## EC MACHINE DIRECTIVE COMPLANCE DECLARATION

(DIREC TIVE 89/392 EEC , APPENDIX II, PARTB)

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BOLOGNA - ITALY

Hereby dec lares that the 884 MCTa utomation system

- is intended to be incomorated into machinery, or to be assembled with othermac hinery to constitute ma chinery in complia nce with the requirements of Directive 89/392 EEC, and subsequent amendments 91/368 EEC, 93/44 EEC and 93/68 EEC;
- complieswith the essential safety requirementsin the following EEC Direc tives:

73/23 EEC and subsequent a mendment 93/68 EEC.
89/336 EEC and subsequent a mendments 92/31 EEC a nd 93/68 EEC.
and furthemore declares that unit must not be put into service until the machinery into which it is incomorated or of which it is a component has been identified and declared to be in conformity with the provisions of Direc tive 89/392 EEC a nd subsequent a mend mentsena cted bythe national implementing legislation.

Bologna, 1 J anuary 1997


## IMPORTANTNOTICE FOR THE INSTA山ER

## GENERAL SAFETY REGULATIONS

1) WARNING! FAAC strongly recommends to follow these instructions literally for the safety of persons. Improper installation or misuse of the product will cause very serious damages to persons.
2) Read the instructions carefully before installing the product.
3) Packaging material (plastic, polystyrene etc.) is a potential hazard and must be kept out of reach of children.
4) Keep these instructions for future reference.
5) This product hasbeen designed and manufactured only forthe use stated in this manual. Any otheruse not expressly set forth will affect the reliability of the product and/or could be source of hazard.
6) FAAC S.p.A. cannot be held responsible forany damage caused by improper use ordifferent from the use for which the a utomation system is destined to.
7) Do not use this device in areas subject to explosion: the presence of flammable gas or fumes is a serious hazard.
8) Mechanical constructive elements must comply with UNI8612, CEN pr EN 12604 and CEN pr EN 12605 standards. Countries outside the EC shall follow the regulations above besides their national nomative references in order to offer the utmost safety.
9) FAAC cannot be held responsible forfailure to observe technic al standards in the construction of gates and doors, or for any deformation of the gates which may occur during use.
10) Insta llation must comply with UNI8612, CEN prEN 12453 and CEN prEN 12635. The degree of safety of the a utomation must be $C+E$.
11) Before carying out any operations, tum off the system's main switch.
12) An omnipowerswitc $h$ shall be provided forthe installation with an opening distance of the contacts of 3 mm ormore. Altematively, use a 6A thermomagnetic breaker with multi-pole switching.
13) Ensure that there is a differential switch up-line of the electrical system, with a trip threshold of 0.03 A .
14) Check that the earthing plant is in perfect condition and connect it to the metallic parts. Also earth the yellow/green wire of the operator.
15) The safety devices (e.g. photocells, safety edges, etc.) protect areas wherethere is a mechanical movement hazard, e.g. crushing, entrapment and shearing.
16) Each installation must be fitted with at least one flashing light (e.g. FAAC LAMP, MINILAMP etc.) as well as a wa ming plate suitably fixed to the gate, besides the safety devices as per point 16. above.
17) FAAC cannot be held responsible regarding safety and correct functioning of the automation in the event that parts other than FAAC original parts are used.
18) Use only FAAC original spare parts for maintenance operations.
19) Do not camy out any modifications to automation components.
20) The installer must supply all information regarding manual operation of the system in the event of an emergency and provide the end-user with the "End-user Guide" attached to the product.
21) Keep out of persons when the product is in operation.
22) Keep out of reach of children the remote radio controls and any control devices. The automation could be operated unintentionally.
23) The end-user must avoid any attempt to repair or adjust the automation personally. These operations must be camed out exclusively by qualified personnel.
24) What is not explicitly stated in these instructions is not pemitted.

## AUIOMATION 884 \& 844 MPST

These instructions a pply to the following models: $\mathbf{8 8 4}$ MCT The FAAC model 884 automations for sliding gates are electromechanic al operators which transmit movement to the leaf by means of a pinion with rack coupled in an appropriate manner to the sliding gate.
By using a self-braking motor the system is guaranteed to be mechanic a lly locked when the motorisnot in operation so a lock does not need to be installed. The gear motors have adjustable mechanical clutches to ensure correct use of the automation. A convenient manual release device allows the gate to be opened in the event of a power failure or malfunction. The electronic control unit is incorporated in the gear motors.
The 884 automations have been designed and built for vehicle access control in industrial areas. Do not use for any other purpose.

## 1. DESCRIPIION AND TECHNICAL SPECIFCATIONS



## 2. DIMENSIONS



Values are expressed in mm.
Fig. 2

Table 1 Tec hnic al spec ific ations

| Power supply | $230 \mathrm{~V} 3 \mathrm{ph} / 400 \mathrm{~V} 3 \mathrm{ph}+\mathrm{N}(+6 \%-10 \%) 50 \mathrm{~Hz}$ |
| :---: | :---: |
| Power consumption (W) | 850 |
| Reduction ratio | 1:43.2 |
| No. of pinion teeth CR | Z16-Rack 30x30 Module 6 |
| Nominal torque Nm | 155 |
| Max. thrust N | 5000 |
| Duty rating | 50\% / 100\% ( 2000 Kg ) |
| Oil quantity (kg) | 2 |
| Temperature range | $-20 \div+55^{\circ} \mathrm{C}$ |
| Gear motor weight (kg) | 50 |
| Housing protection | IP 55 |
| Max. gate weight (kg) | 3500 |
| Gate speed | $10 \mathrm{~m} / \mathrm{min}$ |
| Max. gate length | 35 m |
| Clutch | Twin discs in oil bath |
| Housing treatment | cataphoresis |
| Casing painting | polyester RAL 2004 |
| Control unit | 844 MPST (incomporated) |
| Limit switches | mechanical |
| Gear motor dimensions LxHxD (mm) | see Fig. 2 |


|  |  |
| :--- | :---: |
| Power supply | Electric motor technical specifications |
| Frequency Hz | $230 \mathrm{~V}(+6 \%-10 \%) / 400 \mathrm{~V}(+6 \%-10 \%)$ |
| Current A | 50 |
| Power consumption kW | $2.7 / 1.6$ |
| Motor speed pm | 0.8 |

## 3. ELECTRUCAL SETUP



## 4. INSTAШNG THE AUIOMATION

### 4.1. PREUMINARYCHECKS

For safe, correct operation of the automation, make sure that the following requirements are met:

- The gate's structure must be suitable for automation. Take special care to ensure that the wheels are large enough to support the full weight of the gate, that a top runner is installed and that mechanical limit stops are fitted to prevent the gate from coming off the runner.
- The characteristics of the ground must ensure sufficient support for the foundation plinth.
- There must be no pipes orelectrical cables in the area to be dug for installing the foundation plinth.
- If the gear motor is located in a vehic le transit a rea, it isa good idea to provide protection against accidental collisions.
- Check that the gear motor has an efficient earth connection.


### 4.2. INSTAШNG THE BASE PLATE

1) The base plate must be positioned as shown in Fig. 4. For the positioning distances refer to fig. 5.
Important The plate must be level with the middle of the pinion. Remember to mainta in a minimum distance of 10 mm between the rack and the gate.
2) Assemble the foundation plate as shown in A, Fig. 4.
3) Prepare a foundation plinth asshown in Fig. 4 and install the base plate providing one or more conduits for electrical cables. Use a level to check that the plate is perfectly horizontal and wait for the cement to set.
N.B.: It is advisable to install the plate slightly raised from the ground. See A, fig. 9.
4) Set up the electrical cables for connection to the accessories and the electricity supply as described in section 5. For ease of connection, ensure that the cablesprotrude by about 1 m from the hole in the base plate.


### 4.3. MOUNTING THE PINION

Before mounting the operator on the foundation plate, mount the pinion on the transmission shaft and fit the casing provided as shown in fig. 6.


Fig. 6

### 4.4. MECHANICALINSTAШATION

1) Remove the casing (2, fig. 1) and position the gear motor on the foundation plate. Fit, but do not tighten, the washer, the split washer and the nut as shown in fig. 7-9.


Fig. 7
2) Fit the adjustment screws on the gear motor base as shown in A, fig. 8.
3) Adjust the height of the feet while keeping the gear motor raised from the plate by 1 cm and maintaining the distance from the gate shown in figs. 5 and 9.
4) Use a level to check that the operator is perfectly horizontal.
5) Tighten up the four securing nuts provisionally.
6) Set up the operatorformanual operation asdescribed in section 12.


### 4.5 PREPARING FORRACKMOUNTING

Important To mount the rack on the leaf it is necessary to construct special supports specifically for the type of gate. Fig. 10 showsa n example of "L"support. Forpositioning the supports refer to figs. 5 and 9.

### 4.5.1 MOUNTING THERACK

1) Slide the leaf manually to the closed position.
2) Rest the first rack element level on the pinion and weld the support onto the gate as shown in fig. 11.
3) Move the gate manually making sure that the rack rests on the pinion and weld the remaining supports.


Fig. 9
4) Place another rack element next to the first and use a section of rack to set the teeth of the two elements in phase as shown in 11A.
5) Open the gate manually and weld the remaining supports. Proceed in thismannerforallthe rackelements and supports until the entire gate has been covered.
N.B.: Check that none of the rack elements come off the pinion during the movement of the gate.

## Important Do not weld the rack elements together.

After installing the rack, lower the position of the gear motor (fig. 12) by adjusting the level screws (A, Fig. 8) by about 4 mm to ensure correct meshing with the pinion.
Screw up tightly the 4 gear motor securing nuts.
Check manually that the gate reaches the mechanic al travel limits comec tly and thatitdoes notenc ounterfriction during its travel.
Do not use grease or other lubric ants between the pinion and the rack.


Fig. 10



The 884 operator is equipped with a mechanical travel stop with roller and trigger. The movement of the gate is stopped when a bent travel stop plate fixed to the top of the rack operatesthe trigger, trip ping the mic roswitch (fig. 12A).
To position the two travel stop plates provided, proceed as follows:

1) Switch on the power supply.
2) Move the gate by hand towards its open position, stopping 5 cm from the desired closure position.
3) Slide the travel stop plate along the rackin the opening direction.

When the LED of the opening travel end limit switch (FCA) in the 844 MPST electronic control unit (fig. 16) goes out, advance the travel stop plate 10 mm more, and fasten it temporarily in position with two spot welds
4) Move the gate by hand towards its closed position, stopping 5 cm from the mechanical travel stop.
5) Slide the travel stop plate along the rack in the closing direction.
When the LED of the closing travel end limit switch (FCC) in the 844 MPST electronic control unit (fig. 16) goes out, advance the travel stop plate 10 mm more, and fasten it temporarily in position with two spot welds.
Note: the travel stop plates may be fastened by means of screws, if desired (fig. 12a).
The fastening slot makes it possible, if necessary, to adjust the travel stop position.
Important a) The limit witc $h$ must be tripped by the initial bent part of the travel stop plate, asshown in fig. 12A.
b) It is advisable to straighten the final bent part of the travel stop plate, as shown in fig. 12A, in order to prevent the plate from passing the limit switch.
6) Lock the system (see paragraph 12).

Caution: To prevent damage to the operator and/or stoppage of operation, leave about 5 cm between the limit switch position and the desired closure position.

## 5. START-UP

### 5.1. CONNEC TION TO ELEC TRONIC CONIROLUNIT

Waming: Always tum off the electricity supply before carying out any work on the electronic control unit (connections, programming, maintenance).

Observe points 10, 11, 12, 13 a nd 14 in the GENERALSAFETY INSTRUCTIONS.

Since the system requires two different powersupplies(230 and 400 Vac ), install two differential magneto-thermal circ uit breakers with a dequate trip threshold up-line of the system.
Connect the earth cable to the connection on the base of the operator. See fig. 15.
The gearmotor is provided with a safety device (Fig. 1 Ref. 7) operated by the relase system.

While activated the safety device keeps the gearmotor from making any movement.

As shown in Fig. 3, prepare the conduits and make the electricalconnectionsfrom the 844MPSTelectronic control unit to the chosen accessories.
Always route the powersupply cables sepa rately from the control and safety cables (keyswitch, receiver, photocells, etc.). Use separate conduits to avoid any interference.

Table 2 Tec hnic al specifications 844MPST

| Power supply | $230 \mathrm{~V}(+6 \%-10 \%) 50 \mathrm{~Hz}$ |
| :--- | :---: |
| Absorbed power | 10 W |
| Max. motor load | 800 W |
| Max. electric lock load | 0.5 A |$\left|\begin{array}{l}-20^{\circ} \mathrm{C}+55^{\circ} \mathrm{C}\end{array}\right|$| $3($ see fig. 5.1.1) |
| :--- |


5.1.1. LAYOUT AND ELEC TRICAL CONNEC TIONS


Fig. 16
Table 3 Control unit components 844MPST

| D1 | OPEN LED |
| :---: | :---: |
| LD | STOP LED |
| L3 | SAFETY LED |
| L5 | CLOSURE LIMITSWITC H LED |
| L5 | OPENING LIMITSWITC H LED |
| LD | LED OPEN PARTAL/ CLOSE |
| P1 | RESETBUTTON |
| J1 | DECODERCONNECTOR |
| J2 | LOW VOLTAGETERMINALBLOCK |
| J3 | LIMITSWITCHCONNECTOR |
| J5 | CONTACTORCONNECTION TERMINALBLOCK |
| J7 | FAAC LAMP CONNEC TION TERMINALBLOCK |
| J8 | POWER SUPPLY |
| F1 | CONTACTOR FUSE (F5 A) |
| F2 | ACCESSORIES FUSE (T1.6 A) |
| F3 | TRANSFO RMER FUSE (T250 mA) |
| LK1 | WARNING LAMP FREECONTACT |
| DS1 | PROGRAMMING DIPSWITCH |

5.1.2 HIGH VOLTAGEELEC TRICALCONNEC TIONS



Fig. 18
(1) Low voltage teminal block J2 (Fig. 16) is used to connect all accessories (see Table 4).

## 1. A/C Partial opening

This means any control device with a N.O. contact which causes partial opening of the gate when activated in E1, E2, A1, A2, S1 or S2 logics. In B and C logics it causes the gate to close. To install more than one partial opening control device, connect the N.O. contacts in parallel.

## 2. OPEN

This means any control device with a N.O. contact which causes the gate to open when activated. In automatic and semiautomatic logics it is active for both opening and closure. To install more than one opening control device, connect the N.O. contacts in parallel.

## 3. STOP

This means a control device with a N.C. contact which causes the gate status (opening-pause-closure) to be intemupted until the next impulse is sent. To install more than one stop device, connect the N.C. contacts in series to MS1 and MS2.

## 4. FSW SAFEIIES

This means all devices (photocells, safety edges, magnetic loops) with a N.C. contact which stop the movement of the gate when an obstacle is present in the area protected by the safety devices. To install more than one safety device, connect the N.C. contacts in series.
N.B.: if safety devices are not connected, jumper terminals 4 and 5 on the electronic control unit
5. Controls common and accessories power supply negative
6. 24 Vac output for waming lamp power supply
7. $\mathbf{+ 2 4} \mathrm{Vdc}$ accessories power supply positive

Waming: the maximum load of the accessories is 500 mA .
To calculate powerconsumption referto the corresponding table.

Tab. 4 Ac cessories curent draw

| TYPE OF ACCESSORY | NOMINAL CURRENT DRAW |
| :--- | :---: |
| PLUS 40SL | 30 mA |
| PLUS E | 20 mA |
| MINIDEC SL / DS | 6 mA |
| DECODER SL/DS | $20 \mathrm{~mA} \mathrm{/} \mathrm{55mA}$ |
| RP ESL / EDS | $12 \mathrm{~mA} \mathrm{/} 6 \mathrm{~mA}$ |
| DIGICARD | 15 mA |
| METALDIG IKEY | 15 mA |
| FOTO SWITCH | 90 mA |
| DEIEC TOR F4 / PS6 | 50 mA |
| PHOTOBEAM | 50 mA |

W.LGHT (terminals 6-8-9)

These are the 24 Vdc terminals to which the waming lamp must be connected. With jumper LK1 intact it is possible to powera $24 \mathrm{~V} / 5 \mathrm{~W}$ max. wa ming lamp between terminals 6 and 9. In case a potential free contact is needed between the terminal strips 8 and 9 , the link LK1must be cut. (see Table 5).
WARNING: If the jumper LK1 is broken, the 24 Vac accessories power supply (teminals 6 and 8 ) is no longer a vailable.

Table 5: Waming lamp connection

| LK1 INTACT | LK1 BROKEN <br> (FREE CONTACT) |
| :---: | :---: |
|  |  |

(2) Connector J3 limit switch unit connection
(3) Terminal block J5 contactor connection

The motor control contactors must be connected to these terminals.
(4) Terminal block J 6 (fig. 16)

L: 230 V power supply (live)
N: 230V power supply (neutral)
(5) Terminal block J 7 (fig. 16)

Flashing light output (230V)

## 6. BEHAVIOUR OF SAFETY DEVICES

The safety devic esoperate during closure only. In "A1", "E1" and "S1" logics, intemupting the safety device contacts causes the gate to stop closing and start opening immediately. In "A2", "E2" a nd "S2" logics, intemupting the safety device contacts causes the gate to stop closing, then to start opening again when the safety devices are released.
In "B"a nd "C "logic s, intemupting the safety device contacts causes the gate to stop closing.

## 7. DIPSWICH SETIINGS

To program automation operation, set the dipswitchesas shown in the diagram below.

(1) Pause times include pre-flashing.
(2) Pre-flashing commences 5 seconds before the start of each movement.

## N.B.: PRESS THE RESETBUTTON AFIER ALL PROGRAMMING OPERATIONS.

## 8. OPERATION IN VARIOUS LOGICS

The following 8 logics are available:
E1/E2/B: "Semia utomatic"
A1/A2: "Automatic"
S1/S2: "Safety"
C: "Deadman"

Operation of the various logicsis shown in tables 6-7-8-9-10-11-12-13.

TABLE 6 LOG IC E1 (SEMIAUTOMATIC)

| LOGIC E1 | IMPULSES |  |  |
| :---: | :---: | :---: | :---: |
| GATE STATUS | OPEN - A/C (1) - | STOP | SAFETY |
| CLOSED | opens (2) | no effect | no effect |
| OPEN | recloses (2 | no effect | no effect |
| CLOSING | inverts motion | stops | inverts motion |
| OPENING | stops | stops | no effect |
| STOPPED | recloses (reopens when safety <br> devices are engaged) (2) | no effect | no effect |

TABLE 7 LOGIC E2 (SEMIAUTOMATIC)

| LOGIC $\boldsymbol{Q}$ | IMPULSES |  |  |
| :---: | :---: | :---: | :---: |
| GATE STATUS | OPEN -A/C(1)- | STOP | SAFEEY |
| CLOSED | Opens (2) | no effect | no effect |
| OPEN | recloses (2) | stops counting | no effect |
| CLOSING | inverts motion | stops | freezes pause until <br> disengagement |
| OPENING | stops | stops | no effect |
| STOPPED | recloses (reopens when safety <br> devices are engaged) (2) | no effect | no effect |

TABLE 8 LOG IC A1 (AUTOMATIC)

| LOGIC A1 | IMPULSES |  |  |
| :---: | :---: | :---: | :---: |
| GATE STATUS | OPEN - A/C (1) - | STOP | SAFETY |
| CLOSED | Opens and recloses after <br> pause time (2) | no effect | no effect |
| OPEN | recloses after 5 (3) | stops counting | freezes pause until <br> disengagement |
| CLOSING | inverts motion | stops | no effect |
| OPENING | no effect | stops | no effect |
| STOPPED | recloses (2) | no effect | no effect |

TABLE 9 LOG IC A2 (AUTOMATIC)

| LOGIC A2 | IMPULSES |  |  |
| :---: | :---: | :---: | :---: |
| GATE STATUS | OPEN - A/C (1) - | STOP | SAFETY |
| CLOSED | Opens and recloses after <br> pause time (2) | no effect | no effect |
| OPEN | recloses after 5 s <br> $(3)$ | stops counting | recloses after 5 5 when <br> disengaged |
| CLOSING | inverts motion | stops | inverts motion |
| OPENING | no effect | stops | no effect |
| STOPPED | recloses (2) | no effect | no effect |

TABLE 10 LOGIC S1 (SAFETY)

| LOGIC SI | IMPULSES |  |  |
| :---: | :---: | :---: | :---: |
| GATE STATUS | OPEN - A/C (1) - | STOP | SAFETY |
| CLOSED | Opens and recloses after <br> pause time (2) | no effect | no effect |
| OPEN | recloses immediately <br> (2 and 3) | stops counting | recloses after 5 5 when <br> disengaged <br> inverts motion <br> CLOSING <br> inverts motion stops |
| OPENING | inverts motion | stops | no effect |
| STOPPED | recloses (2) | no effect | no effect |

TABLE 11 LO G IC S2 (SAFETY)

| LOGIC S2 | IMPUSES |  |  |
| :---: | :---: | :---: | :---: |
| GATESTATUS | OPEN- A/C (1)- | STOP | SAFETY |
| CLOSED | Opensand reclosesafter <br> pause time (2) | no effect | no effect |
| OPEN | reclosesimmediately <br> (2 and 3) | stopscounting | freezespause until <br> disengagement |
| CLOSING | invertsmotion | stops | stopsand inverts motion <br> when disengaged (2) |
| OPENING | invertsmotion | stops | no effect |
| STOPPED | recloses (2) | no effect | no effect |

TABLE 12 LOG IC B (SEMIAUTOMATIC)

| LOGIC B | IMPULSES |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| GATESTATUS | OPEN | A/C (5) | SAFETY (until <br> disengagement) | STOP |
| CLOSED | opens(2) | no effect | no effect | no effect |
| OPEN | no effect | closes (2) | inhibitsclosing | no effect |
| CLOSING | no effect | no effect | stops | stopsmovement |
| OPENING | no effect | no effect | no effect | stops movement |
| STOPPED | completes <br> opening (2) | completes <br> closing (2) | inhibitsclosing | no effect |

TABLE 13 LOGIC C (DEADMAN)

| LOGIC C | IMPULSES |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| GATESTATUS | OPEN (4) | A/C (4and 5) | SAFEYY (until <br> disengagement) | STOP |
| CLOSED | opens | no effect | no effect | no effect |
| OPEN | no effect | closes | inhibitsclosing | no effect |
| CLOSING | no effect | stops |  |  |
| OPENING | no effect | stops | soeffect | stops |
| STOPPED | completesopening | completesclosing | inhibitsclosing | no effect |

(1) The A/C input enables partial opening.
(2) With pre-flashing selected movement starts after 5 seconds.
(3) If the impulse issent a fterpre-fla shing the timerrec ounts.
(4) Foroperation in C logic keep the pushbutton depressed.

Movement stops upon release.
(5) The A/C input controls closure.

## 9. CHECKING DIRECTION OF ROTATION

1 - Check the status of LEDs 4 and 5 with reference to Table 14
Table 14 Operation of status signalling LEDs

| LEDS | ON | OFF |
| :--- | :--- | :--- |
| OPEN input A | Command active | Command inactive |
| OPEN input B | Command active | Command inactive |
| STOP | Command inactive | Command activated |
| FSW (Open safeties) | Safeties disengaged | Safetiesengaged |
| FCA (Open limit sw.) | Opening limit switch free | Opening limit switch engaged |
| FCC (Close limit sw.) | Closure limit switch free | Closure limit switch engaged |

N.B.: The condition of the LEDswith the gate at rest isshown in bold type.
If the Open/Closed positions do not correspond to the status of the LEDs, invert the brown and green MS3 wireson the terminal block (See Fig. 18).
2 - Disconnect the power supply from the electronic control unit and release the operator.

- Slide the gate manually to the mid-travel position.
- Re-engage the operator and restore the electrical power supply.
- Send an OPEN impulse and check that the gate opens.
If the first impulse causes the gate to close, invert 2 phases of the motor power supply.


## 10. SETIING THE MECHANICAL СШІСН

To calibrate the transmitted torque adjustment system, refer to fig. 19.
Remove the safety lid and the lock nut. Adjust the clutch using a socket wrench (fig. 19).

Tum the nut clockwise to increase torque.
Tum the nut anticlockwise to decrease torque.
Activate the operator and check that the clutch is set to allow the leaf to slide without being too dangerous.
Refit the lock nut and the safety lid.


Fig. 19

## 11. TESTING THE AUIOMATION

When installation is complete, affix the danger waming label to the top of the casing (Fig. 20). Thoroughly check operation of the automation and all connected a c cessories.
Give the customer the User's Guide.Explain correct use and
operation of the gear motor and draw attention to the potential danger zones of the automation.


Fig. 20

## 12. MANUAL OPERATION

If the gate has to be operated manually due to a power failure or malfunction of the automation, use the release device as follows.

- Open the door in the casing using the triangular key provided (see fig. 21).

- Operate the relase levershown in fig. 22 (pos. MANUAL).
- A safety microswitch in the release system prevents the automation from being activated by accidental commands (7, fig. 1).
- Close the door and open or close the gate manually.


## 13. REIURN TO NORMAL OPERATION

- Open the door in the casing using the triangular key provided (see fig. 21).
- Move back the lever shown in fig. 22 up to the mechanical stop (pos. AUTOMATIC).
- Close the door.


## 14. MAINTENANCE

When performing maintenance always check that the anti-crushing clutch is correctly regulated and that the safety devices operate correctly.

## 15. REPAIRS

For repairs contact an authorised FAAC Repair Centre.

## USER'S GUIDE

## AUIOMATION 884

Read the instructions carefully before using the product and keep them for future reference.

## GENERALSAFETYINSTRUCTIONS

If correctly installed and operated, the 884 automations ensure a high level of safety.
However, some simple rules should be followed to avoid accidents:

- Do not stand in the vic inity of the automation or allow a nyone else, especially children, to do so and do not place objects in the vicinity of the automation. This is partic ularly important during operation.
- Keep remote controls and other control devices out of the reach of children to prevent them from accidentally operating the automation.
- Do not allow children to play with the automation.
- Do not deliberately obstruct the movement of the gate.
- Make sure that branches or bushes do not interfere with the movement of the gate
- Keep the luminoussignalling systems efficient and clearly visible.
- Do not attempt to operate the gate manually without first releasing it.
- In the event of a malfunction, release the gate to allow access and call a qualified technician for service.
- Aftersetting ma nualoperation, disc onnect the electricity supply from the system before retuming to normal operation.
- Do notmake a ny mod ific ationsto componentsbelonging to the automation system.
- Do not attempt to perform a ny repairwork orta mperwith the a utomation. Call FAAC qualified personnel forrepairs.
- At least once every six months ha ve the automation, the safety devices and the earth connection checked by a qualified technician.


## DESCRIPION

The FAAC 884 a utomation is ideal for controlling industrial vehicle access areas.
The 884 for sliding gates is an electromechanic al operator which transmits movement to the leaf by means of a pinion with rack or chain coupled in an appropriate manner to the sliding gate.
If automatic operation has been selected, sending an impulse causes the gate to reclose on its own after the selected pause time.
If semiautomatic operation has been selected, a second impulse must be sent to reclose the gate.
An opening impulse sent while the gate is reclosing causes it to change direction of movement.
A stop command (if available) stops movement at a ny time. For detailed information on operation of the sliding gate in the various operating modes, contact the installation technician
The automations have safety devices (photocells) which prevent the gate from reclosing when an obstacle lies within the area they are protecting.
The system ensures mec hanical locking when the motor is not in operation, so it is not necessary to install a lock.
The gear motors have an adjustable mechanical clutch for safe use of the automation.
The electronic control unit is incorporated in the gear motor.
A convenient manual release device allows the gate to be
operated in the event of a power failure or malfunction. The light flashes while the gate is moving.

## MANUAL OPERATION

If the gate hasto be operated manually due to a power failure or malfunction of the automation, use the release device as follows:

- Open the door in the casing using the triangular key provided (see Fig. 1).
- Operate the relase lever shown in fig. 2 (pos. MANUAL).
- A safety mic roswitch in the release system prevents the automation from being activated by accidental commands.
- Close the door and open or close the gate manually.


## REIURN TO NORMAL OPERATION

- Open the door in the casing using the triangular key provided (see Fig. 1).
- Move back the lever shown in fig. 2 up to the mechanic al stop (pos. AUTOMATIC).
- Close the door.


Fig. 1


Fig. 2

