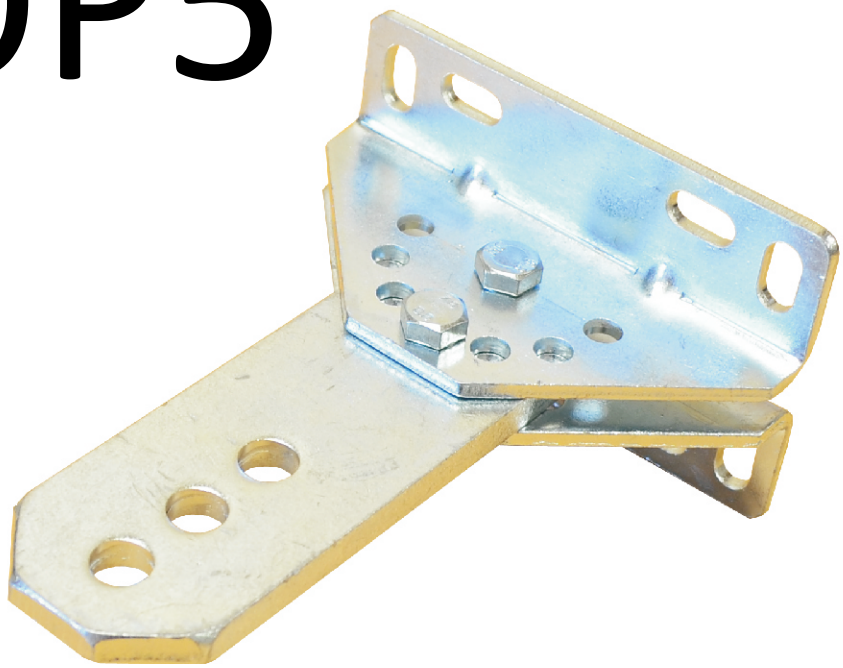
OPTIMO OP3-OP5 V.1

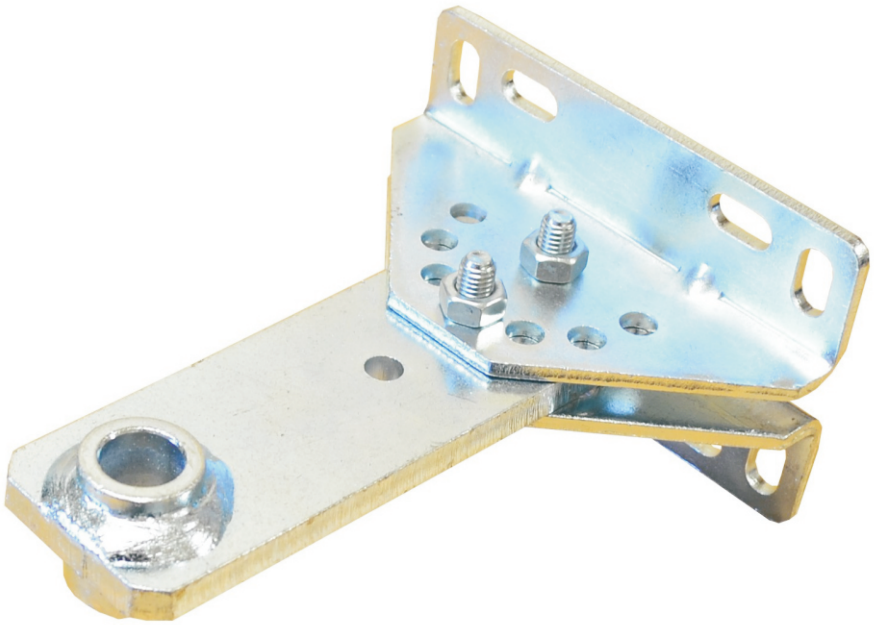
GB **LINEAR ELECTROMECHANICAL OPERATOR FOR SWING GATES**

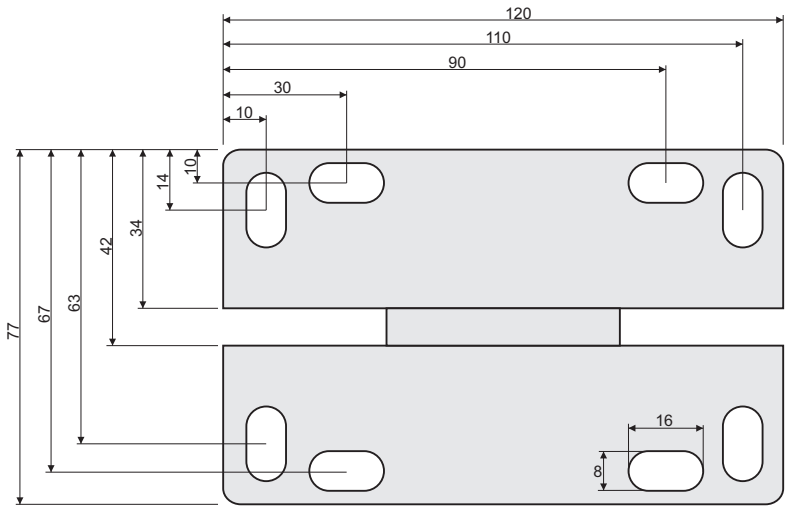
INSTRUCTIONS AND WARNINGS FOR INSTALLATION, USE AND MAINTENANCE

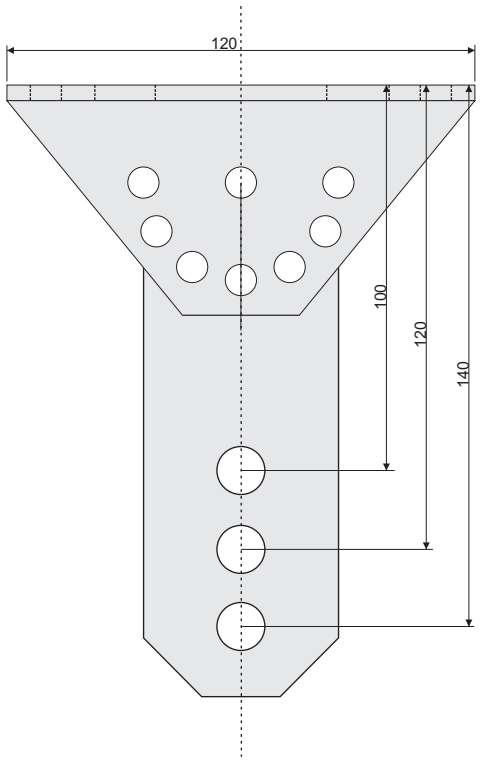


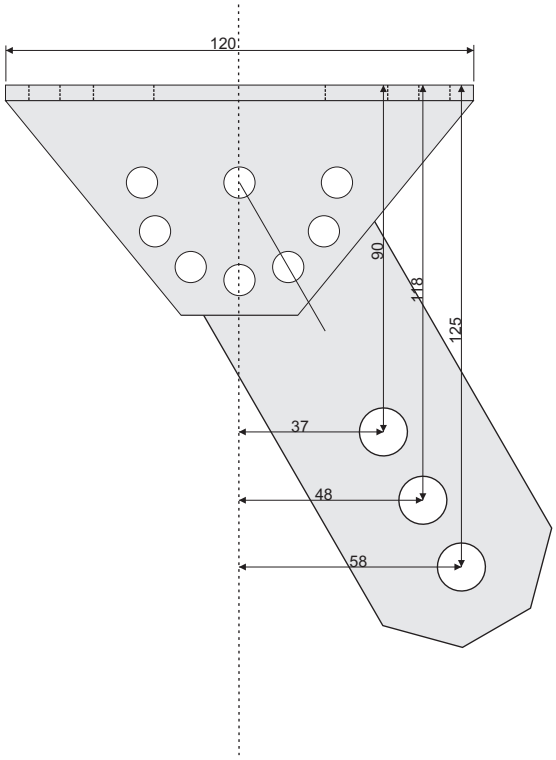
AOP5

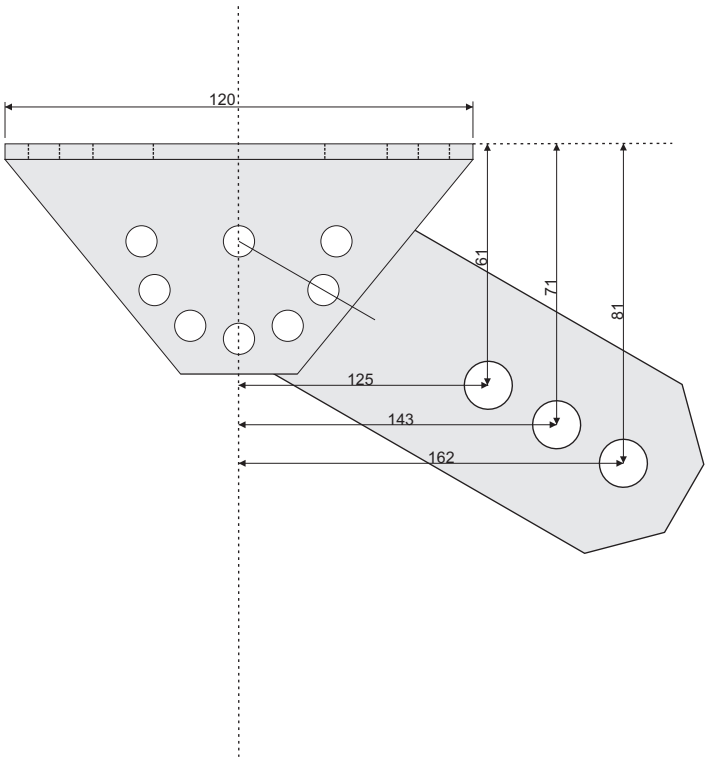


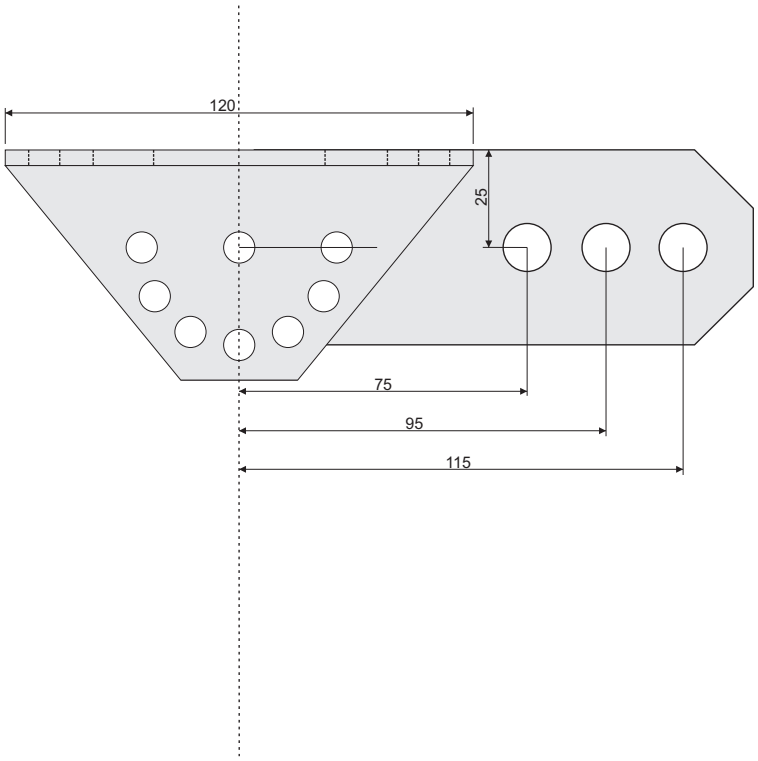




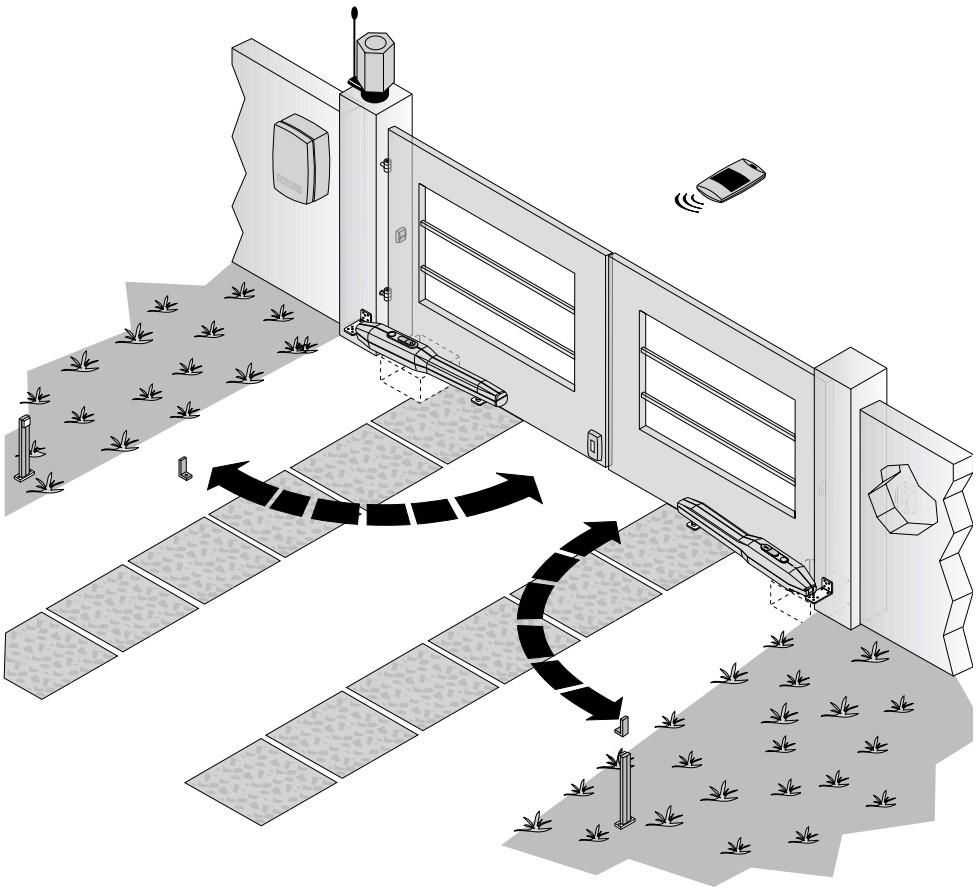

120
100
120
140

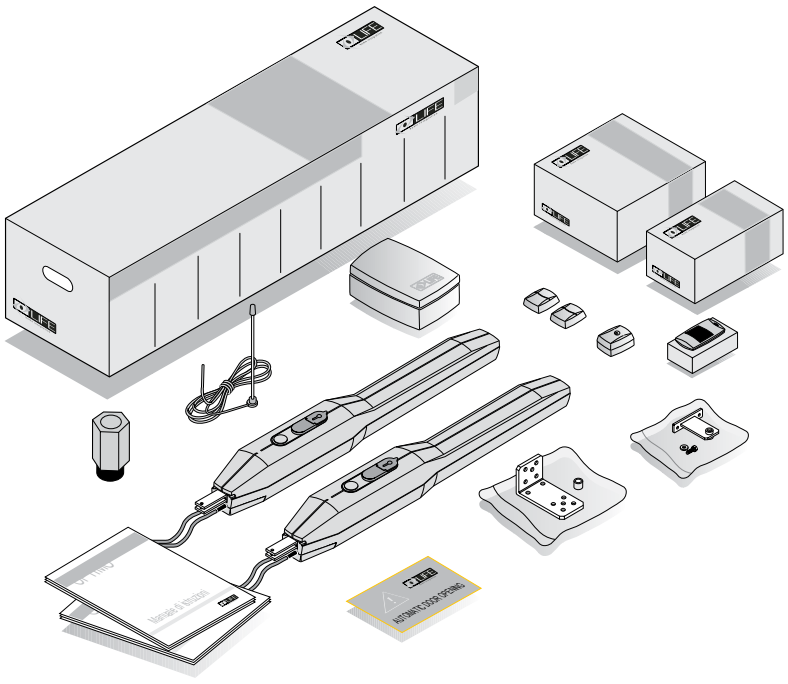

120
90
118
125
37
48
58


120
61
71
81
125
143
162


120
25
75
95
115

GB STANDARD INSTALLATION





1 TECHNICAL FEATURES

LIFE home integration reserves the right to make changes to technical characteristics at any time and without prior notice, without changing the product's intended use and function.

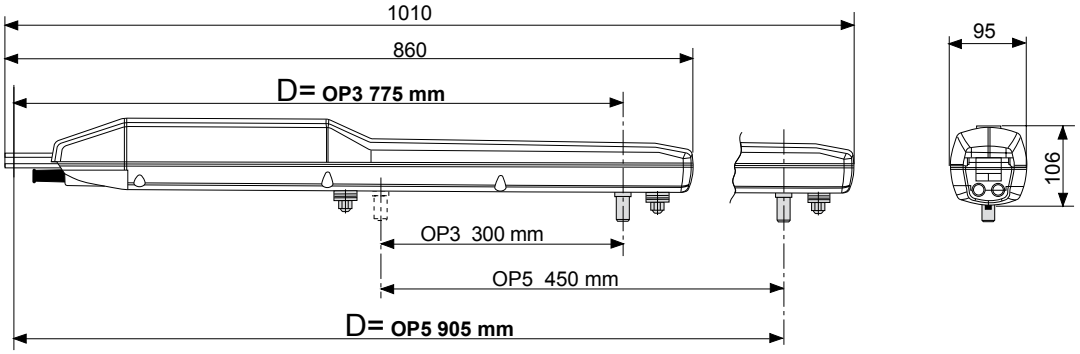
OPTIMO: Irreversible electromechanical operator with 230V or 24V power supply for swing gates with or without optical encoder, with or without limit switches and with stop plates.

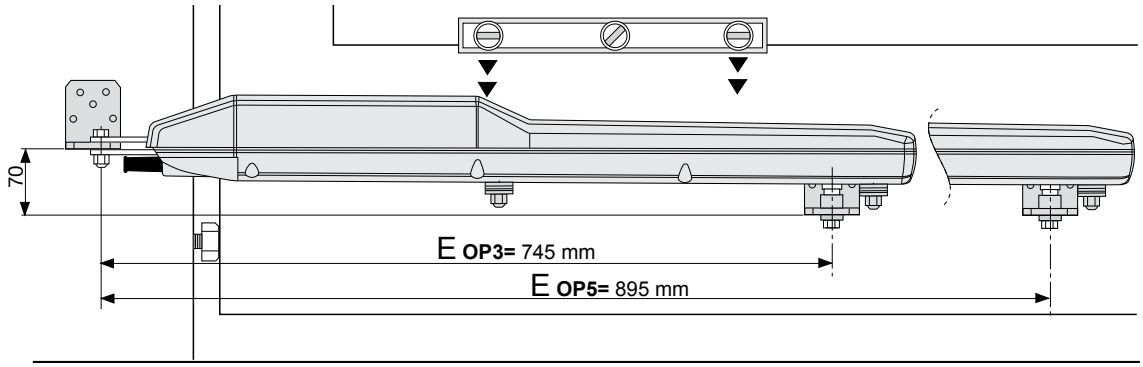
NAME		OP3	OP3 UNI	OP3L	OP3L UNI	OP5	OP5 UNI	OP5L	OP5L UNI	OP324	OP324 UNI	OP524	OP5 UNI
Motor power supply	V	230 V ac 50 Hz								24V dc			
Power	W	210								80			
Input	A	1,3								3,5			
Capacitor	µF	8								NO			
Thrust	N	2000								1800			
Lubrication	Type	grease											
Net rod travel	mm	300				450				300		450	
Thermal protection device	°C	140								NO			
Stop plate		-	YES	-	YES	-	YES	-	YES	-	YES	-	YES
Electromechanical limit switches		YES	-	YES	-	YES	-	YES	-	YES	-	YES	-
Optic encoder		YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
Connected cable	CENELEC	H07RN-F											
Operating temperature	°C	from -20 to +70											
Protection class	IP	54											
Speed	m/min.	0,96		0,6		0,96		0,6		0,96		0,96	
Time to open 90°	S	19		30		28		45		19		28	
Work cycle	%	35		30		35		30		80		80	
Nominal work time	min.	10		7,5		10		7,5		20		20	
Motor insulation class		F								D			
Battery recharge time*	h	-								48			
Opening cycles with charged battery	N°	-								15		10	
Operator weight	kg	8,5				9,5				8,5		9,5	
Total dimensions		95x106L=860				95x106L=1010				5x106L=860		95x106L=1010	
Use in acid, saline or potentially explosive environment		NO											

2.0 INSTALLATION

2.1 Limits of use

The type of gate, height and shape of the leaf and climatic conditions impose certain limits of use and must be carefully taken into consideration during installation. The following table is to be considered a rough guide.



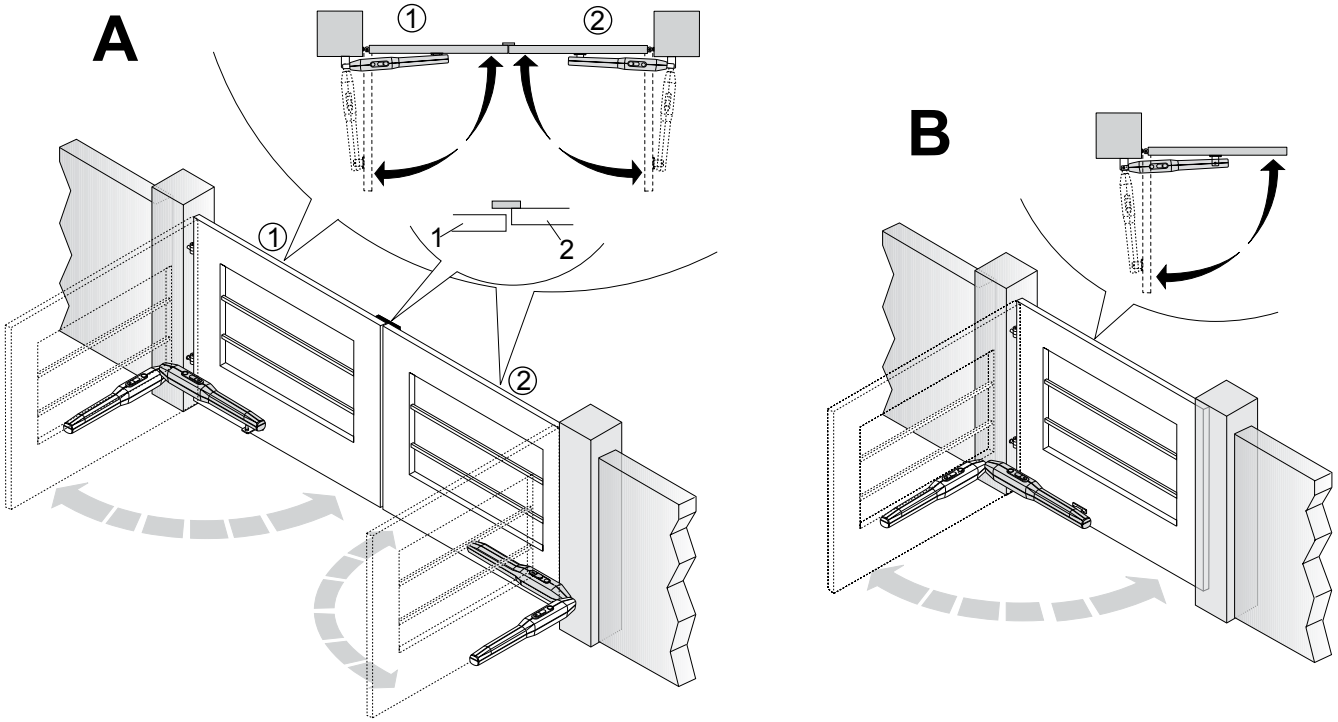


OP3 - OP3L - OP3 UNI - OP3L UNI - OP324 - OP324 UNI		OP5 - OP5L - OP5UNI - OP5L UNI - OP524 - OP524	
Max leaf length (m)	**Max leaf weight (kg)**	**Max leaf length (m)**	**Max leaf weight (kg)**
2,00	800	3,00	500
2,50	600	4,00	400
3,00	400	5,00	300

2.2 Typical installation

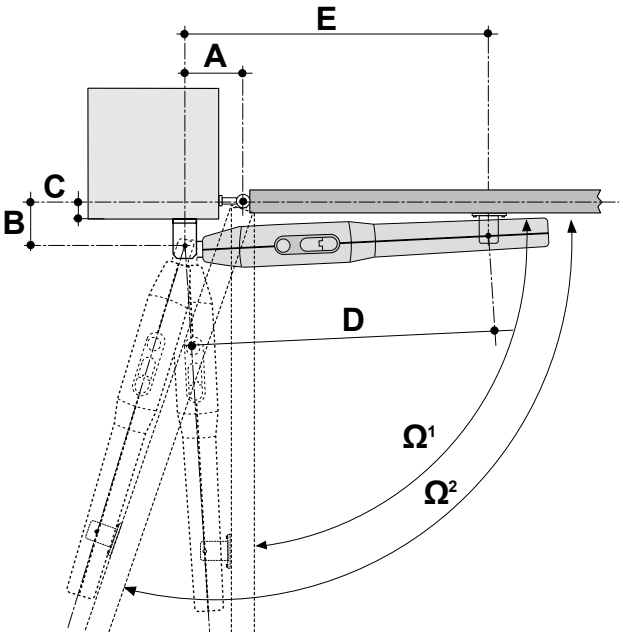
A) TWO-LEAF SYSTEM
The definition of leaf 1 and leaf 2 of the gate is essential for automation operation.
Leaf 1: is the first to open (1) when the gate is closed and the second to move when the gate is open; it finishes its closure travel after leaf 2.
Leaf 2: is the second to open (2) when the gate is closed and the first to move when the leaves are open; it finishes its closure travel before leaf 1.

B) ONE-LEAF SYSTEM
Leaf 1: the gate's only leaf.



Check that the distance “C” on the gate support structure is no greater than the value given in the table below. If the distance is higher than this value, it is necessary to intervene by making a niche in the structure to obtain the indicated value. This is to avoid the linear operator colliding with the edge of the structure during closure. The niche must be made in the area in which the linear operator is to be installed and it must have a height such as to allow operator passage.

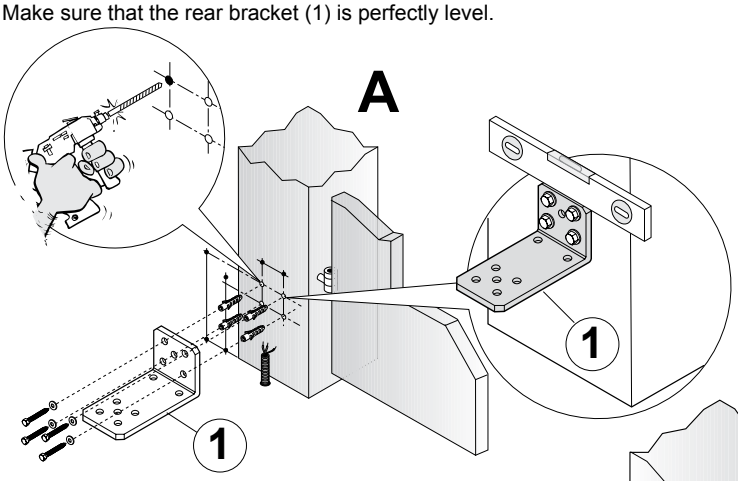
Ω	OP3 - OP3L - OP3 UNI – OP3L UNI – OP324 OP324 UNI				OP5 – OP5L – OP5UNI – OP5L UNI – OP524 OP524 UN			
	A -mm	B -mm	CMAXmm	D*mm	A -mm	B -mm	CMAXmm	D*mm
Ω1=90°	140	140	90 max	755	210	210	140 max	905
Ω2=120°	140	100	50 max	755	210	120	70 max	905



2.3 Rear and front bracket positioning

A

a) Define the clamping position of the rear bracket (1) of the operator, observing the distances A, B and C.
b) Check that the outlet of the pipe housing the electric cables is below the bracket (1).
c) Check that there is enough space on the leaf, at the point in which the operator’s front bracket is to be clamped, and that the surface is suitable for clamping (with screws or by means of welding).
d) Fix (with screws or by means of welding) the rear bracket (1) to the pillar in the established position.
e) Make sure that the rear bracket (1) is perfectly level.

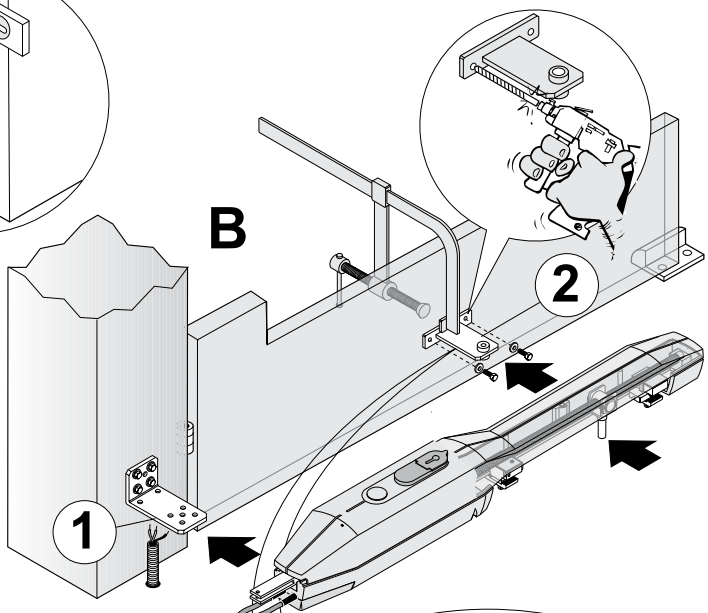


B

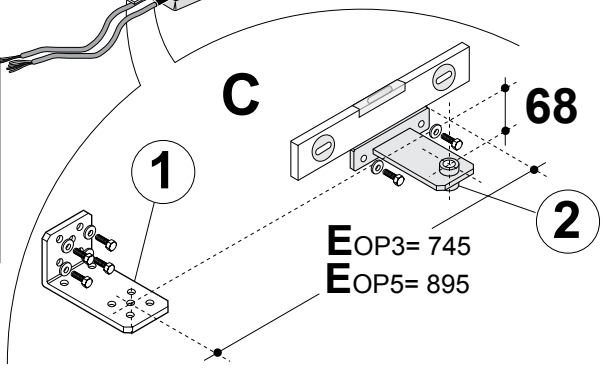
a. Take the leaf to the closure position, resting it against the closure stop plates.

C

b. Position the front bracket (2) at distance E from the rear bracket (1) and 68 mm lower.



	OPTIMO 3	OPTIMO 5
	OP3 - OP3L - OP3 UNI – OP3L UNI OP324-OP324UNI	OP5 – OP5L – OP5UNI – OP5L UNI OP5-OP5L–OP524 UNI
E	745 mm	895 mm



The value of **E** must be just lower **(10 mm)** than **D** (maximum space between centres) to allow optimal stop plate adjustment.

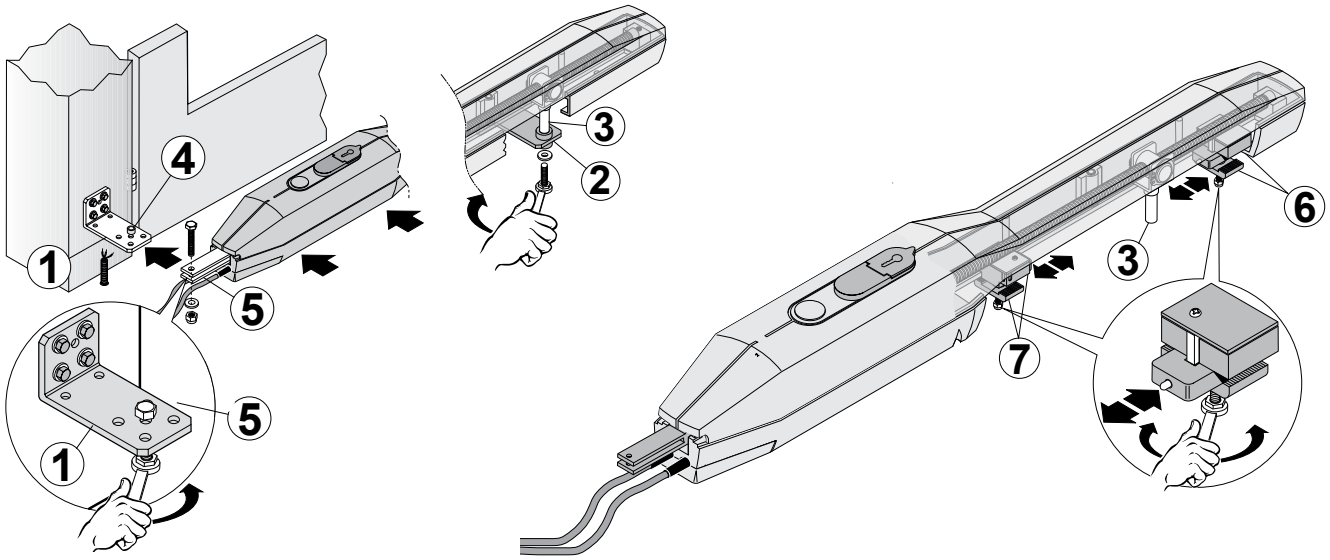
a) Temporarily block the front bracket **(2)** with a clamp.
b) Check that the bracket is level using a spirit level.

2.4 Positioning the operator and stop plate adjustment

1. Release the operator as indicated in the RELEASING THE OPERATOR chapter.
2. Lift the operator and insert the nut screw bushing support pin (3) into the hole on the front bracket (2).
3. Insert the bushing (4) into the chosen hole on the rear bracket (1) and thread the operator fork (5) on to the bracket, aligning the hole with the bushing. Fix the whole set with a screw, washer and self-locking nut and tighten.
4. Fix the operator to the front bracket (2) using a screw and washer, and tighten.
5. Manually open and close the gate several times and check that the movement of the leaf is regular and that the operator moves on a plane parallel to the gate's plane of movement.
6. Check that the nut screw bushing support (3) slides perfectly on the operator nut screw and that, with the leaf closed and open, there are at least 5 mm between the nut screw bushing support (3) and the closure (6) and opening (7) stop plates.
7. If necessary, use a different hole on the rear bracket and repeat the operations indicated in points 3 and 4. .
8. Define with precision the opening and closure positions of the stop plates on the operator's internal slider, as follows:

- take the gate to a closed position, abutting against the stop plate.
- loosen the support of the closure stop plate (6) using a suitable wrench and position so that it touches the nut screw bushing support (3); then lock again by tightening.
- Take the gate leaf to the desired opening position;
- loosen the support of the opening stop plate (7) using a suitable wrench and position so that it touches the nut screw bushing support (3); then lock again by tightening.

9. Definitively fix the front bracket (2) of the operator, to the leaf of the gate, choosing the clamping means to suit the material of the leaf (with screws or by welding).
10. Release the operator as indicated in the RELEASING THE OPERATOR chapter.



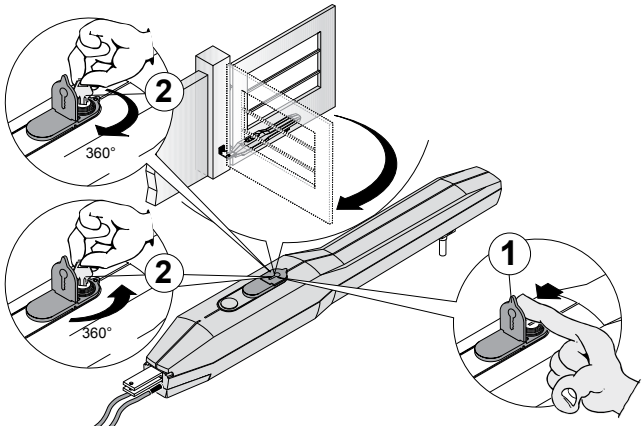
2.5 Releasing the operator

ATTENTION:

- **The fitter must permanently fix the label describing the manual release operation close to the manual release key.**
- **The activation of the manual release could cause an uncontrolled movement of the gate in the event of mechanical damage or mechanical unbalance conditions.**
- **Before performing the manoeuvre, switch off the electricity supply to the automation.**
- **To avoid breaking the key, do not apply excessive force.**

This command makes it possible to release the operator transmission and to perform leaf movement manually. It can be used in the case of a blackou system malfunction.
The release is activated using a key, which must be kept in a safe place.

a) Lift the lock protection cover (1).
b) Insert the key (2) into the lock and turn clockwise through 360°.
c) The leaf is now free and can be moved manually.
d) To relock the leaf, insert the key (2) and turn anticlockwise through 360°.



3.0 WIRING AND CONNECTIONS

- Before commencing wiring and connection work, read the SAFETY INSTRUCTIONS AND WARNINGS chapter carefully.
- The operator must be connected to Life control units only.

OPERATORS		LIFE PLUG-IN RADIO RECEIVER	INTEGRATED 433.92 MHz RADIO RECEIVER
230 V 50 Hz	OP3 - OP3L - OP5 - OP5L	GE1A -GE2A	GE1R -GE2R
	OP3 UNI - OP3L UNI - OP5 UNI - OP5L UNI		GE UNI R
24 V	OP324 - OP524 GE1A 24	GE1A 24-GE2A 24	
	OP324 UNI - OP524 UNI		GE UNI 24R

- All wiring and connection operations must be carried out with the control unit disconnected from the electricity supply. If the disconnection device is not in view, display a sign reading: "ATTENTION: MAINTENANCE WORK IN PROGRESS".
- The internal wiring of the linear electromechanical operator performed by the Manufacturer, may not be modified under any circumstances.

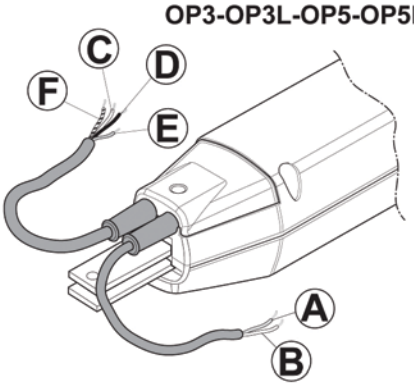
3.1 Electrical connections of the operator

One or two cables lead out of the operator depending on whether or not one has the UNI version.
The UNI single-cabled version, only has a power supply cable, which can be 230 V (cable with 4 wires) or 24 V (cable with two wires).
The 230 V and 24 V two-cabled versions have an extra cable for the encoder and limit switch signal (2-wired cable).
The 230V models come with a capacitor, which is housed in the control unit. The capacitor is connected in parallel to the "open motor" and "close motor" cables.

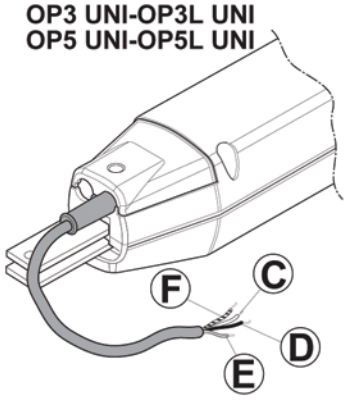
OPERATORS		MOTOR POWER SUPPLY Min. 1.5mm² cable		LIMIT SWITCH and ENCODER SIGNAL Min. 1mm² cable	
230 V 50 Hz	OP3 - OP3L - OP5 - OP5L	BLUE/ GREY	COMMON	BROWN	+
		BLACK	OPEN MOTOR	BLUE	-
	OP3 UNI - OP3L UNI - OP5 UNI - OP5L UNI	BROWN	CLOSE MOTOR		
		YELLOW - GREEN	EARTH		
24 V	OP324 - OP524	BLUE	+	BROWN	+
		BROWN	-	BLUE	-
	OP324 UNI - OP524 UNI	YELLOW - GREEN	EARTH		

N.B. each cable is 1m long.

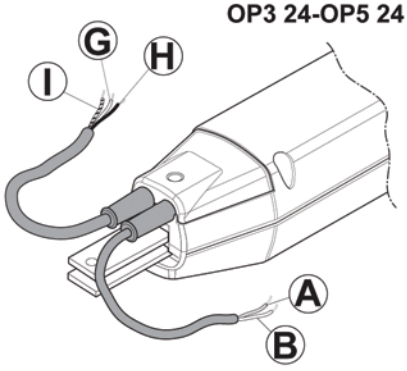
OP3-OP3L-OP5-OP5L



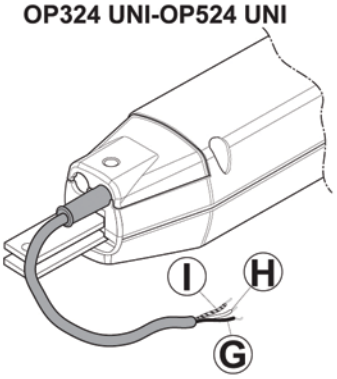
OP3 UNI-OP3L UNI
OP5 UNI-OP5L UNI



OP3 24-OP5 24

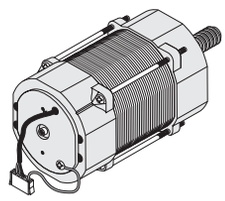


OP324 UNI-OP524 UNI



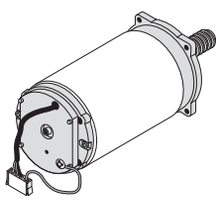
- (I) DESCRIZIONE COMPONENTI OP/OP5
- (GB) DESCRIPTION OF OP3/OP5 COMPONENTS
- (F) DESCRIPTIONS PARTICULIERES OP3 / OP5
- (E) DESCRIPCIONES DE LOS DETALLES DEL OP3 / OP5
- (P) DESCRIÇÕES PARTICULARES OP3 / OP5
- (D) BESONDERE BESCHREIBUNGEN OP3 / OP5
- (PL) OPIS SZCZEGÓŁOWY OP3 / OP5
- (RUS) ОПИСАНИЕ ОСОБЕННОСТЕЙ OP3 / OP5
- (HU) OP3/OP5 RÉSZLETEZETT ROBBANTOTT LEÍRÁSA

1-2



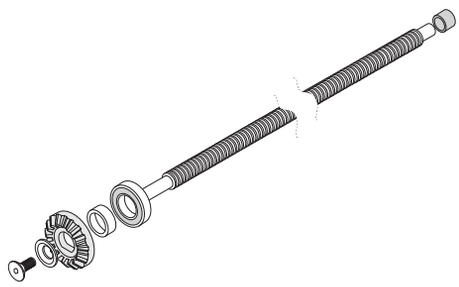
1) 5RI0870000 OP3-OP5-OP3UNI-OP5UNI
2) 5RI0880000 OP3L-OP3LUNI-OP5L-OP5LUNI

3



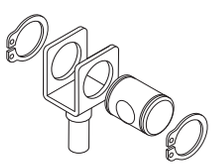
3) 5RI0890000 OP324-OP324UNI-OP524-OP524UNI

4-5



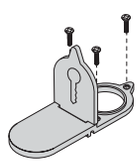
4) 5RI0900000 OP3-OP3UNI-OP3L-OP3LUNI-OP324-OP324UNI
5) 5RI0910000 OP5-OP5UNI-OP5L-OP5LUNI-OP524-OP524UNI

6



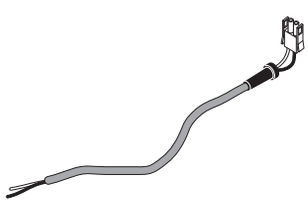
6) 5RI0920000 OPTIMO

7



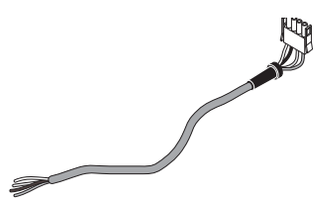
7) 5RI0930000 OPTIMO

8



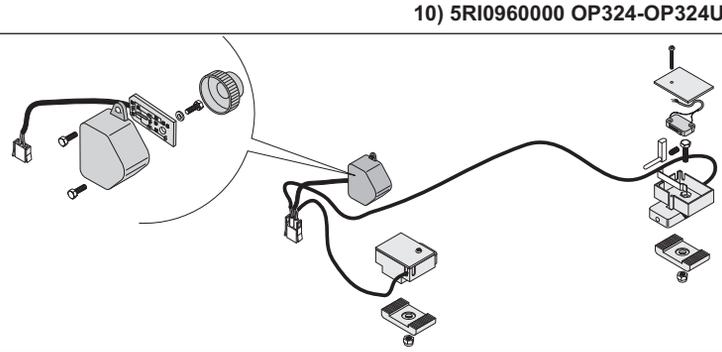
8) 5RI0940000 OP3-OP3L-OP5-OP5L-OP324-OP524

9-10



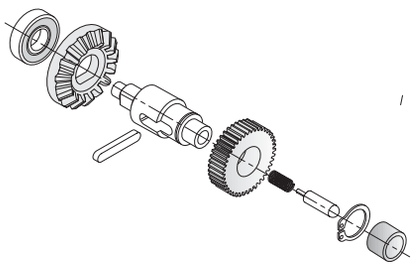
9) 5RI0950000 OP3-OP3L-OP3UNI-OP3LUNI-OP5-OP5L-OP5UNI-OP5LUNI
10) 5RI0960000 OP324-OP324UNI-OP524-OP524UNI

11-12



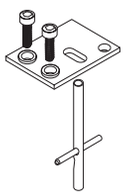
11) 5RI0970000 OP3-OP3L-OP324
12) 5RI0980000 OP5-OP5L-OP524

13



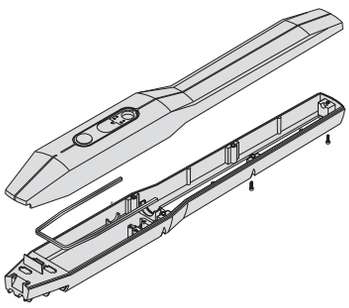
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14



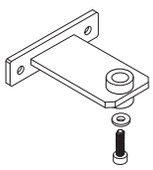
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15-16



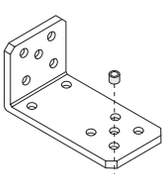
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16) 5RI1020000 OP5-OP5L-OP524

17



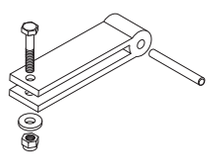
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18



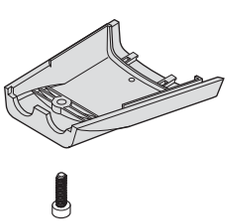
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19



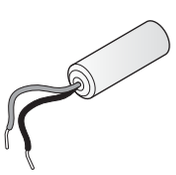
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20



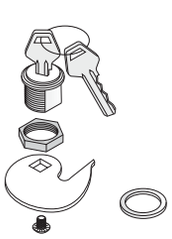
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21



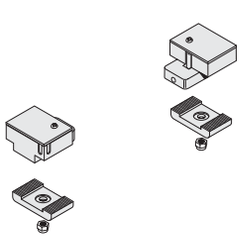
22) 5RI1080000 OP3-OP3L-OP3UNI-OP3LUNI-OP5-OP5L
OP5UNI-OP5LUNI

22



22) 5RI1100000 OPTIMO

23



23) 5RI2750000 OP3UNI-OP3LUNI-OP324UNI-OP5UNI
OP5LUNI-OP524UNI

14 MANUFACTURER'S DECLARATION OF CONFORMITY

Declaration of

CE

conformity
under Directive 98/37/EC, appendix II, part B (Manufacturer's Declaration of CE Conformity).

LIFE home integration
Via Sandro Pertini 3/5
31014 COLLE UMBERTO (TV) Italy

declares that the following product:

OP3-OP5

satisfies the essential requisites established in the following directives:

- Low voltage directive 73/23/EEC and subsequent amendments,
- Electromagnetic compatibility directive 89/336/EEC and subsequent amendments,
- Radio and telecommunications equipment directive 1999/5/EC and subsequent amendments.

and satisfies the following standards:

- EN 12445:2000 Industrial, commercial and garage doors and gates – Safety in the usage of motorised doors – testing methods
- EN 12453: Industrial, commercial and garage doors and gates – Safety in the usage of motorised doors - Requisites.
- EN 60204-1:1997 Machinery safety – Electric equipment of the machine – Part 1: general rules.
- EN 60950 Information technology equipment - Safety - Part 1: General requisites
- ETSI EN 301489-3:2001 Electromagnetic compatibility for radio equipment and appliances.
- EN 300220-3:2000 Radio equipment and systems – short band devices – Technical characteristics and testing methods for radio apparatus with a frequency of 25 to 1000 MHz and powers of up to 500mW.

The Manufacturer also declares that it is not permitted for the abovementioned components to be used until such time as the system in which they are incorporated is declared conform to directive 98/37/EC.

C□

Position: Managing Director

Signature:



Instruction issue V.1