Type R Models

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 Crusair 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 ft/.9m cable can be remote 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 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 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 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

<table>
<thead>
<tr>
<th>Model</th>
<th>Capacity (BTU/hr)</th>
<th>Power¹ Volt/Hz/Ph</th>
<th>Full Load Amps Cool</th>
<th>Heat</th>
<th>LRA²</th>
<th>MCB³</th>
<th>Refrigerant⁴</th>
<th>Weight ³ (lb/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R, RX, RN5</td>
<td>5,000</td>
<td>115/60/1</td>
<td>5.0</td>
<td>6.2</td>
<td>28</td>
<td>15A</td>
<td>R22 or R-417A</td>
<td>48/21.8</td>
</tr>
<tr>
<td>R, RX, RN7</td>
<td>7,000</td>
<td>230/60/1 220-240/50/1</td>
<td>6.2</td>
<td>7.7</td>
<td>34</td>
<td>20A</td>
<td>R22 or R-417A</td>
<td>50/22.7</td>
</tr>
<tr>
<td>R, RX, RN7C</td>
<td>10,000</td>
<td>230/60/1</td>
<td>4.3</td>
<td>5.5</td>
<td>28</td>
<td>15A</td>
<td>R22 or R-417A</td>
<td>60/27.3</td>
</tr>
<tr>
<td>R, RX, RN10</td>
<td>12,000</td>
<td>230/60/1 220-240/50/1</td>
<td>5.4</td>
<td>6.6</td>
<td>34</td>
<td>15A</td>
<td>R22 or R-417A</td>
<td>62/28.2</td>
</tr>
<tr>
<td>R, RX, RN10C</td>
<td>16,000</td>
<td>230/60/1</td>
<td>5.4</td>
<td>6.4</td>
<td>31</td>
<td>15A</td>
<td>R22 or R-417A</td>
<td>63/28.6</td>
</tr>
</tbody>
</table>

1. 115V, 230V, and 440V 60 Hz equipment can be operated at 100V, 200V, or 380V respectively, in a 50 Hz environment. In such a 50 Hz 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 R22 models listed above.

5. Weights shown are units only. Shipping weights will be approximately 6 lbs (2.7kg) more.

NOTE: Compressor starting current will vary with voltage and is approximately 3-4 times the full-load amps.

### INTERPRETING MODEL NUMBERS

- **RX**
  - Capacity x 1,000 Btu/hr

- **10**
  - AC Power
  - Blank: 100/115V 50/60 Hz

- **CK**
  - Refrigerant
  - Blank: R22

- **417**
  - Type of Control
  - R: Rotary Knob
  - RX: SMX II
  - RN: SMX Net

**Revised: 01-06-06    L-2431**

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