



### OPERATOR FOR COMMERCIAL AND INDUSTRIAL ROLLER SHUTTERS AND GRILLES



### **GRIFCO**<sup>®</sup> OVER 100 YEARS OF AUSTRALIAN MANUFACTURING

## eDrive +2.0

# The industry-leading benchmark for quality, reliability and intelligence.

eDrive +2.0 has been relied upon for years to deliver lasting performance for traditional spring-balanced roller shutters and grilles. Its power and adaptability is matched by its onboard, expandable logic, resulting in an intelligent, modular workhorse that is widely trusted as the proven performer.

- Purpose-designed gearbox with a range of powerful motors
- Multiple configuration options to suit a broad range of applications
- Electronic limits with radio on board
- Multiple models to select from to suit your application
- A broad and modular range of accessories



#### LASTING PERFORMANCE

The purpose designed gearbox and AC motor combine to deliver extremely reliable, powerful operation. eDrive +2.0 is manufactured in Australia



#### SAFE AND COMPLIANT

Meets all applicable regulatory standards. Utilise Grifco's broad range of safety accessories to achieve a safe and compliant installation



#### INTELLIGENCE AND FLEXIBILITY

Straight out of the box the Grifco +2.0 logic is ideal for car park applications. An expansion board is also available for advanced functionality



### MULTIPLE ACCESSORIES

Grifco offers a complete range of accessories to improve the safety and convenience of your commercial door installation

### Standard Shutters and Doors

Grifco claims operator performance based on door area. These claims are based on what we regard as a "standard" roller shutter. Please refer below our standard shutter or door assumptions. The eDrive +2.0 range comprises 0.5Hp, 1.0Hp, and 1.5Hp operators in single and 3-phase variants with Low Cycle and High Cycle options.

### Standard Roller Shutter Assumptions

All recommended door sizes are based on a "standard roller shutter" (refer below):

- The shutter is correctly spring balanced
- The shutter has  $\leq$  1.0mm x  $\geq$  100mm slats
- The shutter has no wind-locks
- A sprocket ratio ≥ 4:1 is used
- Diameter 150mm drum for doors ≤ 36m<sup>2</sup>
- Diameter 200mm drum for doors ≤ 50m<sup>2</sup>

#### Non Standard Roller Shutters

Some consideration should be given to increasing the sprocket ratio or operator size if a roller shutter falls outside the standard configuration above. Grifco technical support can provide guidance if required.

### Duty Cycle

Grifco offers motors with differing duty cycle (operational) ratings to ensure we are able to provide the most efficient and cost effective match for your commercial door automation requirements.

- Low cycle refers to approx 10% duty, which equates to 6 minutes of run time per hour
- High cycle refers to approx 30% duty, which equates to 18 minutes of run time per hour

### Engineered and manufactured in Australia

The Australian Chamberlain Group factory in West Gosford NSW manufactures the eDrive +2.0 operator. It is continually updated with modern manufacturing equipment and processes to maintain an excellent level of craftsmanship and quality. Grifco has been manufacturing for over 100 years in Australia.







### 2 Year Warranty

# A leading warranty from the only Australian manufacturer. of roller shutter operators.

Grifco's warranty covers the entire operator and is supported by our national Field Service Technicians and our Customer Service Centre.



### Intelligent and Expandable Logic

Straight out of the box, the eDrive +2.0 is ready for the bulk of typical commercial and industrial applications. The logic board is feature packed, with multiple configurations for door behaviour and settings.

For applications with additional requirements, the expansion board offers further benefit, such as relay configuration and dock leveler interface. See page 5 for the expansion board and page 7 for a detailed look at the eDrive +2.0's logic boards.

### Automatic Chain Engage

In the absence of power, the roller shutter or grille can be manually operated via the hauling chain. The Automatic Chain Engage Mechanism (ACEM) disengages the motor to the gearbox when the chain is pulled, allowing safe and easy operation in the absence of power.

### Absolute Positioning Encoder

The eDrive +2.0 utilises Chamberlain Group's proven Absolute Positioning Encoder technology to control the door limits and direction.

### **Included Accessories**

eDrive +2.0 is supplied with the low-voltage C10A-4 wired wall control. This enables most door configuration settings to be performed at ground level and also communicates diagnostics. Also available are advanced wall controls, found on page 5.

### **Multiple Configurations**

The full range of Grifco eDrive +2.0 operators are designed to suit the needs of most traditional roller shutters. With choices of power supply, motor size, duty cycle and handing, there is a product to suit your needs.

### Security +2.0 Remote Control

eDrive +2.0 features the industry-leading SECURITY +2.0 REMOTE CONTROL radio technology. This advanced platform cuts through interference, and ensures consistent, reliable and long range operation.

Transmitter management can be easily added to the installation, with the addition of the STAR1000EVO device.

### eDrive +2.0



Clutch (C)

+

Орыа		ייווע				10	Output Shaft				
Part No.	kW	Amps	Нр	Voltage	Phase	Max. Door Size	IP Rating	Duty	No Neutral (N)	Pre-Wired (P)	IP55 (W)
eDrive +2.0 Op	erator   Low (	Cycle   Th	ree Phase	e 415V					Optional Up	ogrades	
ML5053	0.37kW	1.55A	0.5Hp	415V	3ph	18m <sup>2</sup>	IP44	Low Cycle	+	+	+
ML5103	0.75kW	2.3A	1.0Hp	415V	3ph	36m <sup>2</sup>	IP44	Low Cycle	+	+	+
ML5153	1.10kW	2.55A	1.5Hp	415V	3ph	50m <sup>2</sup>	IP44	Low Cycle	+	+	+
eDrive +2.0 Op	erator   Low (	Cycle   Sii	ngle Phase	e 240V							
ML5051	0.37kW	3.4A	0.5Hp	240V	1ph	18m <sup>2</sup>	IP44	Low Cycle	-	$\checkmark$	+
ML5102	0.75kW	6.0A	1.0Hp	240V	1ph	36m²	IP44	Low Cycle	-	$\checkmark$	+
eDrive +2.0 Op	erator   High	Cycle   Th	nree Phase	e 415V							
MH5103	0.75kW	1.95A	1.0Hp	415V	3ph	30m <sup>2</sup>	IP44	High Cycle	+	+	+
eDrive +2.0 Op	erator   High	Cycle   Si	ngle Phas	e 240V							
MH5102	0.75kW	4.35A	1.0Hp	240V	1ph	30m <sup>2</sup>	IP44	High Cycle	-	$\checkmark$	+
eDrive +2.0 Op	erator   Low (	Cycle   Th	ree Phase	e 415V   S	Smoke E	Baffle Fea	ture				
ML5103SBF	0.75kW	2.30A	1.0Hp	415V	3ph	36m²	IP44	Low Cycle	+	+	+
ML5153SBF	1.10kW	2.55A	1.5Hp	415V	3ph	50m <sup>2</sup>	IP44	Low Cycle	+	+	+

### Operators for Roller Shutters

eDrive +2.0 Operator	Low Cycle   Single Phase 240V	Smoke Baffle Feature
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ML5102SBF	0.75kW	6.0A	1.0Hp	240V	1ph	36m²	IP44	Low Cycle
When ordering please specify an "L" or an "R" at the end of every part number.								

			opropriate abbreviation (found g. For example RML5051WR
√	As standard	- Not available	+ Optional Upgrade

- 🗸 + +

### Operator Kits for Roller Shutters

Part	No.	

Нр Amps

kW

Voltage Phase Max. IP Rating Duty Door Size

#### eDrive +2.0 Operator | Low Cycle | Monitored Safety Beams | Transmitters

ML5103RO	0.75kW	2.3A	1.0Hp	415V	3ph	36m²	IP44	Low Cycle	
ML5102RO	0.75kW	6.0A	1.0Hp	240V	1ph	36m²	IP44	Low Cycle	
Kit includes eDrive +	2.0 Operator, C	210A-4 Wal	l Control, GP	S15 Safet	/ Beams a	and 2 x E96	0G Wireless	Keyring Transmitters.	



### **Expansion Board**

### eDrive +2.0 Expansion Board Kit

EB with Mounting Cradle & eDrive +2.0 High Lid

Part No.

#### Description

For Use With

eDrive +2.0 Operator

eDrive +2.0 Expansion Board

EB1

All remote access devices are compatible with eDrive +2.0 operators.



EB1 With Mounting Cradle and High Lid for eDrive +2.0



### Wall Controls eDrive +2.0 Wall Controls

Part No. eDrive +2.0 Wall	Description Control   Basic Operation	Enclosure Material		
C10A-4	Standard eDrive +2.0 Control	Plastic		
C10AW-4	Standard eDrive +2.0 Control, Waterproof	Plastic		
C30A	Standard eDrive +2.0 Control	Metal		
C10A-4 is supplied standard with all eDrive +2.0 Operators.				

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eDrive +2.0 Wall Control   Key Switch Operation	n

C21B	Includes Basic Key Isolator	Plastic
C41B	Includes Basic Key Isolator	Metal
C23B	Includes "Lock-it-Well" Key Isolator	Plastic
C43B	Includes "Lock-it-Well" Key Isolator	Metal
C21D-2	Includes Multi-Mode Key Isolator	Plastic
C41D-2	Includes Multi-Mode Key Isolator	Metal

"Lock-it-Well" Key Isolator features re-keyable cylinder. Multi-Mode Key Isolator features Off, Auto, Auto/Manual Modes.











C21D-2



C41D-2

C30A

C21B

C41B

C23B

C43B

Part No.

Description

eDrive +2.0 Wall Control   Spare Parts				
SA-500-1-SALES	C10A-4 Control Lid Assembly Only			
EB-P011-1	C10A-4 Control Base Only			
R455	Replacement key for basic locks (C21B, C41B, C21D-2, C41D-2)			



## eDrive +2.0 Control Boards





### C10A-4 Control Panel

Multiple functions at the wall control:

- Limit setting
- Power indicator
- Auto-close (10 sec increments)
- Fault diagnositcs Door direction
- Remote learning
- External key switch options • E-Stop for auxiliary emergency
- stop control

### Access Control Devices

Toggle input for access devices such as card readers, loop detectors or the Grifco STAR1000EVO transmitter management system

### Service Connection

Terminal for diagnostics & debugging of software (Grifco only)

### Mechanically -Interlocked Contactors

Safety device for motor protection

### Dock Leveller Integration

Connect to a dock levelling device via relavs 1 & 2

### 4 Relays for External Devices

Allow devices such as lights & sounders to behave in certain ways or connection to building management outputs

Relay 1: Open Status Relay 2: Closed Status Relay 3: Door Moving Status Relay 4: Service Required

(with DIP Switch configuration)

### Coaxial Antenna Connection

Connection for antenna

### External **Receiver Cards**

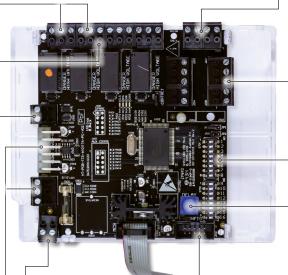
Connection for industry standard receiver cards

Connection to Wall Control Connection to the low voltage C10A-4

wall control (supplied with eDrive +2.0) or advanced wall controls

> APE Encoder Expansion Board





### Auxiliary 24V Power Input

To provide external backup supply for relays

#### Learn Button Dedicated learn button for up to 64 Security +2.0 transmitters

"BUMP"

"IR2"

"IR1"

### between 'inching' & 'latching' door behaviour in both open & closed directions

**Reset Button** 

reauired

Reset safety beams when

Inching & Latching

Dip switches offer selection

### Monitored Entrapment Protection Inputs

Inputs for 2 monitored safety beams and 1 safety edge

### 24V 150mA Power Supply

Unreggulated constant power supply for peripherals such as sirens & lights

### Power Connection

240V single phase or 415V three phase power connection

### **Door Activation Inputs**

Wire in key switches, push buttons or card readers for open, stop or close

### **Extended Limit Option**

Wired input to send door to 3rd limit position

### **DIP Switches**

16 dip switches for door configuration behaviour

### Auto-Close Fine Adjustment

Infinite adjustment of auto-close time up to 5 mins

### Service Connection

Terminal for diagnostics & debugging of software (Grifco only)

### Accessories

eDrive +2.0 is available with a huge range of accessories to improve the safety, convenience and building integration of your commercial door opening.

Please consult the relevant brochure for more information.





eDrive +2.0 operators have radio on board and can operate with a range of remote access devices. All feature advanced Security +2.0 technology to ensure secure connection and excellent range.

Note monitored safety devices are needed to allow the door to close with the single press of any button.

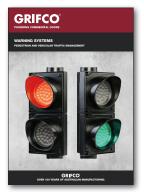


Grifco offers a range of monitored safety beams that prevent or stop a door from closing. Beams should be positioned in a manner that provides a safe and complaint door opening, in accordance with the relevant safety standard.

For the ultimate in entrapment protection, the Monitored Light Curtain provides safety across the entire working plane of the

The 1,500mm of detection field captures movement in the door opening, beyond what a single beam is capable of.

door opening.



Warning systems are an easy addition to any door installation that provide visual or audible warning to pedestrians and motorists.

Typical in carpark applications, traffic lights, flashing lights and sounders are also a useful addition for industrial applications.



The Grifco Transmitter Management Pack is ideal for multi-tenanted applications such as carparks in apartment buildings.

It combines with the STAR1000EVO transmitter management device to manage multiple transmitters for the entire building.

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