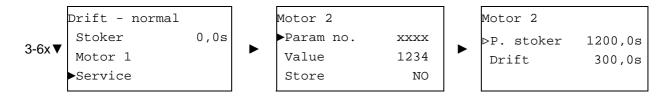
2.9 PARAMETER LIST

The access to the service parameters is possible by activating the "Service menu". This menu will be visible if the "Left arrow", "Up arrow" and "F" while the Power to the controller is turned on.



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BLOWER SHEET

Param nr= 26 : Blower Out Min (The output will never go lower than this entered %)

Param nr= 132: Blower Period (The time between each start of "Blower pulse")

Param nr= 66 : Blower2StartDelay (Delay between blower1 start, to blower2 starts up)

Param nr= 68 : Blower2StopDelay (From blower1 stop to blower2 also stop can be entered this delay)

STOKER SHEET:

Param nr= 45 : Stoker Oxygen Limit (below this oxygen% the stoker screw stops)

Param nr= 320 : Auto Reverse Time (Value in ms.)

Param nr= 44 : Stoker On Time Minimum (If the time is below this time the stoker stops completely)

Param nr= 59 : Stoker2 On Time (The stoker2 will be running this time after no. 1 is stopped)

Param nr= 60 : Stoker2 Delay Time (Stoker2 starts with this delay after stoker1)

Param nr= 1537: StokerGain_0 (Gear setting in % for the Low gear)

Param nr= 1553: StokerGain 1 (Gear setting in % for the Medium gear)

Param nr= 1569: StokerGain_2 (Gear setting in % for the High gear)

Param nr= 289 : Stoker Gain High limit (Please see chapter 2.3.1.13 for details)
Param nr= 290 : Stoker Gain Low limit (Please see chapter 2.3.1.13 for details)
Param nr= 291 : Stoker Gain Ad Time (Please see chapter 2.3.1.13 for details)
Param nr= 292 : Stoker Gain Ad Value (Please see chapter 2.3.1.13 for details)
Param nr= 293 : Stoker Gain Max (Please see chapter 2.3.1.13 for details)
Param nr= 294 : Stoker Gain Min (Please see chapter 2.3.1.13 for details)

Param nr= 305 : Stoker Manual Factor (Please see chapter 2.3.1.13 for details)

OXYGEN CONTROL SHEET:

Param nr= 130 : Lambda Offset (The lambda probe's calibration value. In mV. by 21% oxygen)

Param nr= 1792 : Voltage4 (Actual reading in mV.)

Param nr= 1793 : Voltage4 Offset (Calibration value for the hardware)

Param nr= 29 : Blower Oxygen Gain (A factor different from zero will change the blower(s) performance)

Param nr= 30 : Modified Output ()

STARTUP/RESTART SHEET

Startup (These settings is only active when the "START" is pressed)

Param nr= 789 : Oxygen Start Limit (Below this oxygen% the state changes from StartUp to Run mode)

Param nr= 800 : Start Feed Percentage (The start pulse for the stoker screw in each "start try")

Param nr= 785 : Start Time (Time for each "start try")

Param nr= 787: Blower Power Start (Blower performance in the first "Start try")

Param nr= 790 : Blower Power Incensement (The blower's performance will be increased by each retry)

Param nr= 788 : Start Retries (How many retries is allowed)

Restart (These settings is active when the controller leaves the pause state)

Param nr= 533 : Oxygen Start Limit (Below this oxygen% the state changes from Restart to Run mode)

Param nr= 544 : Start Feed Percentage (The start pulse for the stoker screw in each "start try")

Param nr= 529 : Start Time (Time for each "start try")

Param nr= 531 : Blower Power Start (Blower performance in the first "Start try")

Param nr= 532 : Start Retries (How many retries is allowed)

Automatic ignition

Param nr= 530 : Start Time Ignition (If an output is set to Ignition here must be entered an amount of sec.)

Ignition blower

Param nr= 75 : Ignition Blower Stop Delay (If a output is set as Ignition blower, it can cool down the ignition in this delay.)

Auutomatic restart after power on

Param nr= 534: Auto Start Time (The delay between the power is back and till the controller starts up)

Param nr= 535: Auto Start Max Retry (No. of "Start retries allowed, before the controller stops)

PAUSE

Param nr= 283: Pause Feed Percentage (The amount of fuel provided in each pause feeding)

Param nr= 275 : Pause Wait period (Time between each pause feeding)

Param nr= 276: Pause Blower On time (The number seconds the blower shall run by each pause feeding)

Param nr= 277 : Pause Blower performance (Blower performance in pause mode)

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Start and stop

Param nr = 27: Restart Output (When the output is = or > this percent, the controller will change from pause to restart

Param nr= 21 : Immediate Pause (If the output goes as lo as this in 2 "counts" the controlle will go directely into Pause. 1 "count" = The performance regulator's Sampling time, usually 30 sec.)

Param nr= 282: Min. Output before pause (If the output comes below this percent in the time, parameter 281 says, the controller will change statefrom "Running" to "Pause"

Param nr= 281: Count for Pause

Hot stoker

Param nr= 278 : Feeding "Hot stoker" (100% = normal pause feeding)

Param nr= 280 : Pause time between "Hot stoker" feeding

OTHER

Param nr= 135 : Alarm Temperature (Software "Boiler overheat")

Minimum temperature. (If smoke temp. is enabled, the "min temp" is act water temp + Param. 96 value)

Param nr= 96 : Minimum Temperature Param nr= 97 : Time Under Min Temp.

Night -set back

Param nr= 80 : Night temperature set point (When a lower (higher) temperature is wanted in a certain part of the day/night, this temperature can be set here. An input must be set as "Night set back" in order to enable the function. When the D-in has signal the "Night temperature is enabled.)

Param nr= 81 : Circulation pump delay (An addition to the input an output can be named "Circulating pump". When the controller changes it's state to Pause, the pump will stop when this delay is passed.)

Scraper

Param nr= 1392: Pause time (The controller will accumulate the stokers puls times, and when it reach this time the scraper will run forward in the Pulse time)

Param nr= 1393: Pulse time (This is the shortest time the scraper will move forward. It can either move this time by every move, or the settings can say: first move= Pulse time*1, 2^{nd} = Pulse time*2, and finally 3^{rd} = Pulse time*3)

Param nr= 1394: Hold time between forward and reverse

Param nr= 1395 : Error time (If the "scraper returned" switch is not activated within this time + the move time, from the reverse signal begins, the controller will stop the scraper and give a warning in the display)

Refill

Param nr= 1664 : Fill Delay (Delay from the "Tank high level" comes on and the controller stops the refill)

Param nr= 1665 : Fill Time Max (Maximum refill time. If the "Tank high level" signal is not returned before this time from the refilling is started, the controller will stop the refill output and show a warning in the display)

Param nr= 1666: Delay before refill (The time from the "Tank low level" (or "Tank high level" if only one input is used) to the refill output is activated.)

High oxygen indicator.

Param nr= 49 : Oxygen level (Blower1 stops below this level if blower2 is set as output)

Exhaust ventilator

Param nr= 48 : Chimney Fan Time (The Chimney fan will always start in this time before anything else, and also stop after all other motors are stopped.)

REGULATORS

Performance regulator

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Param nr= 16 : PID K
Param nr= 17 : PID Ti
Param nr= 18 : PID Td
Param nr= 19 : PID Ts
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Param nr= 23 : P Part Output (P-Part Output only for reading)
Param nr= 24 : I Part Output (I-Part Output only for reading)
Param nr= 25 : D Part Output (D-Part Output only for reading)

Param nr= 20 : Regulator Max output Param nr= 21 : Regulator Min output

Param nr= 560 :.D part Min Param nr= 561 : D part Max Param nr= 562 : P part Min Param nr= 563 : P part Max

Oxygen regulator

Param nr= 32 : PID K
Param nr= 33 : PID Ti
Param nr= 34 : PID Td
Param nr= 35 : PID Ts

Param nr= 39 : P Part Output (P-Part Output only for reading)
Param nr= 40 : I Part Output (I-Part Output only for reading)
Param nr= 41 : D Part Output (D-Part Output only for reading)

Param nr= 36 : Regulator Max output Param nr= 37 : Regulator Min output

Param nr= 576 : D part Min Param nr= 577 : D part Max Param nr= 578 : P part Min Param nr= 579 : P part Max