

**CENTURION
D3, D5, A5, A10
and FAAC 844
SLIDING GATE AUTOMATION**

Product Code: CP70SLIDRO

USER GUIDE

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CENTURION
THE AUTOMATIC CHOICE



Product Guarantee

All CENTURION products are manufactured with extreme care, thoroughly inspected and tested. They are guaranteed for a period of 12 months, provided that proof of purchase documentation is submitted with any claim.

The guarantee only covers repair, components and labour, provided that the equipment is returned to our workshop.

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CENTURION SYSTEMS (PTY) LTD has been manufacturing automatic gate systems since 1987, and is committed to providing reliable, cost effective solutions in the field of access automation.

CENTURION strives to give service and backup second to none. Our engineers are available to give sales support, installation training, and answers to technical or installation problems.

The equipment is installed worldwide and is available through a network of distributors.

CENTURION is an ISO 9001 registered company, continually striving to update its products in line with world trends to ensure maximum customer satisfaction.

Further information is available on our website www.centsys.co.za

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Table of Contents

INTRODUCTION	7
MODELS COVERED.....	7
MAIN FEATURES	7
NORMAL OPERATION.....	9
Radio transmitter.....	9
Intercom pushbutton	9
Pedestrian keyswitch	10
CONTROLLER FEATURES & FUNCTIONS	11
Introduction.....	11
Anti-crushing device	11
Automatic alignment	12
Automatic closing	12
Auto-close override	12
Mains failure detection	13
Battery low protection	13
Thermal overload	14
Origin sensor fail	14
Lightning protection	14
ANCILLARY EQUIPMENT	14
Protection beam	14
Holiday lockout	15
Courtesy light timer	15
Pre-flashing	15
Gate status indication	16
Solar panel	17
DC converter module	17

SPECIAL FUNCTIONS 19

 Reversing mode 19

 Condominium 19

 Passive infra red auto-close (PIRAC) 19

MANUAL RELEASE 20

 Re-engaging the manual release. 21

BASIC MAINTENANCE 21

 General. 21

 Battery 22

 Gearbox oil level 22

 Power supply 22

 A10 Inverter module 23

SPECIFICATIONS 24

 D3/D5/A5/ operator 24

 A10 operator 24

 A10 DC converter 25

 FAAC 844 25

DECLARATION OF CONFORMITY 26

COMMISSIONING CHECK SHEET 27

Introduction

This guide highlights the features and operation of CENTURION SLIDING GATE OPERATORS to ensure that YOU, the user, get the most from your system. Basic maintenance is also described, but in the event of product malfunction, you are advised to contact your installer, or your local Centurion branch (refer to back page).

Models Covered

- CENTURION D3
- CENTURION D5
- CENTURION A5
- CENTURION A10
- FAAC 844 (with Centurion CP81 controller)

Main Features

D3, D5, A5

A key feature of these products is the chassis/gearbox which is moulded from a high tech engineering polymer. The user benefits from this material in terms of its aesthetics, and corrosion free properties. Due to the self locking action of the internal gearset, the unit is resistant to forced entry.

An optional theft resistant cage is available to give additional peace of mind.

A revolutionary aspect of the CENTURION range of operators is the limit switch mechanism. Mounted internally, and therefore tamper proof, the limit switch monitors the speed and location of the gate, ensuring reliable and safe anti-crushing protection and accurate position control.

Precise control of the gate stopping position is achieved by a high resolution encoder wheel and opto-electronic sensor built into the unit.

The electronic controller has many advanced features including variable sensitivity collision detection, adjustable delay autoclose, pedestrian opening, etc. Advanced lightning protection is built into the controller as standard. On D3/D5 domestic

models a 12V battery is the primary power source thus providing a limited number of operations in the event of a mains power failure. This battery is normally charged by an internal 220V* charger. For sites where a 220V mains supply is unavailable, an external 220-12V adaptor, or solar panel is optional (see SOLAR PANEL, Page 17 for more details about solar charging)

In multi user applications the D5 operator is available with a transformer rectifier unit (power-pack) which replaces the battery and charger. The power-pack operates directly off a 220V* mains supply only. Battery back-up is available by simply adding an externally mounted battery.

**Alternative voltage ratings are available on request*

A10

Engineered for industrial and high duty sites, the A10 is built around a precision machined, die cast aluminium chassis/gearbox incorporating a self locking gearset. Accordingly the unit is resistant to forced entry.

The integral electronic controller has similar functions to those of the D3/D5 and uses the same technology in terms of origin & encoder signal inputs. Unique to the A10 is the high speed mode, enabling adjustable opening/closing speeds up to 30m/min.

The key to the A10's outstanding torque and duty cycle lies in the 3-phase induction motor and electronic inverter that form the heart of the system. Single-phase 220V AC power is converted into variable frequency 3-phase power, allowing electronically controlled soft starting and stopping of the motor.

An optional DC converter is available, containing 12V batteries and UPS type backup circuits. This enables the A10 to continue operating for a limited period in the event of a power failure. Another option is the anti theft cage, to give additional peace of mind.

“Endurance” & “Heavyweight” derivatives of the A10 are available to suit high duty, and high gate mass sites respectively.

FAAC

All FAAC models feature die cast aluminium gearboxes enclosing a self locking gearset.

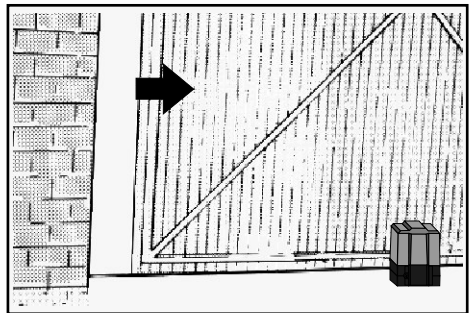
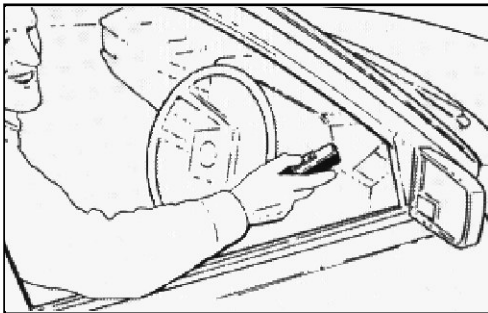
The FAAC 844 models employ an inductive proximity limit switch, which has no moving parts, thereby improving reliability. Electronic controllers are integral with all 844 models except the 844 three-phase model, in which case the electronics are housed in a separate wall mounted enclosure.

Normal Operation

The gates can be opened or closed in the following way:

RADIO TRANSMITTER

A handheld radio transmitter, carried in the motor car, sends a coded signal to the receiver mounted in the control enclosure to open or close the gate.



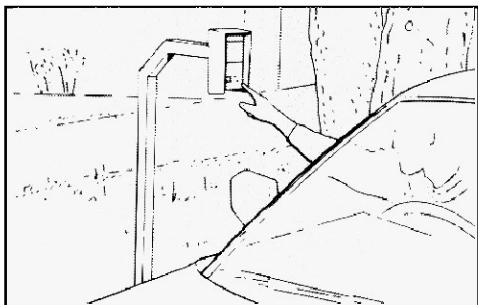
-Press once for approximately 1 second to initiate gate motion.

If the transmitter is pressed while the gate is either opening or closing the gate will immediately stop. Pressing the button again will cause the gate to reverse.

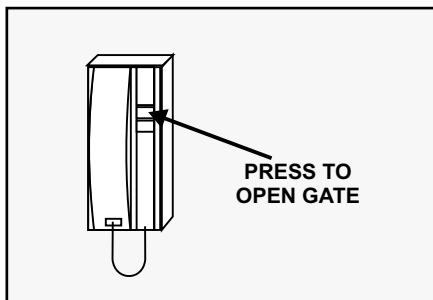
If the automatic closing feature (see *Controller Features and Functions*) has been selected and the gate is closing automatically when the transmitter is pressed, the gate will stop and stay in that position. Pressing the button again will cause the gate to reopen. If the gate is opening with the automatic closing facility selected, and the transmitter is then pressed, the gate will stop. The gate will close automatically after the auto-close delay time.

INTERCOM PUSHBUTTON:

Most automatic gate installations are fitted with an intercom which provides for communication between the house and the gate. The intercom handset is usually



Visitor outside gate requests entrance.

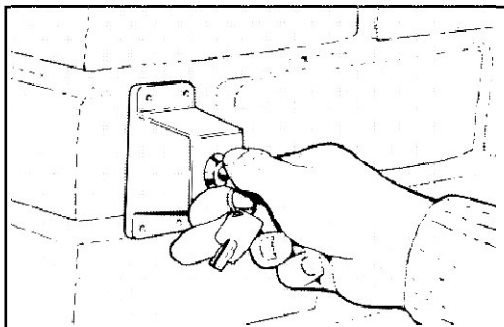


Gate opened from intercom pushbutton inside house.

provided with a "Gate" or "Door Release" pushbutton which, when pressed, sends a signal to the gate controller to open the gate.

The sequence of operation of this pushbutton is identical to the radio transmitter described under "Radio Transmitter".

PEDESTRIAN KEYSWITCH (OPTIONAL)



The pedestrian keyswitch is fitted to the gate pillar. Its purpose is to open the gate a limited amount for pedestrians.

- Fit key into keyswitch and turn key clockwise as though starting a motor car.
- Let key spring back to rest position and remove key immediately.

To allow time for removal of the key, there is a 5 second delay before the gate begins to open. If the courtesy light is connected to the control card it will flash five times, indicating that the signal has been accepted.

The gate will open approximately 1 metre and then stop. After 5 seconds the gate will automatically close.

The gate can be held open by keeping the key turned in the keyswitch. As soon as the key is released back to its normal rest position, the gate will close after the 5 second

delay. (The opening distance and the time that the gate remains open can be adjusted to suit. Default values are described above)

If a protection beam has been fitted (refer section “Protection Beam”) and the beam is broken while the gate is closing, the gate will stop. The gate will remain in that position while the beam is broken and only close 5 seconds after the beam has been cleared.

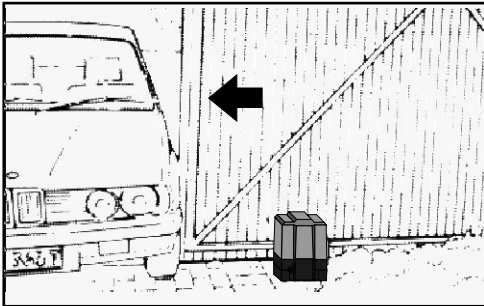
Controller Features and Functions

INTRODUCTION

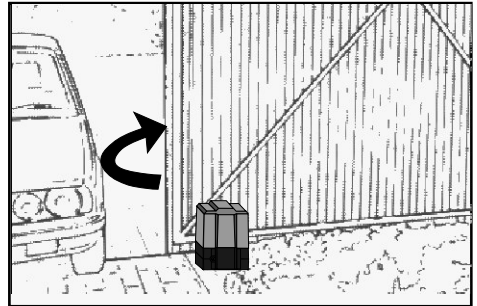
The electronic controller synchronizes the functions of the gate operator. Although the controllers for each operator are marginally different, the functions and safety features which are described below are similar.

ANTI-CRUSHING DEVICE

Gate Closing

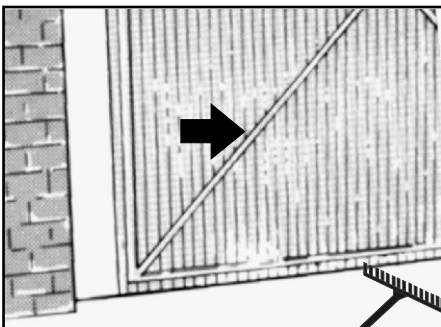


Gate closing into an obstruction

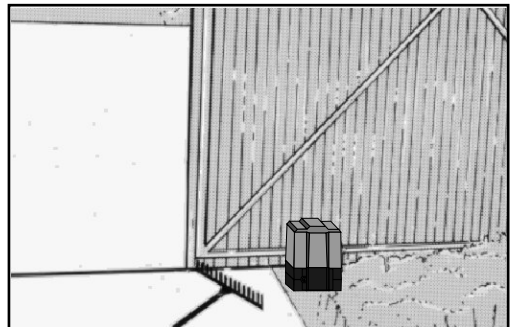


Gate automatically reverses and re-opens

Gate Opening



Gate opening



Gate stops on hitting the obstruction

! (For CENTURION models only). If the gate is obstructed repeatedly 4 times, either opening or closing, often referred to as multiple collision, the gate will stop and will not respond to trigger inputs for 2 minutes.

After this time the gate will once again respond to command signals. This function is a warning to the user that the obstruction must be removed. (The number of obstructions before the system will shutdown can be adjusted to suit, default is 4).

The FAAC units do not reverse on striking an object when in the closing mode. For both opening and closing modes, the mechanical clutch will start slipping and if no operator input is provided, the motor will automatically cutout after 1 minute.

AUTOMATIC ALIGNMENT

CENTURION and FAAC operators are fitted with a manual override mechanism. This is to allow the gate to be operated in the event of a total malfunction of the equipment. It is also required if the mains power has failed in the case of the 220V operators (A5, A10 and FAAC models).

In the case of the CENTURION operators (D3, D5, A5, A10) when a command signal is given after the gate has been moved manually and then re-engaged, the gate will drive to either it's fully open, or closed, position. Referred to as automatic alignment, the gate can only be stopped, but not reversed until the alignment cycle is complete. The system will then revert to normal operation.

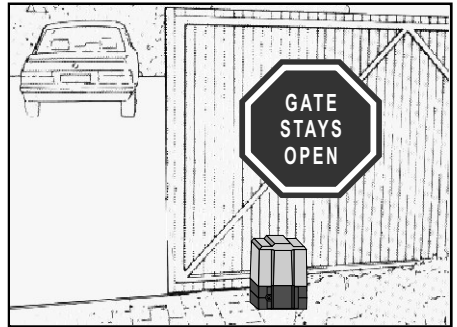
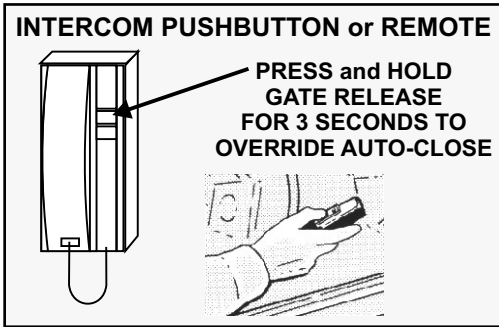
The A5 operator will also perform an automatic alignment after a mains power failure. The FAAC units do not have automatic alignment.

AUTOMATIC CLOSING (OPTIONAL)

The system has the facility to automatically close the gate after it has been opened. The default setting is that this facility is disabled. The time that the gate remains open can be adjusted up to 4 minutes where the default is 15 seconds.

AUTO-CLOSE OVERRIDE

The auto-close function can be temporarily overridden by holding down the remote control pushbutton or intercom gate release when opening the gate, until the gate stops. (Default setting is 3 seconds. It can be changed to suit) This confirms that the auto-close has been overridden. On releasing the button the gate will continue to open fully, and remain open as long as required. Closing the gate by using either the



transmitter or intercom gate release button resets the system back to auto-close. If a gate status indicator (LED) has been fitted inside the house (refer below) an additional confirmation of the functioning of the override is provided. The status LED will stop flashing and remain ON when the auto-close has been overridden.

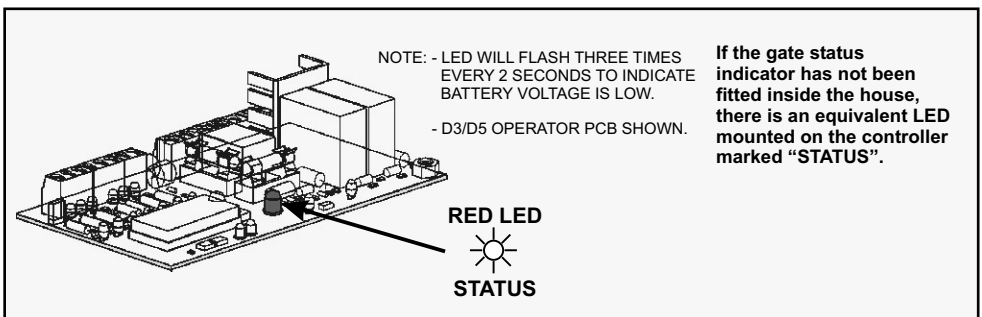
MAINS FAILURE DETECTION (D3/D5 ONLY)

Although these systems will continue to operate in the event of a mains power failure due to the built in battery, it is important to register that there is a problem before the battery is run flat.

The controller (CP80) monitors whether mains voltage (via the charger transformer) is present. If not, the gate status LED, will flash twice every 2 seconds to indicate mains loss.

BATTERY LOW PROTECTION (D3/D5 ONLY)

The controller has circuitry that monitors the state of the battery. During a power failure energy is drawn from the battery, but not replaced. To prevent the battery running flat, and being damaged, the protection circuitry shuts off the gate system when the battery voltage drops below 10.6 volts.





THERMAL OVERLOAD (A10 ONLY)


In the event of the A10 operator being used excessively and the duty cycle rating of the unit exceeded, the unit will shut down due to thermal overload in order to protect the system from abuse.

The unit cannot be re-operated until the unit has cooled. To provide indication to the user that this is the cause of the fault the STATUS LED will flash 2 times every 2 seconds.

ORIGIN SENSOR FAIL (A10 ONLY)

The A10 operator uses an origin switch to ensure it stops in the correct open and closed positions. If this switch fails for any reason, the operator will shut down. To provide indication to the user that there has been an origin sensor failure, the STATUS LED will flash 3 times every 2 seconds.

This condition is treated as serious and the unit cannot be activated again until the gate has been moved manually either fully open or fully closed, ensuring that the gate magnet has passed the sensor. If the sensor registers correctly, the unit will reset, and can be operated again. If the sensor does not re-register, the unit will remain in the locked state.

 IF the system cannot be reset by following the procedure above, it is a clear indication that the SENSOR is faulty or not switching reliably. It is important that the operation of the SENSOR is checked by a qualified technician.

LIGHTNING PROTECTION

All CENTURION controllers have on board lightning protection. The protection circuitry was designed in conjunction with the CSIR. Provided that the system has been properly earthed the protection will significantly improve the resistance of the system against lightning strikes.

Ancillary Equipment

PROTECTION BEAM (OPTIONAL, BUT RECOMMENDED)

An infrared beam, or underground loop, across the gate entrance may be connected to the controller as an additional safety feature. When a motor vehicle activates the loop or beam the following occurs:

- If the gate is closing, it will immediately stop and reopen.
- If the transmitter or intercom gate release pushbutton is pressed while the beam is broken, or the loop activated, the gate will remain open. The auto-close time will restart its countdown.

HOLIDAY LOCKOUT (OPTIONAL)

A keyswitch can be connected to the gate system that will allow the system to be totally immobilised. The keyswitch is mounted with access from the outside of the property. When the keyswitch is OFF, the gate system will shut down and it will not be possible to operate the gate. When the keyswitch is ON, the gate system will operate normally.

This is an added security feature should the property be unattended for an extended length of time.

The holiday lock out facility could also be activated using a keypad, radio receiver with a latching output or an ON/OFF toggle switch.

COURTESY LIGHT TIMER (OPTIONAL)

If a 220V power supply is available at the gate, timed courtesy lights can be connected through the controller. Each time the gate is opened, the lights will switch on for a period of time and switch off. The time can be adjusted up to 40 minutes in 10 second increments.

A courtesy light pushbutton can be mounted inside the house (typically on the intercom) allowing convenient control of the lights. By pressing the pushbutton.

By pressing the courtesy light pushbutton (if fitted), momentarily the light will switch on for the light timer period and automatically switch off. By pressing and holding the pushbutton down for 3 seconds the lights will switch on and remain on. The status LED (if fitted) will flash once every 2 seconds to confirm this. To switch off the lights press the pushbutton momentarily. If courtesy lights are fitted to the controller, and the pedestrian keyswitch is operated, the courtesy lights will flash for 5 seconds before the gate opens. This warns the pedestrian that the gate will open within 5 seconds allowing time to remove the key and stand back from the gate.

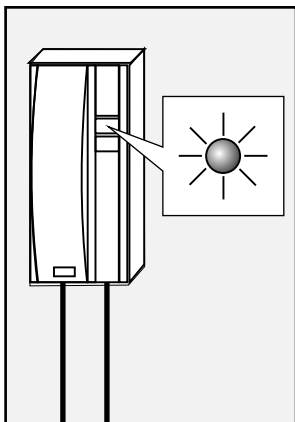
PRE-FLASHING

The courtesy light can be programmed to flash for a period of time before the gate

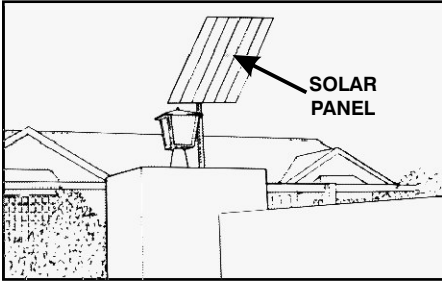
starts to open or close. The courtesy light timer will function as normal. (Preflash time can be adjusted to suit, from 1 to 250 seconds, where the default is 5 seconds). By default pre-flashing is off.

GATE STATUS INDICATION (OPTIONAL)

The controller can provide visual indication inside the house of the position of the gate and the condition of the battery and power supply. A LED is typically mounted on the intercom inside the house. The different signals of the LED are shown in the following table:



<i>LED STATUS</i>	<i>INDICATION</i>
Slow regular flash	Gate is opening
Quick regular flash	Gate is closing
Off	Gate is closed
On	Gate is open
1 Flash/2 seconds	Courtesy light switched on (see Courtesy Light Timer, page 15)
2 Flashes/2 seconds	Mains failure (D3/D5 only. See Mains Failure Detection, page 13) Or: Over temperature (A10 only. See Thermal Overload, page 14)
3 Flashes/2 seconds	Battery low (D3/D5 only. See Battery Low Protection, page 13) Or: Missed origin (A10 only. See Origin Sensor Fail, page 14)
4 Flashes/2 seconds	Collision shutdown (Except FAAC units) (See Anti-crushing Device, page 11)



SOLAR PANEL (OPTIONAL ON D3/D5 SYSTEMS ONLY)

The battery of the 12V DC operator may be charged using a solar panel in place of the conventional charging circuit. A 12 Watt panel will provide on average 10 - 12 operations of an average gate without causing the battery to discharge over a period of time. It is necessary to have at least a 35A/H deep cycle low maintenance battery fitted, in order to provide sufficient backup capacity during days of poor weather. For further details contact your local CENTURION agent.

DC CONVERTER MODULE (OPTIONAL FOR A10 ONLY)

The DC converter module allows the A10 gate operator to function from a 12V battery in the absence of AC mains. The converter module steps up the 12V battery supply to 310V DC. The inverter drive on the A10 operator then switches the high voltage DC supply to run the three phase induction motor.

⚠ WARNING The 310V DC supply is hazardous and potentially lethal. The A10 converter module should be installed and maintained by a qualified installer.

The following features are of interest to the end-user:

The converter module includes battery protection circuitry. This circuitry prevents the converter module from being damaged in the event of reverse polarity connection. In addition the circuitry automatically disconnects the battery when the battery drops into a low-voltage state. This prevents the converter module from running the battery flat and potentially damaging the battery.

There is a push button on the converter module that manually reconnects the battery in the event of a power failure and low-battery voltage state. Upon activation, and if the battery voltage exceeds the low-voltage parameter, the protection circuitry will automatically keep the battery connected to the converter. If, on the other hand, the battery voltage is below the low-voltage parameter, the protection circuitry will not connect the battery to the converter.

The DC Converter module has three status LED's. These LED's indicate battery status, AC mains status, and lastly the temperature of the converter. The LED's operate in the following manner:

LED	When <i>ON</i> , it indicates:	Logic	When <i>OFF</i> , it indicates:	Logic
Battery status	Battery is fully charged		Voltage low	DC converter will shut down until battery reaches normal operating voltage.
AC Mains	Mains present		Mains failure	DC converter will power A10 until mains restored or battery voltage < threshold
Converter temperature	Overheated	DC converter will shut down until it has cooled to normal operating temperature range.	Converter temperature normal	

The converter module has a current limiting fuse on the high-voltage supply. Caution must be exercised when checking this fuse. The procedure to replace the fuse is outlined below:

1. Disconnect the mains from the entire system. This includes the A10, and the converter module.
2. Disconnect the battery.
3. Disconnect the 6-way header that connects the converter module to the A10. The converter module is now off, and the board is safe to handle.
4. Remove the fuse protection housing (If the housing is still in place).
5. Remove the fuse and replace it with a 5A, 250V, fast-blow fuse. (Dimensions 5x20mm).
6. Reconnect the 6-way header.
7. Reconnect the battery.
8. Reconnect the mains.

Upon reconnecting, if the converter module fails to function correctly in the event of a power failure, refer to an installer or service technician.

Special Functions

REVERSING MODE

Apart from the standard mode of operation as described in the section Normal Operation, the system offers another mode of operation. Referred to as reversing mode, if the transmitter is pressed while the gate is moving, the gate will automatically reverse direction. The gate can never be left in mid position with this mode selected.

Other modes of operation which can be selected and operated using a radio transmitter are CONDOMINIUM and PIRAC, which are described below:

CONDOMINIUM

The system can be programmed for “Condominium” operation. This mode of operation will override the normal mode of operation described under the section “Normal Operation”. This facility is designed for greater safety and security in applications where there will be a number of users, such as the gate at a townhouse estate, factory or office park the “Auto-Close” facility described earlier.

In “Condominium” mode “Auto-close” cannot be overridden. If the remote control or intercom pushbutton is pressed while the gate is open the “Auto-close” will restart its countdown. If the gate is activated while the gate is closing the gate will reopen. The gate cannot be stopped in a midway position and will therefore always close.

A protection beam should be used in conjunction with this facility to prevent the “Auto-close” from closing the gate onto a vehicle passing through.

PASSIVE INFRARED AUTO-CLOSE (PIRAC)

This facility is an extension of the Condominium facility described above. It is designed for applications requiring greater security as the gate closes immediately behind the vehicle or person passing through.

PIRAC will operate only if a protection beam or other type of vehicle detection system (e.g. Inductive loop) has been fitted.

The remote control or intercom pushbutton will only open the gate. As a vehicle drives through the entrance it activates the protection beam and as soon as the vehicle clears the beam the gate will close immediately, even before it is fully open. If the gate reaches the fully open position without the beam being activated the gate will close immediately.



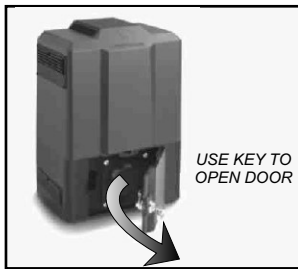
In this mode and for a particular application should the gate start to close too quickly the "Auto-close" facility described earlier can be enabled.

The gate will now remain in the open position until either the "auto-close" has timed out or a vehicle has driven through the entrance in which case the gate will start to close immediately the vehicle has passed.

Manual Release

All operators are fitted with a manual release mechanism. This is to allow the gate to be operated in the event of a total malfunction of the equipment. It is also required if the mains power has failed in the case of the A5, A10 (without DC converter) and FAAC operators.

CENTURION D3, D5 & A5

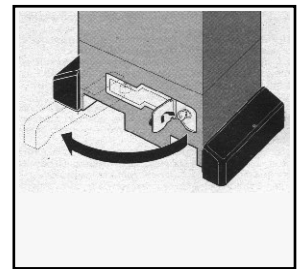


Open manual override



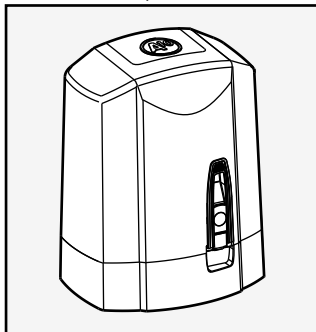
Rotate thumbwheel clockwise until gate is free to move

FAAC 844

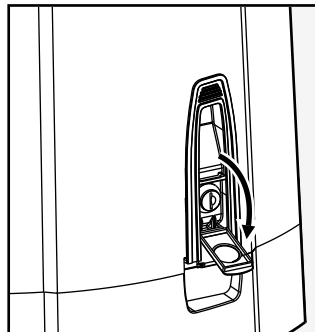


FAAC844 Manual Release

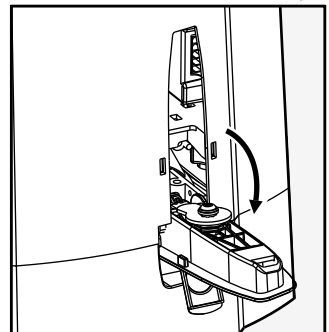
CENTURION D3, D5 & A5



Manual release handle in closed position.



Open lock cover and insert key. Turn key 1/4 turn counter clockwise to unlock.



Pull manual release handle down to disengage manual release



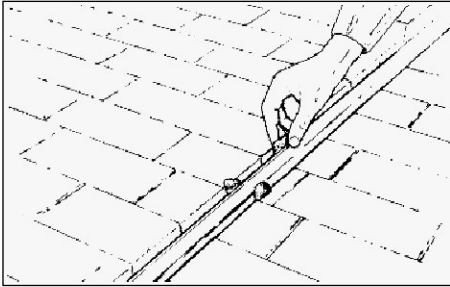
RE-ENGAGING THE MANUAL RELEASE (A10 ONLY). It is strongly recommended that the gate is first pushed to the fully open position, and then to the fully closed position before the release handle is re-engaged. This is to ensure that no untoward behavior occurs due to the system having lost its position information.

Basic Maintenance

CENTURION operators are designed to be maintenance free. However, there are some basic checks that should be carried out regularly, (every six months). These will increase the long term reliability of the system, and obviate false triggering of the protection systems leading to erratic operation of the gate.

⚠ ISOLATE MAINS SUPPLY TO SYSTEM BEFORE CLEANING OR WORKING ON THE EQUIPMENT.

GENERAL



- Keep the track clear of stones, dirt and obstructions.
- Ensure that all rollers are free.
- In manual mode check that the gate runs freely on its rail and does not catch or foul against the walls or pillars.
- Ensure that the gate wheels and guide rollers are rotating freely and are not worn. In high volume applications it will be

necessary to replace these components regularly.

- Ensure that the rack is properly secured to the gate and that it does not press down onto the operator pinion at any point along its travel.
- Keep shrubs and vegetation clear of the motor, rack or chain.
- Check that the key still operates the manual override access door or flap. Spray with oil if necessary.
- Keep the inside of the motor housing clear of insects and dust.
- On operators fitted with a cooling fan, check that the air inlet ducts in the cover and the outlet ducts in the gearbox are clear.

THE BATTERY (D3/5 OPERATORS ONLY)

CENTURION systems that are fitted with maintenance free lead acid batteries, should provide at least 3 years of normal service life.

For sites utilizing an external 35A/H battery ensure that the level of liquid (electrolyte level) is correct. Check for corrosion of the battery terminals. Clean and apply copper based grease as necessary.

GEARBOX OIL LEVEL (A10 ONLY)

Check the oil level as described in the section, *Lubrication*, of the Installation Manual. Should the installation manual be unavailable, please refer to the *On Line Manuals* on our website, www.centsys.co.za. Alternatively, please refer to your CENTURION installer.

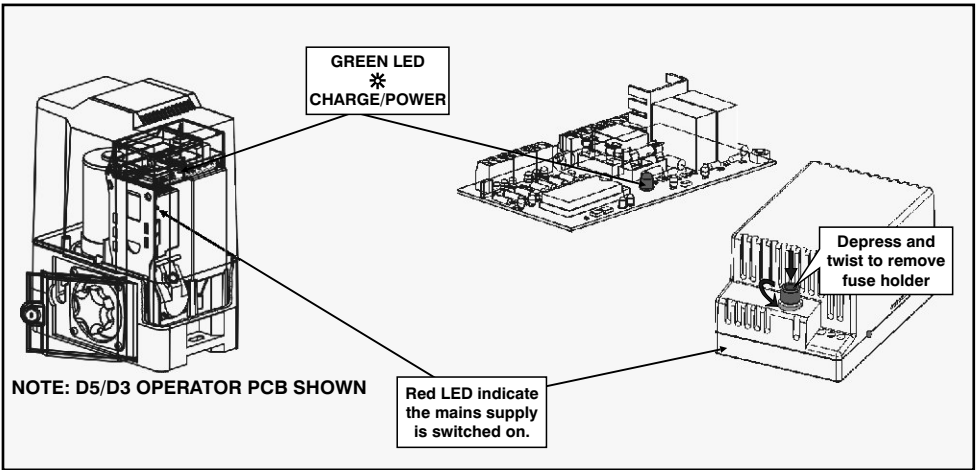
POWER SUPPLY

All Centurion/FAAC operators have power supplies separate to the controllers. In the case of product malfunction, the power supply fuses should be checked.

A10 models are supplied with spare fuses housed in the controller card cover. The FAAC 844 houses spare fuses inside the lid.

Be careful to replace A10 fuses with those of the correct rating (see diagram overleaf).

The small green light (LED) on the controller marked - "POWER" - indicates if the card is active. Each power supply has a red light (LED) to indicate mains supply.

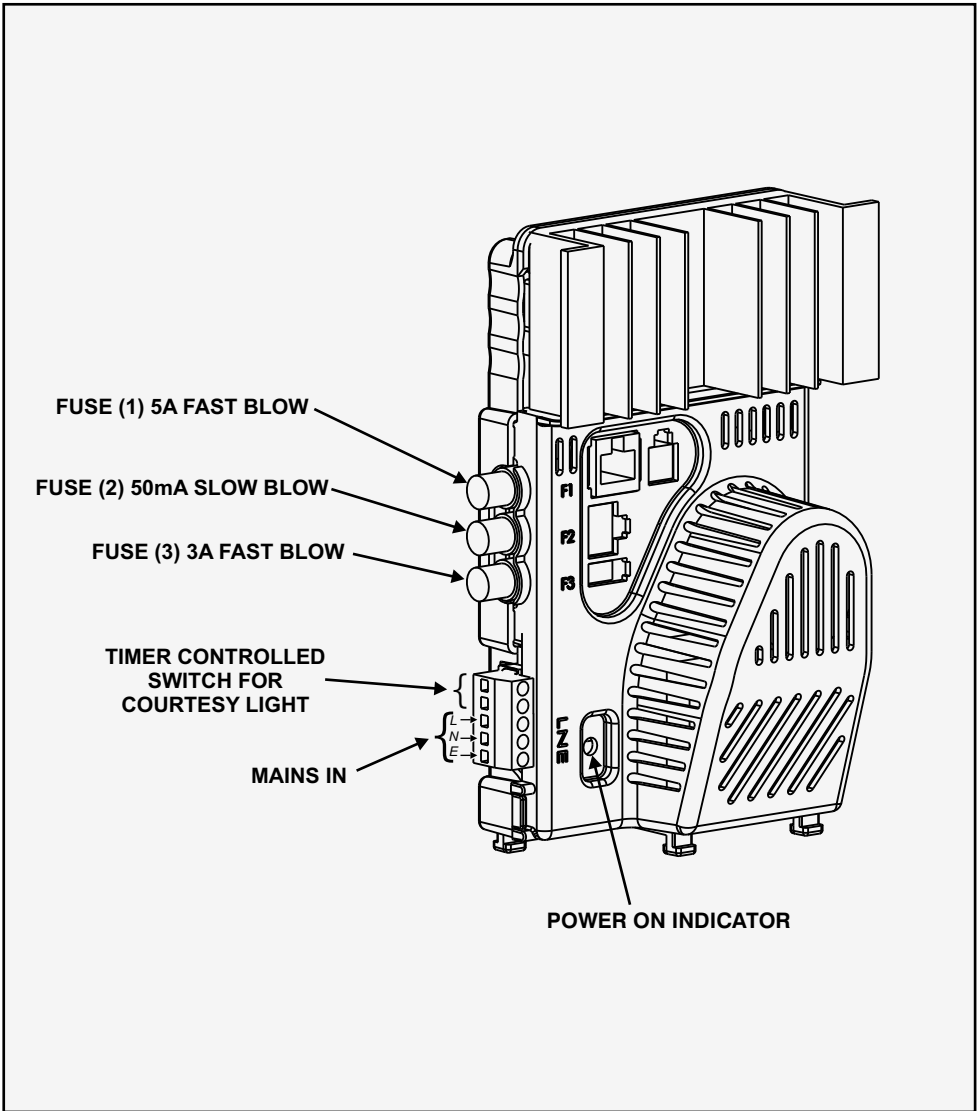


A10 Inverter Module



WARNING

The 310V DC supply is hazardous and potentially lethal. The A10 inverter module should be installed and maintained by a qualified installer.



Specifications

CENTURION D3, D5 & A5

TECHNICAL DATA	D3 / D5	A5
POWER SUPPLY	220V, +/-10%, 50Hz ²	220V, +/-10%, 50Hz ²
MAXIMUM ABSORBED CURRENT	160mA battery charger	A
MOTOR VOLTAGE	12V DC	220V AC
STARTING THRUST	35/60kgF	25kgF
RATED THRUST	12/20kgF	50kgF
GATE SPEED (NOMINAL)	15/16m/min	16m/min
DUTY CYCLE AT RATED THRUST	20/50% ¹ (at thrust less than 10kgF)	20% (70% Fan)
OPERATING TEMPERATURE RANGE	-10 +50 °C	-15 +50 °C
ANTI-CRUSHING SENSING	ELECTRONIC	MECHANICAL / ELECTRONIC
MASS OF UNIT	12/13.8kg (incl. battery)	13.2kg
MAXIMUM GATE LENGTH	11m	11m
MAXIMUM GATE WEIGHT	300/500kg	500kg

1. - Other voltage options available; 2. - Alternative source of supply is a solar charger; 3. - An operating speed of 12m/mm is available using a 20 tooth pinion, maximum gate mass 1000kg - single phase unit only; 4. - Unit fitted with PSU (40% PSU fan cooled).

CENTURION A10

SPECIFICATIONS	A10 BASIC		A10 ENDURANCE		A10 HEAVY WEIGHT
Power Supply	220V +/- 10%, 50Hz - 1 Phase		220V +/- 10%, 50Hz - 1 Phase		220V +/- 10%, 50Hz - 1 Phase
Maximum Absorbed Current	6A		6A		6A
Motor Voltage	220V 3 Phase		220V 3 Phase		220V 3 Phase
Output Pinion	20 Tooth Mod 4		20 Tooth Mod 4		17 Tooth Mod 4
Starting Thrust	40kgF*	30kgF**	40kgF*	30kgF**	47kgF
Rated Thrust	30kgF*	22.5KgF**	30kgF*	22.5KgF**	35kgF
Operating Speed @ Rated Thrust	16m/min	² Adj. Up to 30m/min	16m/min	² Adj. Up to 30m/min	13.6m/min
Motor Cooling	Direct Drive Fan (1400RPM)		High Efficiency Fan (2300 RPM)		High Efficiency Fan (2300 RPM)
Duty Cycle (continuous) ¹	45%		90%		90%
Duty Cycle (1/2hr endurance) ¹	65%		95%		95%
Ambient Temperature Range	-20°C to +50°C		-20°C to +50°C		-20°C to +50°C
Anti-crushing sensing	Electronic		Electronic		Electronic
Motor Thermal Protection	Electronic		Electronic		Electronic
Maximum Gate length	20m		20m		17m
IP Rating	44		44		44
Optional Battery Back-up	Yes		Yes		Yes
Shipping Mass of Unit	15.5kg		15.7kg		15.6kg
Maximum Gate Mass	1 000kg*	600kg**	1 000kg*	600kg**	2 000kg

(1) At rated thrust and 25°C maximum ambient temperature, unit in full shade.

(2) Refer to RATED THRUST values.

CENTURION A10 DC CONVERTER

SPECIFICATIONS	DC CONVERTER
Input Voltage	12V DC
Input Current @ Rated Thrust	30A
Rated Output Voltage	310V DC
Battery Charger	1A ⁴
Maximum Duty Cycle	20%
Thermal Protection	Electronic
Enclosure	IP65 External Plastic Enclosure
Dimensions	310mm X 240mm X 110mm
Maximum Battery Size	12V 7AH (External 35AH optional)
Open and close cycles ⁵	7 - 12 (7AH battery) 40 - 70 (40AH battery)
Shipping Mass	10kg (Inc 7AH Battery)

(4) Upgradable on request.

(5) Dependant on site / environmental conditions.

FAAC 844

TECHNICAL DATA	844	844 3 PHASE
POWER SUPPLY	230V~ (+6% - 10%) 50Hz	380V, 3 Phase
ABSORBED POWER	650W	950W
CURRENT DRAW	3.5A	1.9A
MAX. STARTING PULL	45kgf (Z16) - 35kgf (Z20)	50kgf (Z16)
TEMPERATURE RANGE	-20 TO 55°C	-20 TO 55°C
MOTOR SPEED	1400rpm	1400rpm
REDUCTION RATIO	1 ÷ 30	1 ÷ 30
No. OF PINION TEETH	Z16 (Z20)	Z16
RACK PITCH	4 MODULE	4 MODULE
OPERATING SPEED	9.5m/min (Z16), 12m/min (Z20)	9.5m/min
WINDING THERMAL PROTECTION	120°C	100°C
DUTY CYCLE	40%	60%
OIL QUANTITY	1.8 LITRES	1.8 LITRES
TYPE OF OIL	FAAC XD 220	FAAC XD 220
HOUSING PROTECTION	IP 55	IP55
GEAR MOTOR WEIGHT	14.5kg	16kg
STARTING CAPACITOR	35µF	N/A
CLUTCH	BIDISK IN OIL BATH	BIDISK IN OIL BATH
CONTROL UNIT	CENTURION CP81	CENTURION CP81 3 PHASE
LIMIT SWITCH	INDUCTIVE	INDUCTIVE
MAX. GATE MASS	(Z16) 1800kg (Z20) 1000kg	(Z16) 2200kg
TYPE OF COOLING	OIL	OIL
ANTI-CRUSHING CONTROL	SLIPPING CLUTCH IN OIL BATH	SLIPPING CLUTCH IN OIL BATH



Declaration of Conformity

DECLARATION OF CONFORMITY

according to ISO/IEC Guide 22 and EN 45014

Manufacturer's Name: CENTURION SYSTEMS (Pty) Ltd
Manufacturer's Address: 148 Epsom Avenue
North Riding, Gauteng, 2031, South Africa

declares that the product

Product name: SERIES 5 SLIDER

Model Number: D3, D5

Product Options: All

conforms to the following Product Specifications:

Safety: IEC 335-1: 1991

EMC: CISPR 14: 2nd edition 1985 ¹

IEC 801-2: 2nd edition 1991 - 4kV CD, 8kV AD

IEC 801-3: 1st edition 1984 -10V/m

IEC 801-4: 1st edition 1988 - 1.0kV Power Lines

IEC 1000-3-2: 1997

IEC 1000-3-3: 1997

IEC 1000-4-5: 1997

Supplementary Information:

The product herewith complies with the requirements of the following Directives and carries the CE-marking accordingly.

- the Low Voltage Directive 73/23/EEC
- the EMC Directive 89/336/EEC (inclusive 93/68/EEC).

¹ The product was tested in a typical configuration with simulated gate load.

CENTURION SYSTEMS
Office of Quality Manager
North Riding, Gauteng, South Africa
May 5, 1998

Commissioning Check Sheet

Fill in data for later reference

Model:		Actual	Default	L.E.D. Quick Ref.
All	AUTOCLOSE ON	ON OFF	OFF	2/1 2/2
All	AUTOCLOSE TIME		15 Secs	3/Time
All	MODE	<input type="checkbox"/> Standard <input type="checkbox"/> Condominium <input type="checkbox"/> PIRAC <input type="checkbox"/> Reversing <input type="checkbox"/> PLC (A10 only)	Standard	4/1 4/2 4/3 4/4 4/5
All	PED. AUTOCLOSE TIME		5 Secs	5/Time
All	COURTESY LIGHT TIME		120 Secs	6/Time
All	COLLISION SENSITIVITY	<input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	High	7/1 7/2 7/3
All	AUTOCLOSE OVER-RIDE		3 Secs	8/Time
All	POSITIVE CLOSE MODE	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> NO	9/1 9/2
All	PRE-FLASHING MODE	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> OFF	<input type="checkbox"/> OFF	10/1 10/2 10/3 10/4
	PRE-FLASH TIME		5 Secs	11/Time
	COLLISION COUNT		4	12/Count
D3/D5 A5 A10	CRAWL DISTANCE (1 FLASH = 350mm) COAST MODE (1 FLASH = 10mm) OPENING SPRINT MODE SELECT	<input type="checkbox"/> Standard speed <input type="checkbox"/> Standard speed + 30% <input type="checkbox"/> Standard speed + 60% <input type="checkbox"/> Standard speed + 90%	350mm 30mm Standard	13/Count 13/Count 4/1 4/2 4/3 4/4
A10	CLOSING SPRINT MODE SELECT	<input type="checkbox"/> Standard speed <input type="checkbox"/> Standard speed + 30% <input type="checkbox"/> Standard speed + 60% <input type="checkbox"/> Standard speed + 90%	Standard	4/1 4/2 4/3 4/4
A10	MOTOR CUTOFF TIME		60 Secs	15/Time
A10	INVERTED RACK	<input type="checkbox"/> Rack below pinion <input type="checkbox"/> Rack above pinion	Above	16/1 16/2



CENTURION

THE AUTOMATIC CHOICE



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148 EPSOM AVENUE, NORTH RIDING
P.O. BOX 506, CRAMERVIEW, 2060
SOUTH AFRICA

WEB: <http://www.centsys.co.za> General information e-mail: info@centsys.co.za

FOR TECHNICAL SUPPORT CONTACT:

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DURBAN	(031) 701-9583	EAST LONDON	(043) 743-4923
NELSPRUIT	(013) 752-8074/5	BLOEMFONTEIN	(051) 448-1714
PRETORIA	(012) 348-2610/1	KIMBERLEY	(053) 832-3231
CAPE TOWN	(021) 447-1295	VEREENIGING	(016) 422-5667

AFRICA

ECHO-LINE, NAMIBIA	Tel: (61) 220-8309
MOLECULAR CONSULTANTS, NIGERIA	Tel: 803-3123182
SECURITY DISTRIBUTORS, ZIMBABWE	Tel: (4) 795-873
SEKANYOLYA TIMBER WORKS, UGANDA	Tel: (41) 231-40

EUROPE

AUTOMATISME BATIMENT, FRANCE	Tel: (1) 697-93120
CROWN AXCESS LTD U.K. UNITED KINGDOM	Tel: (1483) 450-011
NESTOR, BELGIUM	Tel: (9) 380-4020

NORTH AMERICA

BILLY GATES, CANADA	Tel: (250) 334-1553
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ABA GATES, WESTERN AUSTRALIA	Tel: (8) 933-03061
DOMINATOR SYSTEMS, NEW ZEALAND	Tel: (3) 384-5145
ICBT, VICTORIA	Tel: (3) 933-54213
ROTECH, QUEENSLAND	Tel: (7) 326-47330
SA GATES, SOUTHERN AUSTRALIA	Tel: (8) 826-64235
SECURITE DU PACIFIQUE, NEW CALEDONIA	Tel: 283-760

INDIAN OCEAN

SECULOGIX LTD, MAURITIUS	Tel: 467-8509
SECURITE AUTOMATISMES REUNION, REUNION	Tel: 280-368

ASIA & PACIFIC

VAST VIDEO, MALAYSIA	Tel: (3) 214-34931
BLT ASSOCIATES, THAILAND	Tel: (2) 691-6793