

Ellickson Insulated Sectional Doors



Custom Made Quality Solutions.

03 – EC Declaration



DECLARATION OF CONFORMITY

Ellickson Doors Ltd declares under its own responsibility that the Insulated Sectional Doors:

Make: Ellickson Doors Ltd.
Model: EDL Overhead Insulated Sectional Door.
Year: 2013.

Is compliant with the essential requirements of the following directives:

- 89 / 106 / EC** Construction Products Directive.
- 98 / 37 / EC** Machinery Directive.
- 89 / 336 / EC** Electromagnetic Compatibility Directive.
- 73 / 23 / EC** Low Voltage Directive.

And have been calculated and designed pursuant to the following European standards:

- EN 12424:2000** Resistance to wind loading.
- EN 12425:2000** Resistance to water penetration.
- EN 12426:2000** Air permeability.
- EN 12453:2000** Safety in use of power operated doors.
- EN 12604:2000** Mechanical aspects
- EN 12605:2000** Mechanical aspects: Testing process
- EN 1954-1:1996** Safety of machines: Safety parts and controls.
- EN 60204-1:1997** Safety of machines: Electrical equipment where applied.

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Technical Specifications: Ellickson Doors Ltd Insulated Sectional Door.

1) Insulated door panel.

The insulated door panel incorporating self-extinguishing high density rigid firesafe isophenic ipn core fire reaction rating to BS2 DO EN13501 encapsulated with inner and outer 0.5mm hot dipped galvanised sheet steel to BS EN10147. Complete with plastisol outer finish. Pvc thermal break gaskets fitted between panel sections. The 40mm x 610mm High panels incorporate integral interlocking male and female tongue and groove continuous interlocking joint across full width.

2) Galvanised steel end caps

Each insulated door panel section is trimmed with galvanised end caps to support roller bracket hardware installation.

4) EDPM Seal

The top and bottom panel sections are fitted with an extruded aluminium profile with integrated rubber fin type seal.

5) EDPM Side Frame Seal

2 No. vertical fin type seals are fitted to door track externally.

6) Guide roller and carrier

Each door panel section is fitted with galvanised guide roller carriers. The guide rollers are constructed of high performance steel with nylon bearing surface and sealed for life ball bearings.

7) Panel hinges

The panel sections are fitted with galvanised heavy-duty hinges. Number of door hinges is determined by door ope size.

8) Galvanised door track

Each door is provided with 2No. vertical and horizontal J sections cold rolled galvanised steel track. Incorporating radius bends (if required) for altering direction of door lift. Track configuration – designed to suit specific applications.

9) Galvanised track fixing angle

Each track is to be fitted with profiled galvanised steel fixing angle 100mm x 65mm.

10) Galvanised bearing plate

Galvanised steel bearing plates are provided to support the spring counterbalance shaft assembly. The number of bearing plates depends on the size of door opening. Each plate is fitted with seal bearings.

11) Counterbalance spring shaft assembly

The counterbalance spring assembly is individually calibrated to suit each door. The helical torsion springs are powder painted and mounted on a 25mm diameter galvanised shaft. 500,000 life cycles.

12) Alloy cable drum

2 no alloy cable drums are provided with each counter balance assembly.

13) Steel wire ropes

The bottom panel section is connected to the cable drum and counterbalance assembly by 2 No 5mm galvanised wire ropes.

14) Galvanised buffer and pusher springs

Each door is fitted with a pair of buffer springs on track assembly configuration ensuring that the wire ropes are constantly in tension.

15) Door Finish Colour

External colour to HP200 plastisol leathergrain finish to a standard cladding colour. Internal colour to Stucco finish Ral 9010. Standard colours are as follows.

Goosewing Grey BS10A05. Merlin Grey BS18B25. Bone White Ral9002. White Ral 9010. Sargasso Blue Ral5003. Solent Blue BS18E53. Gentian Blue Ral5010. Olive Green BS12B27. Moorland Green BS12B21. Heritage Green Ral6002. Poppy Red BS04E53. Sunset Red Ral3000. Silver Ral9006. Sepia Brown Ral8014. Yellow Ral1021. Anthracite Grey Ral7016. Other colours on request.

16) Weight

The weight of the overall door varies depending upon width and height, general guide for structural loading 15 Kg / m. sq.

17) Electrical operation

Standard electrical 380 Volt 3 Phase 50Hz 0.5Kw drive motor complete with built on starter controls with low level open / close / stop push button control. Emergency low level hand chain over ride.

18) Sectional Door Specification Performance

Thermal U value Panel 0.33w/m.sq.k.

Thermal U value Installed Door 0.9w/m.sq.k.

Air Permeability to BSEN 12426:2000 Class 3.

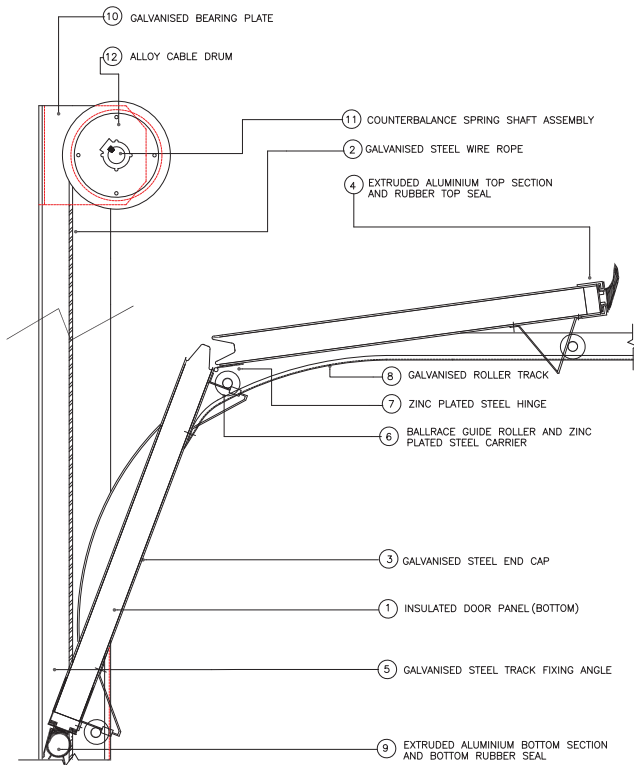
Water Tightness to BSEN 12425; 2000 Class 4.

Wind Loading to BSEN 12424; 2000 Class 4.

Sound Insulation to BSEN 717-1. 27 db.

19) Warranty And Maintenance

All sectional doors come with 12 months warranty period cover from date of installation handover. This period covers all faulty components of door. Warranty cover does not include for mis use of door components. Maintenance contract proposals are available for all door products if required.



High Lift Door



Unit 17F, Six Cross Roads Business Park, Waterford
TEL: 051-338451 MOB: 087 2859866, 087 2306843

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN
MILLIMETRES
DO NOT SCALE DRAWING

DRAWING TITLE

**SECTION THROUGH OPE HEIGHT OF
ELICKSON INSULATED OVERHEAD DOOR**

DRAWN BY

AOB

DATE

21-04-11

STORAGE REFERENCE:

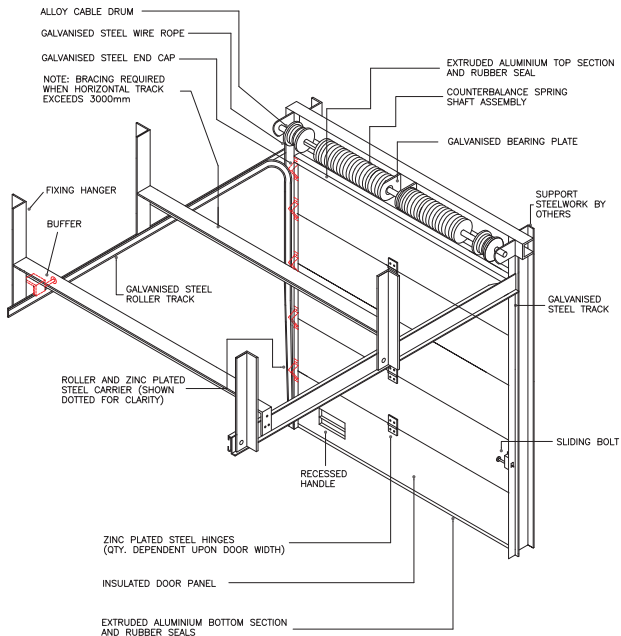
Sectional Door

JOB REFERENCE

CHECKED BY

DRAWING NO.

SEC-01



ISOMETRIC VIEW OF TYPICAL STANDARD PUSH UP OVERHEAD DOOR

DSK D1-Scully



Ellickson Doors
SUPPLY - INSTALL - SERVICE

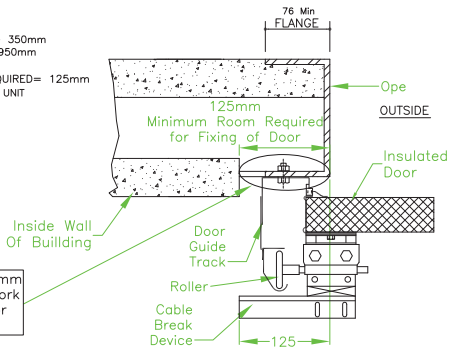
Unit 17F, Six Cross Roads Business Park, Waterford
TEL: 051-338451 MOB: 087 2859866, 087 2306843

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETRES DO NOT SCALE DRAWING		DRAWING TITLE Isometric view of Typical Standard Push up Overhead Door	
DRAWN BY AOB	DATE 21-04-11	STORAGE REFERENCE: Sectional Door	JOB REFERENCE
CHECKED BY		DRAWING NO. SEC-03	

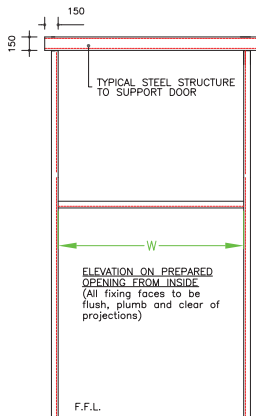
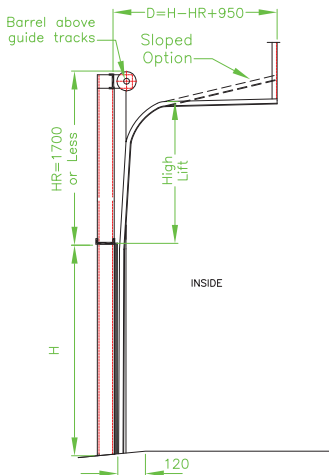
DESIGN CRITERIA

1. HR= HEADROOM REQUIRED= HIGH LIFT + 350mm
2. D= PROJECTION INTO BUILDING= H-HR+950mm
3. H= OPE HEIGHT W= OPE WIDTH
4. MINIMUM GUIDE TRACK SIDE ROOM REQUIRED= 125mm
5. EXTRA SIDE ROOM IS REQUIRED AT DRIVE UNIT OR CHAIN HOIST OF Min. 400mm

Note:- Please ensure 125mm is not covered by block work as this is a fixing area for door guide track.



TYPICAL GUIDE FIXING TO STEEL JAMB
(AT LOW LEVEL)



Unit 17F, Six Cross Roads Business Park, Waterford
TEL: 051-338451 MOB: 087 2859866, 087 2306843

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DRAWN BY
A0B

DATE
21-04-11

CHECKED BY

DRAWING TITLE
Opening Preparation for
High Lift Door of Head Room 1700 or Less

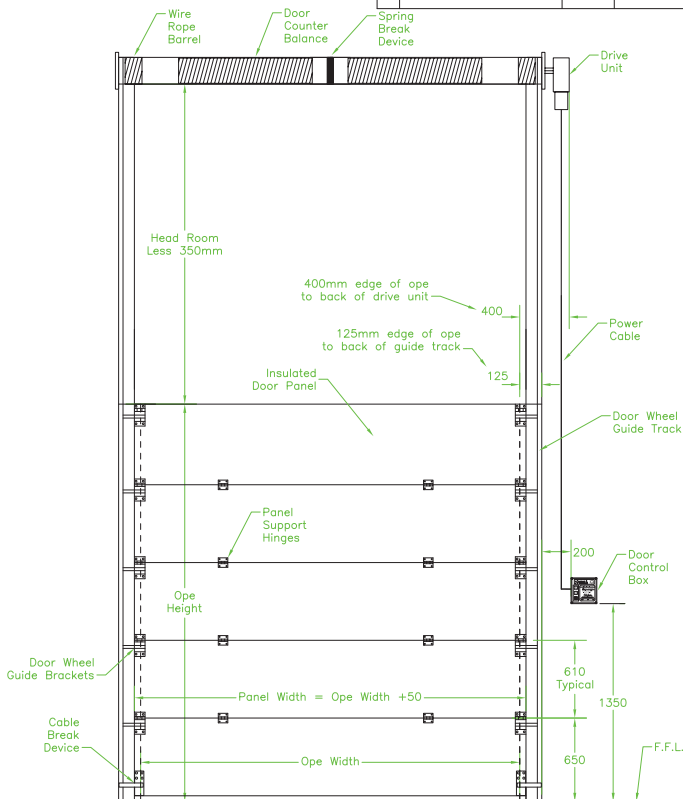
STORAGE REFERENCE:
Sectional Door

JOB REFERENCE

DRAWING NO.

SEC-05

REVISIONS			
REV	DESCRIPTION	DATE	DRAWN BY



Internal Door Elevation



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DRAWN BY

AOB

DATE

21-04-11

CHECKED BY

DRAWING TITLE

Internal Door Elevation of
High Lift Door of Head Room 1700 or Less

STORAGE REFERENCE:

Sectional Door

DRAWING NO.

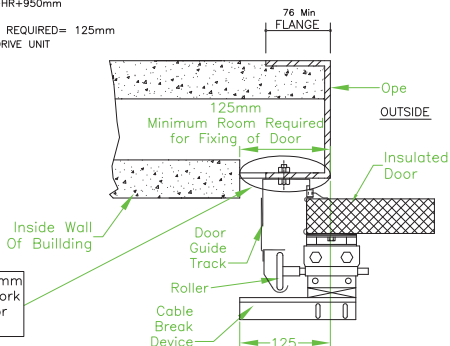
SEC-TSM-03

JOB REFERENCE

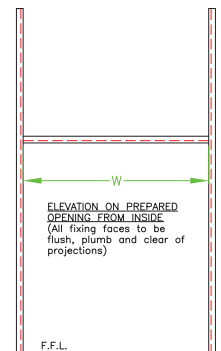
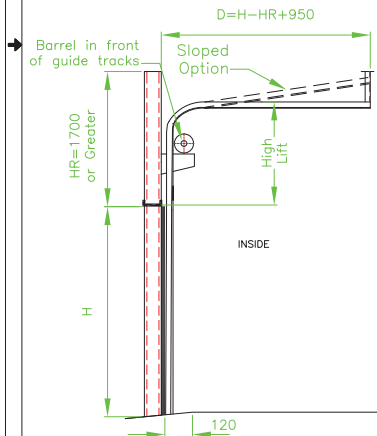
DESIGN CRITERIA

1. HR= HEADROOM REQUIRED= 1700 OR GREATER
2. D= PROJECTION INTO BUILDING= H-HR+950mm
3. H= OPE HEIGHT W= OPE WIDTH
4. MINIMUM GUIDE TRACK SIDE ROOM REQUIRED= 125mm
5. EXTRA SIDE ROOM IS REQUIRED AT DRIVE UNIT OR CHAIN HOIST OF Min. 400mm

Note:- Please ensure 125mm is not covered by block work as this is a fixing area for door guide track.



TYPICAL GUIDE FIXING TO STEEL JAMB
(AT LOW LEVEL)



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TEL: 051-338451 MOB: 087 2859866, 087 2306843

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DATE
21-04-11

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DRAWING TITLE

Opening Preparation for
High Lift Door of Head Room 1700 or Greater

STORAGE REFERENCE:
Sectional Door

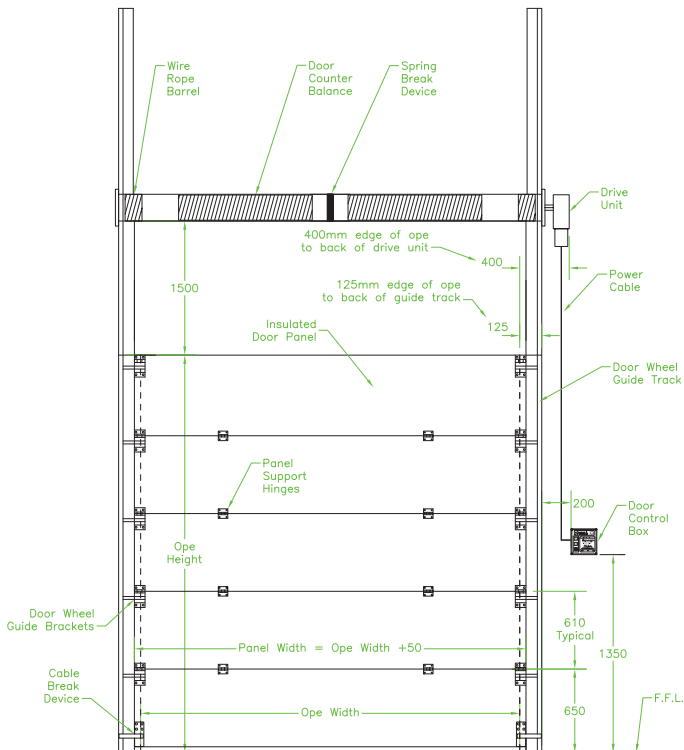
JOB REFERENCE

DRAWING NO.

SEC-09

REVISIONS

REV	DESCRIPTION	DATE	DRAWN BY



Internal Door Elevation



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AOB

DATE
21-04-11

CHECKED BY

DRAWING TITLE

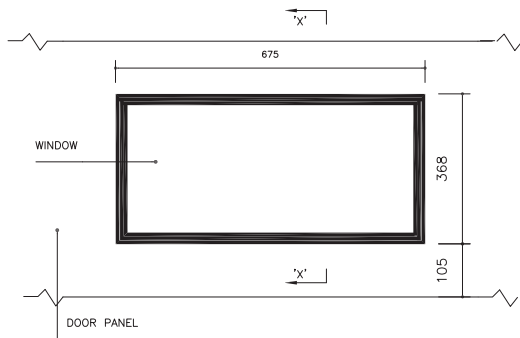
Internal Door Elevation of
High Lift Door of Head Room 1700 or Greater

STORAGE REFERENCE:
Sectional Door

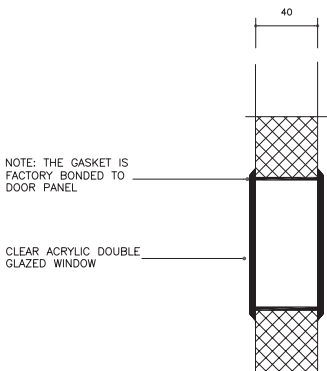
JOB REFERENCE

DRAWING NO.

SEC-TSM-02



ELEVATION FROM OUTSIDE



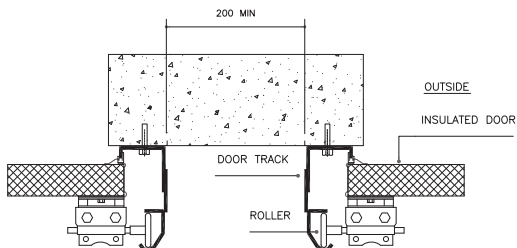
NOTE: NUMBER OF WINDOWS
NOT TO EXCEED ONE WINDOW
PER METER OF DOOR WIDTH
E.G. 4500 WIDE = 4 WINDOWS

SECTION ON 'X-X'

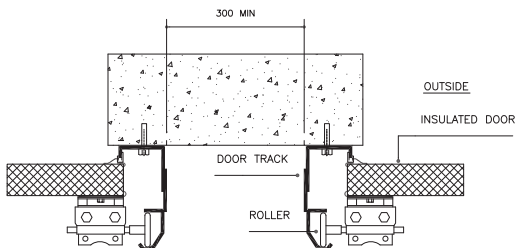


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TEL: 051-338451 MOB: 087 2859866, 087 2306843

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETRES DO NOT SCALE DRAWING		DRAWING TITLE DETAILS OF WINDOW	
DRAWN BY AOB	DATE 21-04-11	STORAGE REFERENCE: Sectional Door	JOB REFERENCE
CHECKED BY		DRAWING NO. SEC-04	



TYPICAL DETAIL OF DOORS (HAND OR CHAIN OPERATED)
ON COMMON COLUMN.



TYPICAL DETAIL OF DOORS (ELECTRIC OPERATE)
ON COMMON COLUMN



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21-04-11

STORAGE REFERENCE:
Sectional Door

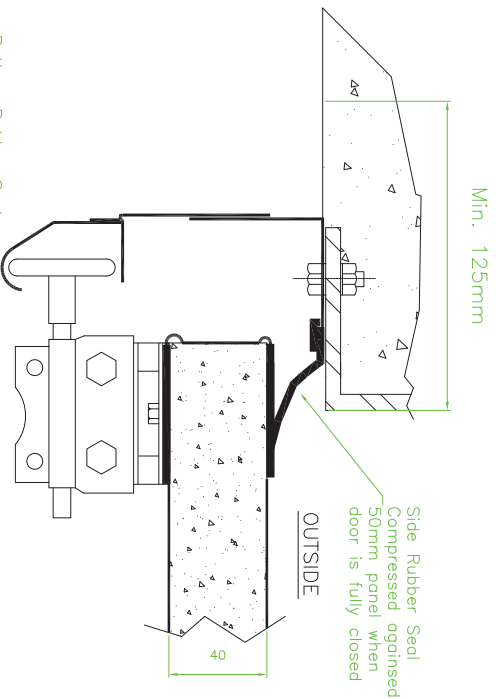
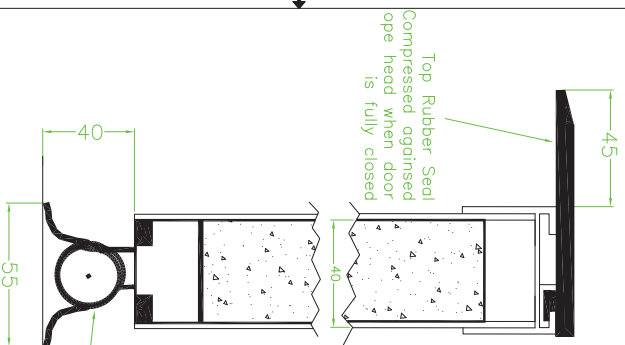
JOB REFERENCE

CHECKED BY

DRAWING NO.

SEC-08

Details of Doors
on Columns



E50 Ellicksen Doors
DESIGN • INSTALL • SERVICE

Unit 179, Six Cross Roads Business Park, Watford
Herts. SG11 2JH, UK
Tel: 01924 474444 Fax: 01924 474445
E: info@ellicksendoors.co.uk W: www.ellicksendoors.co.uk

DRAWING TITLE

E50 Door

Insulation Details

STORAGE REFERENCE

DESIGNED BY

A08

DATE

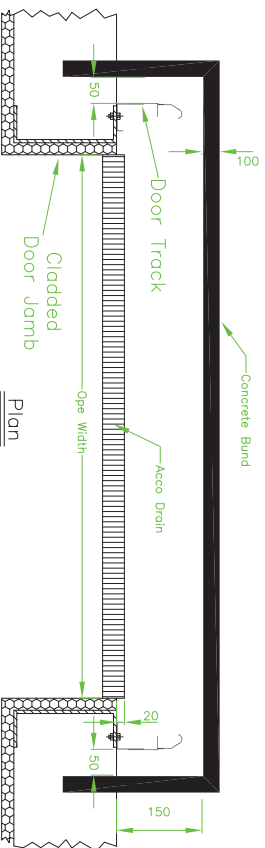
27-04-11

DRAWING NO.

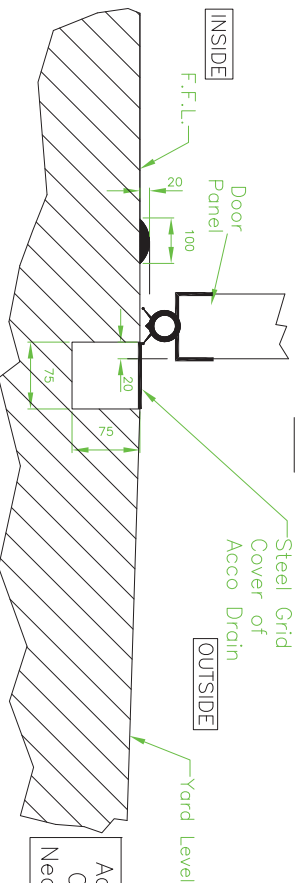
SEC-10

JOB REFERENCE

SEC-10



Plan



Section A / A

Acco Drain
Outlet To
Nearest Gully

Ref. National Car Rental Building



Unit 175, 5th Cross Roads Business Park, Waterford

Tel: 051-334651 Mob: 087 285966, 087 230843

UNITED KINGDOM OFFICES

00 181 7544 0000

00 181 7544 0000

00 181 7544 0000

00 181 7544 0000

00 181 7544 0000

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00 181 7544 0000

DRAWING TITLE

Acco Drain Detail

SECTION REFERENCE

Sectional Door

SECTION NO. SEC-11-C

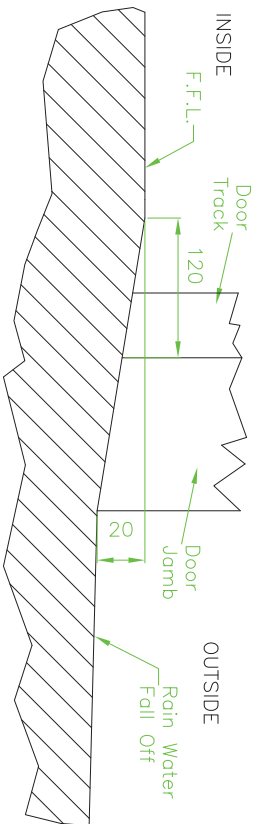
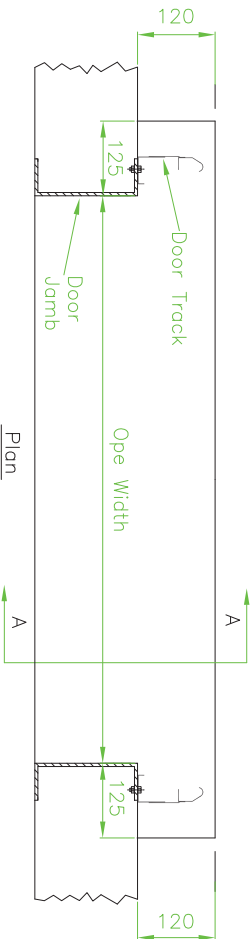
DESIGNED BY

AOB

21-04-11

DATE

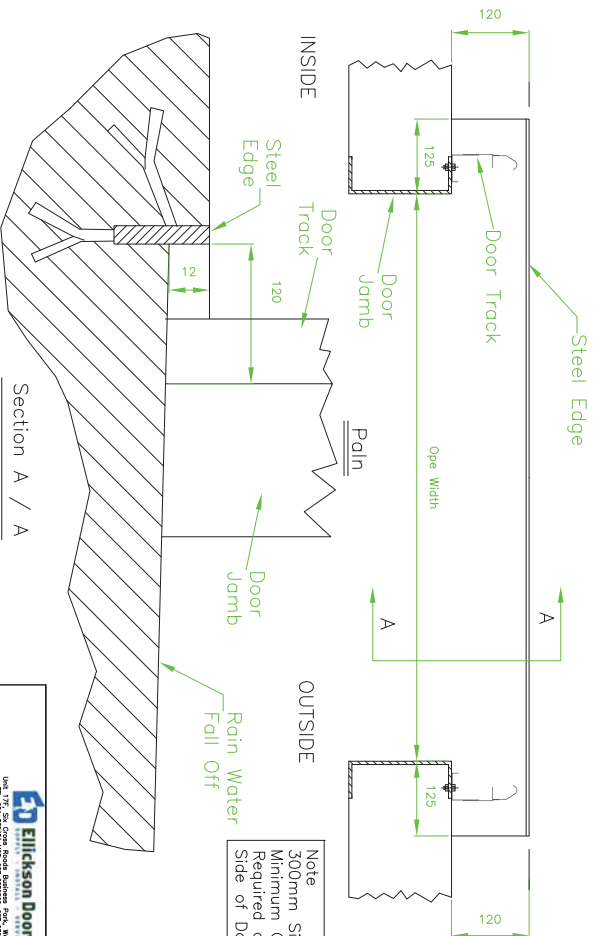
21-04-11



Note
300mm Side-Room
Minimum Clearance
Required on Motor
Side of Door.

Section A / A

FD Ellicksen Doors 10000 16th Avenue SW, Suite 100 Seattle, WA 98148 TEL: 206-334-4444 FAX: 206-334-4445 WWW: www.ellicksendoors.com			
UNITS: DIMENSIONS IN INCHES DIMENSIONS ARE IN INCHES DIMENSIONS ARE IN INCHES		UNIT: 17", 50" Cross Roads Business Park, Woodford TEL: 017-334-4444 FAX: 017-334-4445 WWW: www.ellicksendoors.com	
DRAWING TITLE: Threshold Detail		DRAWING NO.: SEC-11-B	
DRAWING BY: AOB		CHECKED BY: SEC-11-B	
DATE: 21-04-11		SCALE: Sectional Door	
PROJECT NO.: SEC-11-B		XREF: SEC-11-B	



Section A / A



Unit 177, 5th Cross Roads Business Park, Wetherford

Tel: 01753-35451 Mob: 087 285966, 087 230843

UNITED KINGDOM

DOORWAYS ARE IN

DO NOT HOLD

DRIVING TITLE

Threshold Detail

Source Reference

108 VERSION

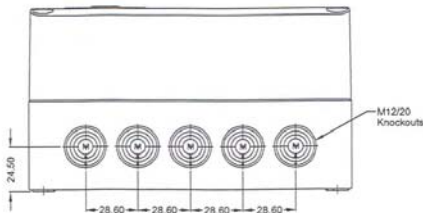
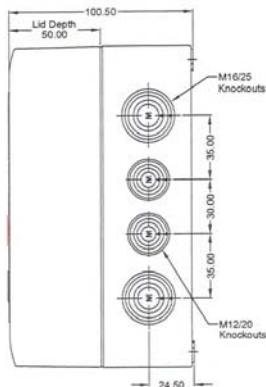
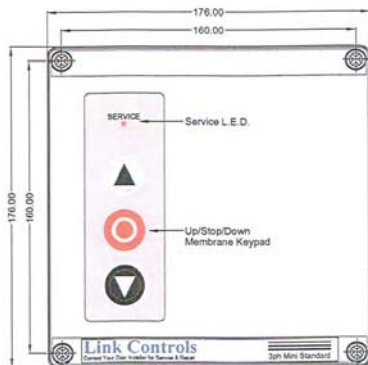
21-04-11

DOOR NO. SEC-11

(Step)

3ph MINI Standard Control Panel Installation Instructions (Stock Code: 40-5300)

WARNING! Read these instructions **FULLY** before use.
Installation should only be carried out by a **COMPETENT** installer.



DISCLAIMER: Link Controls Ltd. constantly strives to improve the quality of its goods and as such reserves the right to replace/modify products without prior notification. Any examples given are intended for guidance only.



Link Controls



MFZ

Stuart Rd, Manor Park, Runcorn, Cheshire, WA7 1TS

T: +44 (0)1928 579050
www.linkcontrols.co.uk

F: +44 (0)1928 579259
sales@linkcontrols.co.uk

Drawing No:- LC-1643

Page No:- 1 of 16

Revision No:- O

Rev Date:- 24/10/06

Drawn By:- S.B.P.

Date:- 25/10/99

Checked By:- A.M.

Appr By:- S.L.

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Installation Instructions

1. Knockouts are provided for cable entry, which can be removed as required.
2. For wall mounting, remove the control panel cover via the four fixing screws.
3. Mark up the mounting hole centres at a suitable height & location, which is free from excessive vibration.
4. Drill holes for plugs and Ø4mm fixing screws.
5. Ensure that the control panel is free from debris (swarf, dust, etc.) before wall mounting.
6. Refer to wiring instructions.

Note:-

All connections to the control panel **MUST** be made in accordance with the connection diagram and all terminations **MUST** be securely tightened.

Maintaining I.P.65 Environmental Protection Rating

TO MAINTAIN THE BEST PROTECTION AGAINST WATER / MOISTURE IT IS RECOMMENDED THAT ALL OF THE ENTRIES ARE MADE FROM THE BOTTOM OF THE ENCLOSURE.

1. When cabling, ensure that the correct cable gland size is used with an appropriately sized sealing ring.
2. Under **NO** circumstances must an unsecured cable enter the panel through a grommet.
3. The enclosure has been designed to exclude dust, moisture, etc. so therefore it is essential to select the correct cable glands in order to maintain the integrity of the enclosure.

Installation Procedure

1. Manually operate the door into the mid-position.
 2. Ensure all D.I.L. switches are OFF.
 3. Apply power to the control panel.
 4. Press the Open test button, the door will open in Deadman mode (D.I.L. Switch 1 OFF, default).
- Note:-** Be prepared to stop the door as the direction of travel may be the opposite of expected.
5. Stop the door at the 'Fully Open' position.
 6. Set the appropriate Open limit cam. (See instructions issued with operator for Limit Setting procedure)
 7. Press the Close test button, the door will close in Deadman mode (D.I.L. Switch 2 OFF, default).
 8. Stop the door at the 'Fully Closed' position.
 9. Set the appropriate Close limit cam. (See instructions issued with operator for Limit Setting procedure)

Set D.I.L. switches '1' & '2' to the ON position to enable Impulse operation (i.e. Press & Release).

Caution!

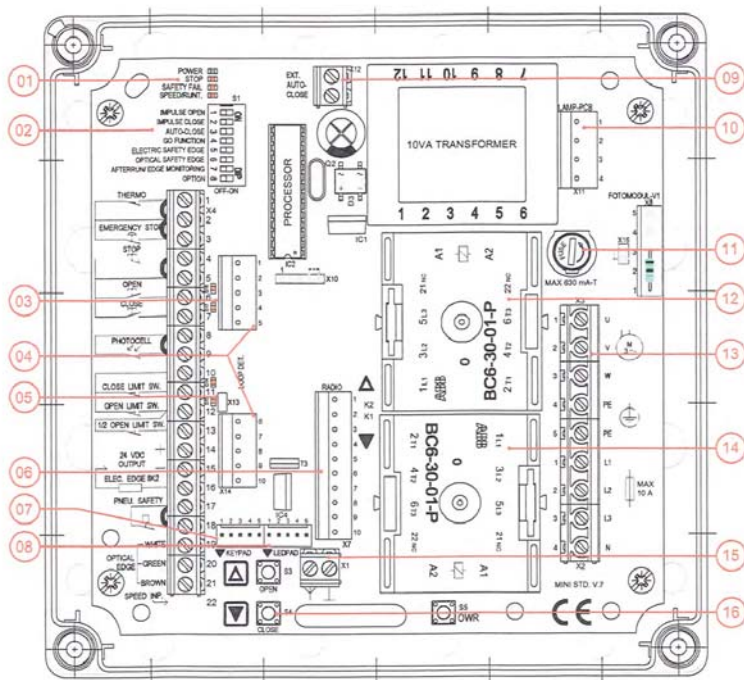
In order to comply with current regulations, Impulse Close operation **MUST** only be used in conjunction with a monitored safety edge system, otherwise Deadman Close operation should be selected (i.e. retain D.I.L. Switch 2 in the OFF position).

Operation

The door may be opened & closed in Deadman mode using either the test pushbuttons during installation or the remote pushbuttons during normal operation with selectable Deadman or Impulse mode (See D.I.L. Switch Settings for further information).

If a safety device is actuated during the closing cycle, then the door will stop for approximately 0.5 seconds before returning to the Fully Open position. Once the obstruction has been removed, the door will attempt to close if either a close signal has been given or after the pre-set time (Default: 15 seconds) if the Automatic Return function has been selected.

Control Board Layout



Key	Description	Reference	Key	Description	Reference
01	Circuit board Status L.E.D.'s	Page 15	09	External Auto-Close	Page 06
02	D.I.L. Switches	Page 05	10	Plug-in Traffic Light Controller (Optional)	Page 13
03	Pushbutton L.E.D.'s	Page 15	11	630mA Fuse	-
04	Plug-in Loop Detector Card (Optional)	Page 10	12	Open Contactor	-
05	Limit Switch L.E.D.'s	Page 15	13	Power Terminals	Page 06
06	1/2-Channel Plug-in Radio Card (Optional)	Page 12	14	Close Contactor	-
07	Membrane Keypad Connector	-	15	Antenna Terminals	Page 06
08	Membrane Service L.E.D. Connector	Page 05	16	Test Buttons	Page 06

D.I.L. Switch Settings

1: Impulse Open

When enabled, it activates Impulse Open operation (Press & Release).

2: Impulse Close

When enabled, it activates Impulse Close operation (Press & Release).

3: Variable Auto-Close Timer

Enables the Variable Auto-Close Timer, which is fully adjustable between 1-240 seconds

Setting the Variable Auto-Close

1. Turn D.I.L. Switch 3 to ON & Run the door to the Fully Open position.
2. Press and hold the 'OPEN' & 'CLOSE' pushbuttons together for 5 seconds.
3. The Red, 'STOP' L.E.D. will flash to indicate learning mode.
4. Press the 'CLOSE' pushbutton once the required time has elapsed.
5. The new Auto-close time has been set.

Note:- If the Mini Standard is left in learn mode, the Auto-close time will default to 15s (Factory pre-set).

4: GO Function

When enabled, it activates the 'OPEN' button as a GO Function (Opens a door, Closes a fully open door, Reverses a closing door). Set this D.I.L. Switch to ON if Single Button Radio operation is required.

5: Electric Safety Edge (8K2)

When enabled, it activates the Electric Safety Edge input.

Note:- If the Electric Safety Edge input is enabled, it is prioritised over the Pneumatic Safety Edge input.

6: Optical Safety Edge

When enabled, it activates a FRABA Compatible Safety Edge input.

7: Afterrun/Safety Edge Monitoring (Pneumatic Safety Edge ONLY)

When enabled, it activates the Afterrun function, which uses the Close limit (set 50mm from the floor) as a safety edge override limit. When the Closed limit is activated the operator electronically overruns this limit (max. of 0.3 seconds) until a signal from the safety edge is received. If no safety edge signal is received, the 'Safety Fail' L.E.D. will flash and the door will fail to Deadman Mode. To reset, simply close the door fully until a safety edge signal is received.

8: Service Interval Counter (See also inside lid of MINI Standard enclosure)

When enabled, it allows the 'No. of Operations' service interval to be set. The counter value is entered via D.I.L. Switches:- Sw.1 (1K); Sw.2 (5K); Sw.3 (10K); Sw.4 (20K); Sw.5 (30K); Sw.6 (40K) & Sw.7 (50K).

Note:- Record the original D.I.L. switch settings prior to Service Counter adjustment.

Setting the Service Counter

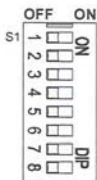
1. Move ALL D.I.L. switches to the OFF position.
2. Set D.I.L. Switch 8 + only one other D.I.L. switch (1-7) to the ON position to schedule the required service interval, based on 'No. of Operations' & indicated via the "Service" & "Speed/RunT." L.E.D.'s.
3. Press and hold the 'OWR', 'OPEN' & 'CLOSE' buttons together for 3 seconds.
4. The Service L.E.D. will illuminate for 3 seconds to confirm that the Service Counter has been set.
5. Return all D.I.L. switches to the previous configuration for normal door operation mode.

Resetting the Service Counter

1. Press and hold the 'OWR', 'OPEN' & 'CLOSE' buttons together for 3 seconds.
2. The Service L.E.D. will illuminate for 3 seconds to confirm that the Service Counter has been reset.

Disabling the Service Counter

1. Move ALL the D.I.L. switches to the 'ON' position.
2. Press and hold the 'OWR', 'OPEN' & 'CLOSE' buttons together for 3 seconds.
3. The Service L.E.D. will light for 10 seconds to confirm that the Service Counter has been disabled.
4. Return all D.I.L. switches to the previous configuration for normal door operation mode.



Note:- Move required D.I.L. Sw. right to set to ON & enable option

Test Buttons

S3: "OPEN" Test Button

Press to Open the door whilst setting the limits. Ensure door travels in the correct direction.

S4: "CLOSE" Test Button

Press to Close the door whilst setting the limits. Ensure door travels in the correct direction.

S5: "OWR" (Override) Test Button

In case of a failure of the pneumatic edge, photocell or loop these can be overridden by this button. The controller will then change to Deadman Closing. Press, in conjunction with the "CLOSE" Test Button.

Connections

Power Connections

- 3ph Motor: Connect a suitable motor to terminals 'U', 'V', 'W' & 'PE' as illustrated on page 7.
- Power Supply: Connect a 3ph/415V/Neutral/Earth suitably fused (6A Max.) supply to terminals 'L1', 'L2', 'L3', 'N' & 'PE'.

***Note:-** A Neutral is optional and is not required for the panel to operate.

Basic Control Connections

- Thermal Trip: Connect a N/C contact from the thermal trip to terminals '1' & '2'.
Note:- Alternatively, the thermal trip may be connected in series with the common leg of the Open & Close limit switches - Both options are shown on page 7.
- Emergency Stop Pushbutton: Connect a N/C contact from the E.Stop pushbutton to terminals '2' & '3'.
- Stop Pushbutton: Connect a N/C contact from the Stop pushbutton to terminals '4' & '5'.
- Open Pushbutton: Connect a N/O contact from the Open pushbutton to terminals '5' & '6'.
- Close Pushbutton: Connect a N/O contact from the Close pushbutton to terminals '5' & '7'.
- Photocell: Connect a N/C contact from the Photocell to terminals '8' & '9' (See page 8).
Note:- If more than one photocell is to be fitted, they must be connected in series across these terms.
- Safety Interlock: Connect a N/C contact from the safety interlock between terminal '10' and in series with the common leg of the limit switches.

Note:- Alternatively, if the 2nd wiring option (See #1) is chosen, connect the N/C contact of the safety interlock in series with the thermal trip and the common leg of the Open & Close limit switches.

- Close Limit: Connect a N/C contact from the Close limit switch to terminals '10' & '11'.
- Open Limit: Connect a N/C contact from the Open limit switch to terminals '10' & '12'.
- Part (1/2) Open Limit: Wire a N/C contact from the 1/2 Open limit in parallel with a N/O keyswitch and connect to terminals '12' & '13'.

Note:- This signal is normally "Linked Out" - To activate, remove Jumper 'X13' & operate the keyswitch.

- 24VDC Output: A 24VDC @ 150mA output is available at terminals '14' & '15' for auxiliary equipment.

Note:- If a radio card is fitted the output will be reduced to 100mA.

- Electric Safety Edge: Connect the electric safety edge to terminals '15' & '16' (See page 9).
- Pneumatic Safety Edge: Connect the pneumatic safety edge to terminals '17' & '18' (See page 9).
- Optical Safety Edge: Connect the 3-wires (White, Green & Brown) from the transmitter and receiver of the FRABA Compatible Optical safety edge in parallel and terminate to terminals '19' (White), '20' (Green) & '21' (Brown) respectively (See page 9).
- Speed Input: Not Used - Reserved for future expansion.

Note:- Links are provided to bridge certain N/C contacts. Remove these links from any input required.

Antenna Connections

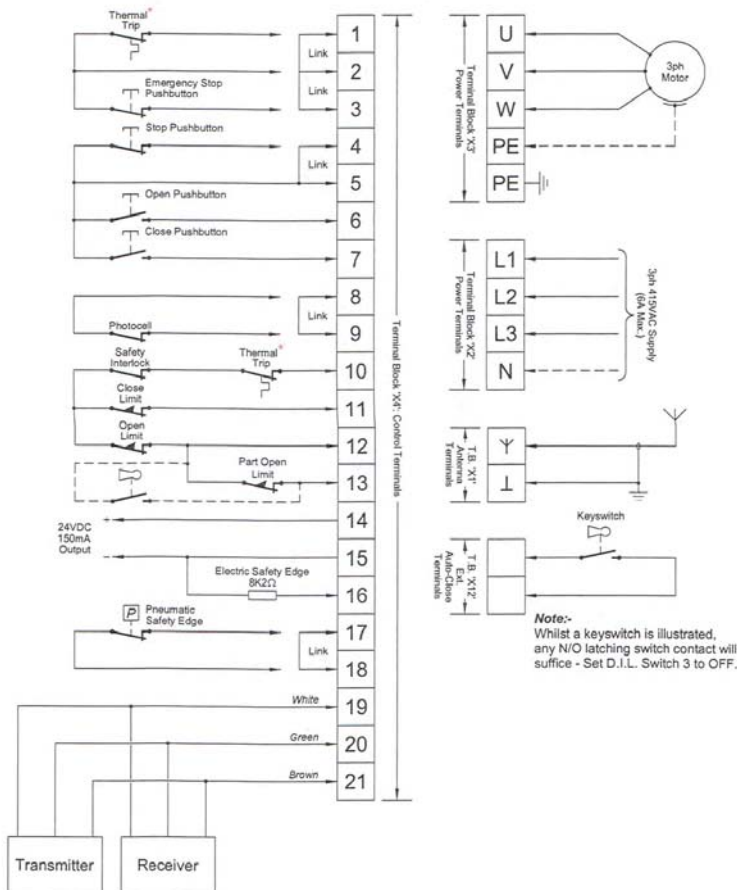
- Antenna: Connect the Antenna wire to terminal 'Y' and the ground to terminal 'Lo' of Terminal Block 'X1'.

External Auto-Close Connections

- External Auto-Close: Connect a N/O contact from a latching switch (e.g. Keyswitch or Toggle Switch) to the terminals of Terminal Block 'X12'.

Note:- D.I.L. Switch 3 **MUST** be set to OFF for this function.

Terminal Connection Diagram



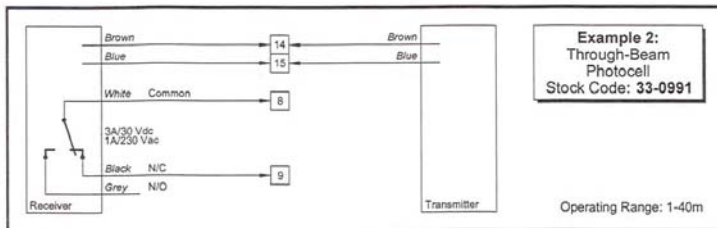
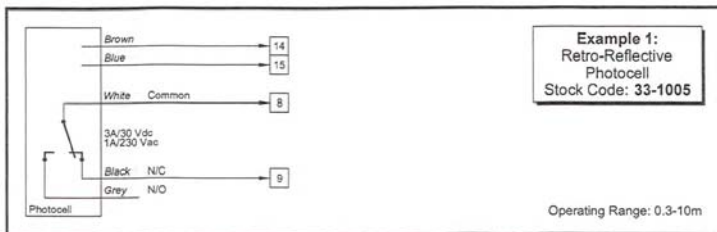
*Note:-

The thermal trip contact can be wired in either of the two positions indicated.

Photocell Connections

1. Connect a N/C contact from the Photocell, to terminals '8' & '9'.
2. Connect the power leads of the Photocell to terminals '14' (+) & '15' (-), observing polarity.

Caution! It is not recommended to power more than two photocells from this supply.



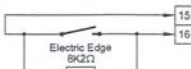
Note:- Please see Drawing No. LC-0255 for detailed information.

Safety Edge


The MINI Standard control panel is designed to meet the latest European Regulations:- EN12453, EN12445 & EN12978.

The panel will accept conductive, pneumatic or optical safety edge and has an integral evaluator for the conductive safety edge system.

Note:- A safety device **MUST** be fitted if using radio.




OFF ON




S1
Note:-
For D.I.L. Switch 7
ON/OFF is **Optional**

Option 1:
Electric
Safety Edge

1. An 8k2 ohm End-of-Line resistor **MUST** be fitted.
2. Set D.I.L. Switch 5 to the ON position to enable the 'Electric Safety Edge' function.
3. Set D.I.L. Switch 7 to the ON position to enable the 'Afterrun/Edge Monitoring' function (Optional).
4. Set the limit switches as per the instructions included with the operator, except that the close limit should be set a maximum of 50mm from the fully closed position.



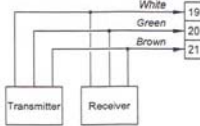
OFF ON




S1
Note:-
D.I.L. Switch 7
Must be set to ON

Option 2:
Pneumatic
Safety Edge

1. Remove the link and connect a Pneumatic Safety Edge between terminals '17' & '18'.
2. Set D.I.L. Sw.7 to the ON position to enable the 'Afterrun/Edge Monitoring' function (Compulsory).
3. Set the limit switches as per the instructions included with the operator, except that the close limit should be set a maximum of 50mm from the fully closed position.



OFF ON



S1
Note:-
For D.I.L. Switch 7
ON/OFF is **Optional**

Option 3:
Optical
Safety Edge

1. Connect the White, Green & Brown wires from the paralleled transmitter and receiver of the FRABA Compatible Optical Edge to terminals '19', '20' & '21' respectively.
2. Set D.I.L. Switch 7 to the ON position to enable the 'Afterrun/Edge Monitoring' function (Optional).
3. Set the limit switches as per the instructions included with the operator, except that the close limit should be set a maximum of 50mm from the fully closed position.

Afterrun/Edge Monitoring Function

If enabled, the door will electronically overrun the close limit and stop on the floor after receiving a signal from the safety edge. If the 'Safety Fail' L.E.D. flashes, either the safety edge is not working or the close limit is set too high. With regards to Pneumatic Safety Edge, after receiving a healthy signal from the safety edge the door will open fractionally to relieve pressure from the safety edge.

Plug-in Loop Detector Card Instructions

Circuit Board Layout (TST-SUVEK2)

L.E.D. Functions

- Green Fast Flashing:-Detector is tuning
- Green On Constantly:-Detector is ready
- Green & Red On Constantly:-Loop has detected
- Red On Constantly:-Loop is defective

Note:-

If only one Loop is required, a 100 μ H choke **MUST** be fitted in place of the unused Loop.

Function Settings

Note:- Loop 2 Dip-Switches shown in brackets

Dip-Switches 1 (5) & 2 (6):- Sensitivity (4 Steps)

Min.  Max.

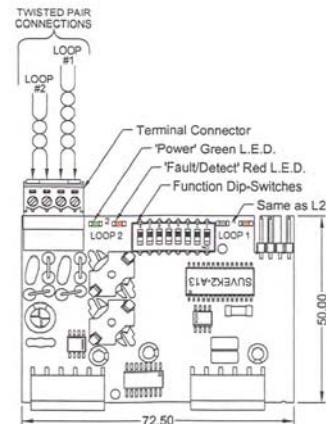


Dip-Switch 3 (7):- Holding Time (5mins - Infinity)



Note:- Loop recalibrates after 5mins constant detection.

Dip-Switch 4 (8):- Frequency (High/Low)



Note:-

P.C.B. layout for TST-SUVEK1 as above, except only 4 Dip-Switches & 1 set of Loop components.

Operating Instructions

1. Remove power to the MINI Standard.
2. Plug the Loop Detector module into the pins provided, as illustrated on page 4.
3. Adjust the function Dip-Switches on the Loop Detector card as required.
Please refer to Dip-Switch Function Settings for the appropriate loop. Fit choke if required (See Note).
4. Re-apply power to the MINI Standard.
5. Both Green 'Power' L.E.D.'s will flash and will continue to flash until the loops are tuned. Once both loops are tuned, the Green 'Power' L.E.D.'s will illuminate constantly.
6. If a loop is faulty or not connected properly the Red 'Fault/Detect' L.E.D. will illuminate constantly.
7. If a loop is covered the Red 'Fault/Detect' L.E.D. and the Green 'Power' L.E.D. will illuminate together.

Loop Detector Operation with MINI Standard

Loop 1: Open

1. Opens a door on loop detection
2. Keeps a door open, whilst loop is still detecting.
3. Reverses a closing door, if loop detects.

Loop 2: Safety Only

1. Prevents a door from closing, if loop detects.

Note:-

For complete Loop Detector details, please request Drawing No. LC-1732

TST-SUVEK1 Plug-in Loop Detector (Stock Code: 37-4051)

TST-SUVEK2 Plug-in Loop Detector (Stock Code: 37-4052)

Loop Installation

Loop Cable: Rubberised insulated wire of $0.75\text{--}1.50\text{mm}^2$ (awg20 - awg16), preferably multi-stranded.

Loop Size: *Note:-* High bed vehicles require larger loops.

**No. of Turns
in Loop:**

Loop Circumference	Number of Turns
2 - 4m	6
4 - 7m	5
7 - 12m	4
12 - 25m	3

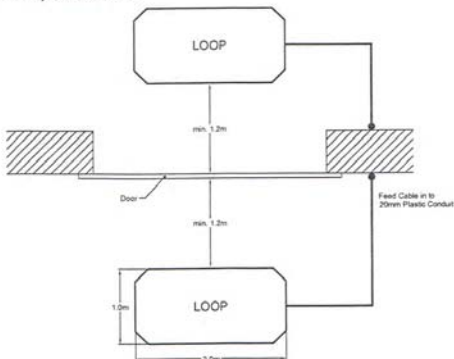
Loop Slot: Recommended depth to top of loop cable 25-50mm. (Maximum depth 65mm)
 Loop slot **MUST** be sealed after cable has been installed and tested.
 Use a flexible, weather proof sealant (i.e. Hot bitumen, Rubberised bitumen sealant).
Caution! Never use cement / concrete, etc...

Feeder Cable: The feeder cable **MUST** be twisted a min.10 times per meter & can be up to 250m long.

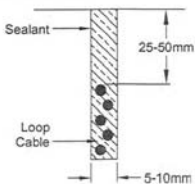
Loop Position: The loop must be placed at least 5m away from high tension cables and at least 1m away from low tension cables. If the loop is placed in an area with reinforcing iron (e.g. a concrete floor), the loop must be placed at least 50mm above the reinforcement.

Two Loops: If the detector is used for detecting high vehicles (e.g. lorries etc.) use only one loop for each detector, otherwise it is possible to connect two loops to a single detector. Series coupling the loops gives the largest sensitivity, parallel coupling gives the fastest reaction.

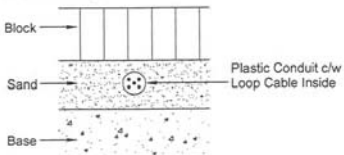
Typical Example of Loop Installation



Concrete/Tarmac

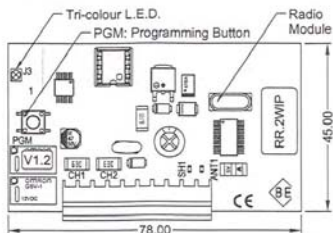


Block Paving



Plug-in 1/2-Channel Radio Card (Stock Code: RR.1(2)WIP(V)) Instructions

Circuit Board Layout



Models Covered

Model	Ch.	Code	Model	Ch.	Code	Housing
RR.1WIP	1	Fixed	RR.1WIV	1	Rolling	Molex Skt.
RR.2WIP	2	Fixed	RR.2WIV	2	Rolling	Molex Skt.

Technical Data

Frequency	433.92 MHz
Antenna	Tuned
Power Supply	12-24VAC/DC
No. of Tx Codes (Fixed/Rolling)	16/512
Range	30-100m
Channels	1 to 2
Relay Contact	1A, 24VDC
Consumption when in Stand-by	10mA
Consumption with one relay triggered	42mA
Consumption with both relays triggered	66mA

Installation

To optimise reception, install the antenna far away from obstacles & metal structures and avoid positioning several receivers next to each other. **Note:-** If no antenna is used, reception will be considerably reduced.

Memorising Transmitters

To set one or more transmitters to activate the 1st Channel, follow this simplified procedure:

1. Press the "PGM" button; the Red L.E.D. will light for 3 secs, go out for 1 sec & light again for 5 secs.
2. Whilst the Red L.E.D. is ON, press the button on the transmitter to match it to Channel 1.
3. Set another transmitter by pressing its button within 5 secs of setting the previous transmitter.
4. To end, wait 5 secs and the receiver will exit programming.

Resetting the Memory

Remove power to the receiver. Press & hold the "PGM" button. Restore power, whilst still depressing the "PGM" button. The L.E.D. will light Red; after 5 secs it will blink rapidly, alternating Green-Red, release the button. Wait for the L.E.D. to go out. The memory is now completely erased.

Programming

Transmitters can be memorised and separate Channel modes may be set using the "PGM" button.

To cycle programming modes, press the "PGM" button within 3 secs of previously pressing it.

After selecting a programming mode, wait approx. 3-4 secs for a L.E.D. signal to indicate the mode has been entered (see "Operations" table column below)

Programming Modes

Mode	L.E.D.	Function	Operations
0	Off	No function	Normal Status
Press the "PGM" button			
1	Red	Memorise Channel 1	The Red L.E.D. will light for 3 secs, go out & then light again; press transmitter button within 5 secs to match it to Channel 1**
Press "PGM" button within 3 seconds			
2	Green	Memorise Channel 2*	The Green L.E.D. will light for 3 secs, go out & then light again; press transmitter button within 5 secs to match it to Channel 2**

* Only for dual channel receivers (i.e. "RR.2W")

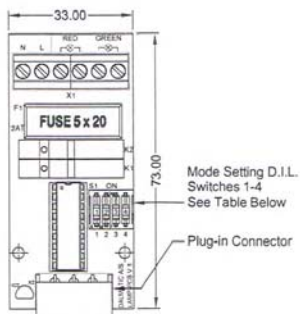
**After pressing the 1st transmitter's button, the receiver will wait 5 secs to memorise another transmitter, thus allowing all transmitters being matched to one channel to be recorded in sequence. After 5 secs the receiver exits programming mode. If using this method of recording in sequence it is best to temporarily remove the antenna, thereby reducing the receiver's range and limiting disturbance.

Note:- Once a programming mode has been entered, other modes cannot be accessed. If programming several functions, complete one programming mode sequence (indicated by L.E.D. going out) at a time.

Note:- For full details of 1 & 2-Channel Radio Cards, please request Drawing No. LC-2753.

Plug-in Traffic Light Controller (Stock Code: 40-5303) Instructions

Circuit Board Layout

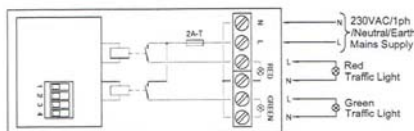


Technical Data

Programmable light controller with galvanic isolated output.
Designed for connection to MINI Standard Controller.

Max output current:	2 Amp (Fuse 2A-T)
Max output breaking voltage:	250VAC
Creep distance 24VDC/output:	4.8mm
Isolation voltage 24V/output:	3000Vrms

Block Diagram



Specification Table

Mode	Name	Sw1	Sw2	Sw3	Sw4	Door Closed	Door Mid-Travel	Door Opened	Pre-Close Warning
1	L1	0	0	0	0	Red Traffic Light Illuminated	Red Traffic Light Illuminated	Green Traffic Light Illuminated	Not Applicable
2	L1G	1	0	0	0	Red Traffic Light Illuminated	Red Traffic Light Illuminated	Green Traffic Light Flashing	Not Applicable
3	L1R	0	1	0	0	Red Traffic Light Flashing	Red Traffic Light Flashing	Green Traffic Light Illuminated	Not Applicable
4	L1RG	1	1	0	0	Red Traffic Light Flashing	Red Traffic Light Flashing	Green Traffic Light Flashing	Not Applicable
5	L2	0	0	1	0	No Traffic Lights Illuminated	Red Traffic Light Illuminated	Green Traffic Light Illuminated	Not Applicable
6	L2G	1	0	1	0	No Traffic Lights Illuminated	Red Traffic Light Illuminated	Green Traffic Light Flashing	Not Applicable
7	L2R	0	1	1	0	No Traffic Lights Illuminated	Red Traffic Light Flashing	Green Traffic Light Illuminated	Not Applicable
8	L2RG	1	1	1	0	No Traffic Lights Illuminated	Red Traffic Light Flashing	Green Traffic Light Flashing	Not Applicable
9	L3	0	0	0	1	No Traffic Lights Illuminated	Red Traffic Light Illuminated	Green Traffic Light Illuminated	Red Traffic Light Illuminated Constantly before Closing
10	L3G	1	0	0	1	No Traffic Lights Illuminated	Red Traffic Light Illuminated	Green Traffic Light Flashing	Red Traffic Light Illuminated Constantly before Closing
11	L3R	0	1	0	1	No Traffic Lights Illuminated	Red Traffic Light Flashing	Green Traffic Light Illuminated	Red Traffic Light will start Flashing before Closing
12	L3RG	1	1	0	1	No Traffic Lights Illuminated	Red Traffic Light Flashing	Green Traffic Light Flashing	Red Traffic Light will start Flashing before Closing

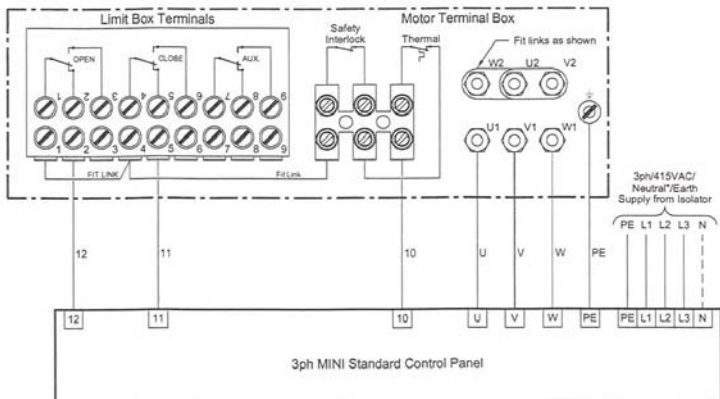
Note:- See also Drawing No. LC-2653

Wiring Examples

Connection Diagram to a CDO-100/150/200/300 Operator

Note:-

If the motor rotates in the wrong direction when operated, then interchange two of the incoming supply phases. i.e. Swap L1 & L2.

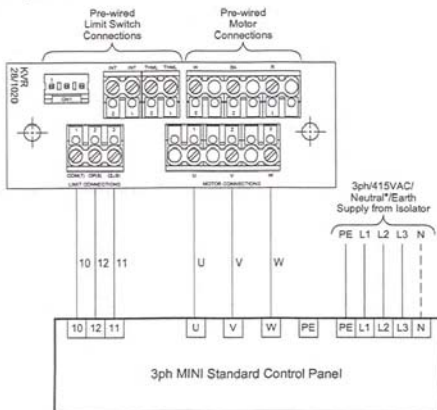


***Note:-** A Neutral is optional and is not required in order for the panel to operate.

Connection Diagram to a CDO-100k/KVR Operator

Note:-

If the motor rotates in the wrong direction when operated, then interchange two of the incoming phases. i.e. Swap L1 & L2.



Fault Finding Guide

Note:- A test meter, able to test Voltage & Continuity, is required for fault finding.

Fault	Procedure
The door will not operate	Check that the supply is O.K. - is the 'POWER' L.E.D. ON? Check the safety device, stop & limit switch circuits are N/C.
The door will only travel in one direction, regardless of which pushbutton is pressed	Check the safety device, photocell & limit switch circuits are N/C. Check the link is correctly fitted between terminals '8' & '9'.
The door closes when the Open pushbutton is activated & vice versa	Interchange two of the incoming phases (i.e. Swap 'L1' & 'L2').
The door stops before the Fully Open or Close limits are actuated	Check that the Open & Close limit stops are set correctly. Check that the thermal trip has not actuated. If the motor has been run continually it will get hot, therefore actuating the thermal trip; allow it to cool before proceeding.
The door closes but will not open or opens but will not close	Check that the open & close limit stops are set correctly. Check that the limit wires in terminals '10', '11' & '12' are correct.

Note:-

N/C - Normally Closed;

N/O - Normally Open

L.E.D. Status

L.E.D.	Tag	Status	Description	Action
GN	POWER	ON	24VDC Supply Healthy	N/A
		OFF	No 24VDC Supply	Check Fuse F1 & Mains Supply
RD	STOP	ON	Stop Circuit(s) Open	Check '1 & 2', '2 & 3' + '4 & 5'
			Open & Close Limits made simultaneously	Check Limits & Interlock Circuit
		Constant Flashing	Learning Mode of Auto-Close Timer Function activated	Press the Close pushbutton once set time has elapsed - See Page 5
		OFF	O.K.	N/A
OG	SAFETY FAIL	ON When Close P.B. is pressed	Safety Devices are open circuit Is D.I.L. Switch 5 ON when no Electric Edge is fitted?	Check '8 & 9', '15 & 16' + '17 & 18' Switch D.I.L. Switch 5 OFF
		Constant Flashing	Safety Edge Monitoring is ON (D.I.L. Switch 6) & No safety edge signal was received when the door is fully closed	Check Safety Edge
		OFF	O.K.	N/A
RD	SPEED /RUNT.	ON	Door has exceeded Run Time	N/A
		Constant Flashing	"No. of Operations" has reached Service Interval	Service Unit & Reset Service Counter - See page 5
		OFF	O.K.	N/A
OG	D14	ON	Close limit switch is open circuit	N/A
		OFF	Close limit switch is closed circuit	N/A
OG	D15	ON	Open limit switch is open circuit	N/A
		OFF	Open limit switch is closed circuit	N/A
OG	D16	ON	Open pushbutton activated	N/A
		OFF	Open pushbutton not activated	N/A
OG	D17	ON	Close pushbutton activated	N/A
		OFF	Close pushbutton not activated	N/A

Key:

GN: Green

RD: Red

OG: Amber

N/A: Not Applicable

5. Installation

5.1 Preparation



Danger!

To avoid injury, the following points must be observed:

- The operator must be installed free of any tension.
- The operator must not move on the shaft.
- The design and subsurface of all components must be suitable for the forces encountered.



Warning!

To avoid damage to the operator and the door, the operator must only be fitted if:

- the operator is undamaged,
- the ambient temperature is $-20\text{ }^{\circ}\text{C}$ to $+60\text{ }^{\circ}\text{C}$,
- the altitude of the location does not exceed 1,000 m,
- a suitably rated mains protection device has been selected.

⚠ Before installation, ensure that:

- the operator is not blocked,
- the operator has been newly prepared after a lengthy storage period,
- all connections have been carried out correctly,
- the direction of rotation of the drive motor is correct,
- all motor protective devices are active,
- no other sources of danger exist,
- the installation site has been cordoned off over a wide area.



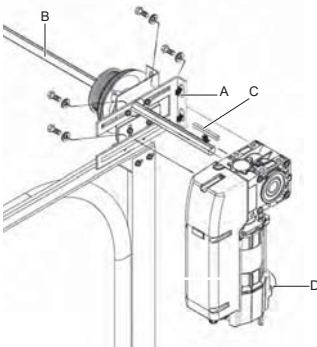
Information

The relevant instruction for the door must be observed when fitting the drive to the door.

- a suitably rated mains protection device must be selected.

5.2 STA Sectional Operator

Mounting with torque bracket - example



- ⚠ Fit the torque support bracket/console (A).
- ⚠ Grease the spring shaft (B) around the operator seating.
- ⚠ Insert the feather key (C) into the spring shaft (B).
- ⚠ Place the operator (D) on the spring shaft (B).
- ⚠ Secure the feather key (C) against any movement.

The feather key can be secured with two hose clamps or adjusting rings.

- ⚠ Fix the operator to the torque support bracket with 4 bolts.



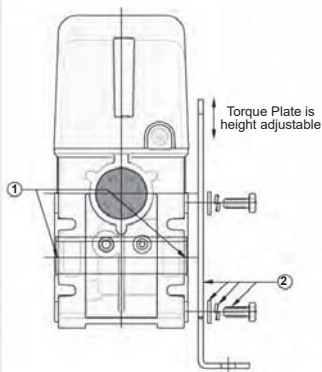
Warning!

Damage due to improper installation the drive! To avoid damage to the drive and to the door, the drive must be mounted on a torque support bracket that it is vibration damped.

5. Installation

Mounting torque support bracket to Operator

1. Remove Plastic caps (if fitted) from hollow shaft of the operator.
2. Fix torque plate using the 4-off M8x20 bolts, 4-off M8 spring washers and 4-off M8 flat washers.



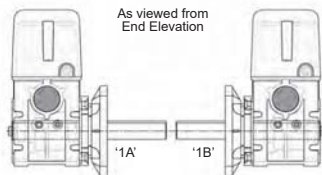
Information:

Link Controls Ltd. constantly strives to improve the quality of its goods and as such reserves the right to replace/modify products without prior notification. Any examples given are intended for guidance only.

5.3 CDO100 Compact Operator - Flange Mount

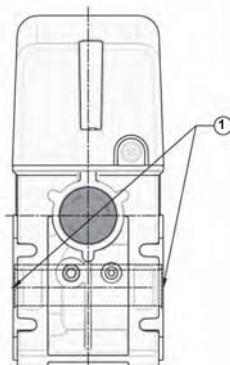
Handing the operator

This operator is suitable for left or right hand installation. The flange and shaft can be removed and fitted on the opposite side.



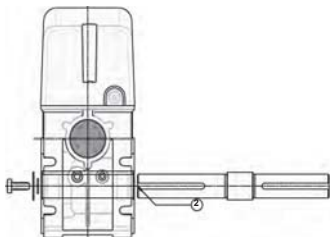
Assembly of the operator

1. Remove the plastic caps (if fitted from hollow shaft of the operator)



5. Installation

2. Fit the drive shaft ensuring that the shaft comes flush with hollow shaft on the non-drive side. The drive shaft is held by the M8x20mm bolt and washer (see step 1)



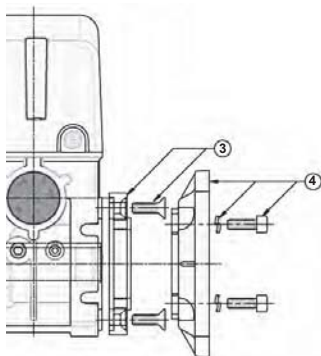
3. Fix the flange adaptor using 4-off M8x25mm countersunk socket cap screws.

4. Fix the flange using the 4-off M8x22mm socket cap screws.

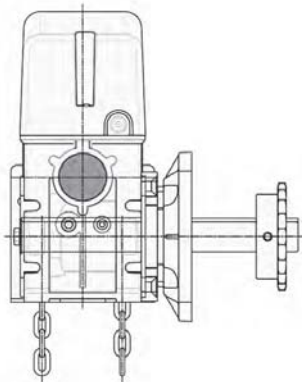


Information:

The flange adaptor will only fit correctly in one orientation



5. Fix the drive sprocket or gear pinion to the drive shaft



Warning!

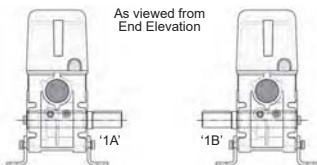
Damage due to improper fixing of the sprocket / gear pinion. Fixing the drive sprocket at the end of the shaft may cause excessive loading on the shaft - resulting in shaft failure.-

5. Installation

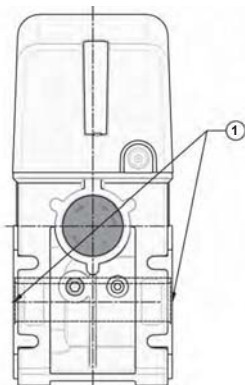
5.4 CDO100 Compact Operator - Foot Mount

Handing the operator

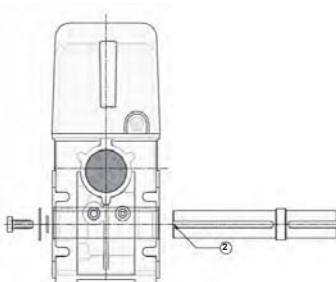
This operator is suitable for left or right hand installation. The shaft can be removed and fitted on the opposite side.



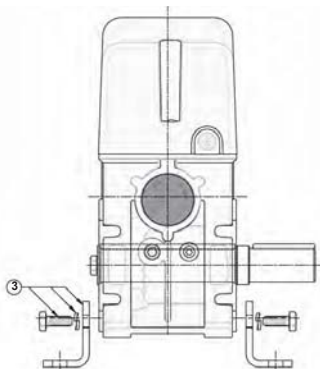
1. Remove the plastic caps (if fitted from hollow shaft of the operator)



2. Fit the drive shaft ensuring that the shaft comes flush with hollow shaft on the non-drive side. The drive shaft is held by the M8x20mm bolt and washer.

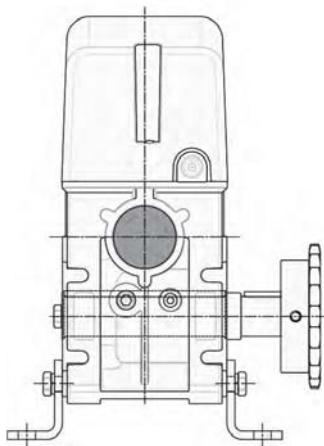


3. Fix each mounting foot using the 2-off M8x20mm Bolts and 2-off M8 spring washers.



5. Installation

4. Fix the drive sprocket or gear pinion to the drive shaft



Warning!

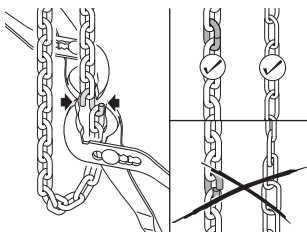
Damage due to improper fixing of the sprocket / gear pinion. Fixing the drive sprocket at the end of the shaft may cause excessive loading on the shaft - resulting in shaft failure.

5.5 Installation of the emergency hand chain (for operators with emergency hand chain)



Information:

To ensure that they work correctly, the chain links must not be twisted.



- ⚠ Join the ends of the emergency hand chain together with a chain connecting link.



Warning!

To avoid damage to the operator and the door, the emergency hand chain must be safely secured (for example in a 'chain keep') while the door is operated electrically.

6. Initial Operation

6.1 Preparation



Warning!

To avoid damage to the operator, the following points must be observed:

- The types of cable and their diameters must be selected according to current regulations.
- The nominal currents and the type of connection must correspond to those on the motor type plate.
- The drive details must agree with the connected loads.

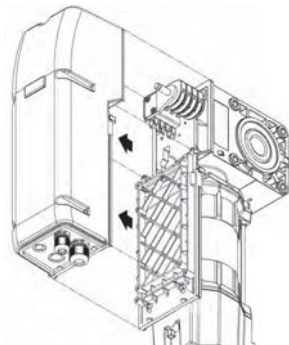


Information:

When operated with electronic control units, the corresponding start-up instructions and circuit diagrams must be complied with.

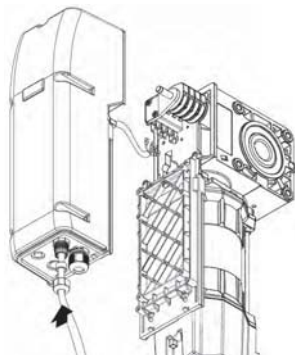
6.2 Motor & Limit Switch Connections

Open the operator



➤ Remove the cover from the operator.

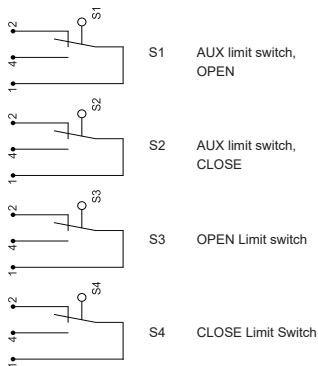
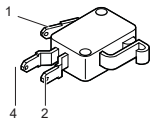
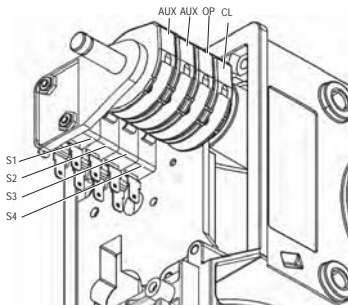
Insert the cables



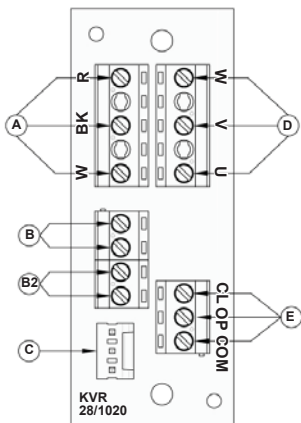
➤ Feed the cables through the gland fitting into the operator.

6. Initial Operation

Limit switch connections (microswitches)



Limit switch connections (PCB)



Internal Pre-wired Connections

- A Motor - "U", "V" & "W"
- B Thermal Switch - N/C
- B2 Interlock Switch - N/C
- C Limit Switches, Plug-in Connector

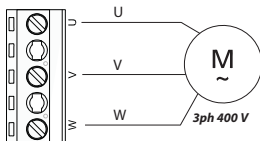
Customer Connections

- D Motor Supply Connections "U", "V" & "W"
- E Limit Switch Connections :-
 "COM" - Common
 "OP" - Open Limit
 "CL" - Close Limit

6. Initial Operation

3 x 400V star connection (standard)

The motor is factory-wired for connection to a 3 x 400V mains supply control panel.



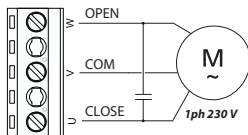
⚠ Connect all the cables required.

3 x 230V delta connection

To connect the operator to a 3 x 230V mains supply, please consult the manufacturer.

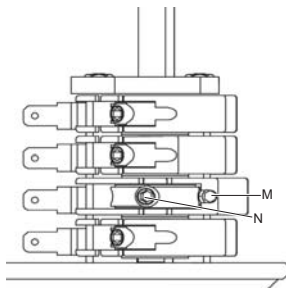
1 x 230V connection

The motor is factory-wired for connection to a 230V/1-phase mains supply control panel.



⚠ Connect all the cables required.

6.3 Setting Mechanical Limits



- M Fine adjustment screw
- N Locking screw

Each control cam has a locking screw (N) and a fine adjustment screw (M).

The locking screw (N) is used to lock the corresponding control cam in the desired position. Finer adjustment can be made with the fine adjustment screw (M).

Set the CLOSED end position

- ⚠ Drive the door to the CLOSED end position.
- ⚠ Set the control cam so that the CLOSED limit switch (S4) is actuated.
- ⚠ Tighten the locking screw (N).

Set the OPEN end position

- ⚠ Drive the door to the OPEN end position.
- ⚠ Set the control cam so that the OPEN limit switch (S3) is actuated.
- ⚠ Tighten the locking screw (N).



Warning!

To avoid damage to the operator it is important that all unused cams **MUST** be locked in position

6.5 Check the system

Check the direction of travel

- ☞ Drive the door in the CLOSED direction.
The operator must close the door.
- ☞ Drive the door in the OPEN direction.
The operator must open the door.



Information:

If the door's direction of travel does not correspond to the commands keyed in, then the direction of rotation must be changed. Instructions for changing the direction of rotation are given in the control unit operating manual.
After this the direction of travel must be checked again.

Check the limit switch settings

- ☞ Drive the door to the CLOSED end position.
The operator must stop in the desired position.
- ☞ Drive the door to the OPEN end position.
The operator must stop in the desired position.

Check the mechanical functions

After assembling and installing all components the functions of the system must be checked.

- ☞ Check that all mountings have been securely tightened.
- ☞ Check all the functions of the system.
- ☞ Check that the operator runs smoothly.
- ☞ Check whether the operator is leaking oil.

If the operator makes unusual noises or leaks oil:

- The operator must be taken out of service immediately,
- Contact technical support.

7. Emergency Operation

Danger!

To avoid injury, the following points must be observed:

- Emergency operation may only be carried out from a safe standing position.
- Emergency operation may only be carried out when the motor is stationary.
- The system must be disconnected from the power supply during emergency operation.
- Operators with a spring brake must be actuated against the closed brake when opening or closing the door.
- For safety reasons, brakes in doors without a weight counterbalance must only be released in the closed door position for testing purposes.
- Accidental releasing of the brake must be rendered impossible by preventive measures at the installation site.

During maintenance works or in the case of an electrical failure, the door can be moved towards the OPEN or CLOSED positions with the help of the emergency manual override equipment.



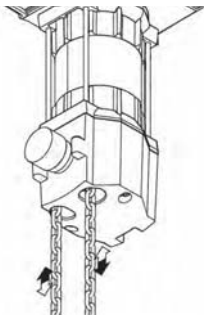
Information:

If the door is moved beyond the CLOSED or OPEN end positions, the operator can no longer be activated electrically

- place the door back into a normal position before attempting powered operation.

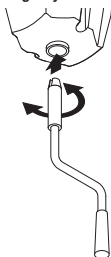
7. Emergency Operation

Operation with emergency hand chain



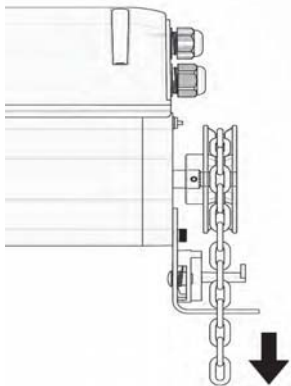
- Release the emergency hand chain from its fixing.
- Move the door in the OPEN or CLOSE direction by pulling on the emergency hand chain on the side concerned.

Operation with emergency hand crank



- Push the emergency hand crank into the operator as far as it will go.
- Move the door in the OPEN or CLOSE direction by turning the emergency hand crank.
- Remove the emergency hand crank from the operator after completing emergency manual operation.

Operation with emergency wheel guide & interlock



- Lift the handchain off the safety switch and place it on the chainwheel.
- The Door can now be operated by handchain. Before power is restored the, the above procedure must should be reversed

SAFETY INSTRUCTIONS

**** THIS DOOR IS A MACHINE ****

All door users to read this manual before using door equipment.

- Keep door openings clear of debris at all times
- Do not operate a door that is obviously damaged.
(Lock it, put a warning notice to both sides and report to management and Ellickson Doors.)
- If any door component is damaged, you must report to a qualified maintenance company or appropriately qualified personnel.
- Stand clear of door during operation.
- Do not lean objects against doors or tracks.
- Open and close the door using only haul chains, handles and electrical push button controls provided. If door is manual use pull cords or handles.
- In the event of any emergency, isolate power supply.

**UNDER NO CIRCUMSTANCES SHOULD UNQUALIFIED PERSONNEL UNDERTAKE
ANY WORK TO DOOR.**

MANUALLY OPERATED DOORS

Operating Instructions

To Open:

To unlock the door. Stand on the footstep handle (where supplied) to release the pressure and at the same time withdraw the shoot bolt or turn the locking handle as appropriate.

PUSH UP DOORS

Lift the door smoothly upwards by the handles or haul chain to control the opening speed.

If the door does not lift easily report to management and Ellickson Doors. **(DO NOT THROW THE DOOR UP !)**

To close door

Pull smoothly on the pull chain or chain hoist until door is fully closed. When closed stand on the footstep handle and engage the shoot bolt and /or locking cleat as required.

HAND CHAIN OPERATED DOORS

Larger doors are supplied with a geared chain hoist. Pull the hand chain smoothly hand over hand and vertically in the with the chain wheel – trying to pull the chain at an angle may damage the hoist.

Always raise the door to its **FULL OPEN POSITION** and engage the chain in the chain cleat where supplied.

ELECTRICALLY OPERATED DOORS

A standard electrically operated door is supplied with a push button station.

Before attempting to operate any electrically operated door you must ensure that the door is unlocked and that the shoot bolt is fully withdrawn. Some systems are supplied with a micro switch, which prevents the door from being operated until the shoot bolt is withdrawn. **Ensure area around door is free from obstruction and stand clear.**

Closely monitor door during operation and isolate power button in the event of any emergency.

To open door

Press the **OPEN** button and release – the door will open to its full height and stop as long as the limits are correctly adjusted referred to as “single impulse control”.

To Close door

Press the **CLOSE** button, if there are no additional safety systems such as photocells or safety edges then continuous pressure must be applied until the door is fully closed, referred to as “constant impulse control”.

If additional safety systems are fitted then “impulse operation” may be possible whereby the **CLOSE** button is pressed and released and the door will return to the closed position.

NEVER SLAM ANY DOOR CLOSED!

NEVER CLOSE DOOR ON A RAISED DOCK LEVELLER!

NEVER ATTEMPT TO CLOSE DOOR FROM THE OUTSIDE!

NEVER CLOSE DOOR ON IMPEDING OBJECT!

ALWAYS STAND CLEAR OF DOOR DURING OPERATION!

MAINTENANCE

The following recommendations for preventative maintenance and repairs are intended to ensure that the best possible use is obtained from your door. Failure to keep your door maintained properly could invalidate any warranty. Ellickson Doors will be happy to provide a contracted preventative maintenance facility tailored to your needs.

Maintenance intervals -- YOUR DOOR IS CLASSIFIED AS A MACHINE!

Frequency of maintenance is dependent on usage. All expert maintenance should be carried out by fully trained and competent door engineers. -With the exception of the recommended "daily maintenance", which should be carried out by the client.

A well-adjusted Ellickson sectional door should operate freely and in a smooth, well balanced manner and when closed provide a weather seal.

Expert maintenance intervals are suggested as follows:

DOOR PER CYCLE SERVICE INTERVAL

Up to 15 every 6 months
Up to 30 every 4 months
Up to 45 every 3 months
Over 45 every 2 months

Daily Maintenance

Daily maintenance that can be carried out by the user:

Ensure that:

- All operatives are fully conversant with operating instructions and safety requirements.
- The door is not damaged in any way.
- Excessive force is not required to operate the door
- Damage or operating difficulties are reported and action taken to carry out necessary repairs.
- Door components are clean and free from build up of dirt or dust.
- Ensure no obstruction is impeding closing path of door

CAUTION :

ANY DAMAGE OR DEFECTS SHOULD BE REPORTED IMMEDIATELY TO MANAGEMENT & ELICKSON DOORS

A DAMAGED DOOR SHOULD BE REPAIRED AS SOON AS POSSIBLE TO PREVENT POSSIBLE

EXCESS WEAR AND TEAR TO THE DOOR COMPONENTS.

A DAMAGED DOOR IS A POTENTIAL SAFETY HAZARD, WHICH COULD CAUSE INJURY OR DEATH.