



RX24 Condensing Unit Shown

## Features

### Type R 20,000 - 48,000 BTU/Hr Condensing Units

- Higher efficiency compressors at lower amperages
- Redesigned R type unit is lighter in weight
- 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 and low pressure switches
- Three different control options:
  - R series uses a 3-knob rotary switch assembly
  - RX series includes an SMX II power/logic board and uses the new SMXht, SMXir or SMX II keypad/displays
  - RN series includes an SMX Net power/logic module
- Electrical box can be remotely mounted to deck or bulkhead up to 5'(1.5m) from unit
- Available with "green-gas" R-417A refrigerant
- Seawater coil manifolds are optional
- Heavy-duty vibration isolators are available

### Type R Models

The new R type remote condensing units are the next generation of seawater-cooled, reverse-cycle heat pumps for cooling and heating in marine applications. Large R type units are available in capacities from 20,000 to 48,000 BTU/Hr, with larger units being designed. Models up to 36,000 BTU/Hr use reciprocating compressors, while the 48K units use scroll compressors.

These condensing units can be installed with up to two Cruisair cooling units, where the total cooling unit capacity is equal to the condensing unit capacity. Some applications may allow three cooling units on one condenser; contact the Cruisair Applications department for assistance in design, prior to installation. In the cooling mode, full performance is available in seawater up to 90°F (32°C). In reverse-cycle heating, the unit will provide heat in seawater as low as 40°F (4.4°C).

The new R type unit has a number of improvements. Higher efficiency compressors deliver full capacity at lower amperages. The newly designed, one-piece electrical box with 5'/1.5m cable can be remote mounted simply by removing one screw (RN models have a secondary box). Additional service ports have been added for ease of charging and servicing. The one-piece chassis/pan has two new drain locations. New style hold-down brackets secure all four corners and allow for easier installation and removal. The R type condenser is designed as a drop-in for the older F type, with few modifications.

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

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

The large R type condensing units are available for a variety of power systems. Please refer to the technical specifications on back of this sheet. Note that the 380-460V units will require a single-phase control circuit power feed (115V or 230V). Three-phase units are not ignition protected and must not be installed in an area where flammable vapors may be present.

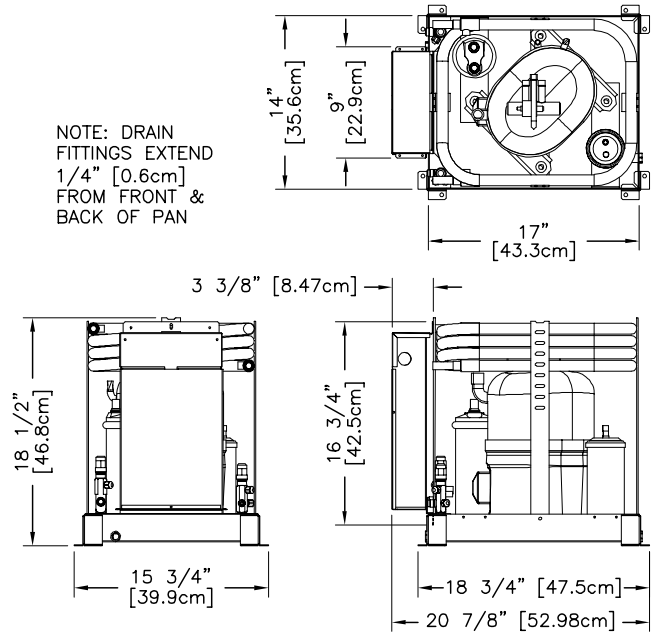
A seawater cooling system, with pump, scoop type through-hull, seacock, strainer, and overboard discharge, is also required.

Every R type unit is fully tested and pre-charged at the factory with R22 refrigerant; "green gas" R-417A is available, too. Installation and final charging of the system must be performed by a certified technician.

Compressor Electrical Power Specs	
Nominal Rating	Acceptable Range
230/60/1	208-240/60/1 & 200/50/1
220/50/1	220-240/50/1
230/60/3	208-230/60/3 & 190-220/50/3
220/50/3	200-220/50/3
460/60/3	440-480V/60/3 & 380-420/50/3
380/50/3	380-420/50/3

Some 60Hz equipment can be operated in a 50Hz environment. However, performance will be decreased by approximately 17%. Fully rated 50Hz capacity may be obtained by specifying Cruisair "CK" equipment. For more information regarding compressor voltages, refer to field notice FNR#192-B3 on the Dometic Corporation - Environmental Systems' Customer News & Information website.

NOTE: DRAIN FITTINGS EXTEND 1/4" [0.6cm] FROM FRONT & BACK OF PAN



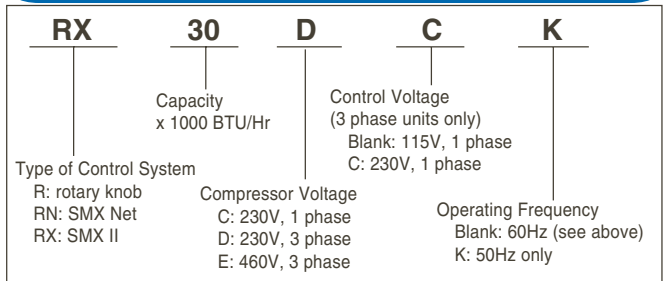
### TECHNICAL SPECIFICATIONS

Model	Capacity (BTU/Hr)	Power Volt/Hz/Ph	FLA Cool	FLA Heat	LRA	Weight (lb/kg)	Refrig. Dis.	Refrig. Sct.	Pump (gpm/lpm)
R, RN, RX20C	20,000	230/60/1	6.0	7.2	48	95/43.1	3/8"	1/2"	6.7/25
R, RN, RX20CK		220/50/1	5.3	6.6	55				
R, RN, RX20ECK		380/50/3	2.7	3.2	24				
R, RN, RX24C	24,000	230/60/1	7.0	8.5	60	100/45.4	3/8"	1/2"	8.0/30
R, RN, RX24CK		220/50/1	6.9	8.5	55				
R, RN, RX24D(C)		230/60/3	5.4	6.4	48				
R, RN, RX24ECK	380/50/3	2.8	3.3	30					
R, RN, RX30C	30,000	230/60/1	7.7	9.6	61	110/49.9	3/8"	3/4"	10.0/38
R, RN, RX30CK		220/50/1	8.7	10.6	69				
R, RN, RX30D(C)		230/60/3	5.8	6.6	58				
R, RN, RX30E(C)	460/60/3	2.8	3.3	30					
R, RN, RX30ECK	380/50/3	3.5	4.2	38					
R, RN, RX36C	36,000	230/60/1	9.8	12.3	82	115/52.2	3/8"	3/4"	12.0/45
R, RN, RX36CK		220/50/1	9.8	12.5	76				
R, RN, RX36D(C)		230/60/3	7.2	8.5	78				
R, RN, RX36E(C)	460/60/3	3.5	4.0	36					
R, RN, RX36ECK	380/50/3	4.0	4.8	42					
R, RN, RX48RC	48,000	230/60/1	12.4	17.2	109	120/54.4	3/8"	3/4"	16.0/61
R, RN, RX48RCK		220/50/1	13.5	17.6	114				
R, RN, RX48D(C)		230/60/3	8.6	11.1	88				
R, RN, RX48E(C)	460/60/3	4.3	5.6	44					
R, RN, RX48ECK	380/50/3	5.0	6.5	50					

**NOTES:**

- All models have the same dimensions; see drawing above.
- All models have 5/8" cooling water connections directly to the condenser coil(s), seawater manifolds are optional.
- Refer to the Compressor Electrical Power Specs chart for nominal ratings and exceptional ranges.
- Compressor starting current will vary with voltage and is approximately 3-4 times the full-load amps (FLA).
- Models 20-36K use reciprocating compressors; 48K units have Scroll compressors.

### INTERPRETING MODEL NUMBERS



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Revised: 10-01-04 L-2360