

ruisair

FX24C3-P Condensing Unit Shown

Features

Type F 20,000 - 72,000 BTU/Hr Condensing Units

- Reverse-cycle, seawater-cooled condensing units
- Models available in many configurations
- Rubber isolation mounts
- Condensate drain pan
- High and low pressure switches
- Reciprocating or scroll compressors
- Can serve up to two Cruisair cooling units
- Three different control options:
 - -F series for use with 3-knob rotary switch assembly
 - -FX series includes an SMX II power/logic board

-FN series includes an SMX Net power/logic module.

• Available with R-417A refrigerant

Type F Models

Type F remote condensing units are seawater-cooled, reverse-cycle heat pumps for cooling and heating in marine applications. Large F type units are available in capacities from 20,000 to 72,000 BTU/Hr.

A Cruisair condensing unit can be installed with up to two Cruisair cooling units, where the total cooling unit capacity is equal to the condensing unit capacity. Copper tubing is used to transport refrigerant between the condensing unit and the cooling unit(s).

In the cooling mode, full performance is available in seawater up to $90^{\circ}F$ (32°C). In reverse-cycle heating, the unit will provide heat in seawater as low as $40^{\circ}F$ (4.4°C).

The condensing unit assembly includes a compressor, cupronickel seawater condenser, reversing valve, refrigerant receiver and accumulator, and other electrical and mechanical components on a single chassis that is mounted in a drain pan with rubber isolation mounts. Models up to 48,000 BTU/Hr use reciprocating compressors, while 60,000 and 72,000 BTU/Hr units use scroll compressors.

F type units are designed for installation in the vessel's engine room or other mechanical space, along with the seawater pump and associated plumbing. 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 F type units are available, depending on what type of control is desired. Standard F units are for 3-knob rotary switch assemblies (an SA3 type switch must be purchased separately). FX units are for the SMX II microprocessor system, and FN models are for the SMX Net microprocessor system. The SMX units include the respective SMX II or SMX Net power/logic board. In addition, an SMXir keypad/display, a CXP connecting cable, and a TSEP temperature sensor must be purchased separately. If networking FN units, CNP network cables are also needed.

The large F 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).

Every type F unit is fully tested and pre-charged at the factory with R22 refrigerant. Installation and final charging of the system must be performed by a certified technician.

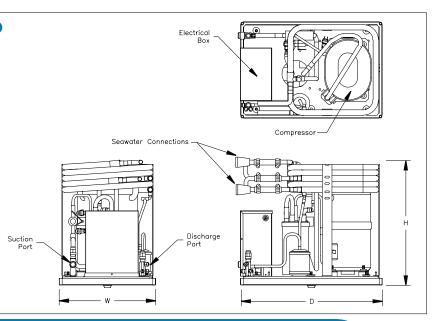


SPECIFYING GUIDE FOR ACCESSORIES

| | REFRIGERANT LINE SIZES | | SEAWATER | SEAWATERPUMP |
|--------|------------------------|---------|-------------|--------------|
| BTU/Hr | DISCHARGE | SUCTION | CONNECTIONS | gpm/pm |
| 20,000 | 3/8" | 1/2" | 5/8" Hose | 6.7/25 |
| 24,000 | 3/8" | 1/2" | 5/8" Hose | 8.0/30 |
| 30,000 | 3/8" | 3/4" | 3/4" FPT | 10.0/38 |
| 36,000 | 3/8" | 3/4" | 3/4" FPT | 12.0/45 |
| 48,000 | 3/8" | 3/4" | 3/4" FPT | 16.0/61 |
| 60,000 | 3/8" | 3/4" | 1" FPT | 20.0/76 |
| 72,000 | 3/8" | 3/4" | 1" FPT | 24.0/91 |

Compressor Electrical Power Specs Nominal Rating Acceptable Range 115/60/1 110-120/60/1 230/60/1 208-240/60/1 220/50/1 220-240/50/1 230/60/3 208-230/60/3 & 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

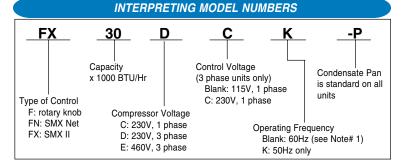
For more information regarding compressor voltages, refer to field notice FN#192-B3 on Dometic Corporation - Environmental Systems' Customer News & Information website.



TECHNICAL SPECIFICATIONS Capacity Power FLA FLA **Dimensions (in/mm)** Weight Model (BTU/Hr) Volt/Hz/Ph Cool Heat LRA н W D (lb/kg) F, FN, FX20C3-P 20,000 230/61/1 6.1 7.5 54 18/458 15.0/381 22.0/559 94/42.6 F, FN, FX24C3-P 230/60/1 7.3 9.0 57 110/49.9 F, FN, FX24CK3-P 220/50/1 9.9 110/49.9 7.8 55 F, FN, FX24DC3-P 24,000 230/60/3 5.4 6.4 48 18/458 15.0/381 22.0/559 115/52.2 F, FN, FX24E3-P 460/60/3 3.0 3.4 24 115/52.2 F, FN, FX24ECK-P 380/50/3 3.6 30 115/52.2 3.0 F, FN, FX30C3-P 230/60/1 8.4 10.9 120/54.4 66 F, FN, FX30CK-P 130/59.0 220/50/1 9.8 11.8 65 F, FN, FX30DC-P 30,000 19.8/502 15.0/381 22.0/559 230/60/3 6.2 7.4 48 125/56.7 F, FN, FX30E3-P 125/56.7 460/60/3 3.4 4.0 30 F, FN, FX30ECK-P 380/50/3 3.3 4.1 30 125/56.7 F, FN, FX36C3-P 230/60/1 11.6 14.1 82 135/61.2 F, FN, FX36CK3-P 220/50/1 12.5 15.5 95 135/61.2 F, FN, FX36DC3-P 36,000 230/60/3 6.9 8.3 60 19.8/502 15.0/381 22.0/559 135/61.2 F, FN, FX36E-P 460/60/3 4.0 4.8 34 135/61.2 F, FN, FX36ECK-P 380/50/3 4.3 5.0 36 135/61.2 F. FN. FX48RC-P 230/60/1 15.6 19.7 108 152/68.9 F, FN, FX48RCK3-P 220/50/1 15.6 18.8 101 152/68.9 F, FN, FX48DC-P 48,000 74 19.8/502 15.0/381 22.0/559 160/72.6 230/60/3 9.3 11.5 F, FN, FX48EC-P 460/60/3 5.2 6.0 37 162/73.5 F, FN, FX48ECK-P 380/50/3 5.6 46 162/73.5 6.5 F, FN, FX60C2-P 230/60/1 13.8 19.5 137 135/61.4 F, FN, FX60DC-P 60,000 230/60/3 9.8 12.7 91 22.0/559 12.5/317 25.0/635 135/61.4 F, FN, FX60ECK-P 380/50/3 5.6 7.6 64 140/63.6 F, FN, FX72DC-P 230/60/3 12.4 16.5 137 195/88.6 72,000 22.0/559 12.5/317 25.0/635 F, FN, FX72ECK-P 380/50/3 7.0 9.2 70 195/88.6

NOTE:

- Some 115V, 230V and 440V 60Hz equipment can be operated at 100V, 200V or 380V respectively, in a 50Hz environment. In such a 50Hz environment, performance will decrease by approximately 17%. Full rated capacity can be obtained by specifying Cruisair "CK" equipment.
- 2. Refer to the Compressor Electrical Power Specs chart above for nominal ratings and acceptable ranges.
- Compressor starting current will vary with voltage and is approximately 3-4 times the full-load amps (LRA).



Dometic Corporation Environmental Systems

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