



Operating Instructions – Alde Compact 3020 HE



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Install an Alde Compact 3020 High Efficiency together with a Truma Aventa Comfort AC and get a fully automatic climate system. The panel already supports the automatic climate function.



OPERATING INSTRUCTIONS ALDE COMPACT 3020 HIGH EFFICIENCY

WARNING! Alde can accept no liability whatsoever for damage or injury resulting from failure to observe these instructions. Please read these instructions carefully before using the boiler for the first time.

See separate directions for installation.

SPECIFIED USE

These instructions are approved for the Alde 3020 Compact HE fitted in caravans, motorhomes or buildings in accordance with CE 0402 no. SC0653-13, and have the E5 mark for installation in vehicles in accordance with ECE R122, no. 00 001 and R10, no. 04 166, for use in central heating and hot water systems.

1. CHECKING THE HEATING SYSTEM BEFORE USE.

- **Check the glycol fluid level** in the expansion tank. It should be approx. 1 cm over the min line when the system is cold. Air bubbles may occur in new vehicles that will disappear when you start using the system and then the level in the expansion tank will decrease.
Warning! The boiler must not be started if there is no ethylene glycol fluid in the system.
Warning! Do not mix different types of glycol as this could cause the glycol fluid to coagulate. Refer to section 12 for more information on glycol fluid.
- **Ensure that the flue** is kept clear of snow and ice, etc., as the intake air to the boiler enters through the flue during LPG operation. Also check that no other objects are hindering or disturbing exhaust and supply air from the flue.
Tip! A flue extension (part no. 3000 320) is available for the roof flue that is recommended for camping in winter.
Warning! Make sure the flue does not end up in a confined space, e.g. the awning, as this can lead to risk of carbon dioxide poisoning.
- **Check supply and exhaust air intake**, the vehicle is often equipped with supply and exhaust air valves (refer to vehicle instructions) that must not be blocked as this will impair the efficiency of the heating system and air quality, which can lead to carbon monoxide poisoning.
- **Check air circulation**, make sure there is nothing preventing air circulation (convection). In order to exploit the water-borne heat design to the full, it is important that air can circulate freely under bunks and behind backrests and wall-mounted cabinets. If the vehicle has a fitted carpet, ensure that the carpet does not obstruct the air supply to the convectors. It is just as important that cushions or blankets do not obstruct and hinder the air circulation behind backrests.

2. THE FIRST TIME YOU START THE HEATING SYSTEM.

- **Hot water heater** Always flush the water heater before using for the first time or if it has not been used for a long period. Then fill the water heater with water, refer to separate instructions for the vehicle. The boiler can equally well be used without any freshwater in the heater.
NB! Hot water from the boiler is not intended as drinking water or for food making.
Warning! Fresh water in the heater should always be drained when there is risk of frost or there is a risk of the boiler freezing. The warranty does not cover frost damage. A frost guard can be installed to reduce the risk of freezing.
NB! Note that the water in the water heater can be hot.
- Carry out a check as in item 1 (Checking the heating system before use).
- Start the boiler as described in section 3.
- Set the clock, refer to section 7:1 item 2.
- Once the heating system has been started for the first time or when accessories have been installed, ensure the correct accessories have been checked in the list of installed functions, refer to section 11.
- Set the desired operating mode (gas and/or electric) and the desired interior temperature, refer to sections 5:1, 5:3 and 5:4.
The LPG boiler and electric elements may be operated simultaneously.

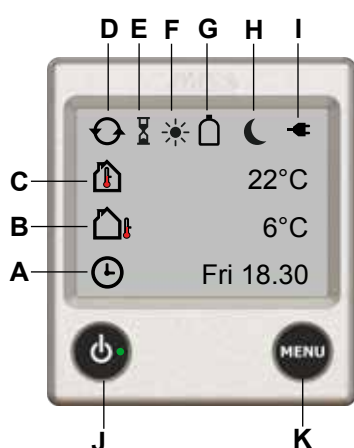
3. STARTING THE BOILER

1. The control panel and the boiler are switched off.
2. To start the boiler, press the On/Off button and the start-up display appears. The boiler starts with the last selected settings.



4. STANDBY

NB! If "Standb. Screen" in the Backlight menu is set to Dark, the display goes out when it enters standby mode but lights up if you touch the screen. See settings under section 1, item 10.



- A. Clock.** The clock shows the day and time (if activated). To set the clock, see under section 1 item 2.
- B. *Exterior temperature.** The outside temperature is displayed.
- C. Interior temperature.** The inside temperature is displayed.
- D. Circulation pump.** This symbol is displayed when the pump is in operation.
- E. Automatic boiler start.** This symbol is displayed when the function is activated in accordance with section 7:1 item 1.
- F. Day auto.** This symbol is displayed when the function is activated and the time is within the set time period in accordance with section 7:1 item 5.
- G. *LPG bottle full/empty.** This symbol is displayed when the sensor on DuoControl is connected and activated in accordance with section 9:14 item 18. If EisEX is installed, the symbols for the set mode are displayed along with the bottle symbol.
- H. Night auto.** This symbol is displayed when the function is activated and the time is within the set time period in accordance with section 7:1 item 4.
- I. 230 volt.** This symbol is displayed when a 230 V power supply is connected to the boiler.
- J. On/Off button.** Main switch for boiler.
- K. MENU button.** Button for the settings menu.

5. SETTINGS MENU

Launch the settings menu by pressing the MENU button. The backlighting comes on and the functions that can be set are displayed. The control panel will go to standby automatically after 30 seconds if the screen has not been touched.

1. Control panel in standby mode.



2. Control panel showing the settings menu.



- Activated functions, see section 6
- Tools menu, see section 7.

5:1 SET THE DESIRED TEMPERATURE

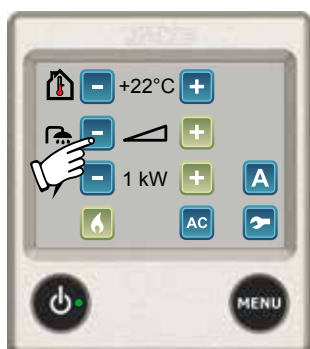
The temperature can be set between +5°C and +30°C in increments of 0.5°C. **NB! If day or night auto is active, refer to section 7:1 items 4 and 5, temperature settings cannot be made. The plus and minus characters will then be grey.**



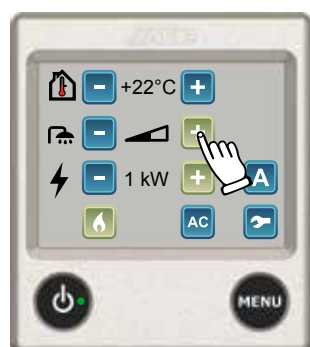
1. The temperature displayed is the temperature which is currently set.
2. Increase the temperature by pressing the + button. Reduce the temperature by pressing the – button.
3. The settings are now complete and the boiler will work at the set temperature.

5:2 DOMESTIC HOT WATER

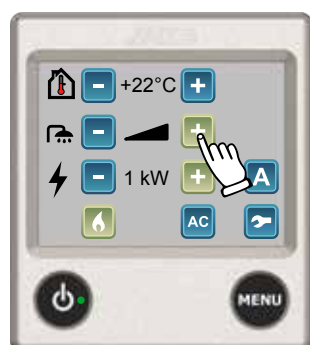
The Alde boiler stores 8.4 Litres of hot water as standard. If the hot water cylinder is empty, the air is heated but no damage can result. There are three different settings options for controlling the boiler in terms of hot water, no hot water, normal operation and more hot water requirements.



1. **No warm water.** If warm water is not needed, press –.(symbol becomes empty). **NB! If day or night auto is active, refer to section 7:1 items 4 and 5, and the hot water has been turned off there, the hot water settings cannot be made. The plus and minus characters will then be grey.**



2. **Normal operation.** If there is freshwater in the heater and hot water is required, press the + button (the symbol will then show half-shaded). **NB! If function 7:1 item 12 Pump operation has been set to Cont, this option cannot be selected.**



3. **More hot water.** If you need more hot water, you can temporarily increase the water temperature to around 65°C. Press the + button so that the symbol shows fully shaded (black). The boiler returns to normal operation after 30 minutes. Once you have selected more hot water, the circulation pump stops. **NB! If function 7:1 item 12 Pump operation has been set to Cont, the continuous pump operation is put out of action for 30 minutes but then returns to continuous pump operation.**

Info! When hot water only is required, during the summer for instance when there is no need for heating, no settings need be made; the boiler looks after this function automatically.

5:3 HEATING WITH ELECTRICITY ⚡

Proceed as follows to activate heating with electricity. The more power (wattage) you select, the quicker heating will take. The priority of electricity or gas can be set if both are selected, see section 7:1 item 8.

The boiler does not use a higher output than is required, even if 3kW has been selected.



1. Use + or – to start and toggle between the various power modes (Off, 1 kW, 2 kW or 3 kW). The set value will be displayed on the screen. The activated mode is indicated by the + symbol changing colour to green. If a *load monitor is installed and set, the boiler will not use more electricity than it is capable of even if 3 kW is selected.
2. The settings are now complete and the boiler is working at the set temperature (point 4).
3. To switch off electrical operation, browse down to Off.

5:4 HEATING WITH GAS 🔥

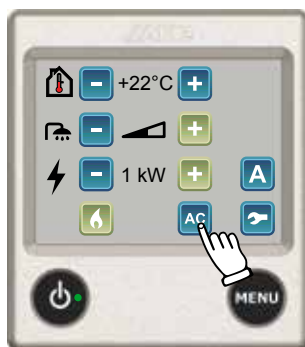
Proceed as follows to activate heating with gas. The priority of electricity or gas can be set if both are selected, see section 7:1 item 8.



1. Start LPG operation by pressing the LPG flame. The LPG symbol is activated and changes colour to green.
2. The settings are now complete and the boiler will work at the set temperature.
3. Press the LPG flame to switch off LPG operation, the symbol turns blue.

5:5 *FULLY AUTOMATIC CLIMATE CONTROL (ACC)

If you have a Truma Aventa Comfort installed and it is connected to the panel, the AC button will be visible and you can control the AC from the panel. This function enables a fully automatic climate control of heating, cooling and warm water.



1. Set the desired temperature, see section 5:1.
2. Then press the AC button, which turns green and the AC function is on but not necessarily in operation. If gas and/or electricity is on, the AC and boiler will work to attain the set temperature irrespective of whether heat or cooling is needed in the vehicle.
3. Press the AC button to switch off AC operation, the symbol turns blue.

NB! Note that the temperature sensor used when the fully automatic climate control is in operation should be located so that it is affected equally by the heat from the Alde heating system and the air from the AC.

In case a high degree of heating is required, AC can also work as a heat source. There is, however, a lower temperature limit that limits AC providing heat.

6. ACTIVATED FUNCTIONS A

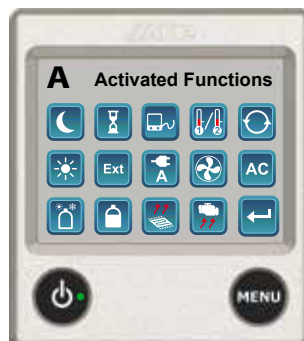
Pressing A (see figure 1) will enable continuing to activated functions (see figure 2). This screen shows the various functions that are activated. From here, you can go directly to each activated function and make new settings.

NB! A symbol is only visible if any of the functions shown below are activated and/or installed.

Figure 1



Figure 2

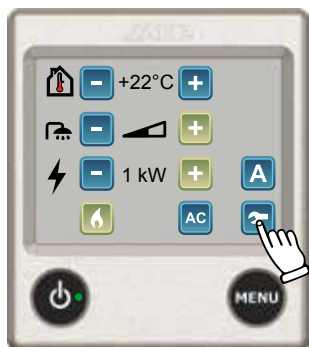


The following is a description of what the different symbols in the menu (Activated Functions) mean when shown.

	Night auto is activated. However, it does not have to be within the time/day setting.		Load monitor is connected and set to limited current.
	Automatic boiler start is activated. However, it does not have to be within the time setting.		Booster is on.
	This function is used in cases where an external main panel can be used to operate some of the boiler functions or if *Alde Smart Control is installed.		AC is on in the panel but it is not necessarily in operation.
	Displayed if one or two external room sensors are connected.		EisEx is installed but not necessarily turned on.
	Circulation pump in continuous operation. NB! This function limits the supply of hot water, particularly when there is a low heating requirement.		DuoControl or DuoComfort is installed and connected to Alde Compact 3020 HE
	Day auto is activated. However, it does not have to be within the time/day setting.		Timer for engine heater is set but not necessarily within the set time/day.
	The boiler is set to be started with External start but has not necessarily been activated.		Floor heating is in operation.

7. TOOLS MENU

The tools menu can be accessed from the settings menu. The other functions of the control panel can be changed from the tools menu.

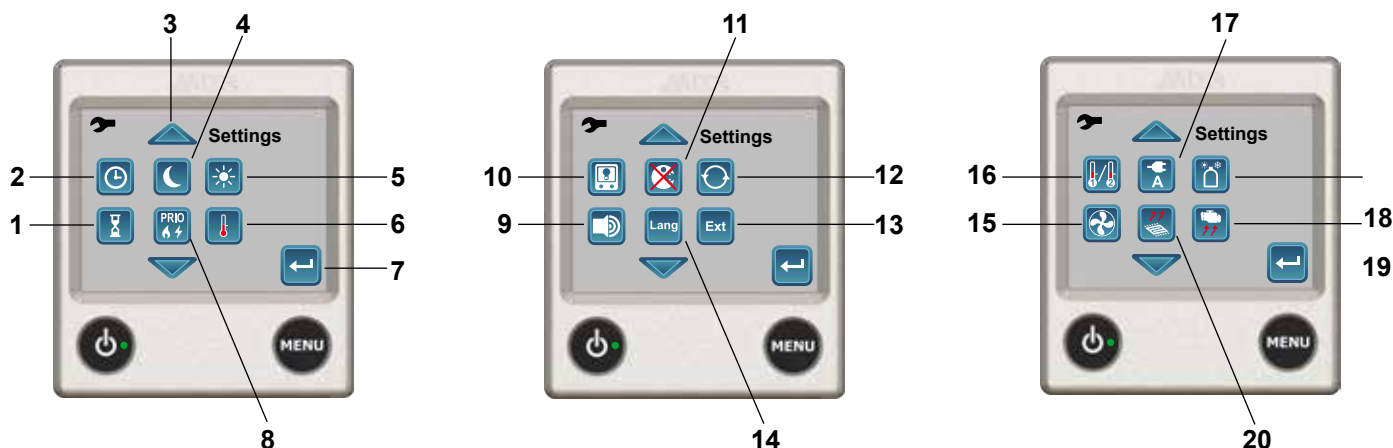


1. Control panel showing the settings menu.
Press the tool symbol to access the tools menu.

7:1 TOOLS MENU – FUNCTIONS

The following tools are available from the tools menu.

A grey function button means the function has not been installed and/or activated.



1. Automatic boiler start

This function is used to start the boiler automatically at a later time. On automatic start, the boiler operates for 24 hours and then stops. After that, automatic start is repeated at the same time and on the same day each week for as long as the function is activated. The boiler must be turned off for automatic start to work.



2. Clock

The clock must be set if engine heater start, night and/or day auto and automatic start is to work. If 12 V power is lost, the clock will stop and will no longer be displayed. Installing battery backup will prevent this happening.



3. Arrow symbols

Use the up/down arrow symbols to browse between the various tool fields. You can exit the tools menu at any time using the MENU button or return button.



4. Night auto

This function is used to automatically change certain functions during the night. This is then done each week during the selected period. You can select every day or one particular day each week. The functions that can be changed during the night are:

- Temperature change
- *Change of room sensor
- Invert display
- Turn off warm water
- *AC in quiet mode



5. Day auto

This function is used to automatically change certain functions, e.g if you are away a certain time in the day. This is then done each week during the selected period. You can select every day or one particular day each week. The functions that can be changed during the day are:

- Temperature change
- Turn off warm water



6. Offset (temperature adjustment)

This function calibrates the temperature on the panel $\pm 5^{\circ}\text{C}$ if you notice that the temperature is not the same as the temperature shown on the panel.

Applies also to display of external temperature.



7. Return

To return to the previous menu, press this symbol.



8. Prio setting

With this function you can choose to prioritise (select) electricity or gas as the main alternative.



9. Button sound

This function turns button sounds on and off.



10. Backlighting

Standb. Screen can be set to three different modes, dark, bright and invert.

Dark: Used to turn of screen backlight. The screen turns off (goes dark) in Standby. Pressing the screen or the menu button while standby is active will light up the screen but it will return to dark again after 30 seconds unless controlled from the panel.

Bright: Used to obtain backlight while the screen is in standby.

Invert: Used to obtain inverted screen backlight while it is in standby. Standby is activated automatically after 30 seconds if the panel is not touched.

The Brightness of the screen's working mode can be adjusted between 1-3.



11. Automatic temperature increase (legionella)

The boiler will start at 02.00 in the morning (if the clock is set) and run as indicated for "More hot water" for 30 minutes (see section 5.2).

This is to reduce the risk of legionella.



12. Circulation pump settings

Pump selection: Choice of pump.



*12 V pump, pump capacity is variably adjustable with a potentiometer on the back of the pump (1-5), normal mode is 2, which works in most cases. Mounted on the boiler.



*PWM controlled 12 V pump, this is a variable speed controlled pump that can be set to five different levels (1-5) via the panel, normal level is 2, which works in most cases. Mounted on the boiler



*Extra 12 V pump, often located in the expansion tank.



*230 V pump. Often used in combination with an extra 12 V pump located in the expansion tank.

If you have both a 230 V pump and an extra 12 V pump installed, you will also be able to select AUTO mode from the menu.

Auto: In this mode, the *230 V pump will work if 230 V is connected and the extra 12 V pump is activated if 230 V is disconnected.

Pump setting: (Setting)

Cont: With this function selected the pump is permanently on. (NB. This function limits the supply of hot water, particularly when there is a low heating requirement).

Therm: With this function selected the pump is controlled by the panel/room sensor. This is the normal operating mode for heating the vehicle and obtaining a normal supply of hot water.



13. External start

This function is used when starting the boiler externally. When an external start has been activated, the panel should be turned off. External start has three modes: Off, Ext and 230 V. The function is turned off in Off mode.

***Ext.** This function is used when starting the boiler through an external signal. When the EXT function has been activated, the control panel's on/off button must be turned off but 12 V must be connected (vehicle's main switch on). Before turning off the control panel with the on/off button, set the parameters/functions that you want the boiler to have when it starts.

NB! In order to use this function, an accessory must be installed that can use external start.

***230 V.** This function is used in connection with starting the boiler when connection of 230 V to vehicle takes place externally. When the 230 V function has been activated, the control panel's on/off button must be turned off but 12 V must be connected (vehicle's main switch on). Before turning off the control panel with the on/off button, set the parameters/functions that you want the boiler to have when it starts (230 V connected). Certain vehicles can be equipped with their own solution, *caravan site connector.



14. Language

This function is used to reset the screen between different languages. Available languages are English, French and German. However, the service menu is only available in English (see section 8).



15.*Booster

This function enables setting two different speeds for one booster. Fan start and stop is controlled from the boiler. If the boiler's circulation pump starts up, the fan on the booster will as well. When the circulation pump stops, the fan will continue to run for another six minutes and also stop unless the circulation pump has started again, i.e. giving automatic control of the booster fan.



16.*Setting room sensor

With this function you can choose the temperature to be active. You can set whether the sensor located in the accommodation part, the sleeping part or in the panel is to be active. If Auto is selected, the sensor in the panel is active and will automatically switch to room sensor (sofa and/or bed) if one is connected. If two room sensors are connected, it will be the one for the accommodation part that is active (sofa).



17.*Load monitor

This function is used to prevent the fuses for a 230 V power supply being overloaded. If the total current consumption of the vehicle exceeds the set value, the electrical output of the boiler will be reduced automatically. This also applies to Truma Comfort AC if connected to the panel. Due to voltage variations and tolerances, you can choose different levels of regulation (5-17 A). If the fuse blows, choose a lower setting.

NB! AC must be turned on from the panel and not via the AC remote control if it is to work with the load monitor.



18.*EisEX, 12 V defroster for gas regulator

This is a little heating element that prevents ice forming in the regulator in winter (for Mono Control CS, DuoControl CS, DuoControl and DuoComfort). If DuoControl CS or DuoControl is installed and connected, symbols will be displayed together with the gas bottle symbol in the rest menu to show what has been selected.

Snowflake = EisEX ON
Sun = EisEX OFF



19.*Engine heater

This function makes it possible to use the heating system to heat the engine in a motor caravan, bus, etc.

Engine heater start: Press the button marked Off, the text will change to On and the button will turn green. Then set the required starting time and day. Engine heating starts at the set time and day, heating is then active for 60 minutes and will stop automatically. **NB! Note that the clock in the panel must be set if the function is to work as desired.**



20.*Floor heating

This function makes it possible to control the operation of the floor heating pump in a water-borne floor heating system. Floor heating pump operation starts at the same time as the heating system's circulation pump starts. The floor heating control has a current-saving function that means the floor heating pump is in operation for 5 min and then stationary for 5 min in intervals as long as heating is required.

Mode: Press the arrows so that Delay or cont. is activated. The floor heating is on in these two modes. The floor heating is turned off in Off mode.

Delay: The floor heating pump runs for a certain time after the circulation pump has stopped. This Delay can be set to 15 min, 30 min or 120 min. **NB! It may get hotter than required in the vehicle In cont. mode as heat regulation has been rendered useless!**

To exit the tools menu, press Return or Menu.

8. SERVICE MENU

The Service menu is accessed by pressing Service (see figure 1). This function shows values from the boiler on the screen (figures 2 and 3). The values are updated every second.

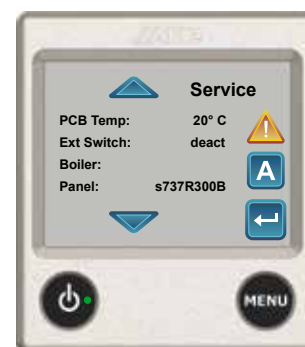
Figure 1



Figure 2



Figure 3



9. ERROR MESSAGES AND TROUBLESHOOTING

Figure 1

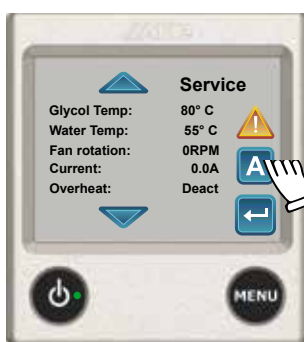


Figure 2



You can access the Error Log from the Service menu by pressing the warning triangle, see Figure 1. The 20 latest error messages are shown here. Browse up and down with the arrows. If a fault occurs in the system, the cause will be shown on the display. This is only displayed when the control panel is in standby mode. To acknowledge the fault and restart, disconnect the panel from the boiler and also pull out the 230 V cable if *AC is connected together with Alde Compact 3020 HE.

Low battery: 12 V supply to boiler has dropped below 10.5 V, possibly causing system brownout. Automatically clears when 12 V supply reaches 11 V.

Fan failure: Combustion fan speed too low. Bearing may be stiff after a period of disuse. Automatically clears after 5 mins. Please try again.

Gas failure: Out of gas or gas is not igniting. Check the gas cylinder is full. Try a different gas cylinder, ensuring it is propane gas. Check the gas regulator and any isolation valves are open and not frozen

Overheat or red blue fail: Bleed the system of air. Check the fluid level in the expansion tank. It should be 1 cm above Min mark when cool. Check the circulation pump is responding. Wait 15 mins for the fluid to cool down.

Overheat PCB: Failsafe in boiler has triggered. Check the fluid level in the expansion tank. It should be 1 cm above the Min mark when cool. Check the boiler compartment is ventilated, and that the vents are unobstructed. Do not place storage in the boiler compartment.

Window open: Optional window sensor has triggered, gas heating is suspended. Automatically clears and gas heating resumes when window is closed.

Connection failure: Break in comms between Alde control panel and daisy-chained third party control panel. Check the cable between the Alde control panel and third party control panel.

Connection fail ext: Loose connection between Alde control panel and boiler. Unplug cable at the control panel and boiler, then carefully plug back in. Check there is slack on the cable at the control panel, but not excessive weight from free-hanging/unmanaged cable

Panel failure 1 and 2: Moisture is trapped in the control panel. Remove the Alde control panel from the vehicle and air in a warm, dry place overnight.

No match Heater/Panel: Control panel is incompatible with boiler PCB. Check control panel part number. Control panel 3020-013 is for 3020 A-series boiler, 3020-113 is for 3020 HE-series boiler.

If problems persist, please contact Alde, or your dealer or installer.

For our frequently asked questions, or download all instruction manuals, please visit our web site at: www.alde.co.uk

9:1 TROUBLESHOOTING

Always start by checking any error messages.

The boiler will not start on gas

- No LPG?
- Is the main tap fully open?
- Check that the type of LPG used is suitable for the prevailing outdoor temperature. Butane is unsuitable for use at temperatures lower than +10°C. Use propane instead.
- If the boiler has not been operated for some time, or if the LPG cylinder is new, it may take longer than normal to light the boiler.
- Check that power is being supplied to the boiler (> 11 V).
- Check that the fuse for the boiler has not blown.
- Check that the electrical connections on the boiler are secure and tight.
- If none of the above helps, contact a service workshop.

The electric element is not working

- Check that power (230 V) is being supplied to the electric element.
- Check that the relays fitted to the boiler come on (a slight click can be heard from the relays when the electric element is switched on at the control panel).
- If none of the above helps, contact a service workshop.

*ACC not working

- If the desired temperature cannot be reached with AC cooling, it may be because something has disturbed the AC calibration. Turn off the AC with the AC button on the Alde panel and then on again. It may also be due to insufficient cooling capacity.

10. RESETTING

The panel can be reset to its factory setting by pressing **Reset**. After resetting, the panel will be set as follows: Boiler – Off mode; electrical operation – 1 kW; LPG heating – On mode; interior temperature – 22°C. Other functions are switched off. NB! The functions that are checked under Installed functions (see section 11) will not be affected by Reset. Error messages in the error log are also affected by reset.



11. ACTIVATING INSTALLED FUNCTIONS

The first time you use the heating system, check that the correct accessories/functions are activated. This also applies when new accessories/functions have been added to the heating system. Activate accessories/functions by pressing Installed Accessories (see figure 1). This will take you to the activation menu for accessories/functions where a check in each function/accessory will activate it.

Figure 1



Figure 2

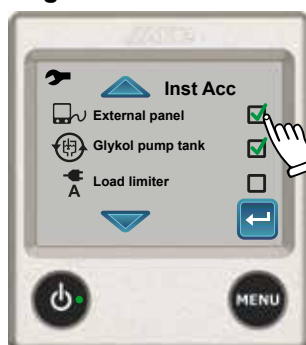


Figure 3



Figure 4

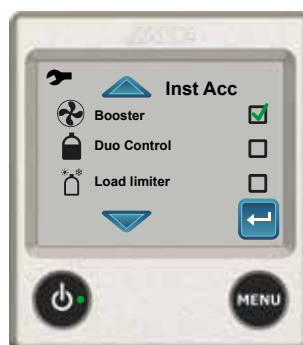
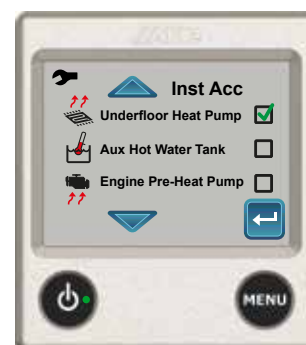


Figure 5



The respective box should be checked if you have:



Connected an external panel or Alde Smart Control.



Connected an extra 12 V pump, often located in the expansion tank.



Connected a load monitor.



Connected a 12 V pump that is variably adjustable with a potentiometer knob.



Connected a PWM controlled 12 V pump with variable speed control that is set from the panel.



Connected a 230 V Pump.



Connected a Booster.



Connected a bottle changer (DuoComfort or DuoControl).



Connected a defroster (EisEx).



Connected a 12 V pump to the floor heating.



Connected an extra heater to increase warm water capacity.



Connected a 12 V pump for heating the vehicle's engine through the Alde heating system.

12. CARE AND MAINTENANCE

- **Checking and changing glycol mixture.** Regularly check the heating system's fluid level in the expansion tank. The level should be about 1 cm above the minimum mark, with the heating system cold. The heating system should be filled with a fluid mixture made up from water and ethylene glycol. For best results, use high-quality ready-mixed ethylene glycol (with inhibitors) intended for use in aluminium heating systems. The proportions when using concentrated ethylene glycol are 60% distilled water or water free from salts and 40% ethylene glycol. If the heating system is exposed to temperatures lower than -25°C, a higher ethylene glycol content must be used, but not more than 50%. **Glycol mixture must be changed every other year** as properties such as corrosion protection will deteriorate. If Alde Premium Antifreeze is used, the change interval can be extended to five years under normal operating conditions. If the fluid level is too low, the ethylene glycol content must be checked before topping up. This is to prevent excessive concentration of ethylene glycol in the mixture. When topping up, use the same quality of ethylene glycol mixture already in the system, alternatively use Alde Premium Antifreeze, which is compatible with most ethylene glycol brands on the market. **NB! Any vessels used for handling or mixing the liquid must be spotlessly clean, and the pipes in the heating system must be free of contamination. This is to prevent the growth of bacteria and corrosion in the system. The boiler must not be started if there is no ethylene glycol fluid in the system.**
- **Filling glycol.** The system is filled through the expansion tank, Either manually or using the Alde filling pump (1900811), which both tops up and bleeds the system. For manual filling, unfasten the circulation pump nut (R) and then lift the pump *(S) out of the tank. Slowly pour the ethylene glycol mixture into the tank. Bleed the system. Top up with more fluid if the level has fallen after bleeding. Bleed a newly filled heating system regularly during the first days it is in operation.
- **Checking LPG system** The LPG system should be checked regularly by a specialist, who will ensure that there are no leaks from connections or hoses. LPG hoses should be changed as indicated on the date stamp, as they tend to dry out and crack and are liable to leak as a result. For increased safety, we recommend fitting an Alde leak detector, type 4071, as close as possible to the reducing regulator.
- **Emptying the water heater.** The boiler is fitted with a built-in hot water heater which can hold approximately 8.5 litres of freshwater. The hot water heater can produce around 12 litres of 40°C water per half-hour (at a cold water temperature of 10°C). If the electric elements are used instead of gas for heating the water heater, the capacity is slightly reduced. **The water in the water heater must be drained at least once a month in order to create a new air cushion in the heater.** The air cushion is used to absorb pressure surges in the heater. For emptying specially-adapted boilers, as well as the vehicle's general freshwater system, please refer to the manufacturer's instructions. **NB! The hot water heater should always be drained completely when there is a risk of frost and when the vehicle is not in use. The warranty does not cover frost damage.**
NB! Note that the water in the water heater can be hot.
Draining the heater using the combined safety/drain valve: (see page 15)
 - Switch off the freshwater pump.
 - Open all water taps.
 - Then open the safety/drain valve by raising the yellow lever (M) to a vertical position, or by turning the knob (K) 180°. The heater will now drain directly below the vehicle through the safety/drain valve hose. Check that all the water is emptied (about 7-10 litres). Leave the valve in the open position until the next time the heater is used.
NB! Check that the automatic non-return valve (N) is open and is allowing air to enter the heater when it is being drained, and that the hose is not blocked.
- **Bleeding the system.** Depending on how the pipes have been fitted, air pockets may form when the system is filled with ethylene glycol fluid. If the pipes only warm up a metre or so from the boiler, even though the circulation pump is operating, it is a symptom of air trapped in the system. In a newly filled system, small air bubbles can form in the expansion tank, resulting in a gurgling sound. Switch off the circulation pump for a few seconds to allow the bubbles to disappear.
Bleed as follows: If a bleed screw is fitted to the outgoing pipe of the boiler, open this screw and leave it open until fluid starts coming out. If the boiler is equipped with an automatic air vent, bleeding the boiler will take place automatically. Start the LPG boiler. The circulation pump should be switched off. Open the remaining bleed screws in the system (please refer to the instruction manual of the vehicle for their locations). Leave the bleed screws open until ethylene glycol fluid starts coming out of them, and then close them. Start the circulation pump and let it run for a while. See if the pipes and radiators are heating up around the vehicle. If this does not help, you can try the following method:
Single-axle caravan: Switch off the circulation pump. Tilt the caravan forwards. Leave it in this position for a few minutes to allow the air to travel upwards in the system. Open the bleed screw located at the highest point. Leave it open until ethylene glycol fluid comes out. Proceed in the same manner but with the caravan tilted backwards. Then position the caravan horizontally and start the circulation pump. See if the pipes and radiators are heating up around the vehicle.
Motor caravan or twin-axle caravan. On these, the easiest way to bleed the system is to park the vehicle on sloping ground or to raise one end of the vehicle using a jack. Bleed the system as described above.

13. IMPORTANT INFORMATION

- Always switch off the main isolating switch for the boiler when the vehicle is not in use.
- When washing the vehicle, do not spray water directly towards the flue.
- When camping in winter conditions, ensure the flue and exhaust air valves are kept clear of snow and ice.
- Ethylene glycol fluid may be heated even if the hot water heater is not filled with freshwater.
- The LPG boiler and electric element may be operated simultaneously.
- Always drain the hot water heater of fresh water when there is a risk of frost and when the vehicle is not being used.
- The LPG boiler must not be in operation when refuelling the vehicle at a garage or similar.
- Never allow the heating system to stand empty of ethylene glycol fluid.

NB! Close the main LPG valve in the following circumstances.

- When the vehicle is not being used
- Depending on national legislation in the country you are in, the main LPG tap must be closed when the vehicle is in traffic.
- When repairing the boiler.
- When leaks in the LPG system are suspected

Warranty

Alde's warranty is valid for two years from date of delivery and is restricted to defects of material or manufacture. It is conditional on the boiler having been installed and operated in accordance with the installation and operating instructions.

NB! The warranty does not cover frost damage.

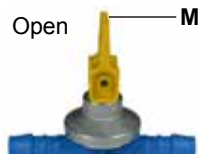
NB! Only original parts from Alde are to be used as spare parts.

Opening manual
safety valve/drain valve

Closed



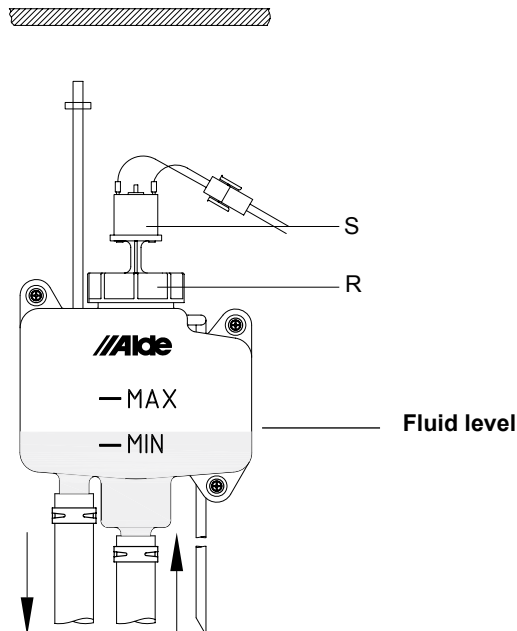
Open



Opening automatic
safety valve/drain valve



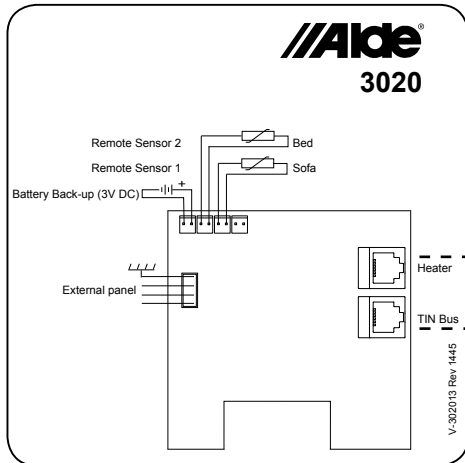
N



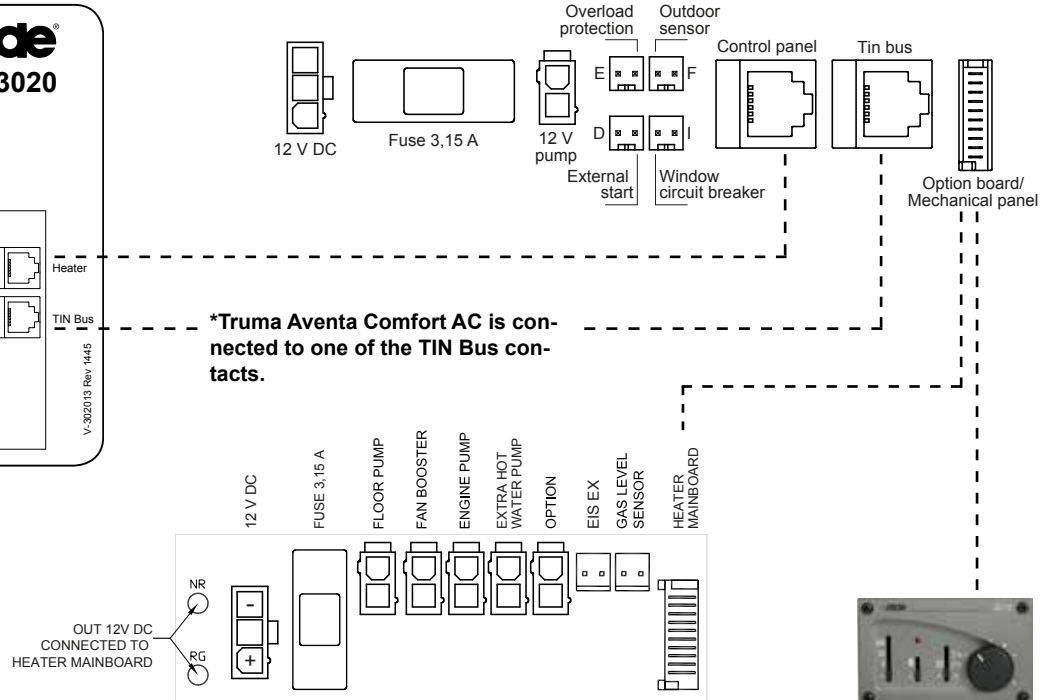
CABLE CONNECTION COMPACT 3020 HIGH EFFICIENCY AND CONTROL PANEL 3020 113

Connect accessories to the boiler and control panel as shown in the diagram below. **NB!** Do not clamp 12 V cables or sensor cables together with 230 V cables. It is best not to position the cables close to one another. If the cables are bundled together, there is a greater risk of malfunction during operation.

Control panel rear



Circuit board on Compact 3020 HE boiler



Optionsplatine für Compact 3020

Option board for Compact 3020



Mechanical panel 3010 214

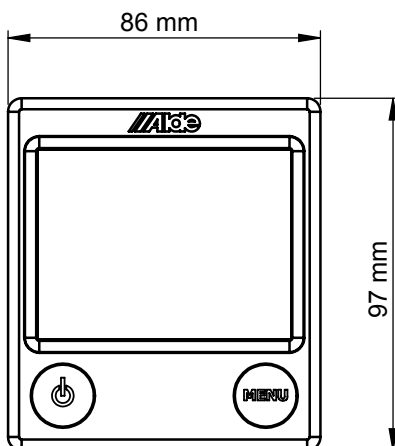
INSTALLATION INSTRUCTIONS – CONTROL PANEL 3020 113

Control panel 3020 113 is intended for the Alde Compact 3020 High Efficiency boiler.

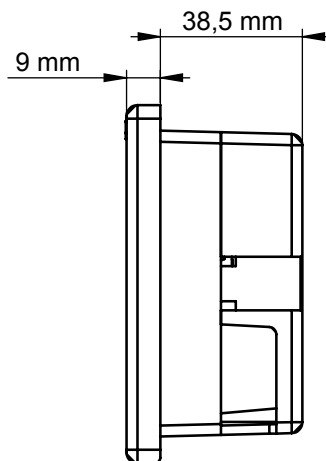
The control panel should be located at least one metre above the floor, but not too close to the ceiling. Nor should it be located on an outer wall or close to items which radiate heat, such as a CD player, refrigerator or lamps, as this may result in incorrect temperatures. The space behind the panel should be well ventilated. If the room thermostat on the panel is still affected, an external sensor should be connected to the panel.

Make a hole for the control panel as shown in Figure C. Screw the control panel securely in place and push the front cover into position. Secure the cable with clamps to prevent any strain on the terminal strip of the panel.

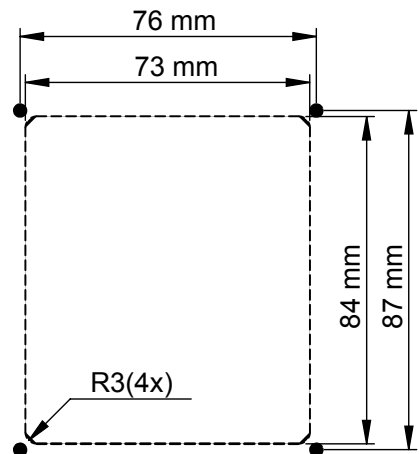
A.



B.



C.





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