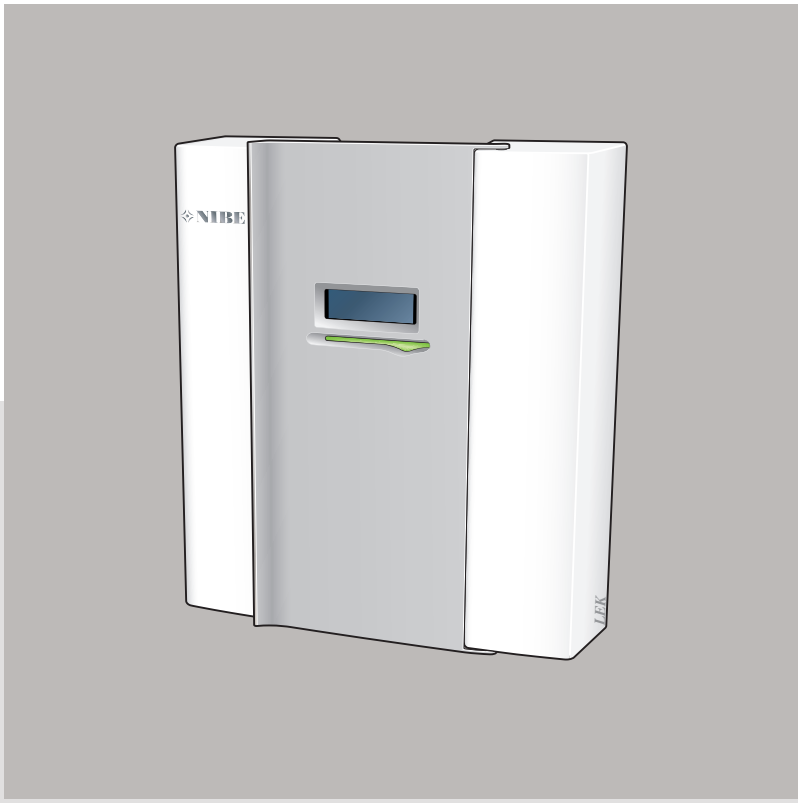
Alarm list SMO 40



ALARM AND INFORMATION MESSAGES

Functions in the event of alarm:

- Red lamp under the display lights up.
- Alarm icon is shown in the display.
- Alarm relay is activated if AUX output is selected for this.
- Alarm actions as selected in menu 5.1.4.

ALARM

In event of an alarm, the red lamp on the front lights up and an alarm icon is displayed. First go through the suggested actions shown in the display.

Alarm no.	*Alarm text on the display*	*Cause*	*Indoor module / heat pump measures*	*May be due to*
1	Sensor fault: BT1 outdoor sensor	No contact with the sensor (Temperature sensor, Outdoor)	Calculated supply temp is set to min supply	• Open circuit or short circuit on sensor input • Defective sensor
6	Sensor fault: BT6 hot water load	No contact with the sensor (Temperature sensor, Hot water charging)	Hot water charging is blocked	• Open circuit or short circuit on sensor input • Defective sensor
20	Sen flt: AZ30-BT20 exh air	Sensor not connected/defective (ventilation)	Automatic reset	• Open circuit or short circuit on sensor input • Defective sensor
21	Sen flt: AZ30-BT21 ex air sen	Sensor not connected/defective (ventilation)	Automatic reset	• Open circuit or short circuit on sensor input • Defective sensor
23	Sen flt: AZ30-BT22 sp air sen	Sensor not connected/defective (ventilation)	Automatic reset	• Open circuit or short circuit on sensor input • Defective sensor
25	Sensor error: BT25 external supply	No contact with the sensor (Temperature sensor, Heating medium supply, External)	Additional heat is blocked New actual value = BT71 + 10K	• Open circuit or short circuit on sensor input • Defective sensor
28	Sen flt: BT71 ext return sensor	No contact with the sensor (Return line sensor)	No action, but heating blocked if alarm 25 occurs at the same time	• Open circuit or short circuit on sensor input • Defective sensor
31	Sensor error: BT63 flow sensor.	No contact with the sensor (Temperature sensor, External supply line after heater)	Additional heat is blocked if the additional heat is before the reversing valve. If the sensor is used to control GP12/GP1, the speed is set to manual	• Open circuit or short circuit on sensor input • Defective sensor
33	Sen flt: BT53 solar panel	Sensor not connected/defective (solar panel)	Switches off solar function	• Open circuit or short circuit on sensor input • Defective sensor

Alarm no.	*Alarm text on the display*	*Cause*	*Indoor module / heat pump measures*	*May be due to*
34	Sen flt: BT54 solar tank	Sensor not connected/defective (solar coil)	Switches off solar function	• Open circuit or short circuit on sensor input • Defective sensor
35	Sen flt: BT52 boiler sensor	No contact with the sensor (Temperature sensor, Boiler)	Shunt closes. Burner is stopped	• Open circuit or short circuit on sensor input • Defective sensor
36	Sensor flt:EP21 BT2 flow line sensor.	Sensor not connected/defective (supply temperature sensor, extra climate system 1)	Controls the return line sensor (EP21-BT3)	• Open circuit or short circuit on sensor input • Defective sensor
37	Sensor flt:EP22 BT2 flow line sensor.	Sensor not connected/defective (supply temperature sensor, extra climate system 2)	Controls the return line sensor (EP22-BT3)	• Open circuit or short circuit on sensor input • Defective sensor
38	Sensor flt:EP23 BT2 flow line sensor.	Sensor not connected/defective (supply temperature sensor, extra climate system 3)	Controls the return line sensor (EP23-BT3)	• Open circuit or short circuit on sensor input • Defective sensor
39	Sensor error: EQ1-BT64 cooling supply	No contact with the sensor (Temperature sensor, Cooling supply line)	Cooling is blocked. Cooling shunt closes	• Open circuit or short circuit on sensor input • Defective sensor
48	Sens flt room sens cool oper	No contact with the sensor (Temperature sensor, Cooling)	Cooling operation is blocked Manual reset when the sensor has contact	• Open circuit or short circuit on sensor input • Defective sensor
56	Erroneous serial no	The heat pump has a serial number that does not exist	Compressors are stopped and relay is deactivated	Incorrectly entered serial number
57	Erroneous software	The heat pump's program and serial numbers do not match each other	Compressors are stopped and relay is deactivated	Incorrect software installed
70	Communication fault with PCA Input.	Communication with the input board (AA3) is missing	Calculated supply temperature is set to min. supply temperature	Defective communication cables
71	Communication fault with PCA Base.	Communication with the PCB (AA2) is missing	Compressor is blocked	Defective communication cables
73-91	Com.err. PCA Accessory	Communication with the accessory board is missing	Accessory is blocked	• Defective communication cables • The accessory is activated in the display while not connected to the communication cable • Incorrectly connected communication cable • Incorrectly set dip switch • No electrical supply to the accessory board
96-99	Com.err. RMU	Communication with the room unit is missing	The room unit is blocked	Defective communication cables

Alarm no.	*Alarm text on the display*	*Cause*	*Indoor module / heat pump measures*	*May be due to*
130-135	Com.flt PCA Accessory	The communication with the accessory board for climate systems 5-8 has been missing for 15 seconds	Accessory is blocked	• Defective communication cables • The accessory is activated in the display while not connected to the communication cable • Incorrectly connected communication cable • Incorrectly set dip switch • No electrical supply to the accessory board
146-149	ERS accessory blocked by lev. monitor	Level monitor for ERS 1-4 has tripped (The input is closed)	Accessory is blocked Automatic reset when the input is open	Check the level monitor
156	Low lp cool	5 repeated alarms for low low-pressure within 4 hours.	Compressor is blocked. Manual reset	• Poor flow • Significant wind effect
193	Com.flt PCA Accessory	Communication fault to EME 20 has occurred three times in a row.	Accessory blocked. Automatic reset, once there has been communication for 60 seconds	• Defective communication cables • The accessory is activated in the display while not connected to the communication cable • Incorrectly connected communication cable • Incorrectly set DIP switch • No electrical supply to the accessory board
206	Com.flt PCA Accessory	Communication with the accessory board for HW comfort has been missing for 15 seconds	Accessory is blocked	• Defective communication cables • Incorrectly set dip switch • The accessory is activated in the display, but is not connected with a communication cable • Incorrectly connected communication cable • No electrical supply to the accessory board
208	Com.flt PCA Accessory	Communication with the accessory board for external additional heat has been missing for 15 seconds	Switches off step-controlled additional heat	• Defective communication cables • The accessory is activated in the display while not connected to the communication cable • Incorrectly connected communication cable • Incorrectly set dip switch • No electrical supply to the accessory board
212	Cmpr has not been running for 1 week.	Compressor has not been in operation for one week	According to selected measure in the menu	Check settings

Alarm no.	*Alarm text on the display*	*Cause*	*Indoor module / heat pump measures*	*May be due to*
218	The compressor's rotor is blocked.		Compressor is blocked	Defective compressor
220	High pressure alarm	The high pressure switch (63H1) has deployed 5 times within 60 minutes or has been deployed for 60 minutes continuously	Compressor is blocked	• Insufficient air circulation or blocked heat exchanger • Open-circuit or short-circuit on input for high pressure switch (63H1) • Defective high pressure switch • The expansion valve is not connected correctly • Service valve closed • Defective control board in outdoor unit • Low or no flow during heating operation • Defective circulation pump • Defective fuse F(4A)
221	Low pressure alarm	Too low a value on the low pressure sensor 3 times within 60 minutes	Compressor is blocked	• Open circuit or short circuit on input for low pressure sensor • Defective low pressure sensor • Defective control board in outdoor unit • Open-circuit or short-circuit on input for suction gas sensor (Tho-S)
222	Motor protection alarm	Alarm 7 from outdoor unit	Compressor is blocked	See relevant manual
223	Com. flt from the heat pump	Communication between the control board and the communication board is interrupted There must be 22 VDC at the switch CNW2 on the control board (PWB1)	Compressor is blocked	• Any circuit breakers for the outdoor unit are in the off position • Incorrect cable routing
224	Fan alarm from heat pump	Deviations in the fan speed in the outdoor unit	Compressor is blocked	• Fan blocked or not connected • Defective fan motor • Fuse blown
225	Mixing up sensor flow/return	The return is hotter than the supply	Compressor is blocked	The connection for supply and return line is mixed up
227	Sensor fault from heat pump	Sensor not connected/defective	Compressor is blocked	Open circuit or short circuit on sensor input
228	Failed defrosting	10 failed consecutive defrostings	Compressor is blocked	• System temperature too low and/or poor flow • Insufficient available system volume • Significant wind effect • Clogged particle filter

Alarm no.	*Alarm text on the display*	*Cause*	*Indoor module / heat pump measures*	*May be due to*
229	Short operating times for compr.	Operation was stopped from the indoor section after less than 5 minutes	Compressor is blocked	• Poor flow or poor heat transfer • Incorrect settings for heating and/or hot water
230	Hot gas alarm	Temperature deviations on the discharge sensor. F2120: Alarm 3 times within 4 hours F2040/AMS: Alarm 2 times within 60 minutes or continuous alarm for 60 minutes	Compressor is blocked	• Disruption in the refrigerant circuit • Lack of refrigerant
231	Phase fault	Alarm 18 from outdoor unit	Compressor is blocked	See relevant manual
232	Low evaporation temp	5 repeated alarms for low evaporation temperature within 4 hours	Compressor is blocked	• Lack of refrigerant • Blocked expansion valve • Significant wind effect
250	Com.err. SMS	Communication with the accessory has been missing for 15 seconds	The accessory is blocked. Manual reset	Check the communication
251	Com. err. MODBUS	Communication with the accessory has been missing for 15 seconds	The accessory is blocked. Manual reset	Check the communication
261	High HWX temp	Temperature deviation on the heat exchanger sensor (ThoR1/R2) 5 times within 60 minutes or continuously for 60 minutes	Compressor is blocked	• Defective sensor • Insufficient air circulation or blocked heat exchanger • Defective control board in F2040/AMS • Too much refrigerant
262	Inv. err.	Power transistor too hot. When IPM (Intelligent Power Module) shows FO (Fault output) signal 5 times for 60 minutes.	Compressor is blocked	The 15V supply to the inverter is unstable
263	Inv. err.	Voltage from the inverter outside the parameters 4 times within 30 minutes	Compressor is blocked	• Incoming power supply interference • Service valve closed • Insufficient amount of refrigerant • Compressor fault • Defective inverter board in F2040/AMS
264	Communication error with Inverter.	Communication between inverter board and control board/PCB interrupted	Compressor is blocked	• Poor connection between control board/PCB and inverter • Inverter de-energised or defective • Defective control board in F2040/AMS
265	Inv. err.	Continuous deviation on power transistor for 15 minutes	Compressor is blocked	• Defective fan motor • Defective circuit board for inverter in F2040/AMS

Alarm no.	*Alarm text on the display*	*Cause*	*Indoor module / heat pump measures*	*May be due to*
266	Low refrig.	Insufficient refrigerant has been detected at start-up in cooling operation. 1 minute after start-up, BT15 must have decreased 4K compared to BT3	Compressor is blocked	• Service valve closed • Loose connection sensor (BT15, BT3) • Defective sensor (BT15, BT3) • Insufficient amount of refrigerant
267	Inv. err.	Failed start for compressor	Compressor is blocked	• Defective circuit board for inverter in F2040/AMS • Defective control board in F2040/AMS • Compressor fault
268	Inv. err.	Overcurrent, inverter A/F module	Compressor is blocked	Sudden power failure
277	Sensor fault from heat pump	The input for the sensor Tho-R (evaporator sensor) has received an unreasonably high or low value 3 times within 40 minutes	Compressor is blocked	• Open circuit or short circuit on sensor input • Defective sensor
278	Sensor fault from heat pump	The input for the sensor Tho-A (outdoor sensor) has received an unreasonably high or low value 3 times within 40 minutes	Compressor is blocked	• Open circuit or short circuit on sensor input • Defective sensor
279	Sensor fault from heat pump	The input for the sensor Tho-D (discharge sensor) has received an unreasonably high or low value 3 times within 40 minutes	Compressor is blocked	• Open circuit or short circuit on sensor input • Defective sensor
280	Sensor fault from heat pump	The input for the sensor Tho-S (suction gas sensor) has received an unreasonably high or low value 3 times within 40 minutes	Compressor is blocked	• Open circuit or short circuit on sensor input • Defective sensor
281	Sensor fault from heat pump	The input for the sensor LPT (low pressure sensor) has received an unreasonably high or low value 3 times within 40 minutes	Compressor is blocked	• Open circuit or short circuit on sensor input • Defective sensor
283	Com.flt PCA Accessory	Temporary Comm. Fault Active 4-pipe cooling ULVP	Accessory is blocked	• Defective communication cables • Incorrectly set dip switch • The accessory is activated in the display, but is not connected with a communication cable • Incorrectly connected communication cable • No electrical supply to the accessory board
292	Sen flt: BT74 cool/heat sen.	Sensor BT74 on the AUX input is not connected/defective	According to selected measure in the menu	• Open circuit or short circuit on sensor input • Defective sensor

Alarm no.	*Alarm text on the display*	*Cause*	*Indoor module / heat pump measures*	*May be due to*
294	Incompatible heat pump	The outdoor air heat pump is not compatible	Compressor is blocked	• Upgrade of outdoor unit failed • No software in outdoor unit
297	Com.flt PCA Accessory	Comprising Comm. Fault Active FTX		• Defective communication cables • Incorrectly set dip switch • The accessory is activated in the display, but is not connected with a communication cable • Incorrectly connected communication cable • No electrical supply to the accessory board
301	Slave heatpump #1 comm.err.	Communication with slave heat pump 1 has been missing for 15 seconds	Blocking compressor in heat pump 1	Check communication cables
302-308	com.err.slave 2-8	Communication with slave heat pump 2-8 has been missing for 15 seconds	Blocking compressor in each heat pump 2-8	Check communication cables
319	Comm.flt with EB103/4-GP12	Communication with the accessory board for GP12 has been missing for 15 seconds	Blocking relevant compressor and stopping relevant GP12	• Defective communication cables • Incorrectly set dip switch • The accessory is activated in the display, but is not connected with a communication cable • Incorrectly connected communication cable • No electrical supply to the accessory board
320	Comm.flt with EB105/6-GP12	Communication with the accessory board for GP12 has been missing for 15 seconds	Blocking relevant compressor and stopping relevant GP12	• Defective communication cables. • Incorrectly set dip switch • The accessory is activated in the display, but is not connected with a communication cable • Incorrectly connected communication cable • No electrical supply to the accessory board

Alarm no.	*Alarm text on the display*	*Cause*	*Indoor module / heat pump measures*	*May be due to*
321	Comm. fault with EB107/8-GP12	Communication with the accessory board for GP12 has been missing for 15 seconds	Blocking relevant compressor and stopping relevant GP12	• Defective communication cables • Incorrectly set dip switch • The accessory is activated in the display, but is not connected with a communication cable • Incorrectly connected communication cable • No electrical supply to the accessory board
324	Com. fault PCA Acc. HTS 1	Communication with the humidity sensor BM1 has been missing for 15 seconds	The minimum calculated cooling supply is set to 18 °C	• Open circuit or short circuit on sensor input • Defective sensor
336	Sen flt: EP44 BT2 supply temp sens.	Sensor not connected/defective	The sensor signal is replaced by EP44-BT3 - 10K during shunt control	• Open circuit or short circuit on sensor input • Defective sensor
337	Sen flt: EP45 BT2 supply temp sens.	Sensor not connected/defective	The sensor signal is replaced by EP45-BT3 - 10K during shunt control	• Defective communication cables • Open circuit or short circuit on sensor input • Defective sensor
338	Sen flt: EP46 BT2 supply temp sens.	Sensor not connected/defective	The sensor signal is replaced by EP46-BT3 - 10K during shunt control	• Defective communication cables • Open circuit or short circuit on sensor input • Defective sensor
339	Sen flt: EP47 BT2 supply temp sens.	Sensor not connected/defective	The sensor signal is replaced by EP47-BT3 - 10K during shunt control	• Defective communication cables • Open circuit or short circuit on sensor input • Defective sensor
341	Recurring safety defr.	Alarm from outdoor unit	Compressor is blocked	Check whether the outdoor unit has iced up and check the sensor See relevant manual
344	Recurring low pressure	Alarm from outdoor unit	Compressor is blocked	See relevant manual
346	Recurring high press	Alarm from outdoor unit	Compressor is blocked	See relevant manual
357	Com.flt PCA Accessory	Permanent communication fault to OPT	None, manual reset	Check communication cables
358	Internal OPT error	Alarm from the gas boiler	None, manual reset	
372	Perm. com. error pool 2	Communication with Pool 2 has been missing for 15 seconds	Accessory is blocked	Defective communication cables
400	Unspecified fault	Unspecified faults	Master is blocking relevant compressor and frost protection is safeguarded	The outdoor unit's software could be more recent than the indoor unit's alarm See relevant manual

Alarm no.	*Alarm text on the display*	*Cause*	*Indoor module / heat pump measures*	*May be due to*
403	Sensor fault from PCA 154	Sensor fault in the outdoor unit	Compressor is blocked	See relevant manual
404	Sensor fault from PCA 154	Sensor fault in the outdoor unit	Compressor is blocked	See relevant manual
412	Sensor fault from PCA 154	Sensor fault in the outdoor unit	Compressor is blocked	See relevant manual
415	Sensor fault from PCA 154	Sensor fault in the outdoor unit	Compressor is blocked	See relevant manual
421	Com. fault w. inverter	A temporary communication alarm has occurred 3 times within 2 hours or has been active for 1 hour	Compressor is blocked Manual reset	See relevant manual
425	Triggered pressure switch	Permanent pressure switch alarm	Compressor is blocked	• Check the heating medium flow • Lack of refrigerant
427	Safety stop inverter	A temporary fault in the inverter has occurred 2 times within 60 minutes	Compressor is blocked	Main and group fuses and their cable connections
429	Safety stop inverter	A temporary internal fault in the inverter has occurred 3 times within 2 hours	Compressor is blocked	Main and group fuses and their cable connections
431	High mains voltage	The phase voltage to the inverter has been too high 3 times within 3 hours or continuously for 1 hour	Compressor is blocked	Main and group fuses and their cable connections
433	Inverter alarm type I	The phase voltage to the inverter has been too low 3 times within 3 hours or continuously for 1 hour	Compressor is blocked	• Main and group fuses and their cable connections • Low supply voltage • Phase loss
435	Inverter alarm type I	Phase L2 to the inverter has been missing 3 times within 3 hours or continuously for 1 hour	Compressor is blocked	Main and group fuses and their cable connections
437	Mains disturbance	A temporary inverter fault has occurred 3 times within 2 hours or has been continuous for 1 hour	Compressor is blocked	• Main and group fuses and their cable connections • Incorrect connection in the inverter's terminal block X5
439	Overheated inverter	The inverter has temporarily reached max working temperature due to poor cooling 3 times within 2 hours or continuously for 1 hour	Compressor is blocked	• Poor position of inverter – Check screws and paste • Defective inverter
441	Inverter alarm type II	Max current in has been temporarily too high 3 times within 2 hour or continuously for 1 hour	Compressor is blocked	• Main and group fuses and their cable connections • Too high current to inverter • Low supply voltage

Alarm no.	*Alarm text on the display*	*Cause*	*Indoor module / heat pump measures*	*May be due to*
443	Overheated inverter	The inverter has temporarily reached max working temperature due to poor cooling 3 times within 2 hours or continuously for 1 hour	Compressor is blocked	• Poor position of inverter – Check screws and paste • Defective inverter
445	Inverter protection	The inverter detected a temporary fault within 10 seconds after compressor start, 5 times in a row	Compressor is blocked	• Main and group fuses and their cable connections • Defective compressor
447	Phase drop	Compressor phase has been missing 3 times within 2 hours or continuously for 1 hour	Compressor is blocked	• Main and group fuses and their cable connections • Incorrectly connected compressor cable
449	Failed compressor starts	The compressor has not started when required 3 times within 2 hours	Compressor is blocked	• Defective inverter • Defective compressor
453	High curr load cmpr	The output current from the inverter to the compressor has been temporarily too high 3 times within 2 hours or continuously for 1 hour	Compressor is blocked	• Main and group fuses and their cable connections • Internal compressor wiring. -if compressor is running slowly, if not, replace inverter
455	High power load compressor	The power output from the inverter has been too high 3 times within 2 hours or continuously for 1 hour	Compressor is blocked	• Main and group fuses and their cable connections • Internal compressor wiring, inverter • Compressor
461	Inverter alarm type II	Only 1-phase The current to the inverter has been too high 3 times within 2 hours or continuously for 1 hour	Compressor is blocked	Main and group fuses and their cable connections • Low incoming voltage that is lower than 198 VAC
490	sensor fault	Sensor BT90 not connected/defective	Automatic reset, once there has been communication for 60 seconds	• Open circuit or short circuit on sensor input • Defective sensor
501	Failed start, no press. diff	The pressure difference between BP9 and BP8 has been too low at compressor start 2 times within 30 minutes.	The compressor is blocked, possibly in order to be heated with the compressor heater. Automatic reset	• Fault in one of the pressure sensors BP8 or BP9 • The compressor is not compressing the refrigerant properly • Compressor breakdown
503	Compressor speed too low	The compressor speed is below the lowest permitted speed	Stops compressor	The inverter's safety function reduces the speed outside of the compressor's working range
505	Inverter has earth fault.	Inverter has earth fault	Automatic reset, once no active earth fault has been sent for 60 seconds	Check connection
510	The inverter has high DC voltage.	The inverter has high DC voltage	Automatic reset, when no active fault has been sent for 60 seconds.	Check incoming voltage from the panels

Alarm no.	*Alarm text on the display*	*Cause*	*Indoor module / heat pump measures*	*May be due to*
511	No comm. with inverter for five days.	No communication with the inverter for five days	Automatic reset, once there has been communication for 60 seconds	Check the installation
524	Com. flt PCA Acc. HTS 2	Communication with AA34.2 has been missing for 15 seconds	The minimum calculated cooling supply is set to 18° C if AA34.2 is the controlling accessory for cooling Manual reset	Check the communication
525	Com. flt PCA Acc. HTS 3	Communication with AA34.3 has been missing for 15 seconds	The minimum calculated cooling supply is set to 18° C if AA34.3 is the controlling accessory for cooling Manual reset	Check the communication
526	Com. flt PCA Acc. HTS 4	Communication with AA34.4 has been missing for 15 seconds	The minimum calculated cooling supply is set to 18° C if AA34.4 is the controlling accessory for cooling Manual reset	Check the communication
901	Com.flt PCA F135	Communication with F135 has been missing for 15 seconds	Accessory is blocked Manual reset	Check the communication
902	Failed defrosting	The defrosting's stop conditions in the exhaust air module have not been met for 3 hours	Accessory is blocked Manual reset	Check the ventilation flow and the exhaust air temperature in the exhaust air module
903	Low defrosting temp	Low defrosting temperature in the exhaust air module	Accessory is blocked Manual reset	• Open-circuit or short-circuit on sensor input in the exhaust air module • Defective sensor in exhaust air module
904	High evaporation temp.	The evaporation sensor BT16 in the exhaust air module is 50° C or higher.	Accessory is blocked Manual reset	• Open-circuit or short-circuit on sensor input in the exhaust air module • Defective sensor in exhaust air module
905	Fan alarm from heat pump	The PWM signal on the fan in the exhaust air module is lower than 29%	Accessory is blocked Manual reset	Check cables in the exhaust air module between the fan GQ1 and the PCB AA2
908	Pump fault	The PWM signal on the circulation pump GP12 in the exhaust air module is lower than 7%.	Accessory is blocked Manual reset	Check cables in the exhaust air module between the circulation pump GP12 and the PCB AA2
912	Sensor fault: BT12 condenser out	The sensor BT12 (condenser out) in the exhaust air module receives an unreasonably high or low value for longer than 2 seconds	Automatic reset, once there has been communication for 60 seconds	• Open-circuit or short-circuit on sensor input in the exhaust air module • Defective sensor in exhaust air module
913	Sensor fault: BT3 return line sensor 1	The sensor BT3 (heating medium return before condenser) in the exhaust air module receives an unreasonably high or low value for longer than 2 seconds	Automatic reset, once there has been communication for 60 seconds	• Open-circuit or short-circuit on sensor input in the exhaust air module • Defective sensor in exhaust air module

Alarm no.	*Alarm text on the display*	*Cause*	*Indoor module / heat pump measures*	*May be due to*
916	Sensor fault: BT16 evaporator sensor	The sensor BT16 (evaporator) in the exhaust air module receives an unreasonably high or low value for longer than 2 seconds	Automatic reset, once there has been communication for 60 seconds	• Open-circuit or short-circuit on sensor input in the exhaust air module • Defective sensor in exhaust air module
976	Sen flt: BT76 defrosting	The sensor BT76 (defrosting) in the exhaust air module receives an unreasonably high or low value for longer than 2 seconds	Automatic reset, once there has been communication for 60 seconds	• Open-circuit or short-circuit on sensor input in the exhaust air module • Defective sensor in exhaust air module
977	Sen flt: BT77 air in	The sensor BT77 (incoming air) in the exhaust air module receives an unreasonably high or low value for longer than 2 seconds	Automatic reset, once there has been communication for 60 seconds	• Open-circuit or short-circuit on sensor input in the exhaust air module. • Defective sensor in exhaust air module

INFORMATION MESSAGES

In the event of an information message, the green light lights up on the front, and a symbol with a service technician is displayed in the information window, until the message is reset. All information messages are automatically reset, if the cause is rectified. These messages are not registered in the alarm log.

No.	*Text in display*	*Cause*	*Indoor module / heat pump measures*	*May be due to*
59	Incompatible setting	Additional heat before QN10 without hot water being selected	-	Check the setting in menu 5.1.12
107	Sensor flt: BT7 HW sens top	The input for the sensor receives an unreasonably high or low value for longer than 2 seconds		• Sensor not connected • Open-circuit or defective sensor
151	Sen flt: CL11-BT51 pool temp sensor	The input for the sensor receives an unreasonably high or low value for longer than 5 seconds	Pool pump stops	• Sensor not connected • Open-circuit or defective sensor
152	Sen flt: CL12-BT51 pool temperature sensor	The input for the sensor receives an unreasonably high or low value for longer than 5 seconds	Pool pump stops	• Sensor not connected • Open-circuit or defective sensor
157	Low lp cool	The low pressure transmitter in the outdoor unit is showing too low a value	Compressor is blocked	• Poor flow • Significant wind effect
162	High condenser out temperature	Condenser out has reached max permitted temperature	Compressor is blocked	• Incorrectly set heating curve • Low heating medium flow • Undersized heating system
163	High condenser in temperature	Condenser in has reached max permitted temperature	Compressor is blocked	• Incorrectly set heating curve • Low heating medium flow • Undersized heating system
165	Low pressure, climate system	Low pressure in the climate system	No action	• Leakage in the heating system • Not enough water in the heating system
170	Communication fault with PCA Input.	Communication fault has occurred to the input board. AA3	None	Check the communication cables and their connections
171	Communication fault with PCA Base.	A temporary communication fault has occurred to the PCB AA2	Compressor is blocked	Check the communication cables and their connections

No.	*Text in display*	*Cause*	*Indoor module / heat pump measures*	*May be due to*
173-178	Com.err. Acc.	Communication fault has occurred to the accessory board	Accessory is blocked	• Defective communication cables • The accessory is activated in the display while not connected to the communication cable • Incorrectly connected communication cable • Incorrectly set DIP switch • No electrical supply to the accessory board
180	Anti-freeze	Frost protection active. Occurs when the outdoor temperature is below 3 °C and no heating is permitted, and when the supply temperature sensor has an actual value that is below the calculated supply temperature (usually min. supply temperature)	Heating is permitted and compressor is permitted if there is no alarm blocking the compressor Additional heat is permitted if there is no alarm blocking the additional heat Calculated supply temperature is set to min. supply temperature	Incorrect settings
181	Problems at periodic increasing	Periodic hot water increase did not reach the stop temperature in 5 hours.	Only information	Incorrect settings
182	Load monitor active	Measured power consumption for at least one phase exceeds the fuse size that has been specified in menu 5.1.12	The heat pump disconnects the power steps for the electric additional heat step by step	• Phase loading • A larger main fuse may be needed
183	Defrosting	Defrosting in progress	Information only, no action	-
184	Filter alarm	Time set in menu 5.3.12 has expired	Information only, no action	
187	Com.err. Acc.	Communication fault has occurred Step controlled additional heat	Accessory is blocked	• Defective communication cables • The accessory is activated in the display while not connected to the communication cable • Incorrectly connected communication cable • Incorrectly set DIP switch • No electrical supply to the accessory board

No.	*Text in display*	*Cause*	*Indoor module / heat pump measures*	*May be due to*
188	Com.err PCA Accessory	Communication fault has occurred Solar.	Accessory is blocked	• Defective communication cables • The accessory is activated in the display while not connected to the communication cable • Incorrectly connected communication cable • Incorrectly set DIP switch • No electrical supply to the accessory board
191	Com.err. PCA Accessory	Communication fault has occurred HWC	Accessory is blocked	• Defective communication cables • The accessory is activated in the display while not connected to the communication cable • Incorrectly connected communication cable • Incorrectly set DIP switch • No electrical supply to the accessory board
209	Com.flt PCA Accessory	Communication fault has occurred Step controlled additional heat	Shuts down step-controlled additional heat	• Defective communication cables • The accessory is activated in the display while not connected to the communication cable • Incorrectly connected communication cable • Incorrectly set DIP switch • No electrical supply to the accessory board
211	Cpr not running	The compressor has not been running for 36 hours, despite there being a need		Check settings
226	Stove monitor activated.	Stove monitor activated.	Only information	
270	Compr. preheat in progress	Preheating of compressor in progress	Compressor is blocked	Start-up in cold weather
271	Cold outd air, heating mode	The outdoor temperature is outside the outdoor unit's working range	Compressor is blocked	See technical specifications in the relevant manual

No.	*Text in display*	*Cause*	*Indoor module / heat pump measures*	*May be due to*
272	Warm outd air, heat. mode	The outdoor temperature is outside the outdoor unit's working range	Compressor is blocked	See technical specifications in the relevant manual
273	Short run times twice in a row.	Set hot water levels cannot be reached	HW-start and HW-stop for economy and normal are set to factory default	Incorrectly set values
274	Compressor limited by load monitor	The load monitor prevents the compressor from running at the desired power	None	Main fuse too small
275	Compressor long term. restr. by load monitor.	The load monitor prevents the compressor from running at the desired power	None	Main fuse too small
282	Com.flt PCA Accessory	Communication fault has occurred Active cooling 4-pipe	Accessory is blocked	• Defective communication cables • The accessory is activated in the display while not connected to the communication cable • Incorrectly connected communication cable • Incorrectly set DIP switch • No electrical supply to the accessory board
322	SPA not updated	Spot price could not be downloaded	Affects the installation's priorities An average value of the most recently obtained prices is used	Check the Internet connection
334	Max. incoming temp. exceeded	The maximum temperature through the outdoor unit exceeded BT3 is higher than 65 °C in heating mode	Heating prioritisation is blocked	• Undersized heating system • Incorrect heating curve • Flow-related • Additional heat incorrectly connected
342	Low temperature water in	Low temperature in during cooling operation	Temporarily stops the compressor	• Flow-related • Incorrect settings
343	Low temp water out	Low temperature out during cooling operation	Temporarily stops the compressor	• Flow-related • Incorrect settings
345	Temp low press	Temporary low pressure BP8 from the outdoor unit	Temporarily stops the compressor	• Lack of refrigerant • Blocked expansion valve • Disruption in the refrigerant circuit

No.	*Text in display*	*Cause*	*Indoor module / heat pump measures*	*May be due to*
347	Temp high press	Temporary high pressure BP9 from the outdoor unit	Temporarily stops the compressor	• Clogged particle filter, air or stop in the heating medium flow • Poor system pressure
349	Sens flt: EQ1-BT50	The cooling accessory's room sensor has no contact with the control module	Parallel displacement with room sensor BT50 is set to 0	• Sensor not connected • Open-circuit or defective sensor
350	Sensor fault on BT50 room sensor.	Sensor not connected/defective	-	• Sensor not connected • Open-circuit or defective sensor
354	Failed sensor calibration	Delta BT3-BT12 is greater than 2K after calibration	Changes from auto to manual pump speed	Flow-related
355	Failed sensor calibration	Delta BT3-BT63 is greater than 2K after calibration	Changes from auto to manual pump speed	Flow-related
359	Int temp OPT error	The gas boiler issues an alarm (OPT)	-	See the accessory's manual
361-368	Sensor fault EPxx, BT3 return line sensor	Sensor BT3 (return) is not connected/defective in one of the climate systems	-	• Sensor not connected • Open-circuit or defective sensor
401	Unspecified fault	The slave sends a message that does not exist in the master	Blocks the compressor and frost protection is reset	Update the software in master and slave
418	Low temp water out	Flow protection defrosting	Defrosting is stopped	Flow-related
419	Freeze prot. exch. defr.	Frost protection exchanger defrosting	Defrosting is stopped	Flow-related
420	Temp. com. fault w. inverter	A temporary communication fault in the inverter has occurred	The compressor is stopped The compressor makes a new attempt to start 60 seconds after inverter fault has been reset	• Main and group fuses, as well as cable to the inverter and its connections • Check the communication cable between PCB and inverter
422	Inverter alarm type II	Compressor stop due to protection mode	Stops the compressor and makes a new start attempt soon	
424	Triggered pressure switch	Temporarily triggered pressure switch	Stops the compressor	• Poor heating medium flow • Lack of refrigerant
426	Temp. safety stop inv.	A temporary internal fault in the inverter has occurred	Stops the compressor	Disruption in supply voltage

No.	*Text in display*	*Cause*	*Indoor module / heat pump measures*	*May be due to*
428	Temp. safety stop inv.	A temporary internal fault in the inverter has occurred	Stops the compressor	Disruption in supply voltage
430	Temp. high mains voltage	Phase voltage to inverter too high	Stops the compressor	Disruption in supply voltage
432	Inverter alarm type I	Phase voltage to inverter too low	Stops the compressor	• Low supply voltage • Phase failure
434	Inverter alarm type I	Phase L2 has been missing	Stops the compressor	Phase loss for phase 2
436	Temp. mains disturb.	A temporary inverter fault has occurred	Stops the compressor	• Disruption in supply voltage • Incorrect connection in the inverter's terminal block X5
438	Temp. overheated inverter	The inverter has temporarily reached max working temperature due to poor cooling	Stops the compressor	• Poor cooling of inverter • Defective inverter
440	Inverter alarm type II	Max. current in has been too high temporarily	Stops the compressor	• Too high current to inverter • Low supply voltage
442	Temp. overheated inverter	Temporarily overheated inverter	Stops the compressor	• Poor cooling of inverter • Defective inverter
444	Temp. inverter protection	The inverter detects a temporary fault	Stops the compressor	• Disruption in supply voltage • Defective compressor
446	Temp. phase drop	Compressor phase missing	Stops the compressor	• Disruption in supply voltage • Incorrectly connected compressor cable
448	Failed compressor start	Compressor does not start when required	Stops the compressor	• Defective inverter • Defective compressor
452	Temp high curr load cmpr.	The current out from the inverter to the compressor has been too high	Stops the compressor	• Disruption in supply voltage • Poor heating medium flow • Defective compressor
454	Temp high pow load cmpr	Power from inverter too high	Stops the compressor	Disruption in supply voltage Poor heating medium flow Defective compressor
460	Inverter alarm type II	(Only single phase) Current in to the inverter temporarily too high	Stops the compressor	• Low incoming voltage that is lower than 198 VAC

No.	*Text in display*	*Cause*	*Indoor module / heat pump measures*	*May be due to*
500	Failed start, no press. diff	The pressure difference between BP9 and BP8 has been too low at compressor start	Compressor does not start	• Fault in pressure sensor BP8/BP9 • The compressor is not compressing the refrigerant sufficiently • Compressor breakdown
502	Compressor speed too low	Compressor speed below the lowest permitted speed	Stops the compressor	The inverter's safety function reduces the speed outside of the compressor's working range
504	The inverter has a message.	The inverter has sent a message	Automatic reset, once no active message has been sent for 60 seconds	See display on inverter
506	Mains voltage outside inv. work. range	The mains supply has been outside the inverter's working range for an extended period	Only information	Check the mains network
507	Mains voltage outside inv. work. range	The mains frequency has been outside of the inverter's working range	Only information	Check the mains network
508	Inv. lost contact with the mains.	The inverter has lost contact with the mains network	Only information	Check the connection and fuses
509	High ambient temp. at inverter.	Ambient temperature at the inverter is too high	Only information	Check the location and ventilation of the inverter
523	Low flow defrosting	Low flow during defrosting	Defrosting stops	Check particle filter and circulation pump
564-567	Sensor fault in BT50 room sensor	Sensor fault BT50 in HTS 1-4	Parallel displacement with room sensor BT50 is set to 0	• Sensor not connected • Open-circuit or defective sensor
568-571	Sensor fault in BM1 humidity sensor	Sensor fault BM1 in HTS 1-4		• Sensor not connected • Open-circuit or defective sensor
572-575	Sensor fault in BT50 room sensor	Sensor fault BT50 in RMU 1-4	Parallel displacement with room sensor BT50 is set to 0	• Sensor not connected • Open-circuit or defective sensor
580	Cold outd air, cooling mode	The outdoor temperature at the outdoor unit is outside its working range	Compressor is blocked	• Outdoor temperature too low • Defective sensor BT28
581	Warm outd air, cool. mode	The outdoor temperature at the outdoor unit is outside its working range	Compressor is blocked	• Outdoor temperature too high • Defective sensor BT28

No.	*Text in display*	*Cause*	*Indoor module / heat pump measures*	*May be due to*
582-588	Low flow defrosting	Low flow during defrosting in one of EB102-EB108	Defrosting stops	• Flow-related • Clogged particle filter • Defective circulation pump
900	Country not selected	Country not defined		Select country in menu 5.12 or in the start guide
995	ext. alarm	An alarm has occurred according to selected function on AUX input	None	External equipment connected to AUX input gives an alarm
996	blocked	Additional heat external blocked	Additional heat is blocked	External equipment connected to AUX input gives an alarm
997	blocked	The compressor is externally blocked	Compressor is blocked	External equipment connected to AUX input gives an alarm
998	starts	Display/installation has restarted		Disruption in supply voltage

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