### EvoDrive+ AUTOMATIC SLIDING DOORS FOR INTERIORS

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**MOTION4** is a company specialized in the development, design and production of automatic sliding doors with innovative magnetic linear motor technology for home, residential and commercial use.

Based in Barcelona, Spain, Linear Motor Applications, S.L. (LMA) was established in 2008 with the strong belief that in the near future the automation of doors, windows and other similar applications will be based in this advanced technology.

## MOTION4

## Autodoors re-defined

**CONVENTIONAL MOTOR** 



LINEAR MOTOR

The **EvoDrive+** is a redefinition of the traditional automatic door operator.

**MOTION4** has developed a unique **magnetic linear motor** that uses an electrically powered motor that instead of rotating, it produces a linear force using magnetic fields to create thrust and movement.

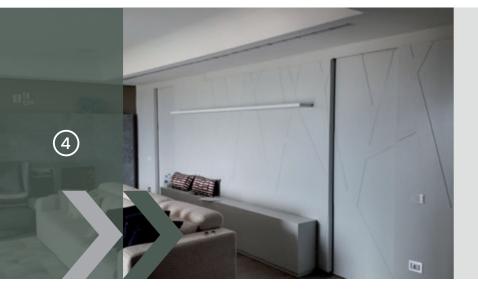
This reduces the number of mechanical parts required, which results in a very compact and stylish **60 x 70 mm** aluminium housing, a **quieter and smoother** motion and a longer lifespan, combining the **compact size** of a manual door track, with the **performance** and convenience of a normal automatic sliding door.



#### **Aesthetic Design**

Housed compactly in a sleek aluminium casing that measures only 60 mm x 70 mm in cross-sectional area, the reduced dimensions of the **EvoDrive+** takes up a fraction of any other traditional automatic door operator. Its elegant unobtrusive design also allows users to enjoy the safety and convenience of having an automatic entrance without compromising on aesthetics.



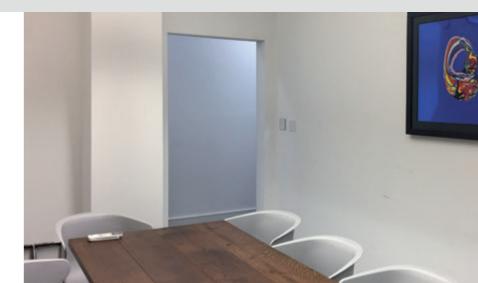


#### Silence in Motion

Powered by magnetic fields rather than mechanical action, the friction is dramatically reduced, which results in a smooth and silent movement. This makes the **EvoDrive+** the ideal automatic door for use in private residences, hotels, care homes and other internal applications where a silent environment is required.

#### **Enhanced Safety**

The **EvoDrive+** is highly sensitive to resistance and obstacles. It can be connected to a wide variety of safety sensors and activation devices, or even set the door in low energy mode. The operator complies with all regulations in force, including European Standard EN16005 "Power operated pedestrian doorsets".





#### Low Maintenance

The absence of belts, pulleys, reduction gears and other mechanical elements commonly used in traditional automatic doors, reduces the need for frequent maintenance and replacement parts. The **EvoDrive+** is easy to install and commission, and will operate for its entire life at a very reduced maintenance cost.





#### **Highly Versatile**

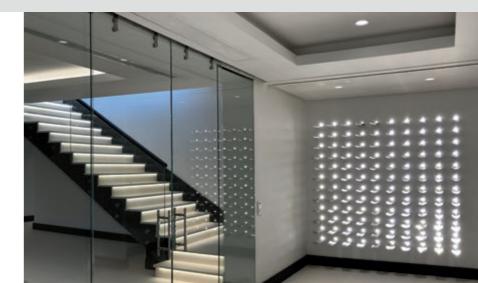
The **EvoDrive+** is so small and compact that it pairs stylishly with a variety of materials, ranging from glass to aluminium or timber, integrating perfectly in any kind of environment. A piece of architecture for creative minds.

#### Variety of Applications

The discreet and elegant look of the **EvoDrive+** combined with it's silent movement, will fit in any project, such as:

- HOTELS
- PRIVATE HOMES
- OFFICE PARTITIONS
- HOSPITALS

- CARE HOMES
- RESTAURANTS
- S AIRPORTS
  - SMOKING ROOMS







- 1. POWER SUPPLY: 110 230 V AC 50-60 Hz
- 2. INPUT/OUTPUT MODULE MASTER
- 3. LEAF TROLLEYS
- 4. LINEAR MOTOR
- 5. MAGNETS

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- 6. MOTOR DRIVER
- 7. PARAMETER SETTING
- 8. ALUMINIUM HOUSING
- 9. ALUMINIUM COVER
- **10.** SIDE COVERS

#### **Conform to European Norms and Directives in Force**

- Directive 2006/42/EC: "Machinery Directive"
- Directive 2014/30/EU: "Electromagnetic Compatibility (EMC)"
- Directive 2014/35/EU: "Low Voltage Directive (LVD)"
- EN 16005:2013/AC:2015: "Power operated pedestrian doorsets"

#### **Adjustable Parameters**

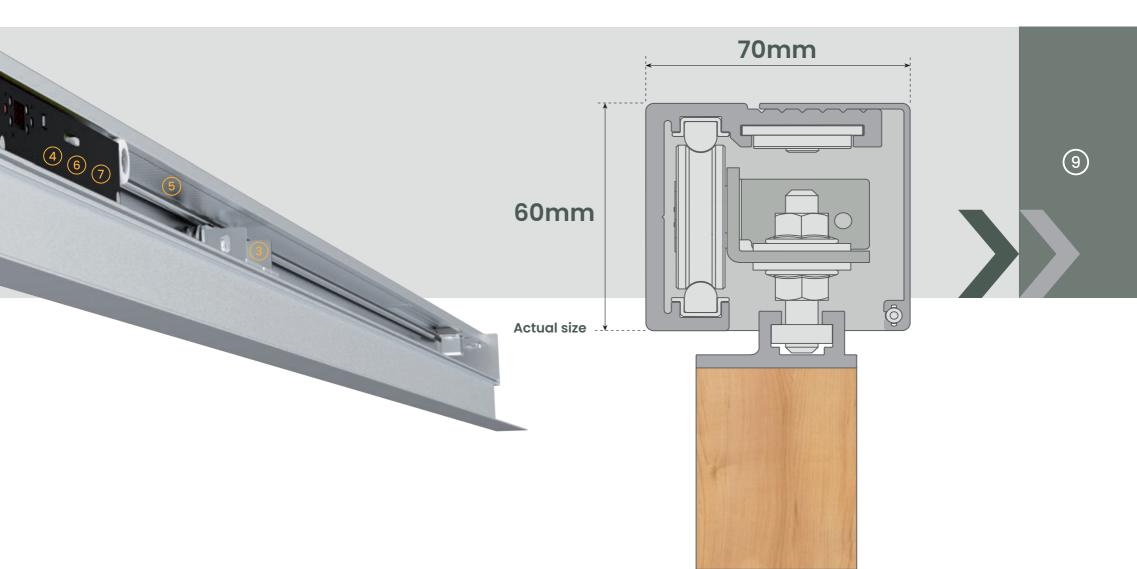
- Opening Direction: Right or Left
- Low Energy or Normal Mode
- Opening Speed
- Closing Speed
- Hold Open Time
- Push & Go
- Push to Open / Push to Close
- Reduced Opening

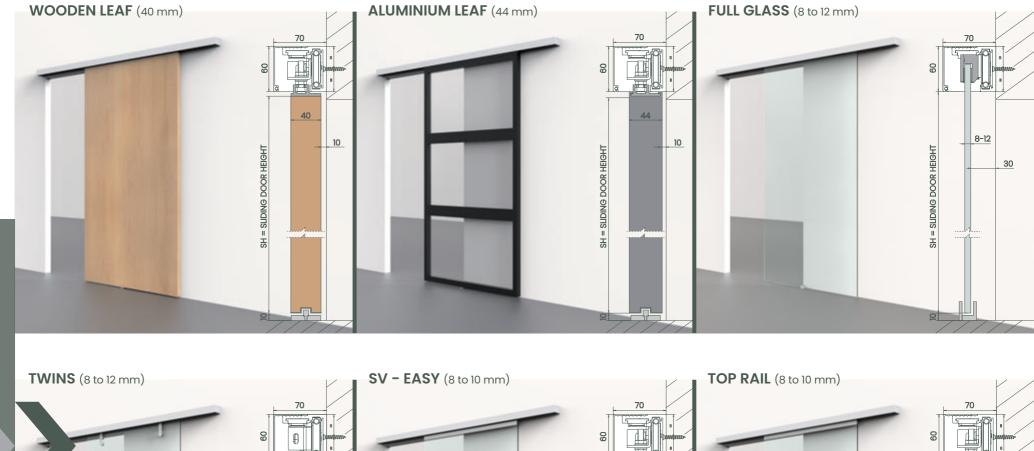
#### **Main Technical Features**

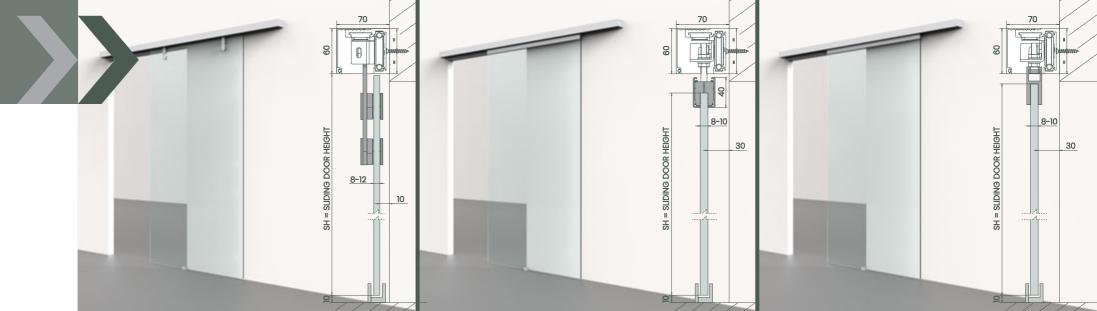
- Compact Aluminium Housing: 60x70 mm
- Minimum Clear Opening: 750 mm (Drive length: 1.550 mm)
- Maximum Clear Opening: 1.400 mm (Drive length: 2.850 mm)
- Leaf Weight: Up to 80 Kg
- Adjustable Opening Speed: 200 to 600 mm/s
- Adjustable Acceleration and Braking Curves: 200 to 800 mm/s2
- Low Operating Noise: <50 dB
- Power Supply: 230/110 V AC 50-60 Hz
- Power Consumption: In operation 80 W / Peaks (0,5 sec) 180 W / Stand-by 4 W

#### **Motor Technical Features**

- Electric three phase AC motor: Type LSMPM -(Linear Synchronous Motor with Permanent Magnets)
- Tension: 24 V DC
- Peak current: 7 A
- Operating current: 3 A
- Motor driver:
  - Magnetic position feedback with 3 hall cells
  - Motion control by means of a driver with field oriented control (FOC)
  - Wireless communication via Bluetooth







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#### **1. INFRARED SENSOR**

When the sensor detects presence or movement, the door activates. It can also be used as a safety device.

#### **2. AUTOMATIC LOCK**

Blocks the door when the leaf is in closed position and the operating mode is in Closed or Exit Only mode.

#### **3. TOUCH-LESS SWITCH**

The door opens and closes by simply approaching your handor elbow to the device.



#### **4. PUSH BUTTON**

Press to open and close the door. Optionally, press to open, and press a second time to close.

#### 5. REMOTE CONTROL

Four operating modes: Auto / Open / Close / Exit Only Receiver incorporated in the main control board Pocked size transmitter - 12V DC battery.

#### 6. PUSH&GO

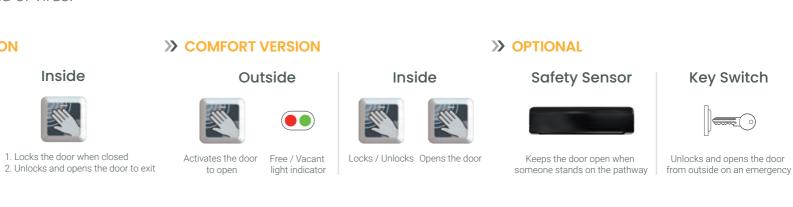
Push the leaf or the door handle, and the door will open automatically. Push-to-open & Push-to-close also available.







We offer a customized solution for public toilets in restaurants, hotels, airports, etc. The EvoDrive+ can be connected to a wide range of sensors and indicators for a user friendly and touch-less experience, to improve hygiene and to help reducing the spread of virus.



**Key Switch** 

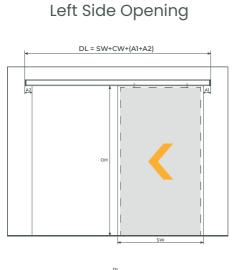
**>> BASIC VERSION** 

Inside

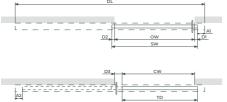




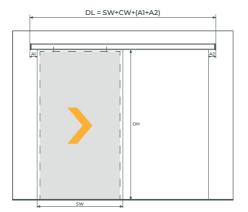
1. Locks the door when closed Activates the door to open



**EvoDrive+** 

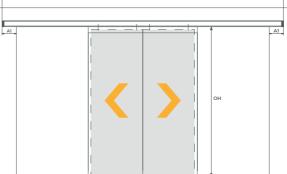


#### EvoDrive+ Right Side Opening









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#### LEGEND

DL Drive Length OH Opening Height OW Opening Width CW Clear Width SW Width of Sliding Leaf TD Travelling Distance D1/D2 Overlap D3 Finger Trap Protection A1/A2 Header extension

#### **Part Numbers**

#### **TYPES OF OPERATORS AND ACCESSORIES**

- 61013121R EvoDrive automatic sliding door operator, single slide. Right opening
- 61013121L EvoDrive automatic sliding door operator, single slide. Left opening
- 61023121 EvoDrive automatic sliding door operator, double-leaf
- 69620004 Automatic lock, fail-safe
- 69111005 Remote control with 4 operating modes (additional units)

#### **ACTIVATION AND SAFETY DEVICES**

69360001	Touch-less switch
69131010	Wireless push button (white)
69330004	Activation and safety IR+MW sensor, OAM-DUAL T
69320001	Activation and safety IR sensor, OA-203C

#### **LEAF ADAPTORS**

- 67630001 TIMBER leaf adaptor for 40 wooden leaf, with floor guide
- 67640001 ALUMINIUM leaf adaptor for 45 mm frame
- 67622000 TOP RAIL leaf adaptor for 8-10 mm glass, with floor guide
- 67625002 FULL GLASS leaf adaptor for 8-12 mm glass, with floor guide
- 67625003 TWINS leaf adaptor for 8-12 mm glass, with floor guide
- 67625004 SV-EASY leaf adaptor. Clamps for 8 mm glass, with cover
- 67625005 SV-EASY leaf adaptor. Clamps for 10 mm glass, with cover

#### **ACCESSORIES FOR TOILET MODE**

69150001	BASIC toilet mode kit: 2 touch-less switches and I/O interface
69150002	COMFORT toilet mode kit: 3 touch-less switches, light indicator and I/O interface
69600001	Key switch







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