

CORAL 1050

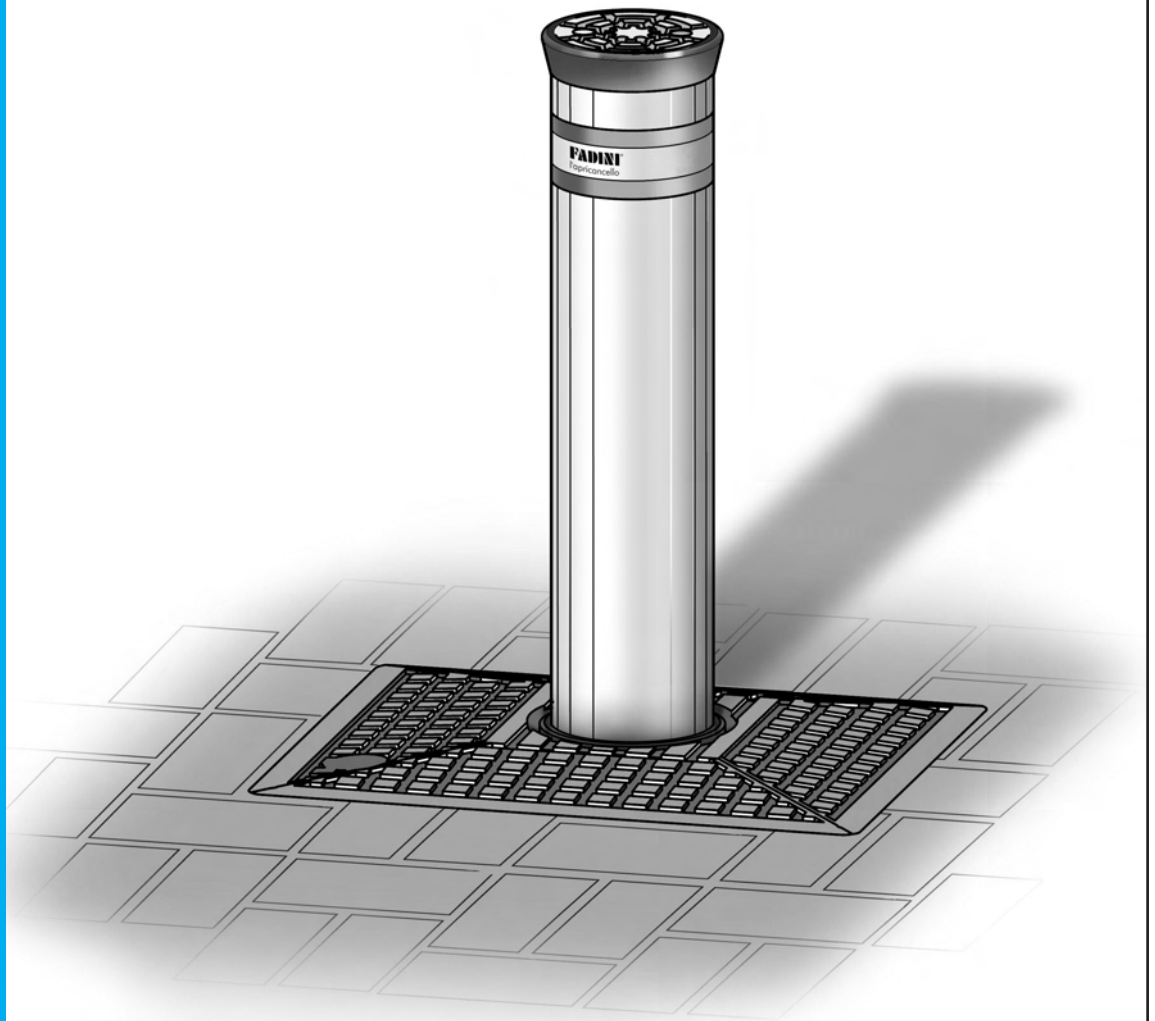
CORAL 1080

Retractable oil-hydraulic traffic control post

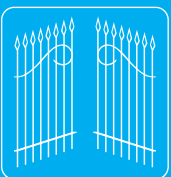
Diameter \varnothing 100mm

Stroke 500 mm

Stroke 800 mm



CE



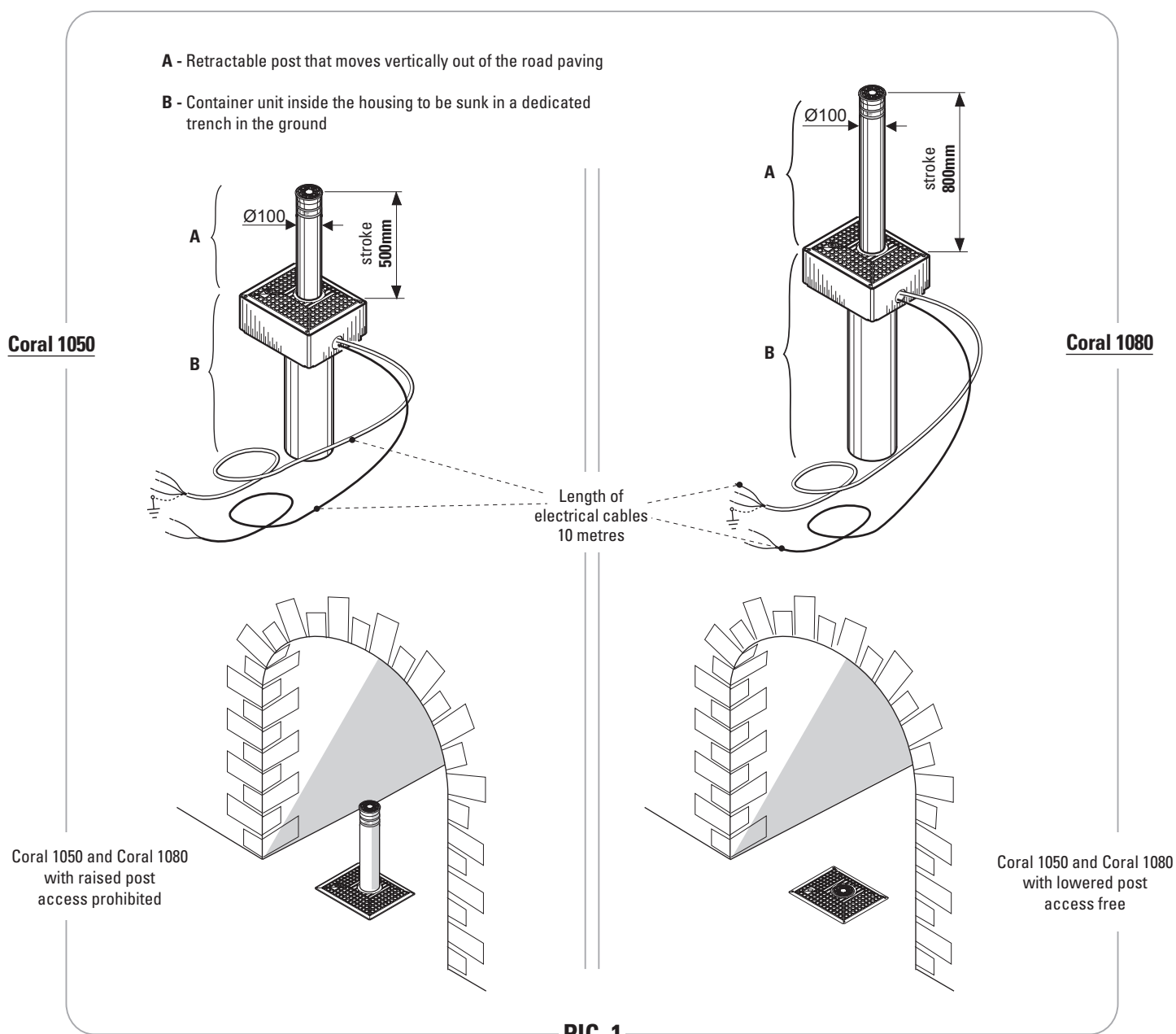
FADINI
the gate opener
Made in Italy

Instruction manual

GB

INSTRUCTIONS TO BE FOLLOWED BEFORE INSTALLING THE OPERATOR

FOR OPTIMAL APPLICATION AND USE OF THE OPERATOR PLEASE READ THE INSTRUCTIONS AND CONSULT EXPLANATORY DIAGRAMS. **IMPORTANT: ALL INSTALLATION OPERATIONS MUST BE PERFORMED BY A QUALIFIED TECHNICIAN, IN OBSERVANCE OF THE EN 12453 - EN 12445 SAFETY REGULATIONS AND MACHINERY DIRECTIVE 98/37/EC. CAREFUL RISK ANALYSIS IS REQUIRED UNDER APPLICABLE REGULATIONS**



OVERVIEW

This product belongs to our range of retractable traffic control posts. It is quick and easy to install, as it does not need to be adjusted or calibrated and has been designed to regulate and prohibit vehicular access.

Both the **CORAL 1050** and **CORAL 1080** oil-hydraulic operators have anti-corrosion treated steel posts with a diameter of **Ø100mm** and ranges of **500mm (Coral 1050)** and **800mm (Coral 1080)**.

The product's hallmark is its ease of installation: once the housing has been secured, the operator can be introduced ready for operation, as soon as the wiring has been completed.

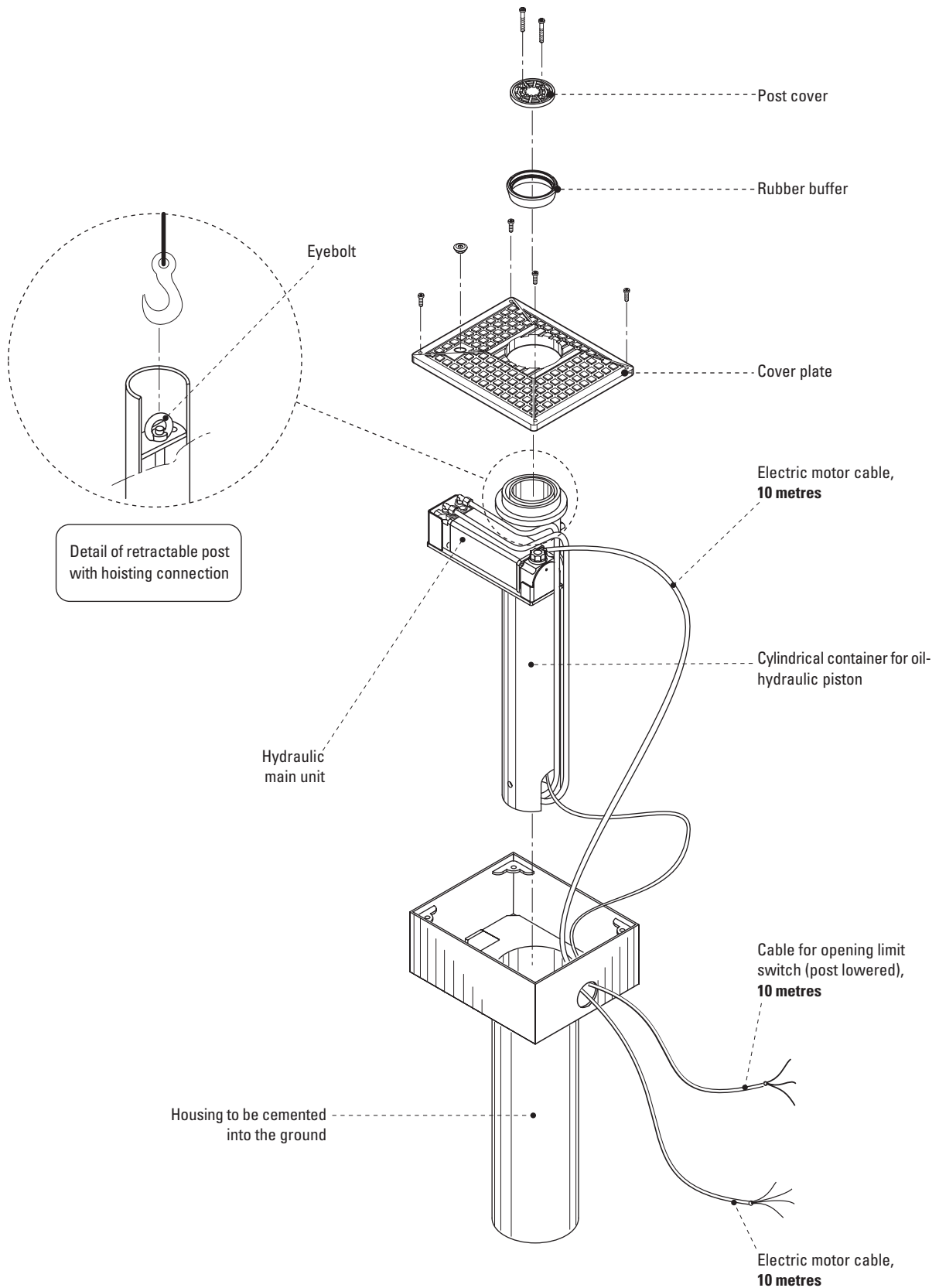
As soon as the retractable post receives a command (from a key switch or radio transmitter), it rises from its interred position. The post is clearly visible at nighttime thanks to a reflective strip and the possibility of connecting a flashing light or traffic light. Using the electronic microprocessor programmer, the operator can also be customised with presence indicator accessories (magnetic coils, presence indicator photocells).

PRELIMINARY OPERATIONS

Before starting installation operations, it is important to follow the indications given below:

- Before digging the trench to house the housing, check that there are no pipes or other utilities that could interfere with the preparatory operations.
- Check the firmness and consistency of the ground.
- Remove any obstacles hindering the post's movement.

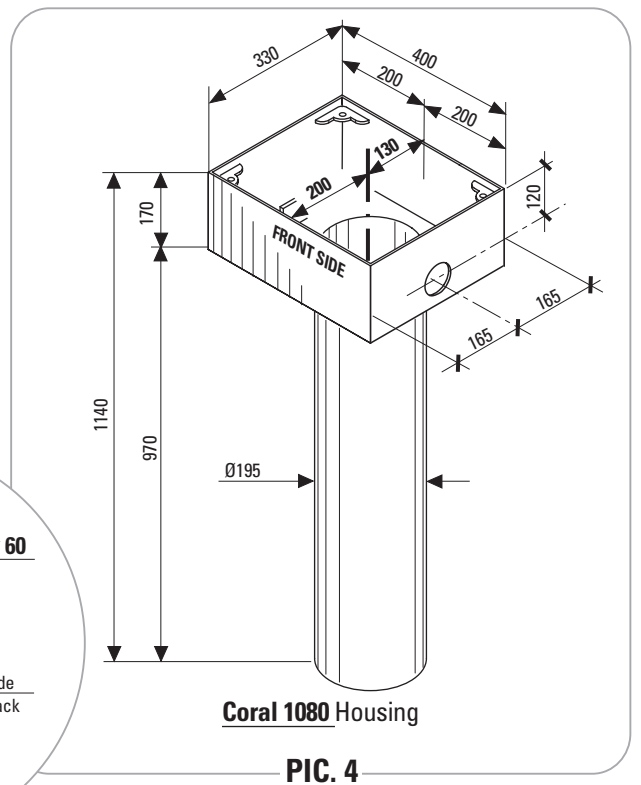
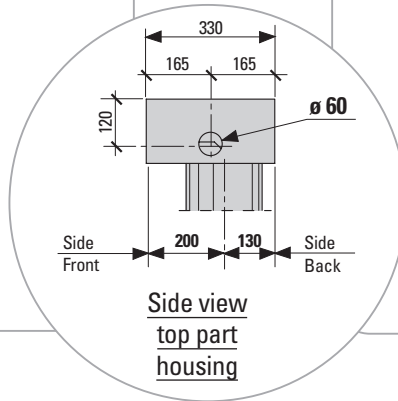
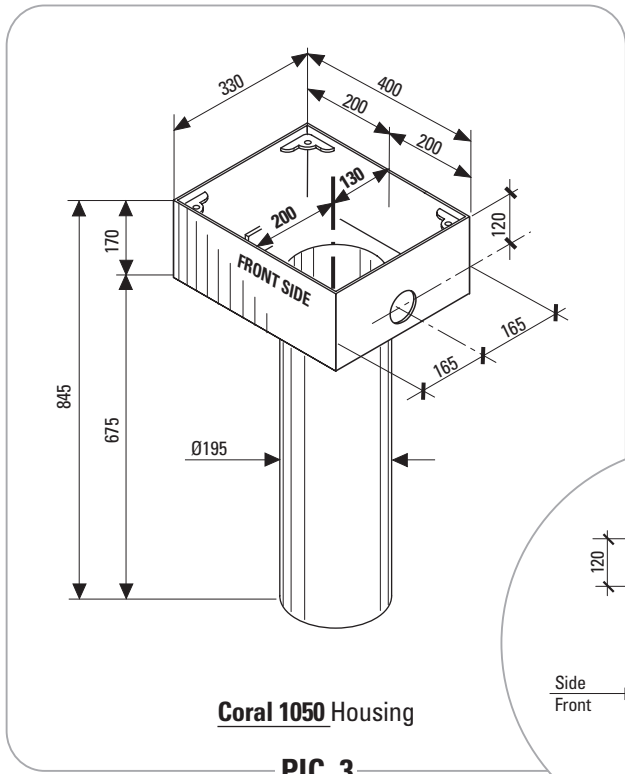
PRELIMINARY OPENING OF ALL FUNCTIONAL COMPONENTS



PIC. 2

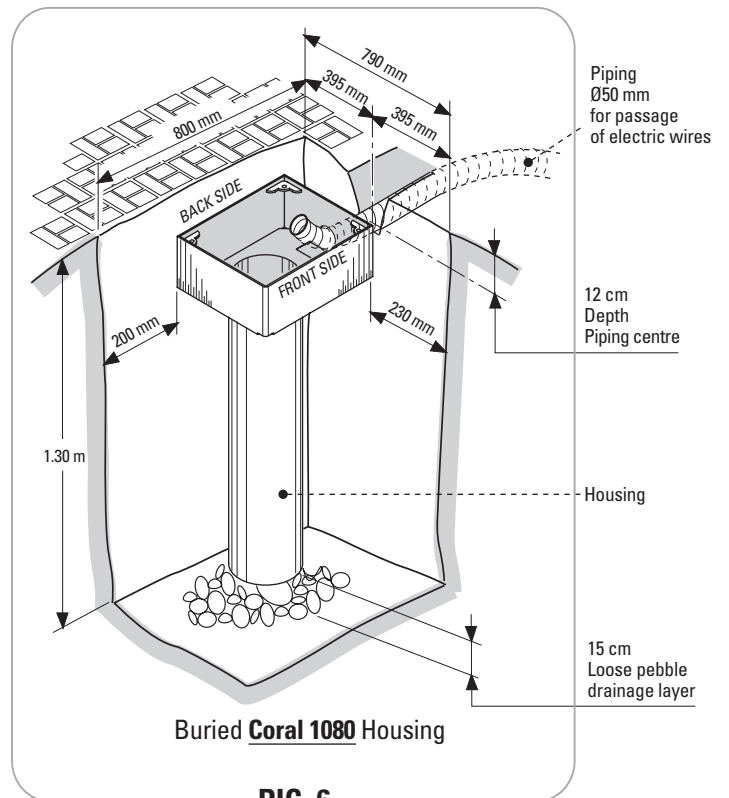
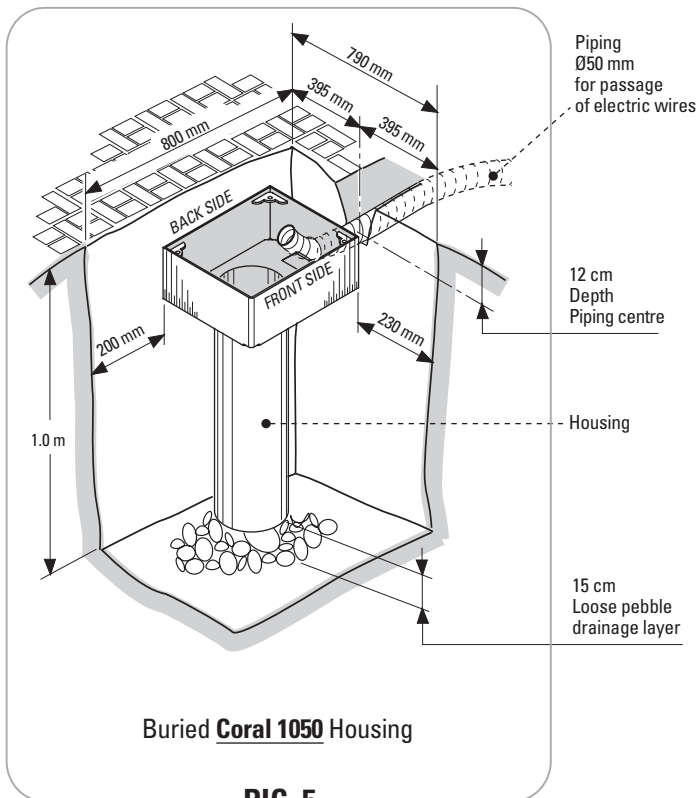
Start by removing the cover plate to reveal the operator and separate the individual components, with the aid of a hoist. Pic.2: this makes it easy to extract the internal piston and hydraulic main unit container unit.

IMPORTANT: take care not to tear or cut wires.

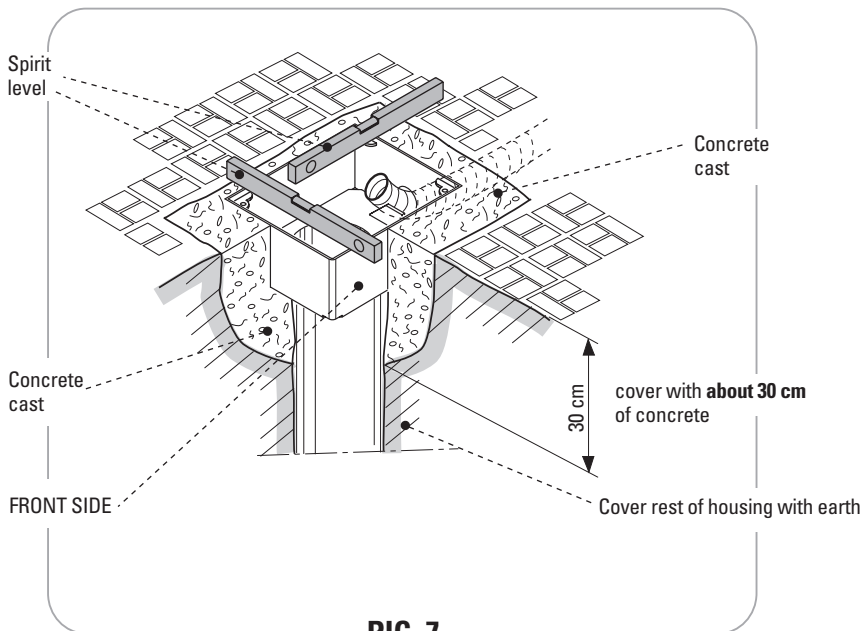


The **Housing** is the component inside which the operator is installed. It is therefore essential, when securing it in the ground to check that the top edge is level with the ground.

IMPORTANT: the top recess of the Housing (inside which the hydraulic main unit is placed), is not central to the tube below inside which the oil-hydraulic piston unit is placed: the latter is **13cm** from the **"Back side"** of the Housing (Pic.3 and Pic.4).



- Dig a trench in the ground in the point at which the Coral 1050 or Coral 1080 operator is to be installed, according to the measurements shown in Pic.5 and Pic.6, and connect a Ø50 mm pipe leading to the Elpro S40 electronic programmer (10 metres of cable are provided). Place a 15 cm deep layer of loose gravel and pebbles on the bottom.



PIC. 7

- Once the housing has been positioned and installation completed, it is important for the top edge to be level with the ground (Pic. 7 and Pic. 8)



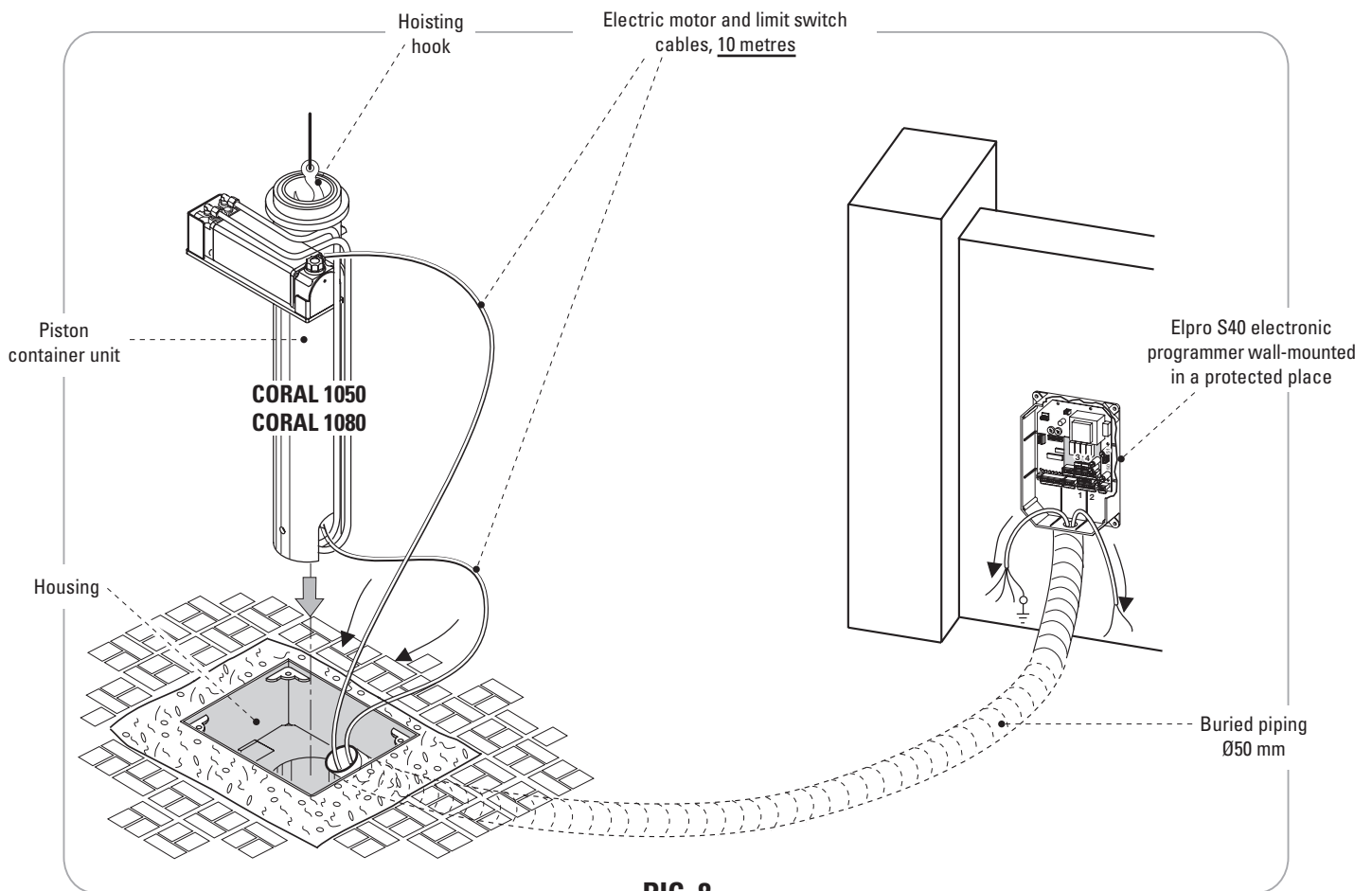
IMPORTANT: The top edge of the housing must be level with the ground when installation has been completed

Housing **CORAL 1050**
Housing **CORAL 1080**

PLACING THE TRAFFIC CONTROL POST

CORAL 1050
CORAL 1080

INSIDE THE HOUSING

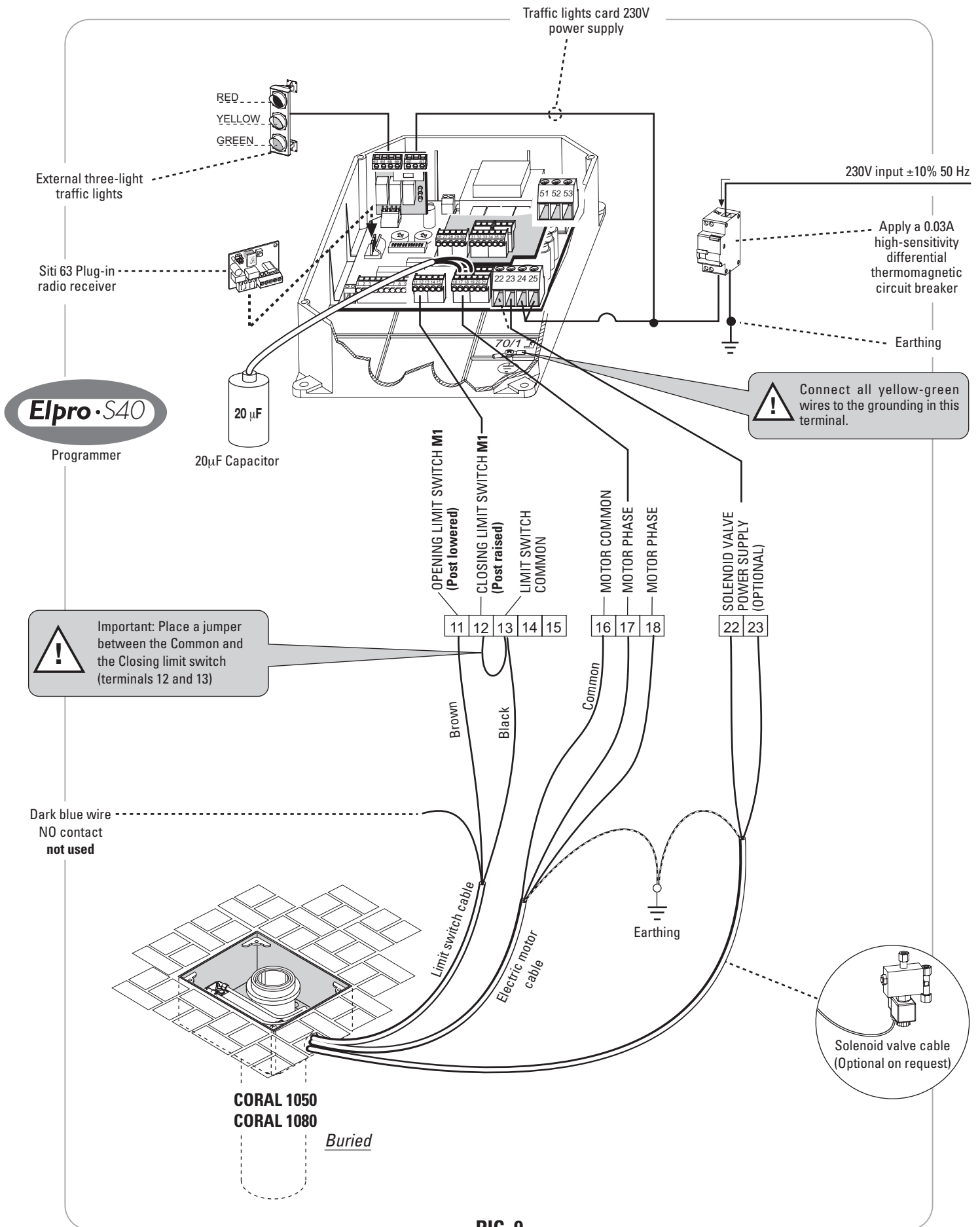


PIC. 8

Before performing this operation, wait for the housing to be secured firmly in place. Do not commence **until the concrete has set** and the electric wire pipe has been secured and covered with soil.

- Use a hoisting hook to lift the piston unit with the post and main unit (using the **eyebolt**) and place on top of the **housing**.
- The subsequent phase of this operation consists in threading the motor and limit switch electric wires through the piping and simultaneously starting to delicately place the operator inside the housing.

IMPORTANT: Pass the motor and limit switch electric wires through the piping without tearing or cutting the cables. Pic.8.



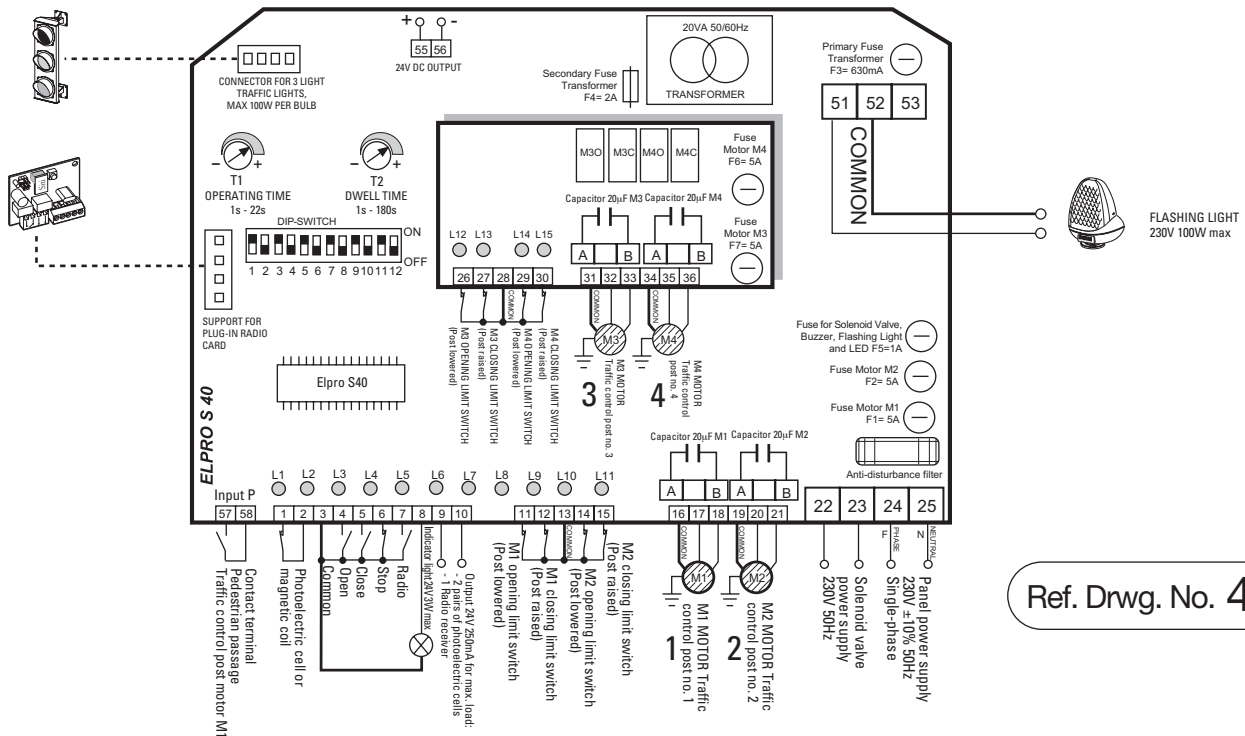
PIC. 9



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Two electric cables are provided with Coral 1050 and Coral 1080 traffic control posts: one to connect the **230V 50Hz electric motor** to terminals **16, 17 and 18** and another one to connect to the **terminal of the opening limit switch 11** and the common **13** (Pic.9).

Place a jumper between terminals **12 and 13** of the closing limit switch



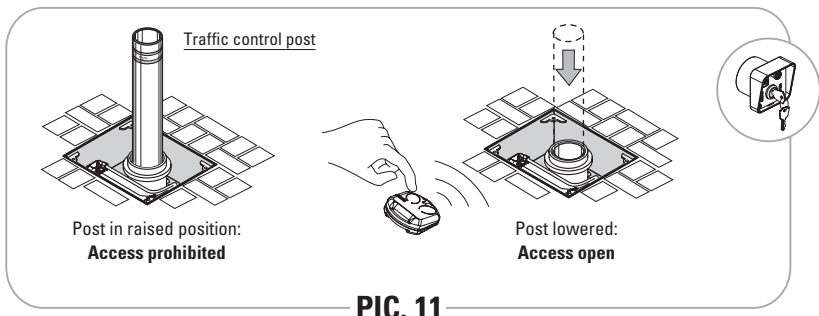
Ref. Drwg. No. 4555
PIC. 10

FIRST OPERATION MANOEUVRES CORAL 1050 CORAL 1080

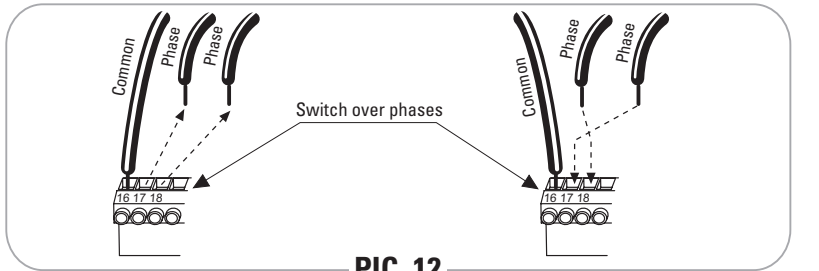
ATTENTION: it is important to establish the exact position of the traffic control post, open or closed, according to whether it allows or prohibits vehicular access (Pic. 11)

Having terminated installation of the traffic control post and all the safety and control accessories and the respective connections with the Elpro S40 programmer, and having completed thorough risk analysis, the first operation manoeuvres can be performed. If you have a radio transmitter, encode the radio receiver according to the relative instructions before giving the command to raise the retractable post, or give the manoeuvre command using a key switch. Pic.11.

During first use, it is important to check whether the wiring of the electric motor phases corresponds to the "open" and "closed" positions of the traffic control post, **with the post raised limit switch (access prohibited)**, if this is not the case, switch over the two "phase" wires, leaving the common fixed (Pic. 12).



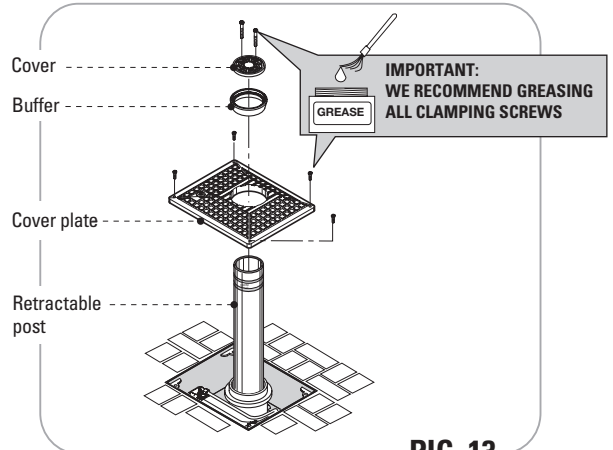
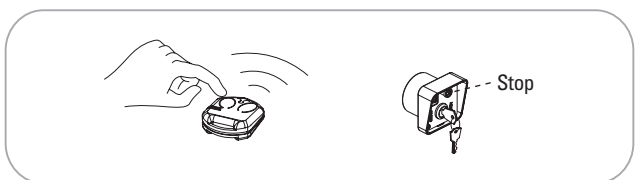
PIC. 11



PIC. 12

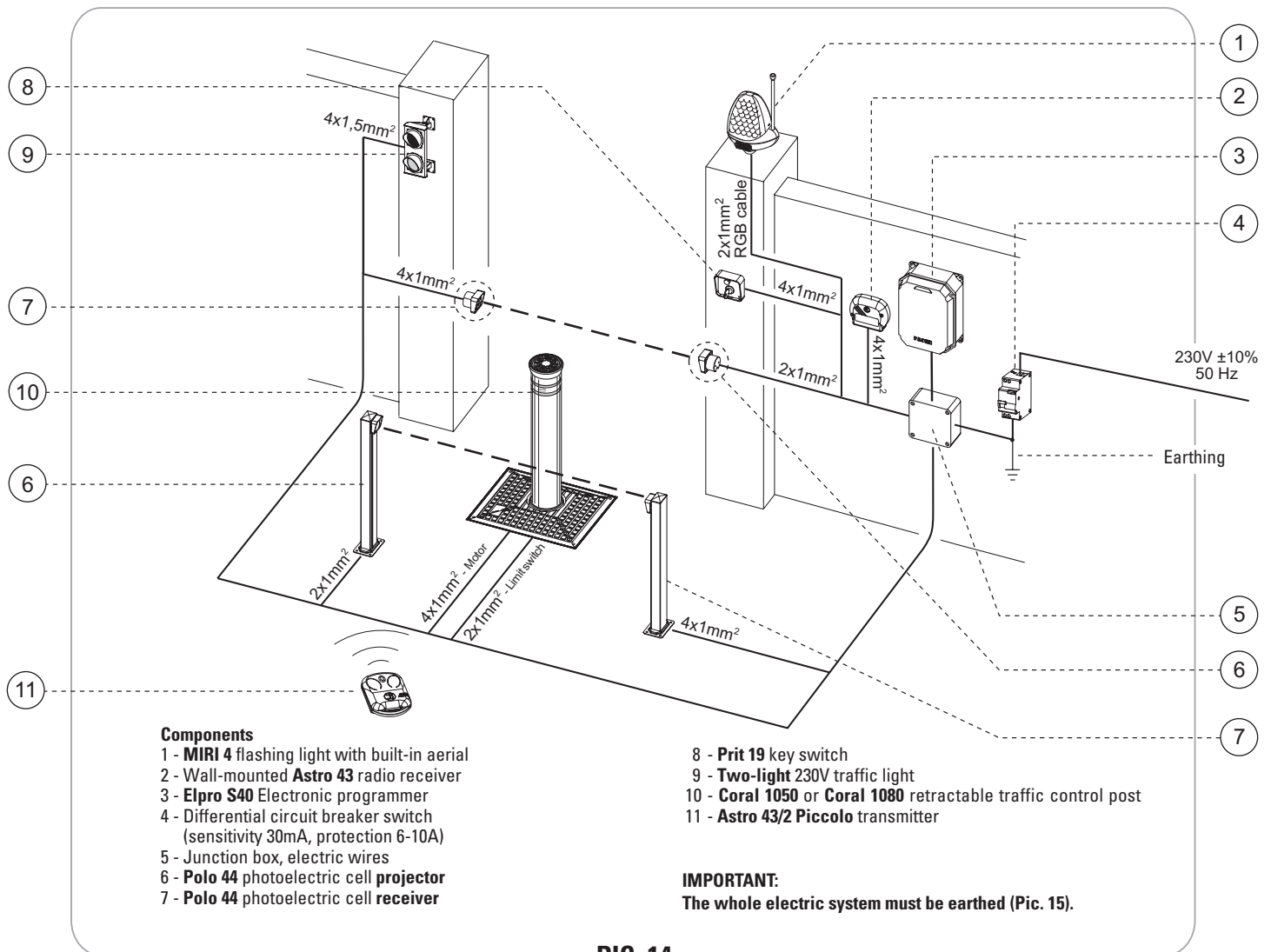
GROUND-LEVEL CLOSURE OF COVER PLATE CORAL 1050 CORAL 1080

- Use the four screws to close the **Cover Plate** (Pic.13)
- Lift the **retractable post** for facilitate closure of the post **cover** with the **buffer**, give the command (by encoding a transmitter with the radio receiver or a key switch Pic.12) to lift the retractable post (Pic.13).



PIC. 13





PIC. 14

Before making electric connections, carefully read the wiring diagrams attached: **Elpro S40** electronic programmer instruction booklet - Drwg. 4555.

- **Power supply, electric motor and flashing light wiring must be made using cables with 1.5 mm² sections**, for a maximum distance of 50 m. For distances of over 50 metres, we recommend using electric wires with sections of 2 mm².
- For the **Photoelectric cells, button switches and accessories**, electric wires with sections of 1 mm² may be used.
- The whole electric system must be earthed.

ARRANGING THE SAFETY AND SIGNALLING ACCESSORIES

CORAL 1050
CORAL 1080

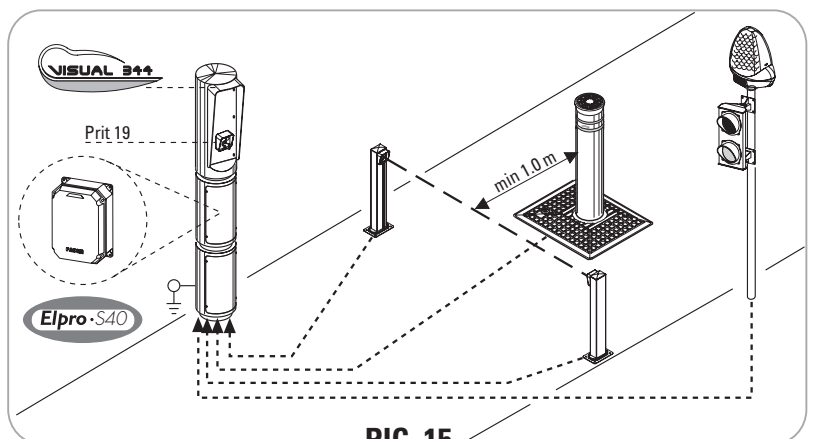
All safety and control accessories must be installed at certain distances from the operator in order to obtain effective installation. Connect to earth.

ARRANGEMENT OF THE PHOTOELECTRIC CELLS

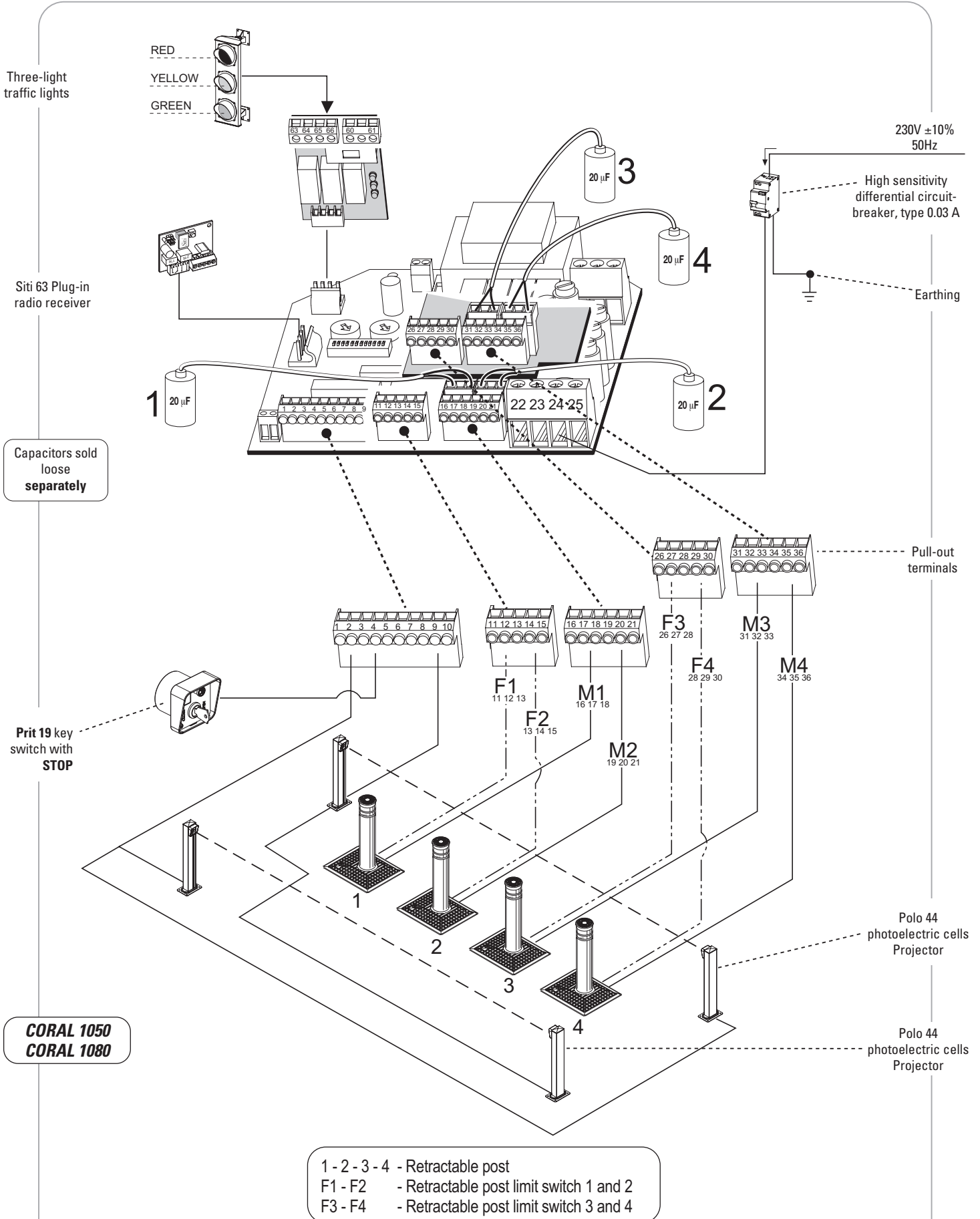
The photoelectric cells must be installed at a minimum working distance as indicated in Pic. 15.

ARRANGING VISUAL 344

The 2 or 3-module **Visual 344** cabinet is a metal accessory used to house the **Elpro S40** in exposed positions, in those installation situations in which the programmer cannot be wall- or recess-mounted. It has also been designed for the installation of possible control accessories such as intercom systems or key switches, in the immediate vicinity of the **Coral 1050** or **Coral 1080** (pic. 15).



PIC. 15



Three-light traffic lights

RED
YELLOW
GREEN

Siti 63 Plug-in radio receiver

230V ±10% 50Hz

High sensitivity differential circuit-breaker, type 0.03 A

Earthing

Capacitors sold loose separately

1 20 µF

20 µF 3

20 µF 4

20 µF 2

Pull-out terminals

Prit 19 key switch with STOP

1 2 3 4 5 6 7 8 9 10

F1 11 12 13

M1 16 17 18

F3 26 27 28

M3 31 32 33

F2 13 14 15

M2 19 20 21

F4 28 29 30

M4 34 35 36

Polo 44 photoelectric cells Projector

Polo 44 photoelectric cells Projector

CORAL 1050
CORAL 1080

- 1 - 2 - 3 - 4 - Retractable post
- F1 - F2 - Retractable post limit switch 1 and 2
- F3 - F4 - Retractable post limit switch 3 and 4

Connecting 4 traffic control posts to the electronic programmer **Elpro-S40**

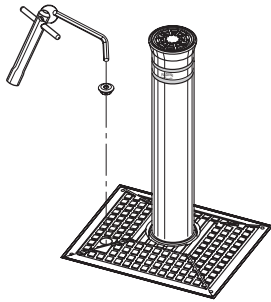
PIC. 16



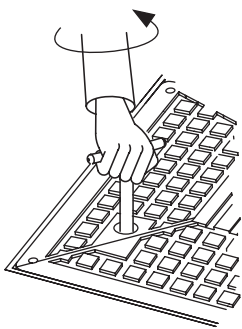
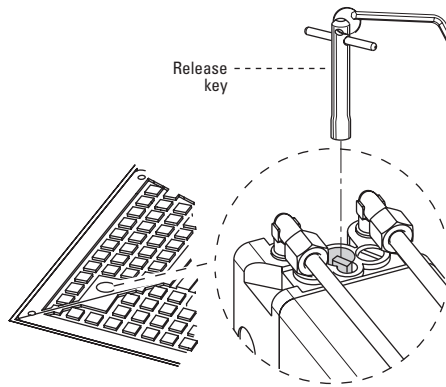
MANUAL RELEASE OPERATIONS

CORAL 1050
CORAL 1080

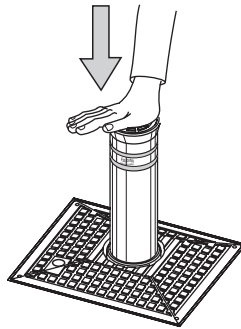
1) - Unscrew protection cap



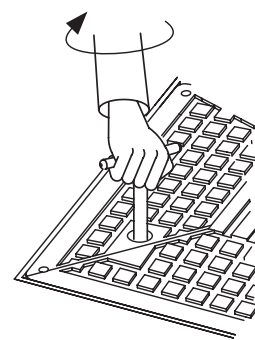
2) - Insert the release key in the release key recess



3) - Release the hydraulic circuit by turning the release key one turn anti-clockwise



4) - Press to lower the post manually



5) - Block the hydraulic circuit by turning the release key clockwise



PIC. 17

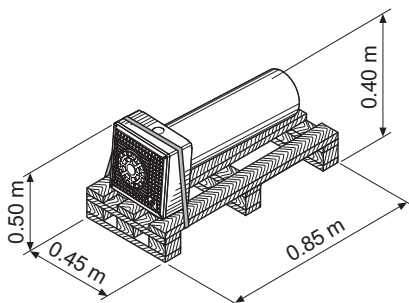
In the case of a blackout, the post can be lowered manually following the instructions show in Pic.17. Unscrew the **Protection cap** (1), insert the **release key** into the recess (2) and turn once anti-clockwise to release the hydraulic circuit (3). Press down manually to lower the column (4) and then block the hydraulic circuit, by turning the **release key** clockwise (5).

= To raise the post, first "**Block**" by turning the key clockwise, then give command =

PACKAGING DETAILS

CORAL 1050
CORAL 1080

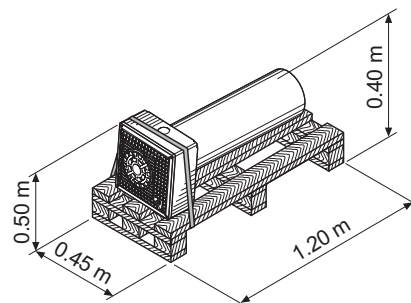
Oil-hydraulic traffic control post **CORAL® 1050**



Individually packed
on wooden pallet

Total weight of **Coral 1050**: 91 Kg

Oil-hydraulic traffic control post **CORAL® 1080**



Individually packed
on wooden pallet

Total weight of **Coral 1080**: 109 Kg



PIC. 18

PIC. 19

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the gate opener
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Important: discarded material should be disposed of using the dedicated containers by specialised firms.

MANUFACTURER'S DECLARATION OF CONFORMITY

Manufacturer:

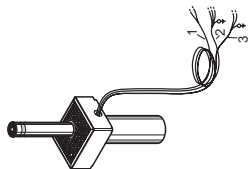


Address: Via Mantova 177/A - 37053 Cerea (VR) Italy
Tel. +39 0442 330422 - Fax +39 0442 331054
e-mail: info@fadini.net - www.fadini.net

HEREBY DECLARES UNDER ITS OWN RESPONSIBILITY THAT:

Model:

CORAL® 1050



retractable traffic control post

IS CONFORMING TO MACHINERY DIRECTIVE98/37/CE

and that:

Coral 1050 is sold for installation as an automated system, with original accessories and components indicated by the Manufacturer.

Pursuant to legal provisions, the operator is a 'machine' and consequently, the Installer must comply with all applicable safety regulations. The Installer is obliged to issue his/her own Declaration of Conformity.

The Manufacturer declines all responsibility for improper use of the product

The product is conforming to the following specific regulations:

- Risk analysis and subsequent operations to eliminate them: ----- **EN 12445 & EN 12453**
- Low Voltage directive: ----- **2006/95 CE**
- Electromagnetic Compatibility Directive: ----- **2004/108/CEE & 92/31 CEE**

In order to certify the product, the Manufacturer declares under its own responsibility that it complies with
PRODUCT STANDARDEN 13241-1

Date: 09-06-08

Meccanica FADINI s.p.a.
Supervisor

Supervisor

GB



FADINI®
the gate opener
Made in Italy

MANUFACTURER'S DECLARATION OF CONFORMITY

Manufacturer:

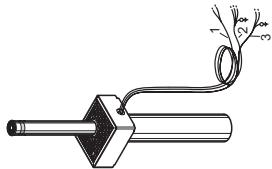


Address: Via Mantova 177/A - 37053 Cerea (VR) Italy
Tel. +39 0442 330422 - Fax +39 0442 331054
e-mail: info@fadini.net - www.fadini.net

HEREBY DECLARES UNDER ITS OWN RESPONSIBILITY THAT:

Model:

CORAL® 1080



retractable traffic control post

IS CONFORMING TO MACHINERY DIRECTIVE98/37/CE

and that:

Coral 1080 is sold for installation as an automated system, with original accessories and components indicated by the Manufacturer.

Pursuant to legal provisions, the operator is a 'machine' and consequently, the Installer must comply with all applicable safety regulations. The Installer is obliged to issue his/her own Declaration of Conformity.

The Manufacturer declines all responsibility for improper use of the product

The product is conforming to the following specific regulations:

- Risk analysis and subsequent operations to eliminate them: ----- **EN 12445 & EN 12453**
- Low Voltage directive: ----- **2006/95 CE**
- Electromagnetic Compatibility Directive: ----- **2004/108/CEE & 92/31 CEE**

In order to certify the product, the Manufacturer declares under its own responsibility that it complies with
PRODUCT STANDARDEN 13241-1

Date: 09-06-08

Meccanica FADINI s.p.a.
Supervisor

Supervisor

GB



FADINI®
the gate opener
Made in Italy

TECHNICAL DATA AND DIMENSIONS

CORAL 1050
CORAL 1080

HYDRAULIC MAIN UNIT

Hydraulic pump	P10
Hydraulic pump flow rate	4.45 l/min
Mean operating pressure	2 MPa (20 bar)
Maximum pump pressure	4 MPa (40 bar)
Operating temperature	-20°C + 80°C
Hydraulic oil type	Oil Fadini
Main unit static weight	10 Kg
Main unit protection class	IP 54

ELECTRIC MOTOR

Output	0.25 KW (0.33 HP)
Supply voltage	230 V
Absorbed current	1.8 A
Frequency	50 Hz
Consumption power	330 W
Capacitor	20 µF
Motor rotation speed	2'800 rpm
Service mode	S 3

CORAL 1050

OIL-HYDRAULIC PISTON

Rod exit time	4s
Net rod stroke	500 mm
Rod diameter	16 mm
Plunger diameter	30 mm
Thrust force	15 daN
Complete protection class	IP 557

PERFORMANCE CORAL 1050 (STROKE 500mm)

Service cycle	4 secs Opening - 30s Dwell - 4s Closing - 30s Dwell
Complete cycle time	68s
Complete Opening - Dwell - Closing - Dwell cycles	53 per hour
Annual cycles (considering 8-hour working day)	154'000

Packaging Pic.18

(See Pic. 20)

CORAL 1080

OIL-HYDRAULIC PISTON

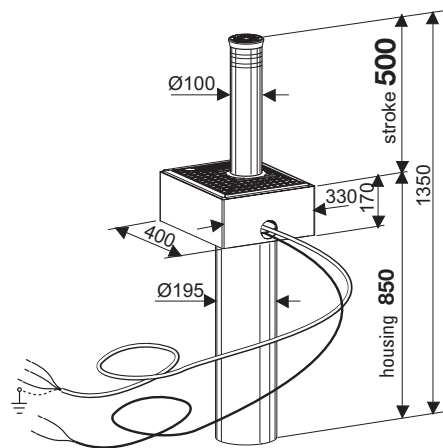
Rod exit time	6s
Net rod stroke	800 mm
Rod diameter	16 mm
Plunger diameter	30 mm
Thrust force	15 daN
Complete protection class	IP 557

PERFORMANCE CORAL 1080 (STROKE 800mm)

Service cycle	6 secs Opening - 30s Dwell - 6s Closing - 30s Dwell
Complete cycle time	72s
Complete Opening - Dwell - Closing - Dwell cycles	50 per hour
Annual cycles (considering 8-hour working day)	146'000

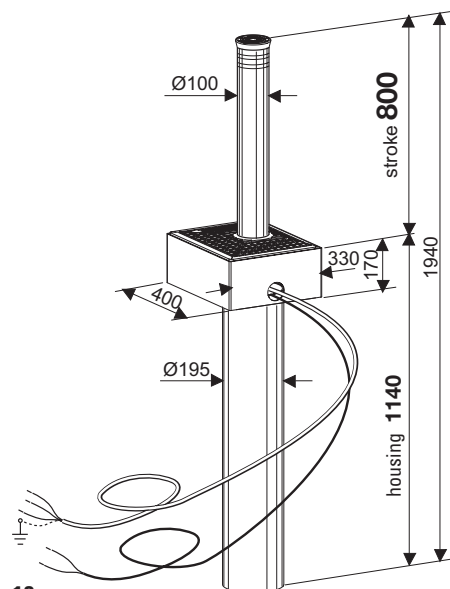
Packaging Pic.19

(See PIC. 21)



10 metres of cable
Electric motor and
limit switch
CORAL 1050 - weight 86 Kg

PIC. 20



10 metres of cable
Electric motor and
limit switch
CORAL 1080 - weight 104 Kg

PIC. 21

WARNINGS

- Before performing installation, conduct Risk Analysis and operate using devices compliant with EN 12445 and EN 12453 safety regulations.
- Packaging materials such as cardboard, nylon, polystyrene, etc. should be disposed of using specialised waste collection firms.
- If the operator is removed, **do not cut the electric wires**, rather remove them from the terminal board loosening the clamping screws inside the dividing box.
- Disconnect the main switch before opening the lid of the electric cable junction box.
- The whole operator must be earthed using the yellow/green electric cable.
- **GUARANTEE CERTIFICATE ON REQUEST BY CUSTOMER**

We recommend reading the standards, suggestions and observations contained in the "Safety Regulations booklet" thoroughly.

CHECKS AND MAINTENANCE:

For optimal performance of the system over time and operation in compliance with safety regulations, correct maintenance and checks must be performed on the operator, the electronic equipment constituting the installation and on wiring performed by qualified technicians:

- Oil-hydraulic operator: maintenance check every 6 months.
- Electronic equipment and safety systems: a monthly maintenance check.

The growth of MECCANICA FADINI has always been based on the development of guaranteed products thanks to our "TOTAL QUALITY CONTROL" system which ensures constant quality standards, updated knowledge of the European Standards and compliance with their requirements, in view of an ever increasing process of improvement.



AUTOMATIC GATE MANUFACTURERS

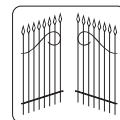
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e-mail: info@fadini.net - www.fadini.net



2003/108/CE Directive
for waste electrical and
electronic equipments
DISPOSE OF PROPERLY
ENVIRONMENT-NOXIOUS MATERIALS



EUROPEAN MARK CERTIFYING CONFORMITY
TO THE ESSENTIAL REQUIREMENTS OF THE
STANDARDS 98/37/EC



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the gate opener
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Distributor's box

The manufacturer reserves the right to make amendments to this manual without prior notice and declines all responsibility for any errors, personal injury or damage to property.