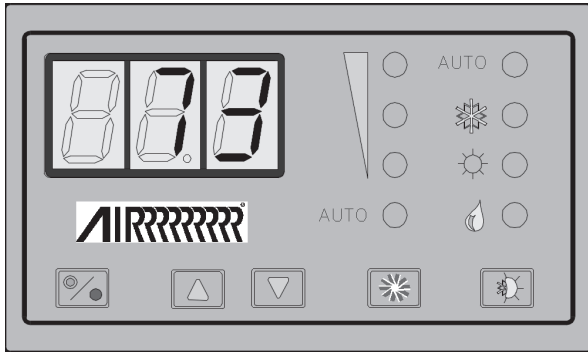


ah-elite control

Operation Manual



Revised: 9-30-05
L-2229



Table of Contents

Introduction	4
Standard Features	4
Optional Features	4
System Overview	4
Normal Heating or Cooling Cycle	5
AH Elite Controls - Basic Operation	6
Dual Button Functions	7
Special Button functions	7
Modes of Operation	7
Fan Modes	7
Program Mode	8
Entering Program Mode	8
Using the Program Mode	8
Programmable Parameters	8
Display Location	12
Display Panel Installation	12
General AH System and Digital Controls Troubleshooting	13
AH-Elite Controls • Specifications	15
Dimensions	15
Cable Lengths	15
System Inputs	15
AH-Elite Controls • Manufacturers Limited Warranty Agreement	16
Marine Air Worldwide Dealer Locator	19

Introduction

The **AH-Elite Control** is designed for use with **Chilled Water** air conditioning systems.

Standard Features

- User friendly 5 button display panel requires no manual for basic operation.
- Five volt logic and micro controller located in the display.
- 3-digit 7-segment display indicates °Fahrenheit or °Celsius.
- Automatic fan speed reduction as set point is approached.
- Three manual fan speeds.
- 13 programmable parameters for custom installations.
- Water In Sensor allowing individual cabin environment control.
- Moisture Mode for controlling relative humidity.
- Universal AC power supply.
- Nonvolatile memory retains settings without batteries.
- Programmable display brightness control.
- Fits Vimar® switch bezels.

Optional Features

The following optional items can be added by plugging the device into the appropriate jack and making the necessary programming changes.

- Outside air temperature sensor.
- Alternate air temperature sensor.
- Electric Heat Control Option.
- Air Filter Cleaning or Replacement Timer (available in software revision A15 or newer)

This manual is intended to provide information necessary to insure proper installation and operation of the AH-Elite Control. Poor installation and misunderstood operating parameters will result in unsatisfactory performance and possible premature failure of the control.

Read This Manual Completely Before Proceeding !

If you have questions, or require assistance with your AH-Elite control, call Dometic Environmental Corporation (Dometic).

The AH-Elite Control is covered under existing Marine Air Systems Warranty Policy. Incorrect installation, neglect and system abuse are not covered under Marine Air Systems warranty policy.

NOTE: In order to continually improve the AH-Elite Control, Marine Air reserves the right to change this products' basic operation, specifications and design criteria without prior notice.

System Overview

AH-Elite is a user friendly, easy to operate, programmable temperature control.

Press the ON/OFF button once to engage the system. The display indicates room temperature when the system is on and the display is blank when the system is off.

Press and release the Mode Button until the desired Mode LED is illuminated.

Set the room temperature by pressing the up or down button. The set point can be viewed by momentarily pressing and releasing the up or down button.

Fan speed operation is automatic. The fan speed decreases as room temperature is approached. The fan will operate at low speed when set point is satisfied. Manual fan speeds can be selected by pressing the Fan Speed Button and selecting the desired fan speed. The fan will operate at the speed selected and will not change speeds with room temperature.

The fan can be programmed to cycle on and off with the Heating and Cooling demand. Normally the automatic fan speed operation is reversed in the heating mode, however, the fan speeds can be programmed to operate the same as in the cooling mode.

Memory: AH-Elite Control has nonvolatile memory which requires no batteries or any form of backup power. When power is lost the operating parameters are retained indefinitely. When power is restored, the control resumes operating as last programmed. All operating and programming parameters are entered into nonvolatile memory instantly and are retained indefinitely.

IMPORTANT PROGRAMMING NOTES TO INSTALLER AND END USER:

1) Air handler units can have either a Split Capacitor or a Shaded Pole fan motor. It is very important to identify the type of fan motor that your particular model has in order to properly program the P-14 parameter in the AH-Elite display. Please refer to the P-14 parameter description in the Programmable Parameters section for further details on how to identify the type of fan motor and how to program the parameter.

2) Standard air handlers come equipped with chilled water bypass valves. However, for “**No-Valve**” air handlers, the fan must be set to “**cycle on demand**”. Verify that installed air handlers have bypass valves; if not, then hold the fan button down for five (5) seconds until “**CYC**” appears in the display.

Normal Heating or Cooling Cycle

When heating or cooling is called for the water valve switches to the appropriate mode. Four (4) seconds later the automatic fan control adjusts the fan to the proper speed. When the demand is satisfied, the water valve cycles off and the fan returns to low speed. If cooling is required, the water valve will not open unless adequate cooling water is available. The fan will remain in low speed until adequate cooling water is available. If heating is required the valve will not open unless adequate heating water is available. The fan remains in low speed until adequate heating water is available. The water temperature can be viewed by simultaneously pressing the Up and On/Off Buttons. Heat will be supplied when no heating water is available if the Optional Electric Heater has been installed and programmed.

NOTE: Adequate cooling/heating water temperature, as described above, is defined by programmable parameter P-17; it is factory set at a 15°F/27°C differential from the ambient air temperature.

While in a Heating or Cooling Mode the controller will maintain a 2°F/1.1°C temperature variation. A 4°F/2.2°C swing is required to cause the unit to shift to the opposite mode. Once in a new mode, Heating or Cooling, AH-Elite Control will maintain a 2°F/1.1°C differential.

AH Elite Controls - Basic Operation

ON/OFF BUTTON Press the power button once to toggle the unit to the on mode. Press the button again to toggle the unit to the off mode.

UP BUTTON Momentarily press and the set point will appear in the display. Press and hold the Up Button the set point will scroll to the upper limit. The set point increases one degree each time the up button is pressed and released.

DOWN BUTTON Momentarily press and release to display the set point. The set point is decreased one degree each time the Down Button is pressed and released. Press and hold the Down Button and the set point will scroll to the lower limit.

FAN BUTTON Press and release the **fan button** to advance from auto fan to manual fan. Press and release the **fan button** to advance the manual fan speeds, from low to high. Press and release again to return to the automatic fan mode. The selected fan mode is indicated by the auto and manual fan LEDs.

MODE BUTTON The **mode button** is used to select one of 4 Operating Modes. Press and release to advance to the next mode. Continue to press and release until the desired Operating Mode is reached. The mode selected is indicated by the Mode LED.

THREE DIGIT SEVEN SEGMENT DISPLAY The room temperature is displayed whenever the control is turned on. The display provides a readout of the inside ambient air temperature and the set point.

HEAT MODE LED The heat mode LED is lit when Heating is selected.

AUTO LED The auto LED is lit when the Automatic Heating or Cooling Mode is selected. The control will automatically switch to heating or cooling when this mode is selected.

COOL MODE LED The cool mode LED is lit when the Cooling is selected.

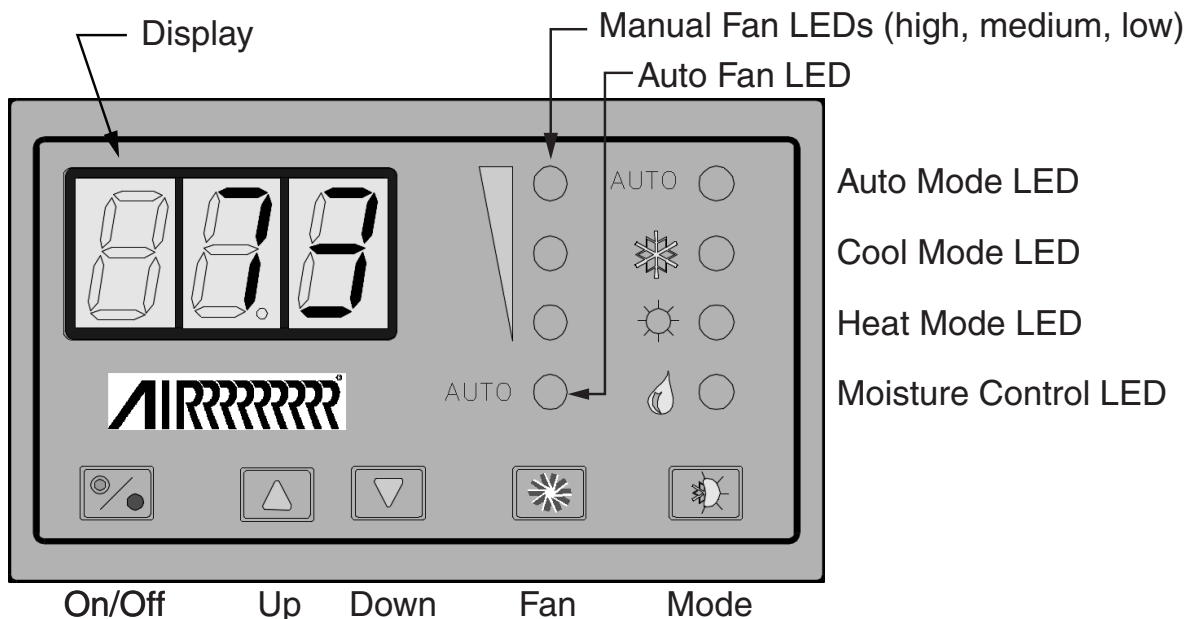
MOISTURE CONTROL LED The moisture LED is lit when the Moisture Control is selected.

MANUAL FAN LED One of the 3 fan LEDs will be lit when manual fan operation is selected.

AUTO FAN LED The auto fan LED is lit when automatic fan speed operation is selected.

FAN SPEED LEDs There are four fan speed LEDs. Each LED represents a fan speed. Auto Fan is indicated by the Auto Fan LED. Low fan is indicated by illuminating the first LED and so on.

WATER VALVE STATUS The system operating status (Water Valve Open or Closed) is indicated in the Auto Mode by turning **On** the Heat or Cool mode LED when either mode is called for. There is no water valve status indicated in manual Heat or Cool Modes. If the control is programmed for electric heat, then the LED will light up if either the valve **OR** the heater are energized.



Dual Button Functions

Up & Down Buttons Simultaneously Press the Up and Down buttons, while in the On Mode, to view the outside air temperature. This feature applies only when the optional outside air sensor is installed.

Press the Up & On/Off Buttons to view the chilled water inlet temperature.

Special Button functions

Fan Button The fan can be operated continuously when the system is on or set to cycle with heating or cooling demand. Press and hold the Fan Button for 5 seconds to change fan operation from cycle on demand (**cyc**) to continuous (**con**).

Modes of Operation

Off Mode

When the **AH-Elite Control** is in the **off mode**, all control outputs are turned off. Program parameters and user settings are saved in nonvolatile memory. The program mode can only be accessed from the off mode.

On Mode

When the control is in the **on mode**, power will be supplied to the appropriate control outputs and the display will indicate the room temperature. The operating and program parameters resume based on those stored the last time the unit was operating.

Cool Only Mode

When **Cool LED** is on, only the cooling systems are selected and operated as required. When the temperature drops below the set point, the system will **not automatically** switch to heating.

Heating Only Mode

When the **Heat LED** is on, only the heating systems are selected and operated as required. Should the temperature rise above the set point, the system will **not automatically** switch to cooling.

Automatic Mode

When the **Automatic LED** is on, both heating and cooling are supplied as required. The **heat** and **cool LEDs** will be lit and the water valve turned on according to the mode required. Temperature will be maintained at 2°F/1.1°C, however, a 4°F/2.2°C change is required to allow the control to change modes. Once in a new mode, the temperature will remain within 2°F/1.1°C of the set point.

Moisture Mode

While in the **on mode**, press the Mode Button until the Moisture Mode LED is illuminated. The first cycle will start in 1 minute. Every 4 hours, the fan is started and air circulated for 30 minutes. During this time the air temperature is sampled and entered into memory. The cooling cycle is started and continues until the temperature is lowered 2°F/1.1°C. The system is allowed a maximum of one hour running time to reach the desired temperature. Four (4) hours after the temperature is satisfied or the one hour timer runs out the cycle is repeated.

Fan Modes

Automatic Fan Speeds

AH-Elite has three automatic fan speeds available. Speed three is high, two is medium and one is low speed. Automatic fan mode allows the AH-Elite to determine the required fan speed based on room temperature. The closer the room temperature is to the set point, the slower the fan will run. This permits a balance between the most efficient temperature control and slower, quieter fan speeds. Automatic fan operation is the **factory default**, however, manual fan speed control is available.

Manual Fan Speeds

There are three fan speeds available: low, medium and high. Manual fan mode allows the user to select and maintain the desired fan speed manually. When a manual fan speed has been selected, the speed is indicated by one of the 3 LEDs above the AUTO fan LED. The top LED represents the fastest speed.

Fan Only Mode

The fan only can be operated for air circulation when no cooling or heating is desired. From the Off Mode press and release the fan button to start fan speed one. Press and release again to select speed two. Press and release a third time for speed three. Press and release a fourth time to turn off the fan. Starting a cycle will revert the fan to the automatic mode or the last selected manual fan setting.

Program Mode

Program Mode Overview

The program mode is used to adjust operating parameters to suit the particular needs of individual users and tailor the system for efficient operation within installation variables such as, ducting layout, sensor location and air handler type. The program mode allows the system to operate as efficiently as possible under all conditions. **AH-Elite Control** is shipped with factory default settings which are stored in memory and can be recalled. However, reprogrammed settings can be saved as the new default, thus overwriting the factory defaults (see programmable parameter P-15).

Warning

Severe electrical disturbances can sometimes upset the AH-Elite operating sequences. Operator confusion related to program parameters can also cause, what seem to be, operational problems. Whenever there is any doubt as to the proper operation of the controller, Factory Default Parameters should be Re-initialized.

Entering Program Mode

The program mode can **only** be entered from the **Off Mode**. From the Off Mode and in the following order, press the **Mode**, **Up**, **Down** and the **Mode** buttons . These buttons have to be pressed and released in the order given. The numerals “85” which represent the high fan limit, appears in the display. The “85” is followed by the characters “P 1” followed again by the parameter setting “85”. “**P 1**” represents the first programmable parameter. The AH-Elite Control is now in the program mode. Exit the program mode, to the **off mode**, by pressing and releasing the **power** button.

NOTE: The control will exit the program mode and return to the **Off Mode** if no programming is attempted for one (1) minute.

Restore Default Settings

IMPORTANT ! The default settings can be **restored** by entering the program mode and setting P-15 to **rSt**. Exit the program mode and the software version number appears in the display. The **default settings** are restored and the AH-Elite Control returns to the **off mode**. The software version number is always displayed when you exit the program mode.

Using the Program Mode

Increment from one **program parameter** to the next by pressing the **Mode Button** while in the **program mode**. Decrement from one program parameter to the previous one by pressing the **Fan Button**. Use the **up** and **down buttons** to change the program parameter values. The **programmable parameters** range from P-1 through P-19.

Up and Down Buttons

The **up** and **down buttons** are used to select the data or set the desired limits for the parameter being programmed. This method is followed throughout the program mode, however, special instructions are included for individual functions as require them.

Exiting the Program Mode

There are two methods to exit the program mode. Press the power button and the **AH-Elite Control** will return to the **off mode**. Not pressing any buttons or attempting any program changes for sixty (60) seconds will allow the control to exit the **program mode** to the **off mode**. Any programming changes that were made while in the program mode will be memorized, set as the new default, and put into operation when the program mode is exited and the control is returned to the on mode.

Programmable Parameters

There are thirteen (13) programmable parameter locations with their Factory Default Settings listed in this section. The table below indicates what these parameters are, along with the permitted values and the original Factory Default Settings.

P-1: High Fan Limit

The upper fan speed limit can be adjusted for various motors. The high fan limit is adjusted with the system installed and operating. The values range from 56 through 95 arbitrary units. Set a higher number for a higher fan speed. Set lower number to lower the fan speed. Use the Up and Down Buttons to select the desired speed.

P-2: Low Fan Limit

The low fan limit determines the lowest output allowed for the low fan speed. The values from 30 through 55, arbitrary units. Use the Up and Down Buttons to select the low fan limit. Set a higher number, for higher fan speed. Setting lower numbers lowers the fan speed.

IMPORTANT ! Once the high and low fan speed limits are set, the unit will automatically readjust the remaining speeds to produce three equally spaced fan speeds in both Automatic and Manual Fan Modes.

P-4: Temperature Calibration

Use this feature to calibrate the air sensor within a range of $\pm 10^{\circ}\text{F}$. Enter the Program Mode and the ambient temperature appears in the display. Use the Up and Down Buttons to select the desired offset. The temperature in the display will increase or decrease according to the offset programmed. Note that setting increments are in $^{\circ}\text{F}$ even when the control is set to display $^{\circ}\text{C}$.

P-9: Display Brightness Control

The display brightness can be adjusted to suit ambient cabin lighting conditions. The allowed settings are 4 to 18, with 4 being the dimmest and 18 the brightest. Typically a dark cabin will require a setting of 4 or 5. A very bright cabin will require a setting of 12 to 18.

P-10: Fahrenheit or Celsius Selection

The unit can be programmed to display either Fahrenheit or Celsius. Programming $^{\circ}\text{F}$ selects degrees Fahrenheit and programming $^{\circ}\text{C}$ displays degrees Celsius. The factory default setting is $^{\circ}\text{F}$. When degrees Celsius ($^{\circ}\text{C}$) is selected the readings are displayed in tenths, i.e. 22.2 $^{\circ}$.

P-12: Reverse Automatic Fan Speeds During Heating

The automatic fan speeds can be reversed during the Heat Mode to improve heat output in cooler climates. The fan speed is decreased as the temperature spread increases. The fan will speed up as the set point is approached. The fan switches to low speed when the set point is satisfied and the water valve cycles off. The fan can be programmed to operate the same as in cooling by programming P-12 “nor”.

P-13: Electric Heat Option

Units may be equipped with an electric heater, which are used when the main chiller system is in cooling mode and a particular cabin requires heating. Electric heaters are also used to supplement the circulated water heating (via the hydronic valve) when necessary. Set this parameter to “ELE” to enable the electric heat option or set to “nor” to disable.

NOTE: For AH-Elite software revision A13 and older, when this parameter is programmed for electric heat, only the electric heat relay located towards the middle of the AH-Passport I/O circuit board is energized during a heating cycle (see Sample Wiring Diagram at the back of this manual). For AH-Elite software revision A15 and newer, when programmed for electric heat, both the electric heater relay and the compressor relay are energized. This change was made to support the future elimination of the electric heater relay. Therefore,

AH-Passport I/O circuit boards that do not have electric heater relays will require an AH-Elite display with software revision A15 or newer to properly energize the compressor relay. Also, when using configuration, the electric heater L1 connection must be connected to the COMP L1 terminal on the AH-Passport I/O circuit board (see Sample Wiring Diagram). If you require further assistance, please consult with Dometic Environmental Customer Service or with an authorized service technician.

P-14: Fan Motor Selection

IMPORTANT NOTE TO INSTALLER AND END USER:

Air handler units can have either a Split Capacitor (SC) or a Shaded Pole (SP) fan motor. All Blow Through (AH-BT) and Slim Line (AH-SL) models have Split Capacitor motors, so P-14 should be left at the factory default setting “SC”. However, many AT air handler models have Shaded Pole blowers. For example, an AT12FZ is a Shaded Pole model, whereas an AT12HVZ is a Split Capacitor model. A Split Capacitor fan motor, also referred to as a “High Velocity” unit, does not have a blower motor overhang, the motor is inside the blower, and there is an “HV” in the model number. A Shaded Pole fan motor does have a blower motor overhang, the motor is external to the blower, and there is an “F” in the model number. If your air handler model is this Shaded Pole type, then you must change parameter P-14 to “SP” prior to operating the equipment. Save this change as a new default by simultaneously pressing and releasing the Up and Down Buttons prior to exiting the program mode. Make note of new default in the Programmable Parameters table.

P-15: Reset Memorized Defaults

The default programming parameters can be reset by entering the Program Mode and selecting “rSt”. This restores the programmable parameters to the default values. The default parameters listed in the Programmable Parameters table may be altered by the installing dealer or end user. Once new defaults are entered and memorized, the factory defaults will be over written. The original factory program parameters as listed in the Programmable Parameters table may be restored manually.

Why Memorize New Defaults?

Once the desired programming changes have been made and the system tests satisfactorily your work can be saved as new factory defaults. The new defaults are initiated by simultaneously pressing and releasing the up and down buttons prior to exiting the program mode.

Programmable Parameters Table

Program Number	Description	Default	New Default*	Range
P-1	High Fan Speed Limit (arbitrary units)	95		56 - 95
P-2	Low Fan Speed Limit (arbitrary units)	50		30 - 55
P-4	Temperature Sensor Calibration	Ambient		Ambient \pm 10° F
P-9	Display Brightness Control	15		4 = Low 18 = Maximum
P-10	Display ° Fahrenheit or ° Celsius	°F		°F = Fahrenheit Displayed °C = Celsius Displayed
P-12	Reverse Fan Speeds During Heating Mode	rEF		nor = Normal Fan Operation rEF = Reversed Fan In Heating
P-13	Chill Water Heating or Electric Heat	nor		nor = Chill Water Heat Only ELE = Electric Heater Installed
P-14	Fan motor type selection... Shaded pole or split capacitor.	SC		SP = Shaded Pole Fan Motor SC = Split Cap. Fan Motor
P-15	Reset Memorized Programming Defaults	nor		nor = Normal rSt = Reset Defaults
P-16	Water Valve Forced Open 4 Hours to Bleed the Chillwater System	nor		nor = Normal Operation OPn = Valve Forced Open
P-17	Ambient Air to Chill Water Temperature Differential	15°F		5°F to 25° Fahrenheit
P-18	Air Filter Cleaning/Replacement Timer Setting ¹	0		100-2500 hours (displayed in hours/10) 0=Timer Disabled
P-19	Air Filter Cleaning/Replacement Timer Value & Reset ¹	0		Displays the elapsed time (in hours/10) since the timer was started or reset. Pressing Up or Down resets the value to 0, restarts the timer, and clears the "FIL" reminder.

¹ This feature is only available in software revision A15 and newer.

** Default parameter settings may be reprogrammed by user, enter new default settings in this column.*

Should any programming problems or confusion occur, reset the Default Settings by entering the program mode and setting P-15 to rSt.

P-16: Hydronic Water Valve Forced Open

The parameter opens the water valve to bleed air from the system. "OPn" forces the valve open for 4 hours while the AH-Elite control is turned off. If the AH-Elite control is turned on or if AC power is interrupted to the

control electric box during this 4 hour period, this valve override feature is canceled. The valve can also be returned to normal operation at anytime by changing P-16 back to "nor" manually. (NOTE: This feature was modified to include this automatic, early cancellation in AH-Elite software revision A15.)

P-17: Water Temperature Differential

The difference between ambient air temperature and hydronic water temperature is used to control the water valve. Selecting 10°F opens the valve when water temperature is ten degrees less than ambient in cooling mode and 10°F greater than ambient in the heating mode.

Careful selection of the temperature differential can fully utilize the ships heating and cooling resources. For example, while in the cooling mode and using a ten degree value, the valve will open to allow some cooling while the hydronic system is coming down to temperature.

P-18: Air Filter Cleaning/Replacement Timer Setting

(available only in software revision A15 and newer)

The AH-Elite can be programmed to display a reminder to clean or replace the evaporator air filter on a regular basis. This is especially beneficial when using Dometic's Breathe Easy® Micro-Particle and Anti-Allergenic Air Filters. By default, this timer is disabled (P-18=0). The allowed settings are 10-250 in multiples of 10, which correspond to 100-2500 hours.

NOTE: How often the air filter must be checked will depend on the air quality. Dometic recommends that you check the air filter at least every 500 hours of operation.

Once set, the timer keeps track of the total amount of run hours that the fan accumulates (see P-19). Once the timer setting is reached, "FIL" will briefly flash on the LED display every 10 seconds until it is cleared. The room temperature will continue to be displayed and the normal operation of the system will not be affected. The "FIL" reminder can only be cleared and the timer reset via programmable parameter P-19. See below for instructions.

P-19: Filter Cleaning/Replacement Timer Value & Reset

(available only in software revision A15 and newer)

This parameter displays the current elapsed time (in hours/10) since the timer was started or reset. For example, if the value of P-19 is "30", then somewhere between 300-399 hours have elapsed since the timer was started or reset. Once the value of P-19 reaches the value set in P-18 (explained above), "FIL" will flash on the LED display every 10 seconds until it is cleared. To clear the "FIL" reminder, press either the Up or Down button while viewing the P-19 parameter. This will reset P-19 to 0 and restart the timer. Fault Handling Codes and Reminders

When a fault is detected AH-Elite will display one of the following mnemonic fault codes:

"ASF" ... Indicates failed air sensor.

"FIL" Indicates that the air filter requires cleaning or replacement.

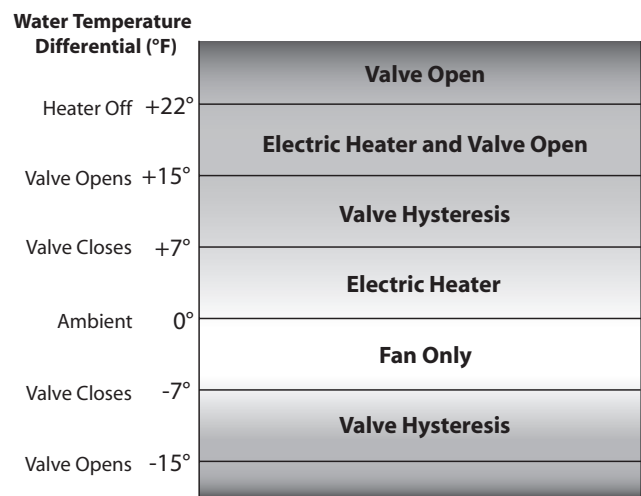
Ambient Air Temperature to Water Temperature Differential

The optional electric heater will overlap with the chilled water heat by 22°F/12.2°C. The heater will turn on when heat is required and remain on until the chilled water temperature exceeds the ambient by 22°F/12.2°C or until the room temperature is satisfied.

Electric heat overlaps the chilled water heat supplementing heating during very cold conditions.

Note that parameter P-17 setting increments are in °F even when the control is set to display °C.

Note: Chart uses the Default Values! P-17



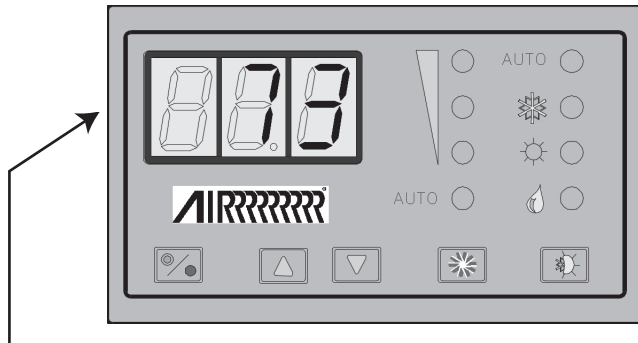
Ambient Air to Water Temperature Differential

Display Location

IMPORTANT!

The system's air sensor is located in the Display Panel. The display **MUST** be located on an inside wall at eye level. It must **NOT** be located in direct sunlight or inside a cabinet.

If these conditions cannot be met, the Optional Remote Air Sensor must be purchased and installed in the return air stream.



Face plate sensor location

If a proper location for room temperature sensing cannot be found for the display, an optional remote air sensor may be used. Mount the remote air sensor in the return air stream behind the return air grille/opening and plug its cable (6-pin connector) into the "ALT AIR" socket #J4 in the upper left-hand corner of the circuit board. Installing the remote air sensor will override the face-plate sensor. An optional outside air temperature sensor and cable may also be used. Plug that cable into the "OAT" socket #J3 (next to #J4). Mount the sensor outside but not in direct sunlight. Air sensor cables are available in various lengths. Do not staple any cables when mounting.

When using the AH-Elite with a chilled water airhandler, plug the water inlet sensor cable into the "SERVICE/H2O" socket #J5.

Display Panel Installation

Before mounting the Elite or AH-Elite digital display panel touch pad, consider the location. The air sensor built into the display panel will provide excellent room air temperature sensing given a proper installation. The display panel should be mounted on an inside wall, slightly higher than mid-height of the cabin, in a location with freely circulating air where it can best sense average temperature. The cut out size for the display panel is 3-5/16" (3.31"/8.41cm) wide by 2-3/16" (2.19"/5.56cm) high. Do not mount the display in direct sunlight, near any heat producing appliances or in a bulkhead where temperatures radiating from behind the panel may affect performance. **Do not mount the display in the supply air stream.** Do not mount the display above or below a supply or return air grille. Do not mount the display behind a door, in a corner, under a stairwell or any place where there is no freely circulating air.

Mount the display within display cable length (custom lengths available) of the air conditioner. Plug one end of the display cable (8-pin connector) into the upper right-hand socket on the circuit board in the electric box and the other end into the back of the display panel. Secure the display panel to the bulkhead using the four screws provided. Do not use a screw gun and do not over-tighten screws when mounting, because either method may damage the display. Once the display is securely mounted, then mount the bezel over the display frame until it snaps into place.

General AH System and Digital Controls Troubleshooting

Also see specific chiller system manual for additional troubleshooting information.

Fault: AH System will not start.

Possible Reason/Correction

- 1. Air handler circuit breaker is off.**
Turn circuit breaker on at ship's panel.
- 2. Digital Control is not turned on.**
See Basic Operation section for more information
- 3. Wrong wiring at terminal strip.**
Check wiring diagram and correct if necessary.
- 4. Push-on butt connectors became disconnected during installation.**
Disconnect power supply and open electric box, check wiring diagram, correct if necessary.
- 5. Input line voltage is insufficient.**
Check power source (shore/generator) for proper voltage. Check wiring and terminals for proper sizes and connections. Verify with a voltmeter that the power at the unit is the same as the power source.

Fault: Digital display panel is not lit.

Possible Reason/Correction

- 1. 8-pin display cable plugs are not making contact (unplugged, dirty, bent, or broken pins).**
With POWER OFF at the circuit breaker, remove connector and inspect. If damaged, replace connector or entire display cable.

Fault: Fan is not running or runs continuously.

Possible Reason/Correction

- 1. Digital control is programmed for either cycled or continuous fan operation.**
Press and hold the Fan Button for five seconds to change to "con" so fan will stay on continuously or to "CYC" so the fan cycles with the compressor.
- 2. Passport I/O Circuit Board Triac or fan motor is faulty.**
Attempt to run the fan in manual mode by pressing the Fan button to select a specific speed. If the fan does not function, contact an authorized service technician to further troubleshoot the problem.

Fault: No cooling or heating.

Possible Reason/Correction

- 1. Temperature set point is satisfied.**
Lower or raise set point.
- 2. Fan is not running.**
See previous section.
- 3. Digital control is set for Cool only or Heat only mode.**
See Modes of Operation section for more information on how to change the operating mode.
- 4. Chilled water loop is inadequately cooled or heated, chiller system is not in the proper mode of operation, or Electric Heater is disabled.**
If the air handler system is equipped with water temperature sensors, check the water temperature at the digital control by pressing the Up and On/Off buttons simultaneously. If the water temperature is not at least 15°F warmer (for heat mode) or cooler (for cool mode), the water valve will not open. See Ambient Air Temperature to Water Temperature Differential section and the P-17 programmable parameter for more information. If the air handler system is equipped with an electric heater, insure that programmable parameter P-13 is set to "ELE".

Fault: Low airflow.

Possible Reason/Correction

- 1. Airflow is blocked.**
Remove any obstructions in return air stream. Clean return air filter and grille. Check for crushed or restricted ducting, ducting must be as straight, smooth and taut as possible.
- 2. Fan speed is set to manual low.**
If the fan speed is set to manual low, press and release the Fan button until the desired fan speed and airflow is reached. If automatic fan speed control is desired, press and release the Fan button until the indicator light next to the word AUTO is lit.

Fault: System heats or cools continuously.

Possible Reason/Correction

- 1. Set point temperature is improperly set: too low for cooling or too high for heating.**

Raise or lower set point.

- 2. Porthole or hatches open.**

Close all port holes and hatches.

- 3. Inaccurate room temperature reading due to improper air sensor location.**

If using an alternate air sensor, insure that the sensor is located directly in the system's return air path to obtain an accurate reading. If an alternate air sensor is not being used, insure that the digital control display is located out of direct sunlight and away from open doors or hatches. See Display Location section for more information.

Fault: "ASF" is displayed.

Possible Reason/Correction

- 1. Indicates failed display air sensor, alternate air sensor or display cable.**

Unplug alternate air sensor if installed or plug in alternate air sensor if not installed. Try another display cable.

- 2. Damaged jack/socket in display head or on circuit board.**

Visually check to see that pins inside socket are not bent or corroded. Repair or replace display or circuit board if needed.

Fault: "FIL" is displayed.

Possible Reason/Correction

- 1. Indicates that it is time to clean or replace the systems air filter.**

Inspect the air filter. If it the plastic mesh type, clean and replace. If it is a Dometic Breathe Easy® micro-particle anti-allergenic type, replace with the same size and model. Reset and clear the air filter cleaning/replacement reminder by setting program-mable parameter P-19 to 0.

AH-Elite Controls • Specifications

Set Point Operating Range	65° F to 85° F
Ambient Temperature Operating Range Displayed	5° F to 150° F
Sensor Accuracy	± 2° F at 77° F
Low Voltage Limit 115 volt units	75 VAC
Low Voltage Limit 220 volt units	175 VAC
Low Voltage Processor Reset	50 VAC
Line Voltage	115 Through 240 VAC
Frequency	50 or 60 Hz
Fan Output	6 Amps @ 115 VAC and 6 Amps @ 230 VAC
Valve Output	1/4 Amps @ 115/230 VAC
Minimum Operating Temperature	0° F
Maximum Operating Temperature	180° F
Maximum Rh conditions	99% Non Condensing
Power Consumption	Less Than 5 Watts
Electric Heater Output	30 Amps @ 115 VAC and 20 Amps @ 230 VAC

Dimensions

Display Panel	4.41" (11.20 cm) X 2.96" (7.52 cm)
Panel Cut Out	3 5/16" (3.31"/8.41 cm) X 2 3/16" (2.19"/5.56 cm)
Bezel Size	4.85" (12.32 cm) X 3.25" (8.26 cm)

Cable Lengths

Display	15' Standard
Air Sensor	7' Standard
Water Sensor	7' Standard
All custom cable lengths supplied in standard 5' increments	75' Maximum

NOTES: Maximum length of display and sensor cable is 75 feet. The **outside air sensor** and **alternate air sensors** are optional items and are **not** included with the standard control package.

System Inputs

Ambient or Inside Air Temperature	1
Water Inlet Temperature Sensor	1
Outside Air Temperature Sensor (Optional)	1
Alternate Air Temperature Sensor (Optional)	1

AH-Elite Controls • Manufacturers Limited Warranty Agreement

The following warranty is extended to cover marine air conditioners manufactured or supplied by Dometic Environmental Corporation, and is subject to qualifications indicated. Dometic warrants for the periods set forth below that products manufactured or supplied by it will be free from defects in workmanship and material, provided such products are installed, operated, and maintained in accordance with Dometic's written instruction.

ALL IMPLIED WARRANTIES INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE TERMS AND PERIODS OF WARRANTY SET FORTH BELOW AND, TO THE EXTENT PERMITTED BY LAW, ANY AND ALL IMPLIED WARRANTIES ARE EXCLUDED.

Warranty with the Elite or Passport I/O digital controls (Coverage applies to units manufactured on or after 03/01/03 and applies only to units equipped with Elite or Passport I/O digital controls at the Dometic factory.): Components comprising of the Passport I/O circuit boards, Elite or Passport I/O digital displays, and associated cables are warranted for a period of three (3) years from the date of installation, but not to exceed four (4) years from the date of manufacture at the Dometic factory. All other components comprising a complete system (excluding pumps and pump relay panels) on a new installation are warranted for a period of two (2) years from the date of installation, but not to exceed three (3) years from the date of manufacture at the Dometic factory. Pumps and pump relay panels are warranted for a period of one (1) year from the date of installation, but not to exceed two (2) years from the date of purchase. OEM installed equipment warranties begin with the purchase of the vessel, not from the date of installation.

Warranty with MCP (Mechanical Control Panel) control: Components comprising a complete system on a new installation are warranted for a period of one (1) year from the date of installation, but not to exceed two (2) years from the date of manufacture at the Dometic factory. OEM installed equipment warranties begin with the purchase of the vessel, not from the date of installation.

In addition, Dometic will pay labor costs and travel as outlined in its **Schedule of Limited Warranty Allow-**

ances for removal and reinstallation of such components for a period of one (1) year from the date of installation, but not to exceed two (2) years from the date of manufacture at the Dometic factory. OEM installed equipment warranties begin with the purchase of the vessel, not from the date of installation. Warranty will be paid in accordance with our established schedule of allowances. Compensation for warranty repairs is only made to Dometic authorized service companies.

Dometic will repair, or replace at its option, components found to be defective due to faulty materials or workmanship, when such components, examined by an authorized service dealer or a factory service representative, are found to have a defect for which the company is responsible. **Refer to Manufacturer's Limited Warranty Policy** for complete coverage and exclusions. Replacement components are warranted for the duration of the remaining warranty period in effect on the original component. In the event that a unit has to be returned to the factory, it must be properly packaged to prevent shipping damages. If packaging is not available, Dometic will provide it at no charge. The warranty may be voided on any piece of equipment or component that is damaged due to improper packaging.

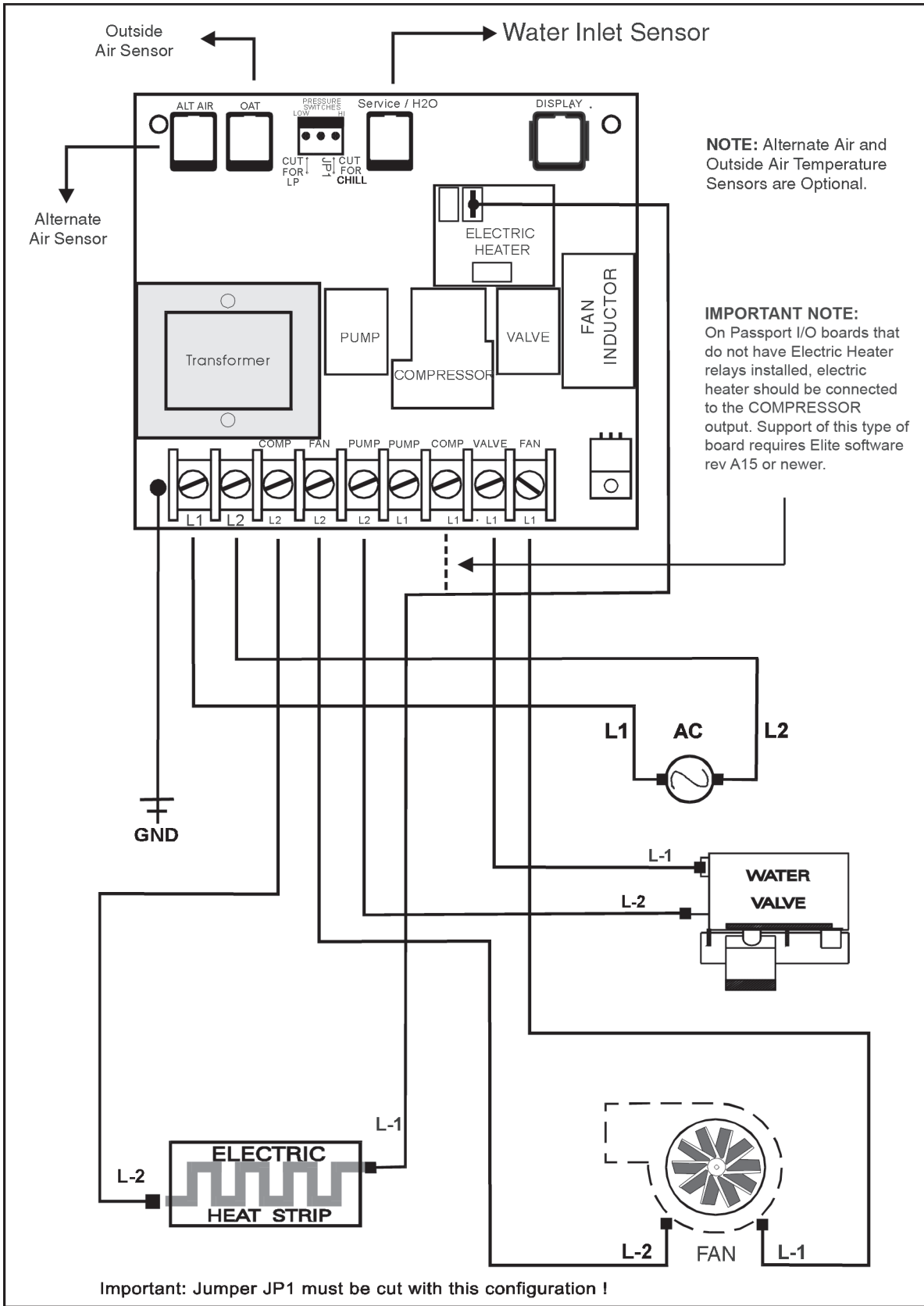
This limited warranty is extended in lieu of all other warranties, agreements or obligations, expressed or implied, concerning Dometic's components. This warranty is extended only to the original purchaser and is not transferable. This warranty shall be governed by the laws of the State of Florida and gives the original first end user definite legal rights.

This warranty does not cover damages incidental and/or consequential to the failure of Dometic's equipment including but not limited to; normal wear, accident, misuse, abuse, negligence, improper installation, lack of reasonable and necessary maintenance, alteration, civil disturbance or acts of God.

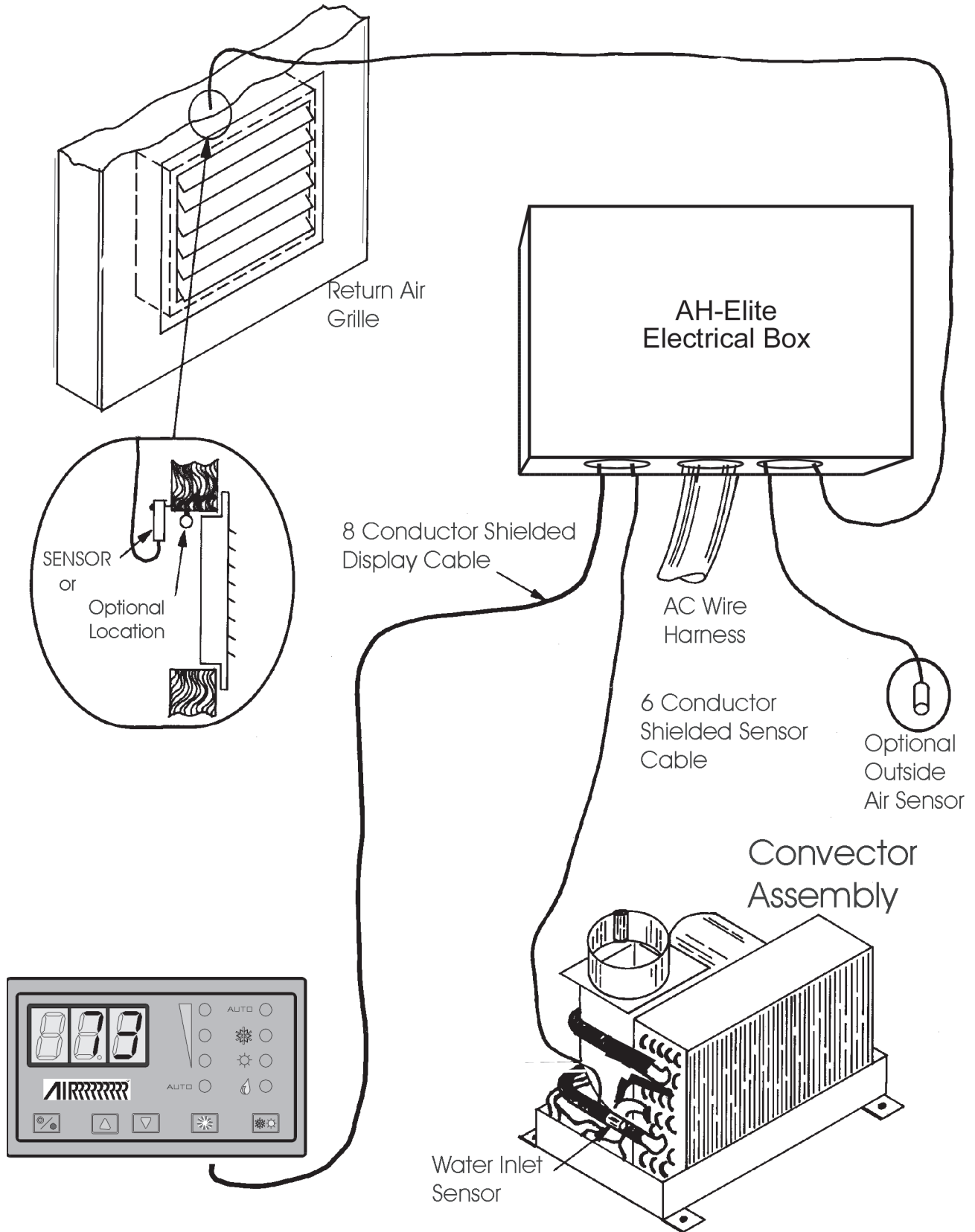
No person or dealer is authorized to extend any other warranties or to assume any other liabilities on Dometic's behalf, unless made or assumed in writing by an officer of Dometic.

Sample Wiring Diagram

NOTE: THIS IS A SAMPLE DIAGRAM. WIRE COLORS MAY VARY. SEE UNIT SPECIFIC DIAGRAM LOCATED IN ELECTRICAL BOX OR IN AIR CONDITIONING UNIT MANUAL. TURN POWER OFF BEFORE OPENING ELECTRICAL BOX.



Sample Application



Marine Air Worldwide Service Dealer Locator

The majority of the service listings displayed for the United States are key members of the national Marine Air distributor network. If you need service, please contact the closest company shown. In most cases they will direct you to a local dealer or service port. We have over 500 Marine Air dealers in the national Marine Air network, and one should be convenient to you.

The **international** companies listed are, in many cases, distributors and are capable of managing the majority of service requests for the countries listed. In some cases they will refer you to a local dealer.

You may also contact us directly via the web site or call us in the US at (954) 973-2477.

For a complete and up-to-date Dealer locator list, please visit our website at <http://www.marineair.com/locator/index.html>

USA

Alabama

AER Marine Supply

Location: Seabrook, TX, USA
Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupply.com

Alaska

American Marine Contractors

Location: Seattle, WA, USA
Phone: (206) 660-2240
Fax: (206) 548-5008
E-mail: gene@nwmarineair.com

Arizona

Southern California Marine Enterprises

Location: San Diego, CA, USA
Phone: 619-224-2869
Fax: 619-226-0496
E-mail: sales@southernmarine.com
Web: www.southernmarine.com

Arkansas

AER Marine Supply

Location: Seabrook, TX, USA
Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupply.com

California

Southern California Marine Enterprises

Location: San Diego, CA, USA
Phone: 619-224-2869
Fax: 619-226-0496
E-mail: sales@southernmarine.com
Web: www.southernmarine.com

Colorado

AER Marine Supply

Location: Seabrook, TX, USA
Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupply.com

Connecticut

Ocean Options

Location: Tiverton, RI, USA
Phone: (401) 624-7334
Fax: (401) 624-8050
E-mail: Sales@oceanoptions.com
Web: www.oceanoptions.com

Delaware

Ocean Options - Mid Atlantic

Location: Annapolis, MD, USA
Phone: (410) 268-9365
Fax: (410) 268-8199
E-mail: Sales@oceanoptions.com
Web: www.oceanoptions.com

Florida (North)

Beard Marine Savannah - Distributor

Location: Savannah, GA, USA
Phone: (912) 356-5222
Fax: (912) 692-1006
E-mail: beardsav@aol.com
Web: www.beardmarine.com

Florida (South)

ARW Maritime - Dealer

Location: Ft. Lauderdale, Florida, USA
Territory: Fort Lauderdale
Phone: (954) 463-0110
Fax: (954) 522-1139
E-mail: arwgroup@earthlink.net

Beard Marine - Ft. Lauderdale - Dealer

Location: Ft. Lauderdale, Florida, USA
Territory: Fort Lauderdale
Phone: (954) 463-2288
Fax: (954) 527-0362
E-mail: info@beardmarine.com
Web: www.beardmarine.com

Beard Marine of the Palm Beaches - Dealer

Location: Riviera Beach, Florida, USA
Territory: Riviera Beach
Phone: (561) 881-9598
Fax: (561) 881-9599
E-mail: bmpb@beardmarine.com

Cable Marine - Dealer

Location: Ft. Lauderdale, Florida, USA
Territory: Fort Lauderdale
Phone: (954) 462-2840
Fax: (954) 523-3686
Web: www.cablemarine.com

Comfort Marine - Dealer

Location: Ft. Lauderdale, FL, USA
Territory: Ft. Lauderdale
Phone: (954) 257-9848
Fax: (954) 689-7332

Cowherd Marine - Dealer

Location: Lake Park, Florida, USA
Territory: West Palm Beach
Phone: (561) 844-1666
Fax: (561) 844-1628

Dometic Corporation-Environmental Systems, Distributor

Location: Pompano Beach, FL, USA
Territory: South Florida
Phone: (954) 973-2477
Fax: (954) 979-4414
E-mail: sales@dometicenviro.com
Web: www.dometicenviro.com

Edd Helms Marine Air Conditioning - Dealer

Location: Miami, Florida, USA
Territory: Ft. Lauderdale, Miami
Phone: 954 522 2520
Fax: 954 522 1331
E-mail: srogers@eddhelms.com

Florida (South)

IYS Marine - Dealer

Location: Pinellas Park, Florida, USA
Territory: Tampa-St Petersburg
Phone: (727) 521-6650
Fax: (727) 520-0844
E-mail: iysmarine2002@aol.com

Jim's Marine A/C - Dealer

Location: Port Charlotte, Florida, USA
Territory: Port Charlotte
Phone: (941) 629-8788

Marine Air Conditioning - Dealer

Location: Ft. Pierce, Florida, USA
Territory: Port St. Lucie
Phone: (772) 464-7896
Fax: (772) 464-8697

Masters Marine Center, Inc. - Dealer

Location: Miami, Florida, USA
Territory: Miami
Phone: (305) 891-1236
Fax: (305) 891-8700

Neptune Air Corporation - Dealer

Location: Ft. Lauderdale, Florida, USA
Territory: Fort Lauderdale
Phone: (954) 792-6550
Fax: (954) 792-6551

Palm Beach Aqua Air - Dealer

Location: West Palm Beach, Florida, USA
Territory: West Palm Beach
Phone: (561) 832-8820
Fax: (561) 659-7918

Sea Air Land Technologies - Dealer

Location: Marathon, Florida, USA
Territory: Florida Keys
Phone: (305) 289-1150
Fax: (305) 359-5272
E-mail: saltmail@salt-svstems.com
Web: www.salt-systems.com

Sea Breeze Marine - Dealer

Location: Lighthouse Point, Florida, USA
Territory: Lighthouse Point
Phone: (954) 427-3843
Fax: (561) 368-0463

Tropica Boats & Marine, Inc. - Dealer

Location: Fort Myers, Florida, USA
Territory: Fort Myers
Phone: (239) 694-5259
Fax: (239) 694-5243
E-mail: info@tropica.net
Web: www.tropica.net

Ty Cobb Services, Inc. - Dealer

Location: Sebastian, Florida, USA
Territory: Sebastian
Phone: (772) 388-5966
Fax: (772) 581-0056

Georgia

Beard Marine Savannah - Distributor

Location: Savannah, GA, USA
Phone: (912) 356-5222
Fax: (912) 692-1006
E-mail: beardsav@aol.com
Web: www.beardmarine.com

Hawaii

Southern California Marine Enterprises

Location: San Diego, CA, USA
Phone: 619-224-2869
Fax: 619-226-0496
E-mail: sales@southernmarine.com
Web: www.southernmarine.com

Idaho

American Marine Contractors

Location: Seattle, WA, USA
Phone: (206) 660-2240
Fax: (206) 548-5008
E-mail: gene@nwmarineair.com

Illinois

Midwest Marine Supply

Location: St. Clair Shores, MI, USA
Phone: (586) 778-8950
Fax: (586) 778-6108

Indiana

Midwest Marine Supply

Location: St. Clair Shores, MI, USA
Phone: (586) 778-8950
Fax: (586) 778-6108

Iowa

Midwest Marine Supply

Location: St. Clair Shores, MI, USA
Phone: (586) 778-8950
Fax: (586) 778-6108

Kansas

AER Marine Supply

Location: Seabrook, TX, USA
Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupply.com

Kentucky

Midwest Marine Supply

Location: St. Clair Shores, MI, USA
Phone: (586) 778-8950
Fax: (586) 778-6108

Louisiana

AER Marine Supply

Location: Seabrook, TX, USA
Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupply.com

Maine

Ocean Options

Location: Tiverton, RI, USA
Phone: (401) 624-7334
Fax: (401) 624-8050
E-mail: Sales@oceanoptions.com
Web: www.oceanoptions.com

Maryland

Ocean Options - Mid Atlantic

Location: Annapolis, MD, USA
Phone: (410) 268-9365
Fax: (410) 268-8199
E-mail: Sales@oceanoptions.com
Web: www.oceanoptions.com

Massachusetts

Ocean Options

Location: Tiverton, RI, USA
Phone: (401) 624-7334
Fax: (401) 624-8050
E-mail: Sales@oceanoptions.com
Web: www.oceanoptions.com

Michigan

Midwest Marine Supply

Location: St. Clair Shores, MI, USA
Phone: (586) 778-8950
Fax: (586) 778-6108

Minnesota

Midwest Marine Supply

Location: St. Clair Shores, MI, USA
Phone: (586) 778-8950
Fax: (586) 778-6108

Mississippi

AER Marine Supply

Location: Seabrook, TX, USA
Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupply.com

Missouri

AER Marine Supply

Location: Seabrook, TX, USA
Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupplv.com

Montana

American Marine Contractors

Location: Seattle, WA, USA
Phone: (206) 660-2240
Fax: (206) 548-5008
E-mail: gene@nwmarineair.com

Nevada

AER Marine Supply

Location: Seabrook, TX, USA
Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupply.com

New Hampshire

Ocean Options

Location: Tiverton, RI, USA
Phone: (401) 624-7334
Fax: (401) 624-8050
E-mail: Sales@oceanoptions.com
Web: www.oceanoptions.com

New Jersey

Marine Specialists

Location: Ronkonkoma, NY, USA
Territory: New York, New Jersey
Phone: (631) 580-0545
Fax: (631) 580-0551
E-mail: Sales@marinespecialists.com
Web: www.marinespecialists.com

New Mexico

AER Marine Supply

Location: Seabrook, TX, USA
Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupply.com

New York

Marine Specialists

Location: Ronkonkoma, NY, USA
Territory: New York, New Jersey
Phone: (631) 580-0545
Fax: (631) 580-0551
E-mail: Sales@marinespecialists.com
Web: www.marinespecialists.com

North Carolina

Beard Marine Savannah - Distributor

Location: Savannah, GA, USA
Phone: (912) 356-5222
Fax: (912) 692-1006
E-mail: beardsav@aol.com
Web: www.beardmarine.com

North Dakota

Midwest Marine Supply

Location: St. Clair Shores, MI, USA
Phone: (586) 778-8950
Fax: (586) 778-6108

Ohio

Midwest Marine Supply

Location: St. Clair Shores, MI, USA
Phone: (586) 778-8950
Fax: (586) 778-6108

Oklahoma

AER Marine Supply

Location: Seabrook, TX, USA
Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupply.com

Oregon

American Marine Contractors

Location: Seattle, WA, USA
Phone: (206) 660-2240
Fax: (206) 548-5008
E-mail: gene@nwmarineair.com

Pennsylvania

Ocean Options - Mid Atlantic

Location: Annapolis, MD, USA
Phone: (410) 268-9365
Fax: (410) 268-8199
E-mail: Sales@oceanoptions.com
Web: www.oceanoptions.com

Rhode Island

Ocean Options

Location: Tiverton, RI, USA
Phone: (401) 624-7334
Fax: (401) 624-8050
E-mail: Sales@oceanoptions.com
Web: www.oceanoptions.com

South Carolina

Beard Marine Savannah - Distributor

Location: Savannah, GA, USA
Phone: (912) 356-5222
Fax: (912) 692-1006
E-mail: beardsav@aol.com
Web: www.beardmarine.com

South Dakota

Midwest Marine Supply

Location: St. Clair Shores, MI, USA
Phone: (586) 778-8950
Fax: (586) 778-6108

Tennessee

Beard Marine Savannah - Distributor

Location: Savannah, GA, USA
Phone: (912) 356-5222
Fax: (912) 692-1006
E-mail: beardsav@aol.com
Web: www.beardmarine.com

Texas

AER Marine Supply

Location: Seabrook, TX, USA
Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupply.com

Utah

AER Marine Supply

Location: Seabrook, TX, USA
Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupply.com

Vermont

Ocean Options

Location: Tiverton, RI, USA
Phone: (401) 624-7334
Fax: (401) 624-8050
E-mail: Sales@oceanoptions.com
Web: www.oceanoptions.com

Virginia

Ocean Options - Mid Atlantic

Location: Annapolis, MD, USA
Phone: (410) 268-9365
Fax: (410) 268-8199
E-mail: Sales@oceanoptions.com
Web: www.oceanoptions.com

Washington

American Marine Contractors

Location: Seattle, WA, USA
Phone: (206) 660-2240
Fax: (206) 548-5008
E-mail: gene@nwmarineair.com

West Virginia

Ocean Options - Mid Atlantic

Location: Annapolis, MD, USA
Phone: (410) 268-9365
Fax: (410) 268-8199
E-mail: Sales@oceanoptions.com
Web: www.oceanoptions.com

Wisconsin

Midwest Marine Supply

Location: St. Clair Shores, MI, USA
Phone: (586) 778-8950
Fax: (586) 778-6108

Wyoming

American Marine Contractors

Location: Seattle, WA, USA
Phone: (206) 660-2240
Fax: (206) 548-5008
E-mail: gene@nwmarineair.com

Antigua

Aboard Refrigeration

Location: , Antigua, West Indies
Phone: (268) 460-1690
Fax: (419) 858-0544
E-mail: aboardrf@candw.aq
Web: www.aboardrefrigeration.com

Argentina

Baron SRL

Location: San Fernando, Buenos Aires, Argentina
Phone: (54) 11-4-580-5556
Fax: (54) 11-4-746-1696
E-mail: rosito@baron.com.ar
Web: www.baron.com.ar

Australia

Seairland Systems, Inc.

Location: Brisbane, Queensland, Australia
Phone: (61) 7-3268-7511
Fax: (61) 7-3268-1445
E-mail: hadyn@seairland.com.au

Austria

Domestic Marine – Italy, Sales Company

Location: Milano, Italy
Phone: 390 26172583
Fax: 390 266010223
E-mail: marine.info@dometic.it
Web: www.dometic.com

Bahamas

Freezing Point, Ltd.

Location: Nassau, Bahamas
Territory: Nassau
Phone: (242) 325-3589
Fax: (242) 356-5271
E-mail: rolandknowles@bahamas.net.bs

Bahrain

International Agencies Co.

Location: Manama, Bahrain
Phone: 973-17728691
Fax: 973-17728412

Mantech

Location: Dubai, United Arab Emirates
Phone: (971) 4-3332-542
Fax: (971) 4-3330-649

Brazil

Marine Express

Location: Sao Paulo, Brazil
Phone: 55-11-5182-7166
Fax: 55-11-5183-3636
E-mail: fabrizio@marineexpress.com.br
Web: www.marineexpress.com.br

British Virgin Islands

BVI Marine Management

Location: Roadtown, Tortola, British Virgin Islands
Phone: (284) 494-2938
Fax: (284) 494-5006

C & G Refrigeration

Location: , Tortola, British Virgin Islands
Phone: (284) 776-0038

Canada

British Columbia

American Marine Contractors

Location: Seattle, WA, USA
Phone: (206) 660-2240
Fax: (206) 548-5008
E-mail: gene@nwmarineair.com

Ontario

Northland Supply Company

Location: Queensville, Ontario, Canada
Territory: Queensville
Phone: (905) 478-2244
Fax: (905) 478-2295
E-mail: norsupco@aol.com
Web: www.norsupco.com

Woodard and Company - Manufacturer's Rep.

Location: Concord, Ontario, Canada
Territory: All Canadian Provinces except BC
Phone: (905)760-0245
Fax: (905)760-0250
E-mail: john.reid@woodardcompany.com

Quebec

Kimplex, Inc.

Location: Drummondville, Quebec, Canada
Territory: Drummondville, Quebec
Phone: (705) 721-0947
Fax: (705) 721-1704
E-mail: scott.pipher@kpx-kimpex.com
Web: http://www.kpx-kimpex.com

Caribbean Islands

Aboard Refrigeration

Location: , Antigua, West Indies
Phone: (268) 460-1690
Fax: (419) 858-0544
E-mail: aboardrf@candw.aq
Web: www.aboardrefrigeration.com

BVI Marine Management

Location: Roadtown, Tortola, British Virgin Islands
Phone: (284) 494-2938
Fax: (284) 494-5006

C & G Refrigeration

Location: , Tortola, British Virgin Islands
Phone: (284) 776-0038

Centro Cruisair de Puerto Rico

Location: San Turce, Puerto Rico
Phone: 787-727-3637
Fax: 787-727-3637
E-mail: fernan_moreno@hotmail.com

Cool-Tech Air Condition

Location: Fajardo, Puerto Rico
Phone: (787) 860-2615
Fax: (787) 801-2050
E-mail: cooltech@isppr.com
Web: www.isppr.net/cooltech

Enertech N.V.

Location: Simpson Bay, St. Maarten/St. Martin, Netherland Antilles
Phone: 599-551-2145
Fax: 305-675-5857 (USA)
E-mail: service@entertechnv.com

Freezing Point, Ltd.

Location: Nassau, Bahamas
Territory: Nassau
Phone: (242) 325-3589
Fax: (242) 356-5271
E-mail: rolandknowles@bahamas.net.bs

May Day Marine

Location: San Juan, Puerto Rico
Phone: 787-751-0490
Fax: 787-790-2551

Nau-T-Kol Marine Refrigeration

Location: Chaguaramas, Trinidad
Phone: 868-634-2174
Fax: 868-634-2174
E-mail: nautkol@cablenett.net
Web: www.nautkol.com

Reefco, Inc.

Location: , St. Thomas, US Virgin Islands
Phone: (340) 776-0038
Fax: (340) 776-0038
E-mail: denny@reefco.net
Web: www.reefco.net

Regis Electronics (St Lucia) LTD.

Location: St. Lucia, West Indies
Phone: 758-452-0205
Fax: 758-452-0206
E-mail: stlucia@regiselectronics.com

Sun Cool Air Conditioning

Location: Carolina, Puerto Rico, Puerto Rico
Territory: Carolin
Phone: (787) 791-6971
Fax: (787) 791-3885
E-mail: suncool1@coqui.net

China

Flash Marine Trading Pte.Ltd.

Location: Shanghai, China
Phone: (86 21) 509 04120
Fax: (86 21) 509 04789
E-mail: fmrmasb@online.sh.cn

Costa Rica

Gato Frío

Location: Playa Jaco, Costa Rica
Territory: Costa Rica, Panama
Phone: 506-637-7181
Fax: 506-637-7180
E-mail: eric@yachtshare.net

Croatia

Dometic Marine – Italy, Sales Company

Location: Milano, Italy
Phone: 390 26172583
Fax: 390 266010223
E-mail: marine.info@dometic.it
Web: www.dometic.com

Cyprus

Dometic Marine - United Kingdom, Sales Company

Location: Poole, Dorset, England
Phone: 44 (0) 870 3306101
Fax: 44 (0) 870 3306102
E-mail: sales@dometicmarine.com
Web: www.dometic.com

Dominican Republic

May Day Marine

Location: San Juan, Puerto Rico
Phone: 787-751-0490
Fax: 787-790-2551

Ecuador

Quasar Nautica, S.A.

Location: P.O. Box 17-01-0069, Quito, Ecuador
Phone: (593) 2-446-996/997
Fax: (593) 2-436-625

Egypt

Engineering Air

Location: Abasia, Cairo, Egypt
Phone: 202 4829341
Fax: 202 4829341

France

Dometic Marine – France, Sales Company

Location: Plailly, France
Phone: Cell: 0033 (0)680 415 543
Fax: 0033 (0)344 633 518
E-mail: marine.sales@dometic.fr
Web: www.dometic.com

PolyMarine Distribution (C/O Occas Marine)

Location: Le Cannet, Rocheville, France
Phone: 0033 493463634
Fax: 0033 493463634
E-mail: polymarine.bayle@free.fr

Greece

Dometic Marine - United Kingdom, Sales Company

Location: Poole, Dorset, England
Phone: 44 (0) 870 3306101
Fax: 44 (0) 870 3306102
E-mail: sales@dometicmarine.com
Web: www.dometic.com

Athens

Aegean Diesel Electric Ltd.

Location: Athens, Piraeus, Greece
Territory: Athens
Phone: 0030-1-4222484
Fax: 0030-1-4175201
E-mail: info@ade-marine.gr

Hong Kong

Piercey Marine Limited

Location: Sai Kung, NT, Hong Kong
Phone: (852) 2791-4106
Fax: (852) 2791-4124
E-mail: pmltd@atglobal.net

Italy

Condaria 87 SRL

Location: Nova Milanese (MI), Italy
Phone: 39 0362 44182
Fax: 39 0362 452226

Dometic Marine – Italy, Sales Company

Location: Milano, Italy
Phone: 390 26172583
Fax: 390 266010223
E-mail: marine.info@dometic.it
Web: www.dometic.com

Japan

Tominaga & Company, Ltd.

Location: Osaka, Japan
Phone: 816.6365.5010
Fax: 816.6365.6294
E-mail: nishi@mail.tomco.co.jp

Kuwait

Mantech

Location: Dubai, United Arab Emirates
Phone: (971) 4-3332-542
Fax: (971) 4-3330-649

Samhari Marine Trading

Location: Al-Shawikh, Kuwait
Phone: 965-5740408
Fax: 965-5715655

Malta

Dometic Marine - United Kingdom, Sales Company

Location: Poole, Dorset, England
Phone: 44 (0) 870 3306101
Fax: 44 (0) 870 3306102
E-mail: sales@dometicmarine.com
Web: www.dometic.com

Inmartech Ltd.

Location: Swieqi, STJ 04, Malta
Phone: 00356 21376476
Fax: 00356 21376476

Mexico

Southern California Marine Enterprises

Location: San Diego, CA, USA
Phone: 619-224-2869
Fax: 619-226-0496
E-mail: sales@southernmarine.com
Web: www.southernmarine.com

Netherlands

Eberca

Location: , Netherlands
Phone: 31 1866 21955
Fax: 31 1866 21818
E-mail: info@eberca.nl

Heinen & Hopman Eng. Bv.

Location: Spakenburg, Netherlands
Phone: (31) (0) 33 2992500
Fax: (31) (0) 33 299 2599
E-mail: info@heinenhopman.com
Web: www.heinenhopman.com

Netherlands Antilles

Enertech N.V.

Location: Simpson Bay, St. Maarten/St. Martin, Netherland Antilles
Phone: 599-551-2145
Fax: 305-675-5857 (USA)
E-mail: service@entertechnv.com

New Zealand

Whiting Power Systems

Location: 192 Herne Bay, Auckland, New Zealand
Phone: 649.358.2050
Fax: 649.358.0285
E-mail: sales@whiting.co.nz
Web: www.whiting.co.nz

Oman

Mantech

Location: Dubai, United Arab Emirates
Phone: (971) 4-3332-542
Fax: (971) 4-3330-649

OHI Marine LLC

Location: Muscat, Oman
Phone: 968-712240
Fax: 968-712085

Panama

Gato Frío

Location: Playa Jaco, Costa Rica
Territory: Costa Rica, Panama
Phone: 506-637-7181
Fax: 506-637-7180
E-mail: eric@yachtshare.net

Productos Marine Air

Location: La Chorrera, Panama
Territory: Panama
Phone: 507-232-5406
Fax: 507-232-7648
E-mail: masters@sinfo.net

Portugal

PowerCool Lda

Location: Portimao, Portugal
Territory: Portugal
Phone: 351 91 786 63 73
Fax: 351 282 461 818
E-mail: info@powercool.org
Web: www.powercool.org

Puerto Rico

Centro Cruisair de Puerto Rico

Location: San Turce, Puerto Rico
Phone: 787-727-3637
Fax: 787-727-3637
E-mail: ferman_moreno@hotmail.com

Cool-Tech Air Condition

Location: Fajardo, Puerto Rico
Phone: (787) 860-2615
Fax: (787) 801-2050
E-mail: cooltech@isprr.com
Web: www.isprr.net/cooltech

May Day Marine

Location: San Juan, Puerto Rico
Phone: 787-751-0490
Fax: 787-790-2551

Sun Cool Air Conditioning

Location: Carolina, Puerto Rico, Puerto Rico
Territory: Carolin
Phone: (787) 791-6971
Fax: (787) 791-3885
E-mail: suncool1@coqui.net

Qatar

Al-Badi Trading Co.

Location: Doha, Qatar
Phone: 974-4320715
Fax: 974-4442888

Mantech

Location: Dubai, United Arab Emirates
Phone: (971) 4-3332-542
Fax: (971) 4-3330-649

Russia

Standarte

Location: Starbevo, Moscow region, Russia
Phone: 7 095 575 67 23
Fax: 7 095 575 39 77
E-mail: info@standarte.ru
Web: www.standarte.ru

Saudi Arabia

Mantech

Location: Dubai, United Arab Emirates
Phone: (971) 4-3332-542
Fax: (971) 4-3330-649

Samaco Marine Division

Location: Alnahdah dis Jeddah, Saudi Arabia
Territory: Saudi Arabia
Phone: (966) 2-699-2300
Fax: (966) 2-699-1024

Scandinavia

Dometic Marine – Nordic Sales, Sales Company

Location: Halmstad, Sweden
Phone: 46 35165700
Fax: 46 35165710
E-mail: marine.info@dometic.se
Web: www.dometic.com

Singapore

Tritex Equipment PTE, Ltd.

Location: , Singapore
Territory: Singapore
Phone: (65) 6861-1188
Fax: (65) 6861-4263
E-mail: anqilene@tritex.com.sg

Slovenia

Dometic Marine – Italy, Sales Company

Location: Milano, Italy
Phone: 390 26172583
Fax: 390 266010223
E-mail: marine.info@dometic.it
Web: www.dometic.com

South Africa

C-Dynamics cc

Location: Cape Town, South Africa
Phone: 27 21 555 3232
Fax: 27 21 555 3230
E-mail: info@c-dynamics.co.za
Web: www.c-dynamics.co.za

Spain

Acastimar

Location: Tarragona, Spain
Phone: 349-77-362118
Fax: 349-77-362687
E-mail: acastimar@acastimar.com

Dometic Marine – France, Sales Company

Location: Plailly, France
Phone: Cell: 0033 (0)680 415 543
Fax: 0033 (0)344 633 518
E-mail: marine.sales@dometic.fr
Web: www.dometic.com

Techno Electronica Naval, S.A.

Location: Barcelona, Spain
Phone: 34 (93) 664-49-70
Fax: 34 (93) 665-76-26
E-mail: ten@ten-sa.com
Web: www.ten-sa.com

Sri Lanka

G&M Enterprises

Location: Borella-Colombo 8, Sri Lanka
Phone: 94 11 2691966
Fax: 94 11 2691751
E-mail: gandM@sltnet.lk

Sweden

Dometic Marine – Nordic Sales, Sales Company

Location: Halmstad, Sweden
Phone: 46 35165700
Fax: 46 35165710
E-mail: marine.info@dometic.se
Web: www.dometic.com

Thailand

Thai Kolon Co. Ltd.

Location: Bangkok, Thailand
Phone: 66-2-745-6468-77 (10 lines)
Fax: 66-2-745-6152
E-mail: thkolon@ji-net.com

Trinidad & Tobago

Nau-T-Kol Marine Refrigeration

Location: Chaguaramas, Trinidad
Phone: 868-634-2174
Fax: 868-634-2174
E-mail: nautkol@cable.net
Web: www.nautkol.com

Turkey

Dometic Marine - United Kingdom, Sales Company

Location: Poole, Dorset, England
Phone: 44 (0) 870 3306101
Fax: 44 (0) 870 3306102
E-mail: sales@dometicmarine.com
Web: www.dometic.com

Egemar Muhendiscik Ltd.

Location: Tuzla, Istanbul, Turkey
Phone: 90 216 494 2168
Fax: 90 216 494 2218
E-mail: sales@egemar.com.tr
Web: www.egemar.com.tr

U.S. Virgin Islands

Reefco, Inc.

Location: , St. Thomas, US Virgin Islands
Phone: (340) 776-0038
Fax: (340) 776-0038
E-mail: dennv@reefco.net
Web: www.reefco.net

Ukraine

Standarte

Location: Starbevo, Moscow region, Russia
Phone: 7 095 575 67 23
Fax: 7 095 575 39 77
E-mail: info@standarte.ru
Web: www.standarte.ru

United Arab Emirates

Mantech

Location: Dubai, United Arab Emirates
Phone: (971) 4-3332-542
Fax: (971) 4-3330-649

United Kingdom

Dometic Marine - United Kingdom, Sales Company

Location: Poole, Dorset, England
Phone: 44 (0) 870 3306101
Fax: 44 (0) 870 3306102
E-mail: sales@dometicmarine.com
Web: www.dometic.com

Uruguay

Baron SRL

Location: San Fernando, Buenos Aires, Argentina
Phone: (54) 11-4-580-5556
Fax: (54) 11-4-746-1696
E-mail: rosito@baron.com.ar
Web: www.baron.com.ar

Venezuela

Rich Marine Center

Location: Complejo Turistico El Morro, Venezuela, South America
Phone: (58) 281 2181630
Fax: (58) 281-2811630
E-mail: richmarine@telcel.net.ve
Web: www.tuyate.net

West Indies

Aboard Refrigeration

Location: , Antigua, West Indies
Phone: (268) 460-1690
Fax: (419) 858-0544
E-mail: aboardrf@candw.ag
Web: www.aboardrefrigeration.com

Regis Electronics (St Lucia) LTD.

Location: St. Lucia, West Indies
Phone: 758-452-0205
Fax: 758-452-0206
E-mail: stlucia@regiselectronics.com

Yemen

Mantech

Location: Dubai, United Arab Emirates
Phone: (971) 4-3332-542
Fax: (971) 4-3330-649



Dometic Environmental Corporation

2000 N. Andrews Ave. Ext. • Pompano Beach, FL 33069-1497 USA • Phone: 954-973-2477 • Facsimile: 954-979-4414
For Sales and Service Calls within Europe and the Middle East, please contact +44 (0) 870 330 6101
Website: www.marineair.com • Email: sales@marineair.com

