Number	Alarm	Cause:	Heat pump operation:	Action:	Type
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. VVM 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. VVM 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) VVM 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.	
8					

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.	
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)	Grounde 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.	
22	Sensor fault DEW-BT6	Sensor not connected/defective (hot water sensor, controlling in extra water heater)			
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 fault-tracing 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 fault-tracing 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) VVM 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-BT53	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 electric 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.	
40	Compressor phase1 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:	Compressor blocked. Manual reset.	Proposal: Groundsource: Check the brine flow and brine frost protection	

		The low pressure switch has triggered.		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.	Proposal: 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	
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.	
69			Not affected		

	Non-calibrated air flow sensor	The air flow sensor has not been calibrated		Perform a ventilation adj u stment 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 the base-, input- and display card.	
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 communiation 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-, input- and 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			Accessory blocked.		

	Perm. com. error additive with shunt	No communication with the accessory card.		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		F 1 1 0 : Defrost discontinued. Compressor stopped.	P r op o sal	
86	Perm. com. error SAM 40	No communication with the accessory card for SAM 40		- Check the power supply to the accessory card. - Check the setting of	

		which is activated in menu 5.2.		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.	Accessory blocked.	Proposal: Check the cables and cards.	

		Incorrect address on the dipswitch.			
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.	
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 PCD4	Permanent communication fault with the	Accessory blocked.	Proposal: Check the cables and cards.	

		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.			
95	Perm. Com. Error	Permanent communication fault with	Accessory blocked.	Proposal: Check 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	Propposal: - Check the power supply leading to inverter and communication cables.	
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	Sensro fault BT7	Sensor temporarily missing	Proposal: Check any sensors 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 BT12	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	
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	
150	High condensor out	Condensor out has reached max permitted temperature	Automatic reset		
155	Hot gas alarm	The Hot gas (BT14) has temporarilly been over 135° C	Compressor stopped. Automatically reset when the hot gas is below 90° C.	Proposal: - Contact a qualified service technician.	
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	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		
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	
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	
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	Permits room heating		

		outdoor temperature is below 3 degrees and no heating is permitted.			
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	Anti-freeze supply air	Supply air temperature (BT22) or the return temperature from the heating battery (BT69) is below	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	Temporary communication fault with accessory card with solar		Proposal: Check any cables/cards	
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		Proposal: Check any cables/cards	

		card with 2 pipe cooling		
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 FJ V M	Temporary communication fault with	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 3	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 NIBE 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 NIBE 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 NIBE 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 NIBE 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 NIBE F750 for fault specification.	
206	Perm. com. error HW-comfort	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		VVM 500: - Check the communication cables - Check the dip switch settings	
209	Com. error ACC-EPxx	3 communication faults in a row with the accessory 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.	Suggestion: - Upgrade firmware to at least version: F1155, F1255 v7740R4 F2120 v431 F750 v7679R4 F730 v7696R6 - Replace the inverter	
220	High pressure alarm	Heat pump (selected outdoor unit) sending fault message to the controller	Compressor blocked	See troubleshooting for selected outdoor unit.	
221	Low pressure alarm	Heat pump (selected outdoor unit) sending fault message to the controller	Comperssor blocked.	See troubleshooting for selected outdoor unit.	
222	Motor protection alarm	Heat pump (selected outdoor unit) sending fault message to the controller	Compressor blocked	See troubleshooting for 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. Read more in: TDI 20141023	
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.	
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	Compressor blocked		

		unit) sending fault message to the controller		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 any 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	
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.	

				Read more in: TDI 20141023	
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 protoection 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	Compressor blocked	Proposal: - Defect sensor - Insufficient air circulation - The heat exchanger is clogged - Defect control card EB101 - Too large amount of refrigerant	
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 interupted	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	
270	Compressor preheater is active		Preheat	Compressor is in preheat mode until BT29> B P8	
270	Preheating	Preheat of the compressor is active	Compressor is blocked. Automatic reset.		
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 HW-stop have been reset to factory settings	Adj u stment 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.			
275	Compressor phase overloaded longtime	Load monitor has caused the compressor not to operate with desired power.			
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	
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 communication 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.	
294	Not compatible heatpump	The alarm occurs if the outdoor unit toward VVM320 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. Read more in: TDI 20141023 , TDI 20140813	
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. Read more in: TDI 20141023	
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	
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	
340	Anti-freeze supply air	Supply air temperature (BT22) is below 11° C .	HW load blocked. Returns automatically when the supply air temperature exceeds 16°	- 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.	
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	
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	GP1 switches to manual speed if auto control is	Proposal: - Check the sensors	

		sensors BT3 and BT12. The difference is more than 2K between them at calibration.	selected. Manual reset of auto control in menu 5.1.11	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.	
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.	
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.	
420	Inverter alarm type II		Compressor stopped. Automatic reset 60 sec.	Proposal: - Check the main fuse	

		A temporary communication alarm has occured.	after the inverter fault is reset. The compressor will make a new attempt to start according to normal start routine.	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.	
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	A compressor phase 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.	
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	Compressor stopped. Automatic reset 60 sec.	Poor circulation in HM circuit. Proposal:	

		temperature because of poor cooling.	after the inverter fault is corrected.	- 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.	
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	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.	

		continuously for 1 hour.			
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 III	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 III	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 (> 1 98 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.	
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 (> 1 98	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.	
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.	
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.	
995	External alarm	An alarm according to chosen on the AUX - entrance.	Only information. A u tomatic reset w h en closing the entrance is	- Check possible external connection function.	
996	Blocked	External addition heat blocked through AUX -	Automatic reset when closing over the entrance is broken. Additional heat blocked.		
997	Compressor blocked	External compressor blocked through AUX -	Automatic reset when closing over the entrance is broken. Compressor blocked.		
998