

SWING GATE OPERATORS

There is virtually limit to the capabilities of our swing gate operators; combining industry-leading functionality, world-class reliability and ease of installation, CentSys' swing gate operators truly are in a league of their own. We have even given special attention to aesthetic value, ensuring that your gate operator is as good looking as it is dependable.

Swing Gate Operator Quick Selection Guide

This quick selection guide will help you to select the perfect CentSys operator for you or your client's swing gate by providing the differentiating features and key specifications of each.



		R3	R5	
Input voltage 1		220V - 240V AC	90V - 240V AC	
Maximum gate leaf width for corresponding gate mass		2m - 250kg	2m - 600kg	
		3.5m - 150kg	3.5m - 260kg	
Typical gate opening time		11 sec	17 sec	
	Domestic	150	-	
Maximum daily operations	Light-industrial	-	250	
Onboard multichannel receiver		-	-	
Interface type		LED-based	LED-based	
Automatic beam test		-	-	

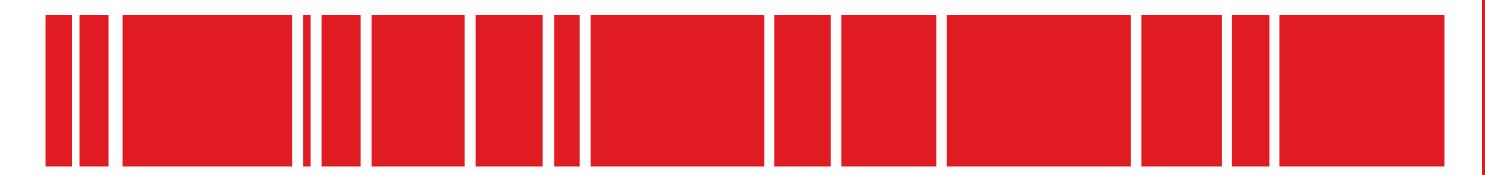
1. Can operate off a solar supply, consult Centurion Systems (Pty) Ltd for assistance







VECTOR2 400	VECTOR2 500	IT24N
90V - 240V AC	90V - 240V AC	220V - 240V AC
2m - 500kg	2m - 600kg	2m -550kg
4m - 200kg	4m - 310kg	3.5m - 400kg
14 sec	17 sec	<20 sec
100	100	-
250	250	-
√	√	-
LCD	LCD	LED-based
√	V	-



SWING GATE OPERATOR QUICK SELECTION GUIDE

VECTOR2 Linear Swing Gate Operators

Product Codes: VECTOR2 400: VEC40002V4_AU, VECTOR2 500: VEC50002V4_AU

The VECTOR2 range of linear swing gate operators are quick and easy to install, provide high push force and operate at rapid speeds while still allowing for smooth acceleration and deceleration – courtesy of full position control technology.

Models available

VECTOR2 400: A reliable operator for the majority of domestic swing gate applications **VECTOR2 500:** Features an extended stroke for large domestic and light-industrial swing gates

Main Features

Mechanical Features

- Battery backup
- Linear actuator system for quick and easy installation
- · Wallbox includes LED Gate Status Output and reliable Anti-tamper indication
- Revolutionary centrifugal brake ensures secure braking
- High push force to handle large gates and offer greater reliability in high-wind conditions
- Robust and durable construction extends operating life of the
- · In-line design for improved aesthetic appeal

Electronic Features

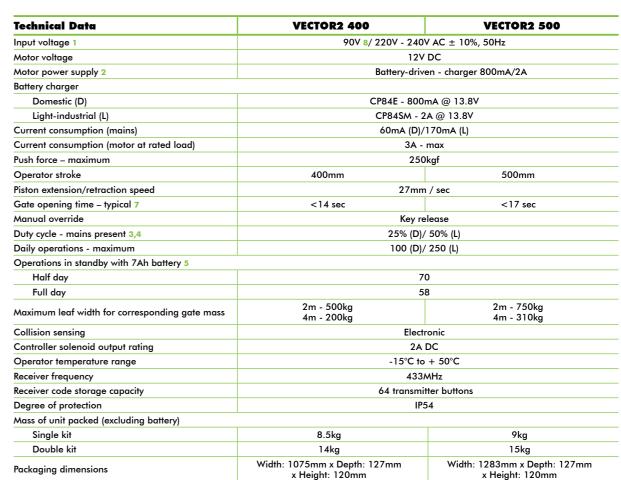
- Onboard gate lock relay can be configured to provide either a normally-open or normally-closed output, AC or DC
- Safe anti-crushing protection for greater safety keep your children, pets and vehicles out of harm's way

VECTOR2

- Quadra-drive technology Soft Start and Stop and gate speed is adjustable in both directions
- LCD interface for exceptionally easy setup

- · Diagnostic screens indicating:
- · Battery-low
- · Battery charge level
- Fuse blown
- · High current draw
- · Details of the last transmitter activated
- · Health of the drive electronics
- · Currently activated gate inputs
- See Diagnostics Made Easy for further details
- · Full position control obviates the need for endstops and makes the system quick and easy to install
- · Multiple operating features including Intruder-detection Alarms (a world first)
- Onboard CentSys code-hopping multichannel receiver with selective add and delete - operate a multitude of functions; for e.g. operate gate, switch on Pillar Light, Pedestrian Opening, etc.

Technical Specifications



- 1. Can operate off a solar supply, consult Centurion Systems (Pty) Ltd for
- 2. Can increase battery capacity for longer standby times
- 3. Based on 25°C ambient temperature and unit not in direct sunlight
- 4. Based on an operator push force of less than 50% of rated
- 5. Based on double kit excluding infrared Photocells 6. Assumes a 90° opening gate and optimum mounting position
- 7. Assumes full stroke of operator is used
- 8. CP84SM only
- D. Domestic L. Light-industrial













Cabling Requirements

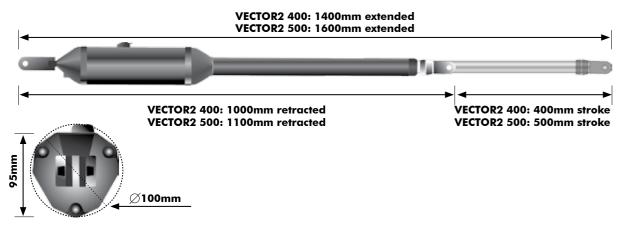
- 90V / 220V 240V AC mains cable via mains isolator switch 1(3 core LNE 0,5mm²) 2, or low-voltage 16V AC battery charger supply 4
 (2 core 1,5mm²)
- 2. Master Motor (MTR M) or Slave Motor (MTR S) cable (minimum, 2 core 2mm² + 4 core 0,5mm² multi-stranded) see note 6

Optional Wiring (all cable is multi-stranded):

- 3. Intercom, cable from control box to dwelling (n1 7 + 6 core 4 0.5mm² multi-stranded) or cable from control box to entry panel (n2 7 0.5mm² multi-stranded)
- 4. Radio receiver cable (3 core 0,5mm² multi-stranded, optional) 5
- 5. Pedestrian Keyswitch (2 core 0,5mm² multi-stranded) or optional keypad (3 core 0,5mm² multi-stranded)
- 6. Infrared Photocells or safety edge (3 core 0,5mm² multi-stranded or 4 core 0.5mm² for CE compliance)
- 7. Intercom cable (n2 + 2 core $0.5 \, \text{mm}^2$ multi-stranded) to gate station
- 8. Electric lock (2 core 1.5mm²)

4. Domestic charger only

- 9. Pillar Light cable (3 core, size according to power regulations)
- 10. Inductive loop detector for free-exit (1 core 0.5mm² multi-stranded silicone-coated)
- 1. Mains isolator must be fitted less than 1m from controller
- 2. Increase cable thickness if Pillar Lights are to be installed
- 3. Screened cable is always recommended to provide better protection against lightning earth one end of screening
- 5. For optimum range an external receiver can be mounted on the wall
- 6. CentSys has available custom VECTOR2 cable order reference: CABLEVEC68
- 7. Number of cores required by the intercom



Windloading SWING gates

In this modern age of smartphone apps and genetic engineering, there seems to be very few things that we don't have total control over. A recent radio segment even spoke about how, in a couple of years' time, we'll be printing 3D vital organs, meaning that we may even some day have control over how long we live. But one of the few things that in all likelihood will remain beyond our control is the weather. When it comes to the weather, we are forever at Mother Nature's mercy.

For exactly this reason, it's important to ensure that your swing gate operator can weather the storm, so to speak. As we mentioned in a previous article, swing gates suffer more resistance in their trajectory since they operate in multiple planes whereas sliders operate in only a single plane. One thing to keep in mind is that, the longer the gate leaf, the more susceptible it will be to unfavourable wind loading. This is simple physics, really.

The larger the surface area, the more impact an applied force will have.

Our award-winning VECTOR2 range has been outfitted with a revolutionary centrifugal brake system that is able to withstand significant force in the opposite direction, such as might be exercised by wind. To help you get the most out of your swing gate system, we have created the table below indicating the maximum wind loading conditions for corresponding gate length under which your VECTOR2 swing gate motor will still perform optimally. You'll notice that your A and B installation dimensions, as well as the percentage of coverage of the gate leaf, also play an important role when determining these values.

For a 25% covered gate: (Palisades, etc.) x 1.8m high

dimensions once installed+	Up to 1.5m	Up to 2m	Up to 2.5m	Up to 3m★	Up to 3.5m★	Up to 4m★
100mm	94km/h	48km/h	44km/h	41km/h	37km/h	37km/h
140mm	119km/h	65km/h	57km/h	51km/h	46km/h	46km/h
180mm	138km/h	78km/h	67km/h	60km/h	53km/h	53km/h
220mm	156km/h	89km/h	76km/h	67km/h	60km/h	60km/h
260mm	171km/h	99km/h	84km/h	74km/h	65km/h	65km/h
300mm	186km/h	108km/h	91km/h	80km/h	71km/h	71km/h
3.40mm	100km/h	116km/h	08km/h	86km/h	76km/h	76km/h

For a 100% covered gate: (Fully clad gates, etc.) x 1.8m high

dimensions once installed ⁺	1.5m	2m	2.5m	3m ★	3.5m ★	4m★
100mm	47km/h	33km/h	24km/h	22km/h	20km/h	19km/h
140mm	59km/h	43km/h	32km/h	28km/h	26km/h	23km/h
180mm	69km/h	50km/h	39km/h	34km/h	30km/h	27km/h
220mm	78km/h	57km/h	44km/h	38km/h	34km/h	30km/h
260mm	86km/h	63km/h	49km/h	42km/h	37km/h	33km/h
300mm	93km/h	68km/h	54km/h	46km/h	40km/h	35km/h
340mm	100km/h	74km/h	58km/h	49km/h	43km/h	38km/h

Up to Up to Up to Up to Up to

[★] An electric lock must be fitted

Refer to the VECTOR2 Installation Manual for installation details

R3 and R5 **Rotary Swing Gate Operators**

These robust rotary swing gate operators allow for fast, smooth and quiet operation of the gate. Mounted separately on a pedestal, the R3 and R5 operators are ideal for gate installations with wide pillars. Besides offering very safe anti-crushing, the operators support a host of very useful functions for looking after the gate entrance.

Models Available

The logical choice for domestic gates with large pillars

R5: This unit is well-suited for large domestic and light-industrial swing gates

Main Features

Mechanical Features

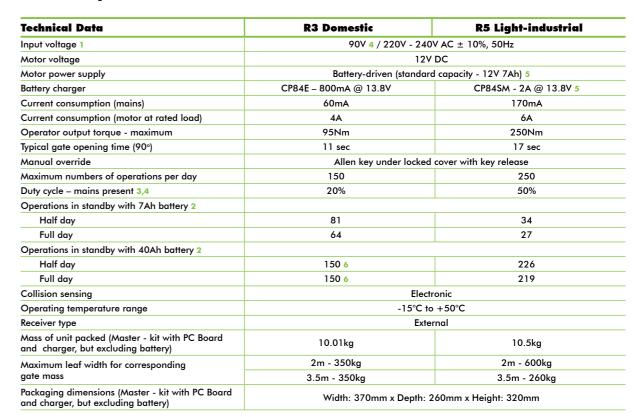
- Battery backup
- Rotary arm system ensures smooth and exceptionally reliable operation
- Both wall- and pedestal-mount configurations for greater flexibility of installations
- Fast operation for optimum security and convenience
- Whisper-quiet operation totally unobtrusive operation

Electronic Features

- Multiple programmable features to suit a wide variety of applications
- · Master motor with integrated controller and charger simplifies the installation
- Adjustable Autoclose timer gate is never left open unnecessarily

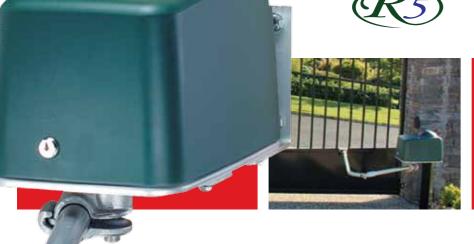
- · Diagnostic LEDs for easy programming
- · Dedicated Pillar Light Relay
- The following onboard inputs and outputs are provided:
- Free-exit input
- Trigger input
- · Solenoid lock connection
- 12V DC output for auxiliary devices such as external receivers, gate Photocells, etc.
- · Input for infrared Photocells
- Pedestrian Opening input
- Dedicated Holiday Lockout input
- Fuse-protected

Technical Specifications



- 1. Can operate off a solar supply, consult Centurion Systems (Pty) Ltd for
- 2. Based on 4m gate, excluding infrared Photocells
- 4. CP84SM2A only
- 5. Can increase battery capacity to 40Ah for longer standby times 6. Limited by number of maximum operations per day
- 3. Based on 25°C ambient temperature and unit not in direct sunlight



















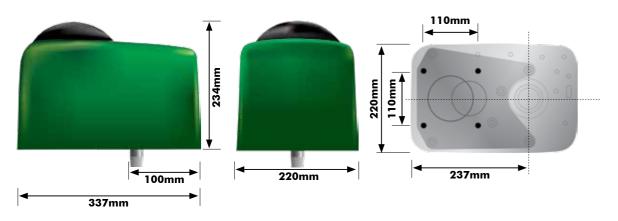


Cabling Requirements

- 220V 240V AC mains cable via double pole mains isolator switch (3 core LNE 1.5mm² 1 SWA 2) or low-voltage cable from transformer (34V secondary @ 800mA) to battery charger (2 core + earth 1.5mm² Norsk)
- 2. Master Motor (MTR M) or Slave Motor (MTR S) cable (minimum, 3 core 2.5mm² + 3 core 0,5mm² multi-stranded)

Optional Wiring (all cable is multi-stranded):

- Intercom, cable from control box to dwelling (n1 6 + 6 core 3 0.5mm² multi-stranded) or cable from control box to entry panel (n2 6 0.5mm² multi-stranded)
- 4. Infrared Photocells (3 core 0.5mm² multi-stranded)
- 5. Access control device (3 core 0.5mm² multi-stranded 4)
- 6. Pedestrian Keyswitch (2 core 0.5mm² multi-stranded) or
- 7. Keypad (3 core 0.5mm² multi-stranded)
- 8. External radio receiver (3 core 0.5mm² multi-stranded 5)
- 9. Pillar Lights (3 core LNE SWA 2, size according to power requirements)
- 10. Ground loop for free-exit (1 core 0.5mm² multi-stranded silicone-coated)
- 11. Electric lock (2 core 1.5mm²)
- 1. Possibly increase cable thickness if Pillar Lights are to be installed
- 2. SWA steel wire armoured type of cable must adhere to municipal bylaws and preferably be screened. Screening provides better protection against lightning earth one end of the screening
- 3. Allows for all features such as Pedestrian Opening, Status LED, etc. to be operated from the intercom handset inside the dwelling
- 4. Number of cores and type of cable could vary depending on the brand of access control system being used
- 5. For optimum range an external radio receiver can be mounted on the wall
- 6. Number of cores required by the intercom



Multi-lingual Class technical support

Thanks to the recent addition of a formidable team of tech-savvy polyglots to our technical support call centre, we are now not only able to provide you with world-class support on your CentSys-manufactured or supported product, but chances are we are able to do it in your own language! C'est formidable!

The CentSys technical support call centre now offers support in all eleven official South African languages as well as French, Portuguese and Spanish. In addition to their linguistic abilities, all of our support technicians are highly skilled and hold various technical qualifications; they have also received extensive training on all CentSys access automation products from both our product trainers and our support training facilitator, Dumisani Sibeko. You're in good hands, mon ami. If you're based locally, you can reach these very astute tech support guys and gals on our ShareCall number, 0861 003 123, or on +27 11 699 2481 if you're dialling from outside of South Africa. We'd also like to remind you about some of the other platforms through which you can make contact with us:

It turns out social media channels are good for more than playing Farmville and looking at pictures of cats in amusing poses with adorably misspelt captions. Who knew? We actively monitor these channels so go on and send us your questions, compliments or complaints. Do it!

We have an entire channel on YouTube chock-a-block with useful how-to tutorials covering our most popular gate motors and access control products. So, while YouTube has mostly

been taken over by videos featuring the scandalous exploits of pop stars, it's good to know that one can still learn something!

There is also a comments section for you to post your questions.

If you're looking for a nice read that's also educational, we believe our blog checks both of those boxes.

Everything from improving your intercom's speech

quality to getting
better range out of
your remote control
is covered on the
official CentSys
blog.

Whether you're looking to download product documentation, register your device, use the G-WEB online interface, find out more about one of our products or just get to know us a little

www.CentSys.com is the place to be!

Even in the so-called Digital Age, there's still no substitute for good old-fashioned human interaction, and with eight branches nationwide and one in Nigeria, we're just dying to meet you in person!

better.

IT24N Underground Swing Gate Operator

Product Code: BEN9591457 / BEN9150039

A powerful underground swing gate operator for discerning home owners that do not want to see an operator moving their gates, the IT24N provides reliable swing gate automation for gates up to 3.5 metres wide without impacting the aesthetic appeal of the gate. These operators are also ideal for operating gates with limited or sidewall space.

Suitable for domestic and light-industrial applications providing safe, quiet and reliable operation.

Main Features

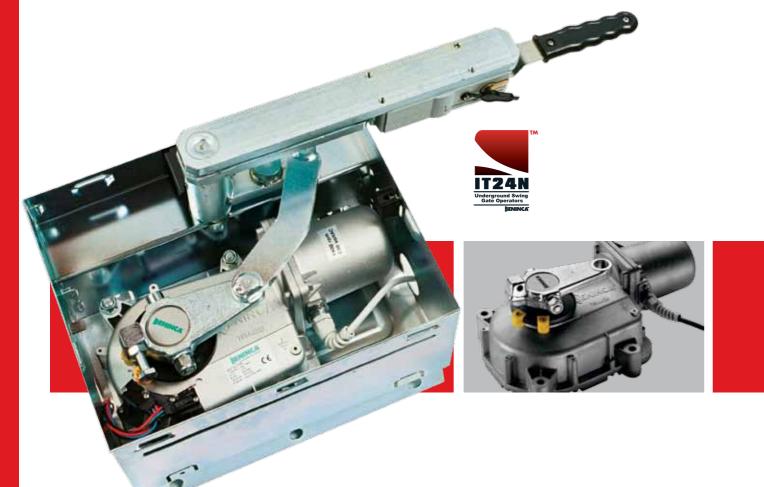
Mechanical Features

- Hidden from view for greater aesthetic appeal
- Battery backup
- Extremely potent and reliable motor reduction unit for smooth and dependable operation

Electronic Features

- Multiple operating features to suit a wide variety of applications
- Proven lightning protection for greater reliability
- High immunity to noise not affected by external interference
- Micro controller platform allows customisation improved versatility
- Trigger input with local test button useful for testing the operation of the device when a transmitter is not available
- Local and remote multi-function Gate Status LED

- Pedestrian Opening input prevents unauthorised vehicle access
- Photocell input connecting infrared Photocell dramatically increases the safety of the automated system
- Free-exit input (only opens gate) ideal for fitting free-exit ground loops or pushbuttons in townhouse complexes and high-volume vehicle access applications
- Holiday Lockout input ensures that gate cannot be opened when home owners are away
- Timed potential-free contact (e.g. Courtesy Lights)
- · Low-voltage switching of potential-free contact
- Selectable/adjustable Autoclose timer (5 45 seconds)
- · Override of Autoclose timer via trigger input
- · Local diagnostic LEDs for easy programming
- Available in 12V and 24V DC variants





Technical Specifications

Technical Data	IT24N			
Input voltage 1	220V - 240V AC ± 10%, 50Hz			
Motor voltage	24V DC			
Motor power supply 2	Battery-driven 500mA charger			
Operator output torque	360Nm			
Gate opening time – typical 3	<20 sec			
Duty cycle – mains present 4	50%			
Daily operations – maximum	200			
Operating temperature	-15°C to +50°C			
Maximum leaf width for corresponding gate mass	2m – 550kg 3.5m – 400kg			
Allowable wind loading – 100% coverage	2m – 45km/h 3.5m – 25km/h			
Degree of protection	IP67			
Boxed shipping weight (operator and foundation plate)	20.5kg			
Dimensions	Width: 350mm x Depth: 200mm x Height: 133mm			

- 1. Can operate off a solar supply, consult Centurion Systems (Pty) Ltd for assistance
- 2. Battery-driven with two x 7Ah batteries (can be upgraded for longer power failure autonomy)
- 3. Assumes a 90° opening gate
- 4. Based on 25°C ambient temperature and unit not in direct sunlight











Cabling Requirements

- 1. 220V 240V AC mains cable via double pole mains isolator switch (3 core LNE 1.5mm² 1 SWA 2) or low-voltage cable from transformer (34V secondary @ 800mA) to battery charger (2 core + earth 1.5mm² Norsk)
- 2. Motor cables (2 core + earth 1.5mm², 3 core 0.5mm², multi-stranded 2)

Optional Wiring (all cable is multi-stranded):

- Intercom cable from control box to dwelling (n1 7 + 6 core 3 0.5mm2 multi-stranded) or cable from control box to Entry Panel (n2 7 0.5mm² multi-stranded)
- Photocells (3 core 0.5mm² multi-stranded)
- Access control device (3 core 0.5mm² multi-stranded 4)
- Pedestrian Keyswitch (2 core 0.5mm² multi-stranded) or
- Keypad (3 core 0.5mm² multi-stranded)
- External radio receiver (3 core 0.5mm² multi-stranded 5)
- Pillar Lights (3 core LNE SWA 2, size according to power requirements)
- 10. Inductive loop detector for free-exit (1 core 0.5mm² multi-stranded silicone-coated 7)
- 11. Electric lock (2 core 1.5mm²)
- 1. Possibly increase cable thickness if Pillar Lights are to be installed
- 2. SWA steel wire armoured type of cable must adhere to municipal bylaws and preferably be screened. Screening provides better protection against lightning earth one end of the screening
- 3. Allows for all features such as Pedestrian Opening, Status LED, etc. to be operated from the intercom handset inside the dwelling
- 4. Number of cores and type of cable could vary depending on the brand of access control system being used







- 5. For optimum range an external radio receiver can be mounted on the wall
- 6. Consult manufacturer of loop detector for specific details







Answer your intercom... from just about anywhere!

Installing a G-SPEAK GSM-based intercom is so quick and easy, you'll be on the beach in no time

Main Features:

- Your mobile phone becomes your intercom handset making it appear that you are always home, greatly increasing security
- Up to four input/output channels with 100 authorised users *

Add and delete authorised numbers quickly and securely via SMS

Can be powered via most gate motors

Easy to install and commission

The G-SPEAK is so much more than an intercom system! With its simple, effortless dialling to dedicated numbers, it's also ideal for:

Small children to reach their parents

 Elderly persons to reach their children and caregivers



Swing Gate Operator Accessories



A. CentSys Photocells

ess photocells: PHOTONIVI AU: i5 wired photocells: I5V3 AU





Always recommended on any gate automation installation to increase the safety of the automated system.

C. Solar Supply



Alternative means of powering the system – consult Centurion Systems (Pty) Ltd for details.

E. G-SWITCH-22 GSM Device



Allows for monitoring and activating the operator, via your phone, from anywhere in the world with GSM coverage.

B. FLUX SA Loop Detector



Allows free-exit of vehicles from the property (requires ground loop to be fitted).

D. CentSys Transmitter

Product Code: One-button: TX1NV2433 AU; Two-button: TX2NV433 AU; Three-button: TX3NV2433 AU; Four-button: TX4NV2433 AU



Incorporates ultra-secure code-hopping technology. Available in one-, two-, three- and four-button variants.

F. SMARTGUARD or SMARTGUARDair Keypad

Product Code: SK/1BLK_AU, SK/AIRBLK_AU



Cost-effective and versatile wired or wireless keypad, allowing access for pedestrians.

www.CentSys.com.au



G. Pedestrian Keyswitch



Basic key-operated switch for allowing access for pedestrians.

I. SOLO/LATTICE Proximity Access Control

Product Code: SOLO0001V1_AU / LATC0003V1_AU



Proximity reader for allowing access for both pedestrians and vehicles.

K. VECTOR2 Cable



VECTOR2 cable has been optimised for the VECTOR2 range of swing gate operators to provide reliable operation time and time again.

Steel pole for mounting intercom gate station or access

H. POLOphone/G-SPEAK Intercom

Allows visitors to communicate with people inside in order

J. Gooseneck Product Code: XGSN-60000 or XSGN-6GIVO

to gain access to the property.

L. VECTOR2 Wallbox



A fully weatherproof wall-mounted enclosure for your VECTOR2 operator's electronics, providing a neat and convenient central point of operation.

VECTOR2 Optional Mounting Accessories

control.

M. Gate Adaptor Kit



This kit is used when a need arises to spread the load absorbed by the gate bracket over a wide area of the gate surface. The Spreader Plate can be welded between bars or onto an existing beam. This should be used when the gate is made of thin-section material, and is highly recommended for all light-industrial installations.

N. Mechano Kit



The securing plates in this kit have been designed to secure to either the standard-, or high-security wall brackets. The position of the holes in the securing plate ensures maximum flexibility in selecting the most appropriate mounting point for the operator.

O. High-Security Kit



The High-Security Wall Bracket enables the installer to spread the load of the cyclic repetition of the gate opening over a wider wall area, along with providing more static strength against attempted forced entries.

The Long Security Plate enables the installer to position the operator according to the installation tables easily with a minimum of cutting, grinding and welding.

P. Wall Adaptor Kit



The Wall Adaptor Plate spreads the load of the wallbracket over four holes vertically. This kit can be used with either the standard-, or high-security wall brackets.



VECTOR2

R3 R5 controller

Wallbox

33Ah battery



R3 R5





IT24N

VECTOR2 LED External Indicator Board



CP77 24V controller







2A Switch Mode







VECTOR2 Mounting

- Gate bracket
- Pins
- Wall bracket

Swing Gate Operator Kits

Single VECTOR2 400 or 500 Kit

Product Code: VEC4KITSLIND or VEC5KITSLIND

- 1 x Operator 1
- Mounting hardware M
- 1 x Controller A
- 1 x Wallbox (includes mains isolator and external status LED indicator board)1 x 7Ah battery F
- 1 x 2A Switch Mode charger H
- 1 x 7Ah battery I
- 1 x LED External Indicator Board D
- 1 x Onboard CentSys multichannel receiver
- 2 x 4 button CentSys transmitters E

Single R3/R5 Pedestal/Wall-mount Kit

Product Code: Refer to price lists

- 1 x Operator 2
- Mounting hardware M
- 1 x Charger (R3: 800mA) G
- 1 x Charger (R5: 2A Switch Mode) H
- 1 x Controller B
- 1 x 7Ah / 33Ah battery I

Single IT24N kit

Product Code: BENUG24KITS

- 1 x Operator (including foundation box, cover plate, and internal linkages) 3
- 1 x Controller c
- 1 x Wallbox F
- 1 x CP24 24V charger
- 2 x 7Ah battery I

Double VECTOR2 400 or 500 Kit

Product Code: VEC4KITDLIND or VEC5KITDLIND

- 2 x Operators 1
- Mounting hardware M
- 1 x Controller A
- 1 x Wallbox (includes mains isolator and external status LED indicator board)1 x 7Ah battery F
- 1 x 2A Switch Mode charger H
- 1 x 7Ah battery I
- 1 x LED External Indicator Board D
- 1 x Onboard CentSys multichannel receiver
- 2 x 4 button CentSys transmitters E

Double R3/R5 Pedestal/Wall-mount Kit

Product Code: Refer to price lists

- 2 x Operator 2
- Mounting hardware M
- 1 x Charger (R3: 800mA) G
- 1 x Charger (R5: 2A Switch Mode) H
- 1 x Controller B
- 1 x 7Ah / 33Ah battery I

Double IT24N kit

Product Code: BENUG24KITD

- 1 x Controller c

• 2 x 7Ah battery I

- 1 x Wallbox F
- 2 x Operators (including foundation boxes, cover plates, and internal linkages) 3

- 1 x CP24 24V charger

- R3 R5 Mounting hardware
- Square tube Pedestal-mount only (R3: 75 x 75mm; R5: 100 x 100mm)
- · Wall bracket Wall-mount only
- Gate bracket
- Drive arm clamp with wedge (includes bolts)
- Connecting pole

VECTOR2 controller

CentSys

7Ah battery

• Padlock and padlock shield (optional extras)