# Communication protocoll

## MOD BUS

## Boiler P4

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# Digital Outputs

Function: Read Coil Status (FC=01)
Address Range: 00001-00158

| Adr. | Description | Unit | Scale |
|---|---|---|---|
| 00001 | Heating circuit pump 1 | | 1 |
| 00002 | Heating circuit pump 2 | | 1 |
| 00003 | Heating Circuit 1 Mixer OPEN 1 | | 1 |
| 00004 | Heating Circuit 1 Mixer CLOSED 1 | | 1 |
| 00005 | Heating Circuit Mixer OPEN 2 | | 1 |
| 00006 | Heating Circuit Mixer CLOSED 2 | | 1 |
| 00007 | Lambda probe heating | | 1 |
| 00008 | Burner relay | | 1 |
| 00009 | Heating circuit pump 0 | | 1 |
| 00011 | Primary air flap CLOSED | | 1 |
| 00014 | Standby relay | | 1 |
| 00015 | Ash screw manual | | 1 |
| 00016 | Pellet suction fan | | 1 |
| 00017 | WOS-drive | | 1 |
| 00018 | Open grate | | 1 |
| 00019 | Close grate | | 1 |
| 00020 | Ignition | | 1 |
| 00021 | Fault message | | 1 |
| 00022 | BBF manual | | 1 |
| 00024 | Room air flap | | 1 |
| 00026 | Heating circuit pump 3 | | 1 |
| 00027 | Heating circuit pump 4 | | 1 |
| 00028 | Heating Circuit Mixer OPEN 3 | | 1 |
| 00029 | Heating Circuit Mixer CLOSED 3 | | 1 |
| 00030 | Heating Circuit Mixer OPEN 4 | | 1 |
| 00031 | Heating Circuit Mixer CLOSED 4 | | 1 |
| 00032 | Heating circuit pump 5 | | 1 |
| 00033 | Heating circuit pump 6 | | 1 |
| 00034 | Heating Circuit Mixer OPEN 5 | | 1 |
| 00035 | Heating Circuit Mixer CLOSED 5 | | 1 |
| 00036 | Heating Circuit Mixer OPEN 6 | | 1 |
| 00037 | Heating Circuit Mixer CLOSED 6 | | 1 |
| 00038 | Heating circuit pump 7 | | 1 |
| 00039 | Heating circuit pump 8 | | 1 |
| 00040 | Heating Circuit Mixer OPEN 7 | | 1 |
| 00041 | Heating Circuit Mixer CLOSED 7 | | 1 |
| 00042 | Heating Circuit Mixer OPEN 8 | | 1 |
| 00043 | Heating Circuit Mixer CLOSED 8 | | 1 |
| 00044 | Heating circuit pump 9 | | 1 |
| 00045 | Heating circuit pump 10 | | 1 |
| 00046 | Heating Circuit Mixer OPEN 9 | | 1 |
| 00047 | Heating Circuit Mixer CLOSED 9 | | 1 |
| 00048 | Heating Circuit Mixer OPEN 10 | | 1 |
| 00049 | Heating Circuit Mixer CLOSED 10 | | 1 |
| 00050 | Heating circuit pump 11 | | 1 |

| | | | |
|---|---|---|---|
| 00051 | Heating circuit pump 12 | | 1 |
| 00052 | Heating Circuit Mixer OPEN 11 | | 1 |
| 00053 | Heating Circuit Mixer CLOSED 11 | | 1 |
| 00054 | Heating Circuit Mixer OPEN 12 | | 1 |
| 00055 | Heating Circuit Mixer CLOSED 12 | | 1 |
| 00056 | Heating circuit pump 13 | | 1 |
| 00057 | Heating circuit pump 14 | | 1 |
| 00058 | Heating Circuit Mixer OPEN 13 | | 1 |
| 00059 | Heating Circuit Mixer CLOSED 13 | | 1 |
| 00060 | Heating Circuit Mixer OPEN 14 | | 1 |
| 00061 | Heating Circuit Mixer CLOSED 14 | | 1 |
| 00062 | Heating circuit pump 15 | | 1 |
| 00063 | Heating circuit pump 16 | | 1 |
| 00064 | Heating Circuit Mixer OPEN 15 | | 1 |
| 00065 | Heating Circuit Mixer CLOSED 15 | | 1 |
| 00066 | Heating Circuit Mixer OPEN 16 | | 1 |
| 00067 | Heating Circuit Mixer CLOSED 16 | | 1 |
| 00068 | Heating circuit pump 17 | | 1 |
| 00069 | Heating circuit pump 18 | | 1 |
| 00070 | Heating Circuit Mixer OPEN 17 | | 1 |
| 00071 | Heating Circuit Mixer CLOSED 17 | | 1 |
| 00072 | Heating Circuit Mixer OPEN 18 | | 1 |
| 00073 | Heating Circuit Mixer CLOSED 18 | | 1 |
| 00074 | Heating flow sensor | | 1 |
| 00080 | BBF motor | | 1 |
| 00089 | Vacuum extension reserve DO | | 1 |
| 00090 | Suction turbine 1 | | 1 |
| 00091 | Suction turbine 2 | | 1 |
| 00094 | Vacuum extension probe 3 | | 1 |
| 00095 | Vacuum extension probe 2 | | 1 |
| 00096 | Vacuum extension probe 1 | | 1 |
| 00101 | CLOSE suction unit slide valve | | 1 |
| 00102 | OPEN suction unit slide valve | | 1 |
| 00103 | PM suction unit safety shutdown | | 1 |
| 00104 | PM reserve OUT 2 | | 1 |
| 00115 | Return feed mixer Closed | | 1 |
| 00116 | Return feed mixer Open | | 1 |
| 00118 | Open probe 1 | | 1 |
| 00119 | Open probe 2 | | 1 |
| 00141 | Stoker forwards | | 1 |
| 00142 | Stoker backwards | | 1 |

## Digital Inputs

Function: Read Input Status (FC=02)
Address Range: 10001-10086

| Adr. | Description | Unit | Scale |
|---|---|---|---|
| 10001 | Door switch | | 1 |
| 10002 | Hi-limit stat input | | 1 |
| 10003 | E-stop input | | 1 |
| 10006 | MAX level | | 1 |
| 10007 | Jam sensor | | 1 |
| 10008 | Back-fire slide valve closed | | 1 |
| 10010 | Grate open | | 1 |
| 10011 | Grate closed | | 1 |
| 10014 | Room air flap open | | 1 |
| 10016 | Motor protection switch pellet delivery screw | | 1 |
| 10027 | Fill level sensor maximum on vacuum extension | | 1 |
| 10028 | Fill level sensor minimum on vacuum extension | | 1 |
| 10029 | Blockage sensor on vacuum extension | | 1 |
| 10030 | Safety ventilation on vacuum extension open | | 1 |
| 10031 | Safety ventilation on vacuum extension closed | | 1 |
| 10032 | Boiler enable | | 1 |
| 10033 | Back-fire slide valve open | | 1 |
| 10034 | PM power supply overcurrent switch | | 1 |
| 10035 | PM power supply overcurrent warning | | 1 |
| 10036 | PM suction unit active | | 1 |
| 10037 | PM Dig. in res 2 | | 1 |
| 10049 | Latch input on pellets modul | | 1 |
| 10050 | MIN level | | 1 |

## Actual Values

Function: Read Input Registers(FC=04)
Address Range: 30001-30272

| Adr. | Description | Unit | Scale | Dec |
|---|---|---|---|---|
| 30001 | Boiler temperature | °C | 2 | 1 |
| 30002 | Flue gas temperature | °C | 1 | 0 |
| 30003 | Board Temperature | °C | 2 | 1 |
| 30004 | Residual oxygen content | % | 10 | 1 |
| 30005 | Outside air temperature | °C | 2 | 1 |
| 30008 | ID fan speed | U/min | 1 | 0 |
| 30009 | Sensor 1 | °C | 2 | 1 |
| 30011 | Return sensor | °C | 2 | 1 |
| 30012 | Flue gas temperature after condenser | °C | 2 | 1 |
| 30013 | Air speed at suction opening | m/s | 100 | 2 |
| 30014 | Ignition pipe temperature | °C | 1 | 0 |
| 30016 | ID fan control | % | 1 | 0 |
| 30019 | Boiler control variable | % | 1 | 0 |
| 30020 | Flue gas setpoint | °C | 1 | 0 |
| 30022 | Actual flow temperature 1 | °C | 2 | 1 |
| 30023 | Flow temperature setpoint 1 | °C | 2 | 1 |

| | | | | |
|---|---|---|---|---|
| 30025 | Room temperature 1 | °C | 2 | 1 |
| 30026 | Actual flow temperature 2 | °C | 2 | 1 |
| 30027 | Flow temperature setpoint 2 | °C | 2 | 1 |
| 30029 | Room temperature 2 | °C | 2 | 1 |
| 30030 | Actual flow temperature 3 | °C | 2 | 1 |
| 30031 | Flow temperature setpoint 3 | °C | 2 | 1 |
| 30033 | Room temperature 3 | °C | 2 | 1 |
| 30034 | Actual flow temperature 4 | °C | 2 | 1 |
| 30035 | Flow temperature setpoint 4 | °C | 2 | 1 |
| 30037 | Room temperature 4 | °C | 2 | 1 |
| 30038 | Actual flow temperature 5 | °C | 2 | 1 |
| 30039 | Flow temperature setpoint 5 | °C | 2 | 1 |
| 30041 | Room temperature 5 | °C | 2 | 1 |
| 30042 | Actual flow temperature 6 | °C | 2 | 1 |
| 30043 | Flow temperature setpoint 6 | °C | 2 | 1 |
| 30045 | Room temperature 6 | °C | 2 | 1 |
| 30046 | Actual flow temperature 7 | °C | 2 | 1 |
| 30047 | Flow temperature setpoint 7 | °C | 2 | 1 |
| 30049 | Room temperature 7 | °C | 2 | 1 |
| 30050 | Actual flow temperature 8 | °C | 2 | 1 |
| 30051 | Flow temperature setpoint 8 | °C | 2 | 1 |
| 30053 | Room temperature 8 | °C | 2 | 1 |
| 30054 | Actual flow temperature 9 | °C | 2 | 1 |
| 30055 | Flow temperature setpoint 9 | °C | 2 | 1 |
| 30057 | Room temperature 9 | °C | 2 | 1 |
| 30058 | Actual flow temperature 10 | °C | 2 | 1 |
| 30059 | Flow temperature setpoint 10 | °C | 2 | 1 |
| 30061 | Room temperature 10 | °C | 2 | 1 |
| 30062 | Actual flow temperature 11 | °C | 2 | 1 |
| 30063 | Flow temperature setpoint 11 | °C | 2 | 1 |
| 30065 | Room temperature 11 | °C | 2 | 1 |
| 30066 | Actual flow temperature 12 | °C | 2 | 1 |
| 30067 | Flow temperature setpoint 12 | °C | 2 | 1 |
| 30069 | Room temperature 12 | °C | 2 | 1 |
| 30070 | Actual flow temperature 13 | °C | 2 | 1 |
| 30071 | Flow temperature setpoint 13 | °C | 2 | 1 |
| 30073 | Room temperature 13 | °C | 2 | 1 |
| 30074 | Actual flow temperature 14 | °C | 2 | 1 |
| 30075 | Flow temperature setpoint 14 | °C | 2 | 1 |
| 30077 | Room temperature 14 | °C | 2 | 1 |
| 30078 | Actual flow temperature 15 | °C | 2 | 1 |
| 30079 | Flow temperature setpoint 15 | °C | 2 | 1 |
| 30081 | Room temperature 15 | °C | 2 | 1 |
| 30082 | Actual flow temperature 16 | °C | 2 | 1 |
| 30083 | Flow temperature setpoint 16 | °C | 2 | 1 |
| 30085 | Room temperature 16 | °C | 2 | 1 |
| 30086 | Actual flow temperature 17 | °C | 2 | 1 |
| 30087 | Flow temperature setpoint 17 | °C | 2 | 1 |
| 30089 | Room temperature 17 | °C | 2 | 1 |
| 30090 | Actual flow temperature 18 | °C | 2 | 1 |

| | | | | |
|---|---|---|---|---|
| 30091 | Flow temperature setpoint 18 | °C | 2 | 1 |
| 30093 | Room temperature 18 | °C | 2 | 1 |
| 30094 | DHW tank top temperature 1 | °C | 2 | 1 |
| 30095 | DHW tank bottom temperature 1 | °C | 2 | 1 |
| 30096 | Pellet module board temperature | °C | 2 | 1 |
| 30097 | Suction air temperature | °C | 2 | 1 |
| 30098 | Delivery screw current | A | 1000 | 2 |
| 30099 | Service hours | h | 1 | 0 |
| 30100 | DHW tank top temperature 2 | °C | 2 | 1 |
| 30101 | DHW tank bottom temperature 2 | °C | 2 | 1 |
| 30102 | DHW tank top temperature 3 | °C | 2 | 1 |
| 30103 | DHW tank bottom temperature 3 | °C | 2 | 1 |
| 30104 | DHW tank top temperature 4 | °C | 2 | 1 |
| 30105 | DHW tank bottom temperature 4 | °C | 2 | 1 |
| 30106 | DHW tank top temperature 5 | °C | 2 | 1 |
| 30107 | DHW tank bottom temperature 5 | °C | 2 | 1 |
| 30108 | DHW tank top temperature 6 | °C | 2 | 1 |
| 30109 | DHW tank bottom temperature 6 | °C | 2 | 1 |
| 30110 | DHW tank top temperature 7 | °C | 2 | 1 |
| 30111 | DHW tank bottom temperature 7 | °C | 2 | 1 |
| 30112 | DHW tank top temperature 8 | °C | 2 | 1 |
| 30113 | DHW tank bottom temperature 8 | °C | 2 | 1 |
| 30115 | Number of burner starts | | 1 | 0 |
| 30117 | Feed | % | 1 | 0 |
| 30118 | Oxygen control | % | 1 | 0 |
| 30119 | storage tank top temperature 1 | °C | 2 | 1 |
| 30120 | storage tank middle temperature 1 | °C | 2 | 1 |
| 30121 | storage tank bottom temperature 1 | °C | 2 | 1 |
| 30122 | storage tank top temperature 2 | °C | 2 | 1 |
| 30123 | storage tank middle temperature 2 | °C | 2 | 1 |
| 30124 | storage tank bottom temperature 2 | °C | 2 | 1 |
| 30125 | storage tank top temperature 3 | °C | 2 | 1 |
| 30126 | storage tank middle temperature 3 | °C | 2 | 1 |
| 30127 | storage tank bottom temperature 3 | °C | 2 | 1 |
| 30128 | storage tank top temperature 4 | °C | 2 | 1 |
| 30129 | storage tank middle temperature 4 | °C | 2 | 1 |
| 30130 | storage tank bottom temperature 4 | °C | 2 | 1 |
| 30139 | Calculated boiler setpoint | °C | 2 | 1 |
| 30140 | Solar temperature storage tank bottom | °C | 2 | 1 |
| 30141 | Store pump control 1 | % | 1 | 0 |
| 30142 | Store pump control 2 | % | 1 | 0 |
| 30143 | Store pump control 3 | % | 1 | 0 |
| 30144 | Store pump control 4 | % | 1 | 0 |
| 30145 | DHW tank pump control 1 | % | 1 | 0 |
| 30146 | DHW tank pump control 2 | % | 1 | 0 |
| 30147 | DHW tank pump control 3 | % | 1 | 0 |
| 30148 | DHW tank pump control 4 | % | 1 | 0 |
| 30149 | DHW tank pump control 5 | % | 1 | 0 |
| 30150 | DHW tank pump control 6 | % | 1 | 0 |
| 30151 | DHW tank pump control 7 | % | 1 | 0 |

| | | | | |
|---|---|---|---|---|
| 30152 | DHW tank pump control 8 | % | 1 | 0 |
| 30153 | Collector pump control | % | 1 | 0 |
| 30163 | Slide valve position | % | 10 | 1 |
| 30165 | Current status runtime | | 1 | 0 |
| 30166 | Maximum status runtime | | 1 | 0 |
| 30172 | Network pump speed | % | 1 | 0 |
| 30173 | Network return temperature | °C | 2 | 1 |
| 30174 | Stoker screw service hours | h | 1 | 0 |
| 30175 | Feed screw service hours | h | 1 | 0 |
| 30176 | Rotary valve service hours | h | 1 | 0 |
| 30179 | Heat exchanger service hours | h | 1 | 0 |
| 30180 | Ash screw service hours | h | 1 | 0 |
| 30181 | Ignition service hours | h | 1 | 0 |
| 30182 | Lambda probe service hours | h | 1 | 0 |
| 30183 | Suction fan(s) service hours | h | 1 | 0 |
| 30185 | Safety ventilation load cycle | | 1 | 0 |
| 30187 | BBF load cycle | | 1 | 0 |
| 30188 | Speed, feeder pump 1 | % | 1 | 0 |
| 30189 | Return temperature feeder 1 | °C | 2 | 1 |
| 30190 | Speed, feeder pump 2 | % | 1 | 0 |
| 30191 | Return temperature feeder 2 | °C | 2 | 1 |
| 30192 | Speed, feeder pump 3 | % | 1 | 0 |
| 30193 | Return temperature feeder 3 | °C | 2 | 1 |
| 30194 | Speed, feeder pump 4 | % | 1 | 0 |
| 30195 | Return temperature feeder 4 | °C | 2 | 1 |
| 30197 | Temperature of secondary boiler | °C | 2 | 1 |
| 30198 | Collector Temperature | °C | 2 | 1 |
| 30199 | Heat source sensor | °C | 2 | 1 |
| 30200 | Heat sink sensor | °C | 2 | 1 |
| 30201 | Pump speed | % | 1 | 0 |
| 30202 | Speed of the circulation pump | % | 1 | 0 |
| 30203 | Return temperature in secondary circulation line | °C | 2 | 1 |
| 30204 | Burner relay status | | 1 | 0 |
| 30205 | Collector pump runtime | h | 1 | 0 |
| 30206 | Collector return temperature | °C | 2 | 1 |
| 30207 | Heat exchanger sec. return temperature (line to storage tank) | °C | 2 | 1 |
| 30208 | Pump between heat exchanger and storage tank | % | 1 | 0 |
| 30209 | Pump between heat exchanger and DHW tank | % | 1 | 0 |
| 30210 | Diverter valve for top/bottom coils | % | 1 | 0 |
| 30211 | Flow switch on the domestic hot water line | | 2 | 1 |
| 30212 | Lambda probe voltage | mV | 100 | 2 |
| 30213 | Ignition service hours | h | 1 | 0 |
| 30214 | Hours since last maintenance | h | 1 | 0 |
| 30215 | Boiler request via heating circuit or DHW tank pending | | 1 | 0 |
| 30220 | P4 Pellet skim pump | % | 1 | 0 |
| 30221 | Lambda probe voltage  korrigiert | mV | 100 | 2 |
| 30222 | Hours of heating | h | 1 | 0 |
| 30224 | Sensor deflector top | °C | 2 | 1 |
| 30225 | Sensor deflector bottom | °C | 2 | 1 |

| | | | | |
|---|---|---|---|---|
| 30226 | Store charge | % | 1 | 0 |
| 30228 | Backup boiler boiler temperature 1 | °C | 2 | 1 |
| 30229 | Backup boiler boiler temperature 2 | °C | 2 | 1 |
| 30230 | Backup boiler boiler temperature 3 | °C | 2 | 1 |
| 30231 | Backup boiler OK 1 | | 1 | 0 |
| 30232 | Backup boiler OK 2 | | 1 | 0 |
| 30233 | Backup boiler OK 3 | | 1 | 0 |
| 30234 | Backup boiler is heating 1 | | 1 | 0 |
| 30235 | Backup boiler is heating 2 | | 1 | 0 |
| 30236 | Backup boiler is heating 3 | | 1 | 0 |
| 30237 | Backup boiler control variable 1 | % | 1 | 0 |
| 30238 | Backup boiler control variable 2 | % | 1 | 0 |
| 30239 | Backup boiler control variable 3 | % | 1 | 0 |
| 30240 | Boiler charging pump speed | % | 1 | 0 |
| 30241 | Boiler charging pump speed 1 | % | 1 | 0 |
| 30242 | Boiler charging pump speed 2 | % | 1 | 0 |
| 30243 | Boiler charging pump speed 3 | % | 1 | 0 |
| 30244 | Broadband probe heating current | A | 1000 | 2 |
| 30245 | Broadband probe heating voltage | V | 1000 | 2 |
| 30246 | Broadband probe Nernst voltage | V | 1000 | 3 |
| 30247 | Broadband probe pump current | mV | 1000 | 3 |
| 30248 | Broadband probe internal resistance | R | 1 | 0 |
| 30250 | DHW tank bottom temperature | °C | 2 | 1 |
| 30255 | Hours in partial load (Boiler control variable < 40 %) | h | 1 | 0 |
| 30264 | Actual power from solar heat meter [kW] | | 100 | 2 |
| 30266 | Hours of boiler 2 (burner relays) | h | 1 | 0 |

## Parameters

Function: Read Holding Registers(FC=03)
Address Range: 40001-41094

| Adr. | Description | Unit | Scale | Dec | Min | Max |
|---|---|---|---|---|---|---|
| 40001 | Shutdown if current boiler temperature is higher than boiler setpoint + | °C | 2 | 0 | 2 | 20 |
| 40004 | Maximum flue gas temperature | °C | 1 | 0 | 85 | 300 |
| 40005 | Minimum difference between flue gas- and boiler temperature in HEATING | °C | 1 | 0 | 0 | 50 |
| 40009 | Always switch off at maximum boiler setpoint + | °C | 2 | 0 | 0 | 20 |
| 40023 | ID fan min | % | 1 | 0 | 0 | 95 |
| 40024 | ID fan max | % | 1 | 0 | 0 | 95 |
| 40033 | Minimum loading rate | % | 1 | 0 | 0 | 100 |
| 40034 | O2 Controller max | % | 1 | 0 | 0 | 250 |
| 40035 | Influencing factor for O2 controller | | 100 | 2 | 0 | 10 |
| 40040 | No feed when residual O2 below | % | 10 | 1 | 0 | 21 |
| 40041 | Boiler output at flue gas temperature of 20°C | % | 1 | 0 | 0 | 100 |
| 40042 | 100% boiler output from a flue gas temperature of | °C | 1 | 0 | 0 | 300 |
| 40045 | Minimum ID fan speed | % | 1 | 0 | 0 | 100 |
| 40048 | Feed time before ignition | s | 1 | 0 | 0 | 1000 |
| 40049 | Duration of pre-heating | s | 1 | 0 | 0 | 1000 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 40050 | Flue gas - Flue gas difference for start process | °C | 1 | 0 | 0 | 100 |
| 40051 | Maximum ignition duration | min | 60 | 0 | 0 | 500 |
| 40052 | Shutdown wait 1 | min | 60 | 0 | 0 | 500 |
| 40053 | Shutdown wait 2 | min | 60 | 0 | 0 | 500 |
| 40054 | Safety time | min | 60 | 0 | 0 | 500 |
| 40055 | ID fan during heating up | % | 1 | 0 | 0 | 100 |
| 40056 | ID fan during pre-heating | % | 1 | 0 | 0 | 100 |
| 40057 | Slide-in during ignition | % | 1 | 0 | 0 | 100 |
| 40058 | ID fan during shutdown | % | 1 | 0 | 0 | 100 |
| 40059 | ID fan during Ignition | % | 1 | 0 | 0 | 100 |
| 40060 | WOS runtime | s | 1 | 0 | 0 | 900 |
| 40061 | Start of 1st pellet filling | | 1 | 0 | 0 | 2400 |
| 40062 | Preliminary suction time | s | 1 | 0 | 0 | 900 |
| 40063 | Screw cycle | s | 1 | 0 | 20 | 400 |
| 40064 | Suction run-on | s | 1 | 0 | 0 | 900 |
| 40065 | Refill of cyclone from | % | 207 | 0 | 0 | 100 |
| 40067 | Minimum return temperature | °C | 2 | 0 | 55 | 90 |
| 40074 | Mixer runtime | s | 1 | 0 | 0 | 1000 |
| 40075 | Heating circuit overheat in variable mode | °C | 2 | 0 | 0 | 100 |
| 40076 | Variable mode activated | | 1 | 0 | 0 | 1 |
| | **Heating circuit 01** | | | | | |
| 40077 | Desired room temperature during heating mode | °C | 2 | 0 | 10 | 30 |
| 40078 | Desired room temperature during setback mode | °C | 2 | 0 | 10 | 30 |
| 40079 | Controller gain room temperature Kp-Rm | | 10 | 1 | 0 | 20 |
| 40080 | Reduction of flow temperature in setback mode | °C | 2 | 0 | 0 | 70 |
| 40081 | External temperature, at which heating circuit pump switches off in heating mode | °C | 2 | 0 | -20 | 50 |
| 40082 | External temperature, at which heating circuit pump switches off in setback mode | °C | 2 | 0 | -20 | 50 |
| 40083 | Maximum heating circuit flow temperature | °C | 2 | 0 | 20 | 110 |
| 40086 | Mixer runtime | s | 1 | 0 | 30 | 600 |
| 40087 | Frost protection temperature | °C | 2 | 0 | -10 | 20 |
| 40088 | Flow temperature SP at external temperature of -10°C | °C | 2 | 0 | 10 | 110 |
| 40089 | Flow temperature SP at external temperature of +10°C | °C | 2 | 0 | 10 | 110 |
| | **Heating circuit 02** | | | | | |
| 40091 | Desired room temperature during heating mode | °C | 2 | 0 | 10 | 30 |
| 40092 | Desired room temperature during setback mode | °C | 2 | 0 | 10 | 30 |
| 40093 | Controller gain room temperature Kp-Rm | | 10 | 1 | 0 | 20 |
| 40094 | Reduction of flow temperature in setback mode | °C | 2 | 0 | 0 | 70 |
| 40095 | External temperature, at which heating circuit pump switches off in heating mode | °C | 2 | 0 | -20 | 50 |
| 40096 | External temperature, at which heating circuit pump switches off in setback mode | °C | 2 | 0 | -20 | 50 |
| 40097 | Maximum heating circuit flow temperature | °C | 2 | 0 | 20 | 110 |
| 40100 | Mixer runtime | s | 1 | 0 | 30 | 600 |
| 40101 | Frost protection temperature | °C | 2 | 0 | -10 | 20 |
| 40102 | Flow temperature SP at external temperature of -10°C | °C | 2 | 0 | 10 | 110 |
| 40103 | Flow temperature SP at external temperature of +10°C | °C | 2 | 0 | 10 | 110 |
| | **Heating circuit 03** | | | | | |
| 40105 | Desired room temperature during heating mode | °C | 2 | 0 | 10 | 30 |
| 40106 | Desired room temperature during setback mode | °C | 2 | 0 | 10 | 30 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 40107 | Controller gain room temperature Kp-Rm | | 10 | 1 | 0 | 20 |
| 40108 | Reduction of flow temperature in setback mode | °C | 2 | 0 | 0 | 70 |
| 40109 | External temperature, at which heating circuit pump switches off in heating mode | °C | 2 | 0 | -20 | 50 |
| 40110 | External temperature, at which heating circuit pump switches off in setback mode | °C | 2 | 0 | -20 | 50 |
| 40111 | Maximum heating circuit flow temperature | °C | 2 | 0 | 20 | 110 |
| 40114 | Mixer runtime | s | 1 | 0 | 30 | 600 |
| 40115 | Frost protection temperature | °C | 2 | 0 | -10 | 20 |
| 40116 | Flow temperature SP at external temperature of -10°C | °C | 2 | 0 | 10 | 110 |
| 40117 | Flow temperature SP at external temperature of +10°C | °C | 2 | 0 | 10 | 110 |
| | **Heating circuit 04** | | | | | |
| 40119 | Desired room temperature during heating mode | °C | 2 | 0 | 10 | 30 |
| 40120 | Desired room temperature during setback mode | °C | 2 | 0 | 10 | 30 |
| 40121 | Controller gain room temperature Kp-Rm | | 10 | 1 | 0 | 20 |
| 40122 | Reduction of flow temperature in setback mode | °C | 2 | 0 | 0 | 70 |
| 40123 | External temperature, at which heating circuit pump switches off in heating mode | °C | 2 | 0 | -20 | 50 |
| 40124 | External temperature, at which heating circuit pump switches off in setback mode | °C | 2 | 0 | -20 | 50 |
| 40125 | Maximum heating circuit flow temperature | °C | 2 | 0 | 20 | 110 |
| 40128 | Mixer runtime | s | 1 | 0 | 30 | 600 |
| 40129 | Frost protection temperature | °C | 2 | 0 | -10 | 20 |
| 40130 | Flow temperature SP at external temperature of -10°C | °C | 2 | 0 | 10 | 110 |
| 40131 | Flow temperature SP at external temperature of +10°C | °C | 2 | 0 | 10 | 110 |
| | **Heating circuit 05** | | | | | |
| 40133 | Desired room temperature during heating mode | °C | 2 | 0 | 10 | 30 |
| 40134 | Desired room temperature during setback mode | °C | 2 | 0 | 10 | 30 |
| 40135 | Controller gain room temperature Kp-Rm | | 10 | 1 | 0 | 20 |
| 40136 | Reduction of flow temperature in setback mode | °C | 2 | 0 | 0 | 70 |
| 40137 | External temperature, at which heating circuit pump switches off in heating mode | °C | 2 | 0 | -20 | 50 |
| 40138 | External temperature, at which heating circuit pump switches off in setback mode | °C | 2 | 0 | -20 | 50 |
| 40139 | Maximum heating circuit flow temperature | °C | 2 | 0 | 20 | 110 |
| 40142 | Mixer runtime | s | 1 | 0 | 30 | 600 |
| 40143 | Frost protection temperature | °C | 2 | 0 | -10 | 20 |
| 40144 | Flow temperature SP at external temperature of -10°C | °C | 2 | 0 | 10 | 110 |
| 40145 | Flow temperature SP at external temperature of +10°C | °C | 2 | 0 | 10 | 110 |
| | **Heating circuit 06** | | | | | |
| 40147 | Desired room temperature during heating mode | °C | 2 | 0 | 10 | 30 |
| 40148 | Desired room temperature during setback mode | °C | 2 | 0 | 10 | 30 |
| 40149 | Controller gain room temperature Kp-Rm | | 10 | 1 | 0 | 20 |
| 40150 | Reduction of flow temperature in setback mode | °C | 2 | 0 | 0 | 70 |
| 40151 | External temperature, at which heating circuit pump switches off in heating mode | °C | 2 | 0 | -20 | 50 |
| 40152 | External temperature, at which heating circuit pump switches off in setback mode | °C | 2 | 0 | -20 | 50 |
| 40153 | Maximum heating circuit flow temperature | °C | 2 | 0 | 20 | 110 |
| 40156 | Mixer runtime | s | 1 | 0 | 30 | 600 |
| 40157 | Frost protection temperature | °C | 2 | 0 | -10 | 20 |
| 40158 | Flow temperature SP at external temperature of -10°C | °C | 2 | 0 | 10 | 110 |

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|---|---|---|---|---|---|---|
| 40159 | Flow temperature SP at external temperature of +10°C | °C | 2 | 0 | 10 | 110 |
| | **Heating circuit 07** | | | | | |
| 40161 | Desired room temperature during heating mode | °C | 2 | 0 | 10 | 30 |
| 40162 | Desired room temperature during setback mode | °C | 2 | 0 | 10 | 30 |
| 40163 | Controller gain room temperature Kp-Rm | | 10 | 1 | 0 | 20 |
| 40164 | Reduction of flow temperature in setback mode | °C | 2 | 0 | 0 | 70 |
| 40165 | External temperature, at which heating circuit pump switches off in heating mode | °C | 2 | 0 | -20 | 50 |
| 40166 | External temperature, at which heating circuit pump switches off in setback mode | °C | 2 | 0 | -20 | 50 |
| 40167 | Maximum heating circuit flow temperature | °C | 2 | 0 | 20 | 110 |
| 40170 | Mixer runtime | s | 1 | 0 | 30 | 600 |
| 40171 | Frost protection temperature | °C | 2 | 0 | -10 | 20 |
| 40172 | Flow temperature SP at external temperature of -10°C | °C | 2 | 0 | 10 | 110 |
| 40173 | Flow temperature SP at external temperature of +10°C | °C | 2 | 0 | 10 | 110 |
| | **Heating circuit 08** | | | | | |
| 40175 | Desired room temperature during heating mode | °C | 2 | 0 | 10 | 30 |
| 40176 | Desired room temperature during setback mode | °C | 2 | 0 | 10 | 30 |
| 40177 | Controller gain room temperature Kp-Rm | | 10 | 1 | 0 | 20 |
| 40178 | Reduction of flow temperature in setback mode | °C | 2 | 0 | 0 | 70 |
| 40179 | External temperature, at which heating circuit pump switches off in heating mode | °C | 2 | 0 | -20 | 50 |
| 40180 | External temperature, at which heating circuit pump switches off in setback mode | °C | 2 | 0 | -20 | 50 |
| 40181 | Maximum heating circuit flow temperature | °C | 2 | 0 | 20 | 110 |
| 40184 | Mixer runtime | s | 1 | 0 | 30 | 600 |
| 40185 | Frost protection temperature | °C | 2 | 0 | -10 | 20 |
| 40186 | Flow temperature SP at external temperature of -10°C | °C | 2 | 0 | 10 | 110 |
| 40187 | Flow temperature SP at external temperature of +10°C | °C | 2 | 0 | 10 | 110 |
| | **Heating circuit 09** | | | | | |
| 40189 | Desired room temperature during heating mode | °C | 2 | 0 | 10 | 30 |
| 40190 | Desired room temperature during setback mode | °C | 2 | 0 | 10 | 30 |
| 40191 | Controller gain room temperature Kp-Rm | | 10 | 1 | 0 | 20 |
| 40192 | Reduction of flow temperature in setback mode | °C | 2 | 0 | 0 | 70 |
| 40193 | External temperature, at which heating circuit pump switches off in heating mode | °C | 2 | 0 | -20 | 50 |
| 40194 | External temperature, at which heating circuit pump switches off in setback mode | °C | 2 | 0 | -20 | 50 |
| 40195 | Maximum heating circuit flow temperature | °C | 2 | 0 | 20 | 110 |
| 40198 | Mixer runtime | s | 1 | 0 | 30 | 600 |
| 40199 | Frost protection temperature | °C | 2 | 0 | -10 | 20 |
| 40200 | Flow temperature SP at external temperature of -10°C | °C | 2 | 0 | 10 | 110 |
| 40201 | Flow temperature SP at external temperature of +10°C | °C | 2 | 0 | 10 | 110 |
| | **Heating circuit 10** | | | | | |
| 40203 | Desired room temperature during heating mode | °C | 2 | 0 | 10 | 30 |
| 40204 | Desired room temperature during setback mode | °C | 2 | 0 | 10 | 30 |
| 40205 | Controller gain room temperature Kp-Rm | | 10 | 1 | 0 | 20 |
| 40206 | Reduction of flow temperature in setback mode | °C | 2 | 0 | 0 | 70 |
| 40207 | External temperature, at which heating circuit pump switches off in heating mode | °C | 2 | 0 | -20 | 50 |
| 40208 | External temperature, at which heating circuit pump switches off in setback mode | °C | 2 | 0 | -20 | 50 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 40209 | Maximum heating circuit flow temperature | °C | 2 | 0 | 20 | 110 |
| 40212 | Mixer runtime | s | 1 | 0 | 30 | 600 |
| 40213 | Frost protection temperature | °C | 2 | 0 | -10 | 20 |
| 40214 | Flow temperature SP at external temperature of -10°C | °C | 2 | 0 | 10 | 110 |
| 40215 | Flow temperature SP at external temperature of +10°C | °C | 2 | 0 | 10 | 110 |
| | **Heating circuit 11** | | | | | |
| 40217 | Desired room temperature during heating mode | °C | 2 | 0 | 10 | 30 |
| 40218 | Desired room temperature during setback mode | °C | 2 | 0 | 10 | 30 |
| 40219 | Controller gain room temperature Kp-Rm | | 10 | 1 | 0 | 20 |
| 40220 | Reduction of flow temperature in setback mode | °C | 2 | 0 | 0 | 70 |
| 40221 | External temperature, at which heating circuit pump switches off in heating mode | °C | 2 | 0 | -20 | 50 |
| 40222 | External temperature, at which heating circuit pump switches off in setback mode | °C | 2 | 0 | -20 | 50 |
| 40223 | Maximum heating circuit flow temperature | °C | 2 | 0 | 20 | 110 |
| 40226 | Mixer runtime | s | 1 | 0 | 30 | 600 |
| 40227 | Frost protection temperature | °C | 2 | 0 | -10 | 20 |
| 40228 | Flow temperature SP at external temperature of -10°C | °C | 2 | 0 | 10 | 110 |
| 40229 | Flow temperature SP at external temperature of +10°C | °C | 2 | 0 | 10 | 110 |
| | **Heating circuit 12** | | | | | |
| 40231 | Desired room temperature during heating mode | °C | 2 | 0 | 10 | 30 |
| 40232 | Desired room temperature during setback mode | °C | 2 | 0 | 10 | 30 |
| 40233 | Controller gain room temperature Kp-Rm | | 10 | 1 | 0 | 20 |
| 40234 | Reduction of flow temperature in setback mode | °C | 2 | 0 | 0 | 70 |
| 40235 | External temperature, at which heating circuit pump switches off in heating mode | °C | 2 | 0 | -20 | 50 |
| 40236 | External temperature, at which heating circuit pump switches off in setback mode | °C | 2 | 0 | -20 | 50 |
| 40237 | Maximum heating circuit flow temperature | °C | 2 | 0 | 20 | 110 |
| 40240 | Mixer runtime | s | 1 | 0 | 30 | 600 |
| 40241 | Frost protection temperature | °C | 2 | 0 | -10 | 20 |
| 40242 | Flow temperature SP at external temperature of -10°C | °C | 2 | 0 | 10 | 110 |
| 40243 | Flow temperature SP at external temperature of +10°C | °C | 2 | 0 | 10 | 110 |
| | **Heating circuit 13** | | | | | |
| 40245 | Desired room temperature during heating mode | °C | 2 | 0 | 10 | 30 |
| 40246 | Desired room temperature during setback mode | °C | 2 | 0 | 10 | 30 |
| 40247 | Controller gain room temperature Kp-Rm | | 10 | 1 | 0 | 20 |
| 40248 | Reduction of flow temperature in setback mode | °C | 2 | 0 | 0 | 70 |
| 40249 | External temperature, at which heating circuit pump switches off in heating mode | °C | 2 | 0 | -20 | 50 |
| 40250 | External temperature, at which heating circuit pump switches off in setback mode | °C | 2 | 0 | -20 | 50 |
| 40251 | Maximum heating circuit flow temperature | °C | 2 | 0 | 20 | 110 |
| 40254 | Mixer runtime | s | 1 | 0 | 30 | 600 |
| 40255 | Frost protection temperature | °C | 2 | 0 | -10 | 20 |
| 40256 | Flow temperature SP at external temperature of -10°C | °C | 2 | 0 | 10 | 110 |
| 40257 | Flow temperature SP at external temperature of +10°C | °C | 2 | 0 | 10 | 110 |
| | **Heating circuit 14** | | | | | |
| 40259 | Desired room temperature during heating mode | °C | 2 | 0 | 10 | 30 |
| 40260 | Desired room temperature during setback mode | °C | 2 | 0 | 10 | 30 |
| 40261 | Controller gain room temperature Kp-Rm | | 10 | 1 | 0 | 20 |
| 40262 | Reduction of flow temperature in setback mode | °C | 2 | 0 | 0 | 70 |

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|---|---|---|---|---|---|---|
| 40263 | External temperature, at which heating circuit pump switches off in heating mode | °C | 2 | 0 | -20 | 50 |
| 40264 | External temperature, at which heating circuit pump switches off in setback mode | °C | 2 | 0 | -20 | 50 |
| 40265 | Maximum heating circuit flow temperature | °C | 2 | 0 | 20 | 110 |
| 40268 | Mixer runtime | s | 1 | 0 | 30 | 600 |
| 40269 | Frost protection temperature | °C | 2 | 0 | -10 | 20 |
| 40270 | Flow temperature SP at external temperature of -10°C | °C | 2 | 0 | 10 | 110 |
| 40271 | Flow temperature SP at external temperature of +10°C | °C | 2 | 0 | 10 | 110 |
| | **Heating circuit 15** | | | | | |
| 40273 | Desired room temperature during heating mode | °C | 2 | 0 | 10 | 30 |
| 40274 | Desired room temperature during setback mode | °C | 2 | 0 | 10 | 30 |
| 40275 | Controller gain room temperature Kp-Rm | | 10 | 1 | 0 | 20 |
| 40276 | Reduction of flow temperature in setback mode | °C | 2 | 0 | 0 | 70 |
| 40277 | External temperature, at which heating circuit pump switches off in heating mode | °C | 2 | 0 | -20 | 50 |
| 40278 | External temperature, at which heating circuit pump switches off in setback mode | °C | 2 | 0 | -20 | 50 |
| 40279 | Maximum heating circuit flow temperature | °C | 2 | 0 | 20 | 110 |
| 40282 | Mixer runtime | s | 1 | 0 | 30 | 600 |
| 40283 | Frost protection temperature | °C | 2 | 0 | -10 | 20 |
| 40284 | Flow temperature SP at external temperature of -10°C | °C | 2 | 0 | 10 | 110 |
| 40285 | Flow temperature SP at external temperature of +10°C | °C | 2 | 0 | 10 | 110 |
| | **Heating circuit 16** | | | | | |
| 40287 | Desired room temperature during heating mode | °C | 2 | 0 | 10 | 30 |
| 40288 | Desired room temperature during setback mode | °C | 2 | 0 | 10 | 30 |
| 40289 | Controller gain room temperature Kp-Rm | | 10 | 1 | 0 | 20 |
| 40290 | Reduction of flow temperature in setback mode | °C | 2 | 0 | 0 | 70 |
| 40291 | External temperature, at which heating circuit pump switches off in heating mode | °C | 2 | 0 | -20 | 50 |
| 40292 | External temperature, at which heating circuit pump switches off in setback mode | °C | 2 | 0 | -20 | 50 |
| 40293 | Maximum heating circuit flow temperature | °C | 2 | 0 | 20 | 110 |
| 40296 | Mixer runtime | s | 1 | 0 | 30 | 600 |
| 40297 | Frost protection temperature | °C | 2 | 0 | -10 | 20 |
| 40298 | Flow temperature SP at external temperature of -10°C | °C | 2 | 0 | 10 | 110 |
| 40299 | Flow temperature SP at external temperature of +10°C | °C | 2 | 0 | 10 | 110 |
| | **Heating circuit 17** | | | | | |
| 40301 | Desired room temperature during heating mode | °C | 2 | 0 | 10 | 30 |
| 40302 | Desired room temperature during setback mode | °C | 2 | 0 | 10 | 30 |
| 40303 | Controller gain room temperature Kp-Rm | | 10 | 1 | 0 | 20 |
| 40304 | Reduction of flow temperature in setback mode | °C | 2 | 0 | 0 | 70 |
| 40305 | External temperature, at which heating circuit pump switches off in heating mode | °C | 2 | 0 | -20 | 50 |
| 40306 | External temperature, at which heating circuit pump switches off in setback mode | °C | 2 | 0 | -20 | 50 |
| 40307 | Maximum heating circuit flow temperature | °C | 2 | 0 | 20 | 110 |
| 40310 | Mixer runtime | s | 1 | 0 | 30 | 600 |
| 40311 | Frost protection temperature | °C | 2 | 0 | -10 | 20 |
| 40312 | Flow temperature SP at external temperature of -10°C | °C | 2 | 0 | 10 | 110 |
| 40313 | Flow temperature SP at external temperature of +10°C | °C | 2 | 0 | 10 | 110 |
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| | **Heating circuit 18** | | | | | |
| 40315 | Desired room temperature during heating mode | °C | 2 | 0 | 10 | 30 |
| 40316 | Desired room temperature during setback mode | °C | 2 | 0 | 10 | 30 |
| 40317 | Controller gain room temperature Kp-Rm | | 10 | 1 | 0 | 20 |
| 40318 | Reduction of flow temperature in setback mode | °C | 2 | 0 | 0 | 70 |
| 40319 | External temperature, at which heating circuit pump switches off in heating mode | °C | 2 | 0 | -20 | 50 |
| 40320 | External temperature, at which heating circuit pump switches off in setback mode | °C | 2 | 0 | -20 | 50 |
| 40321 | Maximum heating circuit flow temperature | °C | 2 | 0 | 20 | 110 |
| 40324 | Mixer runtime | s | 1 | 0 | 30 | 600 |
| 40325 | Frost protection temperature | °C | 2 | 0 | -10 | 20 |
| 40326 | Flow temperature SP at external temperature of -10°C | °C | 2 | 0 | 10 | 110 |
| 40327 | Flow temperature SP at external temperature of +10°C | °C | 2 | 0 | 10 | 110 |
| | **DHW tank 01** | | | | | |
| 40339 | Load if temperature difference between storage tank and DHW tank is | °C | 2 | 0 | 3 | 50 |
| 40340 | Set DHW temperature | °C | 2 | 0 | 10 | 100 |
| 40341 | Which storage tank or heat distributor supplies the heat (0 = boiler) | | 1 | 0 | 0 | 4 |
| 40342 | Residual heat use | | 1 | 0 | 0 | 1 |
| 40343 | Reload if DHW tank temperature is below | °C | 2 | 0 | 1 | 90 |
| 40344 | Only load DHW tank once a day | | 1 | 0 | 0 | 1 |
| 40345 | Legionella heating activated | | 1 | 0 | 0 | 1 |
| 40346 | Which day for legionella heating | | 1 | 0 | 1 | 8 |
| 40347 | Load if temperature difference between boiler and DHW tank is | °C | 2 | 0 | 3 | 50 |
| 40348 | Setpoint for temperature difference between boiler - DHW tank | °C | 2 | 0 | 3 | 50 |
| 40351 | Minimum DHW tank speed | % | 1 | 0 | 0 | 100 |
| | **DHW tank 02** | | | | | |
| 40352 | Load if temperature difference between storage tank and DHW tank is | °C | 2 | 0 | 3 | 50 |
| 40353 | Set DHW temperature | °C | 2 | 0 | 10 | 100 |
| 40354 | Which storage tank or heat distributor supplies the heat (0 = boiler) | | 1 | 0 | 0 | 4 |
| 40355 | Residual heat use | | 1 | 0 | 0 | 1 |
| 40356 | Reload if DHW tank temperature is below | °C | 2 | 0 | 1 | 90 |
| 40357 | Only load DHW tank once a day | | 1 | 0 | 0 | 1 |
| 40358 | Legionella heating activated | | 1 | 0 | 0 | 1 |
| 40359 | Which day for legionella heating | | 1 | 0 | 1 | 8 |
| 40360 | Load if temperature difference between boiler and DHW tank is | °C | 2 | 0 | 3 | 50 |
| 40361 | Setpoint for temperature difference between boiler - DHW tank | °C | 2 | 0 | 3 | 50 |
| 40364 | Minimum DHW tank speed | % | 1 | 0 | 0 | 100 |
| | **DHW tank 03** | | | | | |
| 40365 | Load if temperature difference between storage tank and DHW tank is | °C | 2 | 0 | 3 | 50 |
| 40366 | Set DHW temperature | °C | 2 | 0 | 10 | 100 |
| 40367 | Which storage tank or heat distributor supplies the heat (0 = boiler) | | 1 | 0 | 0 | 4 |
| 40368 | Residual heat use | | 1 | 0 | 0 | 1 |

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| 40369 | Reload if DHW tank temperature is below | °C | 2 | 0 | 1 | 90 |
| 40370 | Only load DHW tank once a day | | 1 | 0 | 0 | 1 |
| 40371 | Legionella heating activated | | 1 | 0 | 0 | 1 |
| 40372 | Which day for legionella heating | | 1 | 0 | 1 | 8 |
| 40373 | Load if temperature difference between boiler and DHW tank is | °C | 2 | 0 | 3 | 50 |
| 40374 | Setpoint for temperature difference between boiler - DHW tank | °C | 2 | 0 | 3 | 50 |
| 40377 | Minimum DHW tank speed | % | 1 | 0 | 0 | 100 |
| | **DHW tank 04** | | | | | |
| 40378 | Load if temperature difference between storage tank and DHW tank is | °C | 2 | 0 | 3 | 50 |
| 40379 | Set DHW temperature | °C | 2 | 0 | 10 | 100 |
| 40380 | Which storage tank or heat distributor supplies the heat (0 = boiler) | | 1 | 0 | 0 | 4 |
| 40381 | Residual heat use | | 1 | 0 | 0 | 1 |
| 40382 | Reload if DHW tank temperature is below | °C | 2 | 0 | 1 | 90 |
| 40383 | Only load DHW tank once a day | | 1 | 0 | 0 | 1 |
| 40384 | Legionella heating activated | | 1 | 0 | 0 | 1 |
| 40385 | Which day for legionella heating | | 1 | 0 | 1 | 8 |
| 40386 | Load if temperature difference between boiler and DHW tank is | °C | 2 | 0 | 3 | 50 |
| 40387 | Setpoint for temperature difference between boiler - DHW tank | °C | 2 | 0 | 3 | 50 |
| 40390 | Minimum DHW tank speed | % | 1 | 0 | 0 | 100 |
| | **DHW tank 05** | | | | | |
| 40391 | Load if temperature difference between storage tank and DHW tank is | °C | 2 | 0 | 3 | 50 |
| 40392 | Set DHW temperature | °C | 2 | 0 | 10 | 100 |
| 40393 | Which storage tank or heat distributor supplies the heat (0 = boiler) | | 1 | 0 | 0 | 4 |
| 40394 | Residual heat use | | 1 | 0 | 0 | 1 |
| 40395 | Reload if DHW tank temperature is below | °C | 2 | 0 | 1 | 90 |
| 40396 | Only load DHW tank once a day | | 1 | 0 | 0 | 1 |
| 40397 | Legionella heating activated | | 1 | 0 | 0 | 1 |
| 40398 | Which day for legionella heating | | 1 | 0 | 1 | 8 |
| 40399 | Load if temperature difference between boiler and DHW tank is | °C | 2 | 0 | 3 | 50 |
| 40400 | Setpoint for temperature difference between boiler - DHW tank | °C | 2 | 0 | 3 | 50 |
| 40403 | Minimum DHW tank speed | % | 1 | 0 | 0 | 100 |
| | **DHW tank 06** | | | | | |
| 40404 | Load if temperature difference between storage tank and DHW tank is | °C | 2 | 0 | 3 | 50 |
| 40405 | Set DHW temperature | °C | 2 | 0 | 10 | 100 |
| 40406 | Which storage tank or heat distributor supplies the heat (0 = boiler) | | 1 | 0 | 0 | 4 |
| 40407 | Residual heat use | | 1 | 0 | 0 | 1 |
| 40408 | Reload if DHW tank temperature is below | °C | 2 | 0 | 1 | 90 |
| 40409 | Only load DHW tank once a day | | 1 | 0 | 0 | 1 |
| 40410 | Legionella heating activated | | 1 | 0 | 0 | 1 |
| 40411 | Which day for legionella heating | | 1 | 0 | 1 | 8 |

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|---|---|---|---|---|---|---|
| 40412 | Load if temperature difference between boiler and DHW tank is | °C | 2 | 0 | 3 | 50 |
| 40413 | Setpoint for temperature difference between boiler - DHW tank | °C | 2 | 0 | 3 | 50 |
| 40416 | Minimum DHW tank speed | % | 1 | 0 | 0 | 100 |
| | **DHW tank 07** | | | | | |
| 40417 | Load if temperature difference between storage tank and DHW tank is | °C | 2 | 0 | 3 | 50 |
| 40418 | Set DHW temperature | °C | 2 | 0 | 10 | 100 |
| 40419 | Which storage tank or heat distributor supplies the heat (0 = boiler) | | 1 | 0 | 0 | 4 |
| 40420 | Residual heat use | | 1 | 0 | 0 | 1 |
| 40421 | Reload if DHW tank temperature is below | °C | 2 | 0 | 1 | 90 |
| 40422 | Only load DHW tank once a day | | 1 | 0 | 0 | 1 |
| 40423 | Legionella heating activated | | 1 | 0 | 0 | 1 |
| 40424 | Which day for legionella heating | | 1 | 0 | 1 | 8 |
| 40425 | Load if temperature difference between boiler and DHW tank is | °C | 2 | 0 | 3 | 50 |
| 40426 | Setpoint for temperature difference between boiler - DHW tank | °C | 2 | 0 | 3 | 50 |
| 40428 | Load if temperature difference between boiler and DHW tank is | s | 1 | 0 | 10 | 3600 |
| 40429 | Minimum DHW tank speed | % | 1 | 0 | 0 | 100 |
| | **DHW tank 08** | | | | | |
| 40430 | Load if temperature difference between storage tank and DHW tank is | °C | 2 | 0 | 3 | 50 |
| 40431 | Set DHW temperature | °C | 2 | 0 | 10 | 100 |
| 40433 | Residual heat use | | 1 | 0 | 0 | 1 |
| 40434 | Reload if DHW tank temperature is below | °C | 2 | 0 | 1 | 90 |
| 40435 | Only load DHW tank once a day | | 1 | 0 | 0 | 1 |
| 40436 | Legionella heating activated | | 1 | 0 | 0 | 1 |
| 40437 | Which day for legionella heating | | 1 | 0 | 1 | 8 |
| 40442 | Minimum DHW tank speed | % | 1 | 0 | 0 | 100 |
| 40443 | Which second Boiler is installed? | | 1 | 0 | 0 | 4 |
| | **Storage tank 01** | | | | | |
| 40444 | Heating circuit release from following storage tank temperature | °C | 2 | 0 | 20 | 100 |
| 40446 | Temperature difference between boiler and border layer | °C | 2 | 0 | 2 | 80 |
| 40447 | Minimum storage tank pump speed | % | 1 | 0 | 0 | 100 |
| 40450 | Boiler start if difference between boiler setpoint and top store is larger | °C | 2 | 0 | 5 | 70 |
| 40451 | storage tank fully loaded if temperature difference between boiler and bottom storage tank | °C | 2 | 0 | 3 | 50 |
| | **Storage tank 02** | | | | | |
| 40452 | Heating circuit release from following storage tank temperature | °C | 2 | 0 | 20 | 100 |
| 40454 | Temperature difference between boiler and border layer | °C | 2 | 0 | 2 | 80 |
| 40455 | Minimum storage tank pump speed | % | 1 | 0 | 0 | 100 |
| 40458 | Boiler start if difference between boiler setpoint and top store is larger | °C | 2 | 0 | 5 | 70 |
| 40459 | storage tank fully loaded if temperature difference between boiler and bottom storage tank | °C | 2 | 0 | 3 | 50 |
| | | | | | | |
| | **Storage tank 03** | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 40460 | Heating circuit release from following storage tank temperature | °C | 2 | 0 | 20 | 100 |
| 40462 | Temperature difference between boiler and border layer | °C | 2 | 0 | 2 | 80 |
| 40463 | Minimum storage tank pump speed | % | 1 | 0 | 0 | 100 |
| 40466 | Boiler start if difference between boiler setpoint and top store is larger | °C | 2 | 0 | 5 | 70 |
| 40467 | storage tank fully loaded if temperature difference between boiler and bottom storage tank | °C | 2 | 0 | 3 | 50 |
| | **Storage tank 04** | | | | | |
| 40468 | Heating circuit release from following storage tank temperature | °C | 2 | 0 | 20 | 100 |
| 40470 | Temperature difference between boiler and border layer | °C | 2 | 0 | 2 | 80 |
| 40471 | Minimum storage tank pump speed | % | 1 | 0 | 0 | 100 |
| 40474 | Boiler start if difference between boiler setpoint and top store is larger | °C | 2 | 0 | 5 | 70 |
| 40475 | storage tank fully loaded if temperature difference between boiler and bottom storage tank | °C | 2 | 0 | 3 | 50 |
| 40476 | Cycle of ash screw | | 1 | 0 | 1 | 5000 |
| 40477 | Ash screw runtime | s | 1 | 0 | 0 | 120 |
| 40478 | First start of cleaning | | 1 | 0 | 0 | 2400 |
| 40479 | Second start of cleaning | | 1 | 0 | 0 | 2400 |
| 40480 | Modem installed | | 1 | 0 | 0 | 1 |
| 40481 | Boiler temperature setpoint | °C | 2 | 0 | 25 | 90 |
| 40482 | Minimum boiler temperature to release all pumps | °C | 2 | 0 | 20 | 70 |
| 40483 | Maximum time until switching of probe | min | 60 | 0 | 3 | 120 |
| 40484 | Standby boiler start delay | min | 60 | 0 | 0 | 500 |
| 40485 | Standby boiler start, if storage tank top temperature is below | °C | 2 | 0 | 0 | 100 |
| 40486 | Standby boiler minimum runtime | min | 60 | 0 | 0 | 500 |
| 40487 | Minimum temperature of standby boiler | °C | 2 | 0 | 20 | 95 |
| 40488 | Temperature difference between standby boiler and storage tank | °C | 2 | 0 | 0 | 50 |
| 40489 | Solar system | | 1 | 0 | 1 | 3 |
| 40490 | Temp differential to start collector pump | °C | 2 | 0 | 0 | 50 |
| 40491 | Temp difference to stop collector pump | °C | 2 | 0 | 0 | 50 |
| 40492 | Maximum storage tank bottom temperature during solar charging | °C | 2 | 0 | 0 | 95 |
| 40493 | Boiler target temperature during solar charging | °C | 2 | 0 | 0 | 95 |
| 40494 | Minimum collector pump speed | % | 1 | 0 | 0 | 100 |
| 40511 | Clean after how many shutdowns | | 1 | 0 | 0 | 50 |
| 40512 | Minimum flue gas temperature | °C | 1 | 0 | 65 | 300 |
| 40513 | residual oxygen content setpoint | % | 10 | 1 | 1 | 21 |
| 40514 | Temperature in the hi-limit stat housing at which all pumps run | °C | 2 | 0 | 50 | 104 |
| 40515 | Maximum current for delivery screw | A | 100 | 2 | 0,01 | 6 |
| 40517 | Start of 2nd pellet filling | | 1 | 0 | 0 | 2400 |
| 40519 | Max. runtime of suction fan | min | 60 | 0 | 1 | 120 |
| 40520 | Should this heating circuit heat when there is DHW boiler priority ? HC 01 | | 1 | 0 | 0 | 1 |
| 40521 | Should this heating circuit heat when there is DHW boiler priority ? HC 02 | | 1 | 0 | 0 | 1 |
| 40522 | Should this heating circuit heat when there is DHW boiler priority ? HC 03 | | 1 | 0 | 0 | 1 |

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| 40523 | Should this heating circuit heat when there is DHW boiler priority ? HC 04 | | 1 | 0 | 0 | 1 |
| 40524 | Should this heating circuit heat when there is DHW boiler priority ? HC 05 | | 1 | 0 | 0 | 1 |
| 40525 | Should this heating circuit heat when there is DHW boiler priority ? HC 06 | | 1 | 0 | 0 | 1 |
| 40526 | Should this heating circuit heat when there is DHW boiler priority ? HC 07 | | 1 | 0 | 0 | 1 |
| 40527 | Should this heating circuit heat when there is DHW boiler priority ? HC 08 | | 1 | 0 | 0 | 1 |
| 40528 | Should this heating circuit heat when there is DHW boiler priority ? HC 09 | | 1 | 0 | 0 | 1 |
| 40529 | Should this heating circuit heat when there is DHW boiler priority ? HC 10 | | 1 | 0 | 0 | 1 |
| 40530 | Should this heating circuit heat when there is DHW boiler priority ? HC 11 | | 1 | 0 | 0 | 1 |
| 40531 | Should this heating circuit heat when there is DHW boiler priority ? HC 12 | | 1 | 0 | 0 | 1 |
| 40532 | Should this heating circuit heat when there is DHW boiler priority ? HC 13 | | 1 | 0 | 0 | 1 |
| 40533 | Should this heating circuit heat when there is DHW boiler priority ? HC 14 | | 1 | 0 | 0 | 1 |
| 40534 | Should this heating circuit heat when there is DHW boiler priority ? HC 15 | | 1 | 0 | 0 | 1 |
| 40535 | Should this heating circuit heat when there is DHW boiler priority ? HC 16 | | 1 | 0 | 0 | 1 |
| 40536 | Should this heating circuit heat when there is DHW boiler priority ? HC 17 | | 1 | 0 | 0 | 1 |
| 40537 | Should this heating circuit heat when there is DHW boiler priority ? HC 18 | | 1 | 0 | 0 | 1 |
| 40559 | Suction fan run-on | s | 1 | 0 | 1 | 60 |
| 40560 | Delivery screw runtime | s | 1 | 0 | 1 | 900 |
| 40561 | Delivery screw pause time | s | 1 | 0 | 1 | 240 |
| 40615 | Vacuum filling system permitted from | | 1 | 0 | 0 | 2400 |
| 40616 | Vacuum filling system permitted until | | 1 | 0 | 0 | 2400 |
| 40621 | Display with address 1 is allocated to the following heating circuit | | 1 | 0 | 0 | 18 |
| 40622 | Display with address 2 is allocated to the following heating circuit | | 1 | 0 | 0 | 18 |
| 40623 | Display with address 3 is allocated to the following heating circuit | | 1 | 0 | 0 | 18 |
| 40624 | Display with address 4 is allocated to the following heating circuit | | 1 | 0 | 0 | 18 |
| 40625 | Display with address 5 is allocated to the following heating circuit | | 1 | 0 | 0 | 18 |
| 40626 | Display with address 6 is allocated to the following heating circuit | | 1 | 0 | 0 | 18 |
| 40627 | Display with address 7 is allocated to the following heating circuit | | 1 | 0 | 0 | 18 |
| 40629 | Display with address 1 is allocated to the following DHW tank | | 1 | 0 | 0 | 8 |
| 40630 | Display with address 2 is allocated to the following DHW tank | | 1 | 0 | 0 | 8 |
| 40631 | Display with address 3 is allocated to the following DHW tank | | 1 | 0 | 0 | 8 |
| 40632 | Display with address 4 is allocated to the following DHW tank | | 1 | 0 | 0 | 8 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 40633 | Display with address 5 is allocated to the following DHW tank | | 1 | 0 | 0 | 8 |
| 40634 | Display with address 6 is allocated to the following DHW tank | | 1 | 0 | 0 | 8 |
| 40635 | Display with address 7 is allocated to the following DHW tank | | 1 | 0 | 0 | 8 |
| 40639 | Is a PT1000 sensor used as a solar sensor? | | 1 | 0 | 0 | 1 |
| 40648 | Network return setpoint | °C | 2 | 0 | 20 | 120 |
| 40649 | Minimum speed for network pump | % | 1 | 0 | 0 | 100 |
| 40660 | Adopt specified material values | | 1 | 0 | 0 | 1 |
| 40663 | Memory cycle of data logger | s | 1 | 0 | 3 | 120 |
| 40664 | From which storage tank or distributor is the heating circuit supplied (0 = boiler) HC 01 | | 1 | 0 | 0 | 4 |
| 40665 | From which storage tank or distributor is the heating circuit supplied (0 = boiler) HC 02 | | 1 | 0 | 0 | 4 |
| 40666 | From which storage tank or distributor is the heating circuit supplied (0 = boiler) HC 03 | | 1 | 0 | 0 | 4 |
| 40667 | From which storage tank or distributor is the heating circuit supplied (0 = boiler) HC 04 | | 1 | 0 | 0 | 4 |
| 40668 | From which storage tank or distributor is the heating circuit supplied (0 = boiler) HC 05 | | 1 | 0 | 0 | 4 |
| 40669 | From which storage tank or distributor is the heating circuit supplied (0 = boiler) HC 06 | | 1 | 0 | 0 | 4 |
| 40670 | From which storage tank or distributor is the heating circuit supplied (0 = boiler) HC 07 | | 1 | 0 | 0 | 4 |
| 40671 | From which storage tank or distributor is the heating circuit supplied (0 = boiler) HC 08 | | 1 | 0 | 0 | 4 |
| 40672 | From which storage tank or distributor is the heating circuit supplied (0 = boiler) HC 09 | | 1 | 0 | 0 | 4 |
| 40673 | From which storage tank or distributor is the heating circuit supplied (0 = boiler) HC 10 | | 1 | 0 | 0 | 4 |
| 40674 | From which storage tank or distributor is the heating circuit supplied (0 = boiler) HC 11 | | 1 | 0 | 0 | 4 |
| 40675 | From which storage tank or distributor is the heating circuit supplied (0 = boiler) HC 12 | | 1 | 0 | 0 | 4 |
| 40676 | From which storage tank or distributor is the heating circuit supplied (0 = boiler) HC 13 | | 1 | 0 | 0 | 4 |
| 40677 | From which storage tank or distributor is the heating circuit supplied (0 = boiler) HC 14 | | 1 | 0 | 0 | 4 |
| 40678 | From which storage tank or distributor is the heating circuit supplied (0 = boiler) HC 15 | | 1 | 0 | 0 | 4 |
| 40679 | From which storage tank or distributor is the heating circuit supplied (0 = boiler) HC 16 | | 1 | 0 | 0 | 4 |
| 40680 | From which storage tank or distributor is the heating circuit supplied (0 = boiler) HC 17 | | 1 | 0 | 0 | 4 |
| 40681 | From which storage tank or distributor is the heating circuit supplied (0 = boiler) HC 18 | | 1 | 0 | 0 | 4 |
| 40690 | Return temperature setpoint feeder 1 | °C | 2 | 0 | 20 | 120 |
| 40691 | Return temperature setpoint feeder 2 | °C | 2 | 0 | 20 | 120 |
| 40692 | Return temperature setpoint feeder 3 | °C | 2 | 0 | 20 | 120 |
| 40693 | Return temperature setpoint feeder 4 | °C | 2 | 0 | 20 | 120 |
| 40694 | Minimum speed for feeder pump 1 | % | 1 | 0 | 0 | 100 |
| 40695 | Minimum speed for feeder pump 2 | % | 1 | 0 | 0 | 100 |
| 40696 | Minimum speed for feeder pump 3 | % | 1 | 0 | 0 | 100 |
| 40697 | Minimum speed for feeder pump 4 | % | 1 | 0 | 0 | 100 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 40720 | Air quantity, which should be reached during preparation with P4 Pellet 8/15 | mV | 100 | 2 | 0 | 5 |
| 40728 | Oil valve shut delay | s | 1 | 0 | 0 | 3600 |
| 40732 | Minimum pump speed | % | 1 | 0 | 0 | 100 |
| 40733 | Startup difference | °C | 2 | 0 | -20 | 100 |
| 40734 | Shutdown difference | °C | 2 | 0 | -20 | 100 |
| 40752 | Invert isolating valve | | 1 | 0 | 0 | 1 |
| 40753 | Switch off the pump at what return temperature in the circulation line | °C | 2 | 0 | 20 | 120 |
| 40754 | Circulation pump run-on | s | 1 | 0 | 1 | 3600 |
| 40755 | Return sensor present | | 1 | 0 | 0 | 1 |
| 40758 | Mode | | 1 | 0 | 0 | 2 |
| 40759 | Invert standby boiler isolating valve | | 1 | 0 | 0 | 1 |
| 40760 | Minimum temperature for heat source | °C | 2 | 0 | 1 | 90 |
| 40761 | Maximum temperature for heat sink | °C | 2 | 0 | 10 | 130 |
| 40764 | Heat exchanger - storage tank pump start delay | s | 1 | 0 | 1 | 7200 |
| 40765 | Heat exchanger - storage tank pump stop delay | s | 1 | 0 | 1 | 7200 |
| 40766 | Maximum collector pump speed | % | 1 | 0 | 0 | 100 |
| 40767 | storage tank top solar setpoint (fast loading until this temperature) | °C | 2 | 0 | 20 | 120 |
| 40768 | Collector - storage tank top differential | °C | 2 | 0 | 2 | 60 |
| 40769 | Collector - heat exchanger sec., outfeed difference | °C | 2 | 0 | 2 | 60 |
| 40770 | Collector return - storage tank bottom differential | °C | 2 | 0 | 2 | 60 |
| 40771 | Collector pump control Kp value | | 256 | 2 | 0,01 | 99,99 |
| 40772 | Collector pump control Tn value | s | 1 | 0 | 1 | 3600 |
| 40775 | Control heating circuit according to program (NO -> heating circuit is switched off) HC 01 | | 1 | 0 | 0 | 1 |
| 40776 | Control heating circuit according to program (NO -> heating circuit is switched off) HC 02 | | 1 | 0 | 0 | 1 |
| 40777 | Control heating circuit according to program (NO -> heating circuit is switched off) HC 03 | | 1 | 0 | 0 | 1 |
| 40778 | Control heating circuit according to program (NO -> heating circuit is switched off) HC 04 | | 1 | 0 | 0 | 1 |
| 40783 | Air quantity, which should be reached during preparation with P4 Pellet 20/25 | mV | 100 | 2 | 0 | 5 |
| 40787 | Adopt boiler standard values | | 1 | 0 | 0 | 1 |
| 40788 | Lambda probe correction value | | 14 | 1 | -7 | 8 |
| 40789 | Control standby boiler variably to the target value | | 1 | 0 | 0 | 1 |
| 40790 | Standby boiler delivery temperature | °C | 2 | 0 | 60 | 110 |
| 40791 | Control heating circuit according to program (NO -> heating circuit is switched off) HC 05 | | 1 | 0 | 0 | 1 |
| 40792 | Control heating circuit according to program (NO -> heating circuit is switched off) HC 06 | | 1 | 0 | 0 | 1 |
| 40793 | Control heating circuit according to program (NO -> heating circuit is switched off) HC 07 | | 1 | 0 | 0 | 1 |
| 40794 | Control heating circuit according to program (NO -> heating circuit is switched off) HC 08 | | 1 | 0 | 0 | 1 |
| 40795 | Control heating circuit according to program (NO -> heating circuit is switched off) HC 09 | | 1 | 0 | 0 | 1 |
| 40796 | Control heating circuit according to program (NO -> heating circuit is switched off) HC 10 | | 1 | 0 | 0 | 1 |
| 40797 | Nominal flow of collector pump for heat meter [L/h] | | 1 | 0 | 0 | 10000 |
| 40798 | Room air independent operation | | 1 | 0 | 0 | 1 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 40799 | In pellet mode stop storage tank loading bec. of middle storage tank sensor | | 1 | 0 | 0 | 1 |
| 40800 | Collector monitoring -> Collector pump is switched on every 30 min. for 10 sec. | | 1 | 0 | 0 | 1 |
| 40801 | Output warnings through fault message relays | | 1 | 0 | 0 | 1 |
| 40802 | Condensation heat exchanger present (P4 Pellet) | | 1 | 0 | 0 | 1 |
| 40804 | Only switch on the network pump when required by the store (variant 3 / 4) | | 1 | 0 | 0 | 1 |
| 40805 | DHW tanks run-on (this setting applies for all DHW tanks) | min | 60 | 0 | 0 | 100 |
| 40811 | Start emergency skimming from STL sensor temp. | °C | 2 | 0 | 90 | 110 |
| 40812 | Enable heating circuit pump 0 according to top store | | 1 | 0 | 0 | 1 |
| 40815 | Deviation of room sensor from display with address 1 | °C | 2 | 0 | -20 | 20 |
| 40816 | Deviation of room sensor from display with address 2 | °C | 2 | 0 | -20 | 20 |
| 40817 | Deviation of room sensor from display with address 3 | °C | 2 | 0 | -20 | 20 |
| 40818 | Deviation of room sensor from display with address 4 | °C | 2 | 0 | -20 | 20 |
| 40819 | Deviation of room sensor from display with address 5 | °C | 2 | 0 | -20 | 20 |
| 40820 | Deviation of room sensor from display with address 6 | °C | 2 | 0 | -20 | 20 |
| 40821 | Deviation of room sensor from display with address 7 | °C | 2 | 0 | -20 | 20 |
| 40822 | O2 control release in heating from | min | 60 | 0 | 0 | 30 |
| 40823 | If the boiler is active then all stores charge | | 1 | 0 | 0 | 1 |
| 40825 | Heating hours until ash removal warning | h | 1 | 0 | 10 | 9999 |
| 40830 | Store - Store difference | °C | 2 | 0 | -10 | 20 |
| 40831 | For solar to store and DHW tank, the DHW tank has priority | | 1 | 0 | 0 | 1 |
| 40832 | Heating up program active | | 1 | 0 | 0 | 1 |
| 40833 | Current day of the heating up program | | 1 | 0 | 1 | 30 |
| 40834 | For which heating circuit should the program apply | | 1 | 0 | 1 | 18 |
| 40835 | Which heating up program is used | | 1 | 0 | 1 | 7 |
| 40842 | Buffer charge is 100 % at boiler setpoint parameter | °C | 2 | 0 | -10 | 60 |
| 40843 | Store charge is 0 % at the following temperature | °C | 2 | 0 | 5 | 80 |
| 40844 | Start of store charging from charge | % | 1 | 0 | 0 | 100 |
| 40845 | Start point 2 at store charge | % | 1 | 0 | 0 | 100 |
| 40846 | Start point 3 at store charge | % | 1 | 0 | 0 | 100 |
| 40847 | Start priority of the master boiler | | 1 | 0 | 1 | 4 |
| 40848 | Start priority of slave boiler 1 | | 1 | 0 | 1 | 4 |
| 40849 | Start priority of slave boiler 2 | | 1 | 0 | 1 | 4 |
| 40850 | Start priority of slave boiler 3 | | 1 | 0 | 1 | 4 |
| 40852 | Quick start if store discharge is greater than (% / 10min) | | 1 | 0 | 1 | 40 |
| 40853 | Reduce the overall output of the cascade before the store is fully loaded | % | 1 | 0 | 0 | 70 |
| 40863 | Outfeed setpoint for all days in program 7 | °C | 2 | 0 | 0 | 100 |
| 40864 | COM 2 is used as a MODBUS interface | | 1 | 0 | 0 | 1 |
| 40865 | MODBUS address | | 1 | 0 | 1 | 247 |
| 40866 | MODBUS protocol (1 - RTU / 2 - ASCII) | | 1 | 0 | 1 | 2 |
| 40870 | Broadband probe type (1 .. Bosch / 2 .. NTK) (3 .. LSM11 input) | | 1 | 0 | 1 | 3 |
| 40871 | Broadband probe calibration | | 1 | 0 | 0 | 1 |
| 40872 | Stoker monitoring active | | 1 | 0 | 0 | 1 |
| 40874 | Minimum collector temperature | °C | 2 | 0 | 0 | 80 |
| 40875 | Solar charging to which store | | 1 | 0 | 1 | 4 |
| 40876 | Solar charging to which DHW tank | | 1 | 0 | 1 | 8 |
| 40878 | Control store requests according to system environment | | 1 | 0 | 0 | 1 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 40879 | According to system environment, store request shutdown delay of | min | 60 | 0 | 0 | 120 |
| 40880 | 100 % boiler output from a store charge of | % | 1 | 0 | 0 | 100 |
| 40881 | 0 % boiler output if store charge is over | % | 1 | 0 | 0 | 100 |
| 40888 | Condenser cleaning interval (Heating hours) | h | 1 | 0 | 1 | 120 |
| 40889 | Condenser cleaning duration | s | 1 | 0 | 10 | 240 |
| 40890 | Condenser cleaning possible from | | 1 | 0 | 0 | 2400 |
| 40891 | Condenser cleaning possible till | | 1 | 0 | 0 | 2400 |
| 40892 | Correction value for external sensor | °C | 2 | 0 | -10 | 10 |
| 40893 | Heating circuit modul to which the external sensor is connected (0 = Core modul) | | 1 | 0 | 0 | 8 |
| 40896 | Pulse per litre of flow through meter | | 10 | 1 | 0,1 | 20 |
| 40897 | Is an external flow through counter used | | 1 | 0 | 0 | 1 |
| 40908 | Electrical room air flap present | | 1 | 0 | 0 | 1 |
| 40912 | Refill cyclone after buffer charging? | | 1 | 0 | 0 | 1 |
| 40916 | Use room sensor input for room thermostat | | 1 | 0 | 0 | 1 |
| 40917 | Send a line break when ASCII data output on COM2 | | 1 | 0 | 0 | 1 |
| 40918 | Position 1 of change-over unit is used? | | 1 | 0 | 0 | 1 |
| 40919 | Position 2 of change-over unit is used? | | 1 | 0 | 0 | 1 |
| 40920 | Position 3 of change-over unit is used? | | 1 | 0 | 0 | 1 |
| 40921 | Clean after how many hours heating | h | 10 | 1 | 0 | 24 |
| 40922 | Vacuum + screw filling run-on, applies after reaching the MAX fill level | s | 1 | 0 | 0 | 300 |
| 40923 | High temperature reqirement because of DHW tank loading | | 1 | 0 | 0 | 1 |
| 40926 | For high temperature requirement DHW tank 01 don´t look at DHW tank 01 | | 1 | 0 | 0 | 1 |
| 40927 | On-time of spray valve. Overall cyclus 20 sec | % | 1 | 0 | 10 | 100 |
| 40930 | Touchscreen with address 1 is allocated to the following heating circuit | | 1 | 0 | 0 | 18 |
| 40931 | Touchscreen with address 2 is allocated to the following heating circuit | | 1 | 0 | 0 | 18 |
| 40932 | Tpuchscreen with address 3 is allocated to the following heating circuit | | 1 | 0 | 0 | 18 |
| 40933 | Touchscreen with address 4 is allocated to the following heating circuit | | 1 | 0 | 0 | 18 |
| 40934 | Touchscreen with address 5 is allocated to the following heating circuit | | 1 | 0 | 0 | 18 |
| 40935 | Touchscreen with address 6 is allocated to the following heating circuit | | 1 | 0 | 0 | 18 |
| 40936 | Touchscreen with address 7 is allocated to the following heating circuit | | 1 | 0 | 0 | 18 |
| 40938 | Touchscreen with address 1 is allocated to the following DHW tank | | 1 | 0 | 0 | 8 |
| 40939 | Touchscreen with address 2 is allocated to the following DHW tank | | 1 | 0 | 0 | 8 |
| 40940 | Touchscreen with address 3 is allocated to the following DHW tank | | 1 | 0 | 0 | 8 |
| 40941 | Touchscreen with address 4 is allocated to the following DHW tank | | 1 | 0 | 0 | 8 |
| 40942 | Touchscreen with address 5 is allocated to the following DHW tank | | 1 | 0 | 0 | 8 |
| 40943 | Touchscreen with address 6 is allocated to the following DHW tank | | 1 | 0 | 0 | 8 |
| 40944 | Touchscreen with address 7 is allocated to the following DHW tank | | 1 | 0 | 0 | 8 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 40956 | PWM setting for storage tank 1 pump | | 1 | 0 | 0 | 6 |
| 40957 | PWM setting for storage tank 2 pump | | 1 | 0 | 0 | 6 |
| 40958 | PWM setting for storage tank 3 pump | | 1 | 0 | 0 | 6 |
| 40959 | PWM setting for storage tank 4 pump | | 1 | 0 | 0 | 6 |
| 40960 | PWM setting for DHW tank 1 pump | | 1 | 0 | 0 | 6 |
| 40961 | PWM setting for DHW tank 2 pump | | 1 | 0 | 0 | 6 |
| 40962 | PWM setting for DHW tank 3 pump | | 1 | 0 | 0 | 6 |
| 40963 | PWM setting for DHW tank 4 pump | | 1 | 0 | 0 | 6 |
| 40964 | PWM setting for DHW tank 5 pump | | 1 | 0 | 0 | 6 |
| 40965 | PWM setting for DHW tank 6 pump | | 1 | 0 | 0 | 6 |
| 40966 | PWM setting for DHW tank 7 pump | | 1 | 0 | 0 | 6 |
| 40967 | PWM setting for DHW tank 8 pump | | 1 | 0 | 0 | 6 |
| 40968 | PWM setting for shunt pump | | 1 | 0 | 0 | 6 |
| 40969 | PWM setting for network pump | | 1 | 0 | 0 | 6 |
| 40970 | PWM setting for diff. control pump | | 1 | 0 | 0 | 6 |
| 40971 | PWM setting for boiler 2 pump | | 1 | 0 | 0 | 6 |
| 40972 | PWM setting for solar collector pump | | 1 | 0 | 1 | 2 |
| 40976 | Priority of suction position 2 | | 1 | 0 | 1 | 2 |
| 40977 | Priority of suction position 3 | | 1 | 0 | 1 | 2 |
| 40978 | Start of locking window for suction position with priority 1 | | 1 | 0 | 0 | 2400 |
| 40979 | End of locking window for suction position with priority 1 | | 1 | 0 | 0 | 2400 |
| 41030 | Maximum storage tank 1 pump speed | % | 1 | 0 | 0 | 100 |
| 41031 | Maximum storage tank 2 pump speed | % | 1 | 0 | 0 | 100 |
| 41032 | Maximum storage tank 3 pump speed | % | 1 | 0 | 0 | 100 |
| 41033 | Maximum storage tank 4 pump speed | % | 1 | 0 | 0 | 100 |
| 41034 | Maximum DHW tank 1 pump speed | % | 1 | 0 | 0 | 100 |
| 41035 | Maximum DHW tank 2 pump speed | % | 1 | 0 | 0 | 100 |
| 41036 | Maximum DHW tank 3 pump speed | % | 1 | 0 | 0 | 100 |
| 41037 | Maximum DHW tank 4 pump speed | % | 1 | 0 | 0 | 100 |
| 41038 | Maximum DHW tank 5 pump speed | % | 1 | 0 | 0 | 100 |
| 41039 | Maximum DHW tank 6 pump speed | % | 1 | 0 | 0 | 100 |
| 41040 | Maximum DHW tank 7 pump speed | % | 1 | 0 | 0 | 100 |
| 41041 | Maximum DHW tank 8 pump speed | % | 1 | 0 | 0 | 100 |
| 41043 | Maximum speed for network pump | % | 1 | 0 | 0 | 100 |
| 41044 | Maximum diff. Control pump speed | % | 1 | 0 | 0 | 100 |
| 41045 | Maximum boiler 2 pump | % | 1 | 0 | 0 | 100 |
| 41046 | Maximum circulation pump speed | % | 1 | 0 | 0 | 100 |
| 41050 | PWM setting for feeder pump 1 | | 1 | 0 | 0 | 6 |
| 41051 | PWM setting for feeder pump 2 | | 1 | 0 | 0 | 6 |
| 41052 | PWM setting for feeder pump 3 | | 1 | 0 | 0 | 6 |
| 41053 | PWM setting for feeder pump 4 | | 1 | 0 | 0 | 6 |
| 41056 | PWM setting for circulation pump | | 1 | 0 | 0 | 6 |
| 41057 | Maximum speed for feeder pump 1 | % | 1 | 0 | 0 | 100 |
| 41058 | Maximum speed for feeder pump 2 | % | 1 | 0 | 0 | 100 |
| 41059 | Maximum speed for feeder pump 3 | % | 1 | 0 | 0 | 100 |
| 41060 | Maximum speed for feeder pump 4 | % | 1 | 0 | 0 | 100 |
| 41061 | Minimum boiler 2 pump | % | 1 | 0 | 0 | 100 |
| 41062 | Minimum circulation pump speed | % | 1 | 0 | 0 | 100 |
| 41063 | O2 controller limitation if this is not released | % | 1 | 0 | 0 | 100 |
| 41064 | Nominal current for feed screw | A | 10 | 1 | 0 | 3 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 41065 | Nominal current for feed screw | A | 10 | 1 | 0 | 3 |
| 41067 | During troubleshooting of feed screw, it turns backwards for | s | 10 | 1 | 0 | 25 |
| 41068 | During troubleshooting of feed screw, it turns forwards for | s | 10 | 1 | 0 | 25 |
| 41071 | Switch-on delay feed screw light barrier | s | 10 | 1 | 0 | 25 |
| 41072 | Switch-off delay feed screw light barrier | s | 10 | 1 | 0 | 25 |
| 41073 | High temperature requirement due to boiler 1 charge | | 1 | 0 | 0 | 1 |
| 41078 | Screw 1 active | | 1 | 0 | 0 | 1 |
| 41079 | Screw 2 active | | 1 | 0 | 0 | 1 |
| 41080 | Maximum idle time of screw | m | 1 | 0 | 0 | 320 |
| 41081 | Switch-on delay feed screw light barrier | s | 10 | 1 | 0 | 25 |
| 41082 | Switch-off delay feed screw light barrier | s | 10 | 1 | 0 | 25 |
| 41083 | Maximum DHW tank flow temp Hc 1 | °C | 2 | 0 | 20 | 110 |
| 41085 | Maximum DHW tank flow temp Hc 2 | °C | 2 | 0 | 20 | 110 |
| 41087 | Control heating circuit according to program (NO -> heating circuit is switched off) HC 11 | | 1 | 0 | 0 | 1 |
| 41088 | Control heating circuit according to program (NO -> heating circuit is switched off) HC 12 | | 1 | 0 | 0 | 1 |
| 41089 | Control heating circuit according to program (NO -> heating circuit is switched off) HC 13 | | 1 | 0 | 0 | 1 |
| 41090 | Control heating circuit according to program (NO -> heating circuit is switched off) HC 14 | | 1 | 0 | 0 | 1 |
| 41091 | Control heating circuit according to program (NO -> heating circuit is switched off) HC 15 | | 1 | 0 | 0 | 1 |
| 41092 | Control heating circuit according to program (NO -> heating circuit is switched off) HC 16 | | 1 | 0 | 0 | 1 |
| 41093 | Control heating circuit according to program (NO -> heating circuit is switched off) HC 17 | | 1 | 0 | 0 | 1 |
| 41094 | Control heating circuit according to program (NO -> heating circuit is switched off) HC 18 | | 1 | 0 | 0 | 1 |

## Error buffer

Function: Read Input Registers (FC=04)
Address Range: 33001-33020

| Adr. | Description |
|---|---|
| 33001 | Error 1 / No Error = 0xffff (65535) |
| 33002 | Error 2 |
| 33003 | Error 3 |
| 33004 | Error 4 |
| 33005 | Error 5 |
| 33006 | Error 6 |
| 33007 | Error 7 |
| 33008 | Error 8 |
| 33009 | Error 9 |
| 33010 | Error 10 |
| 33011 | Error 11 |
| 33012 | Error 12 |
| 33013 | Error 13 |
| 33014 | Error 14 |
| 33015 | Error 15 |

| | |
|---|---|
| 33016 | Error 16 |
| 33017 | Error 17 |
| 33018 | Error 18 |
| 33019 | Error 19 |
| 33020 | Error 20 |

## Texts for error buffer

| Code | Description |
|---|---|
| 000 | Overheat Thermostat (STL) or EMERGENCY OFF activated |
| 001 | Boiler temperature sensor faulty |
| 002 | Primary air flap blocked |
| 003 | Secondary air flap blocked |
| 004 | Boiler has air leak |
| 005 | Test combustion chamber overpressure monitor |
| 006 | Back-fire slide valve does not close |
| 007 | Back-fire slide valve does not open |
| 008 | Grate drive defective |
| 009 | Grate fault |
| 010 | Grate cleaning fault |
| 011 | Igntion not successful |
| 012 | Safety time expired, oxygen content too high for too long |
| 013 | Safety time expired, flue gas temperature too low for too long |
| 014 | Boiler door open too long |
| 015 | Screw suction system suction point faulty |
| 016 | Check fuel outfeeder |
| 017 | Check fuel store |
| 018 | Return feed temperature faulty |
| 019 | Return feed temperature too low for more than 30 minutes |
| 020 | Remote control of heating circuit 1 faulty |
| 021 | Flow temperature sensor of heating circuit 1 faulty |
| 022 | Remote control of heating circuit 2 faulty |
| 023 | Flow temperature sensor of heating circuit 2 faulty |
| 024 | External temperature sensor faulty |
| 025 | EMERGENCY OFF switch was activated |
| 026 | Remote control in heating circuit 3 faulty |
| 027 | Remote control in heating circuit 4 faulty |
| 028 | Remote control in heating circuit 5 faulty |
| 029 | Remote control in heating circuit 6 faulty |
| 030 | Remote control in heating circuit 7 faulty |
| 031 | Remote control in heating circuit 8 faulty |
| 032 | Remote control in heating circuit 9 faulty |
| 033 | Remote control in heating circuit 10 faulty |
| 034 | Remote control in heating circuit 11 faulty |
| 035 | Remote control in heating circuit 12 faulty |
| 036 | Remote control in heating circuit 13 faulty |
| 037 | Remote control in heating circuit 14 faulty |
| 038 | Remote control in heating circuit 15 faulty |
| 039 | Remote control in heating circuit 16 faulty |
| 040 | Remote control in heating circuit 17 faulty |

| | |
|---|---|
| 041 | Remote control in heating circuit 18 faulty |
| 042 | Outfeed temperature sensor in heating circuit 3 faulty |
| 043 | Outfeed temperature sensor in heating circuit 4 faulty |
| 044 | Outfeed temperature sensor in heating circuit 5 faulty |
| 045 | Outfeed temperature sensor in heating circuit 6 faulty |
| 046 | Outfeed temperature sensor in heating circuit 7 faulty |
| 047 | Outfeed temperature sensor in heating circuit 8 faulty |
| 048 | Outfeed temperature sensor in heating circuit 9 faulty |
| 049 | Outfeed temperature sensor in heating circuit 10 faulty |
| 050 | Outfeed temperature sensor in heating circuit 11 faulty |
| 051 | Outfeed temperature sensor in heating circuit 12 faulty |
| 052 | Outfeed temperature sensor in heating circuit 13 faulty |
| 053 | Outfeed temperature sensor in heating circuit 14 faulty |
| 054 | Outfeed temperature sensor in heating circuit 15 faulty |
| 055 | Outfeed temperature sensor in heating circuit 16 faulty |
| 056 | Outfeed temperature sensor in heating circuit 17 faulty |
| 057 | Outfeed temperature sensor in heating circuit 18 faulty |
| 058 | Bus module faulty before power switched off |
| 059 | ID fan does not rotate, in spite of full activation |
| 060 | Sensor in DHW tank 1 faulty |
| 061 | Communication with pellet module faulty |
| 062 | |
| 063 | 001 EEPROM Read error |
| 064 | 002 EEPROM Zero checksum |
| 065 | 003 EEPROM Read error |
| 066 | 004 EEPROM Incorrect software version |
| 067 | 005 EEPROM Incorrect parameter length |
| 068 | 006 EEPROM Read error |
| 069 | 007 EEPROM Incorrect checksum |
| 070 | 008 EEPROM Write error |
| 071 | 009 EEPROM Write error |
| 072 | 010 Config. List faulty |
| 073 | Sensor in DHW tank 2 faulty |
| 074 | Sensor in DHW tank 3 faulty |
| 075 | Sensor in DHW tank 4 faulty |
| 076 | Sensor in DHW tank 5 faulty |
| 077 | Sensor in DHW tank 6 faulty |
| 078 | Sensor in DHW tank 7 faulty |
| 079 | Sensor in DHW tank 8 faulty |
| 080 | Bottom sensor in DHW tank 1 faulty |
| 081 | Bottom sensor in DHW tank 2 faulty |
| 082 | Bottom sensor in DHW tank 3 faulty |
| 083 | Bottom sensor in DHW tank 4 faulty |
| 084 | Bottom sensor in DHW tank 5 faulty |
| 085 | Bottom sensor in DHW tank 6 faulty |
| 086 | Bottom sensor in DHW tank 7 faulty |
| 087 | Bottom sensor in DHW tank 8 faulty |
| 088 | Top sensor in storage tank 1 faulty |
| 089 | Top sensor in storage tank 2 faulty |
| 090 | Top sensor in storage tank 3 faulty |

| | |
|---|---|
| 091 | Top sensor in storage tank 4 faulty |
| 092 | Middle sensor in storage tank 1 faulty |
| 093 | Middle sensor in storage tank 2 faulty |
| 094 | Middle sensor in storage tank 3 faulty |
| 095 | Middle sensor in storage tank 4 faulty |
| 096 | Bottom sensor in storage tank 1 faulty |
| 097 | Bottom sensor in storage tank 2 faulty |
| 098 | Bottom sensor in storage tank 3 faulty |
| 099 | Bottom sensor in storage tank 4 faulty |
| 100 | Sensor in follow-up boiler faulty |
| 101 | Sensor in collector faulty |
| 102 | Sensor in additional boiler faulty |
| 103 | Fill level cannot be correctly interpreted |
| 104 | Bypass flap could not be opened |
| 105 | Bypass flap could not be closed |
| 106 | Runtime for filling was exceeded |
| 107 | Delivery screw is blocked at the suction point |
| 108 | Bypass flap could neither be closed nor opened |
| 109 | Ignition attempt failed, light by hand ! |
| 110 | ID fan motor protection switch failed |
| 111 | Stoker motor protection switch failed |
| 112 | Feed screw motor protection switch failed |
| 113 | Back-burn flap opens too quickly |
| 114 | Back-burn flap closes too quickly |
| 115 | No/both end positions of back-burn flap activated |
| 116 | Rotary valve motor protection switch tripped |
| 117 | Lambda probe defective |
| 118 | Flue gas temperature sensor defective |
| 119 | Combustion chamber temperature sensor defective |
| 120 | Light barrier in gravity shaft defective |
| 121 | Drop box cover open |
| 122 | Underpressure sensor cartridge defective |
| 123 | Grate does not open |
| 124 | Safety time expired because of fill level sensor in suction cyclone. |
| 125 | Motor protection delivery screw |
| 126 | Stoker error |
| 127 | Delivery screws error |
| 128 | DANGEROUS status possible |
| 129 | Wood chip module failed -> immediate shutdown |
| 130 | Suction module failed -> immediate shutdown |
| 131 | Load fuel as per instructions |
| 132 | Return sensor for network pump defective |
| 133 | Light barrier in gravity shaft of delivery screw defective(full) |
| 134 | Drop box cover of delivery screw open |
| 135 | Delivery screw motor protection switch tripped |
| 136 | Light barrier in gravity shaft of intermediate screw 1 defective(full) |
| 137 | Drop box cover of intermediate screw 1 open |
| 138 | Intermediate screw 1 motor protection switch tripped |

| | |
|---|---|
| 139 | Clean /check burner |
| 140 | Grate will not close |
| 141 | Back-burn flap will not close |
| 142 | Back-burn flap won't open |
| 143 | Rotary valve frequent overcurrent |
| 144 | Stoker screw frequent overcurrent |
| 145 | Feed screw frequent overcurrent |
| 146 | Control restart |
| 147 | Return feed sensor for feeder 1 faulty |
| 148 | Return feed sensor for feeder 2 faulty |
| 149 | Return feed sensor for feeder 3 faulty |
| 150 | Return feed sensor for feeder 4 faulty |
| 151 | Maximum feed after alteration re-calculated and limited |
| 152 | Light barrier in gravity shaft of intermediate screw 1 defective (empty) |
| 153 | Light barrier in gravity shaft of delivery screw defective (empty) |
| 154 | Slide valve blocked |
| 155 | Error in boiler and fuel selection |
| 156 | Self test error during preparation |
| 157 | Boiler air leak detected by feed |
| 158 | Boiler air leak detected by O2 monitoring |
| 159 | Sensor for circulation pump faulty |
| 160 | Sensor for solar heat exchanger secondary flow faulty |
| 161 | Sensor for solar collector return faulty |
| 162 | Lambda probe defective |
| 163 | Troubleshooting interrupted |
| 164 | Heat source sensor of difference controller defective |
| 165 | Heat sink sensor of difference controller defective |
| 166 | Variant 3, a store and a manifold with the same number activated |
| 167 | Probe switching during filling process due to lack of pellets |
| 168 | Supply bin empty, please top up pellets |
| 169 | Ash box full, please empty |
| 170 | Grate drive has overcurrent, please wait 5 minutes |
| 171 | Senosor 1 in STL casing or pellets unit faulty |
| 172 | Solar reference sensor faulty |
| 173 | Ash box full, please empty |
| 174 | Stoker motor not plugged in or not functioning |
| 175 | Broadband probe not plugged in or heating of probe defective |
| 176 | Sensor element of the broadband probe faulty or short-circuit |
| 177 | Stoker motor not plugged in or not functioning |
| 178 | Feed screw not plugged in or not functioning |
| 179 | Ash box too long open or removed |
| 180 | Under pressure in status Preparation too low |
| 181 | Air damper jammed |
| 182 | Return flow and DHW tank loading through HCP0 is not possible (same sensor input) |
| 183 | Frequency convertor faulty |
| 184 | Temperature monitoring of fan activated (Klixon) |

| | |
|---|---|
| 185 | left part of grate will not close |
| 186 | right part of grate will not close |
| 187 | left part of grate will not open |
| 188 | right part of grate will not open |
| 189 | Motor protection of combustion air blower fan activated |
| 190 | Motor protection of boiler charging pump activated |
| 191 | Too often overcurrent discharge screw |
| 192 | Too often overcurrent intermediate screw |
| 193 | Automatical room air flap will not open |
| 194 | Combustion air supply faulty or blocked |
| 195 | Safety time because of minimum sensor in cyclone expired |
| 196 | ID fan switch not in position AUTO |
| 197 | Motor protection sliding floor tripped |
| 198 | Oil level in power pack too low |
| 199 | High oil temperature in power pack |
| 200 | Key switch for hydraulic room not in position AUTO |
| 201 | Sliding floor averfill |
| 202 | Water temperature in pellet burner (Sensor 1) too high |
| 203 | WOS motor is blocked or not connected |
| 204 | Air flow through is too low or air supply is faluty |
| 205 | Self test error during preparation |
| 206 | Overfilling safety device of rotary valve is active |
| 207 | Rotary valve is not connected or not functioning |
| 208 | Set numbers of cycles at sliding floor is exceeded |
| 209 | Boiler standard values aren´t adopted (Menu Set --> General settings) |
| 210 | Undergrate thermostat triggered |
| 211 | Under pressure in status Preparation too high |
| 212 | Grate drive reports that both end positions are acitve |

## System- and Boiler State

Function: Read Input Registers (FC=04)
Address Range: 34001-34002

| Adr. | Description |
|---|---|
| 34001 | System state |
| 34002 | Boiler state |

## Texts for System state

| Code | Description |
|---|---|
| 000 | winter op. |
| 001 | Summer op. |
| 002 | Transition op. |
| 003 | Firewood operation |
| 004 | Cleaning |
| 005 | Boiler off |
| 006 | Extra heating |
| 007 | Chimney sweep |
| 008 | Cleaning |

## Texts for Boiler state

| Code | Description |
|---|---|
| 000 | FAULT |
| 001 | Boiler off |
| 002 | Heating up |
| 003 | Heating |
| 004 | Slumber |
| 005 | Off |
| 006 | Door open |
| 007 | Preparation |
| 008 | Pre-heating |
| 009 | Ignition |
| 010 | Shutdown wait |
| 011 | Shutdown wait 1 |
| 012 | Shutdown feed 1 |
| 013 | Shutdown wait 2 |
| 014 | Shutdown feed 2 |
| 015 | Cleaning |
| 016 | Wait 2h |
| 017 | Suction / Heating |
| 018 | Ignition fault |
| 019 | Standby |
| 020 | Close grate |
| 021 | Empty stoker |
| 022 | Pre-Heating |
| 023 | Suction |
| 024 | Close BBF |
| 025 | Open BBF |
| 026 | Tip grate |
| 027 | Warming-Up / Ignition |
| 028 | Empty feed |
| 029 | Stoker fill |
| 030 | Warming-Up Lambda Probe |
| 031 | FD fan run-on I |
| 032 | FD fan run-on II |
| 033 | Stopped |
| 034 | Additional Ignition |
| 035 | Ignition wait |
| 036 | TS: Close BBF |
| 037 | TS: Ventilate boiler |
| 038 | TS: Ignition |
| 039 | TS: min. feed |
| 040 | Close BBF |
| 041 | FAULT: HL/ES |
| 042 | FAULT: Tilting grate |
| 043 | FAULT:  C.C.Overpressure |
| 044 | FAULT: Door Switch |
| 045 | FAULT: ID Fan |
| 046 | FAULT: Heating system |

| | |
|---|---|
| 047 | ERROR: STL/EO |
| 048 | ERROR: Tilting grate |
| 049 | ERROR: C.C. Overpressure |
| 050 | ERROR: Door Switch |
| 051 | ERROR: ID Fan |
| 052 | ERROR: Heating system |
| 053 | ERROR: Stoker |
| 054 | FAULT: Stoker |
| 055 | TS: Empty stoker |
| 056 | Purge |
| 057 | FAULT: wood chip |
| 058 | ERROR: Wood chip |
| 059 | Emerg. Oper.: Door open |
| 060 | Emerg. Oper.: Heating up |
| 061 | Emerg. Oper.: Heating |
| 062 | ERROR: STL/EO |
| 063 | ERROR: General |
| 064 | Emerg. Oper.: Shutdown |
| 065 | Self test active |
| 066 | Troubleshooting 20min |
| 067 | ERROR: Drop box |
| 068 | FAULT: Drop box |
| 069 | Cleaning possible |
| 070 | Heating - Cleaning |
| 071 | LW Heating up |
| 072 | LW Heating |
| 073 | LW Heat/Shut down |
| 074 | FAULT save |