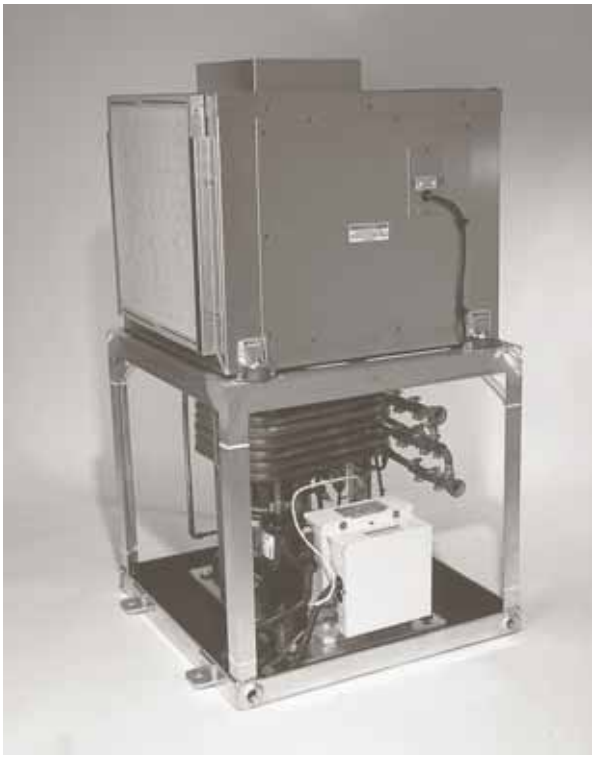
# Commercial DX Framed Package Units



FPV48VC Unit Shown

## Features

- Pre-charged, self-contained heat pump system
- 36,000 & 48,000 Btu/hr
- 230V 50/60, Hz 1 phase, and 230V & 460V, 3 phase models
- Reverse-cycle heating and cooling
- Horizontal or vertical configuration
- Rubber isolation mounts on evaporators and compressor
- SMX II microprocessor control system
- Air filters included
- Horizontal or vertical air discharge
- Full coverage condensate pan

### 3-5 Ton Water Cooled Package Heat Pumps

Type FP is a series of multi-ton self-contained heat pumps designed for marine use. The unit will fit in a large locker or other space, with air ducted to discharge grills placed high in the cabin.

The package unit is a hermetic system, consisting of two sub-modules: a seawater-cooled reverse-cycle condensing unit and a direct-expansion cooling unit. Units are be available in either vertical (cooling unit on top) or horizontal (side by side) configurations. Model FPV is vertical, and FPH is horizontal. The modular layout also allows easy servicing and replacement of components, or an entire sub-module.

The condensing unit subassembly includes a scroll compressor, cupronickel seawater condenser, reversing valve, receiver and accumulator, and necessary electrical components, all mounted on a chassis with rubber isolation mounts. A drain pan encloses the entire unit. High and low pressure switches are standard.

The cooling unit consists of two evaporator coils, a bidirectional refrigerant metering valve, and a direct drive blower, enclosed in an insulated aluminum housing with integral condensate drain pan on rubber isolation mounts. The blower can be ordered with either vertical or horizontal air discharge.

All FP models will work with Cruisair SMX II microprocessor control system.

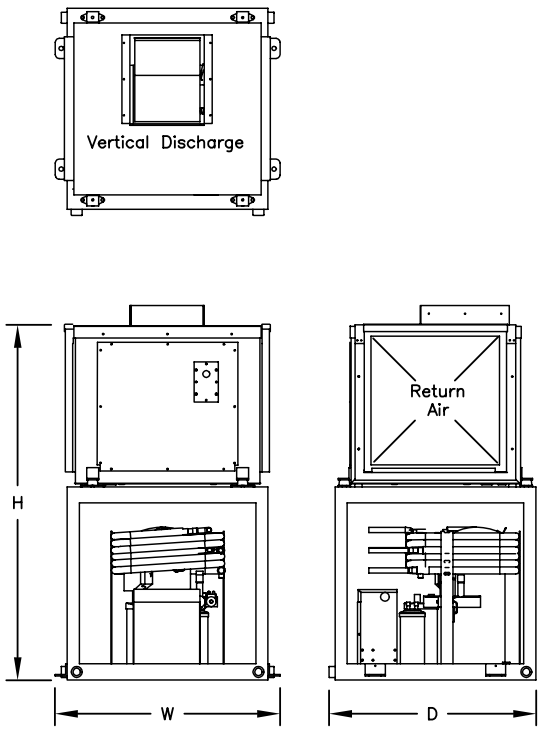
Cruisair package heat pumps are designed to provide reliable cooling and heating performance in the most extreme marine environments. In the cooling mode, it will perform at full rated capacity in 90° F (32° C) seawater. In reverse cycle heat mode, heat can be produced in waters as cold as 40° F (4.4° C).

Units are available in 230V 50/60 Hz single and three phase, as well as 460V 50/60 Hz 3 phase. Full capacity 50 Hz models are also available. 460V units require a 230V power source for the controls and blower.

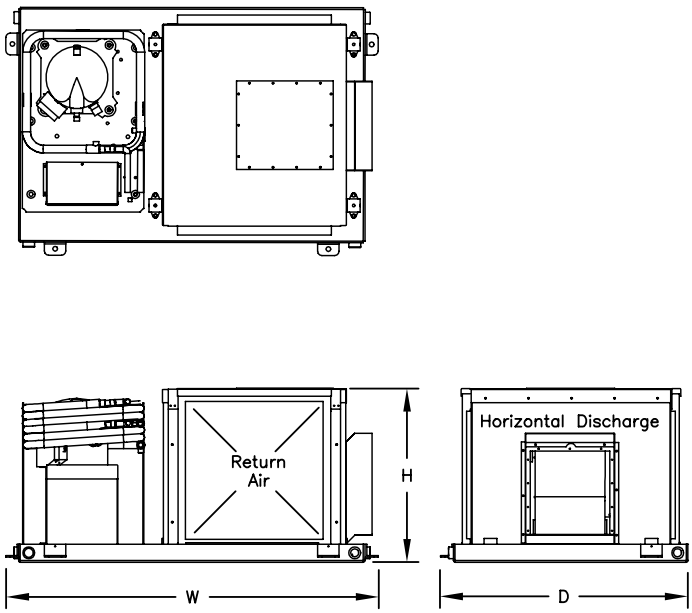
Single-phase units include start and run capacitors, start relay, and a solid state power relay. Three phase models have a definite purpose contactor.

FP units are pre-charged with R-22 refrigerant and tested at the factory, eliminating the need for field charging. In addition to the basic FP unit, the seawater, air distribution, and control systems are required to complete the installation.

## Vertical Unit




## Horizontal Unit

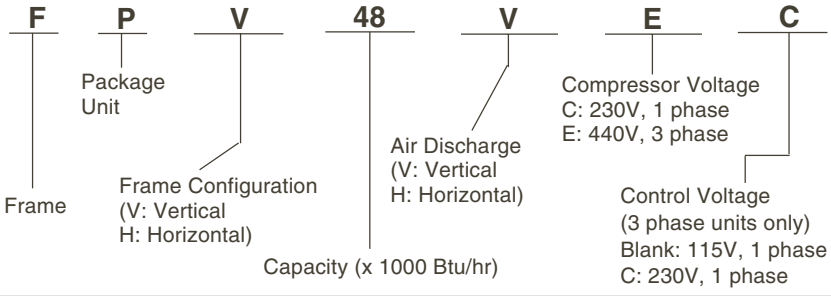



## TECHNICAL SPECIFICATIONS

| Model | Capacity (Btu/hr) | Power (Voltage, Ph.) | Freq. (Hz) | Compressor Amps | *Blower Amps | Dimensions (in/cm) H | W | D | Weight (lb/kg) |
|---|---|---|---|---|---|---|---|---|---|
| FPV36VC | 36,000 | 230V, 1 Ph. | 60 | 17 | 3.5 | 44/112 | 25/64 | 25/64 | 150/68 |
| FPH36HC | 36,000 | 230V, 1 Ph. | 60 | 17 | 3.5 | 20/51 | 43/109 | 23/58 | 150/68 |
| FPV48VC | 48,000 | 230V, 1 Ph. | 60 | 21 | 3.5 | 44/112 | 25/64 | 25/64 | 200/91 |
| FPV48VEC | 48,000 | 460V, 3 Ph. | 60 | 11 | 3.5 | 44/112 | 25/64 | 25/64 | 200/91 |
| FPH48HC | 48,000 | 230V, 1 Ph. | 60 | 21 | 3.5 | 20/51 | 43/109 | 28/71 | 200/91 |
| FPH48HEC | 48,000 | 460V, 3 Ph. | 60 | 11 | 3.5 | 20/51 | 43/109 | 28/71 | 200/91 |

*Note: Blower amperage is 230V, 1 phase.

## INTERPRETING MODEL NUMBERS




## INSTALLATION DETAILS

| Capacity (Btu/hr) | Air Flow (cfm/cmh) | Required Water Flow (gph/lph) |
|---|---|---|
| 36,000 | 1200/2040 | 750/2850 |
| 48,000 | 1600/2700 | 1000/3800 |
| 60,000 | 2000/3400 | 1250/4750 |
| 72,000 | 2400/4100 | 1500/5700 |

**Dometic Corporation**
Environmental Systems

P.O. Box 15299 • Richmond, VA 23227-0699 USA • Phone: 804-746-1313 • Facsimile: 804-746-7248
2000 N. Andrews Ave. Ext. • Pompano Beach, FL 33069-1497 USA • Phone: 954-973-2477 • Facsimile: 954-979-4414
Fleets Industrial Estate • 26 Willis Way • Poole, Dorset BH15 3SU, England • Phone: +44(0)870 3306101 • Facsimile: +44(0)870 3306102

Email: sales@cruisair.com • Website: www.cruisair.com

Revised: 09-30-04 L-1002