

OCEAN COOL

BATTERY POWERED

HFL's experience in the manufacture, installation and service of marine airconditioning equipment has led to the development of the unique Ocean Cool self contained DC air conditioner. The unit is based on a hermetically sealed compressor powered by 12 or 24 volts directly from the ship's batteries. An oversized condenser, evaporator and blower allow for efficient and quiet air processing. Via a Rheostat the air speed can be changed by up to 60%, thus achieving smooth air flow and gentle air distribution. The seawater pump is not self priming and must be mounted below the seawater line. Two different models are available, one quieter than the other. The controls are provided by either a manual panel, with a two knob control, or a digital, using electronic displays for set point temperature and ambient temperature display.



Designed for vessels where no AC power is available, the Ocean Cool air conditioner delivers 6000BTU/h, 1500Kcal/h, 1350 Watt/h of cold air. Reverse cycle is not available, i.e. you cannot heat with the air conditioner. The sound construction of the unit lends itself to a variety of applications, including motor and sailing yachts, work boats, fishing vessels and personal tenders. Primarily we see its use in leisure craft, yachts and power boats.

The installation of the Ocean Cool requires no refrigeration skills. Each Ocean Cool air conditioner comes precharged and factory tested, ready to bolt down and connect up for immediate operation. The safety arrangements provide refrigerant circuit protection by means of failsafe shutdown in the event of low or high refrigerant pressure caused by lack of air flow or lack of seawater flow, as experienced by clogged seawater inlet strainers. This is also one of the main causes for premature compressor burnout of marine refrigeration or air conditioning equipment. Sufficiently sized seawater strainers are essential for reliable performance of the equipment.

HFL can provide the complete package including the grilles, ductwork, Y pieces, return air apertures, transitions, rings, etc to facilitate easy installation. The accessories also allow for the climate control of two cabins from one single air conditioner. Two Ocean Cool units can be powered by one seawater pump provided a relay box is being used.

The Ocean Cool air conditioner is to be powered via a battery with the power source either from

a battery charger connected to shore supply or from the engine driven alternator when the propulsion unit is running or better still from an HFL diesel charger, available at 12 or 24 volts. The HFL "Traveller" comes with a rating of 12 volt 100amps max or 24 volt 50amps max output.

A battery monitor should be installed to alert of low battery voltage. Even better would be the use of a complete battery monitoring system, such as the SALT battery monitor. The low voltage battery signal can be used to automatically start the HFL "Traveller" and ensure continuous operation of the airconditioner.

HFL recommend battery sizes of at least 160Ahrs (2x80Ahrs) at 12 volt and the same for a 24 volt system. If the battery voltage is too low or the battery size too small the equipment will perform unsatisfactorily. An operating range of Dt can be expected between 10-15°C at a seawater temperature range up to 25°C and an ambient air of up to 40°C.

SPECIFICATIONS

MODEL	BTU/h	Kcal/h	W/h	Dimensions		Amp 12V 24V	Watts	Duct		kg
				Inches	mm			Inches	mm	
HSD6012	6000	1500	1350	17½x14x11½	440x360x290	44	528	5"	125	32
HSD7024	7000	1750	1575	18x14x11½	460x360x290	28	670	5"	125	35