



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°F (32°C). In reverse-cycle heating, the unit will provide heat in seawater as low as 40°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).

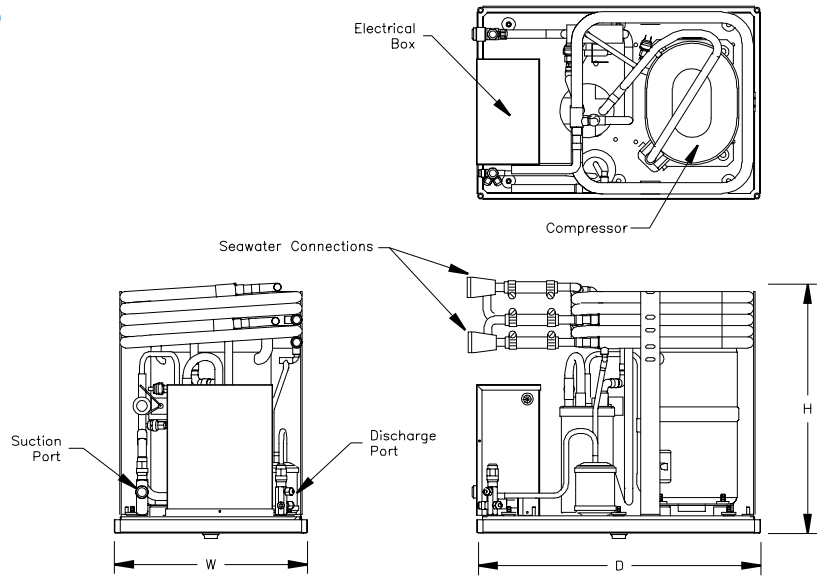
Every type F unit is fully tested and pre-charged at the factory with R22 refrigerant. Installation and final charging of the system must be performed by a certified technician.

SPECIFYING GUIDE FOR ACCESSORIES

BTU/Hr	REFRIGERANT LINE SIZES		SEAWATER CONNECTIONS	SEAWATERPUMP
	DISCHARGE	SUCTION		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

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

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INTERPRETING MODEL NUMBERS

