BMS/parameter list for CTC EcoHeat

Detta tillbehör fungerar endast om produktens programversion är från 20120712 eller nyare

This accessory will only work if the product has program version 20120712 or later.

Dieses Zubehörteil funktioniert nur, wenn das Produkt mit der Programmversion 20120712 oder höher läuft.

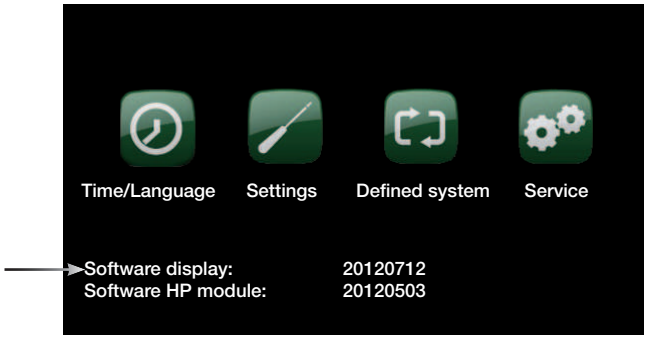
Cet accessoire ne pourra fonctionner que si le produit est équipé de la version 20120712 du programme ou d'une version plus récente.

Dit accessoire werkt alleen als het product programmaversie 20120712 of later heeft.

Dette tilbehør virker kun, hvis produktet har programversion 20120712 eller nyere.

Dette tilbehøret fungerer bare hvis produktets programversjon er fra 20120712 eller nyere

Tämä lisälaite toimii vain, jos tuotteen ohjelmaversio on päivätty aikaisintaan 20120712.



Regist	Byte no	Bit no	Description	Type	Values	Unit	Max	Min	R/W
100			Night reduction: Off, day by day, week program	S16	-1=Off, 0=Day by day, 1 =		1	-1	R/W
101			Night reduction: Day 1 - Decrease 1	S16	0-24, 25=off	h	25	0	R/W
102			Night reduction: Day 1 - Increase 1	S16	0-24, 25=off	h	25	0	R/W
103			Night reduction: Day 1 - Decrease 2	S16	0-24, 25=off	h	25	0	R/W
104			Night reduction: Day 1 - Increase 2	S16	0-24, 25=off	h	25	0	R/W
105			Night reduction: Day 2 - Decrease 1	S16	0-24, 25=off	h	25	0	R/W
106			Night reduction: Day 2 - Increase 1	S16	0-24, 25=off	h	25	0	R/W
107			Night reduction: Day 2 - Decrease 2	S16	0-24, 25=off	h	25	0	R/W
108			Night reduction: Day 2 - Increase 2	S16	0-24, 25=off	h	25	0	R/W
109			Night reduction: Day 3 - Decrease 1	S16	0-24, 25=off	h	25	0	R/W
110			Night reduction: Day 3 - Increase 1	S16	0-24, 25=off	h	25	0	R/W
111			Night reduction: Day 3 - Decrease 2	S16	0-24, 25=off	h	25	0	R/W
112			Night reduction: Day 3 - Increase 2	S16	0-24, 25=off	h	25	0	R/W
113			Night reduction: Day 4 - Decrease 1	S16	0-24, 25=off	h	25	0	R/W
114			Night reduction: Day 4 - Increase 1	S16	0-24, 25=off	h	25	0	R/W
115			Night reduction: Day 4 - Decrease 2	S16	0-24, 25=off	h	25	0	R/W
116			Night reduction: Day 4 - Increase 2	S16	0-24, 25=off	h	25	0	R/W
117			Night reduction: Day 5 - Decrease 1	S16	0-24, 25=off	h	25	0	R/W
118			Night reduction: Day 5 - Increase 1	S16	0-24, 25=off	h	25	0	R/W
119			Night reduction: Day 5 - Decrease 2	S16	0-24, 25=off	h	25	0	R/W
120			Night reduction: Day 5 - Increase 2	S16	0-24, 25=off	h	25	0	R/W
121			Night reduction: Day 6 - Decrease 1	S16	0-24, 25=off	h	25	0	R/W
122			Night reduction: Day 6 - Increase 1	S16	0-24, 25=off	h	25	0	R/W
123			Night reduction: Day 6 - Decrease 2	S16	0-24, 25=off	h	25	0	R/W
124			Night reduction: Day 6 - Increase 2	S16	0-24, 25=off	h	25	0	R/W
125			Night reduction: Day 7 - Decrease 1	S16	0-24, 25=off	h	25	0	R/W
126			Night reduction: Day 7 - Increase 1	S16	0-24, 25=off	h	25	0	R/W
127			Night reduction: Day 7 - Decrease 2	S16	0-24, 25=off	h	25	0	R/W
128			Night reduction: Day 7 - Increase 2	S16	0-24, 25=off	h	25	0	R/W
129			Night reduction Block - Decrease Day 1	S16	0 = Monday 1 = Tuesday 2 = Wednesday 3 = Thursday 4 = Friday 5 = Saturday 6= Sunday	d	6	0	R/W
130			Night reduction Block - Decrease Time 1	S16	Val * 0,5 = h	0,5 h	48	0	R/W
131			Night reduction Block - Increase Day 1	S16	Val * 0,5 = h	d	6	0	R/W
132			Night reduction Block - Increase Time 1	S16	Val * 0,5 = h	0,5 h	48	0	R/W
133			Night reduction Block - Decrease Day 2	S16	Val * 0,5 = h	d	6	0	R/W
134			Night reduction Block - Decrease Time 2	S16	Val * 0,5 = h	0,5 h	48	0	R/W
135			Night reduction Block - Increase Day 2	S16	Val * 0,5 = h	d	6	0	R/W
136			Night reduction Block - Increase Time 2	S16	Val * 0,5 = h	0,5 h	48	0	R/W
137			Night reduction 2: Off, day by day, week programme	S16	-1=Off, 0=Day by day, 1 =		1	-1	R/W
138			Night reduction 2: Day 1 - Decrease 1	S16	0-24, 25=off	h	24	0	R/W
139			Night reduction 2: Day 1 - Increase 1	S16	0-24, 25=off	h	24	0	R/W
140			Night reduction 2: Day 1 - Decrease 2	S16	0-24, 25=off	h	24	0	R/W
141			Night reduction 2: Day 1 - Increase 2	S16	0-24, 25=off	h	24	0	R/W
142			Night reduction 2: Day 2 - Decrease 1	S16	0-24, 25=off	h	24	0	R/W
143			Night reduction 2: Day 2 - Increase 1	S16	0-24, 25=off	h	24	0	R/W
144			Night reduction 2: Day 2 - Decrease 2	S16	0-24, 25=off	h	24	0	R/W
145			Night reduction 2: Day 2 - Increase 2	S16	0-24, 25=off	h	24	0	R/W
146			Night reduction 2: Day 3 - Decrease 1	S16	0-24, 25=off	h	24	0	R/W
147			Night reduction 2: Day 3 - Increase 1	S16	0-24, 25=off	h	24	0	R/W
148			Night reduction 2: Day 3 - Decrease 2	S16	0-24, 25=off	h	24	0	R/W
149			Night reduction 2: Day 3 - Increase 2	S16	0-24, 25=off	h	24	0	R/W
150			Night reduction 2: Day 4 - Decrease 1	S16	0-24, 25=off	h	24	0	R/W
151			Night reduction 2: Day 4 - Increase 1	S16	0-24, 25=off	h	24	0	R/W
152			Night reduction 2: Day 4 - Decrease 2	S16	0-24, 25=off	h	24	0	R/W
153			Night reduction 2: Day 4 - Increase 2	S16	0-24, 25=off	h	24	0	R/W
154			Night reduction 2: Day 5 - Decrease 1	S16	0-24, 25=off	h	24	0	R/W
155			Night reduction 2: Day 5 - Increase 1	S16	0-24, 25=off	h	24	0	R/W
156			Night reduction 2: Day 5 - Decrease 2	S16	0-24, 25=off	h	24	0	R/W
157			Night reduction 2: Day 5 - Increase 2	S16	0-24, 25=off	h	24	0	R/W
158			Night reduction 2: Day 6 - Decrease 1	S16	0-24, 25=off	h	24	0	R/W
159			Night reduction 2: Day 6 - Increase 1	S16	0-24, 25=off	h	24	0	R/W
160			Night reduction 2: Day 6 - Decrease 2	S16	0-24, 25=off	h	24	0	R/W
161			Night reduction 2: Day 6 - Increase 2	S16	0-24, 25=off	h	24	0	R/W
162			Night reduction 2: Day 7 - Decrease 1	S16	0-24, 25=off	h	24	0	R/W
163			Night reduction 2: Day 7 - Increase 1	S16	0-24, 25=off	h	24	0	R/W
164			Night reduction 2: Day 7 - Decrease 2	S16	0-24, 25=off	h	24	0	R/W
165			Night reduction 2: Day 7 - Increase 2	S16	0-24, 25=off	h	24	0	R/W

166			Night reduction 2: Block - Decrease Day 1	S16	0 = Monday 1 = Tuesday 2 = Wednesday 3 = Thursday 4 = Friday 5 = Saturday 6= Sunday	d	6	0	R/W
167			Night reduction 2 Block - Decrease Time 1	S16	Val * 0,5 = h	0,5 h	48	0	R/W
168			Night reduction 2 Block - Increase Day 1	S16	Val * 0,5 = h	d	6	0	R/W
169			Night reduction 2 Block - Increase Time 1	S16	Val * 0,5 = h	0,5 h	48	0	R/W
170			Night reduction 2 Block - Decrease Day 2	S16	Val * 0,5 = h	d	6	0	R/W
171			Night reduction 2 Block - Decrease Time 2	S16	Val * 0,5 = h	0,5 h	48	0	R/W
172			Night reduction 2 Block - Increase Day 2	S16	Val * 0,5 = h	d	6	0	R/W
173			Night reduction 2 Block - Increase Time 2	S16	Val * 0,5 = h	0,5 h	48	0	R/W
174			Extra DHW: Off, day by day	S16	-1=Off, 0=Day by day		0	-1	R/W
175			Extra DHW: Day 1 - Decrease 1	S16	0-24 h	h	24	0	R/W
176			Extra DHW: Day 1 - Increase 1	S16	0-24 h	h	24	0	R/W
177			Extra DHW: Day 1 - Decrease 2	S16	0-24 h	h	24	0	R/W
178			Extra DHW: Day 1 - Increase 2	S16	0-24 h	h	24	0	R/W
179			Extra DHW: Day 2 - Decrease 1	S16	0-24 h	h	24	0	R/W
180			Extra DHW: Day 2 - Increase 1	S16	0-24 h	h	24	0	R/W
181			Extra DHW: Day 2 - Decrease 2	S16	0-24 h	h	24	0	R/W
182			Extra DHW: Day 2 - Increase 2	S16	0-24 h	h	24	0	R/W
183			Extra DHW: Day 3 - Decrease 1	S16	0-24 h	h	24	0	R/W
184			Extra DHW: Day 3 - Increase 1	S16	0-24 h	h	24	0	R/W
185			Extra DHW: Day 3 - Decrease 2	S16	0-24 h	h	24	0	R/W
186			Extra DHW: Day 3 - Increase 2	S16	0-24 h	h	24	0	R/W
187			Extra DHW: Day 4 - Decrease 1	S16	0-24 h	h	24	0	R/W
188			Extra DHW: Day 4 - Increase 1	S16	0-24 h	h	24	0	R/W
189			Extra DHW: Day 4 - Decrease 2	S16	0-24 h	h	24	0	R/W
190			Extra DHW: Day 4 - Increase 2	S16	0-24 h	h	24	0	R/W
191			Extra DHW: Day 5 - Decrease 1	S16	0-24 h	h	24	0	R/W
192			Extra DHW: Day 5 - Increase 1	S16	0-24 h	h	24	0	R/W
193			Extra DHW: Day 5 - Decrease 2	S16	0-24 h	h	24	0	R/W
194			Extra DHW: Day 5 - Increase 2	S16	0-24 h	h	24	0	R/W
195			Extra DHW: Day 6 - Decrease 1	S16	0-24 h	h	24	0	R/W
196			Extra DHW: Day 6 - Increase 1	S16	0-24 h	h	24	0	R/W
197			Extra DHW: Day 6 - Decrease 2	S16	0-24 h	h	24	0	R/W
198			Extra DHW: Day 6 - Increase 2	S16	0-24 h	h	24	0	R/W
199			Extra DHW: Day 7 - Decrease 1	S16	0-24 h	h	24	0	R/W
200			Extra DHW: Day 7 - Increase 1	S16	0-24 h	h	24	0	R/W
201			Extra DHW: Day 7 - Decrease 2	S16	0-24 h	h	24	0	R/W
202			Extra DHW: Day 7 - Increase 2	S16	0-24 h	h	24	0	R/W
203			Room 1 Setpoint temperature	S16		0,1°C	300	50	R/W
204			Room 2 Setpoint temperature	S16		0,1°C	300	50	R/W
205			Vacation Days Remaining	S16		d	300	0	R/W
206			Extra DHW Time	S16		0,5h	20	0	R/W
207			DHW Level Setpoint: Economy, Normal, Comfort		ECONOMY=0 NORMAL=1 COMFORT=2		2	0	R/W
208			Heating circuit 1: Maximum primary flow	S16		0,1°C	800	300	R/W
209			Heating circuit 1: Minimum primary flow	S16		0,1°C	650	140	R/W
210			Heating circuit 1: Heating off temperature	S16		0,1°C	300	100	R/W
211			Heating circuit 1: Heating off time	S16		min	240	30	R/W
212			Heating circuit 1: Inclination	S16		0,1°C	850	250	R/W
213			Heating circuit 1: Adjustment	S16		0,1°C	200	-200	R/W
214			Heating circuit 1: Decrease Primary flow temperature	S16		0,1°C	0	-400	R/W
215			Heating circuit 1: Decrease Room temperatue	S16		0,1°C	0	-400	R/W
216		0	Heating circuit 1: Room sensor: Yes, no	BOOL	1=True, 0=False		1	0	R/W
220			Heating circuit 2: Maximum primary flow	S16		0,1°C	800	300	R/W
221			Heating circuit 2: Minimum primary flow	S16		0,1°C	650	140	R/W
222			Heating circuit 2: Heating off temperature	S16		0,1°C	300	100	R/W
223			Heating circuit 2: Heating off time	S16		min	240	30	R/W
224			Heating circuit 2: Inclination	S16		0,1°C	850	250	R/W
225			Heating circuit 2: Adjustment	S16		0,1°C	200	-200	R/W
226			Heating circuit 2: Decrease Primary flow temperature	S16		0,1°C	0	-400	R/W
227			Heating circuit 2: Decrease Room temperatue	S16		0,1°C	0	-400	R/W
228		0	Heating circuit 2: Room sensor: Yes, no	BOOL	1=True, 0=False		1	0	R/W
232			Compressor: Enabled, blocked	S16		On/Off	1	0	R/W
233			Brine pump on for 10 days: Yes, no	S16		day	10	0	R/W
234			Heat pump tariff control: Yes, no	S16		On/off	1	0	R/W
235			Upper tank immersion heater: Min temperature	S16		0,1°C	600	300	R/W
236			Upper tank immersion heater: Max temperature	S16		0,1°C	700	300	R/W
237			Upper tank immersion heater: Extra DHW temperature	S16		0,1°C	700	300	R/W
238			Upper tank immersion heater: Max power	S16		0,1kW	90	0	R/W
239			Mixing valve delay time: Off, 30-240 minutes	S16	30-240, < 30 = OFF	s	240	29	R/W
240			Main fuse size A	S16		0,1A	350	100	R/W
242			Tariff: Yes, no	BOOL	1=True, 0=False		1	0	R/W
243			External control mode: NR, SO, XDHW	S16	0=NR, 1=SO, 2=XDHW		2	0	R/W
244			Upper tank: Max heat pump temperature	S16		0,1°C	650	400	R/W
245			Upper tank: Max time			0,1°C	150	10	R/W
246			Lower tank: Max time			0,1°C	120	10	R/W
247			Heating circuit 2: Yes, no	BOOL	1=True, 0=False		1	0	R/W

248			Flow/level switch: Off, NC, NO	S16	0=Off, 1=NC, 2=NO		2	0	R/W
256			Language: Swedish, English, German, French, Finnish, Danish, Dutch, Norwegian	S16	0 = Swedish 1 =English 2=German 3=French, 4=Finnish, 5=Danish 6=Dutch 7=Norwegian				R/W
258			BMS Node address	S16	1-200		200	1	R/W
259			Baudrate	S16	0=9600, 1=19200		1	0	R/W
260			Parity	S16	0=No parity 1=Odd parity 2=Even parity		2	0	R/W
261			Stop Bit	S16	Stop bit		2	1	R/W
268			Write log to USB: Yes, no	BOOL	1=True, 0=False	1	0	0	R/W
290			Total operating hours low part	U16					R
291			Total operating hours high part (x 1000)	U16					R

296			Heating circuit 1: Highest primary flow temperature	S16					R
297			Heating circuit 2: Highest primary flow temperature	S16					R
301			Time: Minute	U16		m	59	0	R/W
302			Time: Hour	U16		h	23	0	R/W
303			Week day: Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday	U16	0 = Monday 1 = Tuesday 2 = Wednesday 3 = Thursday 4 = Friday 5 = Saturday 6= Sunday		6	0	R
304			Date: Day	U16			31	1	R/W
305			Date: Month	U16			12	1	R/W
306			Date: Year	U16			99	0	R/W
550									
		0	Alarm active	BOOL	1=True, 0=False				R
		1	Info: High current consumption	BOOL	1=True, 0=False				R
		2	N/A		1=True, 0=False				
		3	Info: Shut off	BOOL	1=True, 0=False				R
		4	Info: Extra DHW	BOOL	1=True, 0=False				R
		5	Heating circuit 1: Heating on	BOOL	1=True, 0=False				R
		6	Heating circuit 2: Heating on	BOOL	1=True, 0=False				R
		8	Info: Lower tank: Heat pump	BOOL	1=True, 0=False				R
		9	Info: Upper tank: Heat pump	BOOL	1=True, 0=False				R
		10	Info: Tariff, immersion heater blocked	BOOL	1=True, 0=False				R
		11	Info: Tariff, heat pump blocked	BOOL	1=True, 0=False				R
		12							
		13							
		14							
		15							
551				U16					
		0	Alarm: Upper tank temperature	BOOL	1=True, 0=False				R
		1	Alarm: Middle tank temperature	BOOL	1=True, 0=False				R
		2	Alarm: Lower tank temperature	BOOL	1=True, 0=False				
		3	Alarm: Outdoor temperature	BOOL	1=True, 0=False				R
		4	Alarm: Heating circuit 1 temperature	BOOL	1=True, 0=False				R
		5	Alarm: Return temperature	BOOL	1=True, 0=False				R
		6	Alarm: Heating circuit 2 temperature	BOOL	1=True, 0=False				R
		7	Alarm: Room 1 temperature	BOOL	1=True, 0=False				R
		8	Alarm: Room 2 temperature	BOOL	1=True, 0=False				R
		9	Alarm: Flow	BOOL	1=True, 0=False				R
		10	Alarm: Security thermostat	BOOL	1=True, 0=False				R
		11	Alarm: Communication relay card	BOOL	1=True, 0=False				R
		12	Alarm: Communication HP	BOOL	1=True, 0=False				R
		13	Alarm: Blown fuse	BOOL	1=True, 0=False				R
		14	Alarm: Compressor type	BOOL	1=True, 0=False				R
		15							
554			Upper tank: Used power	U16		0,1 Kw			R
558			Upper tank: Immersion heater setpoint temperature XDHW	S16		0,1 °C			R
559			Heating circuit 1: Primary flow setpoint temperature	S16		0,1 °C			R
560			Heating circuit 2: Primary flow setpoint temperature	S16		0,1 °C			R
561			Lower tank: Heat pump stop temperature	S16		0,1 °C			R
562			Upper tank: Heat pump stop temperature	S16		0,1 °C			R
563			Lower tank: Setpoint temperature	S16		0,1 °C			R
564			Upper tank: Setpoint temperature	S16		0,1 °C			R
565			Middle tank: Setpoint temperature	S16		0,1 °C			R
571			Work mode: Upper tank, lower tank, add heat, HP + add	U8	0 = HP Upper 1= HP Lower 2 = Boiler 3 = HP + Boiler				R
600			DHW temperature	S16		0,1°C			R
601	HwR		Upper tank temperature	S16		0,1°C			R
602	HwR		Middle tank temperature	S16		0,1°C			R
603	HwR		Lower tank temperature	S16		0,1°C			R
604	HwR		Condenser: Temperature out	S16		0,1°C			R
605	HwR		Condenser: Temperature in	S16		0,1°C			R
606	HwR		Outdoor temperature	S16		0,1°C			R
607	HwR		Heating circuit 1: Primary flow temperature	S16		0,1°C			R
608	HwR		Heating circuit 2: Primary flow temperature	S16		0,1°C			R
609	HwR		Room sensor 1: Temperature	S16		0,1°C			R

610	HwR		Room sensor 2: Temperature	S16		0,1°C			R
611	HwR		External add heat: Temperature	S16		0,1°C			R
612	HwR		Current: L1	U16		0,1A			R
613	HwR		Current: L2	U16		0,1A			R
614	HwR		Current: L3	U16		0,1A			R
617			Bits relay	U16					
		0	N/A	BOOL					R
		1	Hw Input: Security thermostat triggered	BOOL	1=True, 0=False				R
		2	Hw Input: Mixing valve auxiliary switch	BOOL	1=True, 0=False				R
		3	Hw Input: Electricity Low rate	BOOL	1=True, 0=False				R
		4	Hw Input: Blown fuse	BOOL	1=True, 0=False				R
		5	Hw Input: Flow/level switch triggered	BOOL	1=True, 0=False				R
		6	Hw Input: Remote control, NS/RS/XVV	BOOL	1=True, 0=False				R
		7	N/A	BOOL					R
620				U16					
		0	HW Output: Radiator pump 1	BOOL	1=True, 0=False				R
		1	HW Output: Radiator pump 2	BOOL	1=True, 0=False				R
		2	HW Output: Mixing valve 1: Open	BOOL	1=True, 0=False				R
		3	HW Output: Mixing valve 1: Close	BOOL	1=True, 0=False				R
		4	HW Output: Mixing valve 2: Open	BOOL	1=True, 0=False				R
		5	HW Output: Mixing valve 2: Close	BOOL	1=True, 0=False				R
		6	HW Output: DHW Valve	BOOL	1=True, 0=False				R
		7	HW Output: Immersion heater: Low L1	BOOL	1=True, 0=False				R
		8	HW Output: Immersion heater: High L1	BOOL	1=True, 0=False				R
		9	HW Output: Immersion heater: Low L2	BOOL	1=True, 0=False				R
		10	HW Output: Immersion heater: High L2	BOOL	1=True, 0=False				R
		11	HW Output: Immersion heater: High L3	BOOL	1=True, 0=False				R
		12	HW Output: Immersion heater: Low L3	BOOL	1=True, 0=False				R
		13	HW Output: Immersion heater: 3 kW	BOOL	1=True, 0=False				R
		14	HW Output: Immersion heater: 6 kW	BOOL	1=True, 0=False				R
		15							
621				U16					
		0	HW Output: Alarm active		1=True, 0=False				R
		2	HW Output: Alarm led (analog room sensor)		1=True, 0=False				R
		3							
		4							
		5							
		6							
		7							
		8							
		9							
		10							
		11							
		12							
		13							
		14							
		15							
630			Heat pump 1: Brine temperature out	S16		0,1 °C			R
631			Heat pump 1: Brine temperature in	S16		0,1 °C			R
632			Heat pump 1: Flow temperature in	S16		0,1 °C			R
634			Heat pump 1: Flow temperature out	S16		0,1 °C			R
635			Heat pump 1: Discharge temperature	S16		0,1 °C			R
636			Heat pump 1: Suction gas temperature	S16		0,1 °C			R
637			Heat pump 1: High pressure	S16		0,1 Bar			R
638			Heat pump 1: Low pressure	S16		0,1 Bar			R
639			Heat pump 1: Calculated condensing temperature	S16		0,1 °C			R
640			Heat pump 1: Calculated evaporating temperature	S16		0,1 °C			R
641			Heat pump 1: Superheat	S16		0,1 °C			R
642			Heat pump 1: Expansion valve position	S16		0,1%			R
644			Heat pump 1: Heat quantity counter capacity	S16		0,1 Kw			R
645			Heat pump 1: Sort start current	S16		0,1 A			R
647			Heat pump 1: Compressor start delay timer	S16		1 min			R
648			Heat pump 1: Charge pump value (%)	S16		0,1 %			R
650			Heat pump 1: Relays	S16					R
		0	HW output: Compressor on/off	BOOL	1=On, 0=Off				R
		3	HW output: Brine pump on/off (EcoPart, EcoHeat)	BOOL	1=On, 0=Off				R
		7		BOOL					R
		8		BOOL					R
		9		BOOL					R
		10		BOOL					R
		11		BOOL					R
		12		BOOL					R
		13		BOOL					R
		14		BOOL					R
		15		BOOL					R
656			Heat pump 1: Alarm 1	S16					R
		0		BOOL					
		1		BOOL					
		2		BOOL					
		3	Alarm 1: Pump overload	BOOL	1=True, 0=False				R
		4	Alarm 1: System pump overload	BOOL	1=True, 0=False				R
		5	Alarm 1: Compressor overload	BOOL	1=True, 0=False				R
		6		BOOL					

		7	Alarm 1: High pressure	BOOL	1=True, 0=False				R
		8		BOOL					
		9		BOOL					
		10		BOOL					
		11		BOOL					
		12	Alarm 1: Low brine flow	BOOL	1=True, 0=False				R
		13	Alarm 1: Low brine temperature	BOOL	1=True, 0=False				R
		14		BOOL					
		15		BOOL					
657			Heat pump 1: Alarm 2	S16					
		0	Alarm 2: Sensor brine out	BOOL	1=True, 0=False				R
		1	Alarm 2: Sensor brine in	BOOL	1=True, 0=False				R
		2		BOOL					
		3	Alarm 2: Sensor heat pump in	BOOL	1=True, 0=False				R
		4		BOOL					
		5	Alarm 2: Sensor outdoor	BOOL	1=True, 0=False				R
		6	Alarm 2: Sensor heat pump out	BOOL	1=True, 0=False				R
		7		BOOL					
		8	Alarm 2: Sensor discharge	BOOL	1=True, 0=False				R
		9	Alarm 2: Sensor suction gas	BOOL	1=True, 0=False				R
		10	Alarm 2: Sensor high pressure	BOOL	1=True, 0=False				R
		11	Alarm 2: Sensor low pressure	BOOL	1=True, 0=False				R
		12	Alarm 2: Fan	BOOL	1=True, 0=False				R
		13		BOOL					
		14		BOOL					
		15		BOOL					
658			Heat pump 1: Alarm 3	S16	1=True, 0=False				R
		0	Alarm 3: Compressor Inverter	BOOL	1=True, 0=False				R
		1		BOOL					
		2		BOOL					
		3		BOOL					
		4		BOOL					
		5		BOOL					
		6		BOOL					
		7		BOOL					
		8		BOOL					
		9		BOOL					
		10		BOOL					
		11		BOOL					
		12		BOOL					
		13	Alarm 3: EVO Off	BOOL	1=True, 0=False				R
		14		BOOL					
		15		BOOL					
659			Heat pump 1: Alarm 4	S16					R
		0	Alarm 4: Compressor high current	BOOL	1=True, 0=False				R
		1	Alarm 4: Compressor low current	BOOL	1=True, 0=False				R
		2	Alarm 4: Phase 1 missing	BOOL	1=True, 0=False				R
		3	Alarm 4: Phase 2 missing	BOOL	1=True, 0=False				R
		4	Alarm 4: Phase 3 missing	BOOL	1=True, 0=False				R
		5	Alarm 4: Phase sequence error	BOOL	1=True, 0=False				R
		6	Alarm 4: Communication error Softstarter	BOOL	1=True, 0=False				R
		7		BOOL					
		8		BOOL					
		9		BOOL					
		10		BOOL					
		11		BOOL					
		12		BOOL					
		13		BOOL					
		14		BOOL					
		15		BOOL					
663			Heat pump 1: Compressor operating hours (high)	U16	h x 1000				R
664			Heat pump 1: Compressor operating hours (low)	U16	h x 1				R
665			Heat pump 1: Compressor operating time/24 hours	U16	1 min				R
666			Heat pump 1: Compressor starts/24 hours	U16					R
670			Heat pump 1: Flow temperature in (when alarm occurred)	S16	0,1 °C				R
671			Heat pump 1: Flow temperature out (when alarm occurred)	S16	0,1 °C				R
672			Heat pump 1: Brine temperature in (when alarm occurred)	S16	0,1 °C				R
673			Heat pump 1: Brine temperature out (when alarm occurred)	S16	0,1 °C				R
674			Heat pump 1: Outdoor temperature (when alarm occurred)	S16	0,1 °C				R
675			Heat pump 1: Superheat temperature (when alarm occurred)	S16	0,1 °C				R
676			Heat pump 1: High pressure (when alarm occurred)	S16	0,1 Bar				R
677			Heat pump 1: Low pressure (when alarm occurred)	S16	0,1 Bar				R
678			Heat pump 1: Expansion valve position (when alarm occurred)	S16	0,1 %				R
679			Heat pump 1: Soft starter current (when alarm occurred)	S16	0,1 A				R
680			Heat pump 1: Evo firmware version	S16					R

681			Heat pump 1: Software version	S16					R
682			Heat pump 1: Discharge superheat temperature (when alarm occurred)	S16	0,1 °C				R
690				U16					
		0	Info: Compressor start delay	BOOL	1=True, 0=False				R
		1	Info: Heating circuit 1 - heating off	BOOL	1=True, 0=False				R
		2	Info: Heating circuit 2 - heating off	BOOL	1=True, 0=False				R
		3	Info: Power limitation	BOOL	1=True, 0=False				R
		4	Info: High current	BOOL	1=True, 0=False				R
		5	Info: Tariff - heat pump blocked	BOOL	1=True, 0=False				R
		6	Info: Tariff - immersion heater blocked	BOOL	1=True, 0=False				R
		7	Info: Compressor blocked	BOOL	1=True, 0=False				R
		8		BOOL					R
		9		BOOL					R
		10		BOOL					R
		11		BOOL					R
		12		BOOL					R
		13		BOOL					R
		14		BOOL					R
		15		BOOL					R
691			Program version: Month Day	U16					R
692			Program version: Year	U16					R