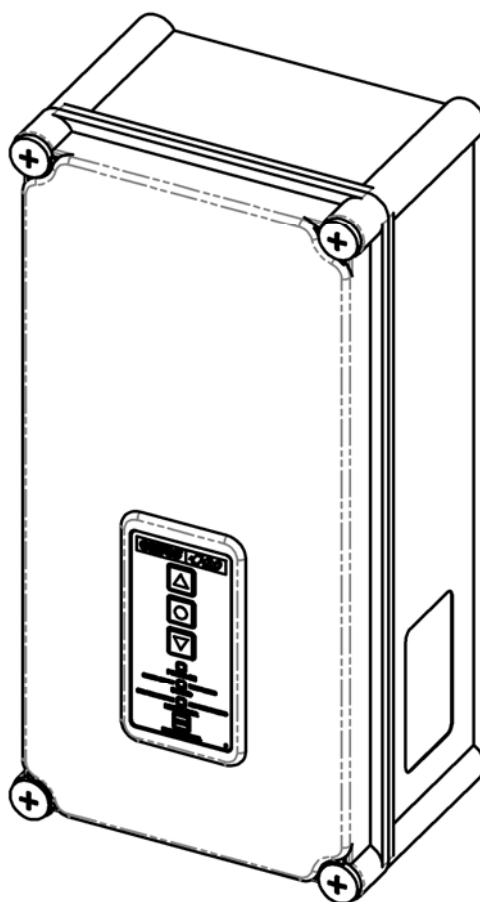


# GRIFCO®

***GLMe2H***

**+2.0**



## **Installation and Users Manual for Commercial Wall Control**

Manufactured by

Chamberlain Australia Pty Ltd  
15 Dell Rd West Gosford  
NSW 2250 Australia  
[www.grifco.com.au](http://www.grifco.com.au)

Supplied by

Chamberlain GmbH  
Alfred-Nobel-Strasse 4  
66793 Saarwellingen, Germany  
[www.liftmaster.eu](http://www.liftmaster.eu)

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## SAFETY SYMBOL AND SIGNAL WORD REVIEW

### Safety symbol and signal word review

This commercial door opener has been designed and tested to offer safe service provided it is installed, operated, maintained and tested in strict accordance with the instructions and warnings contained in this manual.



**WARNING**

Mechanical



**WARNING**

Electrical



**CAUTION**

When you see these Safety Symbols and Signal Words on the following pages, they will alert you to the possibility of serious injury or death if you do not comply with the warnings that accompany them. The hazard may come from something mechanical or from electric shock.

When you see this Signal Word on the following pages, it will alert you to the possibility of damage to your commercial door and/or the commercial door opener if you do not comply with the cautionary statements that accompany it.

### THESE ARE IMPORTANT SAFETY INSTRUCTIONS. FOLLOW ALL INSTRUCTIONS AS INCORRECT INSTALLATION CAN LEAD TO SEVERE INJURY OR DEATH

	Keep commercial door balanced. Sticking or binding doors must be repaired. Commercial doors, door springs, pulleys, brackets and their hardware are under extreme tension and can cause serious personal injury. Do not attempt to loosen, move or adjust them. Call for commercial door service.		Disengage all existing commercial door locks to avoid damage to commercial door. Install the wall control (or any additional push buttons) in a location where the commercial door is visible during operation. Do not allow children to operate push button(s) or remote control(s). Serious personal injury from a closing commercial door may result from misuse of the opener.
	Do not wear rings, watches or loose clothing while installing or servicing a commercial door opener.		Permanently fasten all supplied labels adjacent to the wall control as a convenient reference and reminder of safe operating procedures.
	To avoid serious personal injury from entanglement, remove all ropes connected to the commercial door before installing the door opener.		Activate opener only when the door is in full view, free of obstructions and opener is properly adjusted. No one should enter or leave the building while the door is in motion.
	Installation and wiring must be in compliance with your local building and electrical codes. Connect the power supply cord only to properly earthed mains.		An electrician must disconnect electric power to the commercial door opener before making repairs or removing covers.
	Moisture and water can destroy the electronic components. Make sure under all circumstances that water moisture or storage moisture cannot penetrate the electronics. The same applies for openings and cable entries.		If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard. A disconnection device incorporated in the fixed wiring must be provided in accordance with the wiring rules of the country in which it is installed.
	After the installation a final test of the full function of the system and the full function of the safety devices must be done.		The actuating member of a biased-off switch is to be located within direct sight of the door but away from moving parts. Unless it is key operated, it is to be installed at a minimum height of 1500mm and not accessible to the public.
	When operating a biased-off switch, make sure that other persons are kept away.		Make sure that people who install, maintain or operate the door follow these instructions. Keep these instructions in a safe place so that you can refer to them quickly when you need to.
	The opener cannot be used with a driven part incorporating a wicket door (unless the opener cannot be operated with the wicket door open).		If the opener is installed at a height less than 2.5 metres from floor level or any other level from which the unit can be accessed (eg mezzanine) the installer is responsible to fit guards to the opener to prevent access to the chain drive.
	Ensure that entrapment between the driven part and the surrounding fixed parts due to the opening movement of the driven part is avoided.		This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
	Motor may become hot during operation. Appropriate clearance and/or shielding should be supplied by the installer to ensure any cabling, wiring and/or other items cannot come in contact with the motor. If temperature rise exceeds 50°C all fixed wiring insulation must be protected, for example, by insulating sleeving having an appropriate temperature rating.		Use the commercial door control for its intended purpose. GLMe2HS wall control is designed for operating Grifco openers on spring balanced roller shutters, spring balanced roller doors and counterweighted bi-fold and vertical lift doors.



**WARNING:** Important safety instructions. It is important for the safety of persons to follow all instructions. **SAVE** these instructions.

## INTRODUCTION

Congratulations on your purchase of the Grifco® GLMe2H Door Control. The mechanical motor logic controller is a state-of-the-art door control using proven, feature packed electronics to enable operation of Grifco Heavy Duty mDrive.

The GLMe2H is a compact control, incorporating a C10A Controller into the slimline enclosure and include many of the same features as the eDrive+2.0 range.

## PLANNING

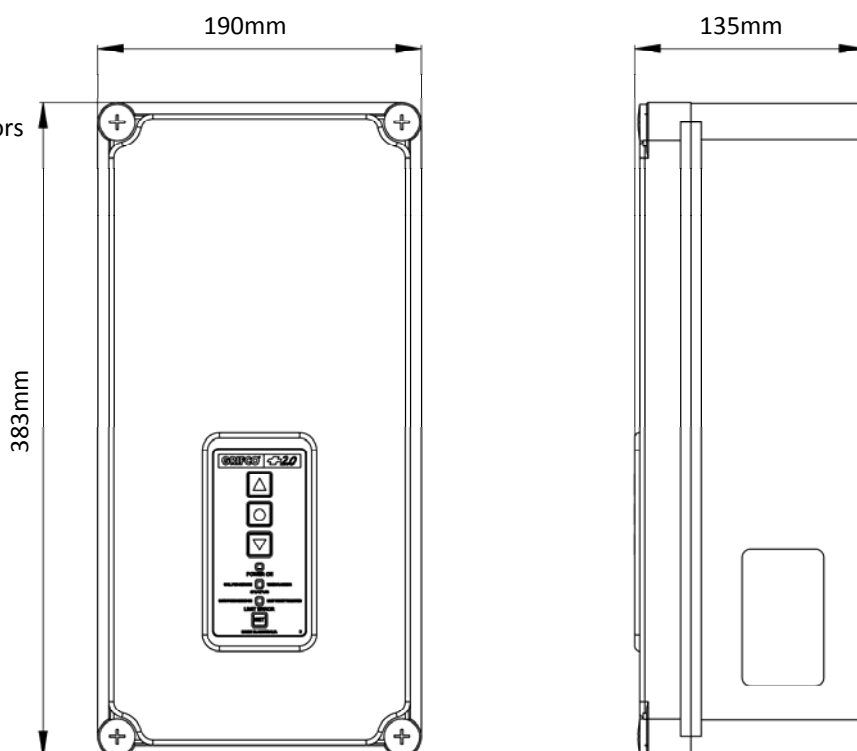
The GLMe2H is designed to work with Grifco® Heavy Duty three phase motors utilising mechanical limit systems.

The GLMe2H variation includes a Thermal Overload to protect the motor from overuse.

This manual must be used in conjunction with the Grifco® Heavy Duty motor manual.

Ensure sufficient room exists to mount the enclosure to the wall in the vicinity of the opener. The wall control must be installed indoors and away from possible water ingress.

Some optional accessories may also be included such as a IR safety beams, transmitters or other access control devices. Ensure these items are with you before attending site.



The GLMe2H control will not allow latching or auto closing without the use of an appropriate safety device, such as an IR Beam, Light Curtain, Safety Edge or similar Entrapment Protection System.

Examples of safety devices include:

Monitored IR Beams -

- Reflective: P/N GPS15 (add RK to include 2 x transmitters)
- Send/Receive: P/N GPS772 (add RK to include 2 x transmitters)

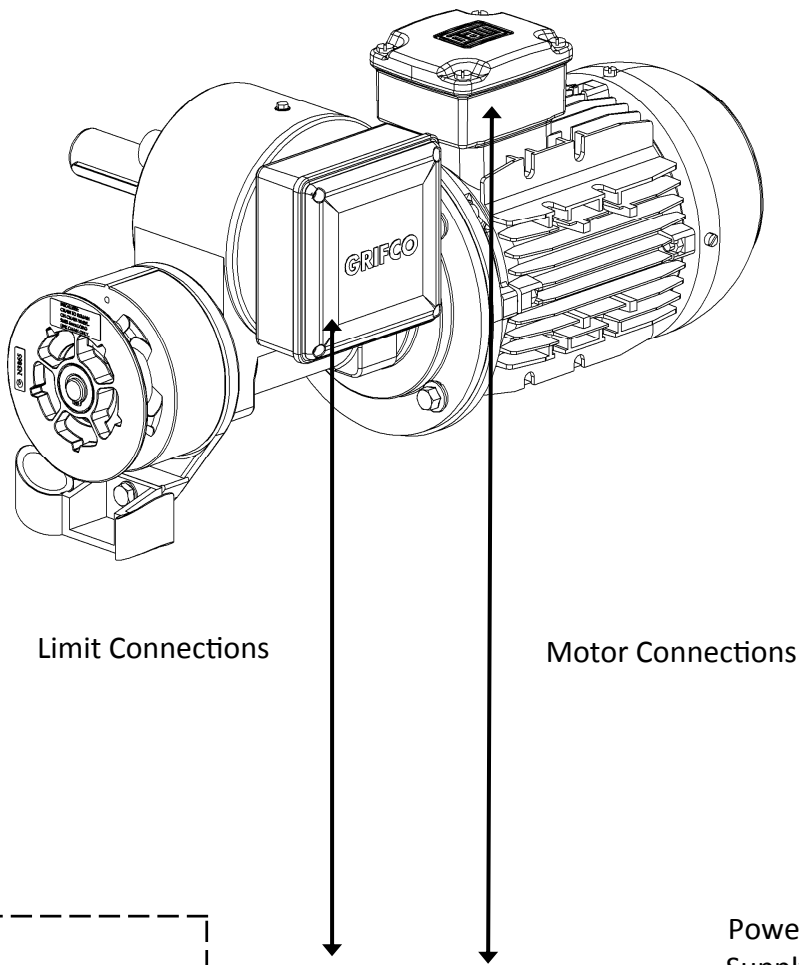
Monitored light curtain -

- Send/Receive: 10m x 1.8m height: P/N GLCPS

If accessories are included, refer to the relevant instructional literature provided.

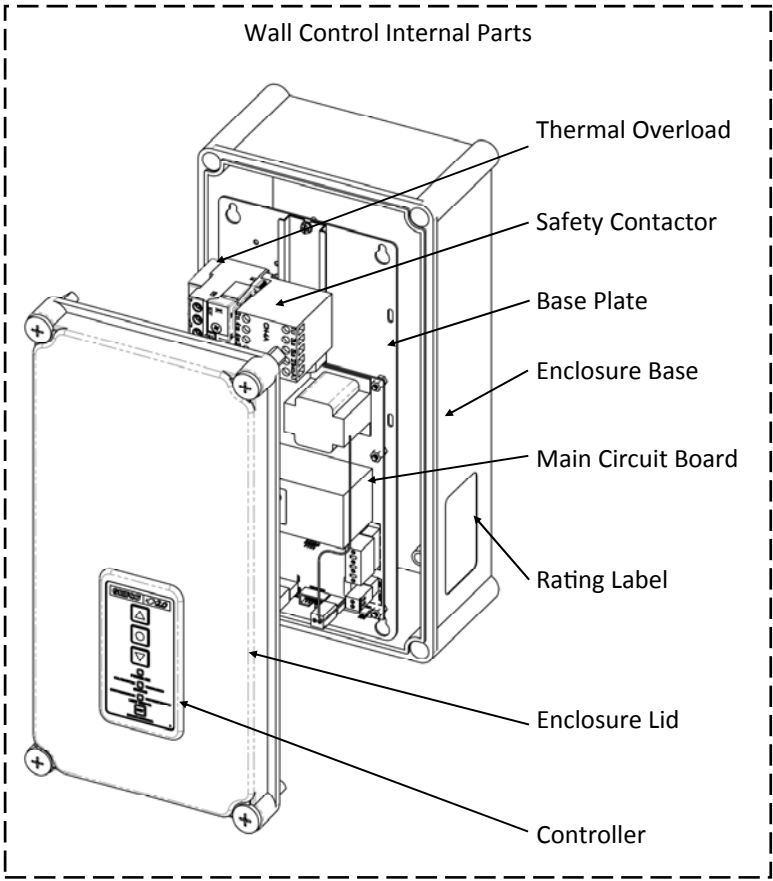
**SYSTEM OVERVIEW**

The illustration below shows an overview of the system and the related connections required.

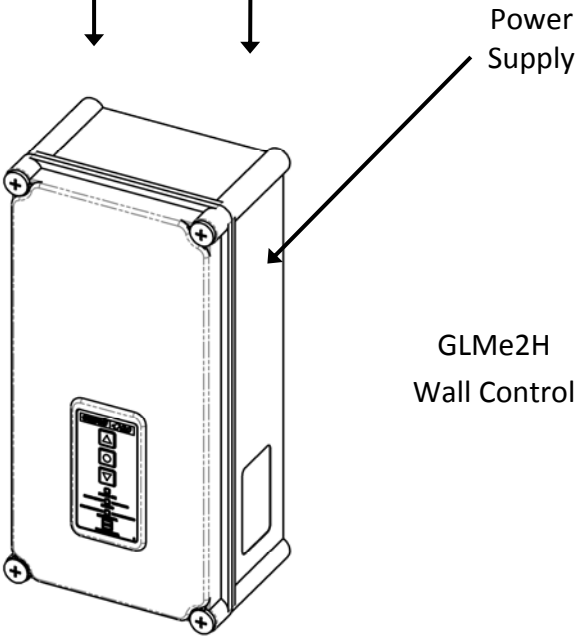


Limit Connections

Motor Connections



Wall Control Internal Parts



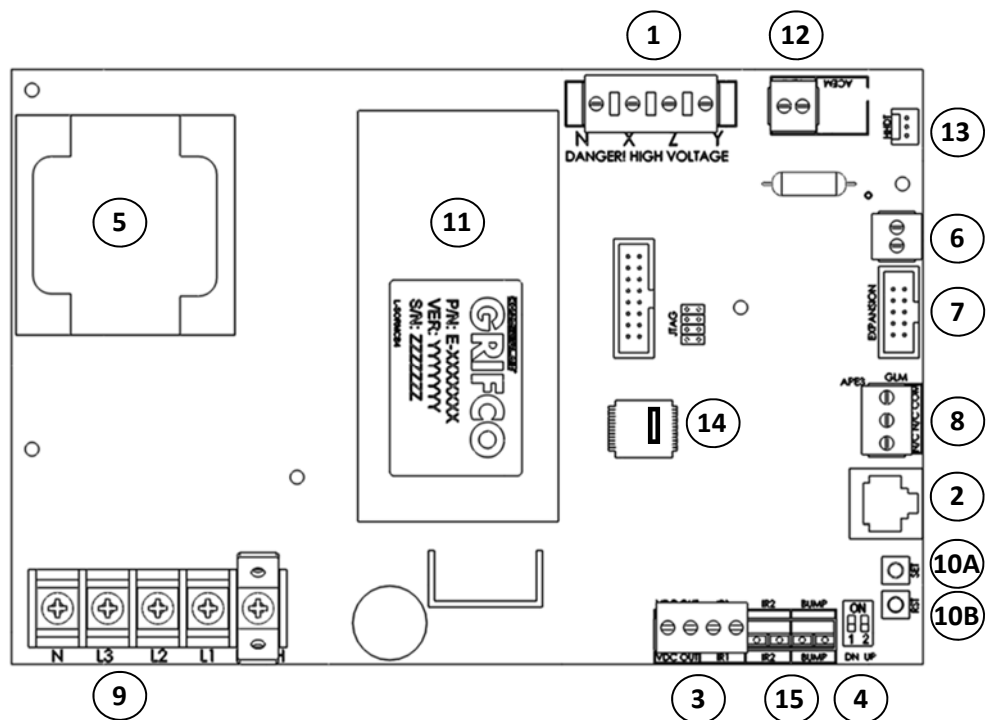
Power Supply

GLMe2H  
Wall Control

COMPONENT OVERVIEW

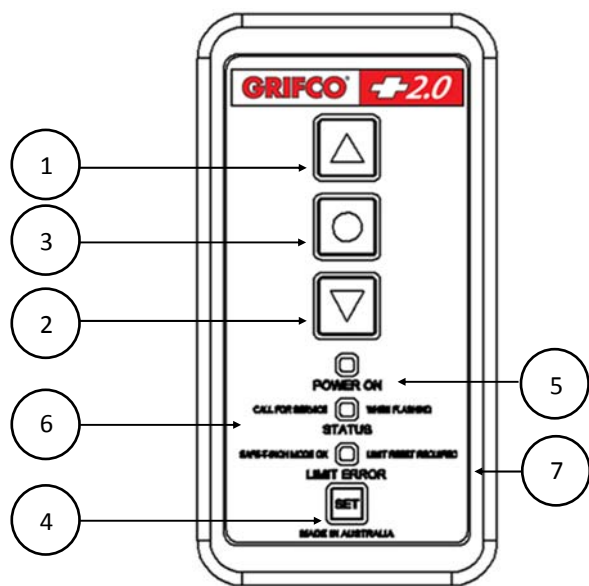
Main Control Board (MCB)

The MCB is the heart of the **GLMe2H**. The diagram below provides an overview of the major components, connections and inputs.



1	Motor terminals	9	Power supply terminals
2	Controller connection socket	10 A	LRN button—Enables learning of new remotes
3	VDC out (24Vdc accessory power)	10 B	RST button —Reset board. Hold this button for 10 seconds to erase and force re-learn of safety Entrapment Protection Devices.
4	Door behaviour DIP Switches	11	Mechanically interlocked contactors
5	Transformer	12	Motor temperature cut-out terminals (N/C)
6	Toggle Input	13	HHDT input (diagnostic tool)
7	Expansion Board Input	14	Radio Lock (jumper fitted to lock)
8	GLMe2L Mechanical limit terminal (2 x N/C)	15	Entrapment Protection Device inputs

Controller



- 1. **UP** —Moves the door upwards
- 2. **DOWN** —Moves the door downwards
- 3. **STOP** —Stops the door
- 4. **SET** —Used to enter advanced programming
- 5. **POWER ON** —Shows when the unit is mains powered
- 6. **STATUS** —Shows the status of the unit
- 7. **LIMIT ERROR** —When lit indicates limits are not set

Controller

## INSTALLATION

### MOUNTING

Carefully remove the Wall Control front cover to access the Main Circuit Board (MCB) and disconnect the Control cable from the MCB. Remove the MCB and base plate from the enclosure base by loosening the retaining screws, and lifting the panel up and out.

Carefully pre-drill the 4 x mounting holes in the base of the enclosure with a 5mm drill. Holding the enclosure against the wall as a template (and with lid removed), mark the mounting holes in the base using a suitable marking pen.

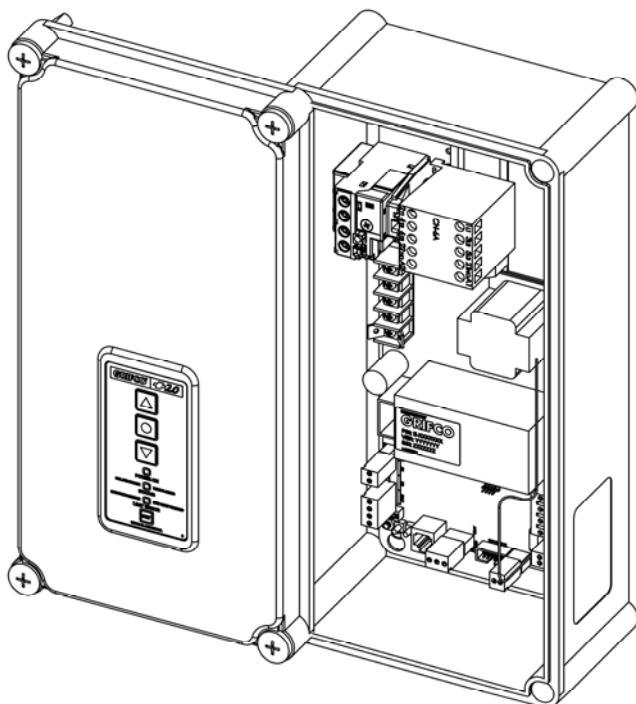
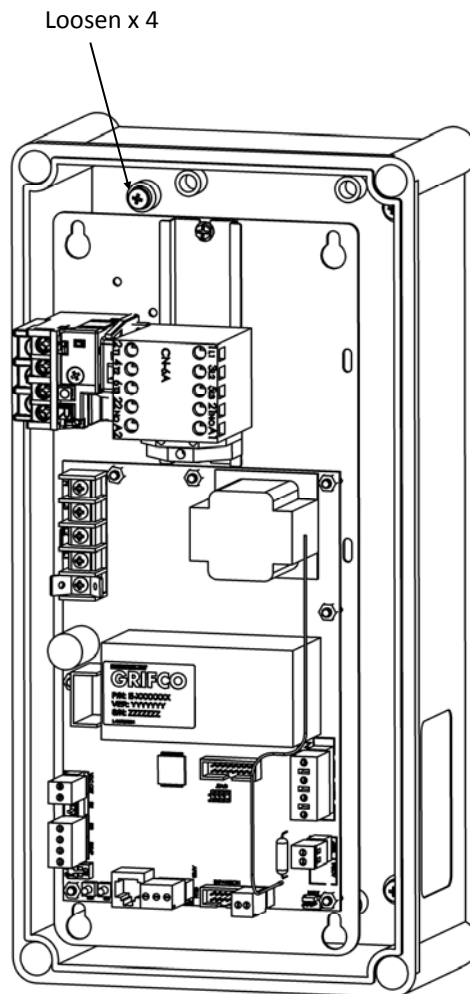
Depending on the surface to be installed against, select the appropriate fastener (#6 gauge minimum) type and drill fixing holes to the marked locations and secure accordingly.

Mount the enclosure base using 4 x mounting holes in the base of the enclosure as shown.

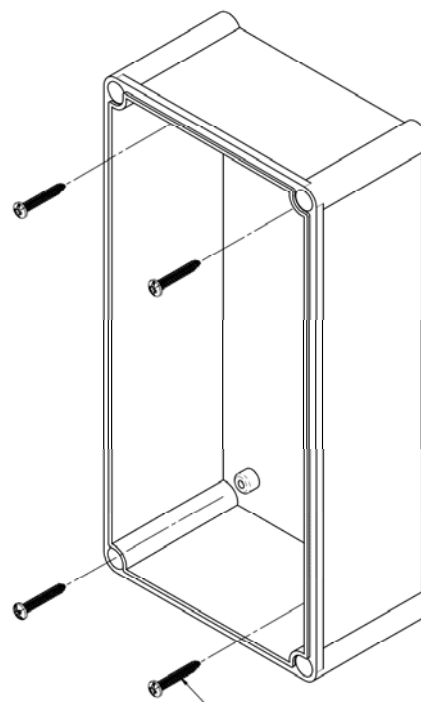
Carefully drill all conduit entries into the enclosure base. Remove all dust and debris from the enclosure base.

Any concrete dust or metal shavings will damage equipment and void warranty.

Refit the Main Circuit Board and base plate to the enclosure base. Connect the Controller cable to the MCB and refit the Wall Control front cover



**TIP: Wall Control cover can be mounted to the box as shown when access is required.**



Mounting screws (not supplied)



## ELECTRICAL CONNECTION

The **GLMe2HS** control **must**:

- be connected via an approved electrical isolation device
- be connected via a suitable circuit breaker that disconnects all live conductors
- be connected in accordance with the wiring rules of the country in which it is installed
- not have control enclosures left open for extended periods (excess dust will void warranty)

It is recommended to run all cable through non-flexible conduit and use appropriate conduit entries.

However if a flexible cable and cable gland are used, additional cable ties / strain relief must be fitted inside the enclosures to prevent the cable from slipping.

It is recommended that 1.5mm<sup>2</sup> (max.) wire size is used to avoid unnecessary crowding and difficulty when making connections. Avoid excess cable in the motor termination box. It is recommended to crimp cable ends with fork or loop connectors to ensure a secure fitting in the terminal block.

### Motor Connections

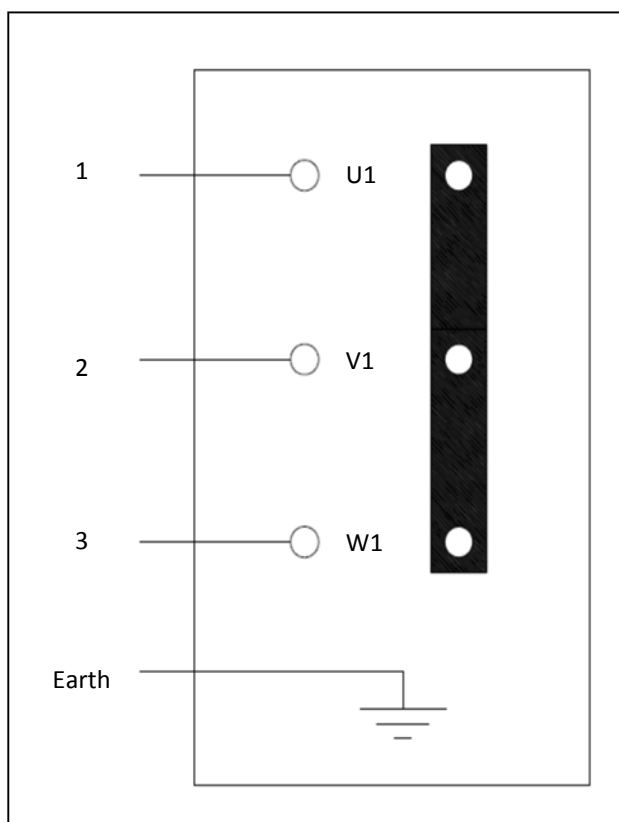
**For further details on electrical connection to the opener, please refer to the opener installation manual.**

Ensure all conduit entries to the motor terminal box are sealed correctly.

Using the appropriate cable, connect the cable from the Wall Control to the motor terminals as shown right.

It is recommended to use cable lugs to connect the cables to the terminal posts and earthing point.

3 phase Motor



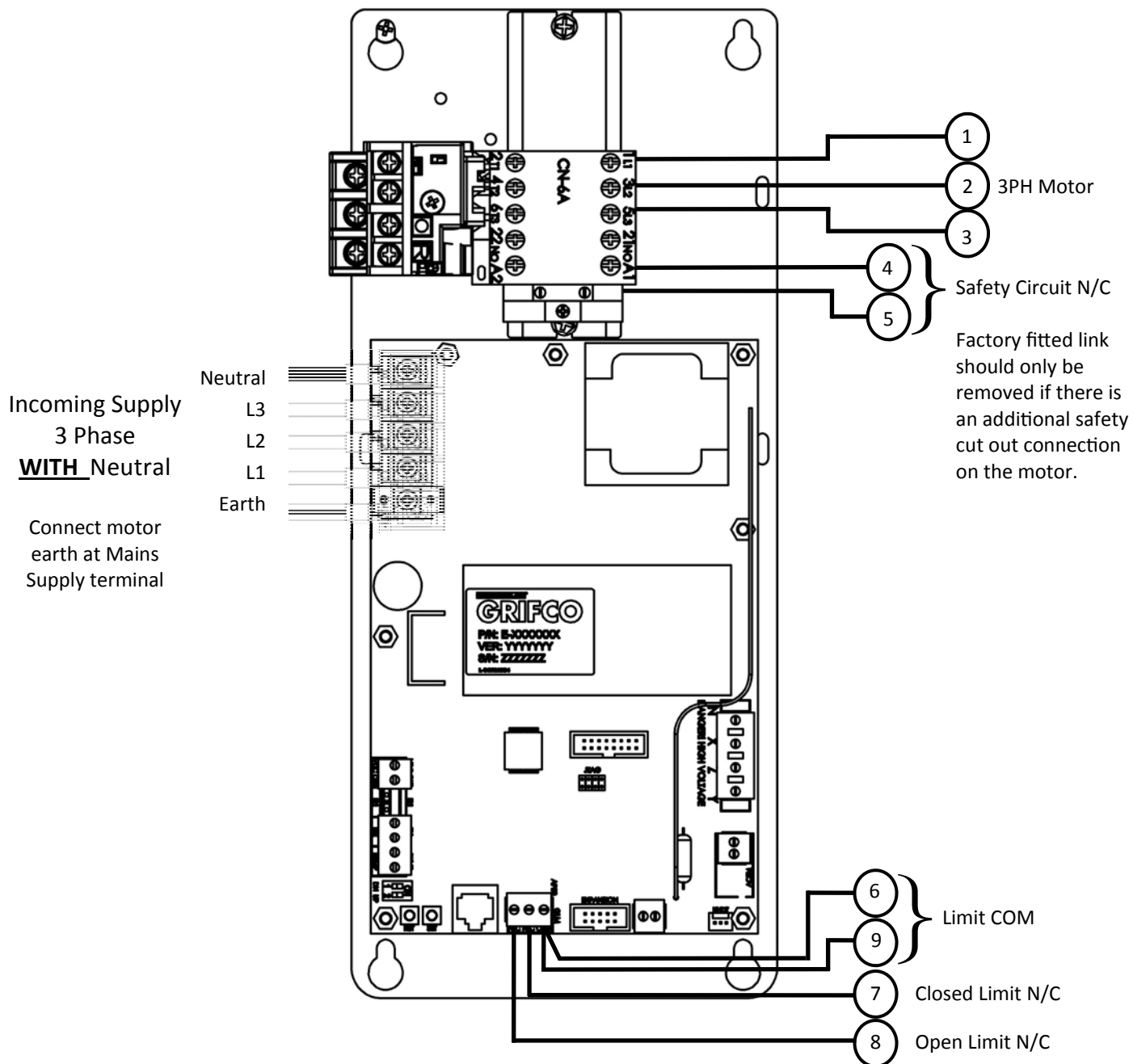


## INSTALLATION

### Electrical Connections

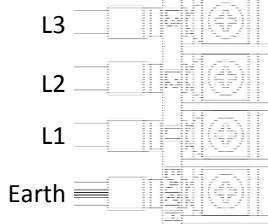
It is recommended that  $1.5\text{mm}^2$  (max.) wire size is used to avoid unnecessary crowding and difficulty when making incoming supply connections. Avoid lengthy cable ends that may cause undue pressure on delicate components. It is recommended to crimp cable ends with fork or loop connectors to ensure a secure fitting in the terminal block.

**A disconnection device incorporated in the fixed wiring must be provided in accordance with the wiring rules of the country in which it is installed.**



Incoming Supply 3 Phase  
**WITHOUT** Neutral

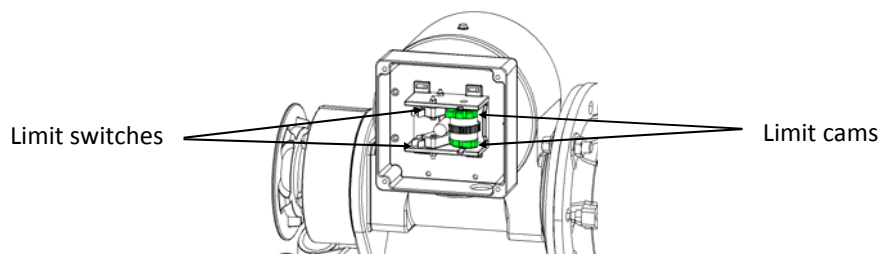
This variation can be identified  
by the 415V transformer on the  
MCB



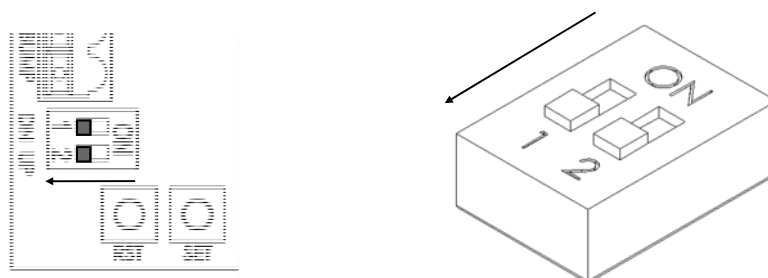
## SETUP AND ADJUSTMENT

With the primary connection of the wall control and opener complete it is time to test the operation. Carefully follow the next steps to ensure safe setup:

- 1) Using the hand chain, position the door away from the opened or closed position by at least 1 metre.
- 2) Check and make sure both limit cams are positioned away from their relevant limit switches. If any limit cam has engaged a limit switch, the door will not move when operated using the Controller.



- 3) Make sure the 2 x behaviour DIP switches located at the bottom left on the MCB (inside the wall control) are set to INCH (OFF) for the door set up process.



### Checking power

Refit the wall control front cover.

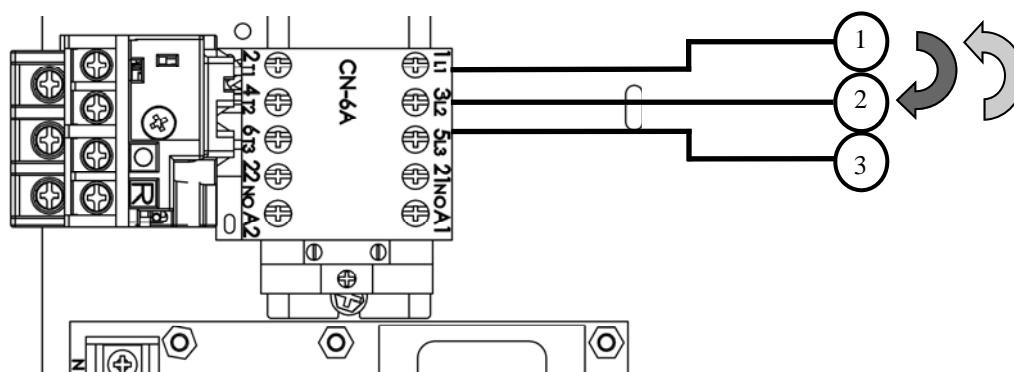
Apply mains power and ensure the unit is powered by checking that the POWER ON indicator on the controller is lit.

If the LIMIT ERROR light is lit there must be a limit connection problem, or both cams may be on their relevant switches. Check limit connections (PG 8) or limit cams (step 2 above)

### Door direction

Ensure there are no obstructions in the path of the door.

Carefully inch the door up and down via the up/down buttons on the Controller. Observe the door direction in relation to the button pressed to ensure it is correct. If it is not, isolate power and swap wires 1 and 2 at the motor connections on the MCB as shown below and recheck door direction.



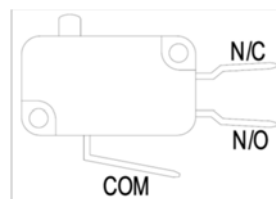
Now that the door direction is known to be correct, the limit setting steps can proceed on the following page.

## SETUP AND ADJUSTMENT

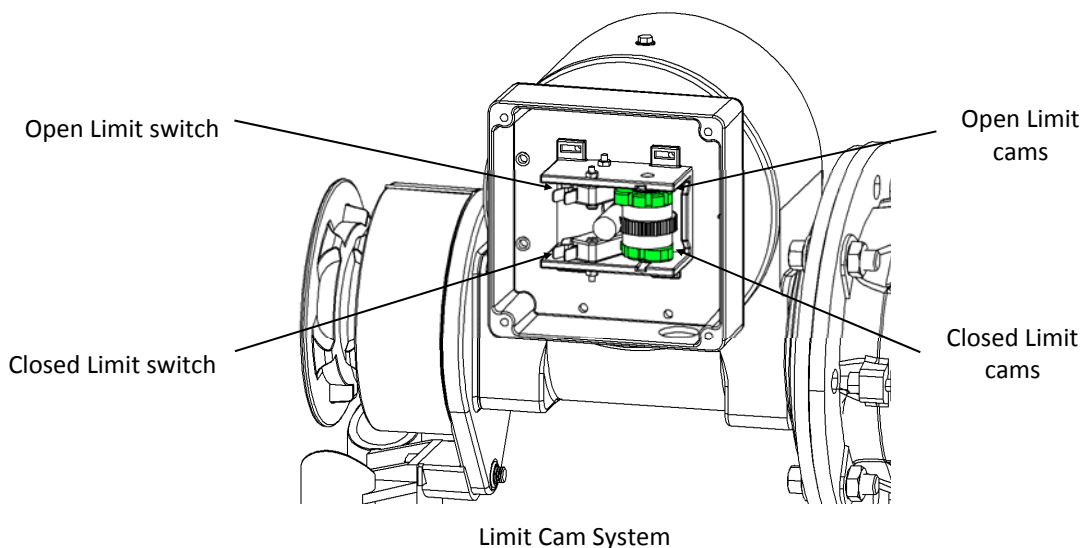
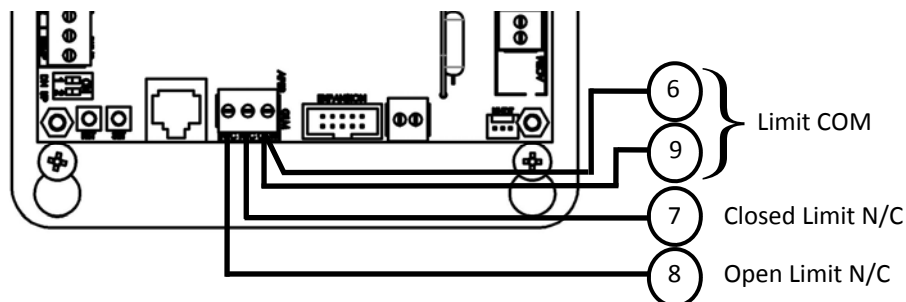
### Limit Setup

**WARNING:** Limits are extremely sensitive; a small cam movement may correspond to a large amount of door travel.

The limit switches must be connected to the control gear being used via the NORMALLY CLOSED (N/C) and COMMON (COM) of the limit switch.



When wiring the limit switches, ensure the upper limit switch in the Limit Enclosure is connected as the Open Limit and the lower limit switch in the Limit Enclosure is connected as the Closed Limit.



The limit switch mechanism is a worm driven friction held adjustable cam system using two micro switches.

Refer to Opener manual for further instructions in setting limits.

1. Go to the controller and drive the door to the desired closed position.
2. Go to the limit switch enclosure on the opener.  
Rotate the closed limit cam to activate the limit switch - listen for a "click and stop."
3. Go to the controller and briefly jog/push the down button. The door should not move as the closed limit switch is activated by the cam.
4. Drive the door up around 500mm using the up button on the Controller, and carefully re-approach the closed position. The door will stop at or near the desired close position. Adjust the Closed Limit Cam if necessary to fine tune the closed limit.
5. Drive the door to near the desired open position.
6. Go to the limit switch enclosure and rotate the open limit cam to activate the limit switch—listen for a "click" and stop.
7. Go to the controller and briefly jog/push the up button. The door should not move as the open limit switch is activated by the cam.
8. Drive the door down by around 500mm using the down button on the Controller, and carefully re-approach the open position. The door will stop at or near the desired position. Adjust the Open Limit Cam to fine tune the open limit.
9. Cycle the door 2 to 3 times between the limits to ensure you are satisfied with the set positions. If required, repeat the steps above.

## SETUP AND ADJUSTMENT

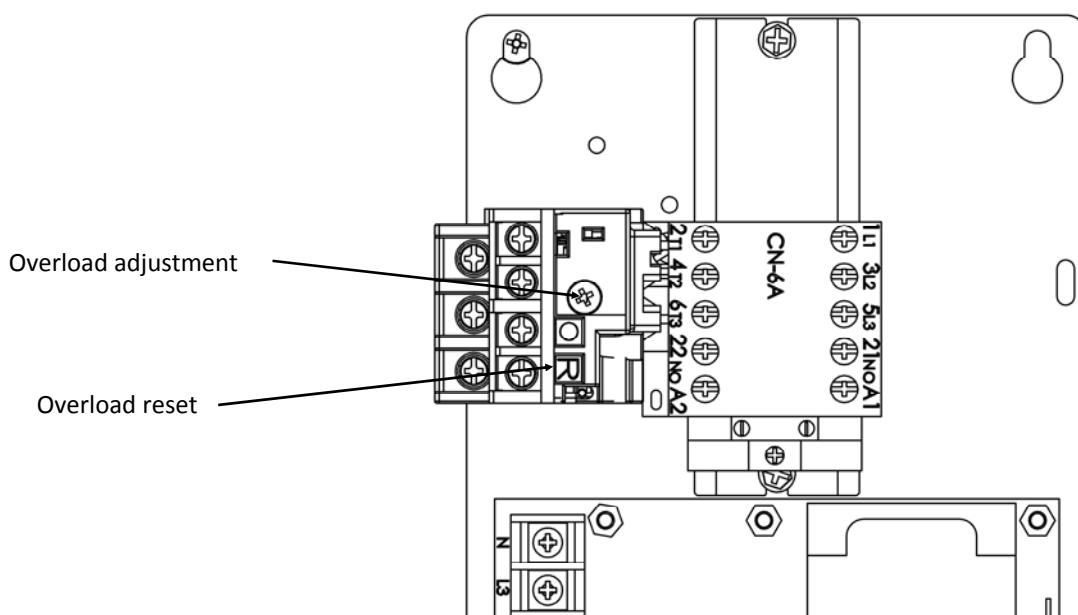
### Overload Setting

The overload has been factory set and may need to be adjusted to suit the motor and the application to ensure safe operation.

The motor will have an “AMPS” value on the compliance rating label. The Overload must match this rating.

To adjust the Overload:

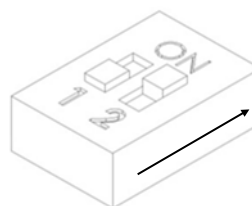
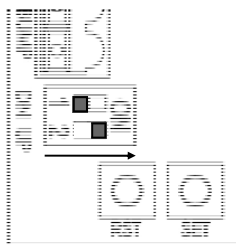
1. Carefully remove the Wall Control front cover to access the Main Circuit Board (MCB) and disconnect the Control cable from the MCB.
2. Rotate the overload setting dial to the minimum value.
3. Cycle to door between limits and check if the overload will trip during normal operation.
4. If the overload trips, increase the setting value by a small amount and push to reset.
5. Cycle the door and check if the overload will trip with the new setting.
6. Repeat steps 4 and 5 until the overload no longer trips during normal operation.



## IMPORTANT

The basic door setup is now complete.

Set the dip switches located at the bottom left of the MCB (inside the wall control) to enable latch up behaviour if required.



For Latch Down behaviour, Entrapment Protection Devices will need to be installed.

For installation of Entrapment Protection Devices and other accessories, please proceed to the following pages.

## ENTRAPMENT PROTECTION DEVICE CONNECTION

### Installing Entrapment Protection Devices (may require terminal blocks P/N TBT2A-5)

Devices such as Infrared (IR) Beams and Safety Bump Edges allow safe automatic or latch closing of the door and **must** be wired directly into the MCB. Grifco® Entrapment Protection Devices such as the Grifco® Light Curtain Protector System (GLCPS, GPS15 or GPS772) and Bump Edge are wired into the quick connect inputs located next to the door behaviour dip switches on the MCB (shown below).

#### Connection overview:

**IR1:** Monitored Grifco® Protector System (P/N GLCPS, GPS15, GPS772), or  
NC (normally closed) contact input

**IR2:** Monitored Grifco® Protector System P/N GPS15 or GPS772) or  
NC (normally closed) contact input

**VDC OUT:** Accessory power 24Vdc - unregulated  
(max 150mA)

For more detailed information, refer to the relevant Grifco® Protector System manual.

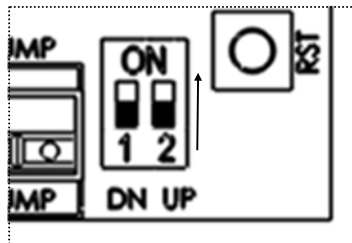
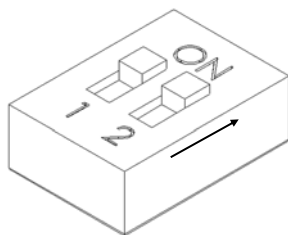
**BUMP:** Monitored 8K2 Resistor type Bump Edge input.

**Note:** When installing Entrapment Protection Devices ensure that the door is at the open limit position.

**Note:** All Entrapment Protection Devices need to be activated once after installation to be learned correctly. Normally closed Entrapment Protection Devices and monitored Bump Edges require one simulated obstruction to be learned by the opener. Once learned, latch closing will be allowed when set.

If the status light is flashing 2 or 3 times, there may be a connection problem, or misalignment of an IR beam device.

With connection of the Entrapment Protection System complete, set the door behaviour DIP switch to latch down and up as shown below. This will cause the door to latch both up and down. i.e. a momentary press of the up or down button will cause the door to run automatically to the fully opened or closed position.



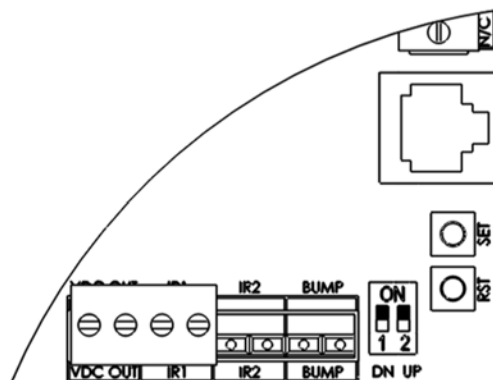
Test proper operation of the installed Entrapment Protection System by operating the door in the closing direction and obstruction the device. The door should stop and reverse to the open position.

### Erase Entrapment Protection Devices

Press RST button on the MCB for at least 10 seconds until the green light blinks rapidly.

### Reactivate Entrapment Protection Devices

Re-install in accordance with the above instruction as required.



## WARNING

### Entrapment Protection

The Entrapment Protection System for your installation will be determined by the functional requirements of the door. To ensure the installation meets these requirements refer to IEC 60335-2-103.

When using the Grifco® Protector System as part of the Entrapment Protection System, ensure it is installed to detect a 100mm high obstacle, ie; approx 80mm from the floor, and in accordance with installation directions supplied.

Consideration should be given to the detection of vehicles or other similar equipment. To provide adequate Entrapment Protection an additional Grifco® Protector System may be required to be installed in a higher suitable position, for example, approx 600mm from the ground.

## APPLICATION EXAMPLE

The GLMe2H can be expanded in many ways to meet the requirements of your application.

The following describes a typical car park application that the GLMe2H is capable of. Read it thoroughly to better understand the capabilities of the GLMe2H before proceeding further with your installation.

### Example of a Typical Car Park Application

The GLMe2H has Car Park Access Control features included as standard.

For typical vehicular access applications, the product can be interfaced with access control devices and features an adjustable Auto Close function. For vehicular access applications an Entrapment Protection System will be required — see “Installing Entrapment Protection Devices” on page 13.

#### Typical Car Park Configuration

- The opener must be installed in accordance with the instructions contained within this document.
- The Entrapment Protection Device/s must be installed before the product can be set for Auto Close.
- For Latch Up (open) and Latch Down (close) set the dip switches on the MCB.
- Set Auto Close in accordance with the instructions (see page 18).

#### Access Control Options

- Grifco® Security +2.0 Transmitter or other Grifco® Security +2.0 Wireless Accessories
- Swipe Card, Magnetic Key, Key Switch or similar access control device

The transmitter once programmed (see page 17) can control entry and exit for the user. Auto Close once set, will close the door after the programmed delay on both entry and exit. Access control devices such as swipe card, magnetic key and other similar systems must be a two wire (normally open) voltage free interface and be connected to the toggle input on the MCB via the quick connect pluggable terminal block (see page 6).

#### Transmitter Management

If Transmitter Management is required, you will need a Grifco® STAR1000EVO. This accessory will allow up to 1000 identified users to be individually added and deleted.

#### Exit Control

The door can be configured to open from either a:

- Grifco® Security+2.0 Transmitter or other Grifco® Security+2.0 Wireless Accessory device, or
- Where a Loop Detector or similar access controls are required to trigger opening to exit, connect to the Toggle Input on the MCB via a quick connect pluggable terminal block as described above (see diagram page 6).

**Note – The Toggle Input will accept N/O inputs from multiple access control devices eg, both a separate entry and exit control.**

#### Auto Close Feature

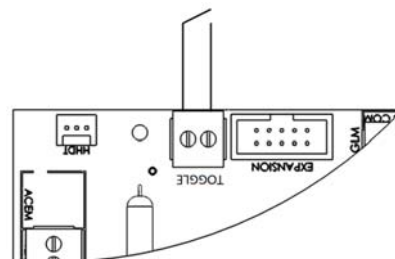
When Auto Close is enabled, the Toggle Input, and Receiver behaviour will become “Open Only” i.e. an activation via the Toggle Input or a Transmitter during opening, or Auto Close delay, will not close the door. Each activation will add Auto Close delay.

## WIRED ACCESS CONTROL / TOGGLE INPUT

A two wire access control / toggle input is provided on the MCB to allow access control based operation (e.g. key switch, card reader etc). The input will operate as “open-stop-close-stop-etc.”

When Auto close is set, the toggle behaviour will become “open only”. This is typical for a car park application.

When the toggle input is bridged\* and held (e.g. a timer or latching switch) the door will remain open (i.e. Auto Close ignored). If the bridge is released, Auto Close will resume.



## ACCESSORIES

Depending on your application requirements, some of the following accessories may be included with your equipment. Review the following to determine if any of these items may be required to satisfy the customer needs if not already included.



### Forklift / Wall Remote

Experience the convenience of a versatile spare remote. Operate up to three doors with one remote that can be fitted to a car, truck, forklift or in the warehouse or factory.

**Model: E943G**

### 3 Button Keyring Remote

Keyring remote transmitters are small and convenient with the ability to operate up to three doors from the one unit. A must have for every set of keys for warehouse workers on site.

**Model: E945G**

### Wireless Wall Control

The wireless wall control can be placed in a suitable location in your warehouse. There is no wiring and it can operate up to two doors. It has a unique hold-to-close feature that is available without IR beams installed.

**Model: E138G**



### Wireless Keypad

Secure keyless entry via a four digit PIN code. The wireless keypad can be programmed with up to twelve user codes and has the option for temporary codes that last for as many hours or door openings that you select. Now you can have secure keyless entry and a unique hold-to-close that is available without IR beams installed.

**Model: E840G**

### Entrapment Protection

The Grifco range of monitored entrapment protection devices feature pre-wired and simply plug into the eDrive MCB. The protection devices offer exceptional safety benefits depending on the nature of the installation. Devices include monitored send / receive or reflective beams, light curtains. Safety edges also available.

**Models:**

**GPS15**

Reflective beam kit

**GPS15RK**

As above including 2 x E945G transmitters

**GLCPS**

Send/receive Light Curtain

**GPS772**

Send/receive beam kit

**GPS772RK**

As above including 2 x E945G transmitters

### Transmitter Management

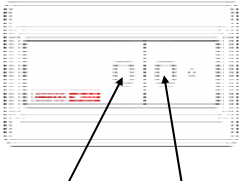
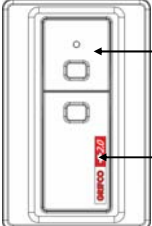

The STAR1000EVO is a high capacity transmitter management system for commercial door openers and dry-contact triggered devices. It is compatible with Security +2.1 remote controls and wireless keypads. It allows individual remote addressing and management, with a capacity of 1,000 wireless devices.

**Model: STAR1000EVO**



## AUTO CLOSE & WIRELESS ACCESSORIES

**NOTE:** Radio Lock jumper (if fitted) must be removed from the MCB before wireless accessories can be learnt. Ref page 6. For security reasons the Radio Lock should be refitted after the wireless learn sequence is completed.

Action	Button Sequence
<b>LEARNING A NEW WIRELESS ACCESSORY (e.g. a transmitter) FROM THE CONTROLLER</b>	<ul style="list-style-type: none"> <li>Press and hold the <b>SET</b> button, then whilst holding press <b>STOP</b> 5 times (<b>green</b> status light will light then continue flashing. Indicating learn mode)</li> <li>Press the desired <b>WIRELESS ACCESSORY BUTTON</b> to learn (<b>orange</b> limit light will flash fast after each wireless accessory is successfully learnt)</li> <li>Press <b>STOP</b> to exit learn mode</li> </ul>
<b>LEARNING A NEW WIRELESS ACCESSORY FROM THE MCB</b>	<ul style="list-style-type: none"> <li>Press the <b>LRN</b> button (green status light will light then continue flashing, indicating learn mode)</li> <li>Press the desired <b>WIRELESS ACCESSORY BUTTON</b> to learn (orange limit light will flash fast after each wireless accessory is successfully learnt)</li> <li>Press <b>LRN</b> button again to exit learn mode</li> </ul>
<b>ERASE ALL LEARNED WIRELESS ACCESSORIES FROM THE CONTROLLER</b>	<ul style="list-style-type: none"> <li>Press and hold the <b>SET</b> button, then whilst holding</li> <li>Press the <b>STOP</b> button 4 times, holding on the fourth press for 5 seconds (green light will flash 5 times, then fast flash to indicate completion)</li> <li>Check that previously learned wireless accessories no longer work</li> </ul>
<b>LEARN THE E138G WIRELESS WALL CONTROL FROM THE CONTROLLER</b>   <p>Door 1    Door 2</p>	<p>The E138G can be used as a two channel wireless wall control for use on one or two doors, or as a dedicated <b>up/down</b> wireless wall control. In either application for the door to latch down an Entrapment Protection Device must be installed. Without Entrapment Protection in two channel configuration the wall control will function as an <b>open/stop</b> device only and in dedicated <b>up/down</b> configuration the down button will operate as “hold to close” only.</p> <p><b>Two Channel Wireless Wall Control</b></p> <ul style="list-style-type: none"> <li>Press and hold the <b>SET</b> button, then whilst holding press <b>STOP</b> 5 times (<b>green</b> status light will light then continue flashing. Indicating learn mode)</li> <li>Press the desired <b>WIRELESS ACCESSORY BUTTON</b> to learn door 1 (<b>orange</b> limit light will flash fast after each wireless accessory is successfully learnt)</li> <li>Repeat previous step to learn door 2 (if required)</li> <li>Press <b>STOP</b> to exit learn mode</li> </ul>
 <p>Top Button Lower Button</p>	<p><b>Dedicated Up/Down Wireless Wall Control (only for applications without entrapment protection)</b></p> <ul style="list-style-type: none"> <li>Press and hold the <b>SET</b> button, then whilst holding press <b>STOP</b> 5 times (<b>green</b> status light will light then continue flashing. Indicating learn mode)</li> <li>Press the <b>E138G TOP</b> button (the orange <b>LIMIT ERROR</b> light will flash at each button press)</li> <li>Then press the <b>E138G LOWER</b> button</li> <li>Press the <b>STOP</b> button on the GRIFCO® controller (the green light will continue to flash)</li> <li>Press the <b>E138G LOWER</b> button again (the green light will go out indicating exit of learn mode)</li> </ul>
<b>LEARN THE E840G WIRELESS KEYPAD FROM THE CONTROLLER</b>   <p>Keypad ENTER button</p>	<ul style="list-style-type: none"> <li>Press and hold the <b>SET</b> button on the GRIFCO® controller, then</li> <li>While holding the <b>SET</b> button, press the <b>STOP</b> button 5 times (the <b>green</b> status light will light then continue flashing, indicating learn mode)</li> <li>Enter a 4-digit PIN code into the keypad (step 3)</li> <li>Press the <b>ENTER</b> button (step 4) (orange LED flickers on controller)</li> <li>To enter additional PIN codes (up to 12) repeat steps 3 &amp; 4</li> <li>Press <b>STOP</b> to exit learn mode</li> <li>Install the <b>RADIO LOCK</b> button on the MCB to prevent any further wireless accessories being learnt, or erased without authority</li> </ul> <p><b>NOTE:</b> The Grifco® Security + 2.0 Wireless Keypad provides :</p> <ul style="list-style-type: none"> <li>Wireless security access</li> <li>Wireless hold to close (for applications without entrapment protection, e.g. IR beams)</li> </ul>



## AUTO CLOSE & WIRELESS ACCESSORY SET UP

Action	Button Sequence
SET AUTO TIMER TO CLOSE FROM THE CONTROLLER (with no expansion board fitted)	<ul style="list-style-type: none"> <li>Press and hold the <b>SET</b> button, then whilst holding press the <b>DOWN</b> button 3 times (<b>green</b> status light ON solid)</li> <li>Press the <b>UP</b> button to increase the auto-timer to close setting in 10-second increments</li> <li>Press the <b>DOWN</b> button to decrease the auto-timer to close setting in 10-second increments</li> <li>Note: the <b>green</b> light will flash according to the number of 10-second increments have been set, then goes back to solid ON. For example, a 5-minute auto-close will be set by increasing the increments until the <b>green</b> light flashes 30 times</li> <li>Press <b>SET</b> to accept setting and exit learn mode</li> <li>Note: To cancel the Auto-timer-to close function, enter the learn mode and press the <b>DOWN</b> button until the number of 10-second increments is ZERO. The <b>green</b> light will flash repeatedly to indicate the function has been reset, then return to solid ON</li> <li>Press STOP to exit</li> </ul>

## TRANSMITTER REGISTER


## MAINTENANCE



**Power MUST be turned off before servicing or adjusting the opener. Disconnect the supply when cleaning!**

The GLMe2H is equipped with smart logic to indicate when your commercial door will require servicing. When the STATUS indicator flashes constantly please contact your commercial door dealer to arrange a routine door service.

Frequently examine the installation for imbalance and signs of wear or damage to cables, springs and mounting. Do not use if repair or adjustment is necessary. Power must be turned off before servicing, cleaning or adjusting the opener.

\* Service Status Indicator is factory set to OFF. To enable this feature a Chamberlain Hand Held Diagnostic tool is required (refer bottom of page). Service interval must be determined by the installer based on the projected door usage.

Certain mechanical aspects of the installation as applicable must be checked, see below:

### Monthly

- Examine the installation for imbalance and signs of wear or damage to cables, springs and mounting. Do not use if repair or adjustment is necessary \*
- Check PE / IR beam/s and bump edge functionality where applicable

### Quarterly

- Check tightness of fixing bolts and (sprocket) grub screws. Adjust if required \*
- Check correct electrical operation
- Check manual operation via hand chain
- Conduct door maintenance in accordance with door manufactures guidelines. This will include door balance \*

\* SERVICE MUST BE CARRIED OUT BY A QUALIFIED TECHNICIAN

### To view total cycles (limits must be set)

- Drive to door to closed limit.
- Press and hold CLOSE for 10 seconds.
- After 10 seconds and while still holding CLOSE, press and release the SET button.
- Status LED will light up indicating number of cycles performed.

To read number of cycles, follow the 'Reading Status Flashes' routine described below.

### Reading Status Flashes

- STATUS indicator will start flashing to signify the value of the least significant digit of the overall number. A solidly lit indicator stands for zero.
- Press set to view the next digit.
- Continue previous step until the STATUS indicator flashes quickly for 1 second then goes out. This signifies that the entire number has been displayed.

### To reset error

(This process indicates there has been a severe problem. Persistent resetting will void warranty and may damage the door and/or opener). This procedure will only work when the status light is flashing **4, 5, 9, 10, 14** or **15** times.

- Hold the STOP button for 10 seconds
- While still holding the STOP button, press and release the SET button

The STATUS indicator should flash quickly for 1 second. Any errors that were flashing should have stopped.

### HHDT (Handheld Diagnostic Tool)

The HHDT allows you to set service interval warnings, and view numerous statistics and information including, total cycles, cycles since service, viewing software version etc.

The input can be found in the corner of the MCB adjacent to the ACEM terminal, see page 14 No.13.

The diagnostic tool is also used to enable the service cycle alert (refer HHDT manual for procedure). The GLMe2H service cycle alert is factory set in disabled mode.



## TROUBLESHOOTING

### Status Indicator (Green) Flash / Problem Table

No. flashes/ Problem	Meaning	Possible causes	Possible Solutions
Solid ON	Motor running		
2	Infrared beam and/or Bump edge obstruction N/C beam removed	IR beam obstructed Bumper edge pressed The opener has detected removal of an Entrapment Protection	<ul style="list-style-type: none"> <li>• Clear obstruction</li> <li>• Remove pressure from bump edge</li> <li>• Set DIP 1 to OFF and press 'reset' (RST) button on MCB for 10 seconds. Re-learn any remaining Entrapment Protection Devices</li> </ul>
3	Entrapment Protection Device removed	The opener has detected removal of an Entrapment Protection Device	<ul style="list-style-type: none"> <li>• Set DIP 1 to OFF and press 'reset' (RST) button on MCB for 10 seconds. Re-learn any remaining Entrapment Protection Devices (see page 15)</li> </ul>
4	MCB error	Internal Error	<ul style="list-style-type: none"> <li>• Power off, and on. If un-resettable replace MCB</li> </ul>
5	EB internal error	EB disconnected or ignored from MCB	<ul style="list-style-type: none"> <li>• Return EB to the installation or resolve EB issue, refer EB1 Manual</li> </ul>
12	Safety warning	Operator disengaged (hand chain engaged)  Safety limit engaged   Thermal overload	<ul style="list-style-type: none"> <li>• Re-engage operator by pulling the green handle</li> <li>• Disengage the operator by pulling the red handle</li> <li>• Use the hand chain to move the door to between normal operating limits</li> <li>• Re-engage the operator by pulling the green handle</li> <li>• Use opener less frequently</li> <li>• Upgrade to a high cycle opener</li> </ul>
14	Direction error	Motor connections altered	<ul style="list-style-type: none"> <li>• Change door direction and reset limits</li> </ul>
Constant flash	Due for service	Door is due for routine service	<ul style="list-style-type: none"> <li>• Contact your local door dealer to arrange service</li> </ul>
No Lights Displayed	Power failure – No lights on MCB or Controller *With lights on at MCB	Power supply not correctly connected *Bad connection to Controller	<ul style="list-style-type: none"> <li>• Check transformer</li> <li>• Check power supply wiring</li> <li>• *Refer below if lights are on at MCB and not on Controller</li> </ul>
Push button not responding	Opener does not drive up and / or down	Bad connection to Controller Damaged Controller cable Controller buttons forced and dislodged from rear of lid	<ul style="list-style-type: none"> <li>• *Check RJ45 plugs are clipped in securely at Controller and MCB</li> <li>• *Check connections</li> <li>• *Replace Controller cable</li> <li>• *Replace Controller</li> </ul>
Open or Close button not responding but green light comes on	Coil failure or incorrect motor wiring if green light on whilst holding up or down button and opener does not move in one direction	Extreme vibration or impact during transit Incorrect motor terminal connection	<ul style="list-style-type: none"> <li>• Replace MCB</li> <li>• Correctly wire the motor</li> </ul>



**Power MUST be turned off before servicing or adjusting the opener. Disconnect the supply when cleaning!**

**1. No indicator lights on controller:**

- Are there any indicator lights ON the MCB (Main Control Board)?

**YES...** Check connection between MCB and wall control

**Check for damage to control cable**

**NO...** Check power supply

**2. Power light illuminated on controller but door will not go up:**

- Does the green status light come ON when button is being pressed?

**YES...** Check for loose motor terminal connection

**NO...** Check for control circuit isolating switch or connection between MCB and controller

**Check for damage to control cable**

**3. Power light illuminated on controller but door will not go down:**

- Is the green status light flashing **2** or **3** times?

**YES...** 2 times - check for obstructions or IR beam misalignment

3 times - check for persistent IR beam obstruction, misalignment or bump edge wiring problem

Check for correct wiring connection and DIP switch settings on MCB

**NO...** *continue onto next question*

- Does the green status light come ON when down button is being pressed?

**YES...** Check for loose motor terminal connection

**NO...** Check for control circuit isolating switch or connection between MCB and controller

**Check for damage to control cable**

**4. Opener activates from controller but not remotes:**

- Are limits set?

**YES...** Change remote battery. Check key switch (if installed) position is in Auto or Auto/Man and check MCB and

Expansion board (if fitted) DIP switches are set correctly. Check that remote is learned and MCB is picking up signal

**NO...** Set limits.

**5. Works from controller but automatic functions do not: (only applicable when using an Expansion Board)**

- Is there a solid orange (COMS) light on the Expansion Board?

**YES...** MCB (Main Control Board) must be reset. Call Chamberlain (1800 GRIFCO) for resetting procedure

**NO...** Make sure key is in correct position

**6. Power light intermittently goes OFF and ON:**

- Is the power light going off on the MCB also?

**YES...** Check supply wiring

**NO...** Check connection between MCB and controller

**Check for damage to control cable**

