

ALPINE CHILLERS



MAXI 240

WATER COOLER

INSTALLATION MANUAL

ALPINE CHILLERS

Final Inspection Sheet

CHILLER MODEL

UBAC2500 UBAC3000 MAXI 240
AC3000 AC3000S
AC4000 AC4000S
AC5000 AC5000S
AC6000 AC6000S

Custom _____

REFRIGERANT TYPE

R404A
R134A
R22

Other _____

STAND TYPE

Stainless Steel Legs 250mm
Stainless Steel Legs 150mm
Stainless Steel Stand 800mm

Custom _____

MANIFOLD TYPE

Hose Tail - 12mm 19mm

Ball Valves - yes no

Outlets - single 2 way 3 way Custom _____

Non return valve - yes no

Other _____

ALPINE CHILLERS

Final Inspection Sheet

SYSTEM CHECK LIST

Pressure test at 2000kpa for 48hrs - checked by _____

Evacuated to 30inhg

System Pull down to temperature

Pull down time

Pressure test water coil

Test low voltage safety circuit

Electrical contacts checked

Agitation motor tested

Test and set control

Test and set Antifreeze

Test and set Level Switch

All fixings checked

Check drain connections

Temperature set at _____ °C

Differential set at _____ °C

Anti-freeze set at _____ °C

REFRIGERATION TYPE

Static Coil (Copper Coil)

Static Coil (Stainless Steel)

PLUG TYPE

Water proof screw fit 10amp

Custom _____

Serial Number _____

Date of Manufacture _____

Final inspection by _____

Inspection completion date _____

ALPINE CHILLERS

Start up Procedure

- Ensure Chiller is level and in operation position.
- Fit the sediment and carbon taste and odour filters (supplied).
- Connect mains water to water inlet.
- Fill the tank with clean water to bottom of the tank overflow using hose.
Note: This water will only need to be changed on maintenance or when chiller is moved.
- Turn on water inlet ball valve and run both taps into a bucket for approx 5 minutes or until air has cleared from lines and water is running clean.

Note: Carbon filters will run murky grey in colour when first installed and approx 10 litres of water will be required to pass through the filter before it will clear.

- Turn auxiliary outlet ball valve on and purge air from line. If the auxiliary outlet is not being used remove handle or plug off outlet so that it can not be accidentally turned on.
- If connecting auxiliary outlet, fit insulated flexi line and purge water to the inlet of ice machine.
- Hold both taps down and slowly close off water inlet ball valve to you maintain the desired flow from the taps. (This adjustment will vary depending on location and water pressure)
- Plug the Chiller into a 10 amp power point and turn on.
- Push the Start Reset button located on the Chiller Service panel.

Note: Chiller has a low voltage safety lockout circuit and will not start if the tank water level is not correct.

- The chiller will run for approximately 20 minutes to bring tank water down to set point temperature.
- Filtered chilled water will now run through taps and auxiliary outlet. The refrigeration system will cycle on and off as required.
- Note: If the power supply (10amp plug) is switched off and back on. The unit safety lock out circuit will prevent the chiller from starting and the fault light will appear on panel. Simply push the Start Reset button on the panel and the chiller will re-start.

ALPINE CHILLERS

Water Cooler Safety Circuit

Red Fault light on panel

Causes & Repair

- Power Supply has been switched off and back on.
 - Check that power supply plug is not being used by others. (Cleaners plugging vacuum cleaners in etc)

Press Start Reset button on panel and chiller will re start.

- Tank water level is low.
 - Remove lid and check water level (Note: the water level sensor float will be down).
 - Re Fill water level to bottom of tank over flow.
 - Check cause of water loss. (Tank drain valve may be open).

Press Start Reset button on panel and chiller will re start.

- Chiller has been tilted or rocked.
 - Remove lid and check water level.
 - Check Chiller is sitting correctly in position and level.
 - Check all water connections are secure and power is safely fitted and plugged in.

Press Start Reset button on panel and chiller will re start.

- Antifreeze Stat has been activated.
 - Remove lid and check water temperature.
 - If tank water is below 2°C or water has formed ice.
 - Check Carel temperature control located in electrical enclosure (Only if you are qualified to work on electrical equipment).
 - If the Carel Control is displaying "EO" the temperature probe is faulty.
 - Check that antifreeze stat is set to 2°C (DO NOT SET LOWER)
 - Call a Refrigeration Technician to re calibrate as required.

Do Not re start Chiller until controls have been set by a qualified refrigeration technician.

ALPINE CHILLERS

Control Settings

- The temperature control has been pre programmed to 4°C cooling temperature.
- The temperature differential (rd) is pre set to 1.5°C. DO Not adjust this setting below 1°C.
- The Control has been programmed with a minimum set point of 3°C and a maximum set point of 25°C.
- This can be altered if required and the programming sheets can be found in this booklet or on the web site www.alpinechillers.com.au
- The Anti-Freeze safety thermostat is pre set to 2°C. DO Not adjust this setting below 1.0°C

NOTE:

- If the Chiller is to be used for below 0°C application for cooling alcoholic beverages etc. The correct levels of glycol must be mixed with the tank water.
- The glycol to water ratios can be found in this booklet.
- The glycol to water ratio (percentage) is measured with a refractometer. This can be purchased from Alpine Chillers.

Adjusting the operating temperature.

- Press and hold the set button until the set temp is displayed (2 seconds).
- Adjust the temp using the up/down buttons (▲ ▼).
- When desired temp is reached press the set button to confirm setting.

Adjusting the differential setting.

- Press and hold the (PRG) button until the display shows parameters (changes from numbers to letters).
- Using (▲ ▼) buttons scroll through until (rd) is displayed.
- Press the set button.
- Set the required differential using the (▲ ▼) buttons.
- Press and hold the (PRG) button until the temp is displayed (this will lock in setting).

ALPINE CHILLERS

Maintenance Procedure

Refrigeration

A refrigeration technician or maintenance person is required to carry out maintenance on the chiller at set intervals.

- Clean the condensing coil using compressed air to blow the coil clean of dust and dirt.
- Depending on the environment, this should be carried out approximately every two months or one month in dusty environment.
- Leak check refrigeration system and check operating pressures and temperatures.
- Check and tighten all electrical contacts.
- Check trough drain is clear and clean.
- A visual inspection of the tank should be carried out periodically and water replaced if dirty.
 - Note: The inner chiller tank and water coil are manufactured from marine grade 316 stainless steel and the refrigeration coil from copper, these will withstand most chemicals. Please ensure cleaning agent is suitable to use on these materials. Cleaning of the tank will ensure years of trouble free use.

Water Filtration

- There is no period of time specified by the manufacturers of water filters for replacement, as this depends on usage and the cleanliness of inlet water.
- Alpine Chillers recommends replacement of filters quarterly or more frequently if the inlet water is dirty.
- DO NOT wait until water flow is restricted by the filter to replace.
- Chemicals introduced to the water by Water Authority etc are essential for maintaining safe water. By NOT maintaining the filtration system and regularly replacing filters, there is a possibility of the filter having the reverse effect and growing algae.
- A standard 10" filter cartridge has been used so that replacement filters can be purchased from most local filter suppliers or Alpine Chillers.

ALPINE CHILLERS

Glycol / water mix is essential when Chiller is being used for applications requiring minus 0°c temperatures

Propylene glycol to water ratio - freezing point of solution

- 10% glycol in water solution has a freezing point of -3.5°c
- 20% glycol in water solution has a freezing point of -7.5°c
- 30% glycol in water solution has a freezing point of -13.5°c
- 40% glycol in water solution has a freezing point of -21.5°c
- 50% glycol in water solution has a freezing point of -34°c
- 60% glycol in water solution has a freezing point of -50°c

The glycol to water ratio (percentage) is measured with a refractometer. This can be purchased from Alpine Chillers.

Please contact Alpine Chillers for set up advice if chiller is to be used for a different application.

Warranty

All parts and materials carry a 1 year manufactures warranty.

- Warranty does not cover labour.
- Warranty does not cover damage caused by ice within the tank due to insufficient glycol levels.
- Warranty does not cover damage caused to the refrigeration system from running the chiller with incorrect temperature and differential settings.

Alpine Chillers are manufactured to the highest standards using high quality materials and components. These units are designed to be simple to operate, low maintenance, strong, reliable and efficient.

For any technical advice please contact:

Alpine Chillers
PO Box 334, Maddington WA 6989
Ph: 08 9493 7322
Fax: 08 9493 7333
Email: admin@alpinechillers.com.au
Web: www.alpinechillers.com.au

CAREL IR33 Summary of operating parameters (v1.131 up)

Set Point (cut out temp)

PRESS & hold for 2 sec **Set** Set point value will be displayed

PRESS **▲** OR **def** To display required Set Point

PRESS **Set** To confirm and save Set Point

(Or adjust parameter "St")

HACCP Parameters
To view HACCP alarm details

PRESS **Set** & **def** "HAn" will be displayed (Follow normal prog steps to view parameters)

To clear HACCP alarm (HACCP Flashing with HA) when in HACCP Menu

PRESS & hold for 5 sec **Set** & **def** After 5 seconds "RES" will be displayed to indicate the alarm is reset

Parameter Access

"F" (frequent parameters)
PRESS & hold for 5 sec **Prg mute** "St" will be displayed

"C" (configuration parameters)
PRESS & hold for 5 sec **Prg mute** & **Set** "Q" will be displayed

PRESS **▲** OR **def** To display "22" (This is the Password)

PRESS **Set** To confirm password entry

See steps below for parameter modification

Parameter Modification

Once level "F" or "C" has been accessed

PRESS **▲** OR **def** To display the parameter to be modified (eg rd = diff)

PRESS **Set** To display the value the parameter is set to

PRESS **▲** OR **def** To adjust the value of the parameter (eg rd = 2.0)

PRESS **Set** To display code of the parameter modified eg rd

Repeat above steps until all required parameters have been programmed

PRESS & hold for 5 sec **Prg mute** This is IMPORTANT. Without this step your parameters will not be saved!

Block Level Access

Block programming access allows the user to scroll between menu blocks rather than scrolling through the complete parameter list

Once level "F" or "C" has been accessed and a parameter code is displayed,

PRESS for 1 sec **Prg mute** To display block code eg Pro for Probes, dEF for defrost

PRESS **▲** OR **def** To display the next block code (eg FAn for fan)

PRESS **Set**

Follow these steps to adjust individual parameters

PRESS **Prg mute** IMPORTANT: Press and hold PRG for 5 sec when programming is completed and repeat above)

(At any time to go back to block programming and repeat above)

| Code | Block | Parameter | Model | Unit | Type | Min. | Max. | Def. | New |
|-------|-------|---|-------|-------|------|------|------|------|-----|
| /2 | Pro | Measurement stability | MSC | - | C | 1 | 15 | 4 | |
| /3 | Pro | Probe display speed | MSC | - | C | 0 | 15 | 0 | |
| /4 | Pro | Virtual probe | MSC | - | C | 0 | 100 | 0 | |
| /5 | Pro | Select °C or °F (0 = °C) | MSC | flag | C | 0 | 1 | 0 | |
| /6 | Pro | Decimal point (0 = decimal point) | MSC | flag | C | 0 | 1 | 0 | |
| /tl | Pro | Sensor shown on controller display (1= Control sen) | MSC | - | C | 1 | 7 | 1 | |
| /tE | Pro | Sensor shown on remote display | MSC | - | C | 0 | 6 | 0 | |
| /P | Pro | Type of probe (0= standard Carel NTC) | MSC | - | C | 0 | 2 | 0 | |
| /A2 | Pro | Probe 2 configuration (eg 2=evap,3=cond) | MSC | - | C | 0 | 4 | 2 | |
| | | | -S- | - | C | 0 | 4 | 0 | |
| /A3 | Pro | Probe 3 configuration (eg 2=evap,3=cond) | MSC | - | C | 0 | 4 | 0 | |
| /A4 | Pro | Probe 4 configuration(eg 0=absent,2=evap,3=cond) | MSC | - | C | 0 | 4 | 0 | |
| /c1 | Pro | Calibration of probe 1 | MSC | °C/°F | C | -20 | 20 | 0.0 | |
| /c2-4 | Pro | Calibration of probe 2-3-4 /c2=probe 2, /c3=probe 3 | MSC | °C/°F | C | -20 | 20 | 0.0 | |
| St | Ctl | Temperature set point | MSC | °C/°F | F | r1 | r2 | 0.0 | |
| rd | Ctl | Controller differential | -SC | °C/°F | F | 0.1 | 20 | 2.0 | |
| m | Ctl | Dead Zone (when used 1 Heat 1 Cool) | -SC | °C/°F | C | 0 | 60 | 4 | |
| rr | Ctl | Reverse (heat) diff in dead zone control | -SC | °C/°F | C | 0.1 | 20 | 2 | |
| r1 | Ctl | Minimum Set Point allowed | MSC | °C/°F | C | -50 | r2 | -50 | |
| r2 | Ctl | Maximum Set Point allowed | MSC | °C/°F | C | r1 | 200 | 60 | |
| r3 | Ctl | Mode 0=cool with defrost,1=cool only, 2=heating | -SC | flag | C | 0 | 2 | 0 | |
| r4 | Ctl | Value to alter Set Point by from Digital Input | MSC | °C/°F | C | -20 | 20 | 3.0 | |
| r5 | Ctl | Enable temperature monitoring | MSC | flag | C | 0 | 1 | 0 | |
| rt | Ctl | Temperature monitoring interval | MSC | hours | F | 0 | 999 | - | |
| rH | Ctl | Max temperature recorded during period rt | MSC | °C/°F | F | - | - | - | |
| rL | Ctl | Min temperature recorded during period rt | MSC | °C/°F | F | - | - | - | |
| c0 | CnP | Comp. and fan start delay at power up | -SC | min | C | 0 | 15 | 0 | |
| c1 | CnP | Minimum time between 2 comp starts | -SC | min | C | 0 | 15 | 0 | |
| c2 | CnP | Minimum compressor OFF time | -SC | min | C | 0 | 15 | 0 | |
| c3 | CnP | Minimum compressor ON time | -SC | min | C | 0 | 15 | 0 | |
| c4 | CnP | Duty setting | -SC | min | C | 0 | 100 | 0 | |
| cc | CnP | Duration of continuous cycle | -SC | hours | C | 0 | 15 | 0 | |
| c6 | CnP | Alarm bypass after continuous cycle | -SC | hours | C | 0 | 15 | 2 | |
| c7 | CnP | Maximum Pump-Down (PD) time | -SC | sec | C | 0 | 900 | 0 | |
| c8 | CnP | Comp. start delay after opening Pump Down valve | -SC | sec | C | 0 | 60 | 5 | |
| c9 | CnP | Enable autostart with Pump Down operation | -SC | flag | C | 0 | 1 | 0 | |
| c10 | CnP | Select Pump-Down by time or pressure switch | -SC | flag | C | 0 | 1 | 0 | |
| c11 | CnP | Second compressor start delay | -SC | s | C | 0 | 250 | 4 | |
| d0 | dEF | Defrost type (0 = elec / temp,1 = H.Gas / temp 2 = elec / time, 3 = hot gas / time.....) | -SC | flag | C | 0 | 4 | 0 | |
| dl | dEF | Interval between defrosts (if not using real time) | -SC | hours | F | 0 | 250 | 8 | |
| dt1 | dEF | End defrost temperature, (if d0 = 0 or 1) | -SC | °C/°F | F | -50 | 200 | 4.0 | |
| dt2 | dEF | End defrost temperature, aux evap (if selected) | -SC | °C/°F | F | -50 | 200 | 4.0 | |
| dP1 | dEF | Maximum defrost duration | -SC | min | F | 1 | 250 | 30 | |
| dP2 | dEF | Maximum defrost duration, aux evap. | -SC | min | F | 1 | 250 | 30 | |
| d3 | dEF | Defrost- delay starting defrost after stopping comp | -SC | min | C | 0 | 250 | 0 | |
| d4 | dEF | Defrost at power up (0 = no, 1 = yes) | -SC | flag | C | 0 | 1 | 0 | |

For technical support contact CAREL Australia Pty Ltd

Sydney Office - Ph 02 - 8762 9200 Fax 02 - 9764 6933 email sales@carel.com.au

Technical literature can be downloaded from www.carel.com.au

| Code | Block | Parameter | Model | Unit | Type | Min. | Max. | Def. | New |
|-------|-------|--|-------|-------|------|------|------|------|-----|
| d5 | dEF | Defrost delay at power up (if d4=1) | -SC | min | C | 0 | 250 | 0 | |
| d6 | dEF | Display during def.(0=dF (flash),1=locked,2=dEF) | -SC | - | C | 0 | 2 | 1 | |
| dd | dEF | Dripping time after defrost | -SC | min | F | 0 | 15 | 2 | |
| d8 | dEF | Bypass alarms after defrost | -SC | hours | F | 0 | 15 | 1 | |
| d9 | dEF | Defrost priority over compressor protection | -SC | flag | C | 0 | 1 | 0 | |
| d1/d2 | dEF | Display defrost probe temp d/1=def P1,d/2=def P2) | MSC | °C/°F | F | - | - | - | |
| dC | dEF | Time basis for defrost (0=hr/min, 1=min/sec) | -SC | flag | C | 0 | 1 | 0 | |
| d10 | dEF | Compressor run time for demand defrost | -SC | min | C | 0 | 250 | 0 | |
| d11 | dEF | Comp. run time temp set for demand defrost | -SC | °C/°F | C | -20 | 20 | 1.0 | |
| d12 | dEF | Advanced defrost enable | -SC | - | C | 0 | 3 | 0 | |
| dn | dEF | Nominal defrost duration (smart defrost) | -SC | - | C | 1 | 100 | 65 | |
| dH | dEF | Proportional factor for variation in 'dl' (smart DF) | -SC | - | C | 0 | 100 | 50 | |
| A0 | ALn | Alarm and fan differential | MSC | °C/°F | C | 0.1 | 20 | 2.0 | |
| A1 | ALn | Type of alarm for AL and AH (0=rel. 1=absolute) | MSC | flag | C | 0 | 1 | 0 | |
| AL | ALn | Low alarm temp (see A1 for absol. or relative) | MSC | °C/°F | F | -50 | 200 | 0.0 | |
| AH | ALn | High alarm temp (see A1 for absol. or relative) | MSC | °C/°F | F | -50 | 200 | 0.0 | |
| Ad | ALn | Low and high temperature alarm delay | MSC | min | F | 0 | 250 | 120 | |
| A4 | ALn | Configuration of digital input 1 | -SC | - | C | 0 | 15 | 0 | |
| A5 | ALn | Configuration of digital input 2 | MSC | - | C | 0 | 15 | 0 | |
| A6 | ALn | Duty setting for comp from digital in alarm | -SC | min | C | 0 | 100 | 0 | |
| A7 | ALn | External alarm delay if using digital input | -SC | min | C | 0 | 250 | 0 | |
| A8 | ALn | Enable alarms 'Ed1' and 'Ed2' (defrost end on time) | -SC | flag | C | 0 | 1 | 0 | |
| Ado | ALn | Door switch light management mode | MSC | flag | C | 0 | 1 | 0 | |
| Ac | ALn | High condenser temperature alarm set point | -SC | °C/°F | C | 0.0 | 200 | 70.0 | |
| AE | ALn | High cond. temp. alarm differential | -SC | °C/°F | C | 0.1 | 20 | 10.0 | |
| Acd | ALn | High cond. temp. alarm delay | -SC | min | C | 0 | 250 | 0 | |
| AF | ALn | Light sensor off time | -SC | s | C | 0 | 250 | 0 | |
| ALF | ALn | Antifreeze alarm set point | MSC | °C/°F | C | -50 | 200 | -5 | |
| AdF | ALn | Antifreeze alarm delay | MSC | min | C | 0 | 15 | 1 | |
| F0 | Fan | Fan management (0=according to F2,F3,Fd 1 = amb - evap, 2 = evap temp (St + F1) | --C | flag | C | 0 | 2 | 0 | |
| F1 | Fan | Fan start temperature | --C | °C/°F | F | -50 | 200 | 5.0 | |
| F2 | Fan | Fans cycle with comp (0=no, 1=yes) | --C | flag | C | 0 | 1 | 1 | |
| F3 | Fan | Fans in defrost (0 = on, 1 = off) | --C | flag | C | 0 | 1 | 1 | |
| F4 | Fan | Condenser fan off temperature | MSC | °C/°F | C | -50 | 200 | 40.0 | |
| F5 | Fan | Condenser fan differential | MSC | °C/°F | C | 0.1 | 20 | 5.0 | |
| Fd | Fan | Fans delay after dripping | --C | min | F | 0 | 15 | 1 | |
| H0 | CnF | Serial address | MSC | - | C | 0 | 207 | 1 | |
| H1 | CnF | Function of relay 4 (0,1=alarm,2=aux,3=light..) | MSC | flag | C | 0 | 11 | 1 | |
| H2 | CnF | Keypad and IR locking | MSC | flag | C | 1 | 6 | 1 | |
| H3 | CnF | Remote control enabling code | MSC | - | C | 0 | 255 | 0 | |
| H4 | CnF | Disable buzzer (0=enabled, 1 = disabled) | MSC | flag | C | 0 | 1 | 0 | |
| H5 | CnF | Function of relay 5 (IR33DIN & PowerCompact) | MSC | flag | C | 0 | 11 | 1 | |
| H6 | CnF | Buttons to lock when keypad locked | MSC | - | C | 0 | 255 | 0 | |
| H8 | CnF | Select output to activate with time band | MSC | flag | C | 0 | 1 | 0 | |
| HPr | CnF | Print profile | MSC | - | C | 0 | 15 | 0 | |
| H9 | CnF | Enable set point change with time | MSC | flag | C | 0 | 1 | 0 | |
| Hdn | CnF | Number of default paramater sets | MSC | flag | C | 0 | 6 | 0 | |

| Code | Block | Parameter | Model | Unit | Type | Min. | Max. | Def. | New |
|---------|-------|-------------------------------------|-------|--------|------|------|------|------|-----|
| Hdh | CnF | Anti-sweat heater control offset | MSC | °C/°F | C | -50 | 200 | 0 | |
| HrL | CnF | Enable remote ind. of light status | MSC | flag | C | 0 | 1 | 0 | |
| HrA | CnF | Enable remote ind. of aux status | MSC | flag | C | 0 | 1 | 0 | |
| HsA | CnF | Enable alarms on network devices | MSC | flag | C | 0 | 1 | 0 | |
| In | CnF | Standard control or master or slave | MSC | flag | C | 0 | 6 | 0 | |
| HAn/HFn | HcP | Number of events HA/HF occurred | MSC | - | C | 0 | 15 | - | |
| HA/HF | HcP | Date/time of most recent HA/HF | MSC | - | C | - | - | - | |
| y__ | HcP | Year | **** | years | * | 0 | 99 | - | |
| M__ | HcP | Month | **** | months | * | 1 | 12 | - | |
| d__ | HcP | Day | **** | days | * | 1 | 7 | - | |
| h__ | HcP | Hour | **** | hours | * | 0 | 23 | - | |
| n__ | HcP | Minute | **** | min | * | 0 | 59 | - | |
| t__ | HcP | Duration | **** | hours | * | 0 | 99 | - | |
| Htd | HcP | HACCP alarm delay | MSC | min | C | 0 | 250 | 0 | |
| td1-td8 | rtc | Defrost time band 1/8 | -SC | - | C | - | - | - | |
| d__ | rtc | Day | **** | days | * | 0 | 11 | 0 | |
| h__ | rtc | Hour | **** | hours | * | 0 | 23 | 0 | |
| n__ | rtc | Minute | **** | min | * | 0 | 59 | 0 | |
| ton | rtc | Light/aux ON time setting | -SC | - | C | - | - | - | |
| d__ | rtc | Day | **** | days | * | 0 | 11 | 0 | |
| h__ | rtc | Hour | **** | hours | * | 0 | 23 | 0 | |
| n__ | rtc | Minute | **** | min. | * | 0 | 59 | 0 | |
| tof | rtc | Light/aux OFF time setting | -SC | - | C | - | - | - | |
| d__ | rtc | Day | **** | days | * | 0 | 11 | 0 | |
| h__ | rtc | Hour | **** | hours | * | 0 | 23 | 0 | |
| n__ | rtc | Minute | **** | min. | * | 0 | 59 | 0 | |
| tc | rtc | RTC date/time setting | MSC | - | C | - | - | - | |
| y__ | rtc | Years | **** | years | 0 | 0 | 99 | 00 | |
| M__ | rtc | Month | **** | months | 1 | 1 | 12 | 1 | |
| d__ | rtc | Day of the month | **** | days | 1 | 1 | 31 | 1 | |
| u__ | rtc | Day of the week | **** | days | 6 | 1 | 7 | 6 | |
| h__ | rtc | Hour | **** | hours | 0 | 0 | 23 | 0 | |
| n__ | rtc | Minute | **** | min | 0 | 0 | 59 | 0 | |

| Code | Icon on the display | Alarm relay | Buzzer | Reset | Description |
|------|---------------------|-------------|--------|-----------|---------------------------------------|
| 'iE' | flashing | active | active | automatic | virtual control probe fault |
| 'E0' | flashing | OFF | OFF | automatic | room probe S1 fault |
| 'E1' | flashing | OFF | OFF | automatic | defrost probe S2 fault |
| 'E2' | flashing | OFF | OFF | automatic | probe S3 fault |
| 'E3' | flashing | OFF | OFF | automatic | probe S4 fault |
| '_' | no | OFF | OFF | automatic | probe not enabled |
| 'LO' | flashing | active | active | automatic | low temperature alarm |
| 'HI' | flashing | active | active | automatic | high temperature alarm |
| 'IA' | flashing | active | active | automatic | immediate alarm from external contact |
| 'dA' | flashing | active | active | automatic | delayed alarm from external contact |

ALPINE CHILLERS

Water Filtration

- There is no period of time specified by the manufacturers of water filters for replacement, as this depends on usage and the cleanliness of inlet water.
- Alpine Chillers recommends replacement of filters quarterly or more frequently if the inlet water is dirty.
- DO NOT wait until water flow is restricted by the filter to replace.
- Chemicals introduced to the water by Water Authority etc are essential for maintaining safe water. By NOT maintaining the filtration system and regularly replacing filters, there is a possibility of the filter having the reverse effect and growing algae.
- A standard 10” filter cartridge has been used so that replacement filters can be purchased from most local filter suppliers or Alpine Chillers.