Commercial swing door operator

A-SERIES

SW 200

Installation Manual

A-200SW
INSTALLATION MANUAL

Contents

2 Safety Guide

WARNING

Please read this manual carefully before beginning installation and for ensuring users are safe when using the door operator. Failure to follow correct procedures, could result in injury, and will void any warranty provided for this product

Instructions for ongoing use

For your safety and the safety of others, it is essential to follow these instructions carefully. Please retain these instructions for future reference.

This door operator is not intended for use by individuals (including children) with reduced physical, sensory, or mental capabilities, or those lacking experience and knowledge, unless they are supervised or instructed in its use by someone responsible for their safety.

Children must be supervised to ensure they do not play with the door operator.
Do not allow children to operate fixed controls. Keep remote controls out of their reach.

Regularly inspect the door operator for signs of imbalance (where applicable), as well as wear or damage to cables, springs, and mounting components. Do not use the equipment if repairs or adjustments are required.

Ensure that the mains voltage is disconnected before performing cleaning or maintenance.
If the supply cord is damaged, it must be replaced by the manufacturer, their service agent, or a similarly qualified person to prevent hazards.

DO NOT turn on power if person or object is in the doorway or cut power when door is operational.
DO NOT attempt to disassemble gearbox from motor as main spring is under tension and could result in serious injury

If power fails you can manually open door, however be aware the mechanical closer will still operate. Ensure the door is opening in the right direction.

Installation Instructions

Improper installation can result in serious injury. Follow all installation instructions carefully.

Please refer to Technical Data to ensure that operator model is suitable for the width and weight of the door

The installer must ensure that the temperature range marked on the drive is suitable for the intended location.

Before installing the drive, ensure that the driven part is in good mechanical condition, operates properly, and is correctly balanced (where applicable).

Stay clear of moving parts to avoid chance of crush injury.

Ensure that the mains voltage is disconnected from door operator unit during installation.

Input supply power is AC 220V. Ensure the ground wire is earthed.
Do not attempt to modify or repair any of the components of this product.
The 24V output is for the sensor. DO NOT use 12V for the sensor

After installation, verify that the mechanism is properly adjusted and that all safety systems, including any manual release mechanisms, are functioning correctly.

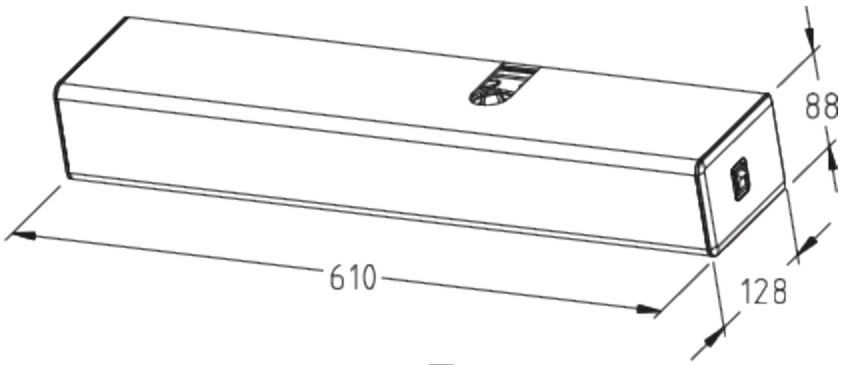
2 Technical Data

Technical Data

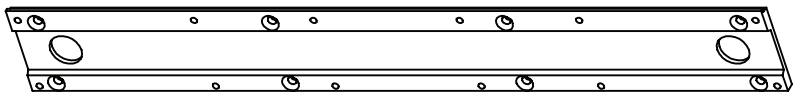
Supply power:	220VAC ±10% , 50/60Hz
Power consumption:	100W (max)
Drive unit:	24V DC Motor, spring closer
Anti- press device:	STD
Open angle:	80°-100°
Opening time(speed):	3-7Sec . (adjustable)
Closing time(speed):	3-7Sec. (adjustable)
Hold-open time:	0.5-30Sec . (adjustable)
Drive arm:	pull arm(inward open) / push arm(outward open)
Environment temperature:	-20°C-45 ° C
Relative humidity :	≤85%

Door width and weight

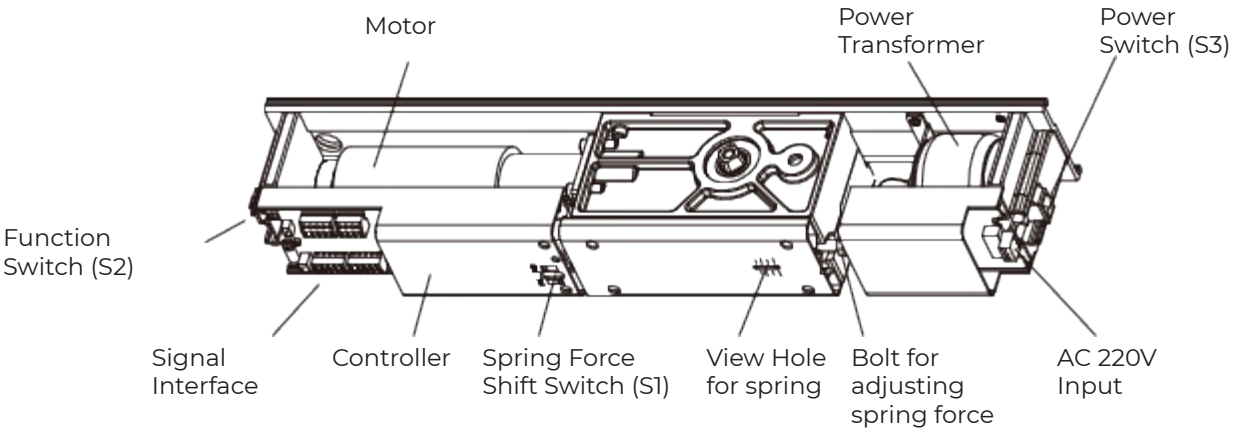
Product Dimension (mm)



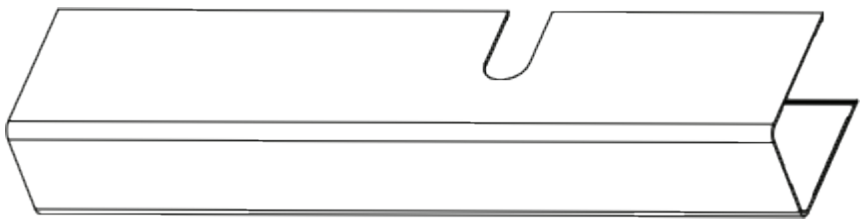
3 Components



Base Plate

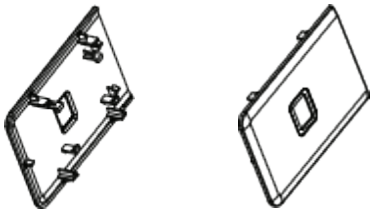


Drive Device

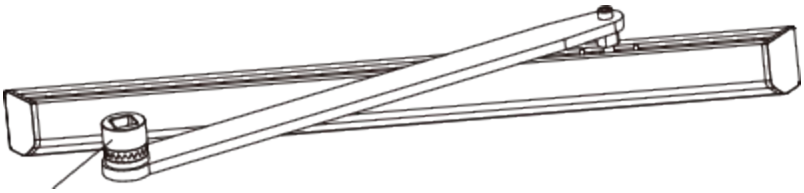


Cover

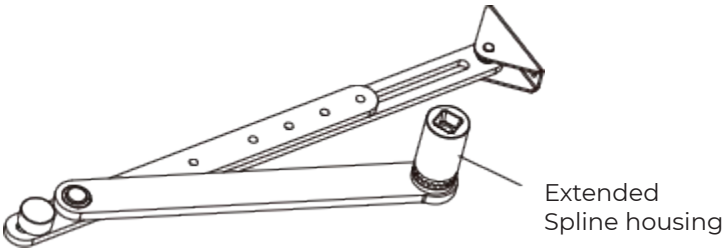
3 Components
Continued



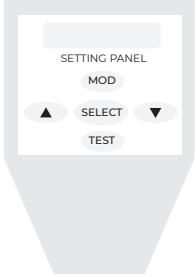
End caps (1 pair)



Pull arm (alternative with push arm)



Push arm (alternative with pull arm)



Hand programmer

4 Installation

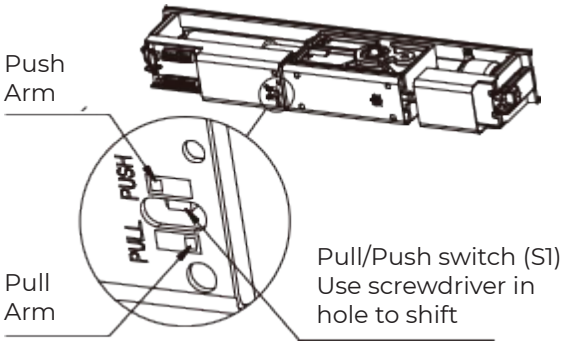
Set Installation Mode

Find the Drive Selector switch (S1) on the Operator

Choose Installation mode according to the operational orientation of the door
- Pull Arm : Inward opening
- Push Arm : Outward opening

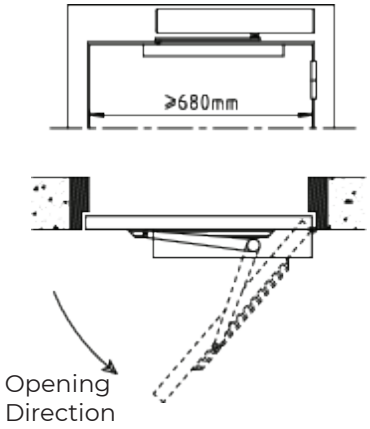
Note
Default factory setting is for installation with a pull arm

If incorrectly selected the operator will not work properly



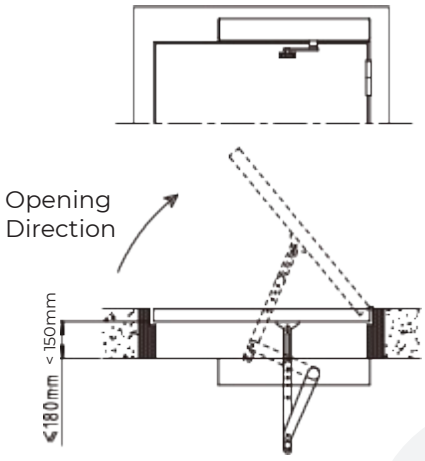
Application of Pull arm mounting

For Inward opening doors
Minimum door leaf width is 680mm



Application of Push arm mounting

For Outward opening doors
The depth between the door face and the opposite wall should be less than 150mm



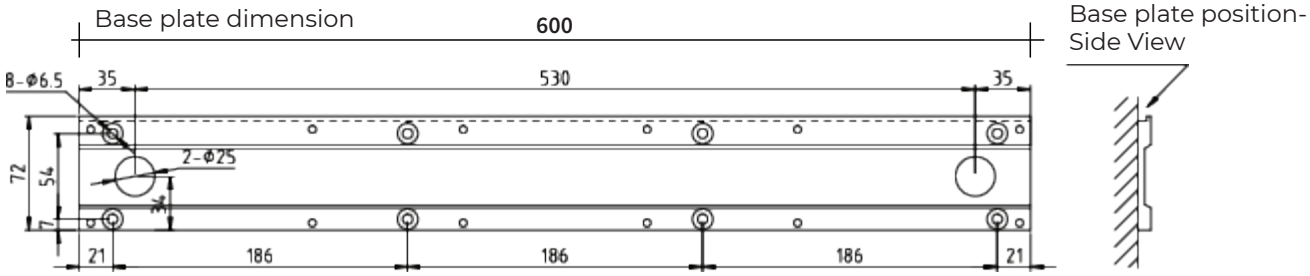
4 Installation
with Pull Arm

Installation with Pull Arm

1 Base Plate and Side rail

The installation of the end of the base plate is to be in line with the hinges and 55mm above the top of the side rail.

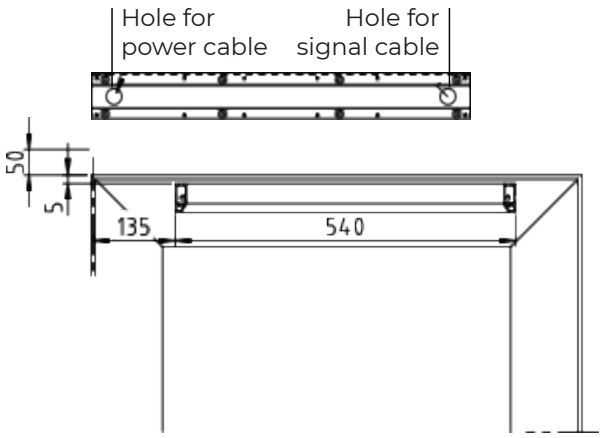
Insure base plate and side rail are level and parallel to each other



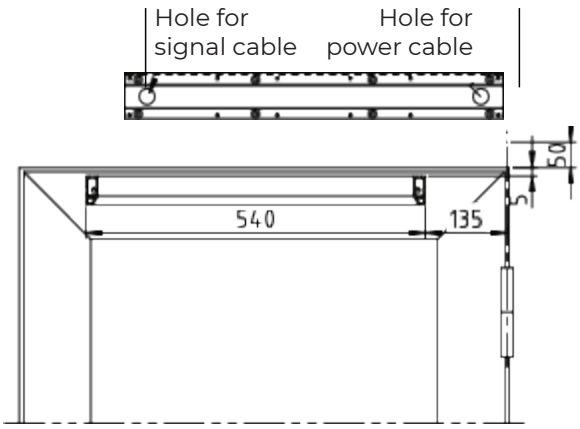
Ensure the mounting location for the base plate has sufficient structure and is aligned vertically

Additional structural strength or packing maybe required to ensure operator is level and secured sufficiently

The slide rail mounts 135mm from the hinged edge of the door and 5mm from the top edge



Pull arm Left hinge



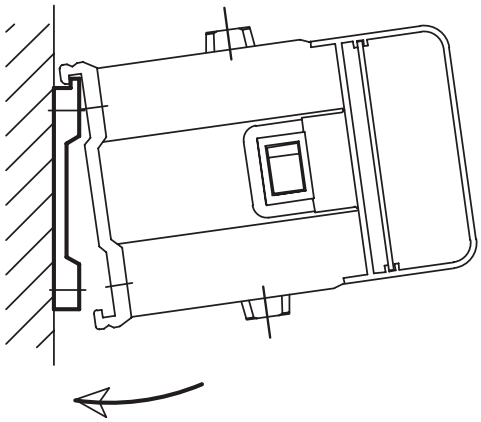
Pull arm Right hinge

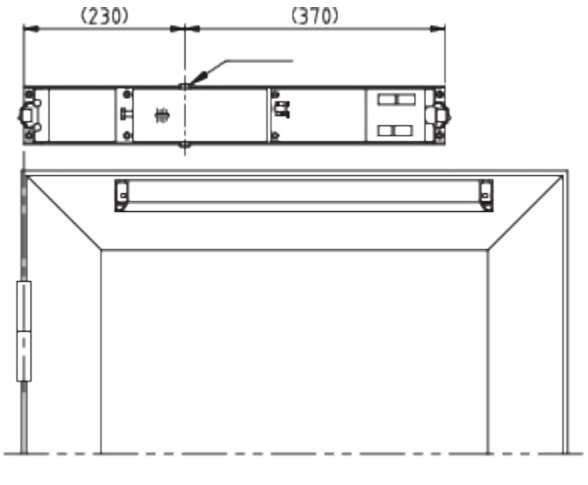
4 Installation
with Pull Arm

Installation with Pull Arm

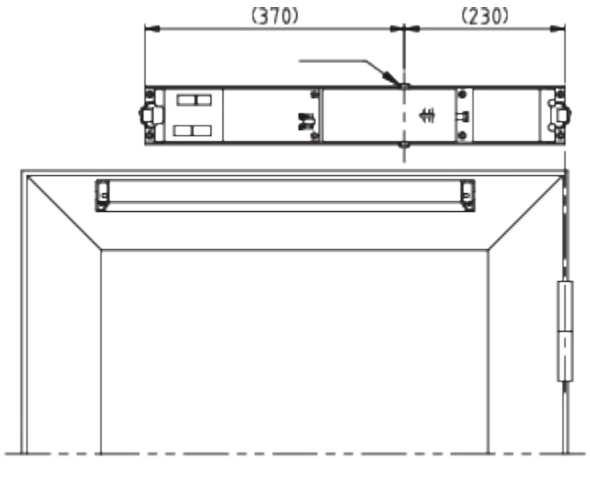
2 Drive Device
Position the drive device onto the base plate and tighten with the 8 M6 x 12mm screws.

The Power Switch aligns to the hinge side of the door





Pull arm Left hinge



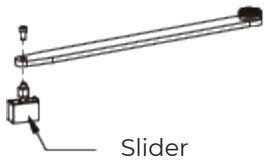
Pull arm Right hinge

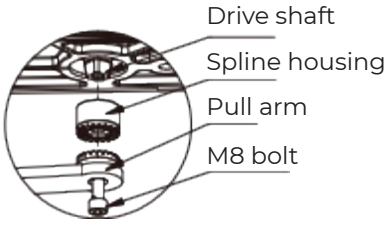
4 Installation
with Pull Arm

Installation with Pull Arm

3 Install the Pull Arm

Temporarily remove the slider pull arm, (Take the right hinge as per assembly as an example), as per the diagram. Assemble to spline housing, and the pull arm to the drive shaft.

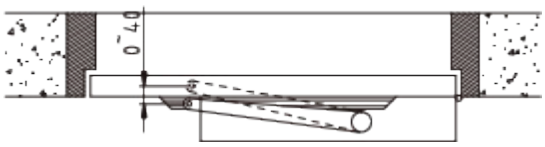




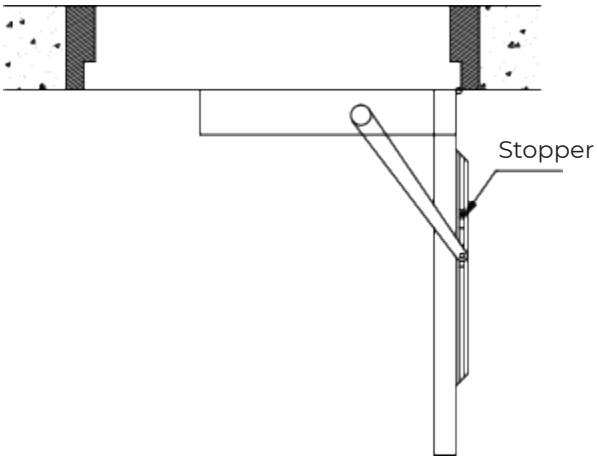
The Pull arm (shown by the dashed line), must be in the range of 0-40mm, if not remove and rotate the spline housing 90° on the drive shaft and test again until it meets the requirements.

Fasten the M8 bolts and tight torque to 15 Nm.

Finally place the slider back into the slide rail and reinstall the pull arm



Position the stopper according to the actual full opening angle of the door. The full opening angle should be less than 100°, otherwise the spring reset mechanism in the drive may not be able to drive the door back to the closed position.



It can be tested by pushing the door to the fully open angle with the operator powered off.

The door leaf should be able to close slowly by itself.

Note:
If the door closes rapidly without resistance, this indicates that the setting of the pull/push arm shift switch (S1) is incorrect. See the page 6 relating to 'Setting the Installation mode'

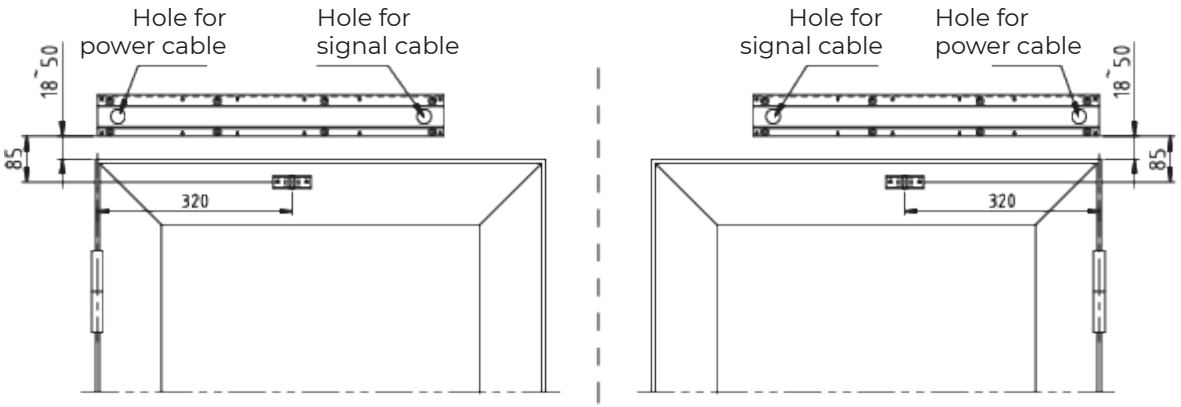
4 Installation
with Push Arm

Installation with Push Arm

1 Base Plate and mounting position of push arm

The installation of the end of the base plate is to be inline with the hinge and 50mm above the top of the door.

Ensure that the base plate is level

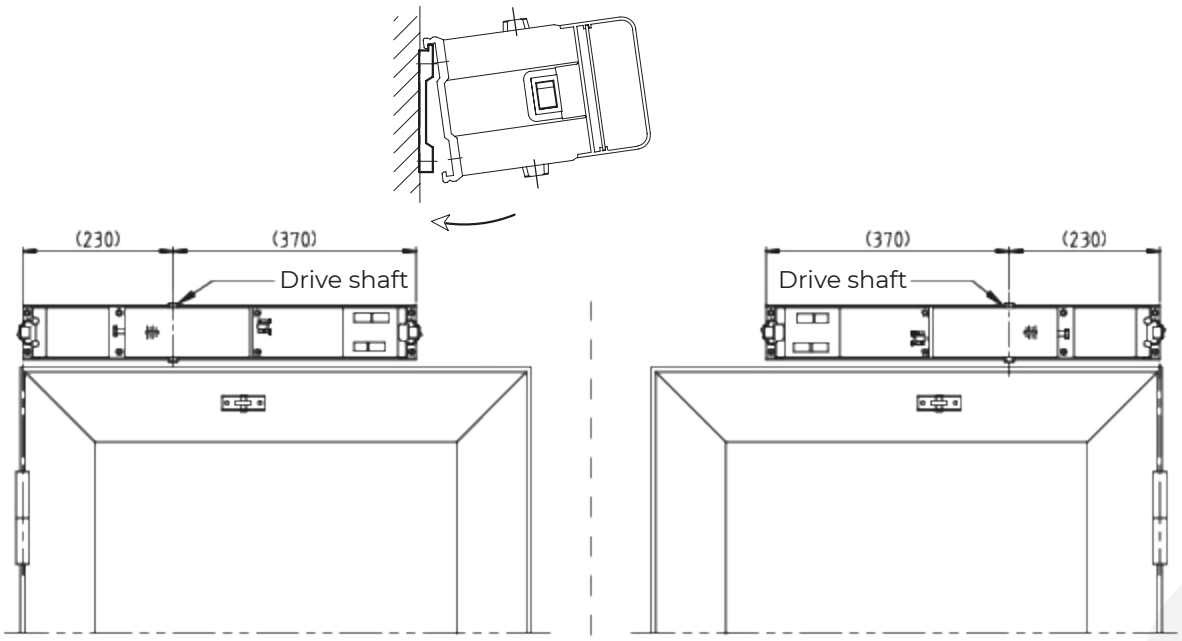


Push arm Left hinge **Push arm Right hinge**

Ensure that the mounting location for the base plate has sufficient structural strength and that is aligned vertically with the operator
(Additional structural material or packing may be required to ensure operator is level and held securely.)
The Push arm mounts 320mm from the hinged edge of the door and
35mm from the top edge

2 Drive device

Hang the drive device onto the base plate and tighten with the 8 M6 x 12mm bolts
The Power switch aligns with the the hinge end of the door.



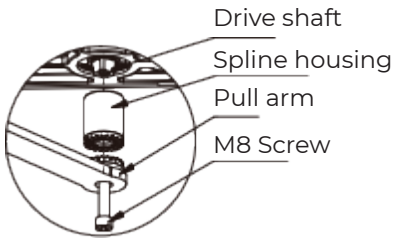
Push arm Left hinge **Push arm Right hinge**

4 Installation
with Push Arm

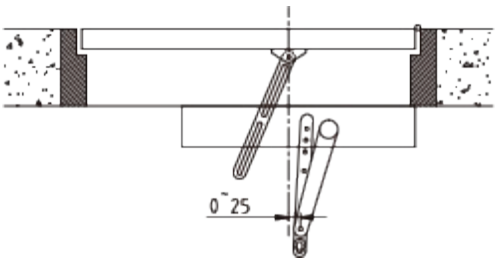
Installation with Push Arm

3 Install the Push Arm

Take the Right hinge assembly as an example, (refer to diagram), and assemble the spline housing, and the push arm to the drive shaft.

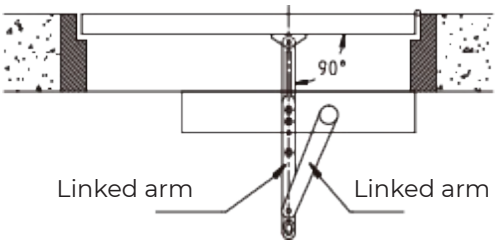


Check that the Push arm angle is within the range of 0-25°, if not, rotate the spline housing 90° relative to the drive shaft and test again until it meets the requirements.



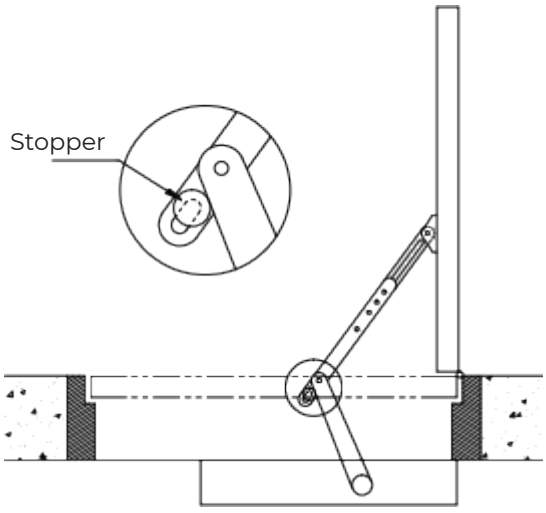
Fasten the M8 screws and tight torque to 15 Nm.

Install the linked arm and adjust the length of it so that it is perpendicular to the door and body at the closed door position.



Position the stopper when the door is in its full open position. The full opening position should not be more than 100°, otherwise the spring in the drive device may not be able to drive the door leaf back to the closed position.

It can be tested by pushing the door to the fully open position with the operator powered off. The door leaf should be able to close slowly by itself.



Note:
If the door closes rapidly without resistance this indicates that the setting of the Push/Pull arm shift switch (S1), is incorrect. Please refer to Page 6 and the ‘Setting of Installation mode”.

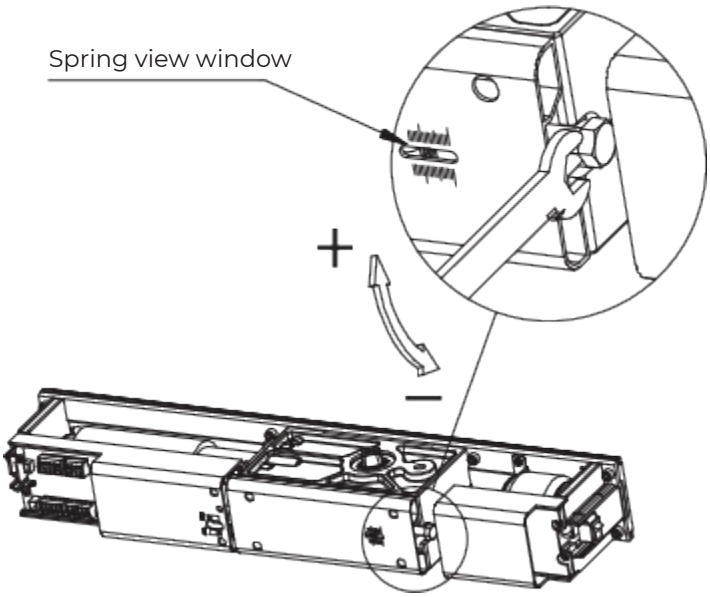
4 Installation
with Push Arm

Installation with Push Arm

3 Adjust the Spring force

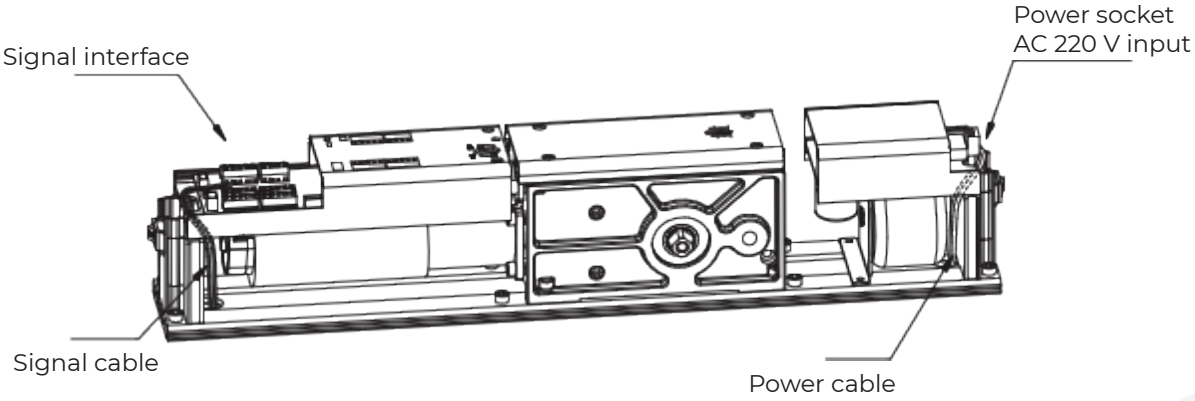
The preloading force of the spring in the operator is set to the minimum by default. During installation, the spring force can be increased according to the door weight and resistance, to allow the spring to close the door smoothly. Check that the force is not too strong, as during a power failure you should be able to open the door manually.

Adjusting the tensioning screw in the clockwise direction increases the closing force.



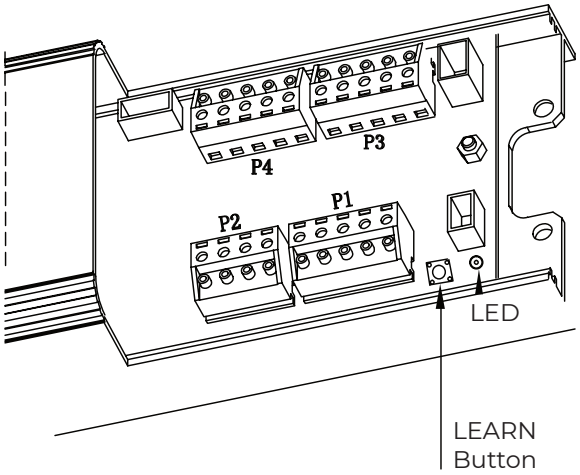
4 Cable connection

The power cable and signal cable are connected to their respective terminals and go through the position shown in the diagram, or via suppliers side entry with lead. Please refer to Page 6 ‘Electronic Connection’ for the wiring of signal cables



5 Programming and Set up

Initialisation Setting



Mechanical Installation Complete
Fully close door by hand

↓

Set up Parameter Settings
See page 14

↓

Press LEARN button
Until door starts to Open

During door opening
Check the LED is flashing

↓

Door open Normally

N ← **Check Installation Mode Pull/Push**
In parameter settings
Check S1

Y

↓

Full Open

↓

Door Close Automatically

During door closing
Check the LED is illuminated

N ← **Door angle is not suitable**
Reduce angle, Re power and re learn

↓

Full Closed

↓

TEST
To Confirm Settings

5 Programming and Set up

Parameter Setting

Connect Hand Programmer
Power On Operator

Displaying

MOD

SELECT → **Operation Data** F-1 ▲▼ **Door Data** F-2

Operation Data F-1

- **Opening Speed oS:04** ▲▼ Opening Speed Max : 06 Min : 00
- SELECT ↓
- **Closing Speed cS:03** ▲▼ Closing Speed Max : 06 Min : 00
- SELECT ↓
- **Open Time ot:02** ▲▼ Open time Max : 30 Min : 00
- SELECT ↓
- **Unlock Delay lt:03** ▲▼ Unlock delay Max : 10 Min : 00
- SELECT ↓
- **Closed Force qc:00** ▲▼ Closed Force Max : 07 Min : 00

SELECT (from Closed Force back to Opening Speed)

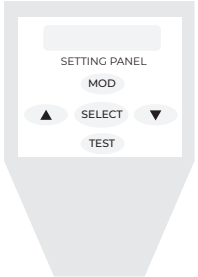
MOD (from Closed Force to Operation Data)

Door Data F-2

SELECT ↓

- **Single Door Double Door n:01** ▲▼ Single/Double Single : 01 Dble/Master : 2Z Dble/Slave : 2C
- SELECT ↓
- **Double Door Linked Open t : F** ▲▼ Double Open Mode First/Second : FSYNC
- ↓ **Not Used C : C**
- **Hand Open o:O** ▲▼ Hand Open o : push, open n : push, not open
- SELECT ↓
- **Lock Mode L : d** ▲▼ Lock mode Lock from S2 : d Auto Lock : L
- SELECT ↓
- **Block Reaction H : o** ▲▼ Meet Block o : door return s : door stop
- SELECT ↓
- **Installation Mode F : H** ▲▼ Choose arm H : Pull arm T : Push Arm

MOD (from Door Data to Operation Data)

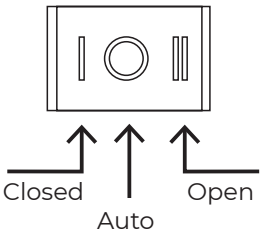


MOD : Press MOD to enter Menu
▲▼ : Increase / Decrease
SELECT : Confirm
TEST : After debugging, test to confirm

5 Programming and Set up

State Setting Selector

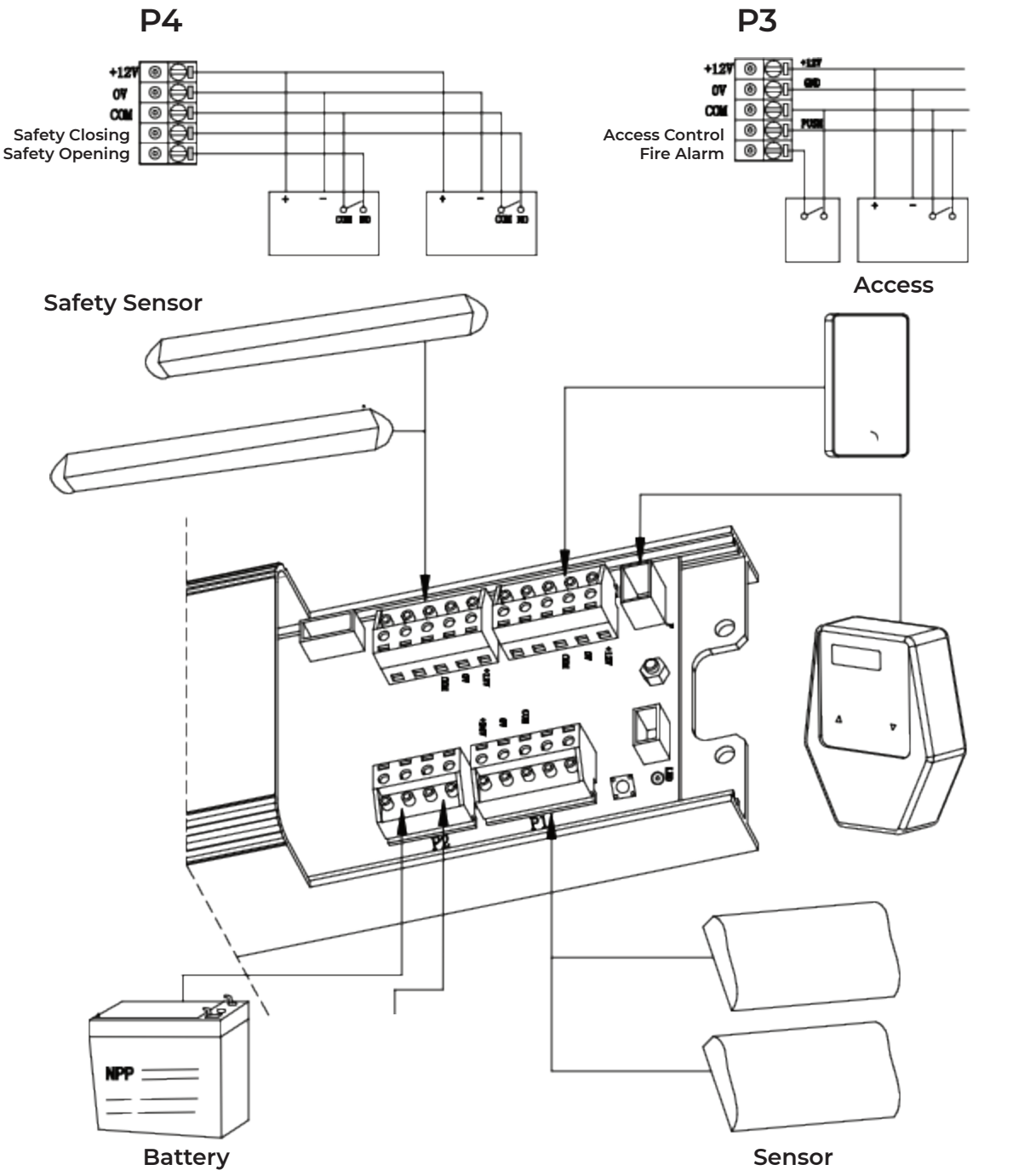
Choose the State setting from Function switch (S2)



Closed : Sensor signal is shielded, but access control signal is effective
Open : The automatic door is kept fully open
Auto : All signal inputs are valid (Normal Operation)

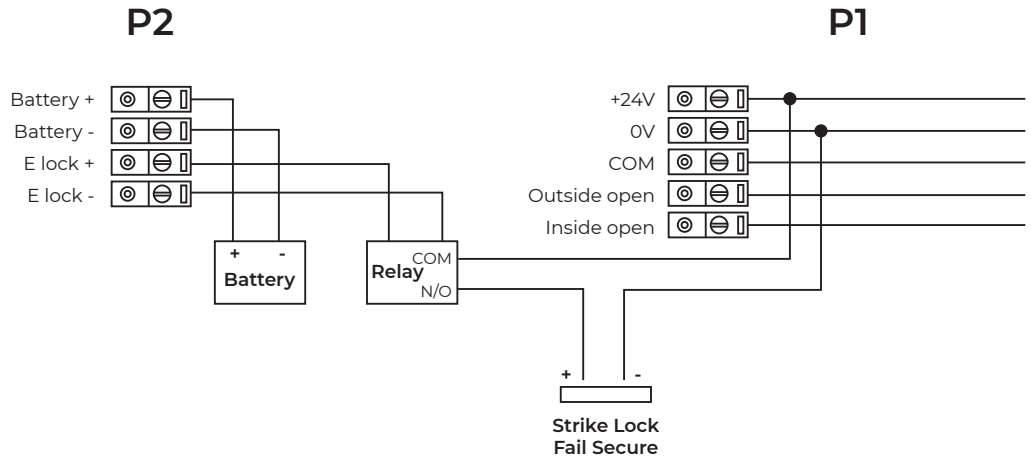
5 Programming and Set up

Electronic Connection



5 Programming and Set up

Electronic Lock

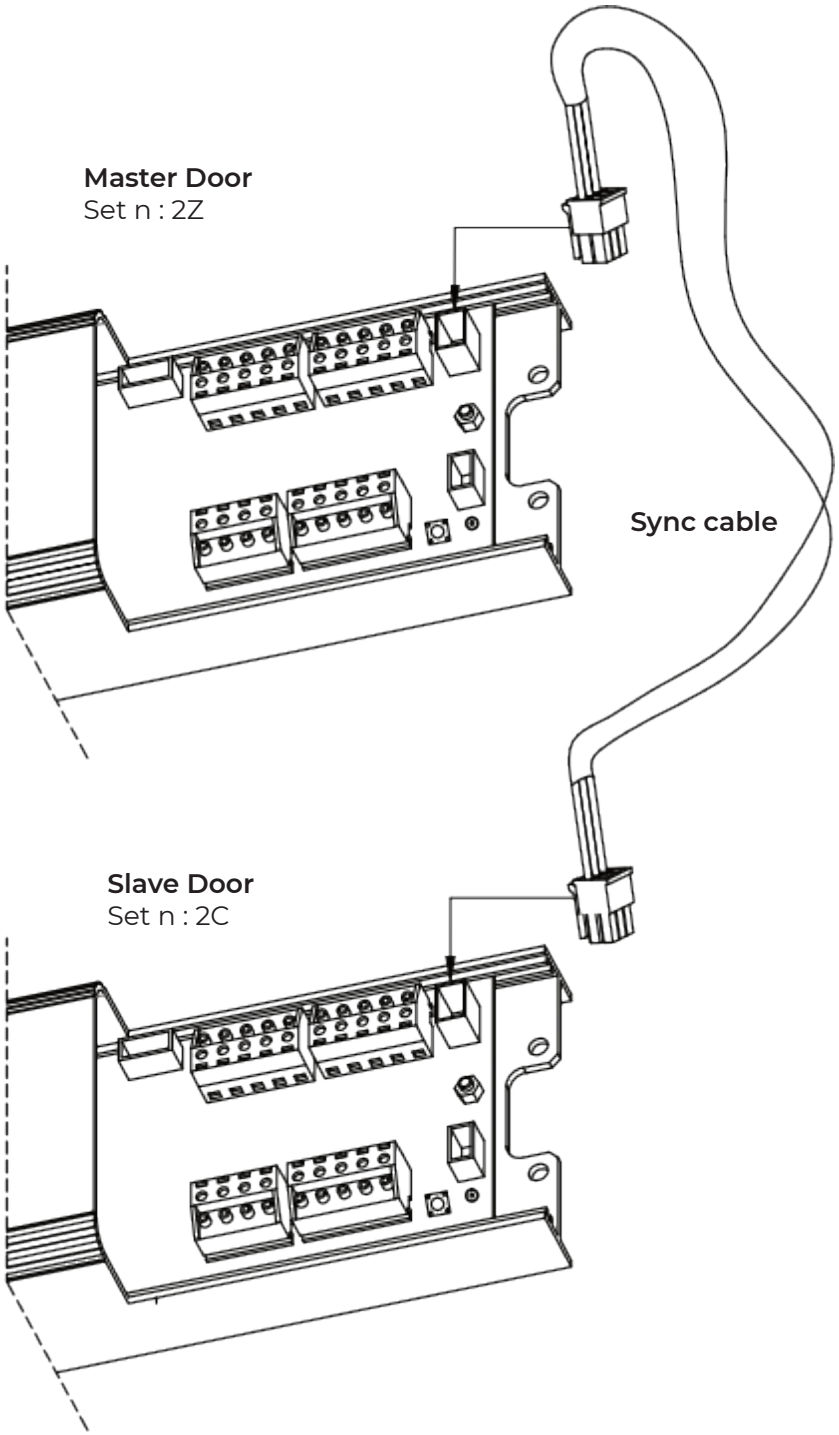


NOTE
When using and electronic strike, use a single pole relay, and power strike from P1 and 24V DC

DO NOT WIRE DIRECT TO P2 E LOCK AS IT WILL DAMAGE PCB

5 Programming and Set up

Double open connection option

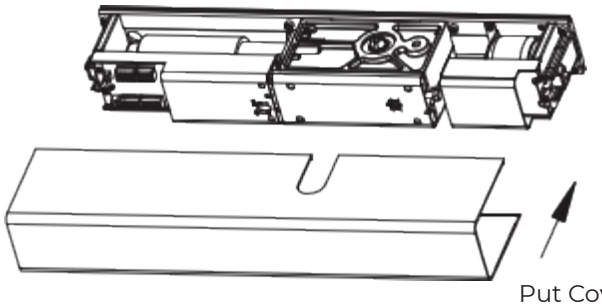


NOTE
Set n : 2Z Master and n : 2C Slave once all other parameters are set and tested

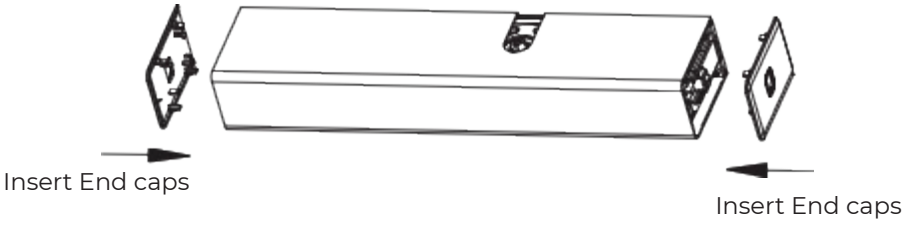
5 Programming and Set up

Cover and end caps

After debugging, put on cover and end caps



Put Cover on



Insert End caps

Insert End caps

6 FAQ

Operator does not open

Check unit has power

Check signal input is activating

Check state switch (S2) is in Auto position

Check for obstructions

Check safety sensors are not being triggered

Operator opens but does not close

Check state switch (S2) is in Auto position

Operator may have gone past 100°. Power off and adjust stopper. Repower and may need to relearn

Safety sensor triggered at full open. Adjust sensor and remove obstruction.

Check signal inputs are not latching on.

Check F2 n setting on Master/Slave

Operator will not learn. LED continues to flash on closing after opening learn

Angle of opening is too large

1. Adjust stopper to maximum 100°
2. Remove spline housing and rotate 90° on drive shaft, realign arm

Door weight or opening force required exceeds operator drive ability.

Door will not full close: (not latching)

Remove spline housing and rotate 90° on drive shaft, realign arm and load.

Increase spring tension

Increase closing force (F1)

Increase preload on door by 1 spline housing tooth.

Electronic lock is not releasing

Check Lock Mode (F2) is set to L : Auto lock

Check relay is triggering when door is activated

Check Unlock delay (F1) is sufficient to allow lock to release before operator actuates.

How do I programme the door with the sync cable installed

Programme each door separately prior to connecting sync cable. Ensure master door operator is set to (F2) n : 2Z and the slave set to n : 2C. The slave operator will receive the opening signal from the master unit and the master will not fully close until it receives the fully closed signal from the slave.

SUPPLIER DECLARATION OF CONFORMITY (SDoC)

In accordance with ISO/IEC 17050-1:2004

SDoC Identification Number[1]: Deper_DSW-200_06062025

Issuer details

Name[2] (of New Zealand manufacturer or importer): James Bull & Co. Chch Ltd.

Telephone: +64 3 3660895

New Zealand Company No. (if applicable): 125361

Email Address: thegaragesale@xtra.co.nz

Contact Address:

45 Sandyford St
Christchurch 8023
NEW ZEALAND

Medium Risk Article – Details[3] (Product name, type, rating, brand, model, batch numbers, and serial numbers, as applicable):

Product Type: Automatic swing door
Trade name: Deper
Model: DSW-200
Input: AC 220-240V~50Hz, IP20, Class I, 100W
Operating temperature -20°C ~ 45°C

The Medium Risk Article listed above, fully complies:

With cited standard(s), as listed[4]:

Standard number and issue year: IEC 60335-1

Edition / Amendment status: Ed 5.0

Standard title: Household and similar electrical appliances - Safety - Part 1: General requirements

AS/NZS ZZ modified Yes ☒ No ☐ N/A ☐

Standard number and issue year: IEC 60335-2-103

Edition / Amendment status: Ed 2.1

Standard title: Household and similar electrical appliances - Safety - Part 2-103: Particular requirements for drives for gates, doors and windows

AS/NZS ZZ modified Yes ☒ No ☐ N/A ☐

OR Complies with the Conformity Cooperation Agreement (CCA)[5] Yes ☐ No ☒

OR is registered on the EESS database & the declarer is registered as the responsible/affiliated supplier[6] Yes ☐ No ☒ **EESS Equipment #** _____

Names and addresses of any Evaluating/Testing/Certification organisation or body used

Name(s): Auckland Lab

Address(es): 1066E Great South Road, Mount Wellington, Auckland 1060, New Zealand

Name(s): -

Address(es): -

Reference to relevant test reports/certification and the issue date that show how compliance is achieved

Supporting document(s) used, to show how compliance with the declared standard(s) is achieved or CCA certification: Test report: AS/NZS 60335.1:2020 + A1:2021 inconjunction with AS/NZS 60335.2.103:2016 + A1:2018 + A2:2020

Report Certification or Document reference N°(s): ACTE202209270

Issue dates(s): 30.05.2025

Reference to any management quality system involved: -

Additional information[7]: Comply with schedule 4 of ESR 2010 requirements

Declaration (signed for and on behalf of)

Name and position as authorized by the issuer[8]: Danny Webster, Manager

Issuer Identification (as affixed to the article):

jamesbull LOCKSMITHS

Signature:

Danny Webster

Date: 13th June 2025