

FOLDING CABIN DOOR USER AND INSTALLATION MANUAL



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Warning and Suggestions



For long service life and to ensure that your installation has A faultless, please read carefully and follow the introductions.

- Only the qualified staff should make the installation.
- Distribution and any partial or whole reproduction of all the instructions, information's, details and drownings which are mentioned in this Manuel requires permission from HKS HAS ASANSÖR A.Ş.
- Dimensions are given for reference. HKS HAS ASANSÖR A.Ş. keeps the right to make any changes without notice.
- The manufacturer HKS HAS ASANSÖR A.Ş. will not hold any responsibility for possible damages arising from improper use of the product.
- Keep this manual as long as you use the product.
- The warranty of these products valid for 2 years.
- Thank you for your attention and prefer our products.

1. Introduction

Cabin mechanism is an electromechanical part turns the circular movement of motor to a horizontal move of panels.

1.1. Usage Manual and Maintenance Instructions

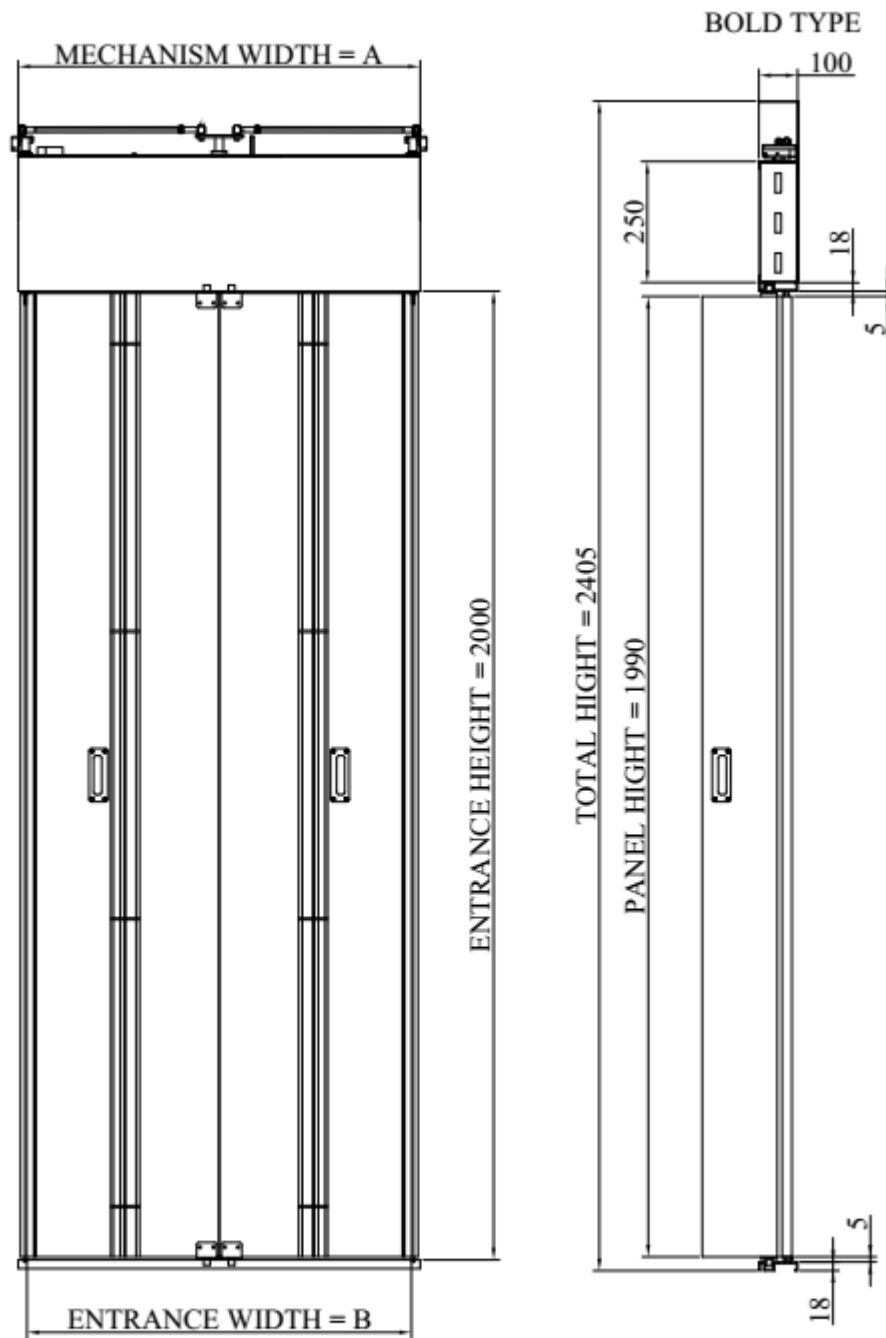
1.1.1. Usage Manual

- 1) Always check whether the cabin is on the floor before entering.
- 2) When the door starts to close, do not try to open it by any means.
- 3) Carry out maintenance according to rules and standards.
- 4) Only the qualified staff should make the installation.
- 5) Keep this manual as long as life cycle.
- 6) Prevent the children younger than 12 years old to use lift by oneself.
- 7) Obey the written instructions of the installation or Maintenance Company when stuck between floors.
- 8) To prevent possible damages when handling use forklifts.
- 9) Do not try to open the doors in different ways than instructed.
- 10) Be sure that the product is not damaged in transportation.
- 11) The manufacturer HKS HAS ASANSÖR A.Ş. will not hold any responsibility for possible damages arising from improper use of the product.

1.1.2. Maintenance Instructions

- 1) Always clean the channels of the sill with grease and don't forget to dry it.
- 2) Do not step on any part of mechanism.
- 3) To protect the mechanism from dust and for the safety do not open the cover on it.
- 4) Check the rescue batteries periodically.
- 5) Check the microswitches periodically.
- 6) Only the authorised companies' qualified staff should intervene to mechanism.

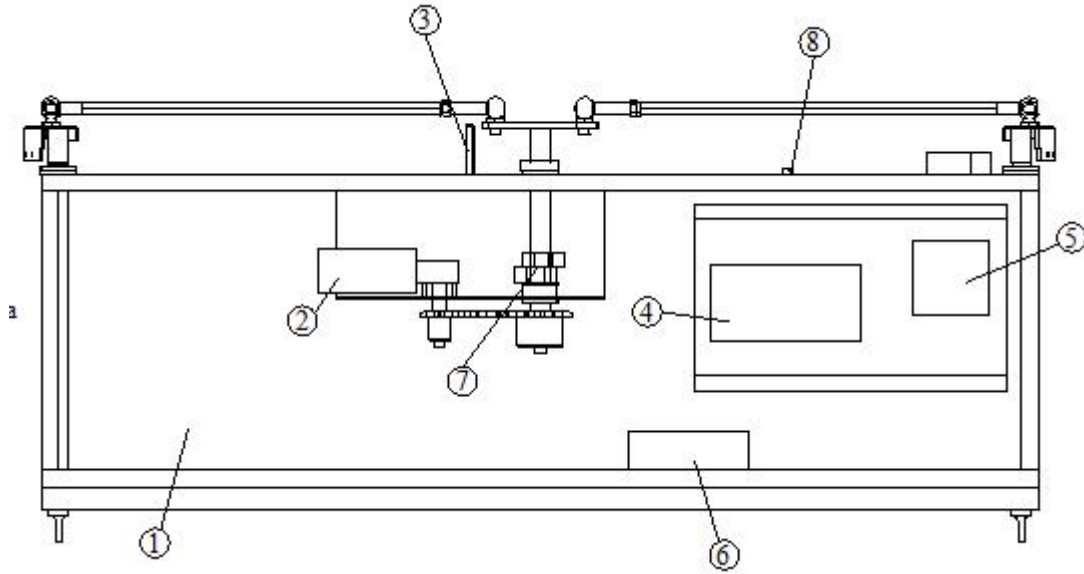
2. Folding Door Common Measures



A	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
B	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200

Figure 1

3. Folding Door Mechanism



No	Part Description
1	Mechanism box
2	Motor
3	Safety Pin
4	Electronic Card
5	Transformer
6	Battery
7	Open/close switch bushing
8	Grounding screw

Figure 2

HKS HAS ASANSÖR A.Ş. producing the folding door mechanism, with more uperiority feature then the similar.

HAS FOLDING DOOR

- * Efficiency reised motor, operation and power settings.
- * Long time working and minumun maintence, due to chain, gear system.
- * Anti jam control system. * Emergency rescue system with battery for power cut.
- * New generation panels and hinges.
- * Low maintance and operating costs in spite of long working time.
- * Maximum pit and cabin compatibility.

4. Installation

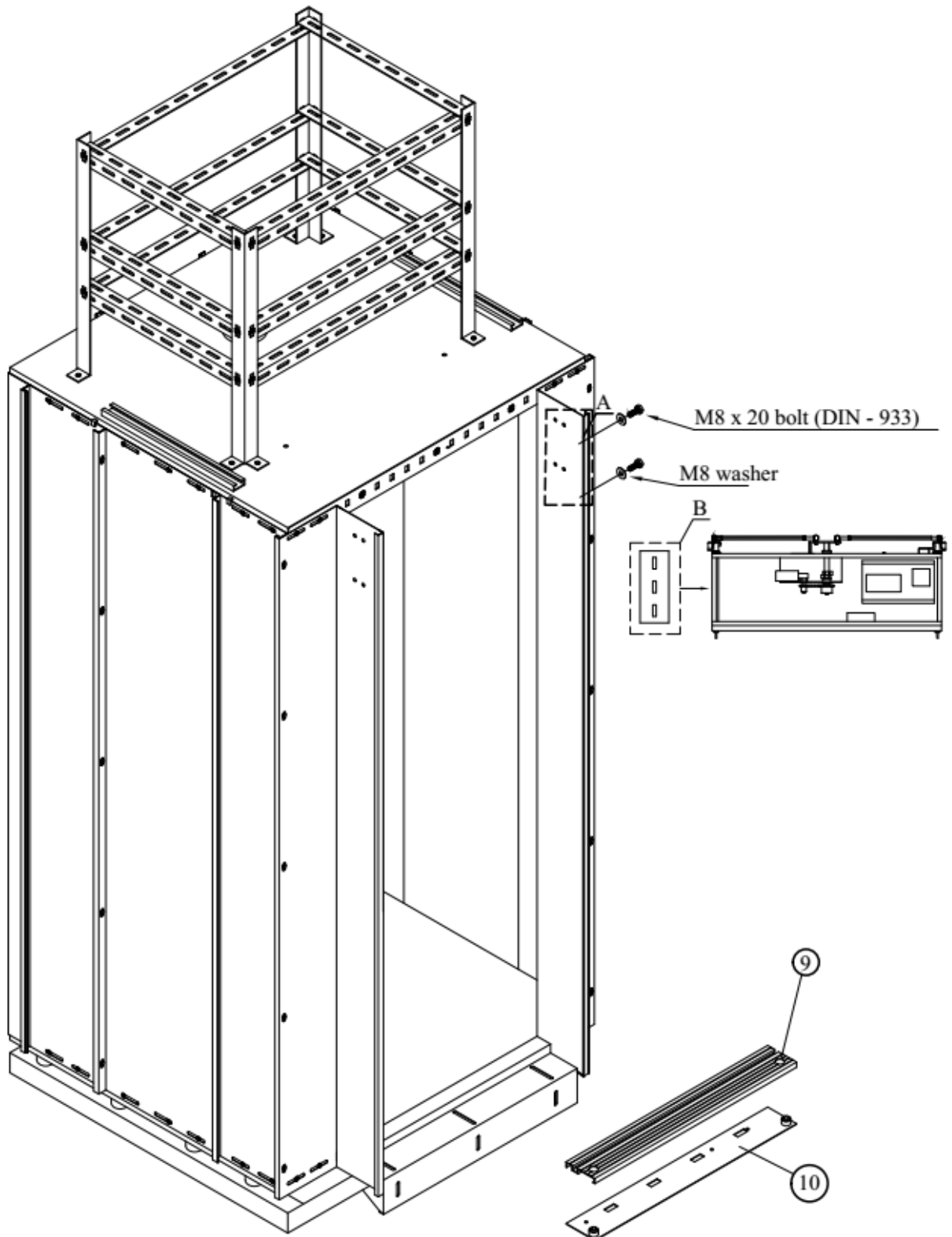


Figure 3

* Before place the mechanism to cabin, check the entrance panel alignment.

- 1) Mount the bottom door sill to cabin which consist of the part 9 and 10 at the adjoining drawing.
- 2) Remove the mechanism front cover.
- 3) Mount the mechanism to cabin by using the holes on the entrance panel (Detail A) and mechanism box (Detail B) with M8x20 hex bolth and M8 washers.

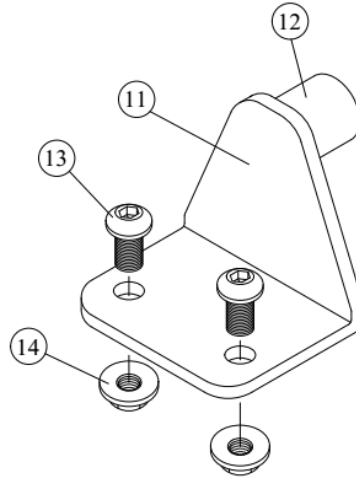


Figure 4

Mount the part 11, which move the panels on the top and bottom sills, with the components 13 and 14 as seen detail C.

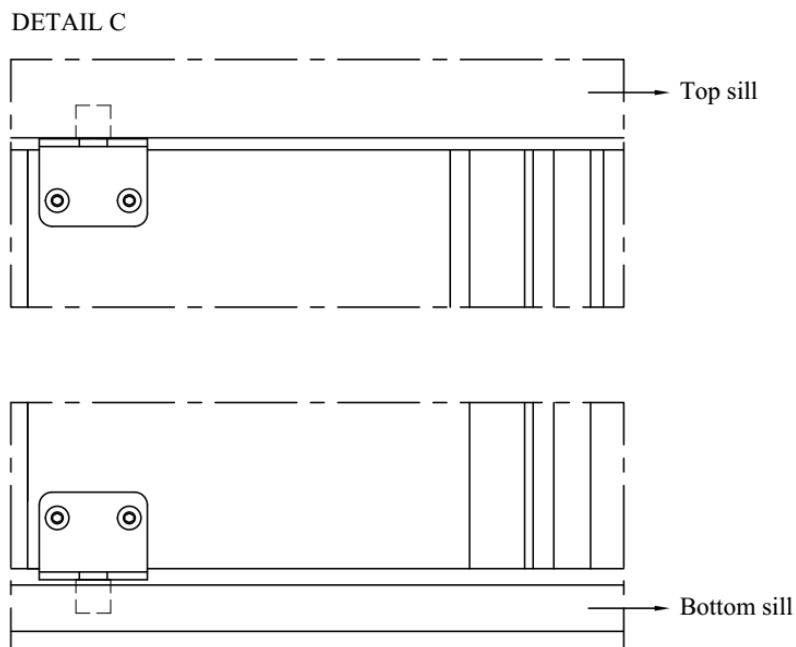


Figure 5

* Use allen wrench while mounting the items.

Panel - Bottom Sill - Mechanism Mounting;

Place the panel to ball slot on the bottom sill. Place the item 12 on the part 11 which was mounted to panel already, to inlet on the bottom sill.

While mounting the panels to mechanism; place the mechanism arm to inlet on the aluminum profile on the panel. Open and close the panels by hand which you mounted to mechanism and bottom sill. Don't change any mechanical setting on the mechanism. Door was already adjusted. Place the front cover and you can start to use door now.

5. Folding Door Electronic Card Electric Connect Schema

MLDOOR-XL CAR DOOR CONTROL CARD

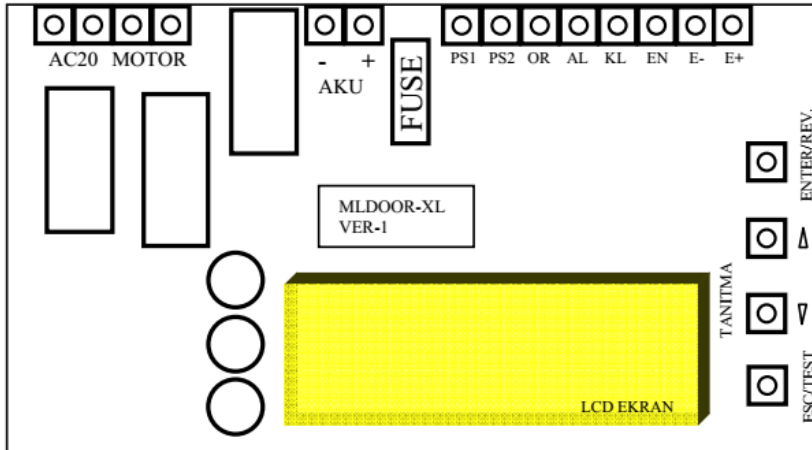


Figure 6

AC20	Transformator Input, 60W 0-20 V
MOTOR	24 V DC Motor
E+	Enkoder (+)
EN	Enkoder Channel
E-	Enkoder (-)
KL	Close Limit
AL	Open Limit
OR	Limit Common
PS1-PS2	48-190 V DC Cam Voltage (Supplied by 220V AC)
Aku+/-	12 v/1.2Ah Dry Battery

USAGE MANUAL

- When the first power on, if the door doesn't detect any limit switch, the door is closed first. It is waited 3 sec. and opened again with the teaching speed that is saved in P18. This is for the lifts with rescue system.
- Upper line of LCD screen shows the position informations. Left side of the bottom line shows the speed that is applied to the door ($V_m=XX$), and right side shows the door position information (Pulse Number, $P=XXXX$).
- By pressing ENTER/INS. on the board, door is taken to the inspection mode. On this position, no power is applied to the motor. So, operator can do the mechanical adjustments without cutting the power off. And also encoder information coming from the motor can be shown.
- By pressing ESC/TEST on the board, the door can be tested as like CS1-CS2 door close signals are exist.

INSPECTION MODE KEYPAD DEFINITIONS

ENTER/INS. = By pressing this button for 2 seconds, door is taken to the inspection mode.

UP = When pressed this button, Total Run Number is screened on LCD during 5 seconds.

DOWN(TEACH) = By pressing this button, the TEACH operation of the door is started. The door is closed with teaching speed first. Then opened with teaching speed and encoder value that is counted is saved.

ESC/TEST = When pressed this button, INSPECTION mode is ended. Then the door is opened back with teaching speed itself and started to wait the close signal.

PROGRAMMING (Ver:1.01)

- To enter MLDOOR-XL card program, first the card is taken to the inspection mode by pressing ENTER/INS. button. On this position, by pressing ENTER/INS. again, programming mode starts.

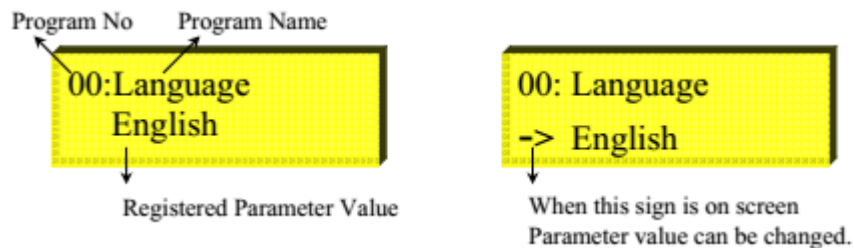


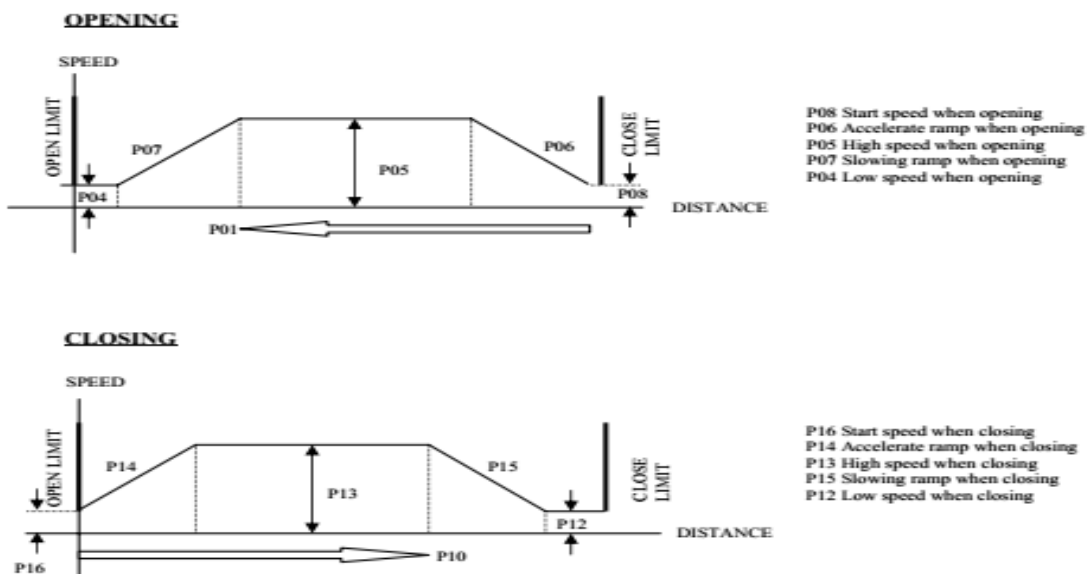
Figure 7

- Required programs can be chosen with UP and DOWN buttons.
- To exit the program, it is pressed ESC/TEST button and "Exit Program" is screened on LCD. By pressing ENTER/INS. button, it is exit the program mode. If it is pressed ESC/TEST, it is turned back to the last processing menu again.
- By pressing ENTER/INS. button in the main menu, the program on the screen is started.
- If the program has a parameter, an arrow sign is screened on the bottom side of the LCD. Parameter value can be changed with UP and DOWN buttons. By pressing ENTER/INS. button, that value is saved and turned back to the main menu. If it is pressed ESC/TEST button, the saved value is protected and turned back to the menu.

Program	Factory Set	Parameters / Explanations
00:Language	English	Turkce - English
01:Open SlowZone	70	00-99 (Entering point to slowing zone when opening. If the value is 00 the door starts to slowing back, if the value is 99 the door starts to slowing front)
02:Op.Press Time	30	20-99 (Pressure detect time=Value x 0.01 s)
03:Open Try Number	05	03-10 (Trying number when getting jammed at opening)
04:Open Low Speed	15	05-40 (Low speed when opening)
05:OpenHighSpeed	50	30-70 (High speed when opening)
06:Op.Accelerate	05	01-10 (Adjustment of accelerate ramp when opening)
07:Open Slowing	05	01-10 (Adjustment of slowing ramp when opening)
08:Op.StartSpeed	15	05-25 (Start speed when opening)
09:OpenHoldPower	05	01-15 (Hold power at opened)
10:Close SlowZone	70	00-99 (Entering point to slowing zone when closing. If the value is 00 the door starts to slowing back, if the value is 99 the door starts to slowing front)
11:Cl.Press Time	30	20-99 (Pressure detect time=Value x 0.01 s)
12:Close Low Speed	15	15-40 (Low speed when closing)
13:Cl. High Speed	50	30-70 (High speed when closing)

14:Cl.Accelerate	05	01-10 (Adjustment of accelerate ramp when closing)
15:Close Slowing	05	01-10 (Adjustment of sloing ramp when closing)
16:Cl.StartSpeed	15	05-25 (Start speed when closing)
17:Cl.Hold Power	05	01-30 (Hold power at closed)
18:TeachingSpeed	20	20-40 (Teaching speed)
19:Demo Mode	Passive	Passive, 01s – 30s (If the value is Passive there is no demo working. It proves the door working with waiting at opening and closing during the selected second time without detecting door cam signal)
20:Lim.Cont.Type	Close Contact	Close Contact-Open Contact (Limit contact type chosen)
21:Press Level	01	01-10 (Pressure level chosen)
99:Factory Set ?		(All parameter values are changed into factory settings)

TRAVEL CURVED LINES



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