


Alarms

An **Alarm code** will be displayed if at least one alarm is active. If multiple alarms are active, the one with greater priority will be displayed according to the Table of Alarms.

Alarm Events Per Hour

Alarms which are **Manual Reset** are reset by pressing the ON/OFF  button and releasing

CODE	INDICATES	DESCRIPTION
E00	Remote off	All loads will be shut down.
E01	High pressure Fault circuit 1	Digital Input All Compressors in circuit 1 will be shut down Manual Reset Required
E02	Low pressure circuit 1	All Compressors in circuit 1 will be shut down; also condenser fans if separate for the 2 circuits Automatically reset unless alarm events per hour reaches the value of parameter Pa A02 , after which manually reset; Inactive during timer Pa A01 after compressor on in circuit 1
E03	Compressor Thermal protection Circuit 1	All Compressors in Circuit 1 will be shut down; Automatic reset until alarm events per hour reaches the value of parameter Pa A07 , after which manually reset; Inactive during timer Pa A08 after compressor on.
E04	Condenser Fan Thermal protection circuit 1	Fans and compressors in circuit 1 will be shut down; If Common to both Circuits Compressors in circuit 2 will also be shut down; Automatically reset until alarm events per hour reaches the value of parameter Pa A09 , after which manually reset;
E05	Anti-freeze circuit 1	Fans and compressors in circuit 1 will be shut down; Triggered when Leaving Water Temperature is lower than Pa A11 ; Turned off if probe Leaving Water Temperature is greater than Pa A11 + Pa A12 ; Automatically reset until alarm events per hour reaches the value of parameter Pa A13 , after which manually reset; Inactive during timer Pa A10 after the Chiller is turned on with the On-OFF key via the keyboard or from the remote ON-OFF input.
E06	Leaving Water Sensor fault	All loads will be shut down; Input shorted or open circuit or probe limits are exceeded (-50 °C.. 100 °C).
E07	Condenser Sensor Circuit 1 fault	All loads will be shut down; Input shorted or open circuit or probe limits are exceeded (-50 °C.. 100 °C).
E09	Not Used	Not used
E11	High pressure circuit 1 on analog input	Compressors in circuit 1 will be shut down; Active when Circuit 1 pressure sensor detects a value greater then Pa A14 ; Inactive if the sensor detects a value lower then Pa A14 – Pa A15 ;
E12	Low pressure circuit 1 on analog input	Compressors in circuit 1 will be shut down, as well as condenser fans if the 2 circuits have separate condensation (refer to combined or separate condensation); Active if the analog probe ST6 (refer to analog inputs) is configured as pressure probe; Active when the pressure probe ST6 detects a value lower then Pa A17; Inactive if the probe detects a value greater then Pa A17 – Pa A18; Automatically reset until alarm events per hour reaches the value of parameter Pa A19, after which manually reset; Inactive during timer Pa A16 after compressor on or reversal of 4-way valve (reversing valve) of circuit 1
E13	Compressor Thermal protection Circuit 2	All Compressors in Circuit 1 will be shut down; Automatic reset until alarm events per hour reaches the value of parameter Pa A07 , after which manually reset; Inactive during timer Pa A08 after compressor on.
E19	Not Used	Not used
E21	High pressure Fault circuit 2	Digital Input All Compressors in circuit 2 will be shut down Manual Reset Required

CODE	INDICATES	DESCRIPTION
E22	Low pressure circuit 2	All Compressors in circuit 2 will be shut down; also condenser fans if separate for the 2 circuits Automatically reset unless alarm events per hour reaches the value of parameter Pa A02 , after which manually reset; Inactive during timer Pa A01 after compressor on in circuit 2
E23	Not Used	Not Used
E24	Condenser Fan Thermal protection circuit 2	Fans and compressors in circuit 2 will be shut down; If Common to both Circuits Compressors in circuit 1 will also be shut down; Automatically reset until alarm events per hour reaches the value of parameter Pa A09 , after which manually reset;
E25	Not Used	Not Used
E26	Not Used	Not Used
E27	Condenser Sensor Circuit 2 fault	All loads will be shut down; Input shorted or open circuit or probe limits are exceeded (-50°C.. 100°C).
E29	Not Used	Not Used
E31	High pressure circuit 2 on analog input	Compressors in circuit 2 will be shut down; Active when Circuit 2 pressure sensor detects a value greater then Pa A14 ; Inactive if the sensor detects a value lower then Pa A14 – Pa A15 ;
E32	Low pressure circuit 2 on analog input	Compressors in circuit 2 will be shut down, as well as condenser fans if the 2 circuits have separate condensation (refer to combined or separate condensation); Active if the analog probe ST6 (refer to analog inputs) is configured as pressure probe; Active when the pressure probe ST6 detects a value lower then Pa A17; Inactive if the probe detects a value greater then Pa A17 – Pa A18; Automatically reset until alarm events per hour reaches the value of parameter Pa A19, after which manually reset; Inactive during timer Pa A16 after compressor on or reversal of 4-way valve (reversing valve) of circuit 2
E33	Not Used	Not Used
E39	Not Used	Not Used
E40	Entering Water Temperature Sensor fault	All loads will be shut down; Input shorted or open circuit or probe limits are exceeded (-50°C.. 100°C).
E41	Flow switch	All compressors, fans and pump will be cut off if manually reset; Triggered if the “Flow switch” remains active for an amount of time equal to Pa A04 ; Goes off if “Flow switch” remains inactive for an amount of time equal to Pa A05 ; Automatically reset until alarm events per hour reaches the value of parameter Pa A06 , after which manually reset; Inactive during timer Pa A03 following pump on.
E42	Outside Air Sensor fault	All loads will be shut down; Input shorted or open circuit or probe limits are exceeded (-50°C.. 100°C).
E43	Anti-freeze external circuit 1,2	Fans and compressors will be shut down; Active if analogue probe ST6 and/or ST3 (refer to analogue inputs) is configured as external anti-freeze probe (Pa H13 = 4, Pa H16=4); Triggered when probe ST3 and/or ST6 detects a value below Pa A11; Turns off when probe ST3 and/or ST6 detects a value above Pa A11 + Pa A12; Automatically reset until alarm events per hour reaches value of parameter Pa A13, after which manually reset; Inactive during timer Pa A10 after turning on Energy 400 using On-OFF key (refer to keyboard) or digital input ON-OFF (refer to digital inputs) or start of heating mode.
E44	Machine out of coolant	In all working modes, except if the boiler is active and during defrost , the machine is checked to identify circuit failures. For example: gas flooding, broken inversion valve in heat pump machines, compressor power phases exchange. The regulator is active if Pa A23=1 and ST2 is configured as water output probe. An alarm arises if one of the following conditions lasts for a minimum time of Pa A22 : ST2-ST1(or ST3)< Pa A20 in heat pump configuration, ST1(or ST3)-ST2< Pa A20 in cooling configuration. The gas flooding alarm always needs a manual reset . Time count resets with each mode change or if all the compressors are off. After a compressor start, the alarm is ignored for a time of Pa A21 .
E45	Configuration	All loads will be shut down;

CODE	INDICATES	DESCRIPTION
	error	Triggered if at least one of the following conditions apply: H11= 2 (ST1 configured as request for <i>heating</i>), H12= 2 (ST2 configured as request for <i>cooling</i>) and both inputs are active. Sum of <i>compressors</i> and capacity steps on machine exceeds 4 The <i>keyboard</i> is declared present (Pa H69=1) and there is no communication between the <i>keyboard</i> and the basic unit.
E46	High temperature regulation algorithm	All <i>loads</i> will be shut down except the pump; Triggered if probe ST1 (refer to <i>analogue inputs</i>) has a value exceeding <i>Pa A25</i> for an amount of time exceeding Pa 26 in <i>cooling</i> mode; Goes off if probe ST1 (refer to <i>analogue inputs</i>) has a value lower than <i>Pa A25 – Pa A12</i> ; Automatically <i>reset</i> .
E47	Not Used	Not Used
E48	Not Used	Not Used
E49	Not Used	Not Used
E50	Not Used	Not Used