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- La presente istruzione è realizzata al 100% in carta riciclata
- Non disperdete nell'ambiente gli imballaggi dei componenti dell'automazione bensì selezionate i vari materiali (es. cartone, polistirolo) secondo prescrizioni locali per lo smaltimento rifiuti e le norme vigenti.

FAAC for the environment

- The present manual is produced in 100% recycled paper
- Respect the environment. Dispose of each type of product packaging material (card, polystyrene) in accordance with the provisions for waste disposal as specified in the country of installation.

FAAC der Umwelt zuliehe

- Vorliegende Anleitungen sind auf 100% Altpapier gedruckt.
- Verpackungsstoffe der Antriebskomponenten (z.B. Pappe, Styropor) nach den einschlägigen Normen der Abfallwirtschaft sortenrein sammeln

FAAC écologique

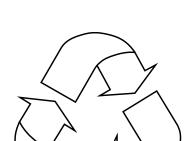
- La présente notice a été réalisée 100% avec du papier recyclé.
- Ne pas jeter dans la nature les emballages des composants de l'automatisme, mais sélectionner les différents matériaux (ex.: carton, polystyrène) selon la législation locale pour l'élimination des déchets et les normes en viaueur.

FAAC por la naturaleza.

- El presente manual de instrucciones se ha realizado, al 100%, en papel reciclado,
- Los materiales utilizados para el embalaje de las distintas partes del sistema automático (cartón, poliestireno) no deben tirarse al medio ambiente, sino seleccionarse conforme a las prescripciones locales y las normas vigentes para el desecho de residuos sólidos



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GUIDELINES FOR THE DRAFTING OF A TECHNICAL FILE FOR POWER OPERATED DOORS AND GATES PURSUANT TO MACHINERY DIRECTIVE 89/392/EEC

Description of door:

(Model, type, serial number etc.)

Location:

(address)

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INTRODUCTION

For the purposes of Art. 1.2 of Machinery Directive 89/392/EEC "'machinery' means an assembly of linked parts or components, at least one of which moves, with the appropriate actuators, control and power circuits, etc. joined together for a specific application, in particular for the processing, treatment, moving or packaging of a material."

In this documents the term "door" means doors, shutters and gates of various kinds (sliding, folding, up-and-over, swing, rolling, vertical sliding and other types with variants for each type).

The term "manufacturer" is used for the party that supplies the power operated door or the party that motorises an existing manual door, or the party that affixes the CE marking to the power operated door and thereby assumes responsibility for the construction of said door.

The European Union Commission has established that power operated doors and gates come within the field of application of the Machinery Directive. Therefore the installer who motorises 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 power operated door);
- draft the EC declaration of conformity in accordance with Annex II-A of the MACHINERY DIRECTIVE;
- affix the CE marking on the power operated door in accordance with point 1.7.3 of Annex I of the MACHINERY DIRECTIVE.

UNAC will accept no responsibility for the use that is made of this document or for amendments to the cited standards and their fulfilment. This document has been drafted by a working group consisting of representatives of the following UNAC member companies: Automatismi Benincà srl, BFT srl, Casit sas, Ditec spa, FAAC spa, Iseo Serrature spa, O.L.V.A. srl, Sesamo srl.

CONTENTS OF TECHNICAL FILE

The technical file must contain the following documents:

- An assembly drawing of the power operated door.
- Electric connection and control circuit diagrams.
- Risks analysis including:
 - a list of the essential requirements specified in Annex I of the Machinery Directive; a list of the risks posed by the power operated door and a description of the solutions adopted.
- The installation and maintenance manuals for the drive system and components.
- The operating instructions and general safety warnings (copy to be given to user).
- The proof book (copy to be given to user).
- The EC declaration of conformity (copy to be given to user).

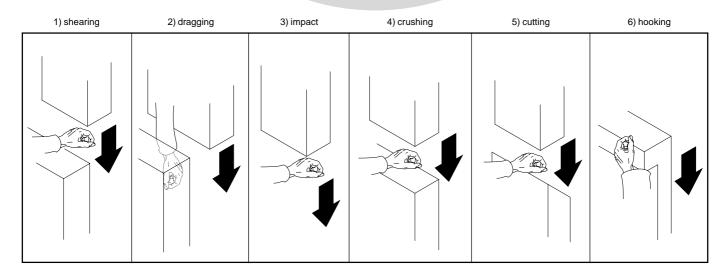
DRAFTING

- 1. Insert the manufacturer's data and the data for the door in the appropriate boxes on the first page.
- 2. Choose the type of door.
- A SLIDING GATE
- B SWING GATE
- C UP-AND-OVER DOOR
- D SECTIONAL DOOR
- E VERTICAL SLIDING DOOR
- F FOLDING SLIDING DOOR
- G BARRIER
- H SHUTTER
- I ROLLING FLEXIBLE DOOR
- L SLIDING PEDESTRIAN DOOR
- M SWINGING PEDESTRIAN DOOR

N _____ (other type of door)

- 3. Adapt Figure 1/(A-N) on page 8 to the constructed system and complete it by indicating any missing danger zones.
- 4. Adapt the electrical diagram and the components of Figure 2/(A-N) on page 8 to the constructed system.
- 5. Adapt and complete table 2 on page 8 with the components present in the system.
- 6. Perform risk analysis using Table 1 on page 3.
- Tick the risks present in the constructed system out of those listed in the column "Type of risk" and tick the corresponding adopted solutions listed in the column "Evaluation criteria and solutions adopted".
- For mechanical risks due to movement of the door, insert the capital letters of Figure 1/(A-N) on page 8, indicating the danger zones in the column "Dangerous zones and/or parts".
- For each danger zone indicate the corresponding risks (numbered from 1 to 7) in the column "Risk considered".
- Indicate the "Adopted solution" with lower-case letters in the relevant column.
- Insert additional observations in the relevant space in Table 1.
- 7. Tick the considered standards listed on page 4.
- 8. Enter the requested data and the necessary signatures in the proof book on pages 5 and 6.
- 9. Complete and sign the EC Declaration of Conformity on page 7.
- 10. Prepare the CE marking plate and affix it to the power operated door (see facsimile on page 4).

KEY TO MECHANICAL MOVEMENT RISKS (with ref. to Table 1)



Point 1.1.1 of Annex I of the Machinery Directive establishes the following meanings:

- Danger zone: any zone within and/or around machinery in which an exposed person is subject to a risk to his health or safety.
- Exposed person: Any person wholly or partially in a danger zone.

GUIDELINES FOR RISK ANALYSIS FOR POWER OPERATED DOOR - Table 1

TYPE OF RISK (Tick the risks considered)	Annex I of Machinery Directive	EVALUATION CRITERIA AND SOLUTIONS ADOPTED (Tick the box corresponding to the solution adopted)	
Integration principles for safety and information: [] unprotected residual risks [] signalling equipment [] warnings [] marking [] operating instructions	1.1.2 1.7.1 1.7.2 1.7.3 1.7.4	[] User informed about presence of unprotected residual risks and foreseeable abnormal use. [] Flashing light, signals, siren etc. installed. [] Warning affixed indicating presence of residual risks. [] CE marking applied to power operated door. [] User given operating instructions and safety warnings.	
Ergonomic risks: [] effort for manual operations	1.1.2 - 1.3.7	[] Checked that manual operations do not require excessive effort.	
Structural mechanical and wear risks: [] loss of stability [] break-up [] tripping [] guides, chains and lifting ropes	1.3.1 1.3.2 1.5.15 4.1.2	[] Solidity of the structure checked, appropriate materials used and adequate means of anchorage provided. [] Appropriate operations and adjustments performed to prevent detachment of leaves. [] Checked that thresholds are appropriately modelled and marked. [] Presence and efficiency of system to prevent falling of mobile parts checked.	
Mechanical risks due to movement of doors. Choice of protective devices.	1.3.8 - 1.4	Dangerous zones and/or parts Ref. to Figure 1/(A-N) Risk considered adopted (Indicate the solution in the third column of the table, left)	
(Indicate the risk considered in the second column of the table, right)		a) Hold-to-run controls b) Safety edges	
1) shearing 2) dragging 3) impact 4) crushing	1.3.7 1.3.7 1.3.7 1.3.7	c) Photocells d) Safety distances e) Force limiters f) Shaping surfaces	
5) cutting 6) hooking 7) other:	1.3.4	g) Pressure-sensitive mats h) Detectors (Radar) i) Acoustic signalling l) Visual signalling m) Warnings n) Guards o) Other:	
Electrical risks: [] direct and indirect contact [] dispersion of electrical energy [] climatic and environmental risks	1.5.1 - 1.5.2	[] CE marked components used pursuant to Low Voltage Directive (73/23/EEC). [] Electrical connections and hook-up to mains performed in accordance with relevant applicable standards and as indicated by the manufacturer of the drive unit. [] Compatibility of power operated door with critical environmental conditions verified.	
Risks relating to electromagnetic compatibility	1.5.10 1.5.11	[] CE marked components used pursuant to EMC Directive (89/336/EEC).	
Safety and reliability of operator and control devices:			
[] safety condition in the event of malfunction or failure of power supply	1.2.1 - 1.2.7 1.2.6	[] An drive unit and control devices adequate for use and meeting current applicable standards used.	
[] different energy sources from electrical energy [] control devices [] consistency of controls [] emergency stop [] trapping	1.5.3 1.2.2 1.2.5 1.2.4 1.5.14	[] An drive unit meeting current applicable standards used. [] Control devices adequate for use and meeting current applicable standards installed. [] Checked that the control is consistent with the movement of the door and the instructions. [] Emergency stop or opening device installed. [] Release device installed to allow for manual operation.	
Risks deriving from: [] fluid materials [] high temperatures [] fire [] explosion [] noise [] vibrations	1.1.3 1.5.5 1.5.6 1.5.7 1.5.8 1.5.9	[] Checked that the fluids used do not cause danger and that they are not released into the environment. [] Checked that the materials used do not reach high temperatures during use. [] Checked that the materials used do not cause fires. [] Checked that flammable gases are absent. [] Checked that the power operated door does not cause dangerous noise. [] Checked that the power operated door is not the source of dangerous vibrations.	
Maintenance: [] operative procedures [] disconnector supply [] documentation	1.6.1 1.6.3	[] Maintenance work program planned and implemented at established intervals. [] Presence of a switch or plug-in system to isolate energy supply checked. [] Maintenance work recorded and EC Declaration of Conformity issued to user.	
Additional remarks:			

LIST OF APPLICABLE STANDARDS

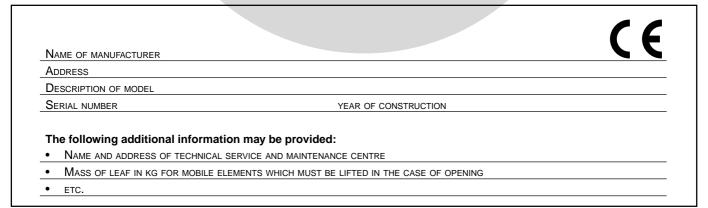
(Tick the standards considered)

Eur	opean standards:			
[]	prEN 12453	Industrial, commercial and garage doors and gates Safety in the use of power operated doors - Requirements and classification		
[]	prEN 12445	Industrial, commercial and garage doors and gates Safety in the use of power operated doors - Test methods		
[]	prEN 12604	Industrial, commercial and garage doors and gates Mechanical aspects - Requirements and classification		
[]	prEN 12605	Industrial, commercial and garage doors and gates Mechanical aspects - Test methods		
[]	prEN 12635	Industrial, commercial and garage doors and gates Procedure for safe installation and use		
[]	prEN 12650-1	Building hardware - Power pedestrian doors Part 1: Product requirements and test methods		
[]	prEN 12650-2	Building hardware - Power pedestrian doors Part 2: Safety at powered pedestrian doors		
Italia	an standards:			
[]	CEI 64-8	Electric user systems with rated voltage no higher than 1000 V in alternating current or 1500 V in direct current		
Other standards:				
[]_				
[]_				

FACSIMILE OF CE MARKING PLATE

Each machine must bear in a legible and indelible manner at least the following indications:

- name and address of manufacturer
- CE marking
- series and type designation serial number (if any)
- year of construction







Technical service:	Technical	service:
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(Name, address, telephone number)



PROOF BOOK

This proof book contains technical references and records of installation, maintenance, repair and modification activities carried out and must be made available for pubblic inspection by authorised bodies.

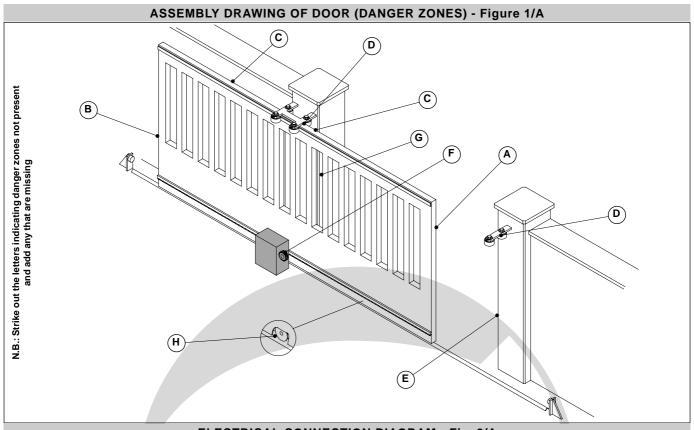
Description of decry
Description of door:
(Model, type, serial number, etc.) Location:
Customer: (Address)
(Name, address and reference person)
Technical data:
Leaves:
(Material, dimension, weight) Installed power:
(Voltage, frequency, current, power) Type of operation:
(Hold-to-run control, impulse activation, automatic operation)
List of installed components (drive unit, control and safety devices, etc.). The technical data and specifications of the components listed below are documented in the corresponding installation manuals and/or or the label on the component.
•
(Model, type, serial number)
• (Model, type, serial number)
• (Model, type, serial number)
• (Model, type, serial number)
Remarks (special characteristics, etc.).

Date	Description of work (Installation, start-up, adjustment, verification of safety devices, replacements, etc.)	Technician's signature	Customer's signature

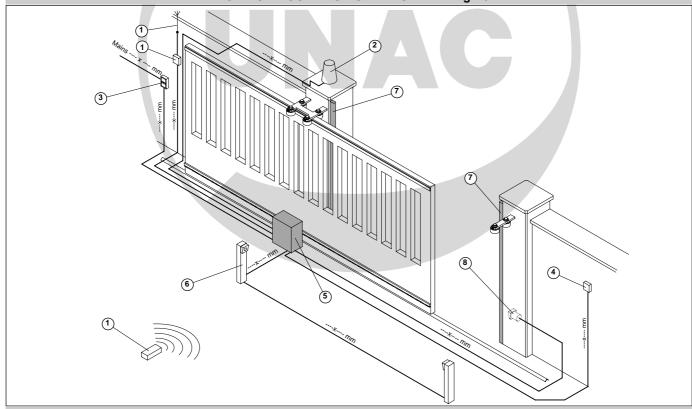
EC DECLARATION OF CONFORMITY

(Machinery Directive 89/392/EEC, Annex II, part A)

Manufacturer:
Address:
Declares that:
(Model, type, serial number, etc.)
Location:
(Address)
Conforms to the conditions of the Machinery Directive 89/392/EEC and subsequent amendments.
Conforms to the conditions of the following additional EEC directives:
Electromagnetic Compatibility Directive 89/336/EEC and subsequent amendments; Low Voltage Directive 73/23/EEC and subsequent amendments.
And also declares that
the following (parts/clauses of) harmonized standards have been applied:
• the following (parts/clauses of) national standards and technical specifications have been applied:
Date:
Signature of Legal Representative:

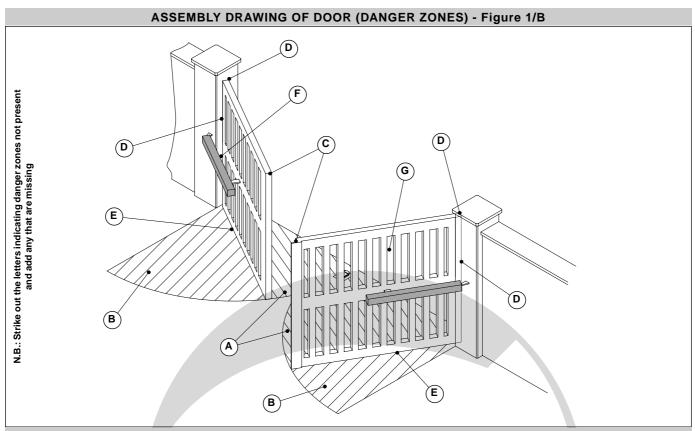


ELECTRICAL CONNECTION DIAGRAM - Fig. 2/A

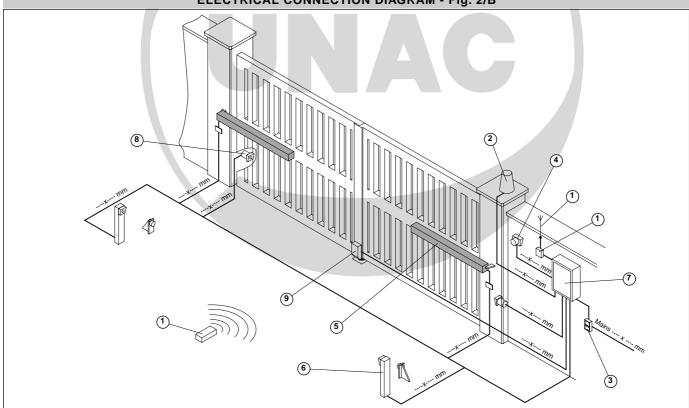


LIST OF INSTALLED COMPONENTS (with ref. to Fig. A) - Table 2

Ref. No.	Description of component	Model / Notes
1	Radio receiver / antenna	
2	Flashing light	
3	Switch / circuit-breaker	
4	Selector / pushbutton	
5	Operator with control panel	
6	Pair of internal photocells	
7	Safety edge	
8	Pair of external photocells	
9		
10		

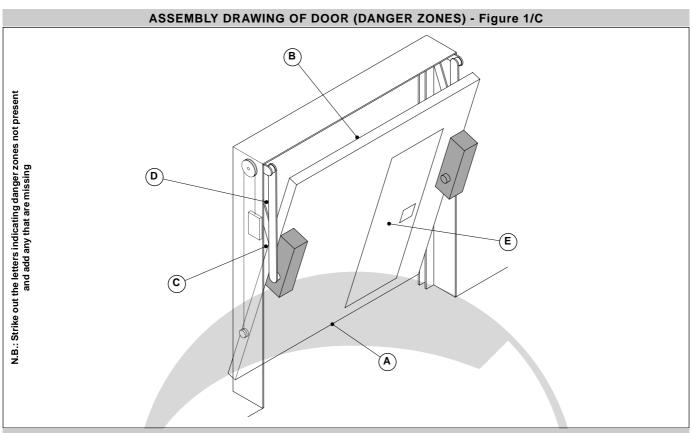


ELECTRICAL CONNECTION DIAGRAM - Fig. 2/B

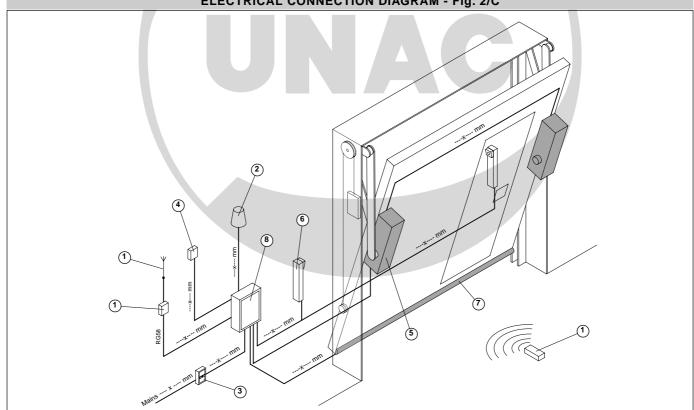


LIST OF INSTALLED COMPONENTS (with ref. to Fig. B) - Table 2

Ref. No.	Description of component	Model / Notes	
1	Radio receiver / antenna		
2	Flashing light		
3	Switch / circuit-breaker		
4	Selector / pushbutton		
5	Operator		
6	Pair of internal photocells		
7	Control panel		
8	Pair of external photocells		
9	Electric lock		
10			

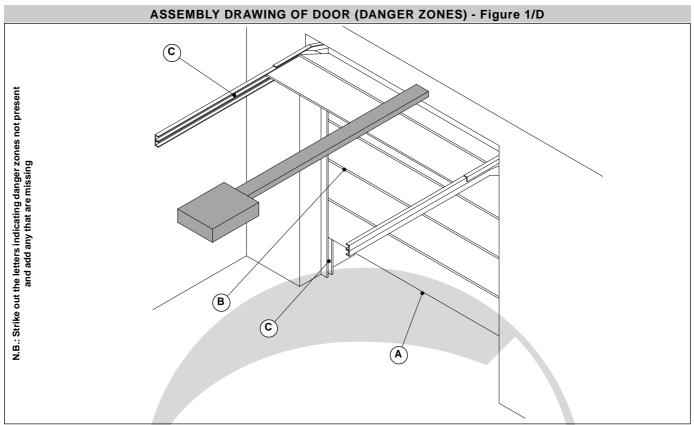


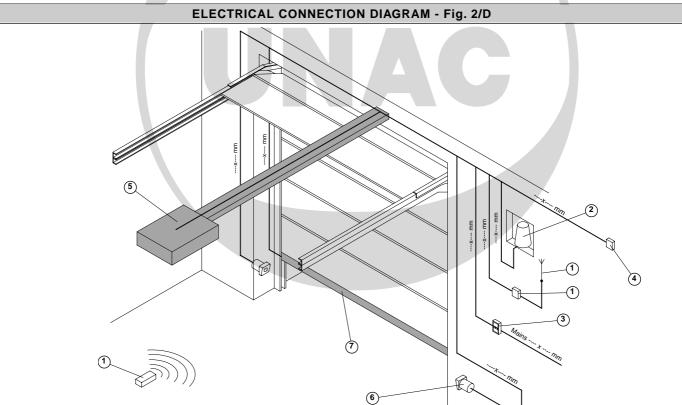




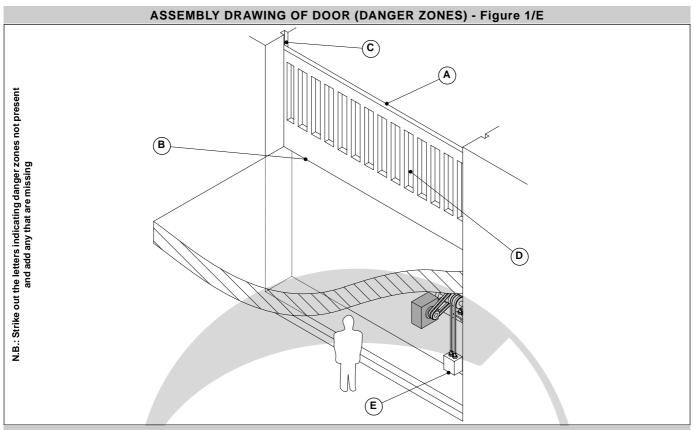
LIST OF INSTALLED COMPONENTS (with ref. to Fig. C) - Table 2

		, ,
Ref. No.	Description of component	Model / Notes
1	Radio receiver / antenna	
2	Flashing light	
3	Switch / circuit-breaker	
4	Selector / pushbutton	
5	Operator	
6	Photocells	
7	Safety edge	
8	Control panel	
9		
10		

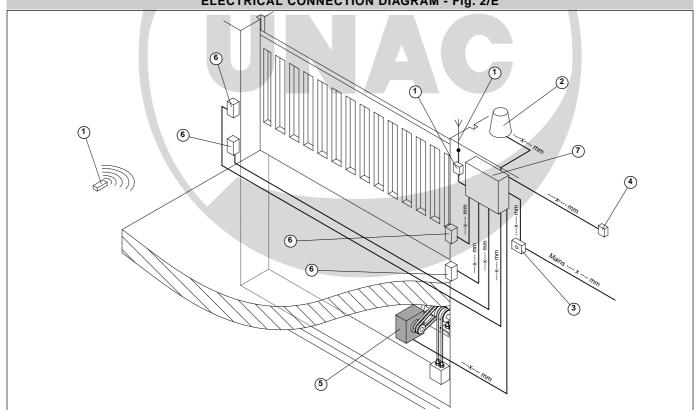




LIST OF INSTALLED COMPONENTS (with ref. to Fig. D) - Table 2 Ref. No. Model / Notes **Description of component** Radio receiver / antenna 2 Flashing light 3 Switch / circuit-breaker 4 Selector / pushbutton 5 Operator 6 Photocells 7 Safety edge 8 9 10

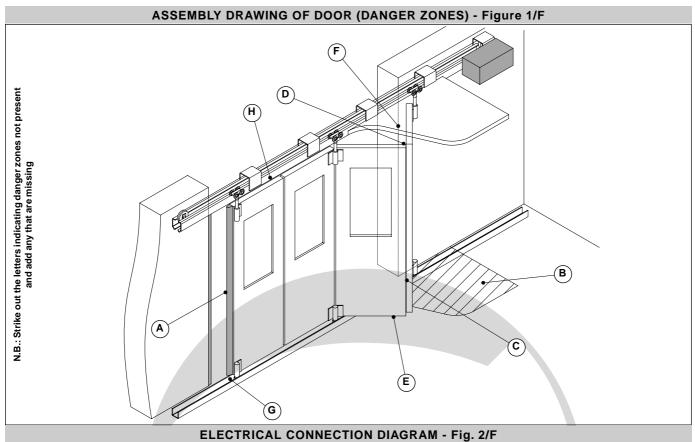


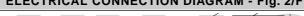


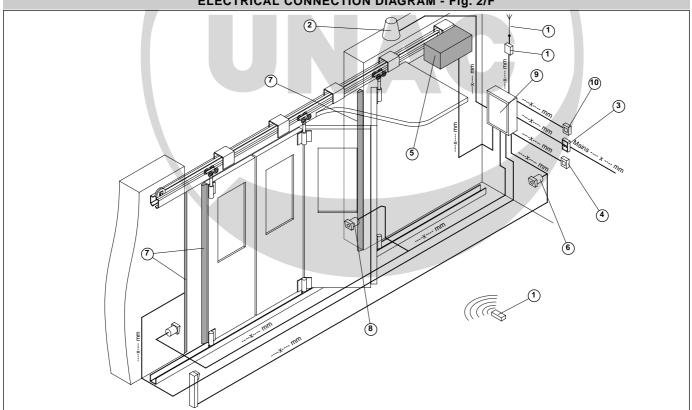


LIST OF INSTALLED COMPONENTS (with ref. to Fig. E) - Table 2

		, ,
Ref. No.	Description of component	Model / Notes
1	Radio receiver / antenna	
2	Flashing light	
3	Switch / circuit-breaker	
4	Selector / pushbutton	
5	Operator	
6	Photocells	
7	Control panel	
8		
9		
10		

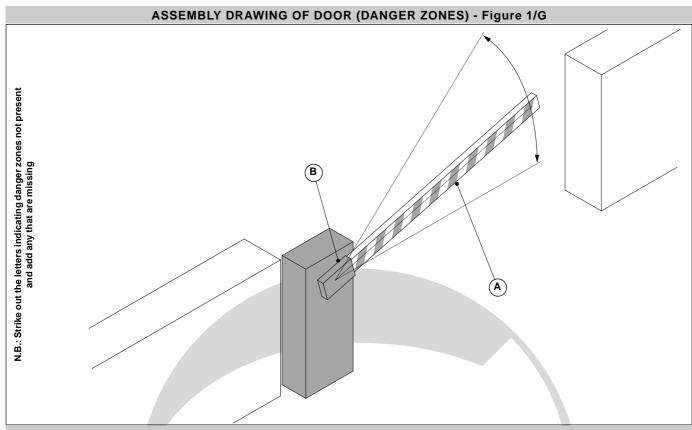


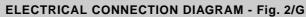


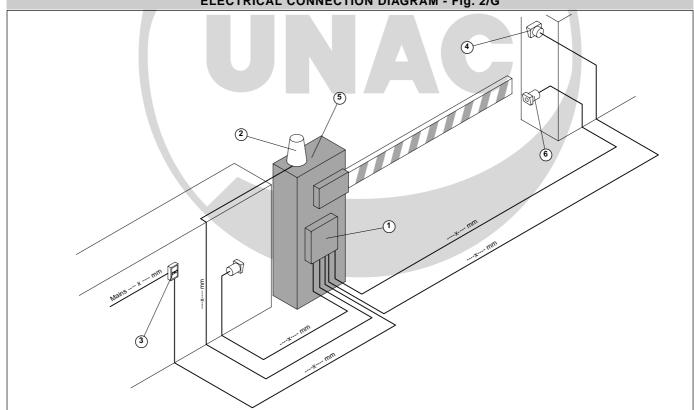


LIST OF INSTALLED COMPONENTS (with ref. to Fig. F) - Table 2

Ref. No.	Description of component	Model / Notes
1	Radio receiver / antenna	
2	Flashing light	
3	Switch / circuit-breaker	
4	Selector / pushbutton	
5	Operator	
6	Pair of internal photocells	
7	Safety edge	
8	Pair of external photocells	
9	Control panel	
10	Emergency stop	

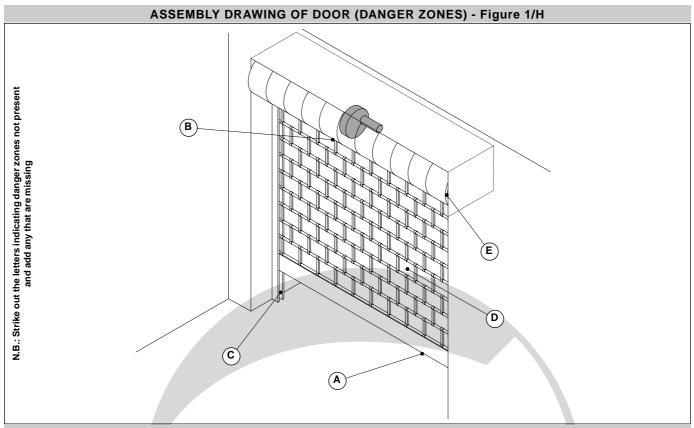




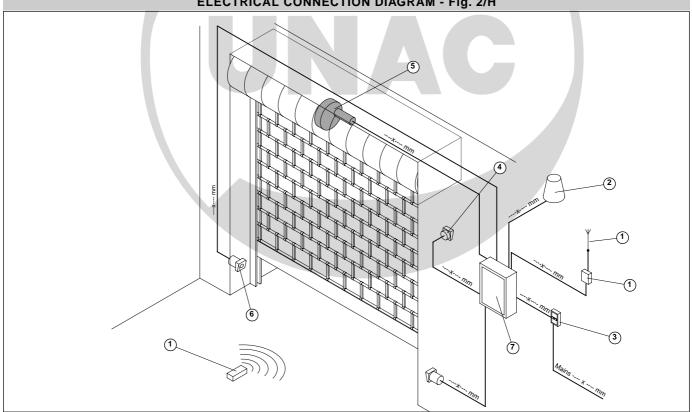


LIST OF INSTALLED COMPONENTS (with ref. to Fig. G) - Table 2

Ref. No.	Description of component	Model / Notes
1	Control panel	
2	Flashing light	
3	Switch / circuit-breaker	
4	Selector / pushbutton	
5	Operator	
6	Photocells	
7		
8		
9		
10		

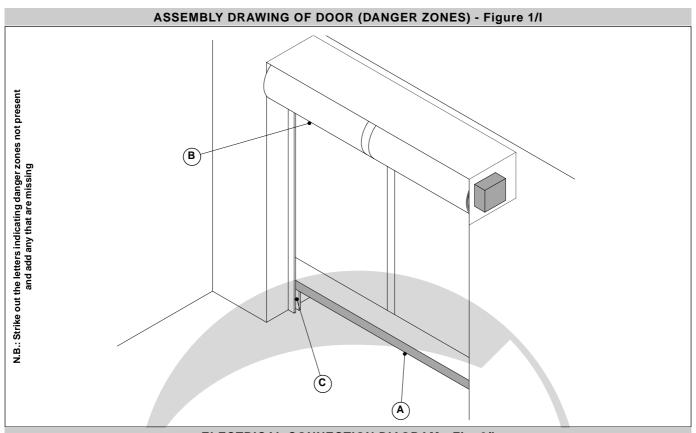




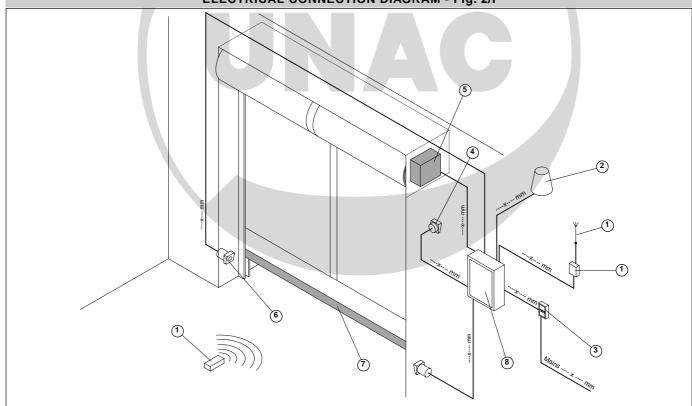


LIST OF INSTALLED COMPONENTS (with ref. to Fig. H) - Table 2

Ref. No.	Description of component	Model / Notes
1	Radio receiver / antenna	
2	Flashing light	
3	Switch / circuit-breaker	
4	Selector / pushbutton	
5	Operator	
6	Photocells	
7	Control panel	
8		
9		
10		

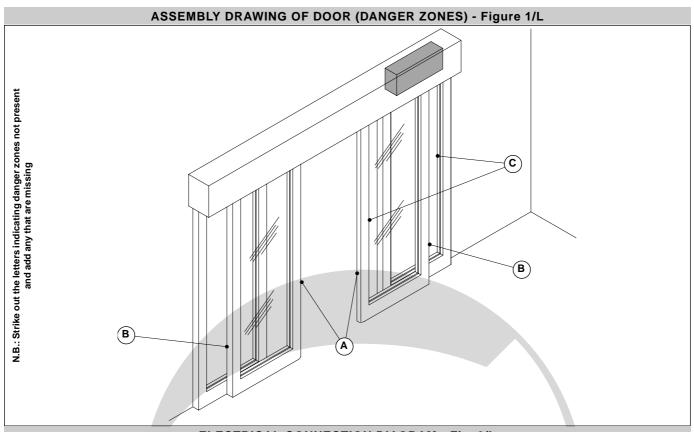


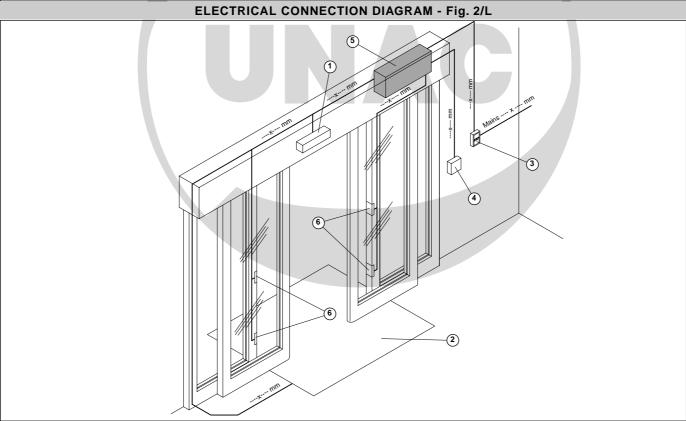




LIST OF INSTALLED COMPONENTS (with ref. to Fig. I) - Table 2

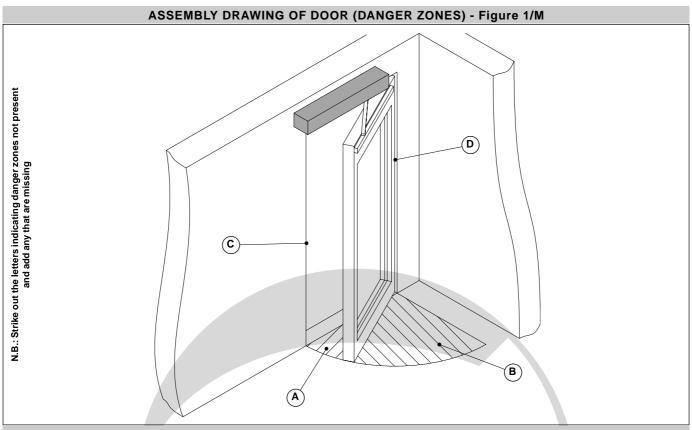
		, , ,
Ref. No.	Description of component	Model / Notes
1	Radio receiver / antenna	
2	Flashing light	
3	Switch / circuit-breaker	
4	Selector / pushbutton	
5	Operator	
6	Photocells	
7	Safety edge	
8	Control panel	
9		
10		



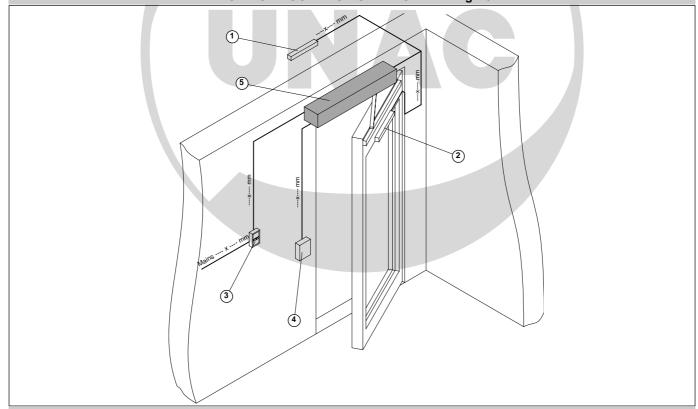


LIST OF INSTALLED COMPONENTS (with ref. to Fig. L) - Table 2

Ref. No.	Description of component	Model / Notes	
1	Radar		
2	Pressure-sensitive mat		
3	Switch / circuit-breaker		
4	Selector / pushbutton		
5	Operator		
6	Photocells		
7			
8			
9			
10			

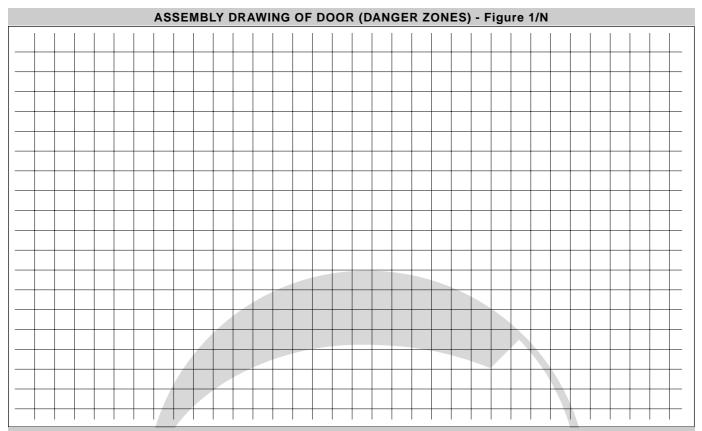


ELECTRICAL CONNECTION DIAGRAM - Fig. 2/M

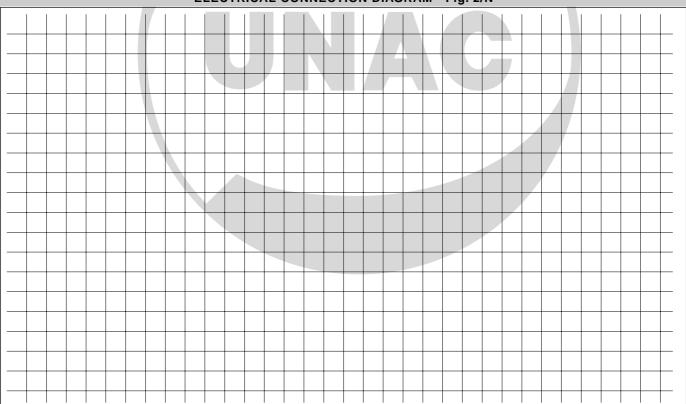


LIST OF INSTALLED COMPONENTS (with ref. to Fig. M) - Table 2

Ref. No.	Description of component	Model / Notes
1	Radar	
2	Loop detector	
3	Switch / circuit-breaker	
4	Selector / pushbutton	
5	Operator	
6		
7		
8		
9		
10		



ELECTRICAL CONNECTION DIAGRAM - Fig. 2/N



LIST OF INSTALLED COMPONENTS (with ref. to Fig. N) - Table 2

Ref. No.	Description of component	Model / Notes
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		