EN

# Building Management System (BMS)

## What is BMS?

A Building Management System (BMS), also known as a Building Automation System (BAS), is a computer-based control system that manages and controls the various building systems, including HVAC, lighting, security, and other building systems. It is used to monitor and control the building's environment, ensuring that it is safe, efficient, and comfortable for the occupants.

The BMS system for heat pumps is composed of hardware and software components that work together to manage and control the heat pump system. The hardware components include sensors, controllers, and actuators that are installed in the heat pump system. The software components include the BMS software application that runs on a computer and the user interface that allows building managers to interact with the system.

The BMS system for heat pumps operates by collecting data from heat pump system, such as temperature, pressure, and flow rate. The data is then analysed and used to control the heat pump system. E.g adjusting the Max compressor speed to reduce energy use in times where electricity is expensive.

### Define BMS

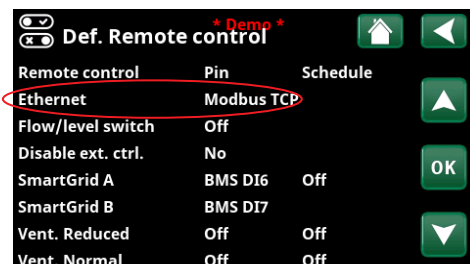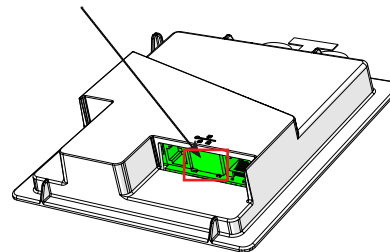To establish communication between the heat pump and the BMS system, "Modbus TCP" must be defined in the display menu "Define remote" (if connecting to the display via the Ethernet connection port). For more information, see the heat pump user manual.

> **i** Only displays with 3 ports can use BMS via TCP/IP.

Ethernet connection port (Modbus TCP/IP)





Display menu "Installer/Define/Remote Control".

# Important to remember!

**A BMS system should only be used by specialist programmers. Nevertheless, it is crucial to know how the CTC controller works.**

Programmers should always use QModMaster if they are testing the functionality.

This program can be found free of charge on the internet.
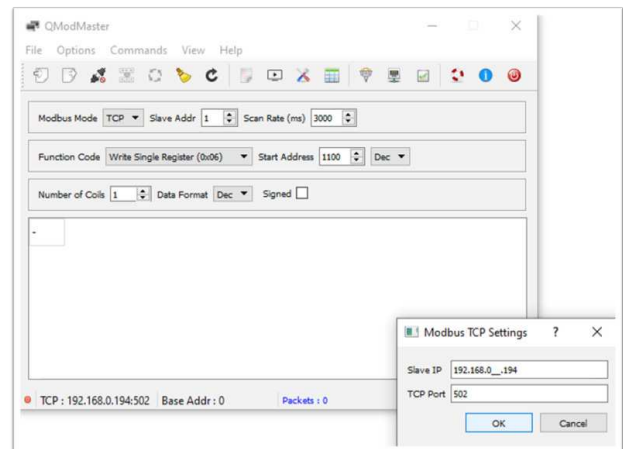
Make sure the base address is always set to 0:
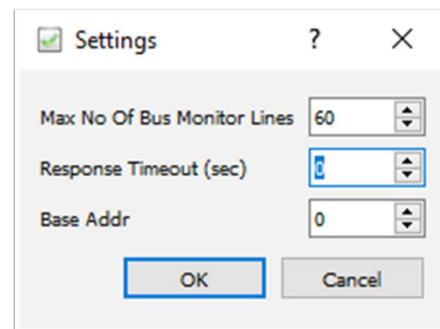
# General data

Register number starts above standard Modbus (larger than 49999)

| | |
|---|---|
| Reading: Analogue Output Holding Registers | Function code: 0x03H / 3 |
| Writing: Analogue Output Holding Registers | Function code:0x10H / 16 |
| Offset: 0 | |
| Max register per transmission: 100. | |

# How to read the BMS list

| BMS Register | English | Signed | Read/ Write | Max | Min | Step | Visible | Bit | Factor |
|---|---|---|---|---|---|---|---|---|---|
| 61500 | Hot water mode<br>0=Economy<br>1=Normal<br>2=Comfort<br>3=Customized | 1 | RW | 60000 | 60001 | 60002 | 62500 | 0 | 1 |
| 61501 | Manual Stop temperature hot water | 1 | RW | 60003 | 60004 | 60005 | 62500 | 1 | 0,1 |
| 61502 | Setting outlet temperature hot water | 1 | RW | 60006 | 60007 | 60008 | 62500 | 2 | 0,1 |
| 61503 | Extra hot water timer | 1 | RW | 60009 | 60010 | 60011 | 62500 | 3 | 0,5 |
| 61504 | Maximum time heating Heat pump | 1 | RW | 60012 | 60013 | 60014 | 62500 | 4 | 1 |
| 61505 | Maximum time hot water | 1 | RW | 60015 | 60016 | 60017 | 62500 | 5 | 1 |
| 61506 | Minimum RPS hot water | 1 | RW | 60018 | 60019 | 60020 | 62500 | 6 | 0,1 |
| 61507 | Minimum RPS Pool | 1 | RW | 60021 | 60022 | 60023 | 62500 | 7 | 0,1 |
| 61508 | Number of vacation days timer | 1 | RW | 60024 | 60025 | 60026 | 62500 | 8 | 1 |
| 61509 | Heating system 1: Setting room temp | 1 | RW | 60027 | 60028 | 60029 | 62500 | 9 | 0,1 |
| 61510 | Heating system 2: Setting room temp | 1 | RW | 60030 | 60031 | 60032 | 62500 | 10 | 0,1 |
| 61511 | Heating system 3: Setting room temp | 1 | RW | 60033 | 60034 | 60035 | 62500 | 11 | 0,1 |
| 61512 | Heating system 4: Setting room temp | 1 | RW | 60036 | 60037 | 60038 | 62500 | 12 | 0,1 |

**BMS Register**

A BMS register is a memory location in a Building Management System (BMS) controller that stores specific data related to building system functions. The data can include temperature setpoints, occupancy levels, and energy usage data. The BMS software uses registers to monitor and control the building systems.

e.g. 61502 : 450 x factor = 45 (°C)
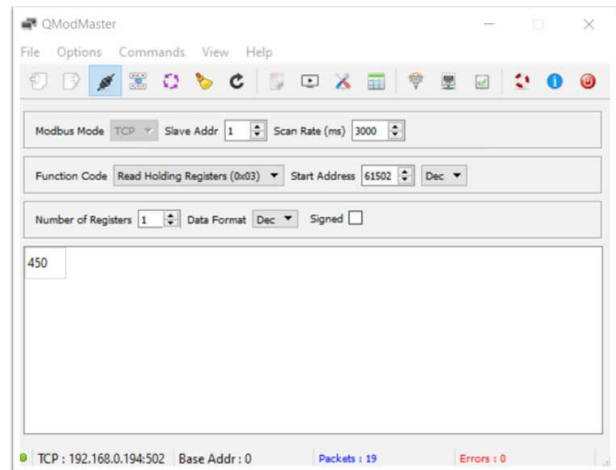


**Description**

This is the explanation in short text of the meaning of the BMS register.

**Signed**

In a BMS, "signed" refers to a data type that can store both positive and negative values. It is used to represent data, such as temperature, that can have a range of values that includes negative numbers. An "unsigned" data type can only store positive values.

## R/W

In BMS, "R/W" stands for "Read/Write" and refers to the ability to read and write data from a specific register. "R/W" registers can read and write data. "R" registers can only read data (e.g. sensors)

### Max

"Max" stands for maximum value. This refer to the highest value that can be set for a particular parameter in the BMS software. For example, the Max outlet temperature for hot water.

Reading register 60006 returns the value 650 with a factor 0,1. This means that the Max outlet temperature for hot water is 65°C.

### Min

"Min" stands for Minimum setpoint: This refers to the lowest value that can be set for a particular parameter in the BMS software. For example, the minimum outlet temperature for hot water.

Reading register 60007 returns the value 380 with a factor 0,1. This means the minimum outlet temperature for hot water is 38°C.

### Step

"Step" is the gradual change of a parameter that is possible. For example, the step of the outlet temperature for hot water. Reading register 60008 returns the value 10 with a factor 0,1. This means that the step is 1°C.

### Factor

This value is used to indicate the multiplication factor that is used to calculate the actual number (temperature, RPS, timer,… ).  E.g., register 60006 : 650 x 0,1 (factor) = 65 (°C).

### Visible & Bit

These 2 are working together. Not all registers/ parameters are visible. It will depend on the product and if it is defined.

e.g. reading register 62500 : 8575

Translated in binary this is:



Bit 7 is 0, this means it is not activated. This is the minimum RPS of the pool and the pool is not defined in this example.

**WARNING!**
These parameters must not be changed a lot of times. If you do so you risk breaking the controller of the heat pump installation. There is a limit to the amount of write cycles!

For parameters that need to be changed often, we have a solution with register 1000. See chapter Control parameters.
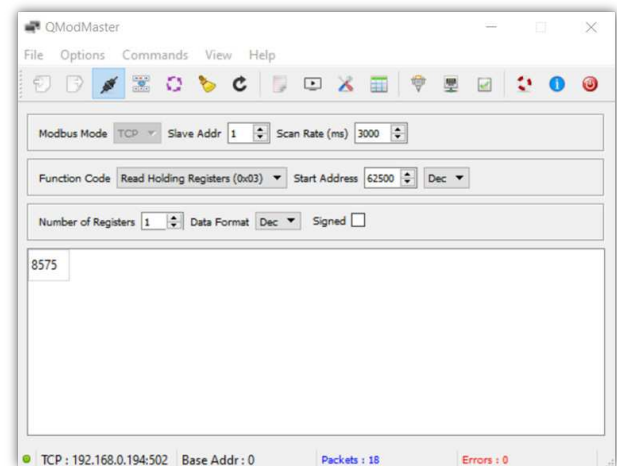
# Control parameters

There are a number of 1000 registers. These registers are to be used to actively control and regulate parameters. These records need to be updated every 5 minutes or they will be reset. They will also be reset on restart.

These parameters can be set as much as the programmer wants, without any risks.

## Control parameters for CTC EcoLogic S

For CTC EcoLogic S there are 2 specific registers. The fist one is for starting and stopping the heat pump. The second one is for setting the primary flow of the heat pump.

| Function | Address |
|---|---|
| Start heat pump | 1000 |
| Setpoint for primary flow | 1001 |

This is for customers who build their own systems where they themselves control shunts, switch valves, tips etc. and where they use their own logic for what the heat pump should do.

## Control parameters for all other controllers

| Function | Address |
|---|---|
| Max RPS compressor | 1002 |
| Max power immersion heater lower tank (For all controllers) | 1003 |
| Max power immersion heater upper tank (For CTC EcoZenith i255, CTC EcoZenith i555 and CTC EcoLogic M/L[1]) | 1004 |
| Virtrual digital in | 1100[2] |

[1]      Depending on the selected system

[2]      Virtual digital inputs, instead of K22-K24 for the same functions

E.g. for a heating system high heating curve can be set and then address 1002 can be controlled to obtain the desired supply from the heat pump.

The immersion heater can also be limited/controlled with these registers.

# Virtual Digital inputs (Register 1100)

Virtual digital inputs are software-based inputs that simulate physical inputs in a BMS. They are used when physical inputs are not available or cannot be installed. E.g. they can be used for controlling the SmartGrid system of the CTC controller.
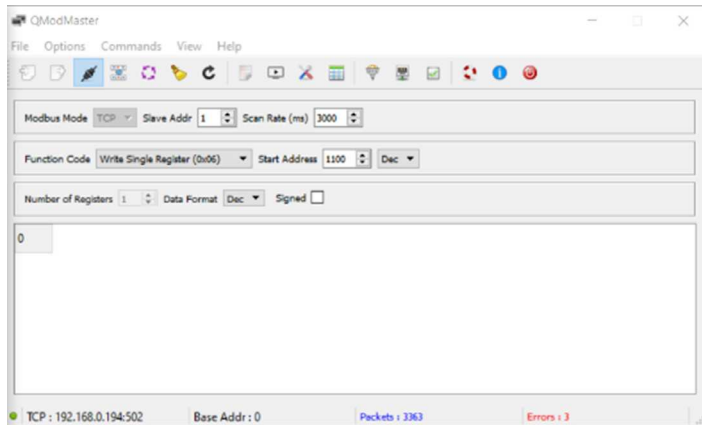


| PIN | BIT |
|-----|-----|
| BMS Di 0 | Bit 0 |
| BMS Di 1 | Bit 1 |
| BMS Di 2 | Bit 2 |
| BMS Di 3 | Bit 3 |
| BMS Di 4 | Bit 4 |
| BMS Di 5 | Bit 5 |
| BMS Di 6 | Bit 6 |
| BMS Di 7 | Bit 7 |

If register 1100 is 0 it means that all 8 bits (0 to 7) are open.
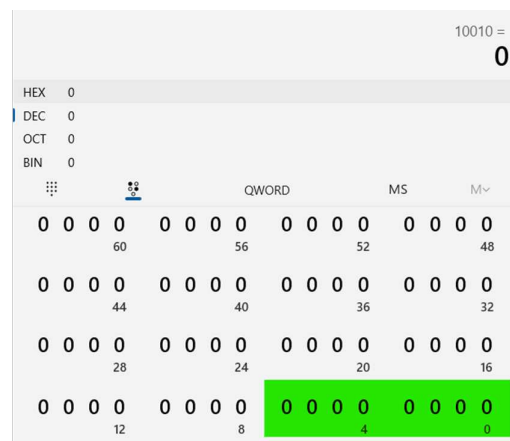


If register 1100 is 255 it means that all 8 bits (0 to 7) are closed.
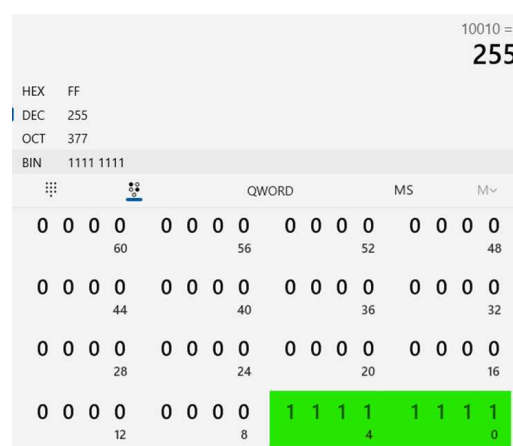
## Example with SmartGrid

In this example we use digital input 6 (DI6) for SmartGrid A and digital input 7 (DI7) for SmartGrid B. To make it easy we assume other digital inputs are not used.

| K22 (SG A) | K23 (SG B) | Function |
|---|---|---|
| Open | Open | Normal |
| Open | Closed | Low price |
| Closed | Closed | Overcapacity |
| Closed | Open | Blocking |
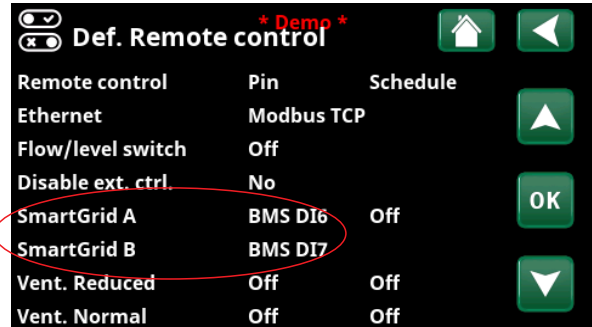


### Function Normal
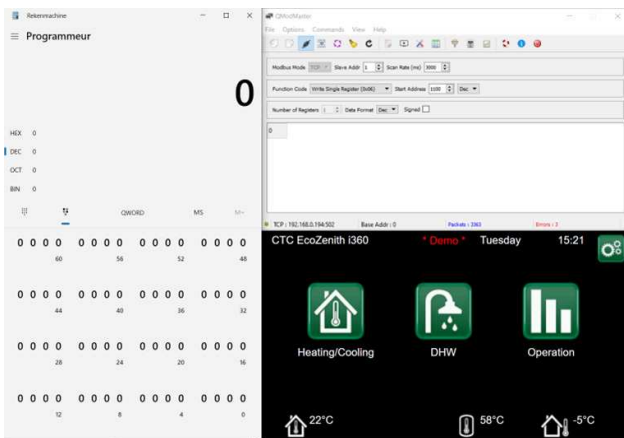


### Function Low price
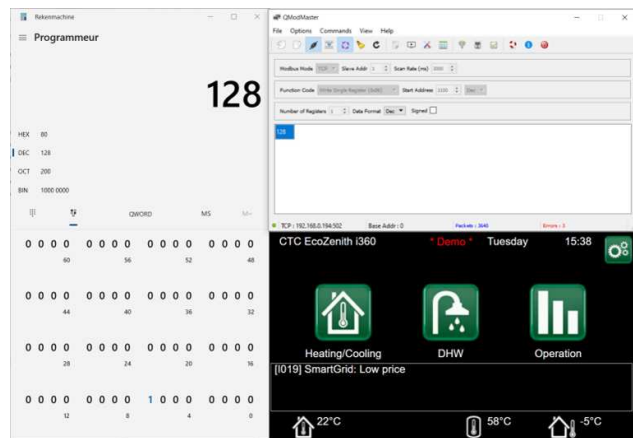


### Function Overcapacity
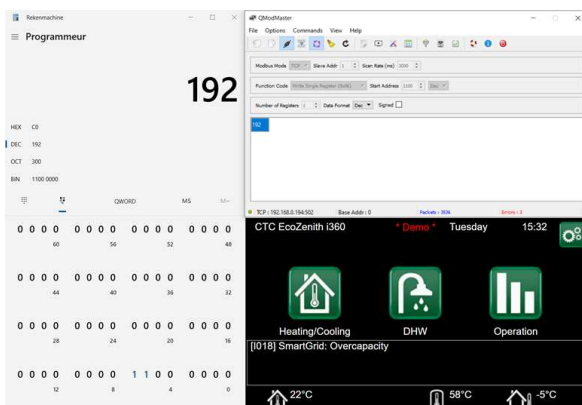


### Function Blocking
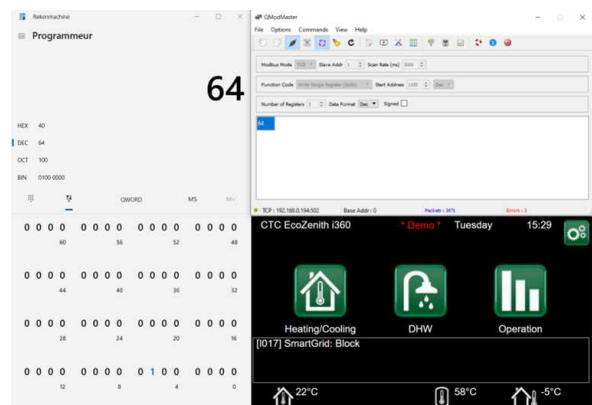


Remark: the priority for SmartGrid is:

1. Remote control (BMS/contact/...)
2. My uplink
3. Week schedule
4. Setting

If both contacts are open (normal working) there is of course no priority for BMS or contacts.

# Alarms and information texts

For the alarms and info texts we work in 2 steps.

- First step (How many alarms/info texts do we have?)
- Second step (What is the exact alarm/info text?)

## How many alarms/info texts do we have?

To know how many alarms/info texts you have, you should read register 65133.

You must look at the number in a hexadecimal way to know how many alarms and how many info text you have.

First 2 digits are for the info texts, the second 2 digits are for the alarms.

The absolute Max you can have, is FFFF (or 255 info texts and 255 alarms).

**An Example:**

#0202 (In hex.)

=> 02 = 2 information texts

=> 02 = 2 alarms
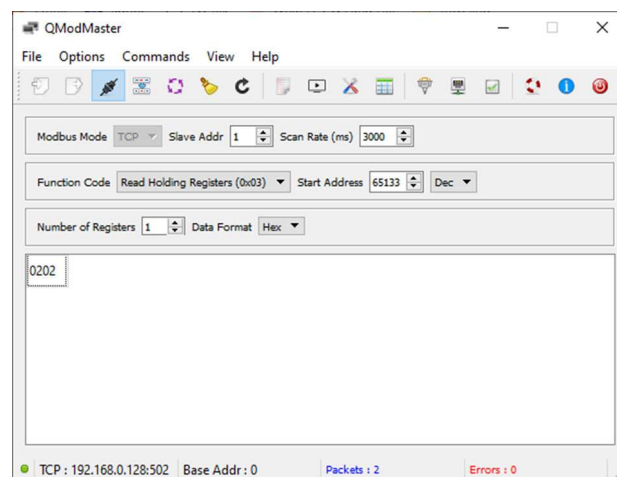
## What is the exact alarm/ info text?

In the next step you can see the details of the alarms & info texts.

Reading register 65133 must precede this step as it populates the data in the buffers.

|  | Registers |
| --- | --- |
| Alarms | 65010 - 65059 |
| Info texts | 65060 - 65069 |

| Register | Alarm number | Explanation |
| --- | --- | --- |
| 65010 | 1 | HP alarm (HP 1-10). |
|  |  | '1' if it is an HP alarm, '0' if it is another alarm e.g., problem with sensor EcoZenith. |
| 65011 | 1 | The actual alarm code |
| 65012 | 2 | HP alarm (HP 1-10). |
|  |  | '1' if it is an HP alarm, '0' if it is another alarm e.g., problem with sensor EcoZenith. |
| 65013 | 2 | The actual alarm code |
| 65014 | 3 | HP alarm (HP 1-10). |
|  |  | '1' if it is an HP alarm, '0' if it is another alarm e.g., problem with sensor EcoZenith. |
| 65015 | 3 | The actual alarm code |
| 65016 | 4 | ... |

| Register | Alarm number | Explanation |
| --- | --- | --- |
| 65060 | 1 | HP info text (HP 1-10). |
|  |  | '1' if it is an HP info text, '0' if it is another info text e.g., HC1 Heating off. |
| 65061 | 1 | The actual information text code |
| 65062 | 2 | HP info text (HP 1-10). |
|  |  | '1' if it is an HP info text, '0' if it is another info text e.g., HC1 Heating off. |
| 65063 | 2 | The actual information text code |
| 65064 | 3 | ... |

## An example for alarms

| Register | Alarm number | Value | Explanation |
|----------|--------------|-------|-------------|
| 65010 | 1 | 0 | Not a HP alarm |
| 65011 | 1 | E155 | SmartControl |
| 65012 | 2 | 0 | Not a HP alarm |
| 65013 | 2 | E158 | Alarm Vent. Filter |
| 65014 | 3 | 0 | NA, no 3rd alarm |
| 65015 | 3 | 0 | N/A |
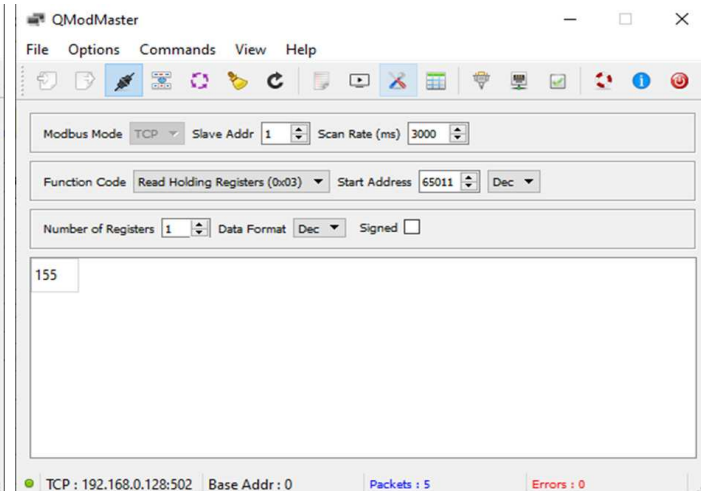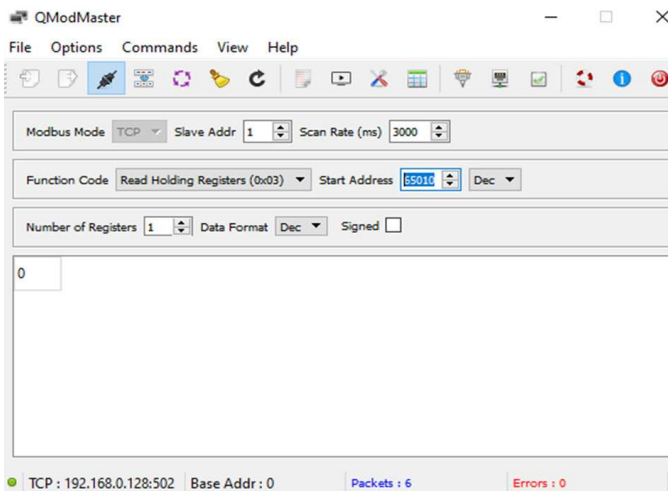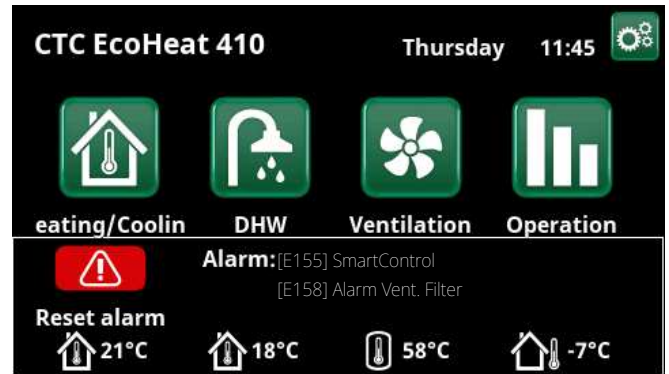






## An example for information texts

| Register | Alarm number | Value | Explanation |
|----------|--------------|-------|-------------|
| 65060 | 1 | 0 | Not a HP info |
| 65061 | 1 | I2 | HC1 Heating off |
| 65062 | 2 | 0 | Not a HP info |
| 65063 | 2 | I3 | Cooling active |
| 65064 | 3 | 0 | NA, no 3rd alarm |
| 65065 | 3 | 0 | N/A |
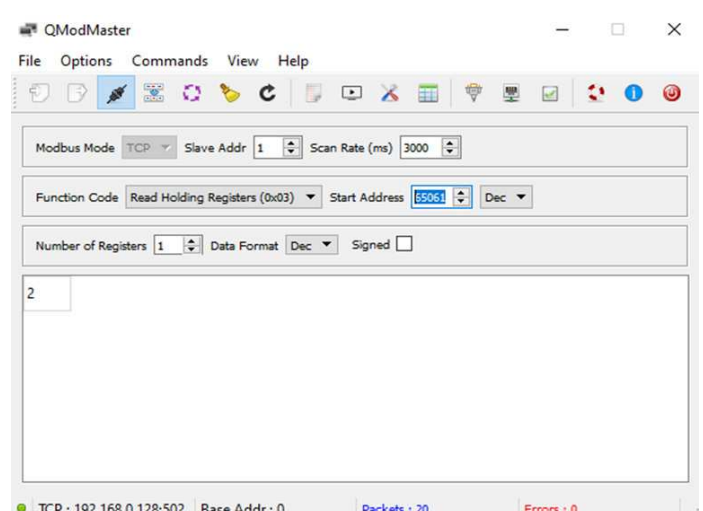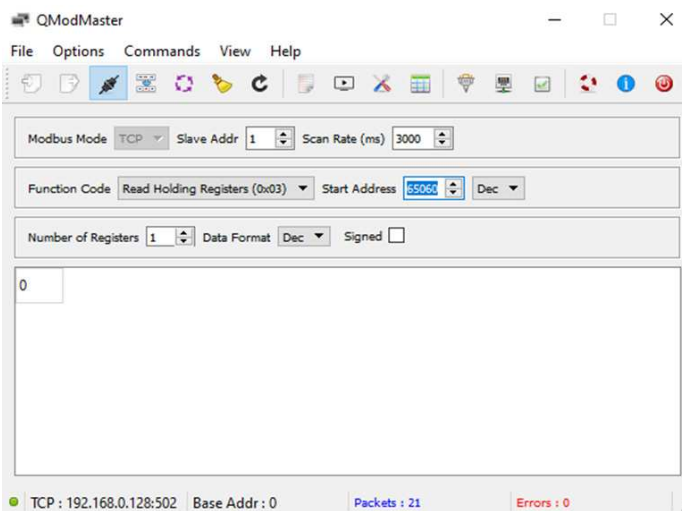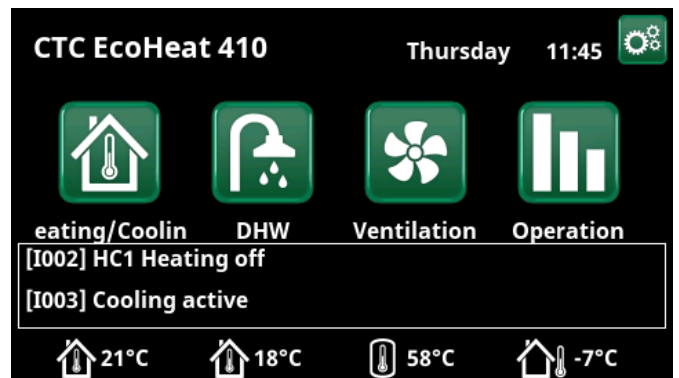
# Modbus address register

See the complete BMS list at the end of this document.

Note that not all parameters of the BMS list can be used for heatpump control if your display is not equipped with 3 ports (BMS via TCP/IP).

# Vad är BMS?

Ett Building Management System (BMS), även kallat Building Automation System (BAS), är ett datorbaserat styrsystem som hanterar och kontrollerar de olika byggnadssystemen, inklusive HVAC, belysning, säkerhet och andra byggnadssystem. Det används för att övervaka och styra byggnadens miljö och se till att den är säker, effektiv och bekväm för de boende.

BMS-systemet för värmepumpar består av hårdvaru- och programvarukomponenter som arbetar tillsammans för att hantera och styra värmepumpsystemet. Hårdvarukomponenterna omfattar givare, styrenheter och ställdon som är installerade i värmepumpsystemet. Programvarukomponenterna omfattar BMS-programvaran som körs på en dator och användargränssnittet som gör det möjligt för fastighetsförvaltare att interagera med systemet.

BMS-systemet för värmepumpar fungerar genom att samla in data från värmepumpsystemet, såsom temperatur, tryck och flödeshastighet. Uppgifterna analyseras sedan och används för att styra värmepumpsystemet. T.ex. justering av kompressorns maximala varvtal för att minska energianvändningen i tider då elen är dyr.

**Definiera BMS**

För att upprätta kommunikation mellan värmepumpen och BMS-systemet måste "Modbus TCP" definieras i displaymenyn "Definiera fjärr" (vid anslutning till displayen via Ethernet-anslutningsporten). För mer information, se värmepumpens Installations- och skötselanvisning.

> **i** Endast displayer med 3 anslutningsportar kan anslutas till BMS via TCP/IP.

Ethernet anslutningsport (Modbus TCP/IP)
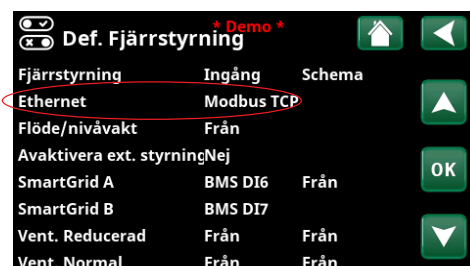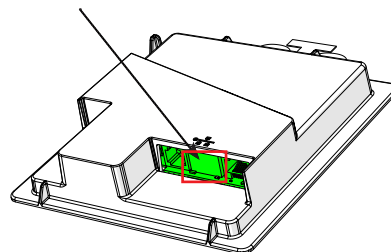




Displaymeny "Avancerat/Definiera/Fjärrstyrning".

## Viktigt att komma ihåg!

**Ett BMS-system bör endast användas av specialiserade programmerare. Trots detta är det viktigt att veta hur CTC-regulatorn fungerar.**

Programmerare bör alltid använda QModMaster när de testar funktionaliteten.
Detta program finns kostnadsfritt på Internet.
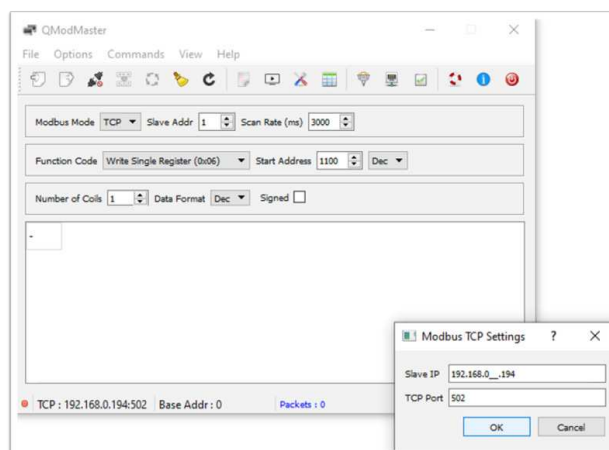


Kontrollera att basadressen alltid är 0:
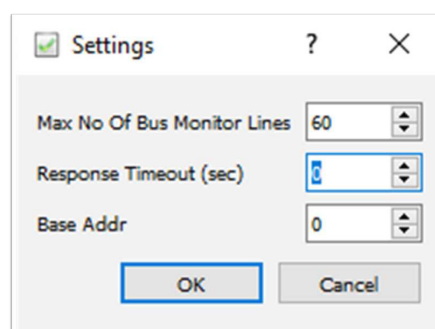


## Allmänna data

Registernummer startar över standard Modbus (större än 49999)
Läsa: Analoga Holding Output register      Funktionskod: 0x03H / 3
Skriva: Analoga Holding Output register      Funktionskod: 0x10H / 16
Offset: 0
Max antal register per överföring: 100.

# Hur man läser BMS-listan

| BMS Register | English | Signed | Read/Write | Max | Min | Step | Visible | Bit | Factor |
|---|---|---|---|---|---|---|---|---|---|
| 61500 | Hot water mode<br>0=Ecomony<br>1=Normal<br>2=Comfort<br>3=Customized | 1 | RW | 60000 | 60001 | 60002 | 62500 | 0 | 1 |
| 61501 | Manual Stop temperature hot water | 1 | RW | 60003 | 60004 | 60005 | 62500 | 1 | 0,1 |
| 61502 | Setting outlet temperature hot water | 1 | RW | 60006 | 60007 | 60008 | 62500 | 2 | 0,1 |
| 61503 | Extra hot water timer | 1 | RW | 60009 | 60010 | 60011 | 62500 | 3 | 0,5 |
| 61504 | Maximum time heating Heat pump | 1 | RW | 60012 | 60013 | 60014 | 62500 | 4 | 1 |
| 61505 | Maximum time hot water | 1 | RW | 60015 | 60016 | 60017 | 62500 | 5 | 1 |
| 61506 | Minimum RPS hot water | 1 | RW | 60018 | 60019 | 60020 | 62500 | 6 | 0,1 |
| 61507 | Minimum RPS Pool | 1 | RW | 60021 | 60022 | 60023 | 62500 | 7 | 0,1 |
| 61508 | Number of vacation days timer | 1 | RW | 60024 | 60025 | 60026 | 62500 | 8 | 1 |
| 61509 | Heating system 1: Setting room temp | 1 | RW | 60027 | 60028 | 60029 | 62500 | 9 | 0,1 |
| 61510 | Heating system 2: Setting room temp | 1 | RW | 60030 | 60031 | 60032 | 62500 | 10 | 0,1 |
| 61511 | Heating system 3: Setting room temp | 1 | RW | 60033 | 60034 | 60035 | 62500 | 11 | 0,1 |
| 61512 | Heating system 4: Setting room temp | 1 | RW | 60036 | 60037 | 60038 | 62500 | 12 | 0,1 |



### BMS-register

Ett BMS-register är en minnesplats i ett "Building Management System" (BMS) styrsystem som lagrar specifika data relaterade till systemets funktioner. Dessa data kan omfatta temperaturbörvärden, beläggningsnivåer och energianvändningsdata. BMS-programvaran använder register för att övervaka och styra systemen.

t.ex. 61502 : 450 x faktor = 45 (°C)
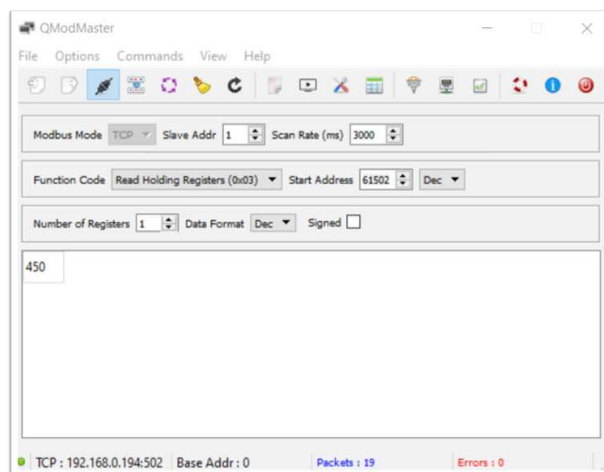
### Beskrivning

Detta är en kort förklaring av betydelsen av BMS-registret.

### Signerad

I ett BMS avser "signerad" en datatyp som kan lagra både positiva och negativa värden. Den används för att representera data, t.ex. temperatur, som kan ha ett värdeintervall som inkluderar negativa tal. En "osignerad" datatyp kan endast lagra positiva värden.

### R/W

I BMS står "R/W" för "Read/Write" och syftar på möjligheten att läsa och skriva data från ett specifikt register. "R/W"-register kan läsa och skriva data. "R"-register kan endast läsa data (från t.ex. givare).

## Max

Max står för Maximalt värde. Detta avser det högsta värde som kan ställas in för en viss parameter i BMS-programvaran. Till exempel den maximala utloppstemperaturen för varmvatten.

Läs data i register 60006. Värdet 650 returneras med en faktor 0,1. Detta innebär att den maximala utloppstemperaturen för varmvatten är 65°C.

## Min

Min står för Minsta börvärde: Detta avser det lägsta värde som kan ställas in för en viss parameter i BMS-programvaran. Till exempel den lägsta utloppstemperaturen för varmvatten.

Läs data i register 60007. Värdet 380 returneras med en faktor 0,1. Detta innebär att den lägsta utloppstemperaturen för varmvatten är 38°C.

## Steg

Steg är den gradvisa förändring av en parameter som är möjlig. Till exempel intervallet för varmvattnets utloppstemperatur. Läs data i register 60008. Värdet 10 returneras med en faktor 0,1. Detta innebär att steget är 1°C.

## Faktor

Detta värde används för att ange den faktor som används för att beräkna det faktiska värdet (temperatur, RPS, timer,...).  T.ex., register 60006 : 650 x 0,1 (faktor) = 65 (°C).

## Synlig & Bit

Dessa två parametrar arbetar tillsammans. Alla register/parametrar är inte synliga. Det beror på produkten och om det är definierat.

t.ex. läser register 62500 : 8575

Översatt i binär form blir detta:



Bit 7 är 0, vilket innebär att den inte är aktiverad. Detta är poolens lägsta RPS och poolen är inte definierad i detta exempel.

**VARNING!**
Dessa inställningar får inte ändras många gånger. Om du gör det riskerar du att värmepumpsinstallationens styrenhet fallerar. Det finns en gräns för antalet skrivcykler!

För parametrar som behöver ändras ofta har vi en lösning med register 1000. Se kapitel Styrparametrar.
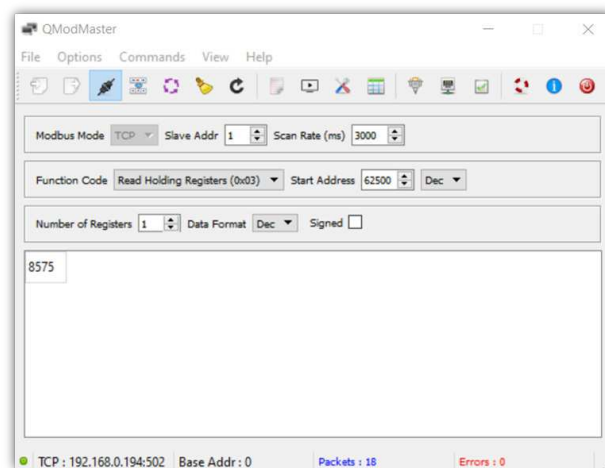
# Styrparametrar

Det finns ett antal 1000-register. Dessa register skall användas för att aktivt styra och reglera parametrar.

Registren måste uppdateras var 5:e minut, annars kommer de att återställas. De kommer också att återställas vid omstart.

Parametrarna kan ställas in så mycket som programmeraren vill, utan några risker.

## Styrparametrar för CTC EcoLogic S

För CTC EcoLogic S finns det två specifika register. Det första är till för att starta och stoppa värmepumpen. Det andra är till för att ställa in värmepumpens primärflöde.

| Funktion | Adress |
|---|---|
| Start värmepump | 1000 |
| Börvärde framledning | 1001 |

Detta är för kunder som bygger sina egna system där de själva styr shuntar, ventiler etc. och där de använder sin egen logik för vad värmepumpen ska göra.

## Styrparametrar för alla andra regulatorer

| Funktion | Adress |
|---|---|
| Max RPS kompressor | 1002 |
| Max effekt spetsvärme nedre tank (för alla styrande enheter) | 1003 |
| Max effekt spetsvärme övre tank (For CTC EcoZenith i255, CTC EcoZenith i555 och CTC EcoLogic M/L[1]) | 1004 |
| Virtuell digital insignal | 1100[2] |

1 Beroende på valt system
2 Virtuella digitala ingångar, istället för K22-K24 för samma funktioner

T.ex. för ett värmesystem kan värmekurvan ställas in och sedan kan adress 1002 styras för att få önskad värmetillförsel från värmepumpen.
Även elpatronen kan begränsas/styras med dessa register.

# Virtuella digitala ingångar (Register 1100)

Virtuella digitala ingångar är programvarubaserade ingångar som simulerar fysiska ingångar i ett BMS. De används när fysiska ingångar inte är tillgängliga eller inte kan installeras. De kan t.ex. användas för CTC-funktionen Smart elprisstyrning.
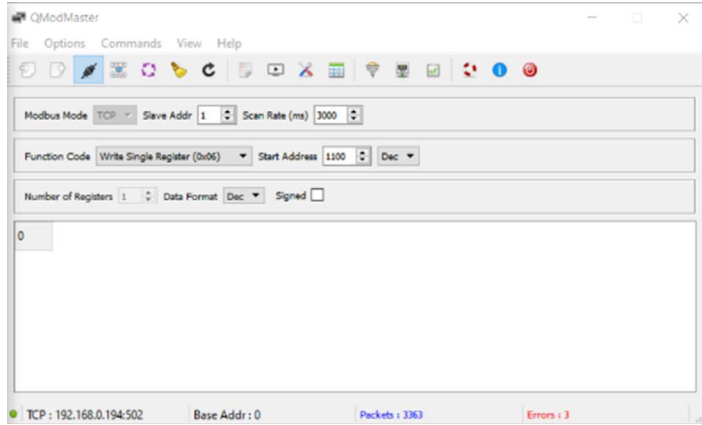


| PIN | BIT |
|-----|-----|
| BMS Di 0 | Bit 0 |
| BMS Di 1 | Bit 1 |
| BMS Di 2 | Bit 2 |
| BMS Di 3 | Bit 3 |
| BMS Di 4 | Bit 4 |
| BMS Di 5 | Bit 5 |
| BMS Di 6 | Bit 6 |
| BMS Di 7 | Bit 7 |

Om register 1100 är 0 betyder det att alla 8 bitarna (0 till 7) är öppna.



Om register 1100 är 255 betyder det att alla 8 bitarna (0 till 7) är stängda.

## Exempel med SmartGrid

I detta exempel använder vi digital ingång 6 (DI6) för SmartGrid A och digital ingång 7 (DI7) för SmartGrid B. För enkelhetens skull antar vi att andra digitala ingångar inte används.

| K22 (SG A) | K23 (SG B) | Funktion |
|------------|------------|--------------|
| Öppen | Öppen | Normal |
| Öppen | Sluten | Lågpris |
| Sluten | Sluten | Överkapacitet |
| Sluten | Öppen | Blockering |
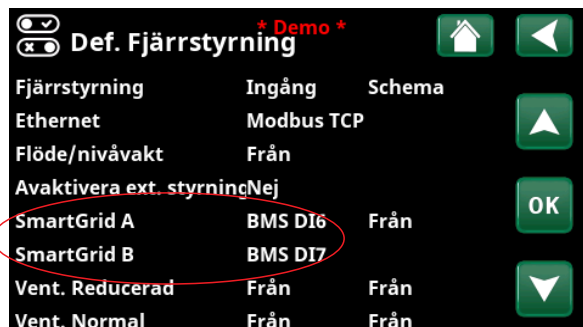


### Funktion SG Normal
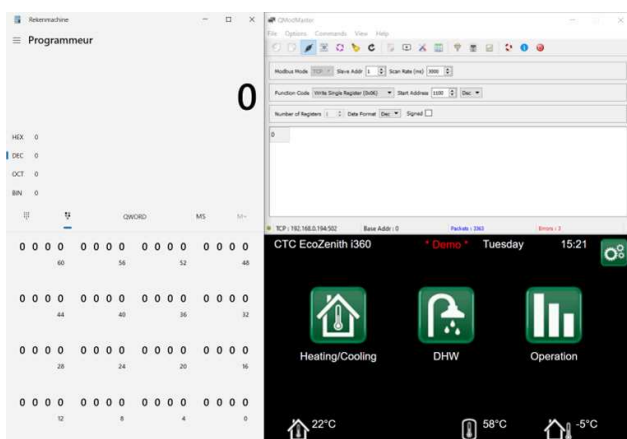


### Funktion SG Lågpris
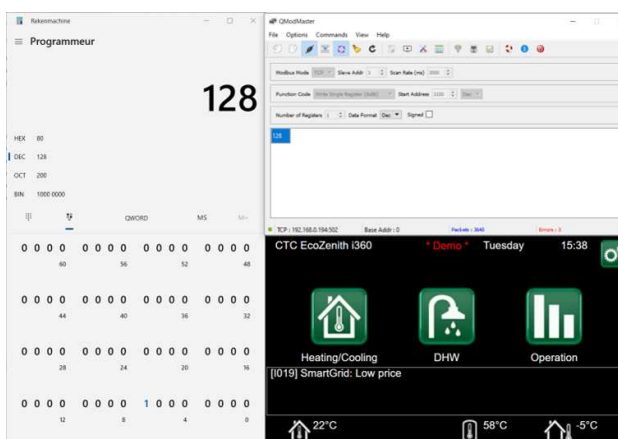


### Funktion SG Överkapacitet
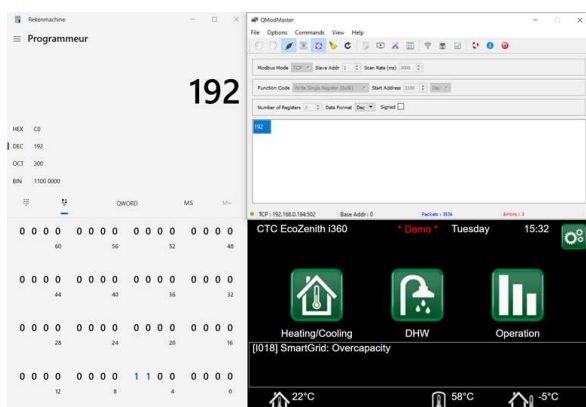


### Funktion SG Blockering
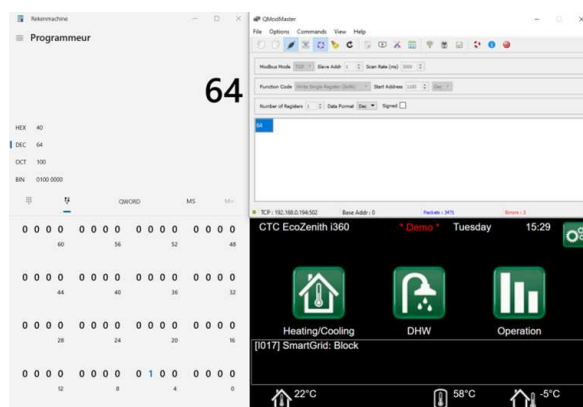


Anmärkning: Prioriteringen för SmartGrid är:

1. Fjärrstyrning (BMS/digitala ingångar/...)
2. myUplink
3. Veckoschema
4. Inställning

Om båda kontakterna är öppna (normal drift) finns det naturligtvis ingen prioritet för BMS eller ingångarna.

# Larm och informationstexter

För larm och informationstexter arbetar vi i två steg.

- Första steget (Hur många larm/ informationstexter har vi?)
- Andra steget (Vilket är det exakta larmet/ informationstexten?)

## Hur många larm/infotexter har vi?

För att veta hur många larm/infotexter man har bör man läsa **register 65133**.
Du måste se på siffran på ett hexadecimalt sätt för att veta hur många larm och hur många infotexter du har.

De första två siffrorna är för infotexterna, de andra två siffrorna är för larmen.

Det absoluta maxantalet du kan ha är FFFF (eller 255 infotexter och 255 larm).

Ett exempel:

#*02*02 (I hex)

  => *02* = 2 informationstexter
  => 02 = 2 larm
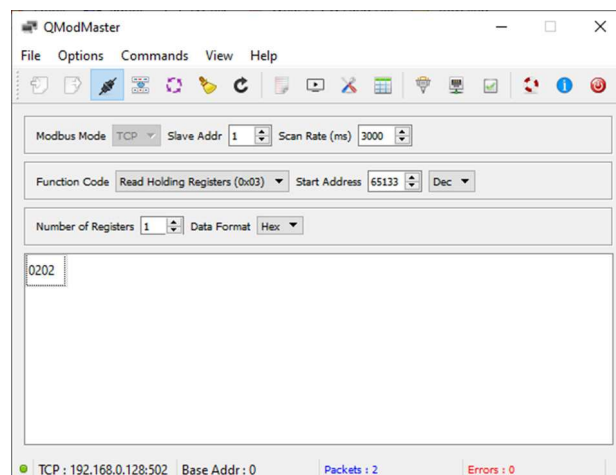
## Vad betyder larmet/infotexten?

I nästa steg kan du se mer detaljerad information om larmen och infotexterna.

Läsning av register 65133 måste föregå detta steg eftersom det fyller på data i buffertarna.

|  | Register |
|---|---|
| Larm | 65010 - 65059 |
| Infotexter | 65060 - 65069 |

| Register | Larmnummer | Förklaring |
|---|---|---|
| 65010 | 1 | VP-larm (VP 1-10). |
|  |  | '1' om det är ett VP-larm, ''0' om det är ett annat larm, t.ex. problem med sensorn EcoZenith). |
| 65011 | 1 | Den faktiska larmkoden. |
| 65012 | 2 | VP-larm (VP 1-10). |
|  |  | '1' om det är ett VP-larm, ''0' om det är ett annat larm, t.ex. problem med sensorn EcoZenith). |
| 65013 | 2 | Den faktiska larmkoden. |
| 65014 | 3 | VP-larm (VP 1-10). |
|  |  | '1' om det är ett VP-larm, ''0' om det är ett annat larm, t.ex. problem med sensorn EcoZenith). |
| 65015 | 3 | Den faktiska larmkoden. |
| 65016 | 4 | ... |

| Register | Larmnummer | Förklaring |
|---|---|---|
| 65060 | 1 | VP-infotext (VP 1-10). |
|  |  | '1' om det är en VP-infotext, '0' om det är en annan infotext, t.ex. HC1 Värme av). |
| 65061 | 1 | Den faktiska informationstextkoden. |
| 65062 | 2 | VP-infotext (VP 1-10). |
|  |  | '1' om det är en VP-infotext, '0' om det är en annan infotext, t.ex. HC1 Värme av). |
| 65063 | 2 | Den faktiska informationstextkoden. |
| 65064 | 3 | ... |

## Ett exempel för larm

| Register | Larmnummer | Värde | Förklaring |
|----------|-----------|-------|------------|
| 65010 | 1 | 0 | Inte ett VP-larm |
| 65011 | 1 | E155 | SmartControl |
| 65012 | 2 | 0 | Inte ett VP-larm |
| 65013 | 2 | E158 | Larm vent. Filter |
| 65014 | 3 | 0 | N/A, inget 3:e larm |
| 65015 | 3 | 0 | N/A |
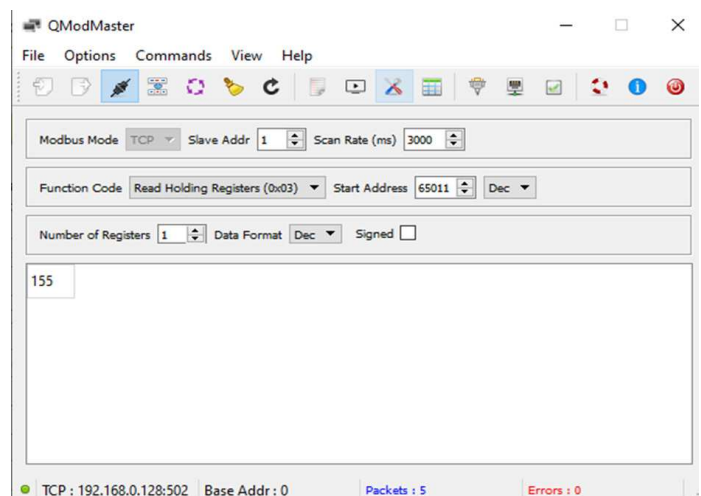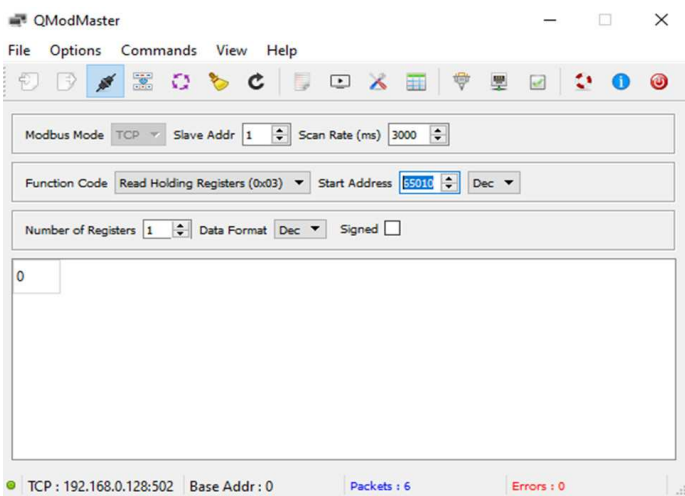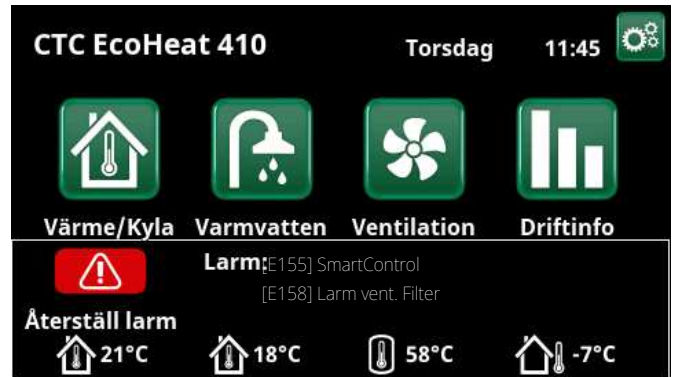
## Ett exempel för informationstexter

| Register | Larmnummer | Värde | Förklaring |
|----------|-----------|-------|------------|
| 65060 | 1 | 0 | Inte VP-info |
| 65061 | 1 | I2 | VS1 Värme från |
| 65062 | 2 | 0 | Inte VP-info |
| 65063 | 2 | I3 | Kyla aktiv |
| 65064 | 3 | 0 | N/A, inget 3:e larm |
| 65065 | 3 | 0 | N/A |
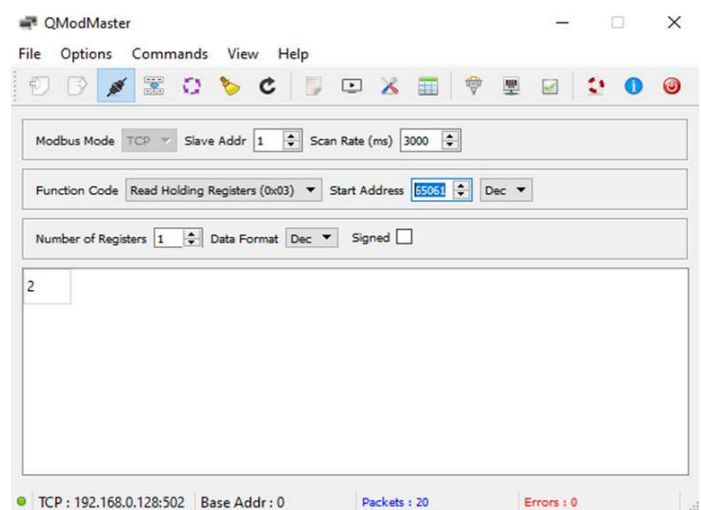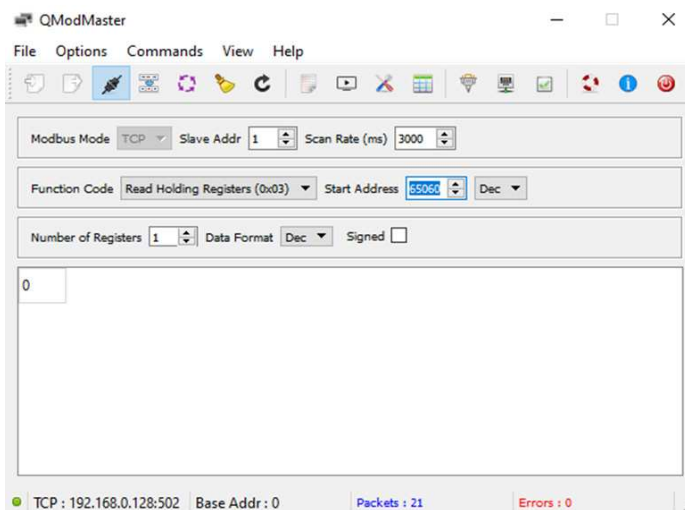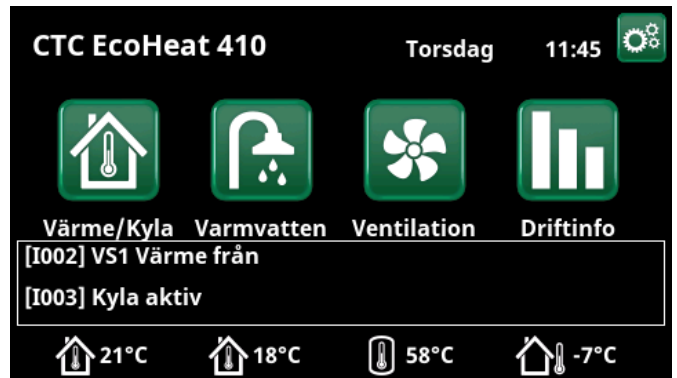
# Modbus adressregister

På följande sidor visas en komplett förteckning över aktuella BMS-adressregister.

Observera att inte alla parametrar i BMS-listan kan användas för värmepumpsstyrning om din display inte är utrustad med 3 anslutningsportar (BMS via TCP/IP).

# Modbus address register/complete BMS list

| BMS Register | English | Description | RW | CTC EcoHeat 400 | CTC EcoZenith i250 | CTC Gsi/ CTC GS | CTC EcoZenith i350/ CTC EcoVent i350F | CTC EcoZenith i550 | CTC EcoLogic | CTC Ecologic S |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Value shall be updated before 5 minutes** | | | | | | | | | |
| 1000 | Start heatpump | | W | | | | | | | x |
| 1001 | Setpoint heatpump primary flow | | W | | | | | | | x |
| 1002 | Maximum RPS | | W | | x | x | x | x | x | x |
| 1003 | Maximum power immersion heater upper tank | | W | x | x | x | x | x | x | |
| 1004 | Maximum power immersion heater lower tank | | W | | x | | | x | x | |
| 1005 | ElPriceMode | | W | x | x | x | x | x | x | |
| | Low = 1 | | | | | | | | | |
| | Normal = 2 | | | | | | | | | |
| | High = 3 | | | | | | | | | |
| 1006 | Extra DHW | | W | x | x | x | x | x | x | |
| 1007 | DHW Mode | | W | x | x | x | x | x | x | |
| | 0 = Economy | | | | | | | | | |
| | 1 = Normal | | | | | | | | | |
| | 2 = Comfort | | | | | | | | | |
| 1008 | CO2 Start setpoint | | W | x | x | x | x | x | x | |
| 1009 | Humidity fan start setpoint | | W | x | x | x | x | x | x | |
| 1010 | Setpoint heat HC1 | | W | x | x | x | x | x | x | |
| 1011 | Setpoint heat HC2 | | W | x | x | x | x | x | x | |
| 1012 | Setpoint heat HC3 | | W | | | | | x | x | |
| 1013 | Setpoint heat HC4 | | W | | | | | x | x | |
| 1014 | Setpoint cool | | W | x | x | x | x | x | x | |
| 1015 | Zone mode HC1 | | W | x | x | x | x | x | x | |
| | 0 = Off, 1 = Heat, 2 = cool, 3 = auto, 4 = On | | | | | | | | | |
| 1016 | Zone mode HC2 | | W | x | x | x | x | x | x | |
| | 0 = Off, 1 = Heat, 2 = cool, 3 = auto, 4 = On | | | | | | | | | |
| 1017 | Zone mode HC3 | | W | | | | | x | x | |
| | 0 = Off, 1 = Heat, 2 = cool, 3 = auto, 4 = On | | | | | | | | | |
| 1018 | Zone mode HC4 | | W | | | | | x | x | |
| | 0 = Off, 1 = Heat, 2 = cool, 3 = auto, 4 = On | | | | | | | | | |
| 1019 | Zone mode Cool | | W | x | x | x | x | x | x | |
| | 0 = Off, 1 = Heat, 2 = cool, 3 = auto, 4 = On | | | | | | | | | |
| 1020 | Setpoint pool | | W | x | x | x | x | x | x | |
| 1021 | Boost ventilation | | W | x | x | x | x | x | x | |
| 1022 | Vent mode | | W | x | x | x | x | x | x | |
| | -1 = Reduced | | | | | | | | | |
| | 0 = Normal | | | | | | | | | |
| | 1 = Forced | | | | | | | | | |
| 1023 | Setpoint offset heat HC1 | | W | x | x | x | x | x | x | |
| 1024 | Setpoint offset heat HC2 | | W | x | x | x | x | x | x | |
| 1025 | Setpoint offset heat HC3 | | W | | | | | x | x | |
| 1026 | Setpoint offset heat HC4 | | W | | | | | x | x | |
| 1027 | Setpoint offset cool | | W | | | | | x | x | |
| 1100 | Virtual digital in | | W | x | x | x | x | x | x | |
| | Bits: | | | | | | | | | |
| | 0 = DI0 | | | | | | | | | |
| | 1 = DI1 | | | | | | | | | |
| | 2 = DI2 | | | | | | | | | |
| | 3 = DI3 | | | | | | | | | |
| | 4 = DI4 | | | | | | | | | |
| | 5 = DI5 | | | | | | | | | |
| | 6 = DI6 | | | | | | | | | |
| | 7 = DI7 | | | | | | | | | |

| BMS Register | Function | Signed | Read/Write | Max | Min | Step | Visible | Bit | Factor | CTC EcoHeat 400 | CTC EcoZenith i250 | CTC Gsi/ CTC GS | CTC EcoZenith i350/ CTC EcoVent i350F | CTC EcoZenith i550 | CTC EcoLogic | CTC Ecologic S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 61500 | Hot water mode 0=Ecomony 1=Normal 2=Comfort | 1 | RW | 60000 | 60001 | 60002 | 62500 | 0 | 1 | x | x | x | x | x | x | |
| 61501 | Manual Stop temperature hot water | 1 | RW | 60003 | 60004 | 60005 | 62500 | 1 | 0,1 | x | x | x | x | x | x | |
| 61502 | Setting outlet temperature hot water | 1 | RW | 60006 | 60007 | 60008 | 62500 | 2 | 0,1 | x | x | x | x | | | |
| 61503 | Extra hot water timer | 1 | RW | 60009 | 60010 | 60011 | 62500 | 3 | 0,5 | x | x | x | | x | x | |
| 61504 | Maximum time heating Heat pump | 1 | RW | 60012 | 60013 | 60014 | 62500 | 4 | 1 | x | x | x | x | x | x | |
| 61505 | Maximum time hot water | 1 | RW | 60015 | 60016 | 60017 | 62500 | 5 | 1 | x | x | x | x | x | x | |
| 61506 | Minimum RPS hot water | 1 | RW | 60018 | 60019 | 60020 | 62500 | 6 | 0,1 | | x | x | x | | | |
| 61507 | Minimum RPS Pool | 1 | RW | 60021 | 60022 | 60023 | 62500 | 7 | 0,1 | | x | x | x | | | |
| 61508 | Number of vacation days timer | 1 | RW | 60024 | 60025 | 60026 | 62500 | 8 | 1 | x | x | x | x | x | x | |
| 61509 | Heating system 1: setting room temp | 1 | RW | 60027 | 60028 | 60029 | 62500 | 9 | 0,1 | x | x | x | x | x | x | |
| 61510 | Heating system 2: setting room temp | 1 | RW | 60030 | 60031 | 60032 | 62500 | 10 | 0,1 | x | x | x | x | x | x | |
| 61511 | Heating system 3: setting room temp | 1 | RW | 60033 | 60034 | 60035 | 62500 | 11 | 0,1 | | | | x | | x | |
| 61512 | Heating system 4: setting room temp | 1 | RW | 60036 | 60037 | 60038 | 62500 | 12 | 0,1 | | | | x | | x | |
| 61513 | Heating system 1: Change inclination | 1 | RW | 60039 | 60040 | 60041 | 62500 | 13 | 0,1 | x | x | x | x | x | x | x |
| 61514 | Heating system 2: Change inclination | 1 | RW | 60042 | 60043 | 60044 | 62500 | 14 | 0,1 | x | x | x | x | x | x | |
| 61515 | Heating system 3: Change inclination | 1 | RW | 60045 | 60046 | 60047 | 62500 | 15 | 0,1 | | | | x | | x | |
| 61516 | Heating system 4: Change inclination | 1 | RW | 60048 | 60049 | 60050 | 62501 | 0 | 0,1 | | | | | | x | |
| 61517 | Room1: Adjustment | 1 | RW | 60051 | 60052 | 60053 | 62501 | 1 | 0,1 | x | x | x | x | x | x | x |
| 61518 | Room2: Adjustment | 1 | RW | 60054 | 60055 | 60056 | 62501 | 2 | 0,1 | x | x | x | x | x | x | |
| 61519 | Room3: Adjustment | 1 | RW | 60057 | 60058 | 60059 | 62501 | 3 | 0,1 | | | | | x | x | |
| 61520 | Room4: Adjustment | 1 | RW | 60060 | 60061 | 60062 | 62501 | 4 | 0,1 | | | | | | x | |
| 61521 | Heat pump 1 (A1): Blocked 0=Blocked 1=Allowed | 1 | RW | 60063 | 60064 | 60065 | 62501 | 5 | 1 | x | x | x | x | x | x | x |
| 61522 | Heat pump 2 (A2): Blocked 0=Blocked 1=Allowed | 1 | RW | 60066 | 60067 | 60068 | 62501 | 6 | 1 | | | | | x | x | |
| 61523 | Heat pump 3 (A3): Blocked 0=Blocked 1=Allowed | 1 | RW | 60069 | 60070 | 60071 | 62501 | 7 | 1 | | | | | x | x | |
| 61524 | Heat pump 4 (A4): Blocked 0=Blocked 1=Allowed | 1 | RW | 60072 | 60073 | 60074 | 62501 | 8 | 1 | | | | | | x | |
| 61525 | Heat pump 5 (A5): Blocked 0=Blocked 1=Allowed | 1 | RW | 60075 | 60076 | 60077 | 62501 | 9 | 1 | | | | | | x | |
| 61526 | Heat pump 6 (A6): Blocked 0=Blocked 1=Allowed | 1 | RW | 60078 | 60079 | 60080 | 62501 | 10 | 1 | | | | | | x | |
| 61527 | Heat pump 7 (A7): Blocked 0=Blocked 1=Allowed | 1 | RW | 60081 | 60082 | 60083 | 62501 | 11 | 1 | | | | | | x | |
| 61528 | Heat pump 8 (A8): Blocked 0=Blocked 1=Allowed | 1 | RW | 60084 | 60085 | 60086 | 62501 | 12 | 1 | | | | | | x | |
| 61529 | Heat pump 9 (A9): Blocked 0=Blocked 1=Allowed | 1 | RW | 60087 | 60088 | 60089 | 62501 | 13 | 1 | | | | | | x | |
| 61530 | Heat pump 10 (A10): Blocked 0=Blocked 1=Allowed | 1 | RW | 60090 | 60091 | 60092 | 62501 | 14 | 1 | | | | | | x | |
| 61531 | Pool: Stop Temp setting | 1 | RW | 60093 | 60094 | 60095 | 62501 | 15 | 0,1 | x | x | x | x | x | x | |
| 61532 | Pool: Maximum time | 1 | RW | 60096 | 60097 | 60098 | 62502 | 0 | 1 | | | x | x | | | |
| 61533 | Pool: Start difference | 1 | RW | 60099 | 60100 | 60101 | 62502 | 1 | 0,1 | x | x | x | x | x | x | |
| 61534 | Heating system 1: Max Primary flow ° C | 1 | RW | 60102 | 60103 | 60104 | 62502 | 2 | 0,1 | x | x | x | x | x | x | x |
| 61535 | Heating system 2: Max Primary flow ° C | 1 | RW | 60105 | 60106 | 60107 | 62502 | 3 | 0,1 | x | x | x | x | x | x | |
| 61536 | Heating system 3: Max Primary flow ° C | 1 | RW | 60108 | 60109 | 60110 | 62502 | 4 | 0,1 | | | | | x | x | |
| 61537 | Heating system 4: Max Primary flow ° C | 1 | RW | 60111 | 60112 | 60113 | 62502 | 5 | 0,1 | | | | | | x | |
| 61538 | Heating system 1: Min primary flow ° C 140=Off | 1 | RW | 60114 | 60115 | 60116 | 62502 | 6 | 0,1 | x | x | x | x | x | x | x |
| 61539 | Heating system 2: Min primary flow ° C 140=Off | 1 | RW | 60117 | 60118 | 60119 | 62502 | 7 | 0,1 | x | x | x | x | x | x | |
| 61540 | Heating system 3: Min primary flow ° C 140=Off | 1 | RW | 60120 | 60121 | 60122 | 62502 | 8 | 0,1 | | | | | x | x | |
| 61541 | Heating system 4: Min primary flow ° C 140=Off | 1 | RW | 60123 | 60124 | 60125 | 62502 | 9 | 0,1 | | | | | | x | |
| 61542 | Heating system 1: Heating mode 0=Auto 1=On 2=Off | 1 | RW | 60126 | 60127 | 60128 | 62502 | 10 | 1 | x | x | x | x | x | x | |

| 61543 | Heating system 2: Heating mode | 1 | RW | 60129 | 60130 | 60131 | 62502 | 11 | 1 | x | x | x | x | x | x |
| | 0=Auto | | | | | | | | | | | | | | |
| | 1=On | | | | | | | | | | | | | | |
| | 2=Off | | | | | | | | | | | | | | |
| 61544 | Heating system 3: Heating mode | 1 | RW | 60132 | 60133 | 60134 | 62502 | 12 | 1 | | | | | x | x |
| | 0=Auto | | | | | | | | | | | | | | |
| | 1=On | | | | | | | | | | | | | | |
| | 2=Off | | | | | | | | | | | | | | |
| 61545 | Heating system 4: Heating mode | 1 | RW | 60135 | 60136 | 60137 | 62502 | 13 | 1 | | | | | | x |
| | 0=Auto | | | | | | | | | | | | | | |
| | 1=On | | | | | | | | | | | | | | |
| | 2=Off | | | | | | | | | | | | | | |
| 61546 | Heating system 1: Heating off, out ° C | 1 | RW | 60138 | 60139 | 60140 | 62502 | 14 | 0,1 | x | x | x | x | x | x |
| 61547 | Heating system 2: Heating off, out ° C | 1 | RW | 60141 | 60142 | 60143 | 62502 | 15 | 0,1 | x | x | x | x | x | x |
| 61548 | Heating system 3: Heating off, out ° C | 1 | RW | 60144 | 60145 | 60146 | 62503 | 0 | 0,1 | | | | | x | x |
| 61549 | Heating system 4: Heating off, out ° C | 1 | RW | 60147 | 60148 | 60149 | 62503 | 1 | 0,1 | | | | | | x |
| 61550 | Heating system 1: Heating off time | 1 | RW | 60150 | 60151 | 60152 | 62503 | 2 | 1 | x | x | x | x | x | x |
| 61551 | Heating system 2: Heating off time | 1 | RW | 60153 | 60154 | 60155 | 62503 | 3 | 1 | x | x | x | x | x | x |
| 61552 | Heating system 3: Heating off time | 1 | RW | 60156 | 60157 | 60158 | 62503 | 4 | 1 | | | | | x | x |
| 61553 | Heating system 4: Heating off time | 1 | RW | 60159 | 60160 | 60161 | 62503 | 5 | 1 | | | | | | x |
| 61554 | Heating system 1: Room temp night reduction | 1 | RW | 60162 | 60163 | 60164 | 62503 | 6 | 0,1 | x | x | x | x | x | x |
| 61555 | Heating system 2: Room temp night reduction | 1 | RW | 60165 | 60166 | 60167 | 62503 | 7 | 0,1 | x | x | x | x | x | x |
| 61556 | Heating system 3: Room temp night reduction | 1 | RW | 60168 | 60169 | 60170 | 62503 | 8 | 0,1 | | | | | x | x |
| 61557 | Heating system 4: Room temp night reduction | 1 | RW | 60171 | 60172 | 60173 | 62503 | 9 | 0,1 | | | | | | x |
| 61558 | Heating system 1: Primary flow Night reduction | 1 | RW | 60174 | 60175 | 60176 | 62503 | 10 | 0,1 | x | x | x | x | x | x |
| 61559 | Heating system 2: Primary flow Night reduction | 1 | RW | 60177 | 60178 | 60179 | 62503 | 11 | 0,1 | x | x | x | x | x | x |
| 61560 | Heating system 3: Primary flow Night reduction | 1 | RW | 60180 | 60181 | 60182 | 62503 | 12 | 0,1 | | | | | x | x |
| 61561 | Heating system 4: Primary flow Night reduction | 1 | RW | 60183 | 60184 | 60185 | 62503 | 13 | 0,1 | | | | | | x |
| 61562 | Heating system 1: Outdoor temp night reduction | 1 | RW | 60186 | 60187 | 60188 | 62503 | 14 | 0,1 | x | x | x | x | x | x |
| 61563 | Heating system 2: Outdoor temp night reduction | 1 | RW | 60189 | 60190 | 60191 | 62503 | 15 | 0,1 | x | x | x | x | x | x |
| 61564 | Heating system 3: Outdoor temp night reduction | 1 | RW | 60192 | 60193 | 60194 | 62504 | 0 | 0,1 | | | | | x | x |
| 61565 | Heating system 4: Outdoor temp night reduction | 1 | RW | 60195 | 60196 | 60197 | 62504 | 1 | 0,1 | | | | | | x |
| 61566 | Heating system 1: Alarm low room temperature | 1 | RW | 60198 | 60199 | 60200 | 62504 | 2 | 0,1 | x | x | x | x | x | x |
| 61567 | Heating system 2: Alarm low room temperature | 1 | RW | 60201 | 60202 | 60203 | 62504 | 3 | 0,1 | x | x | x | x | x | x |
| 61568 | Heating system 3: Alarm low room temperature | 1 | RW | 60204 | 60205 | 60206 | 62504 | 4 | 0,1 | | | | | x | x |
| 61569 | Heating system 4: Alarm low room temperature | 1 | RW | 60207 | 60208 | 60209 | 62504 | 5 | 0,1 | | | | | | x |
| 61570 | Radiator pump setting % | 1 | RW | 60210 | 60211 | 60212 | 62504 | 6 | 1 | | | x | x | x | x |
| 61571 | Start at degree minute | 1 | RW | 60213 | 60214 | 60215 | 62504 | 7 | 1 | | | x | x | x | x |
| 61572 | Heat pump 1 (A1): Max RPS | 1 | RW | 60216 | 60217 | 60218 | 62504 | 8 | 0,1 | | | x | x | x | x | x |
| 61573 | Heat pump 2 (A2): Max RPS | 1 | RW | 60219 | 60220 | 60221 | 62504 | 9 | 0,1 | | | | | x | x |
| 61574 | Heat pump 3 (A3): Max RPS | 1 | RW | 60222 | 60223 | 60224 | 62504 | 10 | 0,1 | | | | | x | x |
| 61575 | Heat pump 4 (A4): Max RPS | 1 | RW | 60225 | 60226 | 60227 | 62504 | 11 | 0,1 | | | | | | x |
| 61576 | Heat pump 5 (A5): Max RPS | 1 | RW | 60228 | 60229 | 60230 | 62504 | 12 | 0,1 | | | | | | x |
| 61577 | Heat pump 6 (A6): Max RPS | 1 | RW | 60231 | 60232 | 60233 | 62504 | 13 | 0,1 | | | | | | x |
| 61578 | Heat pump 7 (A7): Max RPS | 1 | RW | 60234 | 60235 | 60236 | 62504 | 14 | 0,1 | | | | | | x |
| 61579 | Heat pump 8 (A8): Max RPS | 1 | RW | 60237 | 60238 | 60239 | 62504 | 15 | 0,1 | | | | | | x |
| 61580 | Heat pump 9 (A9): Max RPS | 1 | RW | 60240 | 60241 | 60242 | 62505 | 0 | 0,1 | | | | | | x |
| 61581 | Heat pump 10 (A10): Max RPS | 1 | RW | 60243 | 60244 | 60245 | 62505 | 1 | 0,1 | | | | | | x |
| 61582 | E1: Start add heat, degree minute | 1 | RW | 60246 | 60247 | 60248 | 62505 | 2 | 1 | | | | x | x | x |
| 61583 | External boiler diff | 1 | RW | 60249 | 60250 | 60251 | 62505 | 3 | 0,1 | | | | | x | x |
| 61584 | Blocking additional heat outdoor temp ºC | 1 | RW | 60252 | 60253 | 60254 | 62505 | 4 | 0,1 | | | | | | x |
| 61585 | Boiler, open mixing valve ºC | 1 | RW | 60255 | 60256 | 60257 | 62505 | 5 | 0,1 | | | | x | x | x |
| 61586 | Delay stop external boiler | 1 | RW | 60258 | 60259 | 60260 | 62505 | 6 | 1 | | | | | x | x |
| 61587 | Ext boiler mode | 1 | RW | 60261 | 60262 | 60263 | 62505 | 7 | 1 | | | | | | x |
| | 0=Auto | | | | | | | | | | | | | | |
| | 1=On | | | | | | | | | | | | | | |
| | 2=Off | | | | | | | | | | | | | | |
| 61588 | EHS: open shunt degrees | 1 | RW | 60264 | 60265 | 60266 | 62505 | 8 | 0,1 | | | | x | x | |
| 61589 | EHS: start / stop diff | 1 | RW | 60267 | 60268 | 60269 | 62505 | 9 | 1 | | | | x | x | |
| 61590 | Max immersion heater kW / Lower | 1 | RW | 60270 | 60271 | 60272 | 62505 | 10 | 0,1 | | | x | x | x | x | x |
| 61591 | Max immersion heater DHW kW / Upper | 1 | RW | 60273 | 60274 | 60275 | 62505 | 11 | 0,1 | | | x | x | x | x | x |
| 61602 | Heating system 1: Holiday reduction | 1 | RW | 60306 | 60307 | 60308 | 62506 | 6 | 0,1 | x | x | x | x | x | x |
| 61603 | Heating system 2: Holiday reduction | 1 | RW | 60309 | 60310 | 60311 | 62506 | 7 | 0,1 | x | x | x | x | x | x |
| 61604 | Heating system 3: Holiday reduction | 1 | RW | 60312 | 60313 | 60314 | 62506 | 8 | 0,1 | | | | | x | x |
| 61605 | Heating system 4: Holiday reduction | 1 | RW | 60315 | 60316 | 60317 | 62506 | 9 | 0,1 | | | | | | x |
| 61606 | Heating system 1: Primary flow Holiday reduction | 1 | RW | 60318 | 60319 | 60320 | 62506 | 10 | 0,1 | x | x | x | x | x | x |
| 61607 | Heating system 2: Primary flow Holiday reduction | 1 | RW | 60321 | 60322 | 60323 | 62506 | 11 | 0,1 | x | x | x | x | x | x |
| 61608 | Heating system 3: Primary flow Holiday reduction | 1 | RW | 60324 | 60325 | 60326 | 62506 | 12 | 0,1 | | | | | x | x |
| 61609 | Heating system 4: Primary flow Holiday reduction | 1 | RW | 60327 | 60328 | 60329 | 62506 | 13 | 0,1 | | | | | | x |
| 61610 | Heat pump : Diff Heat pump , degree minute | 1 | RW | 60330 | 60331 | 60332 | 62506 | 14 | 1 | | | | | | x |
| 61611 | Heat pump : Delay between Heat pump | 1 | RW | 60333 | 60334 | 60335 | 62506 | 15 | 1 | | | | | x | x |
| 61612 | E1: Diff add heat, degree minute | 1 | RW | 60336 | 60337 | 60338 | 62507 | 0 | 1 | | | | | | x |
| 61613 | E2: Start 0-10V degree minute | 1 | RW | 60339 | 60340 | 60341 | 62507 | 1 | 1 | | | | | | x |
| 61614 | E2: Diff 0-10V, degree minute | 1 | RW | 60342 | 60343 | 60344 | 62507 | 2 | 1 | | | | | | x |
| 61615 | E3: Start EcoMiniEl, degree minute | 1 | RW | 60345 | 60346 | 60347 | 62507 | 3 | 1 | | | | | | x |
| 61616 | E3: Number of steps heating | 1 | RW | 60348 | 60349 | 60350 | 62507 | 4 | 1 | | | | | | x |
| 61617 | E3: Number of steps DHW | 1 | RW | 60351 | 60352 | 60353 | 62507 | 5 | 1 | | | | | | x |
| 61618 | E3: Diff step EcoMiniEl | 1 | RW | 60354 | 60355 | 60356 | 62507 | 6 | 1 | | | | | | x |
| 61619 | E1: Delay add heat E1 | 1 | RW | 60357 | 60358 | 60359 | 62507 | 7 | 1 | | | | | | x |
| 61620 | E2: Delay add heat 0-10V | 1 | RW | 60360 | 60361 | 60362 | 62507 | 8 | 1 | | | | | | x |
| 61621 | E2: Diff 0-10V delay | 1 | RW | 60363 | 60364 | 60365 | 62507 | 9 | 1 | | | | | | x |
| 61622 | E3: Delay EcoMiniEl | 1 | RW | 60366 | 60367 | 60368 | 62507 | 10 | 1 | | | | | | x |

| ID | Description | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 61623 | E3: Delay EcoMiniEl step | 1 | RW | 60369 | 60370 | 60371 | 62507 | 11 | 1 | | | | | | | x |
| 61624 | Cooling: Primary flow at the outdoor temperature +20 ºC | 1 | RW | 60372 | 60373 | 60374 | 62507 | 12 | 1 | | | | | | | x |
| 61625 | Cooling: Primary flow at the outdoor temperature +40 ºC | 1 | RW | 60375 | 60376 | 60377 | 62507 | 13 | 1 | | | | | | | x |
| 61626 | Cooling: Min flow temperature | 1 | RW | 60378 | 60379 | 60380 | 62507 | 14 | 1 | | | | | | | x |
| 61627 | | 1 | RW | 60381 | 60382 | 60383 | 62507 | 15 | 1 | | | | | | | |
| 61628 | | 1 | RW | 60384 | 60385 | 60386 | 62508 | 0 | 1 | | | | | | | |
| 61629 | Delay mixing valve setting<br>241=Off | 1 | RW | 60387 | 60388 | 60389 | 62508 | 1 | 1 | x | x | | | x | | |
| 61630 | Wood boiler start flue gas<br>490=Off | 1 | RW | 60390 | 60391 | 60392 | 62508 | 2 | 0,1 | | | | | x | x | |
| 61631 | Wood boiler start boiler temperature | 1 | RW | 60393 | 60394 | 60395 | 62508 | 3 | 0,1 | | | | | x | | |
| 61632 | Wood boiler hysteresis | 1 | RW | 60396 | 60397 | 60398 | 62508 | 4 | 0,1 | | | | | x | | |
| 61633 | Boiler lower °C | 1 | RW | 60399 | 60400 | 60401 | 62508 | 5 | 0,1 | | x | | | x | | |
| 61634 | Boiler upper °C | 1 | RW | 60402 | 60403 | 60404 | 62508 | 6 | 0,1 | x | x | | | | | |
| 61635 | Boiler add heat °C | 1 | RW | 60405 | 60406 | 60407 | 62508 | 7 | 0,1 | x | x | | | | | |
| 61636 | Boiler DHW °C | 1 | RW | 60408 | 60409 | 60410 | 62508 | 8 | 0,1 | x | x | | | | | |
| 61637 | Diff thermostat start temp diff | 1 | RW | 60411 | 60412 | 60413 | 62508 | 9 | 0,1 | x | x | x | x | | | |
| 61638 | Diff thermostat stop temp diff | 1 | RW | 60414 | 60415 | 60416 | 62508 | 10 | 0,1 | x | x | x | x | | | |
| 61639 | Diff thermostat charge temperature | 1 | RW | 60417 | 60418 | 60419 | 62508 | 11 | 0,1 | x | x | x | x | | | |
| 61640 | EcoLogic / EcoZenith i550: Solar deltaT max Other: Solar start charge difference | 1 | RW | 60420 | 60421 | 60422 | 62508 | 12 | 0,1 | x | x | x | x | x | x | |
| 61641 | EcoLogic / EcoZenith i550: Solar deltaT min Other: Solar stop charge difference | 1 | RW | 60423 | 60424 | 60425 | 62508 | 13 | 0,1 | x | x | x | x | x | x | |
| 61642 | Solar charge pump min | 1 | RW | 60426 | 60427 | 60428 | 62508 | 14 | 1 | x | x | x | x | x | x | |
| 61643 | EcoLogic / EcoZenith i550: Solar deltaT max borehole Other: Solar borehole charge start diff | 1 | RW | 60429 | 60430 | 60431 | 62508 | 15 | 1 | x | x | x | x | x | x | |
| 61644 | EcoLogic / EcoZenith i550: Solar deltaT min borehole Other: Solar borehole charge stop difference | 1 | RW | 60432 | 60433 | 60434 | 62509 | 0 | 1 | x | x | x | x | x | x | |
| 61645 | EcoHeat 400 / EcoZenith i250: Solar H-tank charge temp GSi/EcoZenith i350: Solar EHS-tank harge temp | 1 | RW | 60435 | 60436 | 60437 | 62509 | 1 | 1 | x | x | x | x | | | |
| 61646 | Solar: X-tank charge temp | 1 | RW | 60438 | 60439 | 60440 | 62509 | 2 | 1 | x | x | x | x | | | |
| 61647 | Solar: Eco-tank charge temp | 1 | RW | 60441 | 60442 | 60443 | 62509 | 3 | 1 | x | x | x | x | | | |
| 61648 | EcoHeat 400 / EcoZenith i250: Solar charge H-tank start difference GSi/EcoZenith i350: Solar EHS-tank charge start difference | 1 | RW | 60444 | 60445 | 60446 | 62509 | 4 | 1 | x | x | x | x | | | |
| 61649 | EcoHeat 400 / EcoZenith i250: Solar H-tank charge stop difference GSi/EcoZenith i350: Solar EHS-tank charge stop difference | 1 | RW | 60447 | 60448 | 60449 | 62509 | 5 | 1 | x | x | x | x | | | |
| 61650 | EcoHeat 400 / EcoZenith i250: Solar H-tank charge stop temperature GSi/EcoZenith i350: Solar EHS-tank charge stop temperature | 1 | RW | 60450 | 60451 | 60452 | 62509 | 6 | 1 | x | x | x | x | | | |
| 61651 | Wood boiler buffer tank delay recharge time | 1 | RW | 60453 | 60454 | 60455 | 62509 | 7 | 1 | | | | | x | | |
| 61652 | Setpoint for upper tank when el. heater is used | 1 | RW | 60456 | 60457 | 60458 | 62509 | 8 | 0,1 | | | | | x | | |
| 61653 | Capacity start point for charging DHW | 1 | RW | 60459 | 60460 | 60461 | 62509 | 9 | 0,1 | | | x | x | | | |
| 61654 | Lower temp sensor start point for charging DHW | 1 | RW | 60462 | 60463 | 60464 | 62509 | 10 | 0,1 | | | x | x | | | |
| 61655 | Ventilation mode | 1 | RW | 60465 | 60466 | 60467 | 62509 | 11 | 1 | x | x | x | x | x | x | |
| 61656 | Turn night cooling on or off | 1 | RW | 60468 | 60469 | 60470 | 62509 | 12 | 1 | x | x | x | x | x | x | |
| 61657 | Ventilation away mode | 1 | RW | 60471 | 60472 | 60473 | 62509 | 13 | 1 | x | x | x | x | x | x | |
| 61658 | Pool Enable | 1 | RW | 60474 | 60475 | 60476 | 62509 | 14 | 1 | x | x | x | x | x | x | |
| 61659 | Room temp cooling | 1 | RW | 60477 | 60478 | 60479 | 62509 | 15 | 0,1 | x | x | x | | x | x | |
| 61660 | Cooling permitted from outdoor temp °C | 1 | RW | 60480 | 60481 | 60482 | 62510 | 0 | 0,1 | | | | | x | x | |
| 61661 | Cooling delay active (minutes) | 1 | RW | 60483 | 60484 | 60485 | 62510 | 1 | 1 | x | x | x | | x | x | |
| 61662 | Delay cooling from heating off (minutes) | 1 | RW | 60486 | 60487 | 60488 | 62510 | 2 | 1 | | | | | x | x | |
| 61663 | Cooling start delay (minutes) | 1 | RW | 60489 | 60490 | 60491 | 62510 | 3 | 1 | x | x | x | | x | x | |
| 61664 | Cooling diff calc delay (minutes) | 1 | RW | 60492 | 60493 | 60494 | 62510 | 4 | 1 | | | | | x | x | |
| 61665 | Primary flow temp at outdoor +20 °C | 1 | RW | 60495 | 60496 | 60497 | 62510 | 5 | 0,1 | | | | | x | x | |
| 61666 | Primary flow temp at outdoor +40 °C | 1 | RW | 60498 | 60499 | 60500 | 62510 | 6 | 0,1 | | | | | x | x | |
| 61667 | Primary flow diff at outdoor +20 °C | 1 | RW | 60501 | 60502 | 60503 | 62510 | 7 | 0,1 | | | | | x | x | |
| 61668 | Primary flow diff at outdoor +40 °C | 1 | RW | 60504 | 60505 | 60506 | 62510 | 8 | 0,1 | | | | | x | x | |
| 61669 | Cooling max time HP active (minutes) | 1 | RW | 60507 | 60508 | 60509 | 62510 | 9 | 1 | | | | | x | | |
| 61670 | Cooling HP Charge pump speed | 1 | RW | 60510 | 60511 | 60512 | 62510 | 10 | 1 | | | | | x | | |
| 61671 | Heating program HC1<br>0 = Economy<br>1 = Normal<br>2 = Comfort<br>3 = Custom | 1 | RW | 60513 | 60514 | 60515 | 62510 | 11 | 1 | x | x | x | x | x | x | |
| 61672 | Heating program HC2<br>0 = Economy<br>1 = Normal<br>2 = Comfort<br>3 = Custom | 1 | RW | 60516 | 60517 | 60518 | 62510 | 12 | 1 | x | x | x | x | x | x | |
| 61673 | Heating program HC3<br>0 = Economy<br>1 = Normal<br>2 = Comfort<br>3 = Custom | 1 | RW | 60519 | 60520 | 60521 | 62510 | 13 | 1 | | | | | x | x | |
| 61674 | Heating program HC4<br>0 = Economy<br>1 = Normal<br>2 = Comfort<br>3 = Custom | 1 | RW | 60522 | 60523 | 60524 | 62510 | 14 | 1 | | | | | | x | |
| 61675 | HC1 Heating curve point 1 x-value (outside temp) | 1 | RW | 60525 | 60526 | 60527 | 62510 | 15 | 1 | x | x | x | x | x | x | x |
| 61676 | HC1 Heating curve point 1 y-value (setp temp) | 1 | RW | 60528 | 60529 | 60530 | 62511 | 0 | 1 | x | x | x | x | x | x | x |
| 61677 | HC1 Heating curve point 2 x-value (outside temp) | 1 | RW | 60531 | 60532 | 60533 | 62511 | 1 | 1 | x | x | x | x | x | x | x |
| 61678 | HC1 Heating curve point 2 y-value (setp temp) | 1 | RW | 60534 | 60535 | 60536 | 62511 | 2 | 1 | x | x | x | x | x | x | x |
| 61679 | HC1 Heating curve point 3 x-value (outside temp) | 1 | RW | 60537 | 60538 | 60539 | 62511 | 3 | 1 | x | x | x | x | x | x | x |
| 61680 | HC1 Heating curve point 3 y-value (setp temp) | 1 | RW | 60540 | 60541 | 60542 | 62511 | 4 | 1 | x | x | x | x | x | x | x |
| 61681 | HC1 Heating curve point 4 x-value (outside temp) | 1 | RW | 60543 | 60544 | 60545 | 62511 | 5 | 1 | x | x | x | x | x | x | x |
| 61682 | HC1 Heating curve point 4 y-value (setp temp) | 1 | RW | 60546 | 60547 | 60548 | 62511 | 6 | 1 | x | x | x | x | x | x | x |
| 61683 | HC1 Heating curve point 5 x-value (outside temp) | 1 | RW | 60549 | 60550 | 60551 | 62511 | 7 | 1 | x | x | x | x | x | x | x |
| 61684 | HC1 Heating curve point 5 y-value (setp temp) | 1 | RW | 60552 | 60553 | 60554 | 62511 | 8 | 1 | x | x | x | x | x | x | x |
| 61685 | HC2 Heating curve point 1 x-value (outside temp) | 1 | RW | 60555 | 60556 | 60557 | 62511 | 9 | 1 | x | x | x | x | x | x | |
| 61686 | HC2 Heating curve point 1 y-value (setp temp) | 1 | RW | 60558 | 60559 | 60560 | 62511 | 10 | 1 | x | x | x | x | x | x | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 61687 | HC2 Heating curve point 2 x-value (outside temp) | 1 | RW | 60561 | 60562 | 60563 | 62511 | 11 | 1 | x | x | x | x | x | x | |
| 61688 | HC2 Heating curve point 2 y-value (setp temp) | 1 | RW | 60564 | 60565 | 60566 | 62511 | 12 | 1 | x | x | x | x | x | x | |
| 61689 | HC2 Heating curve point 3 x-value (outside temp) | 1 | RW | 60567 | 60568 | 60569 | 62511 | 13 | 1 | x | x | x | x | x | x | |
| 61690 | HC2 Heating curve point 3 y-value (setp temp) | 1 | RW | 60570 | 60571 | 60572 | 62511 | 14 | 1 | x | x | x | x | x | x | |
| 61691 | HC2 Heating curve point 4 x-value (outside temp) | 1 | RW | 60573 | 60574 | 60575 | 62511 | 15 | 1 | x | x | x | x | x | x | |
| 61692 | HC2 Heating curve point 4 y-value (setp temp) | 1 | RW | 60576 | 60577 | 60578 | 62512 | 0 | 1 | x | x | x | x | x | x | |
| 61693 | HC2 Heating curve point 5 x-value (outside temp) | 1 | RW | 60579 | 60580 | 60581 | 62512 | 1 | 1 | x | x | x | x | x | x | |
| 61694 | HC2 Heating curve point 5 y-value (setp temp) | 1 | RW | 60582 | 60583 | 60584 | 62512 | 2 | 1 | x | x | x | x | x | x | |
| 61695 | HC3 Heating curve point 1 x-value (outside temp) | 1 | RW | 60585 | 60586 | 60587 | 62512 | 3 | 1 | | | | | x | x | |
| 61696 | HC3 Heating curve point 1 y-value (setp temp) | 1 | RW | 60588 | 60589 | 60590 | 62512 | 4 | 1 | | | | | x | x | |
| 61697 | HC3 Heating curve point 2 x-value (outside temp) | 1 | RW | 60591 | 60592 | 60593 | 62512 | 5 | 1 | | | | | x | x | |
| 61698 | HC3 Heating curve point 2 y-value (setp temp) | 1 | RW | 60594 | 60595 | 60596 | 62512 | 6 | 1 | | | | | x | x | |
| 61699 | HC3 Heating curve point 3 x-value (outside temp) | 1 | RW | 60597 | 60598 | 60599 | 62512 | 7 | 1 | | | | | x | x | |
| 61700 | HC3 Heating curve point 3 y-value (setp temp) | 1 | RW | 60600 | 60601 | 60602 | 62512 | 8 | 1 | | | | | x | x | |
| 61701 | HC3 Heating curve point 4 x-value (outside temp) | 1 | RW | 60603 | 60604 | 60605 | 62512 | 9 | 1 | | | | | x | x | |
| 61702 | HC3 Heating curve point 4 y-value (setp temp) | 1 | RW | 60606 | 60607 | 60608 | 62512 | 10 | 1 | | | | | x | x | |
| 61703 | HC3 Heating curve point 5 x-value (outside temp) | 1 | RW | 60609 | 60610 | 60611 | 62512 | 11 | 1 | | | | | x | x | |
| 61704 | HC3 Heating curve point 5 y-value (setp temp) | 1 | RW | 60612 | 60613 | 60614 | 62512 | 12 | 1 | | | | | x | x | |
| 61705 | HC4 Heating curve point 1 x-value (outside temp) | 1 | RW | 60615 | 60616 | 60617 | 62512 | 13 | 1 | | | | | | x | |
| 61706 | HC4 Heating curve point 1 y-value (setp temp) | 1 | RW | 60618 | 60619 | 60620 | 62512 | 14 | 1 | | | | | | x | |
| 61707 | HC4 Heating curve point 2 x-value (outside temp) | 1 | RW | 60621 | 60622 | 60623 | 62512 | 15 | 1 | | | | | | x | |
| 61708 | HC4 Heating curve point 2 y-value (setp temp) | 1 | RW | 60624 | 60625 | 60626 | 62513 | 0 | 1 | | | | | | x | |
| 61709 | HC4 Heating curve point 3 x-value (outside temp) | 1 | RW | 60627 | 60628 | 60629 | 62513 | 1 | 1 | | | | | | x | |
| 61710 | HC4 Heating curve point 3 y-value (setp temp) | 1 | RW | 60630 | 60631 | 60632 | 62513 | 2 | 1 | | | | | | x | |
| 61711 | HC4 Heating curve point 4 x-value (outside temp) | 1 | RW | 60633 | 60634 | 60635 | 62513 | 3 | 1 | | | | | | x | |
| 61712 | HC4 Heating curve point 4 y-value (setp temp) | 1 | RW | 60636 | 60637 | 60638 | 62513 | 4 | 1 | | | | | | x | |
| 61713 | HC4 Heating curve point 5 x-value (outside temp) | 1 | RW | 60639 | 60640 | 60641 | 62513 | 5 | 1 | | | | | | x | |
| 61714 | HC4 Heating curve point 5 y-value (setp temp) | 1 | RW | 60642 | 60643 | 60644 | 62513 | 6 | 1 | | | | | | x | |
| 61715 | Cooling curve point 1 x-value (outside temp) | 1 | RW | 60645 | 60646 | 60647 | 62513 | 7 | 1 | | | | | x | x | |
| 61716 | Cooling curve point 1 y-value (setp temp) | 1 | RW | 60648 | 60649 | 60650 | 62513 | 8 | 1 | | | | | x | x | |
| 61717 | Cooling curve point 2 x-value (outside temp) | 1 | RW | 60651 | 60652 | 60653 | 62513 | 9 | 1 | | | | | x | x | |
| 61718 | Cooling curve point 2 y-value (setp temp) | 1 | RW | 60654 | 60655 | 60656 | 62513 | 10 | 1 | | | | | x | x | |
| 61719 | Cooling curve point 3 x-value (outside temp) | 1 | RW | 60657 | 60658 | 60659 | 62513 | 11 | 1 | | | | | x | x | |
| 61720 | Cooling curve point 3 y-value (setp temp) | 1 | RW | 60660 | 60661 | 60662 | 62513 | 12 | 1 | | | | | x | x | |
| 61721 | Cooling curve point 4 x-value (outside temp) | 1 | RW | 60663 | 60664 | 60665 | 62513 | 13 | 1 | | | | | x | x | |
| 61722 | Cooling curve point 4 y-value (setp temp) | 1 | RW | 60666 | 60667 | 60668 | 62513 | 14 | 1 | | | | | x | x | |
| 61723 | Cooling curve point 5 x-value (outside temp) | 1 | RW | 60669 | 60670 | 60671 | 62513 | 15 | 1 | | | | | x | x | |
| 61724 | Cooling curve point 5 y-value (setp temp) | 1 | RW | 60672 | 60673 | 60674 | 62514 | 0 | 1 | | | | | x | x | |
| 61725 | Heating system 1: Heating on time | 1 | RW | 60675 | 60676 | 60677 | 62514 | 1 | 1 | x | x | x | x | x | x | |
| 61726 | Heating system 2: Heating on time | 1 | RW | 60678 | 60679 | 60680 | 62514 | 2 | 1 | x | x | x | x | x | x | |
| 61727 | Heating system 3: Heating on time | 1 | RW | 60681 | 60682 | 60683 | 62514 | 3 | 1 | x | x | x | x | x | x | |
| 61728 | Heating system 4: Heating on time | 1 | RW | 60684 | 60685 | 60686 | 62514 | 4 | 1 | x | x | x | x | x | x | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| 62000 | Outdoor temperature | 1 | R | | | | 62531 | 4 | 0,1 | x | x | x | x | x | x | |
| 62001 | Stop temperature DHW | 1 | R | | | | 62531 | 5 | 0,1 | x | x | x | x | x | x | |
| 62002 | Setpoint outlet temperature DHW | 1 | R | | | | 62531 | 6 | 1 | | | | x | x | | |
| 62003 | Hot water temperature | 1 | R | | | | 62531 | 7 | 0,1 | | | | x | x | | |
| 62004 | Delay mixing valve | 1 | R | | | | 62531 | 8 | 1 | x | x | | | | x | |
| 62005 | Status | 1 | R | | | | 62531 | 9 | 1 | x | x | x | x | x | x | |
| | *0: HP upper* | | | | | | | | | | | | | | | |
| | *1: HP lower* | | | | | | | | | | | | | | | |
| | *2: Add* | | | | | | | | | | | | | | | |
| | *3: HP + Add* | | | | | | | | | | | | | | | |
| | *4: HC* | | | | | | | | | | | | | | | |
| | *5: DHW* | | | | | | | | | | | | | | | |
| | *6: Pool* | | | | | | | | | | | | | | | |
| | *7: Off* | | | | | | | | | | | | | | | |
| | *8: Heating mix* | | | | | | | | | | | | | | | |
| | *9: Wood* | | | | | | | | | | | | | | | |
| | *10: DHW/HC* | | | | | | | | | | | | | | | |
| | *11: Cooling* | | | | | | | | | | | | | | | |
| | *12: Swap* | | | | | | | | | | | | | | | |
| 62006 | Radiator Water | 1 | R | | | | 62531 | 10 | 0,1 | x | x | | | x | x | |
| 62007 | Heating system 1: Temperature setpoint primary flow | 1 | R | | | | 62531 | 11 | 0,1 | x | x | x | x | x | x | x |
| 62008 | Heating system 2: Temperature setpoint primary flow | 1 | R | | | | 62531 | 12 | 0,1 | x | x | x | x | x | x | |
| 62009 | Heating system 3: Temperature setpoint primary flow | 1 | R | | | | 62531 | 13 | 0,1 | | | | | x | x | |
| 62010 | Heating system 4: Temperature setpoint primary flow | 1 | R | | | | 62531 | 14 | 0,1 | | | | | | x | |
| 62011 | Heating system 1: Primary flow temperature | 1 | R | | | | 62531 | 15 | 0,1 | x | x | x | x | x | x | x |
| 62012 | Heating system 2: Primary flow temperature | 1 | R | | | | 62532 | 0 | 0,1 | x | x | x | x | x | x | |
| 62013 | Heating system 3: Primary flow temperature | 1 | R | | | | 62532 | 1 | 0,1 | | | | | x | x | |
| 62014 | Heating system 4: Primary flow temperature | 1 | R | | | | 62532 | 2 | 0,1 | | | | | | x | |
| 62015 | Return temp | 1 | R | | | | 62532 | 3 | 0,1 | x | x | x | x | x | x | |
| 62016 | DHW circulation | 1 | R | | | | 62532 | 4 | 1 | | | x | x | x | x | |

| ID | Description | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 62017 | Heat pump 1 (A1): Status<br>*0=Compressor_off_start_delay*<br>*1=Compressor_off_redy_to_start*<br>*2=Compressor_wait_until_flow*<br>*3=Comperssor_on_heating*<br>*4=Defrost_active,*<br>*5=Compressor_on_cooling*<br>*6=Compressor_off_blocked*<br>*7=Compressor_off_alarm*<br>*8=Function_test.*<br>*30=HP not defined*<br>*31=Compressor not enabled*<br>*32=Communication error*<br>*33=Charge dhw* | 1 | R | 62532 | 5 | 1 | x | x | x | x | x | x | x |
| 62018 | Heat pump 2 (A2) status<br>0=Compressor_off_start_delay<br>1=Compressor_off_redy_to_start<br>2=Compressor_wait_until_flow<br>3=Comperssor_on_heating<br>4=Defrost_active,<br>5=Compressor_on_cooling<br>6=Compressor_off_blocked<br>7=Compressor_off_alarm<br>8=Function_test.<br>30=HP not defined<br>31=Compressor not enabled<br>32=Communication error<br>33=Charge dhw | 1 | R | 62532 | 6 | 1 | | | | | x | x | |
| 62019 | Heat pump 3 (A3) Status<br>0=Compressor_off_start_delay<br>1=Compressor_off_redy_to_start<br>2=Compressor_wait_until_flow<br>3=Comperssor_on_heating<br>4=Defrost_active,<br>5=Compressor_on_cooling<br>6=Compressor_off_blocked<br>7=Compressor_off_alarm<br>8=Function_test.<br>30=HP not defined<br>31=Compressor not enabled<br>32=Communication error<br>33=Charge dhw | 1 | R | 62532 | 7 | 1 | | | | | x | x | |
| 62020 | Heat pump 4 (A4) Status<br>0=Compressor_off_start_delay<br>1=Compressor_off_redy_to_start<br>2=Compressor_wait_until_flow<br>3=Comperssor_on_heating<br>4=Defrost_active,<br>5=Compressor_on_cooling<br>6=Compressor_off_blocked<br>7=Compressor_off_alarm<br>8=Function_test.<br>30=HP not defined<br>31=Compressor not enabled<br>32=Communication error<br>33=Charge dhw | 1 | R | 62532 | 8 | 1 | | | | | | x | |
| 62021 | Heat pump 5 (A5) Status<br>0=Compressor_off_start_delay<br>1=Compressor_off_redy_to_start<br>2=Compressor_wait_until_flow<br>3=Comperssor_on_heating<br>4=Defrost_active,<br>5=Compressor_on_cooling<br>6=Compressor_off_blocked<br>7=Compressor_off_alarm<br>8=Function_test.<br>30=HP not defined<br>31=Compressor not enabled<br>32=Communication error<br>33=Charge dhw | 1 | R | 62532 | 9 | 1 | | | | | | x | |

| Register | Description | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 62022 | Heat pump 6 (A6) Status<br>0=Compressor_off_start_delay<br>1=Compressor_off_redy_to_start<br>2=Compressor_wait_until_flow<br>3=Compressor_on_heating<br>4=Defrost_active,<br>5=Compressor_on_cooling<br>6=Compressor_off_blocked<br>7=Compressor_off_alarm<br>8=Function_test.<br>30=HP not defined<br>31=Compressor not enabled<br>32=Communication error<br>33=Charge dhw | 1 | R | 62532 | 10 | 1 | | | | | | | x | |
| 62023 | Heat pump 7 (A7) Status<br>0=Compressor_off_start_delay<br>1=Compressor_off_redy_to_start<br>2=Compressor_wait_until_flow<br>3=Comperssor_on_heating<br>4=Defrost_active,<br>5=Compressor_on_cooling<br>6=Compressor_off_blocked<br>7=Compressor_off_alarm<br>8=Function_test.<br>30=HP not defined<br>31=Compressor not enabled<br>32=Communication error<br>33=Charge dhw | 1 | R | 62532 | 11 | 1 | | | | | | | x | |
| 62024 | Heat pump 8 (A8) Status<br>0=Compressor_off_start_delay<br>1=Compressor_off_redy_to_start<br>2=Compressor_wait_until_flow<br>3=Comperssor_on_heating<br>4=Defrost_active,<br>5=Compressor_on_cooling<br>6=Compressor_off_blocked<br>7=Compressor_off_alarm<br>8=Function_test.<br>30=HP not defined<br>31=Compressor not enabled<br>32=Communication error<br>33=Charge dhw | 1 | R | 62532 | 12 | 1 | | | | | | | x | |
| 62025 | Heat pump 9 (A9) Status<br>0=Compressor_off_start_delay<br>1=Compressor_off_redy_to_start<br>2=Comperssor_wait_until_flow<br>3=Comperssor_on_heating<br>4=Defrost_active,<br>5=Compressor_on_cooling<br>6=Compressor_off_blocked<br>7=Compressor_off_alarm<br>8=Function_test.<br>30=HP not defined<br>31=Compressor not enabled<br>32=Communication error<br>33=Charge dhw | 1 | R | 62532 | 13 | 1 | | | | | | | x | |
| 62026 | Heat pump 10 (A10): Status<br>0=Compressor_off_start_delay<br>1=Compressor_off_redy_to_start<br>2=Compressor_wait_until_flow<br>3=Comperssor_on_heating<br>4=Defrost_active,<br>5=Compressor_on_cooling<br>6=Compressor_off_blocked<br>7=Compressor_off_alarm<br>8=Function_test.<br>30=HP not defined<br>31=Compressor not enabled<br>32=Communication error<br>33=Charge dhw | 1 | R | 62532 | 14 | 1 | | | | | | | x | |
| 62027 | Heat pump 1 (A1) HP in | 1 | R | 62532 | 15 | 0,1 | x | x | x | x | x | | x | x |
| 62028 | Heat pump 2 (A2) HP in | 1 | R | 62533 | 0 | 0,1 | | | | | | | x | x |
| 62029 | Heat pump 3 (A3) HP in | 1 | R | 62533 | 1 | 0,1 | | | | | | | x | x |
| 62030 | Heat pump 4 (A4) HP in | 1 | R | 62533 | 2 | 0,1 | | | | | | | x | |
| 62031 | Heat pump 5 (A5) HP in | 1 | R | 62533 | 3 | 0,1 | | | | | | | x | |
| 62032 | Heat pump 6 (A6) HP in | 1 | R | 62533 | 4 | 0,1 | | | | | | | x | |
| 62033 | Heat pump 7 (A7) HP in | 1 | R | 62533 | 5 | 0,1 | | | | | | | x | |
| 62034 | Heat pump 8 (A8) HP in | 1 | R | 62533 | 6 | 0,1 | | | | | | | x | |
| 62035 | Heat pump 9 (A9) HP in | 1 | R | 62533 | 7 | 0,1 | | | | | | | x | |
| 62036 | Heat pump 10 (A10) HP in | 1 | R | 62533 | 8 | 0,1 | | | | | | | x | |
| 62037 | Heat pump 1 (A1) HP out | 1 | R | 62533 | 9 | 0,1 | x | x | x | x | x | | x | x |
| 62038 | Heat pump 2 (A2) HP out | 1 | R | 62533 | 10 | 0,1 | | | | | | | x | x |

| Addr | Description | Qty | RW | Reg | Idx | Scale | C1 | C2 | C3 | C4 | C5 | C6 | C7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 62039 | Heat pump 3 (A3) HP out | 1 | R | 62533 | 11 | 0,1 | | | | | x | x | |
| 62040 | Heat pump 4 (A4) HP out | 1 | R | 62533 | 12 | 0,1 | | | | | | x | |
| 62041 | Heat pump 5 (A5) HP out | 1 | R | 62533 | 13 | 0,1 | | | | | x | x | |
| 62042 | Heat pump 6 (A6) HP out | 1 | R | 62533 | 14 | 0,1 | | | | | | x | |
| 62043 | Heat pump 7 (A7) HP out | 1 | R | 62533 | 15 | 0,1 | | | | | x | x | |
| 62044 | Heat pump 8 (A8) HP out | 1 | R | 62534 | 0 | 0,1 | | | | | | x | |
| 62045 | Heat pump 9 (A9) HP out | 1 | R | 62534 | 1 | 0,1 | | | | | x | x | |
| 62046 | Heat pump 10 (A10) HP out | 1 | R | 62534 | 2 | 0,1 | | | | | | x | |
| 62047 | Heat pump 1 (A1): Discharge temperature | 1 | R | 62534 | 3 | 0,1 | x | x | x | x | x | x | x |
| 62048 | Heat pump 2 (A2) Discharge temperature | 1 | R | 62534 | 4 | 0,1 | | | | | | x | |
| 62049 | Heat pump 3 (A3): Discharge temperature | 1 | R | 62534 | 5 | 0,1 | | | | | x | x | |
| 62050 | Heat pump 4 (A4): Discharge temperature | 1 | R | 62534 | 6 | 0,1 | | | | | | x | |
| 62051 | Heat pump 5 (A5): Discharge temperature | 1 | R | 62534 | 7 | 0,1 | | | | | | x | |
| 62052 | Heat pump 6 (A6): Discharge temperature | 1 | R | 62534 | 8 | 0,1 | | | | | | x | |
| 62053 | Heat pump 7 (A7): Discharge temperature | 1 | R | 62534 | 9 | 0,1 | | | | | | x | |
| 62054 | Heat pump 8 (A8): Discharge temperature | 1 | R | 62534 | 10 | 0,1 | | | | | | x | |
| 62055 | Heat pump 9 (A9): Discharge temperature | 1 | R | 62534 | 11 | 0,1 | | | | | | x | |
| 62056 | Heat pump 10 (A10): Discharge temperature | 1 | R | 62534 | 12 | 0,1 | | | | | | x | |
| 62057 | Heat pump 1 (A1): Suction gas temperature | 1 | R | 62534 | 13 | 0,1 | x | x | x | x | x | x | x |
| 62058 | Heat pump 2 (A2) Suction gas temperature | 1 | R | 62534 | 14 | 0,1 | | | | | | x | |
| 62059 | Heat pump 3 (A3): Suction gas temperature | 1 | R | 62534 | 15 | 0,1 | | | | | x | x | |
| 62060 | Heat pump 4 (A4): Suction gas temperature | 1 | R | 62535 | 0 | 0,1 | | | | | | x | |
| 62061 | Heat pump 5 (A5): Suction gas temperature | 1 | R | 62535 | 1 | 0,1 | | | | | | x | |
| 62062 | Heat pump 6 (A6): Suction gas temperature | 1 | R | 62535 | 2 | 0,1 | | | | | | x | |
| 62063 | Heat pump 7 (A7): Suction gas temperature | 1 | R | 62535 | 3 | 0,1 | | | | | | x | |
| 62064 | Heat pump 8 (A8): Suction gas temperature | 1 | R | 62535 | 4 | 0,1 | | | | | | x | |
| 62065 | Heat pump 9 (A9): Suction gas temperature | 1 | R | 62535 | 5 | 0,1 | | | | | | x | |
| 62066 | Heat pump 10 (A10): Suction gas temperature | 1 | R | 62535 | 6 | 0,1 | | | | | | x | |
| 62067 | Heat pump 1 (A1): High pressure | 1 | R | 62535 | 7 | 0,1 | x | x | x | x | x | x | x |
| 62068 | Heat pump 2 (A2): High pressure | 1 | R | 62535 | 8 | 0,1 | | | | | | x | |
| 62069 | Heat pump 3 (A3): High pressure | 1 | R | 62535 | 9 | 0,1 | | | | | x | x | |
| 62070 | Heat pump 4 (A4): High pressure | 1 | R | 62535 | 10 | 0,1 | | | | | | x | |
| 62071 | Heat pump 5 (A5): High pressure | 1 | R | 62535 | 11 | 0,1 | | | | | | x | |
| 62072 | Heat pump 6 (A6): High pressure | 1 | R | 62535 | 12 | 0,1 | | | | | | x | |
| 62073 | Heat pump 7 (A7): High pressure | 1 | R | 62535 | 13 | 0,1 | | | | | | x | |
| 62074 | Heat pump 8 (A8): High pressure | 1 | R | 62535 | 14 | 0,1 | | | | | | x | |
| 62075 | Heat pump 9 (A9): High pressure | 1 | R | 62535 | 15 | 0,1 | | | | | | x | |
| 62076 | Heat pump 10 (A10): High pressure | 1 | R | 62536 | 0 | 0,1 | | | | | | x | |
| 62077 | Heat pump 1 (A1): Low Pressure | 1 | R | 62536 | 1 | 0,1 | x | x | x | x | x | x | x |
| 62078 | Heat pump 2 (A2): Low pressure | 1 | R | 62536 | 2 | 0,1 | | | | | | x | |
| 62079 | Heat pump 3 (A3): Low Pressure | 1 | R | 62536 | 3 | 0,1 | | | | | x | x | |
| 62080 | Heat pump 4 (A4): Low Pressure | 1 | R | 62536 | 4 | 0,1 | | | | | | x | |
| 62081 | Heat pump 5 (A5): Low Pressure | 1 | R | 62536 | 5 | 0,1 | | | | | | x | |
| 62082 | Heat pump 6 (A6): Low Pressure | 1 | R | 62536 | 6 | 0,1 | | | | | | x | |
| 62083 | Heat pump 7 (A7): Low Pressure | 1 | R | 62536 | 7 | 0,1 | | | | | | x | |
| 62084 | Heat pump 8 (A8): Low Pressure | 1 | R | 62536 | 8 | 0,1 | | | | | | x | |
| 62085 | Heat pump 9 (A9): Low Pressure | 1 | R | 62536 | 9 | 0,1 | | | | | | x | |
| 62086 | Heat pump 10 (A10): Low Pressure | 1 | R | 62536 | 10 | 0,1 | | | | | | x | |
| 62087 | Heat pump 1 (A1): Brine in | 1 | R | 62536 | 11 | 0,1 | x | x | x | x | x | x | x |
| 62088 | Heat pump 2 (A2): Brine in | 1 | R | 62536 | 12 | 0,1 | | | | | | x | |
| 62089 | Heat pump 3 (A3): Brine in | 1 | R | 62536 | 13 | 0,1 | | | | | x | x | |
| 62090 | Heat pump 4 (A4): Brine in | 1 | R | 62536 | 14 | 0,1 | | | | | | x | |
| 62091 | Heat pump 5 (A5): Brine in | 1 | R | 62536 | 15 | 0,1 | | | | | | x | |
| 62092 | Heat pump 6 (A6): Brine in | 1 | R | 62537 | 0 | 0,1 | | | | | | x | |
| 62093 | Heat pump 7 (A7): Brine in | 1 | R | 62537 | 1 | 0,1 | | | | | | x | |
| 62094 | Heat pump 8 (A8): Brine in | 1 | R | 62537 | 2 | 0,1 | | | | | | x | |
| 62095 | Heat pump 9 (A9): Brine in | 1 | R | 62537 | 3 | 0,1 | | | | | | x | |
| 62096 | Heat pump 10 (A10): Brine in | 1 | R | 62537 | 4 | 0,1 | | | | | | x | |
| 62097 | Heat pump 1 (A1): Brine out | 1 | R | 62537 | 5 | 0,1 | x | x | x | x | x | x | x |
| 62098 | Heat pump 2 (A2): Brine out | 1 | R | 62537 | 6 | 0,1 | | | | | | x | |
| 62099 | Heat pump 3 (A3): Brine out | 1 | R | 62537 | 7 | 0,1 | | | | | x | x | |
| 62100 | Heat pump 4 (A4): Brine out | 1 | R | 62537 | 8 | 0,1 | | | | | | x | |
| 62101 | Heat pump 5 (A5): Brine out | 1 | R | 62537 | 9 | 0,1 | | | | | | x | |
| 62102 | Heat pump 6 (A6): Brine out | 1 | R | 62537 | 10 | 0,1 | | | | | | x | |
| 62103 | Heat pump 7 (A7): Brine out | 1 | R | 62537 | 11 | 0,1 | | | | | | x | |
| 62104 | Heat pump 8 (A8): Brine out | 1 | R | 62537 | 12 | 0,1 | | | | | | x | |
| 62105 | Heat pump 9 (A9): Brine out | 1 | R | 62537 | 13 | 0,1 | | | | | | x | |
| 62106 | Heat pump 10 (A10): Brine out | 1 | R | 62537 | 14 | 0,1 | | | | | | x | |
| 62107 | Heat pump 1 (A1): Charge pump | 1 | R | 62537 | 15 | 0,1 | x | x | x | x | x | x | x |
| 62108 | Heat pump 2 (A2): Chargepump | 1 | R | 62538 | 0 | 0,1 | | | | | | x | |
| 62109 | Heat pump 3 (A3): Charge pump | 1 | R | 62538 | 1 | 0,1 | | | | | x | x | |
| 62110 | Heat pump 4 (A4): Charge pump | 1 | R | 62538 | 2 | 0,1 | | | | | | x | |
| 62111 | Heat pump 5 (A5): Charge pump | 1 | R | 62538 | 3 | 0,1 | | | | | | x | |
| 62112 | Heat pump 6 (A6): Charge pump | 1 | R | 62538 | 4 | 0,1 | | | | | | x | |
| 62113 | Heat pump 7 (A7): Charge pump | 1 | R | 62538 | 5 | 0,1 | | | | | | x | |
| 62114 | Heat pump 8 (A8): Charge pump | 1 | R | 62538 | 6 | 0,1 | | | | | | x | |
| 62115 | Heat pump 9 (A9): Charge pump | 1 | R | 62538 | 7 | 0,1 | | | | | | x | |
| 62116 | Heat pump 10 (A10): Charge pump | 1 | R | 62538 | 8 | 0,1 | | | | | | x | |
| 62117 | Heat pump 1 (A1): Brine pump | 1 | R | 62538 | 9 | 0,1 | x | x | x | x | x | x | x |
| 62118 | Heat pump 2 (A2): Brine pump | 1 | R | 62538 | 10 | 0,1 | | | | | | x | |
| 62119 | Heat pump 3 (A3): Brine pump | 1 | R | 62538 | 11 | 0,1 | | | | | x | x | |
| 62120 | Heat pump 4 (A4): Brine pump | 1 | R | 62538 | 12 | 0,1 | | | | | | x | |

| Reg | Parameter | | R/W | Reg2 | Bit | Scale | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 62121 | Heat pump 5 (A5): Brine pump | 1 | R | 62538 | 13 | 0,1 | | | | | | | x | |
| 62122 | Heat pump 6 (A6): Brine pump | 1 | R | 62538 | 14 | 0,1 | | | | | | | x | |
| 62123 | Heat pump 7 (A7): Brine pump | 1 | R | 62538 | 15 | 0,1 | | | | | | | x | |
| 62124 | Heat pump 8 (A8): Brine pump | 1 | R | 62539 | 0 | 0,1 | | | | | | | x | |
| 62125 | Heat pump 9 (A9): Brine pump | 1 | R | 62539 | 1 | 0,1 | | | | | | | x | |
| 62126 | Heat pump 10 (A10): Brine pump | 1 | R | 62539 | 2 | 0,1 | | | | | | | x | |
| 62127 | Heat pump 1 (A1): Fan | 1 | R | 62539 | 3 | 0,1 | x | x | x | x | x | | x | x |
| 62128 | Heat pump 2 (A2) Fan | 1 | R | 62539 | 4 | 0,1 | | | | | | x | x | |
| 62129 | Heat pump 3 (A3): Fan | 1 | R | 62539 | 5 | 0,1 | | | | | | x | x | |
| 62130 | Heat pump 4 (A4): Fan | 1 | R | 62539 | 6 | 0,1 | | | | | | | x | |
| 62131 | Heat pump 5 (A5): Fan | 1 | R | 62539 | 7 | 0,1 | | | | | | | x | |
| 62132 | Heat pump 6 (A6): Fan | 1 | R | 62539 | 8 | 0,1 | | | | | | | x | |
| 62133 | Heat pump 7 (A7): Fan | 1 | R | 62539 | 9 | 0,1 | | | | | | | x | |
| 62134 | Heat pump 8 (A8): Fan | 1 | R | 62539 | 10 | 0,1 | | | | | | | x | |
| 62135 | Heat pump 9 (A9): Fan | 1 | R | 62539 | 11 | 0,1 | | | | | | | x | |
| 62136 | Heat pump 10 (A10): Fan | 1 | R | 62539 | 12 | 0,1 | | | | | | | x | |
| 62137 | Heat pump 1 (A1): Defrost timer | 1 | R | 62539 | 13 | 1 | x | x | x | x | x | | x | x |
| 62138 | Heat pump 2 (A2) Defrost timer | 1 | R | 62539 | 14 | 1 | | | | | | | x | |
| 62139 | Heat pump 3 (A3): Defrost timer | 1 | R | 62539 | 15 | 1 | | | | | | x | x | |
| 62140 | Heat pump 4 (A4): Defrost timer | 1 | R | 62540 | 0 | 1 | | | | | | | x | |
| 62141 | Heat pump 5 (A5): Defrost timer | 1 | R | 62540 | 1 | 1 | | | | | | | x | |
| 62142 | Heat pump 6 (A6): Defrost timer | 1 | R | 62540 | 2 | 1 | | | | | | | x | |
| 62143 | Heat pump 7 (A7): Defrost timer | 1 | R | 62540 | 3 | 1 | | | | | | | x | |
| 62144 | Heat pump 8 (A8): Defrost timer | 1 | R | 62540 | 4 | 1 | | | | | | | x | |
| 62145 | Heat pump 9 (A9): Defrost timer | 1 | R | 62540 | 5 | 1 | | | | | | | x | |
| 62146 | Heat pump 10 (A10): Defrost timer | 1 | R | 62540 | 6 | 1 | | | | | | | x | |
| 62147 | Heat pump 1 (A1): Outdoor temp | 1 | R | 62540 | 7 | 0,1 | x | x | x | x | x | | x | x |
| 62148 | Heat pump 2 (A2) Outdoor temp | 1 | R | 62540 | 8 | 0,1 | | | | | | | x | |
| 62149 | Heat pump 3 (A3): Outdoor temp | 1 | R | 62540 | 9 | 0,1 | | | | | | x | x | |
| 62150 | Heat pump 4 (A4): Outdoor temp | 1 | R | 62540 | 10 | 0,1 | | | | | | | x | |
| 62151 | Heat pump 5 (A5): Outdoor temp | 1 | R | 62540 | 11 | 0,1 | | | | | | | x | |
| 62152 | Heat pump 6 (A6): Outdoor temp | 1 | R | 62540 | 12 | 0,1 | | | | | | | x | |
| 62153 | Heat pump 7 (A7): Outdoor temp | 1 | R | 62540 | 13 | 0,1 | | | | | | | x | |
| 62154 | Heat pump 8 (A8): Outdoor temp | 1 | R | 62540 | 14 | 0,1 | | | | | | | x | |
| 62155 | Heat pump 9 (A9): Outdoor temp | 1 | R | 62540 | 15 | 0,1 | | | | | | | x | |
| 62156 | Heat pump 10 (A10): Outdoor temp | 1 | R | 62541 | 0 | 0,1 | | | | | | | x | |
| 62157 | Heat pump 1 (A1): Software version | 1 | R | 62541 | 1 | 1 | x | x | x | x | x | | x | x |
| 62158 | Heat pump 2 (A2): Software version | 1 | R | 62541 | 2 | 1 | | | | | | | x | |
| 62159 | Heat pump 3 (A3): Software version | 1 | R | 62541 | 3 | 1 | | | | | | x | x | |
| 62160 | Heat pump 4 (A4): Software version | 1 | R | 62541 | 4 | 1 | | | | | | | x | |
| 62161 | Heat pump 5 (A5): Software version | 1 | R | 62541 | 5 | 1 | | | | | | | x | |
| 62162 | Heat pump 6 (A6): Software version | 1 | R | 62541 | 6 | 1 | | | | | | | x | |
| 62163 | Heat pump 7 (A7): Software version | 1 | R | 62541 | 7 | 1 | | | | | | | x | |
| 62164 | Heat pump 8 (A8): Software version | 1 | R | 62541 | 8 | 1 | | | | | | | x | |
| 62165 | Heat pump 9 (A9): Software version | 1 | R | 62541 | 9 | 1 | | | | | | | x | |
| 62166 | Heat pump 10 (A10): Software version | 1 | R | 62541 | 10 | 1 | | | | | | | x | |
| 62167 | Degree minute | 1 | R | 62541 | 11 | 0,1 | | | | | x | x | x | x |
| 62168 | Power kW immersion heater | 1 | R | 62541 | 12 | 0,1 | x | x | x | x | | x | x | |
| 62169 | Power kW immersion heater lower | 1 | R | 62541 | 13 | 0,1 | x | | | x | | x | x | |
| 62170 | Maximum current | 1 | R | 62541 | 14 | 0,1 | x | x | x | x | | x | x | |
| 62171 | Current L1 | 1 | R | 62541 | 15 | 0,1 | x | x | x | x | x | x | x | |
| 62172 | Current L2 | 1 | R | 62542 | 0 | 0,1 | x | x | x | x | x | x | x | |
| 62173 | Current L3 | 1 | R | 62542 | 1 | 0,1 | x | x | x | x | x | x | x | |
| 62174 | Pump Diff thermostat | 1 | R | 62542 | 2 | 1 | x | x | x | x | | | | |
| 62175 | Diff thermostat ° C | 1 | R | 62542 | 3 | 0,1 | x | x | x | x | | | | |
| 62176 | EHS: Temperature | 1 | R | 62542 | 4 | 0,1 | | | | | | x | x | |
| 62177 | EHS: Primary flow -> Mode | 1 | R | 62542 | 5 | 1 | | | | | | x | x | |
| 62178 | Pool Mode | 1 | R | 62542 | 6 | 1 | x | x | x | x | | | | |
| 62179 | Pool: Temperature | 1 | R | 62542 | 7 | 0,1 | x | x | x | x | x | x | | |
| 62180 | Pool: Stop temperature | 1 | R | 62542 | 8 | 0,1 | x | x | x | x | x | x | | |
| 62181 | Solar: Mode<br>0=Off<br>1=On | 1 | R | 62542 | 9 | 1 | x | x | x | x | x | x | | |
| 62182 | Solar: Temperature out | 1 | R | 62542 | 10 | 0,1 | x | x | x | x | x | x | | |
| 62183 | Solar: Temperature in | 1 | R | 62542 | 11 | 0,1 | x | x | x | x | x | x | | |
| 62184 | Solar: Pump panel | 1 | R | 62542 | 12 | 1 | x | x | x | x | x | | | |
| 62185 | Tank Timer | 1 | R | 62542 | 13 | 1 | | | | | | x | x | |
| 62186 | Stat: Total Operation LSB | 0 | R | 62542 | 14 | 1 | x | x | x | x | x | x | x | x |
| 62187 | Stat: Total Operation (<< 16) MSB | | | | | | | | | | | | | |
| 62191 | Stat: Immersion heater kWh | 1 | R | 62543 | 3 | 1 | x | x | x | x | x | | x | |
| 62192 | Function Test | 1 | R | 62543 | 4 | 1 | x | x | x | x | x | | x | |
| 62193 | Heat pump 1 (A1): Current RPS | 1 | R | 62543 | 5 | 0,1 | x | x | x | x | | | x | x |
| 62194 | Heat pump 2 (A2): Current RPS | 1 | R | 62543 | 6 | 0,1 | | | | | | x | x | |
| 62195 | Heat pump 3 (A3): Current RPS | 1 | R | 62543 | 7 | 0,1 | | | | | | x | x | |
| 62196 | Heat pump 4 (A4): Current RPS | 1 | R | 62543 | 8 | 0,1 | | | | | | | x | |
| 62197 | Heat pump 5 (A5): Current RPS | 1 | R | 62543 | 9 | 0,1 | | | | | | | x | |
| 62198 | Heat pump 6 (A6): Current RPS | 1 | R | 62543 | 10 | 0,1 | | | | | | | x | |
| 62199 | Heat pump 7 (A7): Current RPS | 1 | R | 62543 | 11 | 0,1 | | | | | | | x | |
| 62200 | Heat pump 8 (A8): Current RPS | 1 | R | 62543 | 12 | 0,1 | | | | | | | x | |
| 62201 | Heat pump 9 (A9): Current RPS | 1 | R | 62543 | 13 | 0,1 | | | | | | | x | |
| 62202 | Heat pump 10 (A10): Current RPS | 1 | R | 62543 | 14 | 0,1 | | | | | | | x | |
| 62203 | Current room temp 1 | 1 | R | 62543 | 15 | 0,1 | x | x | x | x | x | x | x | |

| Reg | Description | | R/W | Reg2 | Bit | Scale | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 62204 | Current room temp 2 | 1 | R | 62544 | 0 | 0,1 | x | x | x | x | x | x | |
| 62205 | Current room temp 3 | 1 | R | 62544 | 1 | 0,1 | | | | | x | x | |
| 62206 | Current room temp 4 | 1 | R | 62544 | 2 | 0,1 | | | | | | x | |
| 62207 | System Type | 1 | R | 62544 | 3 | 1 | | | | | x | | |
| 62208 | Wood: Flue gas temperature (B8) | 1 | R | 62544 | 4 | 1 | | | | | x | x | |
| 62209 | Wood: Temperature boiler (B9) | 1 | R | 62544 | 5 | 1 | | | | | x | | |
| 62210 | E1: Boiler temperature (B9) | 1 | R | 62544 | 6 | 0,1 | | | | x | x | x | |
| 62211 | E1: Temperature boiler out (B10) | 1 | R | 62544 | 7 | 0,1 | | | | | | | |
| 62212 | E2: Number of steps | 1 | R | 62544 | 8 | 1 | | | | | | x | |
| 62213 | E3: Status | 1 | R | 62544 | 9 | 1 | | | | | x | | |
| 62214 | State: Compressor 1 operating time LSB | 0 | R | 62544 | 10 | 1 | x | x | x | x | x | x | x |
| 62215 | State: Compressor 1 operating time (<< 16) MSB | | | | | | | | | | | | |
| 62216 | State: Compressor 2 operating time LSB | 0 | R | 62544 | 12 | 1 | | | | | x | x | |
| 62217 | State: Compressor 2 operating time (<< 16) MSB | | | | | | | | | | | | |
| 62218 | State: Compressor 3 operating time LSB | 0 | R | 62544 | 14 | 1 | | | | | x | x | |
| 62219 | State: Compressor 3 operating time (<< 16) MSB | | | | | | | | | | | | |
| 62220 | State: Compressor 4 operating time LSB | 0 | R | 62545 | 0 | 1 | | | | | | x | |
| 62221 | State: Compressor 4 operating time (<< 16) MSB | | | | | | | | | | | | |
| 62222 | State: Compressor 5 operating time LSB | 0 | R | 62545 | 2 | 1 | | | | | | x | |
| 62223 | State: Compressor 5 operating time (<< 16) MSB | | | | | | | | | | | | |
| 62224 | State: Compressor 6 operating time LSB | 0 | R | 62545 | 4 | 1 | | | | | | x | |
| 62225 | State: Compressor 6 operating time (<< 16) MSB | | | | | | | | | | | | |
| 62226 | State: Compressor 7 operating time LSB | 0 | R | 62545 | 6 | 1 | | | | | | x | |
| 62227 | State: Compressor 7 operating time (<< 16) MSB | | | | | | | | | | | | |
| 62228 | State: Compressor 8 operating hours LSB | 0 | R | 62545 | 8 | 1 | | | | | | x | |
| 62229 | State: Compressor 8 operating hours (<< 16) MSB | | | | | | | | | | | | |
| 62230 | State: Compressor 9 operating time LSB | 0 | R | 62545 | 10 | 1 | | | | | | x | |
| 62231 | State: Compressor 9 operating time (<< 16) MSB | | | | | | | | | | | | |
| 62232 | State: Compressor 10 operating time LSB | 0 | R | 62545 | 12 | 1 | | | | | | x | |
| 62233 | State: Compressor 10 operating time (<< 16) MSB | | | | | | | | | | | | |
| 62234 | State: Compressor 1 last 24h | 0 | R | 62545 | 14 | 1 | x | x | x | x | x | x | x |
| 62235 | State: Compressor 2 last 24h | 0 | R | 62545 | 15 | 1 | | | | | x | x | |
| 62236 | State: Compressor 3 last 24h | 0 | R | 62546 | 0 | 1 | | | | | x | x | |
| 62237 | State: Compressor 4 last 24h | 0 | R | 62546 | 1 | 1 | | | | | | x | |
| 62238 | State: Compressor 5 last 24h | 0 | R | 62546 | 2 | 1 | | | | | | x | |
| 62239 | State: Compressor 6 last 24h | 0 | R | 62546 | 3 | 1 | | | | | | x | |
| 62240 | State: Compressor 7 last 24h | 0 | R | 62546 | 4 | 1 | | | | | | x | |
| 62241 | State: Compressor 8 last 24h | 0 | R | 62546 | 5 | 1 | | | | | | x | |
| 62242 | State: Compressor 9 last 24h | 0 | R | 62546 | 6 | 1 | | | | | | x | |
| 62243 | State: Compressor 10 last 24h | 0 | R | 62546 | 7 | 1 | | | | | | x | |
| 62244 | Software version Display month day | 1 | R | 62546 | 8 | 1 | x | x | x | x | x | x | |
| 62245 | Software version Display year | 1 | R | 62546 | 9 | 1 | x | x | x | x | x | x | |
| 62246 | Heating system 1 status<br>*0 = Heating off*<br>*1 = Vacation*<br>*2= Night reduction*<br>*3= On (normal mode)* | 1 | R | 62546 | 10 | 1 | x | x | x | x | x | x | |
| 62247 | Heating system 2 status<br>0 = Heating off<br>1 = Vacation<br>2= Night reduction<br>3= On (normal mode) | 1 | R | 62546 | 11 | 1 | x | x | x | x | x | x | |
| 62248 | Heating system 3 status<br>0 = Heating off<br>1 = Vacation<br>2= Night reduction<br>3= On (normal mode) | 1 | R | 62546 | 12 | 1 | | | | | x | x | |
| 62249 | Heating system 4 status<br>0 = Heating off<br>1 = Vacation<br>2= Night reduction<br>3= On (normal mode) | 1 | R | 62546 | 13 | 1 | | | | | | x | |
| 62250 | Ext buffer tank upper B41 | 1 | R | 62546 | 14 | 0,1 | | | | | | x | |
| 62251 | Ext buffer tank lower B42 | 1 | R | 62546 | 15 | 0,1 | | | | | | x | |
| 62252 | Ext DHW buffer tank B43 | 1 | R | 62547 | 0 | 0,1 | | | | | x | x | |
| 62253 | Product type | 1 | R | 62547 | 1 | 1 | x | x | x | x | x | x | |
| 62254 | Heat pump 1 (A1) type | 1 | R | 62547 | 2 | 1 | x | x | x | x | x | x | x |
| 62255 | Heat pump 2 (A2) type | 1 | R | 62547 | 3 | 1 | | | | | x | x | |
| 62256 | Heat pump 3 (A3) type | 1 | R | 62547 | 4 | 1 | | | | | x | x | |
| 62257 | Heat pump 4 (A4) type | 1 | R | 62547 | 5 | 1 | | | | | | x | |
| 62258 | Heat pump 5 (A5) type | 1 | R | 62547 | 6 | 1 | | | | | | x | |
| 62259 | Heat pump 6 (A6) type | 1 | R | 62547 | 7 | 1 | | | | | | x | |
| 62260 | Heat pump 7 (A7) type | 1 | R | 62547 | 8 | 1 | | | | | | x | |
| 62261 | Heat pump 8 (A8) type | 1 | R | 62547 | 9 | 1 | | | | | | x | |
| 62262 | Heat pump 9 (A9) type | 1 | R | 62547 | 10 | 1 | | | | | | x | |
| 62263 | Heat pump 10 (A10) type | 1 | R | 62547 | 11 | 1 | | | | | | x | |
| 62264 | Heat pump 1 (A1) compressor model | 1 | R | 62547 | 12 | 1 | x | x | x | x | x | x | x |
| 62265 | Heat pump 2 (A2) compressor model | 1 | R | 62547 | 13 | 1 | | | | | x | x | |
| 62266 | Heat pump 3 (A3) compressor model | 1 | R | 62547 | 14 | 1 | | | | | x | x | |
| 62267 | Heat pump 4 (A4) compressor model | 1 | R | 62547 | 15 | 1 | | | | | | x | |
| 62268 | Heat pump 5 (A5) compressor model | 1 | R | 62548 | 0 | 1 | | | | | | x | |
| 62269 | Heat pump 6 (A6) compressor model | 1 | R | 62548 | 1 | 1 | | | | | | x | |

| Reg | Description | Val | Acc | Reg2 | Bit | Scale | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 62270 | Heat pump 7 (A7) compressor model | 1 | R | 62548 | 2 | 1 | | | | | | | | x | |
| 62271 | Heat pump 8 (A8) compressor model | 1 | R | 62548 | 3 | 1 | | | | | | | | x | |
| 62272 | Heat pump 9 (A9) compressor model | 1 | R | 62548 | 4 | 1 | | | | | | | | x | |
| 62273 | Heat pump 10 (A10) compressor model | 1 | R | 62548 | 5 | 1 | | | | | | | | x | |
| 62274 | Setpoint lower tank | 1 | R | 62548 | 6 | 0,1 | x | x | | | | | x | x | |
| 62275 | Actual temperature DHW lower | 1 | R | 62548 | 7 | 0,1 | | | | | x | x | | x | |
| 62276 | Actual temperature DHW | 1 | R | 62548 | 8 | 0,1 | x | x | x | x | | | x | x | |
| 62277 | Actual temperature tank solar coil | 1 | R | 62548 | 9 | 0,1 | | | | | | | | x | |
| 62278 | Calculated setpoint for upper tank when el. heater is used | 1 | R | 62548 | 10 | 0,1 | | | | | | | | x | |
| 62279 | Current DHW capacity in percent | 1 | R | 62548 | 11 | 0,1 | | | | | x | x | | | |
| 62280 | Exhaust fan speed percent | 1 | R | 62548 | 12 | 1 | x | x | x | x | | | x | x | |
| 62281 | Highest measured CO2 | 1 | R | 62548 | 13 | 1 | x | x | x | x | x | | x | x | |
| 62282 | Highest measured humidity | 1 | R | 62548 | 14 | 1 | x | x | x | x | x | | x | x | |
| 62283 | Days until filter maintenance | 1 | R | 62548 | 15 | 1 | x | x | x | x | x | | | x | |
| 62284 | Ventilation night cooling status | 1 | R | 62549 | 0 | 1 | x | x | x | x | x | | x | x | |
| 62285 | | | | | | | | | | | | | | | |
| 62286 | | | | | | | | | | | | | | | |
| 62287 | | | | | | | | | | | | | | | |
| 62288 | Cooling tank setp | 1 | R | 62549 | 4 | 0,1 | | | | | | | x | x | |
| 62289 | Cooling tank temp | 1 | R | 62549 | 5 | 0,1 | | | | | | | x | x | |
| 62290 | Active cooling return temp | 1 | R | 62549 | 6 | 0,1 | | | | | | | x | x | |
| 62291 | Heat pump 1 (A1) Primary system flow | 1 | R | 62549 | 7 | 0,1 | x | x | x | x | | | x | x | x |
| 62292 | Heat pump 2 (A2) Primary system flow | 1 | R | 62549 | 8 | 0,1 | | | | | | | x | x | |
| 62293 | Heat pump 3 (A3) Primary system flow | 1 | R | 62549 | 9 | 0,1 | | | | | | | x | x | |
| 62294 | Heat pump 4 (A4) Primary system flow | 1 | R | 62549 | 10 | 0,1 | | | | | | | x | x | |
| 62295 | Heat pump 5 (A5) Primary system flow | 1 | R | 62549 | 11 | 0,1 | | | | | | | x | x | |
| 62296 | Heat pump 6 (A6) Primary system flow | 1 | R | 62549 | 12 | 0,1 | | | | | | | x | x | |
| 62297 | Heat pump 7 (A7) Primary system flow | 1 | R | 62549 | 13 | 0,1 | | | | | | | x | x | |
| 62298 | Heat pump 8 (A8) Primary system flow | 1 | R | 62549 | 14 | 0,1 | | | | | | | x | x | |
| 62299 | Heat pump 9 (A9) Primary system flow | 1 | R | 62549 | 15 | 0,1 | | | | | | | x | x | |
| 62300 | Heat pump 10 (A10) Primary system flow | 1 | R | 62550 | 0 | 0,1 | | | | | | | x | x | |
| 62301 | SGMode<br>0 = None/Normal<br>1 = Block<br>2 = Low price<br>3 = High cap | 1 | R | 62550 | 1 | 1 | x | x | x | x | x | | x | x | |
| 62302 | Elspot Price/MWh Integer (Currency depending on region) | 1 | R | 62550 | 2 | 1 | x | x | x | x | x | | x | x | |
| 62303 | Elspot Price/MWh 4 decimals | 0 | R | 62550 | 3 | 1 | x | x | x | x | x | | | x | |
| 62304 | RadiatorPump1 | 0 | R | 62550 | 4 | 1 | x | x | x | x | x | | x | x | |
| 62305 | RadiatorPump2 | 0 | R | 62550 | 5 | 1 | x | x | x | x | | | x | x | |
| 62306 | RadiatorPump3_G3 | 0 | R | 62550 | 6 | 1 | | | | | | | x | x | |
| 62307 | RadiatorPump4_G4 | 0 | R | 62550 | 7 | 1 | | | | | | | | x | |
| 62308 | Heating system 1: Shunt state<br>0 = Close<br>1 = Inactive<br>2 = Open | 0 | R | 62550 | 8 | 1 | x | x | | | | | x | x | |
| 62309 | Heating system 2: Shunt state<br>0 = Close<br>1 = Inactive<br>2 = Open | 0 | R | 62550 | 9 | 1 | x | x | x | x | | | x | x | |
| 62310 | Heating system 3: Shunt state<br>0 = Close<br>1 = Inactive<br>2 = Open | 0 | R | 62550 | 10 | 1 | | | | | | | x | x | |
| 62311 | Heating system 4: Shunt state<br>0 = Close<br>1 = Inactive<br>2 = Open | 0 | R | 62550 | 11 | 1 | | | | | | | | x | |
| 62312 | PumpG41 Extern DHW | 0 | R | 62550 | 12 | 1 | | | | | | | x | x | |
| 62313 | HotWaterValve | 0 | R | 62550 | 13 | 1 | x | x | x | x | | | x | x | |
| 62314 | ExtBoilerOn | 0 | R | 62550 | 14 | 1 | | | | | | | | x | |
| 62315 | EL1 Relay<br>Bit 0: A<br>Bit 1: B | 0 | R | 62550 | 15 | 1 | x | x | x | x | | | x | x | |
| 62316 | EL2 Relay<br>Bit 0: A<br>Bit 1: B | 0 | R | 62551 | 0 | 1 | x | x | x | x | | | x | x | |
| 62317 | EL3 Relay<br>Bit 0: A<br>Bit 1: B | 0 | R | 62551 | 1 | 1 | x | x | x | x | | | x | x (EcoPart6xx M Pro) | |
| 62318 | ElHeater3_6kW | 0 | R | 62551 | 2 | 1 | | | | | | | x | | |
| 62319 | EVK: Shunt state<br>0 = Close<br>1 = Inactive<br>2 = Open | 0 | R | 62551 | 3 | 1 | | | | | x | x | | | |
| 62320 | ExtBoiler: Shunt state<br>0 = Close<br>1 = Inactive<br>2 = Open | 0 | R | 62551 | 4 | 1 | | | | | | | x | | |
| 62321 | Active Cooling: Valve | 0 | R | 62551 | 5 | 1 | | | | | | | x | | |
| 62322 | Active Cooling: Demand | 0 | R | 62551 | 6 | 1 | | | | | | | x | | |
| 62323 | DHWPump: 0-100 | 0 | R | 62551 | 7 | 1 | | | | | x | x | | | |

| 62324 | SolarTankSelection | 0 | R | 62551 | 8 | 1 | x | x | x | x | | |
| 62325 | SolarBedrockSelection | 0 | R | 62551 | 9 | 1 | x | x | x | x | | |
| 62326 | HotWaterValve2 | 0 | R | 62551 | 10 | 1 | | | | | | x |
| 62327 | E4 | 0 | R | 62551 | 11 | 1 | | | | | | x |
| 62328 | E1 | 0 | R | 62551 | 12 | 1 | | | | | | x |
| 62329 | Stat: Immersion heater kWh MSB (when lower counter reaches 65535 this increases) | 0 | R | 62551 | 13 | 1 | x | x | x | x | x | |
| 62330 | Current room temp cooling | 1 | R | 62551 | 14 | 0,1 | x | x | x | x | x | x |
| 62331 | HP1 Power consumption kW | 0 | R | 62551 | 15 | 0,1 | x | x | x | x | x | x |
| 62332 | HP2 Power consumption kW | 0 | R | 62552 | 0 | 0,1 | | | | | x | x |
| 62333 | HP3 Power consumption kW | 0 | R | 62552 | 1 | 0,1 | | | | | x | x |
| 62334 | HP4 Power consumption kW | 0 | R | 62552 | 2 | 0,1 | | | | | | x |
| 62335 | HP5 Power consumption kW | 0 | R | 62552 | 3 | 0,1 | | | | | | x |
| 62336 | HP6 Power consumption kW | 0 | R | 62552 | 4 | 0,1 | | | | | | x |
| 62337 | HP7 Power consumption kW | 0 | R | 62552 | 5 | 0,1 | | | | | | x |
| 62338 | HP8 Power consumption kW | 0 | R | 62552 | 6 | 0,1 | | | | | | x |
| 62339 | HP9 Power consumption kW | 0 | R | 62552 | 7 | 0,1 | | | | | | x |
| 62340 | HP10 Power consumption kW | 0 | R | 62552 | 8 | 0,1 | | | | | | x |
| 62341 | Compressor 1 Power consumption kWh LSB | 0 | R | 62552 | 9 | 1 | x | x | x | x | x | x |
| 62342 | Compressor 1 Power consumption kWh (<< 16) MSB | 0 | R | 62552 | 10 | 1 | x | x | x | x | x | x |
| 62343 | Compressor 2 Power consumption kWh LSB | 0 | R | 62552 | 11 | 1 | | | | | x | x |
| 62344 | Compressor 2 Power consumption kWh (<< 16) MSB | 0 | R | 62552 | 12 | 1 | | | | | x | x |
| 62345 | Compressor 3 Power consumption kWh LSB | 0 | R | 62552 | 13 | 1 | | | | | x | x |
| 62346 | Compressor 3 Power consumption kWh (<< 16) MSB | 0 | R | 62552 | 14 | 1 | | | | | x | x |
| 62347 | Compressor 4 Power consumption kWh LSB | 0 | R | 62552 | 15 | 1 | | | | | | x |
| 62348 | Compressor 4 Power consumption kWh (<< 16) MSB | 0 | R | 62553 | 0 | 1 | | | | | | x |
| 62349 | Compressor 5 Power consumption kWh LSB | 0 | R | 62553 | 1 | 1 | | | | | | x |
| 62350 | Compressor 5 Power consumption kWh (<< 16) MSB | 0 | R | 62553 | 2 | 1 | | | | | | x |
| 62351 | Compressor 6 Power consumption kWh LSB | 0 | R | 62553 | 3 | 1 | | | | | | x |
| 62352 | Compressor 6 Power consumption kWh (<< 16) MSB | 0 | R | 62553 | 4 | 1 | | | | | | x |
| 62353 | Compressor 7 Power consumption kWh LSB | 0 | R | 62553 | 5 | 1 | | | | | | x |
| 62354 | Compressor 7 Power consumption kWh (<< 16) MSB | 0 | R | 62553 | 6 | 1 | | | | | | x |
| 62355 | Compressor 8 Power consumption kWh LSB | 0 | R | 62553 | 7 | 1 | | | | | | x |
| 62356 | Compressor 8 Power consumption kWh (<< 16) MSB | 0 | R | 62553 | 8 | 1 | | | | | | x |
| 62357 | Compressor 9 Power consumption kWh LSB | 0 | R | 62553 | 9 | 1 | | | | | | x |
| 62358 | Compressor 9 Power consumption kWh (<< 16) MSB | 0 | R | 62553 | 10 | 1 | | | | | | x |
| 62359 | Compressor 10 Power consumption kWh LSB | 0 | R | 62553 | 11 | 1 | | | | | | x |
| 62360 | Compressor 10 Power consumption kWh (<< 16) MSB | 0 | R | 62553 | 12 | 1 | | | | | | x |
| 62361 | Power kW immersion heater(s) | 0 | R | 62553 | 13 | 0.1 | x | x | x | x | x | x |