ATTUATORE LINEARE ELETTROMECCANICO PER CANCELLI A BATTENTE
ISTRUZIONI E AVVERTENZE PER L’INSTALLAZIONE, L’USO E LA MANUTENZIONE

LINEAR ELECTROMECHANICAL OPERATOR FOR SWING GATES
INSTRUCTIONS AND WARNINGS FOR INSTALLATION, USE AND MAINTENANCE

ACTIONNEUR LINEAIRE ELECTROMECANIQUE POUR PORTAILS A
INSTRUCTIONS ET CONSEILS POUR L’INSTALLATION, L’UTILISATION ET

ACTUADOR LINEAL ELECTROMECÁNICO PARA CANCELAS
INSTRUCCIONES Y ADVERTENCIAS PARA LA INSTALACIÓN, EL USO Y EL

MOTOR LINEAR ELECTROMECÂNICO PARA PORTÕES DE BATENTE
INSTRUÇÕES E ADVERTÊNCIAS PARA A INSTALAÇÃO, USO E A MANUTENÇÃO

ELEKTROMECHANISCHER DREHTORANTRIEB
ANLEITUNGEN UND HINWEISE FÜR INSTALLATION, GEBRAUCH UND WARTUNG

MЕХАНИЗМ SIŁOWNIK LINEARNY ELEKTROMAGNETYCZNY DO BRAM
INSTRUKCJA MONTAŻU, UŻYTKOWANIA I KONSERWACJI OBSŁUGIWAJĄCO

ЛИНЕЙНЫЙ ЭЛЕКТРОМЕХАНИЧЕСКИЙ ИСПОЛНИТЕЛЬНЫЙ
ИНСТРУКЦИИ И РЕКОМЕНДАЦИИ ПО МОНТАЖУ, ИСПОЛЬЗОВАНИЮ И ТЕХНИЧЕСКОМУ

ELEKTROMECHANIKUS KAROS MEGHAJTÁS SZÁRNYAS KAPUKHOZ
UTASÍTÁSUK ÉS FIGYELMEZTETÉSEK TELEPÍTÉSHEZ, HASZNÁLATOTHZ ÉS KARBANTARTÁSHOZ
14 MANUFACTURER’S DECLARATION OF CONFORMITY

Declaration of

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

LIFE home integration
Via 1 Maggio, 37
31043 FONTANELLE (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 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.

Fonta

Position: Managing Director

Signature:
Tab. 1: Componenti e dispositivi di automazione tipo, vedi figura

Tab. 1: Components and devices of a typical automation, see figure.

Tab. 1 : Composants et dispositifs d’un automatisme type, voir figure.

Tab.1: Componentes y dispositivos de un automatismo tipo, véase figura.

Tab. 1: Componentes e dispositivos de uma automatização tipo, ver figura.

Tab. 1: Bestandteile und Vorrichtungen eines Musterantriebs, siehe Abbildung.

Tab. 1: Części i urządzenia typowego siłownika, patrz obr..

Tab. 1: апараты и устройства для оборудования в стандартной комплектации см. рисунок

Tab. 1: általános automatikához tartozó robbantott rajz, lásd ábra.

Tab. 2: Descrizione contenuto scatola attuatore OPTIMO, vedi figura

Tab. 2 : Description contenu boîtier actionneur OPTIMO, voir figure.

Tab. 2 : Descripción del contenido de la caja del actuador OPTIMO, véase figura.

Tab. 2: описание содержимого коробки исполнительного механизма OPTIMO, см. рисунок

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Tab.2: Opis zawartości opakowania OPTIMO, patrz obr..

Tab. 2: описание содержимого коробки исполнительного механизма OPTIMO, см. рисунок

Tab. 2: OPTIMO szetthez tartozó doboz tartalma, lásd ábra.
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.

<table>
<thead>
<tr>
<th>NAME</th>
<th>OP3</th>
<th>OP3 UNI</th>
<th>OP3L</th>
<th>OP3L UNI</th>
<th>OP5</th>
<th>OP5 UNI</th>
<th>OP5L</th>
<th>OP5L UNI</th>
<th>OP324</th>
<th>OP324 UNI</th>
<th>OP524</th>
<th>OP524 UNI</th>
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<td>V</td>
<td>230 V ac 50 Hz</td>
<td>24V dc</td>
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<td></td>
<td></td>
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<td>Power</td>
<td>W</td>
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<td>80</td>
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<td>1800</td>
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<tr>
<td>Stop plate</td>
<td>-</td>
<td>YES</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Optic encoder</td>
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<td>YES</td>
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<tr>
<td>Connected cable</td>
<td>CENELEC</td>
<td>H07RN-F</td>
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<tr>
<td>Operating temperature</td>
<td>°C</td>
<td>from -20 to +70</td>
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<td></td>
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<td>Protection class</td>
<td>IP</td>
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<tr>
<td>Speed</td>
<td>m/min.</td>
<td>0,96</td>
<td>0,6</td>
<td>0,96</td>
<td>0,6</td>
<td>0,96</td>
<td>0,96</td>
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<tr>
<td>Time to open 90°</td>
<td>S</td>
<td>19</td>
<td>30</td>
<td>28</td>
<td>45</td>
<td>19</td>
<td>28</td>
<td></td>
<td></td>
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<tr>
<td>Work cycle</td>
<td>%</td>
<td>35</td>
<td>30</td>
<td>35</td>
<td>30</td>
<td>80</td>
<td>80</td>
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<tr>
<td>Nominal work time</td>
<td>min.</td>
<td>10</td>
<td>7,5</td>
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<tr>
<td>Motor insulation class</td>
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<td>D</td>
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<tr>
<td>Battery recharge time*</td>
<td>h</td>
<td>-</td>
<td>48</td>
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<tr>
<td>Opening cycles with charged battery</td>
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<td>15</td>
<td>10</td>
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<tr>
<td>Operator weight</td>
<td>kg</td>
<td>8,5</td>
<td>9,5</td>
<td>8,5</td>
<td>9,5</td>
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</tr>
<tr>
<td>Total dimensions</td>
<td></td>
<td>95x106L=860</td>
<td>95x106L=1010</td>
<td>5x106L=860</td>
<td>95x106L=1010</td>
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<td></td>
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</tr>
</tbody>
</table>

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.
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.
Leaf 2: is the second.

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.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A(_{\text{max}}) mm</td>
<td>B(_{\text{max}}) mm</td>
<td>C(_{\text{max}}) mm</td>
</tr>
<tr>
<td>( \Omega_1=90^\circ )</td>
<td>140</td>
<td>140</td>
</tr>
<tr>
<td>( \Omega_2=120^\circ )</td>
<td>140</td>
<td>100</td>
</tr>
</tbody>
</table>

2.3 Rear and front bracket positioning

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.

A

B

C

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

b. Position the front bracket (2) at distance E from the rear bracket (1) and 80 mm lower.

### OPTIMO 3

| E | 745 mm |

### OPTIMO 5

| E | 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. Fix the operator to the front bracket (2) using a screw and washer, and tighten.
5. Manually open and close the gate's plane of movement.
6. Check that the nut support (3) is 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.
   - Take the gate leaf to the desired opening position.
   - Loosen the support.
   - 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.
- 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 blackout or system malfunction.

The release is activated using a wrench, 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.

### 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 U:

The 230 V and 24 V two-cabled versions have an extra cable for the encoder and limit switch signal (2-wired cable).

The 230 V 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.

#### Life Plug-in Radio Receiver

<table>
<thead>
<tr>
<th>OPERATORS</th>
<th>LIFE PLUG-IN RADIO RECEIVER</th>
<th>INTEGRATED 433.92 MHz RADIO RECEIVER</th>
</tr>
</thead>
<tbody>
<tr>
<td>OP3 - OP3L - OP5 - OP5L</td>
<td>GE1A - GE2A</td>
<td>GE1R - GE2R</td>
</tr>
<tr>
<td>OP3 UNI - OP3L UNI - OP5 UNI - OP5L UNI</td>
<td>GE UNI R</td>
<td></td>
</tr>
<tr>
<td>OP324 - OP524 GE1A 24</td>
<td>GE1A 24-GE2A 24</td>
<td></td>
</tr>
<tr>
<td>OP324 UNI - OP524 UNI</td>
<td>GE UNI 24R</td>
<td></td>
</tr>
</tbody>
</table>

- 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.

#### Operators

<table>
<thead>
<tr>
<th>OPERATORS</th>
<th>MOTOR POWER SUPPLY</th>
<th>LIMIT SWITCH and ENCODER SIGNAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>OP3 - OP3L - OP5 - OP5L</td>
<td>BLUE/GREY</td>
<td>COMMON</td>
</tr>
<tr>
<td></td>
<td>BLACK</td>
<td>OPEN MOTOR</td>
</tr>
<tr>
<td></td>
<td>BROWN</td>
<td>BLUE</td>
</tr>
<tr>
<td>OP3 UNI - OP3L UNI - OP5 UNI - OP5L UNI</td>
<td>BROWN - GREEN</td>
<td>CLOSE MOTOR</td>
</tr>
<tr>
<td></td>
<td>EARTH</td>
<td></td>
</tr>
<tr>
<td>OP324 - OP524</td>
<td>BLUE</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>BROWN</td>
<td>+</td>
</tr>
<tr>
<td>OP324 UNI - OP524 UNI</td>
<td>YELLOW - GREEN</td>
<td>EARTH</td>
</tr>
</tbody>
</table>

N.B. each cable is 1m long.
1-2

1) 5RI0870000 OP3-OP5-OP3UNI-OP5UNI
2) 5RI0880000 OP3L-OP3UNI-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
14 MANUFACTURER’S DECLARATION OF CONFORMITY

Declaration of 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

declarates that the following product:

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Position:   Managing Director

Signature:  _________________