Automatic Grey Water Lifting Unit

AmaDrainer Box Mini

Replacing an Ama-Drainer N Submersible Motor Pump by an AmaDrainer 3 Submersible Motor Pump

Supplementary Operating Manual





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Contents

	GIO	ssary	4
1	Sup	plementary Operating Manual	5
		General	
		Installation at Site	
		1.2.1 Removing the Ama-Drainer N	
		1.2.2 Preparing the AmaDrainer 3	7
		1.2.3 Installing the AmaDrainer 3	(
	1.3	Commissioning / start-up	1
	1.4	Replacement kit	2



Glossary

Mat. No.

This identification number is composed of an 8-digit numerical code that uniquely identifies a product entered in SAP.



1 Supplementary Operating Manual

1.1 General

This supplementary operating manual accompanies the installation/operating manual. All information contained in the installation/operating manual must be observed.

Table 1: Relevant operating manuals

Type series		Reference number of the installation/operating manual					
	AmaDrainer Box Mini	2336.83					

AmaDrainer Box Mini models manufactured between 2011 and 2021 are fitted with Ama-Drainer N submersible motor pumps.

In 2021, the Ama-Drainer N type series was superseded by the AmaDrainer 3 type series.

This supplementary operating manual serves to replace an Ama-Drainer N submersible motor pump by an AmaDrainer 3 submersible motor pump.

Required for the replacement:

- Replacement kit (
 ⇒ Section 1.4, Page 12)
- AmaDrainer 301 submersible motor pump (AmaDrainer Box Mini) or AmaDrainer 301 C submersible motor pump (AmaDrainer Box Mini C)



1.2 Installation at Site

1.2.1 Removing the Ama-Drainer N



DANGER

Power supply not disconnected

Danger to life!

▶ Pull the mains plug and secure the pump against unintentional start-up.



WARNING

Fluids handled, consumables and supplies which are hot and/or pose a health hazard

Hazard to persons and the environment!

- ▷ Collect and properly dispose of flushing fluid and any fluid residues.
- ▶ Wear safety clothing and a protective mask if required.
- Description Observe all legal regulations on the disposal of fluids posing a health hazard.



NOTE

The sensors of the Ama-Drainer N are required for the AmaDrainer 3 replacement pump.

- ✓ The pump set has been de-energised and secured against unintentional start-up.
- 1. Undo three screws 900 with a suitable tool and take off cover 160 of the grey water lifting unit.
- 2. Undo pipe clamp 733 at the discharge connection and store the pipe clamp.
 - ⇒ The fluid handled contained in the discharge line will flow back into the collecting tank.
- 3. Pull hose 719 off the discharge connection.
- 4. If a plug has been fitted in the entry for the electric cable, remove and clean the plug.
- 5. Pull the power cable out through the cable entry.
- 6. Turn the pump set until it disengages from the locking devices.
- 7. Lift the pump set out of the collecting tank.
 - ⇒ The pump set will be automatically drained when it is taken out of the fluid handled.
- 8. Always flush the collecting tank if it has been used for handling noxious, hot or other hazardous fluids.
- 9. Remove float 81-45 from segment 59-49. Clean and store the float.



1.2.2 Preparing the AmaDrainer 3

- ✓ The replacement kit is available. (⇒ Section 1.4, Page 12)
- ✓ The AmaDrainer 301 submersible motor pump (AmaDrainer Box Mini) or AmaDrainer 301 C submersible motor pump (AmaDrainer Box Mini C) is available.
- ✓ Float 74-4 (incl. float lever) of the Ama-Drainer N is available.
- 1. Undo screw 900.3.



Fig. 1: Removing the automatic switchgear

- 2. Remove automatic switchgear 79-1.
- 3. If applicable, undo the bolts/screws (size 4×12 mm) at the suction strainer (2) and store them.
- 4. Pull the clamps (1) outwards. Remove and store the suction strainer (2).

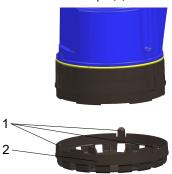


Fig. 2: Removing the suction strainer

- 5. Undo the threaded double union (3) from the discharge nozzle (5).
- 6. Remove and store the swing check valve (4).

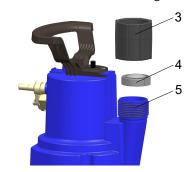


Fig. 3: Preparing the discharge nozzle

7. Undo screw 900.1.



Fig. 4: Removing the handle

- 8. Remove handle 576.
- 9. Fit the foot adapter (included in the replacement kit) to the pump foot with screws (size 4×12 mm). Tighten the screws hand-tight. Observe the position of the lock jaws (6).

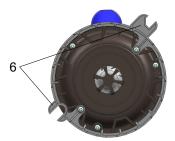


Fig. 5: Fitting the foot adapter

10. Fit the sensor guide (8) (included in the replacement kit) in the corresponding surface area (7) of the pump casing, opposite the discharge nozzle. Slide the sensor guide in from the top, exerting light pressure, until you can hear its snapfit connection engage at the foot adapter.

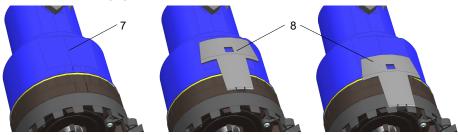


Fig. 6: Fitting the sensor guide

11. Fit segment 59-49 (included in the replacement kit) on the protrusion provided.

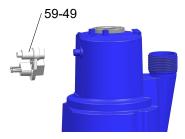


Fig. 7: Fitting the segment



12. Slide the anti-lift protection (9) (included in the replacement kit) over segment 59-49. Fasten it with the screw (size 3×16 mm). Tighten the screw hand-tight. Segment 59-49 has to be held firmly in place by the anti-lift protection (A) and still be able to move freely.

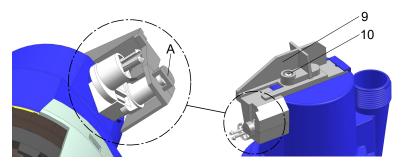


Fig. 8: Fitting the anti-lift protection

13. Clip the float 81-45 (of Ama-Drainer N) onto segment 59-49.

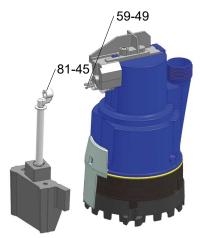


Fig. 9: Fitting the float incl. float lever



1.2.3 Installing the AmaDrainer 3

- ✓ Ama-Drainer N has been removed properly. (⇒ Section 1.2.1, Page 6)
- ✓ AmaDrainer 3 has been prepared properly. (⇒ Section 1.2.2, Page 7)
- ✓ The operating manual of the grey water lifting unit is available.
- 1. Engage the lock jaws of AmaDrainer 3 in the locking devices (1) of the collecting tank.

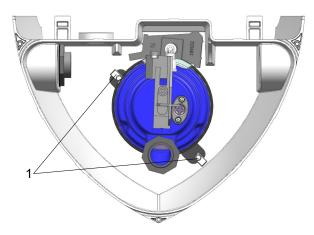


Fig. 10: Engaging the lock jaws in the locking devices

- 2. Place the previously removed swing check valve (3) of AmaDrainer 3 on the discharge nozzle. Make sure the swing check valve (3) opens upwards.
- 3. Screw fitting 720.01 (2) (included in the replacement kit) on the discharge nozzle. Tighten it hand-tight.

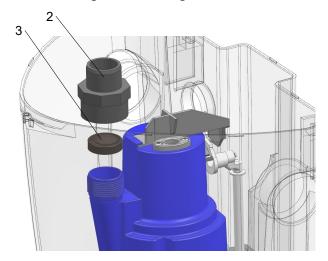


Fig. 11: Fitting the fitting incl. the previously removed swing check valve

4. Pre-assemble hoses 719 (included in the replacement kit) with the hose connection (A) and four pipe clamps 733. The screws of the pipe clamps in the middle have to be located at the bottom.



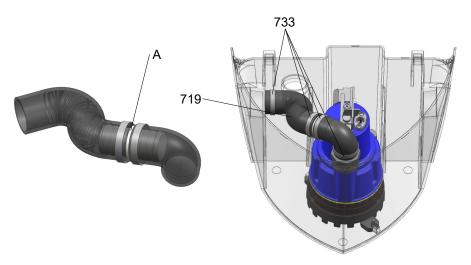


Fig. 12: Fitting the flexible tube (example)

- 5. Connect pre-assembled flexible tube to fitting 720.01 of the pump set and to the discharge line connection of the collecting tank.
- 6. Tighten the screws of pipe clamps 733 hand-tight.
- 7. Route and connect the power cable in accordance with the operating manual of the grey water lifting unit.
- 8. Mount the cover in accordance with the operating manual of the grey water lifting unit.
- 9. Carry out a test run for several start/stop cycles.

1.3 Commissioning / start-up

- ✓ The operating manual of the grey water lifting unit is available.
- 1. Commission / start up the grey water lifting unit in accordance with the operating manual.



1.4 Replacement kit

Table 2: Replacement kit

Item	Description	Connection	AmaDrainer		Mat. No.	[kg]		
			301	303	322	354		
P36	Replacement kit for AmaDrainer Box Mini	-	X ¹⁾	-	-	-	19066504	0,4
The same of the sa	For replacing an AmaDrainer N installed in AmaDrainer Box Mini by an AmaDrainer 3							
	Comprising: installation parts and discharge line							

Order the replacement kit in addition to the required AmaDrainer 3.

