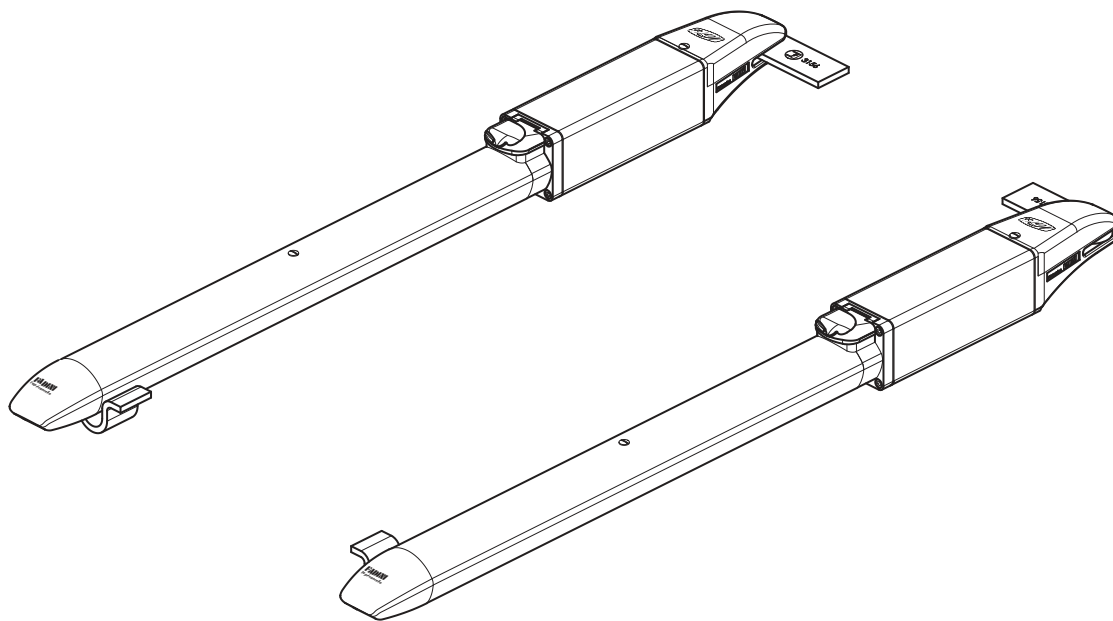


# NUPI 66

**KIT with oil-hydraulic operators for swinging gates up to 2,5 m per gate leaf**



**CARIBBEAN WATERJET SERVICE**

Cutting Edge Technology



EN 13241  
EN 12453  
EN 12445

Made in Italy



**FADINI**  
the gate opener

### GENERAL WARNINGS FOR PEOPLE SAFETY

#### INTRODUCTION

This operator is designed for a specific scope of applications as indicated in this manual, including safety, control and signaling accessories as minimum required with **FADINI** equipment. □ Any applications not explicitly included in this manual may cause operation problems or damages to properties and people. □ Meccanica Fadini snc is not liable for damages caused by the incorrect use of the equipment, or for applications not included in this manual or for malfunctioning resulting from the use of materials or accessories not recommended by the manufacturer. □ The manufacturer reserves the right to make changes to its products without prior notice. □ All that is not explicitly indicated in this manual is to be considered not allowed.

#### BEFORE INSTALLATION

Before commencing operator installation assess the suitability of the access, its general condition and the structure. □ Make sure that there is no risk of impact, crushing, shearing, conveying, cutting, entangling and lifting situations, which may prejudice people safety. □ Do not install near any source of heat and avoid contacts with flammable substances. □ Keep all the accessories able to turn on the operator (transmitters, proximity readers, key-switches, etc) out of the reach of the children. □ Transit through the access only with stationary operator. □ Do not allow children and/or people to stand in the proximity of a working operator. □ To ensure safety in the whole movement area of a gate it is advisable to install photocells, sensitive edges, magnetic loops and detectors. □ Use yellow-black strips or proper signals to identify dangerous spots. □ Before cleaning and maintenance operations, disconnect the appliance from the mains by switching off the master switch. □ If removing the actuator, do not cut the electric wires, but disconnect them from the terminal box by loosening the screws inside the junction box.

#### INSTALLATION

All installation operations must be performed by a qualified technician, in observance of the Machinery Directive 2006/42/CE and safety regulations EN 12453 - EN 12445. □ Verify the presence of a thermal-magnetic circuit breaker 0,03 A - 230 V - 50 Hz upstream the installation. □ Use appropriate objects to test the correct functionality of the safety accessories, such as photocells, sensitive edges, etc. □ Carry out a risk analysis by means of appropriate instruments measuring the crushing and impact force of the main opening and closing edge in compliance with EN 12445. □ Identify the appropriate solution necessary to eliminate and reduce such risks. □ In case where the gate to automate is equipped with a pedestrian entrance, it is appropriate to prepare the system in such a way to prohibit the operation of the engine when the pedestrian entrance is used. □ Apply safety nameplates with CE marking on the gate warning about the presence of an automated installation. □ The installer must inform and instruct the end user about the proper use of the system by releasing him a technical dossier, including: layout and components of the installation, risk analysis, verification of safety accessories, verification of impact forces and reporting of residual risks.

#### INFORMATION FOR END-USERS

The end-user is required to read carefully and to receive information concerning only the operation of the installation so that he becomes himself responsible for the correct use of it. □ The end-user shall establish a written maintenance contract with the installer/maintenance technician (on -call). □ Any maintenance operation must be done by qualified technicians. □ Keep these instructions carefully.

#### WARNINGS FOR THE CORRECT OPERATION OF THE INSTALLATION

For optimum performance of system over time according to safety regulations, it is necessary to perform proper maintenance and monitoring of the entire installation: the automation, the electronic equipment and the cables connected to these. □ The entire installation must be carried out by qualified technical personnel, filling in the Maintenance Manual indicated in the Safety Regulation Book (to be requested or downloaded from the site [www.fadini.net/supporto/downloads](http://www.fadini.net/supporto/downloads)). □ Operator: maintenance inspection at least every 6 months, while for the electronic equipment and safety systems an inspection at least once every month is required. □ The manufacturer, Meccanica Fadini snc, is not responsible for non-observance of good installation practice and incorrect maintenance of the installation.

#### DISPOSAL OF MATERIALS

Dispose properly of the packaging materials such as cardboard, nylon, polystyrene etc. through specializing companies (after verification of the regulations in force at the place of installation in the field of waste disposal). Disposal of electrical and electronic materials: to remove and dispose through specializing companies, as per Directive 2012/19/UE. Disposal of substances hazardous for the environment is prohibited.



#### CE DECLARATION OF CONFORMITY of the manufacturer:

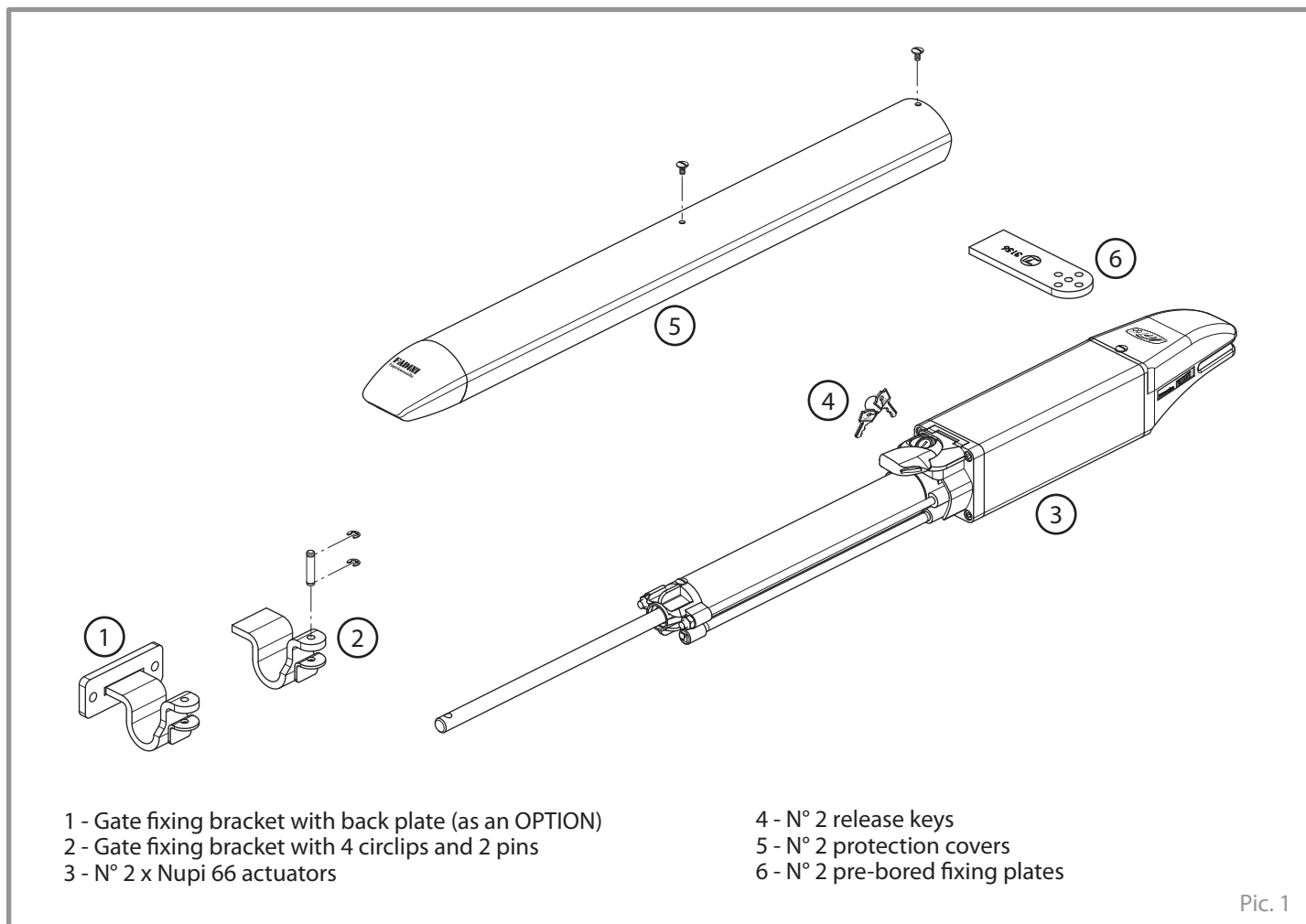
Meccanica Fadini snc (Via Mantova, 177/A - 37053 Cerea - VR - Italy) declares under own responsibility that: **Nupi 66** complies with the 2006/42/CE Machinery Directive, and also that it is sold to be installed in an "automatic system", along with original accessories and components as indicated by the manufacturing company. An automatic gate operator is, by law, a "machinery" and therefore the installer must fit the equipment with all of the applicable safety norms. The installer is also required to issue the installer's Declaration of Conformity. The manufacturer is not liable for possible incorrect use of the product. The product complies with the following specific norms: analysis of the risks and subsequent action to cure them as per EN 12445 and EN 12453, Low Voltage Directive 2014/35/UE, Electromagnetic Compatibility 2014/30/UE. In order to certify the product, the manufacturer declares under own responsibility the compliance with the EN 13241-1 PRODUCT NORMS.

Tested and certified: **CE** marking and type testing according to ITT PDC No. 2391-2008.

Meccanica Fadini s.n.c.  
Director, in charge

**PRODUCT GENERAL INFORMATION**

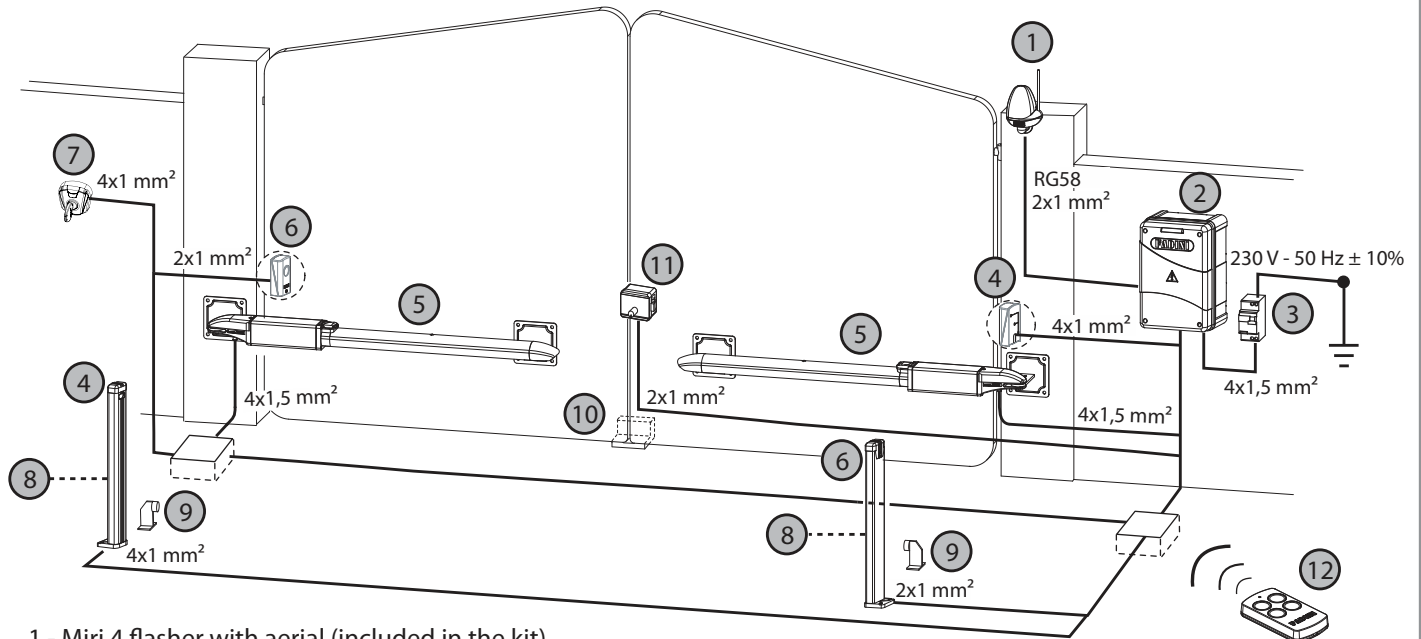
**NUPI 66** is an oil-hydraulic actuator fitted with a locking device to hold the gates in closed position, suitable for gate leaves not wider than 2 meters and designed to be mounted on to the gate and gate post. Its peculiar feature is that thrust power setting into low and high is not by valves, being this function electronically controlled by ELPRO 7 RP.

**ACTUATOR COMPONENTS AND FITTINGS INCLUDED IN THE KIT**

### ELECTRICAL WIRING AND LAYOUT OF THE ACCESSORIES

Before installing Nupi 66 arrange for the accessories to have control of the system and meet safety standards as required.

*Merely indicative general layout : it is the installer's responsibility to lay the tubes for the electrical connections most properly.*



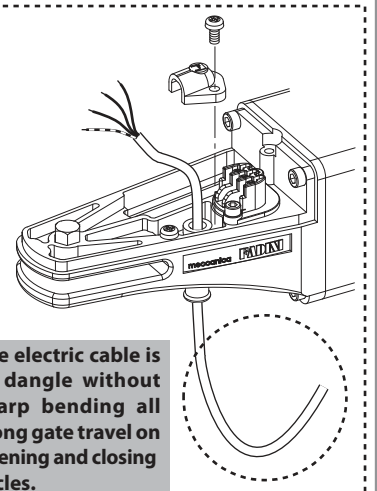
- 1 - Miri 4 flasher with aerial (included in the kit)
- 2 - Elpro 7 controller with VIX 53/2 R plug-in receiver (included in the kit)
- 3 - 230 V - 50 Hz - 0,03 A magneto-thermal circuit breaker (not included) - (beyond 100 m, cable section 2,5 mm<sup>2</sup>)
- 4 - Trifo 11 photocell receiver (for the only one pair included in the kit)
- 5 - Nupi 66
- 6 - Trifo 11 photocell transmitter (for the only one pair included in the kit)
- 7 - Chis 37 keyswitch (included in the kit)
- 8 - Mounting posts for Trifo 11 photocells - code 108L
- 9 - Gate stop in open position (mandatory, not included)
- 10 - Gate stop in closed position (mandatory, not included)
- 11 - Gate electric lock for gate leaves wider than 2 meters (not in the kit)
- 12 - VIX 53/4 TR transmitter (included in the kit)



**IMPORTANT: gate stops in open and closed gate positions are fundamental for the correct functioning of the system with Nupi 66.**



**The electric cable is to dangle without sharp bending all along gate travel on opening and closing cycles.**



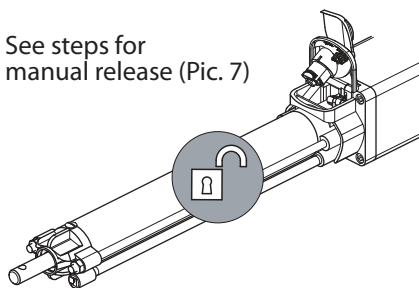
Pic. 2

### FIRST OPERATIONS TO MOVE THE PISTON SHAFT OUTWARDS

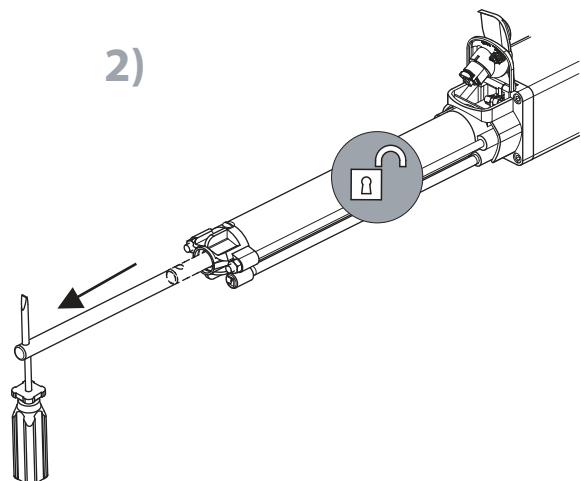
It is possible to move the piston shaft out either by hand as indicated (see Pic. 3) or electrically by supplying the operator with power. Either pull or drive the shaft halfway approximately.

1)

See steps for manual release (Pic. 7)

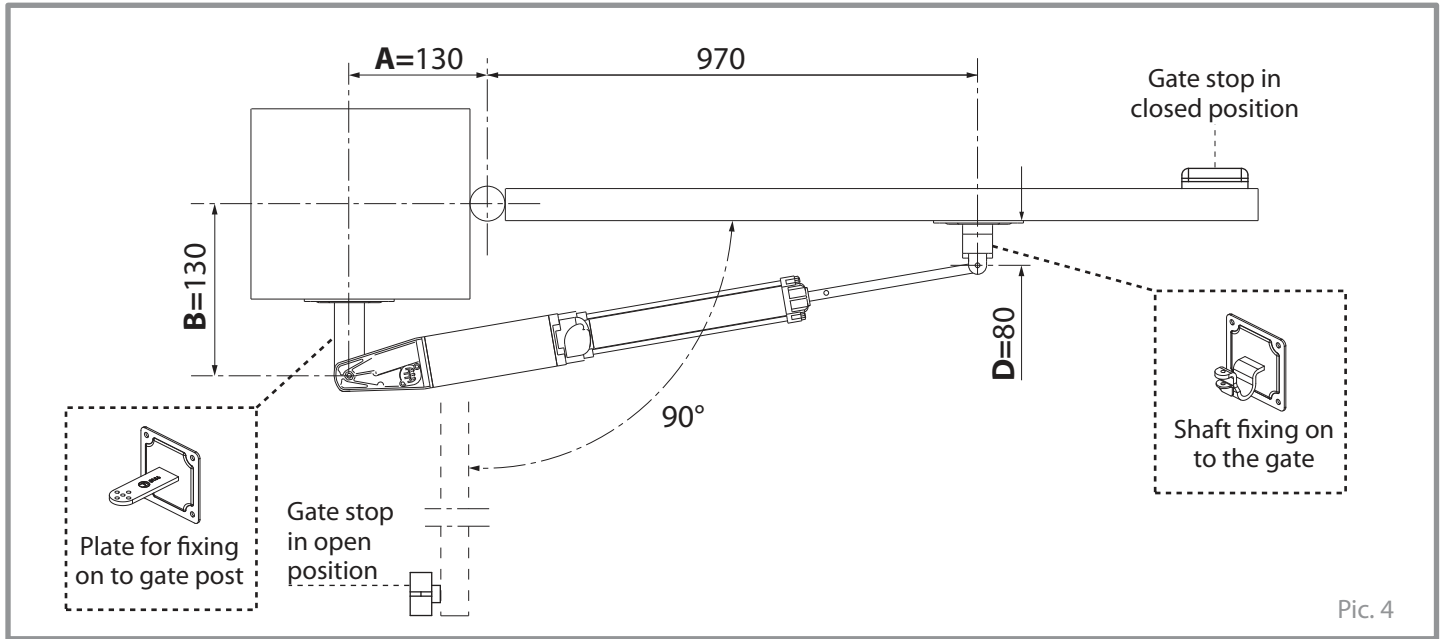


2)



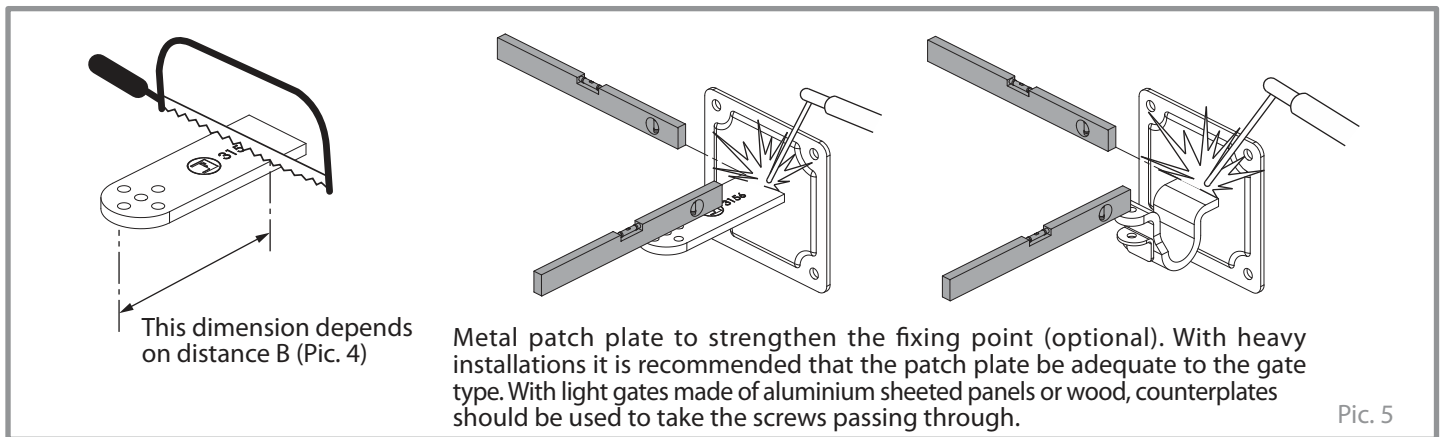
Pic. 3

**FIXING GEOMETRY WITH DISTANCES FOR THE GATES TO OPEN INWARDS**

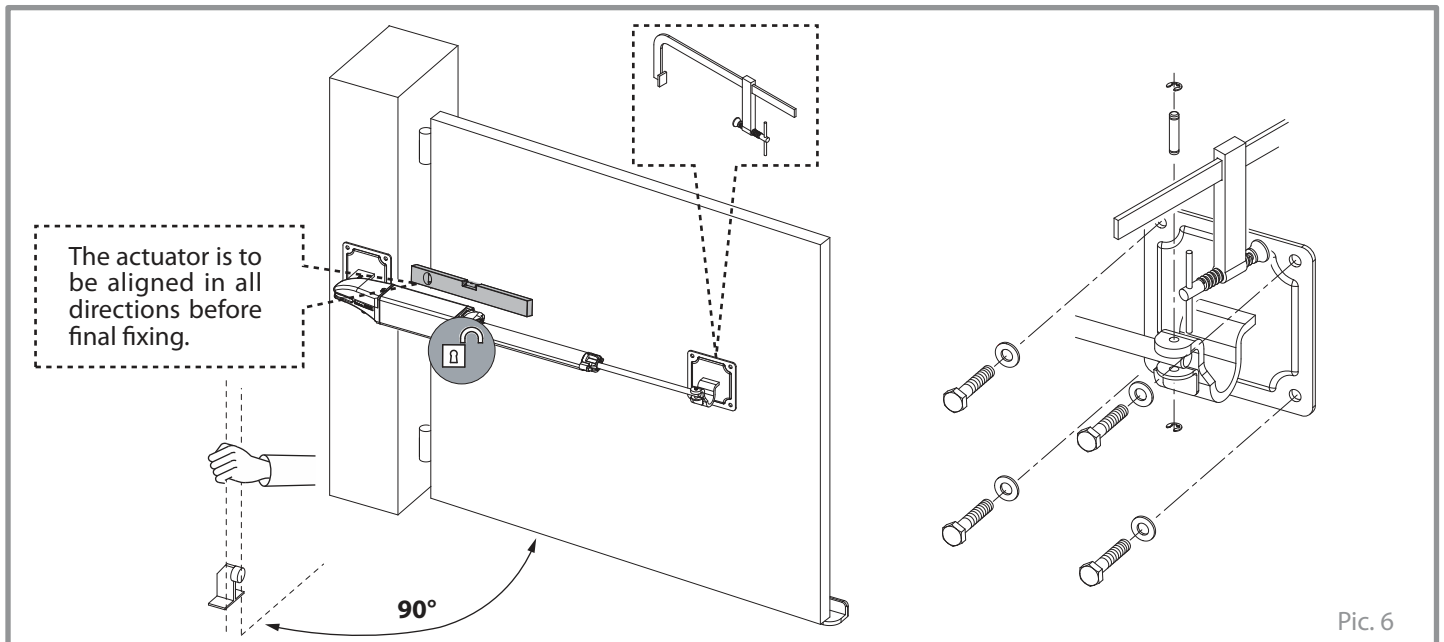


**PREPARATORY WORK WITH FIXING ACCESSORIES**

First of all weld the front and rear fixing brackets to the patch plates (not in the kit pack), perfectly levelled (Pic. 5).



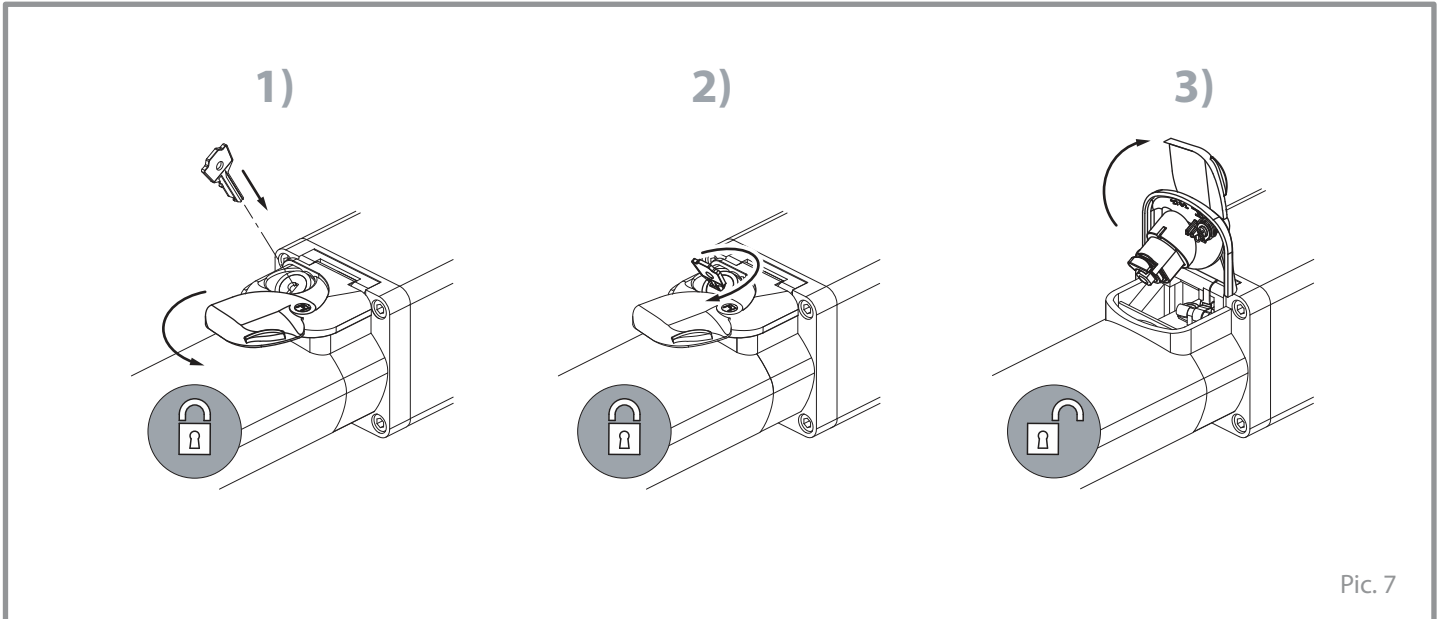
**It is advised that Nupi 66 be temporary fixed to the gate, perfectly aligned, by means of clamps. Then override the locking device and carry out a few manual cycles by opening and closing the gate to make sure the fixing geometry is correct and a proper 90° opening can so be achieved.**



English

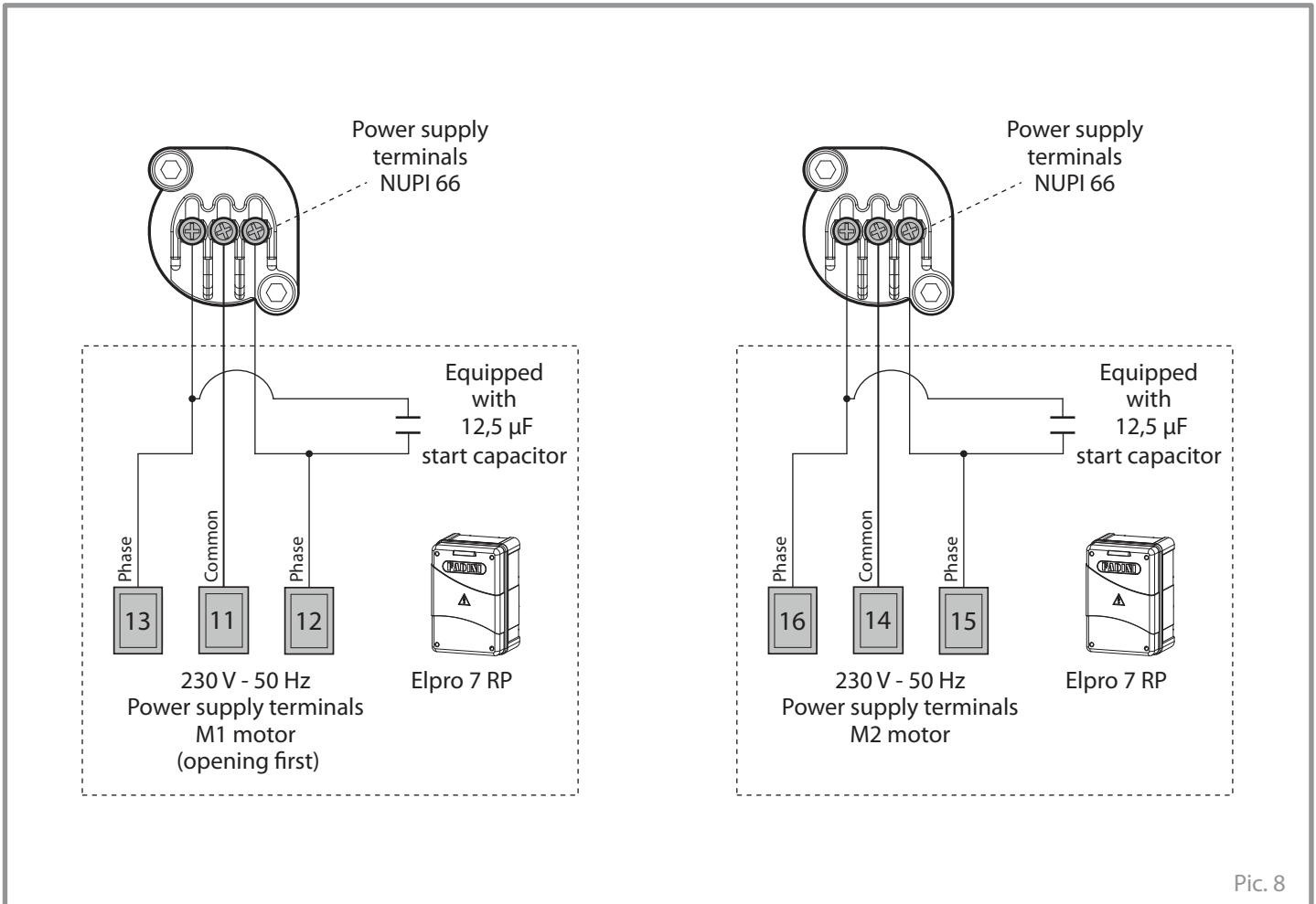
**MANUAL RELEASE OPERATIONS**

English



Pic. 7

**ELECTRICAL CONNECTIONS TO ELPRO 7 RP CONTROLLER**



Pic. 8

**MAINTENANCE RECORD**

hand over to the end user of the installation



Installation address:	Maintainer:	Date:
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Installation type:	Operator model:	Quantity of models installed:
Sliding gate <input type="checkbox"/> Folding door <input type="checkbox"/> Swinging gate <input checked="" type="checkbox"/> Road barrier <input type="checkbox"/> Over-head door <input type="checkbox"/> Bollard <input type="checkbox"/> Lateral folding door <input type="checkbox"/> ..... <input type="checkbox"/>	Dimensions per gate leaf:	Installation date:
Weight per gate leaf:		

**NOTE WELL:** this document must record any ordinary and extraordinary services including installation, maintenance, repairs and replacements to be made only by using Fadini original spare parts. This document, for the data included in it, must be made available to authorized inspectors/officers, and a copy of it must be handed over the end user/s.

The installer/maintainer are liable for the functionalities and safety features of the installation only if maintenance is carried on by qualified technical people appointed by themselves and agreed upon with the end user/s.

N°	Service date	Service description	Technical maintainer	End user/s
1				
2				
3				
4				
5				
6				

\_\_\_\_\_  
Stamp and signature  
installation technician/maintainer

\_\_\_\_\_  
Signed for acceptance  
end user  
buyer

hand over to the end user of the installation



English

### TECHNICAL DATA

#### OIL-HYDRAULIC OPERATOR

Pump flow rate - P5	1,4 l/min
Working pressure	10 atm
Linear speed opening/closing	~13 mm/s
Thrust	3.100 N
Oil type	Fadini Oil - code 708L
Piston stroke	275 mm
Piston diameter	45 mm
Piston shaft diameter	16 mm
Working temperature	-20 °C +80 °C (*)
Operator weight, complete	8 kg
Single gate max. weight	400 kg
Single gate max. width	2,5 m
Protection standards	IP 67
Overall dimensions (L x W x H)	1.240x86x86 mm

#### ELECTRIC MOTOR

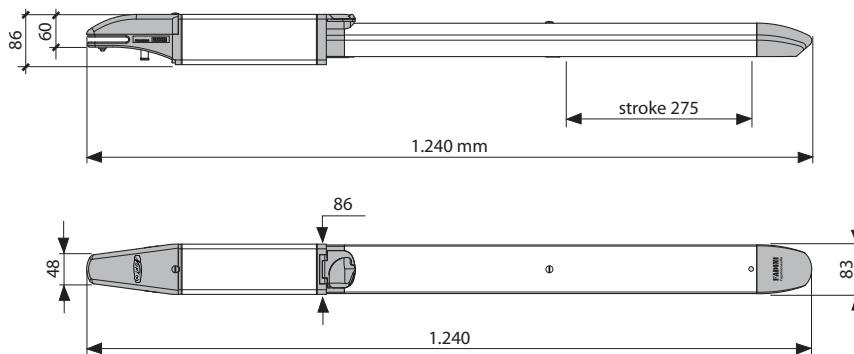
Power	0,18 kW (0,25 HP)
Voltage	230 Vac
Frequency	50 Hz
Absorbed current	1,2 A
Absorbed power	250 W
Capacitor	12,5 µF
Motor revolutions	1.350 rpm
Intermittent service	S3
Class	H
Flexible electric cable	CEI 20- 52 - FROR 450/750 V

(\*) -40 °C with specific optional accessories (General Catalogue refers).

NOTE: an electric lock is always recommended beyond 2 m gate leaf

### PERFORMANCE

Frequency of use	intensive
Duty Cycle	18 s opening - 30 s dwell - 20 s closing - 30 s dwell
Time of one complete cycle	98 s
Complete cycles opening - dwell - closing - dwell	N° 36/hour
Cycles per year with 8 hours' service a day	N° 105.120



**CARIBBEAN WATERJET SERVICE**  
Cutting Edge Technology

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