Alarm Descriptions

This document describes all possible alarm types as listed in the alarm log for software version 5.5.0 and later. ‘X’ indicates compressor circuit for compressor related alarms. Alarms are listed in alphabetical order.

All alarms can be manually cleared from the current alarms list. Note that if alarm is directly linked to a physical device (e.g. Blower Overload), clearing the alarm from the current alarm list will not clear the device if it still indicates a fault.

A ‘+’ sign by the timestamp in the alarm log indicates that the alarm has caused a lockout of related device and that alarm will not automatically be cleared. Clear alarm from current alarm list.

Some alarms will not cause any type of stoppage and are merely there to notify end user that some type of maintenance is required. These alarms will be indicated using the Maint LED instead of the Alarm LED on the keypad. These type of alarms are referred to as alerts in this document.

All alerts are still logged as alarms and also show up in the current alarm list.

Battery
The unit can detect a bad battery by comparing a set of configuration data stored in both battery backed up RAM and in Flash memory (not requiring battery to save data). If there is a mismatch in the data, the battery alert will be tripped.

You will always get this alert if a new core module with new software has been shipped out to replace faulty software in a unit since the battery is on the main board and not on the core module.

Blower OL
Blower overload.

ComprLx
Compressor low pressure fault. This alarm is tripped if low pressure is higher than Max suction pressure level. It can indicate that compressor motor running in reverse or some other serious compressor fault.

The unit is looking at the trend of the pressure changing. For instance, if LP rise above Max pressure level but then starts dropping again, the alarm will not trip. Pressure has to rise or stay the same for at least 35 sec before alarm is tripped.
**ComprHx**
Compressor fault. This alarm is tripped if high pressure is less than Min discharge pressure level. It can indicate that compressor motor running in reverse or some other serious compressor fault.

The unit is looking at the trend of the pressure changing. For instance, if HP drops below Min pressure level but then starts climbing again, the alarm will not trip. Pressure has to drop or stay the same for at least 35 sec before alarm is tripped.

**Cooler**
Compressor cooler fault. Either a LP, HP or Oil fault. All these sensors are wired in series for compressors used as pre-coolers.

**CoolFlt**
Compressor cooler fault at start attempt of cooler. If fault signal is not cleared within compressor anti block time, this alarm is tripped and cooler will not start.

**CWFault**
Chilled water fault. If there is a fault with chilled water circuit, this alarm is tripped. For instance, if a water flow switch has been installed, a bad water flow will cause this alarm to be tripped.

**DisTempHx**
Compressor discharge temperature is too high. Discharge temperature is above 230 F. This alarm trips as soon as the discharge temperature moves above 230 F.

**Exhaust1**
Exhaust fan 1 overload alarm.

**Exhaust2**
Exhaust fan 2 overload alarm.

**Filter**
Dirty Filter alert. Dirty filter schedule is used to trip this alert. By default it will be tripped every 4 months.

Optionally a dirty filter switch can be installed to detect dirty filters. Dirty filter switch has to indicate a reduced airflow for more than 2 hours before alert is tripped.
**Fire**
Fire alarm for units wired up to a fire alarm. The unit is by default configured to require a manual reset of the alarm. Unit can be configured to automatically clear the alarm once the fire alarm clears.

**Freeze**
Freezestat condition. Supply air temperature has been below freezestat setpoint for more than 10 seconds. Alarm can also be tripped if unit has been equipped with a Freezestat sensor. When this alarm is tripped, all exhaust fans are stopped and outdoor air dampers closed.

**Freeze2**
Level 2 freezestat condition. If the supply air temperature remains below freezestat setpoint 90 seconds after the first freezestat alarm, this alarm will be tripped. At this point the main blower will also be stopped.

**HeatRecOL**
Heat recovery pump overload alarm.

**HPx-P1**
High Pressure fault by either pressure switch or transducer shortly after pool 1 heating solenoid has opened. Probable cause for HP trip is not enough water flow through pool water heating coil.

**HPx-P2**
High Pressure fault by either pressure switch or transducer shortly after pool 2 heating solenoid has opened. Probable cause for HP trip is not enough water flow through pool water heating coil.

**HPx-PD**
High Pressure fault by either pressure switch or transducer when compressor is pumping down.

**HPx-SW**
High Pressure Switch fault. Switch trips at 350 psi for R-22 and R-407C and at 500 psi for R-410A.

**HPx-TD**
High Pressure transducer fault. Transducer is set to trip at 340 psi for R22 refrigerant, 360 psi for R-407C and 480 for R-410A.
**HPRelief**
Unit has initiated High Pressure Relief mode. This is an alert and will not cause any stoppage, just a temporary change in operation.

In a pool unit this means that the pool heating solenoid has been opened even if there currently is no pool heating demand. There still is an upper limit for how hot unit will let the pool water to get. Unit will run in this mode for a limited time.

In an OA unit, this means that the pre-cooler will be started if it is not running. The pre-cooler will start as if it was started on a regular demand. It will be turned off once there is less of a demand (i.e. OA wet bulb has dropped below calculated setpoint).

**LPx-SW**
Low Pressure switch. Switch trips at 25 psi for R-22 and R-407C refrigerant and at 50 psi for R-410A.

**LPx-TD**
Low Pressure transducer. Transducer trips at 40 psi for R-22 and R-407C refrigerant and 75 psi for R-410A.

**LPx-Sens**
The first step in starting up compressor is to open pump down valve and wait for the low pressure to rise above LP start level. If this does not happen within the anti block timer and LP switch still indicates a LP fault, this alarm is tripped. Possible sensor faults or compressor very low on refrigerant.

**LPx-Vac**
Low pressure is reaching vacuum level. At startup of the compressor, the low pressure alarm is disabled to avoid tripping on low pressure in case of a big dip in pressure at startup. This alarm is to prevent the pressure from dipping too low. It is set at 20 psi for R-22 and R-407C refrigerant and 40 psi for R-410A.

**No Air**
No air flow alarm. If airflow switch has indicated reduced air flow for more than 2 minutes, this alarm is tripped.

**OACC1 OL**
Outdoor air condenser 1 overload alarm.

**OACC2 OL**
Outdoor air condenser 2 overload alarm.
**Oilx**
On units with an oil failure switch, this indicates a compressor oil failure.

**PumpFault**
Water flow fault for internal pump on Protocol units.

**Purge**
Too cold to use purge. Return air sensor has dropped below purge setpoint when purge is running. Purge will be stopped.

**SucTempHx**
Compressor suction temperature is too high. Suction temperature has been above 80 F for more than 5 minutes.

**SupHeat**
Compressor superheat is too low. Superheat has been below 18 F (default) for more than 5 minutes.

**SWErrXM**
Internal software fault related to extended memory handling.

**SWErrEvt**
Internal software fault related to event handling.

**SWErrTm**
Internal software fault related to timers.

**SWErrSys**
Internal software fault related to system support functions.

**SWErrSP**
Internal software fault related to propriety Seresco Protocol.

**SWErrVT**
Internal software fault related to ValueType object.

**Volt Mon**
Voltage Monitor fault. Voltage monitor has detected a voltage fault. The alarm is cleared once the voltage monitor fault status is cleared.
**Waterflw1**

Pool 1 water flow fault. If compressor trips on HP shortly after pool heating solenoid is opened, there will be two alarms logged.

First one is a HP fault with pool heating as possible cause. The HP alarm will clear after alarm min stop time and compressor will try to run again.

The second alarm is the Waterflw1 alarm that will lockout pool water heating for 60 minutes.

**Waterflw2**

Same as the Waterflw1 alarm but for a 2nd pool.

**WtrFlwHi1**

High water flow alert. This is too alert you that the pool water flow is too high causing a too small differential between the pool in and pool out sensor. There will be no stoppage in pool water heating but if left unattended for a long time it can cause erosion in the water pipes.

The pool out min level is used to determine minimum differential. Note that for 2 compressor units when only one compressor is running, the minimum differential is half of the specified min level.

**WtrFlwHi2**

Same as the WtrflwHi1 alarm but for a 2nd pool.

**WtrHot1**

Pool water temperature too hot. If pool out sensor reaches 115 F, this alarm will be tripped. Pool water heating will be locked out for 60 minutes as for the Waterflw1 alarm.

**WtrHot2**

Same as the WtrflwHi1 alarm but for a 2nd pool.