

DIAGNOSTIC ERROR LIST CONTROL BOARD

DIAGNOSTICA	DESCRIZIONE	CAUSE	COSA FARE
ER01	Photocells faulty test	Exchange of photocell's contacts hasn't been detected or has taken place beyond the useful test time.	<ul style="list-style-type: none"> - Check the wiring of tested photocells - Logics setting: photocells Test is active - Check hardware failures on photocell's Rx or Tx - Check presence of power supply on 24V output and/or starting of 24V Vsafe power supply - Repairs: replace relays or components on 24V or 24V vsafe power supply circuit, components on inputs circuit
ER02	Safety edge faulty test	Exchange of safety device's contacts (safety edges) hasn't been detected or has taken place beyond the useful test time.	<ul style="list-style-type: none"> - Check the wiring of tested safety edges - Logics setting: Safety Edges Test is active - Check hardware failures on safety devices (safety edges) - Check presence of power supply on 24V output and/or starting of 24V Vsafe power supply - Repairs: replace relays or components on 24V or 24V vsafe power supply circuit, components on inputs circuit
ER03	Photocells in opening faulty test	Exchange of contacts of photocells connected on Photocells in Opening hasn't been detected or has taken place beyond the useful test time.	<ul style="list-style-type: none"> - Check the wiring of tested photocells in opening - Logics setting: photocells Test is active - Check hardware failures on photocell's Rx or Tx - Check presence of power supply on 24V output and/or starting of 24V vsafe power supply - Repairs: replace relays or components on 24V or 24V vsafe power supply circuit, components on inputs circuit
ER04	Photocells in closing faulty test	Exchange of contacts of photocells connected on Photocells in Closing hasn't been detected or has taken place beyond the useful test time.	<ul style="list-style-type: none"> - Check the wiring of tested photocells in closing - Logics setting: photocells Test is active - Check hardware failures on photocell's Rx or Tx - Check presence of power supply on 24V output and/or starting of 24V vsafe power supply - Repairs: replace relays or components on 24V or 24V vsafe power supply circuit, components on inputs circuit
ER05	Safety edge faulty test on slave motor (opposite leaves connection)	Exchange of contacts of safety devices (safety edges) connected on the SLAVE panel hasn't been detected or has taken place beyond the useful test time	<ul style="list-style-type: none"> - Check the wiring of tested safety edges on SLAVE - Logics setting: Safety Edges Test is active - Check hardware failures on safety devices (safety edges) wired on SLAVE - Check presence of power supply on 24V output and/or starting of 24V vsafe power supply on SLAVE - Repairs: replace relays or components on 24V or 24V vsafe power supply circuit, components on inputs circuit
ER06	8k2 safety edge faulty test	Verification test error with the safety edge 8k	<ul style="list-style-type: none"> - check connection and settings - Check if the resistance is the proper one - safety edge engaged
ER07	Safety edge opening faulty test	problem with safety edge during the verification test in opening	<ul style="list-style-type: none"> - verify the connection of the safety edge in opening - settings logic active the verification test on safety edge - check hardware failure on the safety edge Rx or Tx - check the power supply presence 24v and Vsafe power supply - Fixing : change the relè or the components related the main 24V or Vsafe or change the board
ER08	Safety edge closing faulty test	problem with safety edge during the verification test in closing	<ul style="list-style-type: none"> - verify the connection of the safety edge in closing - settings logic active the verification test on safety edge - check hardware failure on the safety edge Rx or Tx - check the power supply presence 24v and Vsafe power supply - Fixing : change the relè or the components related the main 24V or Vsafe or change the board
ER10 (motor BT)	Motor 1 relay running faulty test	- Short circuit mosfet	<ul style="list-style-type: none"> - Check and remove the causes of possible high absorption of motor 1 - Reparation: replacement of mosfet
ER10 (motor AC)	relay running MOTOR 1 stucked (faulty)	<ul style="list-style-type: none"> - Motor 1 relay running control circuit failure - Relay with stuck contacts 	- Reparation: verify and in case replace the relay control
ER11 (motor BT)	Test current reading motor 1 failed	<ul style="list-style-type: none"> - Failure on the shunt amplification circuit - Shunt resistance MOTOR 1 faulty - Direction relay MOTOR 1 stucked - Voltage out of range + - 15% 	<ul style="list-style-type: none"> - Check the main power supply (range + - 10%) - Check motor 1 connection - Fixing: replace the shunt resistor, component involved in the shunt amplifier, mosfet
ER11 (motor AC)	Triac MOTOR 1 short circuit Motor 1 in termic protection Motor 1 not connected	<ul style="list-style-type: none"> - Triac faulty - Triac circuit faulty - overheating motor - Wron motor connection 	<ul style="list-style-type: none"> - Check connection of the motor - waiting for the motor cooling down - measure the impedance between the phase and the common and between the other phase and the common (value correct between 10 and 20 ohm) - replace the Triac - Replace the board
ER15 (motor BT)	Motor 2 relay running faulty test	- Short circuit mosfet	<ul style="list-style-type: none"> - Check and remove the causes of possible high absorption of motor 2 - Reparation: replacement of mosfet
ER15 (motor AC)	relay running MOTOR 2 stucked (faulty)	<ul style="list-style-type: none"> - Motor 1 relay running control circuit failure - Relay with stuck contacts 	- Reparation: verify and in case replace the relay control

GENERAL

CONTROL BOARD

ER16 (motor BT)	Test current reading motor 2 failed	- Failure on the shunt amplification circuit - Shunt resistance MOTOR 2 faulty - Direction relay MOTOR 2 stucked - Voltage out of range + - 15%	- Check the main power supply (range + - 10%) - Check motor 2 connection - Fixing: replace the shunt resistor, component involved in the shunt amplifier, mosfet	HARDWARE
ER16 (motor AC)	Triac MOTOR 1 short circuit Motor 1 in termic protection Motor 1 not connected	- Triac faulty - Triac circuit faulty - overheating motor - Wrong motor connection	- Check connection of the motor - waiting for the motor cooling down - measure the impedance between the phase and the common and between the other phase and the common (value correct between 10 and 20 ohm) - replace the Triac - Replace the board	
ER18	motor/ limit switch 1 not connected	problem on the communication for the signal of the motor/limit switch 1	- Check limit switch and or motor connection - Fixing : replace the limit switch, cable	
ER19	motor/ limit switch 2 not connected	problem on the communication for the signal of the motor/limit switch 2	- Check limit switch and or motor connection - Fixing : replace the limit switch, cable	
ER20	Encoder stop on the motor 2 GIUNO Communication error from limit switch motor 2	The actuator movement is too slow or steady compare to the programmed functioning. GIUNO Switch limit problem, connection or cable	Check obstacles, frictions, or other impediments which brake the motor's run Set in the main motor higher speed GIUNO Check the connections, in case of problem replace the limit switch	ENCODER
ER21	Test of the encoder MOTOR 1 failed	- Encoder cable (power supply) disconnected. - Hardware problems (power supply and/or signals) on encoder board or control board	- Check encoder cable and wirings - Replacement of encoder board - Reparation: replacement of encoder management circuit components	
ER22	Encoder direction opposite to main motor movement direction	Motor power supply or encoder signal wires exchanged.	- Exchange motor 2 power supply or encoder signal polarities	
ER25	Encoder stop on the motor 1 GIUNO Communication error from limit switch motor 1	The actuator movement is too slow or steady compare to the programmed functioning. GIUNO Switch limit problem, connection or cable	Check obstacles, frictions, or other impediments which brake the motor's run Set in the main motor higher speed GIUNO Check the connections, in case of problem replace the limit switch	
ER26	Test of the encoder MOTOR 2 failed	- Encoder cable (power supply) disconnected. - Hardware problems (power supply and/or signals) on encoder board or control board	- Check encoder cable and wirings - Replacement of encoder board - Reparation: replacement of encoder management circuit components	
ER27	Encoder direction opposite to the secondary motor movement direction	Motor power supply or encoder signal wires exchanged.	- Exchange motor 1 power supply or encoder signal polarities	
ER30	obstacle detection motor 2 OPENING	Impediments against the normal movement (obstacles) along the motor 2 opening travel	- Check and remove any obstacles. - Check and remove any frictions or other obstacles which required a motor force bigger than the one previously set. - Increase the motor 2 force value setting	
ER31	obstacle detection motor 2 CLOSING	Impediments against the normal movement (obstacles) along the motor 2 closing travel	- Check and remove any obstacles. - Check and remove any frictions or other obstacles which required a motor force bigger than the one previously set. - Increase the motor 2 force value setting	
ER32	Slowdown obstacle detection motor 2 OPENING	Impediments against the normal movement (obstacles) along the motor 2 slowdown opening travel	- Check and remove any obstacles. - Check and remove any frictions or other obstacles which required a motor force bigger than the one previously set. - Increase the motor 2 force value setting	
ER33	Slowdown obstacle detection motor 2 CLOSING	Impediments against the normal movement (obstacles) along the motor 2 slowdown closing travel	- Check and remove any obstacles. - Check and remove any frictions or other obstacles which required a motor force bigger than the one previously set. - Increase the motor 2 force value setting	
ER35	obstacle detection motor 1 OPENING	Impediments against the normal movement (obstacles) along the motor 1 opening travel	- Check and remove any obstacles. - Check and remove any frictions or other obstacles which required a motor force bigger than the one previously set. - Increase the motor 1 force value setting	
ER36	obstacle detection motor 1 CLOSING	Impediments against the normal movement (obstacles) along the motor 1 closing travel	- Check and remove any obstacles. - Check and remove any frictions or other obstacles which required a motor force bigger than the one previously set. - Increase the motor 1 force value setting	
ER37	Slowdown obstacle detection motor 1 OPENING	Impediments against the normal movement (obstacles) along the motor 1 slowdown opening travel	- Check and remove any obstacles. - Check and remove any frictions or other obstacles which required a motor force bigger than the one previously set. - Increase the motor 1 force value setting	
ER38	Slowdown obstacle detection motor 1 CLOSING	Impediments against the normal movement (obstacles) along the motor 1 slowdown closing travel	- Check and remove any obstacles. - Check and remove any frictions or other obstacles which required a motor force bigger than the one previously set. - Increase the motor 1 force value setting	
ER40	Thermal protection - The automation finishes the manoeuvre before jamming	- The using cycle exceeds the expected cycle - In few manoeuvres are measured high motor absorptions	- Wait for the automation's cooling - Comply with the expected cycle of the motor's name plate - Check and remove any frictions or other obstacles which cause an high motor's absorption - Check motor's suitability with the type of leaf to move	TER

ER41	Instantaneous thermal protection - The automation stops the manoeuvre in progress	- The using cycle exceeds the expected cycle, with an high probability of failure which force the motor to stop immediately - High absorptions during the ER40 completion manoeuvre	- Wait for the automation's cooling - Check and remove any frinctions or other obstacles which cause an high motor's absorption - Check motor's suitability with the type of leaf to move	MIC
ER50	Communication error	- Wiring error between serial devices accessories (SCS) - Failure on the serial communication management circuit - Disturbs which matches each other on the serial wiring	Check wiring connection and positioning of the serial expansion accessories devices - Check parameters and logics setting of the control board Serial expansion boards replacement - Reparation: replacement of serial communication circuit components control board	COMMUNICATION
ER51	Communication error with remote devices (opposite leaves)	- Wiring error between serial devices accessories (SCS) opposite leaves - Error on serial communication control circuit - Disturbs which matches each other on the serial wiring	Check wiring connection of the serial expansion accessories device - Check parameters and logic setting of the control board - Check serial wires position on dedicate pipeline (NO with power supply wires) - Serial expansion boards replacement - Reparation: replacement of serial communication circuit components control board	
ER61	Battery back up functioning	- Power supply is missing	- Check the power supply, the batteries will be discharged after few manoeuvres	BATTERY
ER71*	Generic EEPROM error	Hardware and microprocessor's operation defective	- Repair: replace Microprocessor, EEPROM, Oscillator	FIRMWARE
ER72*	EEPROM error on the criteria of operation of the system	Hardware and microprocessor's operation defective	- Press ok for confirming the settings. Important to check the settings of the board - Check restore of operation by pressing the "OK" button to default the board - Repair: replace Microprocessor, EEPROM, Oscillator	
ER73*	EEPROM error on working traject - D Track	Hardware and microprocessor's operation defective	- Make again Autoset - Check restore of operation by pressing the "OK" button to default the board - Repair: replace Microprocessor, EEPROM, Oscillator	
ER74*	Generic MICRO error	Hardware and microprocessor's operation defective	- Repair: replace Microprocessor, EEPROM, Oscillator	
ER75*	Generic OSCILLATOR error	Hardware and microprocessor's operation defective	- Repair: replace Microprocessor, EEPROM, Oscillator	
ERF0	Both limit switches activated	- Both limit switches show opened contact - Hardware failure of limit switch inputs circuit	- Check limit switches wiring and/or contacts - Reparation:input circuit components replacement	LIMIT SWITCH
ERF1	Limit switches not released after the start manoeuvre	- Contact of the last limit switch detected has not closed after a start command - Released motor - Hardware failure of limit switch inputs circuit	- Check limit switches wiring and/or contacts or motor - Unrelease the motor - Reparation:input circuit components replacement	
ERF2	Limit switch still engaged after starting of the maneuver on the SLAVE operator in opposite leaves situation			
ERF3	With opposite leaves errors on the SAFE settings	Wrong configuration of the output SAFE	- check the configuration of the output SAFE - check in the D66 manual	
ERF9	Electric lock output overload	- Not adjustable electric lock with high absorption - 24V output and/or electric lock shortcircuit	- Check electric lock wiring - Use click electric lock 2A max - Check and replace any short circuit electric lock - Check short circuit on accessories wired up to 24Vsafe output - Reparation:replacement of 24Vsafe output circuit components and electric lock	ELECTRIC LOCK
ER1A	no sync from the main power 230V or 120V	Could be aproblem from the main power , sunc absent or failure on the component involved for the sync on the board	- If the error doesn't disappear , replace the board - Chek the sync from the main power	SYNC
ER00TE	Board in test mode	Fw issue	Update the board with the proper related fw	SYSTEM
K01	autoset not done correctly	any external command have not completed the autoset procedure	Repeat The AUTOSSET	AUTOSSET
K02	Gate run inferior of the minimum gate run (more or less 50 cm)	Installation done with a run gate of 50 cm (minimum run of 50 cm)	Install the gate with a run over the 50 cm	
K03	Installation is too eleastic-dinamic	Installation is too eleastic-dinamic	Provide to make a bit stronger the installation using a mechanical block on the limit switch(kit cod. I100025 10005) before doing the autoset	
ER7X*	According to the normative EN60335-2-103 that manages the fw related to class Bhave been added new controls in the firmwares so we can certify also the firmware included into the board. The controls are mandatory where the microprocessor manages security function. With this controls made from the firmware on the routines and processes have been also created a new error group starting from 7x. the controls are made on the microprocessor and on its related components like ram memory, flash memory, system register, program counter, and oscillator. The controls on these components and processes are made automatically every hour or after each reset when the motor is not working			

NOTE : In the case the control board pilots one single motor, it is assumed motor 1