# EntreMatic EMSL USER'S MANUAL







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# Important information

#### Important notice!

To avoid bodily injury, material damage and malfunction of the product, the instructions contained in this manual must be strictly observed.

#### Note!

Instructions, design, specifications and illustrations which are contained in this manual are not binding. Rights reserved for changes without previous notice.

#### **Environment**

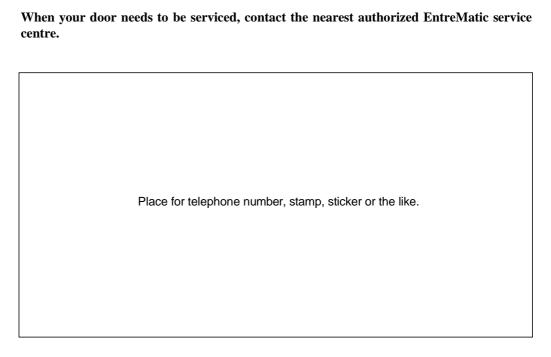
This operator may be equipped with batteries containing materials which are hazardous to the environment. Remove the batteries from the operator before it is scrapped. The batteries must be disposed of safely.

2.0 Introduction

This manual contains the necessary details and instructions for the daily use of the sliding door operator, EntreMatic EMSL.

The EntreMatic EMSL is designed to offer continuous use, a high degree of safety and maximum lifetime. The system is self-adjusting to the effects caused by normal variations in the weather conditions and to minor friction changes caused by e.g. dirt.

3.0 Service



We recommend inspection of doors at least once a year. According to regulations inspection of emergency escape doors is required at least twice a year, carried out by an authorized service centre. Please check the service book.

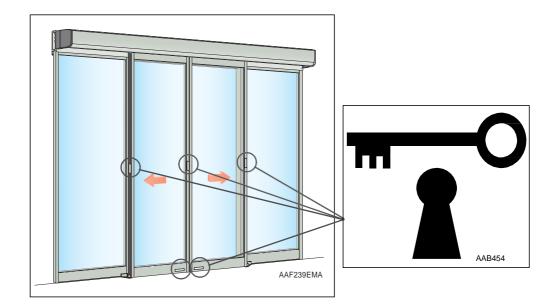
4.0 Locks

## 4.1 Locking

Doors used for emergency escape in buildings such as hospitals and homes for elderly people may not be locked or put in programme selection OFF. In other buildings emergency escape doors may be locked or put in programme selection OFF **after** it is secured that all people has left the building.

## 4.2 Unlocking

Unlock all the mechanical locks before switching on the operator. Note that more than one lock may be fitted.



5.0 Operation

## 5.1 Programme selectors

The functions of the door are set with different key programme selectors. The key must always be removed on emergency escape doors after changing settings.

# Flush mounted PSMB-5/PS-5M



# Surface mounted PSMB-5/PS-5M



#### **Programme selector functions**

\_<sub>↓</sub>†\_

"Exit" The door cannot be opened with inner and outer activation units. The door is locked if an electromechanical locking device has been fitted. The door can be opened with a key switch/emergency push-button (if fitted).

"Exit" Passage from inside only. The door is normally locked if an electromechanical locking device has been fitted. The door can only be opened with the inner activation unit and with a key switch/emergency push-button (if fitted).

"Auto" Two-way traffic, normal operation of the door. The door can be opened with the inner and outer activation units and with a key switch/emergency push-button (if fitted).

In this setting, two-way traffic is obtained.

"Auto The operator selects full or partial opening depending on the volume of width" traffic. The door can be opened with the inner and outer activation units and with a key switch (if fitted). With an emergency push-button the door opens fully.

- If the door remains partly open, or is prevented from closing, for more than 10 sec. full opening is automatically selected.
- If the door is closed, from full opening, for more than 10 sec. the next opening will be partial.
- The width of the partial opening is 75% of full opening.

"Open" The door is permanently open. The door can be moved by hand e.g. for window cleaning. All activation units but emergency push button (if fitted) are disconnected.

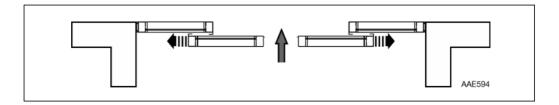
"Reset" Set the programme selector to "Auto". Insert a narrow object in the small hole on the programme selector and push. The operator makes a system test of the battery (if selected), electro-mechanical lock, watch dog relay and closed position. The operator is after closing reset and ready for normal operation.

Note! The "Reset" is not available on the PS-5M.

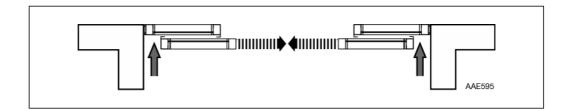
6.0 Safety

## 6.1 Integrated safety

To permit a safe passage between closing doors, the doors reverse immediately if an obstruction is met. They then resume their interrupted movement at low speed to check whether the obstruction has disappeared or not.



If an obstruction is met between opening doors and surrounding walls or interior fittings, the doors stop immediately, and then close after a time delay.



### 6.2 Safety system with presence sensor



Usually the safety system incorporates a presence sensor installed above the door opening. If the presence sensor detects an object in the doorway, while the doors are closing, the doors reverse immediately. They then resume their interrupted movement as soon as the object is removed.

## 6.3 Safety system with photocells



The safety system can incorporate presence photocells in the door opening. If an object is breaking the infrared --- (invisible) beam between the photocell units, while the doors are closing, the doors reverse immediately. They then resume their interrupted movement as soon as the object is removed.

#### 6.4 Emergency escape

The operator can be fitted with different emergency escape units to ensure a safe evacuation of the building.

#### Break-out unit PSB



The door leaves and the side screens are swung outwards when a defined pressure are applied to

The break-out function can also be used to create a wide opening. From fully swung out position, the door leaves can manually be slid sideways offering the possibility to transport wide objects through the opening, or to make a shop entrance more inviting during good weather conditions.

#### Mechanical emergency unit MEU

An elastic cord is used to open the door in the event of power failure. Until the power is restored the door remains open. The operator will then resume the function set by the programme selector. The emergency unit is supervised by the operator control unit, which means that the door opens and remains in this position if a proper emergency opening no longer can be achieved.

Every 3.5 h the following opening impulse generates an emergency opening. If the elastic cord opens the door within the limited time the test is successful and the door resumes the function set by the programme selector.

#### Electrical emergency unit EEU

The door is opened by means of a rechargeable battery unit in the event of power failure. The door remains in this position until the power is restored. The operator will then resume the function set by the programme selector. The emergency unit is supervised by the operator control unit, which means that the door opens and remains in this position if a proper emergency opening no longer can be achieved.

Every 3.5 h the following opening impulse generates an emergency opening. If there is no opening impulse within an additional half hour the operator control unit generates the opening impulse itself. If the battery opens the door within the limited time the test is successful and the door resumes the function set by the programme selector.

# Troubleshooting

Remedies	
Change the setting of the programme selector.	
Check the mains switch.	
If break-out unit PSB is installed, check that the door leaves and side screens are completely closed.	
Unlock the mechanical locks.	
Clean the floor guide.	
Check for objects jammed under the door.	
Change the setting of the programme selector.	
If presence photocells are fitted, clean the protecting covers. Check the mains switch.	
Clean the floor guide.	
Check for objects jammed under the door.	
Prevent traffic using the door and allow it to do a complete opening and closing cycle with low speed.  Reset the operator by setting the programme selector to "Auto" and pushing a narrow object in the small hole on the programme selector.  Allow the operator to control the closed position without interruption.	

8.0 Maintenance

The cover, doors, windows and profiles must be subjected to regular inspection and cleaning, the frequency of which is governed by the environmental conditions (at least once a year).

The best way to remove dust and dirt from the EMSL is to use ordinary water and a sponge. A neutral washing-up liquid may be used.

**Note!** Do not expose windows, doors or profiles to alkalis. Both aluminium and glass are sensitive to alkalis.

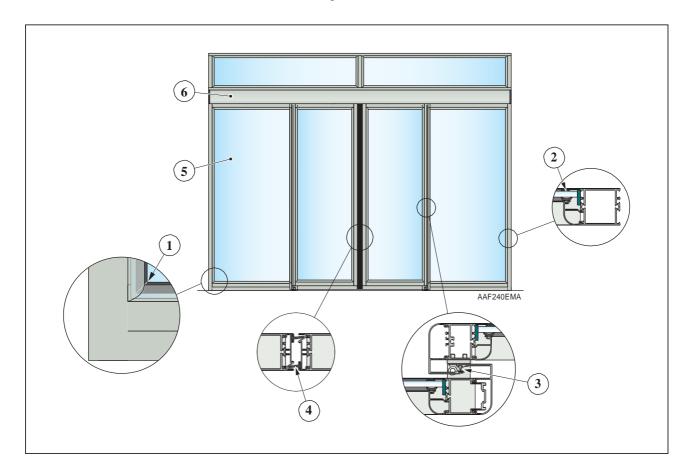
**Note!** Do not clean with high pressure water. Operator, programme selector and sensor may be damaged and water may enter into the profiles.

Note! Do not use detergents or abrasive additives.

Note! Do not scrub with materials like Scotch-brite, as this will cause mechanical damage.

#### 8.1 Inspection

- (1) Make sure that the glazing rubbers have not shrunk at the corners.
- (2) Make sure that the glazing rubbers are undamaged and straight.
- (3) Make sure that the draught excluders are clean and undamaged.
- (4) Make sure that the rubber seals are clean and undamaged.
- (5) Make sure that the glass is clean.
- (6) Make sure that the cover and profiles are clean.



9.0 Accessories

The sliding door operator, EntreMatic EMSL, can be equipped with the following standard or optional equipment. If you wish to upgrade your operator, or add some extra equipment, contact your EntreMatic representative.

**Cover** Made in clear anodized aluminium as standard. Paint finished

in RAL colours or anodizing optional.

**Activation units** See separate manuals or installation drawings.

Programme selector PSMB-5 and PS-5M

See page 8 and separate installation drawing 1000 154.

Programme selector PS-2 See separate installation drawing 1000 155.

Electromechanical locking See separate installation drawing 1000 151.

device

Locked without power.

LD Locked without power.

LDP Locked with power.

Manual unlocking device For manual unlocking of the electromechanical locking device LD. See separate installation drawing 1000 214.

Micro switch kit LSK For indication of door and lock position. See separate installa-

tion drawing 1000 146.

Electrical emergency unit EEU

Used if a door is required to be opened by means of a rechargeable battery unit and remain in this position in the event of power failure (EXU-1/EXU-3 required). See page 10. Every 3.5h the following opening impulse generates an emergency opening. If there is no opening impulse within an additional half hour the operator control unit generates the opening impulse itself. If the battery opens the door within the limited time the test is successful and the door resumes the function set by the programme selector.

**Note!** The test is never performed in programme selector setting "Open" or in setting "Off".

Mechanical emergency unit

MEU

Used if a door is required to be opened and remain opened by means of an elastic cord in the event of power failure (see separate drawing 1000 152). Every 3.5 h the following opening impulse generates an emergency opening. If the elastic cord opens the door within the limited time the test is successful and the door resumes the function set by the programme selector.

**Break-out unit PSB** Enables the door/side screens to be broken outwards in case of

emergency by applying a defined pressure.

**Interlocking** (Typical to reduce energy losses and not for security reasons)

used between two operators when the first operator must close

before the other one can open (EXU-1 required).

**Emergency opening** (Fireman's opening) opens the door in any programme selector

setting (EXU-1 required).

**External error indication** Obtained if a lamp or a buzzer is connected to EXU-1.

**Push button PB**Used to give opening impulse to the door. See separate installa-

tion drawing 1000 215.

Double carriage wheels

**DCW** 

Used for door weights over 100 kg and for narrow door leaves

as anti-tilt.

**Synchronization** Used between the operators of two single sliding doors, work-

ing together in very large openings.

