MARINE HEATING SYSTEMS FROM ESPAR

A WORLD OF COMFORT

Espar

SETTING THE COURSE FOR BOATING COMFORT
ON-BOARD HEATING FROM ESPAR

"There is nothing more contrary than the ocean" — so goes an old salt proverb. It's no wonder then that conditions on board can change just like the sea; one minute the sun is shining brightly, the next a raw, whipping wind brings in driving rain and bitter cold. For the passionate owner or sailor, all this has its own charm. But after a tough day on deck, you've earned a cozy retreat from the elements. Marine heaters by Espar make sure you and your crew remain warm and comfortable below decks, no matter the weather conditions. You decide a precise temperature setpoint and your Espar heater will quickly and quietly provide reliable heat you can count on. You can always feel confident venturing out on the water with an Espar heater on board.

A heater that fits your exact needs is important to you. That's why Espar Climate Control Systems offers two different heating systems for you to choose from. Espar's air heaters focus on providing heat for the interior of your watercraft, thereby creating the perfect ambient temperature below decks. Espar's coolant/water heaters are capable of even more — Hydronic heaters can also heat your domestic water supply so you have hot water on tap throughout the entire vessel.

Espar Climate Control Systems is a leading original equipment manufacturer in today's marine sector, and for many types of boats, you can order your Espar heater directly from the shipyard. Heaters can be OEM installed or retrofitted to virtually any type of boat. Espar also has established a closely integrated global network of partners to ensure professional installations, retrofitting, or maintenance of Espar heaters so you can always be sure you're getting the best product and service.

Using an Espar marine heater means that you benefit from the world's leading heating and climate control technology. Espar heater systems have been setting the standard for decades, with over 40 years experience in the marine sector alone. Espar Climate Control Systems also carries a wide range of products for other applications including passenger cars, transport trucks, heavy equipment, and buses. To see our full range of products and what Espar can do for you, please visit our website at www.espar.com.

ESPAR'S AIR HEATERS

INSTANT HEAT THANKS TO AIRTRONIC

Espsr's Airtronic heaters are built to suit the heating needs of any boat or yacht below deck. Heaters are rugged in design and provide the required heat very quickly in any climate. They, therefore, are especially well suited for the marine sector. Our product portfolio offers a wide range of solutions for your heating needs and our worldwide network of technicians and distributors make it easy to perfectly equip your boat, no matter the type or size.

ESPAR'S AIRTRONIC AIR HEATER SYSTEMS

Espar's Airtronic line of air heaters offers a compact solution with heat creation and fan distribution neatly packaged in one unit. An Airtronic heater, when installed in a locker or engine area, perfectly suits the concept and layout of boats.

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 or through dedicated venting. These heaters cycle quietly through four output levels to maintain a desired temperature range using a fraction of the fuel and power consumed by comparable heaters. Units also offer added benefits such as lavatory heating and hanging locker drying options.

YOUR AIRTRONIC ADVANTAGES:

- Power setting for fast, direct heating
- Continuously variable temperature selection
- Suitable for fresh air operation
- Nearly silent operation
- Can be used specifically for ventilation on warm days
- Inexpensive to operate, service and maintain
- Minimal assembly required — ideal for a retrofit installation
- Easy maintenance and user-friendly
- Available as an OEM or retrofit install

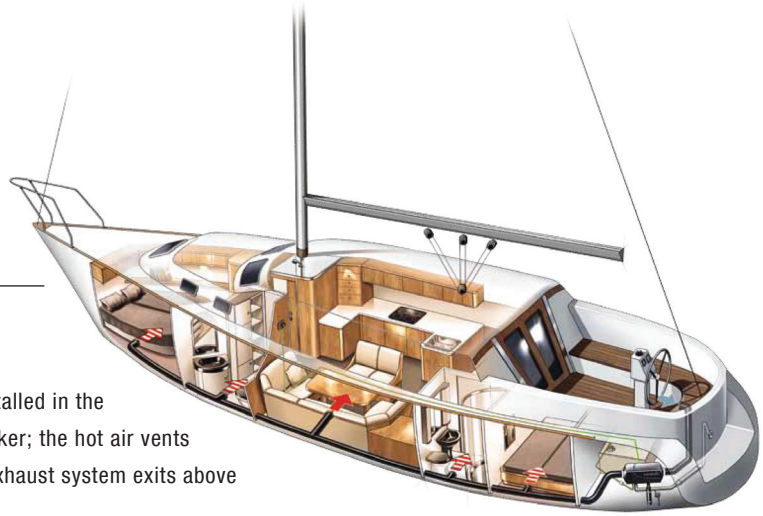
ESPAR AIRTRONIC SELECTION GUIDE*

Boat Length (ft.)	13	16	19	22	26	29	32	36	39	42	45	49	52	55	59	62	65
Airtronic D2																	
Airtronic D4																	
Airtronic D5																	
Airtronic D8LC																	

Sailing Vessel Motor Vessel

*This is a basic guide. Heater size may vary due to your seasonal requirements, boat's geographical location, volume, insulation, etc.

AIRTRONIC AIR HEATER
TECHNICAL DATA



INSTALLATION EXAMPLE

In this example, the Airtronic heater is installed in the port locker. Fresh air is taken from the locker; the hot air vents are distributed throughout the boat. The exhaust system exits above the waterline at the transom.




AIR HEATERS		AIRTRONIC D2	AIRTRONIC D4	AIRTRONIC D5	AIRTRONIC D8LC
Heat Output (kW/BTU)	Boost	2.2 / 7500	4.0 / 13650	5.5 / 18800	4.0 / 13650
	High	1.8 / 6500	3.0 / 10200	4.8 / 16400	3.0 / 10200
	Medium	1.2 / 4100	2.0 / 6800	2.7 / 9200	2.0 / 6800
	Low	0.85 / 2900	0.9 / 3400	1.2 / 4100	0.9 / 3400
Air Throughput (m^3h/cfm)	High	81.6 / 48	144.4 / 85	232.8 / 137	256.6 / 151
	Low	51.0 / 30	32.3 / 19	137.6 / 81	248.1 / 146
Fuel Consumption (l/hr / US gal/hr)	Diesel 1/2				
	Boost	0.28 / 0.07	0.51 / 0.13	0.66 / 0.17	0.51 / 0.13
	High	0.23 / 0.06	0.38 / 0.10	0.58 / 0.15	0.38 / 0.10
	Medium	0.15 / 0.04	0.25 / 0.07	0.34 / 0.09	0.25 / 0.07
	Low	0.10 / 0.02	0.11 / 0.03	0.15 / 0.04	0.11 / 0.03
Electrical Consumption (amps) (12V shown, 12V or 24V available)	Boost	2.8	3.3	7.1	3.3
	High	1.8	2.0	6.7	2.0
	Medium	1.0	1.1	2.5	1.1
	Low	0.67	0.6	1.3	0.6
Weight (kg/lbs)		2.7 / 5.9	4.5 / 9.9	9.3 / 20.0	4.5 / 9.9

SETTING THE COURSE FOR BOATING COMFORT
ON-BOARD HEATING FROM ESPAR

Whether you navigate by power or sail, an Espar diesel-fired heater will keep you warm and comfortable, no matter the weather or season. While other wait in port for the thermostat to rise, with on-board heat from Espar, you're already en route to your destination. Available in s wide range of thermal outputs to closely match your heating needs, Espar heaters are compact, convenient and economical to operate. They are also time-tested for safety, with over 40 years of successful installations.

ESPAR'S HYDRONIC COOLANT/WATER HEATER SYSTEMS

A Hydronic water or coolant heater offers full internal heat control, supplemental cabin heating, and domestic hot water facilities, while consuming minimal amounts of electrical power and fuel.

The Hydronic line of coolant heaters operate like hot water furnaces, heating coolant or water and circulating it for heating. Once the operational system is hot, the heater will automatically regulate down to a lower heat level. When heavy demands are placed on the heating system, such as a shower or maximum cabin heat, the heater automatically returns to a higher heat level.

YOUR HYDRONIC ADVANTAGES:

- More consistent, need-driven heat output— via panel radiators or heaters equipped with blowers
- Installation flexibility, i.e. in the engine compartment with small diameter pipelines
- Individual temperature adjustment and no blower noise for every panel radiator
- Engine preheat and domestic water heating possible
- Maintenance free and user-friendly

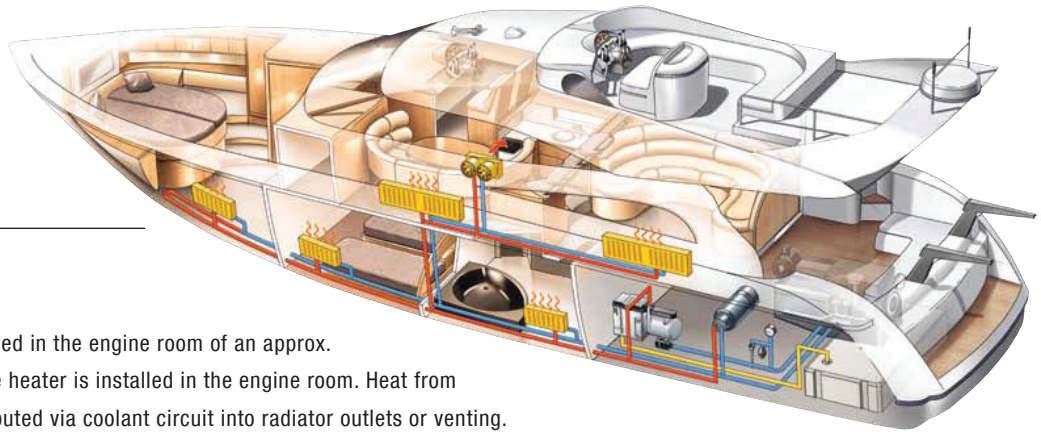
ESPAR HYDRONIC SELECTION GUIDE*

Boat Length (ft.)	19	22	26	29	32	36	39	42	45	49	52	55	59	62	65	68	72
Hydronic 2 Commercial																	
Hydronic 2 Economy																	
Hydronic 5																	
Hydronic M8 Biodiesel																	
Hydronic M10																	
Hydronic M12																	
Hydronic L16																	
Hydronic L24/L30/L35																	

Sailing Vessel Motor Vessel

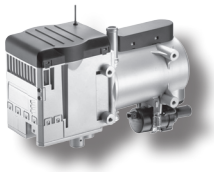
*This is a basic guide. Heater size may vary due to your seasonal requirements, boat's geographical location, volume, insulation, etc.

HYDRONIC COOLANT/WATER HEATER
TECHNICAL DATA



INSTALLATION EXAMPLE

A Hydronic M-II heater is installed in the engine room of an approx. 35ft. yacht. In this example, the heater is installed in the engine room. Heat from warmed coolant/water is distributed via coolant circuit into radiator outlets or venting.



COOLANT HEATERS		HYDRONIC D5 SC	HYDRONIC D5 S	HYDRONIC M-II *	HYDRONIC L-II **
Heat Output (kW/BTU)	High Low	5.0 / 17100 2.4 / 8200	5.0 / 17100 2.4 / 8200	12 / 42000 1.2 / 4100	35 / 120000 16 / 54630
Coolant/Water Throughput (l/h / US gal/h)		900 / 238	800 / 211.3	1400 / 370	5000 / 1320
Fuel Consumption (l/hr / US gal/hr)	Diesel 1/2 High Low	 0.62 / 0.16 0.27 / 0.07	 0.62 / 0.16 0.27 / 0.07	 1.5 / 0.40 0.15 / 0.04	 4.2 / 1.11 2.0 / 0.53
Fuel Metering Pump		External	External	External	—
Electrical Consumption (amps) (12V shown, 12V or 24V available)	High Low	4.2 1.9	4.2 1.9	11.0 2.8	5.0 2.5
Coolant Pump		Internal	External	External	—
Weight (kg/lbs)		2.9 / 6.4	2.3 / 5.07	6.2 / 13.7	18.14 / 40

*Espar's Hydronic M-II has six operating levels, output data shown in chart represents highest and lowest operating levels
**Espar's Hydronic L-II has four power ranges, output data shown in chart represents highest and lowest operating levels

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

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