

PWSS Power Assisted Operator - Fitting Instructions

For use with 44mm thick doors only. For Single doors.

Components

Pocket door kit

- Short / Long 'Z' section
- Long 'Z' section
- Track packer
- Plywood track moun
- Powered operator
- Door bottom channel
- Sole plate
- Door seal

Sliding mechanism

- End stop
- Door leaf connections
- Floor guide

Door jamb set

- Head section
- Front edge jamb
- Cassette edge jamb
- 'T' shaped jamb
- Plasterboard profiles
- Intumescents

ixing items

- Cover plate
- Protective edge cl
- Chock large
- Chock small
- Screw set A, B, C, D, E and F



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Suggested tools Components \square Drill \bigcirc Spirit level Tape measure Hacksaw



Screw sets (Multiple packs of each may be supplied depending on kit type ordered)



PRE-DOOR FITTING INFORMATION

Firstly construct a studwork frame on which to affix the pocket door system. Portman doors are designed for 100mm studwork. It is crucial that the frame is constructed square and plumb. Measure door and studwork heights from the **finished floor level**.

1. To calculate studwork width and height from known door dimensions:

Studwork width (W) = Operator length (Ol) - 79mm Studwork height (H) = Door height (Hp) + 90mm

2. To calculate door height from known studwork height:

Door height (Hp) = Studwork height (H) - 90mm

3. To calculate door size from known door opening dimensions:

Door width (Wp) = Door opening width (Op) + 23mm Door height (Hp) = Door opening height (Oh) + 2mm

4. To calculate door opening width and height from known door dimensions:

Door opening width (Op) = Door width (Wp) - 23mm Door opening height (Oh) = Door height (Hp) - 2mm



Introduction

1. About this manual

1.1 Content and purpose

This manual is part of the product. The manual contains important instructions for safe mounting and operation. Therefore, this manual must be carefully read before using the product. This manual must be kept during the service life of the product and must be passed on with the product. This manual describes the mounting and operation of the Portman Power Assisted Operator.

1.2 Target group

The Portman Power Assisted Operator's installation, commissioning, maintenance and disassembly must only be carried out by qualified technical personnel.

The acceptance inspection must only be carried out by qualified technical personnel authorized for this by Portman.

The operation of the Portman Power Assisted Operator may be carried out by any person who is mentally and physically capable of doing so.

1.3 Limitations of liability

Only use the Portman Power Assisted Operator in accordance with its intended use. Unauthorized changes to the Portman Power Assisted Operator exclude all liability by Portman for resulting damages.

1.4 Symbols used

1.4.1 Hazard categories

Safety instructions are marked with symbols. The safety instructions are introduced by signal words that express the extent of the hazard, e. g.:

WARNING

F

This signal word indicates a situation of potential risk, which could lead to death or serious injury if not averted.

CAUTION

This signal word indicates a situation of potential risk, which could lead to minor or slight injury if not averted.

ATTENTION

This signal word indicates a situation of potential risk, which could lead to damage to property or the environment if not averted.

TIPS & RECOMMENDATIONS

This symbol indicates useful information for efficient and trouble-free operation.

2. Safety

2.1 Safety instructions



WARNING

Danger to life through electric current! Works on electrical systems must only be carried out by qualified electricians.

• Before starting work on electrical systems and equipment, establish a zero-potential condition and ensure this condition while carrying out the work.

WARNING

Danger to life through electric current! Voltage-carrying elements in the drive

- Avoid bringing the drive into contact with water or other liquids.
- Never reach into the drive.
- Never insert metal objects into the openings on the drive.
- Only hold the power cord by the plug to pull it out of the socket. Do not pull it by its cable.
- Do not use the drive if the power cord is damaged.
- The mains connection housing should only be opened by qualified technical personnel.



WARNING

Danger of injury from falling objects. Falling parts or tools can cause injury.

• Secure workplace against unauthorized entry.

2.2 Portman Power Assisted Operator – outstanding safety

Developed according to the latest safety standards:

Low energy operation according to EN 16005

The Portman Power Assisted Operator is developed according to the latest safety standards and certified by a TÜV type examination.

The TÜV certificate and CE declaration can be requested from the manufacturer if required.

2.3 Intended use

The Portman Power Assisted Operator is a sliding door drive and is used for opening and closing 1- and 2-leaf sliding doors in indoor areas with a permissible door leaf weight of 20 to 80 kg each.

2.4 Limitations on use

The Portman Power Assisted Operator is not suitable for use in escape routes, on fire doors (fire/smoke protection doors) or in outdoor areas. Do not allow children to play with the Portman Power Assisted Operator or its regulating and control equipment, including the remote controls.

2.5 Residual risks

Automatic doors carry a risk of injury from crushing, shearing, bumping and pulling. Depending on the structural condition, door variant and protection option, residual risks exist. All automatic doors must be appropriately risk-assessed by a suitably qualified person prior to installation and upon commissioning.

2.6 Danger zones at closing edges

Automatic doors carry a risk of injury from crushing, shearing, bumping and pulling at the closing edges.



Fig. 1 Closing edges

2.7 Risk assessment by installer

Depending on the door's spatial conditions and user group, the use of safety sensors is recommended even for low energy operation. This must be assessed in the planning and by the manufacturer, i.e. the person carrying out the installation, as part of an individual risk assessment. During planning, the installer assesses the use of safety sensors as part of an individual risk assessment.

2.8 Special protection requirements regarding vulnerable persons

If particularly vulnerable persons (e.g. children, elderly people or disabled people) use the door and if the risk assessment reveals a risk of injury, supplement the protection with one or more protective devices (safety sensors).

3. Product description

3.1 General

The Portman Power Assisted Operator is an electromechanical sliding door drive for small and light interior doors with a permissible door leaf weight of 20 kg to 80 kg. The Portman Power Assisted Operator can be used in a 1- or 2-leaf bi-parting. The connection to the door leaf is made with a door kit. The opening and closing speed depends on the door leaf's weight and it can be infinitely adjusted via a potentiometer.



Fig. 2 - Overview

- 1 Portman Power Assisted Operator
- 2 Control and connection terminals for external loads
- 3 Mains connection

3.2 Operating and display elements



3.3 Overview of the DIP switch settings

The DIP switches activate various inputs on the terminals and set operating modes.

DIP 10	ON OFF	without function without function
DIP 9	ON OFF	WC function active WC function inactive
DIP 8	ON OFF	locking no locking
DIP 7	ON OFF	increased end thrust gentle end thrust
DIP 6	ON	Permanently open operating mode active
	OFF	Automatic operating mode active
DIP 5	ON OFF	outside push button active outside motion detector active
DIP 4	ON OFF	inside push button active inside motion sensor active
DIP 3	ON OFF	high sensor test active low sensor test active
DIP 2	ON OFF	secondary closing edge test sensor active inactive
DIP 1	ON OFF	main closing edge test sensor active inactive

3.4 Speed and hold-open time



Setting the speed

The maximum speed depends on the door leaf weight. The speed can be infinitely adjusted with the potentiometer.



Setting the hold-open time After opening, the door closes automatically after expiry of the set hold-open time. The hold-open time can be infinitely adjusted with the potentiometer.

3.5 Operation modes

The Portman Power Assisted Operator is delivered in automatic mode. To change the operating mode, an external program switch is required. This must be ordered separately.

3.5.1 Off

The drive is switched off. The door can be opened and closed manually.

3.5.2 Automatic

After a push button or radio transmitter's impulse or by manual pushing, the door is opened by the drive and closed again after the set hold-open time.

3.5.3 Permanently open

After a push button or radio transmitter's impulse or by manual pushing, the door is opened by the drive and held in the open position until the closing command.

3.6 Functions of the door in automatic mode

The Portman Power Assisted Operator is delivered in automatic mode. Depending on the trigger, the door is opened in different ways.

3.6.1 Opening/Closing by Push & Go

Pushing the door open manually by at least 10 mm causes the door to continue moving automatically in the desired direction. The door closes automatically.

3.6.2 Opening by push button (optional)

After pressing the push button (e.g. wall or radio button), the door is opened by the drive and closed again after the set hold-open time expires.

3.6.3 Opening by sensors (optional)

When proximity sensors are connected, the door automatically opens as soon as a person approaches. The door closes automatically after the set hold-open time expires.

3.6.4 Permanently open by double-click (optional) Double-clicking on the push button (quickly and successively operating button twice) opens the door permanently. Another double-click or manual push start closes the door. Permanently open by double click is only possible with wired push buttons (not radio buttons).

3.6.5 Express function

The drive allows a manual pushing of the door in the direction of travel without resistance. If the maximum speed is exceeded, the driving resistance is increased depending on the speed. After releasing, the door is gently braked to maximum speed. This function is active on all door movements.

3.7 Power supply failure

The door can still be opened and closed manually in the event of a power supply failure. If an electrical lock has been fitted this will release, enabling the door to be opened. When the power returns, the drive automatically carries out a positioning run

3.8 Safety functions

Static forces in low energy mode:

During opening and closing movement, max. 67 N is reached.

If the door encounters an obstacle during the opening movement, the door brakes immediately and stops for 3 seconds. Subsequently, the drive tries to open again. If the obstacle is removed, the door continues

to move. If the obstacle is still present, the door closes after 2 further opening attempts and expired hold open times. If the door encounters an obstacle during the closing movement, the door brakes immediately and opens again.

3.9 Safety sensors (optional)

In order to detect obstacles optically, sensors must be mounted to increase safety. The installation must be carried out by qualified technical personnel and in compliance with EN 16005. With the DIP switches in the drive, an automatic test of these sensors is activated or deactivated in accordance with EN 16005.

If the secondary closing edge sensor detects an obstacle during the opening movement, the door stops immediately. If the obstacle is removed, the door continues to open. If the obstacle is not removed, the door closes after the hold-open time has expired.

If the main closing edge sensor detects an obstacle during the closing movement, the door stops immediately. When the door is closed, this function is not available (the sensor is deactivated).

3.10 Emergency open push button (optional)

If the Permanently open and Automatic inputs are switched simultaneously, the Permanently open mode

is active. This allows, for example, the connection of a key switch as a fire brigade access or the connection of an emergency open push button in parallel with a program switch.

3.11 Low energy mode (delivery state)

In low energy mode, EN 16005 requires the force with which a door leaf hits an obstacle to be limited. The door is moved slowly accordingly. The speed can be further reduced via a potentiometer in the drive.

3.12 Technical information

Mains connection	
Power supply:	220-230 V AC ±10%; 50/60Hz
Fuse provided by customer:	10 A
Cable type:	3 x 1.5 mm ²

Power consumption without external load

Standby operation: 3.7 W

Automatic operation: max. 60 W

General

Temperature range:	0–40 °C
Drive operating noise:	max. 55 dB (A)
Door leaf height:	max. 3000 mm
Door leaf weight:	20–80 kg

Drive weight

Max.area of novement	Drive length (without cladding)	Drive weight
375 mm	1750 mm	8.6 kg
1000 mm	2000 mm	9.4 kg
1125 mm	2250 mm	10.2 kg

3.13 Standards, laws, guidelines and regulations

The Portman Power Assisted Operator is a low energy product according to EN 16005. The EN 16005 calls for the basic protection of an automatic door's area of movement through the use of safety sensors, among other things. Low energy products have special requirements. The Portman Power Assisted Operator fulfills the requirements of a low energy drive within the meaning of the standard by

complying with the following specifications:

- Reduced travel speeds (reduced dynamic door leaf/ contact forces)
- Force limitation (reduced static door leaf/contact forces)

The standard EN 16005 sets different specifications for safeguarding risks at closing edges. The following applies to the use of the Portman Power Assisted Operator.

- The door unit's additional protection is not mandatory.
- The use of safety sensors at the closing edges as additional protection is optional and at the discretion of the installer (see also "Risk assessment by installer").

Protection requirements according to standard EN 16005 in full energy mode:

In this mode, the forces are also limited. Due to the higher contact forces, the standard defines protective measures that must be implemented on site depending on the installation situation.

4. Mounting

4.1 Safety during mounting

WARNING

Danger to injury through electric current. Works on electrical systems must only be carried out by qualified electricians.

• Before starting work on electrical systems and equipment, establish a zero-potential condition and ensure this condition while carrying out the work.

WARNING

Danger of injury from falling objects. Falling parts or tools can cause injury.

• Secure workplace against unauthorised entry.

4.2 General

- The procedure described here is an example. Structural or local conditions, existing aids or other circumstances may make a different approach sensible.
- Use dowels and screws adapted to the substrate for fixing.

- These mounting instructions show the power connection on the right side of the door.
- The mounting of a drive with the connection on the left side takes place in mirror image.
- The connection side of the drive is always the closed position.
- Do not attach any switches, pictures, baseboards etc. to the wall in the door leaves' area of movement.
- When the end stop is released, always keep the drive level so that the end stop and the carriages do not fall out.
- Do not remove the carriage as it contains strong permanent magnets.

4.3 Requirements

• Make sure the floor is level.

4.4 Tools required

To set the speed and hold-open time, a red screwdriver is included.

Step 1 Track mount

A. Cut the plywood track mount to the width of your horizontal studwork / support frame.

For intermediate, wide and double kits, butt the two track mounts together to make up the required length.

- **B.** Position the track mount in the centre of the top horizontal studwork timber / support frame.
- C. Pilot drill and screw through both sides of 'V' Shaped groove and ensure screw heads are fully sunk into the wood (Screws not supplied).





В.



Stud Track mount

C.

Step 2 Mount the drive

- **A.** Move the drive so that the front of the operator is positioned 41mm from face of closing stud.
- **B.** At the opposite end mark a line (1st line) on the end of the drive. Mark another line (2nd line) at a distance of 43 mm away from the first line. Place the fixing lug on the 2nd line, mark the drill holes and then drill the holes and screw the fixing lug on.

ATTENTION

Risk of damage to components due to sagging. The drive's weight can lead to the fixing lug sagging.

- Hold the drive in place.
- **C.** Push the drive into the fixing lug until it stops, taking care to align the drive horizontally and parallel to the wall.





В.



C.



Step 2 (cont'd) Mount the drive

- **D.** Mark the fixing holes through the drive's holes. Move the carriage to access all 4 holes if necessary. Take down the drive.
- **E.** Drill the marked holes. Drill Ø 4.2 mm for the enclosed sheet-metal screws. The sheet thickness must be at least 2 mm. Push the drive into the fixing lug until it stops.
- **F.** Align the door leaf connections with the opening towards the front. Screw the drive on under the crossbeam.









Sole plate

- **A.** Place the front edge of the sole plate **X**mm (Door width + 20mm) from the closing edge stud.
- **B.** If the rear of the sole plate clashes with the rear studwork, cut the sole plate short.
- **C.** Plumb true to the aluminium track above and secure the plate to the floor with appropriate fixings (not supplied).



Step 4 'Z' panels

- A. Extend the 'Z' Panels to desired height (inside surface of sole plate to underside of top studwork). DO NOT DISASSEMBLE 'Z' PANEL SHEETS
- B. Position the bottom 'Z' Panel inside the sole plate so that both leading edges are flush.
 MAKE SURE THE TOP 'Z' SECTION IS ON THE OUTSIDE OF THE POCKET

For intermediate and wide kits, a second set of metal 'Z' panels are supplied. Fit only the first set at this stage. On intermediate kits, the second set are narrower than the first set.

IF USING A REINFORCING KIT, PLEASE REFER TO INSTRUCTIONS 003-285 AND INSTALL IT AT THIS POINT BEFORE SCREW FIXING THE 'Z' PANELS.

C. Ensure panels are level and then fix with screws. DO NOT SCREW INTO DRIVE UNIT.

Fix top 'Z' Section to plywood track mount with 'Screw Set B'. PLEASE NOTE: TOP 'Z' SECTION SHOULD BE ON THE OUTSIDE OF THE POCKET.

Fix bottom 'Z' section to sole plate with 'Screw Set A'.







С.



Step 5 Panel joining

- **A.** At the back of the pocket, place the protective edge clip onto the 'Z' section, covering where the panels join.
- **B.** In the last 'Z' section slot towards the back of the inside pocket, push the large chock into the top 'Z' section and the two small chocks into the bottom 'Z' section. This pushes the edge outwards so the door does not snag on it when closing.

For intermediate and wide kits, fit chocks in the first and last slot in the rear 'Z' sections as detailed above. Fit protective edge clips on all joints on the rear 'Z' sections

- **C.** Repeat stages 4 5 on the other side of the pocket.
- Pilot and screw through from outside to join panels together in five locations using 'Screw Set A'.

ENSURE SHEETS DO NOT BECOME BOWED WHEN FIXING INTO PLACE









Step 6 Door hanging brackets

A. Front Bracket

Cut the front mortice into the top of the door, set back 130mm from the leading edge.

Rear Bracket

Cut the rear mortice into the top of the door, the set back from the leading edge can be found in the table below.

Note: The rear bracket may overhang the back of the door.

Kit	Front of door to rear bracket
Standard	592.5mm
Intermediate	717.5mm
Wide	842.5mm

B. Fix both brackets in place using screw set G.

Α.

Β.







Step 7 T-guide

A. Fix the 'T' guide at finished floor level, into the sole plate by inserting it into the pre-cut area. Ensure it is flush against the metal strip in the sole plate and then screw fix firmly to the finished floor (fixings not included).

For double door kits, repeat for other side.





Step 8 Bottom door groove

A. Cut a groove in the bottom face of the door to suit the plastic channel which the floor guide runs in. Ensure when cutting the groove it is centralised along the width of the door.

Bond or pin the channel into the cut groove ensuring the metal floor guide can move freely within it.

For double door kits, repeat for second door.





Step 9 Mounting the door leaf

- **A.** Hang the door leaf in the door leaf receptacle.
- **B.** Align the door leaf within the pocket entrance. When aligning, make sure the door leaf can be moved freely back and forth.
- **C.** Adjust the height of the door leaf with the adjusting nuts so that the door leaf hangs horizontally and the distance to the Finished Floor Level is 8 mm.





В.



Step 9 (cont'd) Mounting the door leaf

D. Loosen the screws on the end stop on the connection side.

ATTENTION

1

Do not allow the end stop to protrude outwards! Only move the end stop inwards to a limited extent.

Move the door to the desired closed position, observing dimension Y. Push the end stop against the door and screw the end stop on (5 Nm).

E. Loosen the screws on the end stop on the other side. Push the door to the desired open position, observing dimension Y. Push the end stop against the door. Screw the end stop on (5 Nm).

max. area of movement	max. dimension Y
875 mm	200 mm
1000 mm	250 mm
1125 mm	300 mm

F. If a radio receiver, program switch and/or sensors are connected, install them now and route the leads according to the enclosed instructions.







Step 10 Make the mains connection

Warning!

Disconnect the power supply before mounting!

Warning!

Turn the power switch to OFF!

A. Mark the end stop's position on the connection side.

A1. Mounting with mains plug Use the mains connection cable to establish the connection between the connection socket in the drive and the earthing contact socket.

A2. Mounting with fixed connection Loosen the screws on the end stop on the connection side. Push the end stop towards the center of the drive. Unscrew the screw from the cover on the drive's connection side.

Keep the cover and screw, as both will be needed later.

- **B.** Remove the cover. Carefully open the cover from the control housing with the tip of a flat-bladed screwdriver.
- **C.** Loosen the screws on the terminals. Pull out the internal connection socket. Cut the leads L1 and N to length, strip them and connect them to the mains connection terminals.











Step 10 (cont'd) Make the mains connection

Warning! Pass the earthing wire through the control housing and connect it to the earthing terminal!

- **D.** Close the cover of the control housing. Attach the cover of the mains connection. Screw the mains connection's cover on.
- E. Slide the end stop to the position mark. Screw the end stop on.











Step 11 Jamb fitting - Cassette jambs

- **A.** Measure from the finished floor to the underside of the stud and cut the cassette jambs to this measurement. Ensure any cut is made at the end without the notch detail.
- **B.** Push fit the brush seals into all cassette jambs and press the jambs onto the edges of the 'Z' sections.
- **C.** Secure the 'Z' sections at the top and bottom with '**Screw Set B'** and then approximately every 400mm.









Step 12 Track packers

- **A.** To cut the track packers, measure remaining door opening width between the cassette edge jambs and the studwork.
- **B.** To secure the track packers, screw through pre-drilled holes into the plywood track mount using **'Screw Set C'**.





Step 13 Jamb fitting - Front edge jamb

- A. Measure from the finished floor to the underside of the track packers and cut the front edge jamb to this measurement. Position the front edge jamb against the studwork and slide the door to its closed position to test fit. Secure to studwork with appropriate fixings.
- **B.** Cut the rubber seals to the front edge jamb length and press into the pre-made grooves.





Step 14 Head section fitting

- **A.** Cut the head section to fit between the front edge jamb and the cassette edge jamb.
- **B.** 'Screw set D' is used to screw through the head section fixing into the track packer, the screws being approximately 300mm apart along the head sections length.







Step 15 Cover plate

A. Hold cover plate in position against the closing jamb. Slide up until small lip is flush with underside of operator and fix in place using 'Screw set F'.





INTERMEDIATE AND WIDE KITS

Fit the second set of 'Z' section sheets so that the rear edge is in line with the back of the pocket.

Step 16 Plasterboard

A. Clad the kit in 12.5mm of plasterboard. Ensure it butts up level and tight against all jambs.

When positioned correctly, use screw fixings to secure to the stud frame.

B. Pilot drill through the plasterboard and 'Z' section sheets a maximum of 300mm apart vertically and horizontally equal.

Screw the plasterboard into place (fixings not included).

ENSURE NO SCREWS PROTRUDE INTO THE POCKET CAVITY.





Step 17 Commisioning

The visual feedback takes place via the LED operating display.

A. Requirements

- The Portman Power Assisted Operator is completely mounted.
- The door can easily be moved over the entire area of movement.

B. Carry out a learning cycle

The values saved during the learning cycle are overwritten on a new learning cycle.

TIPS AND RECOMMENDATIONS

Do not interrupt the learning cycle as all necessary values are being determined.

- 1. Open the door.
- 2. Switch on the drive.
- LED flashes green.



B2. Start learning cycle

3. Press the reset button on the drive for more than 3 seconds (Fig. 48 - 2).

- The door opens and closes twice, the LED lashes green.
- After that the LED lights up green permanently.
- The Portman Power Assisted Operator is ready for operation and operates in low energy mode.

C. Set speed and hold-open time

ATTENTION

Risk of damage to the potentiometer. The potentiometers can be damaged by excessive forces.

• Please only use the enclosed red screwdriver for settings!



C1 & 2. Set the speed and the hold-open time

- 1. Set the speed on the speed potentiometer (C1).
- 2. Set the hold-open time on the hold-open time potentiometer (C2).

D. Increase end thrust

If the door does not close properly due to existing seals, it is possible to increase the force with which the drive presses the door into the seal.

1. To activate the function, set the DIP switch 7 to the ON position.

Step 17 (cont'd) Commisioning

E. Set functions and operating modes

The DIP switches activate various inputs on the terminals and set operating modes.

DIP 10	ON OFF	without function without function	
DIP 9	ON OFF	WC function active WC function inactive	
DIP 8	ON OFF	locking no locking	
DIP 7	ON OFF	increased end thrust gentle end thrust	
DIP 6	ON	Permanently open operating mode active	
	OFF	Automatic operating mode active	
	ON	outside push button active	
	OFF	outside motion detector active	
DIP 4	ON	inside push button active	
DIP 3	ON	high sensor test active	
•	OFF	low sensor test active	
DIP 2	ON OFF	secondary closing edge test sensor active inactive	
DIP 1	ON OFF	main closing edge test sensor active inactive	

F. Permanently open by double-click

This function is only possible with a push button.

1. To activate the function, set the DIP switches 4 and/or 5 on the control to the ON position.

G. Open/close at the touch of a button

This function is only possible with a push button or via Push & Go.

1. To activate the function, set the DIP switches 4, 5 and 6 to the ON position.

H. Activate WC function

When using the WC function, the following options are not possible:

- connecting a program switch.
- opening/closing the door at the touch of a button.
- increasing end thrust.
- H1. For private areas
- 1. To activate the function, set the DIP switch 8 to the OFF position and set the DIP switch 9 to the ON position.

H.2 For public areas

1. To activate the function, set the DIP switches 8 and 9 to the ON position.

I. Secure closing edges

If sensors are connected to the main and/or the secondary closing edge, the control must be set to the sensors via the DIP switches.



I. DIP switches

If a sensor is connected to the main closing edge:

1. Set the DIP switch 1 to ON and switch the DIP switch 3 depending on the polarity of the test signal of the sensor used (usually to Off) (see E).

If a sensor is connected to the secondary closing edge:

1. Set the DIP switch 2 to ON and switch the DIP switch 3 depending on the polarity of the test signal of the sensor used (usually to Off) (see E).

Step 17 (cont'd) Commisioning

If several sensors are connected to the main and secondary closing edges:

1. Set the DIP switches 1 and 2 to ON and switch the DIP switch 3 depending on the polarity of the test signal of the sensor used (usually to Off) (see E).

J. Emergency stop

If the Permanently open (terminal 34) and automatic (terminal 31) inputs are switched to GND (terminal 3) at the same time, the Permanently open operation mode is active. This allows, for example, the connection of a key switch as a fire brigade access or the connection of an emergency push button in parallel with a program switch.

K. End thrust

If the door does not close properly due to existing seals, it is possible to increase the force with which the drive presses the door into the seal. To activate the function, set the DIP switch 7 on the control to the ON position.

L. Carry out a learning cycle

The values saved during the learning cycle are overwritten on a new learning cycle.

TIPS AND RECOMMENDATIONS

Do not interrupt the learning cycle as all necessary values are being determined.

1. Open the door.

F

- 2. Switch on the drive.
 - LED flashes green (Fig. 59/1).
- 3. Press the reset button on the drive for more than 3 seconds (Fig. 59/2).
 - The door opens 2 times and closed again. The LED flashes green.
 - After that the LED lights up green permanently.
 - The Portman Powered Assisted Operator is ready for operation.



L1 & 2. Start learning cycle

TIPS AND RECOMMENDATIONS

Every time an end stop has been adjusted or when the door weight has changed, a learning cycle must be carried out.

Service

A. Change the operating mode

A.1 With the internal program switch To change the operating mode, set the internal program switch (A1) to the desired position.



A1. Internal program switch.

A.2 With the optional program switch EPS-S3 See program switch EPS-S3 instructions

B. Door behavior in automatic mode

The Portman Power Assisted Operator is delivered in automatic mode. Depending on the devices installed, the door is opened in different ways.

B.1 Push & Go

Pushing the door open manually by at least 10 mm causes the door to continue moving automatically in the desired direction. The door closes automatically after the set hold-open time expires.

B.2 Push button

After pressing the push button (e.g. wall or radio button), the door is opened by the drive and closed again after the set hold-open time expires.

B.3 Sensors

When proximity sensors (radar detectors, etc.) are connected, the door is opened by the drive as soon as a person approaches. The door closes automatically after the set hold-open time expires.

B.4 Permanently open by double-click

Double-clicking on the push button (quickly and successively operating button twice) opens the door permanently. Another double-click or manual push start closes the door. To activate the function, set the DIP switches 4 and/or 5 on the control to the ON position.

B.5 Open/close at the touch of a button

If this function is activated, the door is opened by pressing the push button or by manually pushing (Push & Go). To close the door, press the push button again or push the door. To activate the function, set the DIP switches 4, 5 and 6 to the ON position.

B.6 Express function

The drive allows a manual pushing in the direction of travel without resistance. If the maximum speed is exceeded, the resistance to movement is increased

depending on the amount it is exceeded by. After releasing, the door is gently braked to maximum speed. This function is active on all door movements.

C. Set speed and hold-open time

The door speed can be set between 100 mm/s and 800 mm/s. The maximum speed depends on the door leaf weight.

ATTENTION

Risk of damage to the potentiometer. The potentiometers can be damaged by excessive forces.

- Please only use the enclosed red screwdriver for settings!
- 1. Set the speed on the speed potentiometer (C1).



C1 & C2. Set the speed and the hold-open time

Service (cont'd)

In low energy mode, the hold-open time can be set between 5 and 30 seconds. In full energy mode, the hold-open time can be set between 0 and 30 seconds.

2. Set the hold-open time on the hold-open time potentiometer (C2).

D Power supply failure

ATTENTION

1

Risk of damage to the door unit In the event of a power failure, the door will not be braked

• Manually guide the door over the entire area of movement.

The door can still be opened and closed manually in the event of a power supply failure. If an electrical lock has been fitted this will release, enabling the door to be opened. When the power returns, the drive automatically carries out a positioning run The area of movement must be kept clear during the positioning run.

Maintenance and care

If the door is to be operated according to EN 16005, the following requirements apply:

• Regular, at least annual maintenance and testing taking into account the specifications for the Portman Power Assisted Operator by persons authorised by Portman.

Checklist according to DIN 18650 (Step 11)

- Specialist installation according to the manufacturer's instructions.
- Check the door leaf for easy running, adjust if necessary.
- Flawless functional behaviour of the door (check the opening and closing movement).
- Function of the installed pulse generatorssuch as motion detector, push button or radio.
- Function of installed contactless safety devices (sensors) if installed.

Installation of effective protective measures to prevent or safeguard danger zones between door parts and between the door and parts

- of the building environment, e.g. safety distances, secondary closing edge protection.
- Test plate is attached
- Testing and maintenance work are documented.

CAUTION

Risk of injury from crushing, shearing, bumping or pulling Increasing the speed in full energy mode results in increased forces. Depending on the result of the risk assessment at the installation location, the closing edges must be protected by safety sensors.

The performance of the maintenance must only be carried out by qualified technical personnel.

A. Operating cycles display

Briefly press the reset button to display the current operating cycles. If, during the next opening movement, the LED operating display lights up yellow for 1 second, the drive has opened the door more than 200,000 times.

B. Care

To clean the drives, use only commercially available cleaners. Avoid the use of abrasives.

Troubleshooting

Malfunction	Possible causes	Remedy	Malfunction	Possible causes	Remedy
Door is switched on	No power supply available	Check power supply	LED flashes green	Learning cycle was not completed	Restart learning cycle
Green LED is off	Power cable connection not firmly plugged in	Plug in the power cable		Drive is defective	Replace drive
	Power cable defective	Replace power cable	Door stops while moving	Door moves stiffly	Check the door's area of movement and eliminate any reason for the stiffness
	Mains plug defective	Replace drive			Check track and floor guide for dirt or wear and clean if necessary
Green LED lights up	(OFF)	desired position.	Door moves past the	Corresponding end stop has	Readjust and re tighten end
	Program switch in position [II]	Switch program switch to the	set OPEN or Closed position	Shifted	stop Carry out a learning cycle
	Door was opened by double-	Close the door by double-	Red LED lit up constantly	Control defective	Turn the power switch off and then on again
	CIICKING PERMANENTLY OPEN switched on	clicking again			Replace drive
	Safety sensor on the door is active (obstacles in the sensor's	Remove obstacles and adjust	Red LED flashes cyclically 2 times	Control defective	Turn the power switch off and then on again
	detection area)				Replace drive
	Cable to sensor defective	Check cable and replace if necessary	Red LED flashes cyclically 3 times	Power range switch has been switched over	Turn the power switch off and then on again
	No safety sensors connected	Check jumpers and replace if	f Red LED flashes cyclically 4 times	Testable safety sensors defective	Check safety sensor and replace if necessary
		jumpered		Sensor's cable defective	Check cable and replace if necessary
	Drive defective	Replace drive		DIP switches 1 to 3 set incorrectly	Check and reset DIP switch settings

Troubleshooting (cont'd)

Malfunction	Possible causes	Remedy
Red LED flashes cyclically 5 times	Incremental encoder or incremental encoder cable defective.	Turn the power switch off and then on again
		Replace drive
	Opening width set incorrectly	Reset opening width (end stops). Carry out a learning cycle
Red LED flashes cyclically 6 times	Door's area of movement is blocked	Clear the area of movement
	Opening width set incorrectly	Reset opening width (end stops) Carry out a learning cycle
Red LED flashes cyclically 10 times	Stator or stator cable defective	Turn the power switch off and then on again
		Replace drive
	Short circuit at the connection terminal	1. Eliminate short circuit
		 Turn the drive off and then on again using the power switch
Hum in final position	Unfavorable end position of the door leaf	Move end stop by at least2mm Carry out a learning cycle
Door leaf vibrates while moving	Guide mechanism is tight	If necessary, readjust the door leaf connection and floor guide
		Rotate nuts several times to fix door leaves

Disassembly, disposal and declarations

Disassembly, recycling and disposal

Disassembly is carried out in the reverse order of mounting and must be carried out by qualified personnel.

DANGER

Danger to life through electric current. Works on electrical systems must only be carried out by qualified electricians.

• Before starting work on electrical systems and equipment, establish a zero-potential condition and ensure this condition while carrying out the work.

The product must be disposed of in an environmentally friendly manner. Electrotechnical parts and batteries must not be disposed of as domestic waste. Dispose of electro technical parts and batteries in the designated acceptance and collection points. Refer to the statutory regulations for your country.

Declaration of conformity

dormakaba Deutschland GmbH, DORMA Platz 1, 58256 Ennepetal

hereby declares that the product CS 80 MAGNEO, CS 80 MAGNEO SYNC complies with the provisions of the listed EC Directive(s) and that the standards and/or technical specifications referred to below have been applied.

Directive:

2014/30/EU Electromagnetic Compatibility The technical documentation is available from the Product Compliance Manager at: product.compliance@dorma.com.

Harmonized European standard, national rule: EN 13849-1 EN ISO 12100 EN 16005 EN 60335-1 EN 60335-2-103 EN 61000-6-2 EN 61000-6-3 EN 61000-3-2 EN 61000-3-3

Installation declaration

dormakaba Deutschland GmbH,

DORMA Platz 1, 58256 Ennepetal

hereby declares that the partly completed machine CS 80 MAGNEO, CS 80 MAGNEO SYNC complies with the following essential requirements of the Machinery Directive (2006/42/EC) - Annex I, Articles:

1.1.3, 1.1.5, 1.2.1, 1.2.3, 1.2.5, 1.2.6, 1.3.2, 1.3.3, 1.3.4, 1.3.8.1, 1.3.9, 1.5.1, 1.5.2, 1.5.4 - 1.5.10, 1.5.16, 1.6.1, 1.6.2, 1.6.3, 1.6.4, 1.7.1, 1.7.1, 1.7.3, 1.7.4

The partly completed machine continues to comply with all relevant provisions of Directives 2014/35/EU and 2014/30/EC.

It may be installed and operated in automatic door units in accordance with the Machinery Directive if the unit manufacturer ensures that all requirements resulting from the Machinery Directive are complied with and issues an EC declaration of conformity.

The specialist technical documentation has been created and is available from the Product Compliance Manager at: product.compliance@dorma.com. They will be transmitted electronically to national authorities upon reasoned request.