

Floodable Sewage Lifting Unit

Compacta / mini-Compacta

Replacing the Control Unit
LevelControl Basic 2 BC

Supplementary Operating Manual



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Supplementary Operating Manual Compacta / mini-Compacta

Original operating manual

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1 General

1.1 Principles

This supplementary operating manual is supplied as an integral part of the type series and variants indicated on the front cover.

It supplements the installation/operating manual of the lifting unit type and variant indicated on the front cover and specifically describes the operations required to replace LevelControl Basic 2 with a spare control unit.

1.2 Target group

This supplementary operating manual is aimed at the target group of trained and qualified specialist technical personnel.

1.3 Other applicable documents

The other applicable documents are listed in the relevant installation/operating manual of the pump (set).

1.4 Symbols

Table 1: Symbols used in this manual

Symbol	Description
✓	Conditions which need to be fulfilled before proceeding with the step-by-step instructions
▷	Safety instructions
⇄	Result of an action
⇄	Cross-references
1. 2.	Step-by-step instructions
	Note Recommendations and important information on how to handle the product



2 Safety

All the information contained in this section refers to hazardous situations.

In addition to the present general safety information the action-related safety information given in the other sections must be observed.

2.1 Key to safety symbols/markings

Table 2: Definition of safety symbols/markings

Symbol	Description
 DANGER	DANGER indicates a high-risk hazard which, if not avoided, will result in death or serious injury.
 WARNING	WARNING indicates a medium-risk hazard which, if not avoided, could result in death or serious injury.
 CAUTION	CAUTION indicates a hazard which, if not avoided, could result in damage to the machine and its functions.
	General hazard in conjunction with one of the signal words indicates a hazard which will or could result in death or serious injury.
	Electrical hazard identifies information about protection against electrical voltage.
	In conjunction with the signal word CAUTION , this symbol indicates a hazard for the machine and its functions.

2.2 General

This supplementary operating manual contains additional applicable information. General installation, operating and maintenance instructions that must be observed to ensure safe operation and prevent personal injury and damage to property are given in the installation/operating manual.

The safety information in all sections of this supplementary operating manual and in the relevant installation/operating manual must be complied with.

The supplementary operating manual must be read and completely understood by the responsible specialist personnel/operators.

The contents of this supplementary operating manual must be available to the specialist personnel at the site at all times.

The operator is responsible for ensuring compliance with all local regulations which are not taken into account in this supplementary operating manual.

2.3 Intended use

The lifting unit/control unit must only be operated within the operating limits described in the other applicable documents.

- Only operate lifting units/control units which are in perfect technical condition.
- Do not operate partly assembled lifting units/control units.
- The lifting unit/control unit must only be operated with the fluids described in the relevant installation/operating manual.

Prevention of foreseeable misuse

- Never exceed the permissible operating limits specified in the relevant installation/operating manual.
- Observe all safety information and instructions in this supplementary operating manual.

2.4 Personnel qualification and training

All personnel involved must be fully qualified to install, operate, maintain and inspect the machinery this manual refers to.

The responsibilities, competence and supervision of all personnel involved in installation, operation, maintenance and inspection must be clearly defined by the operator.

Deficits in knowledge must be rectified by sufficiently trained specialist personnel training and instructing the personnel who will carry out the respective tasks. If required, the operator can commission the manufacturer/supplier to train the personnel.

Training on the pump (set) must always be supervised by technical specialist personnel.

2.5 Consequences and risks caused by non-compliance with these operating instructions

- Non-compliance with this supplementary operating manual will lead to forfeiture of warranty cover and of any and all rights to claims for damages.
- Non-compliance can, for example, have the following consequences:
 - Hazards to persons due to electrical, thermal, mechanical and chemical effects and explosions
 - Failure of important product functions
 - Failure of prescribed maintenance and servicing practices
 - Hazard to the environment due to leakage of hazardous substances

2.6 Safety awareness

In addition to the safety information contained in this manual and the intended use, the following safety regulations shall be complied with:

- Accident prevention, health and safety regulations
- Explosion protection regulations
- Safety regulations for handling hazardous substances
- Applicable standards and laws

2.7 Safety information for the operator/user

- Fit protective equipment (e.g. contact guards) supplied by the operator for hot, cold or moving parts, and check that the equipment functions properly.
- Do not remove any protective equipment (e.g. contact guards) during operation.
- Provide the personnel with protective equipment and make sure it is used.
- Contain leakages (e.g. at the shaft seal) of hazardous fluids handled (e.g. explosive, toxic, hot) so as to avoid any danger to persons and the environment. Adhere to all relevant laws.
- Eliminate all electrical hazards. (In this respect refer to the applicable national safety regulations and/or regulations issued by the local energy supply companies.)
- If shutting down the pump does not increase potential risk, fit an emergency-stop control device in the immediate vicinity of the pump (set) during pump set installation.

2.8 Safety information for maintenance, inspection and installation work

- When taking the pump set out of service always adhere to the procedure described in the supplementary operating manual.
- As soon as the work is completed, re-install and/or re-activate any safety-relevant and protective devices. Before returning the product to service, observe all instructions on commissioning.

2.9 Unauthorised modes of operation

Never operate the lifting unit outside the limits stated in the data sheet and in the lifting unit's installation/operating manual.

The warranty relating to the operating reliability and safety of the lifting unit supplied is only valid if the equipment is used in accordance with its intended use.

3 Replacing the LevelControl Basic 2 BC Control Unit

	<div style="background-color: #e67e22; color: white; padding: 5px;">⚠ DANGER</div> <p>Incorrect connection of control unit Danger to life!</p> <ul style="list-style-type: none"> ▷ The control unit must be replaced by a trained electrician only. Any personnel intending to replace the control unit must have read and understood the operating manual of the lifting unit.
	<div style="background-color: #2980b9; color: white; padding: 5px;">NOTE</div> <p>Do not use these replacement instructions for customised units. Marking on name plate: UZX2.150D, X = customised unit.</p>

Proceed as follows to replace the LevelControl Basic 2 control unit for mini-Compacta/Compacta:

- ✓ The lifting unit is not overfilled.
 - ✓ The lifting unit has been taken out of service for the replacement procedure.
1. Pull the mains plug of the control unit installed. If the control unit has been connected without a plug: switch off the circuit breakers.
Take steps to ensure that the lifting unit cannot be inadvertently started!
 2. Open the control unit cover and make sure the control unit is de-energised.
 3. Disconnect the rechargeable battery.
 4. Clearly mark all conductors as required, disconnect them at the control unit and remove.
 5. Remove the control unit and fit the spare control unit.
 6. Run all conductors into the control unit again, connect them and verify correct wiring in accordance with the wiring diagram shown in the operating manual.
 7. Connect the rechargeable battery and close the control unit.
 8. Set all manual-0-automatic selector switches to "0".
 9. Check that the entire system can be operated safely.
 10. Connect the lifting unit to the mains and switch it on.
 11. Set the unit type as described below.
 12. Follow the commissioning/start-up procedure described in section 6 of the operating manual.
Also, comply with the instructions for setting the unit type as described below.
 13. Set all manual-0-automatic selector switches to "automatic".

Setting the unit type

	<div style="background-color: #2980b9; color: white; padding: 5px;">NOTE</div> <p>Always set the unit type before setting the inlet nozzle level.</p>
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Table 3: Control unit: Navigation keys

Key	Description
	Arrow keys (up/down): <ul style="list-style-type: none"> Move up/down in the menu options. Increase/decrease a numerical value
	Escape key: <ul style="list-style-type: none"> Cancel entry without saving it. When entering numbers: Go to the previous digit. Move up one menu level.
	OK key: <ul style="list-style-type: none"> Confirm entries. Confirm a menu selection. When entering numbers: Go to the next digit.

1. Switch on LevelControl Basic 2.
2. Press the "ESC" and "OK" keys simultaneously: P3.1.2.1 is displayed.
3. Press "OK": The display of the lifting unit starts to flash.
4. Refer to the lifting unit's name plate for the unit type (e.g. UZ10.450 D), look up the relevant setting in the table shown below (e.g. 39 for UZ10.450 D) and make the appropriate setting (e.g. 39) using the "Up" and "Down" keys of the control unit.
5. To confirm, press "OK".
6. Press "ESC" to exit parameterisation.

Table 4: Setting the unit type

Unit	Setting	Unit	Setting	Unit	Setting
U1.100 E	1	U5.300 D	18	UZ5.450 D	35
U1.100 D	2	UZ1.150 E	19	UZ3.900 D	36
U2.100 E	3	UZ1.150 D	20	UZ4.900 D	37
U2.100 D	4	UZ2.150 E	21	UZ5.900 D	38
U3.100 D	5	UZ2.150 D	22	UZ10.450 D	39
U4.100 D	6	UZ3.150 D	23	UZ11.450 D	40
U5.100 D	7	UZ4.150 D	24	UZ12.450 D	41
US1.100 E	8	UZ5.150 D	25	UZ13.450 D	42
US1.100 D	9	UZS1.150 E	26	UZ14.450 D	43
US2.100 E	10	UZS1.150 D	27	UZ15.450 D	44
US2.100 D	11	UZS2.150 E	28	UZ10.900 D	45
U1.150 E	12	UZS2.150 D	29	UZ11.900 D	46
U1.150 D	13	UZ3.300 D	30	UZ12.900 D	47
U2.150 E	14	UZ4.300 D	31	UZ13.900 D	48
U2.150 D	15	UZ5.300 D	32	UZ14.900 D	49
U3.300 D	16	UZ3.450 D	33	UZ15.900 D	50
U4.300 D	17	UZ4.450 D	34		

Setting the inlet nozzle level

Table 5: Control unit: Navigation keys

Key	Description
	Arrow keys (up/down): <ul style="list-style-type: none"> ▪ Move up/down in the menu options. ▪ Increase/decrease a numerical value
	Escape key: <ul style="list-style-type: none"> ▪ Cancel entry without saving it. ▪ When entering numbers: Go to the previous digit. ▪ Move up one menu level.
	OK key: <ul style="list-style-type: none"> ▪ Confirm entries. ▪ Confirm a menu selection. ▪ When entering numbers: Go to the next digit.

1. Press the "ESC" and "OK" keys simultaneously: P3.1.2.1 is displayed.
2. Press "Up" key: P3.1.2.2 is displayed.
3. Press "OK".
4. Select the **lowest** inlet nozzle used from the table below and look up the relevant setting (e.g. 1 for inlet nozzle level 180 mm). Then make the appropriate setting (e.g. 1) at the control unit, using the "Up" and "Down" keys.
5. To confirm the selected value press "OK".
6. Press "ESC" to exit parameterisation.

Table 6: Setting the inlet nozzle level

Inlet [mm]	Setting
180	1
250	2
320	3
700	4
Vertical	5



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