

Zephyr Air Conditioning Kit

DIRECT EXPANSION



Zephyr ZF Kit



Two & Three Knob Rotary Control



Optional Dual Duct Kit

Note: The dual duct kit includes a plenum, one discharge grill & an additional length of insulated duct.

Features

- 5,000, 10,000, 12,000 or 16,000 BTU cooling-only air conditioning unit
- Seawater pump
- Control switch & thermostat
(2-knob switch for ZF-5)
(3-knob switch for ZF-10, ZF12 & ZF-16)
- Seawater accessories, including strainer, thru-hull fitting, valve, hose, clamps & associated hardware
- Return & discharge air grills & insulated flexible duct

About R-22

The Zephyr air conditioner is pre-charged at the factory with R-22 refrigerant gas. Under current federal environmental regulations, R-22 will continue to be available at least through the year 2020. The R-22 is contained in a closed loop, which is sealed to prevent any of the gas from escaping into the environment. It will not be necessary for you to add or remove refrigerant at installation.

Zephyr ZF Kits

The cooling-only Zephyr (ZF) air conditioning unit fits easily beneath a vee-berth or settee, in the bottom of a closet or any other out-of-the-way location. The quiet, efficient squirrel-cage blower can be rotated at installation for either a vertical or horizontal discharge. Air is carried through insulated ducting to a discharge grill. An optional dual duct kit is also available, permitting you to discharge cool air in two locations.

The Zephyr kit contains the air conditioning unit, sea-water pump, strainer, thru-hull fittings, hoses, duct, grills controls and all other components. All you'll need to make the installation is several hours of time and a few standard tools.

Like all Cruisair products, the Zephyr air conditioner is backed by a worldwide network of factory-trained servicing dealers. Wherever you go, you're never far from a Cruisair dealer.

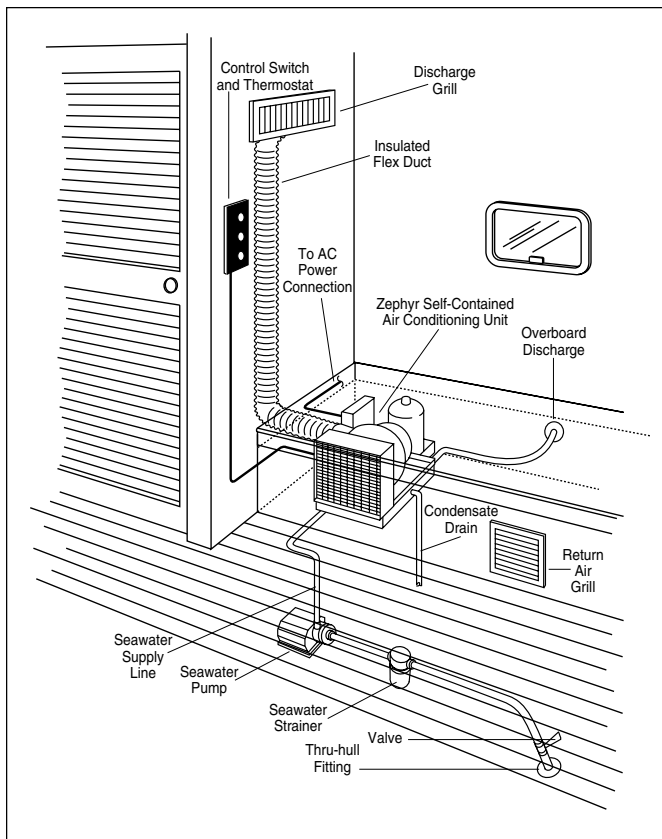
ZF Specifying Guidelines

Divide the boat into three categories:

1. Below deck cabins with sloping sides and few portlights, such as a vee-berth
2. Mid-deck cabins with vertical sides and large windows
3. Above deck cabins with many windows and exposure to sunlight

Measure the area of each cabin in square feet. If one end of the compartment is narrower than the other, take your measurement in the middle for an average. Then use the table below to determine the proper size air conditioner.

Type of Cabin	Area in Sq. Ft.	Recommended Zephyr Unit
Below-Deck	Up to 85	ZF-5
	85-170	ZF-10
	170-210	ZF-12
	210-275	ZF-16
Mid-Deck	Up to 55	ZF-5
	55-110	ZF-10
	110-140	ZF-12
	140-180	ZF-16
Above-Deck	Up to 42	ZF-5
	42-84	ZF-10
	84-110	ZF-12
	110-135	ZF-16



ZF Installation Guidelines

The following is a simplified explanation of the steps involved in installing the Zephyr (ZF) air conditioner. Make sure you refer to the complete Installation Manual when actually installing the system.

- Select the Location.** The Zephyr unit is normally mounted low in a closet, under a vee-berth or settee, or any other out-of-the way location. Cool air is carried through the insulated flexible ducting to a discharge air grill located on a wall as high as possible in the compartment. Seawater is pumped through the unit from an underwater thru-hull fitting and is discharged overboard. The switch assembly is mounted on a convenient wall in the compartment, no more than 10 ft. from the Zephyr unit. It's recommended that the components be placed in the appropriate locations before starting with the installation, to make sure everything fits.
- Install the Seawater Plumbing Components.** The seawater pump must be mounted in the bilge below the waterline, and seawater is piped from a bronze thru-hull fitting through a shut-off valve and strainer to the pump. From there, water is piped upwards through the Zephyr unit's condenser, and then to an overboard discharge fitting above the waterline.
- Mount the Zephyr Unit.** The Zephyr air conditioning unit is mounted on a flat, horizontal surface, using the metal clips provided. The Zephyr blower assembly can be rotated for either a horizontal or vertical discharge.
- Install Grills and Duct.** The return air grill should be placed so there is unobstructed air flow to the Zephyr unit's evaporator coil. The discharge grill should be placed as high as possible. A flexible duct is provided to carry air from the Zephyr unit to the discharge grill. If the dual duct option is required, a plenum is used to split the air discharge so that air is carried to two different grills.
- Connect Electrical Wiring.** Cut a hole for the switch assembly. Route the electrical wiring, along with the copper thermostat capillary tube, to the Zephyr unit. Mount the thermostat bulb in the return air path. Make wiring connections using the wiring schematic.
- Hook Up the Condensate Drains.** Attach plastic hose to either or both of the condensate drain plugs in the pan beneath the unit. Route to an overboard discharge or sump.
- Attach Hose Connections.** The seawater hoses are secured in place using double/reversed hose clamps.

TECHNICAL SPECIFICATIONS

Model	Nominal Capacity (Btu)	Height (in/mm)	Width (in/mm)	Depth (in/mm)	Weight (lb/kg)	Voltage Frequency	Maximum Amps
ZF5	5,000	11.1/282	16/407	11.6/294	39.6/18	115V, 60Hz	29
ZF5CK		11.6/294				220V/240V, 50Hz	17.7
ZF10	10,000	12.9/328	20/508	12.8/326	54/24.5	115V, 60Hz	44
ZF10CK						220V/240V, 50Hz	22
ZF12	12,000	12.9/328	20/508	12.8/326	58.5/26.6	115V, 60Hz	48.3
ZF12CK						220V/240V, 50Hz	27
ZF16	16,000	13.5/343	20/508	13.8/350	62/28.2	115V, 60Hz	67
ZF16CK						220V/240V, 50Hz	32

