World Leader in Lift Productivity

SL230 / SL235 / SL250

Capacity: 3000, 3500 resp. 5000 kg

CE

Model	Serial Number
SL230P	
SL230MP	
SL235P	
SL235MP	
SL235RA	
SL250RA	
SL235S2	
SL235S3	
SL235BR	
SL250BR-RA	
SL235DOP	

Initial operation:
This operation and maintenance manual has to be handed over to the owner/user after putting the lift into operation.

OpMan N1.0
Rev. 20/11/06

OPERATION & MAINTENANCE MANUAL

Content

1. Important remarks

This lift is only for lifting vehicles without persons.

Note the short user instructions at the control box!

Only persons with an age of 18 and more, which are instructed in operating the lift, are allowed to operate them independently. They have to be engaged by the person responsible expressly to operate the lifting platform.

Display this manual in a conspicuous location in the area convenient to the operator.

2. Control box

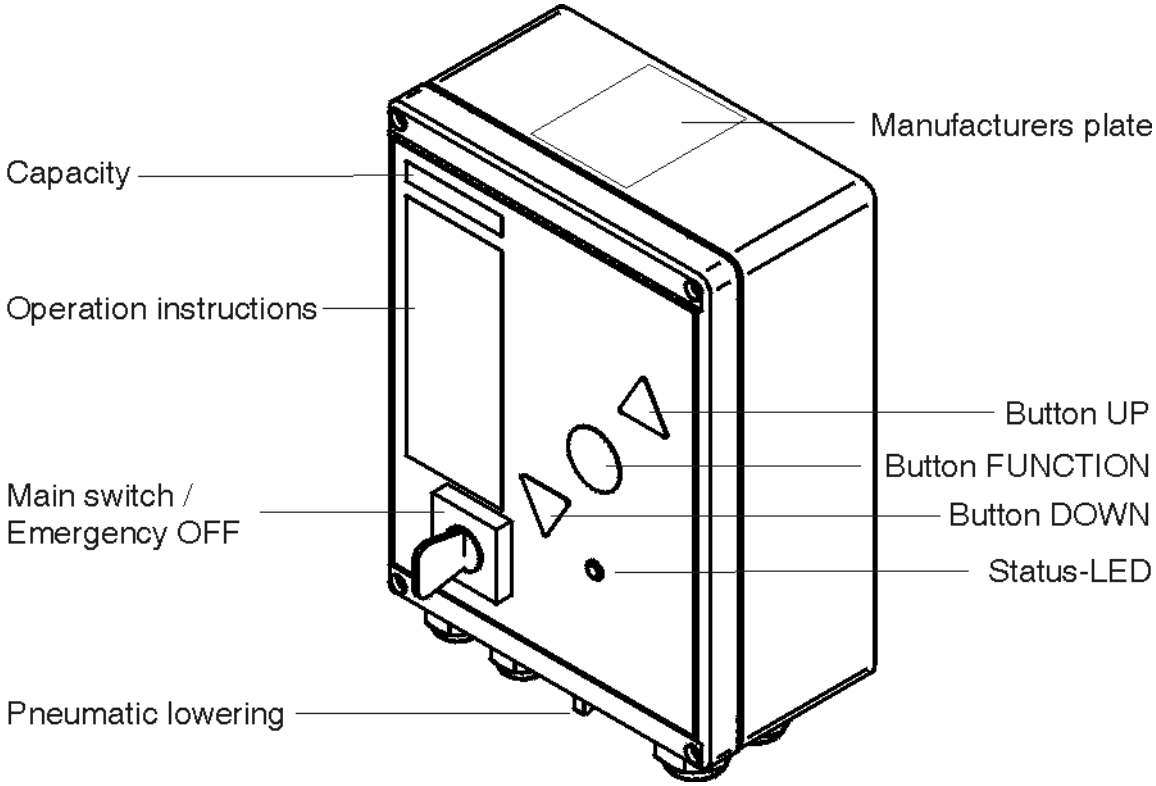

Fig. 1 Control box

Description of the control elements

1. Turning the key from position ´0´ to position ´I´ supplies the motor with power.
2. To lift press the symbolic UP button. To lower press the symbolic DOWN button.
3. After a software-defined time delay the control switches to the ´stand-by-mode´ indicated by a permanent organge LED. Once pressing to the middle round function button the control is activated again indicated by the green LED.
4. Turning the key from position ´I´ to position ´0´ immediately interrupts the power supply of the motor and stops every movement (emergency stop function).
5. At power failure the lift can be lowered using compressed air.
6. If the status-LED (light emitting diode) burn ´green´ then the lift is ready for operation. A ´red´ LED indicates an error.

3. Certificate for initial operation by an expert

The lift of model _____ with the serial number _____
was subjected to the examination of an operational status on _____ .

No faults have been discovered and the lift can be put into operation.

The operator was taught and introduced by the expert about the proper handling.

Place, Date

Signature of the expert

Name of the expert

Adress of the expert

ATTENTION: Please send the clompeted certificate for initial operation by an expert back to the manufacturer for the validity of the rights to claim under warranty. Without this certificate no warranty!

Please cut here and send or fax to BlitzRotary GmbH, Hüfinger Str. 55, D-78199 Bräunlingen, Fax-Nr. ++49-(0)-771/9233-99

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CERTIFICATE FOR INITIAL OPERATION BY AN EXPERT FOR LIFT WITH SERIAL NUMBER _____.

Place, Date

Signature of the expert

Name and adress of the expert

By fax to ++49-(0)-771/9233-99

BlitzRotary GmbH
Hüfinger Str. 55
78199 Bräunlingen
GERMANY

Adress of the owner (stamp):

4. Certificate for power connection by an electro-technician

For the lift with the serial number _____ the power connection was performed by an electro-technician on _____ .

The grounding contact was tested with an current of 10 Ampere [max. 0,1 Ohm] and the high voltage test with 1000 Volts.
The tests have been performed without any complaints.

The electro-technician confirms to the owner that the power connection was performed regularly and the test have been without complaints.

Place, Date

Signature of the electro-technician

Name of the electro-technician

Adress / Stamp of the electro-technician´s company

Please note: Only the owner is responsible for the regular power connection!

5. Indications for the regular maintenance

Technical data of the lift
Check the manufacturer plate, inscription and abridged operating instructions if its readable and still fastened.

Operating status and security devices
Check the lift with and without load in all functions, especially check the end stops at hydraulic cylinders and supports of effectiveness and secure fastening.
Test the load construction and the supports for distortion.
Test the welding seams for cracks.
Check the wear and tear on all movable parts.

Control parts
Check the buttons of the foil keyboard for functioning and fastening.
Check the light emmitting diod(s) for function.
Check the audible signal against to protect of violation.
Check the master switch and the emergency pneumatic lowering function.
Check the security against unauthorized use.
Check all electrical wires for damage and fastening.

Lifting cylinders and hydraulic unit
Check the lifting cylinders and the hydraulic unit especially at the connections for tightness.
Check the loss of oil in the tank.
Check the hydraulic hoses for the proper position and state.

Indications for maintenance

1. Clean the cylinder exit!
2. Tighten all screws!
3. Check all fixation screws according to torque (see installation instructions)
4. Grease all bearings and lubricating nipples!
5. Check all air pressure pipes and conductions.
6. Check level of hydraulic oil! If necessary fill in hydraulic oil HLP22.
7. Clean the hydraulic oil using filter machine!
8. Change all hydraulic hoses every 6 years!
9. Tighten up the hydraulic hoses and the electric wires at the connections!
10. Check all electrical connections inside the cassette for corrosion!
11. Clean and protect the hydraulic unit and all electric parts inside the cassette!
12. Remove water and humidity from the cassette!
13. Check the valve plugs for humidity! If necessary protect with a hydrophobic grease.
14. Renew damaged rubber profile! Use silicone at the contacts of two profiles!
15. Inform the responsible person about special observations!
16. Complete the maintenance manual!

6. Results of the regular maintenance

A regular yearly check by an expert is laid down for the lift. We recommend the carrying out of this check together with a maintenance of an ROTARY-authorised service-technician.

You will find some tips for the carrying out of this yearly check and maintenance at chapter 5. Necessary repairs can be carried out against separate charge.

Date	Results of check	Name and adress of the expert

7. Technical data sheet SL230, SL235 and SL250 series

Manufacturer: BlitzRotary GmbH
Hüfinger Str. 55
78199 Bräunlingen, Germany

Description: Vehicle lift model _____

Serial number: _____ **Year of manufact.:** _____

Date of delivery: _____ **Initial operation:** _____

Lift model	SL230P	SL230MP	SL235P	SL235MP	SL235RA
Capacity in kg	3000	3000	3500	3500	3500
Allowed load distribution	3:2	3:2	2:1	2:1	2:1
Max. lifting velocity cm/sec	6,5	6,5	6,5	6,5	6,5
Max. lowering velocity cm/sec	7,0	7,0	7,0	7,0	7,0
Operating pressure in bar	260	260	260	260	260
Operating voltage in Volts	400	400	400	400	400
Voltage of valves (DC) in Volts	205	205	205	205	205
Voltage of control (DC) in Volts	24	24	24	24	24
Noise level dB (A)	70	70	70	70	70
Upper lifting limitation	yes	yes	yes	yes	yes
CE-stop	yes	yes	yes	yes	yes
Pneumatic emergency lowering	yes	yes	yes	yes	yes
Suitable for use in:					
in wet and damp rooms	yes	yes	yes	yes	yes
in rooms with danger of explosion	no	no	no	no	no

Not for staying below the supports. Not for staying on the supports.
Not for use as a lift bridge.

Manufacturer: BlitzRotary GmbH
Hüfinger Str. 55
78199 Bräunlingen, Germany

Description: Vehicle lift model _____

Serial number: _____ **Year of manufact.:** _____

Date of delivery: _____ **Initial operation:** _____

Lift model	SL235S2	SL235S3	SL235BR	SL235DOP	
Capacity in kg	3500	3500	3500	3500	
Allowed load distribution	2:1	2:1	2:1	2:1	
Max. lifting velocity cm/sec	6,5	6,5	6,5	6,5	
Max. lowering velocity cm/sec	7,0	7,0	7,0	7,0	
Operating pressure in bar	260	260	260	340	
Operating voltage in Volt	400	400	400	400	
Voltage of valves (DC) in Volts	205	205	205	205	
Voltage of control (DC) in Volts	24	24	24	24	
Noise level dB (A)	70	70	70	70	
Upper lifting limitation	yes	yes	yes	yes	
CE-stop	yes	yes	yes	yes	
Pneumatic emergency lowering	yes	yes	yes	yes	
Suitable for use in:					
in wet and damp rooms	yes	yes	yes	yes	
in rooms with danger of explosion	no	no	no	no	

Not for staying below the supports. Not for staying on the supports.
Not for use as a lift bridge.

Manufacturer: BlitzRotary GmbH
Hüfinger Str. 55
78199 Bräunlingen, Germany

Description: Vehicle lift model _____

Serial number: _____ **Year of manufact.:** _____

Date of delivery: _____ **Initial operation:** _____

Lift model	**SL250RA**	**SL250BR-RA**			
Capacity in kg	5000	5000			
Allowed load distribution	2:1	2:1			
Max. lifting velocity cm/sec	4,5	4,5			
Max. lowering velocity cm/sec	5,0	5,0			
Operating pressure in bar	260	260			
Operating voltage in Volt	400	400			
Voltage of valves (DC) in Volts	205	205			
Voltage of control (DC) in Volts	24	24			
Noise level dB (A)	70	70			
Upper lifting limitation	yes	yes			
CE-stop	yes	yes			
Pneumatic emergency lowering	yes	yes			
Suitable for use in:					
in wet and damp rooms	yes	yes			
in rooms with danger of explosion	no	no			

Not for staying below the supports. Not for staying on the supports.
Not for use as a lift bridge.

8. Complete user instructions

8.1 Range of use

The lift is only to be used for the lifting of motor vehicles. The maximum load capacity has not to be exceeded.

8.2 Initial operation

The "Initial Operation" has to be carried out by an expert after the installation of the lifting platform. Then the introduction of the operator into the proper handling and operation has to take place.

Rights to claim under guarantee can only be given after the receipt of the initial sheeth (see form "Initial operation by an expert") by the manufacturer.

8.3 Rights of handling

Only persons with an age of 18 and more, which are instructed in operating the lift, are allowed to operate them independently. They have to be engaged by the person responsible (business employer, workshop master or security representative) expressly to operate the lifting platform. The tips of the abridged operating instructions at the control box are to observe.

8.4 Lifting vehicle (principles)

a) Before you can drive on, off or over the lifting platform, it has to be lowered up to the ground level. The driving on is allowed only in the planned direction.

b) Speeding up and braking of the vehicle rapidly is not allowed over the lift supports.

c) Vehicles with a low distance between underside and ground or with special fittings have to be checked first if damages can happen.

d) The lifting of the vehicles is allowed only at the support points given by the car manufacturers. If necessary use suitable additional support carriers.

e) Take care that the vehicles are lifted secure! The support points at the vehicles and the lift have to be clean and free of oil and grease.

f) Pay attention to the allowed load distribution of 2:1 rep. 3:2.

g) After lifting the wheels from the ground the secure position of the vehicle is to check! This means: Inspect and check if all four suppoet points are lifted up proper and secure and a slipping of the vehicle is not possible. Further the locking systems must be in function. If this is not: Lower down the lift and try again.

h) Possible shifts of center of gravity by a disassembly of heavy parts have to be taken into account.

i) The vehicle is to be taken up by the lift as centric as possible.

j) It is not allowed to set the lift and the vehicle swinging intentionally.

k) During lifting and lowering of the lift no persons are allowed to stay in the danger spot of the lift.

l) At drive-on platforms you have to avoid rolling of the vehicle using the hand brake or additional wedge!

8.4.1 SL230P / SL230MP / SL235P / SL235MP

To drive-on the lift must be in down position at the floor. At the models SL230MP and SL235MP the cross plate of the support must be in the middle position.

The supports are adjustable on the flat carriers in the longwise direction. For every support plate you have 4 position to lift a vehicle. The support plate must engage in the corresponding holes of the flat carriers. Lifting without fixation of the support plate position is not allowed. To lift a vehicle you use normally rubber blocs as additional supports, which can be placed on the support plates below the support points.

The presetting of the support plates is usually like follows:

pushed together: very small vehicles

half extended: small and normal vehicles

full extended: long vehicles

Recommendation: It is possible to lift up nearly 70% of all vehicles in the middle position without further adjustment of the support plates.

The support plate is to be lifted slightly if the longwise adjustment must be corrected and the support plate is to be moved in the desired direction.

Please, ensure, that both support plates - front and back - are pulled out in about equal shares. It is unfavorable if the front plate is completely pulled out, the rear plate pulled in. Because of the center of gravity of the vehicle, it is mostly correct to at first pull out the rear plate.

On the one hand, the MP-version has the advantage that support points which are further below the vehicle are also reachable. On the other hand, the vehicle can also be lifted if it was not driven up fully centric. The crossways adjustment is very smooth-running and can also be carried out without problems at an over-driven vehicle. To preserve the smooth running you have to clean the sheet metal plate below the cross plate.

After lifting wheel-free you have to check if the vehicle is safe on the supports before you continue lifting.

8.4.2 SL235RA / SL235S2 / SL235S3 / SL250RA / SL250BR-RA

Normally vehicles which are “difficult” to be picked-up such as off-road vehicles, vans, big sedans and transporters are lifted with these models.

In the down position at the models SL235RA and SL250RA, the swivel arm slide is positioned at the external end of the cross carrier plate so that the maximum clearance width is available. The swivel arms are lying pulled in and parallel to the drive-on direction.

The models SL235S2, SL235S3 and SL250BR-RA don’t have a possibility to sloide on a cross carrier plate. The swivel arms are lying pulled in and parallel to the drive-on direction.

It is easy to drive over the cross carrier plates in down position. Please notice not to touch the swivel arms when driving in. The vehicle is driven on approx. centrically. It normally stands correctly, if front and back wheels have about the same distance to the cross carrier plates.

The pick-up of the vehicle simplest takes place when at first the swivel arms are swivelled in beside or under the vehicle.

In order to reach the support points exactly the swivel arms can be pulled-out telescopically ans swivelled. Furthermore at the models SL235RA and SL250RA you can slide the complete swivel arms on the cross carrier plate towards the vehicle if necessary to reach the specified support points.

The swivel arm is positioned correctly if the support cups are exactly below the specified support points. If required the support cups are to be turned out to the suitable height. In this case it has to be assured that the distance between support cups and vehicle at all 4 support points is approx. the same so that the vehicle will be lifted in level.

After lifting wheel-free you have to check if the vehicle is safe on the supports before you continue lifting.

8.4.3 SL235BR

With this model normally either accident damaged vehicles, which have to be put on the car repair bench, or vehicles at which bodyworks have to be done are lifted. In down position the svivel arms are at the outer position on the longitudinal girders and are swivelled towards inside.

Special care is necessary and adjustement is from time to time a little bit difficult. In order to meet the various and diverse demands there are given more adjusting and adaptation possibilities than usual. The vehicle is driven centrically between the girders. In accordance with the position of the suitable support points, the swivel arms are first brought into the suitable longside position. This is done easiest when the swivel arms are still swung in. If the swivel arms are already swung out towards the vehicle, the longside adjustment is more difficult since the weight of the swivel arm works as a momentum and complicates the adjustment.

After the best position of the swivel arms on the girders has been chosen, the swivel arms are turned towards the vehicle. With the left hand the swivel arm locking device is unlocked, with the right hand the swivel arm is moved.

The correct position is reached if the support point is approx. centric with the swivel arm axis. Please, ensure that the swivel arm locking device is engaged again.

Now the swivel arm is pushed-out until the screw-in cup is exactly below the support point. By turning the cup, the correct minimum height is to be adjusted, so that it is excluded that lower-level parts of the under body are not lying on the swivel arm.

After lifting wheel-free you have to check if the vehicle is safe on the supports before you continue lifting.

8.4.4 SL235DOP

In down position the lane is on the floor and rests on it´s rubber feet. The automatic roll stops are swung down to drive over. An optional axis lifter is positioned at the front end of the platforms.

Drive-on is either on floor level (inground version of the lanes; option) or using permantly at the head end of the lanes fixed drive-on ramps (version resting on the floor; standard). When driving on vehicles with low frame clearance you have to take care that no damage at the vehicle can happen. If necessary use additional ramps to avoid damages.

The vehicle is to drive on the lanes as centric as possible (related to the center of gravity). To do this you have to drive over the wheel-free supports centrically. As a rule the vehicle is on the right place when the front-wheel is positioned approx. 30 cm in front of the wheel-free system. In any case the maximum distribution of the load of 2:1 resp. 1:2 must be noticed.

You have to protect the vehicle against unintended rolling using the hand brake or suitable wedges!

The lifting of the vehicle is carried out at the control box which is fastened at a control desk or at the front wall.

After short lifting you have to check if the vehicle is safe on the supports before you continue lifting. Especially check if the automatic roll stops are in function.

Use of support sticks for wheel alignment:

If you use support sticks for wheel alignment (option), the lift is leveled on the support sticks as well as on floor level:

a) The low measurement position is if the platform is at the ground (version resting on the floor). In this position the lanes are in level and ready for measurement.

b) For the upper position first raise the lift to about 160 cm and swing down the support sticks. Then lower down the lift until the support sticks are standing on the floor. Using the adjustable feet of the sticks you can define a second level for measurement. After Measurement raise the lift some distance to swing in the sticks again.

8.5 Operation

The lift is switched on by turning the main key from position ´0´ to position ´I´. The initialization of the control takes some seconds. As soon as the light-emitting diode lights up green, the lift is ready for operation.

The lifting is carried out by a permanent pressure on the symbolized UP button. As soon as the button will be released or the upper end stop is reached the lifting process stops. The arriving of the upper end stop is is indicated by a green blinking LED by means of a pressed UP button.

The lowering is carried out by a permanent pressure on the symbolized DOWN button. As soon as the button will be released or the lower end stop is reached the lowering process stops. In case the lift arrives in the meantime the signal tone height the DOWN button has to be released shortly. A new permanent pressure continues the lowering process.

After the lift hasn't been used - with a switched-on control – for a certain time interval (appr. 20 sec.) the control changes in the "Stand-By-Mode". This is indicated by a change of the LED from green to orange. In order to change back in the operation mode (green LED) a short one-time keypress on the middle round control key is necessary.

As soon as one or both push buttons are released the lifting platform stops the lifting or lowering process. When lowering the lift stops approx. 150 mm over floor level and an audible signal sounds. This acoustic signal admonishes the user to ascertain that no person is in danger to mash it´s feet between vehicle and/or support and floor. By releasing and repressing the down button lowering movement is continued with a lasting acoustic signal.

The user must observe lift during the entire lifting and lowering time and ensure that no persons become endangered or obstacles might get under the lifting platform.

Should an error or irregularity occur during a lifting and lowering movement, all control switches have to be released immediately and the system to be secured against starting-up again. A reopening only may occur through an expert.

8.6 Maintenance, care and examination

The lifting platform is in general maintenance-free for the operator provided that the regular annual examination of an authorized ROTARY service technician is carried out together with a maintenance. Otherwise we refer to maintenance instructions (see capter 5.)!

The following indications are to be considered:

Piston escapes and supports are to be held clean and are to be freed from polluting so that moveability of the support plates and swivel arms remains guaranteed.

The pressure hoses between cylinder and hydraulic pump are to be exchanged at the latest after 6 years. The replacement is to be recorded in this maintenance manual.

The annual maintenance is to be recorded in this maintenance manual.

Handle floor cleaners and water economically in the field of the lift! Only employ mild, non-polluting cleaners. Do not use steam jet cleaners and high pressure cleaners in the direct field of piston escape and sealings of the inground cassette. The seals may be damaged.

Keep the area around the lift dry. In the area around the built-in cassette, no floor cleaner and after that no water or "water pools" may gather but the moisture must pour away from the lift.

Don't let supports lie on wet workshop floor overnight but drive it slightly up.

8.7 Behavior in case of malfunction

In case of malfunction, in particular with leakiness in the oil system, the lift is to be shut down immediately and secured against unauthorized use by taking out key of the main power switch.

Before repairing the failure, a further use is forbidden. Repairs may only be carried out by a competent and trained personnel.

For elimination of simple failures, ROTARY service hotline ++49-771-9233-0 is available for you.

8.8 Pneumatic emergency lowering

During power failure or at defective lowering valve, the lift can be lowered without energy. At the control a pneumatic emergency lowering is included on the bottom. Simply blow with a blow gun into the opening and the lift lowers slowly down.

8.9 Spare parts

For repairs, only original ROTARY spare parts are allowed. These can be bought over ROTARY service technicians or in case of smaller self repairs directly from ROTARY.

9. Error codes of the control

Code	Error message in the terminal software	Description
0	no error.	No error at all.
1	I2C bus blocked!	The I2C bus to the configuration EEPROM is not working. Exchange Piggy Board.
2	pointer init	No error: The history log for all error events was initiated for the first time.
8	I2C bus blocked!	The I2C bus to the configuration EEPROM is not working. Exchange Piggy Board.
9	I2C bus blocked!	The I2C bus to the configuration EEPROM is not working. Exchange Piggy Board.
11	I2C bus blocked, tx-buffer full!	The I2C bus to the configuration EEPROM is not working. Exchange Piggy Board.
12	I2C bus blocked!	The I2C bus to the configuration EEPROM is not working. Exchange Piggy Board.
13	invalid parameter sum!	The checksum over the parameters stored within the configuration EEPROM is invalid. Enter Servicemenue and recalculate checksum. If not successful, exchange Piggy-Back board.
14	invalid model type!	The magic number stored in the configuration EEPROM is unknown. Either it was changed by mistake or the EEPROM is damaged. Enter servicemenue and restore the right magic number or exchange Piggy Board if not successful
15	eeprom chip damaged!	The I2C bus to the configuration EEPROM is not working. Exchange Piggy Board
16	piggy back board not working!	The analog multiplexer IC on the Piggy Board does not find the pullup resistor. Either Piggy Board is not working or CPU is damaged. Exchange first Piggy Board then try another Control Board.
17	software hangup, stopped!	There was a reset initiated by the watchdog, checking if the controller firmware is still alive. This error may happen if the keyswitch is quickly reswitched on. The supply voltage had no time to go down enough. If this error happens during normal operations, the CPU or at least the firmware in it is damaged. Exchange the Control Board.
18	ballance safety circuit on	The redundant ballance safety circuit noticed a large difference between the left and right cylinders. If it is no „electronic ballance“ type of carlift, check if the socket for the ballance circuit on the Piggy Back Board is empty. Next enter the Servicemenue and check the values of the cylinder heights. Maybe the potis need to be readjusted.
19	analog reference voltage to low!	The analog +5Volt supply is not ok. Check for a short circuit on the poti cables. Next exchange the Piggy Board. If error persists, exchange Control Board.
20	namur supply voltage too low!	The analog +15Volt supply for the namur switches is not ok. Exchange the Control Board.
21	upwards speed too high!	The limit for the upwards speed was exceeded. Call the Servicemenue and check this limit.

Code	Error message in the terminal software	Description
22	upwards speed too low!	The upwards speed was too low. Check the limit programmed in the configuration EEPROM. If correct, the carlift maybe overloaded, the hydraulic pressure not sufficent (due to a damage) or the carlift was mechanically blocked by an obstacle.
23	downwards speed too high!	The limit for the downwards speed was exceeded. Call the Servicemenue and check this limit. If correct, there may be a leakage in the hydraulic system.
24	downwards speed too low!	The downwards speed was too low. Check the limit programmed in the configuration EEPROM. If correct, the carlift maybe mechanically blocked by an obstacle, or the valve is not opening, check the cables.
25	Keyboard error	When the middle function key was pressed, the uC found another key was pressed too. This may be caused by a blocked key (that means exchange the keyboard) or simply by a not allowed simultanuous key input from a user.
26	Timerchip error	If this error occurs when switching on, the supply for the relays were detected to be already present. This is safety relevant. Check timerchip. If the error happens during normal operation, the timerchip did not enable the supply for the relays. Either the timerchip or the 24V-supply or the TQ-Relay that switches the supply on is not working.
30	left-right difference too large	The electronic ballance controll algorithme failed. The difference exceeded the allowed limit. Check if valve cables or poticables are not interchanged or if the proportional valves are working.
31	left-right difference downwards too large!	The electronic ballance controll algorithme failed. The difference exceeded the allowed limit. Check if valve cables or poticables are not interchanged or if the proportional valves are working. This error maybe recovered by moving upwards.
32	max time for releasing brake exceeded!	The reasonable time span to release the brake was exceeded. Either not enough hydraulic pressure to lift the zylinders, or an obstacle disables the carlift, or the valves stay closed.
40	upper limit exceeded, check cables & potis!	A poti or a namur value exceeds the error level. Check the level in the Servicemenue. If reasonable, check the displayed value of the poti or namur. Either the cable or the sensor itself maybe damaged.
50	LOWERING limit exceeded, check cables & potis!	A poti or a namur value is below the error level. Check the level in the Servicemenue. If reasonable, check the displayed value of the poti or namur. Either the cable or the sensor itself maybe damaged.
60	wheelfree below plattform, check cables & potis!	Check if wheelfree sensor poti is mixed up with platform poti. Check if poti cables are ok.
99	program flow!	Firmware in impossible state. Exchange Control Board.

10. EC conformity declaration

Manufacturer:	BlitzRotary GmbH
Manufacturer´s adress:	Hüfinger Str. 55, 78199 Bräunlingen, Germany
Product decription:	2-piston hydraulic inground lifts
Models:	SL230P, SL230MP, SL235P, SL235MP, SL235RA, SL235S2, SL235S3, SL235BR, SL235DOR, SL235DOP, SL250RA, SL250BR-RA
EC guidelines:	98/37/EC, 73/23/EEC, 89/336/EC
Seriennummer:	
Applied harmonized and national standards:	EN 1493, VBG 14, DIN EN 292-1, DIN EN 292-2, DIN EN 294, DIN EN 60 204-1
Institute of approval:	RW TÜV Anlagentechnik GmbH, Postfach 10 32 61, D-45032 Essen
Certificate No:	

Hereby we declare that this lift as designed, manufactured and put by us on the market meets relevant basic safety and health requirements as set forth in the relevant EC guidelines for machines and electromagnetic compatibility as specified hereafter (in their latest versions). Further we declare that the machine, described in appendix IV of the guideline 89/392, was tested at the arroval institute and this lift corresponds to the tested model.

This declaration will become invalid if the machine is not used as set forth under "Scope of application" of this operation manual or if any modifications or changes whatever are made to the machine without prior approval from our end.

Bräunlingen, 01th of July 2005

F. Scherer
General Manager