

# WHY CHOOSE KONE SLIDING DOORS?

KONE sliding doors provide smooth people flow in a wide variety of building types, from offices to retail environments and transit centers. Our offering includes solutions for both building entrances and interior spaces.

- KONE understands the people flow needs of different building types, customers and end-users and offers a complete range of integrated people flow solutions: building doors, turnstiles, elevators and escalators
- By being continuously present in the building through comprehensive service, we know how the whole building is used during its life cycle

#### **KEY BENEFITS**



#### **SAFETY**

- Compliant with all relevant European standards (including EN 16005)
- Multiple safety features to protect end users



#### **RELIABILITY**

- Designed and manufactured in Europe according to the latest quality standards
- Designed, tested, and supplied as complete systems



#### **DESIGN**

- Flexible design with a wide range of visual options
- Customizable

(III)

Space-efficient options



#### **SUSTAINABILITY**

- Optional eco package for improved energy efficiency
- Special door types to reduce carbon footprint



#### CONNECTIVITY

- Intelligent predictive maintenance
- Continuous equipment status monitoring reduces breakdowns
- Transparency you see what we see



### **KONE** sliding doors

Offering	Standard	Insulated	Break Out	Vandal Resistant	Glass	Folding
Characteristics	Suitable for the majority of external and internal building spaces     Three profile options to enable customization of door appearance:     Standard     Insulated     Special	For building entrances with medium to high traffic levels where the focus is on energy savings and security     Thick profiles     Durable aluminum construction and high thermal insulation     Good sound-insulation properties     Various glazing options to meet the required U-value	Electrical or mechanical operation to meet European regulations including TuV certification for electrical break out     Electrical system with backup battery pack     Mechanical with openable, hinged leaf system	<ul> <li>Strong profile system with glued glass</li> <li>4 x pin locking systems on profiles</li> <li>RC2 class vandal resistance (EN 1627) available for standard, insulated, and break out door sets</li> </ul>	Special profile     Glass leaf has square, straight brush sealing on all sides     No bottom profile needed     Maximum glass surface for a premium appearance     Available with stainless steel (SD100) and standard steel (SD95) brackets	Intelligent fail-safe system ensures safe and reliable opening     Complies with DIN18650-1 (Cat. 4 according to EN 954 and SIL3 according to IEC 61508)
KONE doors	KONE Standard Sliding door (SD30)	KONE Insulated Sliding door (SD50)	KONE Escape or Emergency Exit Sliding door (SD30E, SD50E, and SD60)	KONE Vandal Resistant Sliding door (SD30V)	KONE Full Glass Steel Sliding door (SD95)  KONE Full Glass Stainless Steel Sliding door (SD100)	KONE Standard Folding door (FD50)
Туре	Single sliding Double sliding Single telescopic Double telescopic	Single sliding Double sliding Single telescopic Double telescopic	Single sliding Double sliding	Single sliding Double sliding	Single sliding * Double sliding *	Single leaf folding Double leaf folding

<sup>\*</sup> Tailor-made engineering process (C-process)

#### **FEATURES**

- Choice of systems full glass with bracket, and light, standard, and insulated with aluminum profiles
- Choice of door types single and double, telescopic
- Choice of sizes 1, 2, 3, or 4-leaf doors
- Wide variety of safety features, including manual switches, motion sensors, safety screen, and access control integration
- Can be integrated with KONE Access and other building management systems
- With optional 24/7 connectivity we analyze data from doors to identify maintenance needs before they cause breakdown

#### **QUALITY AND SERVICE**

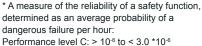
KONE sliding doors are built from high-quality materials and developed based on decades of experience. They comply with the latest European norms and regulations and have been tested by prominent European institutes such as TüV.

KONE also offers comprehensive maintenance services for doors. In the event of a component failure spare parts are typically dispatched within 24 hours, and the KONE Customer Care Center is available 24/7 to support you with any door maintenance and repair needs.

KONE's engineering and manufacturing units are certified according to the ISO 9001:2015 standard for quality management systems.



- 24/7 Connectivity
- Vandal resistant: protect your properties against burglary or vandalism
- Energy saving: half or partially open option reduces warm or cold air loss and temperature oscillations in the building
- Insulated: robust profile with durable glass for weather conditions; can be combined with half or partially opening option; U value can be as low as 1.4
- Escape route: an intelligent fail-safe system for emergency and escape route doors ensures the safe and reliable opening of the door in all circumstances. Door fulfills the demands for escape route doors as described in DIN18650-1 (tested for 1 million cycles minimum) with a performance level\* according to FN 13849-1:
  - Performance level C: Standard sliding door
  - Performance level D: Escape route door



Performance level C:  $> 10^{-6}$  to  $< 3.0 *10^{-6}$ Performance level D:  $> 10^{-7}$  to  $< 10^{-6}$ 



Single sliding door



Double sliding door



Single telescopic door



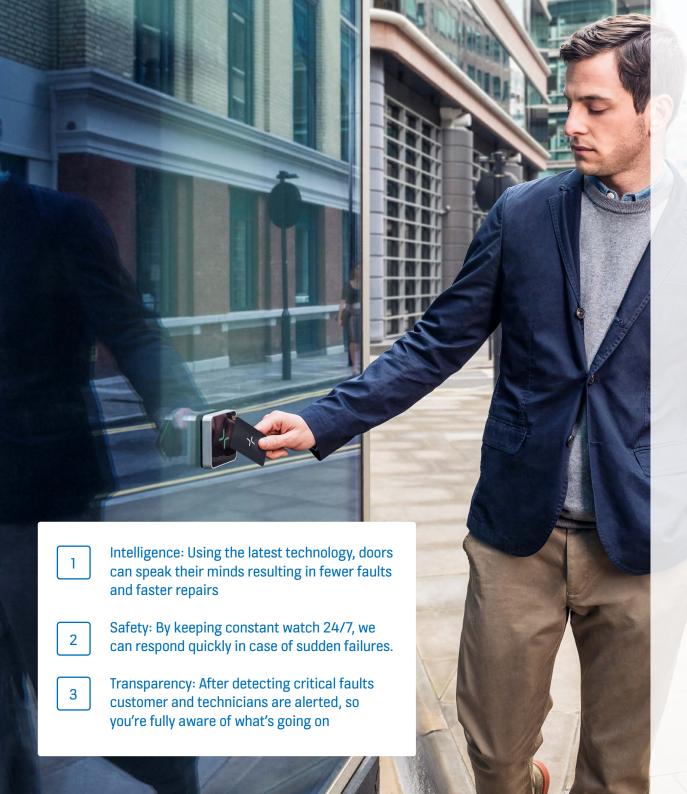
Double sliding door (with fixed leaves)



Double telescopic door



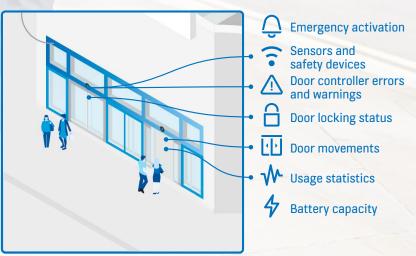
Folding door



#### IMPROVING PEOPLE FLOW WITH CONNECTIVITY

With our new intelligent KONE 24/7 Connected Services we have a clear picture of what's going on with your equipment and can reduce unexpected problems. We gather data on things like:

- Number of door openings and closings
- Status and condition of critical equipment
- Door locking status
- Emergency activations
- Overall usage levels and movement



## INTELLIGENT SLIDING DOOR OPERATORS

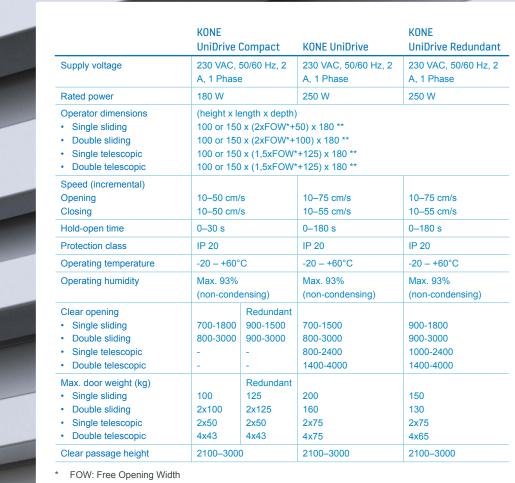
KONE sliding doors feature powerful, fully automatic operators that are suitable for a wide range of door types and environments.

KONE offers three different operators for sliding doors: the KONE UniDrive® Compact, the KONE UniDrive®, and the KONE UniDrive® Redundant.

The KONE UniDrive® Compact is a space-efficient operator with a compact design that discreetly blends in with the surrounding décor.

The KONE UniDrive® is suitable for environments with more demanding traffic flows. It can collect and store information and features self-diagnostic capabilities. it is also equipped with safety features such as reverse opening, which reverses the opening or closing cycle if an obstruction is detected.

The KONE UniDrive® Redundant features dualoperator technology with an integrated rechargeable battery pack. Emergency opening is possible following a power failure with the optional integrated mechanical lock release.



<sup>\*\*</sup> Operator length depends also on the selections - insulated / vandal / lock variants

All operators tested according to Low Voltage Directive and manufactured in compliance with ISO 9001



#### **OPERATING MODES**

- Manually operated activators (push buttons and switches)
- Motion detectors
- Safety sensors
- Entrance control system
- Electronic program switch

#### PROGRAM SWITCH FUNCTIONS

- Automatic open & close
- Reduced opening width
- Maintenance need can be seen from operator info panel
- Key switch with Euro cylinder to lock the program switch to prevent unauthorized use (optional)

#### LOCKING

- Electronic lock activated by the program switch
- Two optional battery backup types:
  - for one-time door opening in case of power cut
  - for performing all door functions for a 30-min. period
- Mechanical lock; hook, bar, or rod lock with key use in door leaf (optional)
- Key switch to lock the program switch to prevent unauthorized use (optional)

#### SAFETY FEATURES

- Electronic safety reverse (highly sensitive reverse settings in both open and close directions)
- Finger trap safety (adjustable to avoid accidental finger trap), photo cell safety (mounted in door opening, control unit tests during every door cycle)
- Door speed safety

   (automatically adjusted based on door weight and resistance)
- Power failure (all settings are stored in case of power failure)
- Mechanical safety screen (prevents people or objects from being struck by a moving door leaf)

### FIRE ALARM FUNCTIONS (OPTIONAL)

- Standard function is 'Door closes' while the photocell is switched off and the radar sensor remains active
- Door closes and manual operation
- Special programming

# KONE SLIDING DOOR PROFILES

KONE offers four profile types to suit your building design:

- Standard
- Insulated
- Special

We also offer a full-glass door with brackets instead of profiles.

The design of the profiles provides an aesthetically pleasing view of the door and fixed leaf. The standard profile can adapt various single layer glass 8, 10, or 12 mm. It is also suitable for insulated glass, gas or air filled package thickness from 22 mm to 28 mm. The Standard profile is suitable for various glass types up to a maximum of 20 mm thick and can be used for both interior and exterior doors.

The Insulated profile is ideal for building entrance doors. We also offer a special profile for fire doors. The full-glass profile is a stylish solution with very thin finishing. In addition to our own profile systems we can also supply doors with various types of aluminum profiles as well as glass, steel, wood, and fire-resistant materials.



### Profile system technical specifications

Star	ndard	Insulated	Special
Sliding Door 30L Sliding Door 30LT Sliding Door 30E Sliding Door 30ET		Sliding Door 50 Sliding Door 50T Sliding Door 50E Sliding Door 50ET Sliding Door 50L Sliding Door 50LT	Sliding Door 30V Sliding Door 30EV Sliding Door 60 Sliding Door 60L
Tight, round, and slim view		Insulated	Tight, round, and slim view
Aluminum AIMgSi, 3.5 mm profile wall thickness, DIN 1725, Dimensions DIN 17615		Insulated aluminum with thermal break	Aluminum AIMgSi, 3.5 mm mm profile wall thickness, DIN 1725, Dimensions DIN 17615
Single sliding Double sliding Single telescopic Double telescopic*		Single sliding Double sliding Single telescopic Double telescopic*	Single sliding Double sliding
Toughened glass		Toughened glass	Toughened glass, toughened and laminated glass
Single: 8, 10, 12 Double layer, air or gas filled	: 3-16-3 (glass-air-glass)	Double layer, air or gas filled (argon/krypton) standard: 3-16-3 or 5-18-5 or 6-16-6 (glass-air-glass)	Single: 8, 10, 12 Double: Lamination based on burglar class 2x4-12-2x3 (glass-air-glass)
47		46	47
35		43	35
47		60	47
30		37	30
700-1500 800-3000 800-2400 1400-4000 2100-3000	900-1800 ** 1000-3000 ** 1000-2400 ** 1400-4000 ** 2100-3000 **	900-1800 900-3000 800-2400 1400-4000 2100-3000	700-1500 800-3000 - - 2100-3000
	Sliding Door 30L Sliding Door 30LT Sliding Door 30E Sliding Door 30E Sliding Door 30ET  Tight, round, and slim view  Aluminum AlMgSi, 3.5 mm profile wall thickness DIN 1725, Dimensions DIN 17615  Single sliding Double sliding Single telescopic Double telescopic*  Toughened glass  Single: 8, 10, 12 Double layer, air or gas filled  47  35  47  30  700-1500 800-3000 800-2400 1400-4000	Sliding Door 30LT Sliding Door 30E Sliding Door 30E Sliding Door 30ET  Tight, round, and slim view  Aluminum AlMgSi, 3.5 mm profile wall thickness, DIN 1725, Dimensions DIN 17615  Single sliding Double sliding Single telescopic Double telescopic*  Toughened glass  Single: 8, 10, 12 Double layer, air or gas filled: 3-16-3 (glass-air-glass)  47  35  47  30  700-1500  800-3000  900-1800 ** 1000-3000 ** 1000-2400 ** 1400-4000	Sliding Door 30L   Sliding Door 50   Sliding Door 50T   Sliding Door 30E   Sliding Door 50E   Sliding Door 50L   Sliding Sliding   Single sliding Sliding Double sliding Single sliding Double sliding Single telescopic   Single telescopic   Single telescopic   Single telescopic   Sliding Slidin

Note: Sliding Door 95/95E and Sliding Door 100/100E are full glass doors without profiles. All values are in millimeters.

L= Compact Operator, LT= Compact Telescopic, T= Telescopic, E= Escape/Emergency Exit, ET= Emergency Telescopic, V= Vandal Resistantt, EV = Escape/Emergency Vandal Resistantt.

<sup>\*</sup> Available with or without fixed leaves \*\* Version E (redundant)

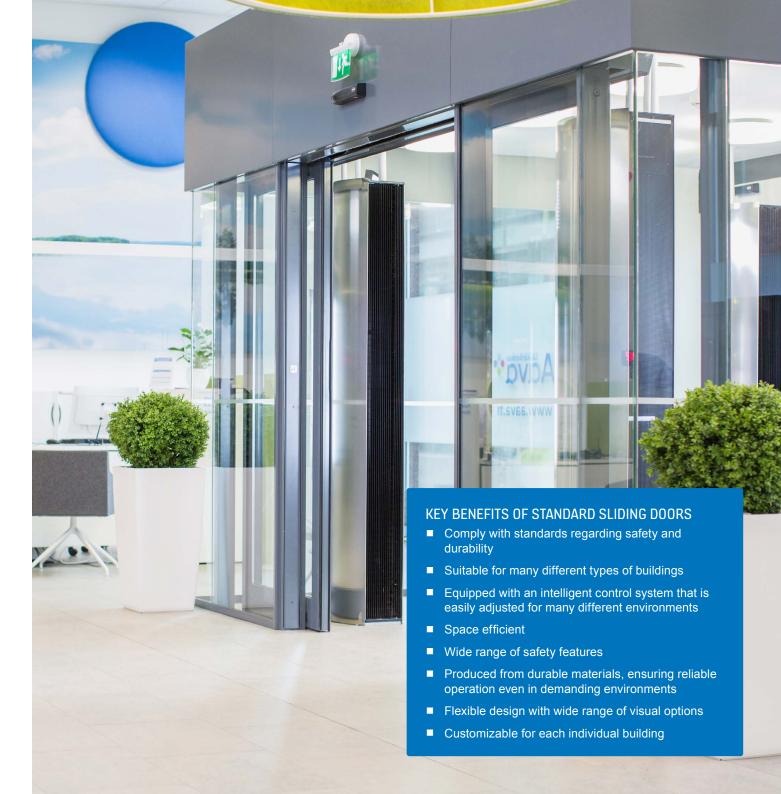
### STANDARD SLIDING DOOR

The KONE Sliding Door 30 is suitable for most external and internal building spaces. Different profile systems allow diverse applications in many buildings.

#### **Features**

Features				
Door type	Single sliding, Double sliding Single telescopic, Double telescopic			
Profile system	Standard			
Material	Aluminum			
Glass	Toughened glass			
Glass variants	Single: 8, 10, 12 Double layer, air or gas filled: 3-16-3 (glass-air-glass)			
Profile width	Vertical: 47 - Top: 3	55 - Bottom: 30		
Opening height	2100–3000			
Rated power	250 W			
Operator dimensions     Single sliding     Double sliding     Single telescopic     Double telescopic	(height x length x depth) 100 or 150 x (2xFOW*+50) x 180 100 or 150 x (2xFOW*+100) x 180 100 or 150 x (1,5xFOW*+125) x 180 100 or 150 x (1,5xFOW*+125) x 180			
Clear opening     Single sliding     Double sliding     Single telescopic     Double telescopic	Standard 700–1500 800–3000 800–2400 1400–4000	Redundant 900–1800 900–3000 1000–2400 1400–4000		
Max. door weight (kg)  • Single sliding  • Double sliding  • Single telescopic  • Double telescopic	Standard 200 160 2x75 4x75	Redundant 150 130 2x75 4x65		

\* FOW: Free Opening Width



#### A SLIDING DOOR FOR ALL SEASONS

The KONE Sliding Door 50 is suitable for public and commercial buildings where reliability, security, convenience, energy efficiency, and image are important factors.

The door has been tested and certified by SKG-IKOB according to European standards\*.

- Low air permeability > Class PPD0 (< 150 Pa)
- High watertightness > Class 3A (100 Pa)
- High wind resistance > PDD 500 (500 Pa)
- Optional burglar resistance > Class RC2
- Thick, robust profiles with multi-layered glass with argon filling
- Thermal break to minimize thermal flow through door profiles
- Seamless closing with rubber/gaskets at the closing edge and brushes around the door to protect against draft
- Optional eco package for improved energy efficiency

Thanks to its highly effective insulation, the KONE insulated sliding door can achieve a U-value\*\* as low as 1.4 W/m2K.

- Air permeability: EN 12207, EN 16361
   Watertightness: EN 12208, EN 16361
   Resistance to wind: EN 12210, EN 16361
   Burglar resistance: EN 1627
- \*\* U-value is a measurement of heat transfer through a building material. The lower the value, the more energy efficient the building component is.



## INSULATED SLIDING DOOR

The KONE Sliding Door 50 is an insulated automatic sliding door designed for building entrances with medium to high traffic levels. It is ideal for ensuring smooth people flow in busy environments.

	Features			
Door type	Single sliding Double sliding Single telescopic Double telescopic			
Profile system	Insulated	Insulated		
Material	Aluminum wi	Aluminum with thermal break		
Glass	Toughened g	lass with gas fi	lling	
Glass variants	Double layer, air or gas filled (argon/krypton) standard 3-16-3 or 5-18-5 or 6-16-6 (glass-air-glass)			
Profile width	Vertical: 46 -	Top: 43 - Botto	m: 60	
Opening height	2100–3000			
Rated power	250 W			
Operator dimensions     Single sliding     Double sliding     Single telescopic     Double telescopic	(height x length x depth) 100 or 150 x (2xFOW*+120) x 180 100 or 150 x (2xFOW*+120) x 180 100 or 150 x (1,5xFOW*+125) x 180 100 or 150 x (1,5xFOW*+125) x 180			
Clear opening  Single sliding  Double sliding  Single telescopic  Double telescopic	Standard 900–1800 900–3000 800–2400 1400–4000	Redundant 900–1800 900–3000 1000–2400 1400–4000	Compact 700–1800 900–3000 800–2400 1400–4000	
Max. door weight (kg)  Single sliding  Double sliding  Single telescopic  Double telescopic	Standard 200 160 2x75 4x75	Redundant 150 130 2x75 4x65	Compact 120 160 2x50 4x43	
U-value	from 1.4			

FOW: Free Opening Width

## SPECIAL SLIDING DOORS

KONE offers a proven and reliable solution for emergency and escape-route doors that includes a reliable and intelligent fail-safe system. The system ensures that doors open safely and reliably in all circumstances. The system fulfills the requirements for escape-route doors as set out in the DIN 18650-1 standard.

#### **KEY FEATURES**

- Single or double leaf with or without fixed leaves
- Available with programmable opening and closing speed, open time, opening width, several timing functions, and obstacle safety reverse

#### **DOOR OPTIONS**

- Electronic lock
- Manual emergency release releases a locked electronic lock during a power failure
- Night switch for one-time opening when the door is electronically locked
- Connection to fire alarm



	KONE Sliding Door 60 (Mechanical break-out)	KONE Sliding Door 30E and 50E (Redundant escape)	KONE Sliding D (Vandal resista	
Door type	Single sliding** Double sliding	Single sliding** Double sliding Single telescopic Double telescopic	Single sliding* Double sliding	
Purpose	Mechanical break out	Redundant	Vandal/burglar re	esistance
Profile system	Standard	Standard	Standard with lo	cking
Profile material	Aluminum	Aluminum	Aluminum	
Glass	Toughened	Toughened	Toughened and	laminated
Glass variants	Single 8, 10, 12 Double 3-16-3 or 5-18-5	Single 8, 10, 12 Double 3-16-3 or 5-18-5	1x10 or 4x4-14-5 (lamina	ated)
Profile width	Vertical: 47 Top: 35 Bottom: 30	Vertical: 47 Top: 35 Bottom: 30	Vertical: 47 Top: 35 Bottom: 30	
Opening height	2100–2500	2100–2500	2100–3000	
Rated power	250 W	250 W	250 W	
Operator dimensions (height x length x depth)  • Single sliding  • Double sliding  • Single telescopic  • Double telescopic	200 x (2xFOW*+260) x 180 200 x (2xFOW*+210) x 180	100 or 150 x (2xFOW*+50) x 180 100 or 150 x (2xFOW*+100) x 180 100 or 150 x (1,5xFOW*+125) x 180 100 or 150 x (1,5xFOW*+125) x 180	150 x (2xFOW*+ 100 or 150 x (2x	-235) x 180 FOW*+170) x 180
Clear opening  Single sliding  Double sliding  Single telescopic  Double telescopic	1000–2500 1000–2500 -	900–1800 900–3000 1000–2400 1400–4000	700–1500 1000–3000	Redundant 900–1800 1000–3000
Max. door weight (kg)  Single sliding  Double sliding  Single telescopic  Double telescopic	1x110 2x110	150 130 2x75 4x65	200 160	Redundant 150 130

<sup>\*</sup> FOW: Free Opening Width







<sup>\*\*</sup> Tailor-made engineering process (C-process)



#### KONE BREAK OUT DOOR SYSTEM

The KONE break out door system can be electrical or mechanical.

Electrical break out, also called redundant escape (SD30E and SD50E), ensures reliable and safe emergency opening when needed.

Mechanical break out (SD60) is for hinged door leaves or side-screens that can be pushed open in emergency use.

#### KONE VANDAL-RESISTANT DOOR SYSTEM

A continuous floor guide rail at the bottom of the door and operator-integrated anti-tamper protection prevent the door from being dislodged. The solution is tested according to RC2 class burglar resistance (EN 1627).

KONE Vandal-resistant door system (SD30V) has a fourpoint hook locking device with automatic locking action at the main closing edge and lateral door profiles.

Special vandal-resistant glazing is applied to the door profile with a special adhesive.



### FULL-GLASS SLIDING DOOR

The KONE Sliding Door 95 and Sliding Door 100 provide maximum transparency for a sleek, stylish full-glass look.

#### **Features**

reatures				
Door type	Single sliding Double sliding			
Bracket system	Stainless steel (SD100) Powder-coated steel (SD95)			
Glass	Toughened safety glass			
Glass variants	10			
Profiles	None			
Opening height	Max. 2500			
Rated power	250 W			
Operator dimensions     Single sliding     Double sliding	(height x length x depth) 100 x (2xFOW*+70) x 180 100 x (2xFOW*+140) x 180			
Clear opening     Single sliding     Double sliding	700–1600 800–2000			
Max. door weight (kg)  • Single sliding  • Double sliding	1x100 2x100			

\* FOW: Free Opening Width



#### MAXIMIZE NATURAL LIGHT

Folding doors allow the maximum levels of light to enter buildings. Because of their solid construction and ease of use, folding sliding doors are ideal for both interior and exterior applications.

#### SAVE SPACE AND ENERGY

The smart folding movement can create a wide opening in even the most compact of entrances, making automatic folding doors an ideal solution for tight spaces. Slim-profile folding doors allow maximum visibility without compromising strength and offer a highly modern look and feel.

#### **INCREASE SAFETY AND SECURITY**

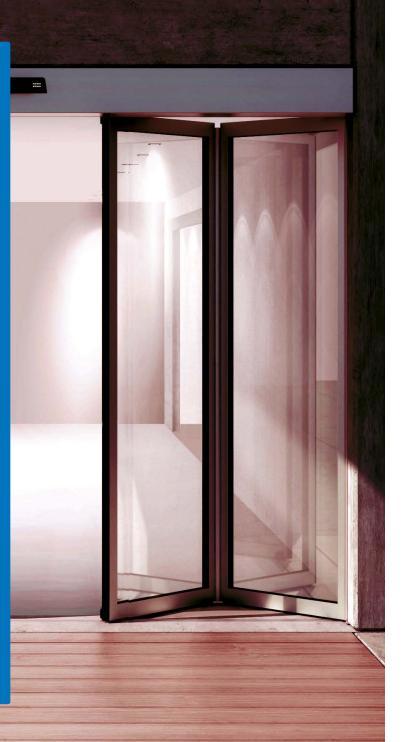
Folding doors do not interfere with access. Their low threshold improves accessibility for wheelchair users and others with restricted mobility, making them ideal for hallways in offices, public buildings, and medical facilities. Dual-drive technology ensures emergency access in any situation. The system self-monitors to ensure reliable opening and closing at all times.

#### ROBUST, SILENT, AND WIND-RESISTANT

The operator transmits its power without toothed belts for significant gains in dynamic response and silent efficiency. This ensures that the door opens and closes quickly, quietly, and with minimal wear. The operating parameters are dynamically modified according to requirements in order to adapt closing behavior to the prevailing weather situation.

#### **FLEXIBLE**

Folding doors offer more flexibility than other types of door, allowing you to fully open up a wall or open the doors to any width within the limits of the frame.



### **FOLDING DOOR**

The KONE Folding Door 50 blends swinging and sliding door technology. The door's unique folding feature provides a much larger opening than standard sliding doors and dramatically reduces sweep when compared to traditional swing doors.

#### **Features**

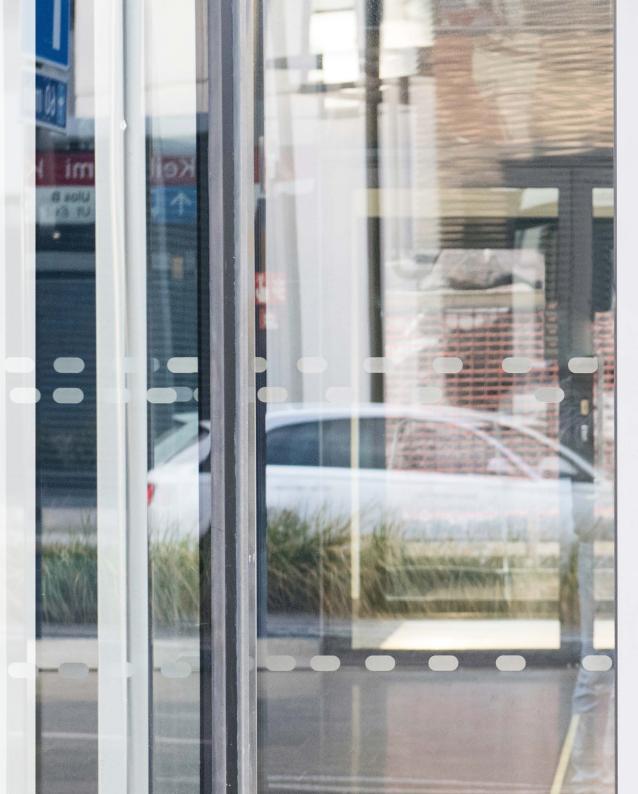
Door type	Single leaf folding door
	Double leaf folding door
Profile system	Insulated
Material	Aluminum
Glass	Laminated and toughened
Glass variants	2x8 with 15 mm air gap
Vertical profile width	Middle 103 - hinge 108 - side 135
Top profile width	60
Bottom profile width	60
Profile thickness	37
Opening height	2100–2500
Rated power	250 W
Operator dimension	(height x length x depth)
Single sliding	155 x (FOW*+190) x 218
Double sliding	155 x (FOW*+280) x 218
Clear opening	
Single sliding	840–1240
<ul> <li>Double sliding</li> </ul>	980-2480
Max. door weight (kg)	
Single sliding	1x90
Double sliding	2x90
U-value	1.7 to 2.4

\* FOW: Free Opening Width

# KONE UNIDRIVE KIT FOR SLIDING DOORS

A smart solution that can be used to modernize KONE or third-party door operators, avoiding the need to replace the entire door unit. Modernizing the operator extends the life of the door and ensures safe operation.

- Fast and efficient repair and replacement of third-party operators
- 2 Reduces need for third-party spares and accessories
- 3 Can be applied to most operators



#### Technical data

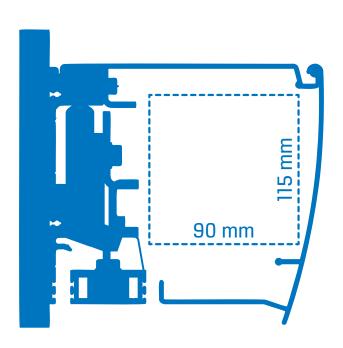
	Standard	Redundant
Power supply	230 V +/- 10% 50 Hz	230 V +/- 10% 50 Hz
Power supply for external accessories	27 V DC / 2 A	27 V DC / 2 A
Rated power	250 W	250 W

#### Function programs

Off	~	~
Automatic	~	~
Permanent opening	~	~
Partial opening	~	~
Exit	~	~

#### Characteristics

Door leaf width (mm), single sliding door	700-1500	900-1800
Door leaf width (mm), double sliding door	800-3000	900-3000
Max. door leaf weight (kg), single leaf	1x200	1x150
Max. door leaf weight (kg), double leaf	2x160	2x130



# BENEFITS OF THE UNIDRIVE KIT

Fast, cost-effective modernization of almost any brand of sliding door operator.

- \$ Cost-effective upgrade with minimal downtime
- Suitable for a wide variety of operator types
- Quiet and smooth operation
- Ensures that the door operator meets the latest standards
- Provides foundation for future connected services

KONE provides innovative and eco-efficient solutions for elevators, escalators, automatic building doors and the systems that integrate them with today's intelligent buildings.

We support our customers every step of the way; from design, manufacturing, and installation to maintenance and modernization. KONE is a global leader in helping our customers manage the smooth flow of people and goods throughout their buildings.

Our commitment to customers is present in all KONE solutions. This makes us a reliable partner throughout the life cycle of the building. We challenge the conventional wisdom of the industry. We are fast, flexible, and we have a well-deserved reputation as a technology leader, with such innovations as KONE MonoSpace® DX, KONE NanoSpace™, and KONE UltraRope®.

KONE employs close to 57,000 dedicated experts to serve you globally and locally.

#### KONE CORPORATION

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