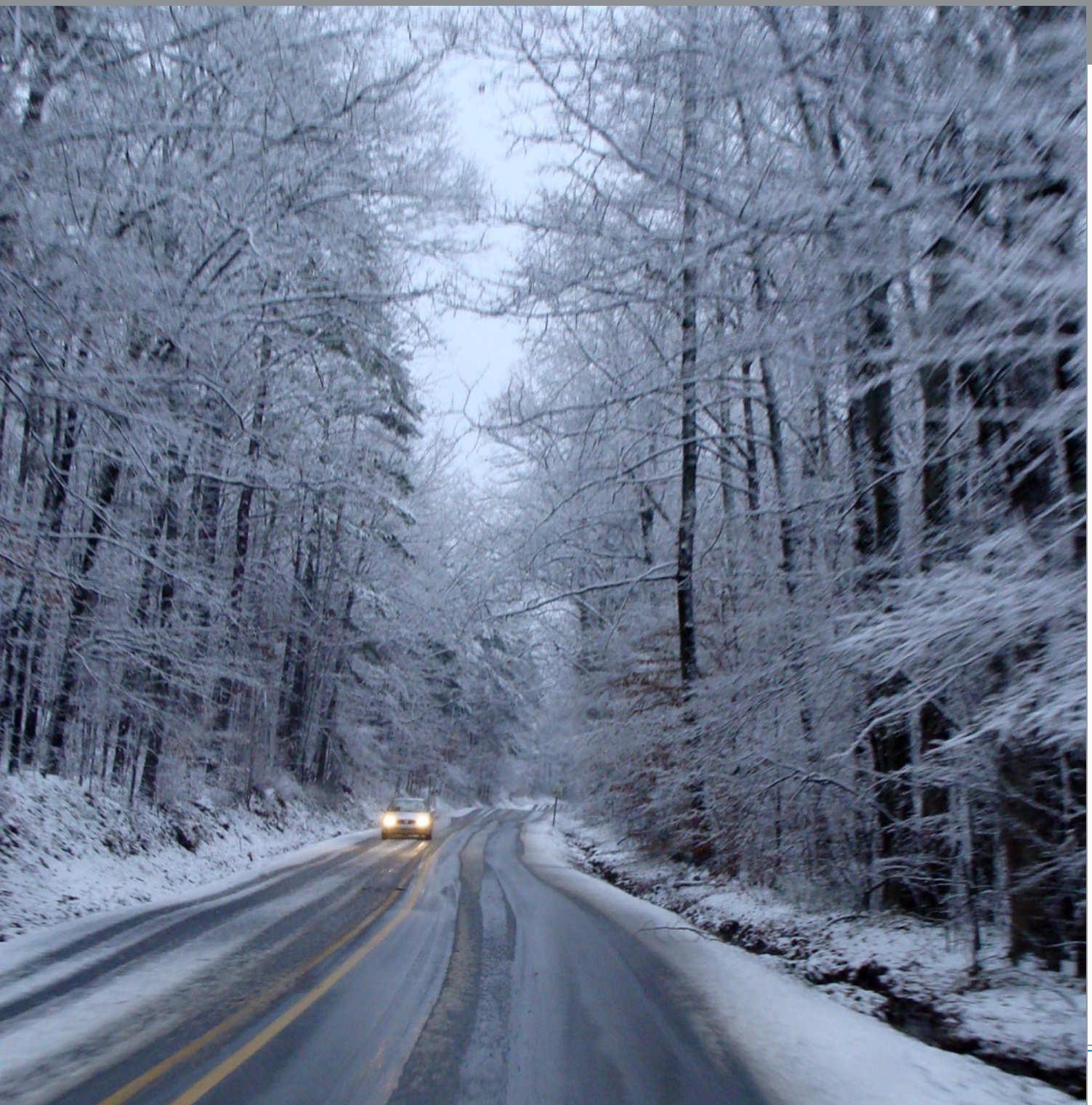
THE RIGHT CLIMATE FOR EVERY REQUIREMENT

A WORLD OF COMFORT

Espar



ESPAR – PROVIDING TRUE COMFORT

Are you looking for a heating system that provides optimum comfort? That ensures safety by supplying heat for mobile workplaces? That actively protects the environment and reduces fuel consumption? That is easy to install and inexpensive to maintain? Are you looking for an expert partner who not only provides heat but also the ideal climate for every challenge? Then Espar is just the partner you need.

Rugged design, high performance, sophisticated technology — Espar fuel heaters have made a name for themselves around the world. For every application, our innovative heating technology ensures an extremely comfortable degree of warmth in vehicles, pleasant temperatures in mobile workplaces, and optimum temperature control in storage compartments.

The safety and time-saving aspects of preheated vehicles are also not to be ignored. For example, the windows of delivery vans no longer have to be de-iced manually, saving the driver's time and effort and ensuring an unobstructed view from the outset. Furthermore, as opposed to electric heaters, our fuel-powered heating systems are not reliant on a power supply and can easily be activated by a timer switch or by radio remote control at the appropriate time.

Not only do they provide heat, they also actively protect the environment. For example, Espar's Hydronic line of heaters enables heat to be produced without having to run the engine and without idling. This saves fuel and money and reduces emissions.

ESPAR'S HEATING SYSTEMS

In order to comply with all the specific requirements of various markets, Espar has developed two different heating systems. The first is our Hydronic line of coolant heaters. The Hydronic heater is specially designed to be integrated directly into the coolant circuit, heating coolant or other service fluids and then circulating it to preheat the engine and vehicle. It is best suited to providing engine preheat and supplementary cab preheat.

Another heating system from Espar is the Airtronic line of air heaters. The Airtronic operates like a forced air furnace, heating air and then circulating it through either the vehicle's own venting or dedicated venting. Heaters work independently of the existing temperature regulation system and are capable of warming the cabin or compartment quickly. A combination of both systems is also possible.

HEATING SYSTEMS FOR CLASS 8 TRUCKS
OPTIMUM WARMTH IN MOBILE WORKPLACES

Frost in the workshop, iced-up windows in the office, icicles in the staff room. Conditions like these would be unacceptable in a standard workplace. But what about vehicles where people are working and sensitive goods are being transported? Temperatures in vehicles should be just as pleasant as in any other place of work.

ADDED WARMTH FOR DRIVERS AND GOODS:
With an Espar auxiliary heater, you can ensure that the vehicle, the working area, and the goods compartment are always heated perfectly — completely independent of the function of the engine.

WORK SAFELY, PRODUCTIVELY, AND COMFORTABLY:
Frozen windows are defrosted in advance and they do not fog up. The driver does not have to de-ice the vehicle and dangerous blind spots due to ice are prevented. Working in the stationary vehicle is also made much easier. Units are easy to use and regulate using the various control elements.

INCREASED LEVEL OF SATISFACTION:
An Espar heater will improve driver comfort and productivity, while saving money and emissions. The operator will also see a return on investment with months of owning an Espar heater.

REDUCE COSTS:
The service life of the engine is increased thanks to trouble free hot starts. This reduces the cost of maintenance and repairs on your engine. And frost damage to valuable freight is a thing of the past, thus saving you money. Maintenance and upkeep for heaters is also easy and inexpensive, thanks to our excellent parts and service options.

PROTECT THE ENVIRONMENT:
Making use of an Espar heater uses less fuel and generates fewer emissions, thus safeguarding the environment. It does this by eliminating idling while warming up the vehicle and also by reducing the amount of fuel and emissions generated by idling or by cold starts.

TOTAL THERMAL MANAGEMENT FOR BUSES
COMFORTABLE TEMPERATURE, WHEREVER YOU ARE

Are you looking for a competent expert who provides the right climate in your buses whatever the challenge? Then Espar is just the partner you need. We design and manufacture innovative heating products with intelligent solutions for total temperature control in buses. As part of the globally active Eberspaecher Group, we are always there when you need us to deliver precisely the range of services you want.

LOW OPERATING COSTS DUE TO EXCELLENT EFFICIENCY:
Product efficiency minimizes operating costs by using less power and fuel while reducing wear and tear on the engine.

COMPACT DIMENSIONS MAKE THE SYSTEMS EASY TO INSTALL:
Small, light, compact, and interface compatible for quick and easy installations at the manufacturing and aftermarket levels.

SAFE AND EASY TO SERVICE:
Diagnostic options for easier service with modular design and fewer components. The intelligent electric control and safety concept operates with two sensor elements: no mechanical overheat, no safety fuse.

RELIABLE STARTING:
Even at extreme temperatures, you csn count on your Espar heater to ensure a hot start.

NOISE OPTIMIZATION:
Noise optimization ensures quiet operation and a more enjoyable and relaxing experience for drivers and passengers alike.

TREND-SETTING CLIMATE CONTROL SOLUTIONS:
Our portfolio offers innovative product and system solutions for both present and future generations of buses and motorcoaches. We also have products suitable for buses with hybrid or electric drive concepts.

OEM AND AFTERMARKET APPLICATION EXPERTISE:
Thanks to our decades of experience, we not only supply heating systems as an aftermarket component but we are also able to interpret and analyze the overall system during the concept phase. This makes us a sought-after OEM development partner for many bus manufacturers.

HEATERS FOR OFF-HIGHWAY AND ENERGY MARKET APPLICATIONS

PROVIDING THE HEAT TO KEEP YOU RUNNING

Espar's preheaters are capable of heating engines from small, non-mobile equipment and light trucks all the way up to 2500 HP+ diesel engines. When the engine is warmed, it allows for other service fluids like coolants, hydraulic oils, and fuels to be heated as well. Espar's forced air heaters can provide economical heat for operator cabs and truck sleepers all the way up to cargo and workspace heating. Ample amounts of heat allow operators and technicians to function safely and efficiently in winter environments.

MAXIMUM COLD WEATHER EQUIPMENT PRODUCTIVITY:

Warm engine starts provide operation reliability in almost any application while avoiding many of the mechanical issues cold weather creates. Engines start easier, so there's less stress on cranking system components and less wear on major powertrain parts. An Espar heater can also provide fluid preheating for full hydraulic system-readiness, cab and compartment heating for productive operator environments, and reliable heat delivery that's proven itself in the field.

MAXIMUM ADVANTAGE FOR YOUR BUSINESS:

An Espar heater can give you the edge over your competitors by reducing overhead costs like winter operating costs, fuel and power consumption due to idling, and cold-start repairs and maintenance. It can also improve your environmental metrics on the jobsite by significantly reducing emissions from idling. Most importantly, an Espar heater can provide all this without sacrificing safety and comfort for the operator, ensuring workplace productivity.

DELIVERING HEAT FOR ANY OFF-HIGHWAY REQUIREMENT:

Espar offers a full line of 12V and 24V heaters. This line includes portable, self-contained air heaters (15000-28000 BTU), small preheaters for light trucks and smaller on-site equipment (17000 BTU), and heat exchangers for almost any size reservoir. Control options suitable to each product are also available.

HEATING SYSTEMS FOR SPECIAL-PURPOSE VEHICLES

WELL-EQUIPPED AND AT THE READY FOR EVERY JOB

There is a heavy frost outside and the landscape is covered in ice, but you can be sitting in a warm cab that's free from ice and frost — all thanks to Espar. Even at extremely low temperatures, Espar heating systems provide warmth in the cab for everything from mobile cranes to ambulances. This improves employee productivity and reduces the risk of illness contracted on the jobsite.

ADDED WARMTH FOR DRIVERS AND PATIENTS:

With an Espar auxiliary heater, you can ensure that the cab is always perfectly heated, while being completely independent of the engine. For example, the cab of a mobile crane can be heated — a feat impossible without an auxiliary heater. In ambulances, it is also easy to heat the patient compartment. It can also be used for vehicles where food is prepared, keeping the compartment at the proper and most comfortable temperatures.

WORK SAFELY, PRODUCTIVELY, AND COMFORTABLY:

The vehicle is preheated when the shift starts and work can begin right away, without a warming-up phase and eliminating cold starts. Frozen windows are defrosted in advance and they do not fog up, enhancing safety and saving the operator's time and efforts. Operation is easy to use and regulate, with a variety of controls and settings.

REDUCE COSTS:

The service life of the engine is increased thanks to trouble-free hot starts. Staff time lost due to non-productive warming-up phases or sickness can be reduced significantly, also saving you money.

PROTECT THE ENVIRONMENT:

Starting the engine when it is preheated uses less fuel and generates fewer emissions. Heaters also virtually eliminate idling, as engines can be powered down while stationary without sacrificing warmth.

AUTOMOTIVE HEATING SYSTEMS
COMFORTABLE TEMPERATURES ON THE GO

If you want ideal interior temperatures, reduced idling time, and a break in fuel costs, then Espar can offer you a customized solution. Our portfolio boasts a wide range of parking heaters for cars and commercial vehicles, each specially designed to suit the needs of a variety of applications. We also have solutions in our portfolio that fit the new engine designs of today and tomorrow.

Ever since we began equipping VW Beetles with Eberspaecher parking heaters in the 1950's, they have become synonymous with comfort and coziness in cars. Now, an Espar heater can keep the windshield clear in the winter, nicely preheat the car, and ensure a warm engine start that protects both the environment and the motor. Not to mention, they provide endless comfort to passengers without sacrificing your budget.

Many auto manufacturers deliver preheaters as standard or custom equipment, directly from the factory. The great thing about these heating systems, however, is that they can be easily retrofitted. Espar works together globally with 4000 certified component partners and specialized dealers, expertly bringing an additional plus to vehicles.

Economical diesel or gasoline engines, as well as vehicles with alternative engines, all pose a unique challenge when it comes to getting the perfect temperature. Our intelligent, low emission, economical fuel-operated heating systems make for a comfortable interior no matter the challenges. They also operate without drawing on the battery, which reduces the operating range of electrical vehicles. Most importantly, you can anticipate your return on investment within months of owning your Espar heater.

ESPAR AUXILIARY HEATERS FOR LIGHT TRUCKS

Espar offers a full line of specially designed heater kits for Dodge Ram, Ford Powerstroke, and Chevy/GMC Duramax applications. These kits are CARB certified and feature: engine preheat, cab preheat, supplemental heating, and Espar's 24 Hour Timer (standard).

HEATING SYSTEMS FOR TRAINS

FULL STEAM AHEAD FOR AN INDEPENDENT, LOW-COST HEATING CONCEPT

Whether it be a shunting engine, a mainline locomotive, or a rail car — the engine driver can only start driving when the engine has be preheated sufficiently. This is where the Espar Hydronic coolant heater comes in. In diesel rail cars, it ensures that the engines are ready for operation and the passenger compartments are preheated to a pleasant temperature. Diesel-driven shunting and mainline locomotives can also benefit from the advantages of a Hydronic heater, like a warm engine, compact and lightweight size, and lower costs than with a conventional system. By preheating driver's cabs using the Airtronic air heater, you ensure that the locomotive does not need an external power supply, an advantage in comparison to electric systems.

WATER OR AIR — THE CHOICE IS YOURS:

In order to meet the varying requirements perfectly, Espar supplies two different heating systems in the train sector: the Hydronic coolant heater and the Airtronic air heater.

Our coolant heaters are integrated into the coolant circuit, where the heat warms and circulates the coolant in order to preheat the engine or passenger compartments.

Our air heaters are forced air furnaces that work independently of the existing temperature regulation system. They heat the driver's cab or passenger compartment to the perfect temperature, thus ensuring a comfortable journey no matter the climatic conditions.

LOW MAINTENANCE AND EXTENDED LIFE:

By using an Espar heater for your needs, you can extend the service life of your engine. Thanks to the engine preheating, you can eliminate cold starts, reduce the wear and tear cause by cold starts, and virtually eliminate problems like frost damage. Espar heaters are also easy to maintain, and only require some simple, periodic upkeep.

EFFICIENT, FAST, RELIABLE:

- The heaters operate using a very small amount of fuel supplied from the vehicle's own fuel tank.
- Virtually no power is taken from the battery and they are more efficient than electric heaters
- The systems are totally independent of power supplies
- The units can be activated by a timer switch or radio remote control, therefore heating can be switched on before the shift starts
- Espar preheaters also defrost the windows and preheat the passenger compartments during the start-up phase for increased comfort and added safety

HEATING SYSTEMS FOR MARINE APPLICATIONS

WARM AND DRY AT SEA IN ANY WEATHER

Marine heaters by Espar ensure you and your crew remain cozy and comfortable in your cabin, no matter the weather conditions. You decide what temperature to set and your Espar diesel-fired heater will quickly and quietly provide you with reliable heating, leaving you with confidence and peace of mind. Anyone with an Espar heater on board can feel at ease venturing out to sea or embarking on exciting cruises, even during the cool seasons.

A heater that fits your exact needs is important, especially when spending long hours out of port. That's why Espar offers two different systems for you to choose from. Espar air heaters focus on providing heat for the interior of the cabin, creating a snug, cozy atmosphere while below deck. Espar water or coolant heaters are capable of heating engine coolant and service fluids, ensuring smooth function of the engine at all times. They can also heat your water supply, so you can always have hot running water both in the shower and galley. Other attachments are also available to provide drying capabilities within the cabin, allowing for a cabin that is both dry and warm.

Using an Espar marine heater means that you benefit from the some of the world's most advanced technology and an extended boating season. Espar heating systems have been setting the standard for decades in a variety of areas — not just the marine sector. Espar is a leading OE manufacturer in boats and marine applications today. And for many types of boats, you can order your Espar products directly from the shipyard. We also have a closely integrated global partner network to ensure professional retrofitting and service.

HEATING SYSTEMS FOR RECREATIONAL VEHICLES
ENJOY MOBILITY ALL YEAR ROUND

With an Espar heater for your recreational vehicle, you can always be completely comfortable; even during the cold part of the year. You can enjoy the great outdoors for hours and then return to the comfort of your own preheated RV, where you can relax without shivering as the day fades away. And here's something extra: an Espar heater meets all your heating needs on command and even lets you sleep through frosty nights. So you're ready for new adventures in the morning!

An Espar heater is guaranteed to keep your "home away from home" at a comfortable temperature. After exciting excursions during the day, you'll experience absolute relaxation in the evening plus peaceful nights filled with warmth for the whole family and an extended season. Go ahead and take this step toward total independence on the road. Espar heaters are available as complementary systems for your existing heating system and as powerful stand-alone solutions. There are two different types of heating solutions available. The Airtronic heating solution quickly gives you a pleasantly warm vehicle interior, while the Hydronic heating solution heat both the vehicle and water lines. This ensures that your engine, service fluids, and running water are always at the correct temperature.

WORLD CLASS FOR WORLD EXPLORERS:

Rugged design, performance, proven technology — Espar heaters have built a strong reputation around the world. To ensure that our solutions really match your requirements perfectly, we are working closely with numerous major recreational vehicle manufacturers in product development. These specially designed systems are exceptionally compact, quieter, and ultimately more powerful. They are also easily installed and are available through OEM installation programs or can be retrofitted to an existing vehicle.

AIRTRONIC AIR HEATERS

THE RIGHT HEATER FOR YOUR EVERY NEED

Espsr's Airtronic heaters are built to suit the heating needs of any cab or compartment. Heaters are rugged in design and provide the required heat very quickly in any climate. They, therefore, are especially well suited for transports, personnel carriers, workshop vehicles, freight compartments, and driver's cabs in a variety of vehicles. Our product portfolio offers a wide range of solutions for your heating needs.

BENEFITS OF AN AIRTRONIC HEATER:

- Extremely fast compartment air heating after a hot start
- Low energy consumption — ideal for long heating periods in stationary vehicles
- Low fuel consumption
- Pre-selectable compartment temperature
- High degree of comfort due to wide control range and the lowest "low setting" on the market
- Continuously variable compartment temperature control
- Quiet operation
- Internal and external installation possible
- Constant function monitoring
- Safety and diagnostic system
- Low maintenance and easy to service
- Espar heaters are CARB compliant and EPA certified

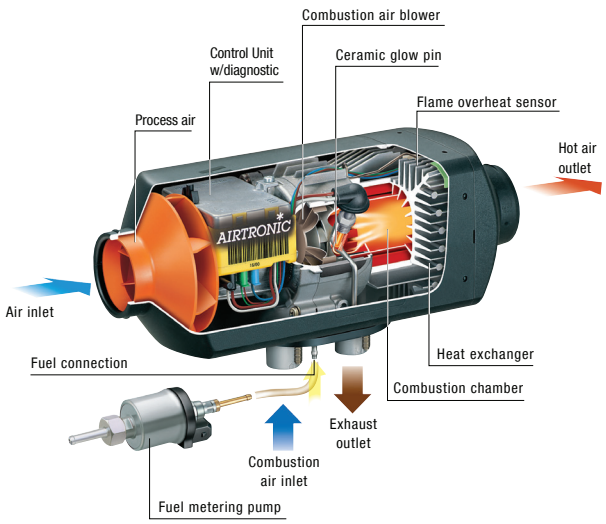
AIRTRONIC AIR HEATERS
TECHNICAL DATA

AIR HEATERS		 AIRTRONIC D2	 AIRTRONIC D4
Heat Output (kW/BTU)	Boost	2.2 / 7500	4.0 / 13650
	High	1.8 / 6500	3.0 / 10200
	Medium	1.2 / 4100	2.0 / 6800
	Low	0.85 / 2900	0.9 / 3400
Fuel Consumption (l/hr / US gal/hr)	Diesel 1/2 Boost	0.28 / 0.07	0.51 / 0.13
	High	0.23 / 0.06	0.38 / 0.10
	Medium	0.15 / 0.04	0.25 / 0.07
	Low	0.10 / 0.02	0.11 / 0.03
Electrical Consumption (amps) (12V shown, 12V or 24V available)	Boost	2.8	3.3
	High	1.8	2.0
	Medium	1.0	1.1
	Low	0.67	0.6
Weight (kg/lbs)		2.7 / 5.9	4.5 / 9.9

AIRTRONIC AIR HEATERS

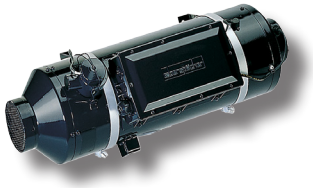
The Airtronic heaters are designed for many types of applications. They are especially suited for cabin and sleeper heat in trucks, workshop vehicles, freight compartments, and general interior heat.

AIRTRONIC AIR HEATERS
TECHNICAL DATA



HOW THE AIRTRONIC HEATER WORKS

The Airtronic line of heaters operate like forced air furnaces. The Airtronic heats and propels air into the vehicle compartment via the vehicle's own venting system. These heaters cycle quietly through four levels to maintain a desired temperature range without idling.



AIR HEATERS		AIRTRONIC D5	D8LC
Heat Output (kW/BTU)	Boost	5.5 / 18800	4.0 / 13650
	High	4.8 / 16400	3.0 / 10200
	Medium	2.7 / 9200	2.0 / 6800
	Low	1.2 / 4100	0.9 / 3400
Fuel Consumption (l/hr / US gal/hr)	Diesel 1/2 Boost	0.66 / 0.17	0.51 / 0.13
	High	0.58 / 0.15	0.38 / 0.10
	Medium	0.34 / 0.09	0.25 / 0.07
	Low	0.15 / 0.04	0.11 / 0.03
Electrical Consumption (amps) (12V shown, 12V or 24V available)	Boost	7.1	3.3
	High	6.7	2.0
	Medium	2.5	1.1
	Low	1.3	0.6
Weight (kg/lbs)		9.3 / 20.0	4.5 / 9.9

HYDRONIC COOLANT HEATERS

OPTIMUM HEAT EXACTLY WHERE YOU WANT IT

The Hydronic line of coolant heaters operate like hot water furnaces, heating coolant and circulating it for preheating. The Hydronic line can preheat the engine, fuel, hydraulics, and other service fluids as well as provide supplementary heat. They are easily OEM installed or retrofitted in a variety of applications and operate using only a small amount of the vehicle's own fuel and energy. They are highly efficient and you can start seeing your return on investment within months of owning your Espar heater.

BENEFITS OF AN ESPAR HYDRONIC:

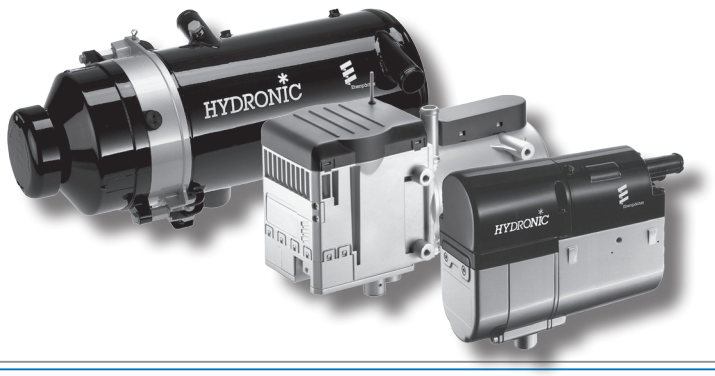
- Supplies engine preheat and supplemental heat to the vehicle's cabin
- Reduced fuel and energy consumption
- Supplemental heat distribution via the vehicle's own air ducts or through dedicated venting
- More eco-friendly with energy saving features
- Fully electronic function sequence control
- Constant function monitoring
- Safety and diagnostic system
- Low maintenance and easy to service
- Espar heaters are CARB compliant and are EPA certified

SPECIAL BENEFITS OF ESPAR HYDRONIC 2 COMMERCIAL:

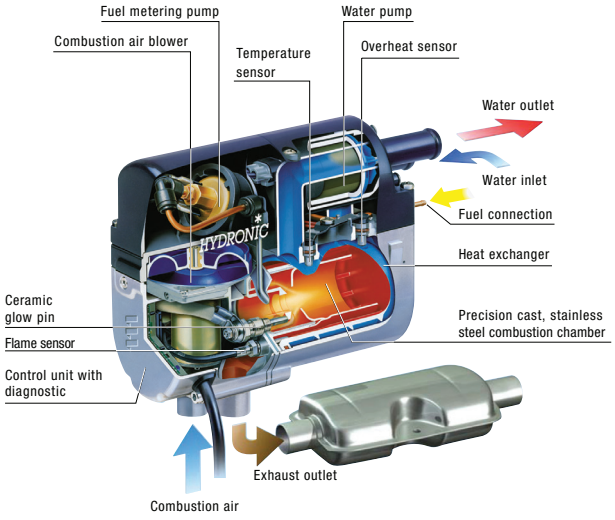
- Extra long service life of 5000 operating hours
- Multi-fuel capability up to 100% FAME
- Guaranteed to start in temperatures as low as -40°C
- Extremely quiet due to optimized casing insulation and 1.2 kW low output setting
- Fast heating using the high setting

SPECIAL BENEFITS OF ESPAR HYDRONIC M:

- Extra long service life of 6000 operating hours
- Automatic height adjustment of the Hydronic M10/M12 up to 3500m

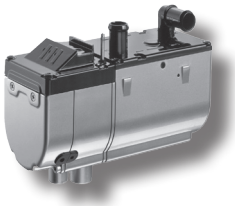


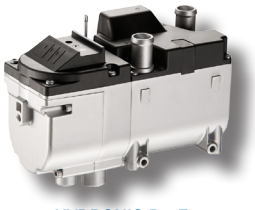
HYDRONIC D5 / SC / S / E
TECHNICAL DATA



HOW THE HYDRONIC HEATER WORKS

Combustion air from the environment and fuel from the vehicle tank are mixed and ignited in the combustion chamber. The heat exchanger transfers the heat energy to the vehicle's own cooling water system. The vehicle's heated coolant then circulates and preheats the engine.



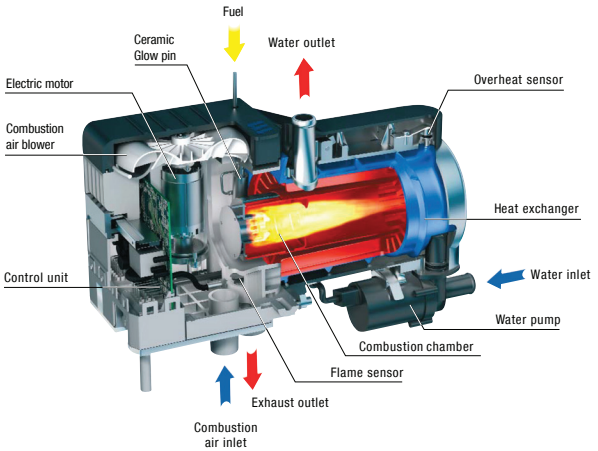


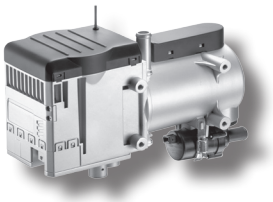
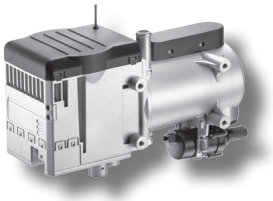
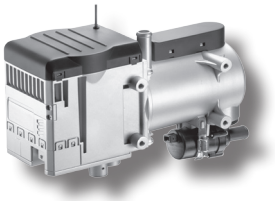
COOLANT HEATERS		HYDRONIC D5 SC	HYDRONIC D5 S	HYDRONIC D5 E
Heat Output (kW/BTU)	Boost	—	—	5.2 / 17755
	High	5.0 / 17100	5.0 / 17100	5.0 / 17100
	Low	2.4 / 8200	2.4 / 8200	2.1 / 7170
Fuel Consumption (l/hr / US gal/hr)	Diesel 1/2 Boost	—	—	0.64 / 0.17
	High	0.62 / 0.16	0.62 / 0.16	0.61 / 0.16
	Low	0.27 / 0.07	0.27 / 0.07	0.26 / 0.07
Fuel Metering Pump		Internal or External	External	External
Electrical Consumption (amps) (12V shown, 12V or 24V available)	Boost	—	—	3.3
	High	4.2	4.2	3.1
	Low	1.9	1.9	1.0
Coolant Pump		Internal	External	External
Weight (kg/lbs)		2.9 / 6.4	2.3 / 5.07	2.4 / 5.3

HYDRONIC M-II
TECHNICAL DATA

HYDRONIC M-II COOLANT HEATER

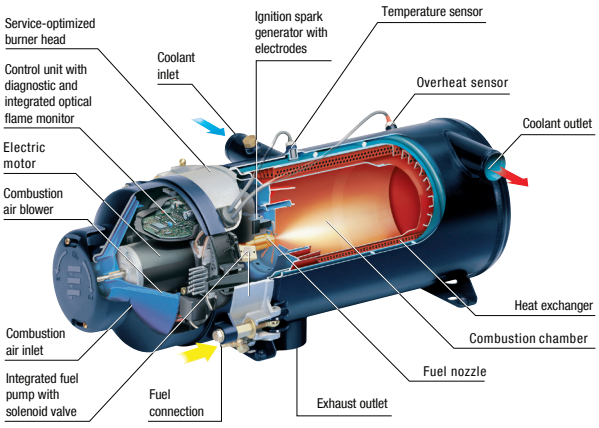
This series of heaters is powerful, compact, and light weight while still being rugged in design. This makes it ideal for providing engine, fuel, and hydraulic preheat for off-road equipment. It is also ideal for providing both engine and supplemental cabin heat for buses and boats.



COOLANT HEATERS	HYDRONIC M8 (BIODIESEL)	HYDRONIC M10	HYDRONIC M12
Heat Output (kW/BTU)	1.5 / 5120 8.0 / 27300	1.5 / 5120 9.5 / 32437	1.2 / 4100 12 / 42000
Fuel Consumption (l/hr / US gal/hr)	0.90 / 0.24 0.18 / 0.05	1.2 / 0.32 0.18 / 0.05	1.5 / 0.40 0.15 / 0.04
Electrical Consumption (amps) (12V shown, 12V or 24V available)	2.9 - 4.6	2.9 - 7.2	2.8 - 11.0
Weight (kg/lbs)	6.2 / 13.7	6.2 / 13.7	6.2 / 13.7

HYDRONIC L-II
TECHNICAL DATA



HYDRONIC L-II COOLANT HEATER

Espar's Hydronic L-II series are for the largest coaches, boats, and off-road engines. These heaters provide engine, fuel, and hydraulic preheat and can be incorporated into a coach's heating system to provide supplemental heat. They're the first choice for rapid heating in "arctic-like" conditions.

COOLANT HEATERS	HYDRONIC 16	HYDRONIC 24	HYDRONIC 30	HYDRONIC 35
Heat Output (kW/BTU)	16 / 54630	24 / 87950	30 / 102430	35 / 120000
Fuel Consumption (l/hr / US gal/hr)	2.0 / 0.53	2.9 / 0.77	3.7 / 0.98	4.2 / 1.11
Electrical Consumption (amps) *24V only without coolant pump 12V converter available	2.50	3.33	4.38	5.00
Weight (kg/lbs)	18.14 / 40	18.14 / 40	18.14 / 40	18.14 / 40
Water Throughput	5200 l/hr against 0.2 bar 1374 US gal/hr against 3 psi			

ACCESSORIES
CONTROL ELEMENTS

DIGI-MAX D1000

The Digi-Max D1000 is specially designed and equipped to meet the needs of Espar's Airtronic line of air heaters. This controller includes an array of useful features and an LCD screen to ensure optimum user-friendliness and programmability.

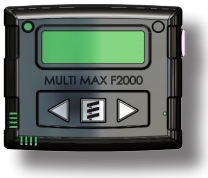
MULTI-MAX F1000 *

The Multi-Max F1000 controller is a fully programmable controller, specially designed for use with Espar's line of Hydronic coolant heaters. The unit is controlled by pre-determined settings stored on a Micro SD card and would be the ideal solution for those managing fleets of vehicles.

MULTI-MAX F2000 *

The Multi-Max F2000 offers all the features of and benefits of the Multi-Max F1000 but includes an LCD screen and additional programmable options. This unit improves ease of use and programmability and would best suit vehicle owners and operators looking for increased flexibility on the road.

* Settings are made with included programmer for Windows by the fleet manager and stored on the Micro SD card



OPERATING ELEMENTS	DIGI-MAX D1000	MULTI-MAX F1000	MULTI-MAX F2000
Heater Model	Airtronic	Hydronic	Hydronic
Description	Manually control the operation of the heater (heating the cab to the desired temperature)	Control the operation of the heater (preheating the engine) either manually or automatically through programmed settings. F1000 is best suited to the needs of a fleet while the F2000 offers more control for owners/operators.	
Pre-Selection	No	Stored on the SD card - Maximum of 4 events per day.	
Diagnostic Feature with Fault Code	Displays short description of fault	LED Blinks Codes	Displays short description of fault
Programmable LVD	Selectable through buttons	SD card	SD card
Runtime Limiter	Selectable through buttons	SD card	SD card
Preventative Maintenance Scheduler	Selectable through buttons	SD card	SD card
Display	LCD Screen 2 LED Indicators 3 Buttons	1 Tri-Colour LED Indicator 1 Button	LCD Screen 1 Tri-Colour LED Indicator 3 Buttons

Espar Products, Inc.
(800) 387-4800
(905) 670-0960
www.espar.com

Espar

02/10/2014
Printed in Canada. Subject to change without notice.