



ENTRE//MATIC

CE

LUXO

IP2128EN- rev. 2011-03-31



EN Installation and
maintenance manual for
swing gates.
(Original instructions)



DITEC S.p.A.

Via Mons. Banfi, 3 - 21042 Caronno Pertusella (VA) - ITALY

Tel. +39 02 963911 - Fax +39 02 9650314

www.ditec.it - ditec@ditecva.com

ISO 9001
Cert. n° 0957

INDEX

| Subject | Page |
|---|------|
| 1. General safety precautions | 3 |
| 2. Declaration of incorporation of partly completed machinery | 4 |
| 2.1 Machinery Directive | 4 |
| 3. Technical specifications | 5 |
| 3.1 Operating instructions | 5 |
| 4. Standard installation | 6 |
| 4.1 Dimensions and references | 7 |
| 5. Installation | 8 |
| 5.1 Preliminary checks | 8 |
| 5.2 Bracket fastening | 9 |
| 5.3 Geared motor installation | 10 |
| 5.4 Reversible and irreversible piston | 11 |
| 6. Electrical connections | 12 |
| 7. Ordinary maintenance program | 12 |
| 8. User instructions | 13 |
| 8.1 General safety precautions | 13 |
| 8.2 Manual release instruction | 13 |

CAPTION



This symbol indicates instructions or notes regarding safety issues which require particular attention.



This symbol indicates informations which are useful for correct product function.

All rights reserved

All data and specifications have been drawn up and checked with the greatest care. The manufacturer cannot however take any responsibility for eventual errors, omissions or incomplete data due to technical or illustrative purposes.

1. GENERAL SAFETY PRECAUTIONS



This installation manual is intended for professionally competent personnel only.

Installation, electrical connections and adjustments must be performed in accordance with Good Working Methods and in compliance with applicable regulations.

Before installing the product, carefully read the instructions.

Bad installation could be hazardous.

The packaging materials (plastic, polystyrene, etc.) should not be discarded in the environment or left within reach of children, as these are a potential source of hazard.

Before installing the product, make sure it is in perfect condition.

Do not install the product in an explosive environment and atmosphere: gas or inflammable fumes are a serious hazard risk.

Before installing the motors, make all structural changes relating to safety clearances and protection or segregation of all areas where there is risk of being crushed, cut or dragged, and danger areas in general.

Make sure the existing structure is up to standard in terms of strength and stability.

The motor manufacturer is not responsible for failure to use Good Working Methods in building the frames to be motorized or for any deformation occurring during use.

The safety devices (photocells, safety edges, emergency stops, etc.) must be installed taking into account: applicable laws and directives, Good Working Methods, installation premises, system operating logic and the forces developed by the motorized gate.

The safety devices must protect any areas where the risk exists of being crushed, cut or dragged, or where there are any other risks generated by the motorized gate.

Apply hazard area notices required by applicable regulations.

Each installation must clearly show the identification details of the motorized gate.



Before making power connections, make sure the plate details correspond to those of the power mains.

Fit an omnipolar disconnection switch with a contact opening gap of at least 3 mm.

Make sure an adequate residual current circuit breaker and overcurrent cutout are fitted upstream of the electrical system.

When necessary, connect the motorized gate to a reliable earth system made in accordance with applicable safety regulations.

During installation, maintenance and repair, interrupt the power supply before opening the lid to access the electrical parts.



To handle electronic parts, wear earthed antistatic conductive bracelets.

The motor manufacturer declines all responsibility in the event of component parts being fitted that are not compatible with the safe and correct operation.

For repairs or replacements of products only original spare parts must be used.

The installer shall provide all information relating to automatic, manual and emergency operation of the motorized gate, and provide the user with operating instructions.

2. DECLARATION OF INCORPORATION OF PARTLY COMPLETED MACHINERY

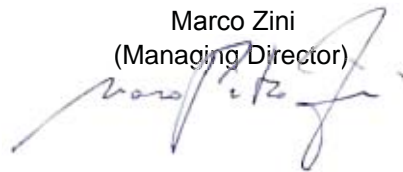
(Directive 2006/42/EC, Annex II-B)

The manufacturer DITEC S.p.A. with headquarters in Via Mons. Banfi, 3 - 21042 Caronno Pertusella (VA) - ITALY declares that the automation system for LUXO swing gates:

- has been constructed to be installed on a manual door to construct a machine pursuant to the Directive 2006/42/EC. The manufacturer of the motorized door shall declare conformity pursuant to the Directive 2006/42/EC (annex II-A), prior to the machine being put into service;
- conforms to applicable essential safety requirements indicated in annex I, chapter 1 of the Directive 2006/42/EC;
- conforms to the Low Voltage Directive 2006/95/EC;
- conforms to the Electromagnetic Compatibility Directive 2004/108/EC;
- technical documentation conforms to Annex VII-B to the Directive 2006/42/EC;
- technical documentation is managed by Alessandro Petenà with offices in Via Pascoli, 50 - 30020 Quarto d'Altino (VE) - ITALY;
- a copy of technical documentation will be provided to national competent authorities, following a suitably justified request.

Caronno Pertusella,
31-03-2011

Marco Zini
(Managing Director)


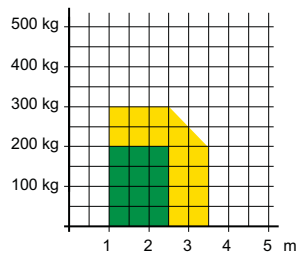




2.1 Machinery Directive

Pursuant to Machinery Directive (2006/42/EC) the installer who motorizes a door or gate has the same obligations as the manufacturer of machinery and as such must:

- prepare the technical file which must contain the documents indicated in Annex V of the Machinery Directive; (The technical file must be kept and placed at the disposal of competent national authorities for at least ten years from the date of manufacture of the motorized door);
- draw up the EC Declaration of Conformity in accordance with Annex II-A of the Machinery Directive and deliver it to the customer;
- affix the EC marking on the motorized door in accordance with point 1.7.3 of Annex I of the Machinery Directive.

3. TECHNICAL DATA

| | LUXO3BH | LUXO4BH | LUXO5BH LUXO5VBH |
|--|---|--|---|
| Power supply | 24 V= | 24 V= | 24 V= |
| Absorption | 4 A | 4 A | 12 A |
| Thrust | 2000 N | 2000 N | 3000 N |
| Max run | 350 mm | 500 mm | 500 mm |
| Opening time | 20÷50 s / 90° | 30÷60 s / 90° | 20÷45 s / 90° |
| Service class | 4 - INTENSIVE | 4 - INTENSIVE | 4 - INTENSIVE |
| Intermittence | S2 = 20 min S3 = 50% | S2 = 20 min S3 = 50% | S2 = 20 min S3 = 50% |
| Temperature | -20° C / +55° C | -20° C / +55° C | -20° C / +55° C |
| Degree of protection | IP24D | IP24D | IP24D |
| Control panel | E2HLX - VIVAH | E2HLX - VIVAH | VIVAH |
| Applications m = leaf width kg = leaf weight  |  |  |  |

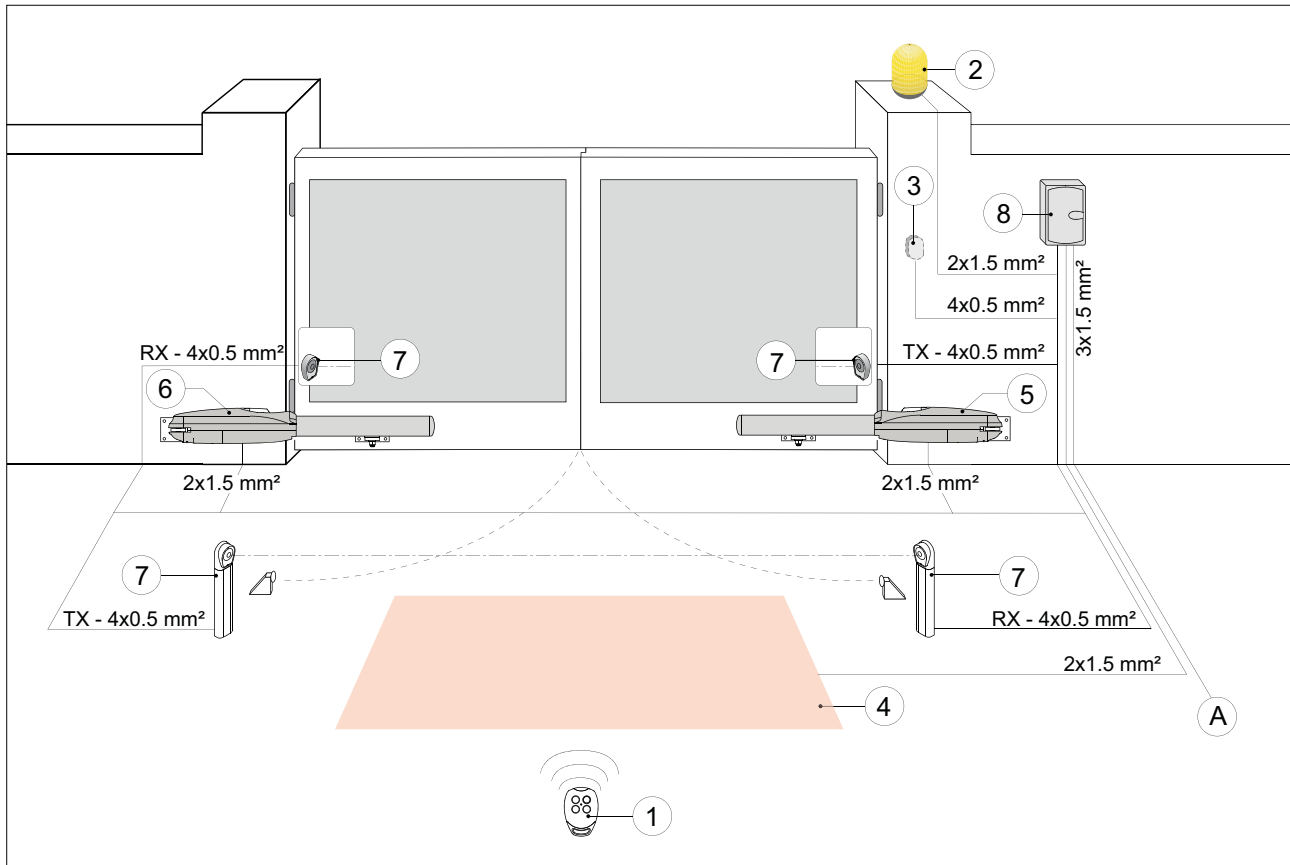
3.1 Operating instructions

Service class: 4 (minimum 100 cycles a day for 10 years or 200 cycles a day for 5 years)

Use: INTENSIVE (For vehicle or pedestrian accesses to large condominiums, industrial or commercial complexes and parking lots with very frequent use).

- Performance characteristics are to be understood as referring to the recommended weight (approx. 2/3 of maximum permissible weight). When used with the maximum permissible weight a reduction in the above mentioned performance can be expected.
- Service class, running times, and the number of consecutive cycles are to be taken as merely indicative Having been statistically determined under average operating conditions, and are therefore not necessarily applicable to specific conditions of use.
- Each automatic entrance has variable elements such as: friction, balancing and environmental factors, all of which may substantially alter the performance characteristics of the automatic entrance or curtail its working life or parts thereof (including the automatic devices themselves). The installer should adopt suitable safety conditions for each particular installation.

4. STANDARD INSTALLATION

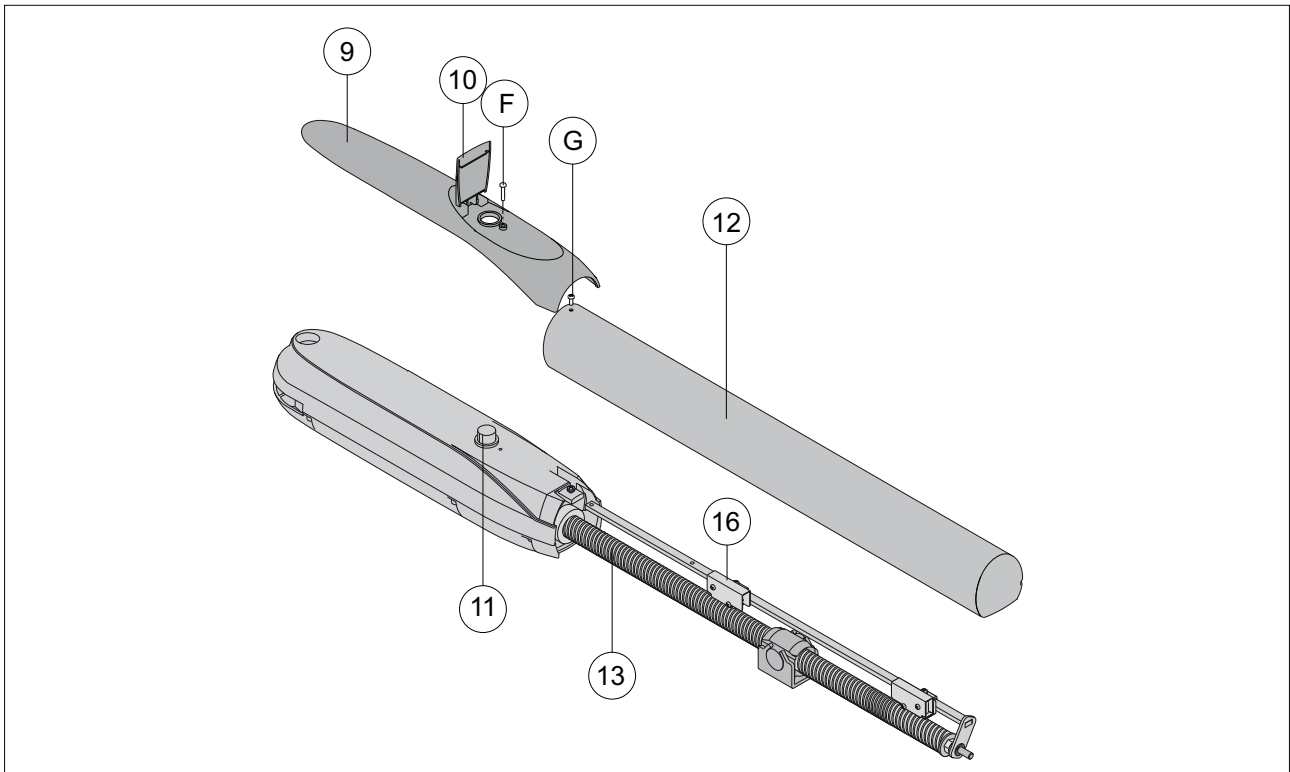


| Ref. | Code | Description |
|------|----------------|---|
| 1 | GOL4 | Transmitter |
| 2 | LAMPH | Flashing light |
| 3 | XEL5 GOL4M | Key selector Codified via radio control keyboard |
| 4 | LAB9 | Magnetic loop detection device for traffic monitoring |
| 5 | LUXO | Piston on the right side |
| 6 | LUXO | Piston on the left side |
| 7 | XEL2 LAB4 | Photocells Photocells IP55 |
| 8 | E2HLX VIVAH | Control panel |
| A | | Connect the power supply to an approved omnipolar switch with an opening distance of the contacts of at least 3mm (not supplied). The connection to the mains must be made via an independent channel, separated from the connections to command and safety devices. |

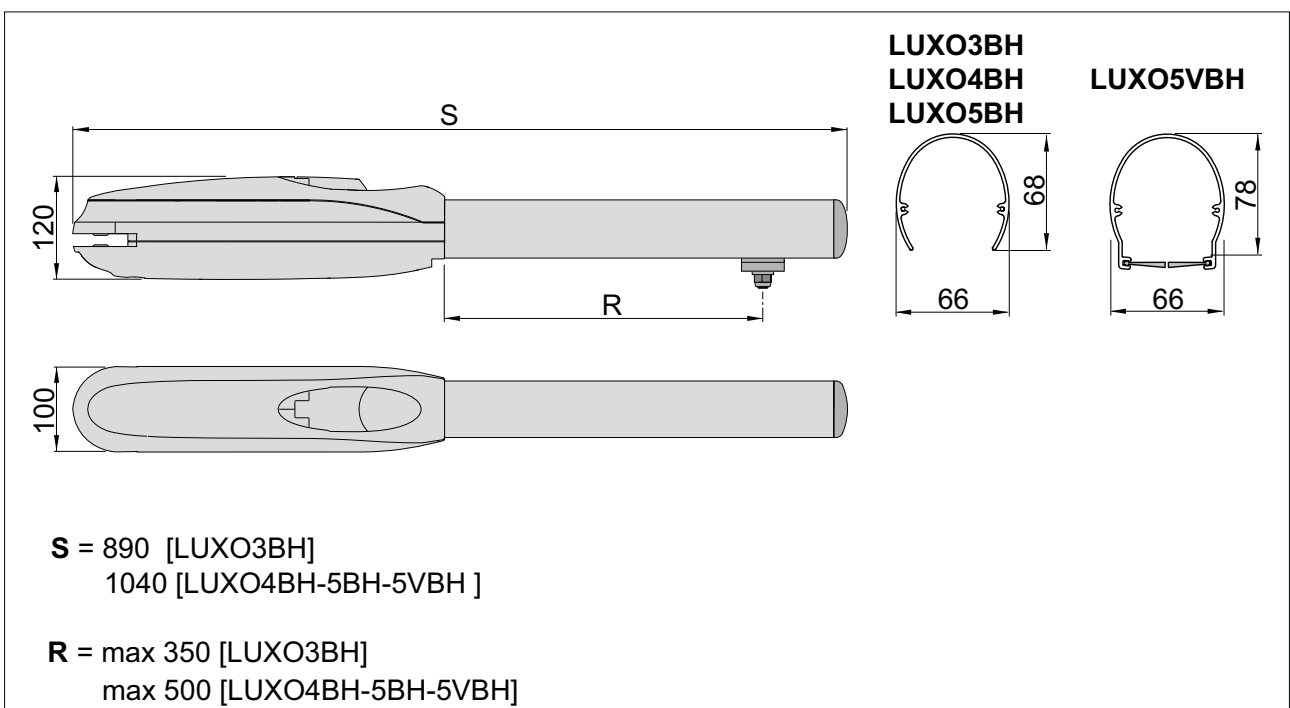


NOTE: the given operating and performance features can only be guaranteed with the use of DITEC accessories and safety devices.

4.1. Dimensions and references



| Ref. | Code | Description |
|------|---------|--|
| 9 | | Cover |
| 10 | | Lock flap |
| 11 | | Release lock |
| 12 | | Drive screw cover |
| 13 | | Drive screw |
| 14 | | Tail bracket |
| 15 | | Head bracket |
| 16 | LUXOFCH | Limit switch (only standard on LUXO5VBH) |
| F | | Cover fastening screw |
| G | | Drive cover fastening screw |



5. INSTALLATION

Unless otherwise specified, all measurements are expressed in millimetres (mm).

5.1 Preliminary checks

Check that the structure is sufficiently rugged and that the hinge pivots are properly lubricated. Provide an opening and closing stop.

Position tail bracket [14] on to the pillar to check installation measurements and secure it.

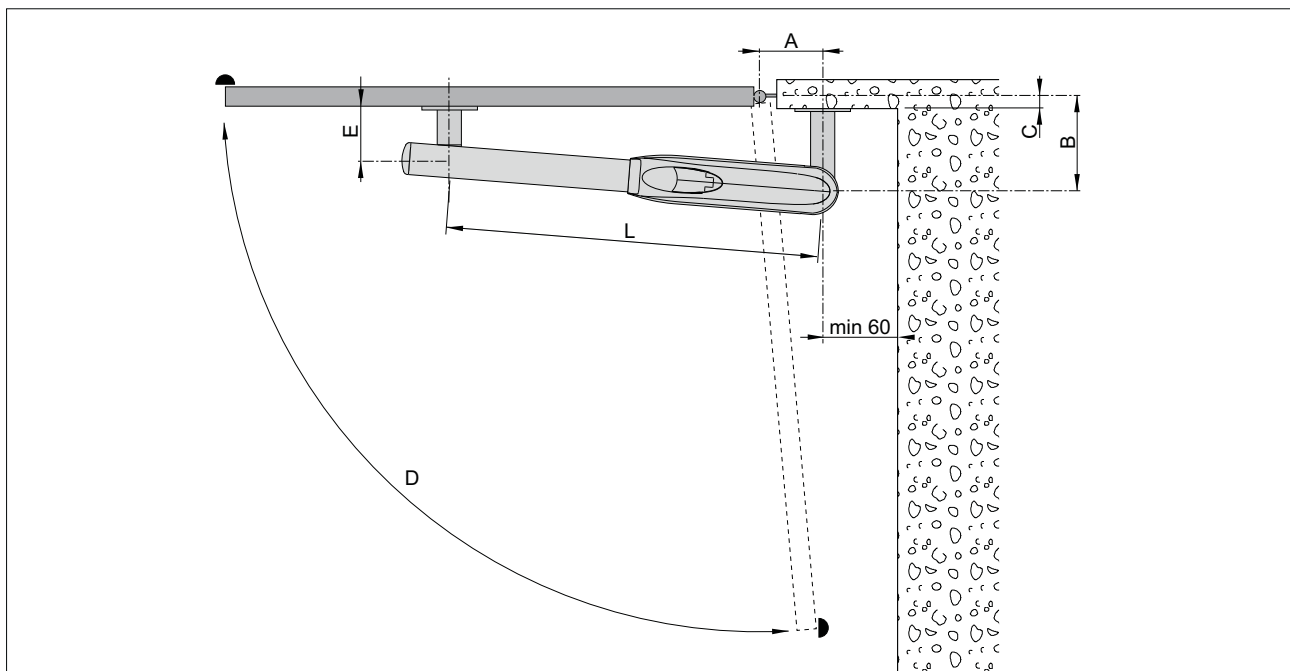
The installation measurements indicated in the table allow you to choose the values of [A] and [B] on the basis of the desired opening angle and in relation to the on site spaces and overall dimensions.

NOTE: The measurements [A] and [B] must be the same, in order to have a regular movement.

Increasing [A] decreases the coming up speed during opening.

Reducing [B] increases the extent of gate opening.

Measurements [A] and [B] must in any case be compatible with the useful travel of the piston so that; if [A] is increased, [B] must be decreased and vice versa.



[*] Use measurements between minimum and maximum values

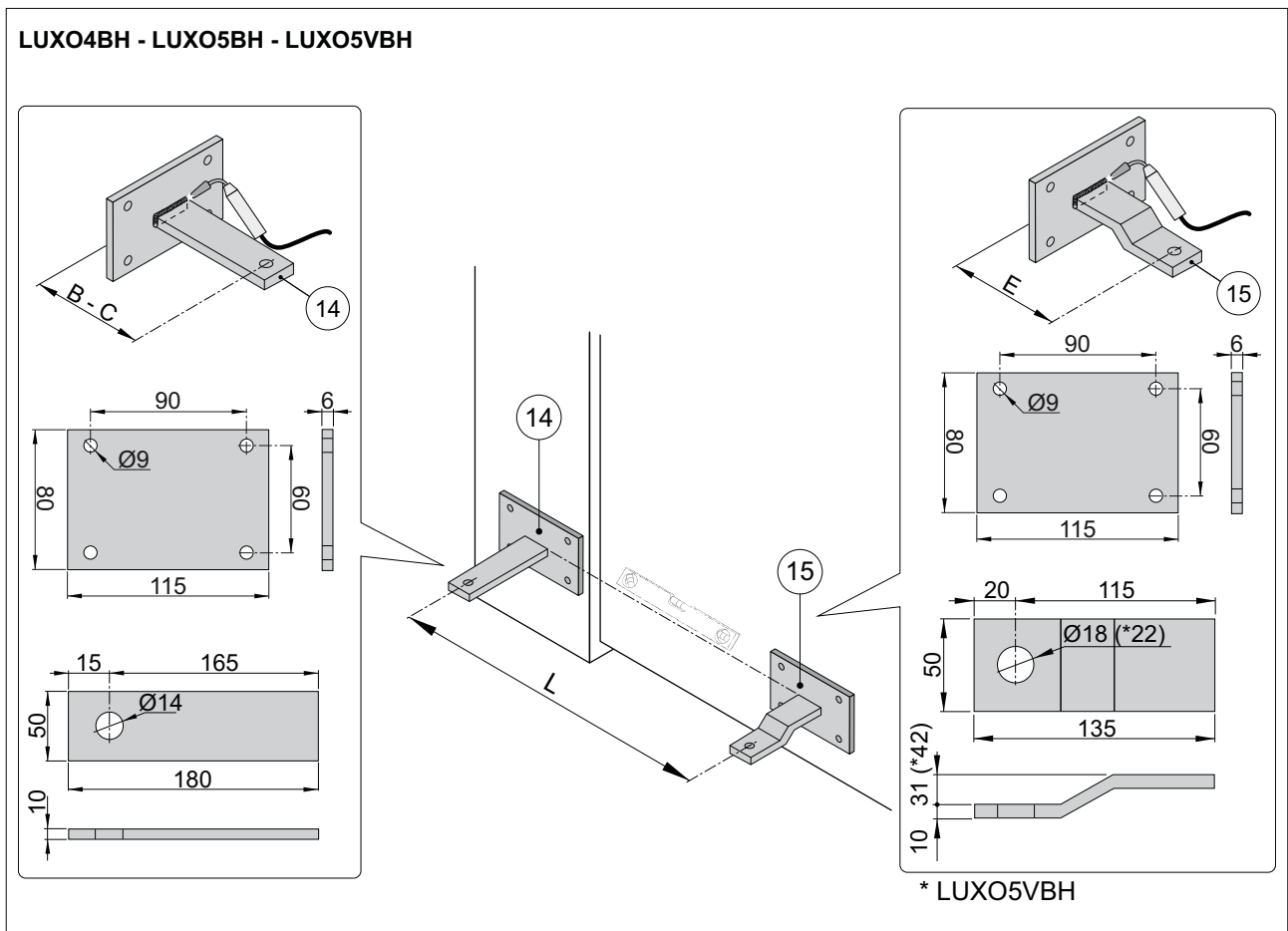
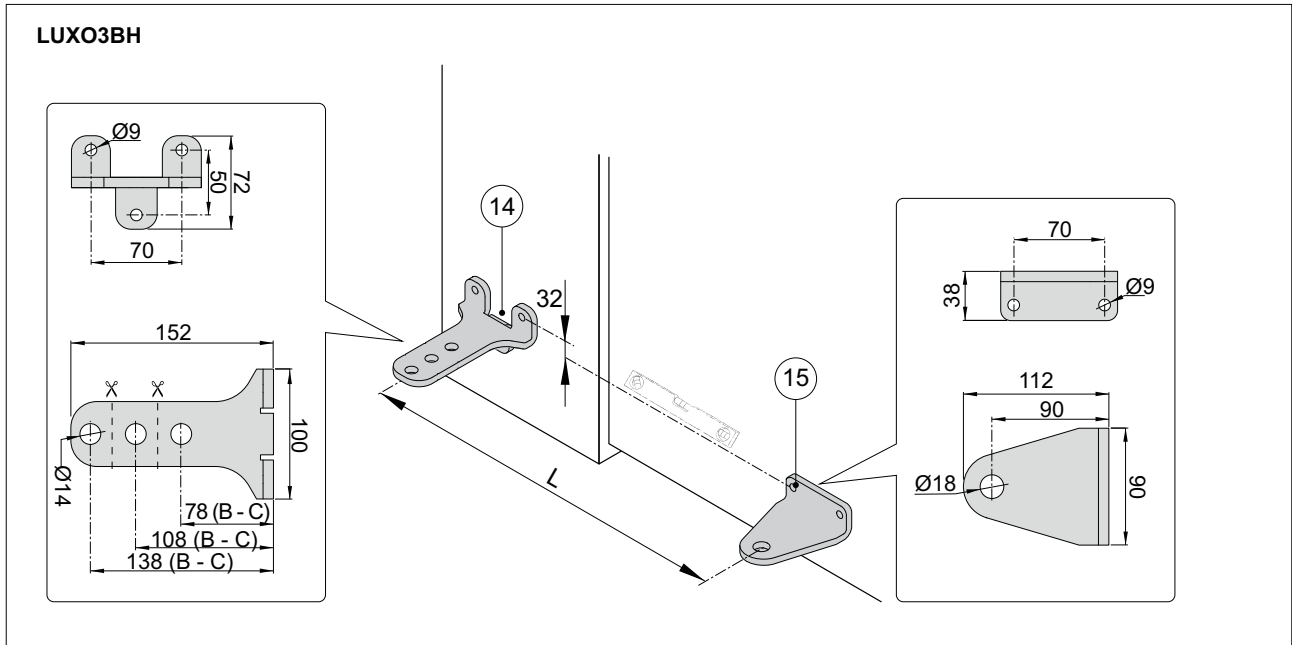
| | A* | B* | A | B | C | D | E | L |
|--------------------------------|--------------------|--------------------|-----|-----|------|------|-----|-----|
| LUXO3BH | min 105 max 130 | min 120 max 170 | 130 | 170 | 100 | 90° | 90 | 760 |
| | | | 105 | 140 | 70 | 90° | | |
| | | | 130 | 130 | 60 | 95° | | |
| | | | 130 | 120 | 50 | 110° | | |
| LUXO4BH LUXO5BH LUXO5VBH | min 130 max 200 | min 170 max 290 | 170 | 170 | 100 | 90° | 120 | 910 |
| 200 | | | 200 | 130 | 95° | | | |
| 200 | | | 170 | 100 | 120° | | | |
| 130 | | | 290 | 220 | 90° | | | |

5.2 Bracket fastening

- Once you have fastened the tail bracket [14] following the measurements indicated on page 8, fasten the head bracket [15] to the gate.

NOTE: shorten the tail bracket [14] by following the instructions on page 8.

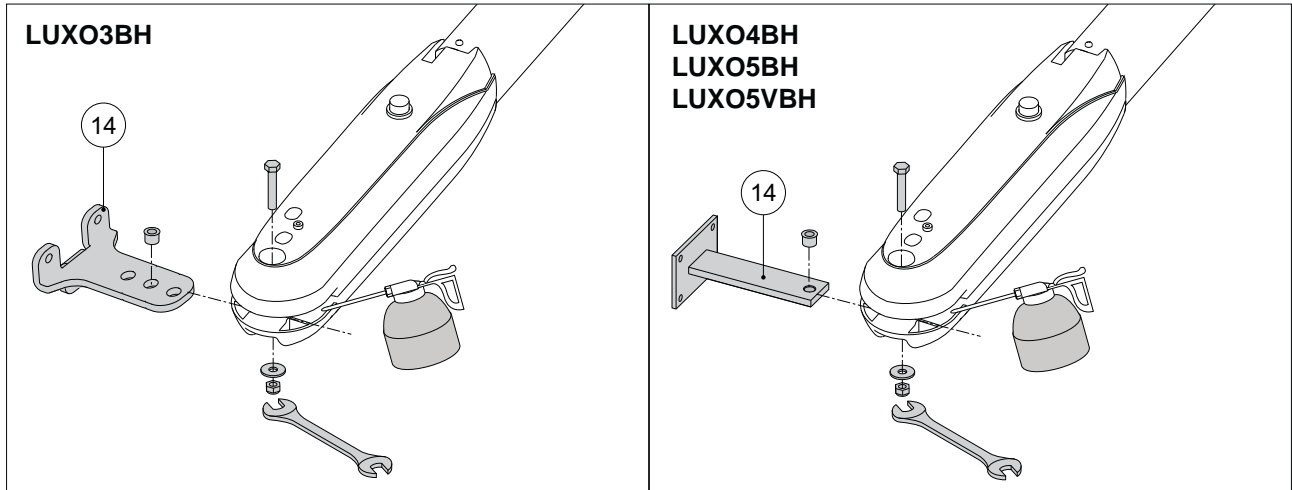
- When the gate is completely closed, place the head bracket [15] near the piston attachment complying with measurements [E] and [L]. Make sure that the head brackets [15] and tail brackets [14] are perfectly level as shown in the following figures and fasten the head bracket [15] to the gate.



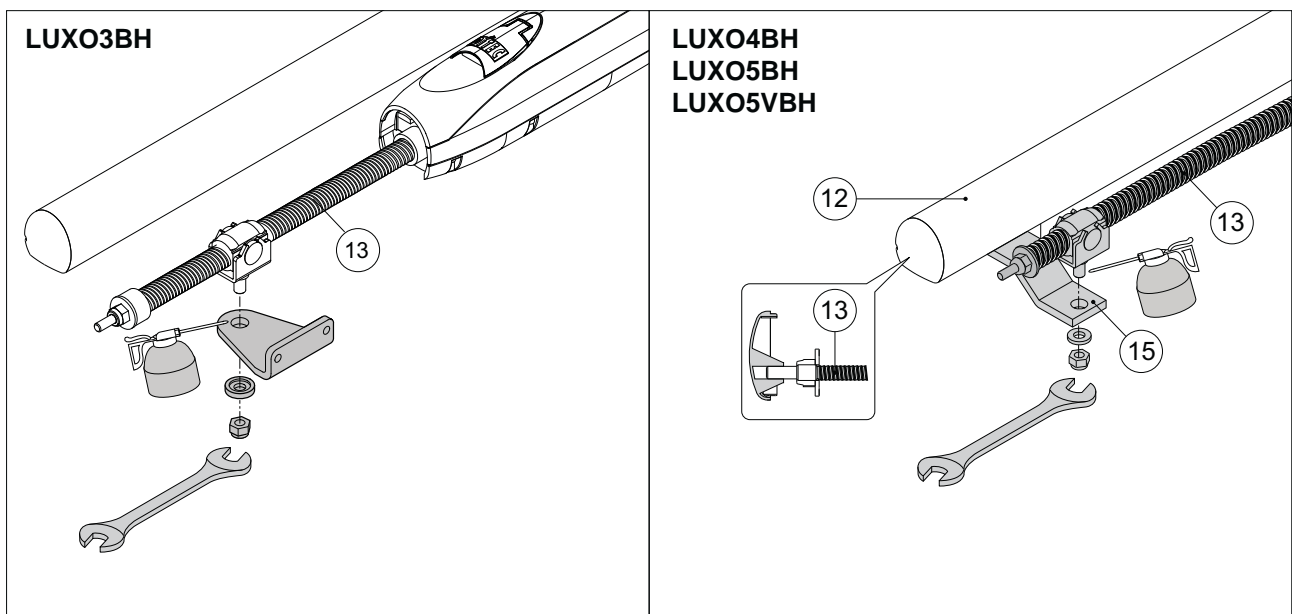
5.3 Geared motor installation

- Open the lock flap [10] unscrew the screw [F] and remove the cover [9]. Unscrew the screw [G] and remove the drive screw cover [12] as shown in the figure on pag. 7. Release the piston (see OPERATING INSTRUCTIONS).
- Mount the piston on tail [14] and head bracket [15], tightly screwing down the self-locking nut and lubricate the turning points.

NOTE: pay special attention to the correct assembly of the washer on the head bracket.



- Fit and secure the drive screw cover [12] on the drive screw [13] by means of the screws provided [G].
NOTE: ensure that the drive screw [13] is properly inserted onto the screw cover head [12] (see figure).
- Move the gate by hand and check for smooth and free movement throughout.

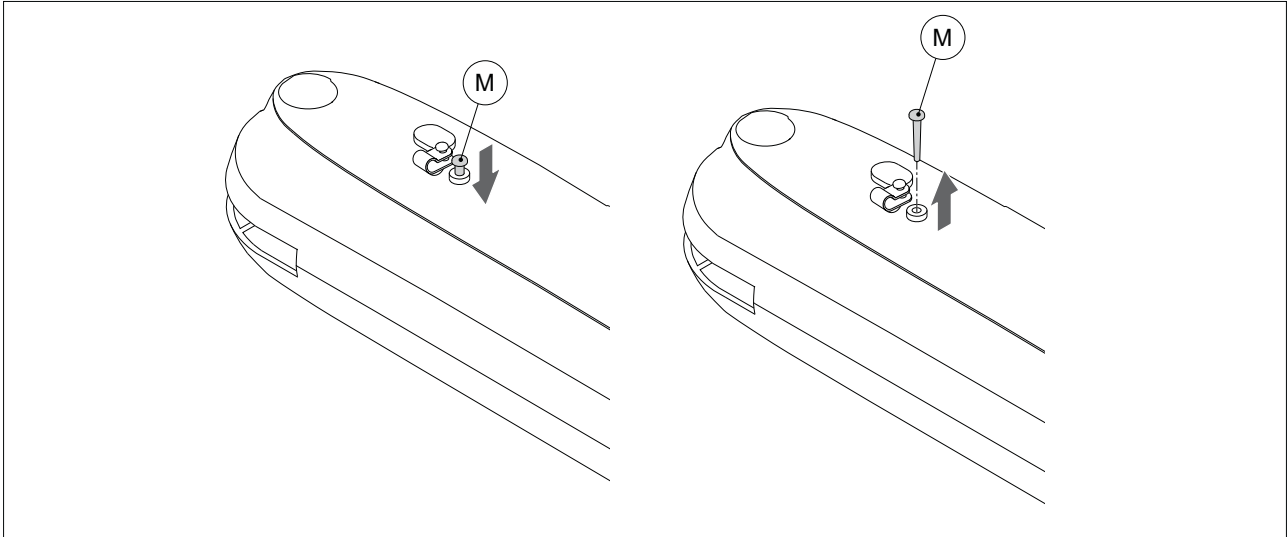


5.4 Reversible and irreversible piston (only LUXO5BH and LUXO5VBH)

To make the piston reversible, insert pin [M].

NOTE: the operation must be carried out with the piston moving.

Removing the pin [M], the piston becomes irreversible, and the release can only be made with the key (see OPERATING INSTRUCTIONS).



6. ELECTRICAL CONNECTIONS

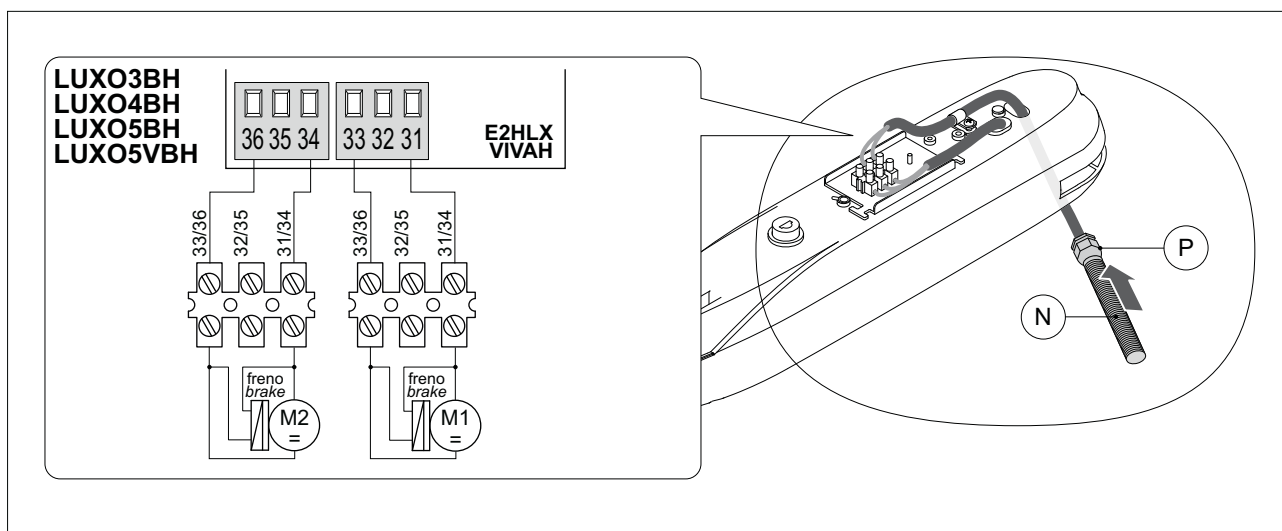
Before connecting the power supply, make sure the plate data correspond to that of the mains power supply. An omnipolar disconnection switch with minimum contact gaps of 3 mm must be included in the mains supply. Check that upstream of the electrical installation there is an adequate residual current circuit breaker and a suitable overcurrent cutout.

The gearmotors LUXO3BH and LUXO4BH can be connected to the E2HLX and VIVAH control panels.

The gearmotors LUXO5BH and LUXO5VBH can be connected to the VIVAH control panel.

The electrical wiring and the start-up of the gearmotors LUXO are shown in figure and in the installation manuals of the E2HLX and VIVAH control panels.

To increase the protection of the motor cable, a flexible Ø16 raceway [N] may be used and the associated Ø20 union [P], not supplied by us. Tighten the screw [F].



7. ROUTINE MAINTENANCE PLAN

Perform the following operations and checks every 6 months according to intensity of use of the automation.

Disconnect the 230 V~ power supply and batteries if present:

- Clean and lubricate, using neutral grease, the turning pins, the hinges of the gate and the drive screw
- Check that fastening points are properly tightened.
- Check the electrical wiring is in good condition.

Reconnect the 230 V~ power supply and batteries if present:

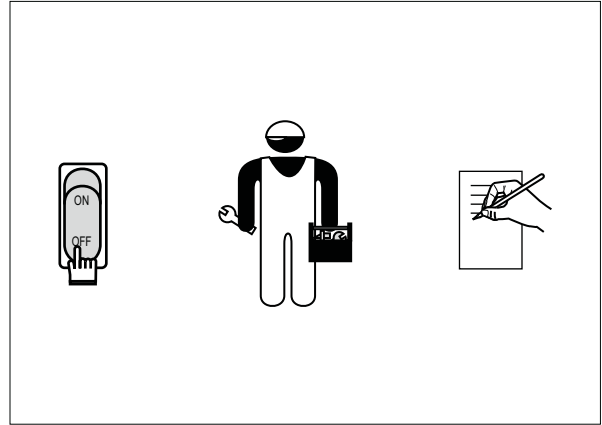
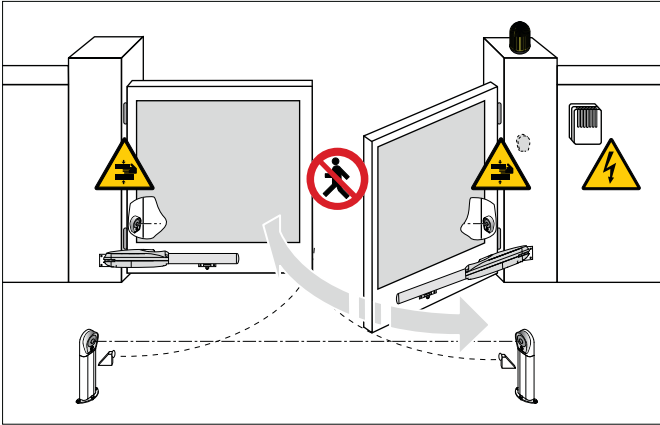
- Check the power adjustments.
 - Check the good operation of all command and safety functions (photocells).
 - Check the good operation of the release.
 - If present, check for battery continuity by powering off and performing several manoeuvres in sequence.
- Upon test completion, power back on (230 V~).



NOTE: For spare parts, see the spares price list.



8. OPERATING INSTRUCTIONS



8.1 General safety precautions

The following precautions are an integral and essential part of the product and must be supplied to the user. Read them carefully since they contain important information on safe installation, use and maintenance.

These instructions must be kept and forwarded to all possible future users of the system.

This product must only be used for the specific purpose for which it was designed.

Any other use is to be considered improper and therefore dangerous.

The manufacturer cannot be held responsible for any damage caused by improper, incorrect or unreasonable use.

Avoid operating in the proximity of the hinges or moving mechanical parts.

Do not enter within the operating range of the motorized door while it is moving.

Do not block the movement of the motorized door since this may be dangerous.

Do not allow children to play or stay within the operating range of the motorized door.

Keep remote controls and/or any other control devices out of the reach of children in order to avoid possible involuntary activation of the motorized door.

In the event of fault or malfunctioning of the product, turn off the power supply switch, do not attempt to repair or intervene directly and contact only professionally competent personnel.


Failure to comply with the above may cause a dangerous situation.

All cleaning, maintenance or repair work must be carried out by professionally competent personnel.

To ensure that the system works efficiently and correctly, the manufacturer's indications must be complied with and routine maintenance of the motorized door must be performed by professionally competent personnel.

In particular, regular checks are recommended in order to verify that the safety devices are operating correctly.

All installation, maintenance and repair work must be documented and made available to the user.

 For the correct disposal of electric and electronic equipment, waste batteries and accumulators, the user must take such products to the designated municipal collection facilities.

8.2 Manual release instructions

In the event of a fault or blackout, insert the key and turn it anticlockwise.

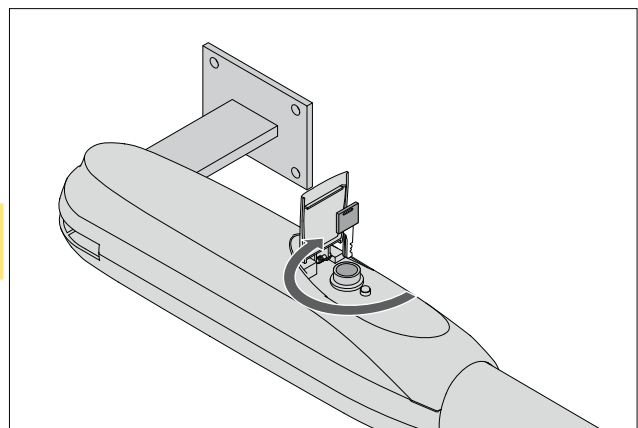
Unlock the electric lock, if mounted.

Manually slide the gate open.

To relock the wings, turn the key anticlockwise.



WARNING: the door wing block and release operations must be performed with the motor idle.





DITEC S.p.A. Via Mons. Banfi, 3 21042 Caronno P.lla (VA) Italy Tel. +39 02 963911 Fax +39 02 9650314
www.ditec.it ditec@ditecva.com

DITEC BELGIUM LOKEREN Tel. +32 9 3560051 Fax +32 9 3560052 www.ditecbelgium.be **DITEC DEUTSCHLAND** OBERURSEL
Tel. +49 6171 914150 Fax +49 6171 9141555 www.ditec-germany.de **DITEC ESPAÑA** ARENYS DE MAR Tel. +34 937958399
Fax +34 937959026 www.ditecespana.com **DITEC FRANCE** MASSY Tel. +33 1 64532860 Fax +33 1 64532861 www.ditecfrance.com
DITEC GOLDPORTA ERMESINDE-PORTUGAL Tel. +351 229773520 Fax +351 229773528/38 www.goldporta.com **DITEC SWITZERLAND**
BALERNA Tel. +41 848 558855 Fax +41 91 6466127 www.ditecswiss.ch **DITEC ENTREMATIC NORDIC** LANDSKRONA-SWEDEN
Tel. +46 418 514 50 Fax +46 418 511 63 www.ditecentrematicnordic.com **DITEC TURCHIA** ISTANBUL Tel. +90 21 28757850
Fax +90 21 28757798 www.ditec.com.tr **DITEC AMERICA** ORLANDO-FLORIDA-USA Tel. +1 407 8880699 Fax +1 407 8882237
www.ditecamerica.com **DITEC CHINA** SHANGHAI Tel. +86 21 62363861/2 Fax +86 21 62363863 www.ditec.cn