NATHAN

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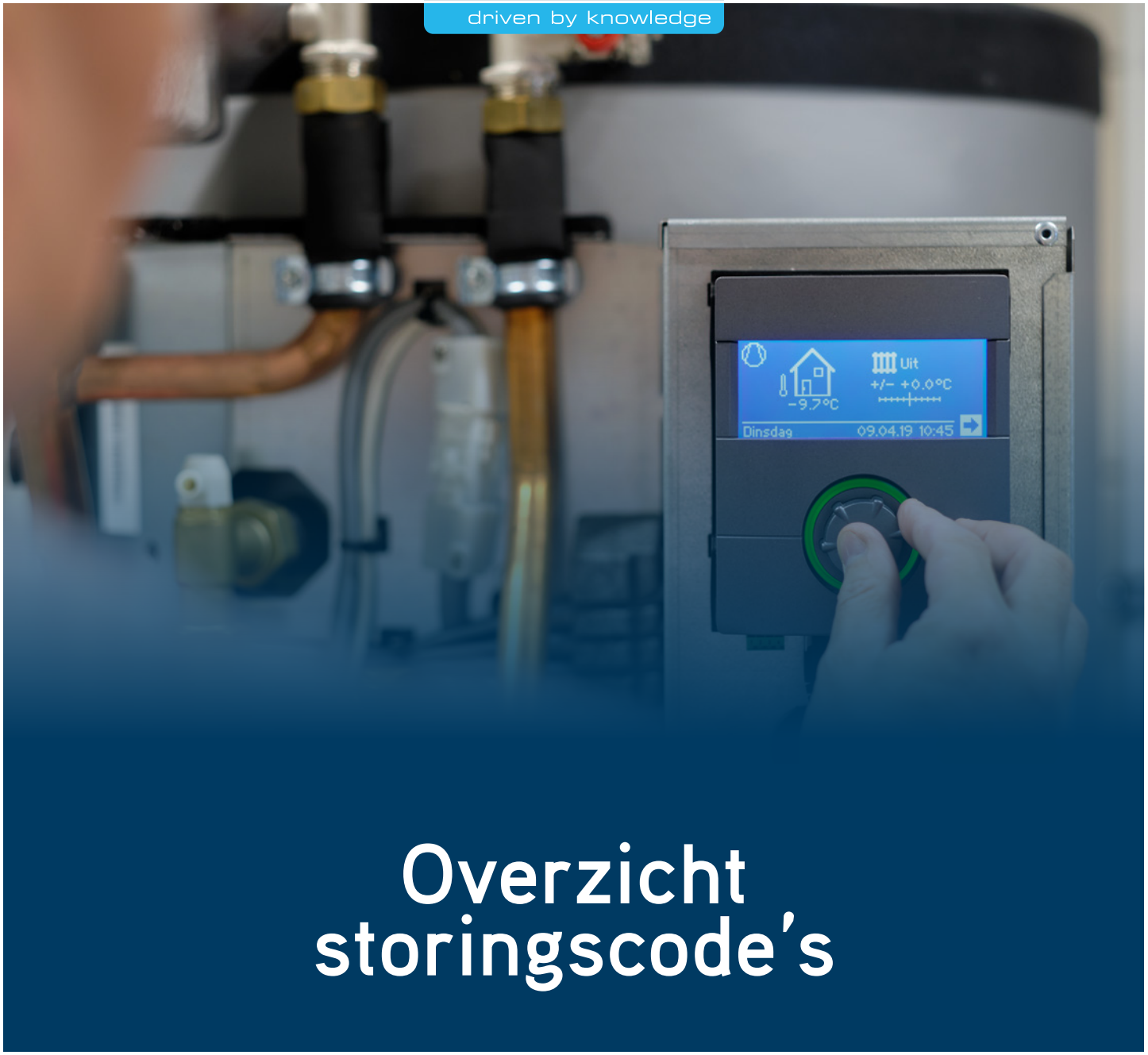

Overzicht storingscode's

alpha innotec

METRO THERM

NR	MELDING	BESCHRIJVING	REMEDIE
701	Lage-drukstoring vergrendeling Installateur bellen	Lagedrukpressostaat f lagedruksensor in koelcircuit heeft meermaals gereageerd (LW) of langer dan 20 seconden (SW)	WP op lekken, schakelpunt pressostaat, ontdooiing en TA-mincontroleren
702	Lage-drukstoring onderbroken Reset autom.	Alleen mogelijk bij L/W-apparaten. Lagedruk in koudemiddel-circuit heeft gereageerd. WP wordt na enige tijd automatisch herstart	WP op lekken, schakelpunt pressostaat, en TA-min controleren
703	Vorstbeveiliging nstallateur bellen	Alleen mogelijk bij L/W-apparaten. Als de warmtepomp werkt en de temperatuur in de aanvoer < 5 °C bereikt, dient de vorst-beveiliging te worden ingeschakeld	WP-vermogen, ontdooiventiel en verwarmingsinstallatie controleren
704	Persgasstoring RESET in hh:mm	Maximum temperatuur in het persgaskoudemiddelcircuit overschreden. Automatische WP-herstart na hh:mm	Koelmiddelhoeveelheid, verdamping, oververhitting aanvoer, retour en WQ-min controleren
705	Motorbeveiliging VEN Installateur bellen	Alleen mogelijk bij L/W-apparaten: motorbeveiliging van de ventilator heeft gereageerd	Ingestelde waarde en ventilator controleren
706	Motorbeveilig. BSUP Installateur bellen	Alleen mogelijk bij B/W- en W/W-apparaten. Motorbeveiliging van de brine- of bronwatercirculatiepomp of van de compr. heeft gereageerd	Ingestelde waarden, compressor, BOS controleren
707	Codering WP Installateur bellen	Breuk of kortsluiting van de codeerbrug in WP na de eerste inschakeling	Codeerweerstand in WP, stekker en verbindingskabel controleren
708	Voeler retourleiding Installateur bellen	Breuk of kortsluiting van de retourvoeler	Retourvoeler, stekker en verbindings-kabel controleren
709	Voeler aanvoer Installateur bellen	Breuk of kortsluiting van de aanvoervoeler. Geen storingsuit-schakeling bij B/W- en W/W-apparaten	Aanvoervoeler, stekker en verbindings-kabel controleren
710	Temp.voeler persgas Installateur bellen	Breuk of kortsluiting in de persgasvoeler in het koudemiddelcircuit	Persgasvoeler, stekker en verbindings-kabel controleren
711	Voeler buitentemp. Installateur bellen	Breuk of kortsluiting van de buitentemperatuurvoeler. Geen storingsuitschakeling. Vaste waarde op -5 °	Buitentemperatuurvoeler, stekker en verbindingskabel controleren
712	Voeler tapwater Installateur bellen	Breuk of kortsluiting van de tapwatervoeler. Geen storingsuitschakeling.	Tapwatervoeler, stekker en verbindings-kabel controleren
713	Voeler WQ-Ein Installateur bellen	Breuk of kortsluiting van de warmtebronvoeler (ingang)	Warmtebronvoeler, stekker en verbindingskabel controleren
714	Persgas BW RESET in hh:mm	Thermische gebruiksgrens van de WP overschreden. Warm-tapwaterproductie geblokkeerd gedurende hh:mm	Doorstroming warm tapwater, warmte-wisselaar, warmtapwatertemperatuur en circulatiepomp warm tapwater controleren.
715	Hogedrukstoring onderbroken Reset autom.	Hogedrukpressostaat in koudemiddelcircuit heeft gereageerd. WP wordt na enige tijd automatisch herstart	Doorstroming VW, overlopen, temperatuur en condensatie controleren.
716	Hogedrukstoring Installateur bellen	Hogedrukpressostaat in koudemiddelcircuit heeft meerdere keren gereageerd.	Doorstroming VW, overlopen, temperatuur en condensatie controleren.
717	Doorstroming-WQ Installateur bellen	Flowswitch bij W/W-apparaten heeft tijdens de voorspoeltijd of tijdens het bedrijf gereageerd	Doorstroming, schakelpunt DFS, filter, luchtvrijheid controleren.
718	Max. buitentemp. Reset autom. in hh:mm	Alleen mogelijk bij L/W-apparaten. Buitentemperatuur heeft de toelaatbare maximum waarde overschreden. Automatische WPherstart na hh:mm	Buitentemperatuur en ingestelde waarde controleren
719	Min. buitentemp. Reset autom. in hh:mm	Alleen mogelijk bij L/W-apparaten. Buitentemperatuur is gedaald tot onder de toelaatbare minimum waarde. Automatische WP-herstart na hh:mm	Buitentemperatuur en ingestelde waarde controleren
720	WQ-temperatuur Reset autom. in hh:mm	Alleen mogelijk bij B/W- en W/W-apparaten. Temperaturen aan de verdamperuitgang is langs WQ-zijde meermaals tot onder de veilig-heidswaarde gedaald. Automatische WP-herstart na hh:mm	Doorstroming, filter, luchtvrijheid, temperatuur controleren
721	Lagedrukuitschakeling Reset autom.	Lagedrukpressostaat f lagedruksensor in koudemiddelcircuit heeft gereageerd. WP wordt na enige tijd automatisch herstart (SW en WW)	Schakelpunt pressostaat, volumestroom bron controleren

NR	MELDING	BESCHRIJVING	REMEDIE
722	TempdiffVW Installateur bellen	Temperatuurspreiding in de verwarmingsmodus is negatief (=foutief)	Werking en positie van de aanvoer- en retourvoeler controleren
723	Tempdiff tapw. Installateur bellen	Temperatuurspreiding in de warm-tapwatermodus is negatief (=foutief)	Werking en positie van de aanvoer- en retourvoeler controleren
724	Tempdiff ABT Installateur bellen	Temperatuurspreiding in het verwarmingscircuit is> 15 K tijdens het ontdooien (=bevriezingsgevaar)	Werking en positie van de aanvoer- en retourvoelers, pompvermogen HUP, overlopen en verwarmingscircuits controleren
725	Installatiefout TW Installateur bellen	Warm-tapwatermodus gestoord, temperatuur ver onder de gewenste opslagtemperatuur	Circulatiepomp TW, buffervatvulling, afsluitschuif en 3-wegventiel controleren. Verwarmingswater en TW ontluchten
726	Voeler mengcircuit 1 Installateur bellen	Breuk of kortsluiting van de menggroepvoeler	Menggroepvoeler, stekker en verbindingskabel controleren
727	Druk brinecircuit Installateur bellen	Brinedrukpressostaat heeft tijdens de voorspoeltijd of tijdens het bedrijf gereageerd	Druk brinecircuit en brine-drukpressostaat controleren
728	Voeler WQ-Uit Installateur bellen	Breuk of kortsluiting in de warmtebronvoeler aan de WQ- uitgang	Warmtebronvoeler, stekker en verbindingskabel controleren
729	Draaiveld storing Installateur bellen	Compressor na het inschakelen zonder vermogen	Warmtebronvoeler, stekker en verbindingskabel controleren
730	Vermogenstekort OWP. Installateur bellen	Het opwarm programma kon een TT-temperatuurtrap niet binnen het ingestelde tijdsinterval bereiken. Opwarmprogramma loopt verder	Vereiste vermogen voor het opwarmen controleren
732	Storing koeling Installateur bellen	De verwarmingswatertemperatuur daalde meerdere keren tot onder de 16°C	Mengklep en verwarmingscirculatiepomp controleren
733	Storing anode Installateur bellen	Storingmeldingsingang van de parasitaire stroomanode heeft gereageerd	Verbindingsleiding tussen anode en potentiostaat controleren. TW-buffervat vullen
734	Storing anode Installateur bellen	Fout 733 houdt reeds meer dan twee weken aan en de productie van warm tapwater is geblokkeerd	Fout voorlopig bevestigen om de productie van warm tapwater weer vrij te geven. Fout 733 verhelpen.
735	Ext. En Installateur bellen	Alleen mogelijk bij ingebouwde Comfort-/ uitbreidingsprintplaat printplaat: breuk of kortsluiting van de voeler “externe energiebron”	Voeler “externe energiebron’; stekker en verbindingsleiding controleren.
736	Sensor zonnecollector Installateur bellen	Alleen mogelijk bij ingebouwde Comfort-/ uitbreidingsprintplaat printplaat: breuk of kortsluiting in de voeler “zonnecollector”	Voeler “zonnecollector’; stekker en verbindingskabel controleren.
737	Voeler buffervat zonnecollector Installateur bellen	Alleen mogelijk bij ingebouwde Comfort-/ uitbreidingsprintplaat printplaat: breuk of kortsluiting in de voeler “zonneboiler”	Voeler “zonneboiler’; stekker en verbindingskabel controleren.
738	Voeler menggroep2 Installateur bellen	Alleen mogelijk bij ingebouwde Comfort-/ uitbreidingsprintplaat printplaat: breuk of kortsluiting in de voeler “menggroep2”	Voeler “menggroep2’; stekker en verbindingskabel controleren
750	Voeler retourleiding Installateur bellen	Breuk of kortsluiting van de retourvoeler	Retourvoeler, stekker en verbindingskabel controleren
751	Fasebewakingsfout	Fasevolgorderelais heeft gereageerd	Controleer draaiveld en fasevolgorderelais
752	Doorstromingsfout	Breuk of kortsluiting van de retourvoeler	Zie fout nr. 751 en nr. 717
755	Verbinding met slave verloren Installateur bellen	Een slave heeft gedurende meer dan 5 minuten niet geantwoord	Netwerkverbinding, switch en IP-adressen controleren. Indien nodig WP-zoekfunctie opnieuw uitvoeren.
756	Verbinding met master verloren Installateur bellen	Een master heeft gedurende meer dan 5 minuten niet geantwoord	Netwerkverbinding, switch en IP-adressen controleren. Indien nodig WP-zoekfunctie opnieuw uitvoeren.
757	LO-storing bij WW-apparaat	Lagedrukpressostaat bij WW-apparaat is meermaals of langer dan 20 seconden geactiveerd.	Bij 3-malig optreden van deze storing kan de installatie alleen nog door geautoriseerd servicepersoneel worden vrijgeschakeld!

NR	MELDING	BESCHRIJVING	REMEDIE
758	Storing ontdooiing	De ontdooiing werd 5 keer na elkaar door een te lage aanvoer-temperatuur beëindigd	Doorstroming controleren Aanvoersensor controleren
759	Melding TOi	Thermische desinfectie kon 5 keer na elkaar niet correct worden uitgevoerd	Instelling tweede warmteopwekker en veiligheidstemperatuurbegrenzer controleren
760	Storing ontdooiing	De ontdooiing werd 5 keer na elkaar via de maximale tijd beëindigd (sterke wind op de verdamper)	Ventilator en verdamper tegen sterke wind beschermen
761	LIN-timeout	LIN-timeout	Kabel/contact controleren.
762	Voeler (aanzuiging verdamper)	VoelerfoutTü (aanzuiging compressor)	Voeler controleren, evt. vervangen.
763	Voeler (aanzuiging compressor)	VoelerfoutTü 1 (aanzuiging verdamper)	Voeler controleren, evt. vervangen.
764	Voeler Compressor-verwarming	Voelerfout Compressorverwarming	Voeler controleren, evt. vervangen.
765	Oververhitting	Oververhitting langer dan 5 minuten onder 2K.	Bij de eerste inschakeling het draaiveld controleren, anders contact opnemen met klantenservice.
766	Toepassingsgebied van de compressor.	Bedrijf 5 minuten buiten het toepassingsgebied van de compressor.	Draaiveld controleren.
767	5TB E-element	5TB van het verwarmingselement aan de SEC werd geactiveerd	Verwarmingselement controleren en de zekering weer indrukken
768	Doorstromings-bewaking	Onvoldoende doorstroming bij LW160H(A)V tijdens de ontdooiing	Hydrauliek controleren, pomp controleren, doorstroming controleren
769	Pompaansturing	Na 10 sec. compressorlooptijd te geringe doorstroming.	PWM-kabel controleren, pomp controleren
770	Lage oververhitting	De oververhitting ligt gedurende een langere periode onder de grenswaarde	Temperatuurvoeler, druksensor en expansieklep controleren
771	Hoge oververhitting	De oververhitting ligt gedurende een langere periode boven de grenswaarde	Temperatuurvoeler, druksensor, inhoud en expansieklep controleren
776	Toepassingsgebied compressor	De compressor werkt gedurende een langere periode buiten zijn toepassingsgrenzen	Thermodynamica controleren
777	Expansieventiel	Expansieklep defect	Expansieklep, verbindingskabels en evt. SEC-board controleren
778	Lage druk voeler	Lagedruksensor defect	Sensor, stekker en verbindingskabel controleren
779	Hoge druk voeler	Hogedruksensor defect	Sensor, stekker en verbindingskabel controleren
780	EVI voeler	EVI-sensor defect	Sensor, stekker en verbindingskabel controleren
781	Gasvoeler. voor Exp. ventiel	Temperatuurvoeler 'vloeibaar voor ex-klep' defect	Sensor, stekker en verbindingskabel controleren
782	EVI zuiggas voeler	Temperatuurvoeler'EVI zuiggas' defect	Sensor, stekker en verbindingskabel controleren
783	Comunicatie SEC - Inverter	Communicatie tussen SEC en inverter gestoord	Verbindingskabel, ontstoringsconden-satoren en bekabeling controleren
784	VSS geblokeerd. 2 min onderbr.	Inverter geblokkeerd	De complete installatie 2 minuten span-ningsloos schakelen Bij herhaald optreden de inverter en compressor controleren
785	SEC-Board defect	Fout in het SEC-board vastgesteld	SEC-board vervangen

NR	MELDING	BESCHRIJVING	REMEDIE
786	Comunicatie SEC - Inverter	Storing in de communicatie tussen SEC en HZIO door SEC vastgesteld	Kabelverbinding tussen HZIO en SECboard controleren
787	Compr. alarm	Compressor meldt fout	Bevestig de storing. Indien fouten meermaals optreden, dient de hulp van geautoriseerd service-personeel (= klantenservice) te worden ingeroepen.
788	Ernstige inverter fout	Fout in de inverter	Inverter controleren
789	LIN/codering niet beschikbaar	Het bedieningselement kon geen codering vaststellen. Ofwel is de LIN-verbinding verbroken, ofwel wordt de coderingsweerstand niet herkend	Verbindingskabel LIN-coderingsweerstand controleren
790	Ernstige inverter fout	Fout in de voeding van de inverter/compressor	Bekabeling, inverter en compressor controleren
791	ModBus verbinding verloren	SEC-board sinds enige tijd niet meer bereikbaar. 791 wordt geactiveerd, wanneer weliswaar een HZIOprintplaat gevonden is (zonder aparte codering), maar hieraan geen SEC-board kan worden gedetecteerd	Indien het om de SEC-configuratie gaat, de modbus-kabel tussen HZIO en SEC-board controleren. Ook op het SEC-board controleren of alles knippert zoals het hoort. Indien er GEEN configuratie met SEC-board is (bijv. omdat het om een PI 84-apparaat gaat), dan de coderingsweer-stand van de HZIO controleren
792	LIN-verbinding verbroken	Er kon geen hoofdprintplaat en ook elders geen configuratie worden gevonden	Coderingsstekkers op LIN-printpla(a)t(en) controleren
793	Ernstige inverter fout	Temperatuurfout in de inverter	Fout zelf fixes
794	Overspanning	Overspanning op de inverter	Stroomvoorziening inverter controleren
795	Onderspanning	Onderspanning op de inverter	Stroomvoorziening inverter controleren
796	Veiligheids-uitschakeling	“Safety Input is geactiveerd Geval 1 - Inverterstoring Reset automatisch? Geval 2 - Hogedrukpressostaaten in het koelcircuit is geactiveerd Reset automatisch?”	“Geval 1 - Inverter controleren. Storing verhelpen Geval 2 - Debiet HW, overstromer, aanvoertemperatuursensor en hogedruk-sensor controleren. Storing verhelpen.”
797	MLRH wordt niet ondersteund	Verwarmingselementregeling wordt niet ondersteund	-
798	ModBus-verbinding verloren	“Modbus storing ventilator. Reset automatisch.”	Modbus bedrading ASB-printplaat controleren
799	ModBus-verbinding verloren	“Modbus storing ASB-printplaat. Reset automatisch.”.	Modbus bedrading ASB-printplaat controleren

RESETTEN VAN EEN STORING

Als er zich een storing voordoet en er op het display een foutmelding verschijnt, moet u:

1. Het foutnummer noteren ...
2. De foutmelding bevestigen door de “draai-drukknop” (7 seconden lang) in te drukken). Het display gaat nu van de foutmelding naar het navigatiescherm ...
3. Wanneer deze foutmelding opnieuw verschijnt, dient u de installateur of bevoegd onderhoudspersoneel (= klantendienst) te bellen, als u daartoe in de foutmelding wordt verzocht. Meld het foutnummer en bespreek wat er verder moet gebeuren.

KNIPPERCODES OP REGELAARPRINTPLAAT

- *Groene LED knippert elke seconde*
  alles in orde
- *Rode LED licht kort op*
  Via LIN-bus worden gegevens ontvangen
- *De groene en rode LED branden*
  De printplaat kan een software-update ontvangen

  Tijdens de software-update brandt de groene LED en knippert de rode snel.

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
1	Sensor fault BT1	Sensor not connected/ defective	Calculated flow temperature is set to min calculated flow temperature	Proposal: Check the sensor and its connections. See also the electrical wiring diagram.
2	Sensor fault BT2	Sensor not connected/ defective (heating medium return)	Addition blocked. GM is calculated with "condensor out" sensor. Even if "condensor out" sensor is missing, heating is blocked. METROAIR 500: 1. Using BT 3 if its available. 2. If BT 3 is not avaialable, BT63 will be used.	Proposal: Check the sensor and its connections. See also the electrical wiring diagram.
3	Sensor fault BT3	Sensor not connected/ defective (heating medium return)	Compressor is blocked when hot water loading. METROAIR 500: Let the heating medium pump go according to the speed that is chosen in the menu 5.1.19= constantly	Proposal: Check the sensor and its connections. See also the electrical wiring diagram.
6	Sensor fault BT6	Sensor not connected/ defective (hot water, controlling) METROAIR 500: Using BT54	Automatic reset	Proposal: Check the sensor and its connections. See also the electrical wiring diagram.
7	Sensor fault BT7	Sensor not connected/ defective (hot water peak)	Automatic reset	Proposal: Check the sensor and its connections. See also the electrical wiring diagram.
10	Sensor fault BT10	Sensor not connected/ defective (brine in)	GP2 switches to manual speed if auto-control is selected. Automatically resets when the sensor has been running correctly in 60 sec. GP2 returns to auto-control led operation.	Proposal: Check the sensor and its connections.
11	Sensor fault BT11	Sensor not connected/ defective (condensor out)	Compressor blocked	Proposal: Check the sensor and its connections. See also the electrical wiring diagram.
12	Sensor fault BT12	Sensor not connected/ defective (condensor return)	Supply sensor (BT2) is used for controlling max condensor out temperature for the compressor. If supply sensor is also missing; blocked heating mode and blocked compressor in HW mode.	Proposal: Check the sensor and its connections. See also the electrical wiring diagram.
14	Sensor fault BT14 hot gas sensor	Sensor not connected/ defect (hot gas sensor)	Compressor blocked	Proposal: -Check the sensor and its conncetions. Also see the electrical wiring diagram.
16	Sensor fault BT16	Sensor not connected/ defective (evaporator)	Automatic reset	Proposal: Check the sensor and its settings. See also the electrical wiring diagram.
20	Ground source: Sensor fault AZ1-BT20 Exhaust air: Sensor fault BT20	Sensor not connected/ defective (exhaust air)	Ground source: Pump (AZ1-GP2) in FLM is blocked. Exhaust air: Automatic reset	Proposal: Check the sensor and its connections. See also the electrical wiring diagram.
21	Ground source: Sensor fault AZ1-BT21 Exhaust air: Sensor fault BT21	Sensor not connected/ defective (extract air)	Ground source: Pump (AZ1-GP2) in FLM is blocked. Exhaust air: Automatic reset	Proposal: Check the sensor and its connections. See also the electrical wiring diagram.

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
22	Sensor fault DEWBT6	Sensor not connected/ defective (hot water sensor, controlling in extra water heater)		
23	Sensor fault AZ30-BT22 supply air sensor	Heatpump has no connection with the supply air sensor in ERS (AZ30)	Compressor blocked	Proposal: Check the sensor and its conncetions. Also see the electrical wiring diagram.
25	Sensor fault BT25	Sensor not connected/ defective (heat medium return external)	External additive blocked	Proposal: Check the sensor and its connections. See also the faulttracing schedule for the current product.
26	Sensor fault AZ1-BT26	Sensor not connected/ defective (brine, collector in)	Pump (AZ1-GP2) in FLM is blocked	Proposal: Check the sensor and its connections. See also the faulttracing schedule for the current product.
27	Sensor fault BP8	Sensor not connected/ defective (low pressure sensor)	Compressor blocked	Proposal: Check the sensor and its connections.
28	Sensor fault BT71	Sensor not connected/ defective (external heating medium return)	No action. Togehter with alarm 25; heat is blocked.	Proposal: Check the sensor and its connections.
29	Sensor fault BT29	Sensor not connected/ defective (compressor oil temperature)	Compressor blocked	Proposal: Check the sensor and its connections.
31	Sensor fault BT63	Sensor not connected/ defective (heating medium supply after immersion heater) METROAIR 500: Blocking internal electric addition	Automatic reset	Proposal: Check the sensor and its connections. See also the electrical wiring diagram.
32	Sensor fault BS1	Air flow is out of range of the air velocity sensor	Automatic reset. Compressor blocked.	Check that the filter is installed. Check the fan speed.
33	Sensor fault EP30-BT53	Sensor not connected/ defective (solar collectors)	Solar additive blocked.	Proposal: Check the senors and its connections. See also the electrical wiring diagram.
34	Sensor fault EP30-BT54	Sensor not connected/ defective (solar panel)	Solar additive blocked	Proposal: Check the sensor and its connections. See also the electrical wiring diagram.
35	Sensor fault EM1-BT52	Sensor not connected/ defective (boiler temperature)	Shunt closes. Burner shuts down.	Proposal: Check the sensor and its connections. See also the electrical wiring diagram.
36	Sensor fault EP21-BT2	Sensor not connected/ defective (supply sensor, heating system 2)	Control on return sensor (EP21-BT3)	Proposal: Check the sensor and its connections. See also the electrical wiring diagram.
37	Sensor fault EP22-BT2	Sensor not connected/ defective (supply sensor, heating system 3)	Control on return sensor (EP22-BT3)	Proposal: Check the sensor and its connections. See also the electrical wiring diagram.
38	Sensor fault EP23-BT2	Sensor not connected/ defective (supply sensor, heating system 4)	Control on return sensor (EP23-BT3)	Proposal: Check the sensor and its connections. See also the electrical wiring diagram.
39	Sensor fault EQ1-BT64	Sensor not connected/ defective (brine, supply)	Brine blocked, brine shunt closes.	Proposal: Check the sensor and its connections. See also the electric wiring diagram.

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
40	Compressor phase 1 missing	Compressor phase is missing or has been below 160V in more than 30 min.	Compressor blocked	Proposal: Check the phase. Reset the phase.
41	Compressor phase 2 missing	Compressor phase is missing or has been below 160V in more than 30 min.	Compressor blocked	Proposal: Check the phase. Reset the phase.
42	Compressor phase 3 missing	Compressor phase is missing or has been below 160V in more than 30 min.	Compressor blocked	Proposal: Check the phase. Reset the phase.
43	Faulty phase sequence	Phases ar connected in wrong sequence	Compressor blocked	Proposal: Reconnect the phase sequence on incoming electricity.
44	Overheated softstart	Fuses for the soft start card are defective	Compressor blocked.	- Defective fuse - Defective soft start card Also read: TDI Alarm 44 F1345 2013-12-18
45		Motor protection on single phase (Norway) has probably been triggered.		
50	High pressure alarm	The high pressure switch has triggered repeatedly	Compressor blocked. Manual reset.	Bad circulation in the heating medium circuit. Proposal: - Bleed heat pump and climate system - Check the heating medium pump - Open any radiator thermostats - Check that the particle filter is not blocked - Check that the pressure switch is correctly connected Fault in cooling circuit: - Call a qualified refrigeration technician
51	Low pressure alarm	F1145: Low pressure sensor has been below its cut-off value. Others: The low pressure switch has triggered.	Compressor blocked. Manual reset.	Proposal: Groundsource: Check the brine flow and brine frost protection point. See also the electric wiring diagram. Exhaust air: - Check ventilation flow and exhaust air temperature. - Check that the pressure switch is correctly connected - Check the defrost function and the sensors that control it.
52	Temperature limiter	Temperature limiter has tripped	Immersion heater blocked. Manual reset.	Proposal - Check if air in system. - Check if heating medium flow is correct. - Manual reset of the temerature limiter. See also the electric wiring diagram.
53	Level switch	Level switch brine / pressure switch has triggered	The compressor and brine pump are blocked.	Proposal: Check and seal any leaks in the collector circuit.
54		The motor protection breaker has triggered.		Proposal: Check the cabling connections of the compressor. Manual reset.
55	Hot gas alarm	Comperssor has been stopped because the hot gas temperature exceeded its limits.	Compressor blocked. Manual reset.	Ground source: Call a qualified refrigeration technician. Exhaust air: See alarm number 50, High pressure alarm.
56	Incorrect serial number	Serial number does not exist	Compressor stopped and relay deactivated	Proposal: Check the serial number

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
57	Incorrect firmware	Serial number and firmware do not match.	Compressor blocked and relay deactivates.	Proposal: Make sure that the firmware is designed for the product and serial number.
58	Pressure switch	High- or low pressure switch have triggered.	Compressor blocked.	Bad circulation in heating medium or collector circuit. Proposal: - Bleed heat pump, climate system and collector circuit - Check the brine freezing point - Check the heating medium and brine pump - Open any radiator thermostats - Check that the particle filter is not blocked - Check that the pressure switch is correctly connected Fault in cooling circuit: - Call a qualified refrigeration technician
60	Low HTF out	The temperature of the outgoing brine goes below the set min- temperature and the alarm is selected.	Compressor blocked.	Proposal: Bad circulation in the brine circuit - Check the brine pump - Check that the brine is bled. Minimum limit is usually changed only at groundwater installations and open systems.
63	Low air flow	Too low air flow at air flow sensor BS1	Compressor blocked.	Check the air filter , fan speed and air flow
64	Low exhaust air temperature	Exhaust air temperature has been below 16°C and not risen above 17°C within 60 minutes.	Compressor blocked, automatic reset. Resets when the exhaust air temperature has been above 17°C in 60 minutes.	For firmware version before 1770 - select “auxiliary operation”. For firmware version from 1770 onwards- the machine switches to auxiliary operation mode automatically.
65	High condensation water level	Alarm from external level monitor	Compressor blocked	- Check the outflow from external condensation water container
66	High condensation water level	Alarm from level monitor in condensation water container	Compressor blocked	- Check that the water has a free flow from the container - Empty water container
67	Antifreeze protection Supply air	Supply air temperature (BT22) is below 5°C.	Fans stops and compressor is blocked. Any blocking of immersion heater repeals.	Suggestions: - Bleed the supply air battery (QM 21). - Check the water temperature and the flow to the heating battery.
68	Pressure switch alarm	The high or low pressure switch has deployed. May be due to poor circulation in the heating circuit, brine system or a problem in the refrigerant system.	Compressor blocked	Proposal: - Bleed the heatpump and climate system- Open all the radiators- Check that the dirt filter is not clogged- Check the charging pump- Check connections of the pressure switches Fault in the brine system:- Contact qualified technician
69	Noncalibrated air flow sensor	The air flow sensor has not been calibrated	Not affected	Perform a ventilation adjustment and set the real air flow in menu 5.1.5.1
70	Perm. com. error input card	No communication with the input card	Calculated flow is set to min. flow. Manual reset.	Proposal: Check the communication circuits connections on the input card and display card.
71	Perm. com. error base card	No communication with the base card (AA2 at AA26).	Compressor blocked. Manual reset.	Proposal: Check the communication circuits connections on thebase-, input- and display card.

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
72	Perm. com. error softstart card	No communication with the softstart card.	Compressor blocked.	Proposal: Check the communication circuits connections on softstart card and base card.
73	Perm. com. error heating system 2	No communication with the accessory card.	Accessory blocked.	Proposal: - Check the power supply leading to the accessory card. - Check the communication cables leading to the accessory card. - Check the setting of the dipswitch.
74	Perm. com. error heating system 3	No communication with the accessory card.	Accessory blocked.	Proposal: - Check the power supply leading to the accessory card. - Check the communication cables leading to the accessory card. - Check the setting of the dipswitch.
75	Perm. com. error base card	No communication with the base card (AA26).	Compressor blocked. Manual reset.	Check the communication circits connections on hte base-, inputand display card.
76	Perm. com. error heating system 4	No communication with the accessory card.	Accessory blocked.	Proposal: - Check the power supply leading to the accessory card. - Check the communication cables leading to the accessory card. - Check the setting of the dipswitch.
77	Perm. com. error additive with shunt	No communication with the accessory card.	Accessory blocked.	Proposal: - Check the power supply leading to the accessory card. - Check the communication cables leading to the accessory card. - Check the setting of the dipswitch.
78	Perm. com. error pool	No communication with the accessory card.	Accessory blocked.	Proposal: - Check the power supply leading to the accessory card. - Check the communication cables leading to the accessory card. - Check the setting of the dipswitch.
79	Perm. com. error FLM	Permanent communication fault with the accessory card for FLM. Communication cables to the card are incorrect or incorrectly installed. Fault in the communication circuits in the accessory-, input- or display card. Incorrect address on the dipswitch.	Accessory blocked.	Check the cables and cards.
83	Unsuccessful defrosting	F750: The defrost stop conditions have not been met for 3 hours. F110: F110 has made three defrosts within 60 minutes.	F110: Defrost discontinued. Compressor stopped. Immersion heater stopped.	Proposal F750: - Check sensors - Check airflow/filter - Check ice formation - Check ventilation flow and exhaust air temperature - Check the defrost function and the sensors that control it Proposal F110: - Check the defrost function. - Check sensors (BT16, BT76, BT77) - Check solenoid valve

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
86	Perm. com. error SAM 40	No communication with the accessory card for SAM 40 which is activated in menu 5.2.		- Check the power supply to the accessory card. - Check the setting of the dipswitch. - Check the communication cables leading to the accessory card.
87	Perm. com. error step controlled additive	Permanent communication fault with the accessory card with step controlled additive.	Accessory blocked.	Proposal: Check the cables and cards.
88	Perm. com. error Solar	Permanent communication fault with the accessory card for Solar. Communication cables to the card are incorrect or incorrectly installed. Fault in the communication circuits in the accessory-, input- or display card. Incorrect address on the dipswitch.	Accessory blocked.	Proposal: Check the cables and cards.
89	Perm. com. error HPAC	Permanent communication fault with the accessory card for HPAC. Communication cables to the card are incorrect or incorrectly installed. Fault in the communication circuits in the accessory-, input- or display card. Incorrect address on the dipswitch.	Accessory blocked.	Proposal: Check the cables and cards.
90	Perm. com. fault groundwater pump	Permanent communication fault with the accessory card for groundwater pump. Communication cables to the card are incorrect or incorrectly installed. Fault in the communication circuits in the accessory-, input- or display card. Incorrect address on the dipswitch.	Accessory blocked.	Proposal: Check the cables and cards.
91	Perm. com. error HWC	Permanent communication fault with the accessory card for hot water circulation. Communication cables to the card are incorrect or incorrectly installed. Fault in the communication circuits in the accessory-, input- or display card. Incorrect address on the dipswitch.	Accessory blocked.	Proposal: Check the cables and cards.

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
92	Perm. com. error DEW	Permanent communication fault with the accessory card for DEW. Communication cables to the card are incorrect or incorrectly installed. Fault in the communication circuits in the accessory-, input- or display card. Incorrect address on the dipswitch.	Accessory blocked.	Proposal: Check the cables and cards.
93	Perm. com. error 2-pipes cooling	Permanent communication fault with the accessory card for 2-pipes cooling. Communication cables to the card are incorrect or incorrectly installed. Fault in the communication circuits in the accessory-, input- or display card. Incorrect address on the dipswitch.	Accessory blocked.	Proposal: Check the cables and cards.
94	Perm. com. error PCS44	Permanent communication fault with the accessory card for 4-pipes passive cooling. Communication cables to the card are incorrect or incorrectly installed. Fault in the communication circuits in the accessory-, input- or display card. Incorrect address on the dipswitch.	Accessory blocked.	Proposal: Check the cables and cards.
95	Perm. Com. Error FJVM	Permanent communication fault with FJVM.	Accessory blocked.	Proposal: Check the cables and cards.
96	Perm. Com. Room unit, zone 1	Permanent communication fault with room unit, zone 1.	Room unit blocked.	Proposal: Check communication cables.
97	Perm. Com. Room unit, zone 2	Permanent communication fault with room unit, zone 2	Room unit blocked.	Proposal: Check communication cables.
98	Perm. Com. room unit, zone 3	Permanent communication fault with room unit, zone 3	Room unit blocked.	Proposal: Check communication cables.
99	Perm. Com. room unit, zone 4	Permanent communication fault with room unit, zone 4.	Room unit blocked.	Proposal: Check communication cables.
100	Perm. Com. error inverter	Permanent communication fault with the inverter	Compressor blocked	Proposal: - Check the power supply leading to inverter and communication cables.

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
101	Sensor fault BT1	Sensor temporarily missing		Proposal: Check any sensors and connections
102	Sensor fault BT2	Sensor temporarily missing		Proposal: Check any sensors and connections
103	Sensor fault BT3	Sensor temporarily missing		Proposal: Check any sensors and connections
104	Sensor fault BT4	Sensor temporarily missing		Proposal: Check any sensors and connections
105	Sensor fault BT5	Sensor temporarily missing		Proposal: Check any sensors and connections
106	Sensor fault BT6	Sensor temporarily missing		Proposal: Check any sensors and connections
107	Sensor fault BT7	Sensor temporarily missing		Proposal: Check any sensors and connections
108	Sensor fault BT8	Sensor temporarily missing		Proposal: Check any sensors and connections
109	Sensor fault BT9	Sensor temporarily missing		Proposal: Check any sensors and connections
110	Sensor fault BT10	Sensor temporarily missing		Proposal: Check any sensors and connections
111	Sensor fault BT11	Sensor temporarily missing		Proposal: Check any sensors and connections
112	Sensor fault B12	Sensor temporarily missing		Proposal: Check any sensors and connections
113	Sensor fault BT13	Sensor temporarily missing		Proposal: Check any sensors and connections
114	Sensor fault BT14	Sensor temporarily missing		Proposal: Check any sensors and connections
115	Sensor fault BT15	Sensor temporarily missing		Proposal: Check any sensors and connections
116	Sensor fault BT16	Sensor temporarily missing		Proposal: Check any sensors and connections
117	Sensor fault BT17	Sensor temporarily missing		Proposal: Check any sensors and connections
118	Sensor fault BT18	Sensor temporarily missing		Proposal: Check any sensors and connections
119	Sensor fault BT19	Sensor temporarily missing		Proposal: Check any sensors and connections
120	Sensor fault BT20	Sensor temporarily missing		Proposal: Check any sensors and connections
123	Sensor fault AZ30-BT23 outdoor air sensor	Heatpump has no connection with the supply air sensor in ERS	Supply and exhaust air fan is stopped	Proposal: -Check the sensor and its conncetions. Also see the electrical wiring diagram
130	Com.flt PCA Accessory climate system 5	Communication toward accessory card is missing. May be due to a temporary external disturbance, eg. thunder	Accessory is blocked. Manual reset.	Proposal: - Check the power supply leading to the accessory card. - Check the communication cables leading to the accessory card. - Check the setting of the dipswitch.

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
131	Com.flt PCA Accessory climate system 6	Communication toward accessory card is missing. May be due to a temporary external disturbance, eg. thunder	Accessory is blocked. Manual reset.	Proposal: - Check the power supply leading to the accessory card. - Check the communication cables leading to the accessory card. - Check the setting of the dipswitch.
132	Com.flt PCA Accessory climate system 7	Communication toward accessory card is missing. May be due to a temporary external disturbance,	Accessory is blocked. Manual reset.	Proposal: - Check the power supply leading to the accessory card. - Check the communication cables leading to the accessory card. - Check the setting of the dipswitch.
133	Com.flt PCA Accessory climate system 8	Communication toward accessory card is missing. May be due to a temporary external disturbance,	Accessory is blocked. Manual reset.	Proposal: - Check the power supply leading to the accessory card. - Check the communication cables leading to the accessory card. - Check the setting of the dipswitch.
140	Compressor phase 1 missing	Compressor phase 1 has been briefly missing		Proposal: No action needed. Possibly check compressor phase.
141	Compressor phase 2 missing	Compressor phase 2 has been briefly missing		Proposal: No action needed. Possibly check compressor phase.
142	Compressor phase 3 missing	Compressor phase 3 has been briefly missing		Proposal: No action needed. Possibly check compressor phase.
145	Temporary general phase fault	Temporary problem with the communication from the base card to the motor protection		Proposal: Check cables/cards
146	The ERS accessory is blocked by the level monitor.	Accessory ERS 1 is blocked by the level monitor	Accessory is blocked. Automatically reset when the blocking stops	Proposal: Check the diptray/drain and siphon
147	The ERS accessory is blocked by the level monitor.	Accessory ERS 2 is blocked by the level monitor	Accessory is blocked. Automatically reset when the blocking stops	Proposal: Check the diptray/drain and siphon
148	The ERS accessory is blocked by the level monitor.	Accessory ERS 3 is blocked by the level monitor	Accessory is blocked. Automatically reset when the blocking stops	Proposal: Check the diptray/drain and siphon
149	The ERS accessory is blocked by the level monitor.	Accessory ERS 4 is blocked by the level monitor	Accessory is blocked. Automatically reset when the blocking stops	Proposal: Check the diptray/drain and siphon
150	High condensor out	Condensor out has reached max permitted temperature	Automatic reset	
151	Sen flt: CL11-BT51 pool temp sensor	Sensor not connected/ defect (pool temp sensor, pool 1)	Pool pump stops (GP19)	Proposal: -Check the sensor and its conncetions. Also see the electrical wiring diagram
152	Sen flt: CL12-BT51 pool temp sensor	Sensor not connected/ defect (pool temp sensor, pool 2)	Pool pump stops (GP19)	Proposal: -Check the sensor and its conncetions. Also see the electrical wiring diagram
155	Hot gas alarm	The Hot gas (BT14) has temporarilly been over 135ºC	Compressor stopped. Automatically reset when the hot gas is below 90ºC.	Proposal: - Contact a qualified service technician.

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
156	Low LP cool			
158	Low defrost temperature	The temperature at the defrost (BT76) is below -25°C.	Defrost discontinued. Compressor stopped.	Proposal: - Check the defrost function - Check the defrost sensor (BT76) - Check solenoid valve
159	High evaporator temperature	The evaporator temperature (BT16) has exceeded 50°C.	Compressor stopped. Defrost discontinued.	Proposal: - Check the defrost function - Check the evaporator sensor (BT16) - Check solenoid valve
160	Low HTFout	Brine out has reached set min temperature	Automatic reset	
161	High HTFin	Brine in has reached set max temperature	Automatic reset	
162	High condensor out	Condensor out has reached max permitted temperature	Automatic reset	
163	High condensor in	Condensor exceeds max temperature		Automatic reset
164	Low exhaust air temperature	See alarm 64	Automatic reset when the temperature exceeds 17 C below X minutes	
165	Low pressure in the climate system	External pressure monitor for climate system indicates low pressure. Review the pressure and refill if necessary.	No action	Proposal: check the pressure in the climate system
166	Electrical anode incorrect	Fault in the electrical anode		Proposal: - Check the electric anode, circuit board at the electric anode and the cables to the electric anode.
170	Com. error input card	Communication with the input card is temporarily missing		Proposal: Check any cables/cards
171	Com. error base card	Communication with the base card is temporarily missing		Proposal: Check any cables/cards
172	Com. error softstart card	Communication with the softstart card is temporarily missing		Proposal: Check any cables/cards
173	Com. error heating system 2	Communication with accessory card for climate system 2 temporarily missing		Proposal: Check any cables/cards
174	Com. error heating system 3	Communication with accessory card for climate system 3 temporarily missing		Proposal: Check any cables/cards
175	Start-up of softstart card	The softstart card is started up. Takes approx 20 sec		Proposal: Check any cables/cards

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
176	Com. error heating system 4	Communication with accessory card for climate system 4 temporarily missing		Proposal: Check any cables/cards
177	Com. error addition with mixing valve	Communication with accessory card for mixing valve controlled additional heat temporarily missing		Proposal: Check any connections, cables and cards.
178	Com. error pool	Communication with accessory card for pool temporarily missing		Proposal: Check any cables/cards
177	Com. error addition with mixing valve	Communication with accessory card for mixing valve controlled additional heat temporarily missing		Proposal: Check any connections, cables and cards.
178	Com. error pool	Communication with accessory card for pool temporarily missing		Proposal: Check any cables/cards
179	Com. error FLM	Communication with accessory FLM is temporarily missing		Proposal: Check any cables/cards
180	Freeze prot	Freeze protection active. Occurs if the outdoor temperature is below 3 degrees and no heating is permitted.	Permits room heating	
181	Failed periodic increase	Periodic increase did not reach the stop temperature within 5 hours		
182	Load monitor activated	One or more power steps cannot be activated because the current in at least one phase is too high		Proposal: Check the phase load. It may require a larger main fuse.
183	Defrosting	Defrosting in progress		No action
184	Filter alarm	Air filter needs cleaning		Proposal: Clean the air filter and restart the heat pump.
185	Antifreeze supply air	Supply air temperature (BT22) or the return temperature from the heating battery (BT69) is below 5ºC.	Fans stopped and compressor blocked. Any blockage of the immersion heater is lifted.	- Check the water temperature and the flow to the heating battery.
187	Com. error step controlled additional heat	Temporary communication fault with accessory card with step controlled additional heat		Proposal: Check any cables/cards
188	Com. fault solar	Periodic increase did not reach the stop temperature within 5 hours		Proposal: Check any cables/cards

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
189	Com. error HPAC	Temporary comunication fault with accessory card with HPAC		Proposal: Check any cables/cards
190	Com. error ground water pump	Temporary communication fault with accessory card with ground water pump		Proposal: Check any cables/cards
191	Com. error HWC	Temporary communication fault with accessory card with hot water circulation		Proposal: Check any cables/cards
192	Com. error 2 pipe cooling	Temporary communication fault with accessory card with 2 pipe cooling		Proposal: Check any cables/cards
193	Com. Error DEW	Temporary communication fault with accessory card DEW		Proposal: Check any cables/cards
194	Com. Error PCD4	Temporary communication fault with accessory card with 4 pipe cooling		Proposal: Check any cables/cards
195	Com. error FJVM	Temporary communication fault with FJVM		Proposal: Check any cables/cards
196	Com. room unit zone 1	Temporary communication fault with room unit zone 1		Proposal: Check any cables/cards
197	Com. room unit zone 2	Temporary communication fault with room unit zone 2		Proposal: Check any cables/cards
198	Com. room unit zone 3	Temporary communication fault with room unit zone 2		Proposal: Check any cables/cards
199	Com. room unit zone 4	Temporary communication fault with room unit zone 4		Proposal: Check any cables/cards
200	Com. error inverter			
201	Inverter alarm	Inverter indicates alarm		See chapter Troubleshooting in the Service manual SEM F750 for fault specification. Alarm code stands in alarm log in F750 in brackets.
202	Inverter fault	Inverter indicates alarm		See chapter Troubleshooting in the Service manual SEM F750 for fault specification. Alarm code stands in alarm log in F750 in brackets.
203	Inverter error type I	Permanent inveter fault type I		See alarm tab menu 6 for error code. See chapter Troubleshooting in the Service manual: SEM F750 for fault specification.
204	Inverter error type II	Permanent inverter fault type II		See alarm tab menu 6 for error code. See chapter Troubleshooting in the Service manual: SEM F750 for fault specification.
205	Inverter error type III	Permanent inverter fault type III		See alarm tab menu 6 for error code. See chapter Troubleshooting in the Service manual: SEM F750 for fault specification.

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
206	Perm. com. error HWcomfort	No communication with accessory card for 15 sec		Proposal: - Check the power supply leading to the accessory card. - Check the communication cables leading to the accessory card. - Check the setting of the dipswitch.
207	Com. error HW-comfort	No communication with the accessory		Proposal: Check any cables/cards
208	Com. error Acc-EB1	No communication with accessory card for 15 sec		METROAIR 500: - Check the communication cables - Check the dip switch settings
209	Com. error ACC-EPxx	3 communication faults in a row with the acces-sory card	Blocking addition	
213	Inverter error type I	Temporary inverter fault	Inverter blocked. If the alarm is active more than 1h the alarm will pass over to alarm 203 (Permanent inverter fault type II)	
214	Inverter error type II	Temporary inverter fault type II	Compressor blocked. If the alarm is active more than 1h or if the alarm is activated 3 times in 2h, the alarm will pass over to alarm 204 (permanent inverter fault type II)	
215	Inverter error type III	Temporary Inverter fault type III	Compressor blocked. If the alarm is active more than 1h or if the alarm is activated 3 times in 2h, the alarm will pass over to alarm 204 (permanent inverter fault type II)	
216	Inverter alarm type II	Incorrect inverter	Manual reset in menu. Compressor blocked.	
220	High pressure alarm	Heat pump (selected outdoor unit) sending fault message to the controller	Compressor blocked	See troubleshooting for the selected outdoor unit.
221	Low pressure alarm	Heat pump (selected outdoor unit) sending fault message to the controller	Compressor blocked	See troubleshooting for the selected outdoor unit.
222	Motor protection alarm	Heat pump (selected outdoor unit) sending fault message to the controller	Compressor blocked	See troubleshooting for the selected outdoor unit.
223	Communication alarm	Heat pump (selected outdoor unit) sending fault message to the controller	Compressor blocked	See troubleshooting for the selected outdoor unit.
224	Fan error	Heat pump (selected outdoor unit) sending a fault message to the controller	Compressor blocked	See troubleshooting for the selected outdoor unit.
225	Flow/return	Heat pump (selected outdoor unit) sending fault message to the controller	Compressor blocked	See troubleshooting for the selected outdoor unit.

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
227	Sensor fault	Heat pump (selected outdoor unit) sending fault message to the controller	Compressor blocked	See troubleshooting for the selected outdoor unit.
228	Defrost fault	Heat pump (selected outdoor unit) sending fault message to the controller	Compressor blocked	See troubleshooting for the selected outdoor unit.
229	Short operation times for compressor	Compressor has stopped three times in a row, short time after start	Compressor blocked	- Open thermostatic valves to ensure circulation in the heating system - Bleed the climate system and heat pump - Check the filter in the climate system and possible ventilation - Check the start- and stop temperature for hot water charging - Check the heating medium pump - Check the cooling circuit
230	Hot gas alarm	Heat pump (selected outdoor unit) sending fault message to the controller	Compressor blocked	See troubleshooting for the selected outdoor unit.
231	Phase sequence error	Heat pump (selected outdoor unit) sending fault message to the controller	Compressor blocked	See troubleshooting for the selected outdoor unit.
232	Low evaporation	Heat pump (selected outdoor unit) sending fault message to the controller	Compressor blocked	See troubleshooting for the selected outdoor unit.
236	Sensor fault AZ2- BT20	Sensor not connected/ defective (exhaust air)	Circulation pump (AZ1-GP2) in FLM blocked	Proposal: Check sensor and its connections
237	Sensor fault AZ2- BT21	Sensor not connected/ defective (exhaust)	Circulation pump (AZ1-GP2) in FLM blocked	Proposal: Check sensor and its connections
238	Sensor fault AZ2- BT26	Sensor not connected/ defective (brine collector in)	Circulation pump (AZ1-GP2) in FLM blocked	Proposal: Check sensor and its connections
239	Sensor fault AZ3- BT20	Sensor not connected/ defective (exhaust)		
240	Sensor fault AZ3- BT21	Sensor not connected/ defective (exhaust)	Circulation pump (AZ1-GP2) in FLM blocked	Proposal: Check sensor and its connections
241	Sensor fault AZ3- BT26	Sensor not connected/ defective (brine collector in)	Circulation pump (AZ1-GP2) in FLM blocked	Proposal: Check sensor and its connections
242	Sensor fault AZ4- BT20	Sensor not connected/ defective (exhaust)	Circulation pump (AZ1-GP2) in FLM blocked	Proposal: Check sensor and its connections
243	Sensor fault AZ4- BT21	Sensor not connected/ defective (exhaust)	Circulation pump (AZ1-GP2) in FLM blocked	Proposal: Check sensor and its connections
244	Sensor fault AZ4- BT26	Sensor not connected/ defective (brine collector in)	Circulation pump (AZ1-GP2) in FLM blocked	Proposal: Check sensor and its connections

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
245	Com. error FLM 2	No communication temporarily with the accessory FLM 2	Accessory blocked	Proposal: - Check fuses, power supply leading to the accessory card. - Check the communication cables leading to the accessory card. - Check the setting of the dipswitch.
246	Com. error FLM 3	No communication temporarily with accessory FLM3	Accessory blocked	Proposal: - Check fuses, power supply leading to the accessory card. - Check the communication cables leading to the accessory card. - Check the setting of the dipswitch.
247	Com. error FLM 4	No communication temporarily with the accessory FLM4	Accessory blocked	Proposal: - Check fuses, power supply leading to the accessory card. - Check the communication cables leading to the accessory card. - Check the setting of the dipswitch.
248	Communication fault	No connection between the display unit and the base card	Compressor and charging pump stopped	- Checkt the communication cable between the display unit and the base card
250	Com.error ACC-SMS 40	No communication temporarily with accessory card	Accessory blocked	See troubleshooting IHB SMS 40
251	Com. error ACC Modbus 40	No communication temporarily with accessory card	Accessory blocked	See troubleshooting IHB SMS 40
252	Com.error slave	No communication temporarily with slave heat pump	Compressor in slave blocked	Proposal: Check slave settings in menu 5.2.2, communication cables and its connections.
253	Sensor fault QZ1-BT70	Sensor not connected/ defective (hot water flow)	Mixing valve closes	Proposal: Check sensor and its connections
255	Motor protection alarm, brine pump	Motor protection on the brine pump triggered	Current comperssor blocked. Automatic reset.	Bad circulation in brine circuit: - check the brine pump - vent the brine system - check the particle filter so its not clogged - check the brine pump cables and connections with the heat pump
257	Com. error ACS45	No communication temporarily with accessory card	Accessory blocked	Proposal: - Check fuses, power supply leading to the accessory card. - Check the communication cables leading to the accessory card. - Check the setting of the dipswitch.
258	Sensor fault EQ1- BT57	Sensor not connected/ defective (Cooling brine)		Proposal: Check sensor and its connections
259	Sensor fault EQ1- BT75	Sensor not connected/ defective (cooling flow heat pump)		Proposal: Check sensor and its connections
261	This alarm was generated by the heat pump	Temperature deviation on the heat exchanger sensor (Tho-R1/R2) five times within 60 minutes or continuously in 60 minutes	Accessory blocked	Proposal: - Defect sensor - Insufficient air circulation - The heat exchanger is clogged - Defect control card EB101 - Too large amount of refrigerant

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
262	This alarm was generated by the heat pump	Overheat power transistor	Compressor blocked	15V power to the inverters PCB is unstable.
263	This alarm was generated by the heat pump	Incorrect voltage out from the inverter	Compressor blocked	Proposal: - Disruption on incoming power - Service valve closed - Not enough refrigerant amount - Compressor fault - Defect circuit board for the inverter in EB101
264	This alarm was generated by the heat pump	Communication between circuit board for the inverter and control card is inter-upted	Compressor blocked	Proposal: - Disruption on the connection between cards - Defect circuit board for the inverter in EB101 - Defect control card EB101
265	This alarm was generated by the heat pump	Continuous error on power transistor during 15 minutes	Compressor blocked	Proposal: - Defect fan motor - Defect circuit board for the inverter in EB101
266	This alarm was generated by the heat pump	Low refrigerant amount	Compressor blocked	Proposal: - Service valve closed - Loose contact on sensor (BT15, BT3) - Defect sensors (BT15, BT3) - Too low refrigerant amount
267	This alarm was generated by the heat pump	Inverter fault, boot failure	Compressor blocked	Proposal: - Defect circuit board for the inverter in EB101 - Defect control card EB101 - Compressor fault
268	This alarm was generated by the heat pump	Overcurrent, inverter A/F module	Compressor blocked	- Sudden power failure
269	Preheating	Preheat of the compressor is active	Compressor is blocked. Automatic reset.	
270	Compressor preheater is active		Preheat	Compressor is in preheat mode until BT29>BP8+10°C
271	Cold outdoor air EB 101	EB 101 sending message to the controller	Compressor blocked	
272	Hot outdoor air	EB 101 sending message to the controller	Compressor blocked	
273	HW-start and HWstop have been reset to factory settings	Adjustment of hotwater-settings because of short operation time	HW-start and HW-stop for economy and normal have been reset to factory settings	
274	Compressor phase overloaded	Load monitor has caused the compressor not to operate with desired power.		

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
275	Compressor phase overloaded longtime	Load monitor has caused the compressor not to operate with desired power.		
276	Communication fault with shunt controlled brine	Communication toward the accessory card is missing	Accessory is blocked	Proposal: - Check the fuses and connection toward the accessory card- Check that communication cables are correctly connected- Check the dip switch settings
277	This alarm was generated by the heat pump	Sensor fault MHI exchanger	Compressor blocked	Proposal: - Sensor fault heat exchanger F2040, THO-R1(BT16)/THO-R2 EB101 - Defect control card EB101
278	This alarm was generated by the heat pump	Sensor fault MHI ambient air	Compressor blocked	Proposal: - Sensor fault outdoor temperature sensor Tho-A(BT28) EB101 - Defect control card EB101
279	This alarm was generated by the heat pump	Sensor fault MHI discharge	Compressor blocked	Proposal: - Sensor fault hotgas BT14 (Tho-D) EB101 - Defect control card EB101
280	This alarm was generated by the heat pump	Sensor fault MHI suction	Compressor blocked	Proposal: - Sensor fault suction gas BT17 (Tho-S) EB101 - Defect control card EB101
281	This alarm was generated by the heat pump	Sensor fault MHI LP	Compressor blocked	Proposal: - Sensor fault low pressure sensor BP2(LTP) EB101 - Defect control card EB101 - Error in refrigerant circuit EB101
282	Comm. error ACC.-EQ1	Three communication error in a row has occurred towards the accessory card ACS 310	Accessory blocked. Temporary communication fault.	
283	Comm. error ACC.-EQ1	Permanent communica-tion error ACS310	Accessory blocked	Proposal: - Check communication cables - Check dipswitch settings
290	Fan alarm	The speed signal (tachometer signal) from the fan indicates that the fan speed is zero.	- Compressor stopped. - Immersion heater stopped. - Defrost stopped.	Check the fan, cables and connections and the base card.
291	Charge pump alarm	The speed signal (tachometer signal) from the charge pump indicates that the charge pump speed is zero.	- Compressor stopped. - Immersion heater stopped. - Defrost stopped.	Check the charge pump, cables and connections and the base card.
292	Sen flt: BT74 cool/ heat sensor	Sensor not connected/ defect (cooling/ heating sensor)	No action	Proposal: -Check the sensor and its conncetions. Also see the electrical wiring diagram

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
293	Low extract air temp	Extract air temperatur (BT21) in ERS (AZ30) has been lower than 0gr in 10 minutes	Supply and exhaust air fan is stopped	Proposal: Check flow and heating setting
294	Not compatible heatpump	The alarm occurs if the outdoor unit toward 320 is not a F2030-7, F2030-9, F2040-8, F2040-12. Faulty settings of the dip switches on the circuit board.	HW blocked. Unit cannot be restarted after power supply was off.	Check the connections of the outdoor unit and dip switch settings.
297	Com. fault with PCA Accessory FTX	Communication toward accessory card is missing. May be due to a temporary external disturbance, eg. thunder	Accessory is blocked. Manual reset	Proposal: - Check the power supply leading to the accessory card. - Check the communication cables leading to the accessory card. - Check the setting of the dipswitch.
299	Wrong version PCA Base	Firmware version on the base card (AA2) is too low for inverter communication.	Compressor blocked. Reset when the correct version is detected.	Proposal: - Change base card (AA2)
301	Com. error slave 1	No communication temporarily with slave heat pump (EB101)	Slave compressor blocked	Proposal: Check slave settings in menu 5.2.2, communication cables and its connections.
302	Com. error slave 2	No communication temporarily with slave heat pump (EB102)	Slave compressor blocked	Proposal: Check slave settings in menu 5.2.2, communication cables and its connections.
303	Com. error slave 3	No communication temporarily with slave heat pump (EB103)	Slave compressor blocked	Proposal: Check slave settings in menu 5.2.2, communication cables and its connections.
304	Com. error slave 4	No communication temporarily with slave heat pump (EB104)	Slave compressor blocked	Proposal: Check slave settings in menu 5.2.2, communication cables and its connections.
305	Com. error slave 5	No communication temporarily with slave heat pump (EB105)	Slave compressor blocked	Proposal: Check slave settings in menu 5.2.2, communication cables and its connections.
306	Com. error slave 6	No communication temporarily with slave heat pump (EB106)	Slave compressor blocked	Proposal: Check slave settings in menu 5.2.2, communication cables and its connections.
307	Com. error slave 7	No communication temporarily with slave heat pump (EB107)	Slave compressor blocked	Proposal: Check slave settings in menu 5.2.2, communication cables and its connections.
308	Com. error slave 8	No communication temporarily with slave heat pump (EB108)	Slave compressor blocked	Proposal: Check slave settings in menu 5.2.2, communication cables and its connections.
322	SPA not updated	Spot price could not be retrieved	Use an average value from the most recently downloaded prices	
323	Sen flt: EQ1-BT25 external supply line cooling	Sensor not connected/ defect (external supply line cooling)	Cooling DM is set to 0. Automatically reset	Proposal: -Check the sensor and its conncetions. Also see the electrical wiring diagram
324	Com. fault PCA Acc. HTS 1	Communication toward accessory card is missing. May due to a temporary external disturbance, eg. thunder	Manual reset. Calculated cooling supply is set to 18degrees if HTS is selected to control in cooling	Proposal: -Check the sensor and its conncetions. Also see the electrical wiring diagram

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
325	Temperature limiter alarm for defrost element	Temperature limiter FD3 has tripped	Heatpump changes to passive defrost	Check the filter and air flow - The alarm can be reset in the alarm menu but will return when the defrost element tries to connect until the temperature limiter is reset. - Temperature limiter shall be reset and function tested by an installer or service technician
326	Fault in EB16	Active defrosting has failed three times in a row	Heat pump merges to passive defrost	- Check the filter and air flow- Checkt the calibration of air speed sensor BS1 in menu 5.1.5.1- Checht the defrosting element EB16
333	Maximum flow temperature from the heat pump is exceeded	Temperature out from heatpump has been over max allowed on supply sensor BT2 alt. BT63. The cause may be: - wrongly connected addition - wrongly adjusted flow - under dimensioned heat system - wrongly adjusted heating curve	Heating blocked. Automatically reset when the tempareture is lower than 70 degrees	Proposal: Check the flow and heating settings, addition function
334	Max. incoming temp. exceeded	Temperature to the heatpump has been over max allowed on condensor in (BT3). The cause may be: - wrongly connected addition - wrongly adjusted flow - under dimensioned heat system - wrongly adjusted heating curve	Heating blocked. Automatically reset when the tempareture is lower than 60 degrees	Proposal: Check the flow and heating settings, addition function
336	Sen flt: EP44 BT2 supply temp sens.	Sensor not connected/ defect (supply sensor, climate system 5)	Control on return sensor EP44- BT3. Automatic reset	Proposal: Check the sensor and its conncetions. Also see the electrical wiring diagram
337	Sen flt: EP45 BT2 supply temp sens.	Sensor not connected/ defect (supply sensor, climate system 6)	Control on return sensor EP45- BT3. Automatic reset	Proposal: Check the sensor and its conncetions. Also see the electrical wiring diagram
338	Sen flt: EP46 BT2 supply temp sens.	Sensor not connected/ defect (supply sensor, climate system 7)	Control on return sensor EP46- BT3. Automatic reset	Proposal: Check the sensor and its conncetions. Also see the electrical wiring diagram
339	Sen flt: EP47 BT2 supply temp sens.	Sensor not connected/ defect (supply sensor, climate system 8)	Control on return sensor EP47- BT3. Automatic reset	Proposal: Check the sensor and its conncetions. Also see the electrical wiring diagram
340	Antifreeze supply air	Supply air temperature (BT22) is below 11ºC.	HW load blocked. Returns automatically when the supply air temperature exceeds 16ºC.	- Bleed the supply air battery. - Check the water temperature and the flow to the heating battery. - If repeated alarms; verify that circulated water volume is sufficient.
341	Recuring safety defrost			

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
344	Recuring low pressure			
346	Recuring high pressure			
350	Sensor fault on BT50 room sensor	Sensor not connected/ defect (room sensor)	No function from BT50. Automatic reset	Proposal: Check the sensor and its conncetions. Also see the electrical wiring diagram
351	Uncertain sensor accuracy	Uncertain sensor accuracy on the brine sensors BT10 and BT11. The difference is more than 2K between them at calibration.	GP2 switches to manual speed if auto control is selected. Manual reset of auto control in menu 5.1.9	Proposal: - Check sensors BT10 and BT11 and their connections.
352	Uncertain sensor accuracy	Uncertain sensor accuracy on the HM sensors BT2 and BT3. The difference is more than 2K between them at calibration.	GP1 switches to manual speed if auto control is selected. Manual reset of auto control in menu 5.1.11	Proposal: - Check the sensors BT2 and BT3 and their connections.
353	Uncertain sensor accuracy	Uncertain sensor accuracy on the HM sensors BT3 and BT12. The difference is more than 2K between them at calibration.	GP1 switches to manual speed if auto control is selected. Manual reset of auto control in menu 5.1.11	Proposal: - Check the sensors BT3 and BT12 and their connections.
354	Slave EB101	Delta BT3-BT12 is larger than 2K after calibration	Changes from auto to manual circulation pump speed. Uncertain sensor accuracy.	
355	Slave EB101	Delta BT3-BT63 is larger than 2K after calibration	Changes from auto to manual circulation pump speed. Uncertain sensor accuracy.	
356	Failed sensor calibration	Sensor calibration differs more than 2K between BT3 and BT63	GP1 will go over to manual operation	Check the flow in the heating system is not disturbed by air or closed ventilators. Restart the display.
357	Com.flt PCA Accessory OPT	May be due to a temporary external disturbance, eg. thunder. Try to reset the alarm, if the alarm recurs, select aid mode and contact your installer.	No action. Manual reset.	Proposal: Check the communication cables and the connections
358	Internal OPT error	GBM alarm. This alarm is caused by the gas boiler. Try to reset the alarm, if the alarm reoccurs see manual for GBM.	No action. Manual reset.	Proposal: See the gas boiler manual for trouble shooting
359	Internal OPT error	GBM alarm. This alarm is caused by the gas boiler and automatically resets when the fault is solved. If the alarm reoccurs , contact a service	No action. Automatically reset.	Proposal: See the gas boiler manual for trouble shooting

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
361	Sensor fault EP21-BT3	Sensor not connected/ defect (supply sensor, climate system 2)	No action. Automatically reset	Proposal: Check sensor and its connections. See also the electrical wiring diagram
362	Sensor fault EP22-BT3	Sensor not connected/ defect (supply sensor, climate system 3)	No action. Automatically reset	Proposal: Check sensor and its connections. See also the electrical wiring diagram
363	Sensor fault EP23-BT3	Sensor not connected/ defect (supply sensor, climate system 4)	No action. Automatically reset	Proposal: Check sensor and its connections. See also the electrical wiring diagram
364	Sensor fault EP44-BT3	Sensor not connected/ defect (supply sensor, climate system 5)	No action. Automatically reset	Proposal: Check sensor and its connections. See also the electrical wiring diagram
365	Sensor fault EP45-BT3	Sensor not connected/ defect (supply sensor, climate system 6)	No action. Automatically reset	Proposal: Check sensor and its connections. See also the electrical wiring diagram
366	Sensor fault EP46-BT3	Sensor not connected/ defect (supply sensor, climate system 7)	No action. Automatically reset	Proposal: Check sensor and its connections. See also the electrical wiring diagram
367	Sensor fault EP47-BT3	Sensor not connected/ defect (supply sensor, climate system 8)	No action. Automatically reset	Proposal: Check sensor and its connections. See also the electrical wiring diagram
369	Sensor fault EP12-BT57	Sensor not connected/ defect (collector -in, groundwater)	No action. Automatically reset	Proposal: Check sensor and its connections. See also the electrical wiring diagram
370	Sensor fault EP12-BT58	Sensor not connected/ defect (collector -in, groundwater)	No action. Automatically reset	Proposal: Check sensor and its connections. See also the electrical wiring diagram
371	Freeze risk EP12-BT58	Ground water sensor BT58 is below its limit	Compressor blocked. Automatically reset	Proposal: Check the flow of the ground water heat exchanger
372	Perm. com. error pool 2	No communication with the accessory card.	Accessory blocked.	Proposal: - Check the power supply leading to the accessory card. - Check the communication cables leading to the accessory card. - Check the setting of the dipswitch.
400	Unspecified fault			
403	Sensor fault on EB101	Sensor fault detected on EB101 of the COM-interface MHI-EMMY	- Compressor blocked - If GP12 or GP1 is regulated by sensor EB101-BT3, they will swich to the manually set speed.	Proposal: - Check the temperature sensor and its connections. See also the wiring diagram.
404	Sensor fault on EB101	Sensor fault detected on EB101 of the COM-interface MHI-EMMY	- Compressor blocked	Proposal: - Check the temperature sensors and its connections. See also the wiring diagram.
412	Sensor fault on EB101-BT12	Sensor fault detected on EB101 of the COM-interface MHI-EMMY	- Compressor blocked - If GP12 or GP1 is regulated by sensor EB101-BT3, they will swich to the manually set speed.	Proposal: - Check the temperature sensor and its connections. See also the wiring diagram.
415	Sensor fault on EB101-BT15	Sensor fault detected on EB101 of the COM-interface MHI-EMMY	Compressor blocked	Proposal: - Check the temperature sensor and its connections. See also the wiring diagram.

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
420	Inverter alarm type II	A temporary communication alarm has occured.	Compressor stopped. Automatic reset 60 sec. after the inverter fault is reset. The compressor will make a new attempt to start according to normal start routine.	Proposal: - Check the main fuse and the group fuses and their connections - Check the communication cable to the inverter and its connections. - If the alarm occurs again; contact a service technician.
421	Inverter alarm type II	A temporary communication alarm has occured 3 times within 2 hours or has been continuously for 1 h.	Compressor blocked. Manual reset in menu.	Proposal: - Check the main fuse and the group fuses and their connections. - Check the communication cable to the inverter and its connections - Do a restart of the heat pump by turning it off through the operating switch - If the alarm occurs again; contact a service technician.
422	Inverter alarm type II	A temporary alarm on the external input of the inverter has occured	Compressor stopped. Automatic reset 60 sec. after the inverter fault is reset. The compressor will make a new attempt to start according to normal start routine.	Proposal: - Check the main fuse and the group fuses and its connections - If the fault occurs again; contact a service technician
423	Inverter alarm type II	A temporary alarm on the external input of the inverter has occurred 3 times within 2 hours or the input has been continuously broken for 1 hour.	Compressor blocked. Manual reset in menu.	Proposal: - Check the communication cable on the external input of the inverter - Check the main fuse and the group fuses - Restart the heat pump by turning it off through the operation switch - If the fault occurs again; contact a service technician
425	Triggered pressure switch	High pressure switch or low pressure switch is triggered.	Compressor blocked	Bad circulation in heating system or lack of refrigerant/problem in refrigerant circuit. Suggestions: - Vent the heatpump and heatingsystem. - Open all thermostats on the radiators. - Check and clean filters/strainers. - Check the chargepump. - Check that pressureswitches are correct wired. Problem in refrigerant circuit: - Call a certified refrigeration technician.
426	Inverter alarm type III	A temporarily fault in the inverter has occur.	Automatically reset 30 minutes after the inverter fault is corrected. Compressor stopped.	Proposal: - Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician.
427	Inverter alarm type III	A temporary internal fault in the inverter has occurred 3 times within 2 hours or continuously in 1 hour.	Compressor blocked. Manual reset in menu.	Proposal: - Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to brek the power. - If the alarm occurs again; contact a service technician.

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
428	Inverter alarm type III	A temporary internal fault in the inverter has occurred.	Compressor stopped. Automatic reset 60 sec. after the inverter alarm has been corrected.	Proposal: - Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician. 1 phase inverter: Check the condensator
429	Inverter alarm type II	A temporary internal fault in the inverter has occurred 3 times within 2 hours or continuously in 1 hour.	Compressor blocked. Reset manually in menu.	Proposal: - Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician. 1 phase inverter: Check the condensator
430	Inverter alarm type I	Phase voltage to the inverter has temporarily been too high.	Automatic reset 60 sec. after the fault is corrected. Compressor stopped.	Proposal: - Check the main fuse and the group fuses and their connections. - If the alarm occurs again; contact a service technician.
431	Inverter alarm type I	Phase voltage to the inverter has temporarily been too high more than 1 hour.	Reset manually in menu. Compressor blocked.	Proposal: - Check the main fuse and the group fuses and their connections. - If the alarm occurs again; contact a service technician.
432	Inverter alarm type I	Phase voltage to the inverter has temporarily been too low.	Automatic reset 60 sec. after the fault is corrected.	Proposal: - Check the main fuse and the group fuses and their connections. - If the alarm occurs again; contact a service technician.
433	Inverter alarm type I	Phase voltage to the inverter has been too low, below 180V in more than 1 hour.	Compressor blocked. Reset manually in menu.	Proposal: - Check the main fuse and the group fuses and their connections. - If the alarm occurs again; contact a service technician.
434	Inverter alarm type I	A compressor phase has temporarily been missing.	Compressor stopped. Automatic reset 60sec.	Proposal: - Check the main fuse and the group fuses and their connections. - If the alarm occurs again; contact a service technician.
435	Inverter alarm type I	continuously missing to the inverter for an hour.	Compressor blocked. Reset manually in menu.	Proposal: - Check the main fuse and the group fuses and their connections. - If the alarm occurs again; contact a service technician.
436	Inverter alarm type II	A temporary internal fault in the inverter has occurred.	Compressor stopped. Automatic reset 60 sec. after the inverter fault.	Proposal: - Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician.
437	Inverter alarm type II	A temporary inverter fault in the inverter has occurred 3 times within 2 hours or continuously in 1 hour.	Compressor blocked. Manual reset in menu.	Proposal: - Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician.

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
438	Inverter alarm type II	The inverter has temporary reach the maximum operating temperature because of poor cooling	Compressor stopped. Automatic reset 60 sec. after the inverter fault is corrected.	Poor circulation in HM circuit. Proposal: - Bleed the heat pump and the climate system. - Check the particle filter, so it is not clogged. - Open radiators/under floor heating thermostats.
439	Inverter alarm type II	The inverter has temporary reached maximum operating temperature because of poor cooling 3 times within 2 hours or been missing continuously in 1 hour.	Compressor blocked. Reset manually in menu.	Poor circulation in HM circuit. Proposal: - Bleed the heat pump and the climate system. - Check the particle filter, so it is not clogged. - Open radiators/under floor heating thermostats. - If the alarm occurs again; contact a service technician.
440	Inverter alarm type II	Max “power in” has temporary been too high.	Compressor stopped. Automatic reset 60 sec. after the inverter fault is corrected.	Proposal: - Check the main fuse and the group fuses and their connections. - If the alarm occurs again; contact a service technician.
441	Inverter alarm type II	Max “power in” has temporary been too high 3 times within 2 hours or been missing continuously for an hour.	Compressor blocked. Reset manually in menu.	Proposal: - Check the main fuse and the group fuses and their connections. - If the alarm occurs again; contact a service technician.
442	Inverter alarm type II	Inverter has temporary reached max operating temperature because of poor cooling.	Compressor stopped. Automatic reset 60 sec. after the inverter fault is corrected.	Poor circulation in HM circuit. Proposal: - Bleed the heat pump and the climate system. - Check the particle filter, so it is not clogged. - Open radiators/under floor heating thermostats.
443	Inverter alarm type II	Inverter has temporary reached max operating temperature because of poor cooling 3 times within 2 hours or been missing continuously in an hour.	Compressor blocked. Manual reset in menu.	Poor circulation in HM circuit. Proposal: - Bleed the heat pump and the climate system. - Check the particle filter, so it is not clogged. - Open radiators/under floor heating thermostats. - If the alarm occurs again; contact a service technician.
444	Inverter alarm type II	A temporary internal fault has occurred in the inverter.	Compressor stopped. Automatic reset 60 sec. after the inverter fault is corrected.	Proposal: - Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician.
445	Inverter alarm type II	A temporary inverter fault has occurred 3 times within 2 hours or continuously in 1 hour.	Compressor blocked. Manual reset in menu.	Proposal: - Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician.

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
446	Inverter alarm type II	A compressor phase has temporarily been missing.	Compressor stopped. Automatic reset 60 sec. after the phase has been reset.	- Check the main fuse and the group fuses and their connections. - If the fault occurs again; contact a service technician.
447	Inverter alarm type II	A phase has temporarily been missing 3 times within 2 hours or been missing continuously for 1 hour.	Compressor blocked. Manual reset in menu.	- Check the main fuse and the group fuses and their connections. - If the fault occurs again; contact a service technician.
448	Inverter alarm type II	The compressor has temporarily been operating with lower speed than allowed minimum speed.	Compressor stopped. Automatic reset 60 sec. after the inverter fault is corrected.	- Check the main fuse and the group fuses and their connections. - If the fault occurs again; contact a service technician.
449	Inverter alarm type II	The compressor has temporarily been operating with lower speed than allowed minimum speed, 3 times within 2 hours or been missing continuously for 1 hour.	Compressor blocked. Manual reset is possible when the alarm has disappeared.	- Check the main fuse and the group fuses and their connections. - If the fault occurs again; contact a service technician.
450	Inverter alarm type II	Not used function (false alarm)		- Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician.
451	Inverter alarm type II	Not used function (false alarm)		- Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician.
452	Inverter alarm type II	Power out from inverter to compressor has temporarily been too high.	Compressor stopped. Automatic reset 60 sec. after the inverter fault is corrected.	- Check the main fuse and the group fuses and their connections. - If the fault occurs again; contact a service technician.
453	Inverter alarm type II	Power out from inverter to compressor has temporarily been too high 3 times within 2 hours or been missing continuously in 1 hour.	Compressor blocked. Manual reset in menu.	- Check the main fuse and the group fuses and their connections. - If the fault occurs again; contact a service technician.
454	Inverter alarm type II	Temporary too high output from the inverter has occurred.	Compressor stopped. Automatic reset 60 sec. after the inverter has occurred.	- Check the main fuse and the group fuses and their connections. - If the fault occurs again; contact a service technician.
455	Inverter alarm type II	Temporary too high output from the inverter has occurred 3 times within 2 hours or been missing continuously in 1 hour.	Compressor blocked. Manual reset in menu.	- Check the main fuse and the group fuses and their connections. - If the fault occurs again; contact a service technician.
460	Inverter alarm type II	(Only 1-phase) Too high “power in” to inverter has temporarily occurred. Can depend on low incomming power (>198 VAC)	Compressor stopped. Automatic reset 60 sec. after the inverter fault is corrected.	- Check the main fuse and the group fuses and their connections. - If the fault occurs again; contact a service technician.

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
461	Inverter alarm type II	(Only 1-phase) Too high "power in" to inverter has temporarily occurred 3 times within 2 hours or been missing continuously in 1 hour. Can depend on low incomming power (>198 VAC)	Compressor blocked. Manual reset in menu.	- Check the main fuse and the group fuses and their connections. - If the fault occurs again; contact a service technician.
467	Inverter fault			
468	Inverter alarm type III	Not used function (false alarm)		Proposal: - Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician.
469	Inverter alarm type III	Not used function (false alarm)		Proposal: - Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician.
470	Inverter alarm type III	Not used function (false alarm)		Proposal: - Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician.
471	Inverter alarm type III	Not used function (false alarm)		Proposal: - Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician.
472	Inverter alarm type III	Not used function (false alarm)		Proposal: - Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician.
473	Inverter alarm type III	Not used function (false alarm)		Proposal: - Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician.
474	Inverter alarm type III	Not used function (false alarm)		Proposal: - Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician.

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
474	Inverter alarm type III	Not used function (false alarm)		Proposal: - Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician.
475	Inverter alarm type III	Not used function (false alarm)		Proposal: - Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician.
476	Inverter alarm type III	Not used function (false alarm)		Proposal: - Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician.
477	Inverter alarm type III	Not used function (false alarm)		Proposal: - Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician.
478	Inverter alarm type III	Not used function (false alarm)		Proposal: - Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician.
479	Inverter alarm type III	Not used function (false alarm)		Proposal: - Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician.
480		Not used function (false alarm)		Proposal: - Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician.
481	Inverter alarm type III	Not used function (false alarm)		Proposal: - Check the main fuse and the group fuses and their connections. - Restart the heat pump through the power switch to break the power. - If the alarm occurs again; contact a service technician.

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
482	Inverter is limited by temp	The inverter has been continuously limited by temperature protec-tion for more than 10 minutes.	No action. Automatic reset.	Poorly circulation in heating medium circuit. Proposal: - Bleed the heat pump and climate system - Check the filter so its not clogged - Open radiator- and floor thermostats. Bad touch of the inverter: - Check screws and paste
483	Inverter is limited for a long time	The inverter has been limited by temperature protection for more than 70% of the past 48 hours	Compressor allowed to run with limitation. Manual reset.	Poorcirculation in heating medium circuit. Proposal: - Purge the heat pump and climate system - Check the filter so its not clogged - Open radiator- and floor thermostats. Bad contact heat transfer of the inverter: - Check screws and paste
501	Failed start, no pressure diff.			
503	Compressor speed too low			
504	The inverter has a message	Accessory SOLAR; inverter has a message. Fault error code can be read in service info 3.1	No action. Automatic reset	
505	Inverter has earth fault	Accessory SOLAR; Inverter has earth fault	No action. Automatic reset	Proposal: Check connection of PVpanels/ inverter
506	Mains voltage outside inv. work. range	Accessory SOLAR; The mains supply has been outside the inverters working range for an extended period.	No action. Automatic reset	Proposal: Check the fuses and the mains network
507	Mains voltage outside inv. work. range	Accessory SOLAR: The inverter gives an error that the he mains voltage frequency (Fac) is temporarily outside the inverter working range	No action. Automatic reset	Proposal: Check the fuses and the mains network
508	Inv. lost contact with the mains.	The inverter has lost contact with the mains network	No action. Automatic reset	Proposal: Check the fuses and the mains network
509	High ambient temp. at inverter	Accessory SOLAR: The inverter ambient temperature is too high	Automatic reset	Proposal: Check the temperature in the installation area
510	Inverter has high DC voltage	Inverter has high DC voltage	Automatic reset	
511	No comm. with inverter for five days	There has been no communication with the inverter for five days. Check the installation.	Automatic reset or manual reset available in menu	Proposal: - Check the inverter - Check the communication cable and its connections toward the inverter
523	Low flow defrost	The flow over the condensor is too low	Terminating the defrost, automatic reset	Proposal: - Check the partical filter - Check the available system voume

NO.	ALARM	CAUSE	HEAT PUMP OPERATION	ACTION
524	Com. flt PCA Acc. HTS 2	Communication toward accessory card is missing. May be due to a temporary external disturbance, eg. thunder	Manual reset. Calculated cooling supply is set to 18 degrees if HTS is set to control cooling	Proposal: Check sensor and its connections. See also the electrical wiring diagram
525	Com. flt PCA Acc. HTS 3	Communication toward accessory card is missing. May be due to a temporary external disturbance, eg. thunder	Manual reset. Calculated cooling supply is set to 18 degrees if HTS is set to control cooling	Proposal: Check sensor and its connections. See also the electrical wiring diagram
526	Com. flt PCA Acc. HTS 4	Communication toward accessory card is missing. May be due to a temporary external disturbance, eg. thunder	Manual reset. Calculated cooling supply is set to 18 degrees if HTS is set to control cooling	Proposal: Check sensor and its connections. See also the electrical wiring diagram
991	Blocked	Blocked		
995	External alarm	An alarm according to chosen on the AUX-entrance.	Only information. Automatic reset when closing the entrance is broken.	- Check possible external connection function.
996	Blocked	External addition heat blocked through AUX-input.	Automatic reset when closing over the entrance is broken. Additional heat blocked.	
997	Compressor blocked	External compressor blocked through AUX-input.	Automatic reset when closing over the entrance is broken. Compressor blocked.	

Technische wijzigingen voorbehouden, ...

Versie: Augustus 2021

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