ADLÅR

User Manual

Aurora II & FJORD I

6 | 10 | 14 kW

80 | 120 | 200 | 300 L

Welcome to your Adlår Heat Pump

Congratulations on choosing sustainable heating. To ensure that you get the most out of your heat pump, we have put together a concise and easy-to-use operating manual for you. Let's get started!

Maintenance Tips:
To keep your heat pump in top condition, simply follow a few guidelines. Clean the dirt filter regularly and keep the outside surface free of dirt and obstacles. For professional maintenance, the Adlår team is always ready to help you.

Need Help?
Do you have questions or are you stuck? Our support team are here to help. Feel free to contact us by phone or email, and we will be happy to help you.

Thank you for choosing the Adlår Heat Pump. We are confident that you will enjoy this user friendly and energy-efficeinct heating solution. Experience the comfort and sustainability that your heat pump offers all your round.

Warmest regards,
Team Adlår

Stay up to date:
Our heat pump is continuously being developed. Additional instructions and/or information are processed in the most current version of the manual. This is always available via our website or by scanning the QR code below on your device.

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GENERAL MAINTENANCE

1. Check water pressure

   Regularly check the water supply system to ensure that the pressure is holding around 1.7 bar. Low water flow can negatively affect the performance and reliability of the heat pump.

2. Clean the filter

   Make sure your filter is cleaned regularly to prevent damage to the heat pump due to dirt build-up or blockage.

3. Remove snow around the pump

   In case of snow; Keep the heat pump free of snow by shoveling or sweeping it away if necessary, so that the air flow is not obstructed.

4. Check the air inlet/outlet

   Make sure that the air inlet and outlet of the heat pump are free of dirt and other obstacles that could obstruct the air flow.

5. Proffessional Maintenance

   Have the evaporator, casing and water pipes of the heat pump cleaned by a professional. It is recommended to clean the water inlet filter at least once a year, and depending on the circumstances more often.

6. Check valves and condensation drain

   Regularly check that the safety valves are working correctly and ensure that the condensate can drain freely with gravity.

7. Leak Checks

   At least once a year, or more often if necessary, check for leaks in the water pipe and the refrigerant circuit. In the event of a leak, contact us immediately.

8. Maintenance by professionals

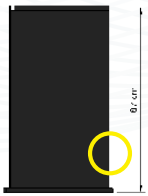
   The heat pump should only be serviced by a qualified professional. Disconnect the power supply and ensure a safe working environment (LOTO procedure) before working on the wiring.

9. Long periods of inactivity

   If the heat pump is not used for a long period of time, it is recommended to drain the system water, close the valves and disconnect the power supply.

RISK OF FREEZING

In the unlikely situation where the outside temperature drops below freezing point and there is no electricity for a long time, the heat pump must be shut off by closing the ball



valves in both the supply and return pipes (both mounted indoors) and the heat pump

must be drained using the drain at the bottom of the heat pump, in order to prevent any risk of the central heating water freezing.

FILLING & BLEEDING THE SYTEM

To ensure that your heating system functions optimally, it is important that it is filled and bled correctly. Follow the steps below carefully:

Required materials:

- Filling Loop (on the expansion)
- Bleeding key
- Pressure guage (on the expansion)

FILLING STEPS:

1. Filling Loop
   Open up the filling loop allowing water to enter the system until it reaches 1.7 bar.
2. Close the filling tap
   Once the pressure reaches between 1.5 and 2 bar you can close the filling loop to prevent overpressure.

BLEEDING STEPS:

Start with the lowest radiator in the system. Use a bleed key to open the bleed valve until water comes out without air bubbles. Then close the valve.

1. Bleed the radiators
   After bleeding, the pressure in the system may drop. Check the pressure gauge and top up if necessary to restore the correct pressure.
2. Repeat
   Work from the lowest to the highest radiator in the system. Make sure that all radiators are properly bled.
3. Switch System ON
   Switch the heating system back on and check that it starts up without any problems. Check the pressure again when the system is fully heated.

TRAPPED AIR:

If you experience trapped air in the system you may need to purge the system to release the air. To do this you need two people, one to fill the system and one to empty the system.

1. Empty the system - valve
   In your system there will be points you can release water out of the system. By attaching a hose to this point you can drain water.
2. Empty the system - heat pump
   By opening the side panel on your heat pump you will be able to see a red pressure release valve (bottom right). Turning this will release water out of the back of the heat pump.
3. Fill the system - filling loop
   As one person drains the system at the heat pump the other person should fill the system.

EXTRA TIP:

It is advisable to bleed your radiators regularly during the first few weeks after your install to ensure maximum performance.

MAINTENANCE AGREEMENT

To ensure that your heat pump performs optimally throughout its lifespan, regular maintenance is essential. Our maintenance agreement not only provides peace of mind, but also a guarantee that your heat pump system will continue to operate efficiently, save energy and maximise its lifespan. Adlår Castra has developed a service programme specifically designed for our heat pumps for this purpose. By choosing our Gold or Platinum maintenance programme, you will benefit from:

Preventative Maintenance:
Regular inspections and maintenance to detect and fix potential problems before they become bigger.

Performance Optimisation:
Adjusting your heat pump system to ensure maximum efficiency and comfort, regardless of the weather conditions.

Energy Savings:
A well-maintained heat pump uses less energy, resulting in lower energy bills and a reduced environmental impact.

Longer Lifespan:
Regular maintenance minimises wear and tear and other problems, extending the lifespan of your heat pump and saving you money on expensive replacements.

Priority Service:
As part of our maintenance program, you will receive priority scheduling of service visits and repairs, so you can get back to enjoying comfort quickly.

Our dedicated technicians are highly trained and experienced in servicing heat pump systems. With their expertise, you can rest assured that your system is in good hands.

ERRORCODE	DESCRIPTION	CAUSE
E01	Protection against incorrectly connected phases.	Phase power sequence error
E02	Power supply missing a phase	Power supply is missing a phase
E03	External water flow fault	1. Circulation pump has failed or water system is blocked; 2. Water flow switch defective or mounted in the opposite direction 3. Insufficient circulation pump lift capacity 4. Circulation pump rotates in the opposite direction 5. Excessive air in the system
E04	Abnormal communication between the main control board and the external module	Check communication link
E05	High pressure switch 1 fault	1. High voltage switch defective or system blocked; 2. Excessive refrigerant 3. Fan not working properly, or water circulation is abnormal; 4. Air or other objects are mixed in the cooling system 5. Improper balance in the water heat exchanger
E06	Low pressure switch 1 fault	1. Low voltage switch error 2. Lack of refrigerant 3. Fan not working properly 4. Blockage in cooling system
E07	High pressure switch 2 fault	See E05
E08	Low pressure switch 2 fault	See E06
E10	Internal water flow fault	See E03
E11	Limited time protection	Enter the boot password
E12	Exhaust gas temperature 1 too high	Lack of coolant in the fluorine circuit system or sensor damage
E13	Exhaust gas temperature 2 too high	Lack of coolant in the fluorine circuit system or sensor damage
E14	Hot water tank temperature fault	Disconnected or damaged sensor/motherboard
E15	Inlet water temperature sensor fault	Disconnected or damaged sensor/motherboard
E16	Spiral sensor 1 fault	Disconnected or damaged sensor/motherboard
E17	Spiral sensor 2 fault	Disconnected or damaged sensor/motherboard
E18	Exhaust gas sensor 1 fault	Disconnected or damaged sensor/motherboard
E19	Exhaust gas sensor 2 fault	Disconnected or damaged sensor/motherboard
E20	Internal temperature sensor fault	Disconnected or damaged sensor/motherboard
E21	Defecte omgevingssensor	Disconnected or damaged sensor/motherboard

ERRORCODE	DESCRIPTION	CAUSE
E22	Return water sensor fault	Disconnected or damaged sensor/motherboard
E23	Cooling / subcooling protection	Normal anti-freeze protection
E24	Board switching temperature error	Damaged sensor or motherboard
E25	Water level switch failure	Damage to water level sensor or motherboard
E26	Antifreeze sensor failure	Disconnected or damaged sensor/motherboard
E27	Water outlet sensor failure	Disconnected or damaged sensor/motherboard
E28	Reserve	Reserve
E29	Return air sensor 1 error	Disconnected or damaged sensor/motherboard
E30	Return air sensor 2 error	Disconnected or damaged sensor/motherboard
E31	Water pressure switch fault	Storing van de waterdrukschakelaar
E32	Protection against too high water temperature	Insufficient water flow or a damaged sensor
E33	High pressure sensor 1 error	Disconnected or damaged sensor/motherboard
E34	Low pressure sensor 2 error	Disconnected or damaged sensor/motherboard
E35	Reserve	Reserve
E36	Reserve	Reserve
E37	Abnormal temperature difference protection between inlet and outlet water	Insufficient water flow
E38	DC fan 1 error	Fan Drive or Motor Damage
E39	DC fan 2 error	Fan Drive or Motor Damage
E40	DC fan 3 error	Fan Drive or Motor Damage
E41	DC fan 4 error	Fan Drive or Motor Damage
E42	Cooling coil sensor 1 error	Disconnected or damaged sensor/motherboard
E43	Cooling coil sensor 2 error	Disconnected or damaged sensor/motherboard
E44	Protection against low ambient temperature	Standaard bescherming
E45	High pressure 2 sensor error	Disconnected or damaged sensor/motherboard
E46	Low pressure 2 sensor error	Disconnected or damaged sensor/motherboard

ERRORCODE	DESCRIPTION	CAUSE
E47	Economizer Inlet sensor 1 error	Disconnected or damaged sensor/motherboard
E48	Economizer Inlet sensor 2 error	Disconnected or damaged sensor/motherboard
E49	Economizer Outlet sensor 1 error	Disconnected or damaged sensor/motherboard
E50	Economizer Outet sensor 2 error	Disconnected or damaged sensor/motherboard
E51	High pressure 1 overvoltage protection	See E05
E52	Low pressure 1 undervoltage protection	See E06
E53	High pressure 2 overvoltage protection	See E05
E54	Low pressure 2 undervoltage protection	See E06
E55	PCB Board Communication Failure	Bad or broken signal line contact
E80	Supply fault	Single-phase power supply detects a three-phase electrical signal.
E88	Inverter Module 1 Protection	Compressor or compressor driver damaged
E89	Inverter Module 2 Protection	Compressor or compressor driver damaged
E94	Water Pump Feedback Error	Damaged DC pump or bad signal line contact
E96	Abnormal Communication Between Compressor 1 Driver and Main Control Board	Bad or broken signal line contact
E97	Abnormal Communication Between Compressor 2 Driver and Main Control Board	Bad or broken signal line contact
E98	Abnormal Communication Between Fan Motor 1 Driver and Main Control Board	Bad or broken signal line contact
E99	Abnormal Communication Between Fan Motor 2 Driver and Main Control Board	Bad or broken signal line contact

IMPORTANT: Always check your radiators and zone valves as an initial check. Closed valves and TRVs are the most likely cause of errors. As a first step in resolving errors you should first open all your radiators and valves fully to ensure good water flow through the system.

If some radiators aren't getting hot, please refer to online radiator bleeding instructions and follow the filling steps. See "General Maintenance".

COMMON ERRORS

Below is a list of the most common error codes with an explanation of what they mean and how to solve them:

E37 - DIFFERENCE BETWEEN SUPPLY AND RETURN TOO HIGH

The delta T is too high between the water coming into the heat pump and water coming out of the heat pump.

1. Check your live data. Press (v) for 5 seconds to see the “Live Data” or view “Query” on your APP .

Use the up button to move through the parameters

2. Move to number “25” or check “Water flow rate” in your APP. The number in the bottom right should read >9.

Common reasons for the flow rate dropping:

1. Not enough water in the system (fill up the system at the filling loop)
2. Air in the system (see removing air from system section)
3. Radiator or zone valves closing (reopen valves to see if flow rate increases)

IMPORTANT: Closing TRV valves on radiators and/or completely shutting down all your valves without a buffer tank installed will cause this error. It is important to ensure you are in the right heat curve in this scenario, rather than opening and closing zones, as previously on boiler based systems.

Closing down zones or valves one by one and then monitoring the flow rate is advisable first step in understanding how your home is plummed and the impact on flow individual zones have on the whole system.

Parameters to change:
Parameters should only be changed after consultation with the Adlår service team.

PAREMETER	DESCRIPTION	DEAFULT SETTING
P260	Maximum circulation pump speed	+20
P116	Regulation based on inlet/outlet	Inlet (0)
P23	Maximum DeltaT	15°C
P99	DeltaT in modulation	5
P100	Minimum circulation speed	+20
P146	Circulation flow setting	+20
P260	Maximum circulation pump speed	99
P261	Circulation when set point reached	+20

Adjustments should only be made step-by-step to reduce pump speeds and improve efficiency.

E51 - HEAT PUMP CANNOT GET RID OF HEAT

With error E51, there is insufficient flow through the heat exchanger (condenser), which means the heat pump cannot get rid of its heat.

Common reasons for the flow rate dropping:

1. Not enough water in the system (fill up the system at the filling loop)
2. Air in the system (see removing air from system section)
3. Radiator or zone valves closing (reopen valves to see if flow rate increases)
4. Pump speed too low
5. Blockage in the system
6. Circulation pump blockage

It is possible that the circulation pump is stuck under this error code, you can fix this by first switching off the heat pump (isolator switch down). Use a cross screwdriver in the front of the circulation pump to manually rotate the blades and unblock the pump.

This video can be used as a reference.

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Product Information:
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