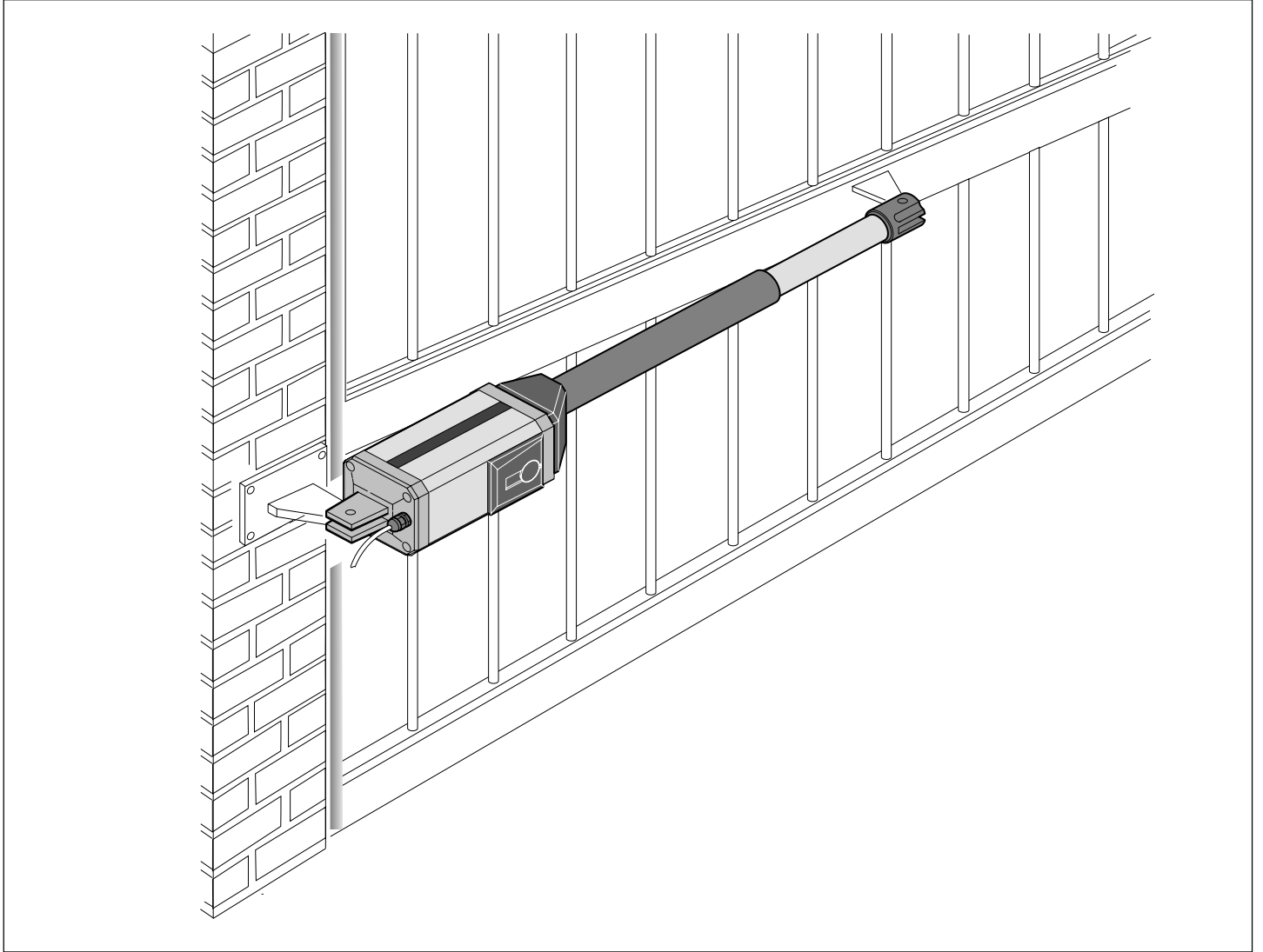


# ***Elite***



# **GENIUS<sup>®</sup>**

**COMPANY  
WITH QUALITY SYSTEM  
CERTIFIED BY DNV  
=ISO 9001/2000=**

**CE**

# ELITE AUTOMATION

The ELITE automation system for swing gates comprises an electromechanical operator which drives the gate leaves by means of a worm screw.

The ELITE operator is irreversible and locks mechanically when the motor is not in use. Therefore a lock does not need to be fitted. Its manual override is activated by a customised key.

## 1. DESCRIPTION AND TECHNICAL SPECIFICATIONS

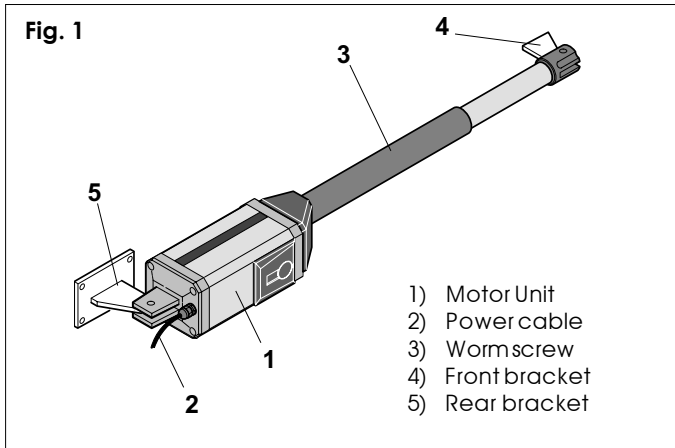
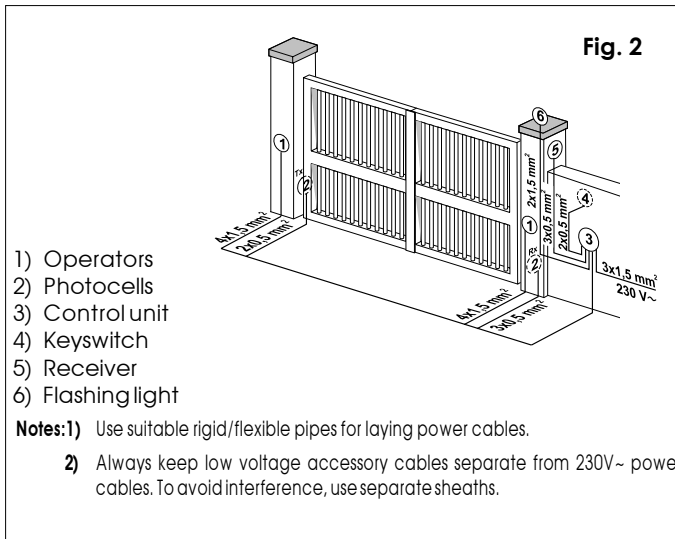


Table 1: Operator technical specifications

Model	ELITE 300 ELITE 400	ELITE 324 ELITE 424	ELITE LENTO
Powersupply	230V~50Hz	24Vdc	230V~50Hz
Absorbed power	350W	70W	280W
Current drawn	1,5A	3A	1,2A
Electric motor rpm	1400		900
Thermal cutout	140°C		140°C
Capacitor	10µF/400V		8µF/400V
Max. thrust/traction force	400 daN	300 daN	320 daN
Rod stroke	300 mm / 400 mm		400 mm
Rod speed	1,6 cm/sec		1,1 cm/sec
Temperature range	-20°C +55°C		
Operator weight	6,5 Kg		
Housing protection	IP 44		
Duty cycle (cycles/hour)	20	50	20
Maximum leaf length	3 m / 4 m		

## 2. STANDARD INSTALLATION LAYOUT



- 1) Operators
- 2) Photocells
- 3) Control unit
- 4) Keyswitch
- 5) Receiver
- 6) Flashing light

**Notes:** 1) Use suitable rigid/flexible pipes for laying power cables.  
2) Always keep low voltage accessory cables separate from 230V - power cables. To avoid interference, use separate sheaths.

## Drawing A INSTALLATION DIMENSIONS

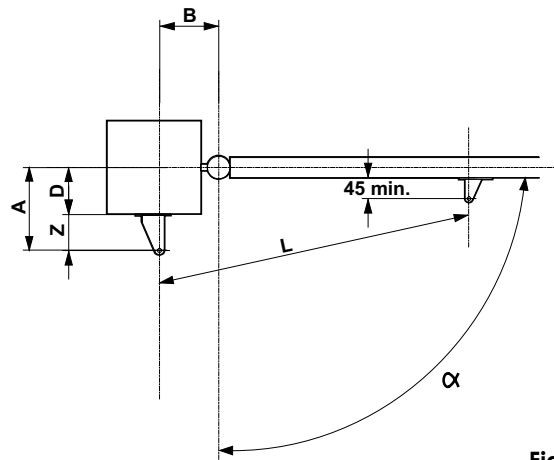


Fig. A

Table A: Recommended dimensions (in mm)

Model	$\alpha$	A	B	C <sup>(1)</sup>	D <sup>(2)</sup>	Z <sup>(3)</sup>	L
300	90°	145	145	290	70	45	970
	110°	125	125	290	50	45	970
400	90°	195	195	390	120	45	1170
	110°	165	165	390	90	45	1170

(<sup>1</sup>) useful rod stroke (<sup>2</sup>) max. dimension (<sup>3</sup>) min. dimension

### CALCULATING INSTALLATION DIMENSIONS: GENERAL RULES

If the dimensions specified in Table A cannot be used, calculate different dimensions as follows:

- For **90° leaf opening**:  $a + b = c$
- For **leaf opening over 90°**:  $a + b < c$
- **The lower the dimensions of a and b the higher the gate speed.** Ensure that current standards are observed.
- **Make sure that the difference between a and b is no more than 4 cm:** larger differences cause large variations in speed during opening and closing.
- Due to the dimensions of the operator, the minimum value for **Z is 45 mm** (fig. A)

If the dimensions of the gate post or the position of the hinge do not allow **a** to be kept within the required value, make a recess in the gate post as shown in fig. B.

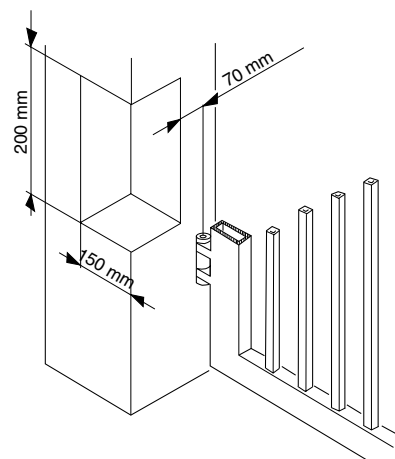


Fig. B

**3. INSTALLATION OF THE AUTOMATION SYSTEM**

**3.1. PRELIMINARY CHECKS**

To ensure trouble-free operation, make sure that the gate (whether existing or to be installed) has the following specifications:

- max. length of each gate leaf: 3 metres (with operator with 300 mm stroke);
- maximum length of each gate leaf: 4 metres (with operator with 400 mm stroke);
- strong and rigid leaf frame
- smooth movement of leaves during entire travel; no stiff points
- hinges in good condition
- mechanical travel limit stops present
- electric lock present in reversible version.

If any welding or brazing has to be done on the gate, this must be done before installing the automation system.

Good condition of the structure is essential for reliability and safety of the automation system.

**3.2. INSTALLATION OF THE OPERATORS**

- 1) Fix the rear bracket to the gate post according to the instructions in **Table A**. Adjust the length of the bracket if necessary.

**Warning:** Observe the specified dimensions to ensure correct operator operation.

In the case of iron gate posts, weld the bracket directly onto the gate post.

In the case of brick/concrete gate posts, flush-mount a wall plate (fig. 3), and weld the bracket to the plate.

- 2) Fix the operator to the rear bracket by means of the screws supplied (fig. 3).

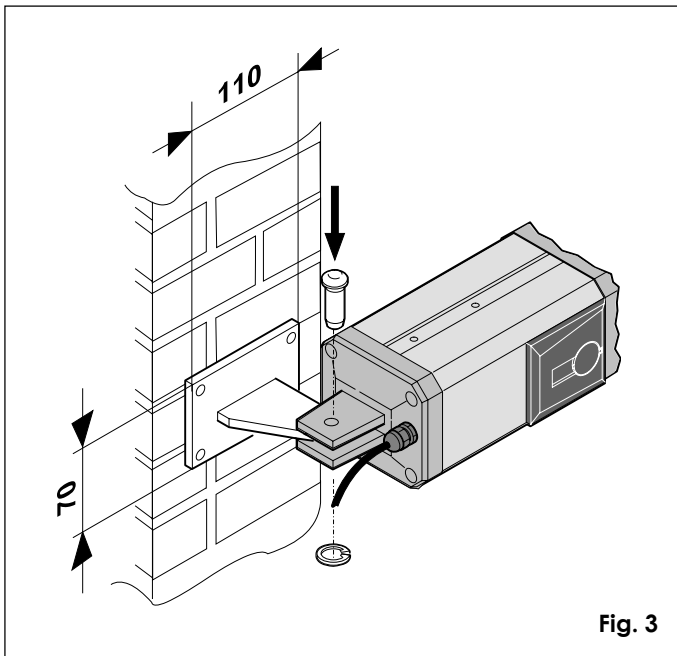


Fig. 3

- 3) Release the operator (see paragraph 6).
- 4) Extend the rod to the end of its stroke (fig. 4).
- 5) Lock the operator (see paragraph 7).
- 6) Rotate the operator rod two full turns clockwise (fig. 4).

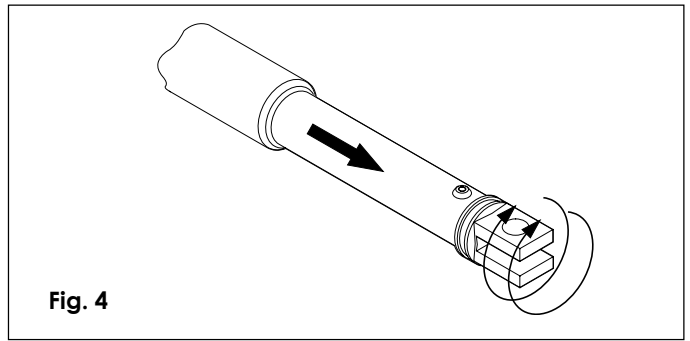


Fig. 4

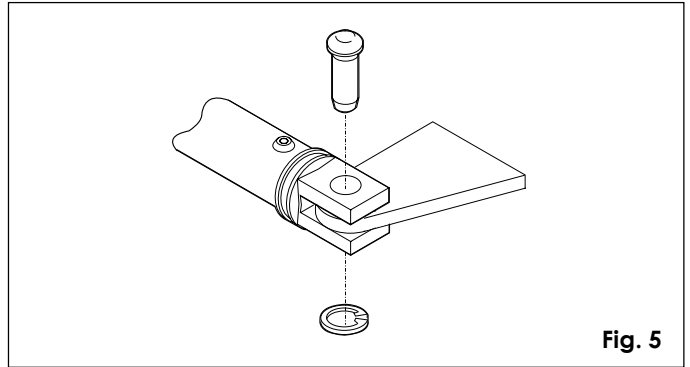


Fig. 5

- 7) Fit the front bracket onto the rod as shown in fig. 5.
- 8) Close the gate leaf and, keeping the operator perfectly horizontal, locate the leaf attachment position on the front bracket (fig. 6).

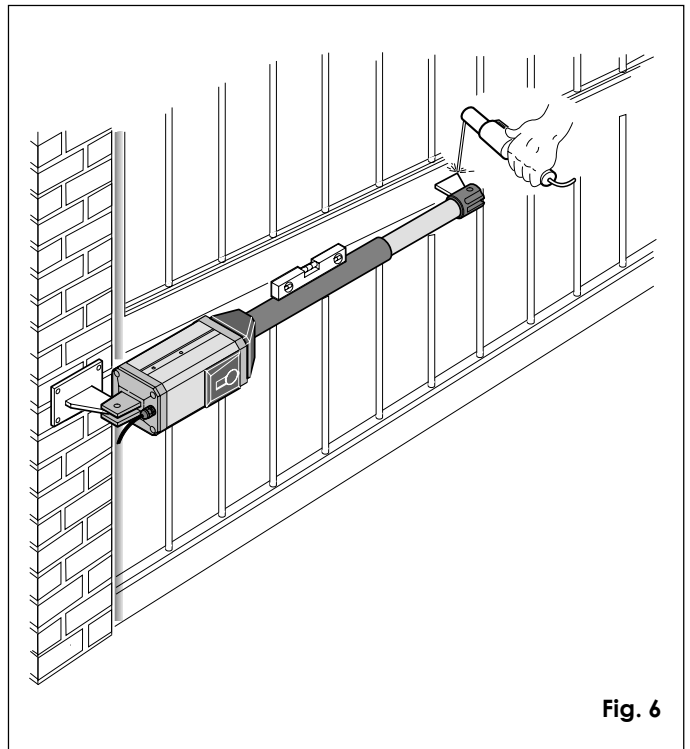


Fig. 6

- 9) Fix the front bracket temporarily to the leaf by two welds. **N.B.:** If the gate frame does not allow for secure fixing of the bracket, add a support plate.
- 10) Release the operator and ensure that the gate opens smoothly with no stiff points and that it stops on the mechanical travel stops.

## ENGLISH

- 11) Completely weld the front bracket to the leaf. When doing this, detach the operator temporarily from the bracket to prevent damage from welding scale.

### N.B.:

- 1) Grease all pivots on brackets
  - 2) If welding is not possible, the front and rear bracket plates can be fixed using screws and screw anchors.
- 12) Attach the metal tag to the slot in the top section of the motor in order to blank off the holes present as shown fig.7. On the other hand, do not block the holes to be found in the lower section.

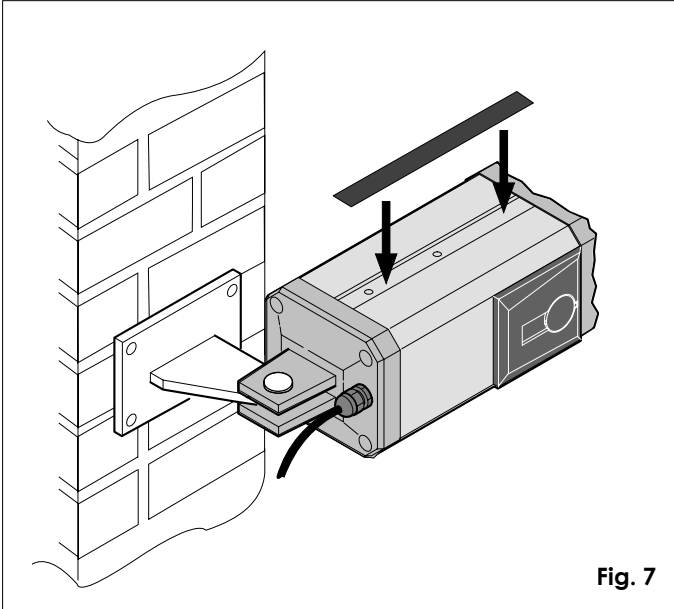


Fig. 7

- 13) Repeat the above operations to install the second operator, if required.
- 14) Install the control unit box according to the dimensions given in the relevant instructions.

## 4. STARTING THE AUTOMATED UNIT

- 1) Program the control unit according to your requirements as described in the relevant instructions.
- 2) Power up the system and check the state of the LEDs according to the table in the control unit instructions.

## 5. TESTING THE AUTOMATED UNIT

Carefully check operation of the operator and all accessories connected to it.

Give the customer the page entitled "End-User Guide". Describe how the operator works and explain how it is to be used correctly. Inform the customer of the potential hazard areas of the automation.

## 6. MANUAL OPERATION

The gate can be operated manually in the event of a power failure or malfunction by removing the plug and inserting the special release key as shown in fig. 8.

To release the operator, turn the key as shown in fig. 8. Open or close the leaves manually.

## 7. RETURNING TO NORMAL OPERATION

Turn off the electricity supply to the system before re-locking the operators to avoid all risk of starting them accidentally.

To re-lock the operator, turn the key as shown in fig. 9.

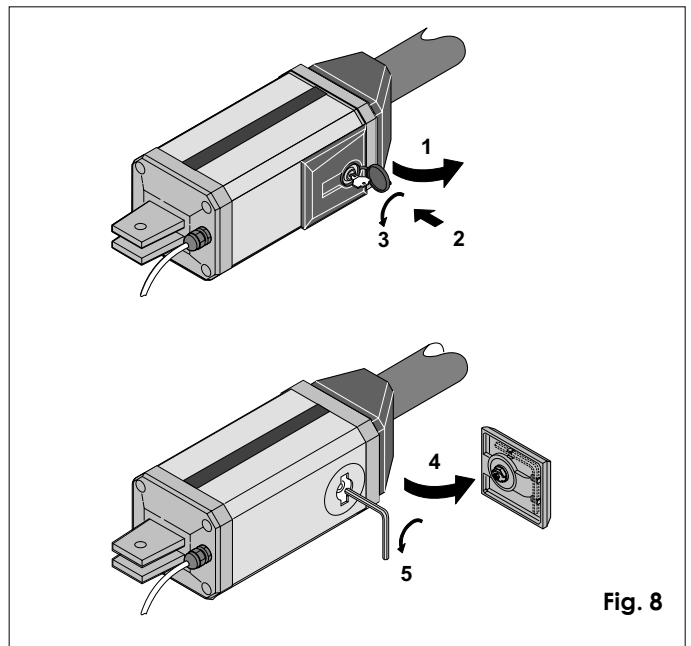


Fig. 8

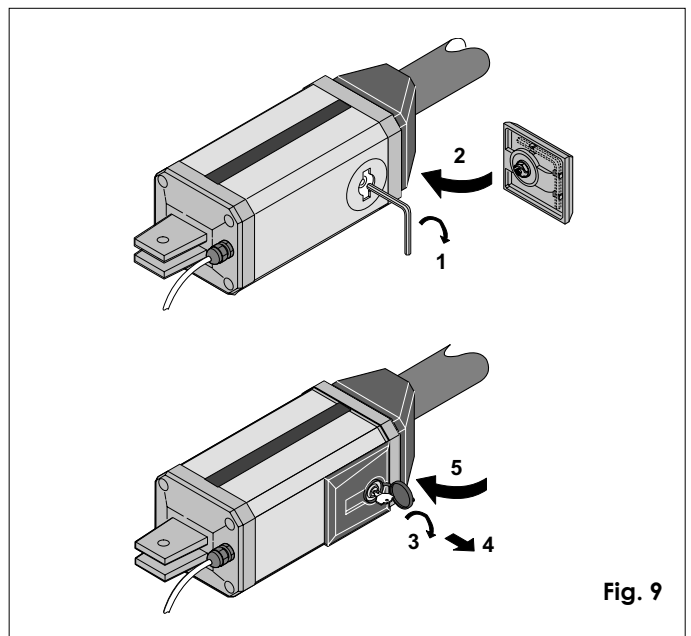


Fig. 9

## 8. SPECIAL APPLICATIONS

There are no special applications.

## 9. MAINTENANCE





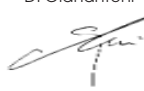
Carry out periodic checks of the gate structure and ensure in particular that the hinges are in perfect working condition.

Check periodically that the electronic anti-crushing system is adjusted correctly and that the release mechanism for manual movement is fully operative (see relevant paragraph).

Safety devices installed on the system must be checked every six months.

## 10. REPAIRS

For repairs, contact authorised service centres.

DICHIARAZIONE CE DI CONFORMITÀ PER MACCHINE (DIRETTIVA 89/392 CEE, ALLEGATO II, PARTE B)	EC MACHINE DIRECTIVE COMPLIANCE DECLARATION (DIRECTIVE 89/392 EEC, APPENDIX II, PART B)	DÉCLARATION CE DE CONFORMITÉ (DIRECTIVE EUROPÉENNE "MACHINES" 89/392/CEE, ANNEXE II, PARTIE B)
<p><b>Fabbricante:</b> GENIUS S.p.a. <b>Indirizzo:</b> Via Padre Elzi, 32 24050 - Grassobbio BERGAMO - ITALIA</p> <p><b>Dichiara che:</b> L'Attuatore mod. ELITE</p> <ul style="list-style-type: none"> <li>è costruito per essere incorporato in una macchina o per essere assemblato con altri macchinari per costituire una macchina ai sensi della Direttiva 89/392 CEE, e successive modifiche 91/368/CEE, 93/44/CEE, 93/68/CEE;</li> <li>è conforme ai requisiti essenziali di sicurezza delle seguenti altre direttive CEE: 73/23 CEE e successiva modifica 93/68/CEE. 89/336 CEE e successiva modifica 92/31 CEE e 93/68/CEE</li> </ul> <p>e inoltre dichiara che <u>non è consentito mettere in servizio il macchinario</u> fino a che la macchina in cui sarà incorporata o di cui diverrà componente sia stata identificata e ne sia stata dichiarata la conformità alle condizioni della Direttiva 89/392/CEE e successive modifiche trasposta nella legislazione nazionale dal DPR n° 459 del 24 Luglio 1996.</p> <p>Grassobbio, 01-06-2005</p> <p>L'Amministratore Delegato D. Gianantoni</p> 	<p><b>Manufacturer:</b> GENIUS S.p.a. <b>Address:</b> Via Padre Elzi, 32 24050 - Grassobbio BERGAMO - ITALY</p> <p><b>Hereby declares that:</b> the ELITE</p> <ul style="list-style-type: none"> <li>is intended to be incorporated into machinery, or to be assembled with other machinery to constitute machinery in compliance with the requirements of Directive 89/392 EEC, and subsequent amendments 91/368 EEC, 93/44 EEC and 93/68 EEC;</li> <li>complies with the essential safety requirements in the following EEC Directives: 73/23 EEC and subsequent amendment 93/68 EEC. 89/336 EEC and subsequent amendments 92/31 EEC and 93/68 EEC.</li> </ul> <p>and furthermore declares that <u>unit must not be put into service</u> until the machinery into which it is incorporated or of which it is a component has been identified and declared to be in conformity with the provisions of Directive 89/392 EEC and subsequent amendments enacted by the national implementing legislation.</p> <p>Grassobbio, 01-06-2005</p> <p>Managing Director D. Gianantoni</p> 	<p><b>Fabricant:</b> GENIUS S.p.a. <b>Adresse:</b> Via Padre Elzi, 32 24050 - Grassobbio BERGAMO - ITALIE</p> <p><b>Déclare d'une part</b> que l'automatisme mod. ELITE</p> <ul style="list-style-type: none"> <li>est prévue soit pour être incorporée dans une machine, soit pour être assemblée avec d'autres composants ou parties en vue de former une machine selon la directive européenne "machines" 89/392 CEE, modifiée 91/368 CEE, 93/44 CEE, 93/68 CEE.</li> <li>satisfait les exigences essentielles de sécurité des directives CEE suivantes: 73/23 CEE, modifiée 93/68 CEE. 89/336 CEE, modifiée 92/31 CEE et 93/68 CEE.</li> </ul> <p><b>et d'autre part</b> qu'il est formellement interdit de mettre en fonction l'automatisme en question avant que la machine dans laquelle il sera intégrée ou dont il constituera un composant ait été identifiée et déclarée conforme aux exigences essentielles de la directive européenne "machines" 89/392/CEE, et décrets de transposition de la directive.</p> <p>Grassobbio, le 01-06-2005</p> <p>L'Administrateur Délégué D. Gianantoni</p> 
<p><b>DECLARACIÓN DE CONFORMIDAD CE PARA MÁQUINAS</b> (DIRECTIVA 89/392 CEE, ANEXO II, PARTE B)</p> <p><b>Fabricante:</b> GENIUS S.p.a. <b>Dirección:</b> Via Padre Elzi, 32 24050 - Grassobbio BERGAMO - ITALIA</p> <p><b>Declara que:</b> El equipo automático mod. ELITE</p> <ul style="list-style-type: none"> <li>Hasido construido para ser incorporado en una máquina, o para ser ensamblado con otros mecanismos a fin de constituir una máquina con arreglo a la Directiva 89/392 CEE y a sus sucesivas modificaciones 91/368 CEE, 93/44 CEE y 93/68 CEE.</li> <li>Cumple los requisitos esenciales de seguridad establecidos por las siguientes directivas CEE: 73/23 CEE y sucesiva modificación 93/68 CEE, 89/336 CEE y sucesivas modificaciones 92/31 CEE y 93/68 CEE.</li> </ul> <p>Asimismo, declara que <u>no está permitido poner en marcha el equipo</u> si la máquina en la cual será incorporado, o de la cual se convertirá en un componente, no ha sido identificada o no ha sido declarada su conformidad a lo establecido por la Directiva 89/392 CEE y sus sucesivas modificaciones, y a la ley que la incorpora en la legislación nacional.</p> <p>Grassobbio, 01-06-2005</p> <p>Administrador Delegado D. Gianantoni</p> 	<p><b>EG-KONFORMITÄTSERKLÄRUNG ZU MASCHINEN</b> (gemäß EG-Richtlinie 89/392/EWG, Anhang II, Teil B)</p> <p><b>Hersteller:</b> GENIUS S.p.a. <b>Adresse:</b> Via Padre Elzi, 32 24050 - Grassobbio BERGAMO - ITALIEN</p> <p><b>erklärt hiermit, daß:</b> der Antrieb Mod. ELITE</p> <ul style="list-style-type: none"> <li>zum Einbau in eine Maschine oder mit anderen Maschinen zu einer Maschine im Sinne der Richtlinie 89/392 EWG und deren Änderungen 91/368 EWG, 93/44 EWG, 93/68 EWG vorgesehen ist.</li> <li>den wesentlichen Sicherheitsbestimmungen folgender anderer EG-Richtlinien entspricht: 73/23 EWG und nachträgliche Änderung 93/68 EWG 89/336 EWG und nachträgliche Änderung 92/31 EWG sowie 93/68 EWG</li> </ul> <p>und erklärt außerdem, daß die <u>Inbetriebnahme solange untersagt ist</u>, bis die Maschine, in welche diese Maschine eingebaut wird oder von der sie ein Bestandteil ist, den Bestimmungen der Richtlinie 89/392 EWG sowie deren nachträglichen Änderungen entspricht.</p> <p>Grassobbio, 01-06-2005</p> <p>Der Geschäftsführer D. Gianantoni</p> 	<p>Le descrizioni e le illustrazioni del presente manuale non sono impegnative. GENIUS si riserva il diritto, lasciando inalterate le caratteristiche essenziali dell'apparecchiatura, di apportare in qualunque momento e senza impegnarsi ad aggiornare la presente pubblicazione, le modifiche che essa ritiene convenienti per miglioramenti tecnici o per qualsiasi altra esigenza di carattere costruttivo o commerciale.</p> <p>The descriptions and illustrations contained in the present manual are not binding. GENIUS reserves the right, whilst leaving the main features of the equipments unaltered, to undertake any modifications to holds necessary for either technical or commercial reasons, at any time and without revising the present publication.</p> <p>Les descriptions et les illustrations du présent manuel sont fournies à titre indicatif. GENIUS se réserve le droit d'apporter à tout moment les modifications qu'elle jugera utiles sur ce produit tout en conservant les caractéristiques essentielles, sans devoir pour autant mettre à jour cette publication.</p> <p>Las descripciones y las ilustraciones de este manual no comportan compromiso alguno. GENIUS se reserva el derecho, dejando inmutadas las características esenciales de los aparatos, de aportar, en cualquier momento y sin comprometerse a poner a día la presente publicación, todas las modificaciones que considere oportunas para el perfeccionamiento técnico o para cualquier otro tipo de exigencia de carácter constructivo o comercial.</p> <p>Die Beschreibungen und Abbildungen in vorliegendem Handbuch sind unverbindlich. GENIUS behält sich das Recht vor, ohne die wesentlichen Eigenschaften dieses Gerätes zu verändern und ohne Verbindlichkeiten in Bezug auf die Neufassung der vorliegenden Anleitungen, technisch bzw. konstruktiv / kommerziell bedingte Verbesserungen vorzunehmen.</p>

# GENIUS®

**GENIUS S.p.a.**  
Via Padre Elzi, 32  
24050 - Grassobbio  
BERGAMO-ITALY  
tel. 0039.035.4242511  
fax. 0039.035.4242600  
info@geniusg.com  
www.geniusg.com

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