

MAINTENANCE HANDBOOK _1.01

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Art.4, c. I.I.a.all.V., D.P.R. n° 459 of 24th /07/96.

CAUTION: This handbook is part of the sectional door.
Please, keep it carefully and show it when necessary.

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1 INTRODUCTION

1.1 MANUFACTURER

BREDA SISTEMI INDUSTRIALI S.P.A.

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1.2 BEFORE USE

DEAR CUSTOMER,

WE WOULD LIKE TO THANK YOU FOR CHOOSING OUR PRODUCTS. THE PRODUCT PURCHASED IS THE RESULT OF YEARS OF STUDY, RESEARCH AND TESTS ON MATERIALS, WHICH HAVE BEEN CARRIED OUT IN COMPLIANCE WITH THE MOST SEVERE EUROPEAN SAFETY STANDARDS. OUR COMPANY OFFERS THE MOST COMPLETE RANGE OF SOLUTIONS AND ACCESSORIES AVAILABLE ON THE MARKET. THE USE OF PARTS OR AUTOMATION SYSTEMS THAT ARE NOT BREDA ORIGINAL COMPONENTS, COULD NEITHER GUARANTEE A PROPER DOOR OPERATION NOR COMPROMISE ITS SAFETY. ANY ITEMS ADDED TO THE PRODUCT MUST BE AGREED UPON WITH BREDA SISTEMI INDUSTRIALI S.P.A. RETAILERS AND INSTALLED BY AN AUTHORISED FITTER (**DO NOT USE SPARE PARTS OR ACCESSORIES THAT ARE NOT ORIGINAL BREDA COMPONENTS**). THE BREDA WARRANTY COVERS ONLY PRODUCTS AND PARTS SUPPLIED BY BREDA. WHEN THE INSTALLATION HAS BEEN COMPLETED AN INITIAL INSPECTION SHALL BE CARRIED OUT FREE OF CHARGE BY THE FITTER. THE TECHNICIAN WILL SHOW HOW THE SECTIONAL DOOR FUNCTIONS, HE/SHE WILL FILL-IN AND HAND OVER THIS USER AND MAINTENANCE MANUAL. THE USER MUST FILL-IN AND SEND THE ATTACHED COUPON TO BREDA SPA TO HAVE THE WARRANTY VALID.

ASK YOUR LOCAL RETAILER TO SHOW YOU THE ADVANTAGES OF SCHEDULED MAINTENANCE. SCHEDULED MAINTENANCE HELPS TO KEEP THE PRODUCT IN A GOOD CONDITION OVER THE YEARS.

DIRECT LINE WITH BREDA

Freephone number: 800 – 577929

TECHNICAL SERVICE – SALES – AFTER SALES INFORMATION

FOR A PROPER USE OF OUR SECTIONAL DOORS, PLEASE READ THIS HANDBOOK CAREFULLY.

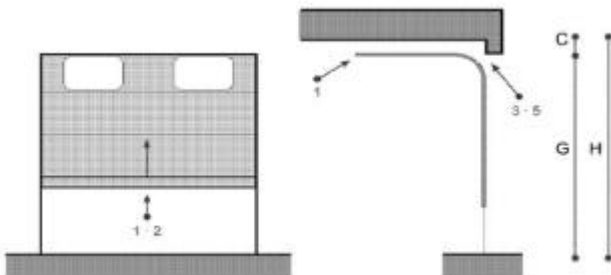
2 DESCRIPTION OF THE SECTIONAL DOOR

2.1 WHAT IS A SECTIONAL DOOR?

BREDA'S SECTIONAL DOOR HAS BEEN DESIGNED AND MANUFACTURED WITH HORIZONTAL SECTIONAL PANELS THAT LIFT TO LEAVE THE PASSAGE COMPLETELY FREE.

2.2 ELEMENTS OF A SECTIONAL DOOR

THE BREDA SECTIONAL DOOR CONSISTS OF OVERLAPPING AND HINGED PANELS. THESE MOVE PARALLEL TO THE WALL AND CEILING BY MEANS OF WHEELS RUNNING IN APPROPRIATE SIDE GUIDES. THE SECTIONAL DOOR IS SUPPORTED BY A GROUP OF BALANCING SPRINGS PLACED IN THE HEADROOM. THIS MAKES DOOR OPENING AND CLOSING EXTREMELY EASY AND LIGHT. THE SECTIONAL DOOR CAN BE SUPPLIED WITH OR WITHOUT MOTOR. THE MOTORISATION SERVES SIMPLY TO AVOID THE USER FROM OPERATING IT MANUALLY AND DOES NOT REPLACE THE ACTION OF THE BALANCING SPRINGS.



THE SECTIONAL DOOR IS ALWAYS MADE OF THREE GROUPS OF ELEMENTS:

- THE DOOR COAT;
- SLIDING GUIDES;
- SPRING UNIT.

(SEE FIG.04 PAG.A2)

THE DOOR COAT CONSISTS OF THE FOLLOWING COMPONENTS:

1. HORIZONTAL SECTIONS (IN STEEL, WOOD, ALUMINIUM PANELS);
2. BOTTOM AND TOP SECTIONS;
3. BOTTOM AND TOP SEALS;
4. HINGES;
5. ROLLER SUPPORT BRACKETS;
6. BASE CONSOLE OR CABLE BREAK SAFETY DEVICES;
7. LIFTING HANDLE;
8. UNBLOCKING DEVICE FOR MANUAL OPERATION;
9. "OMEGA" REINFORCEMENTS (BESIDES A PRESET WIDTH OR WITH PEDESTRIAN DOOR);

THE FOLLOWING ACCESSORIES CAN BE SUPPLIED UPON REQUEST:

10. INSPECTION WINDOW;
11. VENTILATION GRILL;
12. PEDESTRIAN DOOR;
13. GLASS SECTION.

THE GUIDES CONSIST OF THE FOLLOWING COMPONENTS:

14. SUITABLE TYPE OF SLIDING GUIDE;
15. BUFFERS;
16. TEMPLATE;
17. SUPPORT BRACKETS (WHERE PROVIDED);
18. WHEELS.

THE TYPE OF SLIDING SYSTEMS USED BY BREDA TO GUARANTEE THE IDEAL SOLUTION FOR EACH CUSTOMER CAN BE DIVIDED INTO THREE MAIN TYPES:

- HORIZONTAL SLIDING;
- PARTIAL VERTICAL SLIDING;
- VERTICAL SLIDING.

THE SPRING UNIT CONSISTS OF THE FOLLOWING COMPONENTS:

1. SHAFT;
2. CENTRAL COUPLING;
3. SUPPORT BRACKETS;
4. SPRINGS;
5. DRUM;
6. LIFTING CABLE;
7. SPRING BREAK SAFETY DEVICE

THE AUTOMATION SYSTEMS FOR A BREDA SECTIONAL DOOR CONSIST OF:

- ELECTRIC MOTOR;
- INTEGRATED OR EXTERNAL CONTROL SWITCHBOARD;
- SAFETY SYSTEMS.

TYPES OF AUTOMATION SYSTEMS:

42. PULLING DRIVE MOTOR;
43. SINGLE PHASE OR THREE PHASE PINION AND CHAIN GEAR MOTOR;
44. SINGLE PHASE OR THREE PHASE DIRECT DRIVE MOTOR.

TYPE OF ACTUATOR:

45. SINGLE PHASE ELECTRICAL SWITCHBOARD;
46. SINGLE PHASE ELECTRICAL SWITCHBOARD WITH TROUBLESHOOTING;
47. THREE PHASE ELECTRICAL SWITCHBOARD;
48. TWIN-CHANNEL OR FOUR-CHANNEL REMOTE CONTROL;
49. NUMERICAL SELECTOR (BY CABLE OR RADIO);
50. KEY SELECTOR (WITH OR WITHOUT STOP CONTACT).

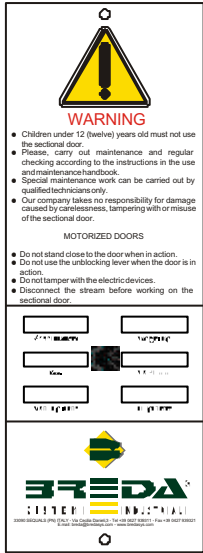
SAFETY SYSTEMS USED IN COMPLIANCE WITH STANDARDS:

51. PHOTOCELLS;
52. INFRARED SAFETY RIB;
53. FLASHING LIGHTS;
54. MICROSWITCH FOR PEDESTRIAN DOOR;
55. MICROSWITCH FOR CABLE BREAK SAFETY DEVICE;
56. MICROSWITCH FOR SPRING BREAK SAFETY DEVICE;
57. SAFETY MECHANISMS.

A PLATE IS FIXED TO THE SECTIONAL DOOR SHOWING THE FOLLOWING ID DATA:

- **SERIAL N°:** NUMBER GIVEN BY THE MANUFACTURER IDENTIFYING THE SECTIONAL DOOR.
- **WEIGHT KG:** WEIGHT OF THE DOOR COAT ACCESSORIES INCLUDED (IN KG.).
- **YEAR:** YEAR OF MANUFACTURE OF THE SECTIONAL DOOR.
- **WIDTH:** WIDTH OF THE OPENING, (IN MILLIMETRES).
- **HEIGHT:** HEIGHT OF THE OPENING, (IN MILLIMETRES).
- **SPRING WINDING TURNS:** SPRING WINDING TURNS ARE INDICATED FOR THE SPRINGS TO BALANCE THE WEIGHT OF THE DOOR COAT WHEN IN ACTION.





3 INSTALLATION

TO GUARANTEE THAT THE SECTIONAL DOOR OPERATES CORRECTLY, AN AUTHORISED INSTALLER SHOULD BE CALLED TO CARRY OUT THE INSTALLATION. THEREFORE, ASK YOUR LOCAL BRED A RETAILER FOR A LIST OF AUTHORISED INSTALLATION CENTRES. SHOULD INSTALLATION BE CARRIED OUT BY NON-QUALIFIED PERSONNEL, THE INSTRUCTIONS CONTAINED IN THE INSTALLATION MANUAL SHOULD BE CAREFULLY FOLLOWED. MOREOVER, THE INSTALLER SHOULD FILL-IN THE QUALITY CERTIFICATION FORM.

4 PRECAUTIONS

READ THE FOLLOWING VERY CAREFULLY.

4.1 GENERAL WARNINGS

- THE MANUFACTURER RESERVES THE RIGHT TO CARRY OUT ANY MODIFICATION CONSIDERED USEFUL OR NECESSARY. IT SHALL NOT RESPOND FOR ANY POSSIBLE INACCURACIES DUE TO MISPRINTING OR WRONG DESCRIPTION CONTAINED IN THIS HANDBOOK;
- THE MANUFACTURER SHALL NOT BE CONSIDERED RESPONSIBLE FOR ANY DAMAGE TO OBJECTS OR PEOPLE, DERIVING FROM IMPROPER, INCORRECT OR MISINSTALLATION;
- THIS HANDBOOK MUST PRESERVED AND KEPT ON HAND FOR THE TECHNICIAN BEFORE STARTING ANY TYPE OF MAINTENANCE WORK, WHICH WILL THEN BE RECORDED.
- THE SECTIONAL DOOR MUST BE USED EXCLUSIVELY FOR THE PURPOSE IT WAS EXPRESSLY INTENDED. ANY OTHER USE IS TO BE CONSIDERED IMPROPER AND THEREFORE DANGEROUS. THE MANUFACTURER SHALL, THEREFORE, NOT BE CONSIDERED RESPONSIBLE FOR ANY DAMAGES DERIVING FROM MISUSE.
- THE INDIVIDUAL PROTECTION DEVICES PRESCRIBED BY THE RULES MUST BE WORN IN RELATION TO THE WORK CARRIED OUT.
- CLOTHING THAT HINDERS MOVEMENT AND/OR CAN EASILY GET CAUGHT MUST NOT BE WORN.
- THE ELECTRICAL SAFETY OF THIS EQUIPMENT IS GUARANTEED ONLY WHEN CORRECTLY CONNECTED TO AN EARTHING SYSTEM, AS REQUIRED BY THE ELECTRICAL SAFETY RULES. BRED A S.P.A. DECLINES ANY RESPONSIBILITY FOR THE NON-OBSERVANCE OF THESE PROVISIONS.
- THE USE OF SPARE PARTS THAT ARE NOT ORIGINAL BRED A COMPONENTS COULD COMPROMISE THE SOUND FUNCTIONING OF THE SECTIONAL DOOR;
- USE OF THE SECTIONAL DOOR WITHOUT HAVING CARRIED OUT ANY SCHEDULED MAINTENANCE WORK IS CONSIDERED A SOURCE OF DANGER.
- THE DOOR MUST NOT BE INSTALLED NEAR A PEDESTRIAN CROSSING WITHOUT THE APPROPRIATE PROTECTIONS AND SIGNALS;
- PACKAGING OF THE DOOR (PLASTIC BAGS, POLYSTYRENE FOAM, NAILS, ETC) LEFT WITHIN THE REACH OF CHILDREN IS CONSIDERED A SOURCE OF DANGER
- LIGHTING IN THE WORK AREA MUST COMPLY WITH THE LAWS IN FORCE IN THE COUNTRY OF INSTALLATION OF THE SECTIONAL DOOR AND MUST, HOWEVER, GUARANTEE A GOOD VISIBILITY AT ANY POINT (300 LX IS RECOMMENDED), SO AS NOT TO CREATE DANGEROUS REFLECTIONS AND ALLOW CLEAR READING OF THE CONTROL PANEL, AS WELL AS THE IDENTIFICATION OF THE EMERGENCY PUSHBUTTON.
- THE DOOR HAS BEEN DESIGNED AND MANUFACTURED TO REDUCE THE NOISE EMISSION LEVEL AS MUCH AS POSSIBLE. THE ACOUSTIC PRESSURE LEVEL IS LOWER THAN 70 DB (A), WHICH WAS DETECTED FROM THE OPERATOR POST.

4.2 PROHIBITIONS

IT IS ABSOLUTELY PROHIBITED:

- TO APPROACH AND STAY NEAR THE SECTIONAL DOOR DURING IN ACTION;
- TO PUT HANDS AND OTHER PARTS OF THE BODY IN THE GUIDE AREAS OR IN THE DOOR MECHANISMS;
- TO USE THE SECTIONAL DOOR IF ONE OF THE SAFETY SYSTEMS HAS COME INTO OPERATION (CABLE OR SPRING BREAK SAFETY DEVICE);
- FOR CHILDREN OR THOSE WHO ARE UNABLE TO USE THE DOOR TO DO SO WITHOUT SUPERVISION;
- TO HANG ONTO THE SECTIONAL DOOR OR ANY OF ITS ACCESSORIES EITHER WHEN IT HAS STOPPED MOVING OR IS IN MOTION;
- TO USE THE SECTIONAL DOOR TO LIFT PEOPLE OR OBJECTS;
- TO HANG OBJECTS ON THE SECTIONAL DOOR;
- TO OBSTRUCT THE OPENING OR CLOSING OF THE SECTIONAL DOOR OR ANY PART THEREOF, WHEN IN MOTION, WITH ANY OBJECT, EQUIPMENT OR

MACHINE;

- TO FORCE THE DOOR TO OPEN OR CLOSE;
- TO MAKE MODIFICATIONS OR ALTER THE DOOR COMPONENTS;
- TO PUT HOT OR BURNING OBJECTS NEAR THE DOOR,
- TO CARRY OUT MAINTENANCE TO THE DOOR WITHOUT USING THE PROTECTIONS INDICATED IN THE NORMATIVES
- TO OPEN THE ELECTRICAL SWITCHBOARD WITHOUT FIRST HAVING SWITCHED OFF THE POWER;
- TO CARRY OUT MAINTENANCE TO THE ELECTRICAL SYSTEMS WITHOUT FIRST HAVING SWITCHED OFF THE POWER TO THE ELECTRICAL SWITCHBOARD BY BLOCKING THE LINE ISOLATOR SWITCH;
- TO REMOVE OR ALTER THE ID PLATES APPLIED TO THE SECTIONAL DOOR BY THE MANUFACTURER
- TO REMOVE, MANHANDLE OR IGNORE, MECHANICALLY OR ELECTRICALLY THE SAFETY SYSTEMS;
- TO USE THE SECTIONAL DOOR IN THE CASE OF EVIDENT MALFUNCTIONING OF THE SAFETY DEVICES;
- TO USE THE SECTIONAL DOOR IN THE CASE OF FAILURE OR WRONG FUNCTIONING (IF THERE IS NOISE OR OFF-CENTRING);
- TO RESET THE OPERATION OF THE FAULTY DOOR WITHOUT THE SPECIALISED PERSONNEL SUPPORT AND NOT CAREFULLY FOLLOW THE INSTALLATION INSTRUCTIONS;
- TO CARRY OUT OPERATIONS RESERVED FOR THE MAINTENANCE PERSONNEL OR QUALIFIED TECHNICIANS;
- TO USE THE DOOR IF NOT IN NORMAL PSYCHO-PHYSICAL CONDITIONS;
- TO USE THE SECTIONAL DOOR DURING MAINTENANCE OPERATIONS.

4.3 INSTRUCTIONS FOR THE USE OF MANUAL DOORS

4.3.1 CLOSING OF THE DOOR-BOLT

AS DESCRIBED PREVIOUSLY, THE SECTIONAL DOOR IS A PRODUCT, WHICH IS COUNTERBALANCED BY SPRING SYSTEM THAT ALLOWS IT TO BE OPERATED MANUALLY. OPENING AND CLOSING IS THEREFORE AN EXTREMELY EASY OPERATION. ALL DOORS ARE PROVIDED WITH SIDE LIFTING HANDLE IN PVC AND A PULL ROPE TO BE FIXED TO THE DOOR BASE TO EASE THE CLOSING OPERATION WHEN IT IS COMPLETELY OPEN.

AS PART OF THE STANDARD SUPPLY, ALL MANUAL DOORS ARE PROVIDED WITH A SIDE SPRING BOLT, WHICH FUNCTIONS FROM THE INSIDE ONLY. WHEN THE BOLT IS IN NORMAL POSITION, IT IS OPEN; TO CLOSE IT PUSH THE KNOB TOWARDS THE GUIDE, WHICH IN TURN FORCES THE SPRING THRUST. TURN THE KNOB BY 90° UPWARDS OR DOWNWARDS. TO UNLOCK THE LATCH FOLLOW THE ABOVE SEQUENCE IN REVERSE ORDER. ONCE THE BOLT HAS BEEN RELEASED FOLLOWING THE AFOREMENTIONED INDICATIONS, TAKE A STRONG HOLD OF THE SIDE HANDLE TO LIFT THE DOOR AND STOP IT IN THE POSITION REQUIRED. TO OPEN IT FULLY, PUSH THE DOOR UPWARDS. IT WILL STOP WHEN IT IS COMPLETELY UP. TO CLOSE THE DOOR, PULL THE ROPE DOWNWARDS AND THEN CLOSE IT COMPLETELY WITH THE HANDLE. LOCK IT WITH THE BOLT AS DESCRIBED ABOVE.

WARNING: THE DOOR CAN ONLY BE CLOSED WITH THE LATCH FROM THE INSIDE, AS IT IS NOT REACHABLE FROM OUTSIDE.

4.3.2 CLOSING WITH SIDE LOCK

THE LOCK CAN BE USED BOTH FROM THE INSIDE AS WELL AS THE OUTSIDE AND, LIKE THE LATCH IT LOCKS SIDEWAYS ON THE GUIDE. TO CLOSE THE DOOR FROM THE INSIDE, TURN THE "T" HANDLE CLOCKWISE. THE LOCK MOVES A LOCKING MECHANISM AGAINST THE GUIDE. TO CLOSE THE DOOR FROM THE OUTSIDE, TURN THE PENDANT HANDLE ANTICLOCKWISE, INSERT AND TURN THE KEY CLOCKWISE. TO OPEN THE DOOR FROM THE INSIDE HOLD THE "T" HANDLE WITH ONE HAND AND WITH THE OTHER MOVE THE HOOK LOCATED ON THE LEFT-HAND SIDE OF THE LOCK TO THE LEFT. TURN THE "T" HANDLE ANTICLOCKWISE. TO OPEN THE DOOR FROM THE OUTSIDE, INSERT AND TURN THE KEY IN AN ANTICLOCKWISE DIRECTION TO RELEASE THE LOCK AND THEN TURN THE PENDANT HANDLE CLOCKWISE.

4.4 INSTRUCTIONS FOR USE OF THE AUTOMATIC DOOR

4.4.1 C SERIES GEARMOTOR

THESE ARE MOTORS THAT ACT ON THE SPRING SHAFT BY MEANS OF A PINION AND CHAIN TRANSMISSION. THEY CAN BE INSTALLED IN ANY POSITION ON THE HEADROOM OR PLACED SIDEWAYS ON THE JAMB AND HEADER. THE MOTORS ARE EITHER SINGLE-PHASE OR THREE-PHASE, DEPENDING ON THE REQUIREMENTS. THEY ARE ALWAYS DRIVEN FROM A SEPARATE SWITCHBOARD. THIS SOLUTION ALLOWS OBTAINING A SUFFICIENTLY CONSTANT LIFTING AND LOWERING SPEED, EVEN WHEN THERE ARE DIFFERENT DRUMS, SIMPLY BY USING DIFFERENT PINIONS. SHOULD THERE BE A POWER FAILURE, THE MOTORS ARE PROVIDED WITH AN UNBLOCKING MECHANISM. THEY MUST HAVE EQUAL REST TIMES AND WORKING TIMES. HEAVY USE TRIGGERS OFF THE THERMAL PROTECTION.



4.4.2 DIRECT DRIVE GEARMOTORS

THESE ARE MOTORS THAT ACT DIRECTLY ON THE SPRING SHAFT. THEY CAN ONLY BE INSTALLED SIDEWAYS ON THE JAMB AND HEADER. THE MOTORS ARE EITHER SINGLE-PHASE OR THREE-PHASE. THEY ARE ALWAYS DRIVEN FROM A SEPARATE ELECTRICAL SWITCHBOARD. THIS SOLUTION DOES NOT ALLOW CONSTANT LIFTING SPEEDS WHEN THERE ARE DIFFERENT DRUMS. SHOULD THERE BE A POWER FAILURE THE MOTORS ARE PROVIDED WITH AN UNBLOCKING MECHANISM. HEAVY USE DOES NOT TRIGGER OFF THE THERMAL PROTECTION.

4.4.3 ZC4 SINGLE PHASE DRIVE SWITCHBOARD

WITH THIS CONFIGURATION, THE DOOR CAN BE DRIVEN FROM THE SWITCHBOARD EITHER BY REMOTE CONTROL OR BY A SELECTOR SWITCH. THE SWITCHBOARD IS PROVIDED WITH A LOCKABLE ISOLATOR SWITCH, OPEN/CLOSE PUSHBUTTON AND EMERGENCY MUSHROOM HEAD PUSHBUTTON THAT ALSO ACTS AS A STOP BUTTON. WHEN THE OPEN/CLOSE PUSHBUTTON IS PRESSED, THE DOOR OPENS OR CLOSES, DEPENDING ON WHETHER IT IS IN AN OPEN OR CLOSED CONDITION TO START WITH. WHEN THE PUSHBUTTON IS PRESSED A SECOND TIME, THE DOOR MOTION IS REVERSED.

4.4.4 ZC3 SINGLE PHASE DRIVE SWITCHBOARD

WITH THIS CONFIGURATION, THE DOOR CAN BE DRIVEN FROM THE SWITCHBOARD EITHER BY REMOTE CONTROL OR BY A SELECTOR SWITCH. THE SWITCHBOARD IS PROVIDED WITH A LOCKABLE ISOLATOR SWITCH, OPEN PUSHBUTTON, CLOSE PUSHBUTTON AND EMERGENCY MUSHROOM HEAD PUSHBUTTON THAT ALSO ACTS AS A STOP BUTTON. WHEN THE OPEN PUSHBUTTON IS PRESSED, THE DOOR OPENS REGARDLESS OF WHAT POSITION IT IS IN. BY PRESSING THE CLOSE PUSHBUTTON, THE DOOR CLOSES FROM WHATEVER POSITION IT IS IN.

4.4.5 ZT4 THREE PHASE DRIVE SWITCHBOARD

PAY ATTENTION TO THE CONFIGURATION OF THE SWITCHBOARD SET BY THE INSTALLER, AS IT COULD EITHER BE SINGLE-PHASE OR THREE-PHASE. DO NOT MODIFY THE CONFIGURATION THAT HAS BEEN SET. WITH THIS SETTING, THE DOOR CAN BE DRIVEN FROM THE ELECTRICAL SWITCHBOARD EITHER BY REMOTE CONTROL OR BY A SELECTOR SWITCH. THE SWITCHBOARD IS PROVIDED WITH A LOCKABLE ISOLATOR SWITCH, OPEN PUSHBUTTON, CLOSE PUSHBUTTON AND EMERGENCY RED PUSHBUTTON THAT ALSO ACTS AS A STOP BUTTON. WHEN THE OPEN PUSHBUTTON IS PRESSED, THE DOOR OPENS REGARDLESS OF WHAT POSITION IT IS IN. BY PRESSING THE CLOSE PUSHBUTTON, THE DOOR CLOSES FROM WHATEVER POSITION IT IS IN.

4.4.6 PARTS THAT ARE COMMON TO THE Z SERIES DRIVE SWITCHBOARDS

THE RED PUSHBUTTON BLOCKS THE DOOR MOVEMENT. TO RESTORE THE MOTION ONCE THE PUSHBUTTON HAS BEEN PRESSED, TURN IT CLOCKWISE. THE LINE ISOLATOR SWITCH SHUTS OFF THE POWER TO THE AUTOMATION SYSTEM AND MUST BE LOCKED BEFORE ANY MAINTENANCE IS CARRIED OUT TO THE DOOR OR THE SPRINGS. SHOULD THE REMOTE CONTROL BE USED, EACH BUTTON DRIVES A USER. WHEN THE BUTTON RELATING TO THE USER REQUIRED IS PRESSED, THE DOOR OPENS/CLOSES. IF THE BUTTON IS PRESSED A SECOND TIME, THE MOTION STOPS, AND WHEN IT IS PRESSED FURTHER THE MOTION REVERSES.

4.4.7 VER DRIVE MOTOR

THIS IS A MOTOR THAT ACTS DIRECTLY ON THE DOOR COVER. IT IS FIXED TO THE CEILING AND DRIVES THE DOOR BY MEANS OF A ROD AND CHAIN SYSTEM CONNECTED TO THE TOP PART OF THE DOOR COVER. THIS SOLUTION ALLOWS OBTAINING A CONSTANT LIFTING AND LOWERING SPEED. THIS MOTOR HAS A BUILT-IN SWITCHBOARD. WITH THIS CONFIGURATION, THE DOOR CAN ONLY BE DRIVEN BY REMOTE CONTROL OR BY A SELECTOR SWITCH. SHOULD THE REMOTE CONTROL BE USED, EACH BUTTON DRIVES A USER. WHEN THE BUTTON RELATING TO THE USER REQUIRED IS PRESSED, THE DOOR OPENS/CLOSES. IF THE BUTTON IS PRESSED A SECOND TIME, THE MOTION STOPS, AND WHEN IT IS PRESSED FURTHER THE MOTION REVERSES. SHOULD THERE BE A POWER FAILURE, THE MOTORS ARE PROVIDED WITH AN UNBLOCKING MECHANISM. HEAVY USE TRIGGERS OFF THE THERMAL PROTECTION.

4.4.8 SERIES C GEARMOTOR UNBLOCKING MECHANISM

SHOULD THERE BE A FAULT OR A POWER FAILURE, THE MOTOR CAN BE MECHANICALLY UNBLOCKED BY MEANS OF A SPECIAL MECHANISM PLACED ON THE SIDE OF THE DOOR NEAR THE ELECTRICAL SWITCHBOARD, OR IF THERE IS NO OTHER ACCESS, EXCEPT THROUGH THE DOOR, THEN ON THE OUTSIDE OF THE OPENING. TO UNBLOCK THE MOTOR, INSERT THE KEY IN THE LOCK AND TURN ANTICLOCKWISE. GRASP THE BLACK KNOB AND TURN IT IN THE SAME DIRECTION. THIS WILL UNBLOCK THE DOOR, WHICH CAN THEN BE MOVED MANUALLY. TO RESET THE LOCK, TURN THE HANDLE IN THE OPPOSITE

DIRECTION, REMOVE THE KEY, THE MOTOR RESTARTS AND THE DOOR IS AUTOMATICALLY LOCKED.

4.4.9 SERIES VER DRIVE MOTOR UNBLOCKING MECHANISM

SHOULD THERE BE A FAULT OR A POWER FAILURE, THE MOTOR CAN BE MECHANICALLY UNBLOCKED BY MEANS OF A SPECIAL MECHANISM PLACED ON THE DOOR COVER. THE UNBLOCKING MECHANISM CAN BE OPERATED BOTH FROM THE INSIDE AS WELL AS THE OUTSIDE AND ACTS ON THE ROD THAT CONNECTS THE DOOR COVER TO THE MOTOR GUIDE. TO DRIVE THE MECHANISM FROM THE INSIDE, GRASP THE "T" HANDLE WITH ONE HAND AND WITH THE OTHER MOVE THE HOOK LOCATED ON THE LEFT-HAND SIDE OF THE LOCK TO THE LEFT. TURN THE "T" HANDLE ANTICLOCKWISE. TO DRIVE THE MECHANISM FROM THE OUTSIDE, INSERT AND TURN THE KEY IN AN ANTICLOCKWISE DIRECTION, THEN TURN THE PENDANT HANDLE IN THE OPPOSITE DIRECTION, THE MOTOR RESTARTS AND THE DOOR IS AUTOMATICALLY LOCKED.

4.4.10 KEY SELECTOR SWITCH

THE E SET KEY SELECTOR SWITCH IS USED TO OPEN AND CLOSE. INSERT THE KEY IN THE LOCK AND TURN IT ANTICLOCKWISE TO OPEN THE DOOR. BY TURNING CLOCKWISE, THE DOOR CLOSES. THE KEY SELECTOR SWITCH WITH JB SET CONTACT HAS THE FUNCTION OF OPENING, CLOSING AND STOPPING. THIS POSSIBILITY DEPENDS ON THE TYPE OF SWITCHBOARD THAT HAS BEEN INSTALLED. FOR FURTHER DETAILS, CONTACT THE INSTALLER. INSERT THE KEY IN THE LOCK AND TURN IT ANTICLOCKWISE TO OPEN THE DOOR. BY TURNING CLOCKWISE, THE DOOR CLOSES AND WITH A SECOND TURN IN THE FIRST DIRECTION, THE DOOR STOPS.

4.4.11 NUMERIC SELECTOR SWITCH

WITH A S9000 SEVEN-DIGIT RADIO NUMERICAL SELECTOR SWITCH, UP TO 4 USERS CAN BE DRIVEN. EACH USER CAN HAVE UP TO 390625 DIFFERENT COMBINATIONS.

ONCE THE PASSWORD HAS BEEN ENTERED, TO OPEN OR CLOSE THE DOOR PLEASE INSERT THE COMBINATION AND PRESS THE "E" KEY. TO MODIFY THE COMBINATION:

1. ENTER THE PASSWORD *PRESS KEY E PRESS KEY 1
2. ENTER THE NEW PASSWORD **PRESS KEY E



4.5 WHAT TO DO IF THE DOOR DOES NOT WORK

| PROBLEM | POSSIBLE CAUSE | SOLUTION |
|---|--|---|
| THE DOOR DOES NOT OPEN OR CLOSE | NO POWER SUPPLY BURNT FUSES BURNT ELECTRIC CARD STOP BUTTON IS DEPRESSED LINE ISOLATOR SWITCH OFF MOTOR THERMAL PROTECTION HAS COME INTO OPERATION BURNT MOTOR | CHECK THAT THERE IS POWER IN THE ELECTRICAL SWITCHBOARD. REPLACE THE FUSES WITH THE SPARE ONES IN THE ELECTRICAL SWITCHBOARD. REPLACE THE ELECTRICAL CARD. ASK FOR ASSISTANCE. RELEASE THE STOP PUSHBUTTON. RESET THE LINE BY TURNING THE ISOLATOR SWITCH CLOCKWISE. OPERATION WILL BE RESET AUTOMATICALLY WITHIN A FEW MINUTES. REPLACE THE MOTOR. ASK FOR ASSISTANCE. |
| THE DOOR OPENS OR CLOSES WITH DIFFICULTY | THERE ARE OBJECTS IN THE GUIDES THE GUIDES ARE DIRTY DOOR COVER IS FAR TOO COMPRESSED | REMOVE THE OBJECTS OBSTRUCTING THE GUIDES. REMOVE THE DIRT USING NEUTRAL DETERGENTS. ADJUST THE COAT STOP AGAINST THE SEALS. |
| THE REMOTE CONTROL DOES NOT WORK | FLAT BATTERY PROGRAMMING ERROR FAULTY RADIO RECEIVER CARD | REPLACE THE BATTERY WITH THE TYPE INDICATED. REPROGRAMME THE REMOTE CONTROL. REPLACE THE RADIO RECEIVER CARD. ASK FOR ASSISTANCE. |
| THE DOOR LIFTS OR LOWERS TOO QUICKLY | SPRINGS ARE LOADED TOO MUCH SPRINGS ARE NOT SUFFICIENTLY LOADED | ASK FOR ASSISTANCE ASK FOR ASSISTANCE |
| THE DOOR LIFTS OR LOWERS ON ONE SIDE ONLY | VERTICAL GUIDES ARE NOT STRAIGHT HORIZONTAL GUIDES ARE NOT LEVEL FLOOR IS NOT LEVEL CENTRAL COUPLING IS LOOSE BROKEN OR FRAYED CABLE | CHECK THE STRAIGHTNESS OF THE VERTICAL GUIDES. ASK FOR ASSISTANCE CHECK THE HORIZONTAL GUIDE LEVEL. ASK FOR ASSISTANCE CHECK FLOOR LEVEL. ASK FOR ASSISTANCE SEE IF THERE IS MOVEMENT. ASK FOR ASSISTANCE SEE IF CABLES ARE WORN. ASK FOR ASSISTANCE. |
| THE SLIDING WHEELS MAKE NOISE | WORN WHEELS. BLOCKED WHEEL BEARING. BLOCKED WHEEL SHAFT. | REPLACE WHEELS. SPRAY SILICON GREASE ON WHEEL BEARINGS. SPRAY SILICON GREASE ON WHEEL PIN |
| THE DOOR IS BLOCKED HALF WAY | BROKEN CABLE BROKEN SPRING SLIPPED CABLE MOTOR LIMIT SWITCH OUT OF TUNE NO POWER | CHECK THE WEAR CONDITION OF THE CABLES. ASK FOR ASSISTANCE CHECK THE CONDITION OF THE SPRINGS. ASK FOR ASSISTANCE CHECK TO SEE IF THE CABLES ARE TENSIONED. ASK FOR ASSISTANCE CHECK TO SEE IF THE DOOR LIFTS OR LOWERS. ASK FOR ASSISTANCE RESET THE LINE POWER OR THE ELECTRICAL SWITCHBOARD PROTECTION DRIVES. |



**FOR ANY DOUBT CONTACT YOUR LOCAL RETAILER
OR CALL BREDASISTEMI INDUSTRIALI SPA FREEPHONE NUMBER**

5 ORDINARY MAINTENANCE

| SCHEDULED MAINTENANCE TABLE | | | |
|---|-----------------------|----------|-----------|
| INSPECTIONS | MAINTENANCE FREQUENCY | | |
| | 3 MONTHS | 6 MONTHS | 12 MONTHS |
| CHECK CABLE WEAR CONDITION | X | | ○ |
| CHECK CABLE AND SPRING BREAK SAFETY DEVICE FUNCTION | | ○ | |
| CHECK SPRING TENSION | | ○ | |
| CHECK DRUM WEAR CONDITION | | | ○ |
| CHECK SLIDING WHEEL WEAR CONDITION | X | | ○ |
| BUFFER POSITION ADJUSTMENT | | | ○ |
| MOTOR LIMIT SWITCH ADJUSTMENT | | ○ | |
| CHECK INFRARED SAFETY RIB FUNCTION | | ○ | |
| CHECK PHOTOCELL FUNCTION | | ○ | |
| CHECK DRIVE PUSHBUTTON FUNCTION | | ○ | |
| CHECK AND CLEAN ELECTRIC MOTOR | | | ○ |
| CHECK AND CLEAN SWITCHBOARD | | | ○ |
| LUBRICATE ALL MOVING PARTS | X | ○ | |

X SMALL MAINTENANCE WORK BY USER
○ SCHEDULED MAINTENANCE BY QUALIFIED TECHNICIAN.

6 TECHNICAL DATA

AS TO THE EQUIPMENT SAFETY, OUR COMPANY COMPLIES WITH THE RULES IN FORCE.

DIRECTIVES 98/37 EX 89/392 EC FOR MACHINES, 73/23 FOR LOW VOLTAGE AND 89/336 FOR RADIO FREQUENCIES.

