R Type Condensing Units

5K to 16K BTU/hr Capacity Range



R type remote condensing units are the next generation of seawater-cooled, reverse-cycle heat pumps for cooling and heating in marine applications. Small R type units are available in capacities from 5,000 to 16,000 BTU/hr.

These condensing units can be installed with up to two Cruisair cooling units, where the total capacity is equal to the condensing unit capacity. In the cooling mode, full performance is available in seawater up to 90°F (32°C). In reverse-cycle heating, they will provide heat in seawater as low as 40°F (4.4°C).

The new R type has a number of improvements over the original "F" type condensing units. A one-piece chassis/pan has a smaller footprint, with two 1/2" FPT drain connections. New hold-down brackets secure all four corners and allow for easier installation and removal. The one-piece electrical box with 3' (0.9m) cable can be remotely mounted. (RN models have a secondary box). Additional service ports have been added for ease of charging and servicing. The R type unit is designed as a drop-in for the older F and J type with few modifications.

Type R models are designed for installation in the vessel's engine room or other mechanical space. It is not affected by moisture, normal vibration, or ambient temperatures up to 140°F (60°C). No ventilation is required.

Three different models are available, depending on what type of control is desired. "R" use the SA3 3-knob rotary switch assembly, "RX" is controlled by the SMX II microprocessor, and "RN" uses the SMX Net. SMX models include the respective

Key Benefits

- Redesigned R type unit is lighter in weight than F type.
- Service ports on refrigerant lines and base valves.
- Rubber isolation mounts on compressors.
- Condensate pan with front and rear drains.
- Corner mounting brackets designed for easy install.
- High pressure switch (SMX models also includes low pressure switch).
- Electrical box can be remotely mounted up to 3' (0.9m) from unit.
- Available with "green-gas" R-417A refrigerant.
- An additional vibration isolation kit is available.
- Ignition protected.



SMX II or SMX Net power/logic boards. In addition, an SMXir or the new SMXht keypad/display, a CXP connecting cable, and a TSEP temperature sensor must be purchased separately. If networking RN units, CNP network cables are also needed.

A seawater cooling system, with pump, scoop type throughhull, seacock, strainer, and overboard discharge, is also required.

Every R type unit is fully tested and pre-charged at the factory with R-22 refrigerant or R-417A "green gas". (All 50Hz "CK" models come standard with R-417A.) Installation and final charging of the system must be performed by a certified technician.

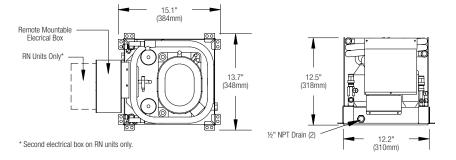
Technical Specifications for R Type Condensing Units

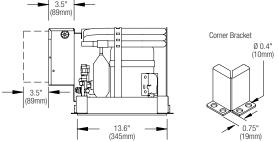
Model	Capacity (BTU/hr)	Power ⁽¹⁾ Voltz/Hz/Ph	Full Load Amps		LRA ⁽²⁾	MCB ⁽³⁾	Connections (Male Flare)		Seawater Flow Rate	Refrigerant ⁽⁴⁾	Weight ⁽⁵⁾
			Cool	Heat			Discharge	Suction	(gpm/lpm) ⁾		(lbs/kg)
R, RX, RN5	5,000	115/60/1	5.0	6.2	28.0	15A	1/4"	3/8"	1.7/6	R-22 or R-417A	48/21.8
R, RX, RN7 R, RX, RN7C R, RX, RN7CK	7,000	115/60/1 230/60/1 220-240/50/1	6.2 3.3 3.0	7.7 4.0 3.7	34.0 20.0 16.0	20A 10A 10A	1/4"	3/8"	2.3/9	R-22 or R-417A	50/22.7
R, RX, RN10 R, RX, RN10C R, RX, RN10CK	10,000	115/60/1 230/60/1 220-240/50/1	8.0 4.3 4.6	10.2 5.5 5.6	47.0 28.0 26.3	30A 15A 15A	1/4"	3/8"	3.3/13	R-22 or R-417A	60/27.3
R, RX, RN12 R, RX, RN12C R, RX, RN12CK	12,000	115/60/1 230/60/1 220-240/50/1	8.4 5.4 5.4	11.0 6.6 6.4	50.0 34.0 31.0	30A 15A 15A	1/4"	3/8"	4.0/15	R-22 or R-417A	62/28.2
R, RX, RN16 R, RX, RN16C R, RX, RN16CK	16,000	115/60/1 230/60/1 220-240/50/1	11.4 6.2 5.0	13.5 7.3 6.0	75 36 35	40A 20A 20A	1/4"	1/2"	5.3/20	R-22 or R-417A	63/28.6

Notes:

- (1) 115V, 230V, and 440V 60 Hz equipment can be operated at 100V, 200V, or 380V respectively, in a 50Hz environment. In such a 50Hz environment, performance will decrease by 17%. Full rated capacity can be obtained by specifying Cruisair "CK" equipment.
 (2) LRA – Locked Rotor Amps
- (3) MCB Maximum Circuit Breaker
- (4) All models are available with refrigerant R-417A. Amp draw would be the same as R-22 models listed above
- (5) Weights shown are units only. Shipping weights will be approximately 6 lbs (2.7kg) more
- Compressor starting current will vary with voltage and is approximately 3-4 times the full-load amps.

Interpreting Model Numbers RX 10 417 Type of Control Capacity X AC Power Refrigerant R: Rotary knob 1,000 BTU/hr Blank: 100/115V, 50/60Hz RX: SMX II C: 200/230V. 50/60Hz 417: R-417A RN: SMX Net CK: 220-240V, 50Hz only





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