

# 01 Series Automatic sliding doors

For versatile door solutions



# The ultimate automatic operator

**For over four decades dormakaba has been manufacturing and supplying the highest quality automatic door operator throughout Australia, South East Asia, the Middle East and New Zealand.**

dormakaba's tradition of superior reliability, longevity, performance and safety continues to influence its product development to supply durable cost effective operators with lower life cycle costs.

Using next generation technology and powered by dormakaba's O1 series high torque motor-gearbox offering superior performance, the O1 Series motor drive can operate door weights up to 1000kg. This impressive automatic sliding door operator is extremely versatile to suit the largest of door applications and architectural creativity.

The elegant design profile combined with intelligent door automation provides the perfect solution for sophisticated architectural concepts and dormakaba's commitment to quality and product longevity ensures that you are investing for the future.

**Profile options**

- Single Slide/Bi-Parting
- 265mm H x 152mm W
- 165mm H x 232mm W
- Telescopic
- 266mm H x 245mm W

The dormakaba O1 Series is Australian made specifically designed for high usage, certified to 1,000,000 cycles.

The in-built UPS (**Uninterrupted Power Supply**) provides full emergency operation under loss of mains power for up to 300 continuous cycles to ensure that safe egress is maintained, and when fitted, electric security locking remains fully operational for up to 48 hours, during a power failure.

When longevity, security and 24 hour on call service and response are paramount, you can rely on dormakaba. This is why dormakaba is the trusted name and clear market choice.

**Compliance**

The dormakaba O1 Series fully complies with the latest Australian and New Zealand industry standards and codes including the National Construction Code (NCC), and is compliant with Australian Standard AS5007.

**Accessories/options**

The dormakaba O1 series is available with a chain or heavy duty 15mm wide belt drive and can be interfaced to an extensive range of door control and program switches, push buttons, presence/safety sensors, P-E safety beams and a wide choice of signage plates including Braille.



**Hospitals and healthcare**



**Financial institutes**



**Shopping centres**



**Law enforcement buildings**



**Hotels & convention centres**



**Government buildings**



**Correctional facilities**



**Airport & transport hubs**

# Engineered for strength

## The dormakaba EL Secure electric motor lock is arguably one of the most secure and versatile locks on the market

### Motor lock

When the motor lock function is selected the door will fully close and lock at normal operating speed when all the safety devices are clear. If the door is obstructed while closing it will auto reverse to the fully open position, dwell time out, close and lock.

### Smart lock

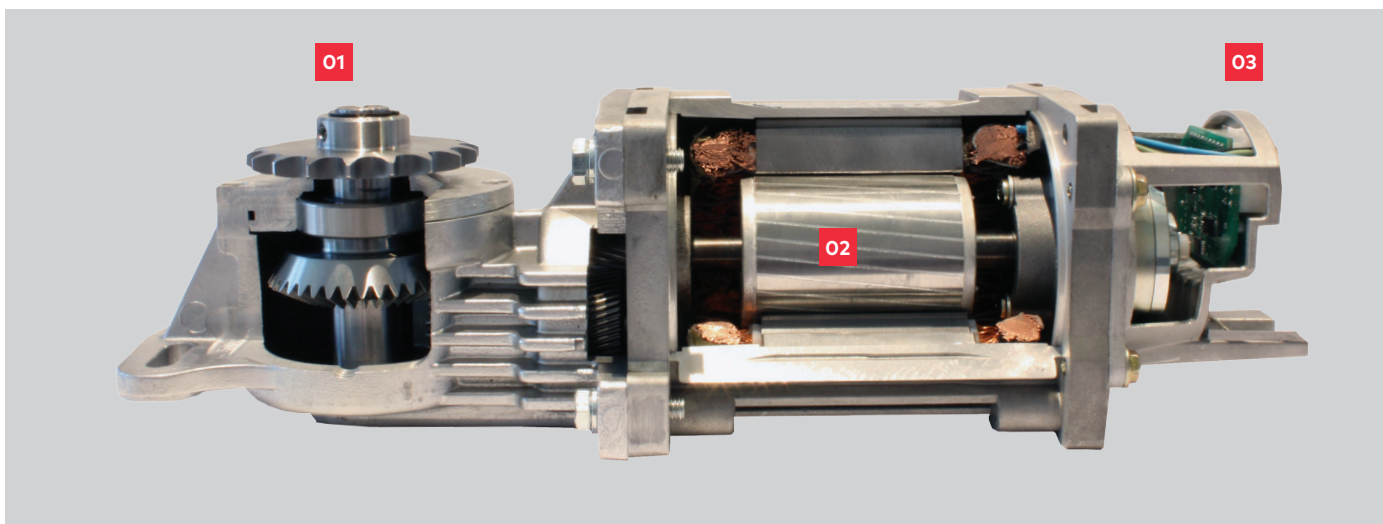
When smart lock is selected the door will close and lock at normal speed overriding all safety devices. If the door is obstructed during the closing cycle it will immediately lock in position for a preset time before closing and re-locking.

### Emergency lock

When the emergency lock function is selected the door will close and lock at its maximum operating speed, overriding all the safety devices. If the door is obstructed during the closing cycle it will immediately lock in this position for a preset time before unlocking and fully closing and re-locking.

### Partial open lock

When the partial open lock function is selected the door will open to a preset distance and lock in this position. A secure transaction can be achieved and when completed the door will fully close and re-lock.



- 01**  
**Direct drive gearbox incorporating high tensile steel cut gears**
- Fully enclosed 8:1 gear ratio
  - Chain drive with 1950kg tensile strength
  - Hardened steel gears
  - Sealed for life bearings

- 02**  
**3 phase 24V high torque motor capable of moving up to 1000 kg**
- Purpose designed
  - Solid construction
  - Maintenance free

- 03**  
**Fully integrated, tamper resistant electric lock enabling the door to be locked in any position**
- Smart lock
  - Partial open lock
  - Emergency lock

## Heavy duty purpose designed and built motor and electric motor lock

Powered from a standard 240VAC GPO, the 01 Series utilises a purpose designed 3 Phase 24V AC motor and a fully enclosed secure motor lock that is totally resistant to vandalism and the effects of extreme weather conditions.

### Features and benefits:

- Doors can be locked in any position, through the electric lock engagement.
- High speed emergency close & lock option.

- Fully enclosed (tamper proof) lock and digital encoder.
- Partial Open Lock - a reduced opening distance that allows secure transactions.
- Constant power at all times during heavy traffic flows – performance guaranteed.
- Engineered to operate door weights in excess of 300kgs.
- Endurance tested and NATA accredited to 1,000,000 cycles (EL 301 and AL 401)



# 01 Series

## Operator models



### EL 301

- Powerful 24VAC high torque motor capable of operating a total door weight capacity of 300kg
- Designed to suit aluminum framed, 12 / 15mm thick frameless glass, solid core timber or custom type doors
- Robust and reliable chain drive power train with a tensile strength of up to 1900kg
- UPS feature built in providing up to 300 continuous open / close cycles during a power failure
- AS5007 NATA accredited
- Tested and certified to 1,000,000 cycles



### EL 301 Secure - motor gearbox/lock

- Fully integrated electronic lock system enclosed in a solid tamper resistant housing
- Security program functions include: lock, smart lock, partial open lock and emergency lock
- Up to 48 hours of continuous lock time during a power failure with an option to extend
- Door leaves can be locked in any position (A/HR's parcel transfer)
- BMS interface including open, closed, power, battery, monitoring
- Customer approach audible alarms



### EL 301 Telescopic - framed door

- As per EL 301 features
- Greater flexibility when a wider clear opening is required but the available space is limited
- Available for use in both bi-parting telescopic (4 door leaves and single sliding telescopic (2 door leaves in one direction) applications
- Up to 3 partial open distances available
- Automatic or manual partial open available



### EL 301 Telescopic - frameless glass door

- As per EL 301 features
- Frameless glass doors provide a clear view and when in the fully open position door leaves sit flush with the fixed panel
- Greater flexibility when a wider clear opening is required but the available space is limited
- Available for use in both bi-parting telescopic (4 door leaves) and single telescopic sliding (2 door leaves in one direction) applications.
- Automatic or manual partial open available
- Up to 3 partial open distances available
- Mode dependant on partial open function



### EL 301 Breakout - framed door

- As per EL 301 features (except door weight)
- Operates as a automatic sliding door system under normal operation
- The emergency breakout/escape function is actioned by applying outward pressure to the door leaf and/or side panel which deactivates the automatic function to allow maximum unimpeded egress
- Sliding door operator with emergency breakout capability (maximum required egress width)
- Standard door weight 240kg
- AS5007 NATA accredited



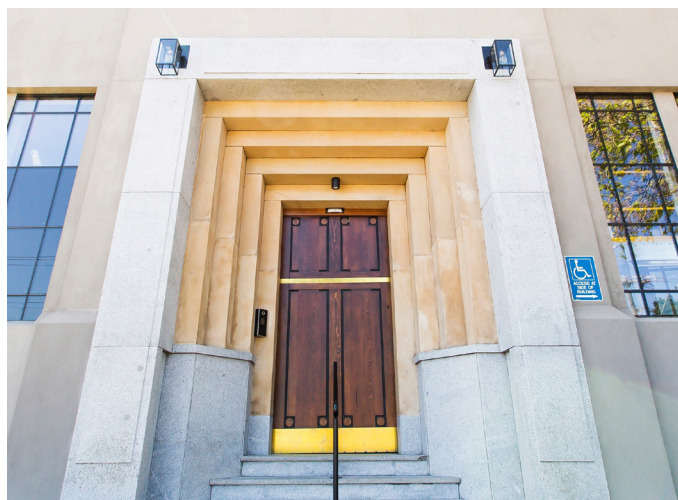
### EL 301 Breakout - frameless glass door

- As per EL 301 features (except door weight)
- Operates as a automatic sliding door system under normal operation
- The emergency breakout/escape function is actioned by applying outward pressure to the door leaf and/or side panel which deactivates the automatic function to allow maximum unimpeded egress
- Frameless sliding door operator with emergency breakout capability (maximum required egress width)
- Standard door weight 200kg
- AS5007 NATA accredited



# 01 Series

## Operator models



### AL 401

- Powerful 3 phase 24 VAC high torque motor
- Door weight capacity 400kg
- Stainless steel track system
- Designed to suit aluminium framed and 12mm, 15mm, 19mm thick frameless glass, solid core timber or custom type doors
- AS5007 NATA accredited
- Tested and certified to 1,000,000 cycles
- Solid 12:1 ratio gearbox with steel cut gears



### AL 501

- Powerful 3 phase 24 VAC high torque motor, coupled with 12:1 ratio gearbox
- Door weight capacity up to 500kg
- Solid aluminium J-track system
- Designed to suit aluminium framed 12mm, 15mm, 19mm, 25mm thick frameless glass, solid core timber or custom type doors
- Solid 12:1 ratio gearbox with steel cut gears



### AL 1001

- Powerful 3 phase 24 VAC high torque motor, coupled with 12:1 ratio gearbox
- Door weight capacity 1000kg
- Solid steel track system ensures smooth operation and long term reliability
- To suit door widths up to 3000mm
- Solid 12:1 ratio gearbox with steel cut gears
- Applications include hospital lead lined doors, large wall dividers and industrial doors

# 01 Series

## Performance table

Door Parameters	EL 301	AL 401	AL 501	AL 1001
Single panel sliding door – Maximum Door width – Maximum Door weight	3000mm 300kg	3000mm 400kg	3000mm 500kg	3000mm 1000kg
Double leaf sliding door – Maximum Door width – Maximum Door weight	1500mm* 150kg	2000mm* 200kg	2000mm* 250kg	2000mm 500kg
<b>Technical Data</b>				
Height (Cowl)	240mm	240mm	240mm	420mm
Depth	152mm	152mm	152mm	152mm
Track Type	Aluminium	Stainless Steel	Solid Aluminium	Solid Steel
<b>Gearbox</b>				
Purpose designed fully enclosed with steel cut gears	●	●	●	●
<b>Drive Train</b>				
High Torque Motor 24V 3 Phase	●	●	●	●
Chain	●	●	●	●
Belt	○	○	○	○
Opening speed (Fully adjustable)	10 – 50cm/sec	10 – 50cm/sec	10 – 30cm/sec	10 – 30cm/sec
Closing speed (Fully adjustable)	10 – 40cm/sec	10 – 40cm/sec	10 – 30cm/sec	10 – 30cm/sec
Hold open time (Independent for Lock and Auto mode)	0 – 60 sec	0 – 60 sec	0 – 60 sec	0 – 60 sec
Power Supply	240 V, 50/60Hz	240 V, 50/60Hz	240 V, 50/60Hz	240 V, 50/60Hz
Power Consumption	175W	175W	175W	175W
Ambient Temperature	-15°C to 50°C	-15°C to 50°C	-15°C to 50°C	-15°C to 50°C
Class of protection (IP Rating)	IP20	IP20	IP20	IP20
<b>Control Module</b>				
Function Modes				
– Off/Lock	●	●	●	●
– Exit	●	●	●	●
– Automatic	●	●	●	●
– Open	●	●	●	●
Electronic Mode Pad	○	○	○	○
Security Interface (Mode Control & Activation)	○	○	○	○
After Hours Exit (Night bank)	●	●	●	●
Self Learn Function	●	●	●	●
Automatic reverse on obstruction	●	●	●	●
Photo electric cells (Safety beams)	●	●	●	●
Failsafe Opening	●	●	●	●
Continuous operation under power failure (UPS)**	●	●	●	●
12 VDC output	●	●	●	●
Customer Approach Alarms (Lock/PE/Auto)	○	○	○	○
<b>Locking</b>				
Electric Motor lock (Fully enclosed/tamper resistant)	○	○	○	○
Lock Functions - Smart/Emergency/Pharmacy	○	○	○	○
Door Lock in any position	○	○	○	○
Standard ● Optional ○	○	○	○	○

\*larger door sizes upon request

\*\* Up to 300 cycles

# General specification text



## The automatic door operator

The automatic single slide/bi-parting door operator is to be a 240-volt fully electric dormakaba 301/401/501 Series. Fully housed in extruded aluminium (height 265mm x width 152mm). Fully complies with the relevant Australian Standards for Automatic Door operators.

## The equipment will incorporate the following:

A 3 phase 24 volt motor that is unable to be burnt out; a programmable logic control with current sensing and durable solid state switching of the motor; chain drive with average tensile strength of 1900kg and a 12.7mm pitch; self-lubricating gearbox with steel cut gears (not nylon or cast) for increased durability with no intermediate belts or pulleys; an anodised aluminium replaceable tracking system; and a carriage assembly supported by glass fiber reinforced nylon track wheels with fully raced and sealed ball bearings.

The operator must have positive electric braking to close the doors smoothly; fully adjustable speed control with independent settings for open, close and braking; automatic re-closing circuitry to ensure doors re-close if partially opened; intermediate selectable opening widths or climate control facility.

The operator is to incorporate a failsafe device to open doors fully on power failure or on fire signal in accordance with the NCC section D2.19 and relevant Australian Standards; monitoring warning signal to indicate when the battery power is low; automatic reversing if obstructed during closing sequence with fully adjustable sensitivity settings; automatic stop and retry if obstructed during opening sequence at a predetermined programmable time and speed; dual sets of jamb fitting high gain (up to 10m) flush mounted safety beams (PE cells) that are resistant to sunlight.

## Actuation

The operator is to be actuated by two dormakaba

microwave movement sensors as standard equipment; the sensors must be resistant against reflected sun light and have focusable area detection settings to reduce unnecessary actuations.

The operator is to be covered by a one (1) year parts warranty from date of invoice.

## Optional features

### Belt drive

15mm belt with curvilinear tooth design precisely formed and accurately spaced to ensure smooth engagement with pulley grooves.

### Motor lock

The operator is to have a failsafe electric motor lock, compliant with the NCC section D2.19 and D2.21, which locks the doors via the drive train regardless of the door position. It is to incorporate a rechargeable battery reserve to ensure the doors remain locked for up to 48 hours under mains power failure with an option to extend.

### Advanced security interface board

Provides operational data output signals for building security system, i.e. open, closed, locked, power, battery (refer to page 12).

### Mode pad

The operator is to be fitted with a dormakaba one touch operation electronic mode pad with back lit LCD screen. The mode pad is to have an input jack for the operator programming device and integrated diagnostic feedback function that provides information on door function status and servicing requirements.



# Operator specification text

## **EL 301 Single/Bi-parting/ Telescopic Automatic Door Operator:**

The automatic framed/frameless/SCD door operator to suit a single/double/four panel sliding door is to be a 240v fully electric dormakaba EL 301 Secure Series. Fully housed in extruded aluminium, the operator is to include a tamper proof fully enclosed electric lock capable of locking the door leaves in any position. The operator must include a monitored battery back up system with audible alarm and be able to provide up to 48 hours of lock function during a power failure. The operator is to comply with the Australian Standard AS5007.

## **EL 301 Breakout - framed door the automatic door operator:**

The automatic single / bi-parting, door operator is to be a 240v fully electric dormakaba EL 301 Framed Breakout Series, fully housed in extruded aluminium (265 mm H x 152 mm W). The operator must be capable of operating a total door weight up to 240kg and in emergency be able to opened fully including the sidelights by applying an outward pressure. It is to include a monitored battery back up system with audible alarm that is able to operate the door up to 300 cycles during a power failure. The operator is to comply with the Australian Standard AS5007 and the Building Code of Australia.

## **AL 501 Automatic door operator:**

The automatic single / bi-parting door operator is to be a 240v fully electric dormakaba AL 501 Series, fully housed in extruded aluminium (265mmH x 152mmW) including a solid aluminium track system. The operator must be capable of operating a total door weight up to 500 kg and include a monitored battery back up system with audible alarm that is able to operate the door up to 100 cycles during a power failure. The operator is to comply with the Australian Standard AS5007 and the Building Code of Australia.

## **EL 301 Breakout - frameless glass door automatic door operator:**

The automatic single / bi-parting, door operator is to be a 240v fully electric dormakaba EL 301 Frameless Breakout Series, fully housed in extruded aluminium (265 mm H x 152 mm W). The operator must be capable of operating a total door weight up to 200 kg and in emergency be able to opened fully including the sidelights by applying an outward pressure. It is to include a monitored battery back up system with audible alarm that is able to operate the door up to 300 cycles during a power failure. The operator is to comply with the Australian Standard AS5007 and the Building Code of Australia.

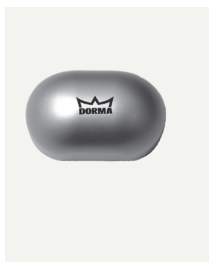
## **AL 401 Automatic door operator:**

The automatic single / bi-parting door operator is to be a 240v fully electric dormakaba AL 401 Series, fully housed in extruded aluminium (265mmH x 152mmW) including a stainless steel track system. The operator must be capable of operating a total door weight up to 400 kg and include a monitored battery back up system with audible alarm that is able to operate the door up to 300 cycles during a power failure. The operator is to comply with the Australian Standard AS5007 and the Building Code of Australia.

## **AL 1001 Automatic door operator:**

The automatic single / bi-parting door operator is to be a 240v fully electric dormakaba AL 1001 Series, fully housed in extruded aluminium (420mm H x 152mm W) including a solid steel track system. The operator must be capable of operating a total door weight up to 1000 kg and include a monitored battery back up system with audible alarm that is able to operate the door up to 100 cycles during a power failure.

# Options



- Motion sensor**
- Adjustable field detection W4500 x D2000mm
  - Flexible mounting options
  - Rain cover option
  - Operating voltage 12/24 AC/DC

**Part No. A86002000**



- Pushbutton**
- Palm activated rocker button
  - Stainless Steel finish
  - H80mm x W80mm

**Part No. D19143201170 - H/CAP**  
**Part No. D19143001170 - Finish SSS**



- Motion/Presence sensor**
- Dual motion/presence sensor
  - Presence safety curtain 2mt wide x 0.20mt deep
  - Motion field 4m wide x 2m deep

**Part No. A86712400**



- PK Series security key switches**
- Solid construction prestige keyswitch
  - Security concealed fixing points. Suitable for most master key systems
  - PK2 - Open
  - PK4 - Open, Lock, Auto, Exit.

**PK4 Part No. A81009004**  
**PK2 Part No. A81009002**



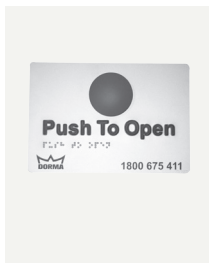
- Presence sensor**
- Presence sensor
  - Presence safety curtain 2mt wide x 0.20mt deep

**Part No. A86302100**



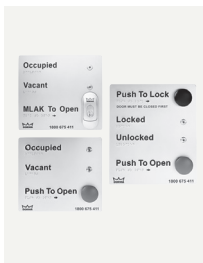
- Remote mode switch**
- Stylish wall mount design
  - Wireless smart range
  - Lock/Open/Auto/Hold function
  - 50m operating distance
  - 120mmW x 70mmH

**Part No. A10120240**



- Push to open plate**
- Suitable for parent room door application
  - Compliant to National Construction Codes (NCC)
  - Durable and robust design including braille and raised lettering
  - 175mmW x 120mmH

**Part No. A10109035**



- Privacy door system**
- Suitable for disabled toilet door applications
  - Compliant to NCC
  - Durable design including braille and raised lettering
  - Bell output, duress and staff over-ride function
  - Polycarbonate plate that is vandal, chemical and UV resistant



- Touchless switch**
- Wall or surface mount
  - Suitable for hospitals, clean room and food preparation area
  - 85mm x 85mm

**Part No. B12010039**



- Mode pad switch LCD displayed**
- Simple one-touch mode selection
  - Auto/Lock/Exit/Open
  - Security pin-coded
  - Diagnostic feedback
  - Customer warning alarms
  - Partial opening settings
  - 43mmWx112mmHx20mmD

**Part No. A10110016B**



- Handheld remote transmitter**
- Four button design
  - Wireless smart range
  - Open, Lock, Partial and Close
  - 125mmLx47mmW

**Part No. A10120260**



- 9004 card/fob reader**
- 35mmWx122mmHx16mmD
  - IP66 rated

**Part No. EACAUTOF (Fobs)**  
**Part No. EACAUTO (Cards)**

- 9003 card/fob reader**
- 48.5mmWx32mmHx18.5mmD
  - IP55 rated
  - Both supplied with 10 cards or fobs
- Part No. EACAUTOLAPCC (Fobs)**  
**Part No. EACAUTOLAPCF (Cards)**

# Building management

## Advanced security interface board

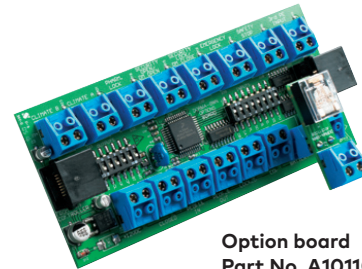
Provides a flexible interface between the door operator and security building management system.

*Input signals include:*

- Security interface to open the door, lock, emergency lock, partial open lock, safety stop, mode control.

*Output signals include:*

- Door closed, locked, 240V power fail, battery condition, malfunction, people count etc.



**Option board**  
**Part No. A10110007**

# Service and maintenance

When you choose dormakaba, you are supported by a nationwide network of accredited and fully trained, specialist automatic door technicians and agents, 24 hours a day, 7 days a week. Our specialised service covers dormakaba's comprehensive range of door operators, door closers, industrial doors and movable walls with our expertise extending to all models.

When you call dormakaba Service you will speak to someone who knows the products and who can offer expert advice. Public safety and security are our paramount concern and this is reflected in our prompt response times - making dormakaba the unrivalled industry leader in service support.



## dormakaba Service – at work in your locality.

With our comprehensive maintenance and repair service, dormakaba ensures the functional integrity, safety and security of door systems for extended longevity.  
dormakaba Service 24/7





[www.dormakaba.com](http://www.dormakaba.com)

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01 Series Automatic Sliding Doors - January 2017  
Subject to change without notice