with hinges for the break out.

Step	Ref.	Description
1	Α	Make 2 slots d.5x15mm, on the vertical profile of side wall for attaching the upper pin, as shown in Figure 8.
		Insert the upper pin (A) in the vertical profile and secure using the supplied screws in the slots.
2	Α	Make 2 slots d.5x15mm, on the vertical profile of side wall for attaching the lower pin, as shown in Figure 8.
		Insert the lower pin (A) in the vertical profile and secure using the supplied screws in the slots.
3	В	Fix the upper bracket (B) to the top edge profile, at the upper pin (A), by screws not supplied by us.
4	В	Fix the lower bracket (B) to the floor, at the lower pin (A), by screws not supplied by us.
5	С	If necessary, fix protection (C) to the side wall, using the provided screws, respect the measurements shown in Figure 8.
		Note: the protections (C) avoid direct contact of the aluminium between the sliding leaf and the side wall, when the sliding leaves and side walls are break out.
6	D	If necessary, fix the hook brackets (D) to the side wall, using the provided screws, respect the measurements shown in Figure 8.

## 4.2 INSTALLATION AND ADJUSTMENT PROCEDURE OF THE SIDE WALL

Step	Ref.	Description
1	-	Make the installation of the frame system.
2	D	Move the sliding doors in closed position. If necessary, fix the hook brackets (D) to the sliding leaves in correspondence of the hook brackets (D) already fixed to the side wall, using provided screws.
		Note: the hook brackets (D) are hooked between them, and they prevent the break-out of the side wall when the door is closed.
3	Α	Adjust the release force of the upper pin (A) on the upper bracket (B), as shown in fig. 9.
4	Α	Adjust the release force of the lower pin (A) on the lower bracket (B), as shown in fig. 9.
5	-	Make adjustments of sliding door indicated in the adjustment procedure, as illustrated in figure 2.
		Note: verify that the required force to break-out every door does not exceed the value of 220N, as required by the EN 16005 European standard.
6	-	Fix the photocell PH3 on the perimeter profile at the top, through the KPH1D support, so that the break-out of the leaf and side wall are detected by the photocell, as indicated in figure 7.
7	-	Make the electrical connections of the PH3 photocell to the electronic control 5CB01, as shown in Figure 3.

FIGURE 8: KBS1D assembly drawing

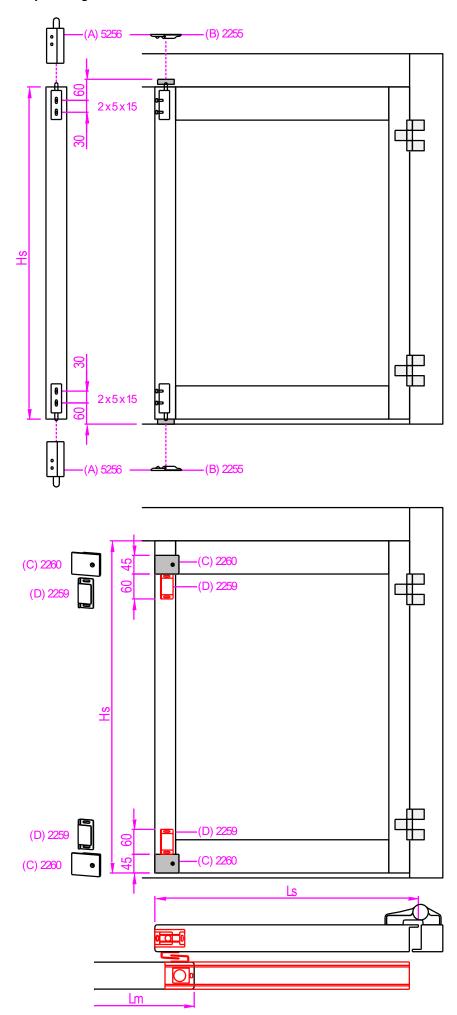


FIGURA 9: KBS1D adjustments

