

## Product Information



### **Rolflex Netherlands**



#### Custom made industrial doors.

Rolflex is the designer and producer of the Compact door.

It is different from a traditional roller shutter or overhead door. The Compact door folds above the entrance while opening and saves not only space, but is also very easy to operate and is maintenance friendly. In this manual we will show all possibilities and benefits of our unique door.



When the doors are produced, and after a final visual inspection, they are packed for transport, to ensure all doors are delivered complete and without damage.

#### Installation

To complement a high quality product it is important to work with skilled specialists in the field of installation and service. In our own "Compact Academy" craftsmen from all over the world are trained to be skilled specialists.

You can be sure that always and everywhere a Compact Door specialist is available.



#### Production

Compact doors are manufactured in a modern factory in The Netherlands. Automated production processes will guarantee a constant high quality and meet European standards and regulations.

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## **Rolflex Netherlands**





#### Unique folding system

The Compact door has a unique and patented rail system without the use of balancing springs. This guarantees a long life cycle and the minimum of maintenance.

#### Service and installation network

The Compact Door is available almost everywhere around the world. A network of independent door companies are official Compact Door dealers and have this type of door in their delivery program. These dealers do have the specific knowledge of their own home market and together with Rolflex are able to deliver Compact Doors according to local regulations.





## The Compact Door



4 Compact

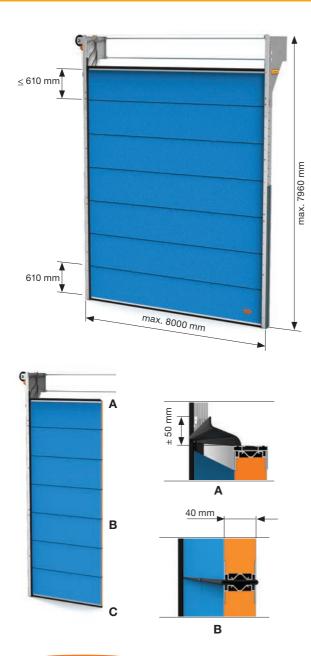
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## Sandwich panels



#### Material panels

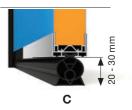
Insulated sandwich panels. CFC-free polystyrene foam covered with aluminium stucco finished cladding.

Aluminium U-profiles on top and bottom of the sandwich panels for extra strength and stability.

#### Panel specifications

Top panel height variable.

- Insulation value EN12428 Panel: U=0.76 W/m<sup>2</sup>K
- Wind resistance EN12424 Class 2 - 5
- Water penetration EN12425 Class 2
- Air permeability EN12426 Class 2
- Noise reduction ISO140-3
   Panel 20db(A)



Compac FOLDING DOOR

## Standard colours 2





10 standard RAL colours. Other RAL colours possible.

#### Warning

Dark RAL colours can cause problems in combination with sun heat and door panel width.



RAL 3002 Carmine red



RAL 7032 Pebble grey



RAL 5010 Gentian blue



RAL 9002 Grey white



RAL 5017 Traffic blue



RAL 9006 White aluminium



RAL 6005 Moss green



RAL 9007 Grey aluminium



RAL 7016 Anthracite grey



RAL 9016 Traffic white

Printing colors can deviate and are just a guide



## 3 Windows rectangular

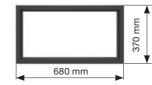


#### Specifications

Window insulated acrylate with black plastic cover.

- Net glass surface: 0.18 m<sup>2</sup>
- Insulation value: U=2.8 W/m<sup>2</sup>K
- One window per meter panel

#### Dimensions



Detail







8

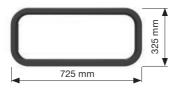
## Windows oval 3

#### Specifications

Window insulated acrylate with black plastic cover.

- Net glass surface: 0.17 m<sup>2</sup>
- Insulation value: U=2.8 W/m<sup>2</sup>K
- One window per meter panel

#### Dimensions



#### Detail









## 4 Full vision panels



#### **Panel specifications**

Aluminium profiles with vertical sections and fillings of choice.

- Standard finish anodized aluminium or RAL 9002
- Other RAL colours possible
- Thick: 40 mm
- Height: 610 mm
- Top panel height variable, minimum 135 mm
- Fillings of choice
- Number of fillings is variable and of choice

#### Dimensions

- From 6000 mm opening width a maximum of two full vision panels is possible in door blade
- The maximum width for a full vision panel is 7000 mm

















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Compac FOLDING DOOR

# 

## Full vision panels 4

#### Specifications

- Full vision panel with fillings of choice
- On the inside of the door blade white plastic click-lists with rubber seals are used to fix the fillings in place
- These click lists are suitable for fillings of 4 mm or 17 mm thickness
- Click lists can be painted in RAL at choice.



#### Filling 4 mm

- Single acrylate
- Single polycarbonate
- Single safety glass
- Stainless steel netting



#### Filling 17 mm

- Insulated acrylate
- Insulated polycarbonate
- Insulated polycarbonate twin-wall
- Insulated sandwich



#### Delivery of plastic click-lists

- For filling of 4 mm
- For filling of 17 mm

## 5 Full light panels



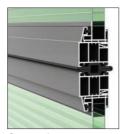
#### **Panel specifications**

Aluminium profiles without vertical sections, filling twin-wall polycarbonate.

- Standard finish anodized aluminium or RAL 9002
- Other RAL colours possible
- Thick: 40 mm
- Height: 610 mm
- Top panel height variable, minimum 135 mm
- Transparent insulated polycarbonate twin-wall

The full light door blade is made of transparent lightweight polycarbonate break resistant panels. A combination with solid sandwich panels or fullvision panels is possible.





**Cross view** 





Opal

Green

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## BEST DESIGN AWARD

## Full light panels 5



Folding door

## 6 Ventilation grating



#### Ventilation grating 452 cm<sup>2</sup>

- Anodized aluminium
- Air permeability net 452 cm<sup>2</sup>

#### Dimensions

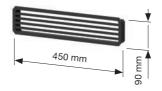




#### Ventilation grating 215 cm<sup>2</sup>

- Black plastic
- Air permeability net 215 cm<sup>2</sup>

#### Dimensions





## (lockable) Ventilation grating 6



#### Ventilation grating 185 cm<sup>2</sup>

- Aluminium RAL 9010 (white)
- Lockable
- Air permeability net 185 cm<sup>2</sup>

#### Dimensions

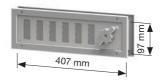




#### Ventilation grating 45 cm<sup>2</sup>

- Aluminium RAL 9010 (white)
- Lockable
- Air permeability net 45 cm<sup>2</sup>

#### Dimensions



## 7 Wicket door



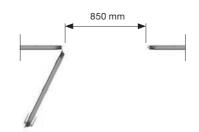


#### Specifications

The wicket door aluminium profiles will be delivered in anodized aluminium finish.

#### Dimensions

- Net opening width 850 mm
- Height (from floor level) 2100 mm
- Threshold ± 120 mm



#### Closure

- Door closer on bottom panel
- Door catcher on top panel
- · Lock in panel 2
- Rubber seal in door frame

#### Safety

Electrical safety switch integrated in the door frame prevents the door running automatically when the wicket door is open.

#### Position wicket door

Hinge side, opening side and position of wicket door in the door blade see page 17.

#### **Position Full vision panels**

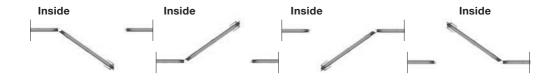
Between 4000 - 6000 mm opening width full vision possible only from panel number 3.

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FOLDING DOOR

## (positions) Wicket door 7





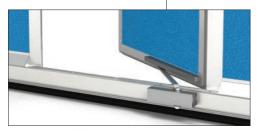


FOLDING DOOR

## 7 Wicket door (detail)



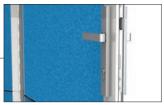
Door closer (bottom panel)



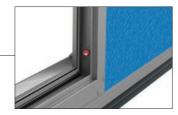
#### Door catch (top panel)



Door lock and handle



Safety switch



#### 90 mm extra top space required for:

- 50 mm for special bottom profile
- 40 mm for door closure installed on bottom



**Euro cylinder lock** Cylinder 30/35 with 3 keys.

> Compact FOLDING DOOR







KABA Lock (Option)

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## (Side door) Wicket door 7





#### Specification

A side door inclusive galvanized steel frame. This door can be installed next to the Compact door and has the same look.

Opening dimensions for side door 1000 mm x 2450 mm (WxH) with fascia panel made of door panels. The side door does not have a threshold and is always opening outwards. Delivery includes a door closer and standard hardware with cylinder lock.

#### Option

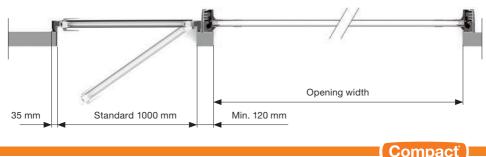
- Panic lock
- KABA lock

#### Site construction (by others)

For installation of the Compact Door tracks and side door frame an installation frame of 120 mm minimum is required.

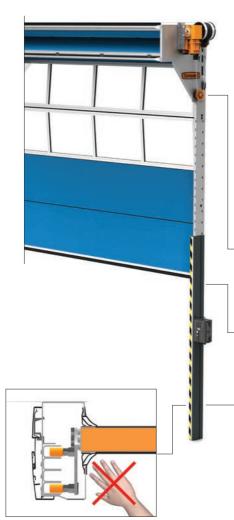
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FOLDING DOOR



#### Dimensions

## Standard safety features



#### General

Safety regulations and norms EN12604 en EN12453 Delivery according EURO norm EN 13 241-1 and CE-certificate.

#### Slack cable device

Motor will be disconnected when cable tension is gone.



#### Side rail covers

Plastic covers to protect the holes in the side rails and to avoid injury.

#### Front rail covers

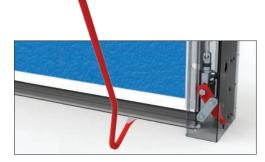
Safety covers with warning tape to prevent injury to fingers and hands.



## Standard safety features 8

#### Fall safety device





#### Anti lift system

The door blade will be held in position automatically by the bottom brackets which will catch in the side rail holes.

#### **Fall movement**



#### Fall stop



#### Function

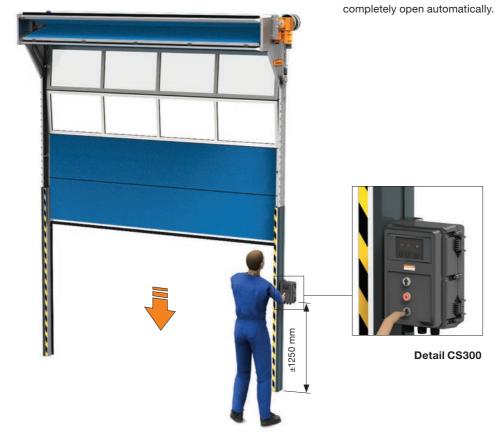
The fall safety device prevents the door blade from falling down in case the steel cables breaks. The bottom brackets will catch in the side rails holes.



## 9 Operation (control)

#### Electrical operation with control box CS300

#### Opening of the door After an impulse the door will



#### Closure of the door with dead man operation

The supervisor who is operating the door will keep control of the closing door. In case of any dangerous situation he will stop the door immediately.



## (control) Operation 9



#### Automatic closure of the door with light curtain safety

With this safety device it is possible to close the door automatically without the supervision of an operator. The light curtain controls the door opening till a height of 2500 mm and detects obstacles.

Once the safety device is activated the closing movement will stop and the door will go up again, thus avoiding danger to materials and persons.

#### **Remote control**



**4-Channel transmitter** Transmitter for maximum operation of 4 doors.

- Frequency 433 MHz
- Inclusive clip holder



Only in combination with light curtain safety.



**99-Channel transmitter** Transmitter for maximum operation of 99 doors.

• Frequency 433 MHz



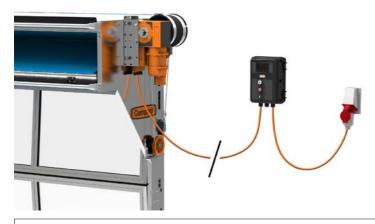
#### **Remote control receiver**

Receiver for 4-channel hand hold transmitter or 99-channel transmitter. Operation till  $\pm$  20 meter. Frequency 433 MHz.

FOLDING DOOR

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## Operation (motor)



#### MOTOR AND SPECIFICATIONS

Motor	RC150	RC175	RC250	RC300	RC300T
Speed (cm/sec) <sup>1</sup>	19 cm/sec	19 cm/sec	19 cm/sec	19 cm/sec	15 cm/sec
Voltage (volt)	1 x 230 V	3 x 400 V	3 x 400 V	3 x 400 V	3 x 400V
Power (ampere)	6,5 A	2,8 A	3,3 A	3,4 A	3,4 A
Power (kilowatt)	0,75 kW	0,75 kW	1,1 kW	1,3 kW	1,3 kW
Frequency (hertz)	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz
Plug (neutral not necessary)	2- pin, 16A	5- pin, 16A	5-pin, 16A	5-pin, 16A	5-pin, 16A
Potential free contact	4	4	4	4	4
Duration (%) <sup>2</sup>	25%	60%	60%	60%	60%
Cycles open/close per hour	12x	20x	20x	20x	20x
Protection class <sup>3</sup>	IP54	IP54	IP54	IP54	IP54
Max. weight doorblade (kilogram)	155 Kg	190 Kg	275 Kg	389 Kg	455 Kg

<sup>1</sup> The Compact door is also available as a high speed door. Opening speed till 60 cm/sec. (see page 35)

- <sup>2</sup> The switch duration is an indication of the number of door cycles. In case of intensive use it is possible to choose an 80% motor (30x open and closing per hour).
- <sup>3</sup> The motor is standard protected against dust and water increase (IP54). In a wet environment it is possible to choose a IP65 protection.



## (motor) Operation 9

Motorposition is universal, left or right. Various installation positions are possible (front, top) (see page 28-29).

Every motor is equiped with an emergency crank handle in case of power failure.

Optional it is possible to choose an emergency chain operator (see page 40).

Cable length between motor and control box is standard 7 meter.

Optional it is possible to choose a cable length of 15 meter.

Plug at 3 x 400 V > 5-pole, 16 A. Plug at 1 x 230 V > 2-pole, 16 A. Other motor types on request (3 x 230 V or 60 Hz).

Standard turning direction pre-set right.

Trafo in control 24 V DC, maximum 250 mA.

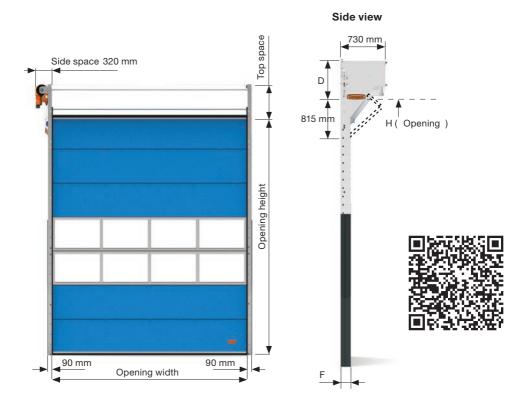
Socket provided on site.

200 mm

± 200 mm



## 10 Dimensions and details (measurements)



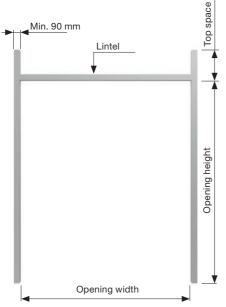
Extra space required for Top motor - Front motor - Protection shield - Wicket door - Storm profiles

# Side space 320 mm H 90 mm 90 mm 90 mm 90 mm

#### Measurements

H (mm) min.(<) - max.(>)	D (mm)	F (mm)
$0 < h \leq 3080$	410	140
$3081 < h \leq 4300$	520	160
$4301 < h \le 5520$	630	180
5521 < h ≤ 6740	770	200
$6741 < h \le 7960$	890	220

## (installation frame) Dimensions and details 10

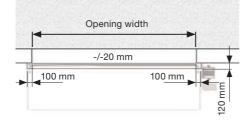


#### Installation frame

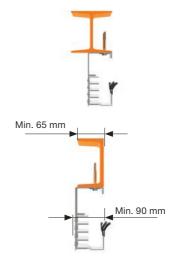
Installation frame has to be stable, flat and square.

Installation on steel, stone, concrete or wood possible.

#### Threshold



Detail



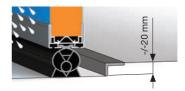
#### Lintel

For installation the lintel is not necessary. Only to protect the building against weather influences. The top seal needs a surface to close.

#### Specifications

We advise a threshold on the bottom to prevent water going into the building.

#### Side view

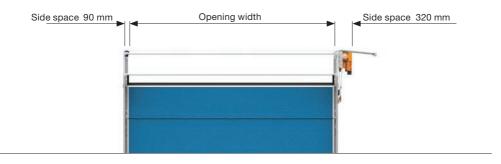


ompac

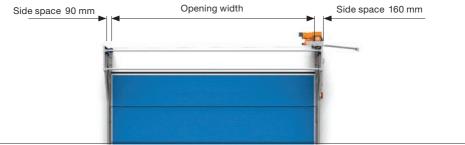
FOLDING DOOR

## **10** Dimensions and details (motor)

#### Side motor



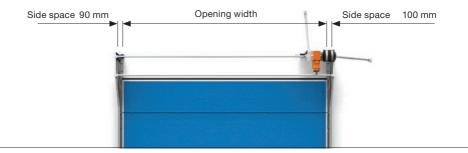
#### Top motor



#### Front motor

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Compact



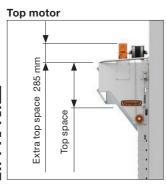
## (motor) Dimensions and details 10



#### Specifications

Top motor parts set

• Necessary when the side space is restricted but enough top space is available.



#### Detail



Specifications

Front motor parts set

• Necessary when less than 320 mm side space is available and only restricted top space is available.

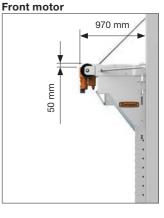
#### Limits

- Maximum weight of the door blade is 275 kg
- Maximum opening height is 5520 mm

Detail



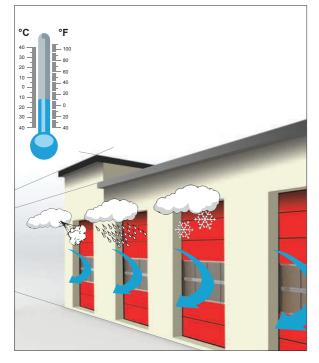




FOLDING DOOR

## 11 Sealings

#### **Optimum closing and insulation**



#### Top rubber



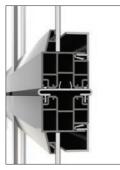
#### **Bottom rubber**



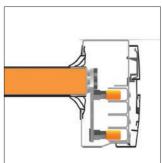
#### Intermediate seal



Intermediate seal



Side seal



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Compact FOLDING DOOR

## (storm protection) Accessories 12



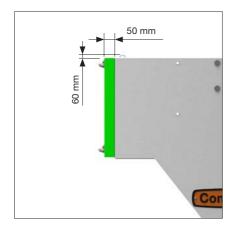
#### Storm profiles

The anodized aluminium profiles are positioned between the door blade panels and make the door blade extra strong. With these profiles the Compact door is extra protected against high wind loads.

Compact doors from 6000 mm and wider are provided with storm profiles as standard.

For other dimensions the storm profiles are available on demand. This could be necessary in high wind areas like in coastal areas or mountains.

#### Detail



#### Stormprofiles in RAL colour

Profiles in RAL colour of choice as an option for aesthetic reasons.



Side view

FOLDING DOOR

## 12 Accessories (fascia panels)

#### Fascia door panel - Sandwich



#### Fascia door panel - Full Vision



Side view



Side view



32 Compact

## (fascia panels) Accessories 12

#### Fascia door panel - Sandwich



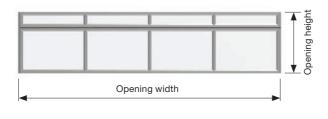
#### Specifications

Sandwich fascia panels similar to the door panels are used.

Delivery in 10 standard colours or colour of choice.

Delivery including aluminium U-profiles.

#### Fascia door panel - Full Vision



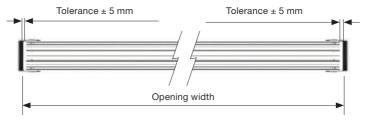
#### Specifications

Full vision panels similar to the door panels are used.

Delivery in 2 standard colours (anodized aluminium or RAL 9002) or in a RAL colour of choice. Filling of choice.

Delivery including aluminium U-profiles.

#### Top view fascia panel





## 12 Accessories (external installation)



#### Cover door package

The Compact door package is protected by a cover. This cover is delivered in component form and can be easily installed over the door package. Available in your RAL colour of choice.

Cover door panels only in combination with a side or front motor, not with top motor. Additional installation space required: 60 mm. Max width: 5860 mm.

#### Cover front motor

The door package and the front motor of the Compact door can be fitted with a protective cover. This is supplied in component form and can be easily installed to protect motor and door package. Available in your RAL colour of choice. Motor side is universal (left or right).

Cover motor only in combination with a side- or front motor, not with top motor. Additional installation space required: 60 mm Max, width 5860 mm.

#### **Cover side motor**

The side motor of the Compact door can be fitted with a protective cover. This is supplied in component form and can be easily installed to protect the motor alone. Available in your RAL colour of choice. Motor side is universal (left or right).

Cover motor only in combination with a side- or front motor, not with top motor.





FOLDING DOOR

## (external installation) Accessories 12

#### **External installation**

Due to the folding system the door is suitable for external installation as well. In this situation the door must be protected against weather influences such as moisture and water, rain and snow.

Additional measures for external installation

- Emergency manual control
- · Secured with lock snap-in glazing on inside

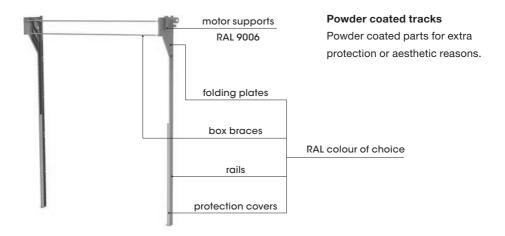


#### Advice at external installation

- Protection cover
- Powder coated rails and hardware
- Motor and control box IP65
- Stainless steel fasteners



## 12 Accessories (powder coating)





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Compact FOLDING DOOR

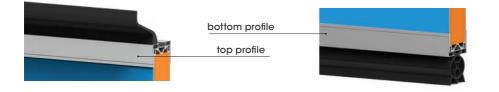
#### Powder coated hardware

Powder coated parts for extra protection or aesthetic reasons. RAL colour 9006

### (powder coating/Stainless steel fasteners) Accessories 12

### Top - bottom profile in RAL colour

Profiles in the same colour as the door blade for aesthetic reasons.



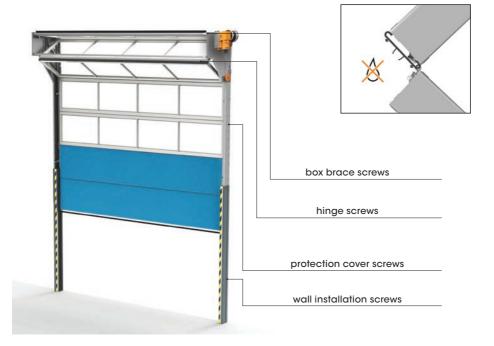
### Stainless steel fasteners

Optimum protection against damp and weather influences.

For use in damp spaces such as car washes or for external installation.

### Extra

Water drainage at sides of panels for maximum prevention of dripping. For use in car washes.



## 12 Accessories (control box)

### Control box CS300 Class IP65



### LED monitor

To adjust end switches open and close position



### LCD monitor

To adjust end switches for open and close position and to program the control functions.



### **Emergency button**

In case of an emergency the door can be stopped immediately.

#### Lock control box

Switch off the controls to avoid Half open function for summer and

Summer/winter switch

unwilling operation of the door. winter. Also to switch off automatic time closure.







### (high speed) Accessories 12

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FOLDING DOOR

	High speed motor with frequency control system
	The Compact door can be delivered as a high speed
	door.
	<ul> <li>Opening speed adjustable till maximum</li> <li>60 cm/sec</li> <li>Closing speed 30 cm/sec</li> </ul>
	Specifications high speed motor RC500R
	• 3 x 400 V
	• 4,7 A
60 cm/sec	• 2,2 kW
	• 50 Hz
	• 5-pin, 16A
	<ul> <li>The Compact door can be delivered as a high speed door.</li> <li>Opening speed adjustable till maximum 60 cm/sec</li> <li>Closing speed 30 cm/sec</li> </ul> Specifications high speed motor RC500R <ul> <li>3 x 400 V</li> <li>4,7 A</li> <li>2,2 kW</li> <li>50 Hz</li> </ul>

#### This motor will be delivered with the following options:

- LCD monitor for programming the control system
- Emergency chain openener in case of power failure
- Light curtain safety
- Switch duration 80% (for intensive use, 30 cycles per hour)
- Safety class IP65 (dust and water protected)
- Emergency button on control box

#### Limits

- Maximum dimensions 5000 x 5000 mm (WxH)
- Maximum weight of door leaf is 190 Kg
- Only available at side motor position (minimum side space required is 350 mm)

# 12 Accessories (extra controls)



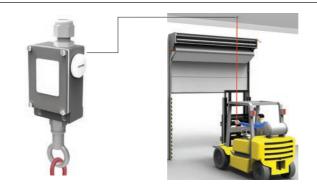


### **Emergency chain opener**

In case of a power failure the door can be operated by hand from floor level.



Additional push button Push button OPEN – STOP – CLOSE, Class IP65.



### Pull switch

Operation of the door from lift truck and other vehicles. Class IP65.

## (extra controls) Accessories 12



Tá mm



Operation by key movement.

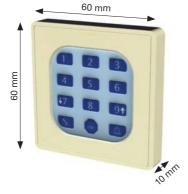


Key switch UP-STOP-DOWN Key switch with Euro Cylinder and 3 keys.

Operation by push buttons.



**Pin code unit** With a personal pin code the door can be operated.



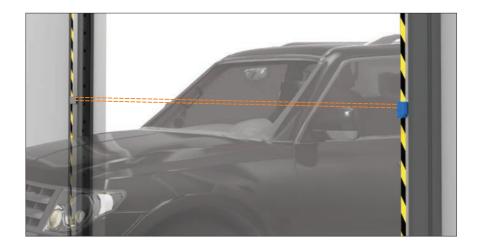


# 12 Accessories (remote control)

### Photocell

For extra safety or to operate the door as an extra opening and close signal. Standard photocell with reflector, Class IP65.

For heavy use or washing bays we advise transmitter and receiver photocell.





#### Standard

Carwash



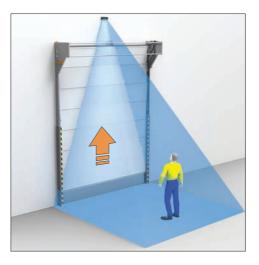
## (electrical) Accessories 12

#### Radar

Infrared adjustable radar.

• Operation till 5 m





### Warning light

Flashlight as warning system, Class IP65.

Traffic light (combinations possible).

Colors green, orange and red available.

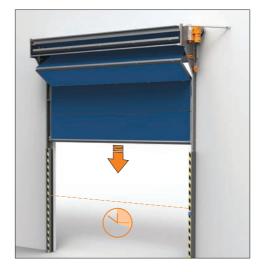






Folding door

# 12 Accessories (options)



#### Automatic time closure

After the door is open it can be closed automatically after an adjustable time schedule. 0 to 600 sec.

#### ATTENTION

Only in combination with light curtain safety.



Extended track set Additional vertical rails for extra height.

It can be useful to increase the height of the folding system and side rails for example when using a crane.

44 Compact

### (ATEX) Accessories 12

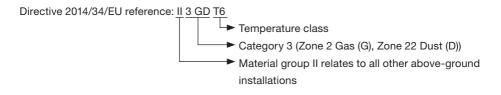
### ATEX

(For Compact doors in potentially explosive environments). There are two possible ATEX models: Mechanical and Electrical.

### Mechanical ATEX for Compact folding doors

The mechanical elements of the Compact folding door comply with:

### Directive 2014/34/EU (ATEX 114)



### Adjustments to Compact folding door with Mechanical ATEX

- · Automatic static discharge of the door
- Transformer for slack rope guard including blue ATEX cables

#### Allowance must also be made for a few aspects:

- The motor must be fitted outside the explosive area, this may mean that adjustments have to be made to the motor, e.g. an extended shaft, possibly in combination with a front-fitted motor.
- The control box must be fitted outside the explosive area.
- The Compact folding door is only available with a "deadman's control" in ATEX-compatible models.

#### ATEX for electrical components of the Compact folding door

The motor and the controls can also be offered in ATEX-compatible models. Combinations are possible that allow positioning the motor or the controls outside the explosive zone. Please ask.



OMPAC

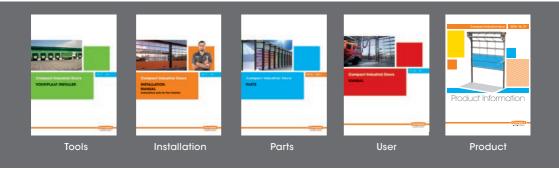
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# **Compact Folding Door Saving Space with more Opportunities**





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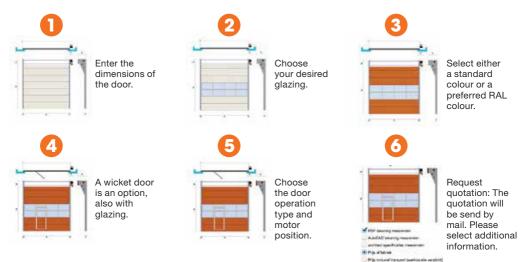


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FOLDING DOOR



www.rolflex.com for more information, quotation, pictures and video's.

# **15** Applications

IGEOT RAPID

Audi

- Automotive
- Authorities
- Emergency Services
- Transport and Logistics
- Special projects
- Commercial buildings
- Explosive environment

# Applications 15



### 16 References





STORK











# **CATERPILLAR®**











Compact FOLDING DOOR



# Notes 17




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