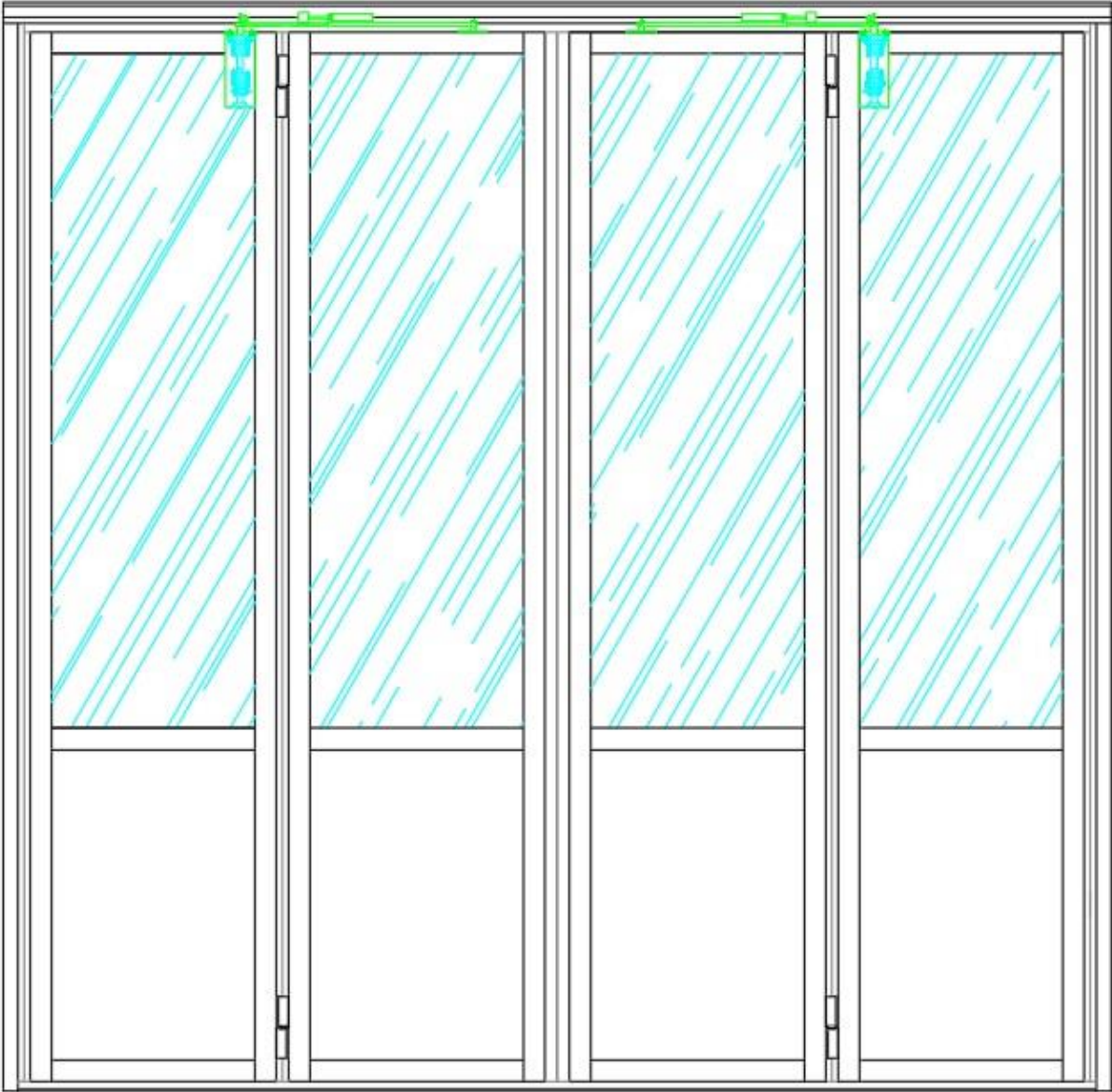


Folding door AL601F 2.0, AL602F, AL603F, ST602F
with automated opening function



Translation of the original **Operating Manual**



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2 Introduction

Dear customer,

This manual provides information on

Safety

Operation

Use

Door system maintenance.

Our manuals are updated on a regular basis. By giving us your suggestions for improvement, you can help us to design even more user-friendly documents. Please get in touch.

Storage

This manual contains important information on the safe, proper and efficient use of your door. Always store this document nearby. It must always be made available for maintenance and checks.

Legal notice

Manufacturer: Schneider Torsysteme Gesellschaft m. b. H.

Address: Kalzitstrasse 1, A-4611 Buchkirchen, Austria

Document no.: S-BA-BR600-F-ÖA-EN

Document type: Operator documentation

2.1 Directives and standards

The following directives and standards were applied during design and production of the door system:

2006/42/EC	Machinery Directive
305/2011/EU	Construction Products Regulation
EN 13241:2003+A2:2016	Gates - Product standard, performance characteristics

The door system has been produced and checked in accordance with the standards and directives listed and left the plant in a technically flawless safety condition.

2.2 Identification



The door system is consistent with the applicable standards and directives. Conformity has been verified; the corresponding documents are filed with the manufacturer.

Information The Declaration of Conformity can be found appended to this manual.

2.3 Explanation of symbols used for safety information

The following symbols are used in this manual to alert the user to safety information:

	This symbol indicates an imminent danger of death or an imminent danger to health. Failure to follow this information can endanger the life of the user, cause serious harm to the health of the user or inflict a life-threatening injury on the user.
	This symbol indicates a risk of injury to the user of the door.
	This symbol indicates important information for proper use of the door. Failure to follow this information may cause door malfunctions.
Information	This symbol indicates usage tips and other useful information, which can help you to maximise use of the functions of your door.
	This symbol indicates an exclusion to manufacturer liability, which may be caused by errors or negligence on the part of the operator or user.
	This symbol indicates proper recycling of the packaging materials and disused assemblies (separated into metals, plastics, etc.).

The safety information provided in this manual must be noted and followed at all times.

3 Essential information

3.1 Warranty and liability

Warranty claims require functionally correct operation and handling. The manufacturer guarantees that at the time of delivery, all parts were free from defects in terms of the material and workmanship.

The door supplier's "General Terms and Conditions of Sale, Delivery and Trade" apply in all cases. These shall be made available to the operator at the time of contract conclusion at the latest. Warranty and liability claims in the event of personal injury and material damage shall be excluded if they can be attributed to one or more of the following causes:

- Improper assembly
- Improper commissioning
- Improper use of the doors



Disclaimer

Operation of the door with defective safety equipment or improperly attached or non-functional safety and protective devices

- Failure to observe the information in the operating manual concerning operation and maintenance of the door
- Unauthorised structural modification of the door, unauthorised modification of the drive or control system
- Inadequate monitoring of machine parts that are subject to wear
- Improperly performed repairs
- Disasters caused by foreign bodies and force majeure
- The effects of changes of use shall be borne by the operator

The manufacturer shall accept no liability for damage caused by operating errors, failure to observe the operating manual or inadequate maintenance/care

3.2 Obligations of the operator

3.2.1 Observance of information in the operating manual

For safe use and fault-free operation of this door, knowledge of the fundamental safety information and safety regulations is essential. This operating manual and its safety information in particular, must be observed by all persons who work on the system. In addition, the rules and regulations concerning accident prevention that are applicable at the place of installation must be observed.



Disclaimer

The manufacturer shall accept no liability for damage caused by non-compliance with safety instructions and safety regulations.

3.2.2 Obligation to instruct

The operator must ensure that all specialist personnel responsible for the ongoing maintenance/care of the door have been instructed in the operation and safety aspects of the door. A log must be created and stored detailing the instruction given to relevant personnel.



Disclaimer

The manufacturer shall accept no liability for damage caused by the operator's failure to fulfil its obligation to instruct. The purchaser is also responsible for ensuring that the operating manual for the door is available to appropriate specialist personnel when using the door.

3.3 Authorised users

3.3.1 Experts

Experts are persons whose specialist training and experience gives them knowledge of the system to be checked in the field of power-operated windows and doors, who are familiar with the applicable national occupational health and safety regulations, directives and accepted engineering regulations (e.g. VDE stipulations, DIN and EN sheets), so that they can evaluate the safety condition of the respective system.

Experts are expected to provide an objective assessment from the perspective of occupational health and safety, uninfluenced by operational or economic concerns.

3.3.2 Instructed operating personnel (not public)

A group of persons is instructed in actuation of the door and the door is not located in the public domain.

3.3.3 Instructed operating personnel (public)

A group of persons is instructed in actuation of the door and the door is located in the public domain.

3.3.4 Uninstructed operating personnel

Uninstructed operating personnel are persons who are not specialists. The operator must ensure that, where necessary, laypersons are instructed in operation of the door system. They are not permitted to carry out work associated with assembly, installation, commissioning, maintenance or disassembly.

3.4 Intended use

The door system is used in pedestrian entrance areas and primarily as a safe access for goods and vehicles, accompanied by persons, in industrial, commercial and private facilities.

If intended for use in an environment in which aggressive influences are present (e.g. treatment plant, washing facility), please consult the manufacturer.

If intended for use in an environment in which aggressive dusts are present (e.g. cement works, grinding shop, foundry), it must be ensured that dust cannot deposit on the door leaf, as this will lead to increased wear.

If the system is continuously exposed to moisture (including splashing water, e.g. in washing facilities), additional measures must be taken to ensure safe operation and to prevent premature ageing.

Intended use also includes observing all information in the operating manual and carrying out all maintenance and service work.

3.5 Prohibited use

Improper use or misuse of the door can endanger the life and health of the user, inflict injury on the user and damage the door or other materials.



Disclaimer

The manufacturer shall accept no liability for damage caused by improper use.

4 Product description: mechanical structure and function



- 01 Door frame
- 02 Door leaf
- 03 Running rail
- 04 Automatic opening function
- 05 Door leaf single actuation
- 06 Central triggering

4.1 Product description AL601F 2.0, AL602F, AL603F

4.1.1 Door frame

The lateral frame profile is produced from an extruded aluminium profile (60 x 75 mm; 3.3 kg/lm) and attached to the running rail profile with a bolted connection. A mounting bracket is bolted and guided flexibly into a groove to allow it to be adapted to the local conditions.

4.1.2 Door leaf

The aluminium folding door is based on a frame-lattice design. The door leaf comprises bolted extruded hard-aluminium profiles. The construction depth is min. 60 mm, profile depth min. 87 mm. The filling is realized with dual-wall construction elements (panels or glass).

For door type AL603F, thermally separated profiles are used, which leads to a better thermal insulation.

4.1.3 Running rail

The running rail is produced from extruded aluminium profile with downward opening, 5 mm wall thickness, dimensions 85 x 135 mm; 4.7 kg/lm and includes integrated seal carrier and a continuous lip sealing. The suspension of the door leaves is realized by horizontal and vertical guided roller units. The plastic-covered track roller diameter is Ø 59 mm per 2 track rollers for horizontal and vertical guide. The bearing is done by dust-proof and maintenance-free ball bearings.

4.2 Product description ST602F

4.2.1 Door frame

The lateral frame profile is produced from steel (60 x 75 mm; 5.5 kg/lm) and is hot-dip galvanised and power coated in the same colour as the door. The frame profile is attached to the running rail profile with a bolted connection. A mounting bracket is bolted to the side and guided flexibly into a groove to allow it to be adapted to the local conditions. The mounting bracket is fixed to the running rail.

4.2.2 Door leaf

The steel folding door is based on a frame design. The door leaf comprises hot-dip galvanised steel profiles. The construction depth is min. 60 mm, profile depth min. 95 mm. The filling is realized with dual-wall construction elements (panels or glass).

4.2.3 Running rail, steel folding door

The running rail is produced from hot-dip galvanised steel profile with downward opening, 3.6 mm wall thickness, dimensions 85 x 125 mm; 6.3 kg/lm with bolted seal carrier to partially cover the steel running rail (aluminium cover profile) with continuous lip sealing. The suspension of the door leaves is realized by horizontal and vertical guided roller units. The plastic-covered track roller diameter is Ø 59 mm per 2 track rollers for horizontal and vertical guide. The bearing is done by dust-proof, maintenance-free ball bearings.

5 Safety instructions

5.1 General notes

Attention! In the event that the door is used or operated by persons in any kind of employment relationship, the stipulations of the most recent version of the Austrian General Health and Safety Ordinance (Allgemeinen Arbeitnehmerschutzverordnung, AAV, BGBl.218) must be observed.

Attention! Children are not permitted to actuate the door!



WARNING

Attention! The door must always be locked in the open as well as in the closed state. It is not permitted to leave the door in an intermediate position. The opening and closing of the leaf are only permitted with facilities provided for this purpose.

Attention! In the event of misuse or damage as well as hazardous operating statuses, the door must be taken out of operation, appropriately secured and safeguarded to prevent unauthorised reactivation.

5.2 Hazard areas, folding door

The door system has been built according to the state-of-the-art and the accepted technical safety requirements. However, there is a risk to the life and health of the user or third parties, or adverse effects on the door or other material during use, if the door:



DANGER

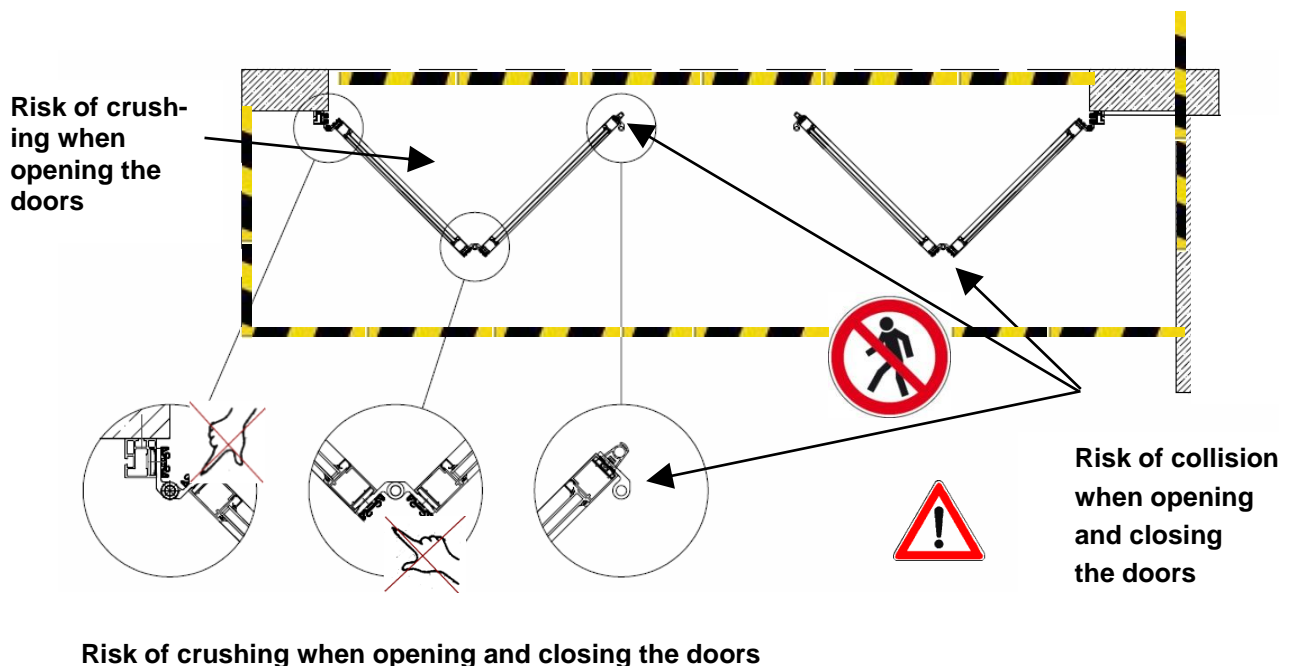
- Is used improperly
- Is not used in a technically flawless safety condition
- Is used in extremely windy conditions

5.2.1 Risk of crushing or collision



WARNING

- Risk of crushing between the leaves when opening the door
- Risk of crushing between the leaves when closing the door
- Risk of collision when opening and closing the door





WARNING

These areas are safeguarded either by the type of actuation or by appropriate safety equipment. Safety equipment may not be disabled.



WARNING

5.2.2 Risk of tripping

Risk of tripping and falling in the event of possible existing thresholds with a height of more than 5 mm.



WARNING

5.2.3 Specific risk for particularly vulnerable persons

Additional safety measures may need to be taken on door systems that are used by particularly vulnerable persons (e.g. children, the elderly, disabled persons). Additional measures must be specific to the object and determined on a case-by-case basis. In the event of doubt, please contact the manufacturer.

6 Operation

The opening is performed by the release mechanism. The closing is performed manual using the handle on the door leaf.



7 Cleaning instructions

7.1 Safety instructions for cleaning and care



WARNING

Only permitted, suitable tools, special tools and other equipment (e.g. ladders) may be used.

Information

7.2 Care instructions for the door

To ensure that the coated/anodised door is properly cared for, the following must be carried out at least once annually, or more frequently in the event of heavy environmental pollution:

Use clean water with a low additive content of neutral or very weak alkaline detergent. A mechanical cleaning component may be added with the aid of a soft cloth or rag that is unable to cause scratches.

The door must be cold when cleaning is carried out (max. 25°C).

Acidic or heavily alkaline cleaning or wetting agents that could attack aluminium must not be used. Agents that are able to cause scratches or similar must not be used (abrasive cleaning). Use only soft cloths or industrial cotton for cleaning. Coarse rubbing is not permitted. Organic solvents containing esters, ketones, alcohol, glycol ethers or halogen hydrocarbons must not be used. Cleaning agents of unknown composition must not be used.

Greasy, oily or sooty substances may be removed with aromatic compound-free petroleum hydrocarbons. Adhesive residues, and residue from silicone rubber or tape, etc. can also be removed. It is important that removal is prompt.

The maximum treatment time of cleaning agents must not exceed one hour; the cleaning process may be repeated after 24 hours, if necessary. Clean, cold water must be used for rinsing immediately after each cleaning process.

Information

7.3 Care information for door glass

When cleaning, running water must firstly be used for rinsing. Cleaning is best carried out with a soft car-wash brush attached to a permanent supply of clean water by a hose. Use a clean, moist chamois leather for drying.

A mild dish-washing detergent is the only permissible cleaning additive.

Never use

Rubber pullers or hard cleaning equipment such as scrapers, razor blades and spatulas, abrasives, solvents or glass cleaners or high-pressure cleaners.

8 Maintenance and inspection work

Maintenance intervals are not necessarily a fixed period of time. The maintenance work that needs to be carried out is largely dependent on the operating location and frequency of use of the door system. As a minimum requirement, comprehensive maintenance must be carried every 2000 movements or once annually.



IMPORTANT

Only regular maintenance, checks and care can ensure the door's long service life. If maintenance/checks are not carried out, neglected or carried out by an unauthorised person, the manufacturer shall not be liable for any resulting damage or its consequences. The amount of annual maintenance that is carried out is dependent on the operating location and frequency of use. We recommend, therefore, concluding a maintenance contract.

We urgently recommend entrusting the supplier of the system with maintenance and checks. The supplier offers the best guarantee of checks being carried out by a trained specialist with knowledge of the design and the regulations that need to be satisfied.

In another sense, maintenance may also be understood to mean a daily glance (depending on the frequency of use) over the safety area, running gear, belts, drive bar, etc. by the operator. Brief actuation of the safety bar by hand, the light barrier, etc. could also form part of a brief daily check.

8.1 Safety instructions for maintenance



WARNING

Only permitted, suitable tools, special tools and other equipment (e.g. ladders) may be used.

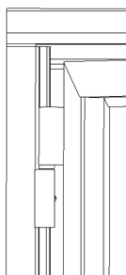
8.2 Checking the door system

We recommend using the separate test log to document checks:
ON-ZP B 1205 add. 1 (2014-10-01)

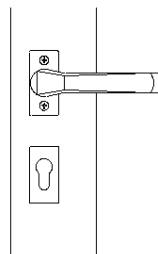
The following must be checked:

- The proper function of the door (regularly)
- The following parts for damage, wear, corrosion and secure holding

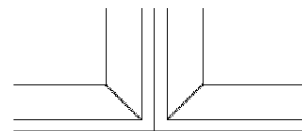
8.2.1 Door leaf and door leaf connection



Belts



Triggers + lock

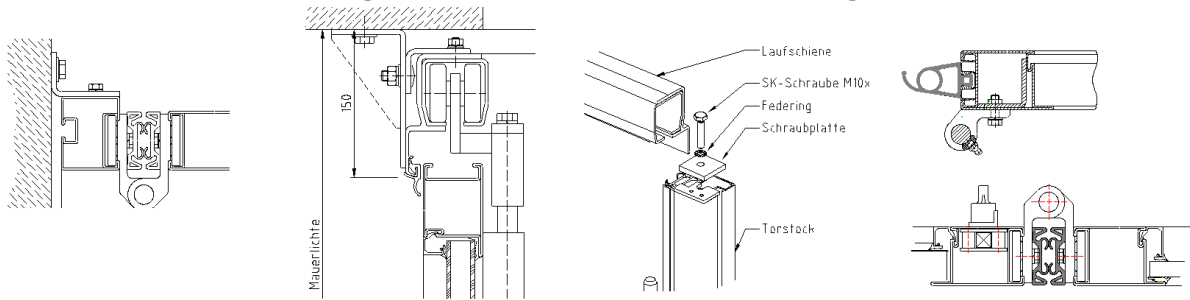


Door leaf connection

Components must be checked for signs of wear, damage and deformation and for secure holding.

- In the event of visible damage, parts must be replaced
- Take the door out of operation

8.2.2 Door frame, running rail and seals - schematic drawing



Fixing to wall

Running rail

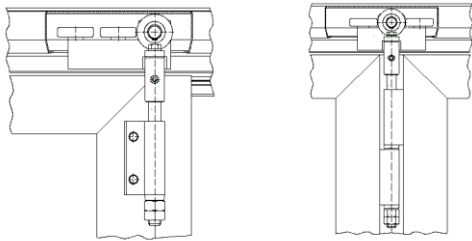
Running rail bolted connection

Door frame seal
Filling rubber

Components must be checked for signs of damage and deformation and for secure holding.

- In the event of visible damage, parts must be replaced.
- Take the door out of operation

8.2.3 Running gear



Track rollers, Thrust bearing, Attachment

Components must be checked for signs of damage and deformation and for secure holding.

- In the event of visible damage, parts must be replaced.
- Take the door out of operation

8.3 Check and maintenance report

Check and maintenance report no. _____ Date: _____

Folding doors, manual and power-operated in accordance with EN 12604, EN 12453, EN 60335-1

Client

Delivery address

Contact

Telephone number

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Door system identification

Order number	Item	Door type	Year of construction	Man.

The safety requirements for folding doors with a manual and power-operated design are specified in the aforementioned regulations. A specialist must carry out a check of the door system every 2000 movements, but annually as a minimum. The aforementioned standards must be taken into account as well as occupational health and safety and accident prevention regulations and accepted engineering regulations. Please refer to the installation, maintenance and operating manuals as well as specific safety information.

The following list of components and circumstances to be checked may be expanded under 'Other' to include any relevant points. For certain designs, this may be a requirement.

'Lubricate' is used below as a general term; where/whether an oil or a grease should be used must be determined on a case-by-case basis. Only permitted, suitable lubricants may be used.

	Not available	OK	Not OK
1. General/condition function			
1.1 General condition (e.g. corrosion, wear, damage, manoeuvrability of moving parts)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.2 Safety area (e.g. no storage of goods/objects in the immediate door area)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.3 Remove objects from the immediate door area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4 Door leaf, vertical position	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.5 Bolts, wedges, etc. → Condition and firm seating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.6 Lubricate belts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.7 Personnel door (e.g. function of lock, door closer)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.8 Type plate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.9 Other (describe component/circumstance in detail)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Running gear and belt components			
2.1 Track rollers, bearings, running gear objects → Condition and attachment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.2 Floor guides → Condition and attachment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.3 Belts, thrust bearings → Condition and attachment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.4 Stop buffer → Condition and attachment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.5 Other (describe component/circumstance in detail)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Seals			
3.1 Door frame seals between leaf and door frame → Condition and attachment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.2 Floor rubber → Condition and attachment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3 Running rail seal → Condition and attachment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not available	OK	Not OK

3.4 Window/frame elements → Sealing condition

3.5 Other (describe component/circumstance in detail)

4. Door leaf/fittings

4.1 General condition (e.g. damage to the leaves)

4.2 Pushers, cylinders, lock → Condition and attachment

4.3 Other (describe component/circumstance in detail)

5. Door frame

5.1 Attachment of side door frame → Firm seating

5.2 Attachment of running rail → Firm seating

5.3 Door structure/mounting frame: ensure firm attachment of mounting frame to building and of door structure to mounting frame

5.4 Other (describe component/circumstance in detail)

6. Manual operation

6.1 Function of drive bar and pusher at the traffic leaf

6.2 Other (describe component/circumstance in detail)

7. Replacement in the event of damage



It is especially important to note, at this point, that the following components may not be repaired in the event of damage or impaired function. The components must be replaced and the door must be taken out of operation.

These components are: belts, running gear, running gear attachments, running rail

8. Operating the door system

8.1 Door system can be operated (observe maintenance intervals)

8.2 Door system can continue to be operated under caution to max.

 in current condition (*repair completed*)

8.3 Door system may not be operated before repair

9. Description of defects

Clearly list all items found to be 'not OK' with the corresponding number, describe the defect and justify. Continue on a separate sheet, if necessary.

	Checked by	System operator
Place	_____	_____
Date	_____	_____
Name	_____	_____
Signature	_____	_____

Actioned stamp:

Defects rectified, door system ready for operation

Place	_____
Date	_____
Name	_____
Signature	_____

9 Faults and repair

The aim of this section is to guide responsible specialist personnel in troubleshooting and restoring the system to its intended condition.

In the first instance, fault warnings should alert the system operator to the improper condition of the system.

The responsible system operator must ensure that the intended condition of the system is restored as quickly as possible. The system operator must ensure that:

- The cause of the fault is identified and evaluated
- Faults are rectified by competent personnel

9.1 Explanation of terms

9.1.1 Fault

A fault is an improper condition of the system and must be rectified as quickly as possible. The system operator must ensure that faults are rectified.

9.1.2 Repair

A repair is the restoration of the intended condition of a system. The operator must ensure that fault rectification and/or repair is carried out.

9.2 Faults and their rectification

The following faults may be rectified by instructed operating personnel:

- Removal of soiling from the floor/ground
- Removal of obstacles between the closing edges

All other faults may be rectified by authorised service personnel only. In these cases, please consult the manufacturer, see *the customer service address* provided on *page 22*.

10 Disassembly and disposal



If you wish to disassemble the door, please contact the manufacturer, see the *customer service address provided below*.

Information The illustrations in this document may differ depending on the type and model delivered.

Information The operating manual refers to the standard version of a folding door with power drive. Individual requirements may vary slightly in terms of design and operation.

Customer service address

Schneider Torsysteme Gesellschaft m. b. H.
Kalzitstrasse 1, A-4611 Buchkirchen (Austria)

Tel.: +43 7243 54588-0

E-Mail: service@schneider.co.at

Web: <http://www.schneider.co.at>

EC Declaration of Conformity

(in accordance with the Machinery Directive 2006/42/EG, Annex II A)

Manufacturer

Schneider Torsysteme Gesellschaft m. b. H.
Kalzitstrasse 1
4611 Buchkirchen
Austria

We hereby declare that the following product (series BR 600)

- Folding door AL601F 2.0, AL602F, AL603F, ST602F

by virtue of its design and type and in the model that we have brought to the market, satisfies the applicable fundamental health and safety requirements of the following directives/provisions:

2006/42/EC Machinery Directive

Regulation (EU) 305/2011 concerning the marketing of construction products

2014/30/EU Electromagnetic Compatibility Directive

Applied harmonised standards:

EN 13241:2003+A2:2016 Industrial, commercial and garage doors and gates – Product standard, performance characteristics

EN 60335-1:2012 Household and similar electrical appliances – Safety - General requirements

EN 60335-2-103:2015 Household and similar electrical appliances – Safety - Particular requirements for drives for gates, doors and windows

Other applied technical standards and specifications:

EN 12453:2017 Industrial, commercial and garage doors and gates – Safety in use of power operated doors – Requirements and test methods

EN 12604:2017 Industrial, commercial and garage doors and gates – Mechanical aspects – Requirements and test methods

The Declaration shall apply only if assembly is carried out in accordance with all items in the assembly manual provided by the manufacturer and if the safety of the final assembly has been ascertained by the assembly supervisor. Validity shall be void if modifications are made to the system by the operator or a third party.

Authorised to compile documentation: Bernhard Pichler

Buchkirchen, dated 03.04.2019

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