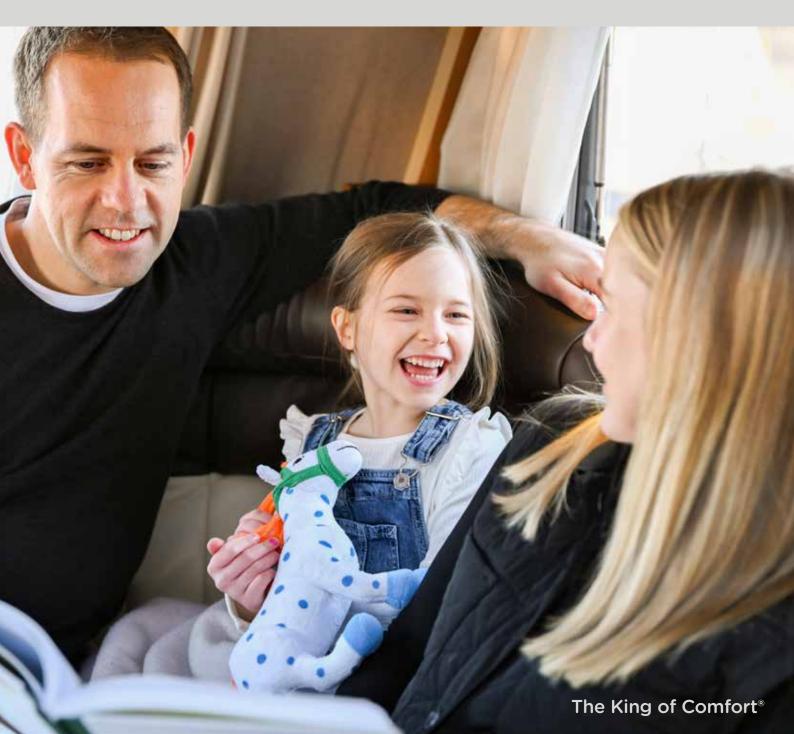
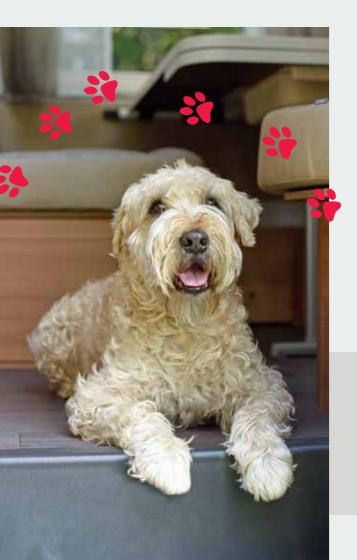


# A warm welcome





## The quiet, pleasant heating



Alde Heating System gives the family an outstanding indoor environment. Since the laws of nature make the heated air circulate by itself, our system is by far the most quiet in the market.

It is also so efficient that your entire mobile home is filled with pleasant warmth. You can always count on a warm welcome.



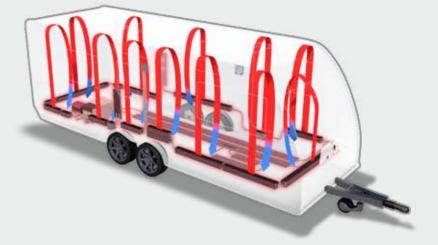


## Hydronic heating - the ultimate option

The Alde technology is as sophisticated as the heating you find in modern homes. Our radiant, hydronic central heating creates silent, gentle air movements that fill your mobile home with pleasant warmth and natural humidity.

The boiler is powered by LPG and electricity, and the system is filled with warm glycol, which heats the air via convectors. The natural convection is based on the principle that heated air rises to the ceiling and flows downwards again as it cools.

- Embracing warmth and natural airflow.
- Heats the entire vehicle.
- Quiet and pleasant.
- Can be powered by LPG as well as electricity.

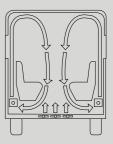


#### Our four-legged friend's best friend

A warm floor becomes such a comfortable resting place for the family's four-legged friend that you get the sofa to yourselves, and the gentle, natural air movements don't make animal hair fly around either. The accessory Alde Flow provides the whole family, including possibly reluctant dogs, with continuous hot water for showers on rainy, muddy days.

#### This is how natural convection works

The natural convection technology is based on the simple principle that hot air rises by itself. When reaching the ceiling, the air flows downwards as it cools and is heated again. The circulating air warms furniture and surfaces and keeps the cold out by forming a barrier in front of the windows.





## Development and production in Sweden since 1949



Sweden's harsh climate is a perfect place for developing and testing world-class heating systems, and our founder Alde Rask was determined to develop the ultimate heating system for caravans.

Our present approach to functionality, quality and reliability is equally uncompromising. Our hydronic heating systems are tested in temperatures down to -35 °C to ensure that you get maximum comfort at any time.

All products are developed and manufactured at our head office and modern production facility in southern Sweden. From here, we export heating systems to customers and users all over the world.

- Development with focus on world-class quality and functionality.
- All products made in Sweden.
- Tested to verify functionality and reliability.



## Reliable comfort - all-year, in all weather conditions

We can't wax your skis, fix a puncture on your bike, make the sun shine or find the best spots for picking berries. But we can guarantee that you are welcomed by a lovely indoor temperature and plenty of hot water when you return from your adventure.

Our heating system offers you reliable all-year comfort in any weather. The whole family can enjoy warm floors in the winter and delightful showers after active summer days.

- A heating system for all seasons.
- Central heating and hot water in the same system.
- · Smart accessories for extra comfort.
- User-friendly control panel.



## Built for tough conditions

Our heating systems are tested in biting cold down to -35 °C to give you reliable comfort all year round, regardless of the weather.

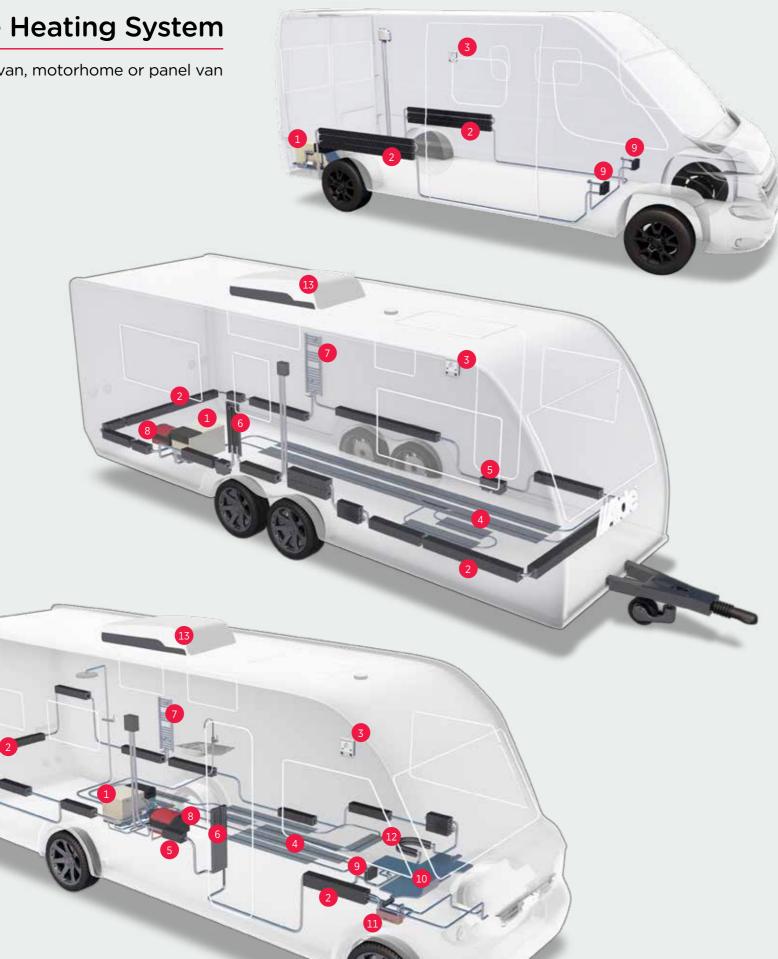
## The heart of the heating system

The boiler Alde Compact 3030/3030 Plus with integrated water heater is the heart of the heating system. It is powered by LPG and electricity. The complete system also includes convectors, underfloor heating and other accessories that together create a comfortable comfort. All this is controlled via a user-friendly control panel.



## Alde Heating System

In your caravan, motorhome or panel van



#### Core components of the system

The boiler is plumbed and wired in for hot water, LPG and electric heating. It heats and circulates the glycol fluid through pipework, convectors and other heat emitters. The control panel provides computerised controls and a hub for discrete temperature sensors.

#### 1. Boiler

The boiler Alde Compact 3030/3030 Plus is the heart of the system which produces heating and hot water.

#### 2. Convectors

The convectors are placed along the outer wall where they produce heat and envelop the environment with a protective thermal barrier that prevents draughts.

#### 3. Control Panel

Our intuitive control panel gives you full access to the entire range of heating system functions, including a number of smart comfort settings.

#### Smart accessories aren't just a luxury

following pages.

#### 4. Underfloor Heating

Our underfloor heating based on pi creates pleasant, warm floors with comfort feeling.

#### 5. Fan Convector

An efficient way to get rapid and di heating, for example in wardrobes t damp clothes and shoes.

#### 6. Panel Radiator

Elegant solution for efficient heatin small spaces.

#### 7. Heated Towel Rail

Provides warm, soft towels and add heat in the toilet space.

#### 8. Alde Flow Continuous hot water mo

The accessory Alde Flow provides of hot water, as much and as long as you desire.

Accessories may be optional but are essential for a cleverly-designed heating system. Enhance your comfort, convenience and long-term economy! Read more about our accessories on the

	9. Heat Booster
pe coils	Small and powerful heating unit with
that extra	integrated fan for rapid and directed heating.
	10. Heating Mat
	Provides pleasant warmth in the drive
rected	cabin while you are on the road.
o dry	(Only available for Left Hand drive).
	11 Engine Llest Evelonger
	11. Engine Heat Exchanger
a of	Uses the motorhome's engine cooling system
g of	to produce heating and warm water.
	12. Seat Heating Convector
litional	Custom made convectors under the driver
IILIOIIdi	and passenger seat.
	17 Automotic Climate Control
	13. Automatic Climate Control
dule	Alde Heating System can be combined with
continuous	an air conditioning from Truma. The lectronic control ensures that you get the same,
iou desire	pleasant indoor temperature all year round



## Warm feet are happy feet

## Alde Underfloor Heating

Alde is the only one offering you a complete heating system with integrated underfloor heating. Our underfloor heating solution is based on pipe coils and heat shields in the floor. The coils are connected to the glycol flow in the central heating system.

- Pleasant, warm floors add extra comfort.
- Connected to the central heating system.
- Effectively spreads the heat across floor area.
- Alde is the only one in the business offering hydronic underfloor heating.



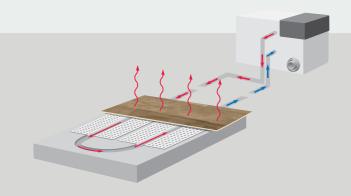


## Spa feeling with hot water for the entire family

## Alde Towel Heating

Our heated towel rails and towel radiators are available in many different sizes, with chrome and painted finishes. Surely something for every toilet/wash area. They connect to the Alde heating system as normal, and some of our high heat output towel radiators also have thermostatic control. Enjoy delightfully warm towels and faster drying.





#### This is how underfloor heating works

The boiler heats the glycol liquid in the heating system. The underfloor heating is connected to the heating system. The hot glycol liquid circulates in the pipes in the floor and emits heat. The slightly cooled glycol liquid circulates back to the boiler where it is reheated.

#### Alde Flow

Alde Flow is a favourite feature for shower lovers and teenagers. The smart comfort solution produces continuous hot water via a separate hot water tank connected to the central heating system. Alde Flow preheats the fresh water before it enters the boiler's own hot water tank.



#### This is how Alde Flow works

Cold water is preheated in the Alde Flow and pumped on into the boiler's hot water heater. The preheated water is heated to about 65 °C by the boiler's high-efficiency gas burner / electric heater. In the thermostat mixer, hot water is mixed with cold water to a comfortable temperature for showering, hand washing etc.



## Save energy and protect our environment

#### Alde Engine Heat Exchanger

Hydronic heating is not only pleasant and quiet. You can also enjoy the outstanding climate comfort with a clear conscience and save energy with a heat exchanger, which uses the vehicle's engine cooling system for heating and production of hot water. Winter campers are also able to run the system in reverse and use it as an engine block heater.

LPG is the main energy source in our heating systems. This efficient and environmentally sound fuel is more or less pollution-free.

- Preheats the vehicle's living space while driving.
- Can be used as an engine heater in combination with a circulation pump on the engine side.
- Easily controlled via the control panel.
- Heats hot water for shower and hand washing while traveling.
- Environmentally friendly thanks to the use of excess heat and preheating of the engine block.
- Fewer cold starts prolong the life of the motorhome engine.





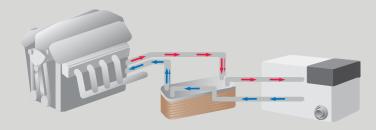
## Ensure safe and comfortable water temperatures

## Alde Thermostatic Mixing Valve 3

The Alde Thermostatic Mixing Valve 3 (TMV 3) mixes hot and cold water to ensure safe and comfortable water temperatures, reducing the risk of accidental injury and scalding.

Quick and easy to install, with minimum size and weight, make it perfect for factory or DIY fit. The valve complies with all applicable UK and European performance standards, and has WRAS approval, holding TMV2 and TMV3 certificates.

- Regulates the supply of cold and hot water to create usable warm water.
- Emergency function. The valve shuts off the hot water throughput in the event of cold water supply running out.
- · Works with flow rates as low as 1 litre per minute making it ideal for aerated showerheads.
- Compact solution.
- WRAS (Water Regulations Advisory Scheme) approved and TMV2, TMV3 & UPC compliant.



#### This is how a Heat Exchanger works

Hot cooling water from the motorhome's engine is led into the heat exchanger. In the heat exchanger, the hot cooling water from the engine heats the water in the circulating heating system. The water in the heating system circulates and is heated continuously through the heat exchanger as long as the motorhome's engine is running. The cooled coolant is led back and then cools the engine again.







## The complete comfort solution - all year round

#### Alde Automatic Climate Control (ACC)

Set your desired room temperature once and automatic climate control takes care of the rest. Whether outdoor temperatures climb or drop, you'll be comfortable with your ideal, stable temperature indoors. Fully integrated with our programming, you don't even need to touch the control panel at bedtime.

By supplementing your Alde Heating System with air conditioning from Truma, you get the complete climate system, which senses indoor and outdoor temperatures and adjusts fan speeds and temperature to the ideal level. You never have to worry about turning the AC on or off again - everything is taken care of automatically.

- Stable temperature around the clock, all year round without having to change settings.
- Enjoy a calm, comfortable indoor atmosphere with subtle transitions in temperature.
- Faster heat-up times in cold weather with the boiler and AC heat pump working together (not available in Truma Aventa Compact).
- With extra room sensors, you can select a temperature for each zone. Just enter the desired temperature, and the automation will take care of the rest.
- An outdoor sensor allows the true speed of the AC to be adapted to the cooling demand, depending on the outdoor temperature.







## Even our small accessories make a big difference

#### Help yourself with clean and safe water

Alde AquaClear is an efficient 12 V water disinfection product for increased safety of water quality in systems where water is filled externally and stored in a tank, and where the risk of microbiological growth is thus higher.

The disinfection is based on UV-C light, through the latest UV-C LED technology and a carbon filter. The product neutralizes about 99% of the microorganisms and ensures that you have an odorless water without bad taste or color.

#### Prevent the fuses from tripping

A circuit breaker always trips at a bad moment and having to go outside in bad weather to reset it is just as irritating. The load monitor will power down the electric heating automatically when the load is high. This prevents the circuit breaker from tripping when you are using high-consuming appliances, such as coffee maker, kettle, blow dryer or vacuum cleaner.

#### Keep your heating system in good shape

The heating fluid flowing around your system deteriorates over time and should be changed every other year unless using an Alde-approved antifreeze. Alde Premium Antifreeze G13 can be changed every 5 years. Our ready heating fluid is tailored for Alde Heating System and can be used in temperatures down to -37 °C. Alde-approved antifreeze is a more ecofriendly alternative to conventional products and has several advantages. In addition to frost protection and long-lasting corrosion protection, it lubricates circulation pumps and helps prevent bacterial growth.







## Get the most out of your heating system



Make the most of the heating system by making sure that the heat can circulate freely in your vehicle.

Here are a few tips to help the heat circulate and make your living area even cosier.

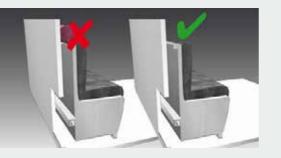
# A second second

Avoid placing newspapers, drying wet clothes, etc. on the grille above the convector.

Also make sure that carpets do not furl up against the air intakes on the furniture and prevent air supply to the convectors.



Don't fill the upper cabinets in such a way that hinders air circulation. Condensation may form in the cabinets if there is poor or no circulation. When camping in winter, your pillows might even freeze to the outer wall.



Try not to place pillows, duvets and suchlike on top of the circulation openings. If circulation is prevented, the warm air barrier will disappear and you'll get cold draughts from the windows.

## Winter advice

## Is mains electric power sufficient to heat my vehicle during the winter?

During the winter or when it is really cold outside, it is usually not enough to just heat the vehicle with electricity. You will need to support with gas heating as a complement to the heat from the electric elements.

If the temperature is above single figures, you can probably rely on electric heating alone but it depends on the vehicle insulation, size and the specification of the heating system, which differs from vehicle to vehicle.

To get the temperature up as quickly as possible in a cooled vehicle, we recommend running the boiler on combined gas and electricity if possible. The energy power from the immersion heaters is up to 3 kW while the LPG power is as much as 5.5 kW, which together gives an output corresponding to 8.5 kW.

## In winter, can I use my central heating even though the fresh water is drained down?

Yes, operate the Alde system normally. No harm will result as there are no electric heating elements in the hot water cylinder.

## Advice for the spring and summer season

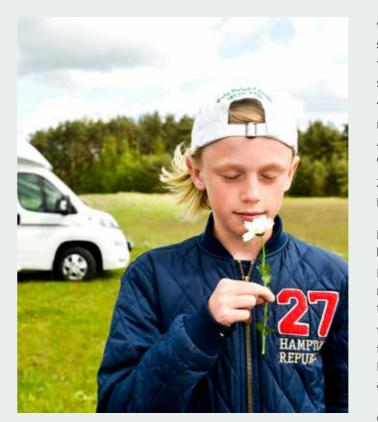
When camping in winter, remember to make sure the flue on the roof is clear of snow. Fitting a flue extension which raises the flue cap by 20 cm is a good solution.

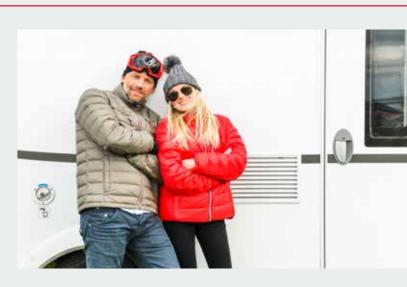
If you are a winter camper and do not want freshwater in the vehicle, you can still run the heating system.





This is how it should be when the hot air from the convectors flows up behind the sofa and upper cabinets.





#### What should I keep in mind when storing my vehicle in winter?

First of all, drain the fresh water from the water heater via the drain valve at the boiler. If you are unsure how to do this, read the operating instructions for the boiler. Check that all the fresh water has been drained. Do not forget to also open the fresh water taps.

Also check that you have enough frost protection in the antifreeze in the heating system so that it can withstand the temperature at which the vehicle is to be stored for the winter.

## What should I keep in mind when preparing my vehicle for spring and summer season?

You should check two things when your vehicle has been stationary for a long time:

**1. Glycol fluid**. Check the glycol fluid in the heating system - the right level and the right condition. Our own specially adapted Alde Premium Glycol G13 gives your heating system the best conditions with caring and protective effect on the system.

**2. LPG**. Also check the gas heating, bulkhead regulator and pigtails. If you have a filter, make sure it's clean.

## Does the heating system itself need to be overhauled before I hit the roads?

Normally, the heating system doesn't need any special maintenance if it worked correctly when you put the vehicle away for the winter. Start the boiler as usual and warm up the system.

We also recommend that you test the fresh water. Do not forget to close the drain valve.

Make sure that the water is heated and that the mixers work as they should

Check out our website www.alde.co.uk for more questions and answers!.



#### Read more on alde.co.uk

No matter if you are using your computer, smart phone or tablet, almost everything you want to know about Alde Heating System is only a couple of clicks away. Our home page contains information about the heating system, its functions, our accessories and where you find the nearest Alde service location. Just surf right in!

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