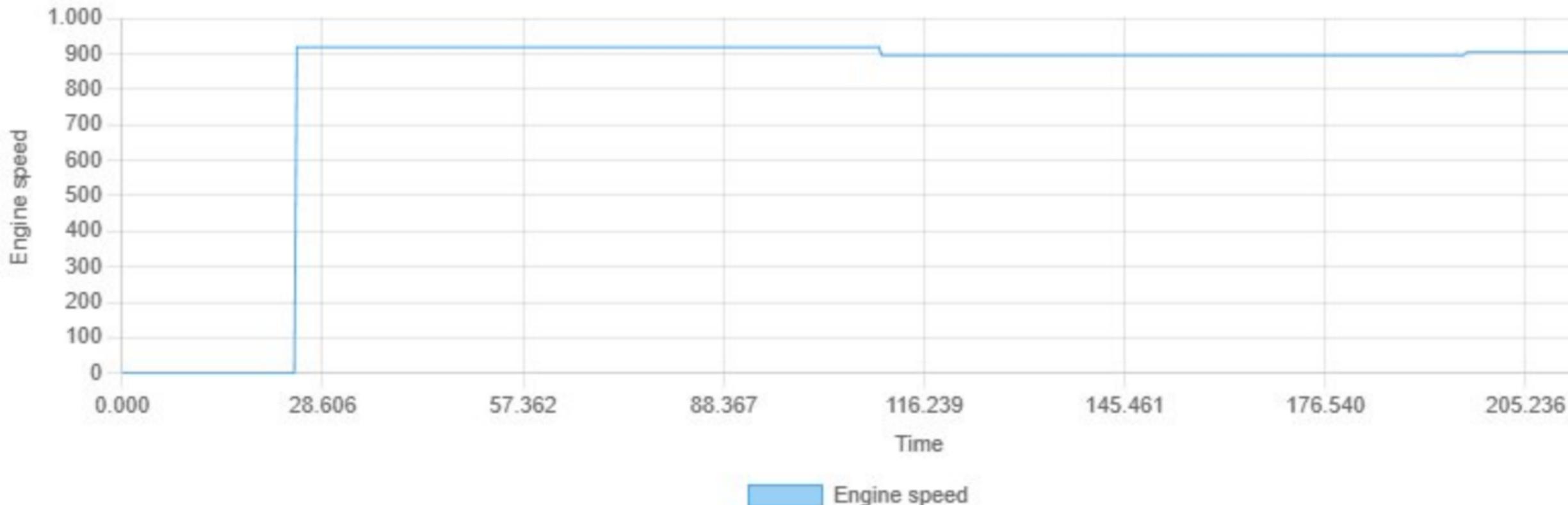
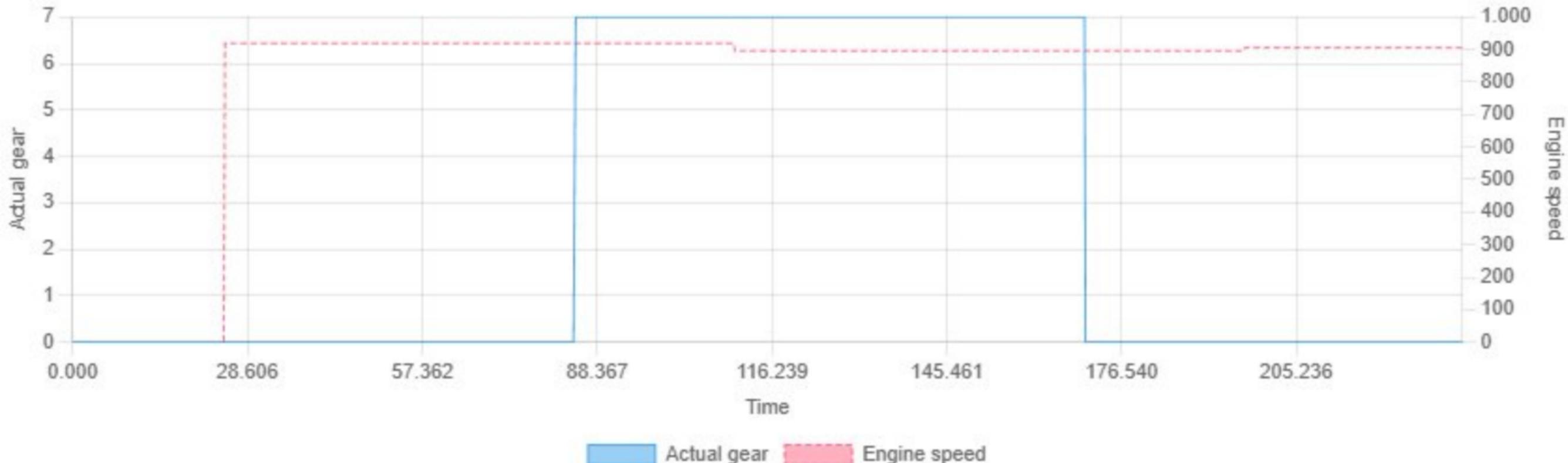


## Engine speed vs Time

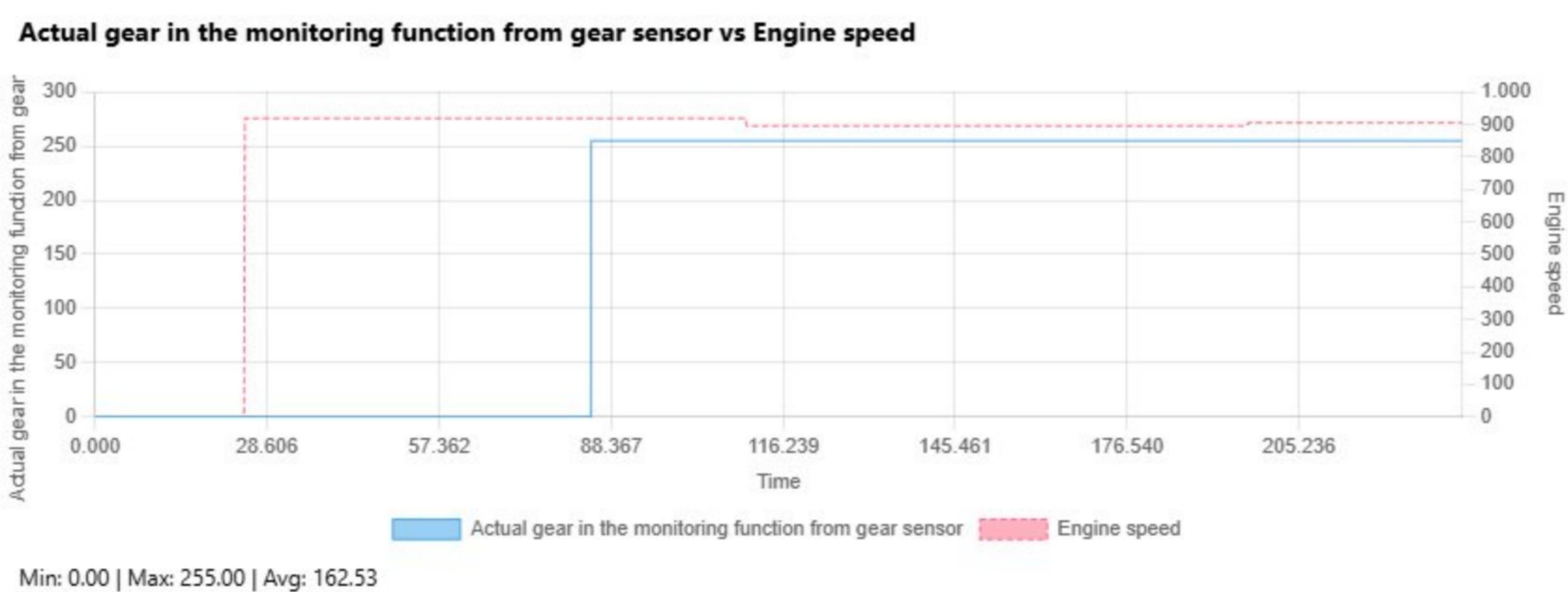


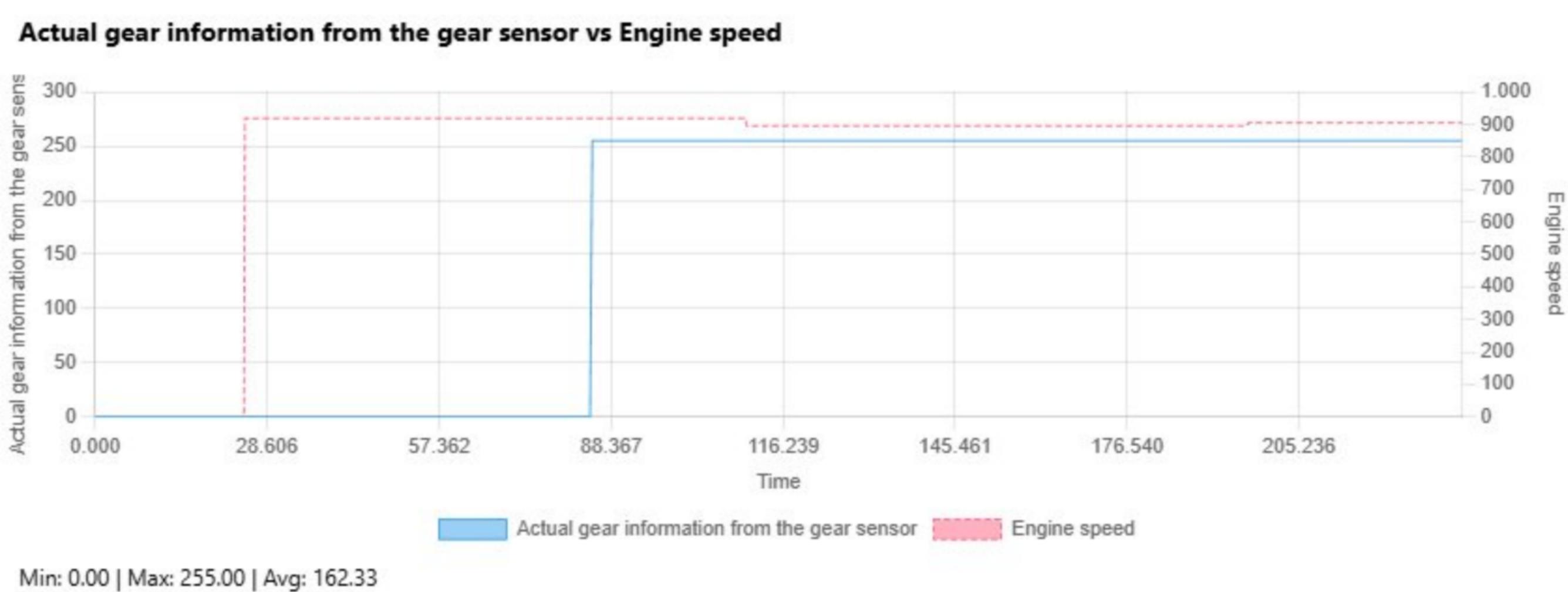
Min: 0.00 | Max: 919.00 | Avg: 807.66

## Actual gear vs Engine speed

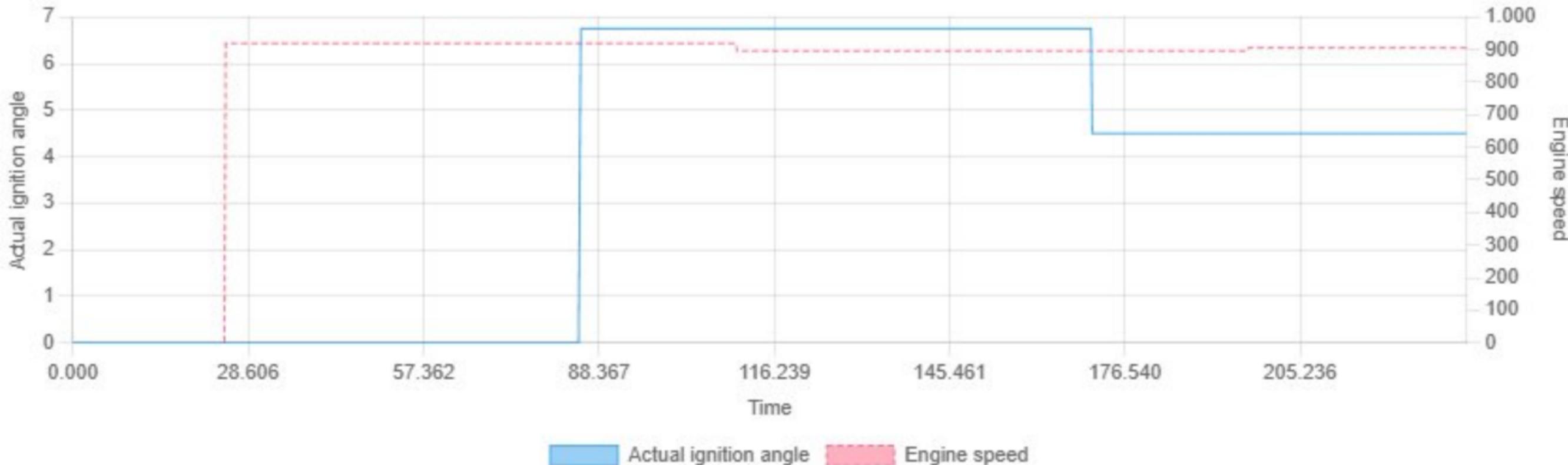


Min: 0.00 | Max: 7.00 | Avg: 2.57

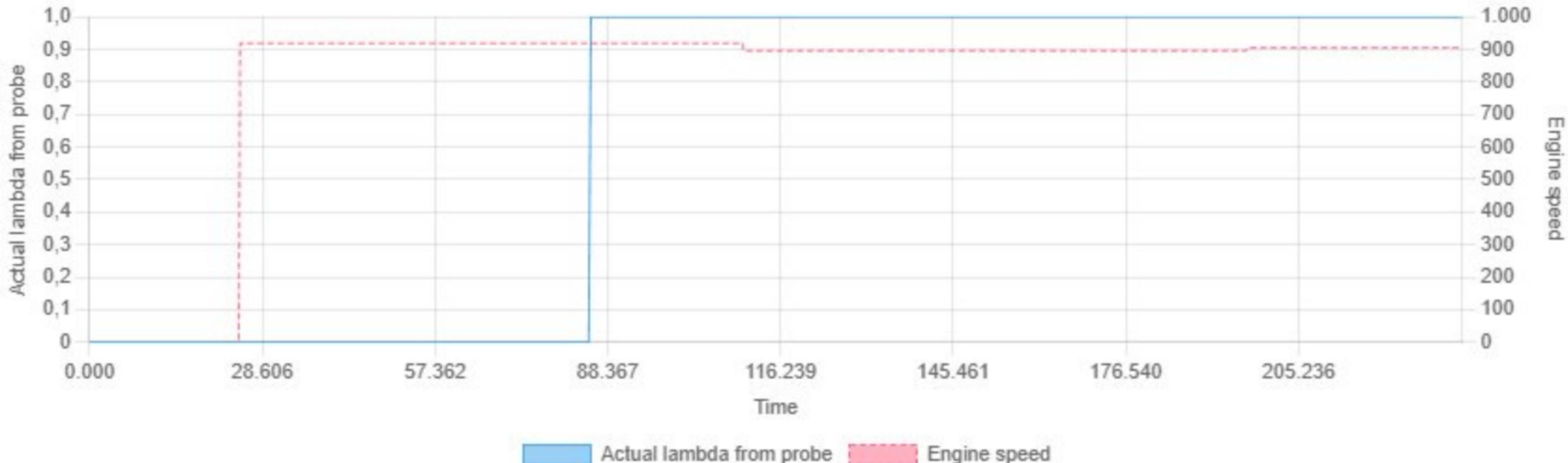


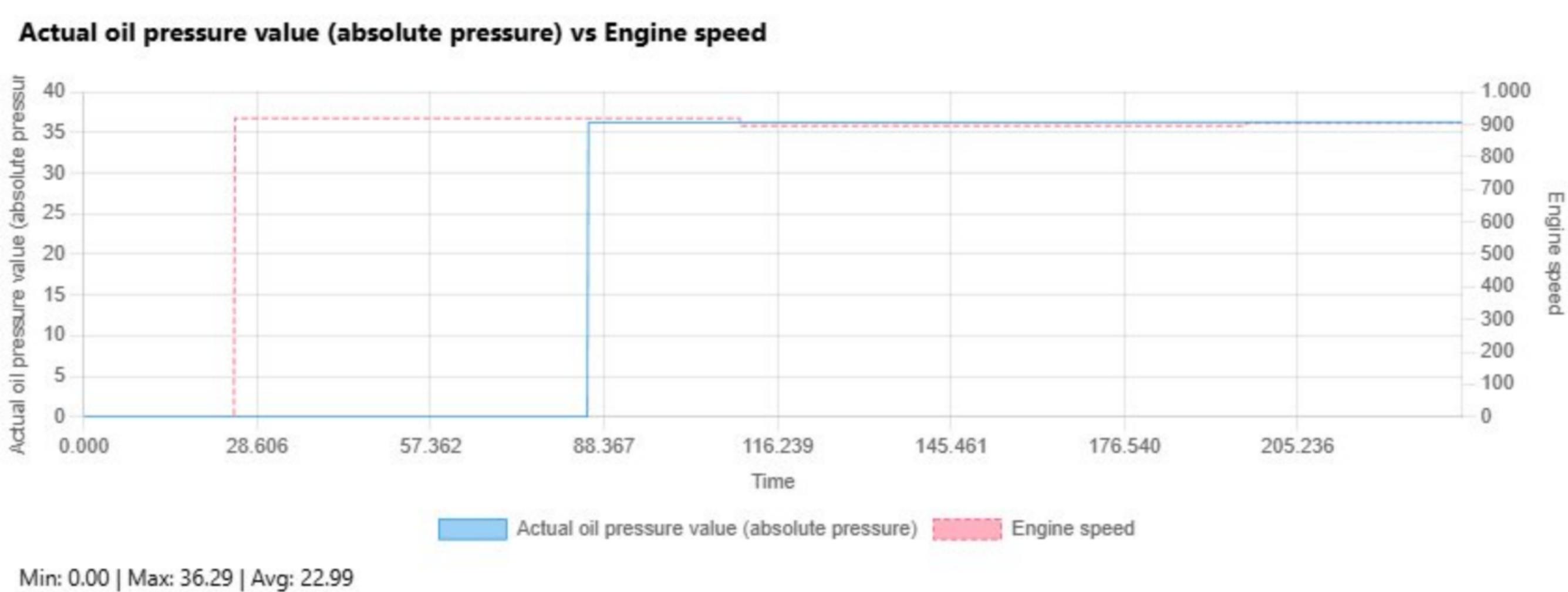


## Actual ignition angle vs Engine speed

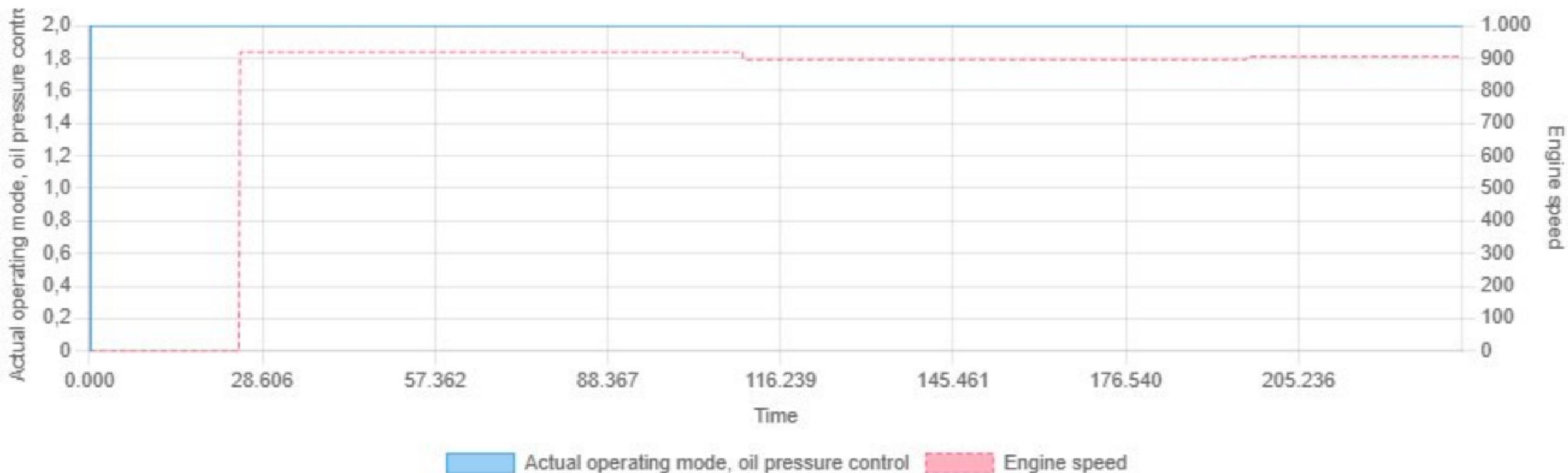


## Actual lambda from probe vs Engine speed





## Actual operating mode, oil pressure control vs Engine speed



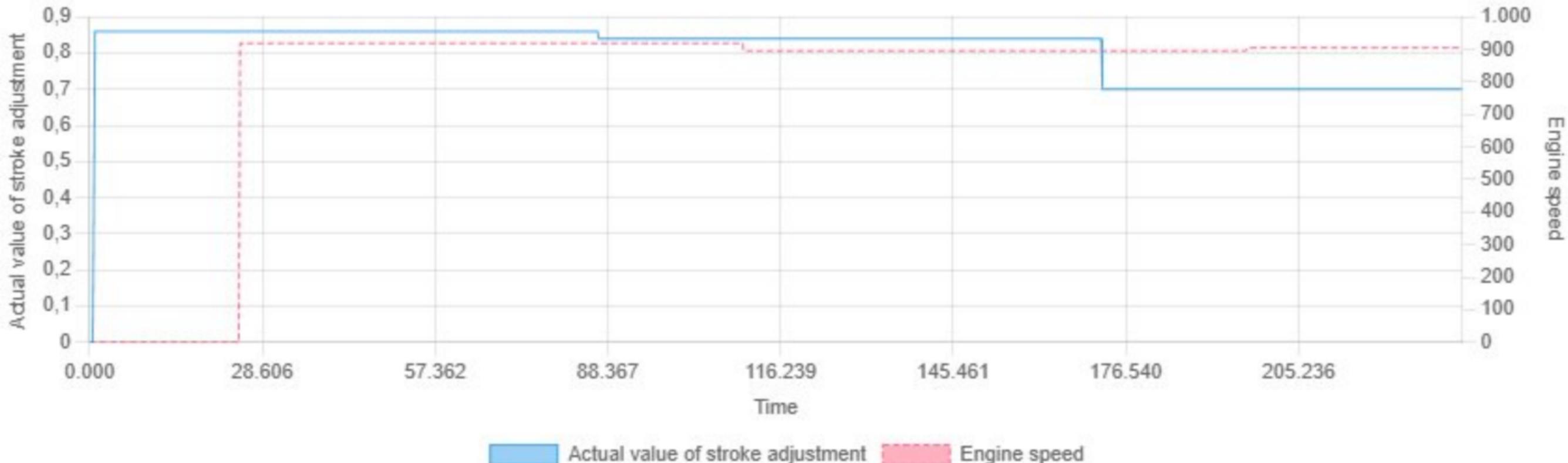
Min: 0.00 | Max: 2.00 | Avg: 2.00

## Actual value inlet spread vs Engine speed



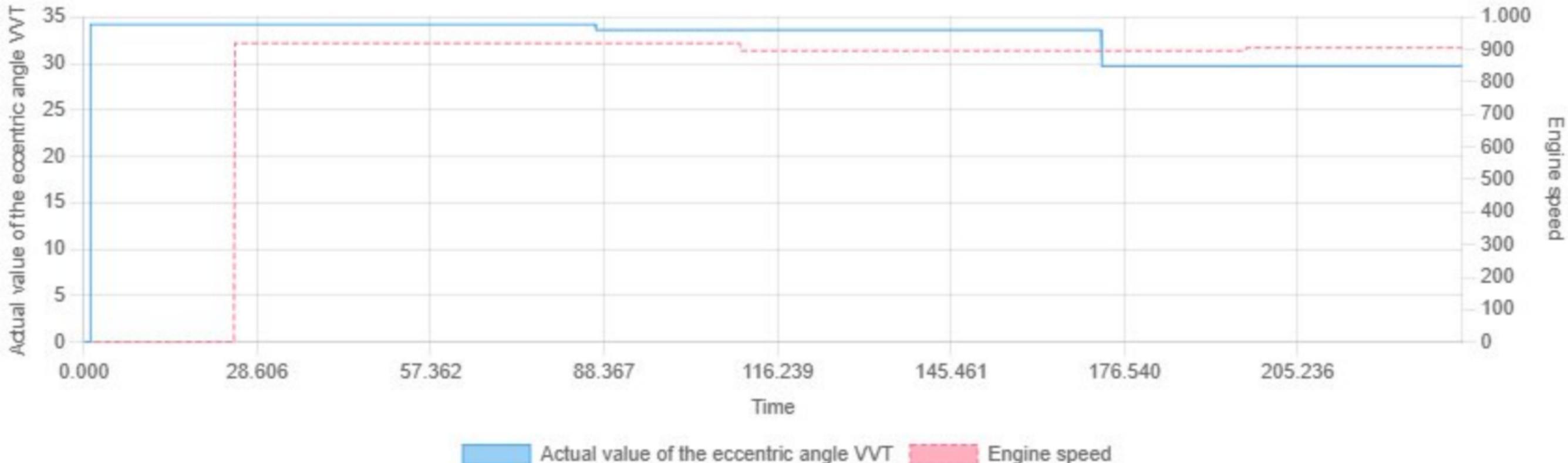
Min: 0.00 | Max: 107.10 | Avg: 101.75

## Actual value of stroke adjustment vs Engine speed

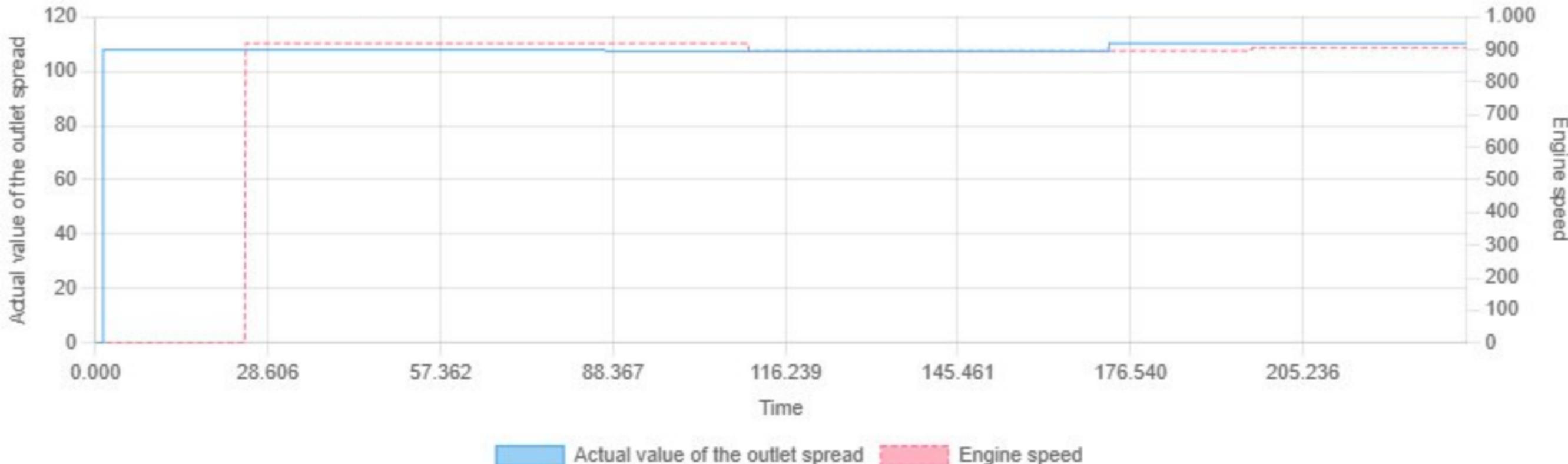


Min: 0.00 | Max: 0.86 | Avg: 0.81

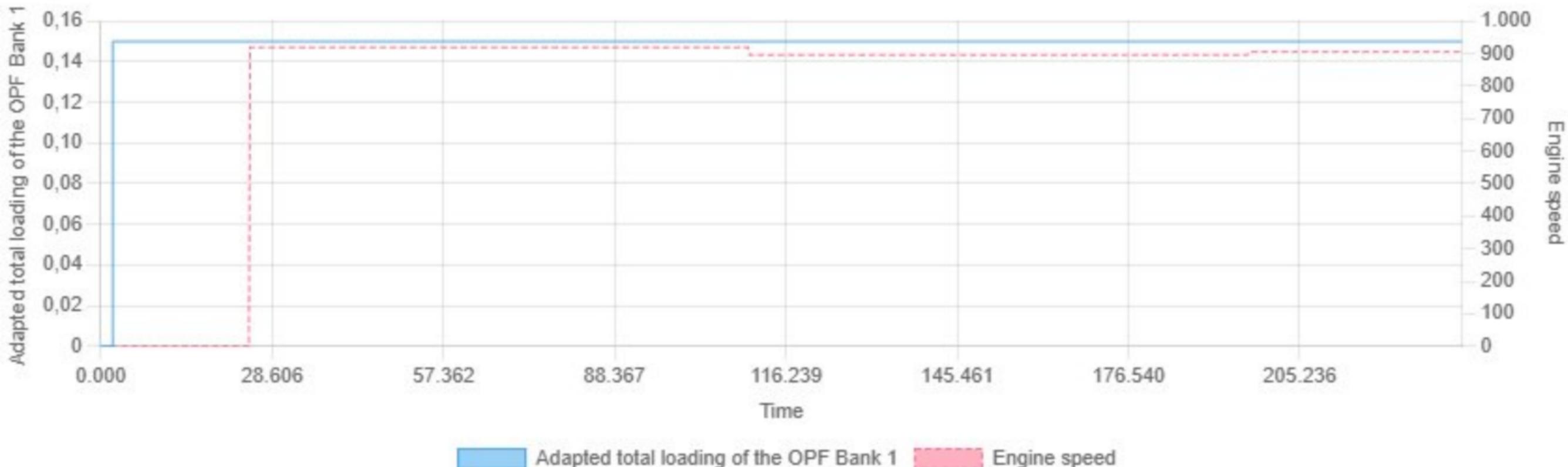
## Actual value of the eccentric angle VVT vs Engine speed



## Actual value of the outlet spread vs Engine speed

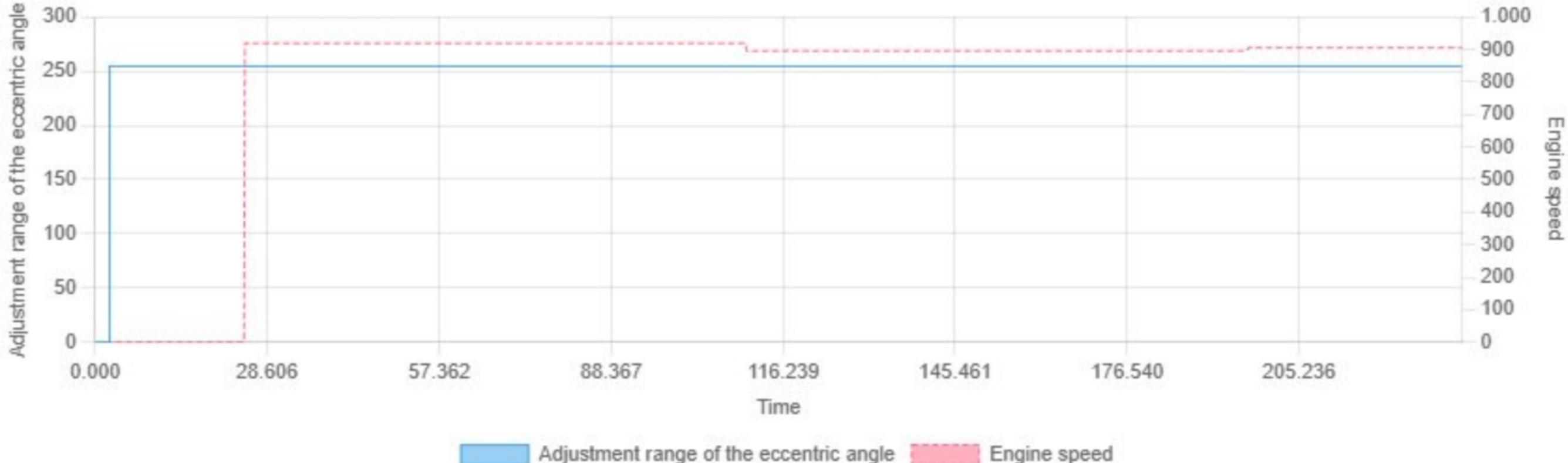


## Adapted total loading of the OPF Bank 1 vs Engine speed



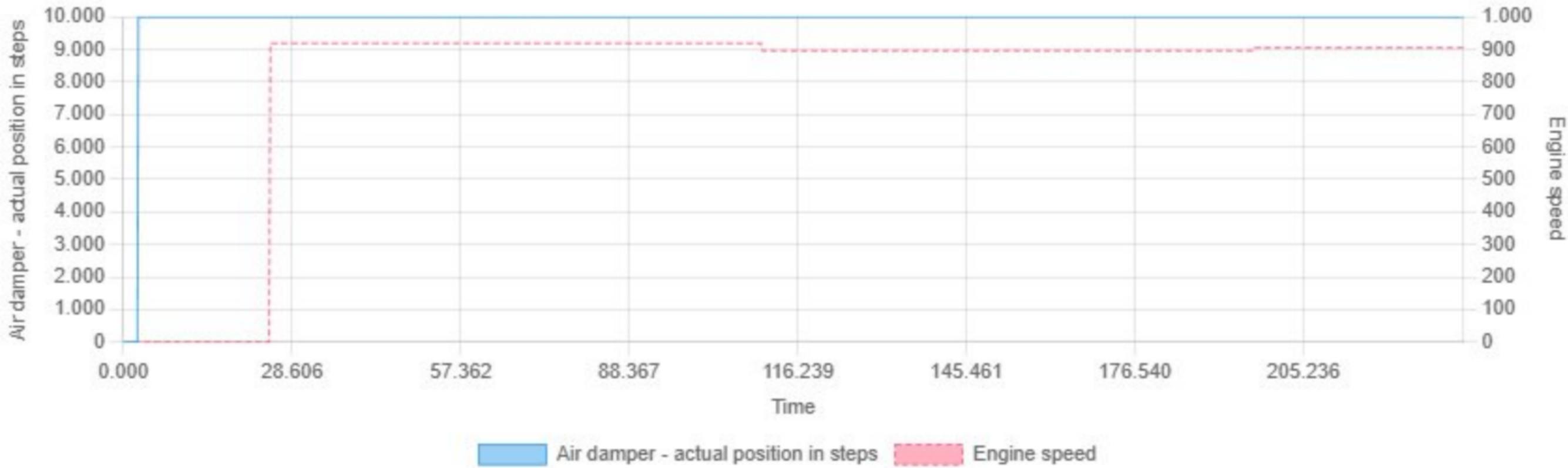
Min: 0.00 | Max: 0.15 | Avg: 0.15

## Adjustment range of the eccentric angle vs Engine speed

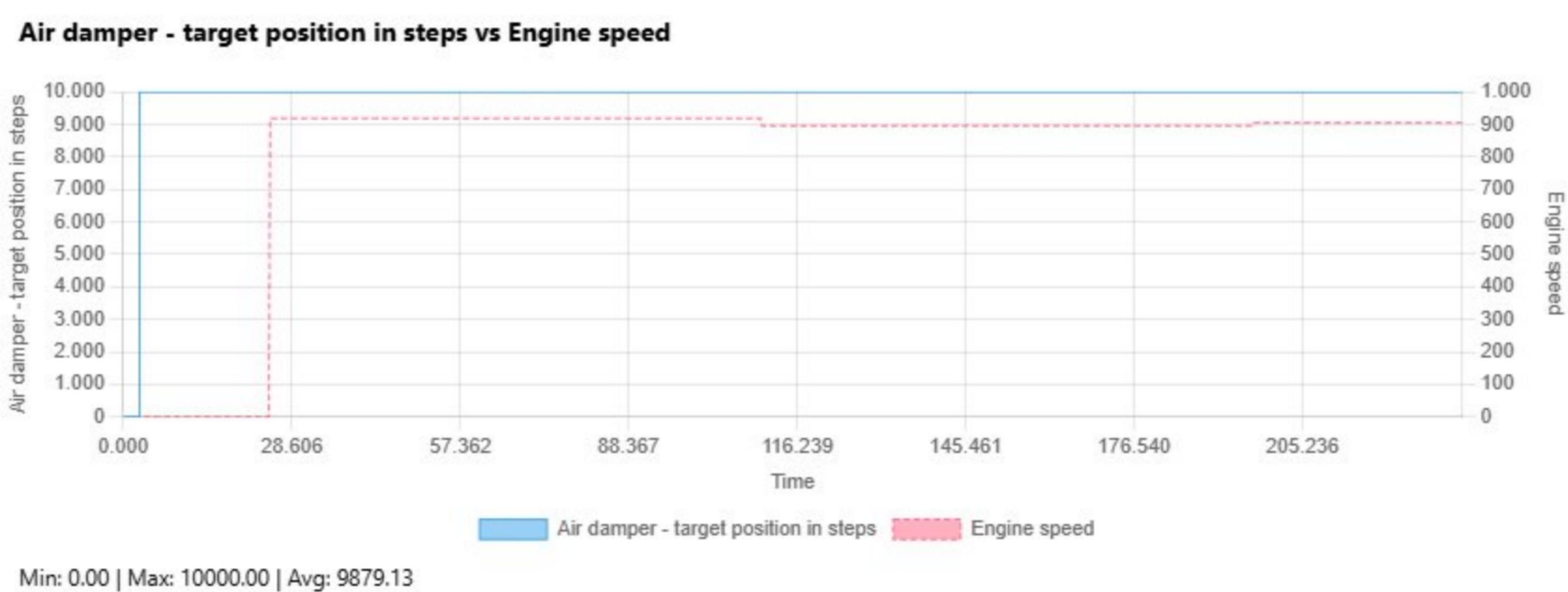


Min: 0.00 | Max: 254.60 | Avg: 251.93

## Air damper - actual position in steps vs Engine speed



Min: 0.00 | Max: 10000.00 | Avg: 9887.19

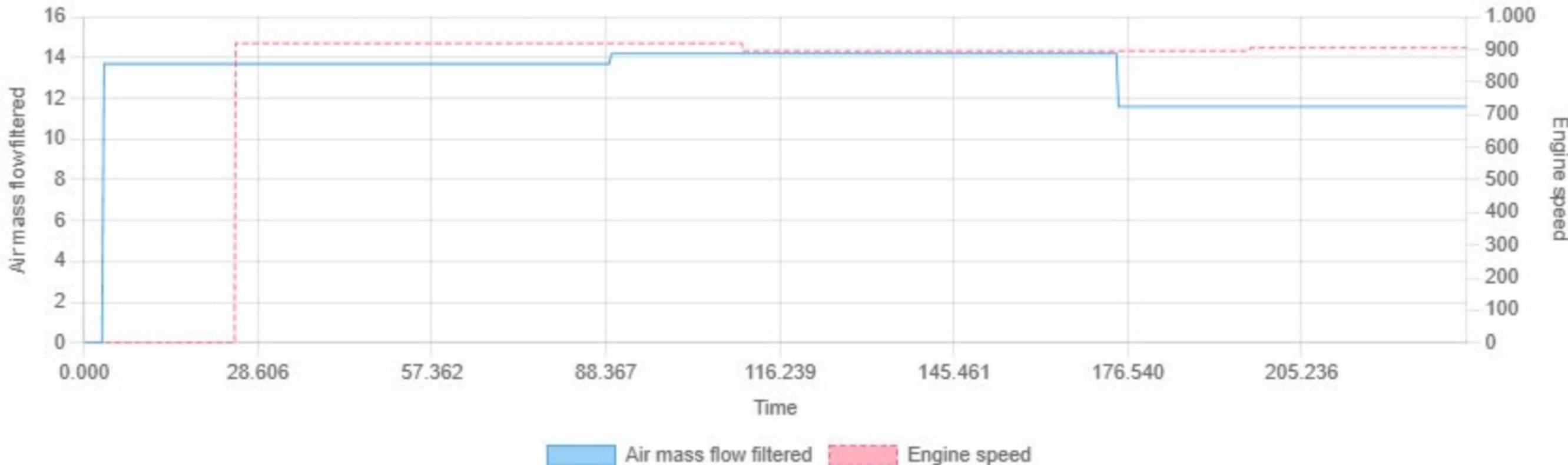


## Air mass flow vs Engine speed

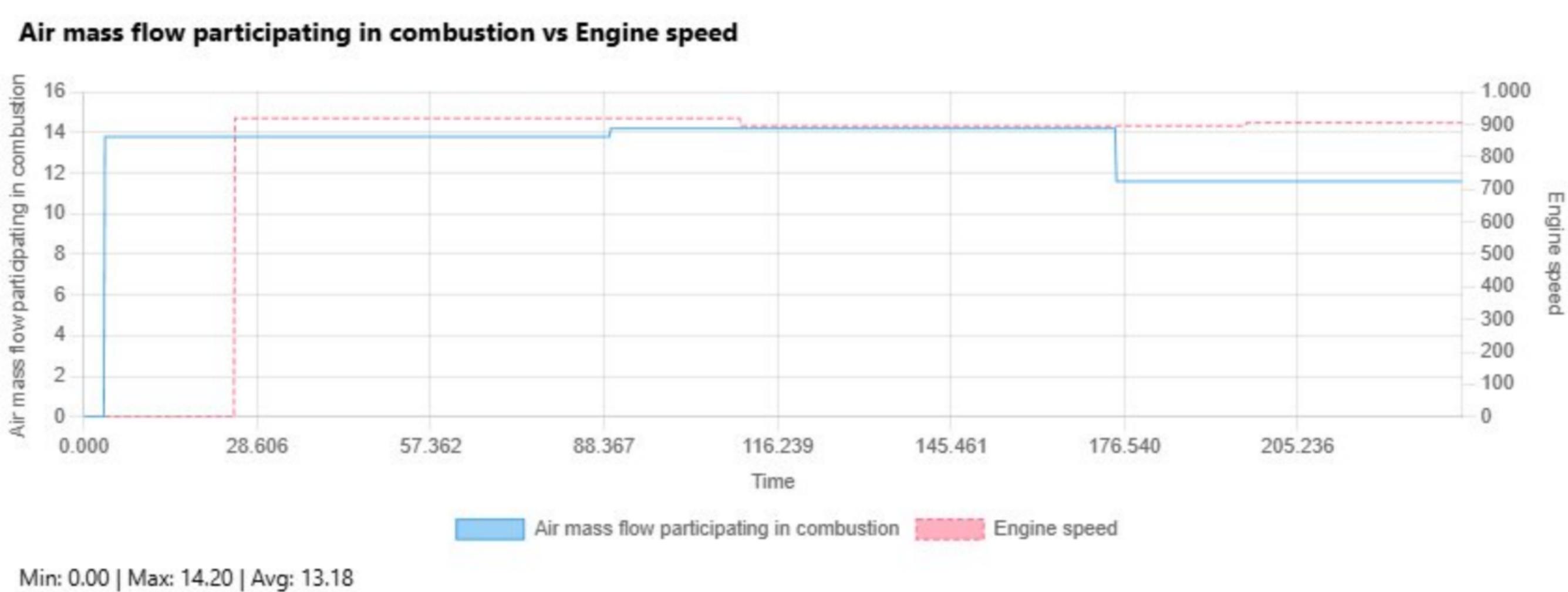


Min: 0.00 | Max: 12.00 | Avg: 10.83

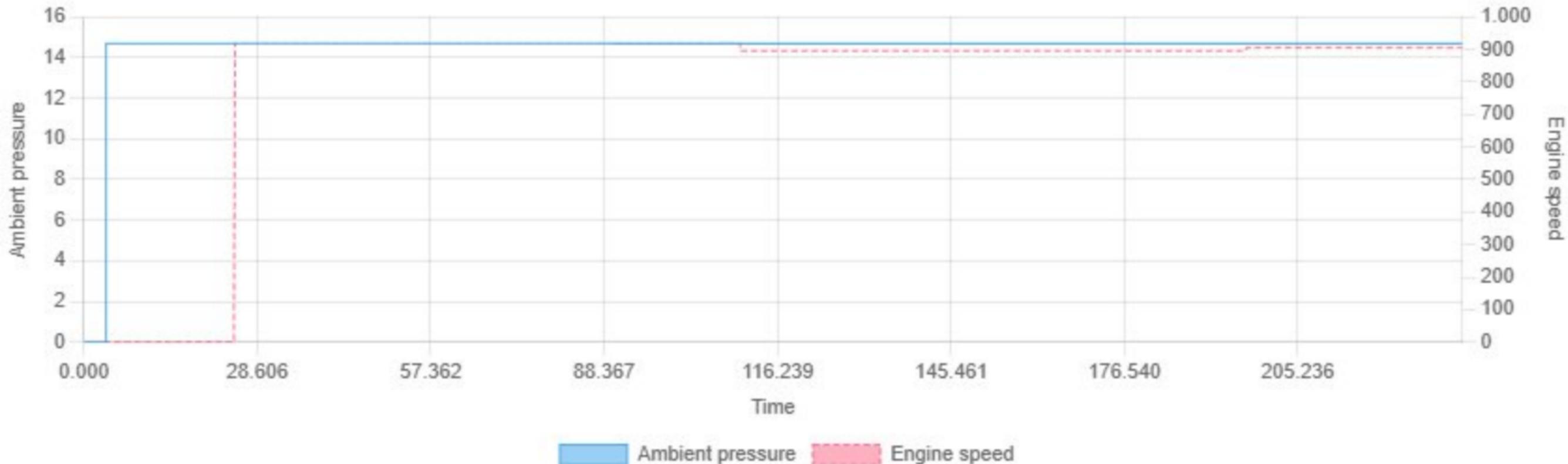
## Air mass flow filtered vs Engine speed



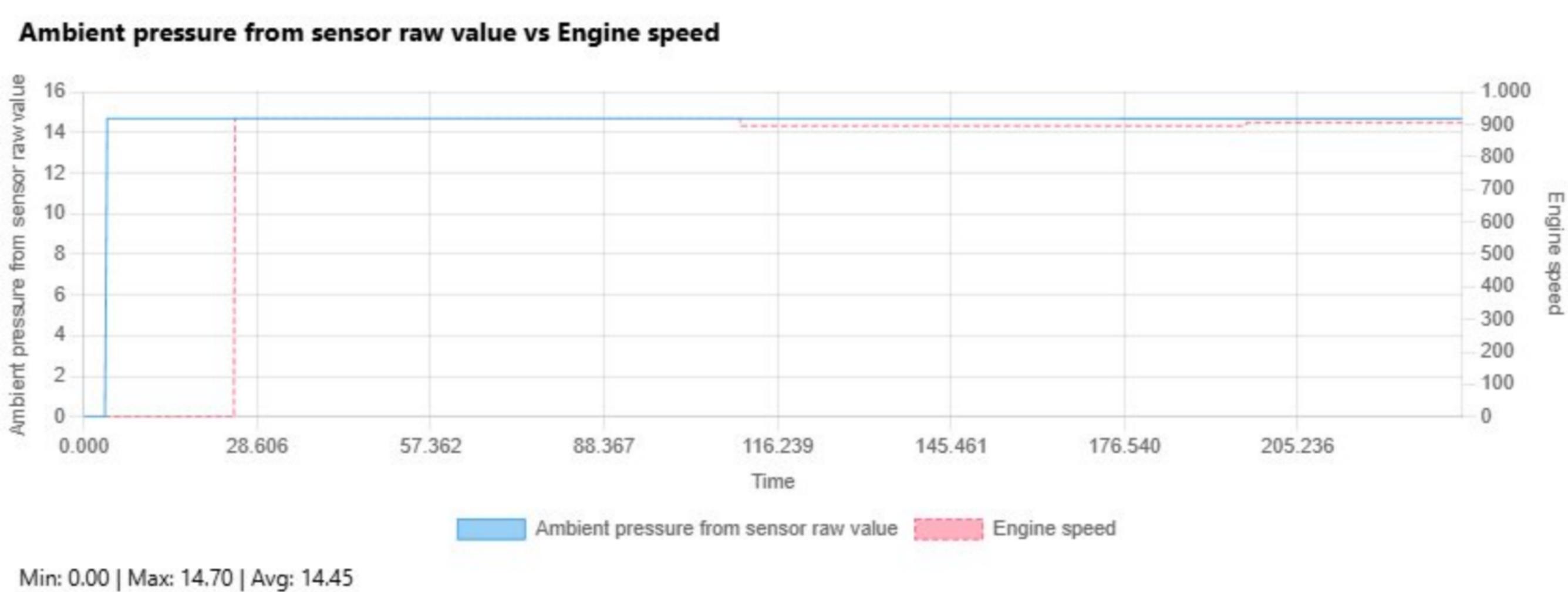
Min: 0.00 | Max: 14.20 | Avg: 13.15



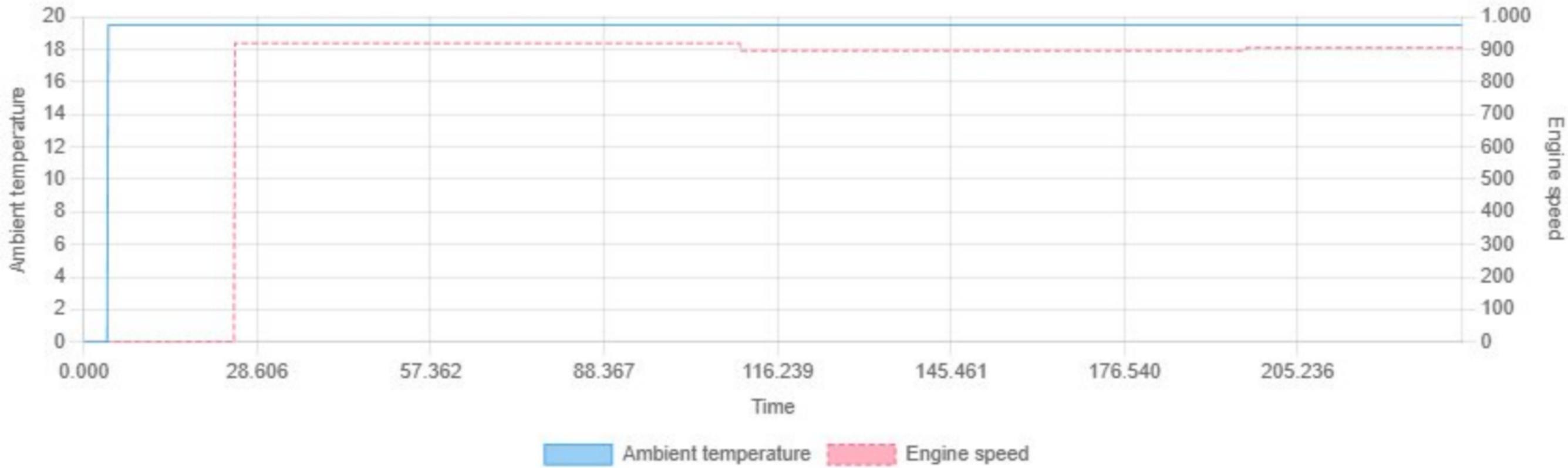
## Ambient pressure vs Engine speed



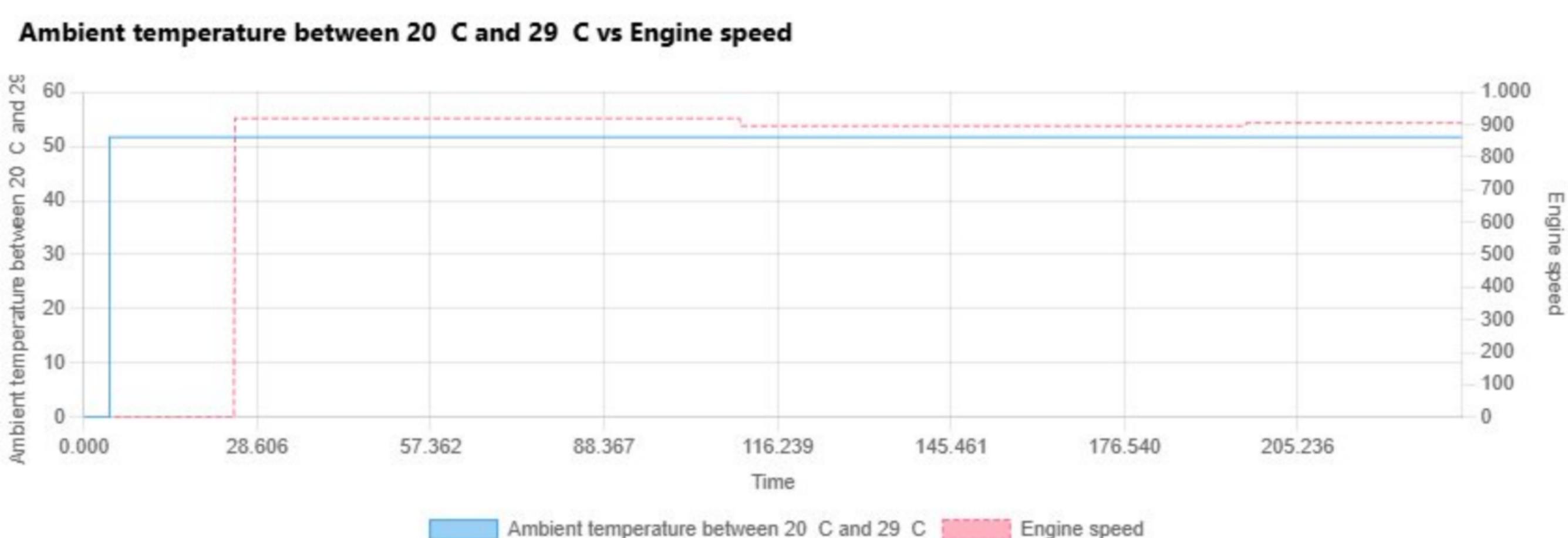
Min: 0.00 | Max: 14.70 | Avg: 14.46



## Ambient temperature vs Engine speed

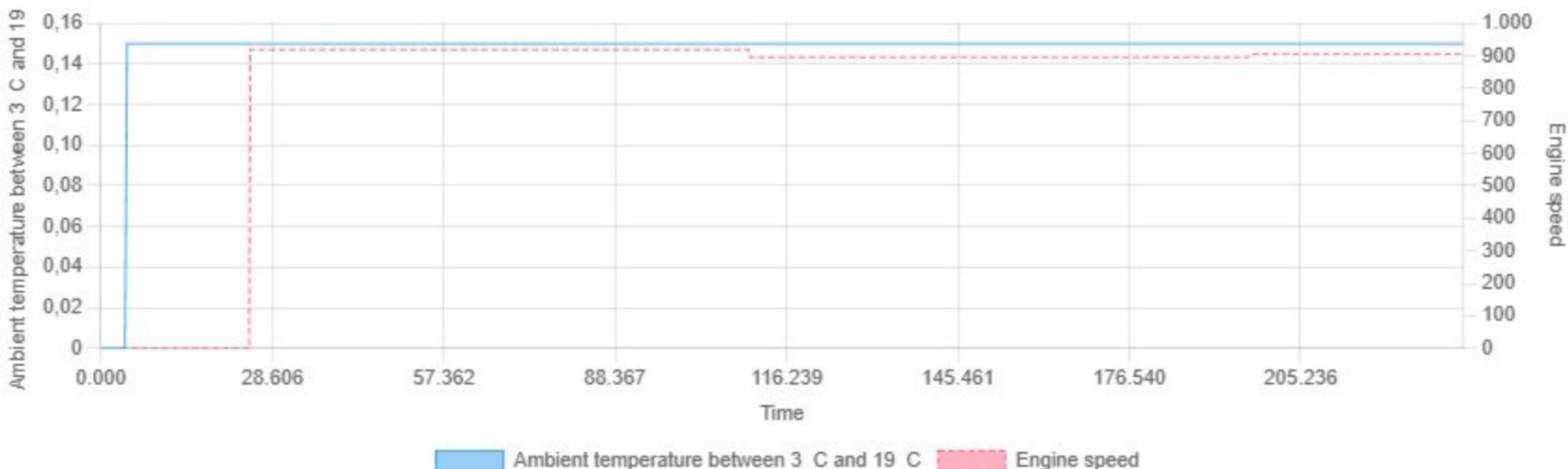


Min: 0.00 | Max: 19.50 | Avg: 19.15

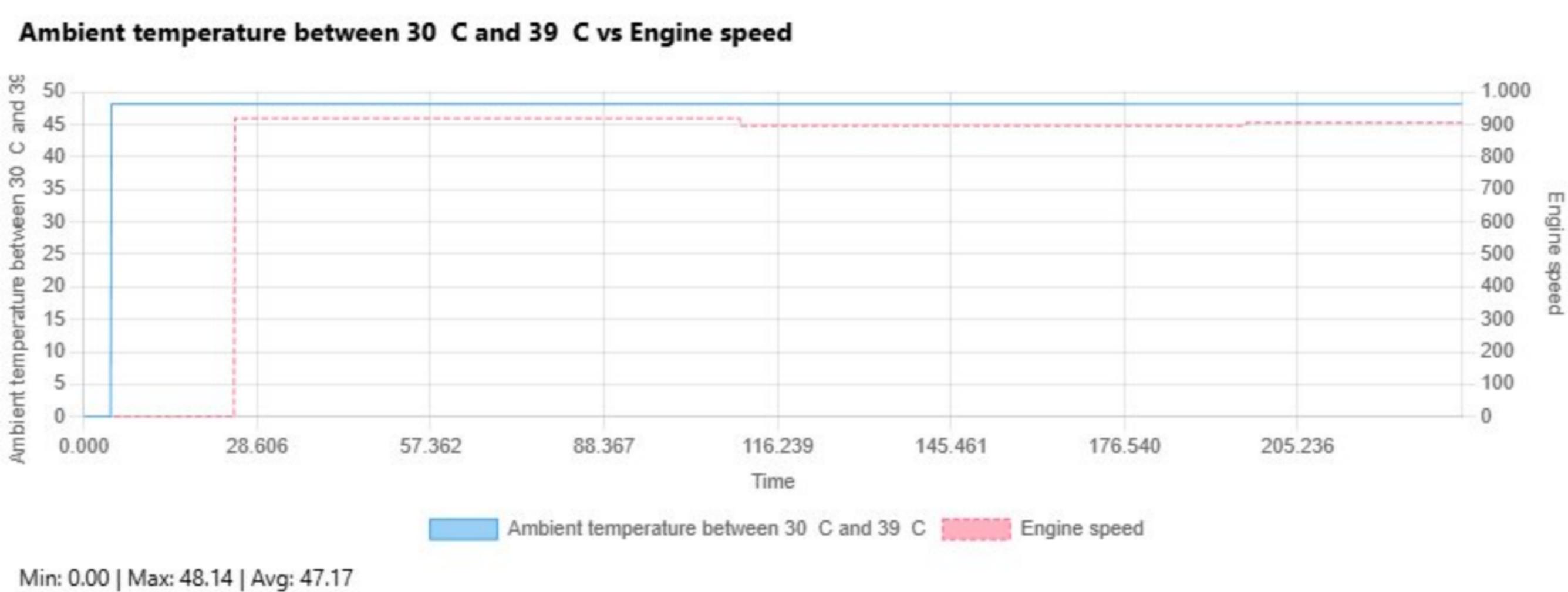


Min: 0.00 | Max: 51.71 | Avg: 50.75

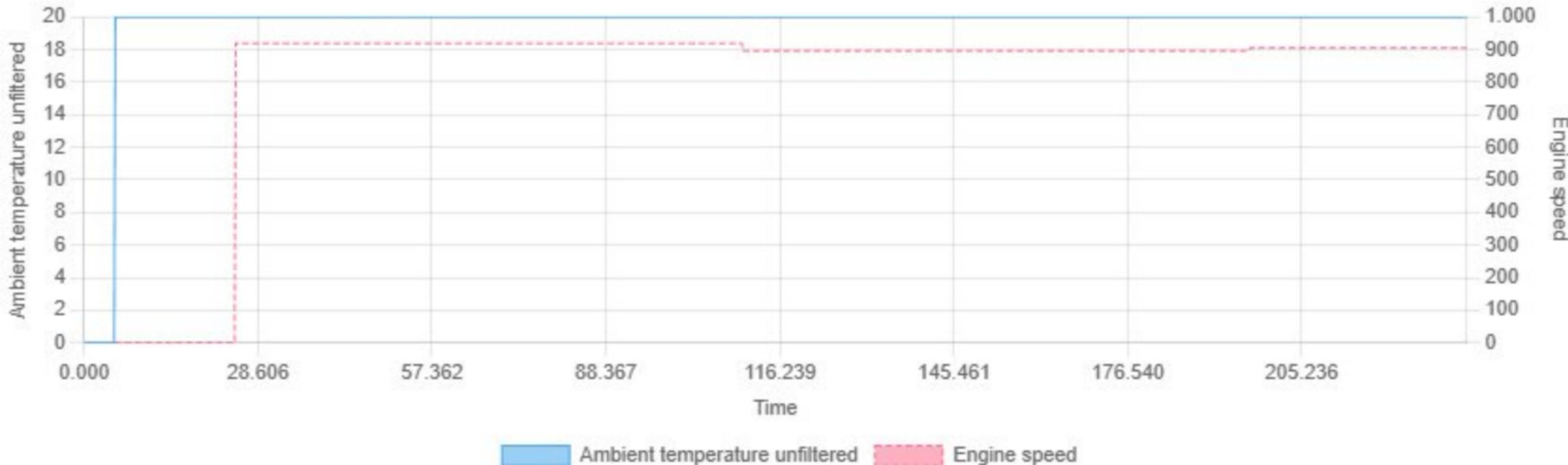
## Ambient temperature between 3 °C and 19 °C vs Engine speed



Min: 0.00 | Max: 0.15 | Avg: 0.15

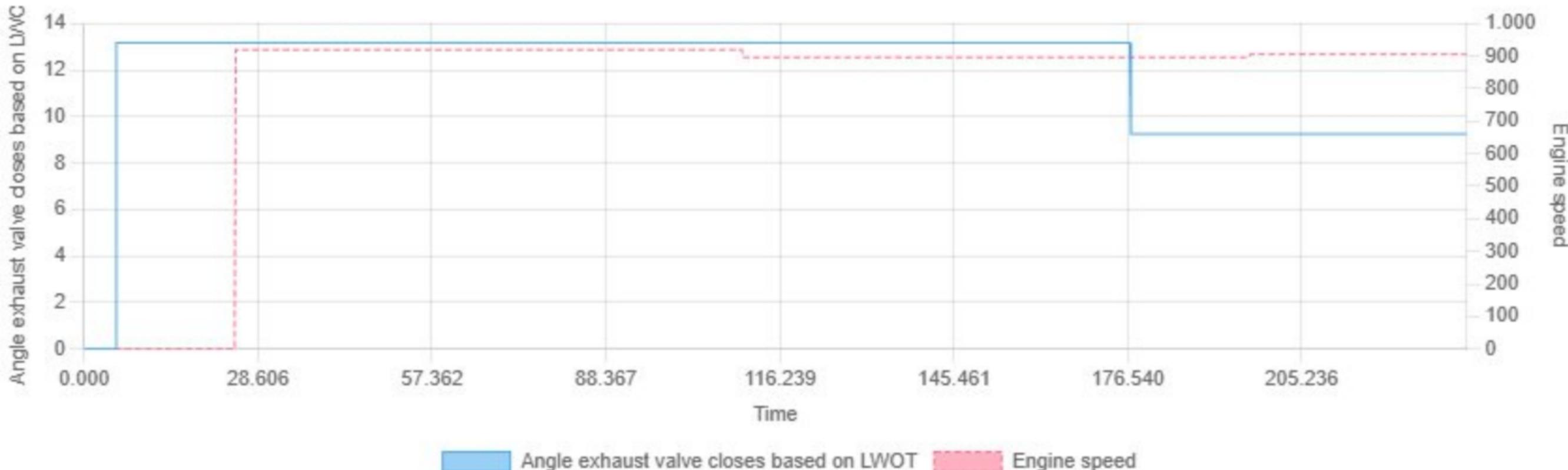


## Ambient temperature unfiltered vs Engine speed

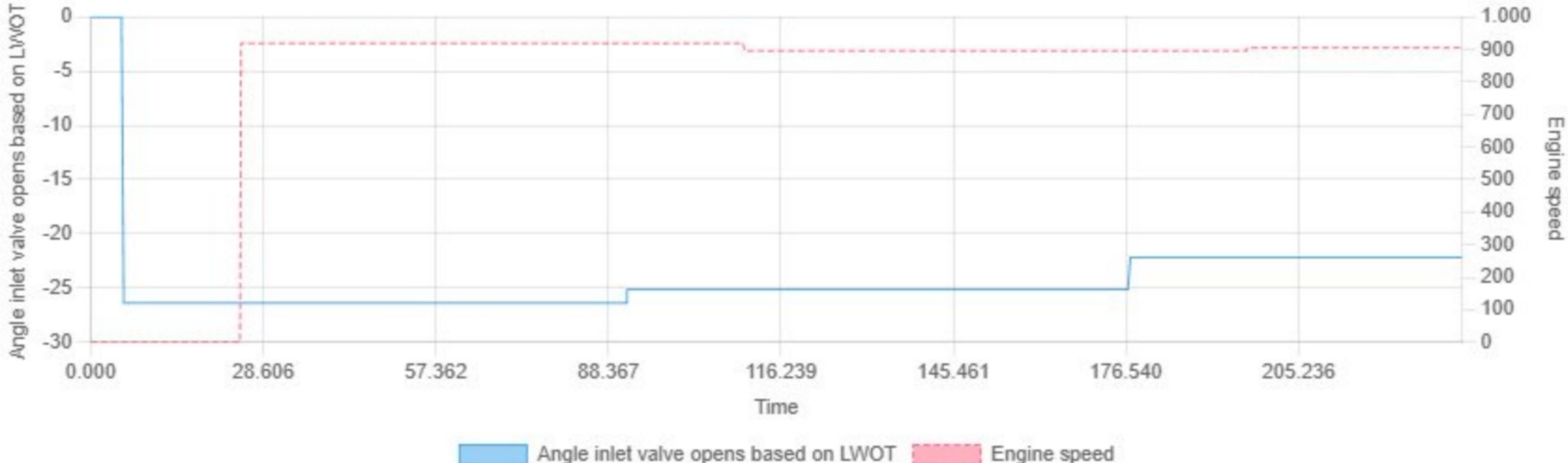


Min: 0.00 | Max: 20.00 | Avg: 19.55

## Angle exhaust valve closes based on LWOT vs Engine speed

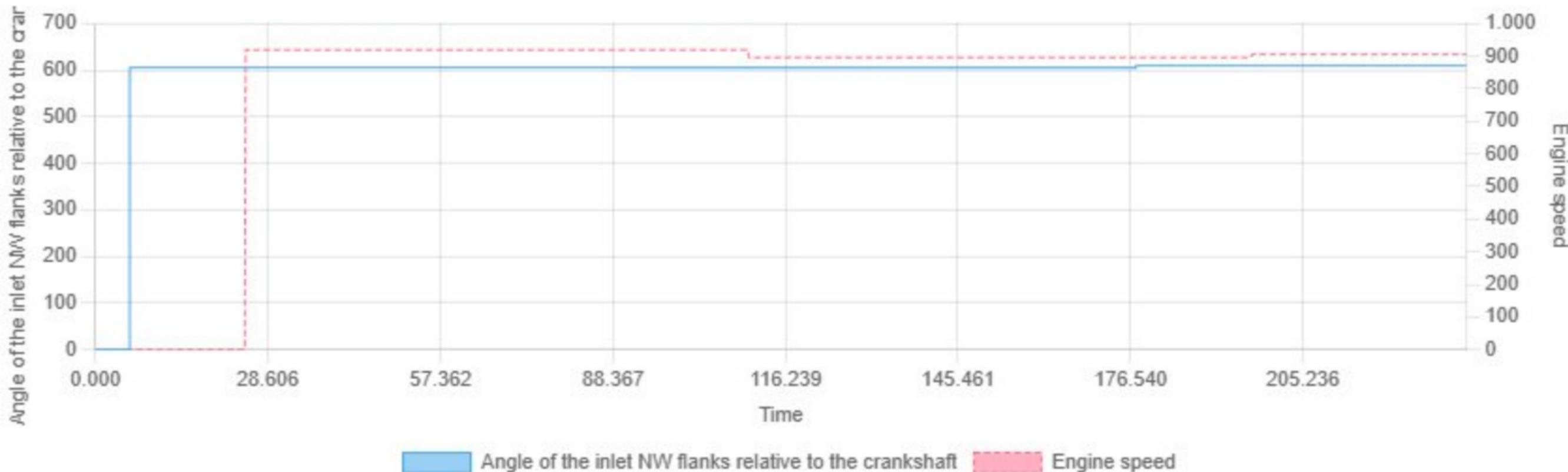


## Angle inlet valve opens based on LWOT vs Engine speed



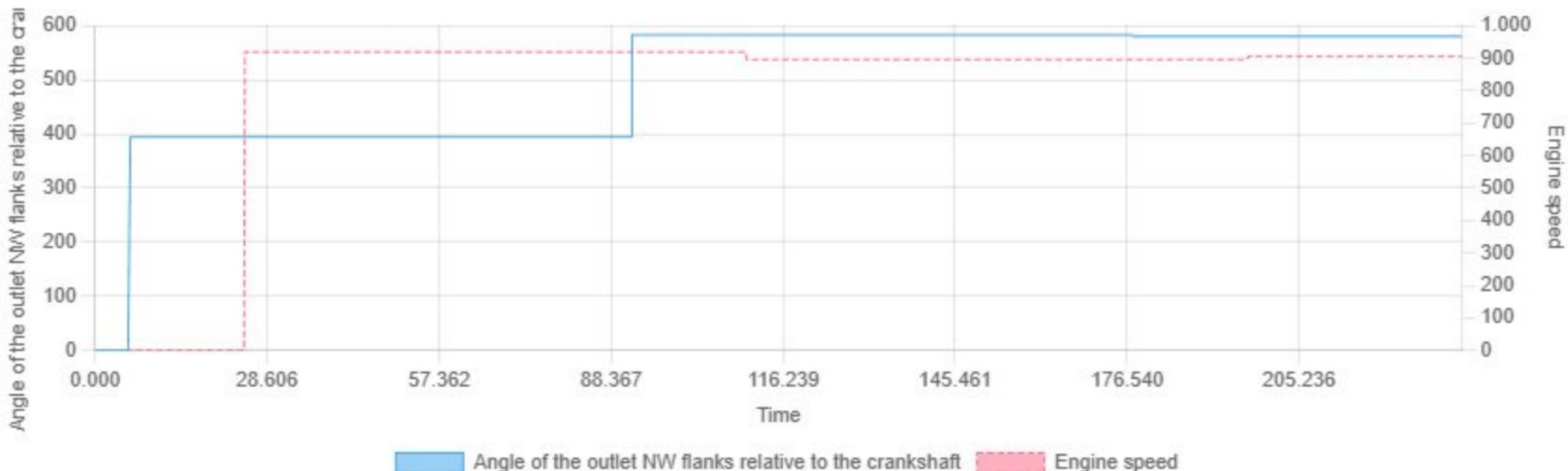
Min: -26.39 | Max: 0.00 | Avg: -24.28

## Angle of the inlet NW flanks relative to the crankshaft vs Engine speed



Min: 0.00 | Max: 609.19 | Avg: 590.84

## Angle of the outlet NW flanks relative to the crankshaft vs Engine speed



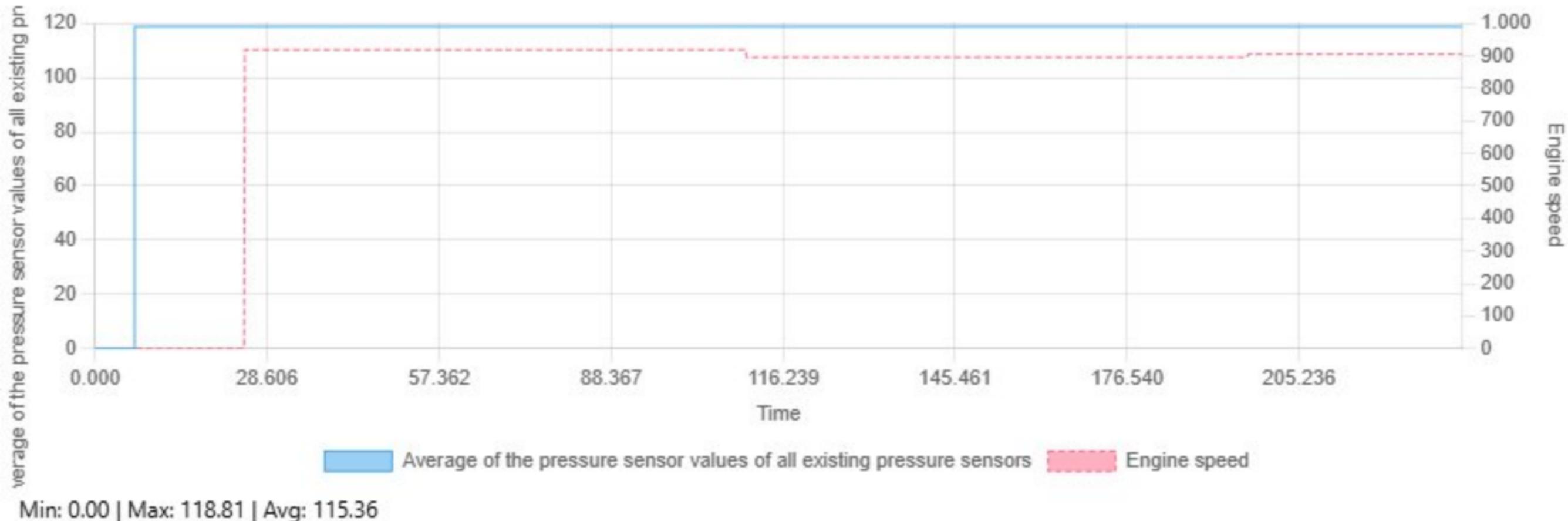
Min: 0.00 | Max: 583.20 | Avg: 498.19

## Ash influence vs Engine speed

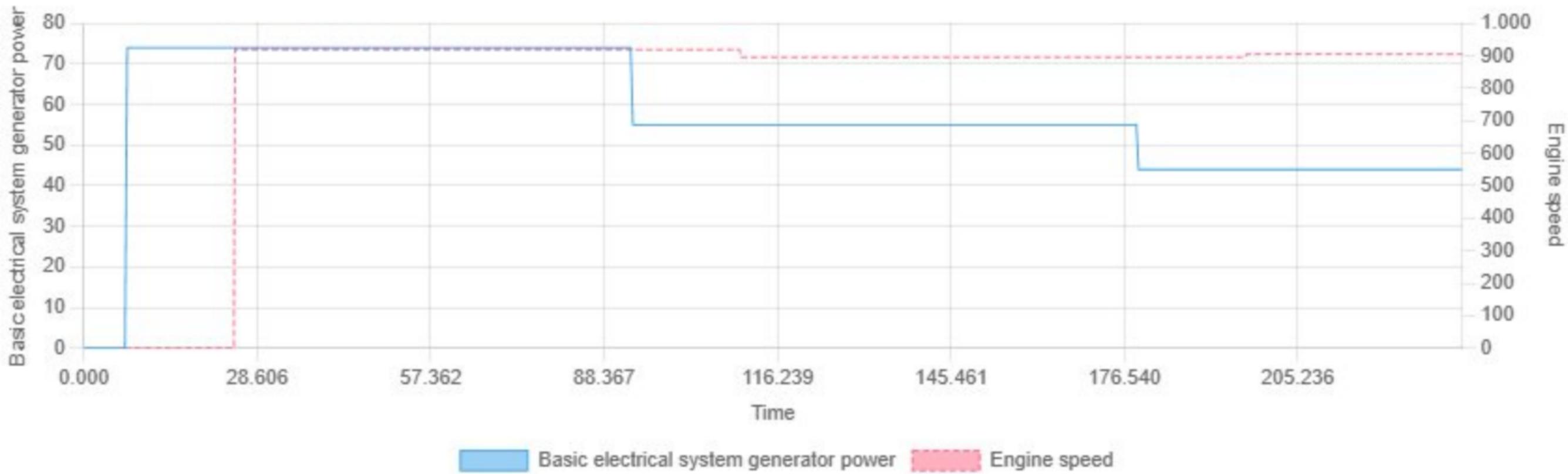


Min: 0.00 | Max: 0.02 | Avg: 0.02

## Average of the pressure sensor values of all existing pressure sensors vs Engine speed

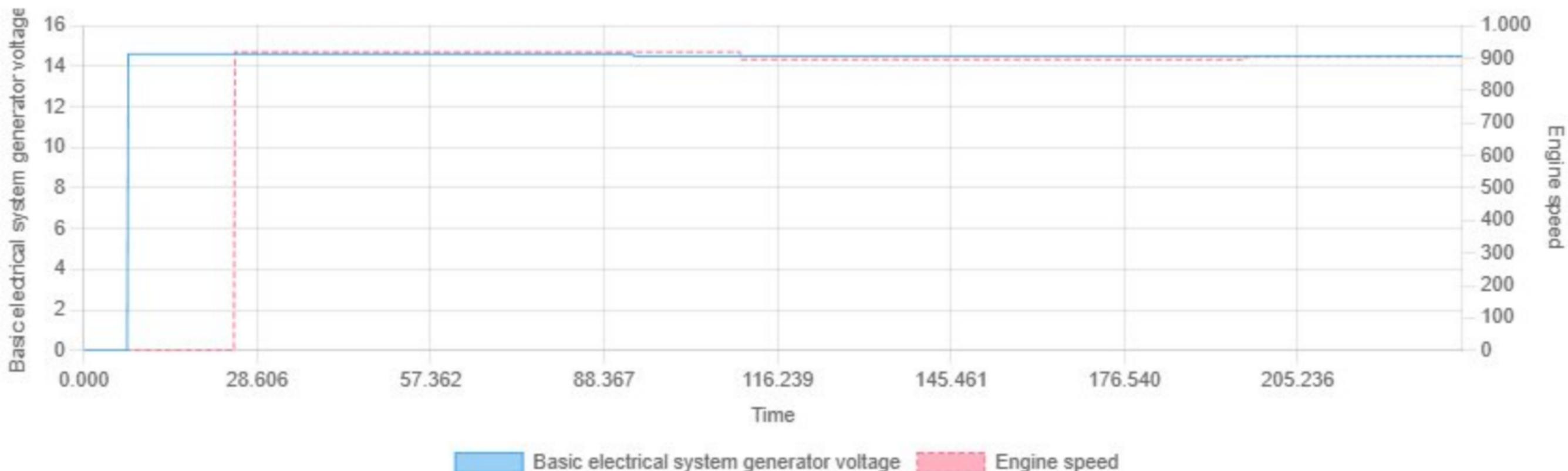


## Basic electrical system generator power vs Engine speed

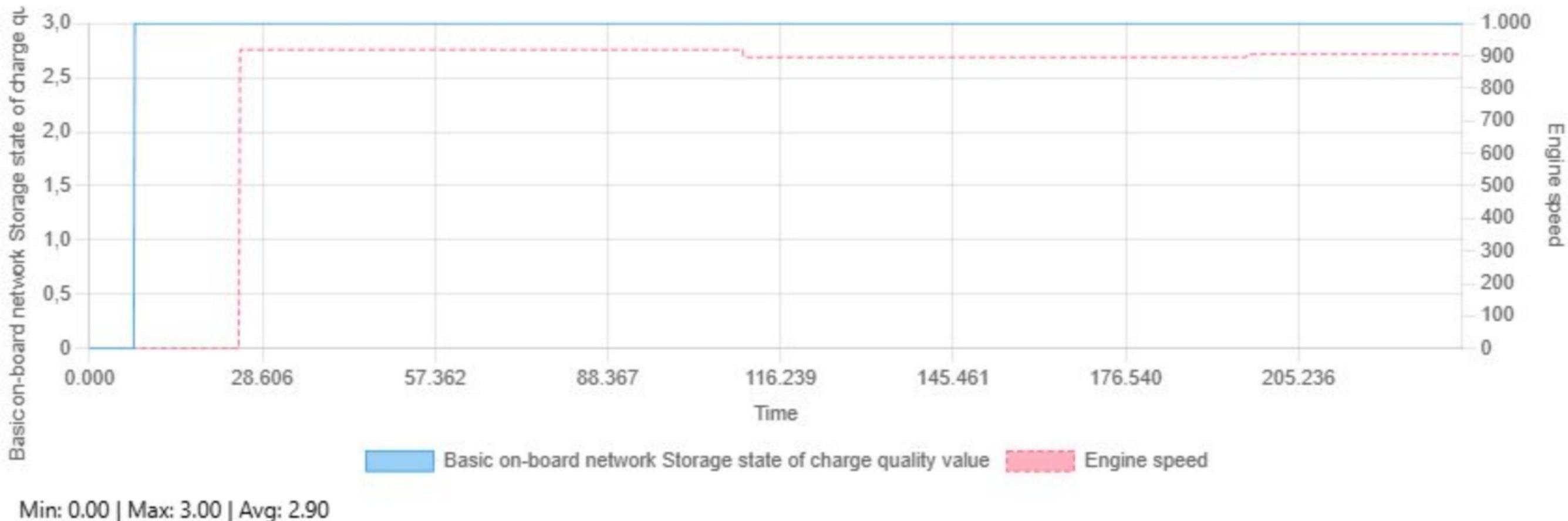


Min: 0.00 | Max: 74.00 | Avg: 57.65

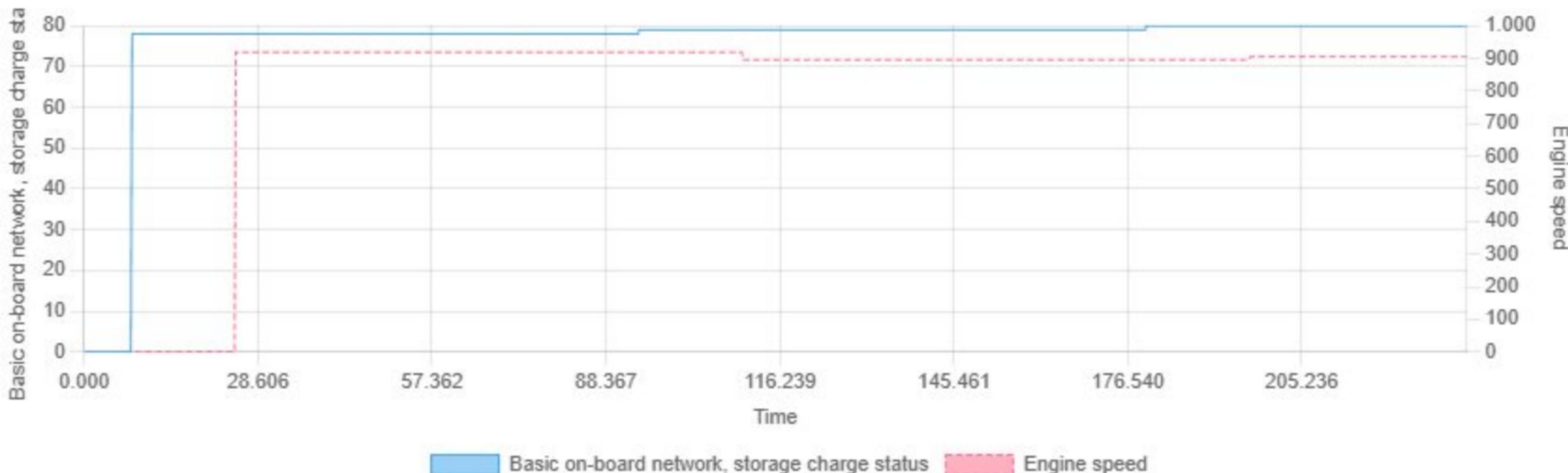
## Basic electrical system generator voltage vs Engine speed

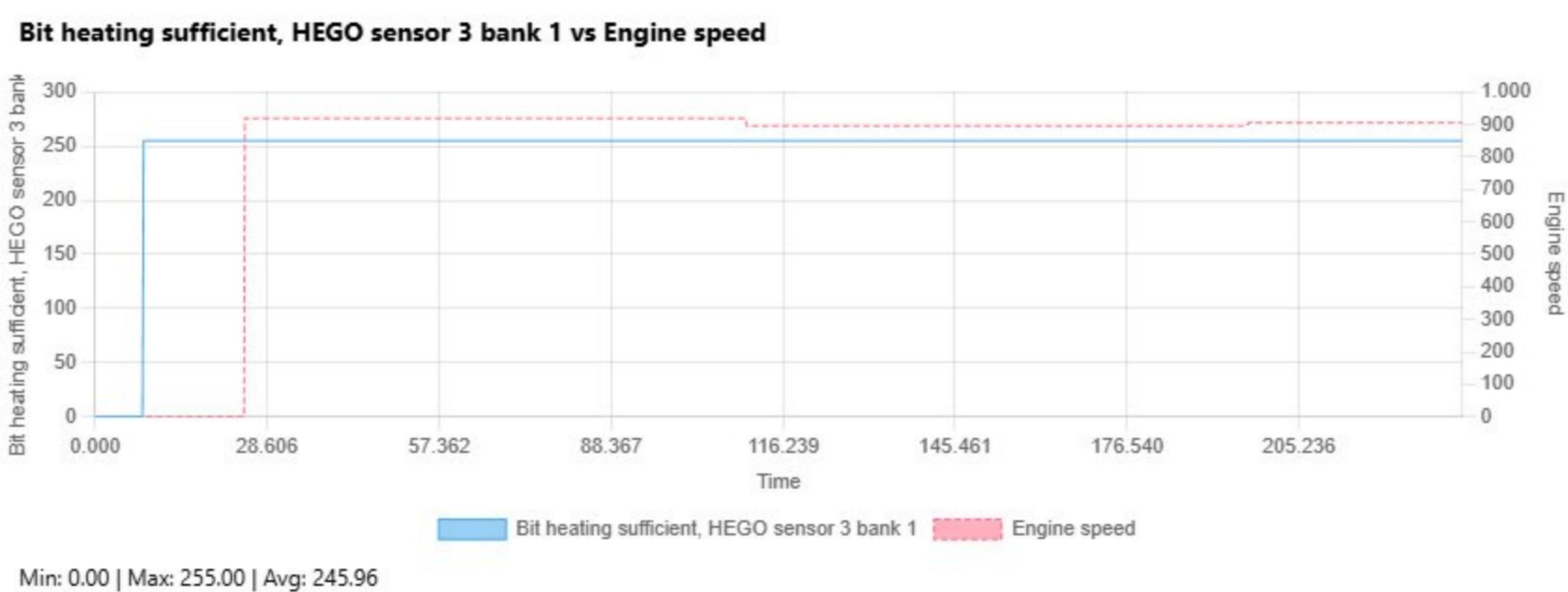


## Basic on-board network Storage state of charge quality value vs Engine speed

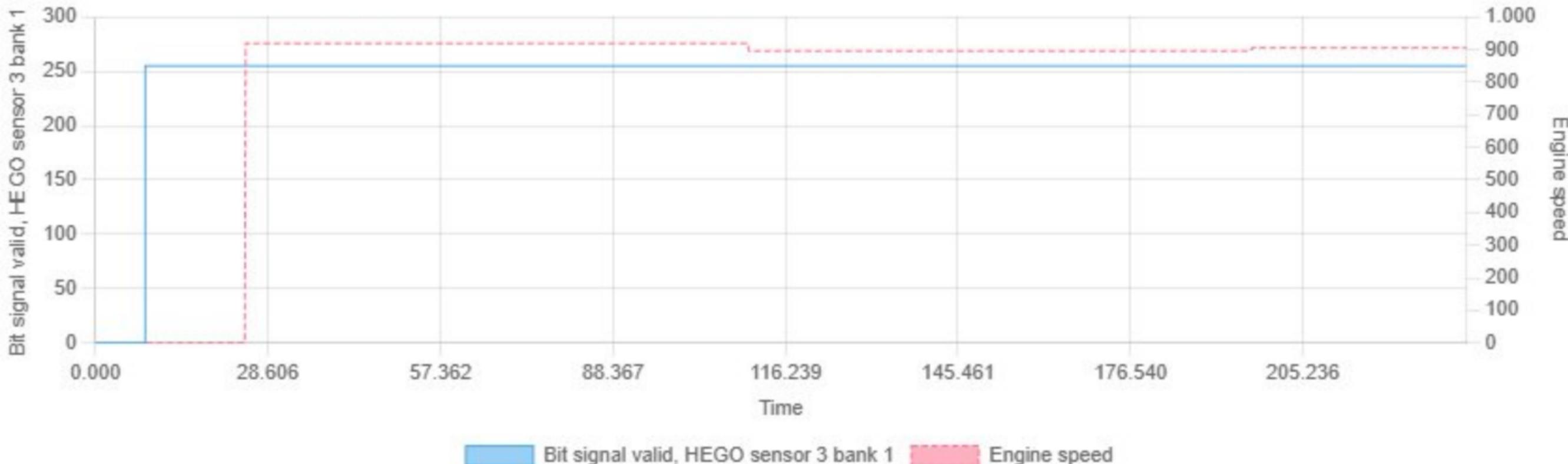


## Basic on-board network, storage charge status vs Engine speed



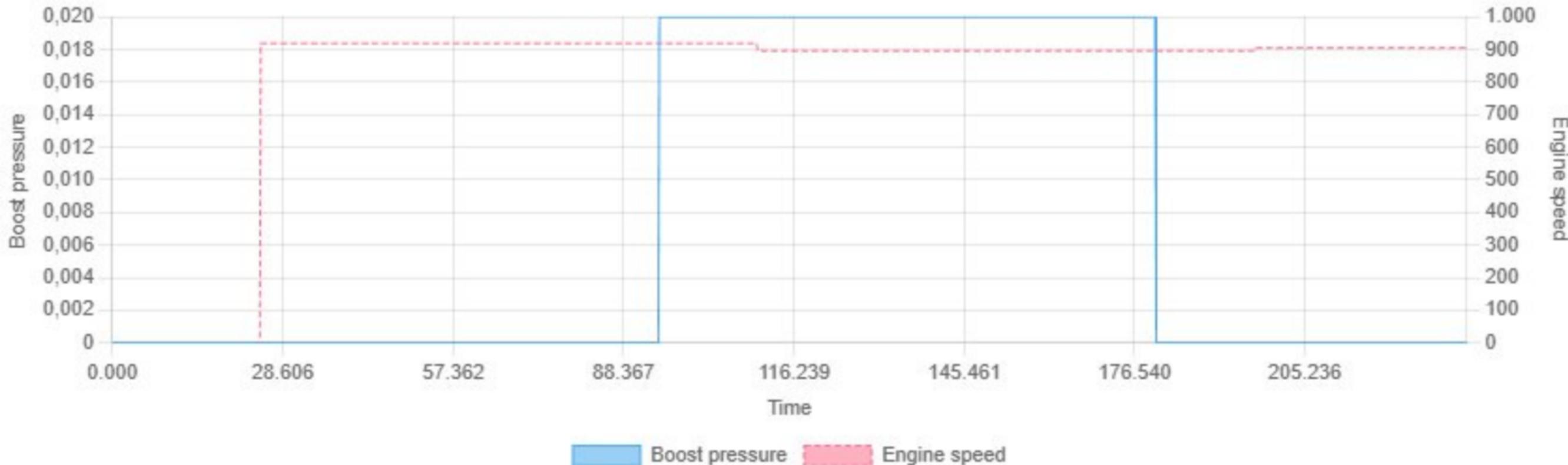


## Bit signal valid, HEGO sensor 3 bank 1 vs Engine speed



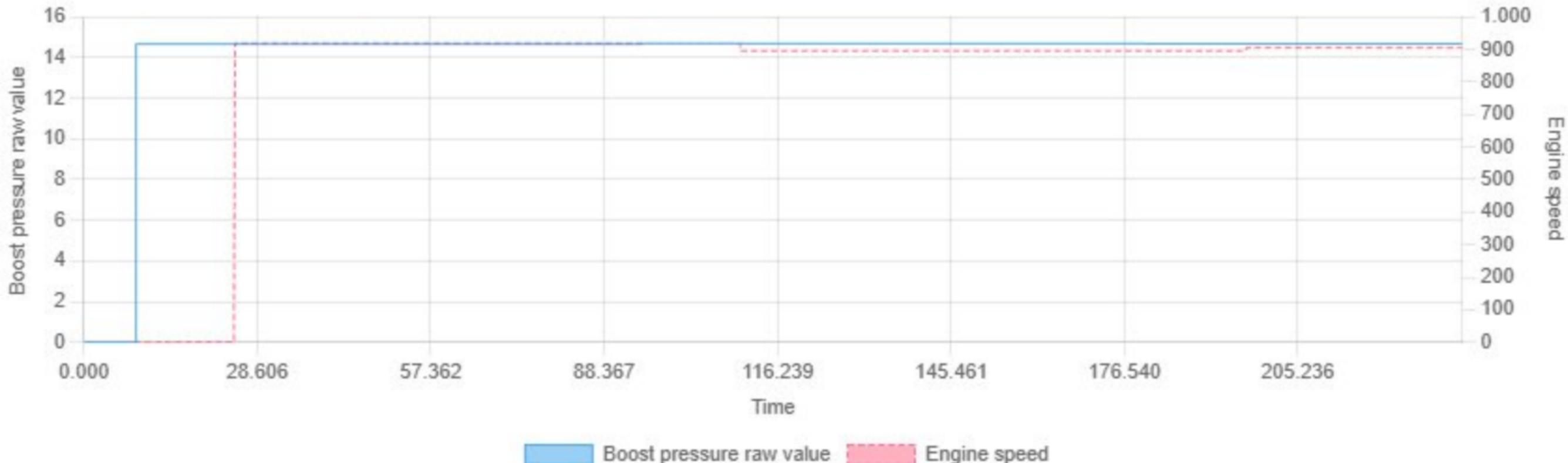
Min: 0.00 | Max: 255.00 | Avg: 245.75

## Boost pressure vs Engine speed



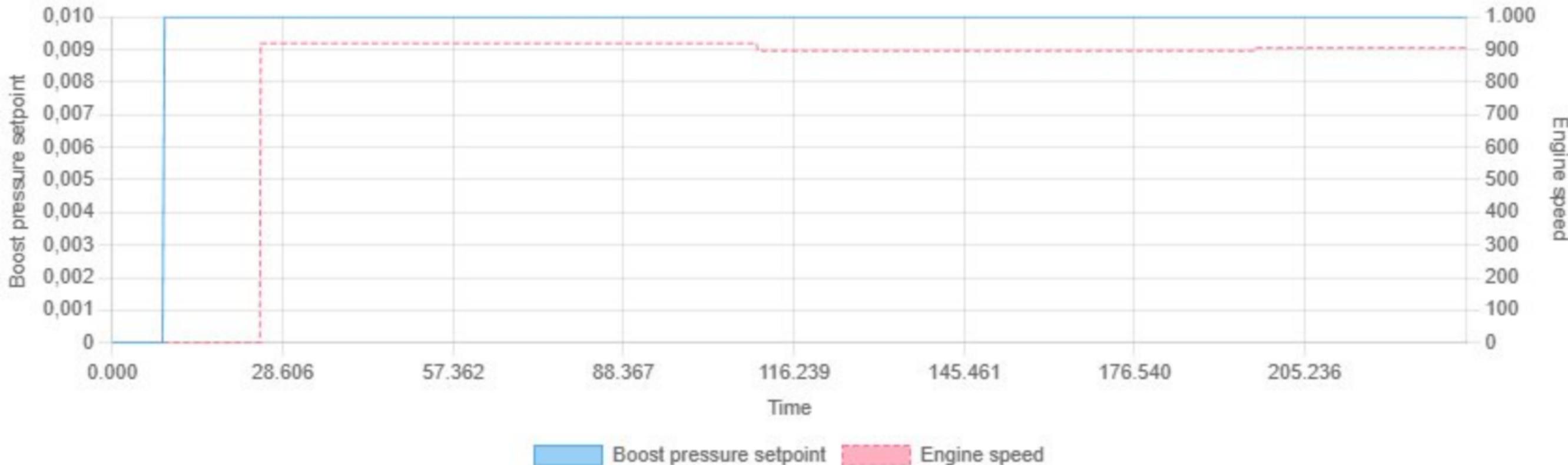
Min: 0.00 | Max: 0.02 | Avg: 0.01

## Boost pressure raw value vs Engine speed



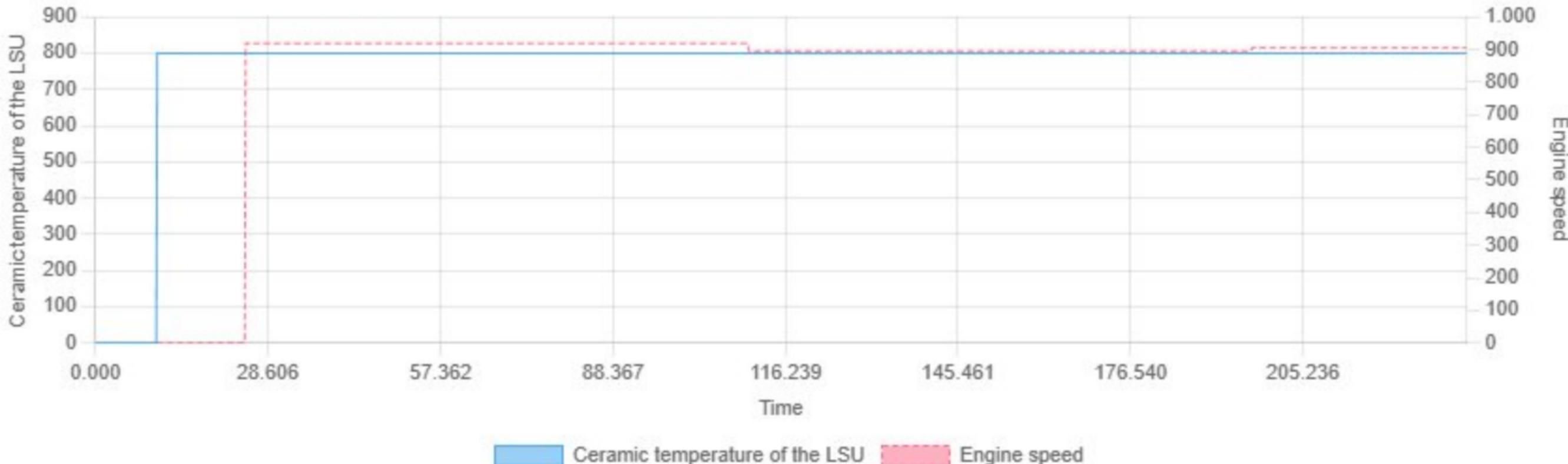
Min: 0.00 | Max: 14.70 | Avg: 14.12

## Boost pressure setpoint vs Engine speed



Min: 0.00 | Max: 0.01 | Avg: 0.01

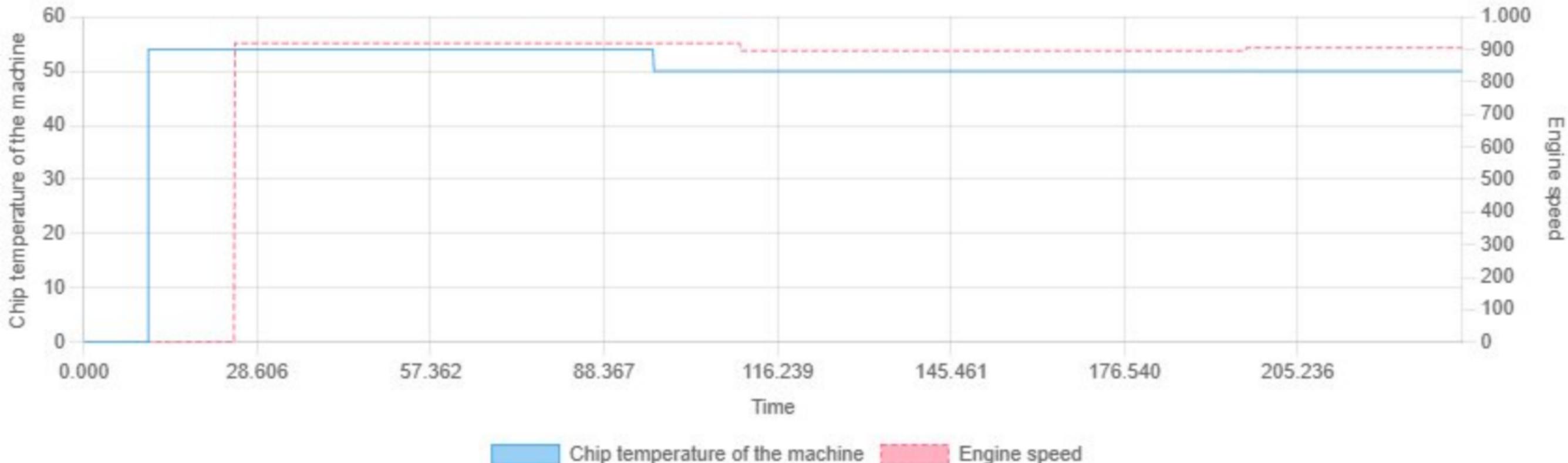
## Ceramic temperature of the LSU vs Engine speed



Ceramic temperature of the LSU      Engine speed

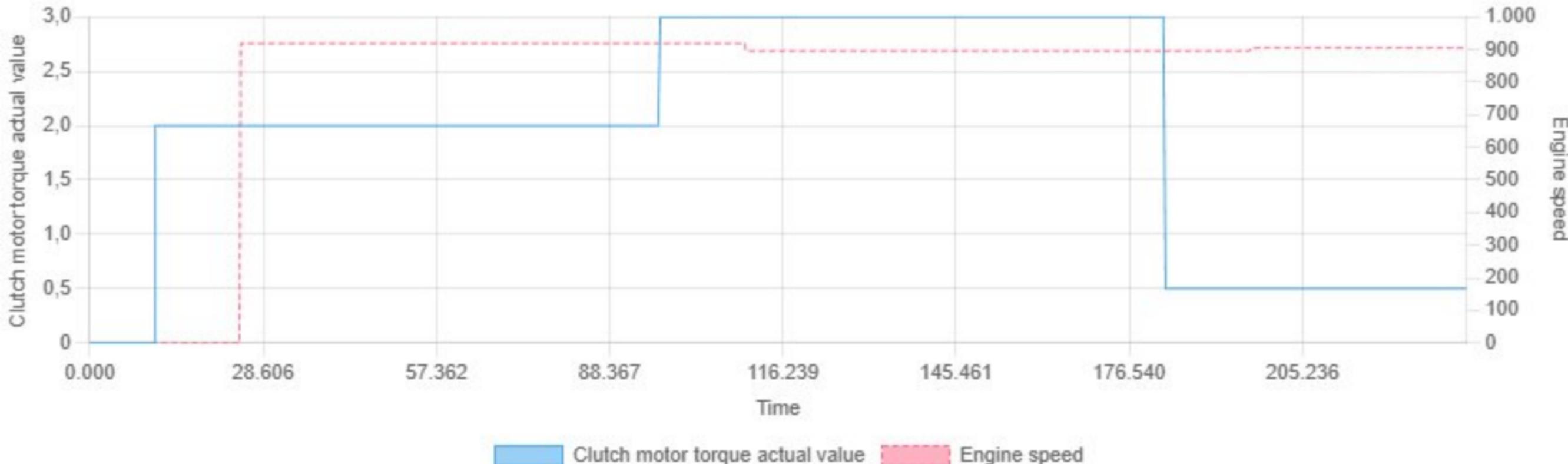
Min: 0.00 | Max: 800.05 | Avg: 763.80

## Chip temperature of the machine vs Engine speed



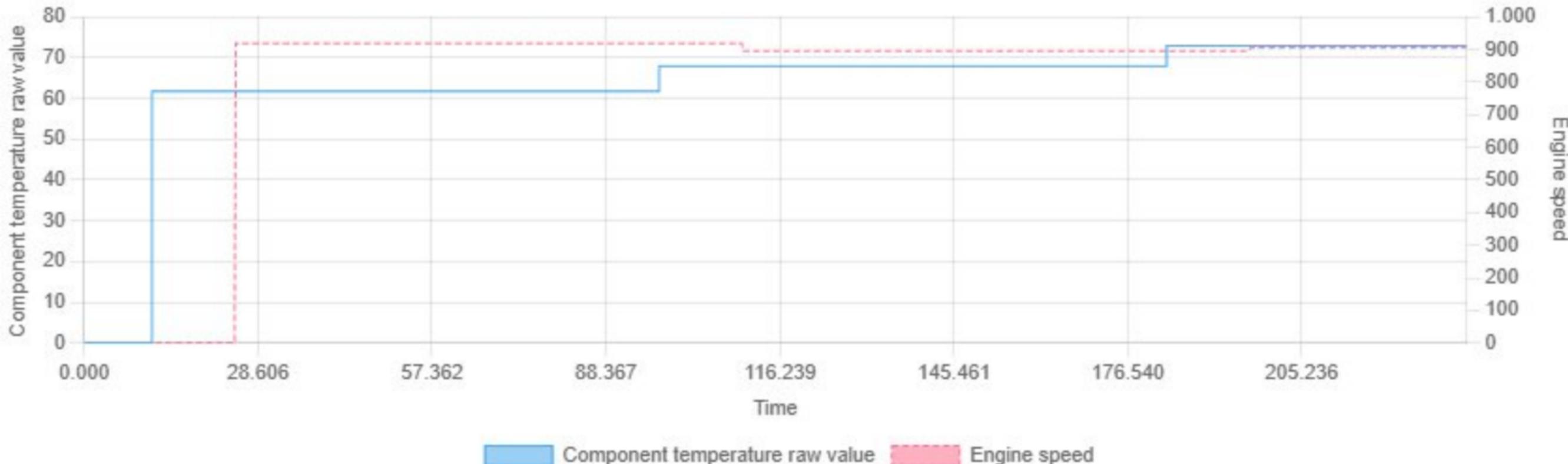
Min: 0.00 | Max: 54.00 | Avg: 49.13

## Clutch motor torque actual value vs Engine speed



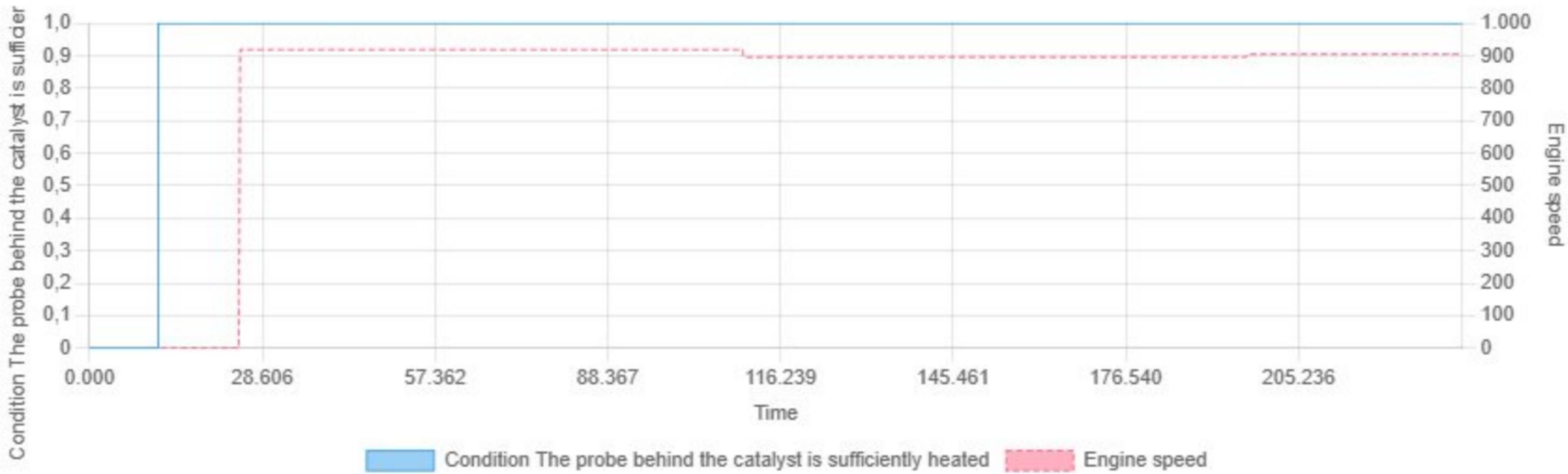
Min: 0.00 | Max: 3.00 | Avg: 1.94

## Component temperature raw value vs Engine speed



Min: 0.00 | Max: 72.96 | Avg: 63.43

## Condition The probe behind the catalyst is sufficiently heated vs Engine speed



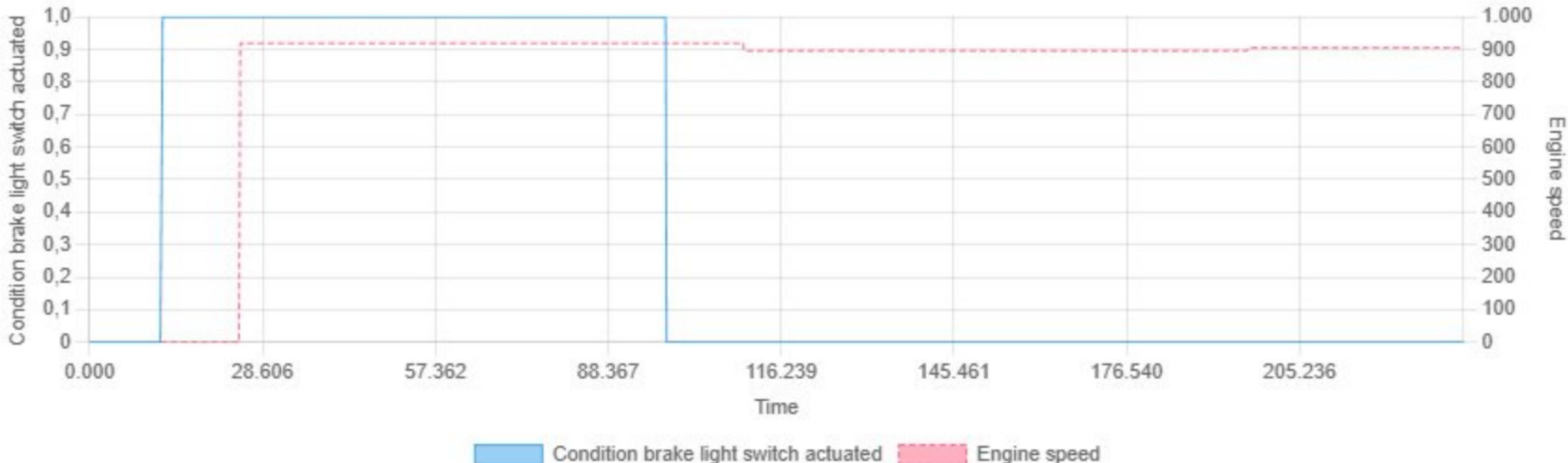
Min: 0.00 | Max: 1.00 | Avg: 0.95

## Condition Vanos entrance at the ready vs Engine speed

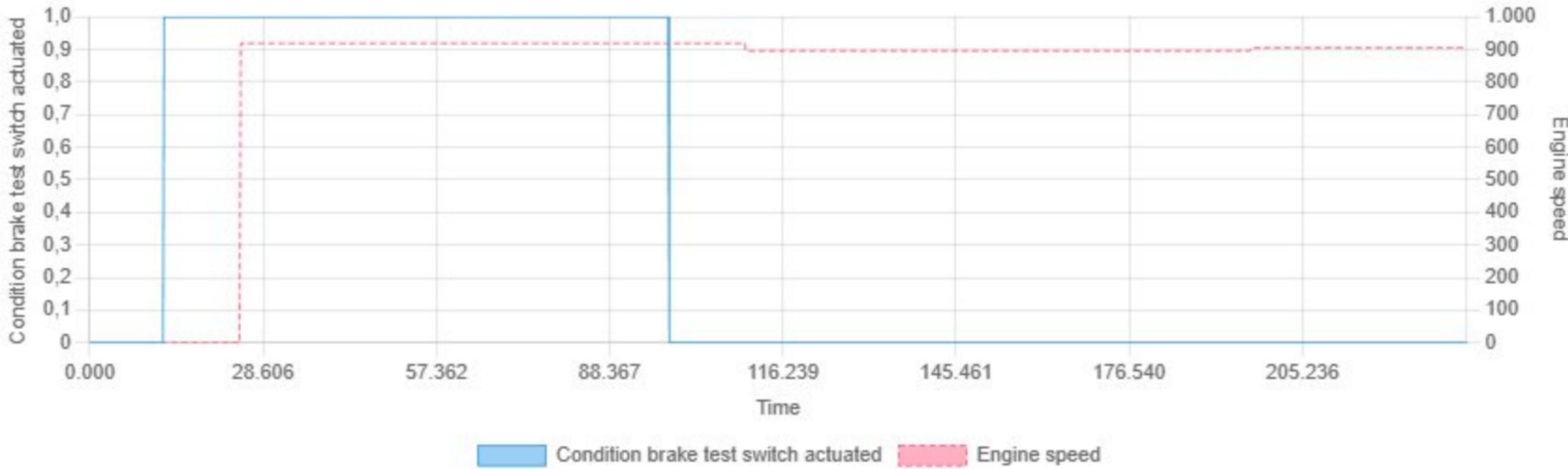


Min: 0.00 | Max: 1.00 | Avg: 0.95

## Condition brake light switch actuated vs Engine speed

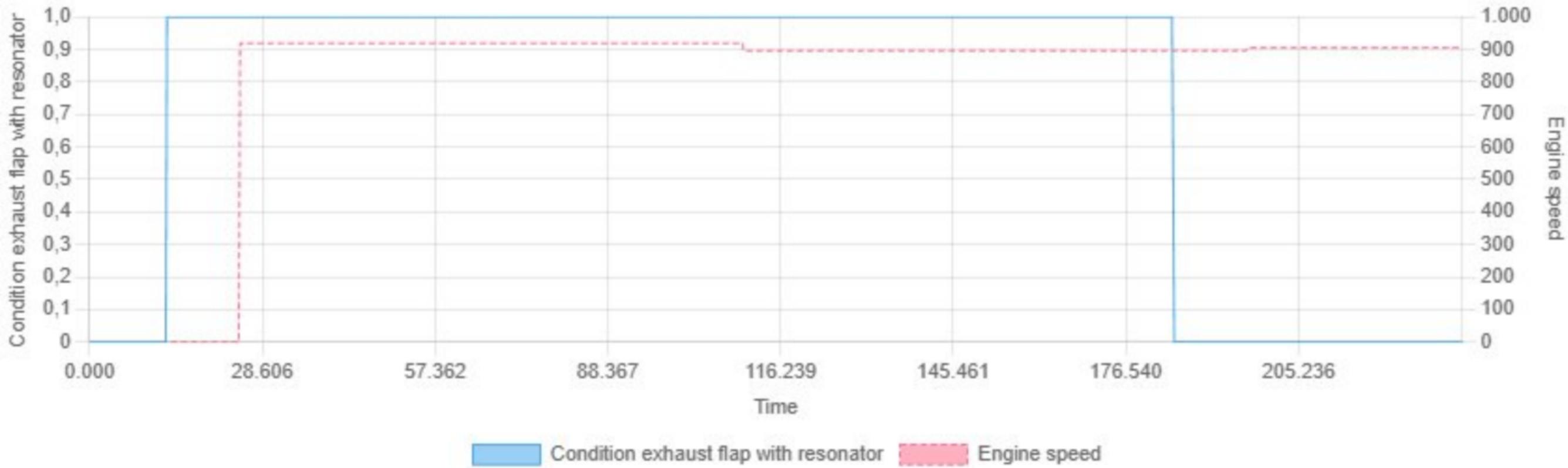


## Condition brake test switch actuated vs Engine speed



Min: 0.00 | Max: 1.00 | Avg: 0.37

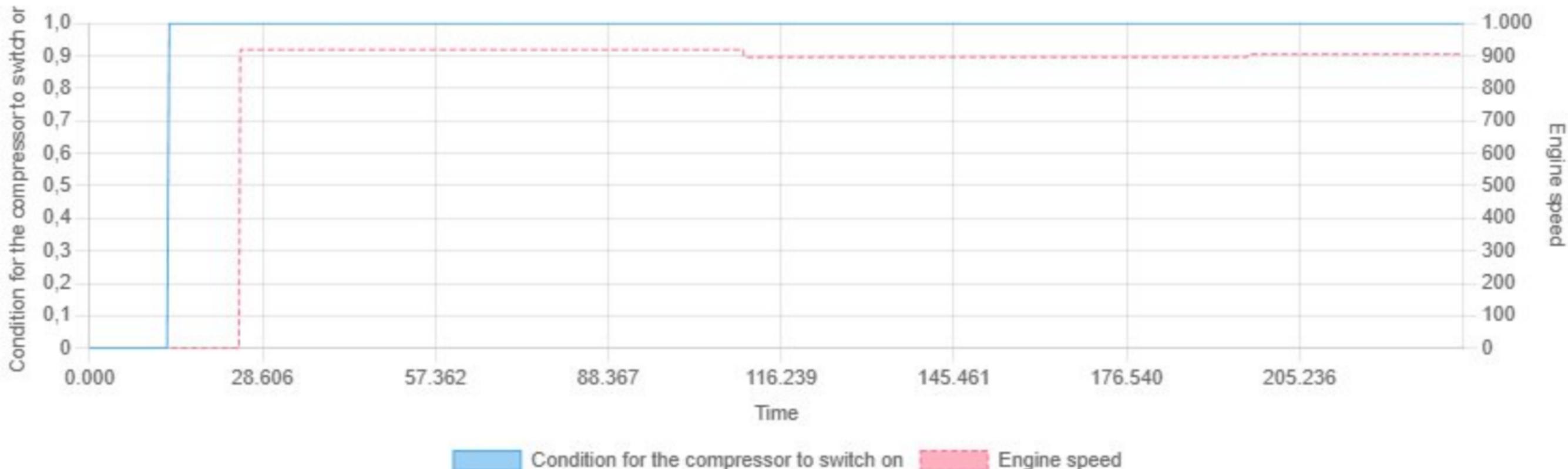
## Condition exhaust flap with resonator vs Engine speed



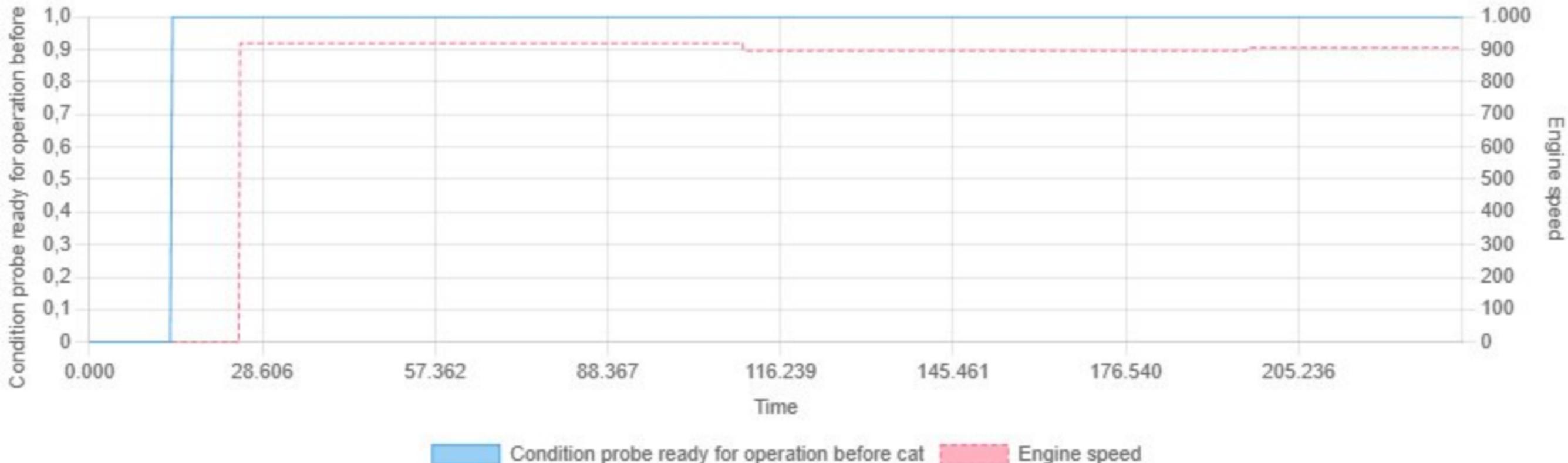
Condition exhaust flap with resonator      Engine speed

Min: 0.00 | Max: 1.00 | Avg: 0.73

## Condition for the compressor to switch on vs Engine speed

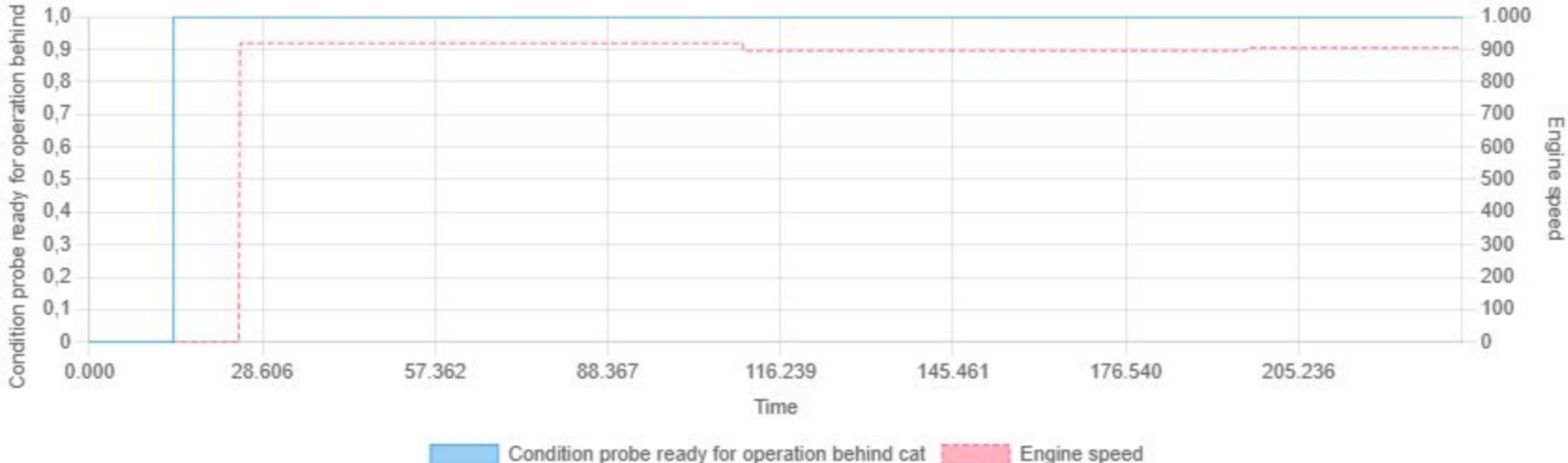


## Condition probe ready for operation before cat vs Engine speed



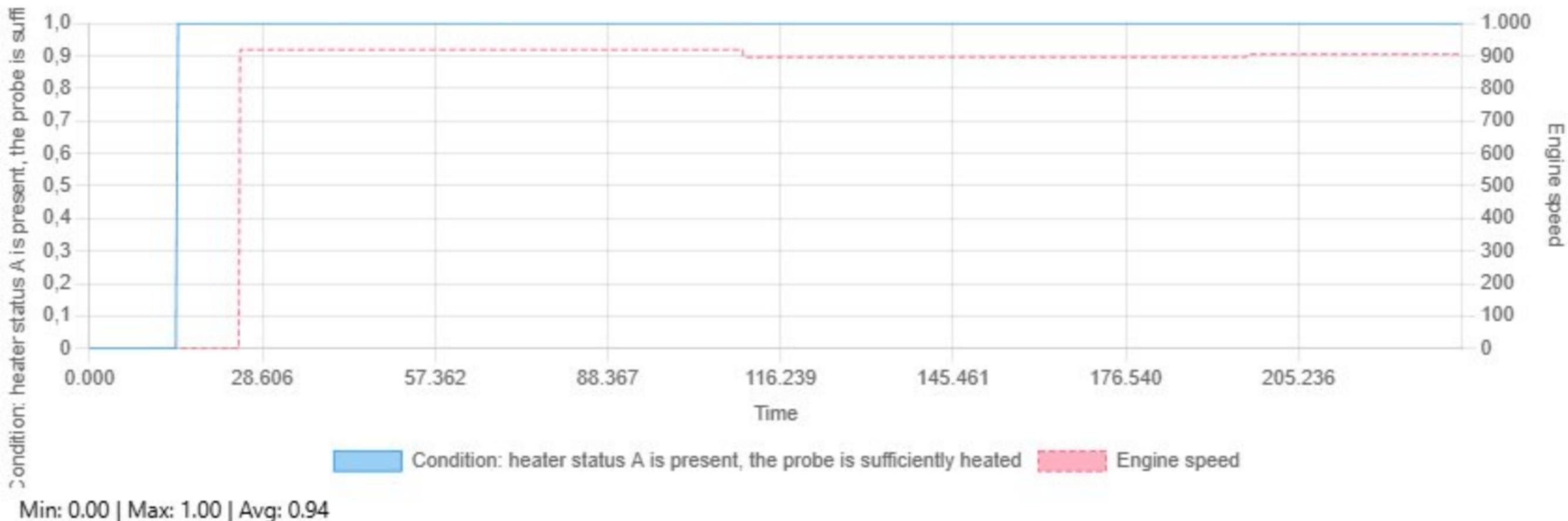
Min: 0.00 | Max: 1.00 | Avg: 0.94

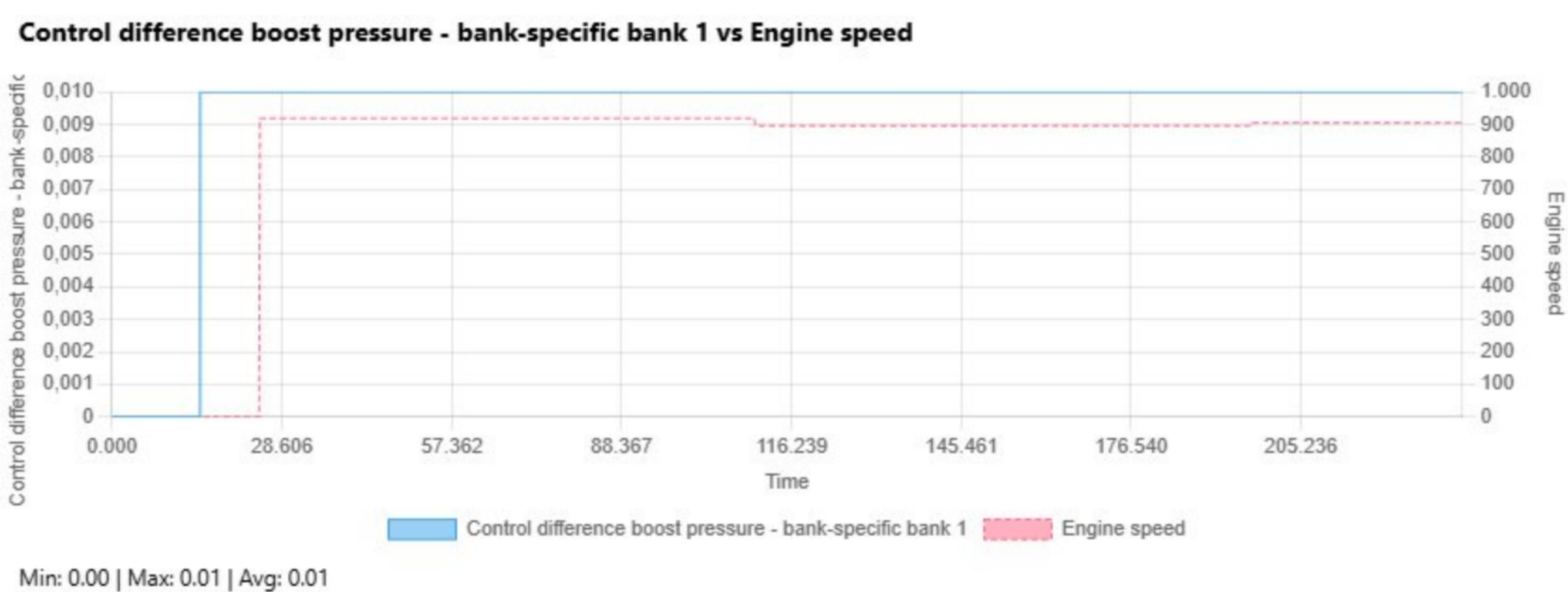
## Condition probe ready for operation behind cat vs Engine speed



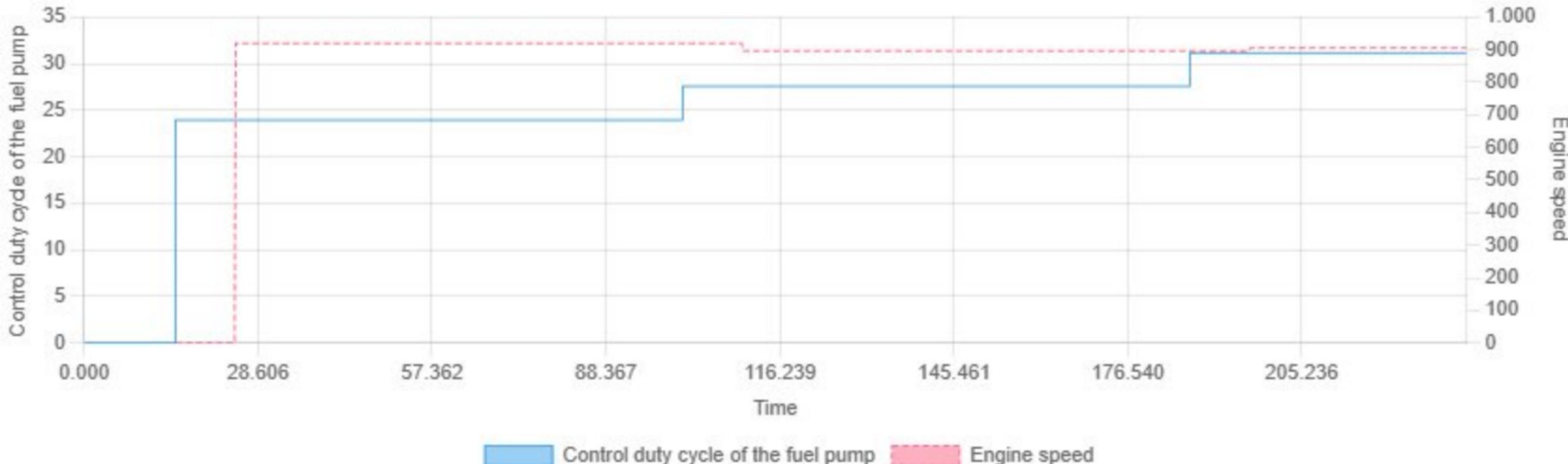
Min: 0.00 | Max: 1.00 | Avg: 0.94

**Condition: heater status A is present, the probe is sufficiently heated vs Engine speed**



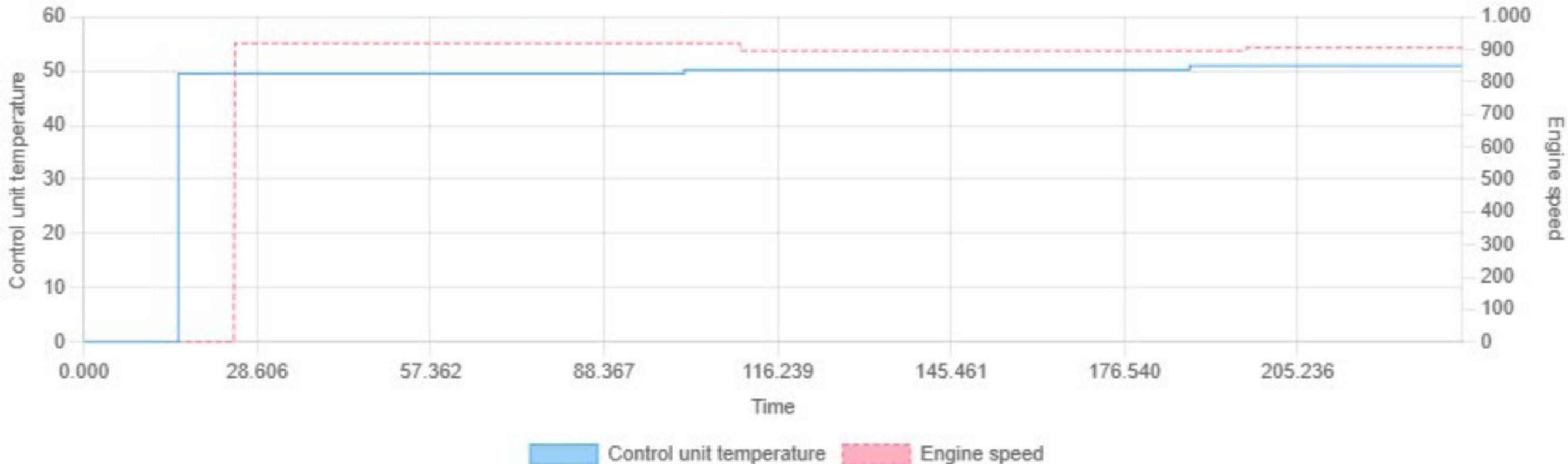


## Control duty cycle of the fuel pump vs Engine speed



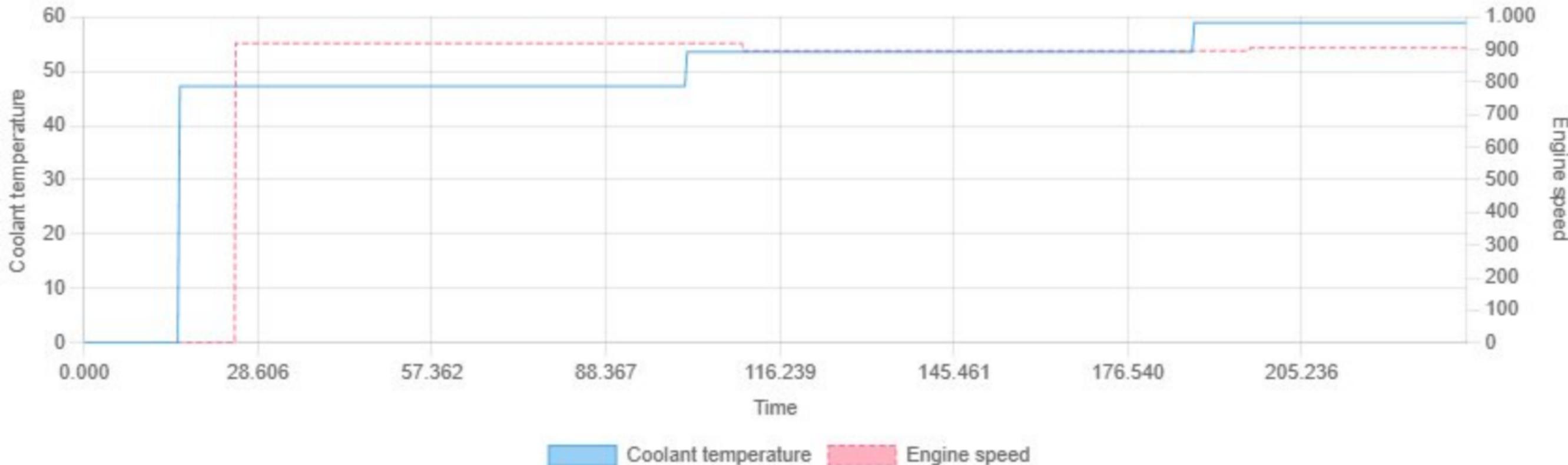
Min: 0.00 | Max: 31.15 | Avg: 25.13

## Control unit temperature vs Engine speed



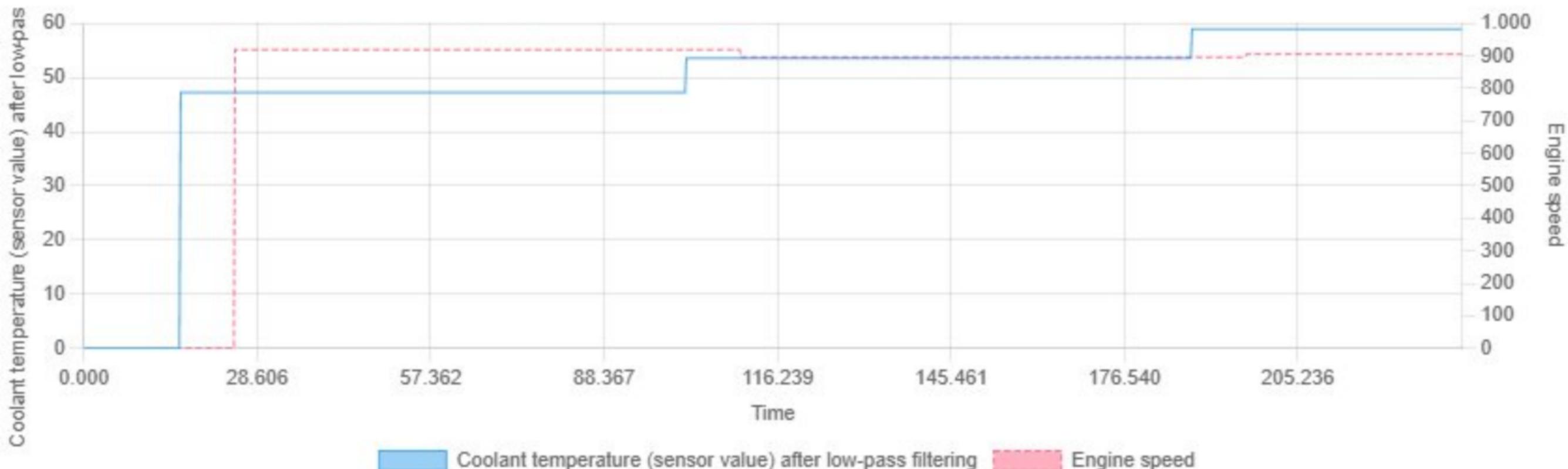
Min: 0.00 | Max: 51.00 | Avg: 46.68

## Coolant temperature vs Engine speed



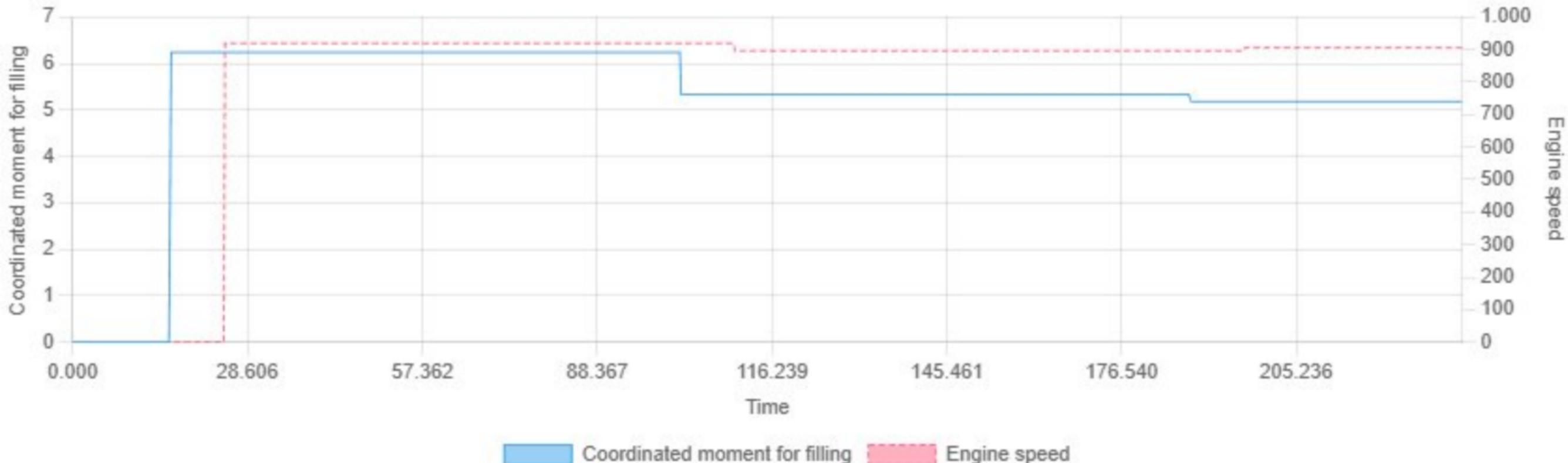
Min: 0.00 | Max: 58.96 | Avg: 48.60

## Coolant temperature (sensor value) after low-pass filtering vs Engine speed



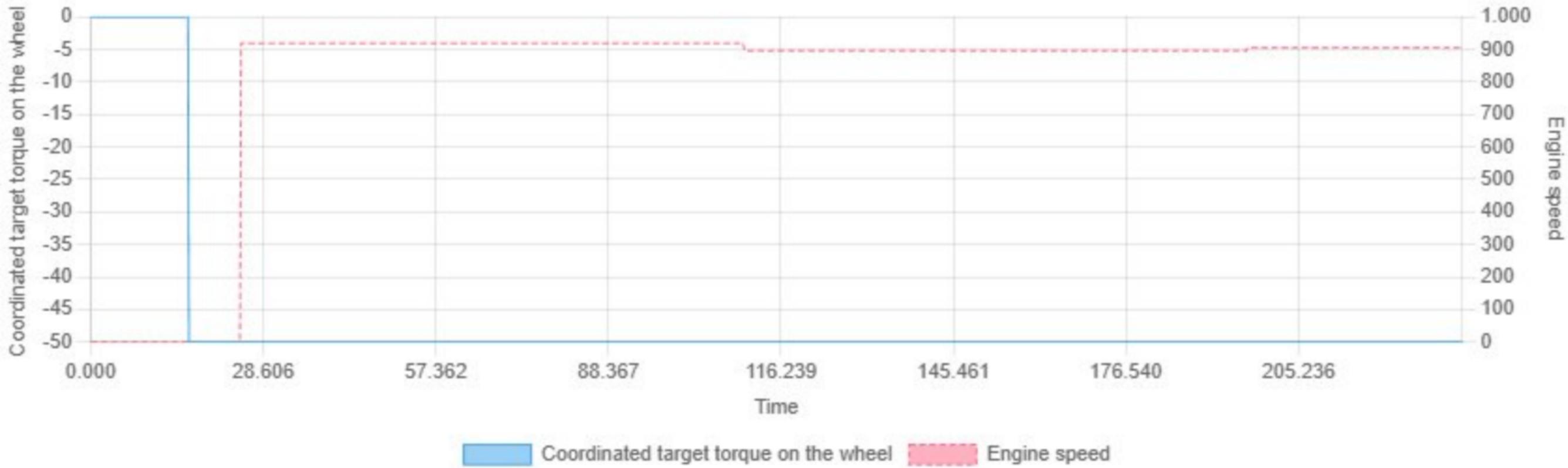
Min: 0.00 | Max: 58.96 | Avg: 48.56

## Coordinated moment for filling vs Engine speed



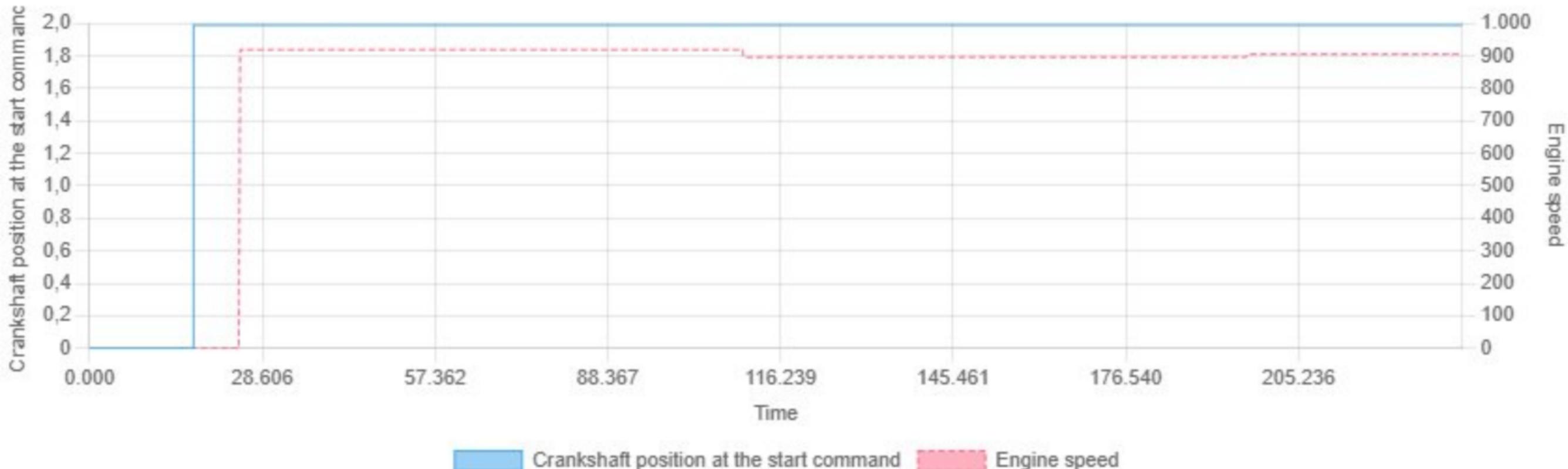
Min: 0.00 | Max: 6.24 | Avg: 5.26

## Coordinated target torque on the wheel vs Engine speed



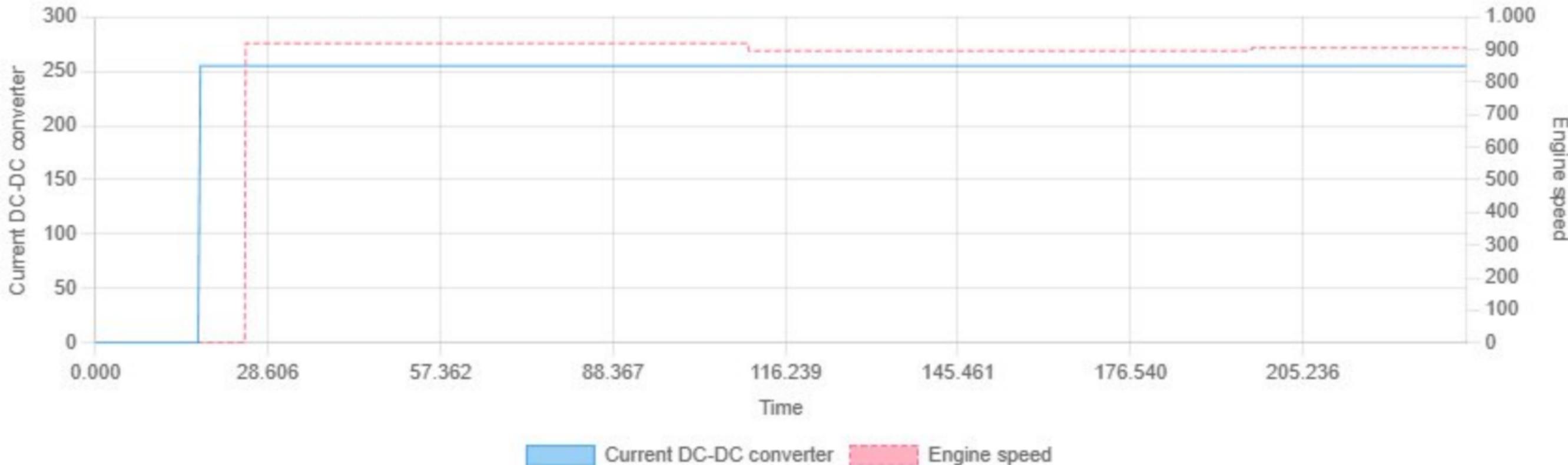
Min: -50.00 | Max: 0.00 | Avg: -46.41

## Crankshaft position at the start command vs Engine speed

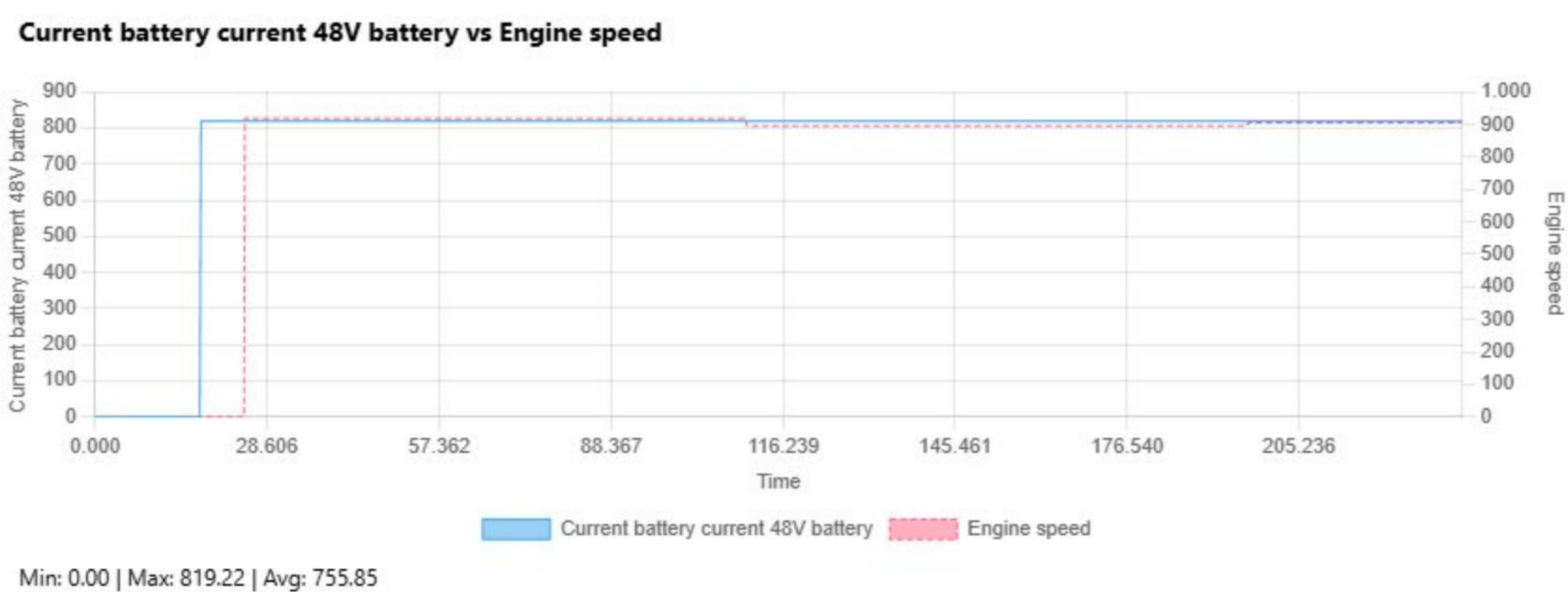


Min: 0.00 | Max: 1.99 | Avg: 1.84

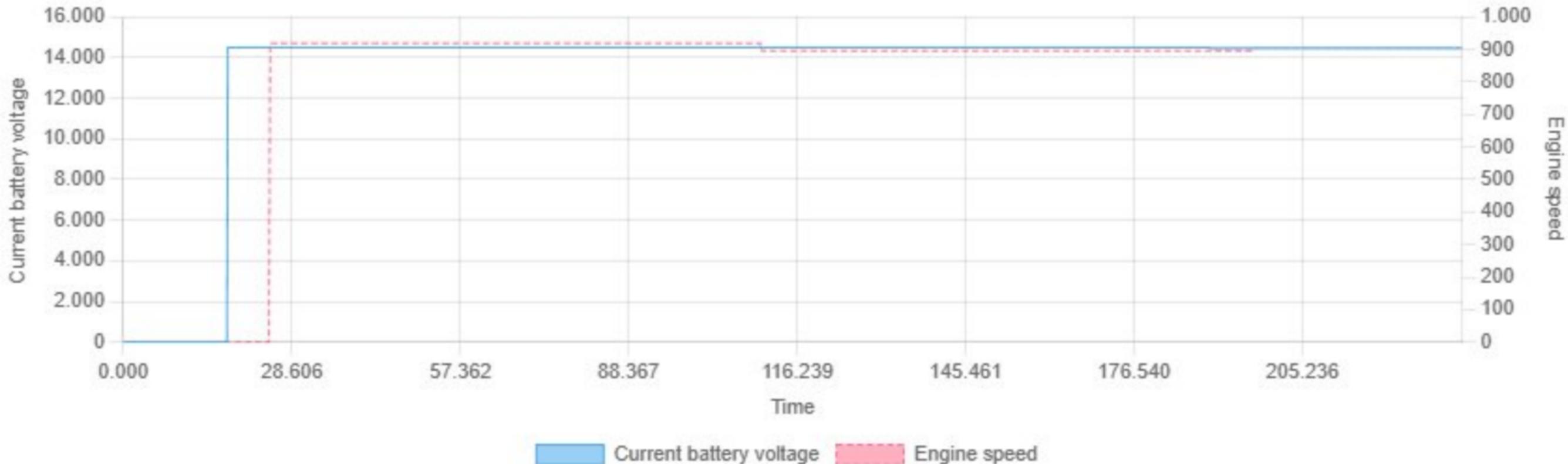
## Current DC-DC converter vs Engine speed



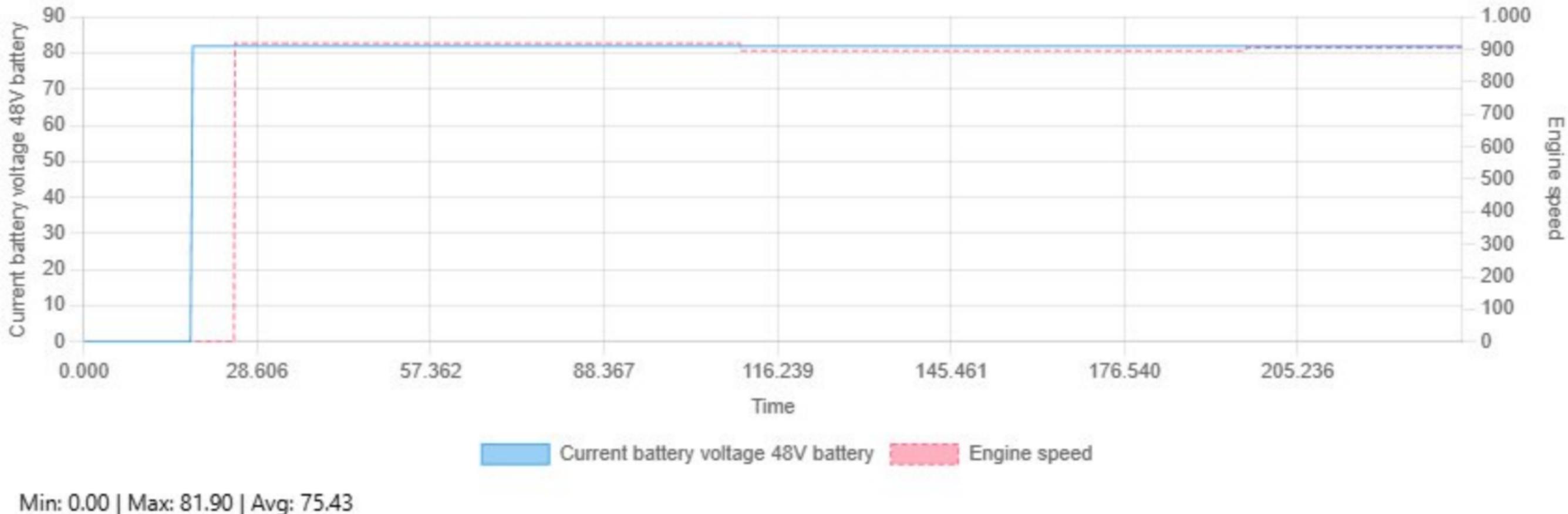
Min: 0.00 | Max: 255.00 | Avg: 235.48



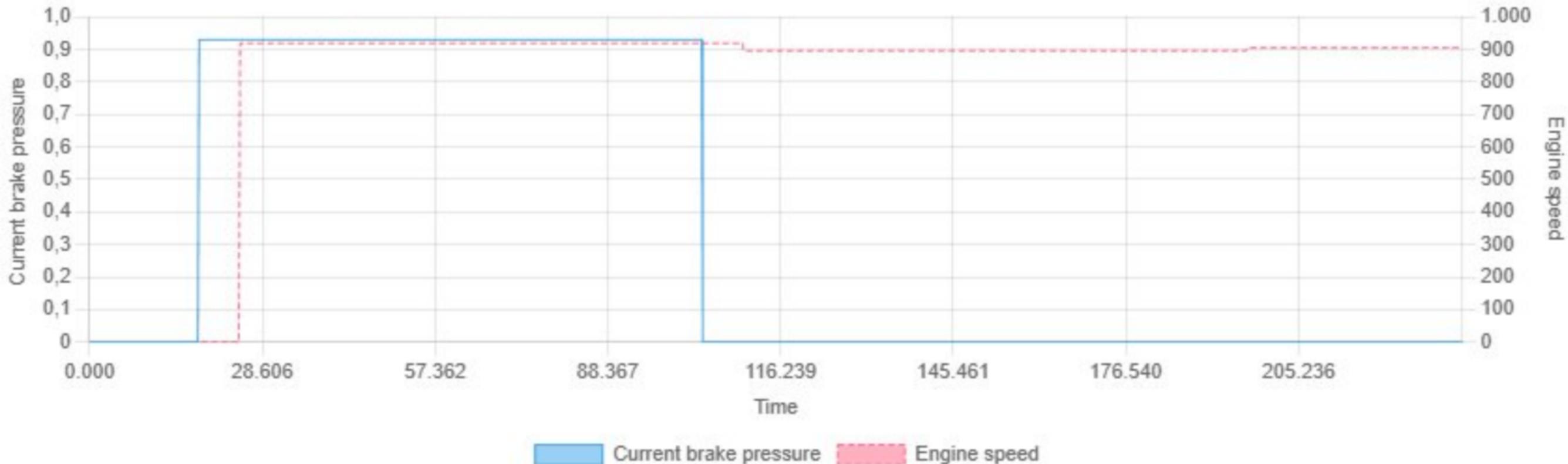
## Current battery voltage vs Engine speed



## Current battery voltage 48V battery vs Engine speed



## Current brake pressure vs Engine speed

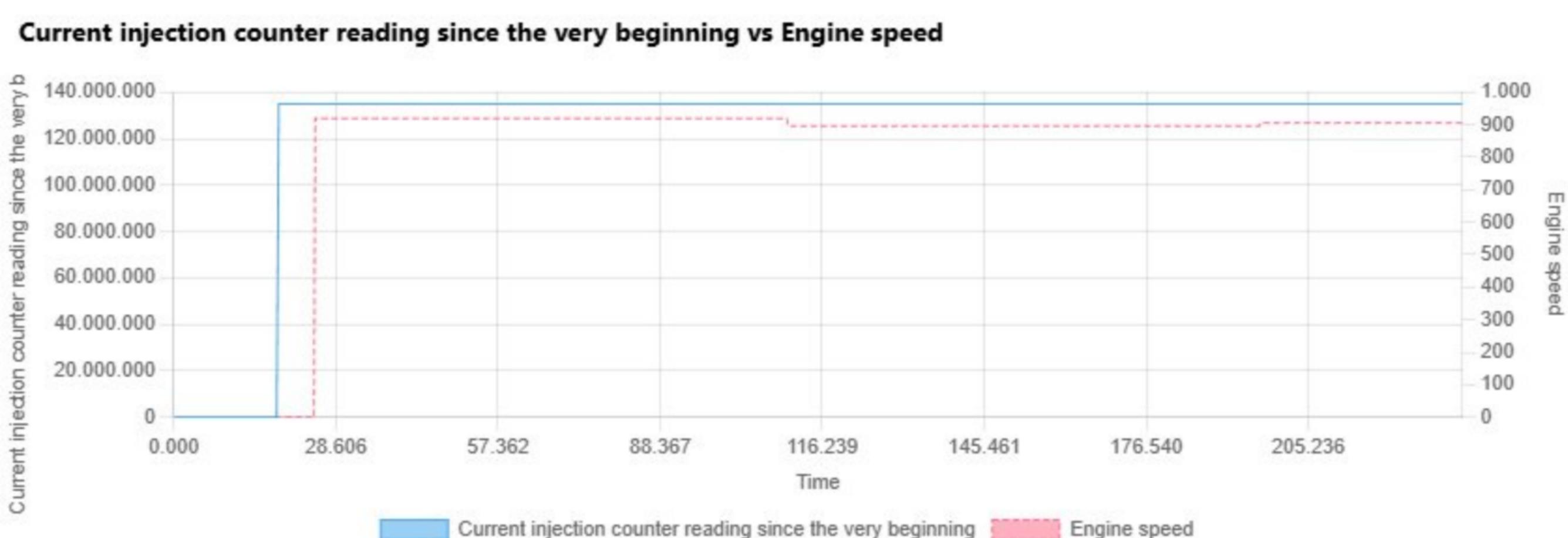


Min: 0.00 | Max: 0.93 | Avg: 0.34

## Current fuel viscosity vs Engine speed

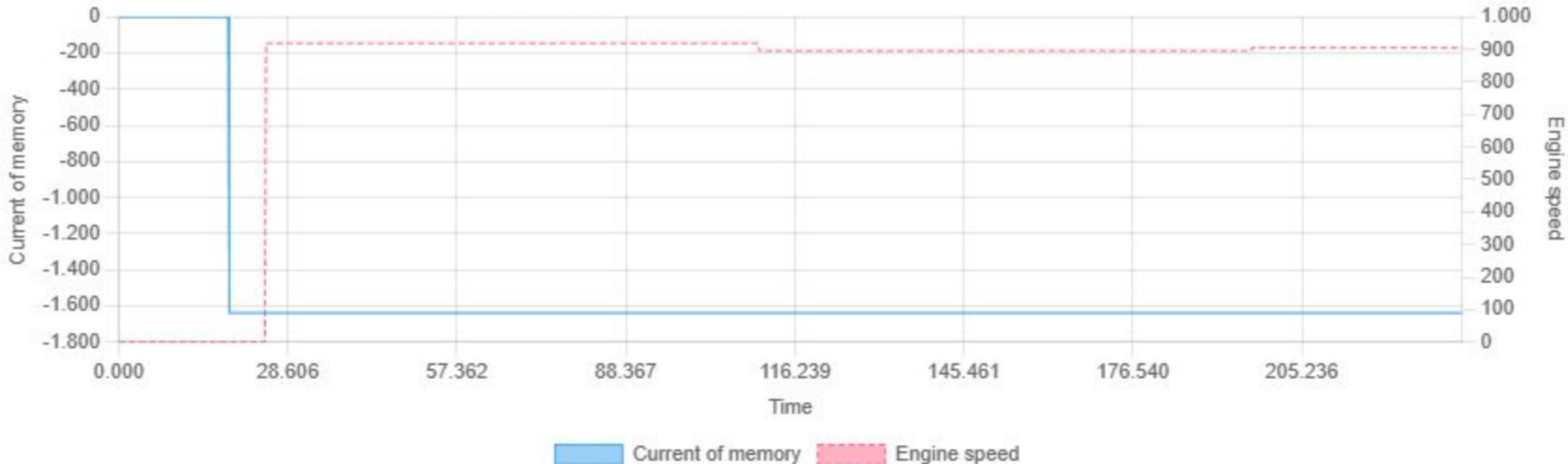


Min: 0.00 | Max: 0.34 | Avg: 0.29



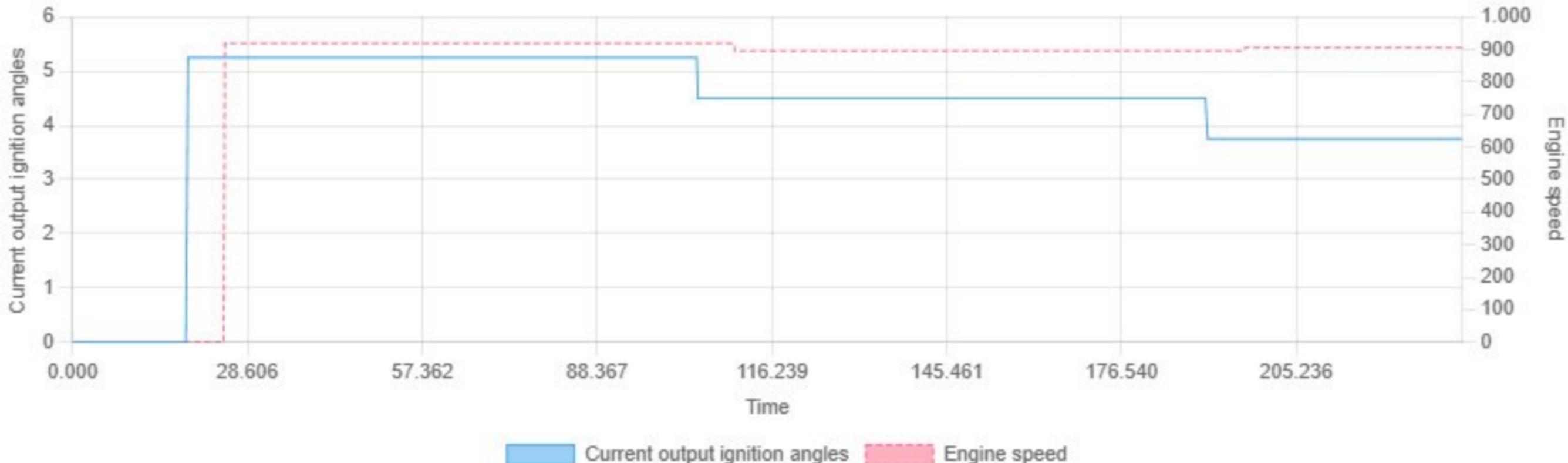
Min: 0.00 | Max: 134925584.00 | Avg: 123942374.47

## Current of memory vs Engine speed



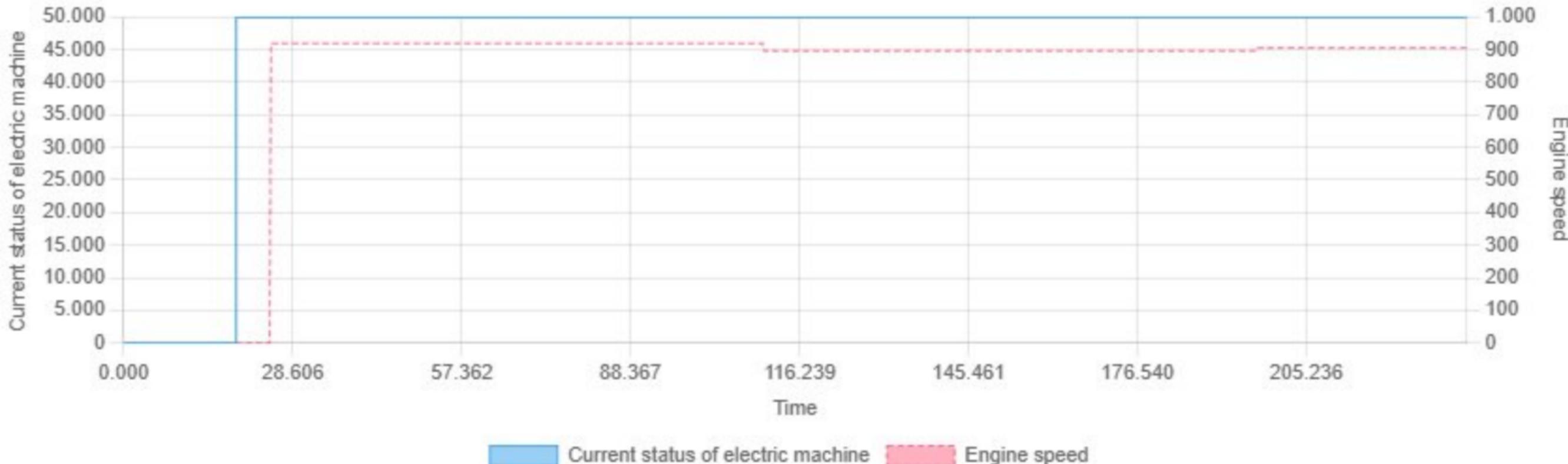
Min: -1638.35 | Max: 0.00 | Avg: -1503.69

## Current output ignition angles vs Engine speed

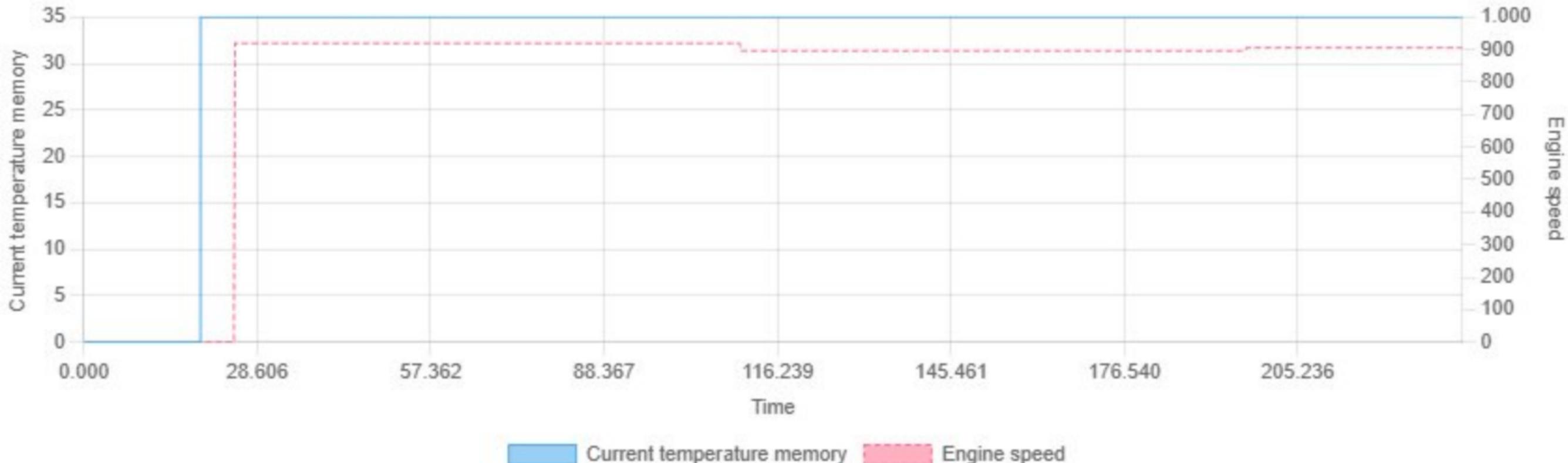


Min: 0.00 | Max: 5.25 | Avg: 4.26

## Current status of electric machine vs Engine speed

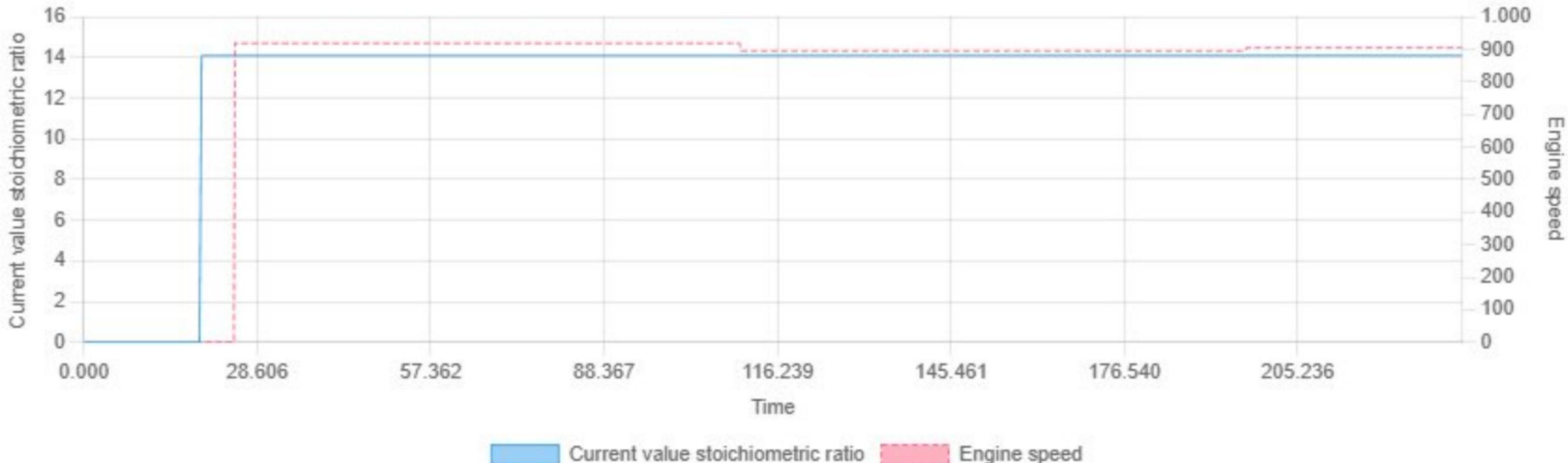


## Current temperature memory vs Engine speed

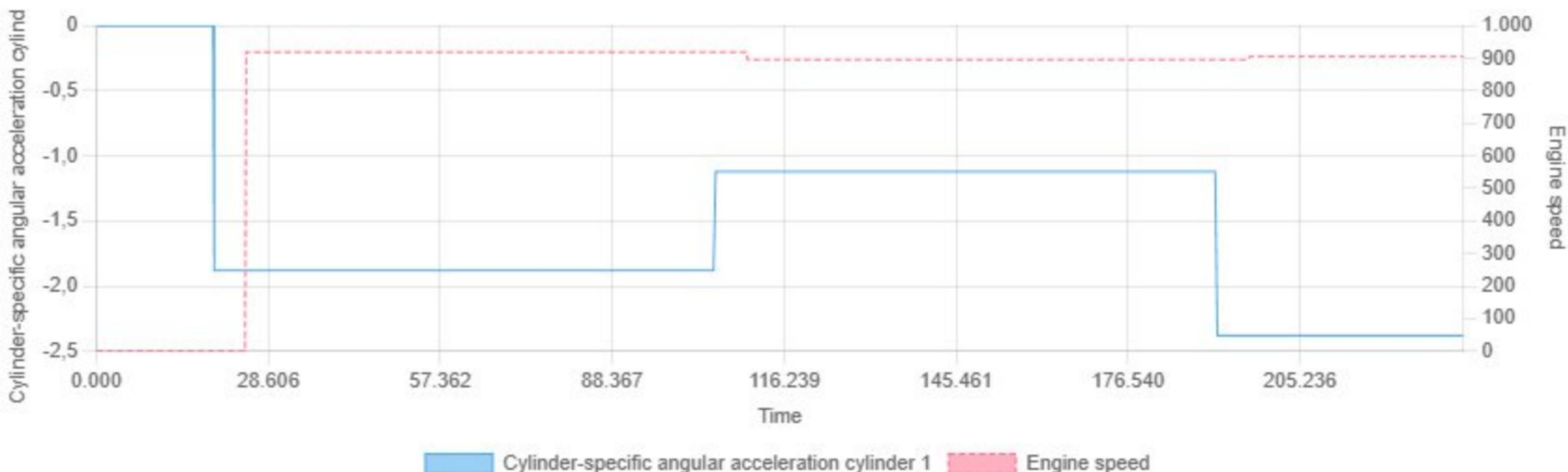


Min: 0.00 | Max: 35.00 | Avg: 32.04

## Current value stoichiometric ratio vs Engine speed

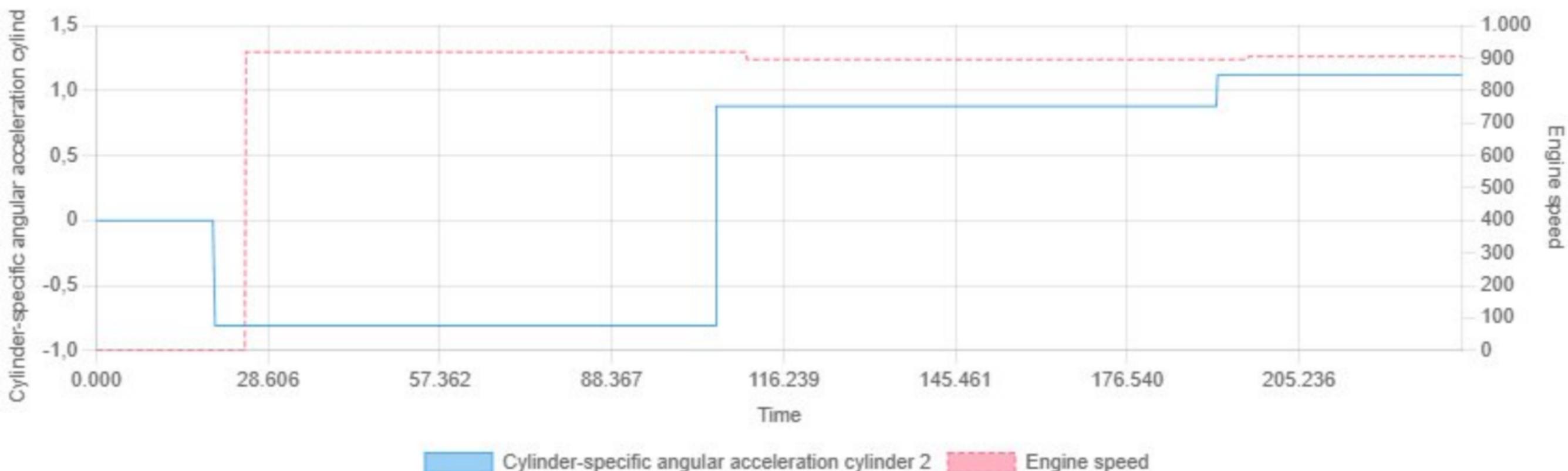


## Cylinder-specific angular acceleration cylinder 1 vs Engine speed



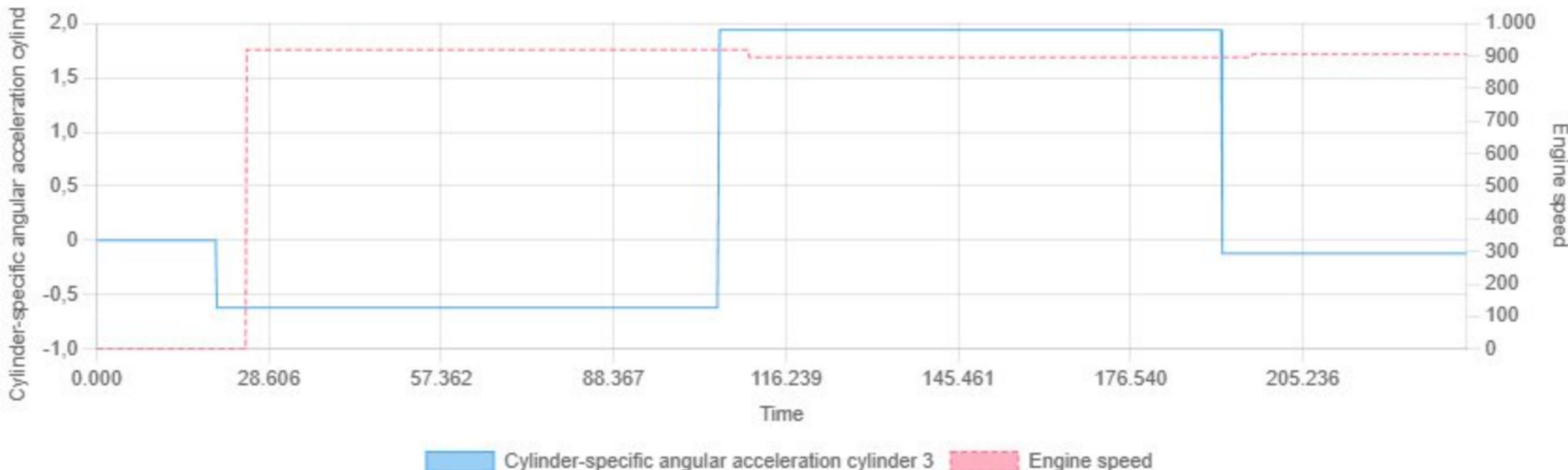
Min: -2.38 | Max: 0.00 | Avg: -1.53

## Cylinder-specific angular acceleration cylinder 2 vs Engine speed



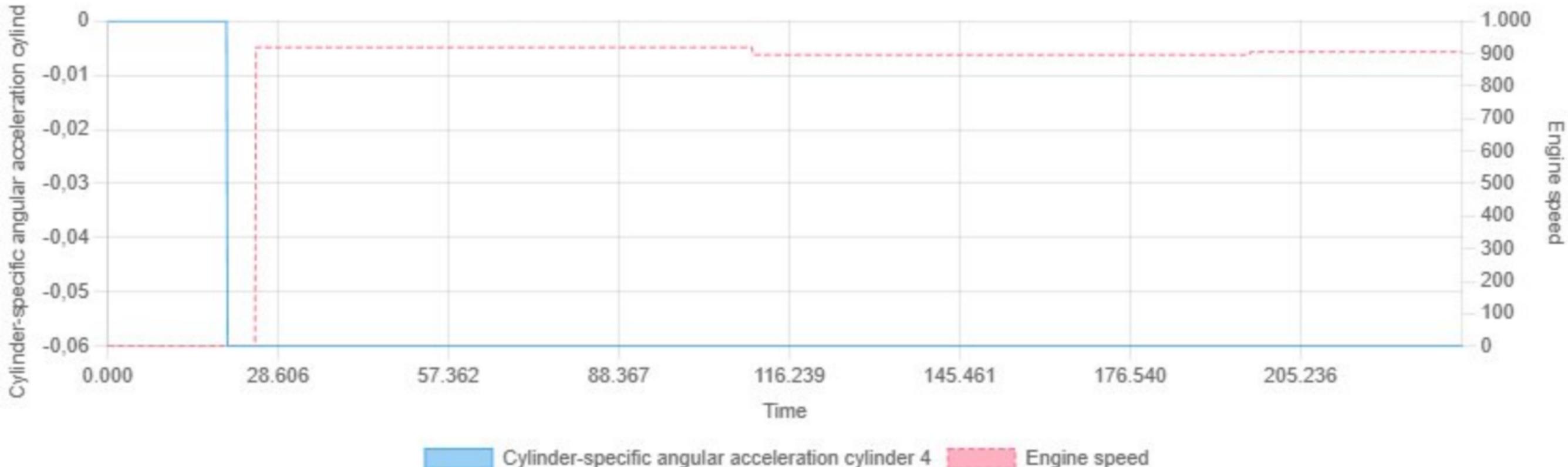
Min: -0.81 | Max: 1.12 | Avg: 0.23

## Cylinder-specific angular acceleration cylinder 3 vs Engine speed



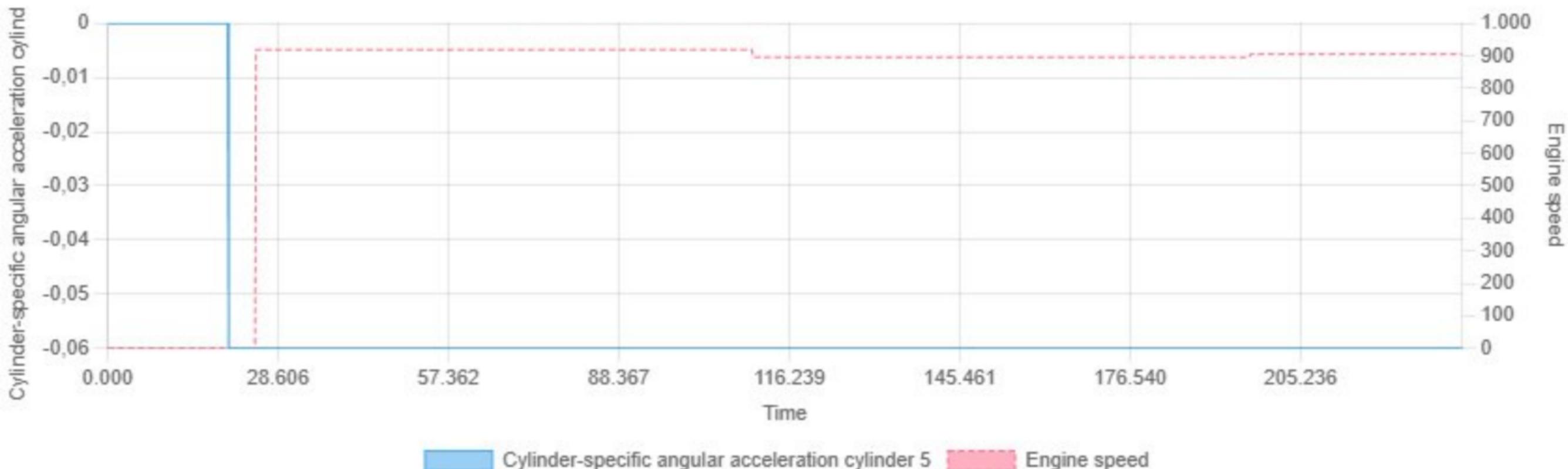
Min: -0.62 | Max: 1.94 | Avg: 0.46

## Cylinder-specific angular acceleration cylinder 4 vs Engine speed



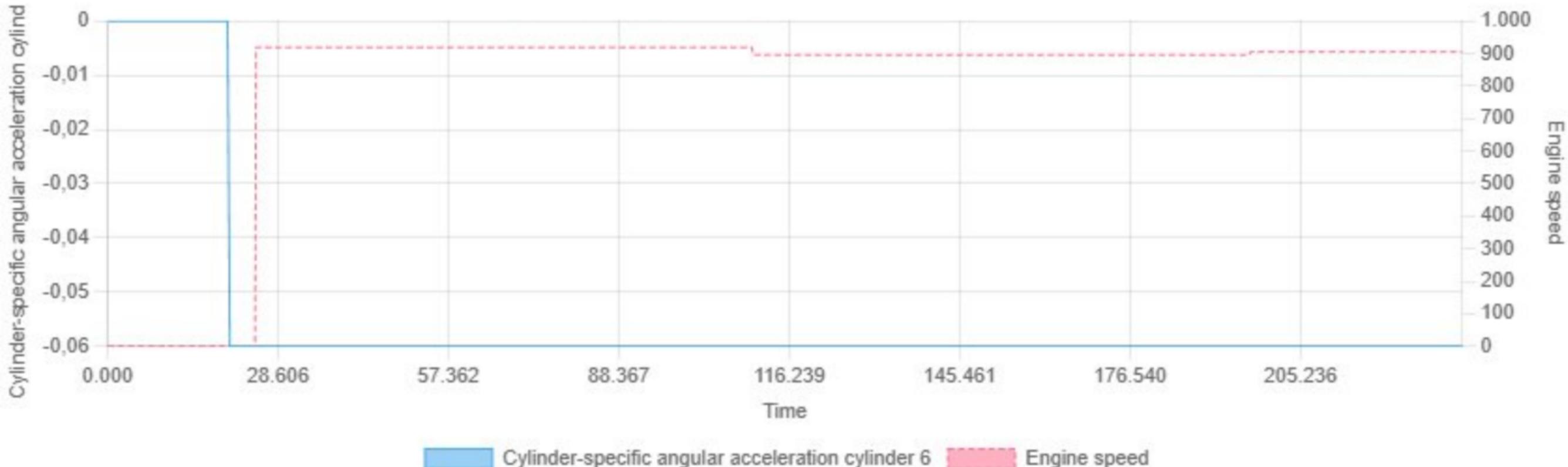
Min: -0.06 | Max: 0.00 | Avg: -0.05

## Cylinder-specific angular acceleration cylinder 5 vs Engine speed



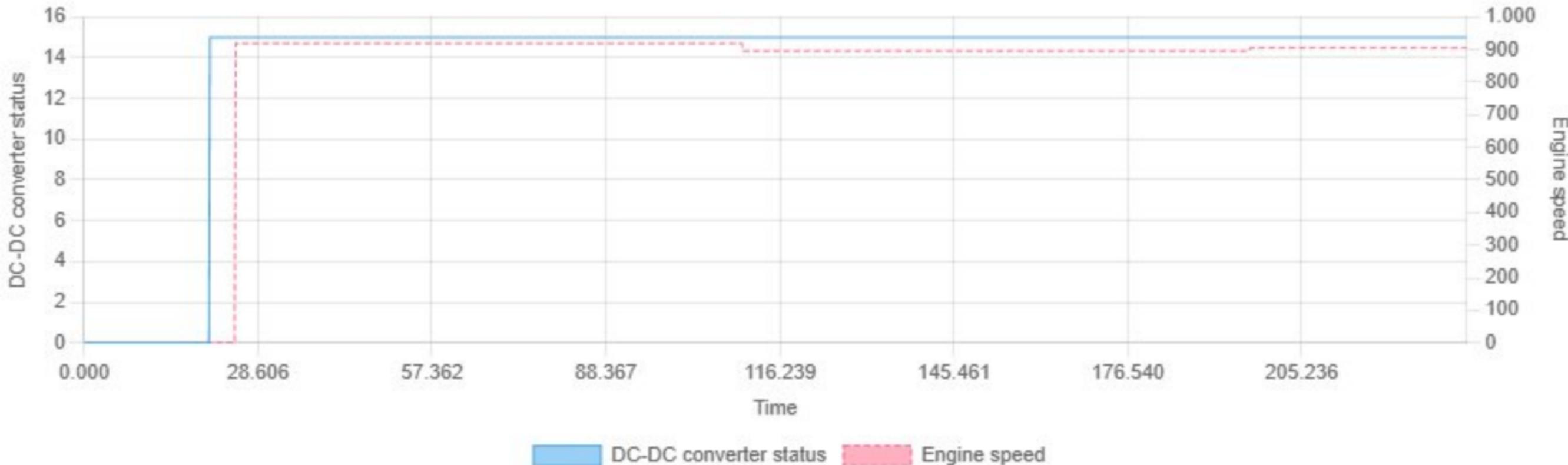
Min: -0.06 | Max: 0.00 | Avg: -0.05

## Cylinder-specific angular acceleration cylinder 6 vs Engine speed



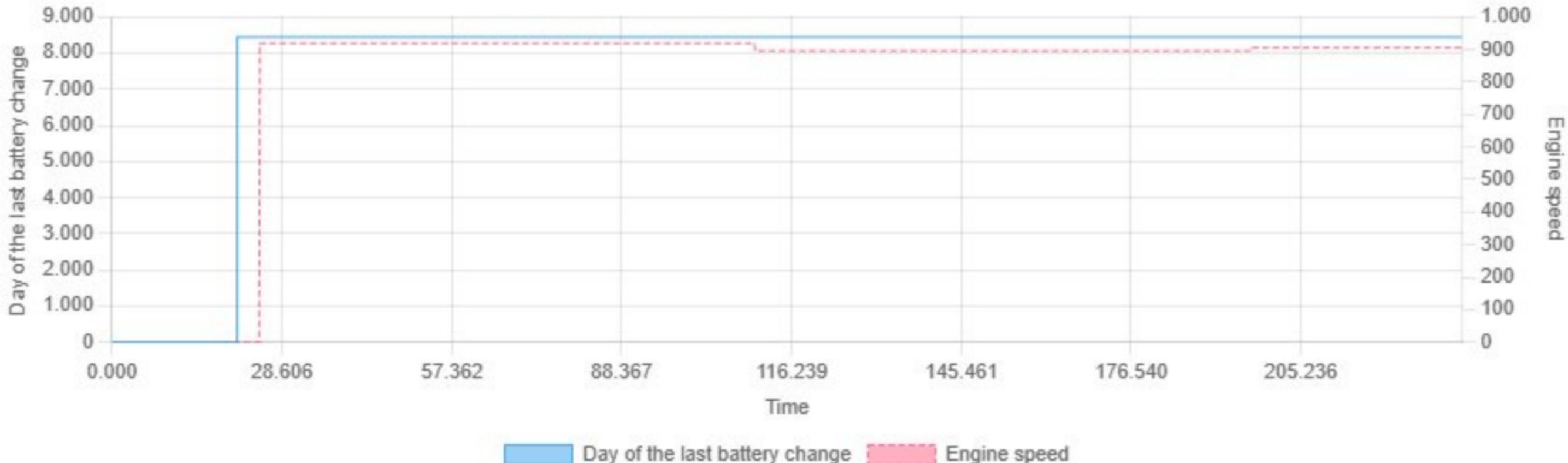
Min: -0.06 | Max: 0.00 | Avg: -0.05

## DC-DC converter status vs Engine speed



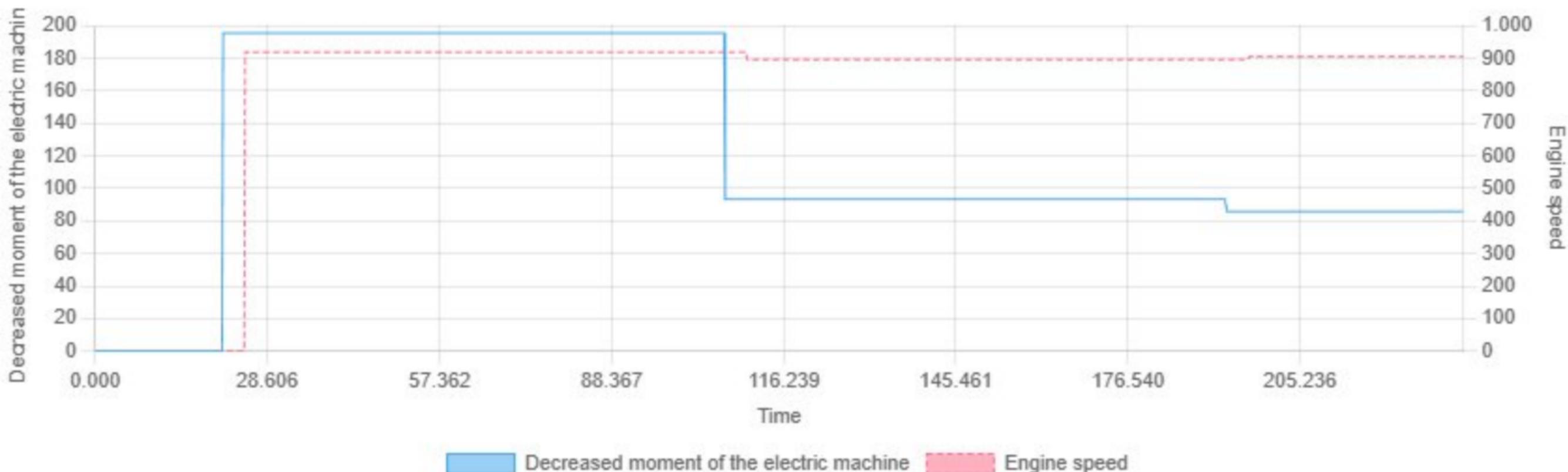
Min: 0.00 | Max: 15.00 | Avg: 13.63

## Day of the last battery change vs Engine speed



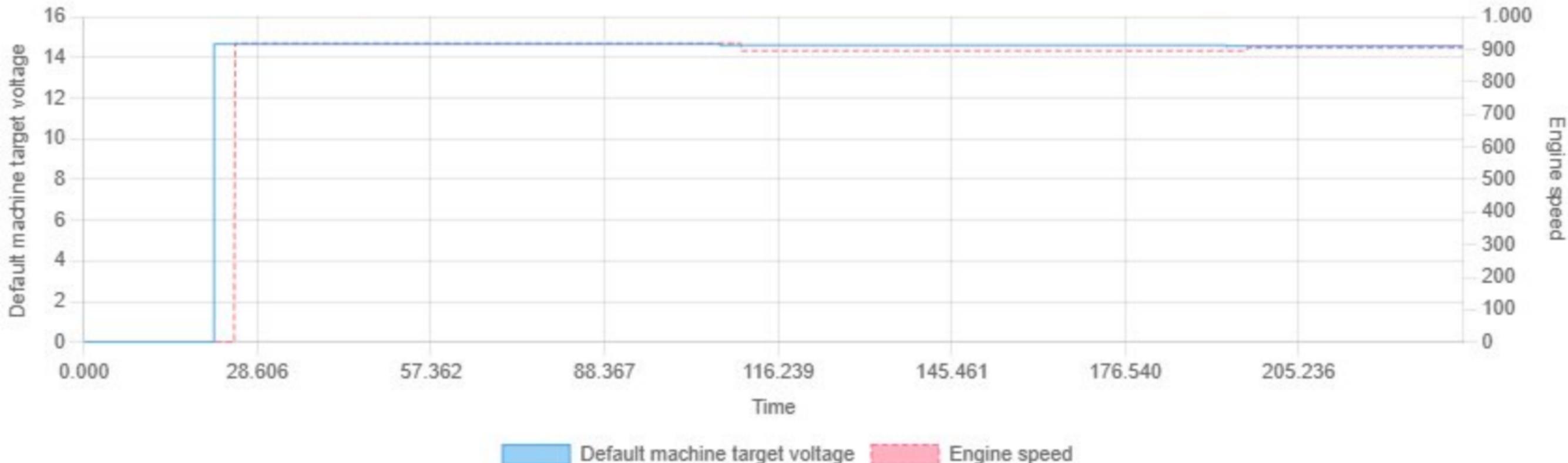
Min: 0.00 | Max: 8441.00 | Avg: 7658.80

## Decreased moment of the electric machine vs Engine speed



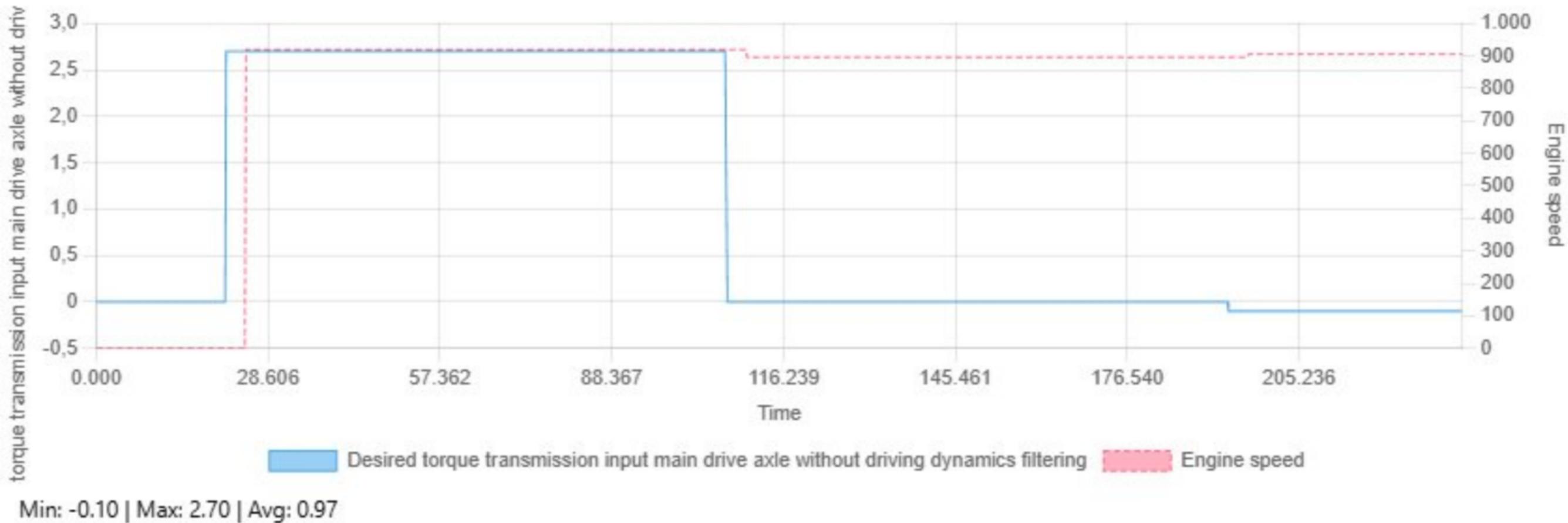
Min: 0.00 | Max: 195.50 | Avg: 120.80

## Default machine target voltage vs Engine speed

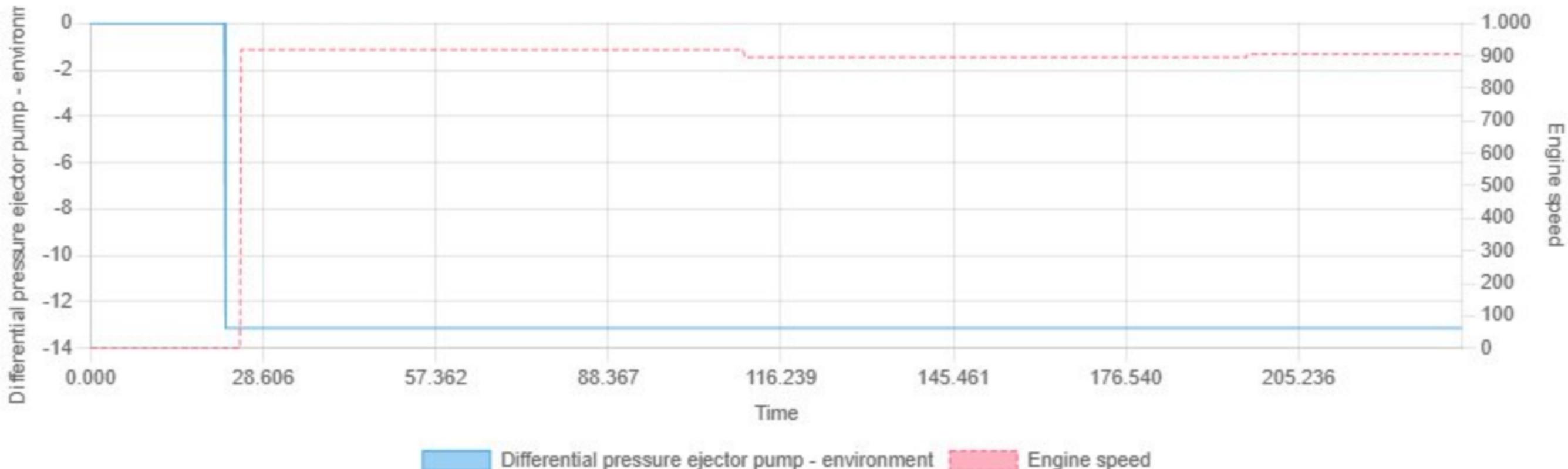


Min: 0.00 | Max: 14.66 | Avg: 13.25

## Desired torque transmission input main drive axle without driving dynamics filtering vs Engine speed

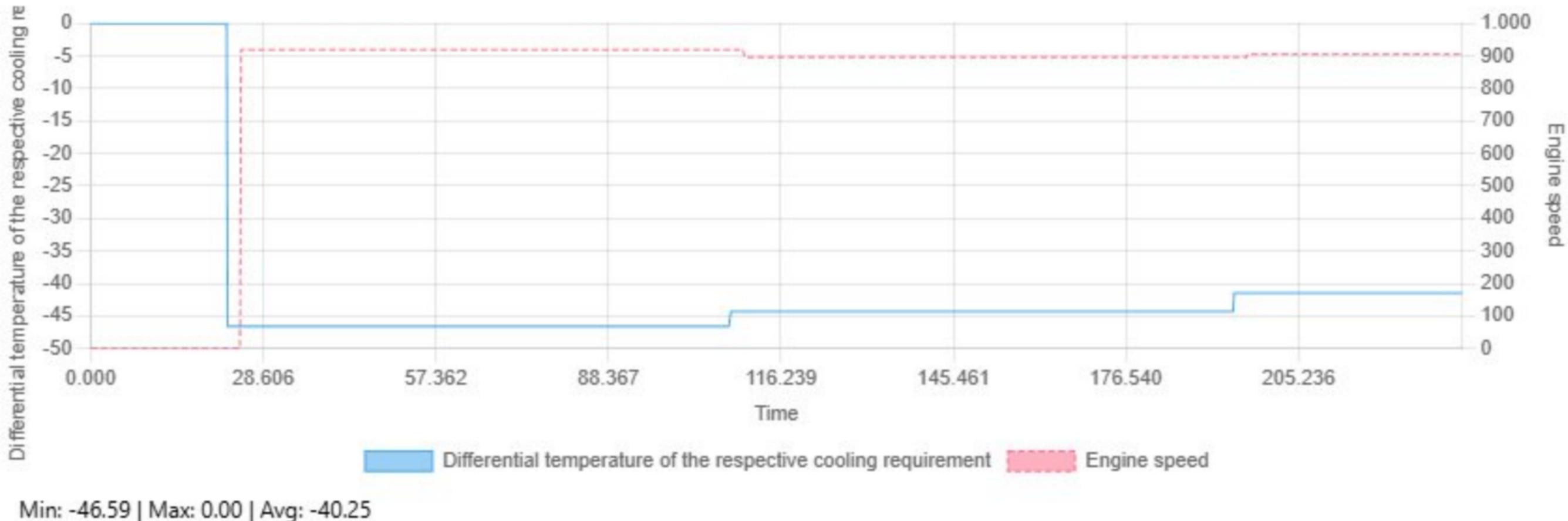


## Differential pressure ejector pump - environment vs Engine speed

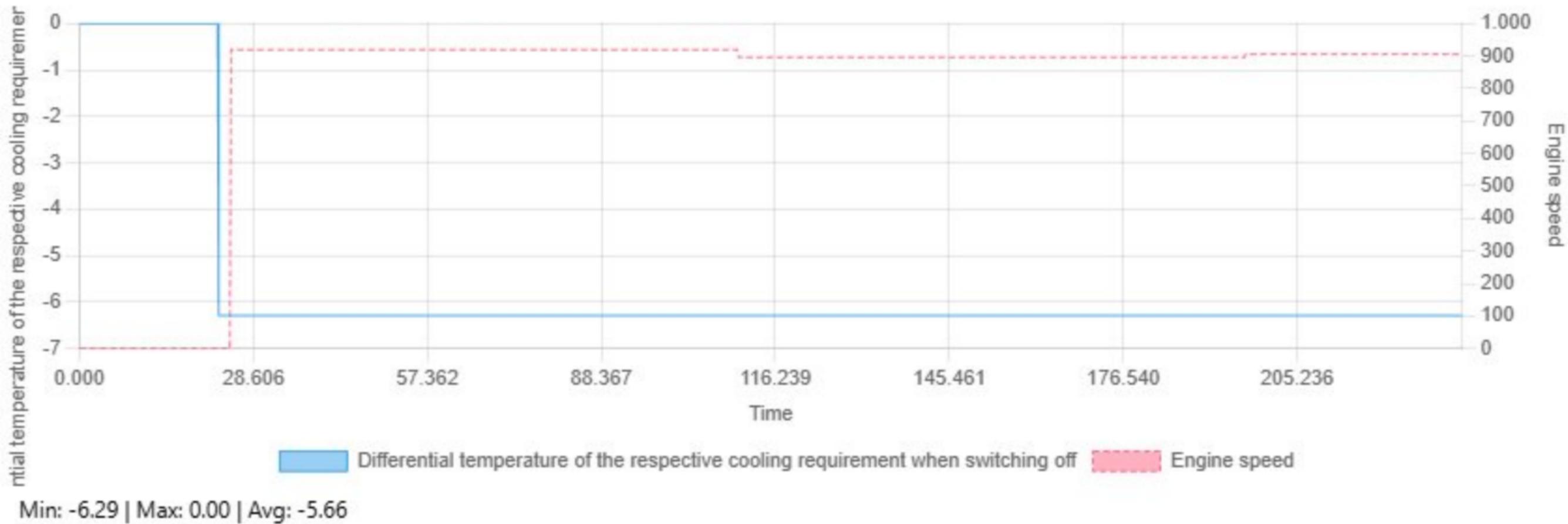


Min: -13.13 | Max: 0.00 | Avg: -11.84

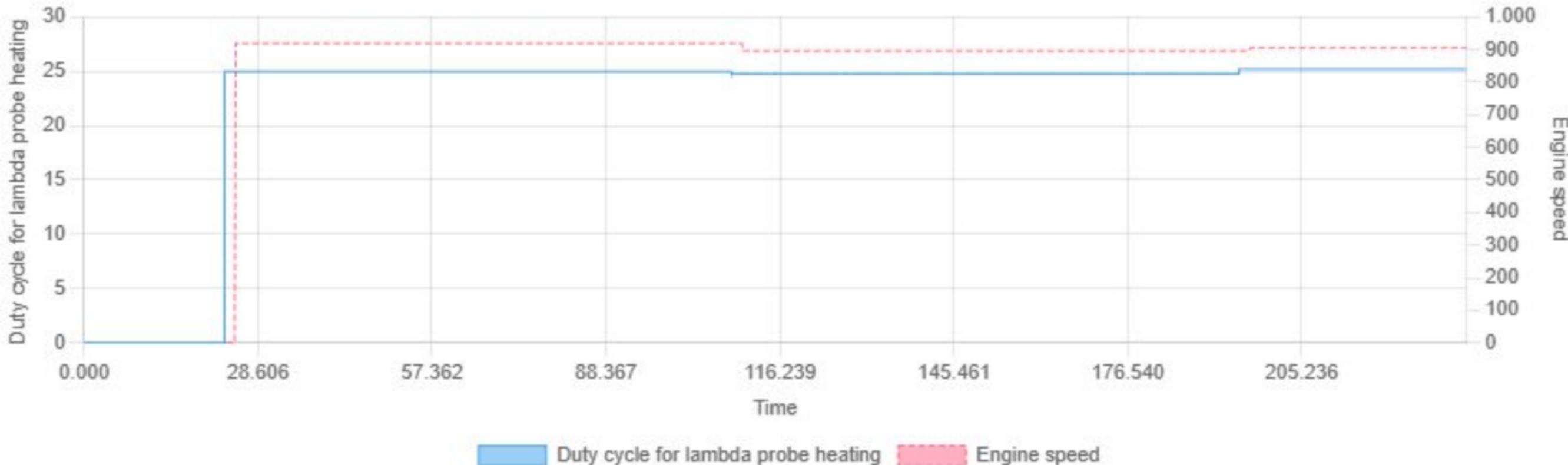
## Differential temperature of the respective cooling requirement vs Engine speed



## Differential temperature of the respective cooling requirement when switching off vs Engine speed

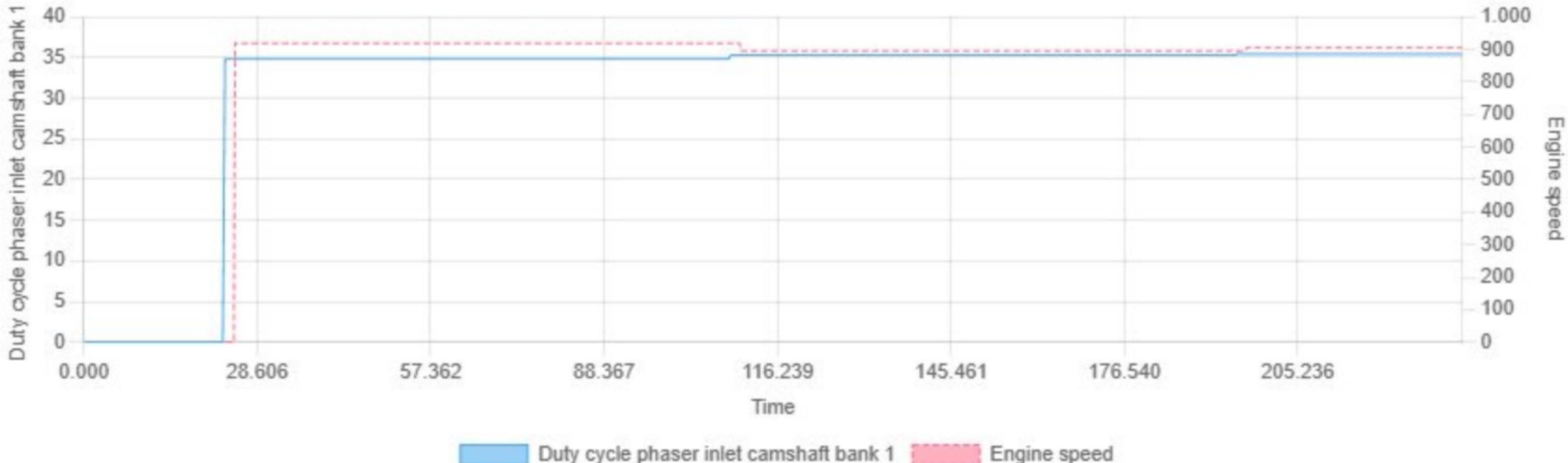


## Duty cycle for lambda probe heating vs Engine speed

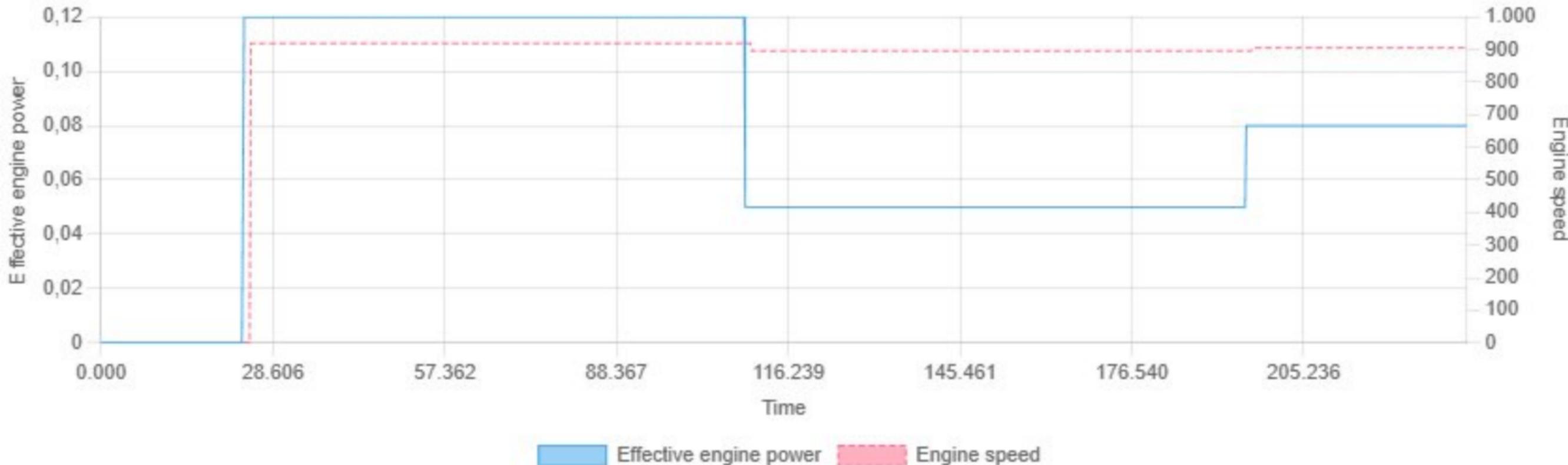


Min: 0.00 | Max: 25.20 | Avg: 22.40

## Duty cycle phaser inlet camshaft bank 1 vs Engine speed

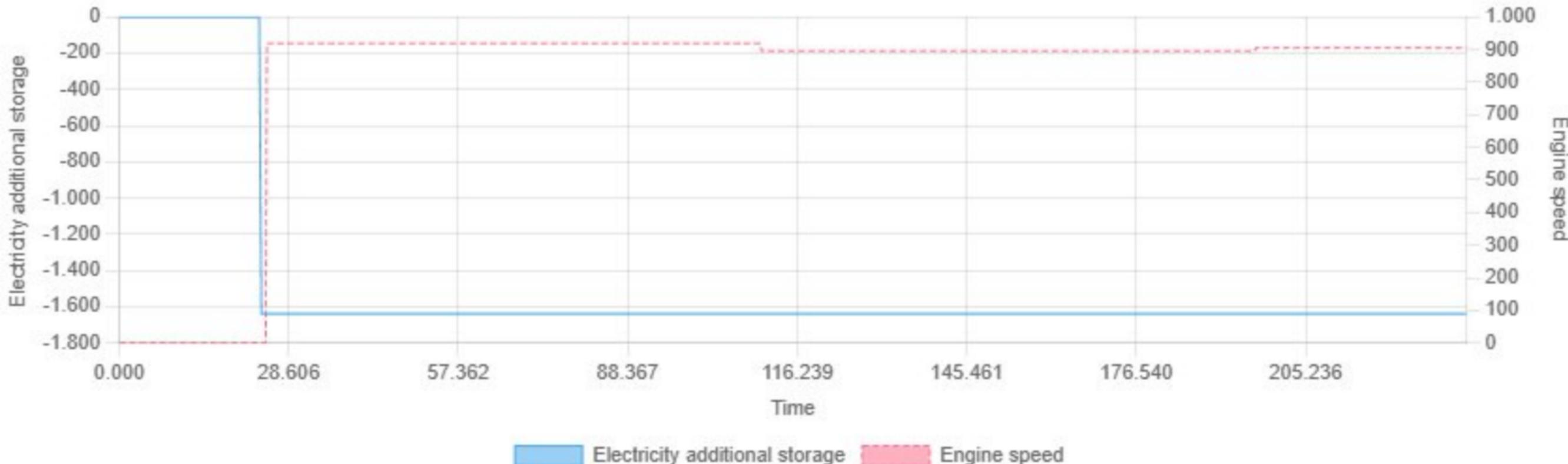


## Effective engine power vs Engine speed

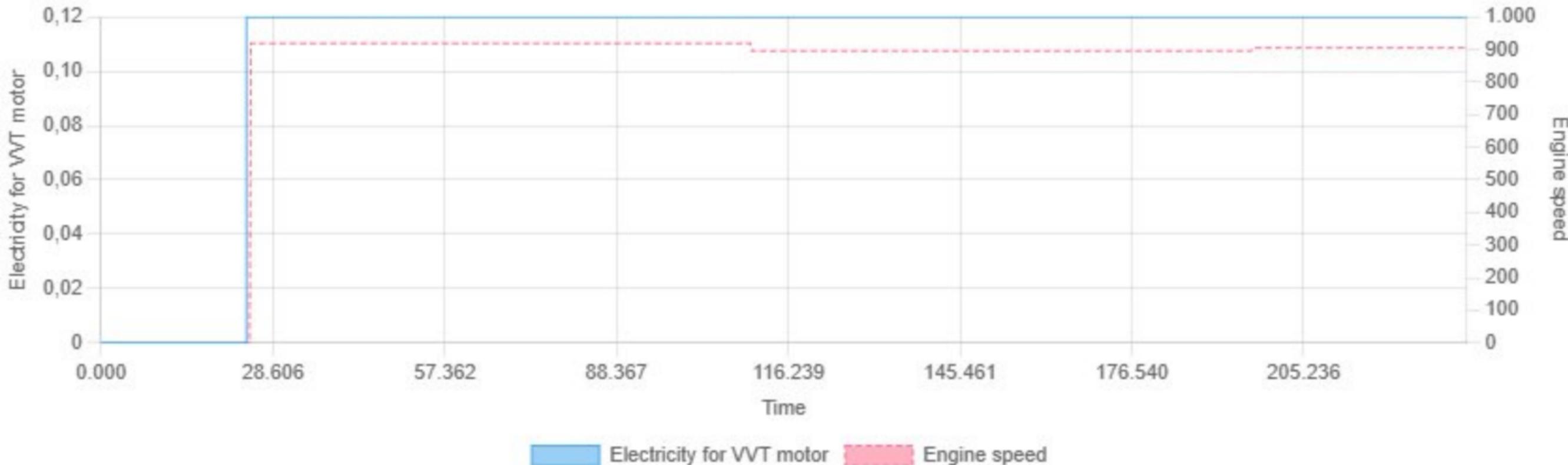


Min: 0.00 | Max: 0.12 | Avg: 0.08

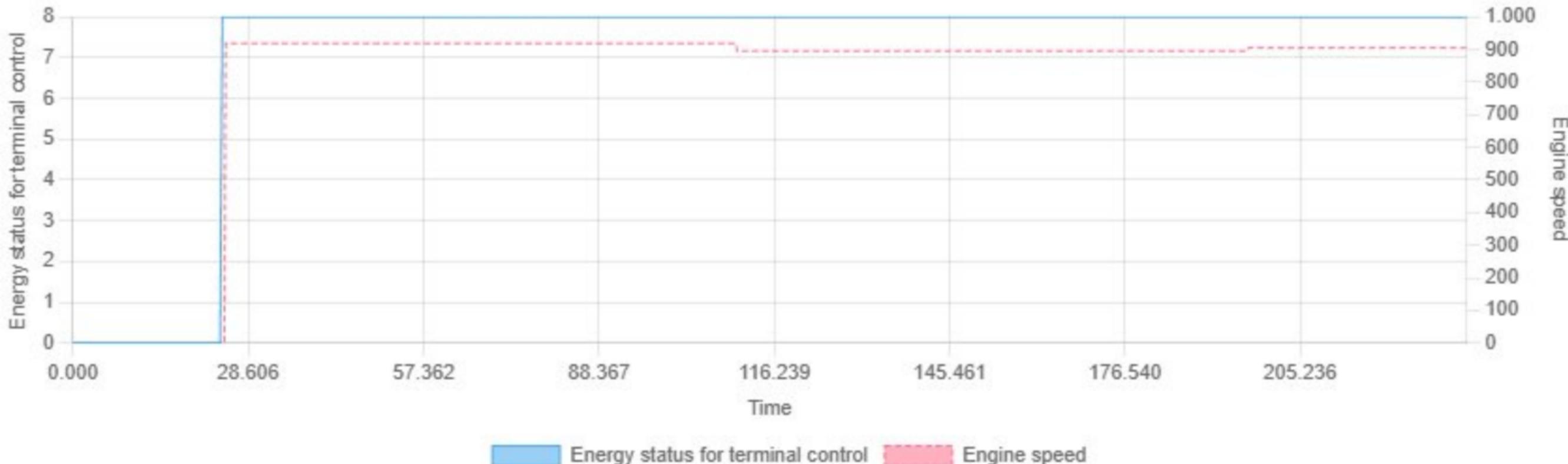
## Electricity additional storage vs Engine speed



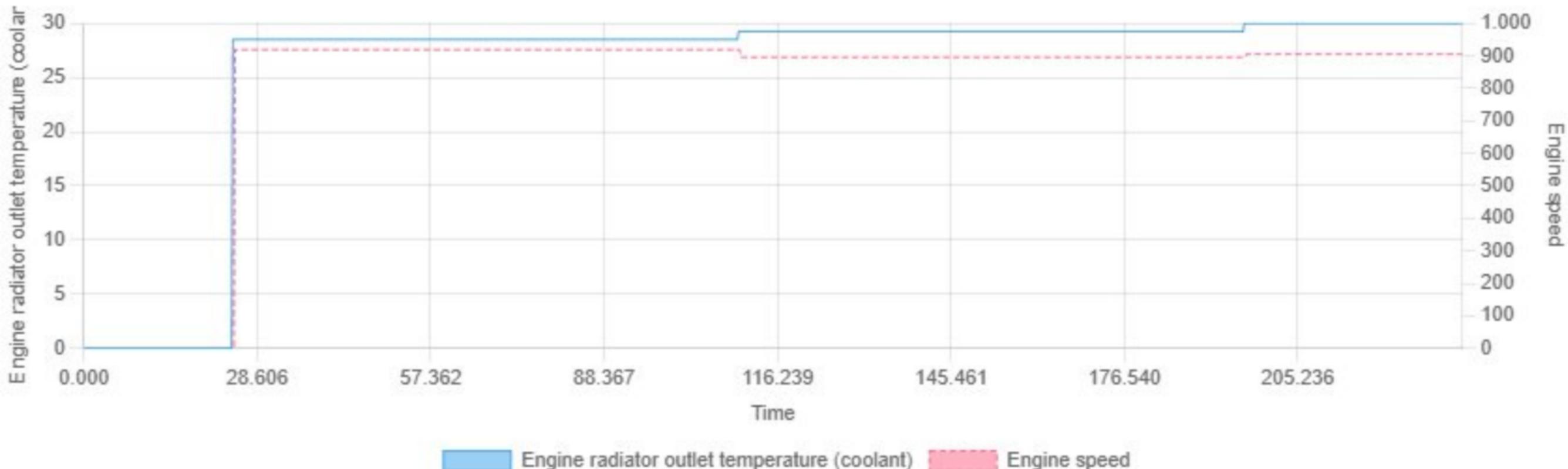
## Electricity for VVT motor vs Engine speed



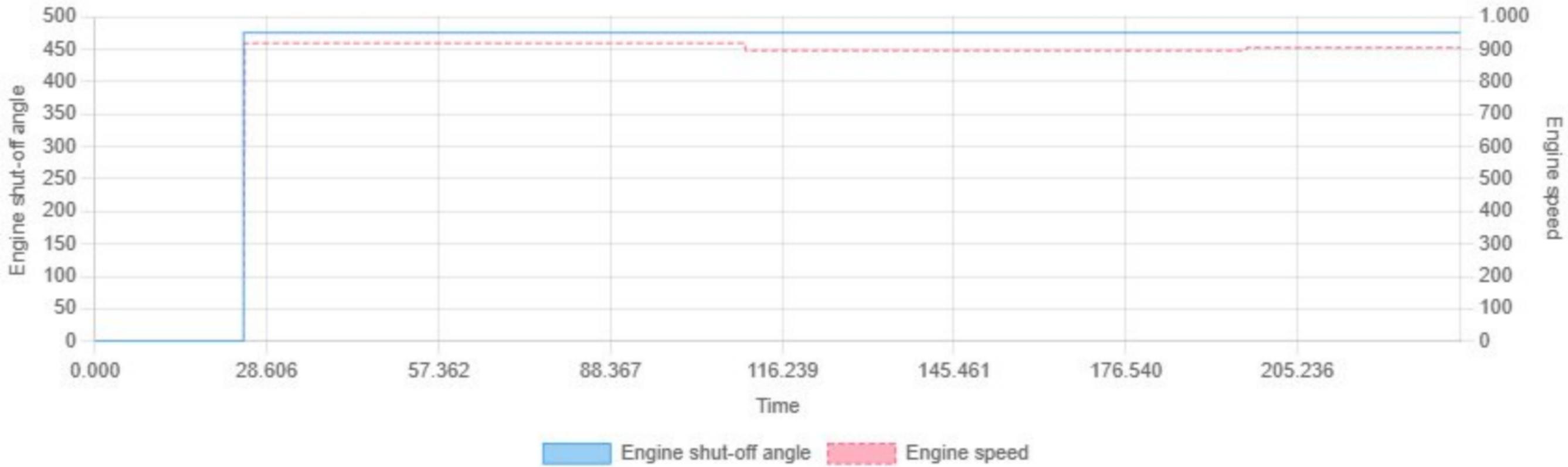
## Energy status for terminal control vs Engine speed



## Engine radiator outlet temperature (coolant) vs Engine speed

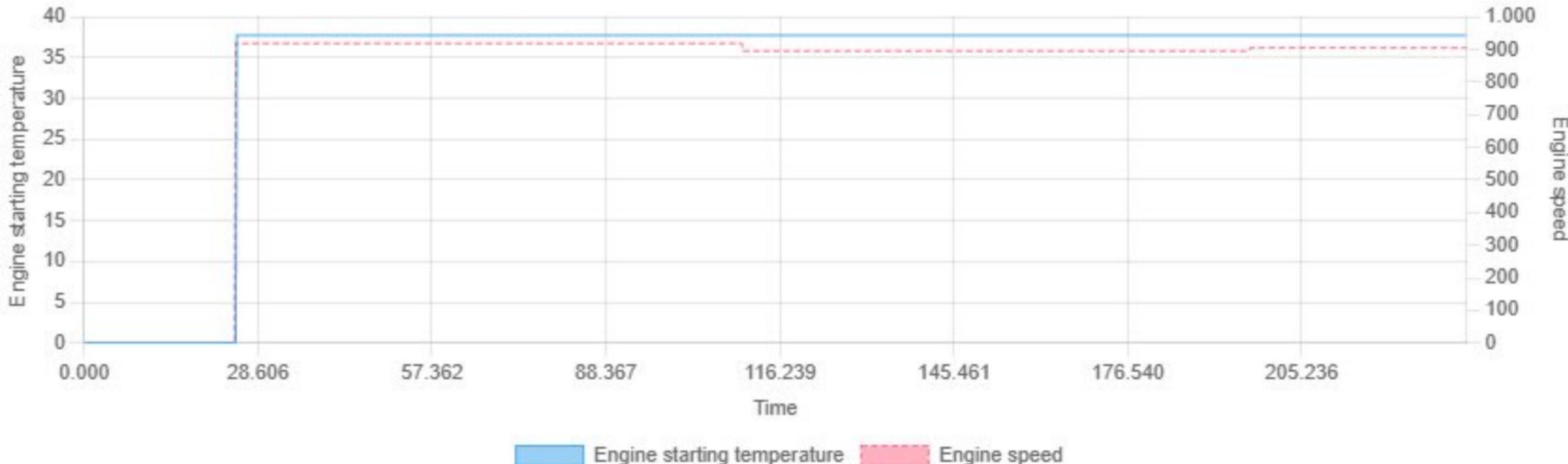


## Engine shut-off angle vs Engine speed



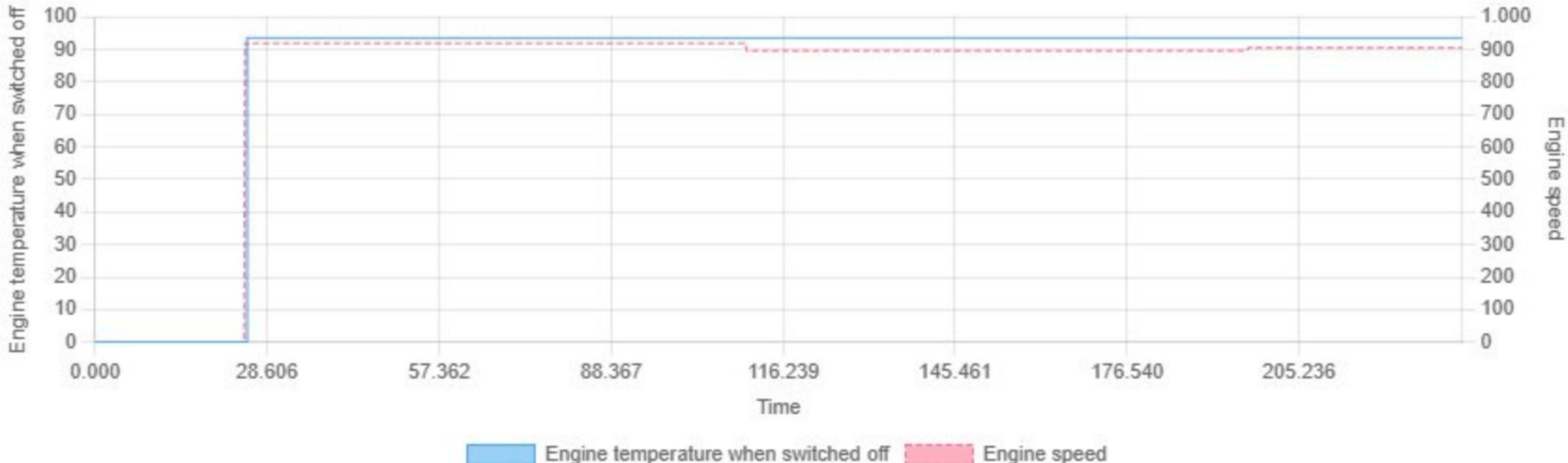
Min: 0.00 | Max: 475.51 | Avg: 423.78

## Engine starting temperature vs Engine speed



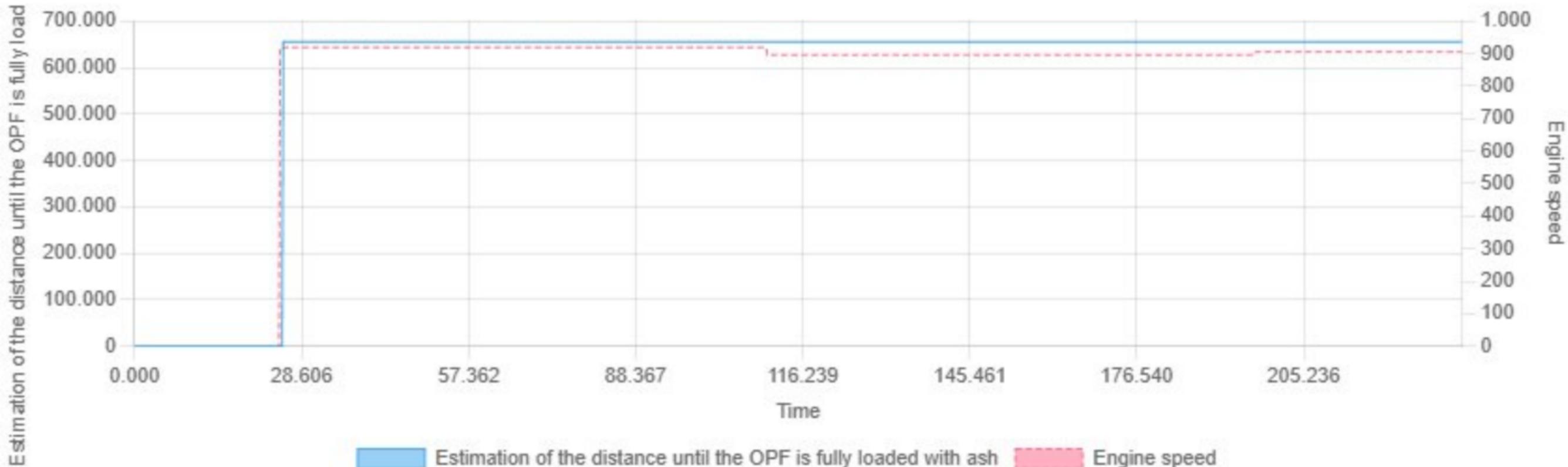
Min: 0.00 | Max: 37.76 | Avg: 33.59

## Engine temperature when switched off vs Engine speed

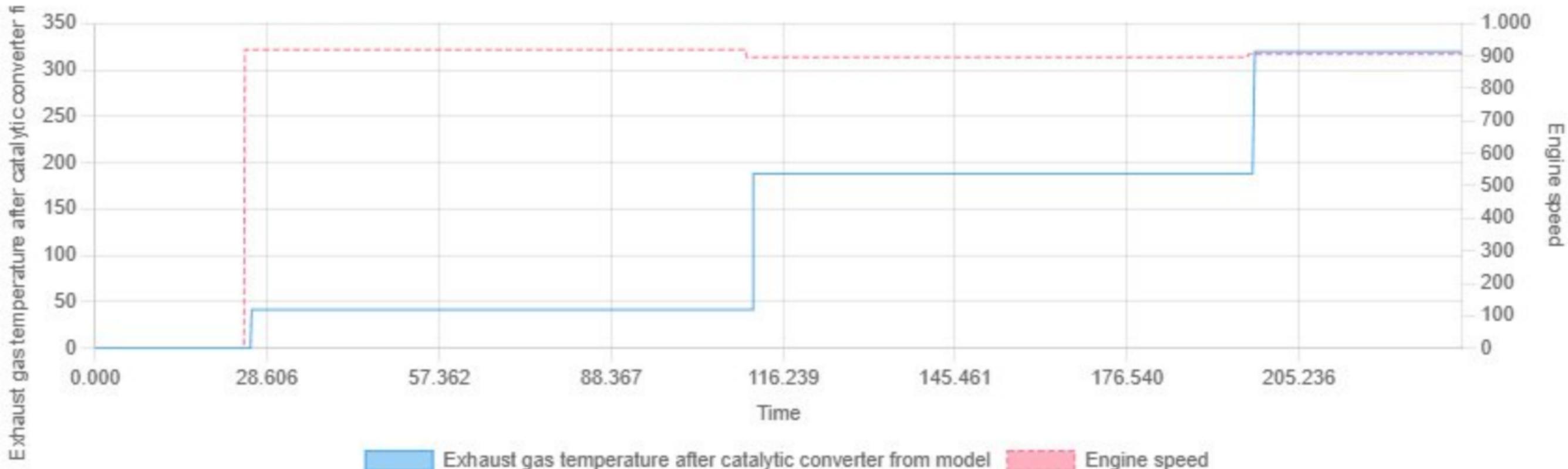


Min: 0.00 | Max: 93.56 | Avg: 83.16

## Estimation of the distance until the OPF is fully loaded with ash vs Engine speed

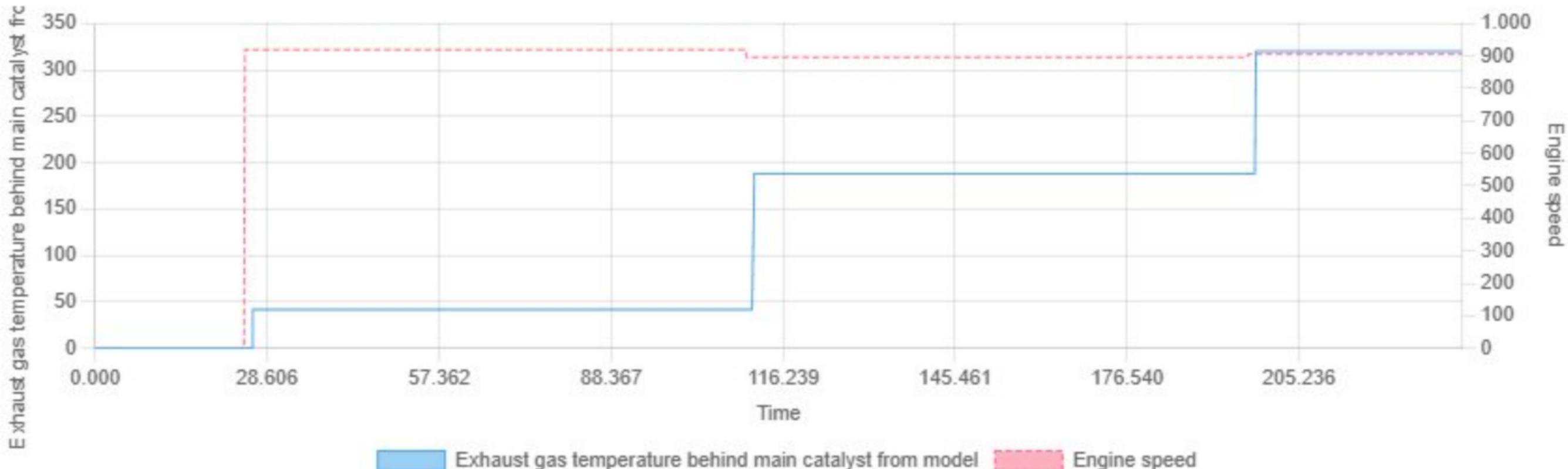


## Exhaust gas temperature after catalytic converter from model vs Engine speed

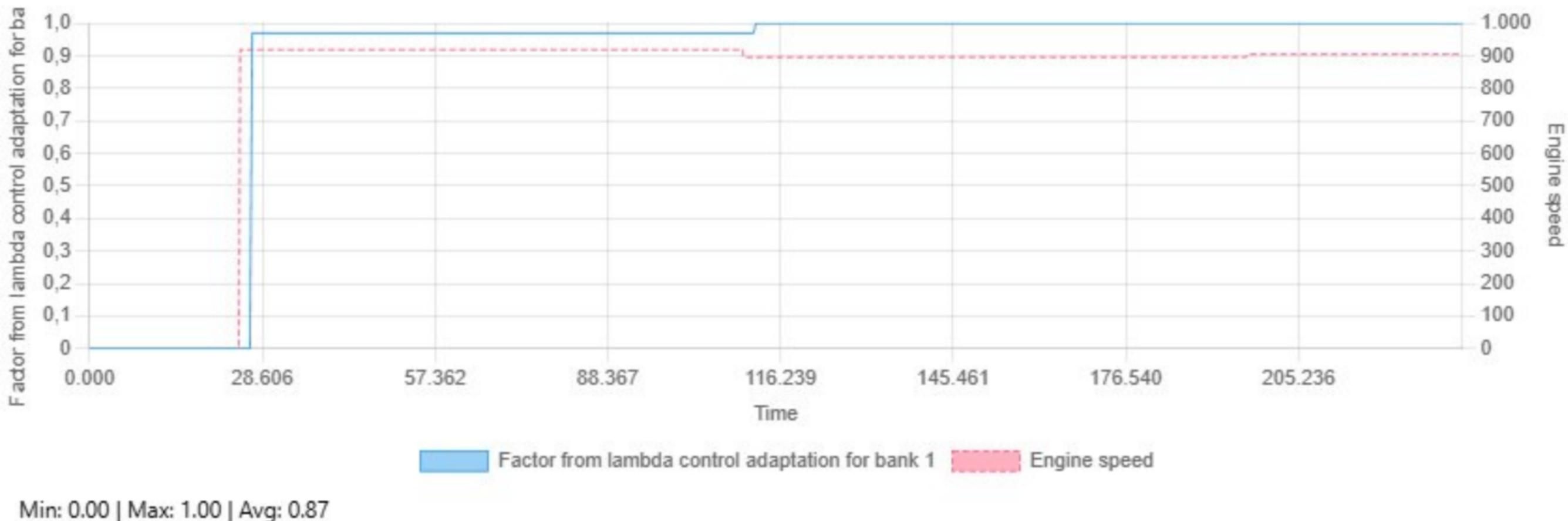


Min: 0.00 | Max: 319.76 | Avg: 132.92

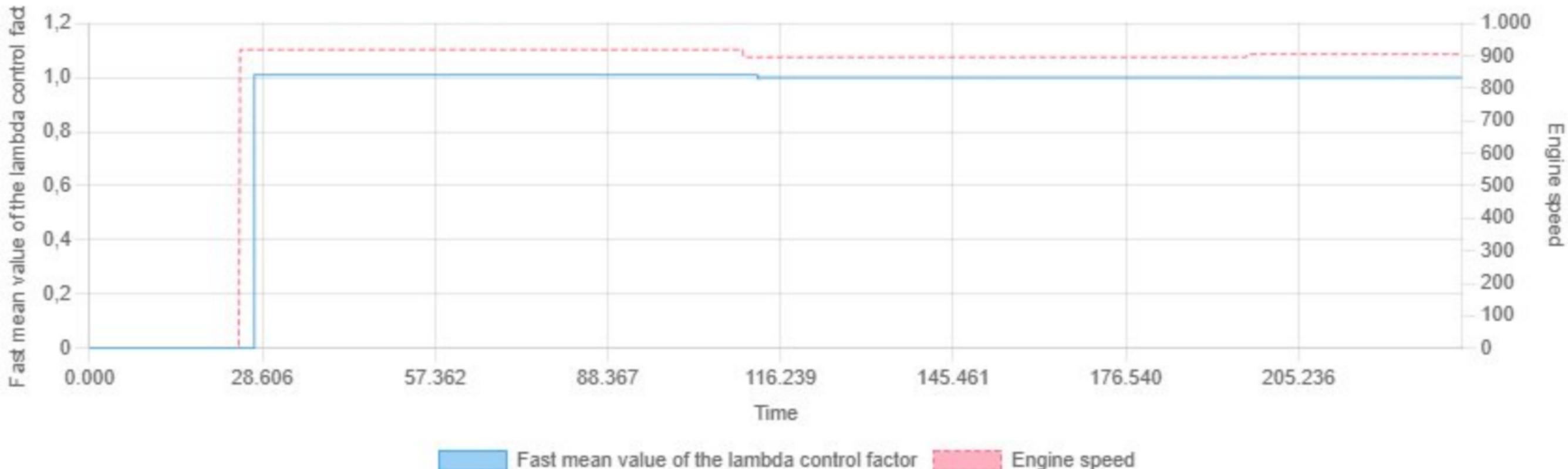
## Exhaust gas temperature behind main catalyst from model vs Engine speed



## Factor from lambda control adaptation for bank 1 vs Engine speed



## Fast mean value of the lambda control factor vs Engine speed



Fast mean value of the lambda control factor

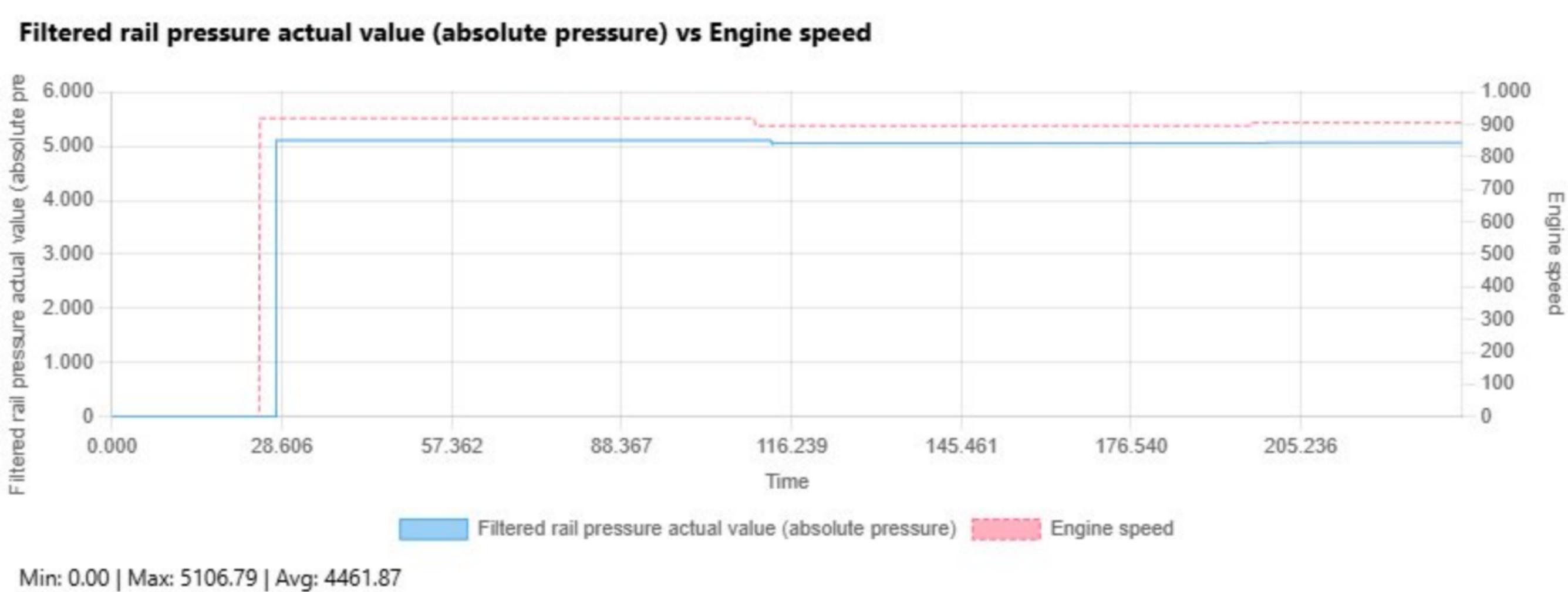
Engine speed

Min: 0.00 | Max: 1.01 | Avg: 0.88

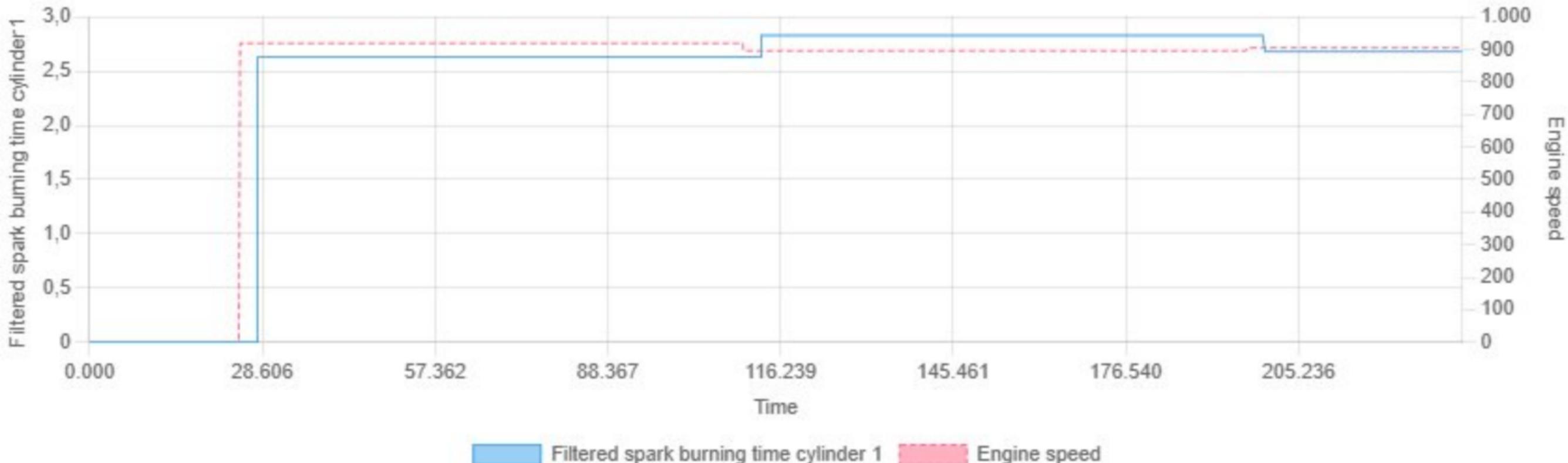
## Filtered fuel flow vs Engine speed



Min: 0.00 | Max: 2.02 | Avg: 1.68

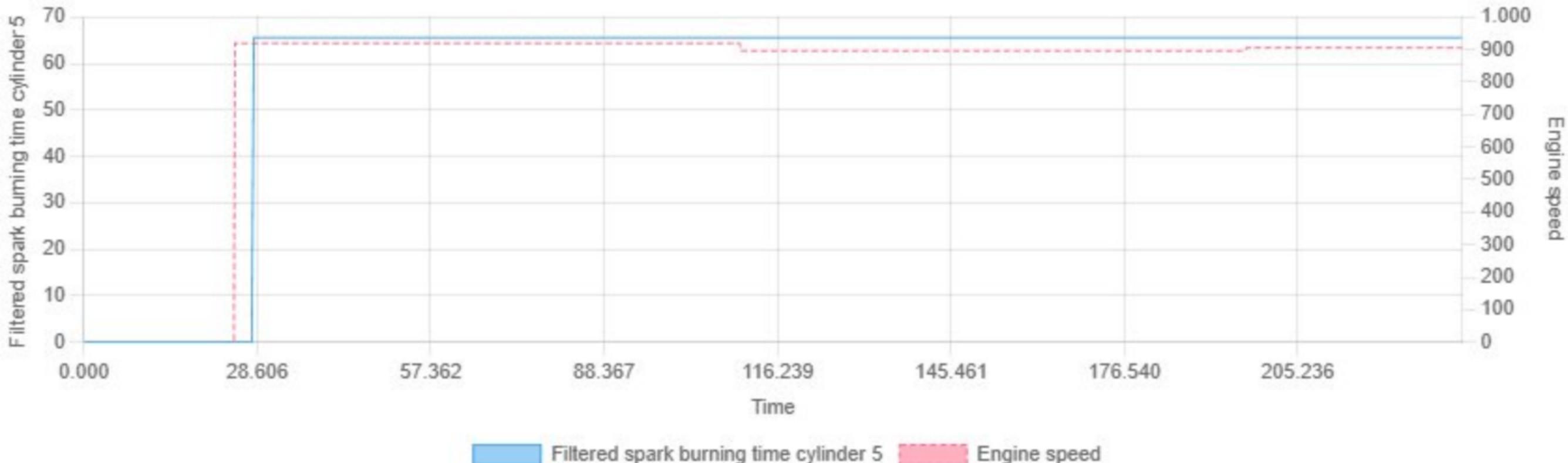


## Filtered spark burning time cylinder 1 vs Engine speed



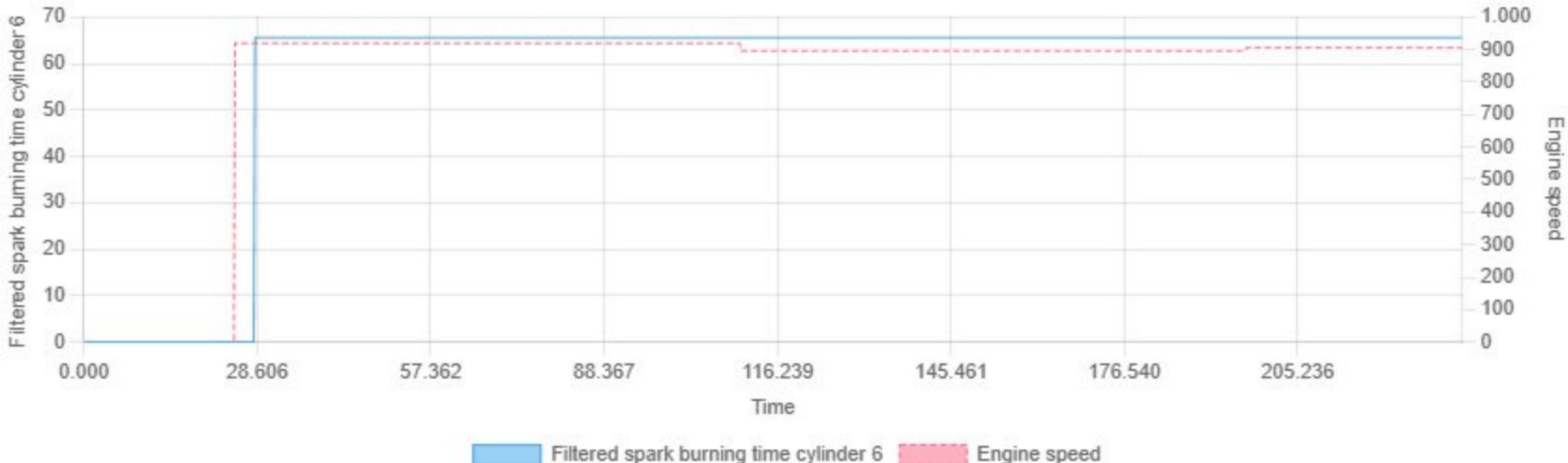
Min: 0.00 | Max: 2.83 | Avg: 2.39

## Filtered spark burning time cylinder 5 vs Engine speed



Min: 0.00 | Max: 65.54 | Avg: 57.46

## Filtered spark burning time cylinder 6 vs Engine speed



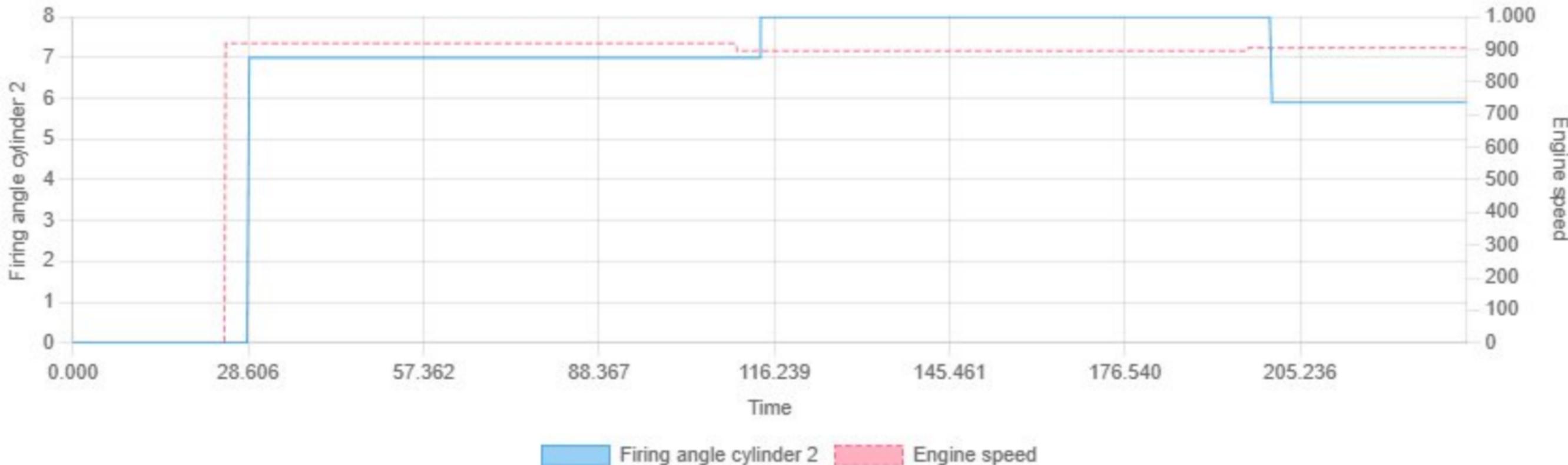
Min: 0.00 | Max: 65.54 | Avg: 57.41

## Firing angle cylinder 1 vs Engine speed



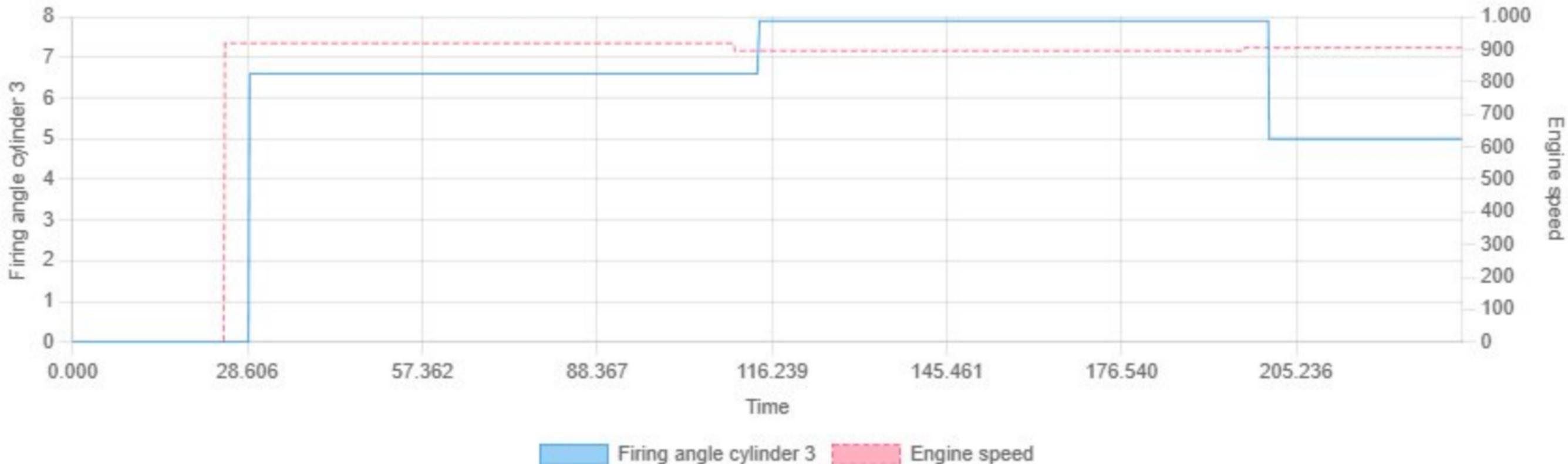
Min: 0.00 | Max: 5.40 | Avg: 4.50

## Firing angle cylinder 2 vs Engine speed



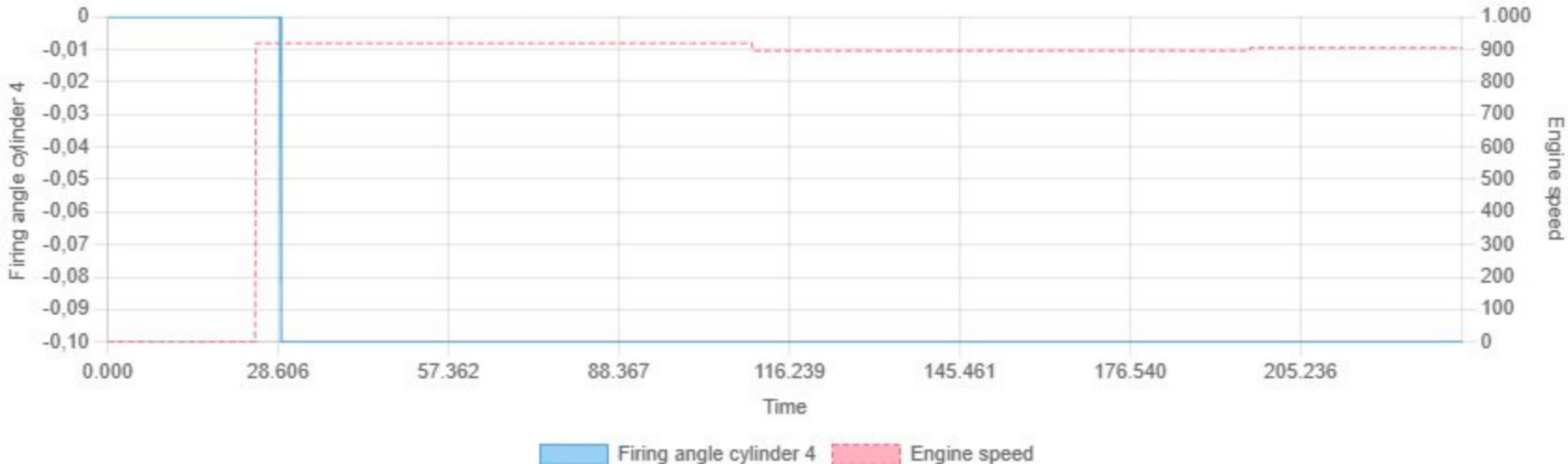
Min: 0.00 | Max: 8.00 | Avg: 6.33

## Firing angle cylinder 3 vs Engine speed



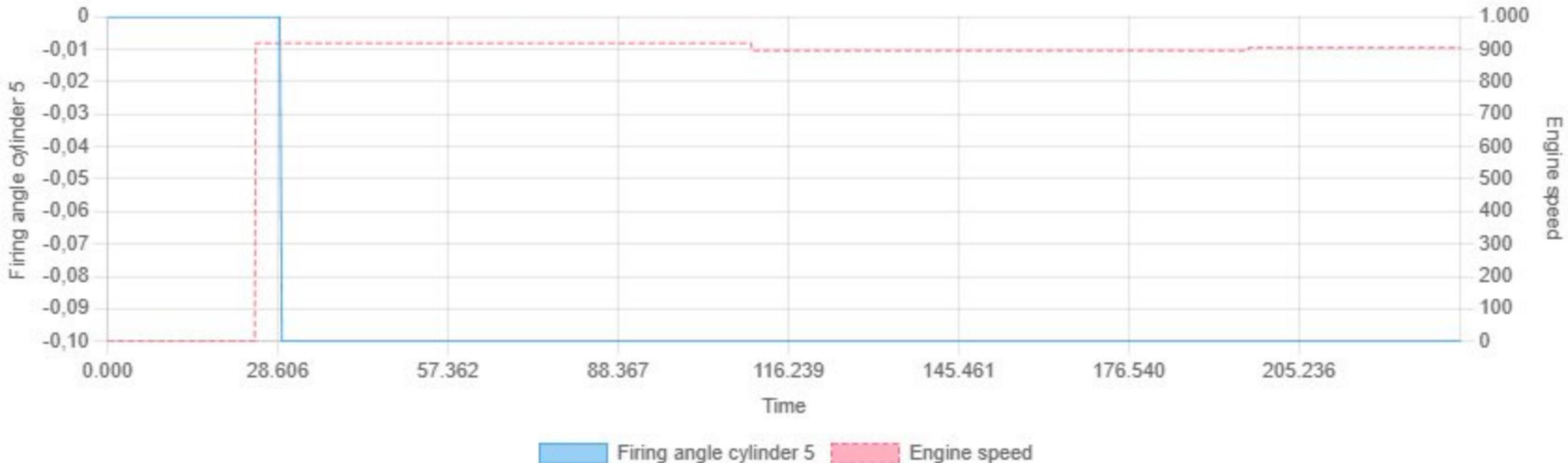
Min: 0.00 | Max: 7.90 | Avg: 6.01

## Firing angle cylinder 4 vs Engine speed



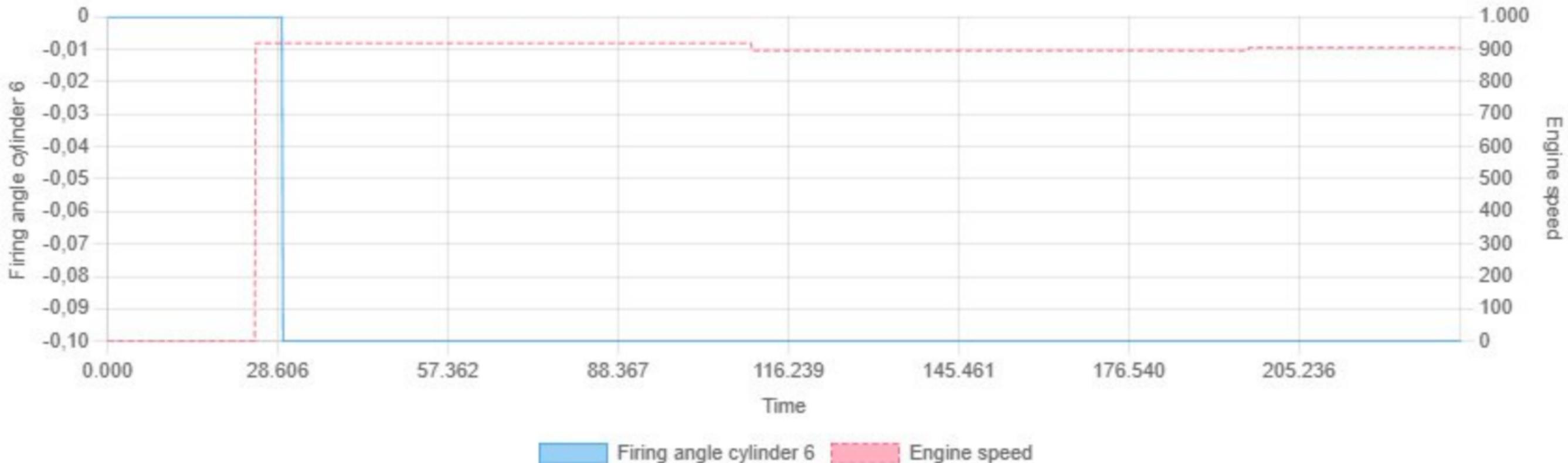
Min: -0.10 | Max: 0.00 | Avg: -0.09

## Firing angle cylinder 5 vs Engine speed



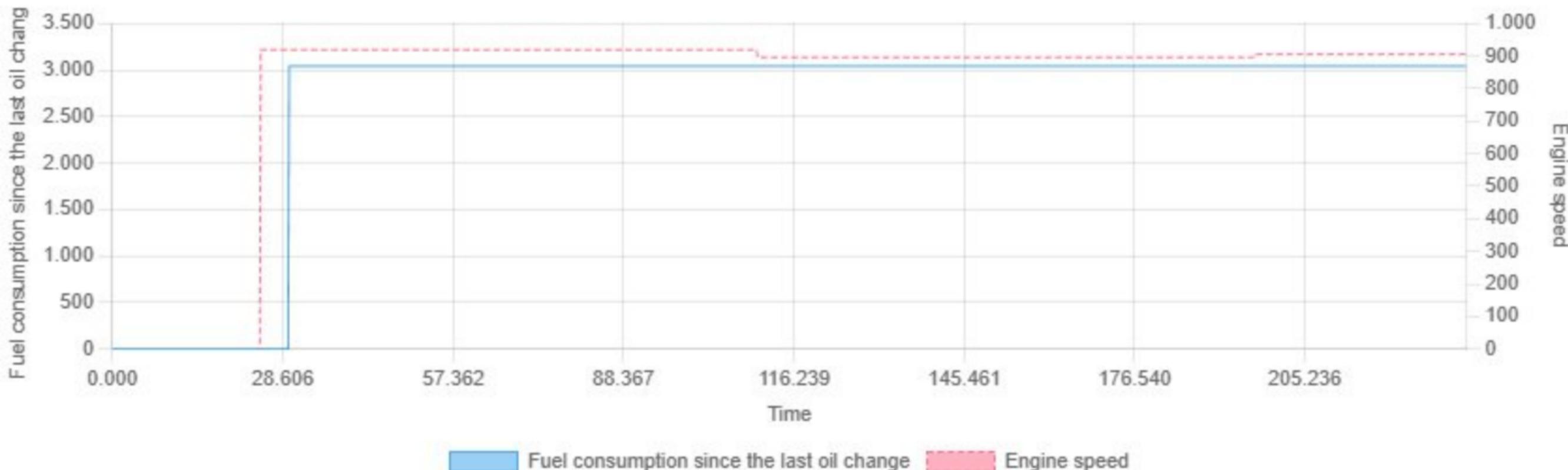
Min: -0.10 | Max: 0.00 | Avg: -0.09

## Firing angle cylinder 6 vs Engine speed



Min: -0.10 | Max: 0.00 | Avg: -0.09

## Fuel consumption since the last oil change vs Engine speed

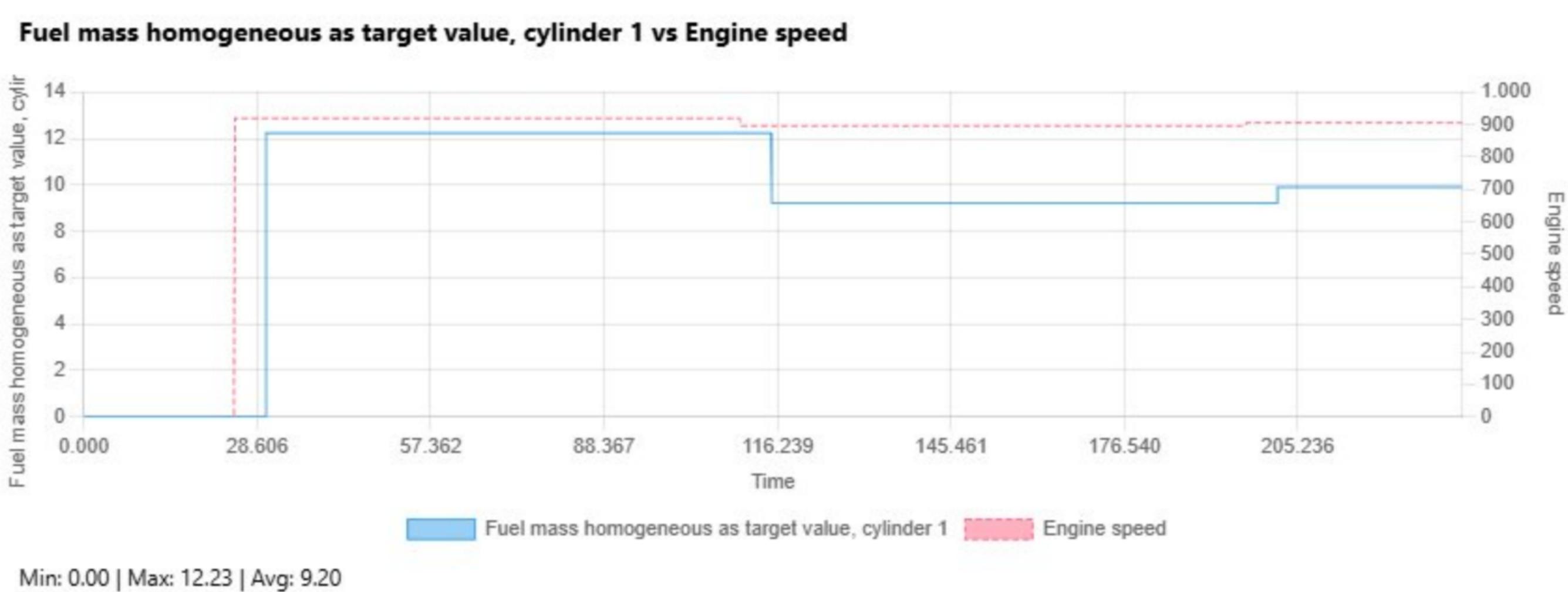


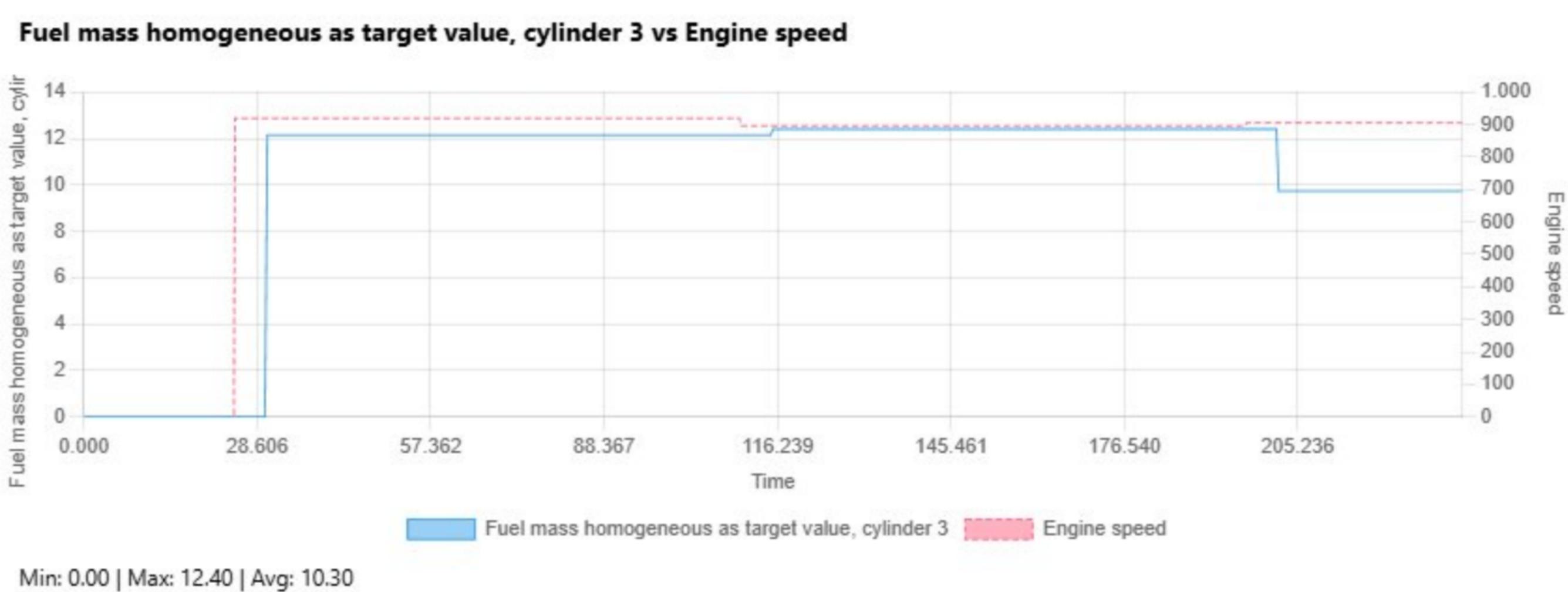
Min: 0.00 | Max: 3041.29 | Avg: 2644.25

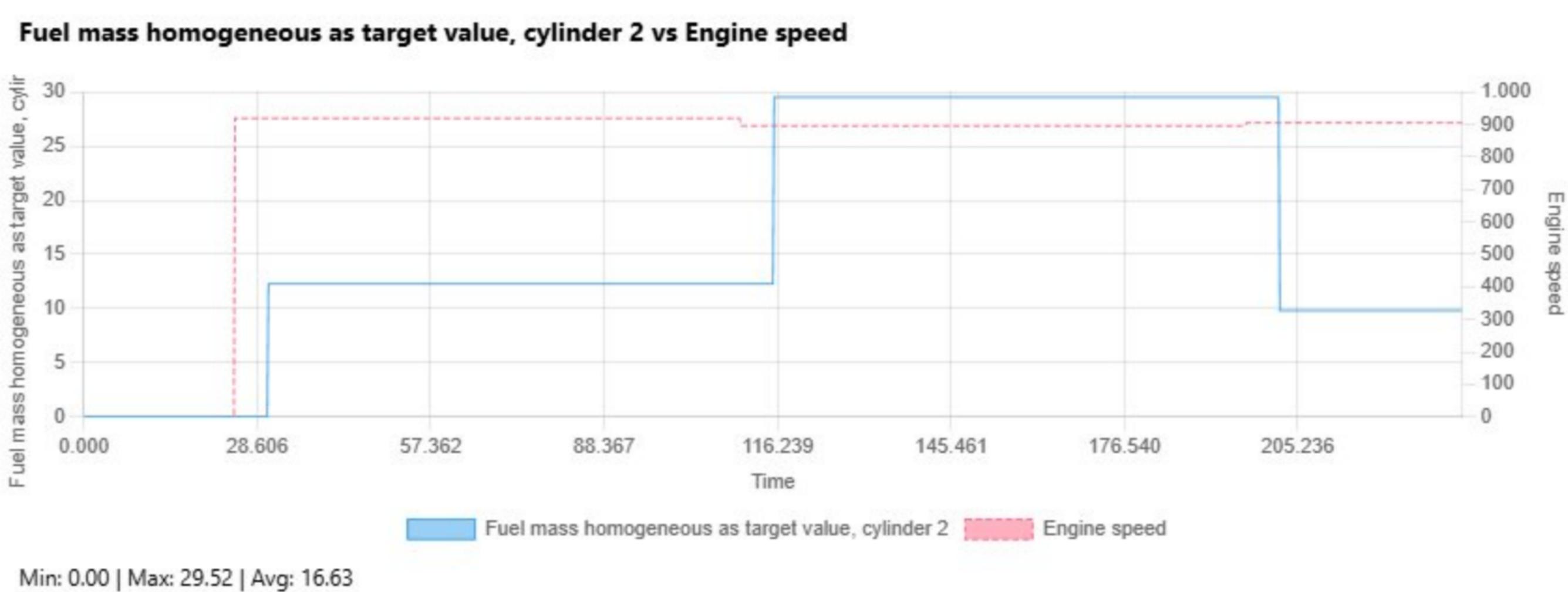
## Fuel mass flow vs Engine speed

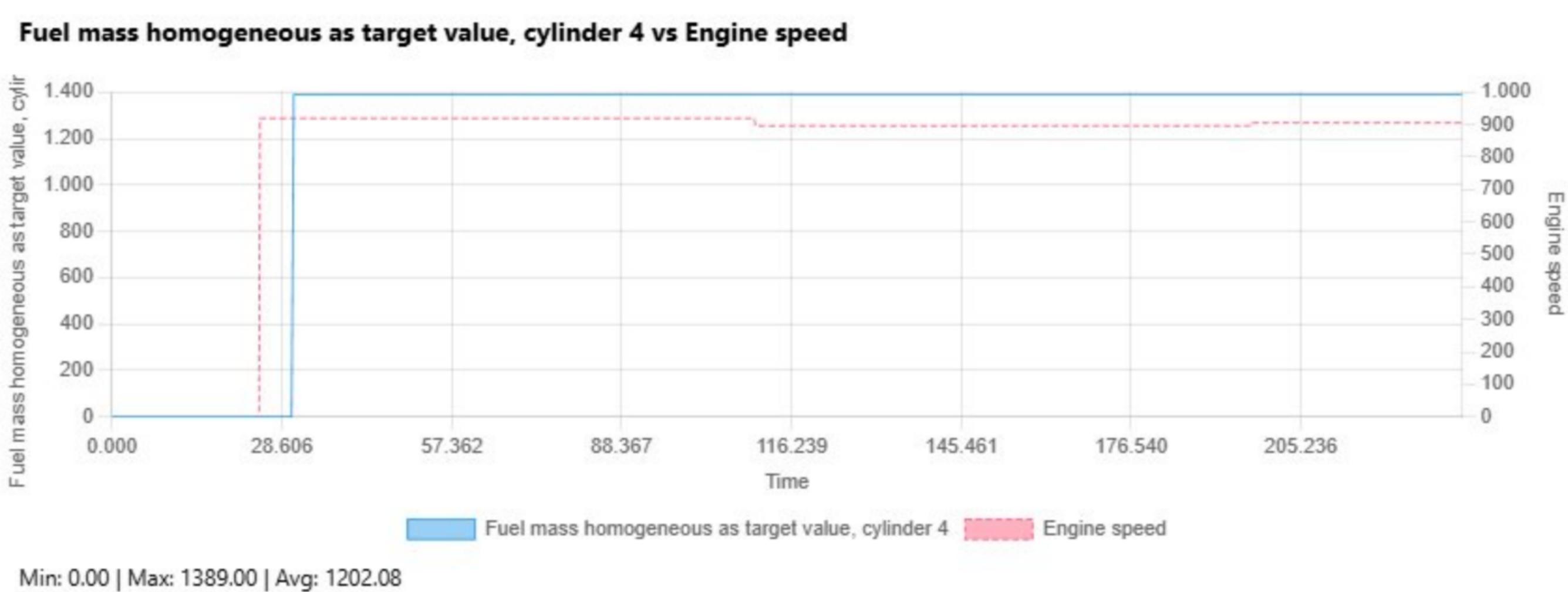


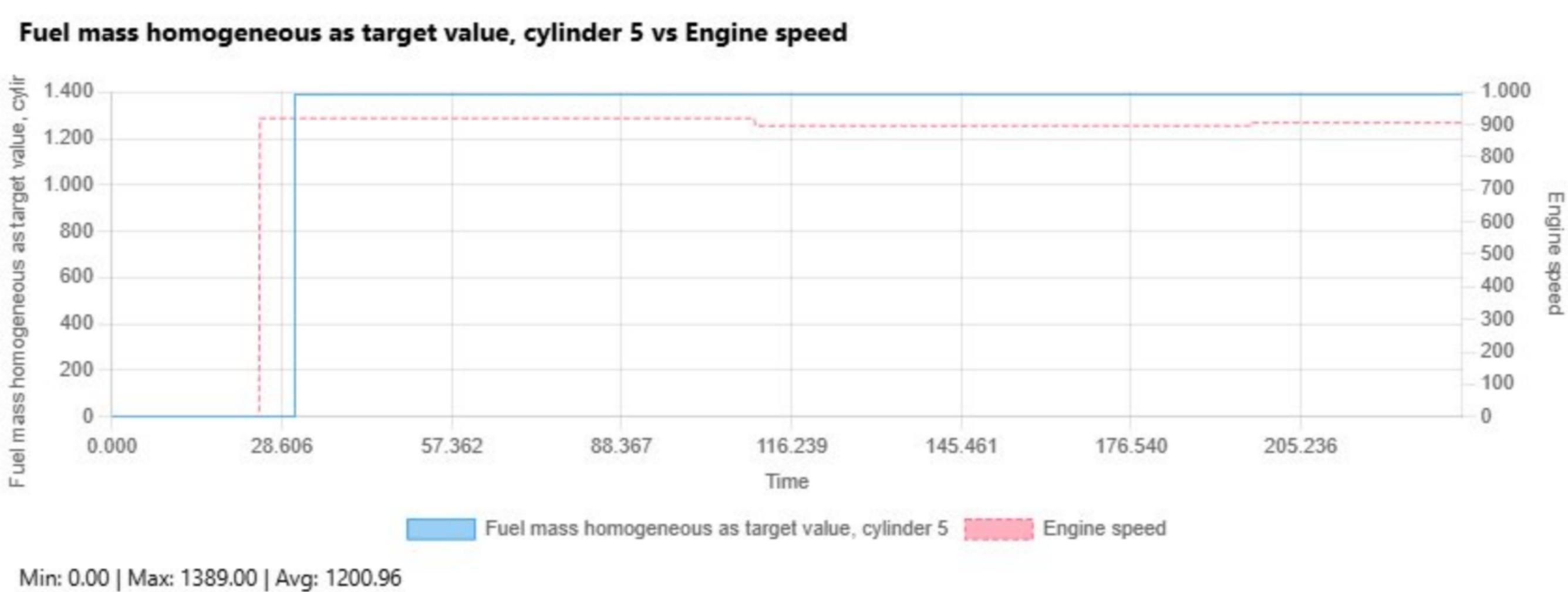
Min: 0.00 | Max: 1.40 | Avg: 0.94

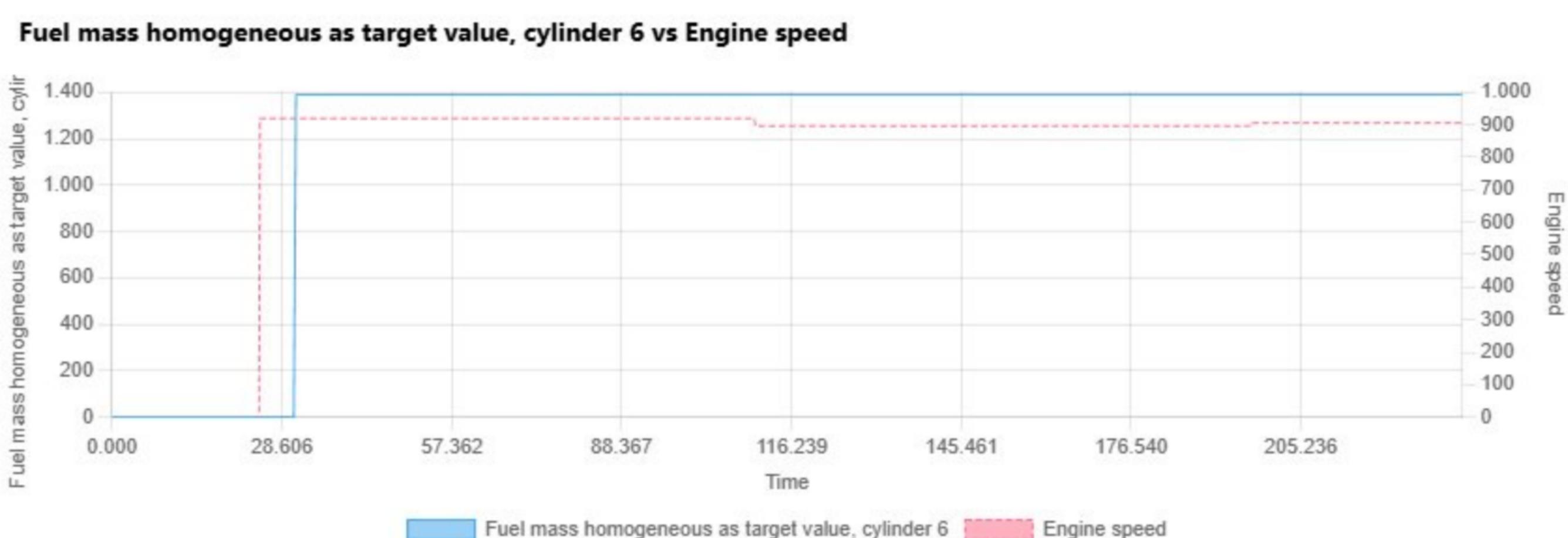




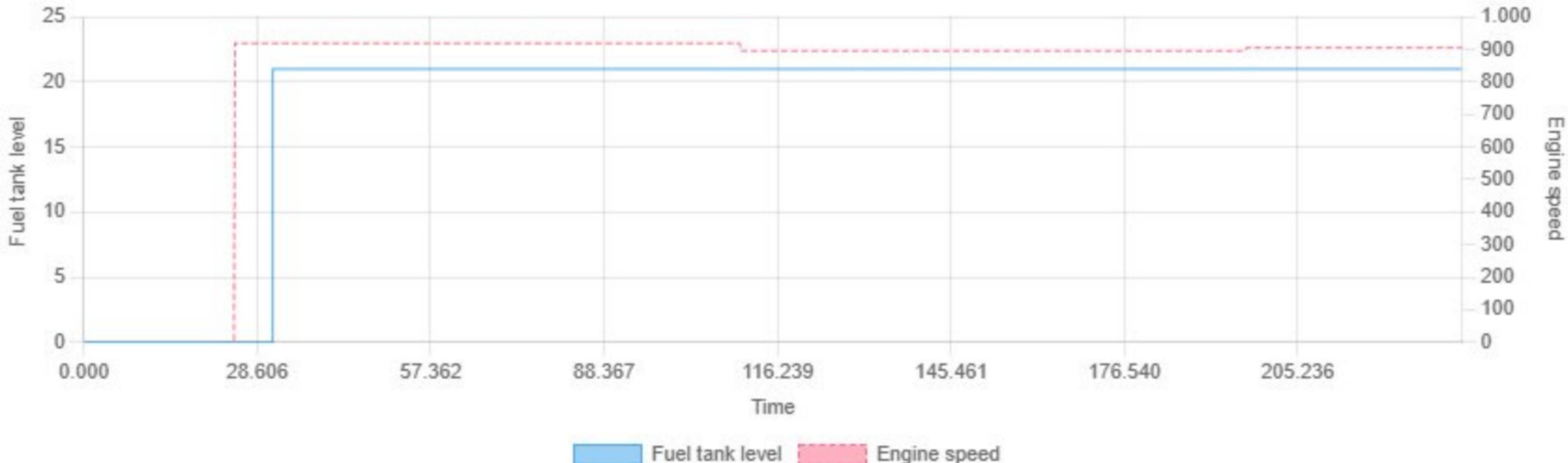






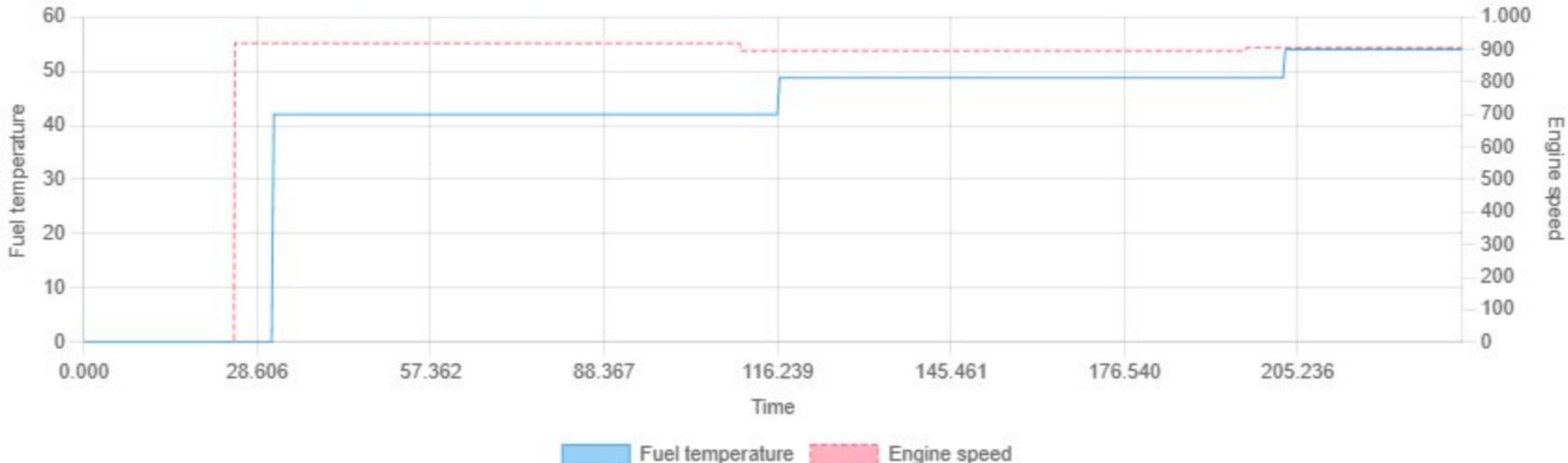


## Fuel tank level vs Engine speed



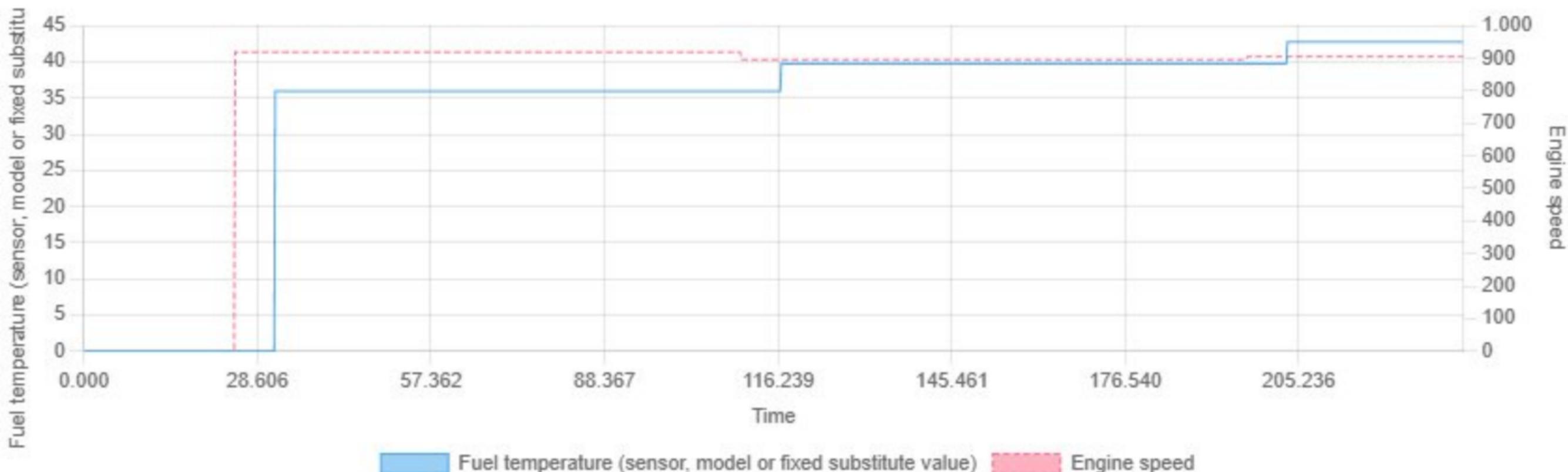
Min: 0.00 | Max: 21.00 | Avg: 18.12

## Fuel temperature vs Engine speed

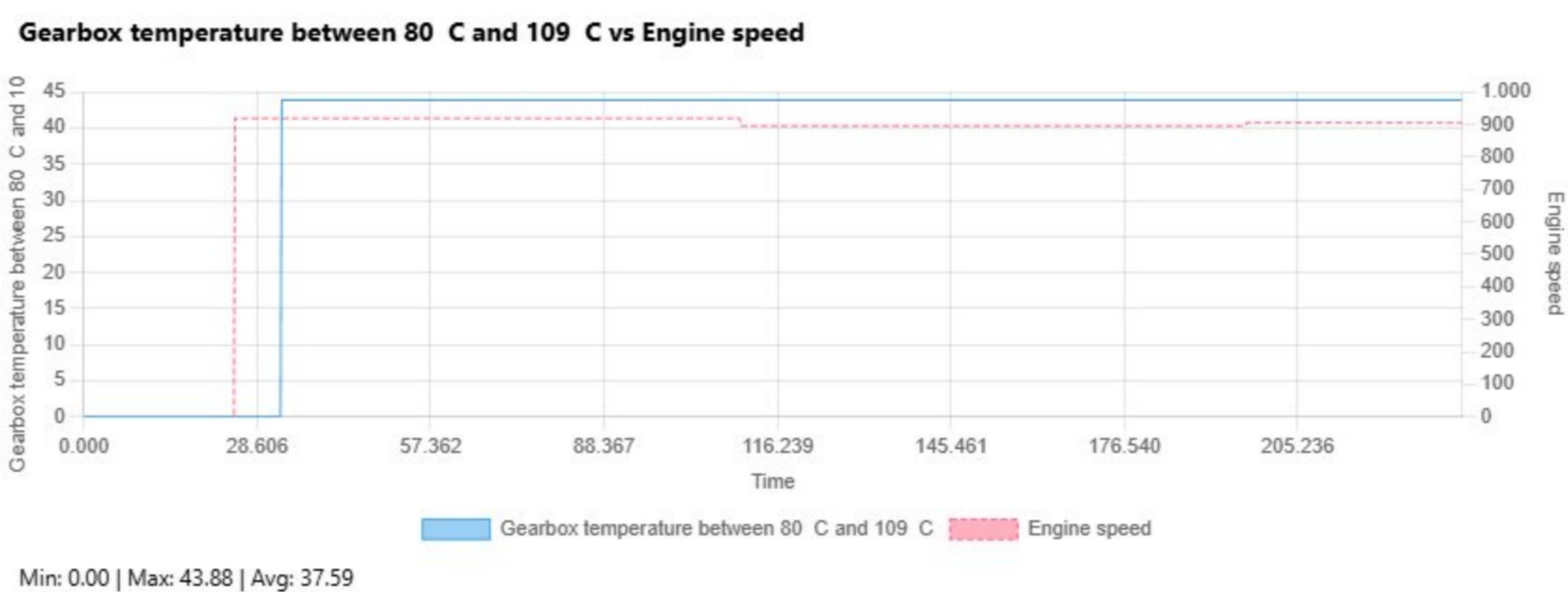


Min: 0.00 | Max: 54.00 | Avg: 40.23

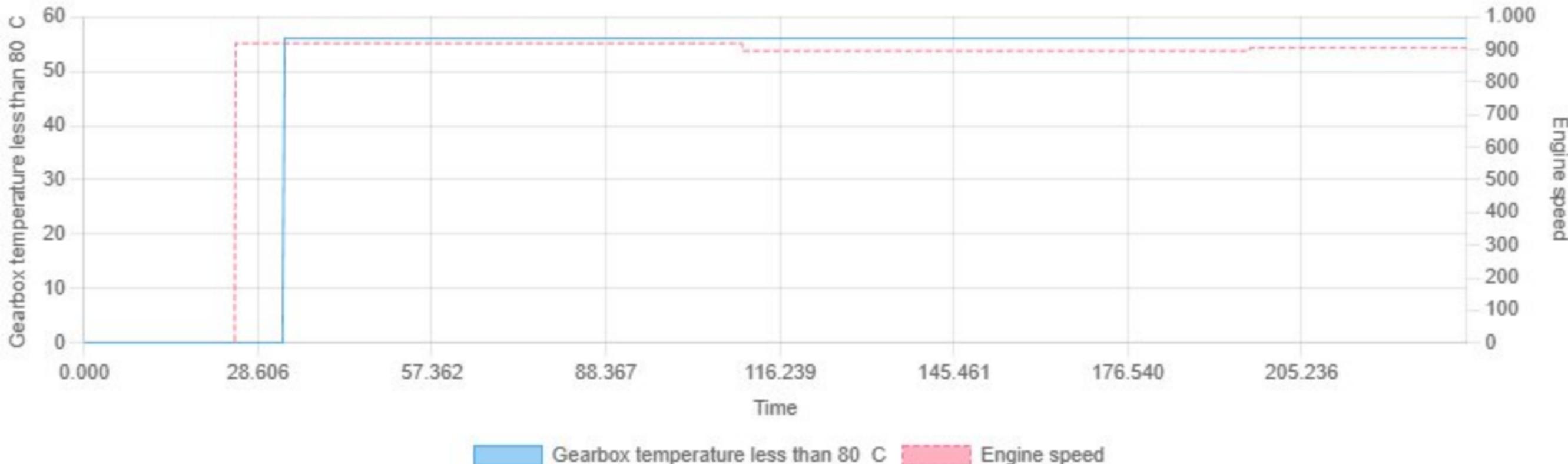
## Fuel temperature (sensor, model or fixed substitute value) vs Engine speed



Min: 0.00 | Max: 42.76 | Avg: 33.24

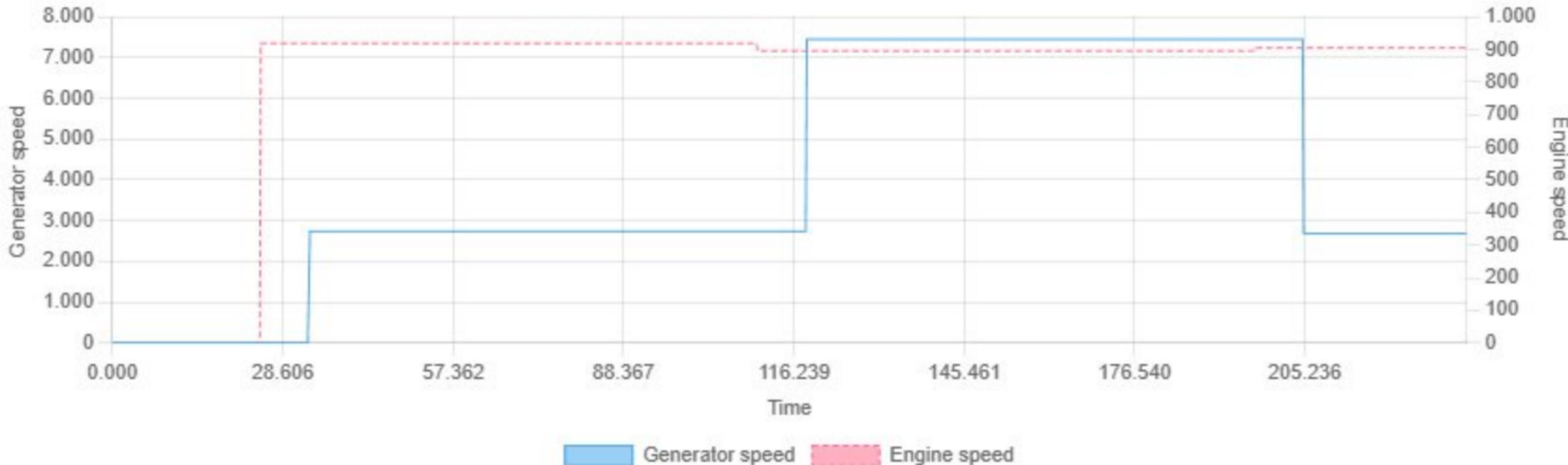


## Gearbox temperature less than 80 C vs Engine speed

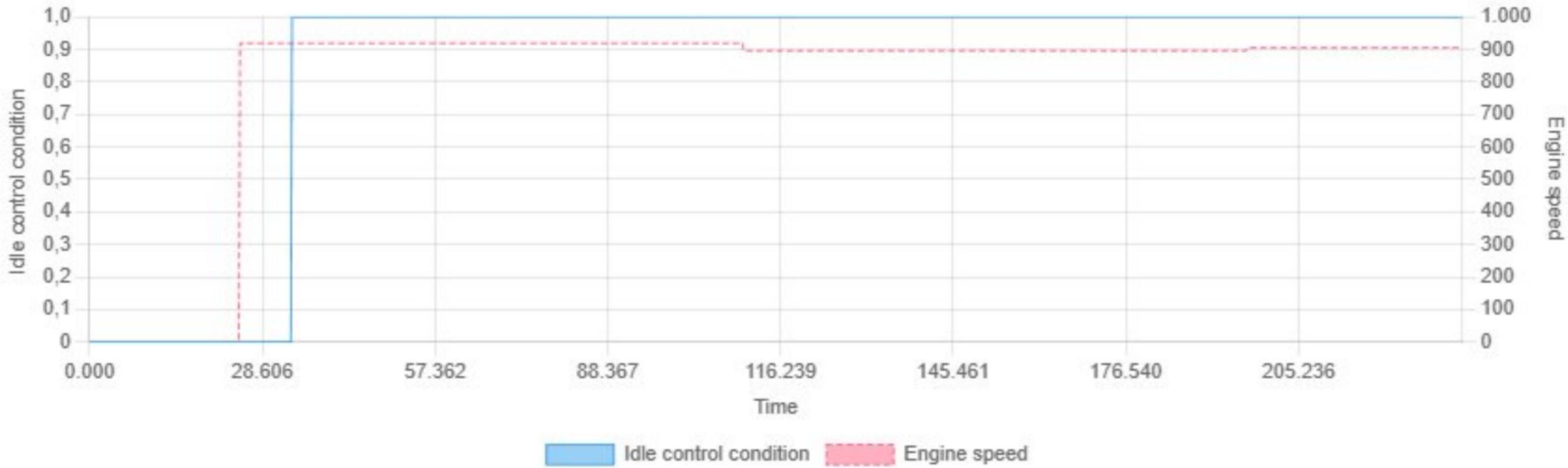


Min: 0.00 | Max: 56.12 | Avg: 47.98

## Generator speed vs Engine speed

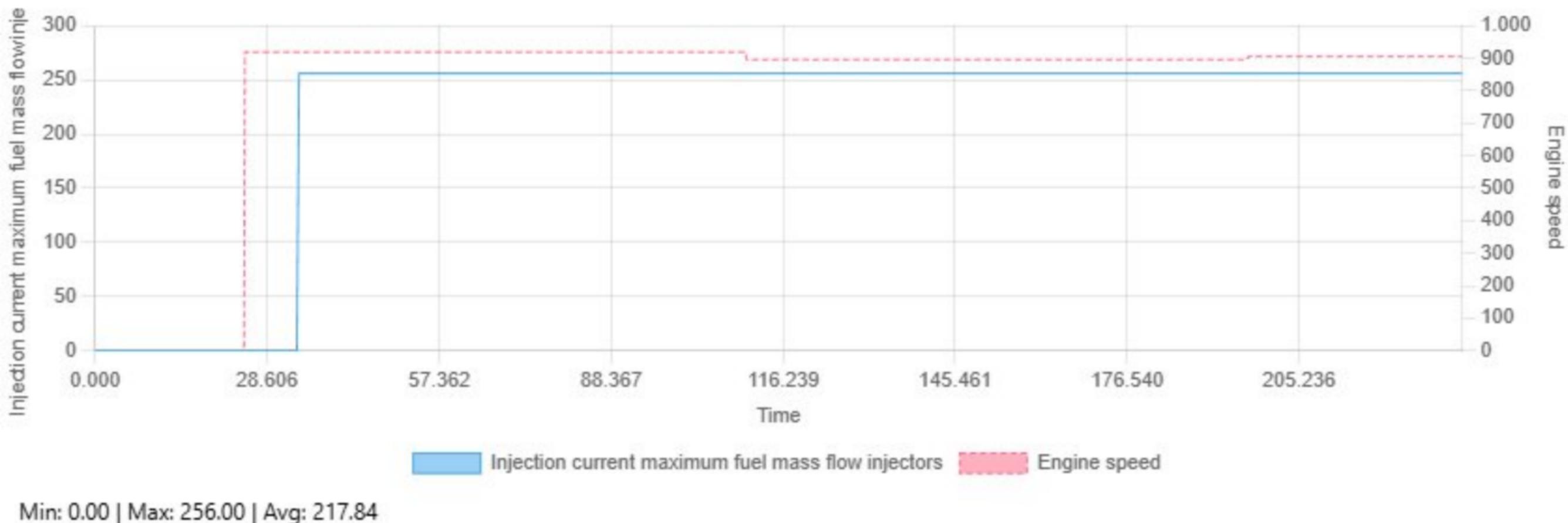


## Idle control condition vs Engine speed

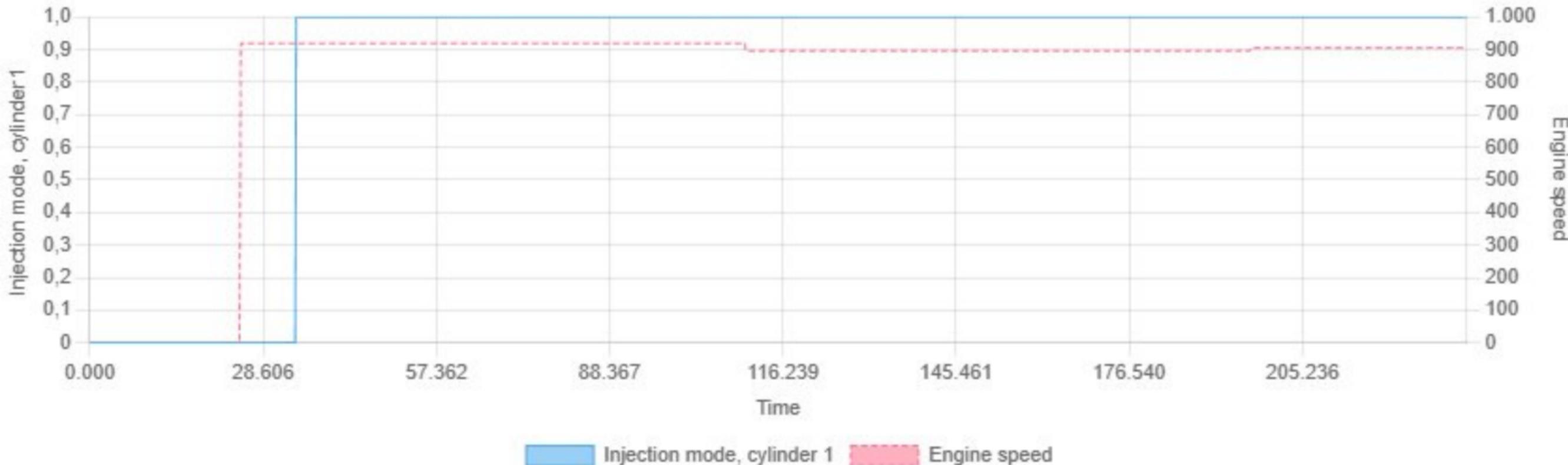


Min: 0.00 | Max: 1.00 | Avg: 0.85

## Injection current maximum fuel mass flow injectors vs Engine speed

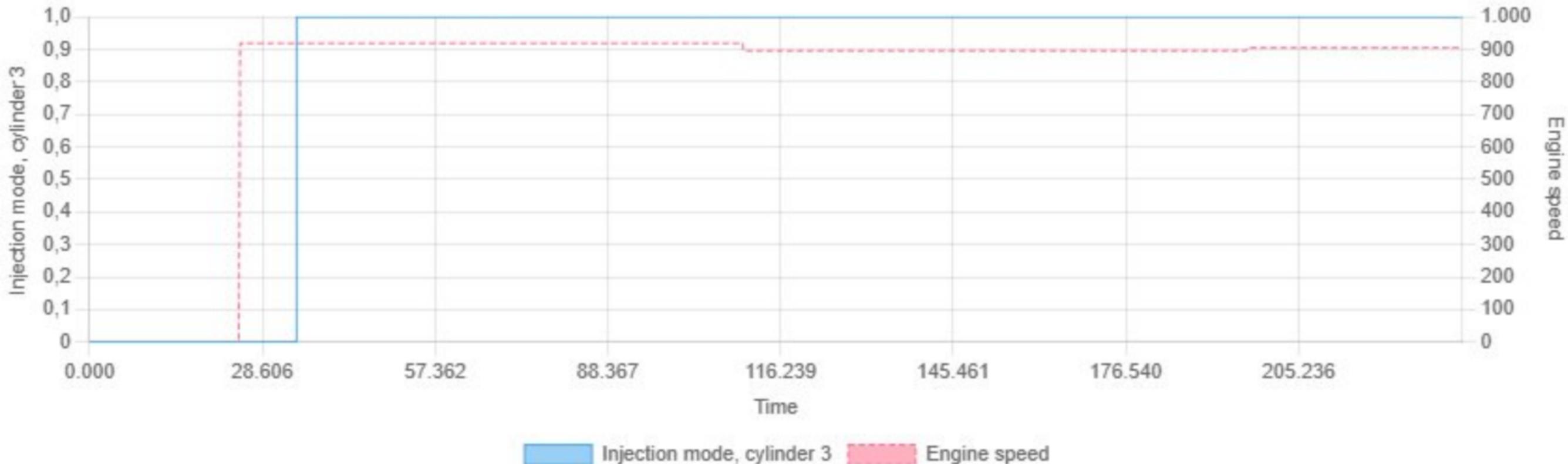


## Injection mode, cylinder 1 vs Engine speed



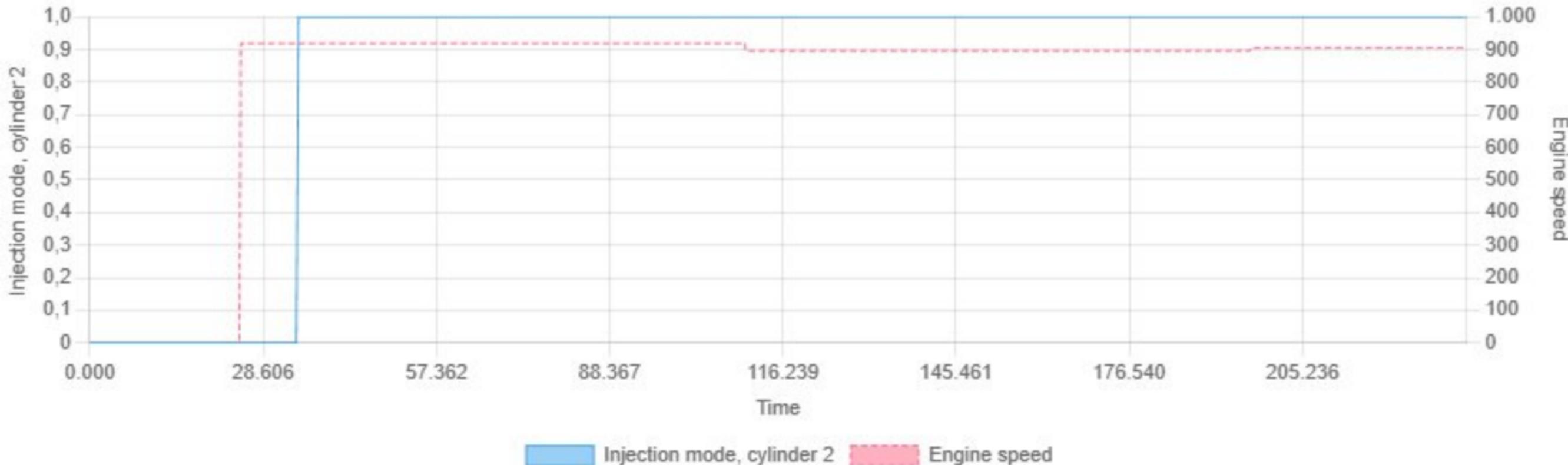
Min: 0.00 | Max: 1.00 | Avg: 0.85

## Injection mode, cylinder 3 vs Engine speed



Min: 0.00 | Max: 1.00 | Avg: 0.85

## Injection mode, cylinder 2 vs Engine speed



Min: 0.00 | Max: 1.00 | Avg: 0.85

## Injection mode, cylinder 4 vs Engine speed



Min: 0.00 | Max: 255.00 | Avg: 216.16

## Injection mode, cylinder 5 vs Engine speed



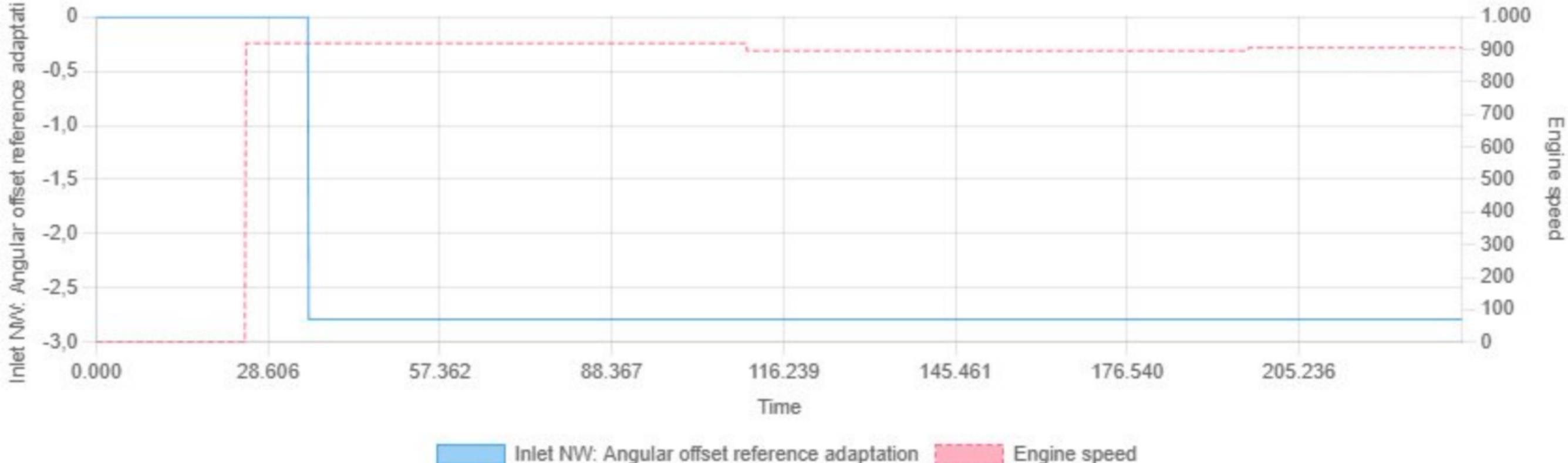
Min: 0.00 | Max: 255.00 | Avg: 215.96

## Injection mode, cylinder 6 vs Engine speed



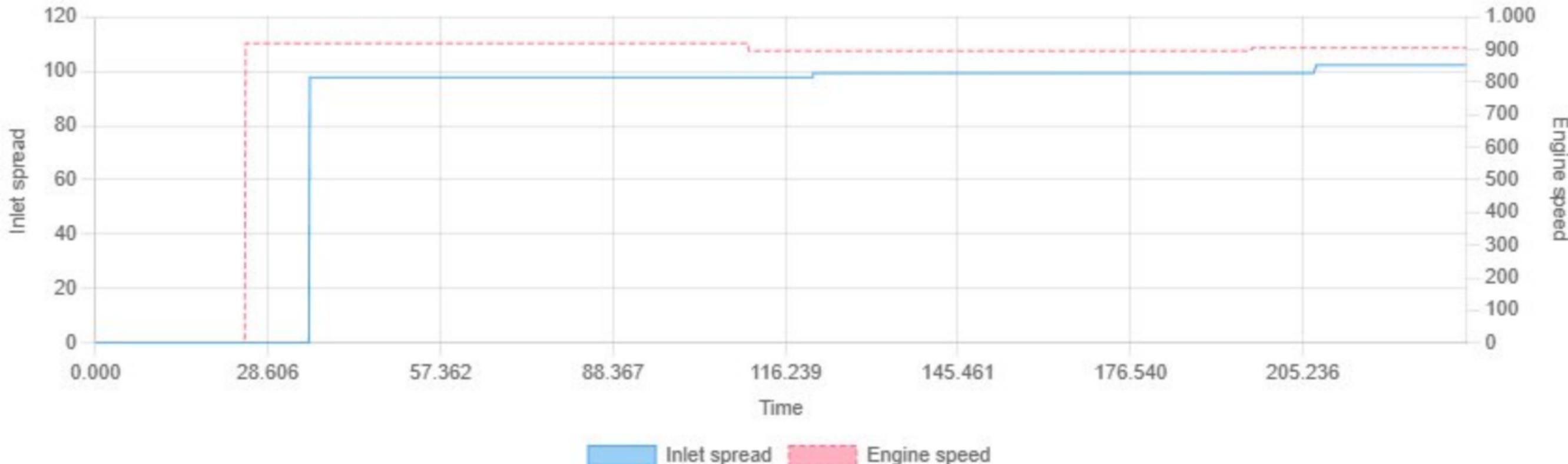
Min: 0.00 | Max: 255.00 | Avg: 215.75

## Inlet NW: Angular offset reference adaptation vs Engine speed



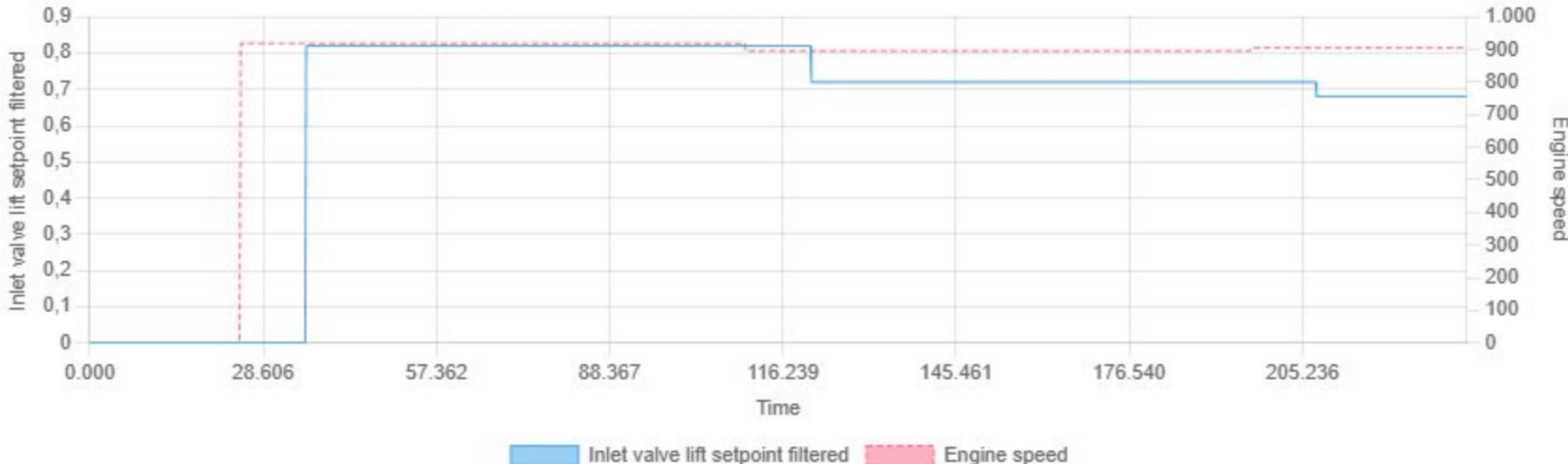
Min: -2.79 | Max: 0.00 | Avg: -2.36

## Inlet spread vs Engine speed



Min: 0.00 | Max: 102.30 | Avg: 83.56

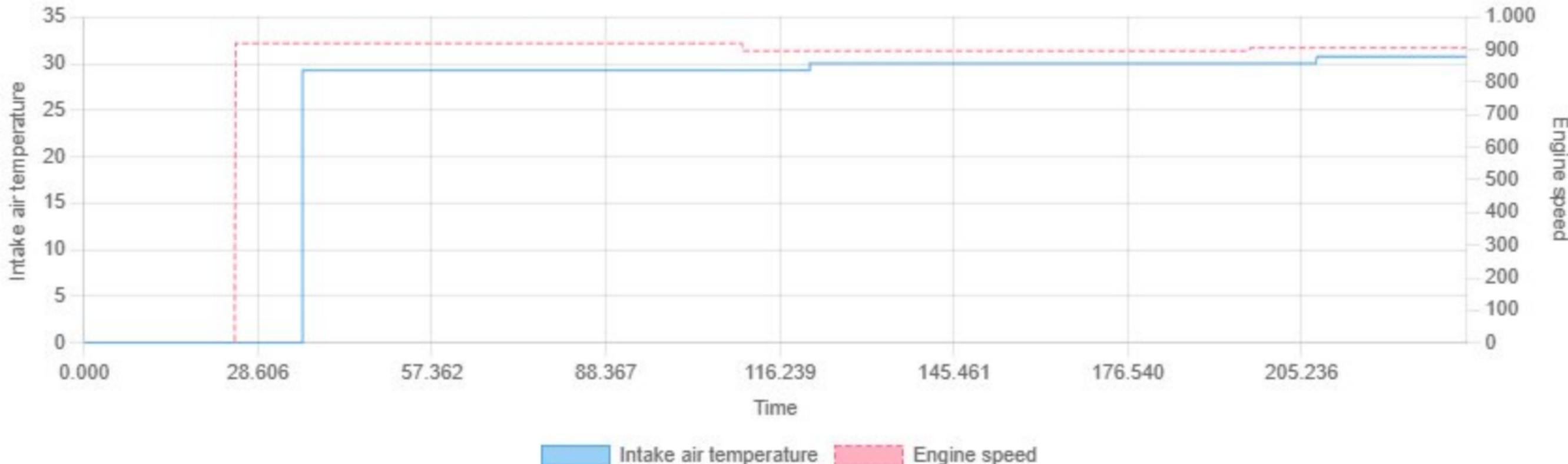
## Inlet valve lift setpoint filtered vs Engine speed



Inlet valve lift setpoint filtered      Engine speed

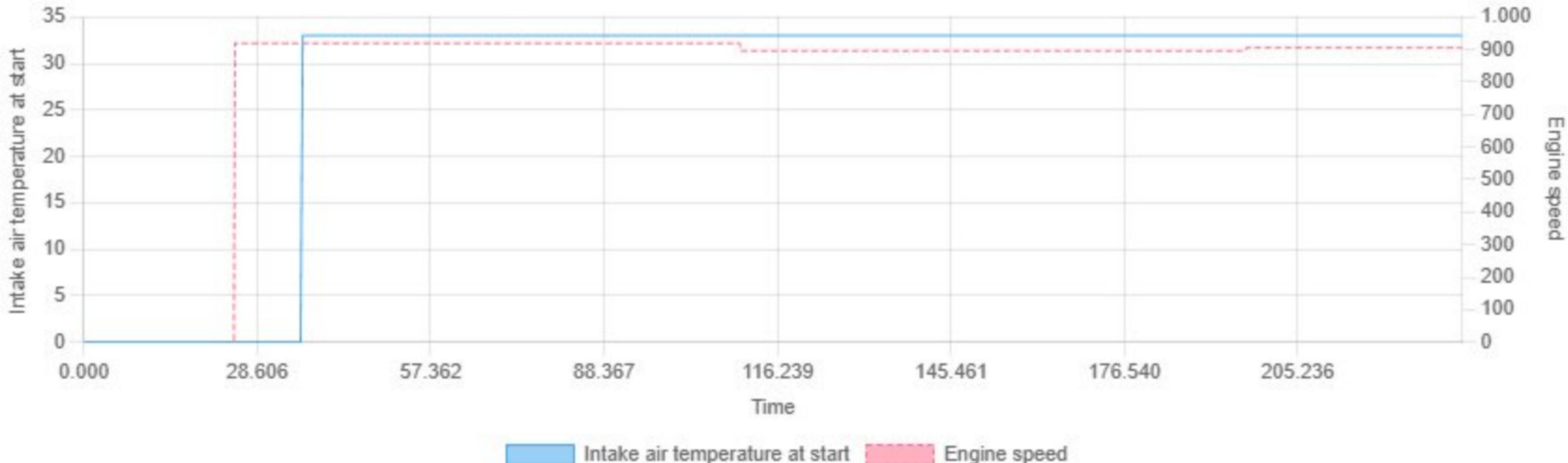
Min: 0.00 | Max: 0.82 | Avg: 0.64

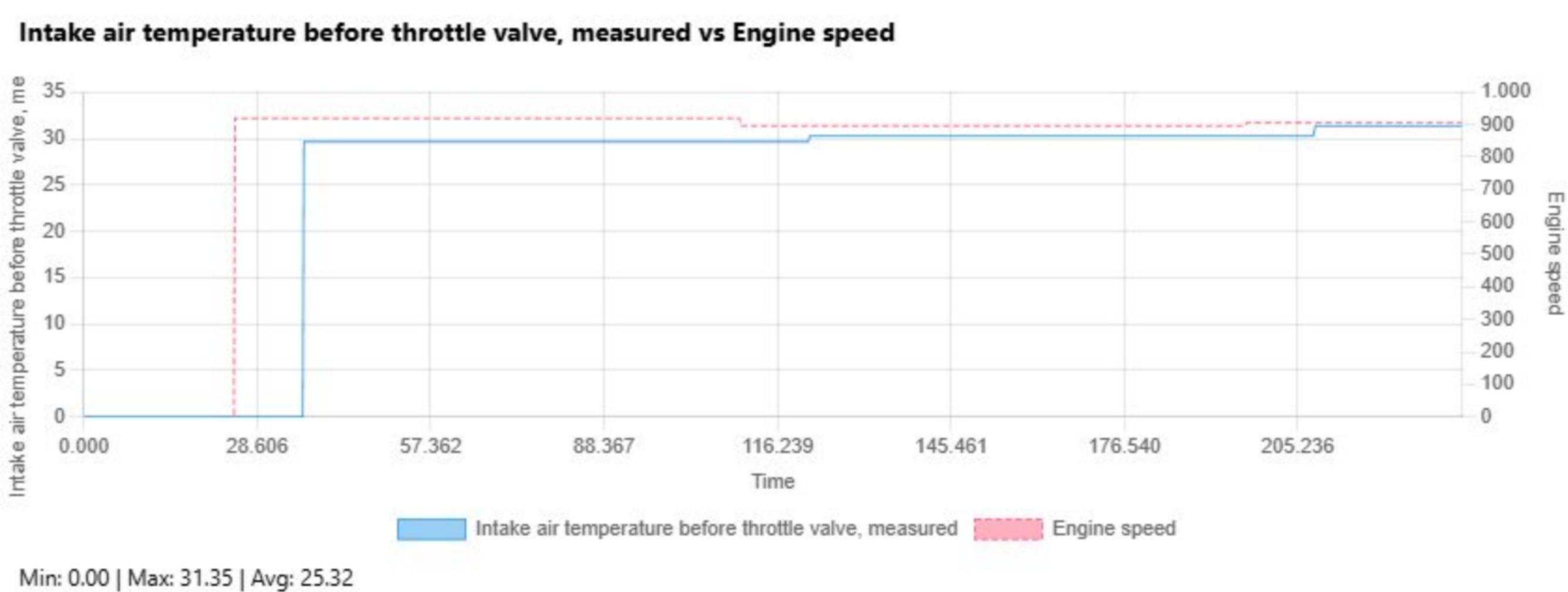
## Intake air temperature vs Engine speed



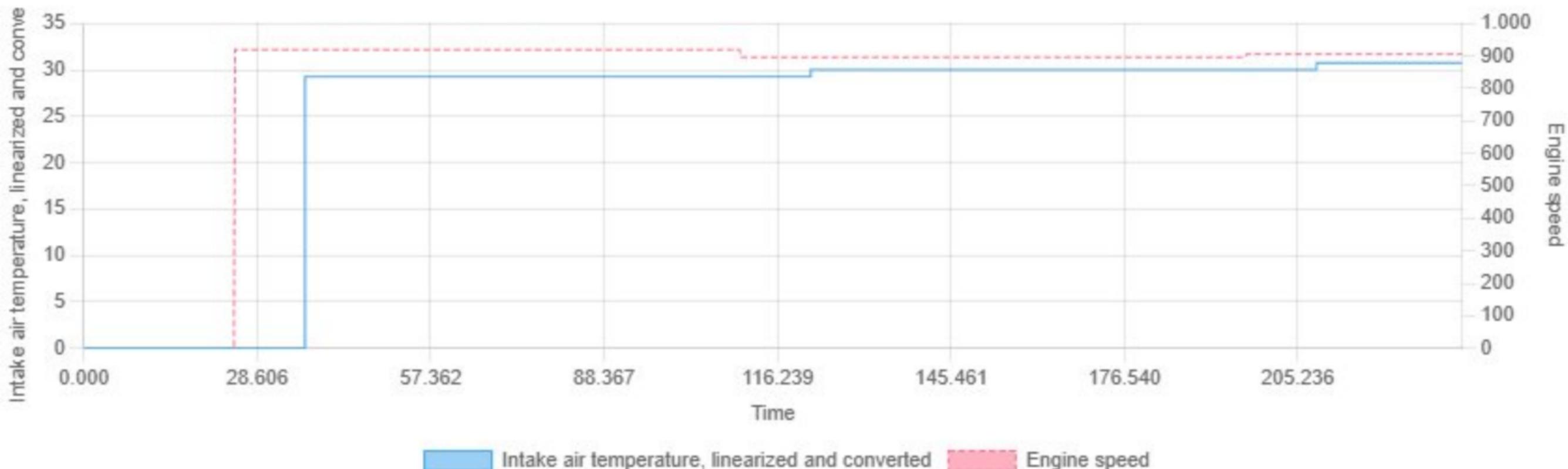
Min: 0.00 | Max: 30.75 | Avg: 25.07

## Intake air temperature at start vs Engine speed



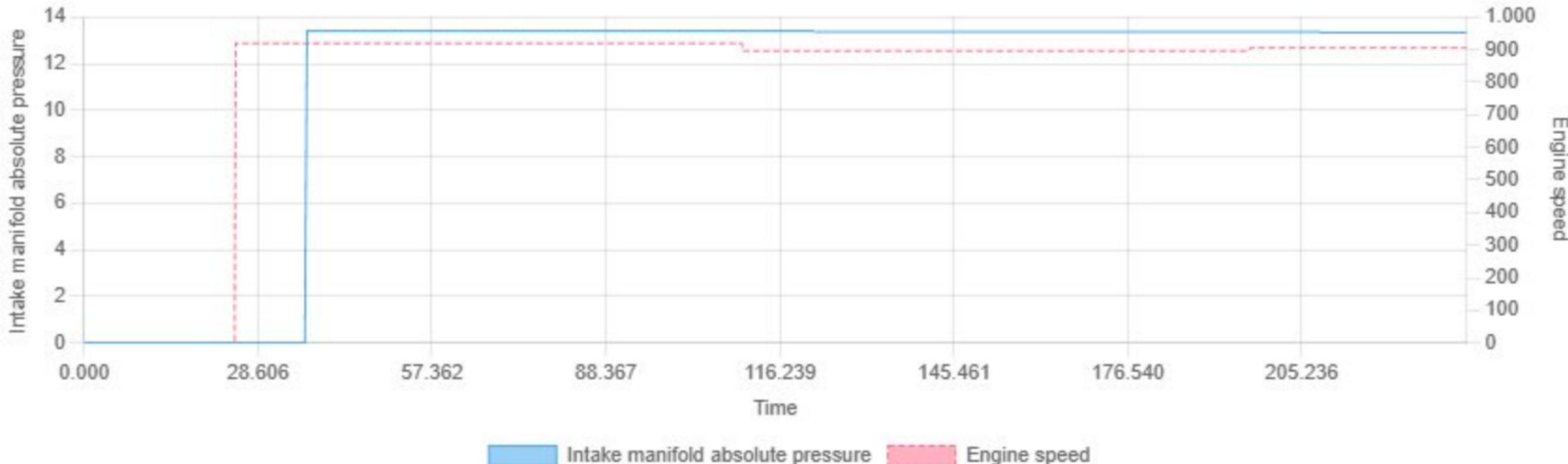


## Intake air temperature, linearized and converted vs Engine speed

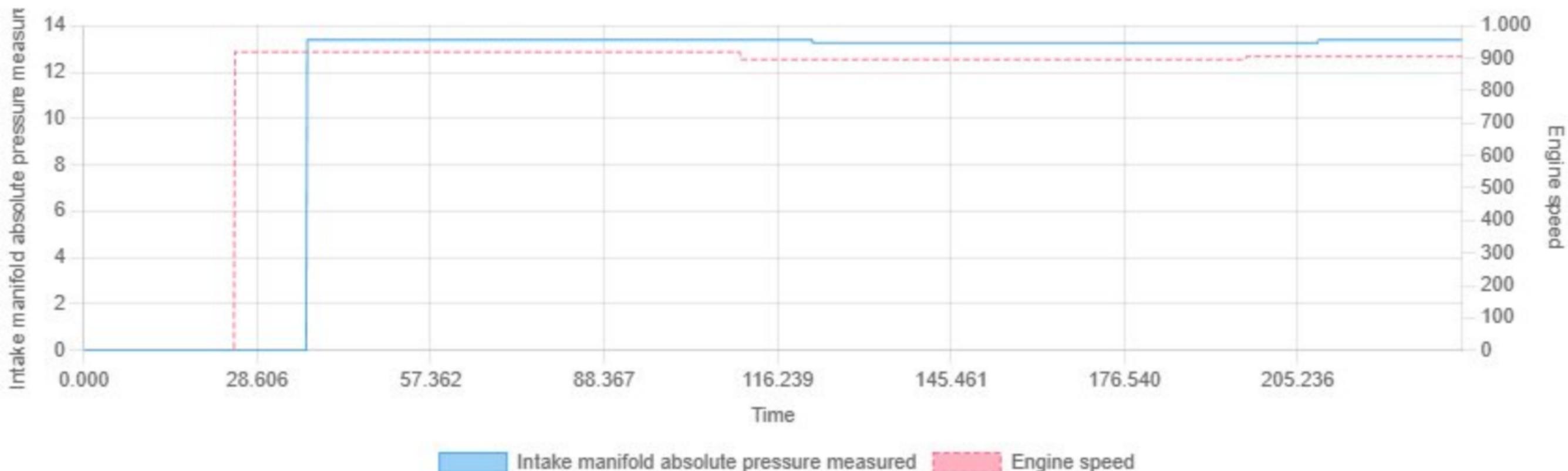


Min: 0.00 | Max: 30.75 | Avg: 24.99

## Intake manifold absolute pressure vs Engine speed

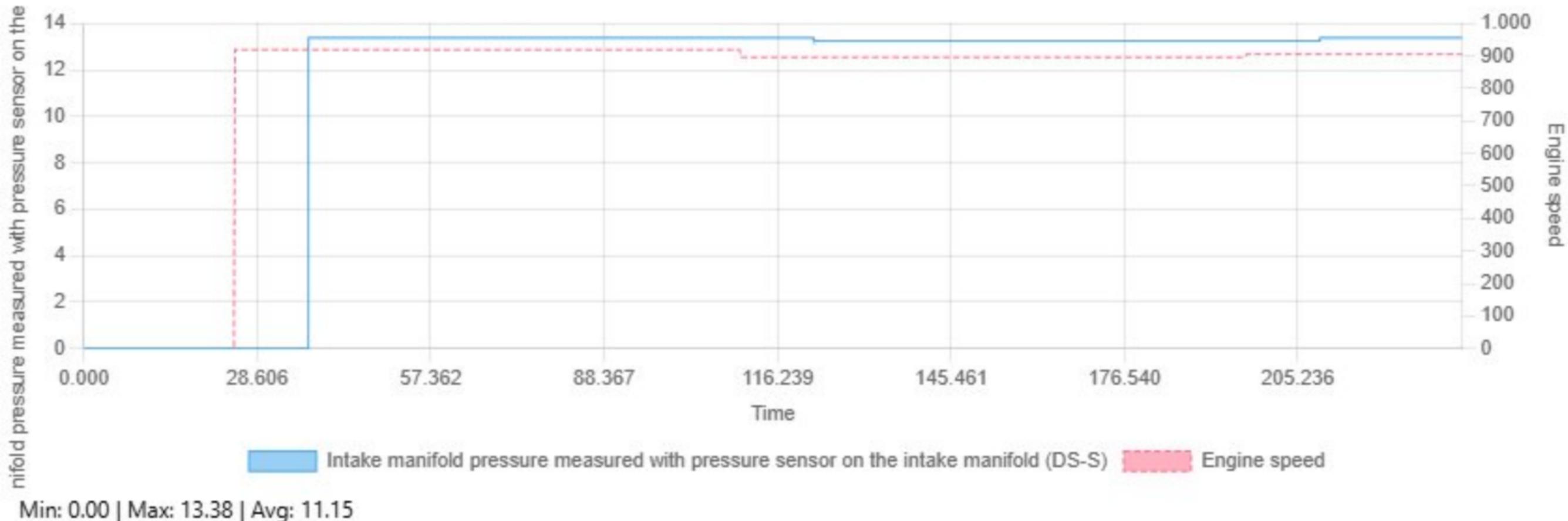


## Intake manifold absolute pressure measured vs Engine speed

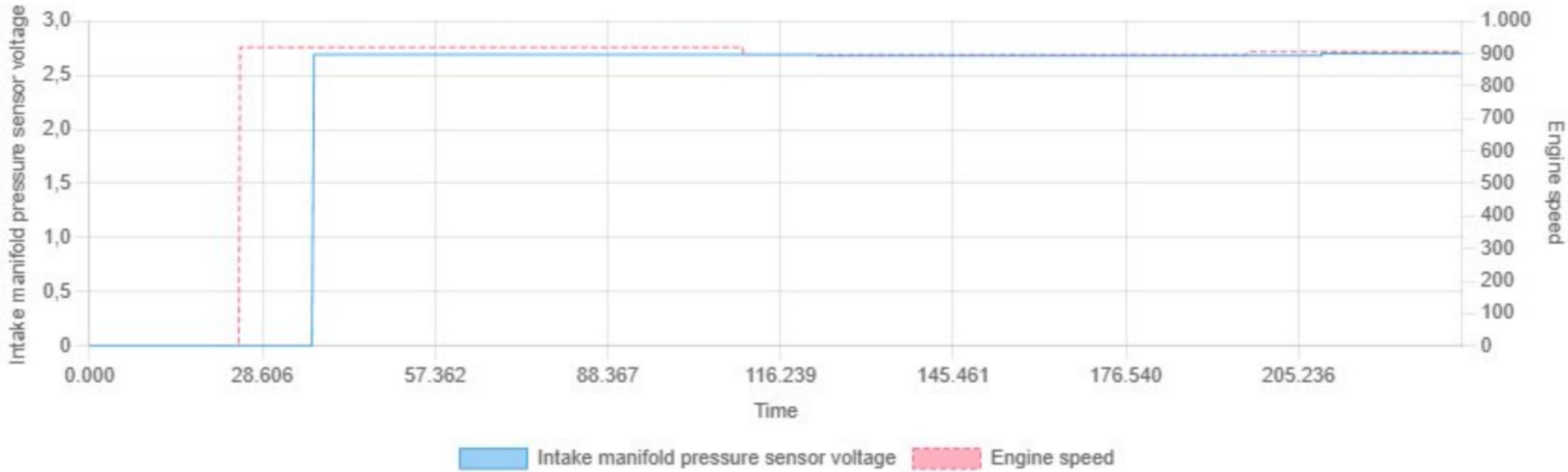


Min: 0.00 | Max: 13.39 | Avg: 11.17

## Intake manifold pressure measured with pressure sensor on the intake manifold (DS-S) vs Engine speed



## Intake manifold pressure sensor voltage vs Engine speed

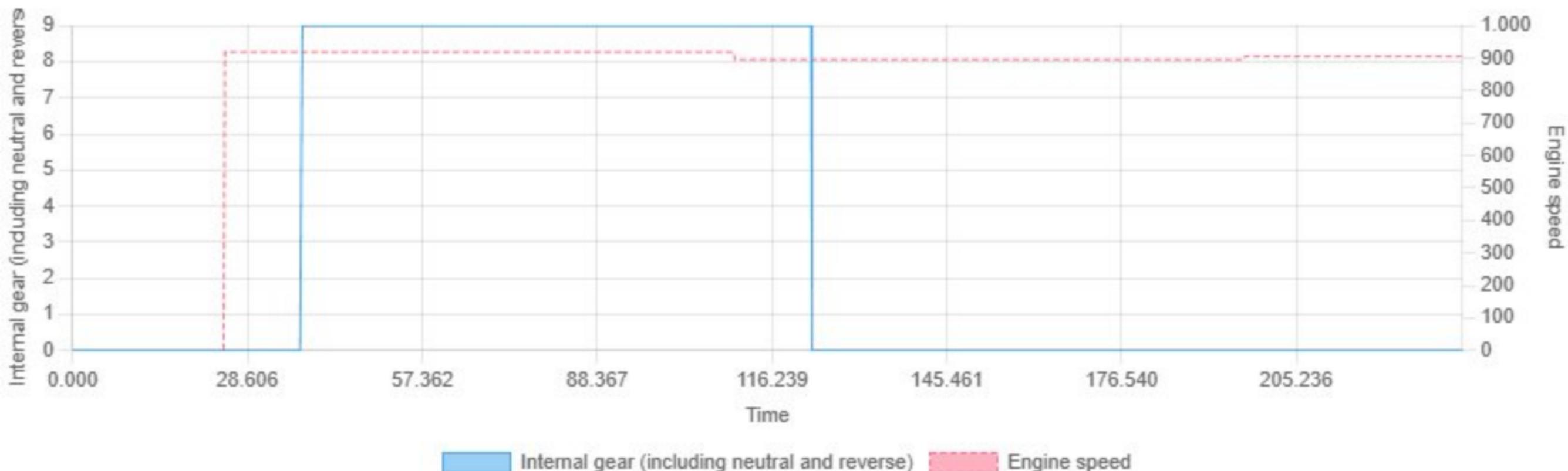


Intake manifold pressure sensor voltage

Engine speed

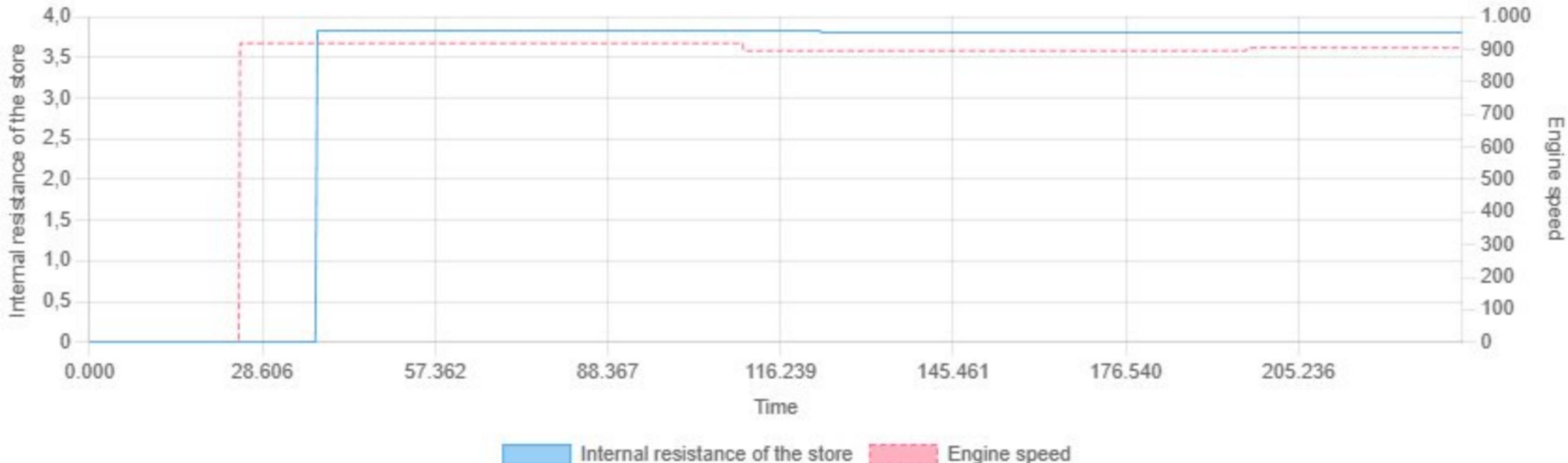
Min: 0.00 | Max: 2.70 | Avg: 2.25

## Internal gear (including neutral and reverse) vs Engine speed



Min: 0.00 | Max: 9.00 | Avg: 3.30

## Internal resistance of the store vs Engine speed

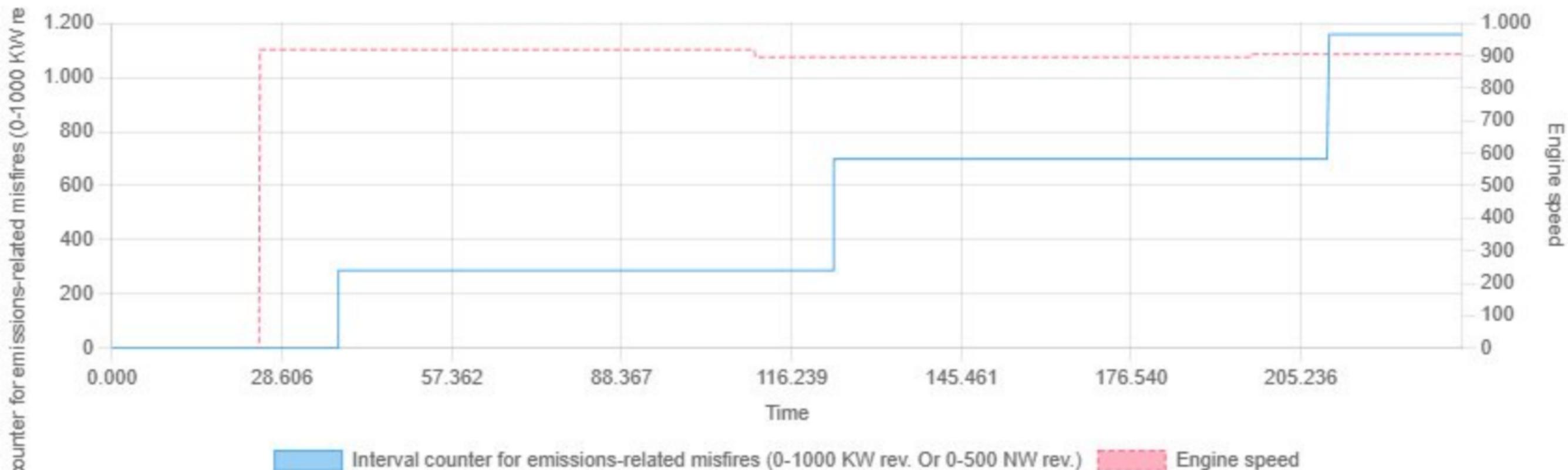


Min: 0.00 | Max: 3.83 | Avg: 3.18

## Internal resistance, HEGO sensor 3 bank 1 vs Engine speed



## Interval counter for emissions-related misfires (0-1000 KW rev. Or 0-500 NW rev.) vs Engine speed



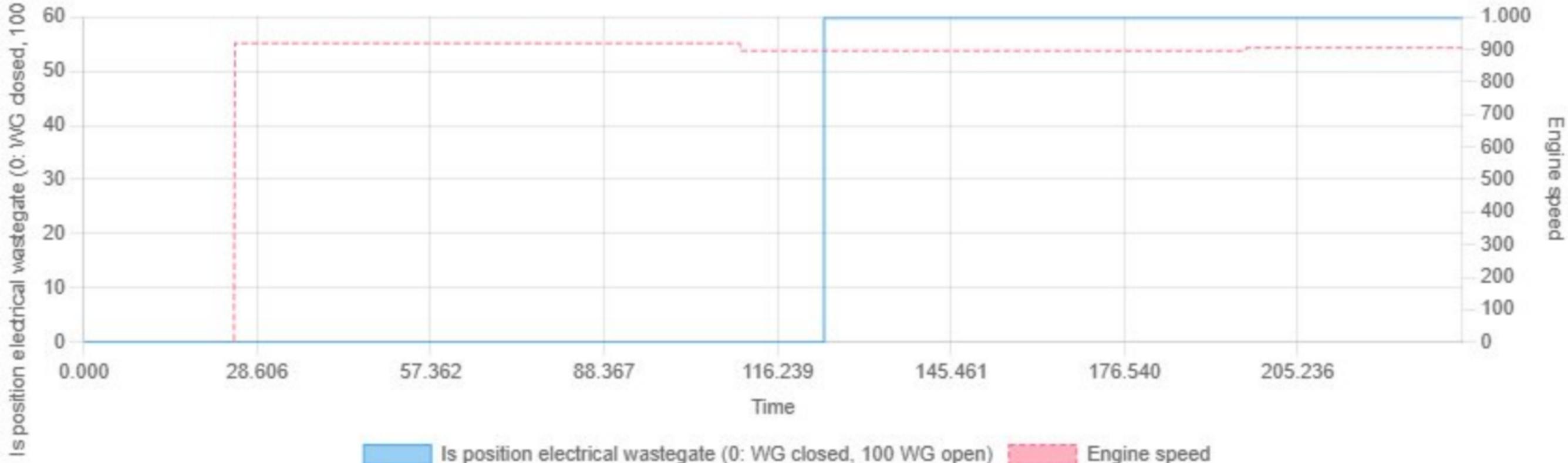
Min: 0.00 | Max: 1159.00 | Avg: 476.38

## Is banked road surface vs Engine speed



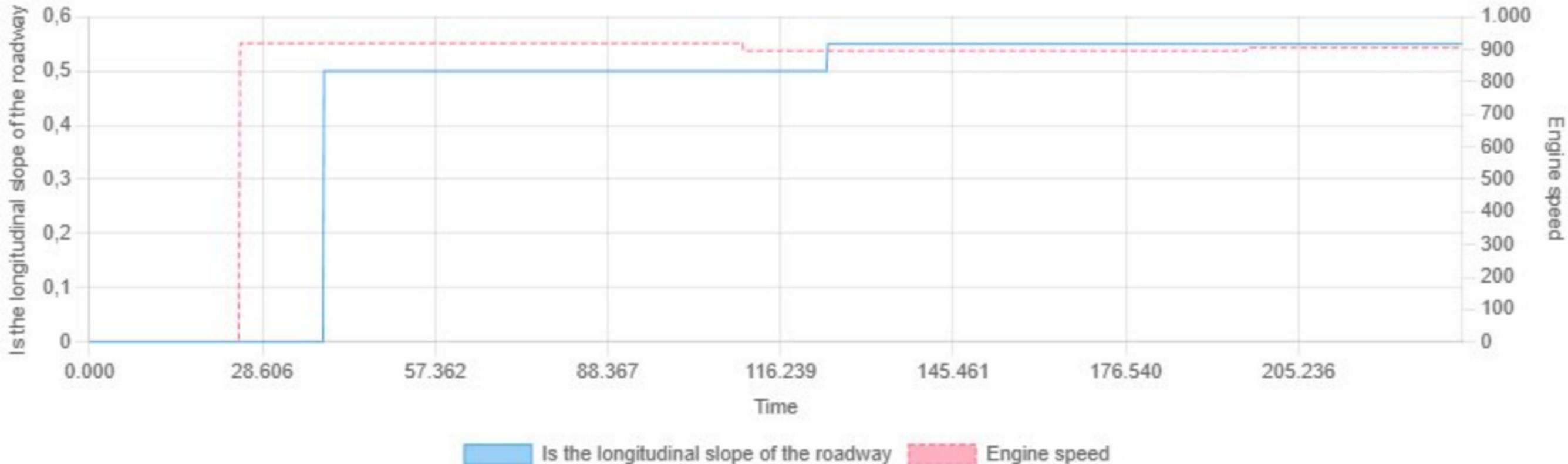
Min: -0.80 | Max: 0.00 | Avg: -0.64

## Is position electrical wastegate (0: WG closed, 100 WG open) vs Engine speed



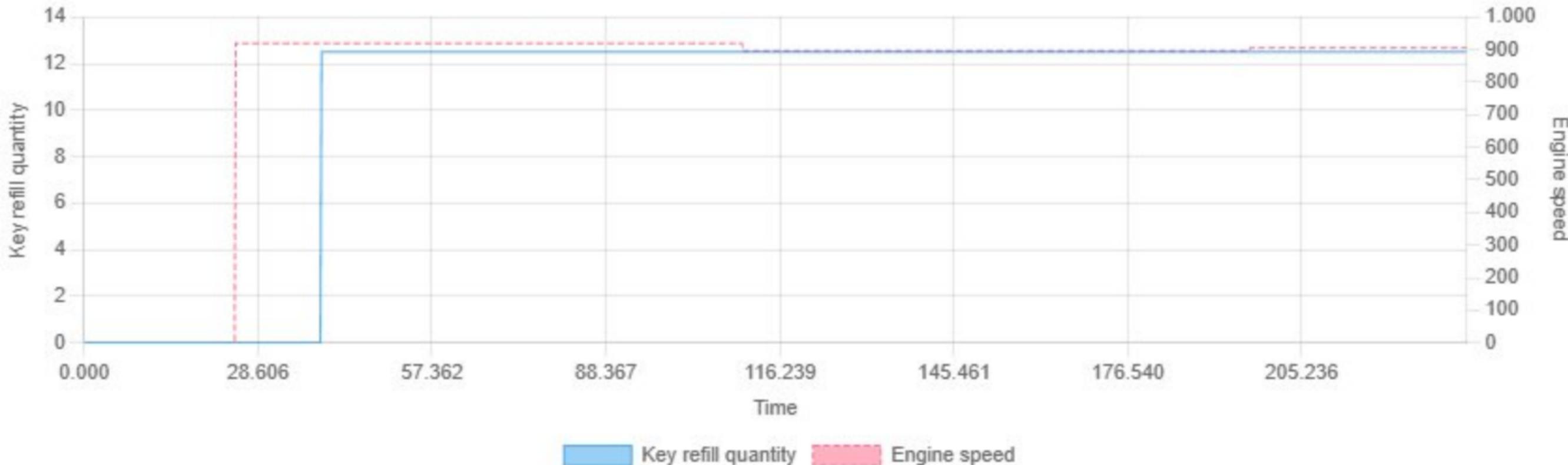
Min: 0.00 | Max: 59.77 | Avg: 27.69

## Is the longitudinal slope of the roadway vs Engine speed



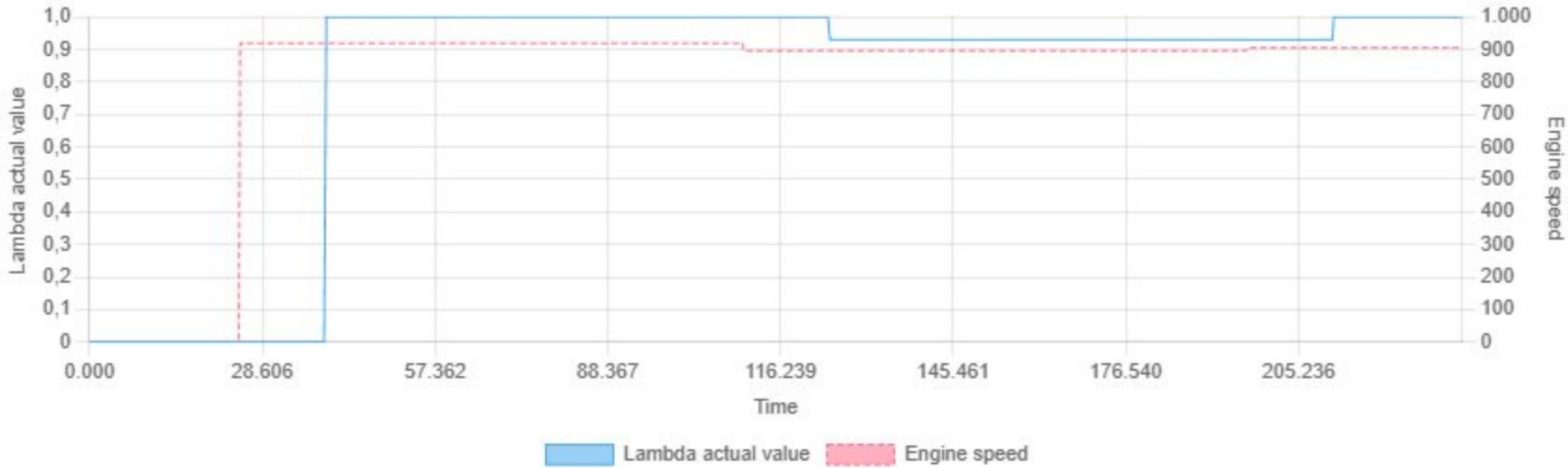
Min: 0.00 | Max: 0.55 | Avg: 0.44

## Key refill quantity vs Engine speed



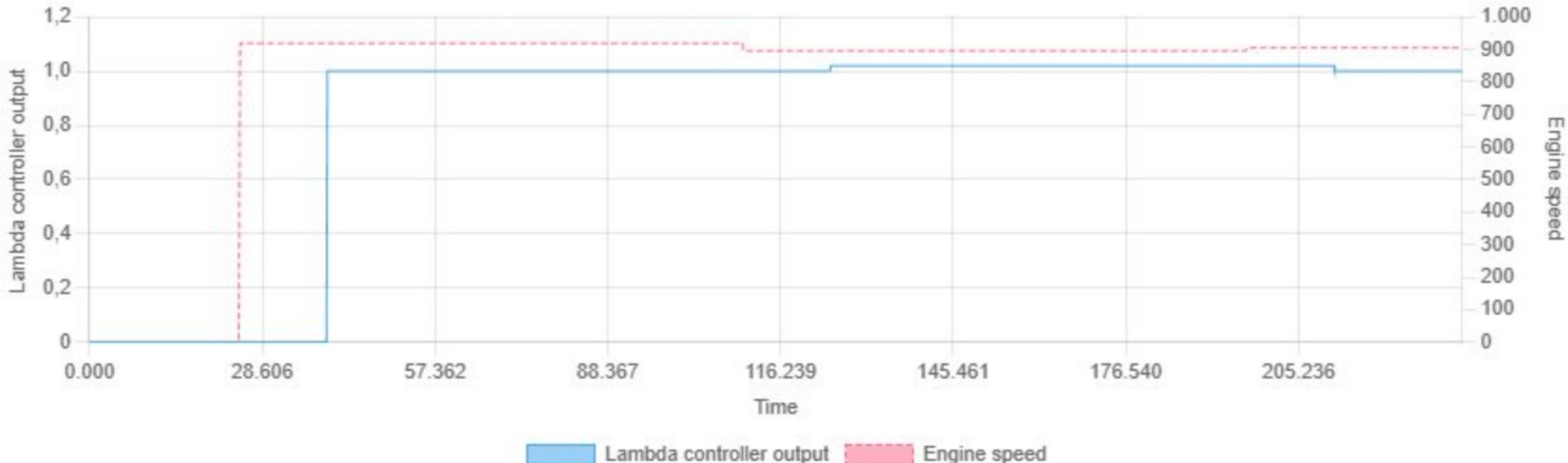
Min: 0.00 | Max: 12.50 | Avg: 10.35

## Lambda actual value vs Engine speed



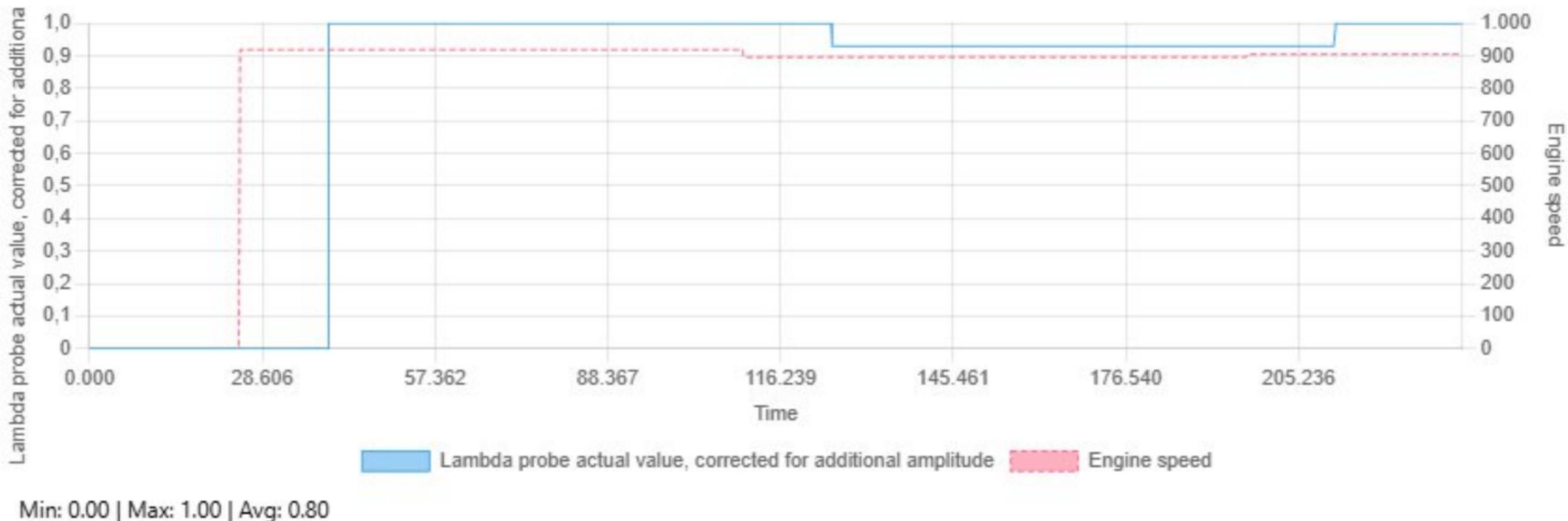
Min: 0.00 | Max: 1.00 | Avg: 0.80

## Lambda controller output vs Engine speed

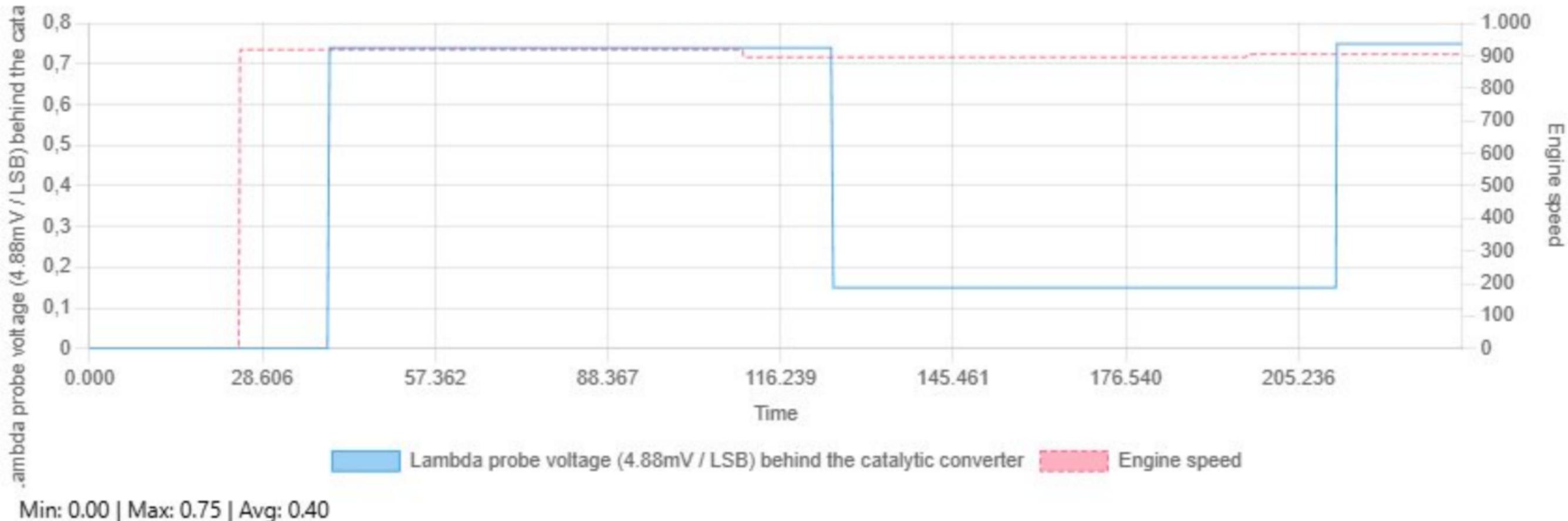


Min: 0.00 | Max: 1.02 | Avg: 0.83

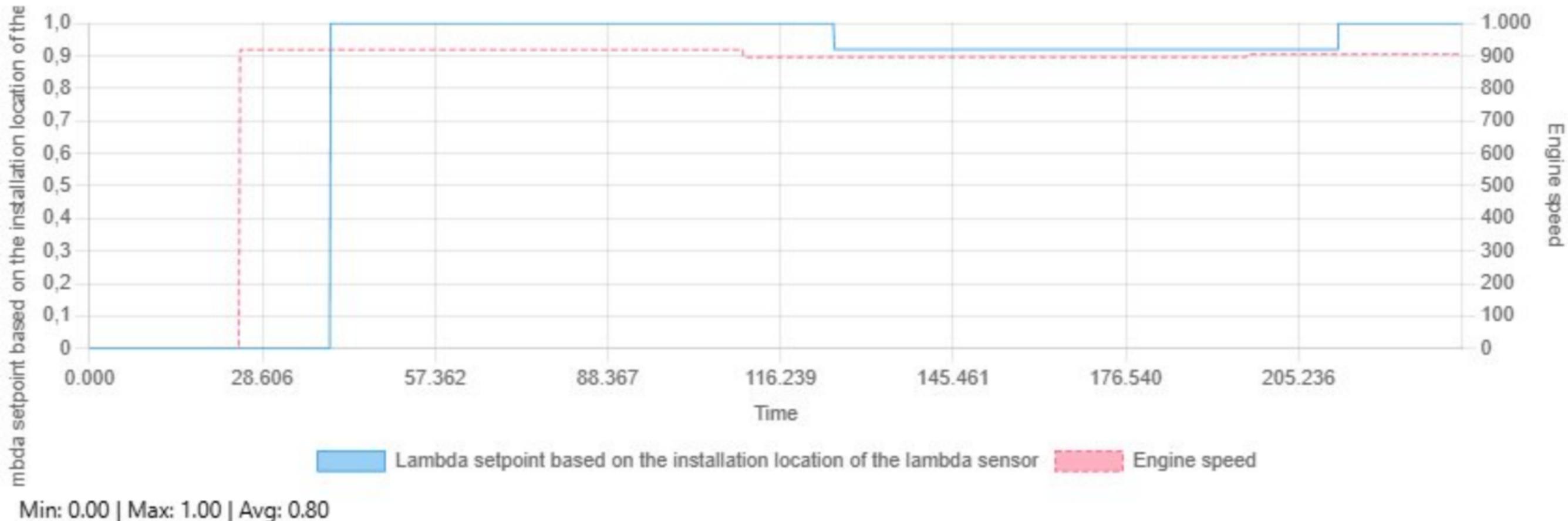
## Lambda probe actual value, corrected for additional amplitude vs Engine speed



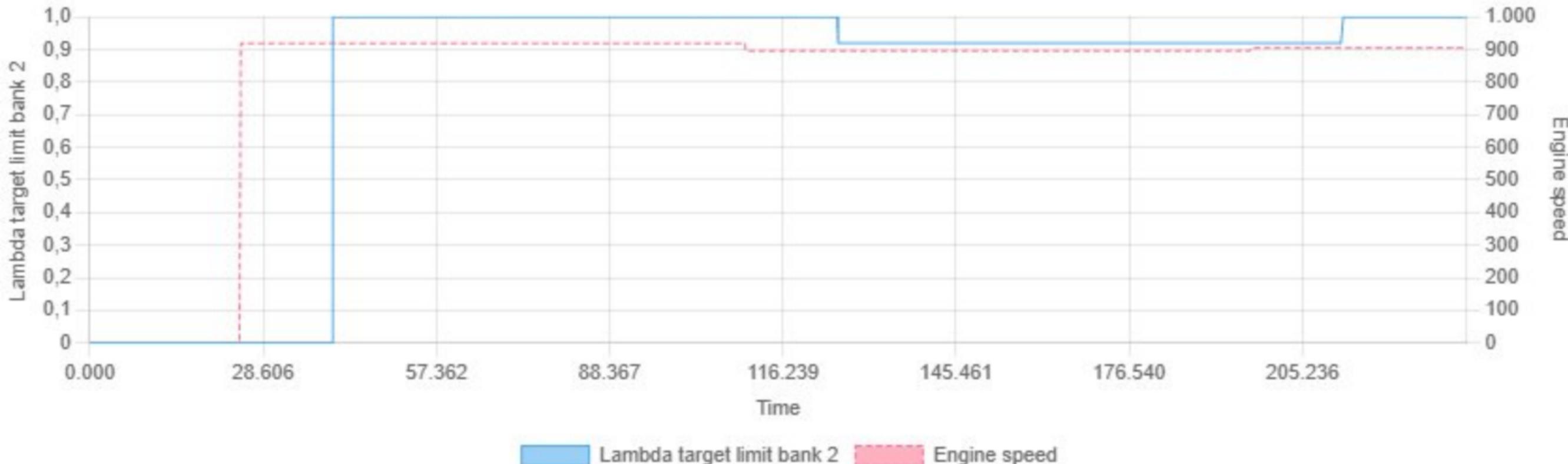
## Lambda probe voltage (4.88mV / LSB) behind the catalytic converter vs Engine speed



## Lambda setpoint based on the installation location of the lambda sensor vs Engine speed

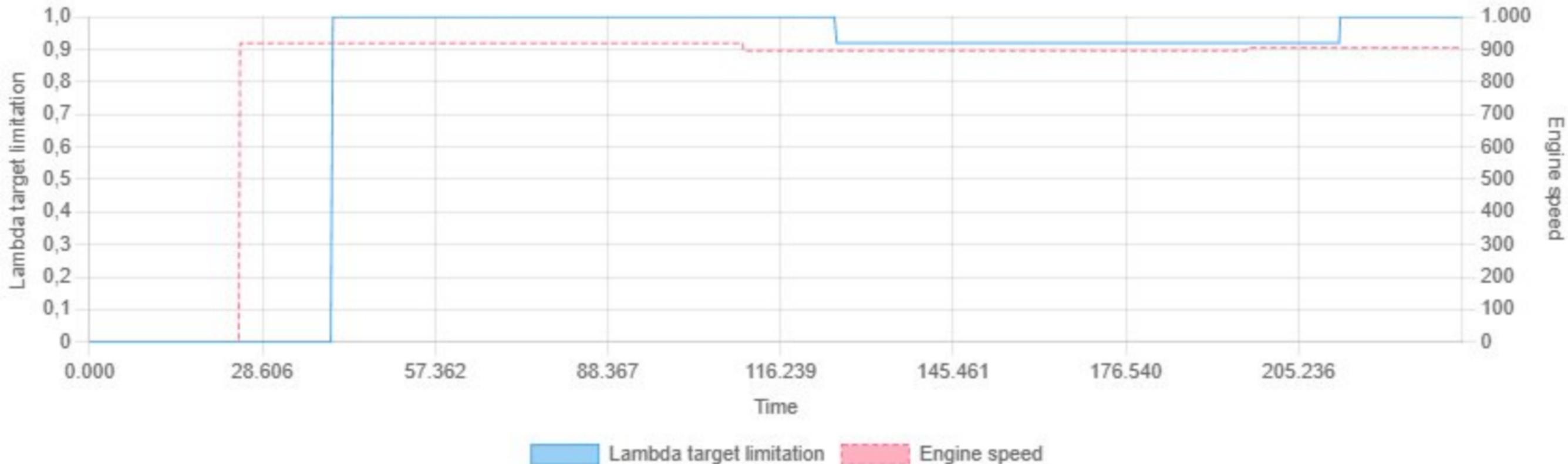


## Lambda target limit bank 2 vs Engine speed



Min: 0.00 | Max: 1.00 | Avg: 0.79

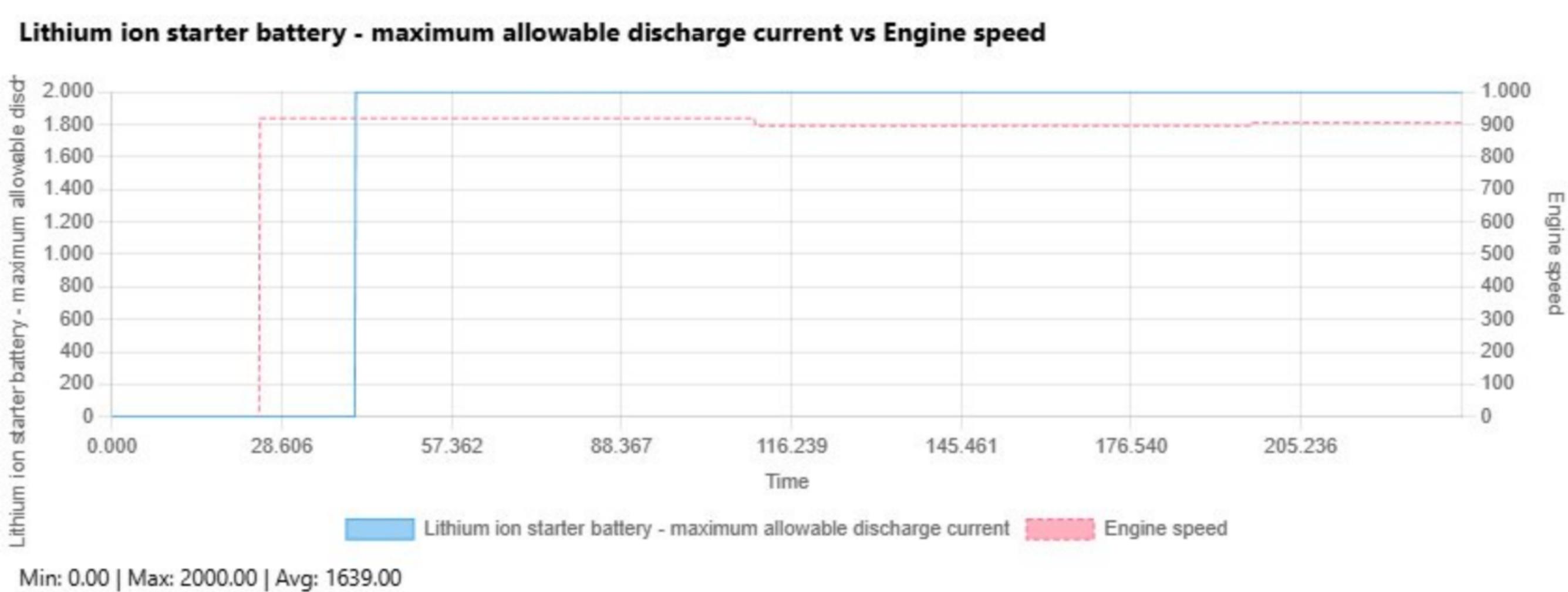
## Lambda target limitation vs Engine speed



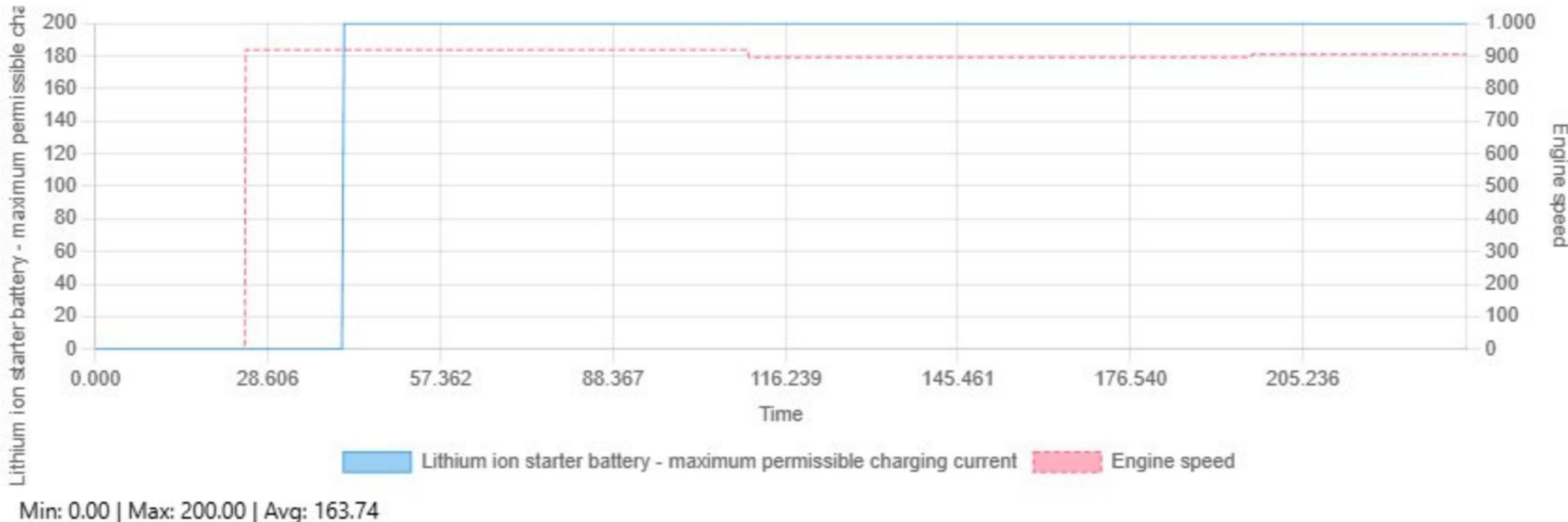
Min: 0.00 | Max: 1.00 | Avg: 0.79

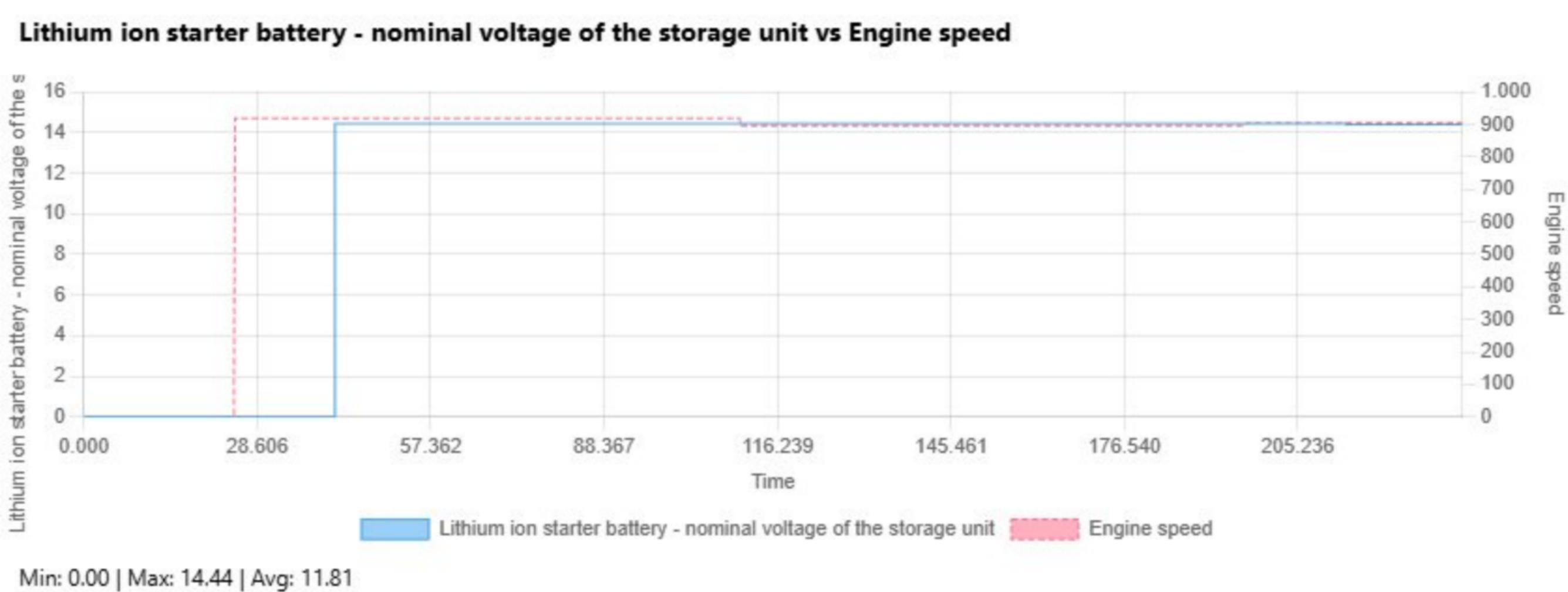
## Level of the right half of the tank vs Engine speed



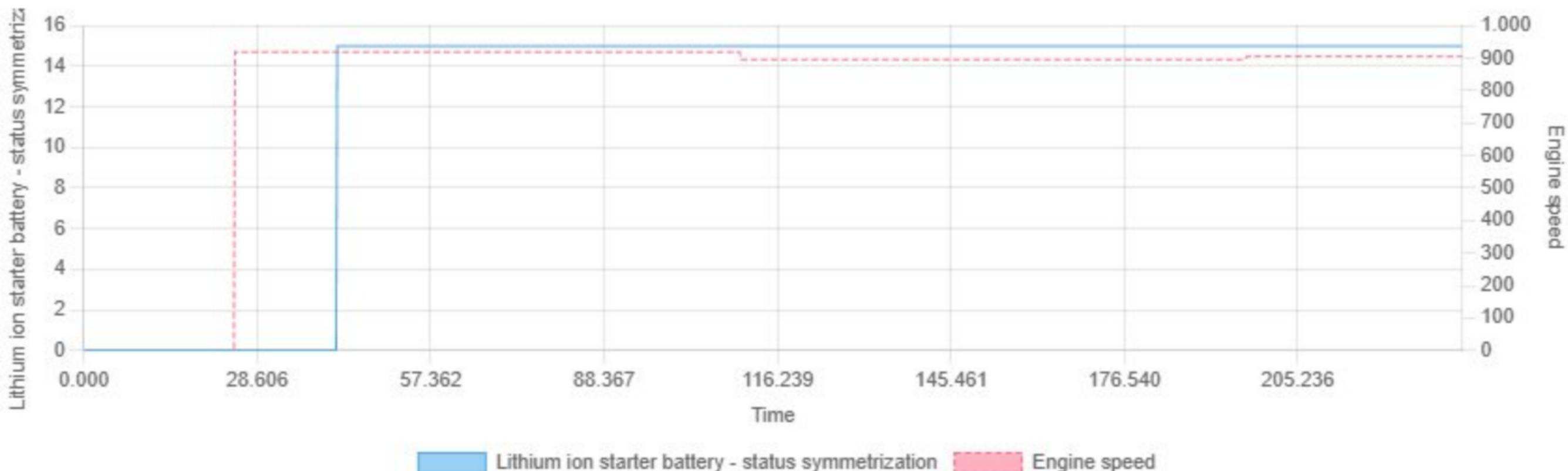


## Lithium ion starter battery - maximum permissible charging current vs Engine speed



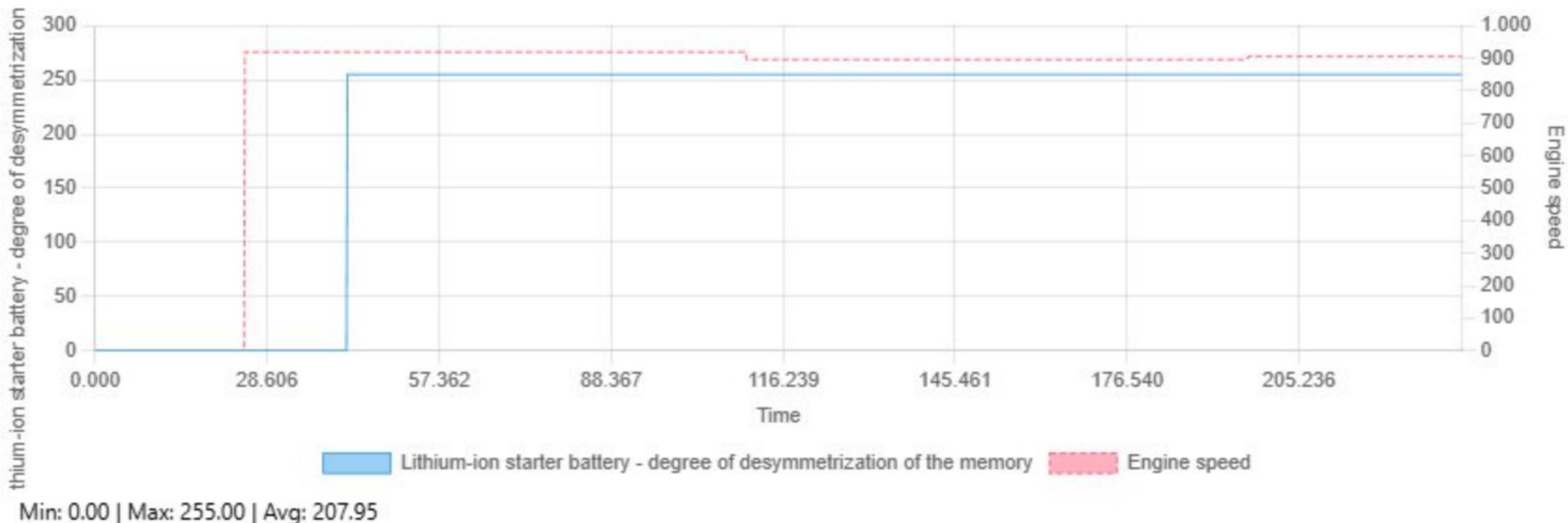


## Lithium ion starter battery - status symmetrization vs Engine speed

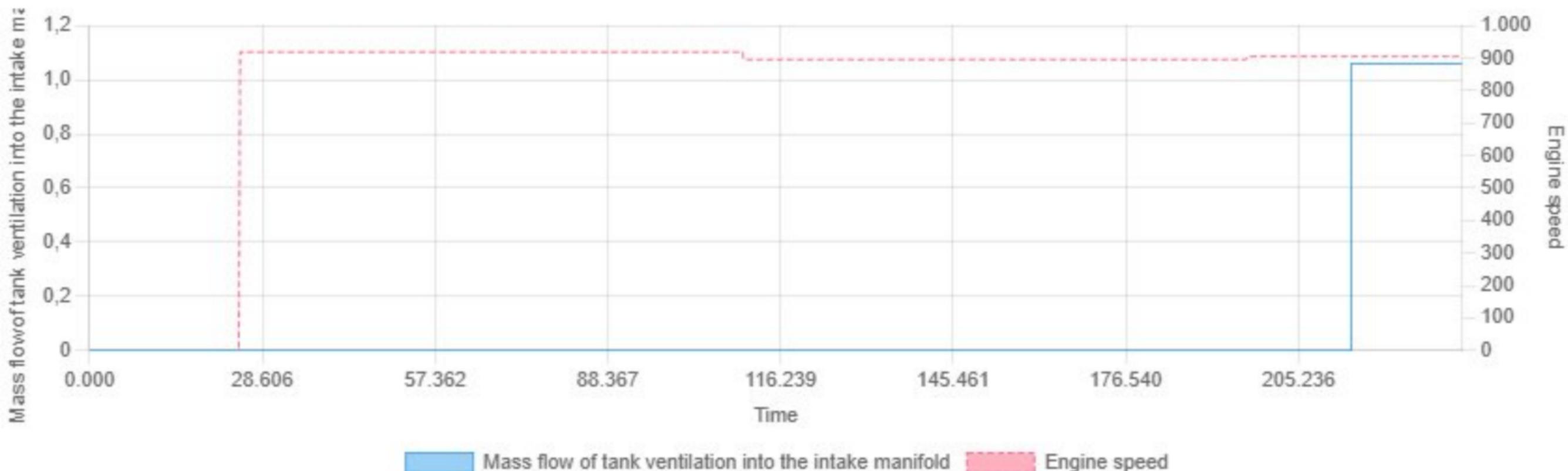


Min: 0.00 | Max: 15.00 | Avg: 12.24

## Lithium-ion starter battery - degree of desymmetrization of the memory vs Engine speed

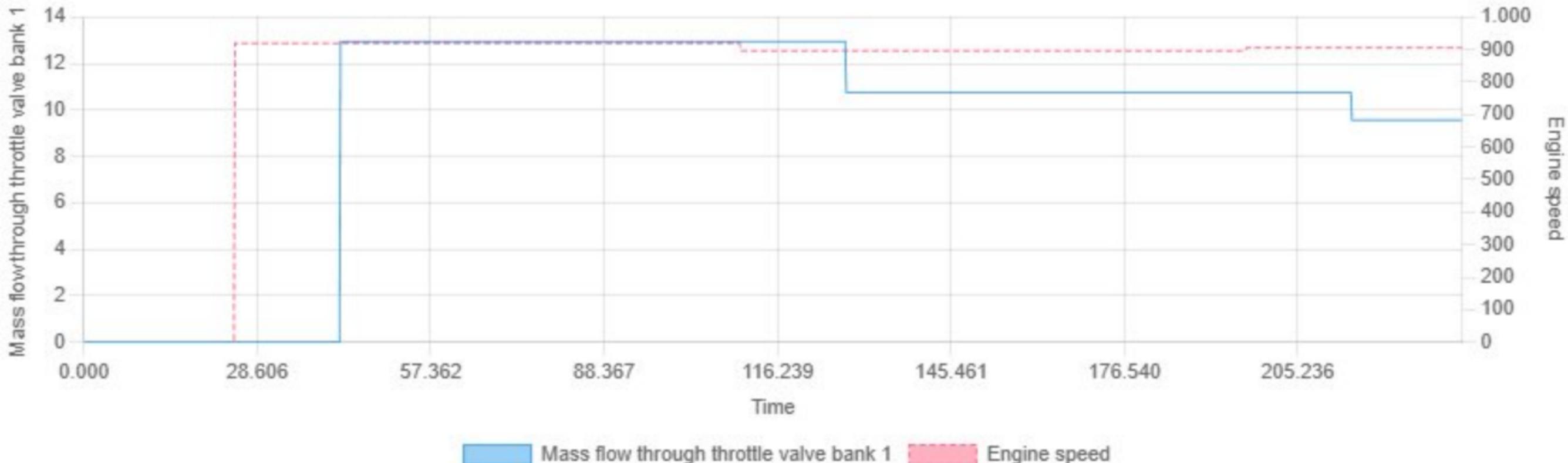


## Mass flow of tank ventilation into the intake manifold vs Engine speed



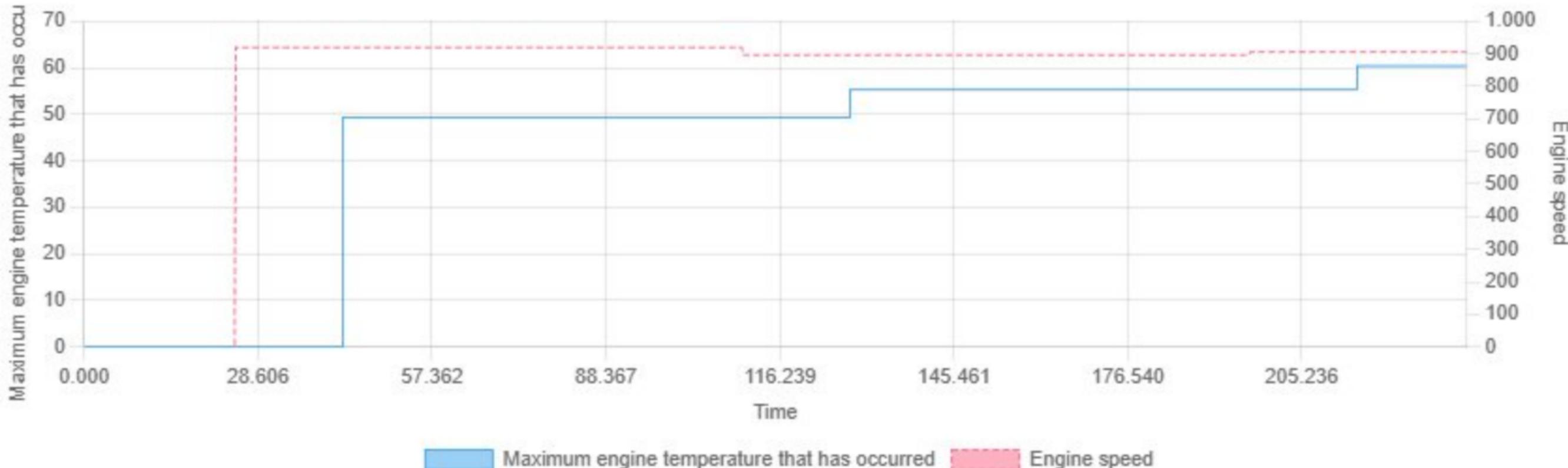
Min: 0.00 | Max: 1.06 | Avg: 0.09

## Mass flow through throttle valve bank 1 vs Engine speed



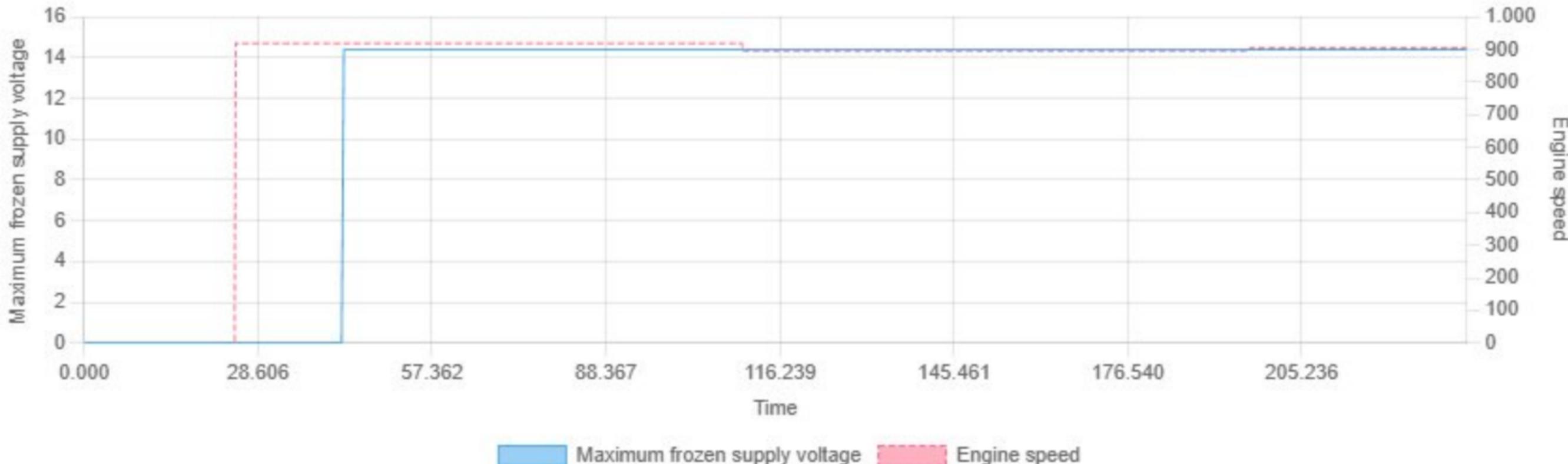
Min: 0.00 | Max: 12.94 | Avg: 9.46

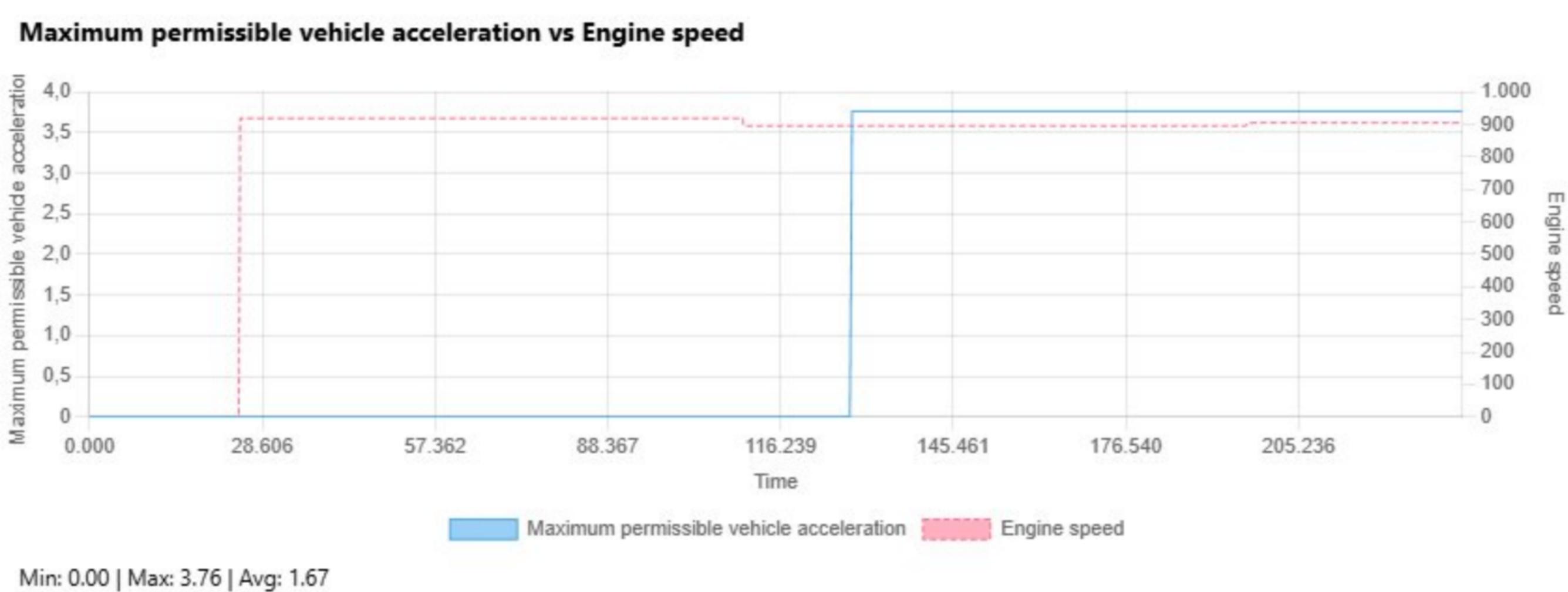
## Maximum engine temperature that has occurred vs Engine speed

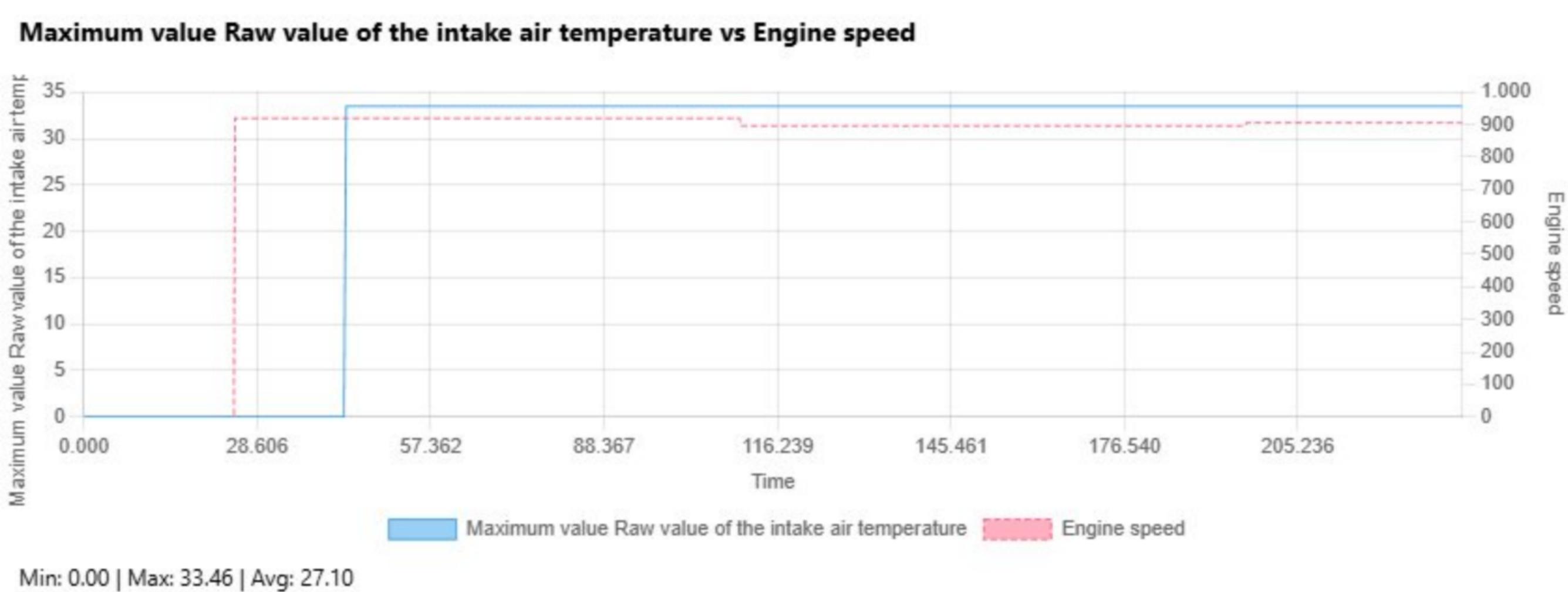


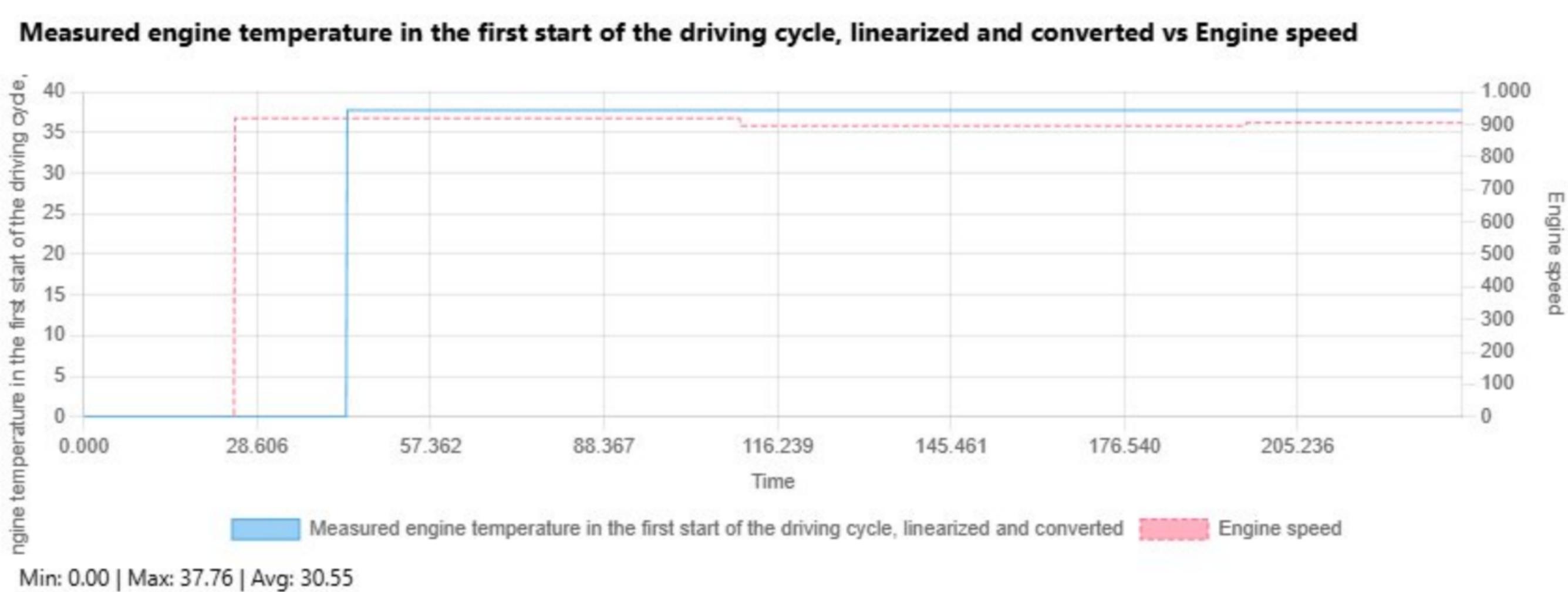
Min: 0.00 | Max: 60.36 | Avg: 43.14

## Maximum frozen supply voltage vs Engine speed

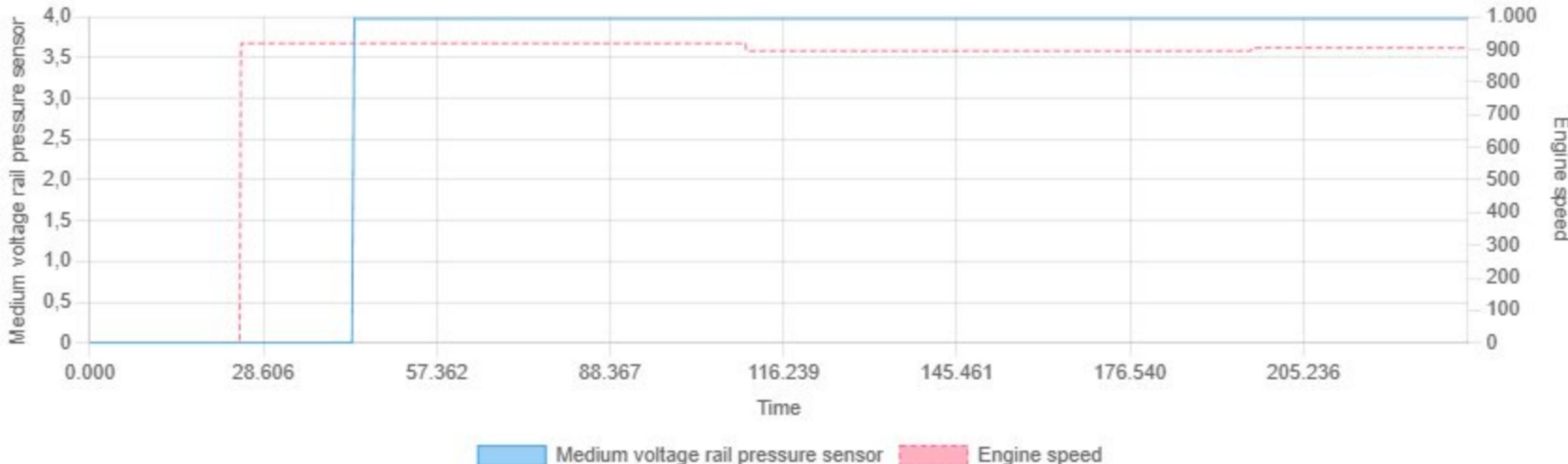








## Medium voltage rail pressure sensor vs Engine speed

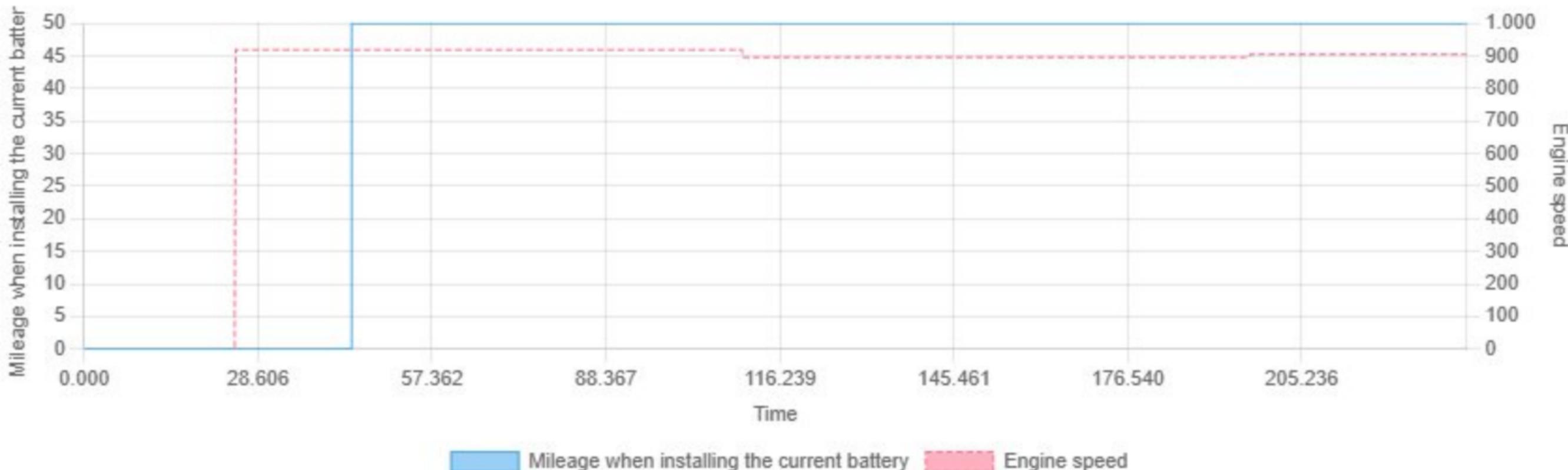


## Mileage fuel delivery module vs Engine speed



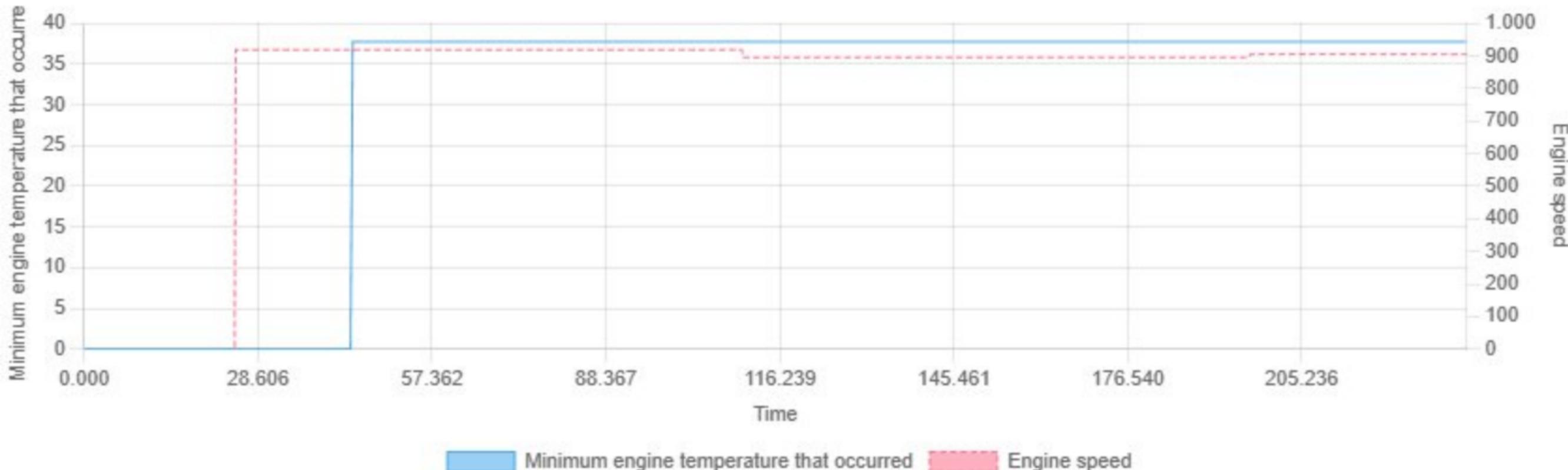
Min: 0.00 | Max: 31927.00 | Avg: 25778.29

## Mileage when installing the current battery vs Engine speed



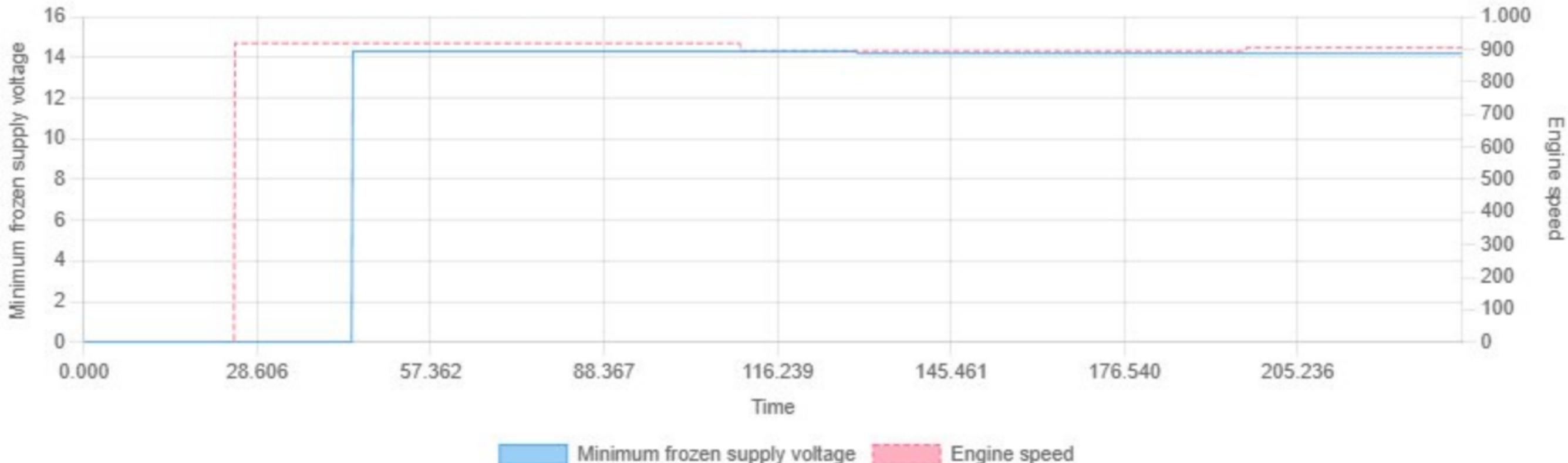
Min: 0.00 | Max: 50.00 | Avg: 40.33

## Minimum engine temperature that occurred vs Engine speed



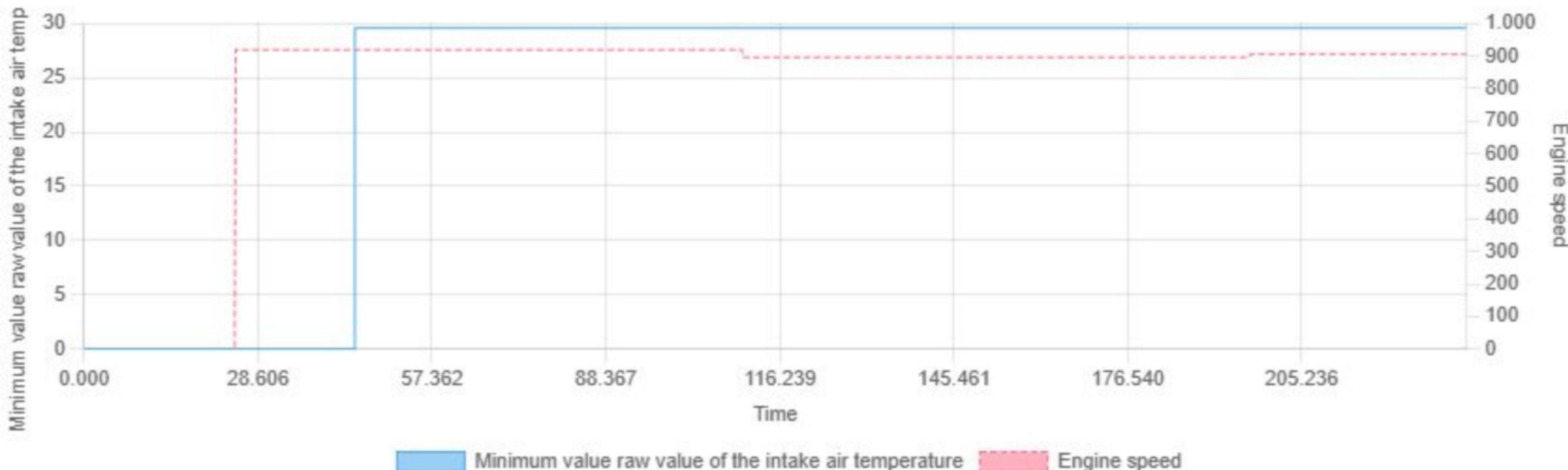
Min: 0.00 | Max: 37.76 | Avg: 30.43

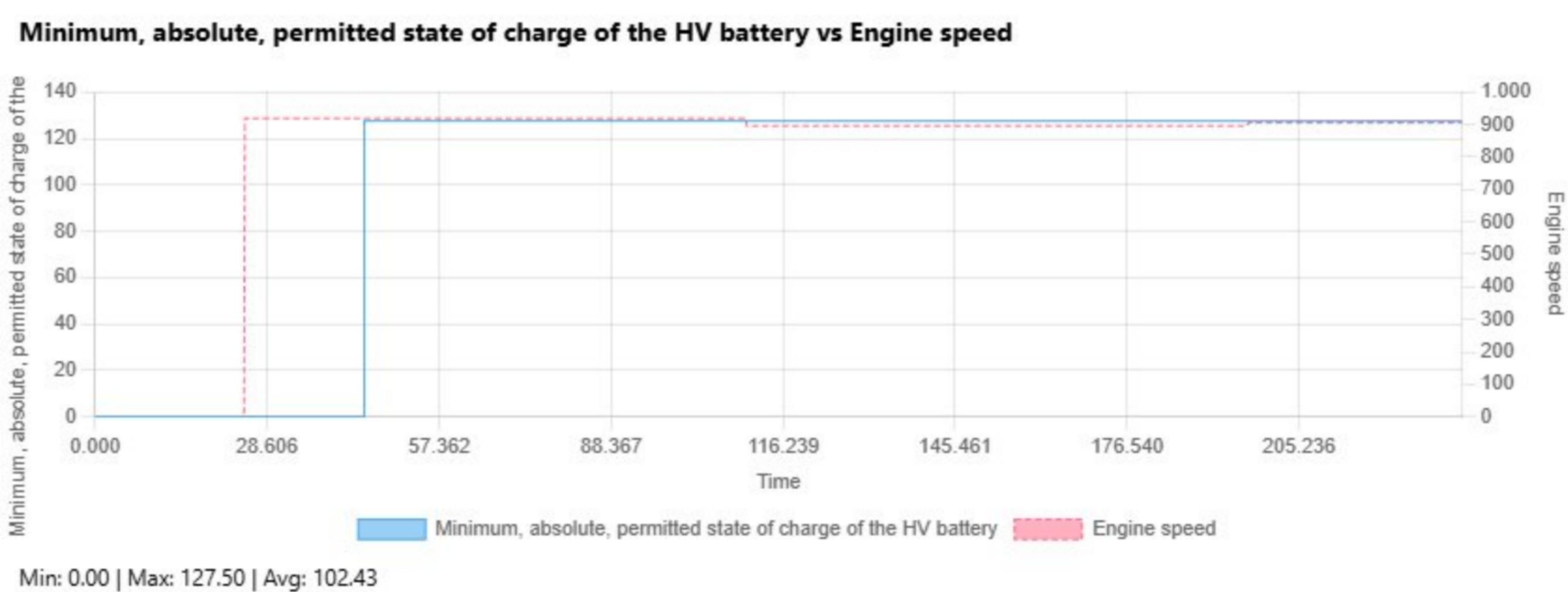
## Minimum frozen supply voltage vs Engine speed



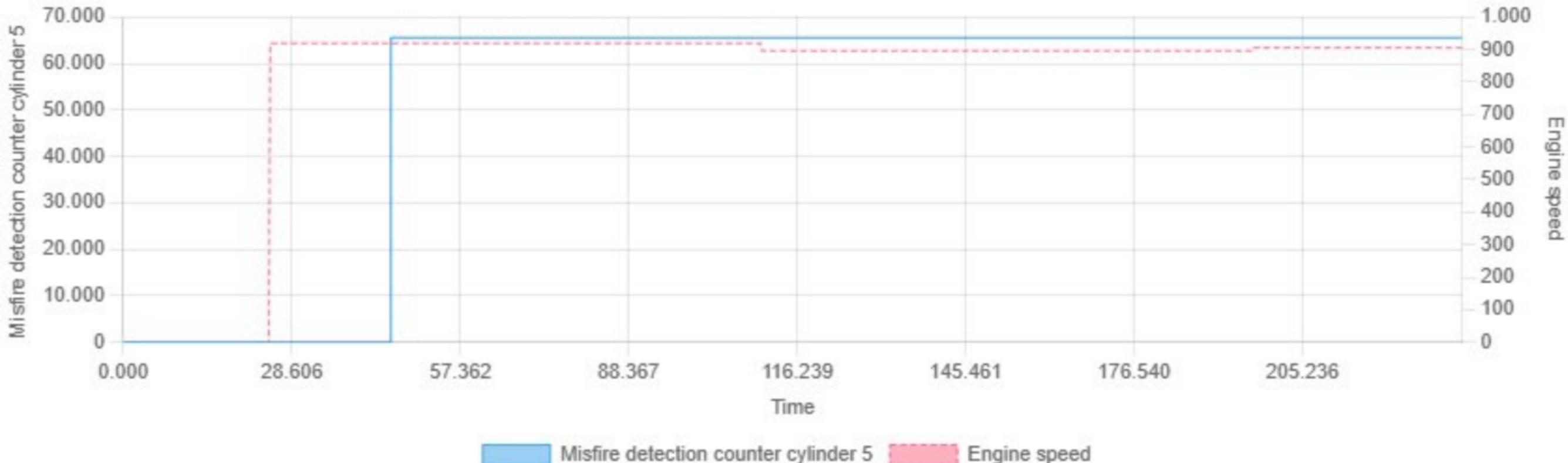
Min: 0.00 | Max: 14.30 | Avg: 11.47

## Minimum value raw value of the intake air temperature vs Engine speed



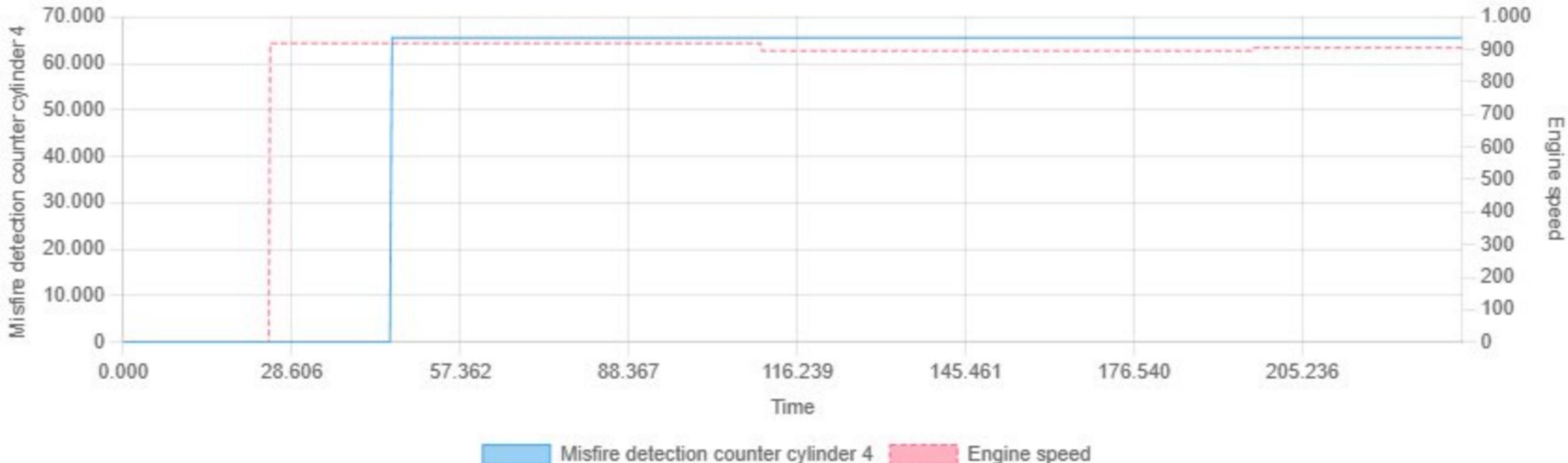


## Misfire detection counter cylinder 5 vs Engine speed



Min: 0.00 | Max: 65535.00 | Avg: 52438.56

## Misfire detection counter cylinder 4 vs Engine speed

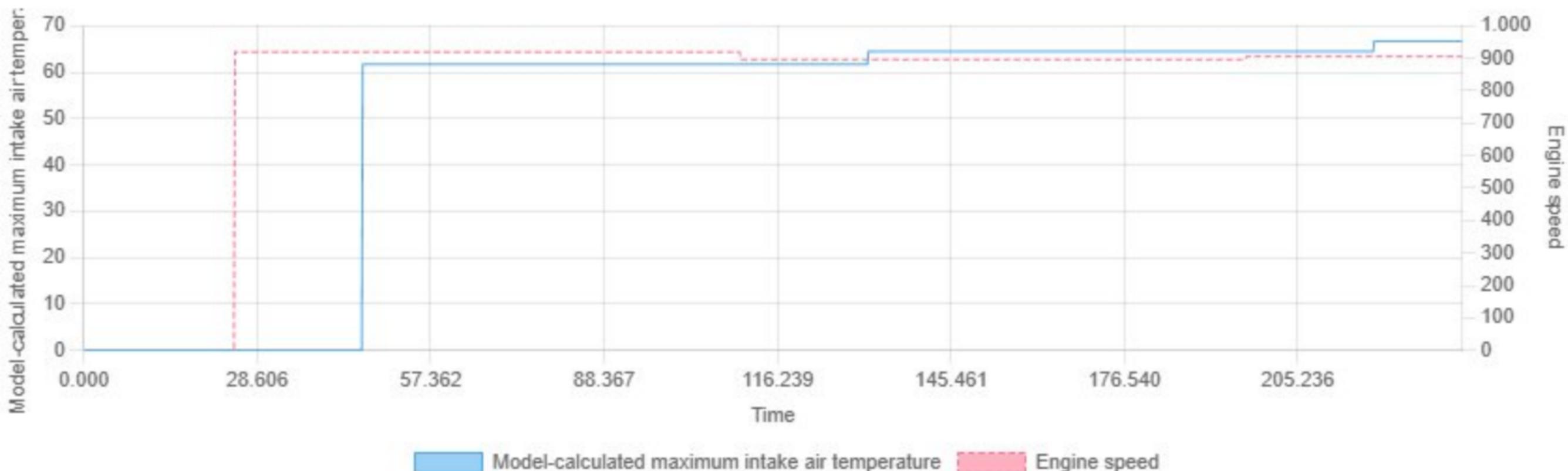


Min: 0.00 | Max: 65535.00 | Avg: 52385.75

## Misfire detection counter cylinder 6 vs Engine speed

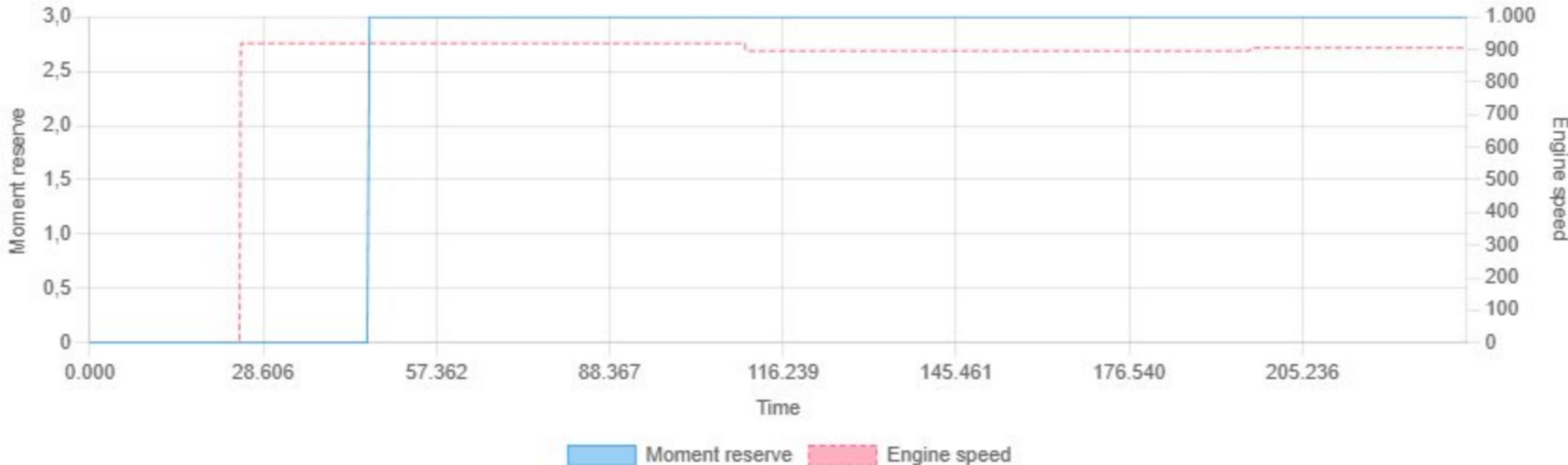


## Model-calculated maximum intake air temperature vs Engine speed

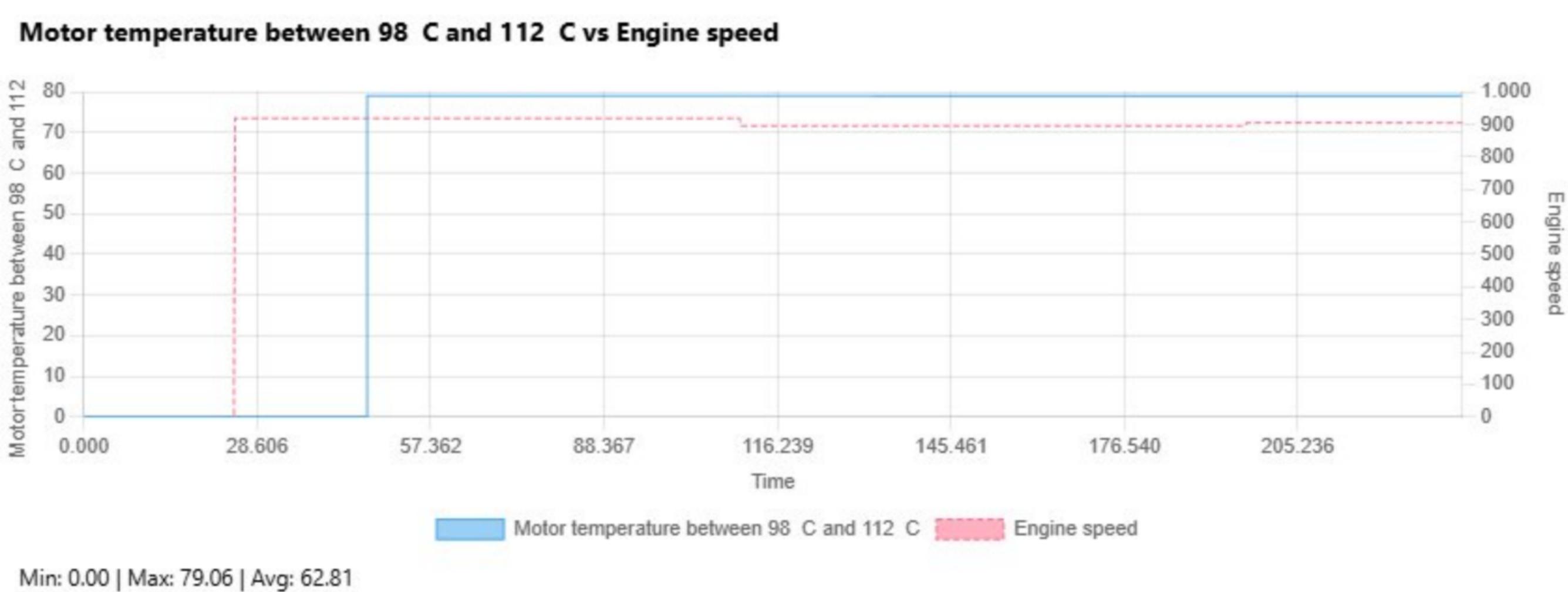


Min: 0.00 | Max: 66.66 | Avg: 50.54

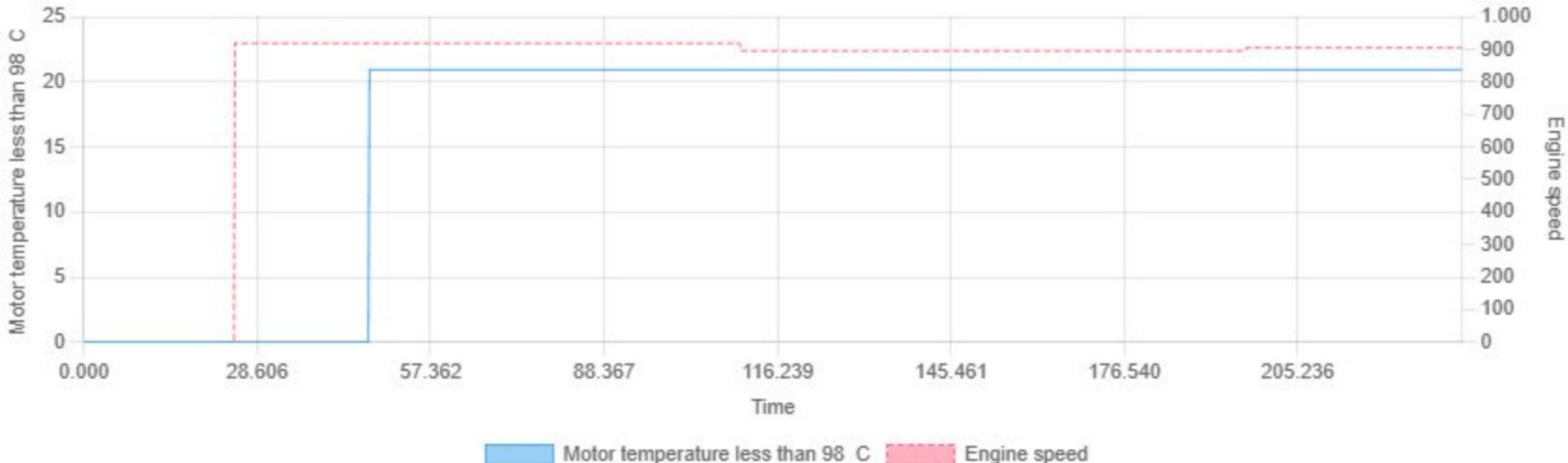
## Moment reserve vs Engine speed



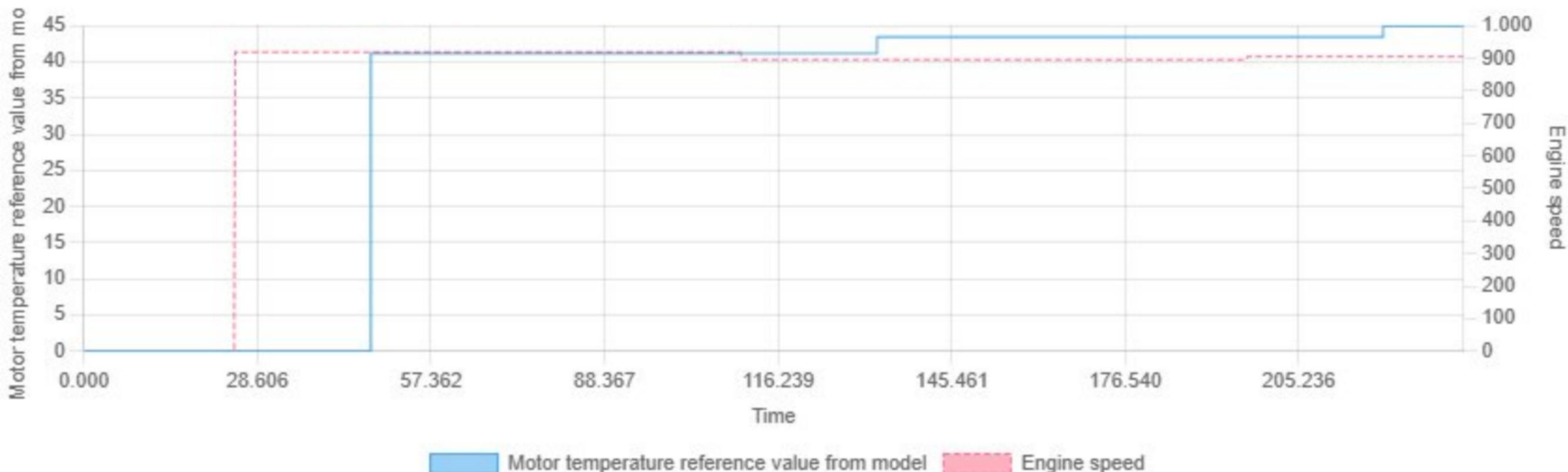
Min: 0.00 | Max: 3.00 | Avg: 2.39



## Motor temperature less than 98 C vs Engine speed

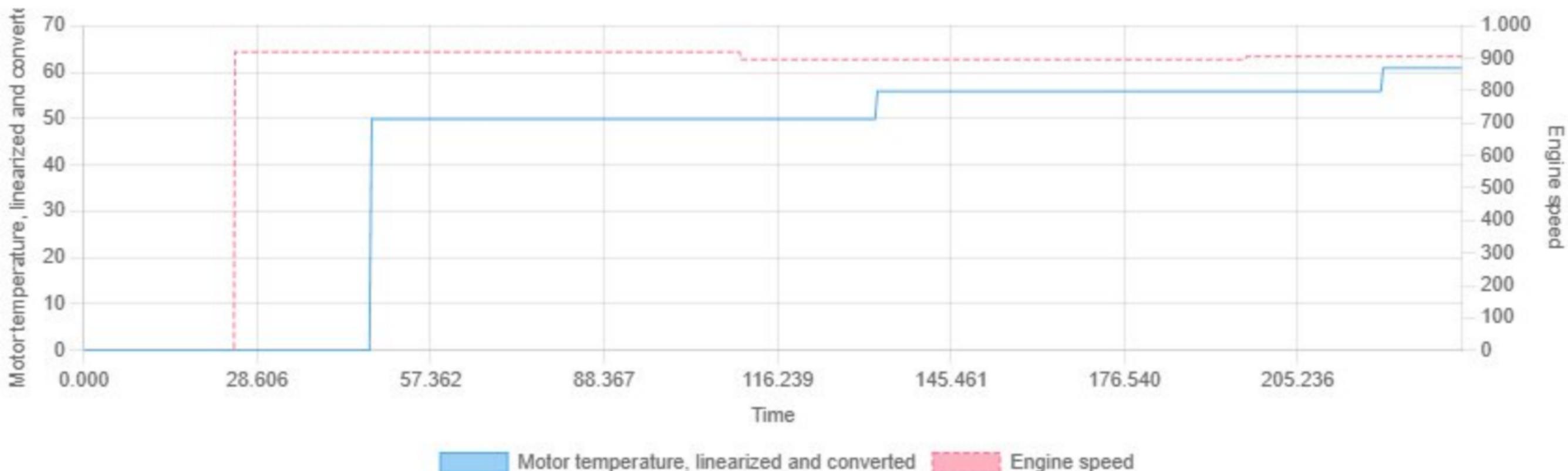


## Motor temperature reference value from model vs Engine speed



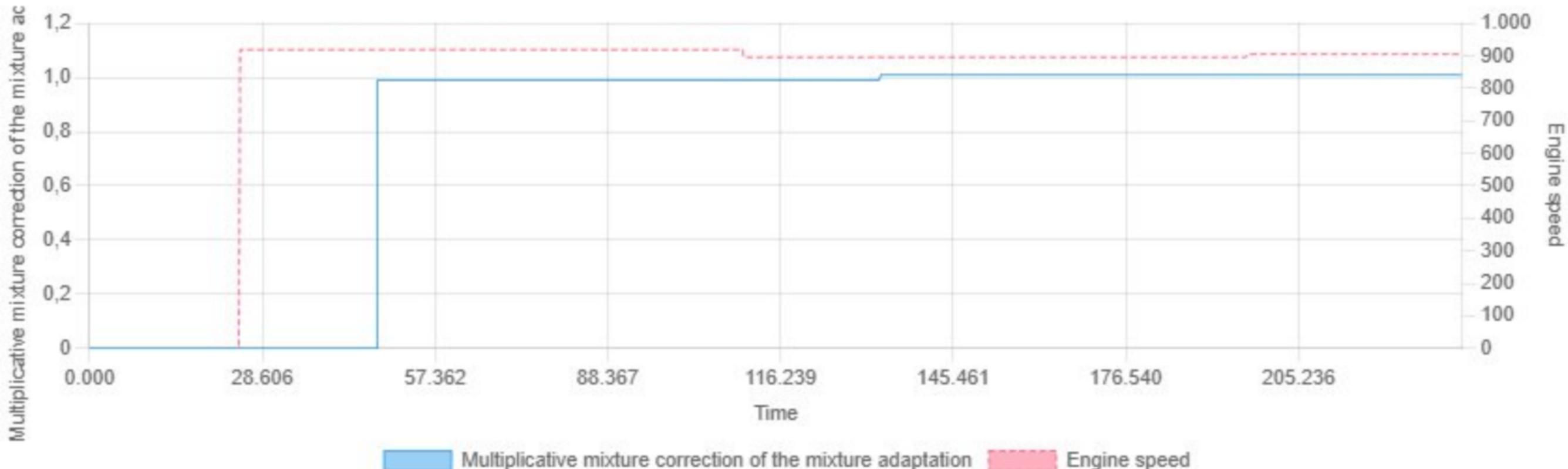
Min: 0.00 | Max: 44.96 | Avg: 33.67

## Motor temperature, linearized and converted vs Engine speed



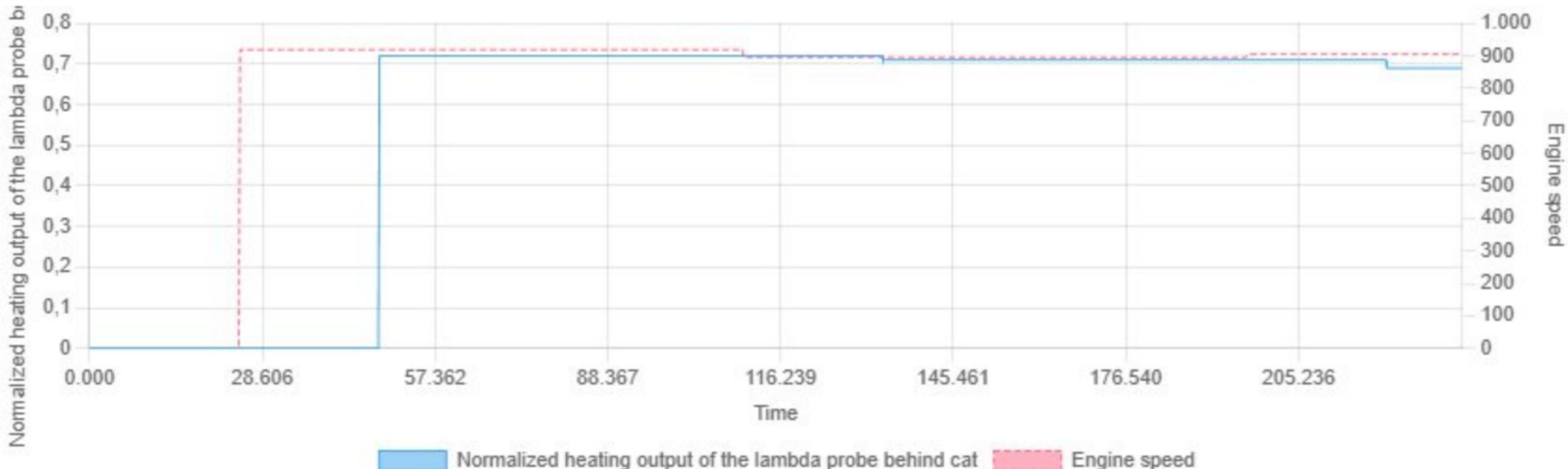
Min: 0.00 | Max: 60.86 | Avg: 42.29

## Multiplicative mixture correction of the mixture adaptation vs Engine speed

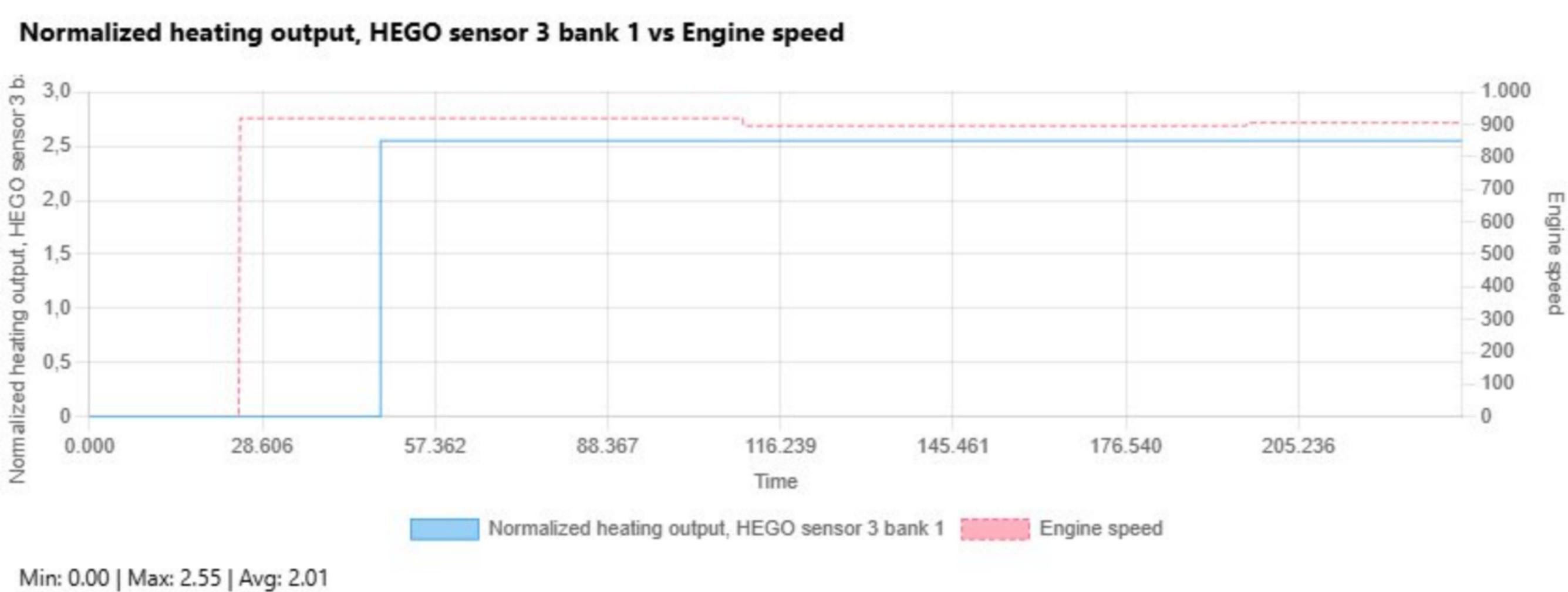


Min: 0.00 | Max: 1.01 | Avg: 0.79

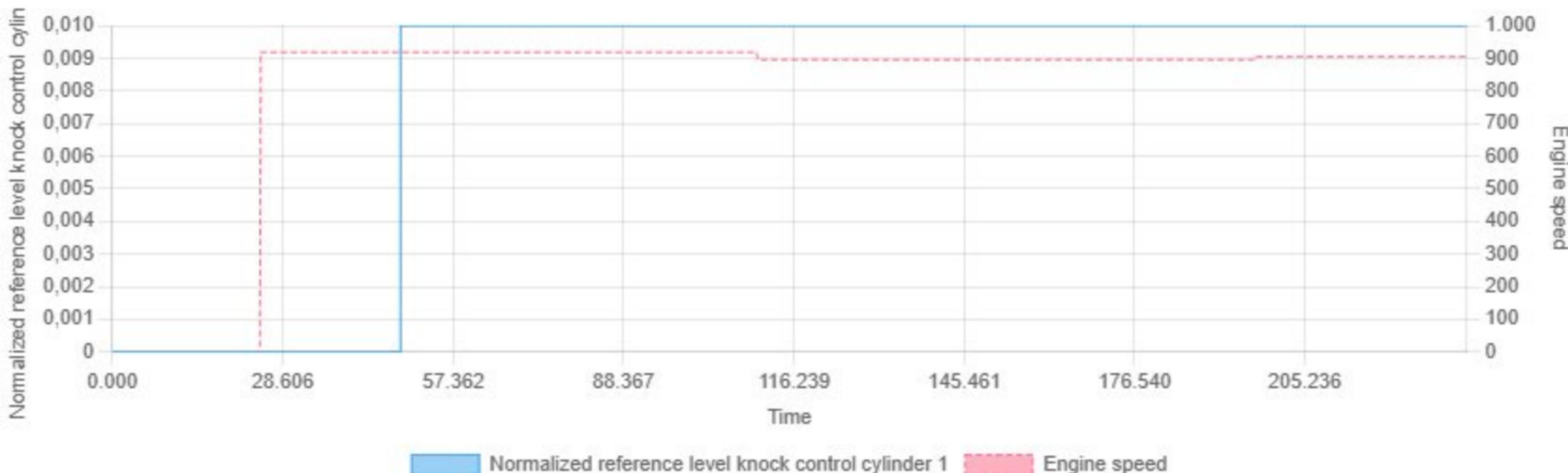
## Normalized heating output of the lambda probe behind cat vs Engine speed



Min: 0.00 | Max: 0.72 | Avg: 0.56

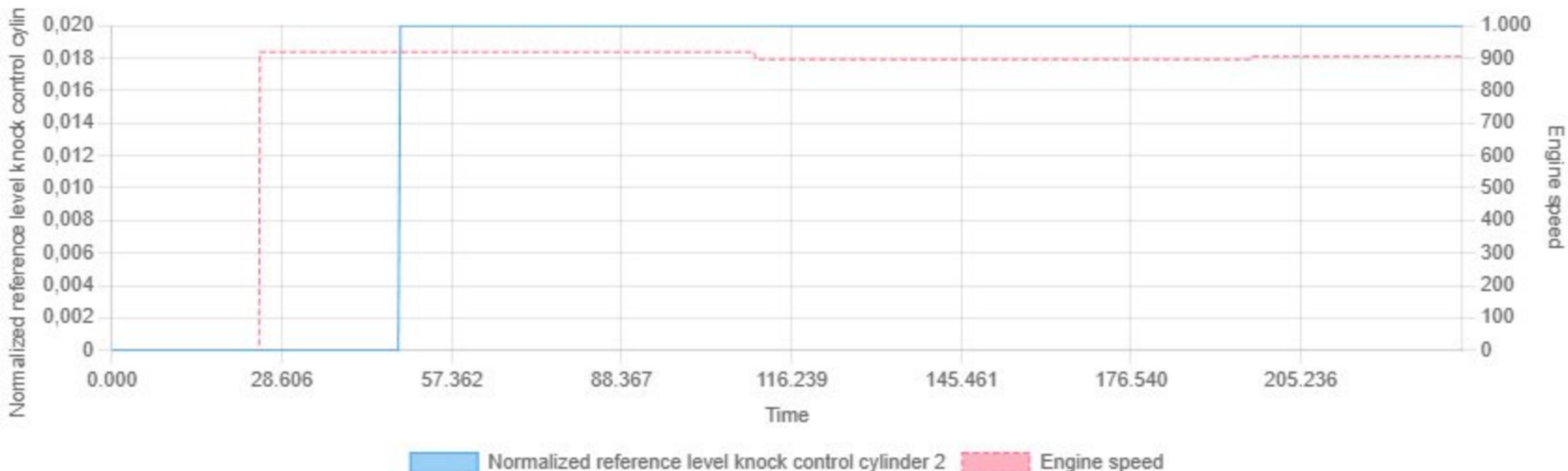


## Normalized reference level knock control cylinder 1 vs Engine speed



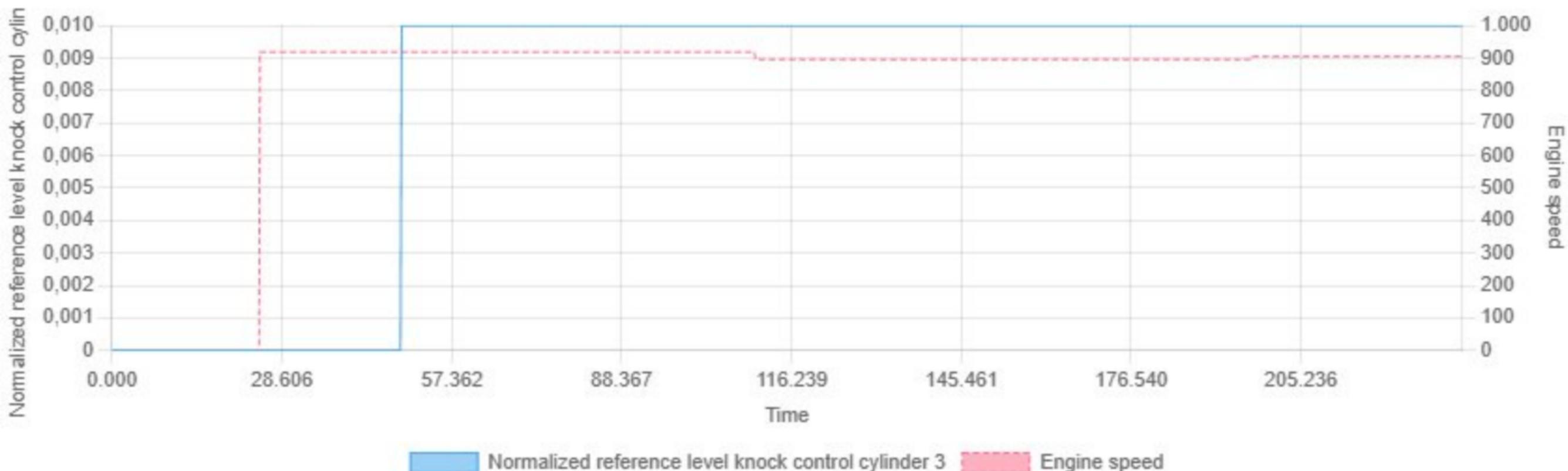
Min: 0.00 | Max: 0.01 | Avg: 0.01

## Normalized reference level knock control cylinder 2 vs Engine speed



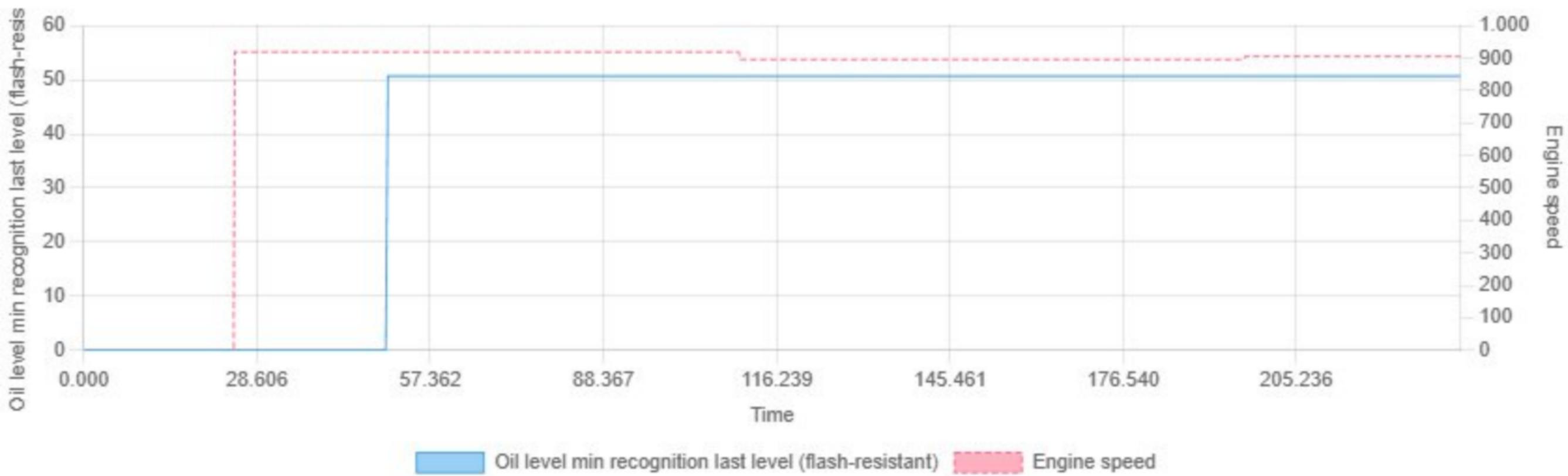
Min: 0.00 | Max: 0.02 | Avg: 0.02

## Normalized reference level knock control cylinder 3 vs Engine speed



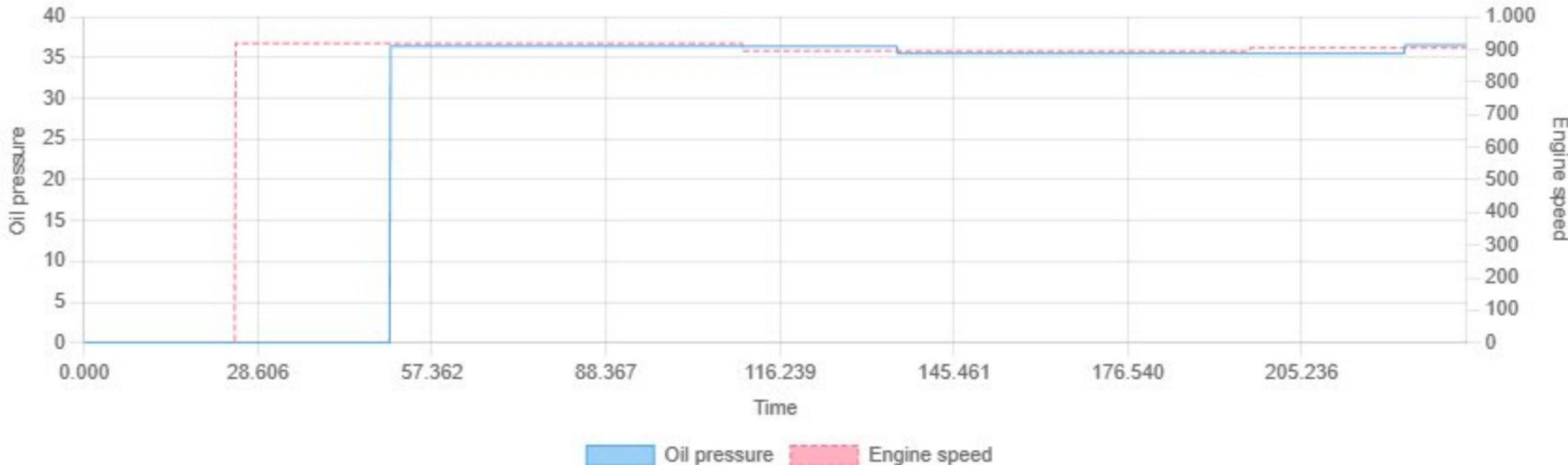
Min: 0.00 | Max: 0.01 | Avg: 0.01

## Oil level min recognition last level (flash-resistant) vs Engine speed

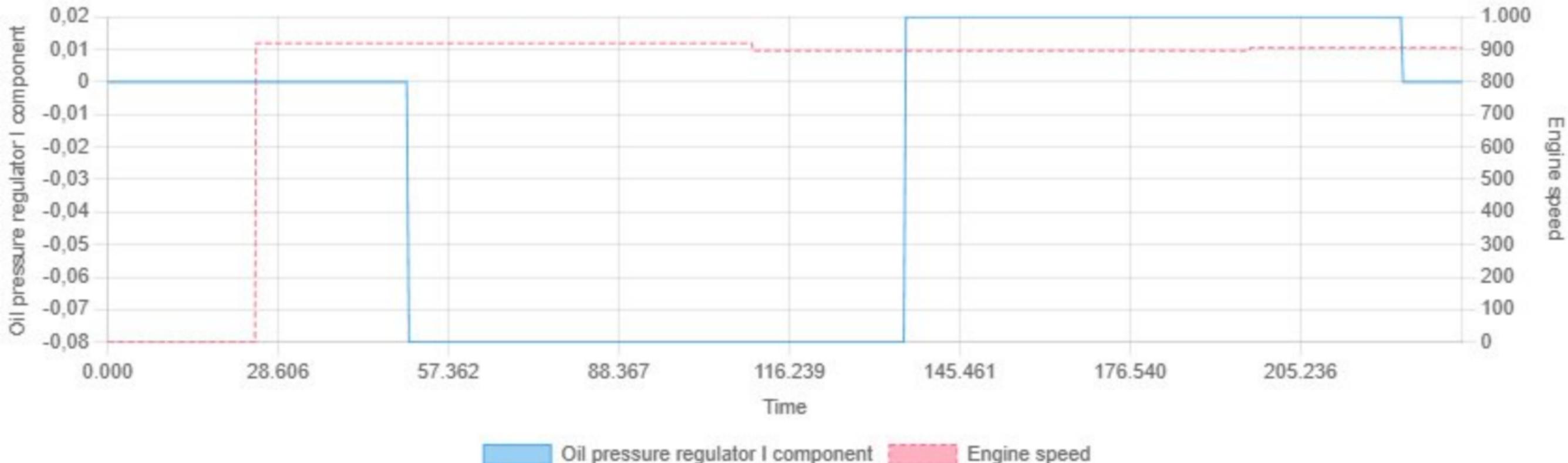


Min: 0.00 | Max: 50.68 | Avg: 39.49

## Oil pressure vs Engine speed

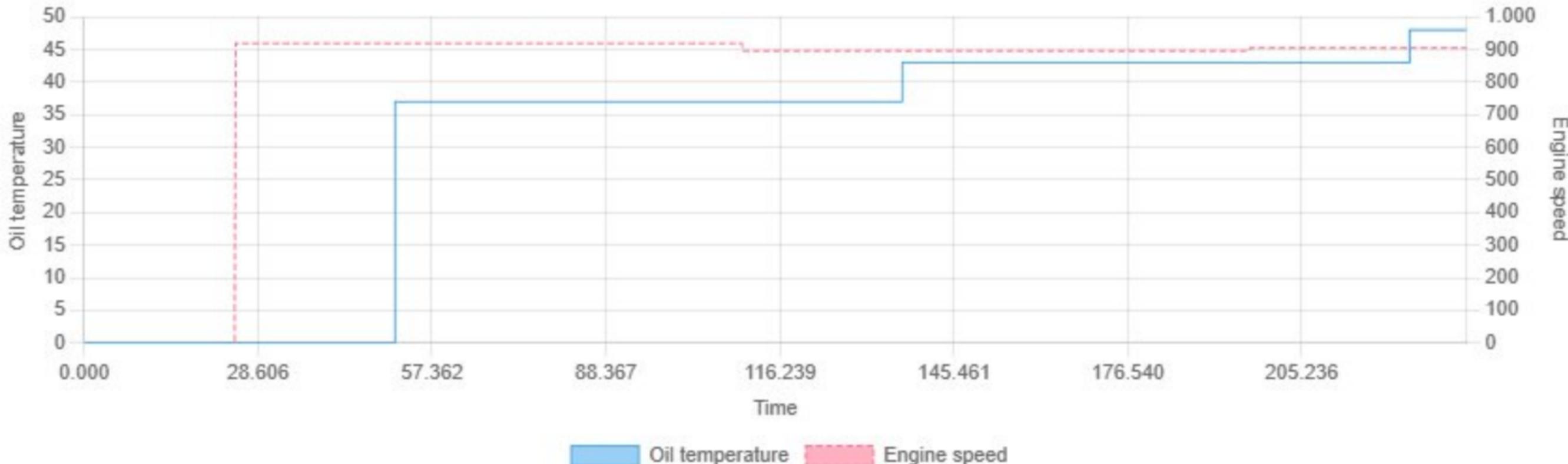


## Oil pressure regulator I component vs Engine speed



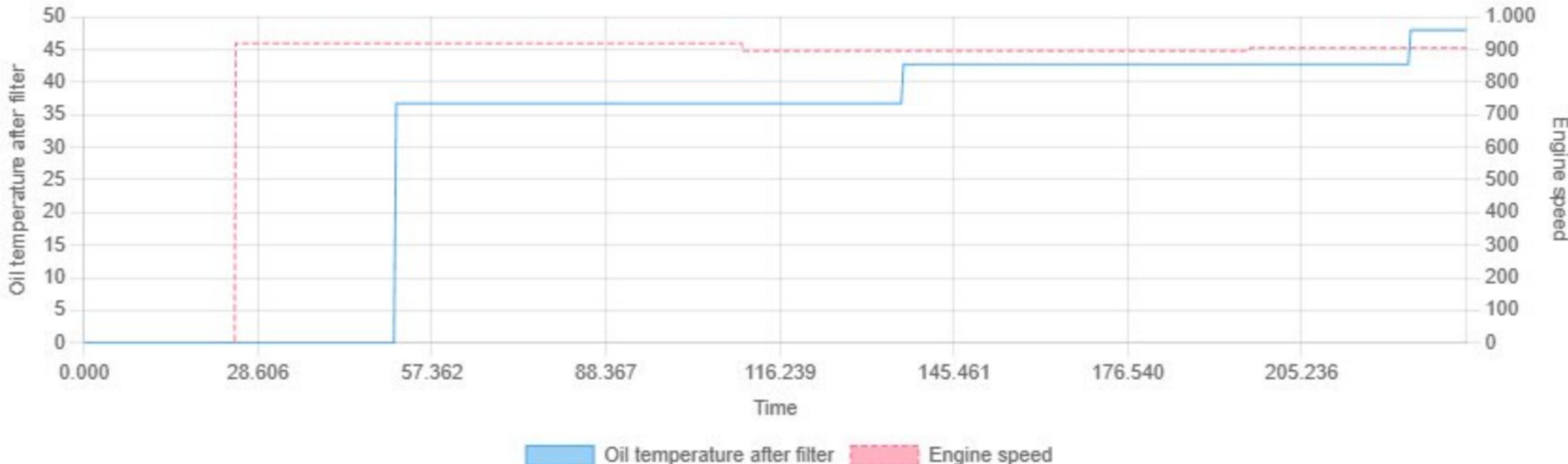
Min: -0.08 | Max: 0.02 | Avg: -0.02

## Oil temperature vs Engine speed



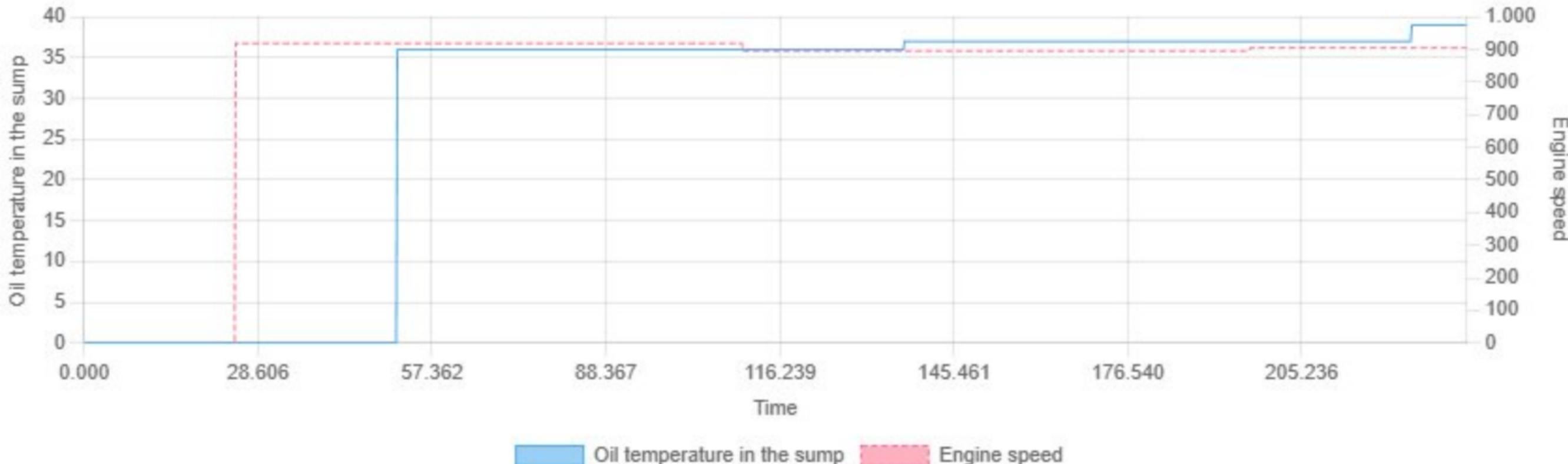
Min: 0.00 | Max: 48.00 | Avg: 31.34

## Oil temperature after filter vs Engine speed



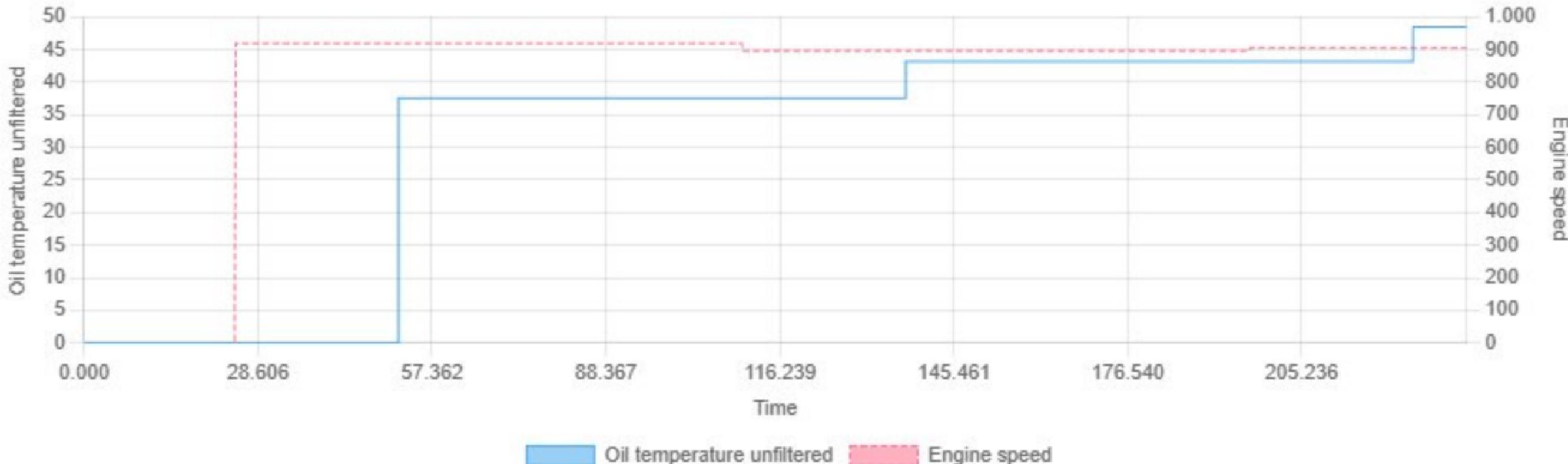
Min: 0.00 | Max: 48.00 | Avg: 31.12

## Oil temperature in the sump vs Engine speed



Min: 0.00 | Max: 39.00 | Avg: 28.34

## Oil temperature unfiltered vs Engine speed

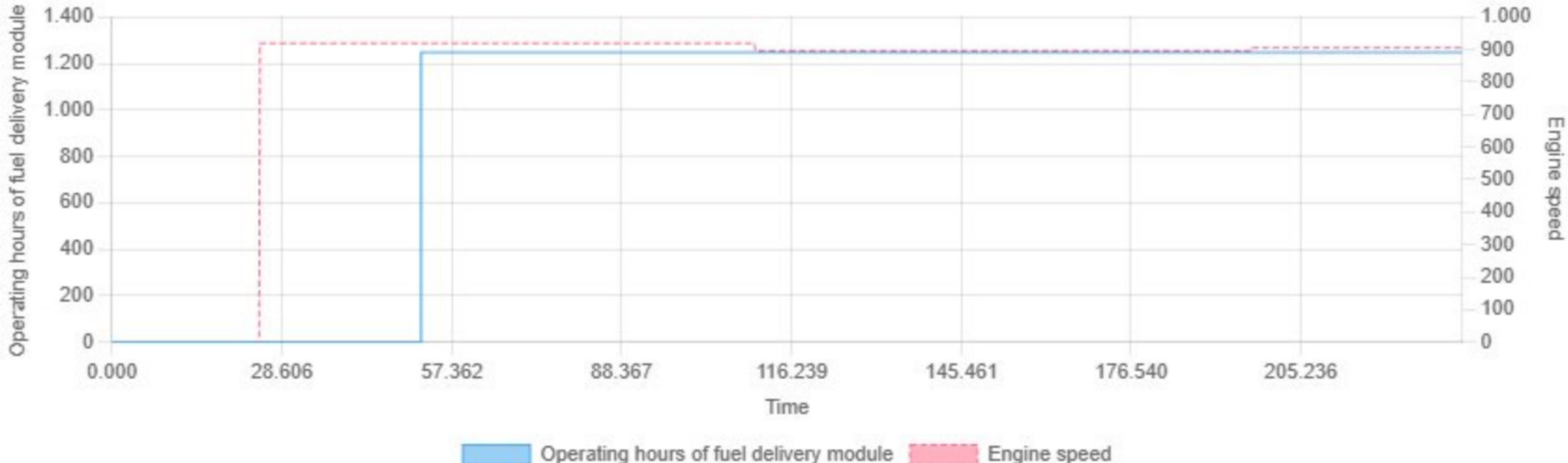


Min: 0.00 | Max: 48.46 | Avg: 31.51

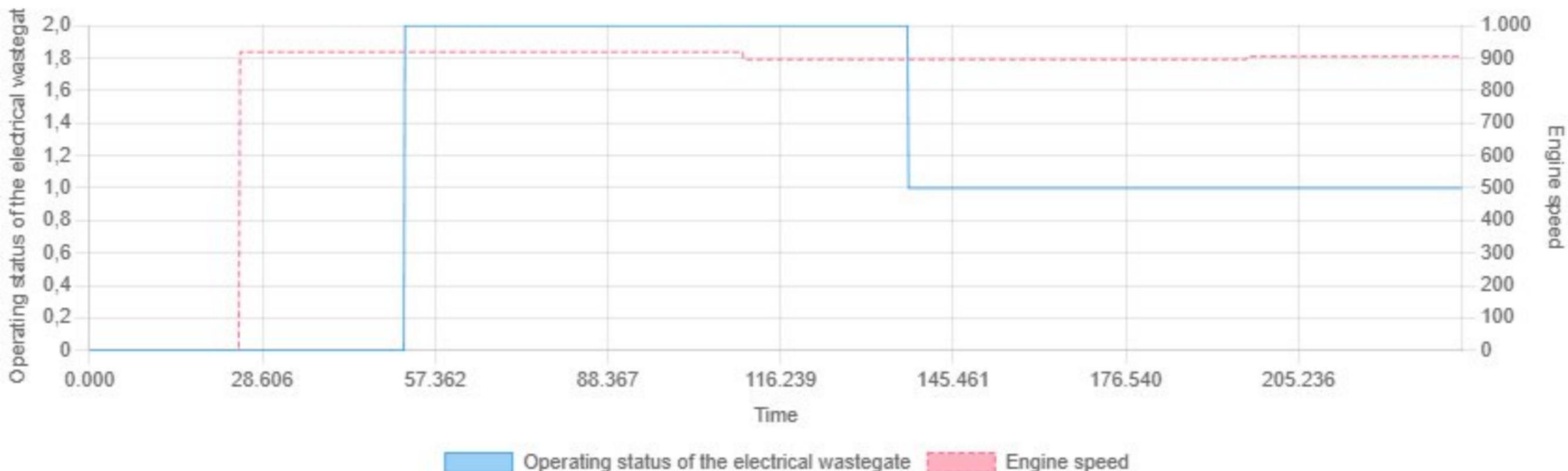
## Operating hours counter vs Engine speed



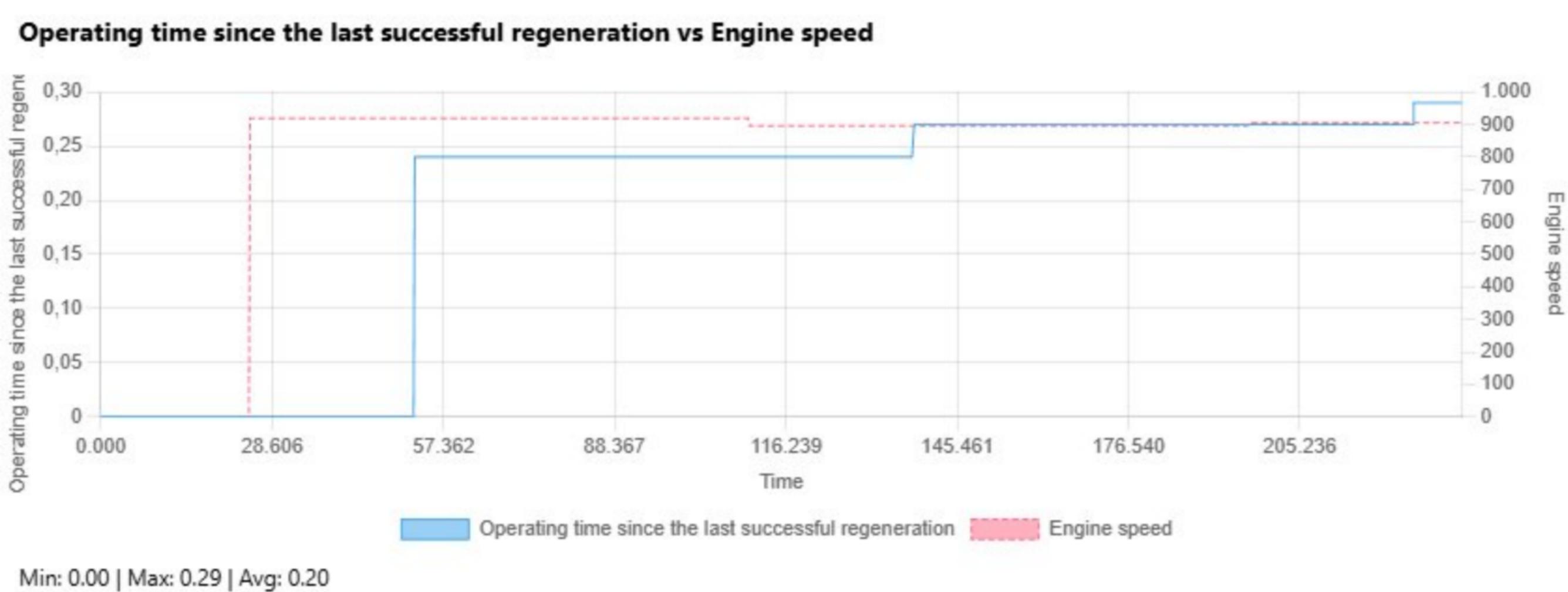
## Operating hours of fuel delivery module vs Engine speed



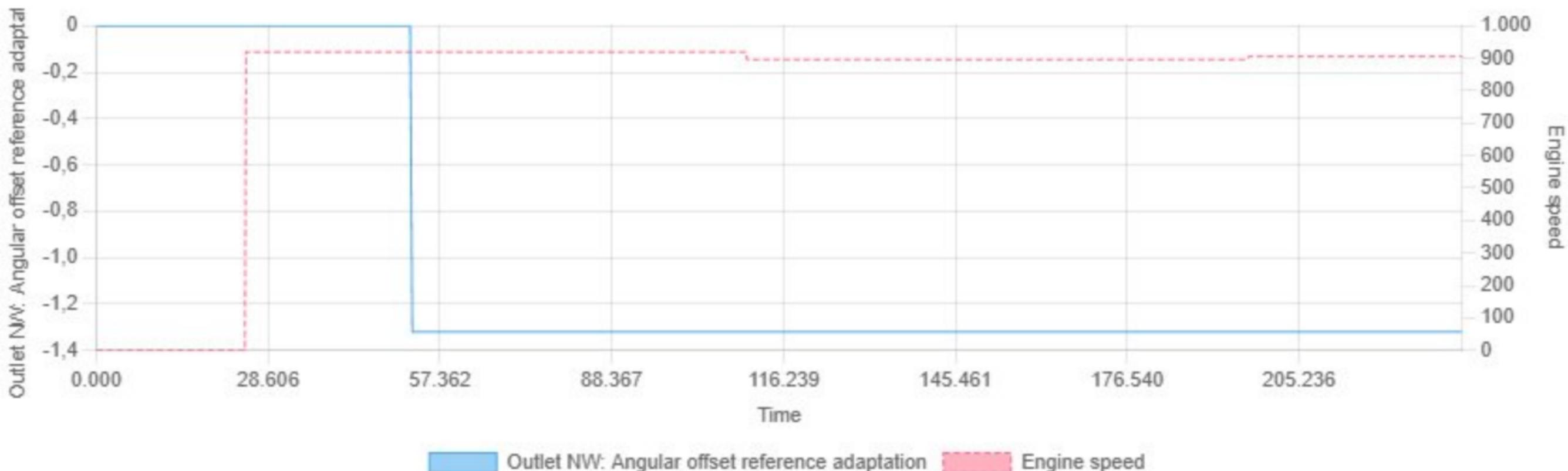
## Operating status of the electrical wastegate vs Engine speed



Min: 0.00 | Max: 2.00 | Avg: 1.14

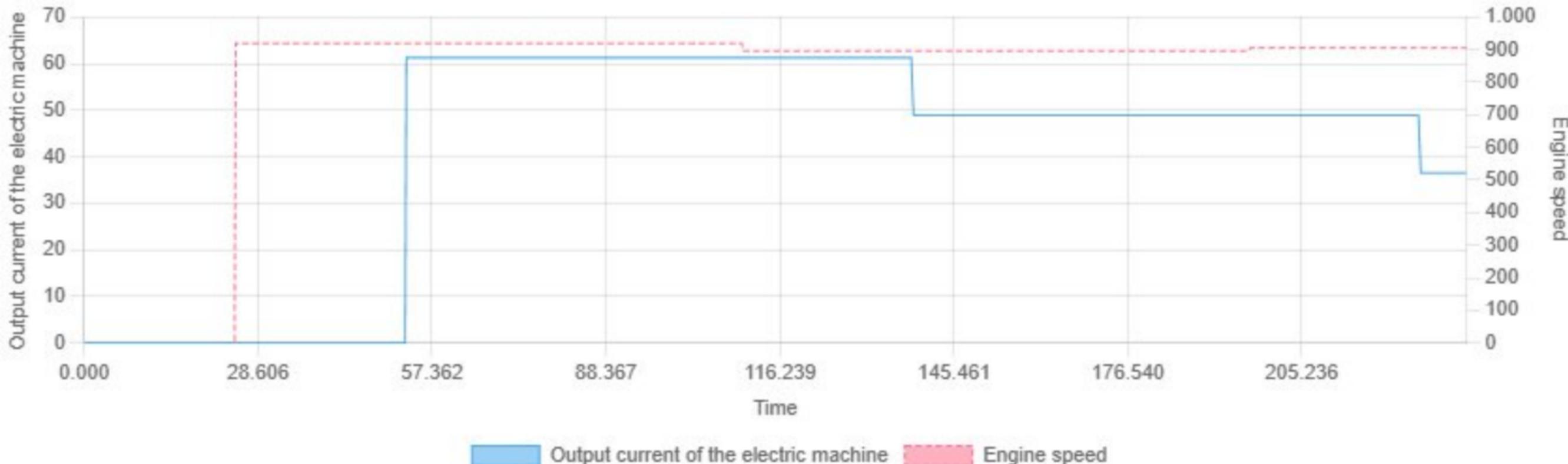


## Outlet NW: Angular offset reference adaptation vs Engine speed



Min: -1.32 | Max: 0.00 | Avg: -1.01

## Output current of the electric machine vs Engine speed



Min: 0.00 | Max: 61.25 | Avg: 41.61

## Output duty cycle for tank vent valve vs Engine speed



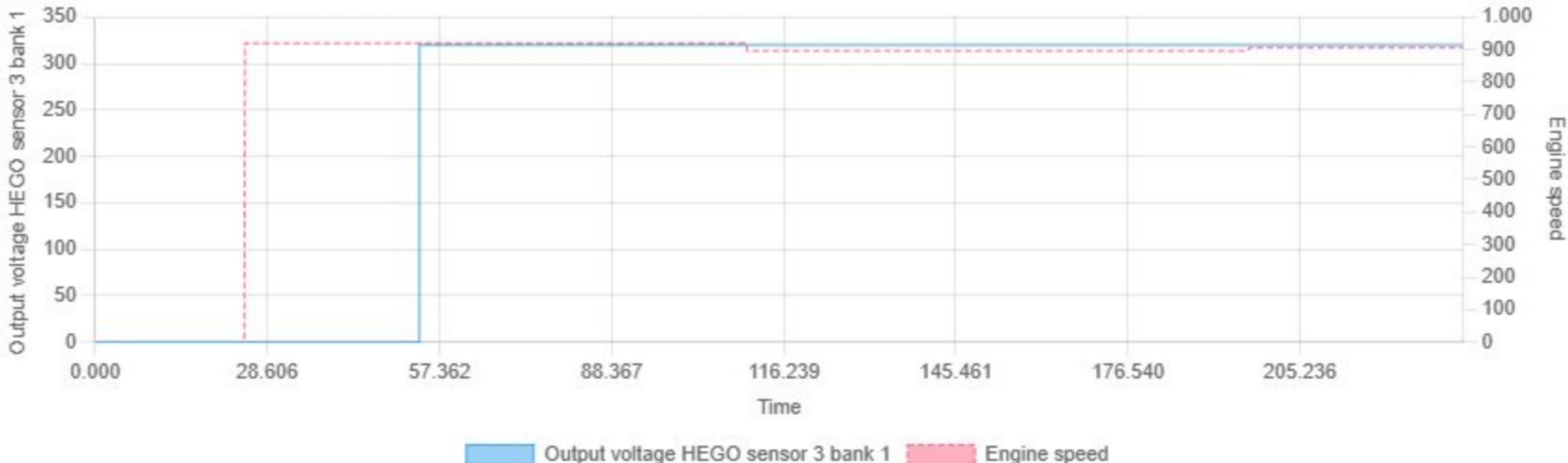
Min: 0.00 | Max: 35.68 | Avg: 1.18

## Output duty cycle for the controller vs Engine speed



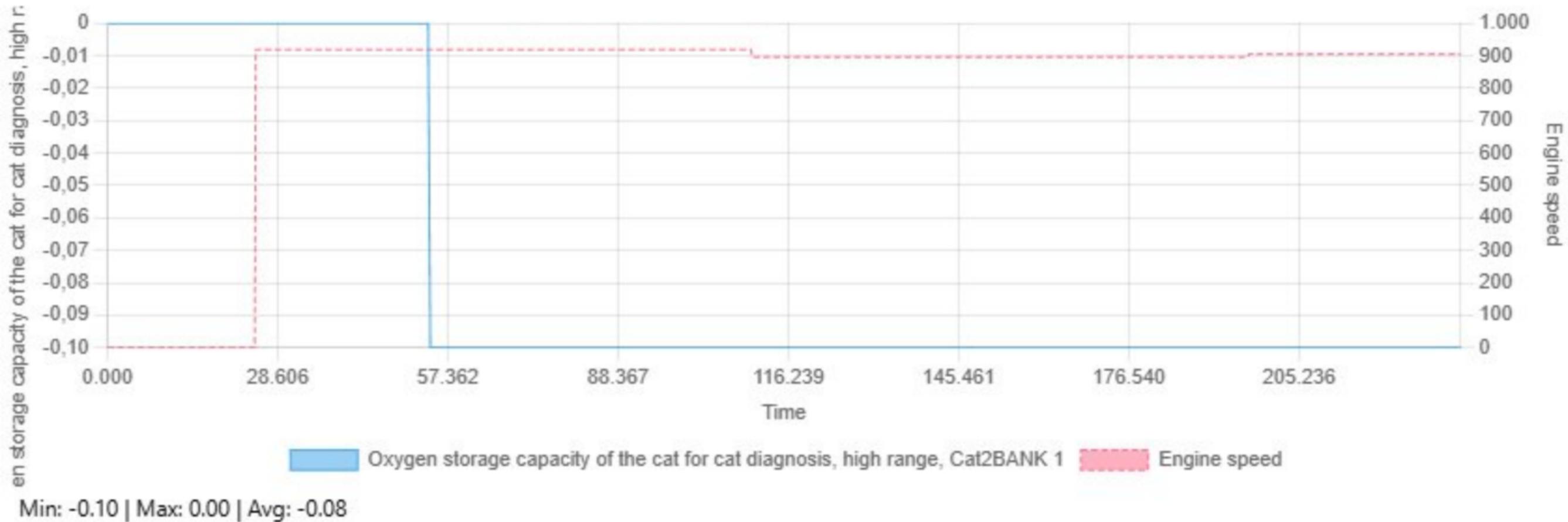
Min: 0.00 | Max: 6.00 | Avg: 4.59

## Output voltage HEGO sensor 3 bank 1 vs Engine speed

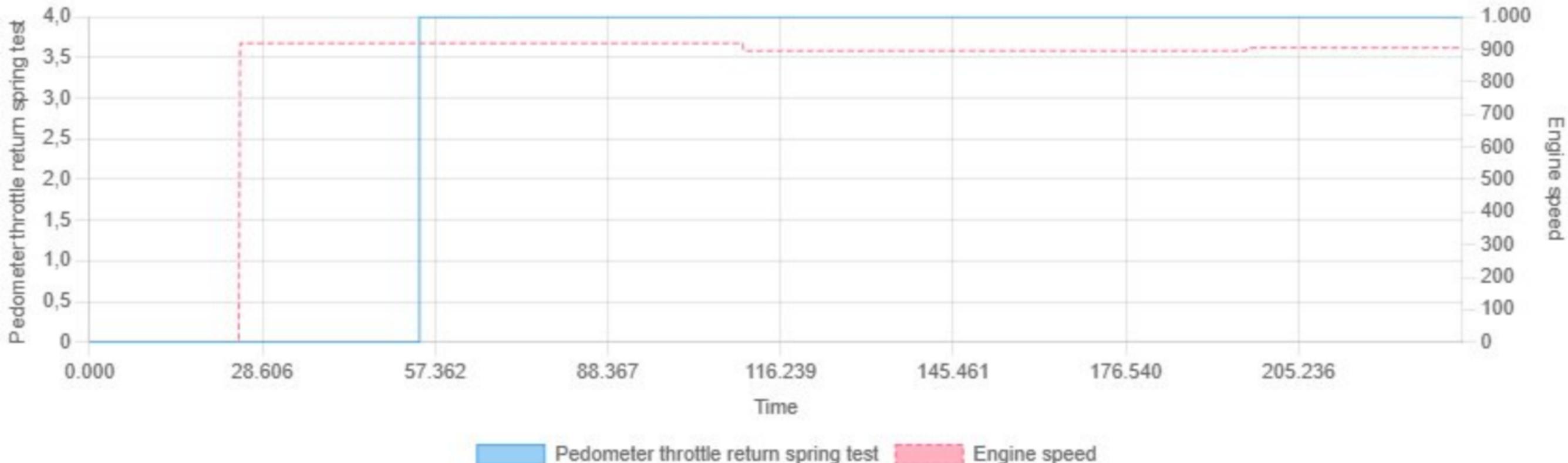


Min: 0.00 | Max: 319.99 | Avg: 244.18

## Oxygen storage capacity of the cat for cat diagnosis, high range, Cat2BANK 1 vs Engine speed

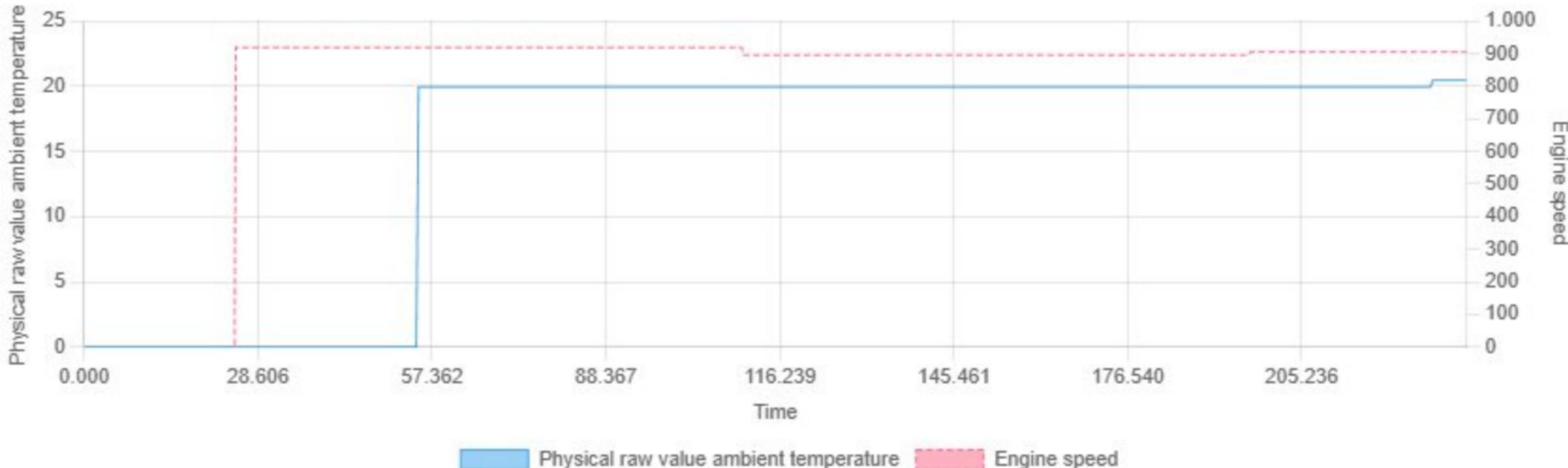


## Pedometer throttle return spring test vs Engine speed

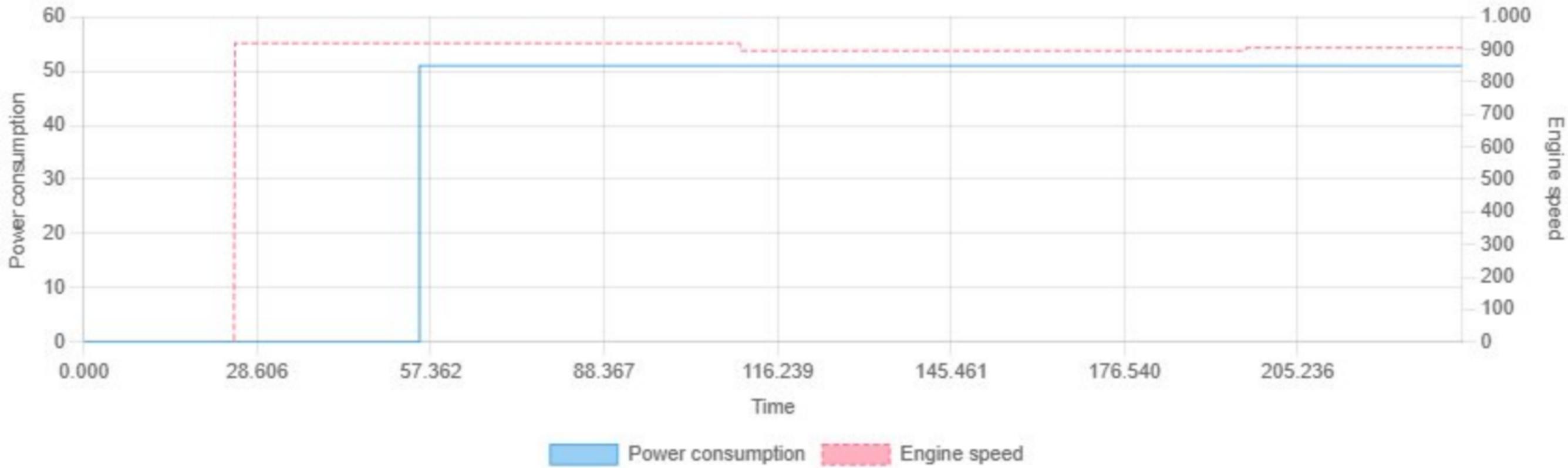


Min: 0.00 | Max: 4.00 | Avg: 3.04

## Physical raw value ambient temperature vs Engine speed

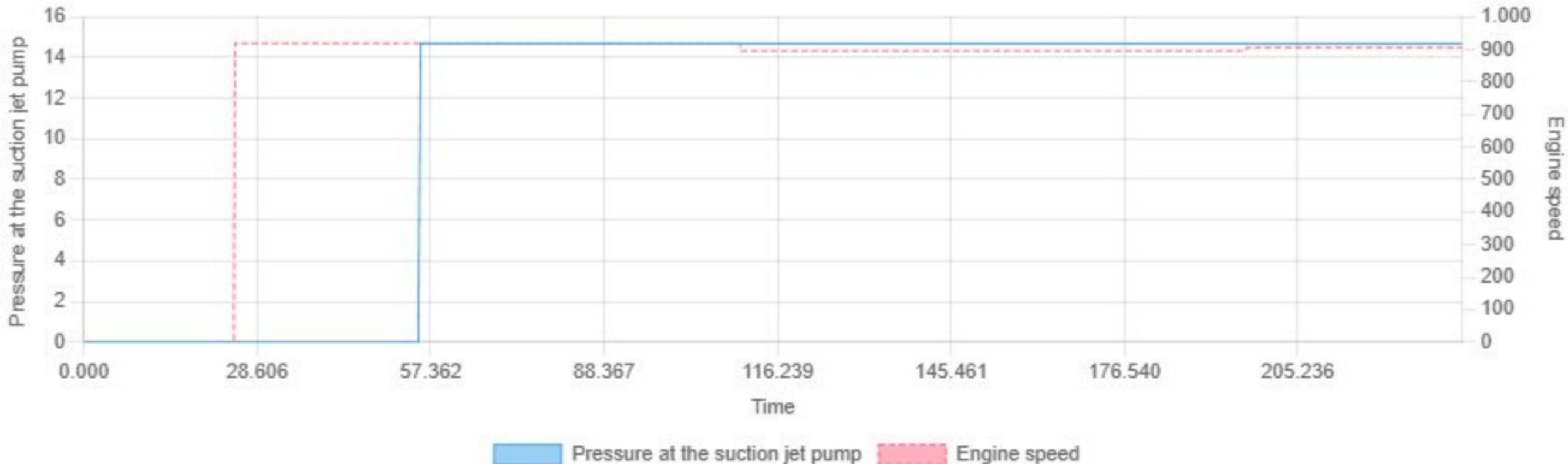


## Power consumption vs Engine speed



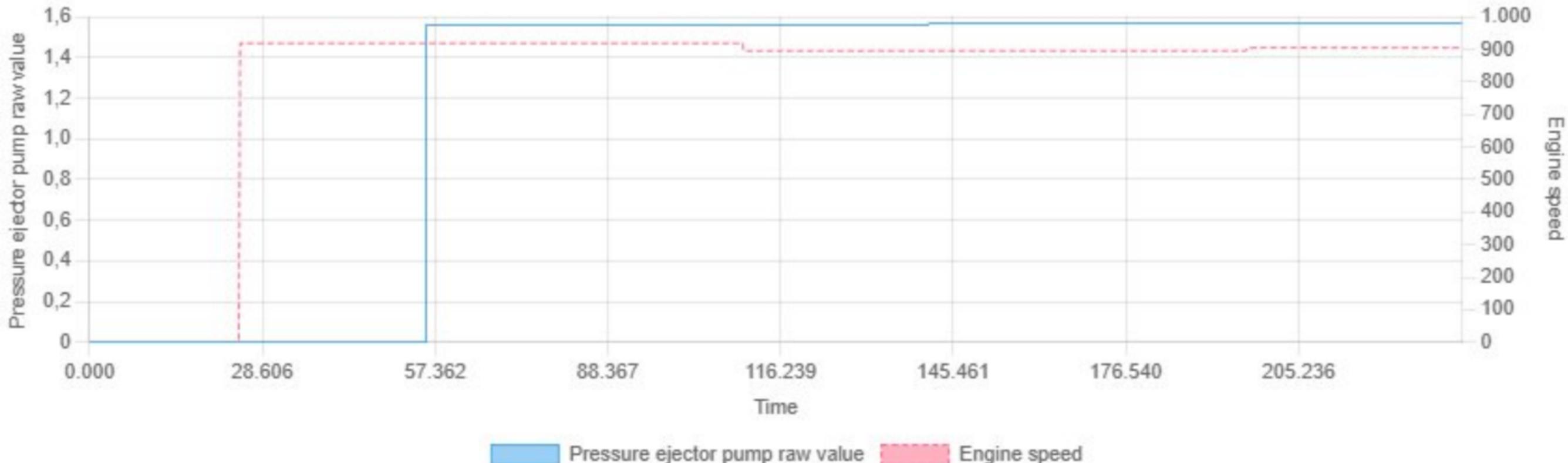
Min: 0.00 | Max: 51.00 | Avg: 38.59

## Pressure at the suction jet pump vs Engine speed



Min: 0.00 | Max: 14.69 | Avg: 11.10

## Pressure ejector pump raw value vs Engine speed



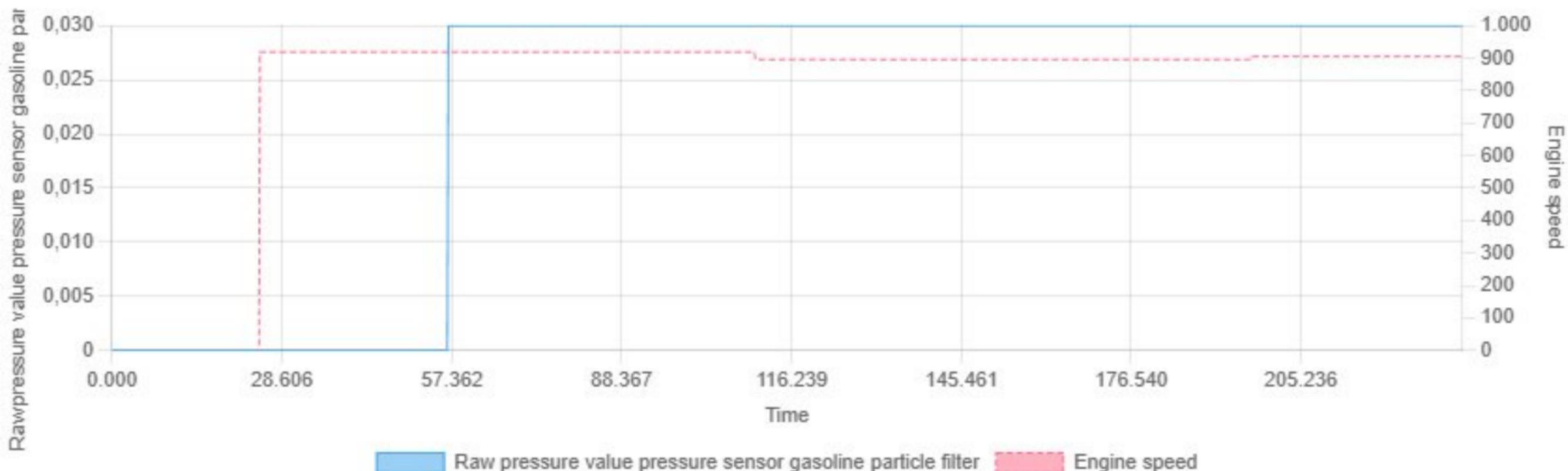
Min: 0.00 | Max: 1.57 | Avg: 1.18

## Quality value actual capacity vs Engine speed



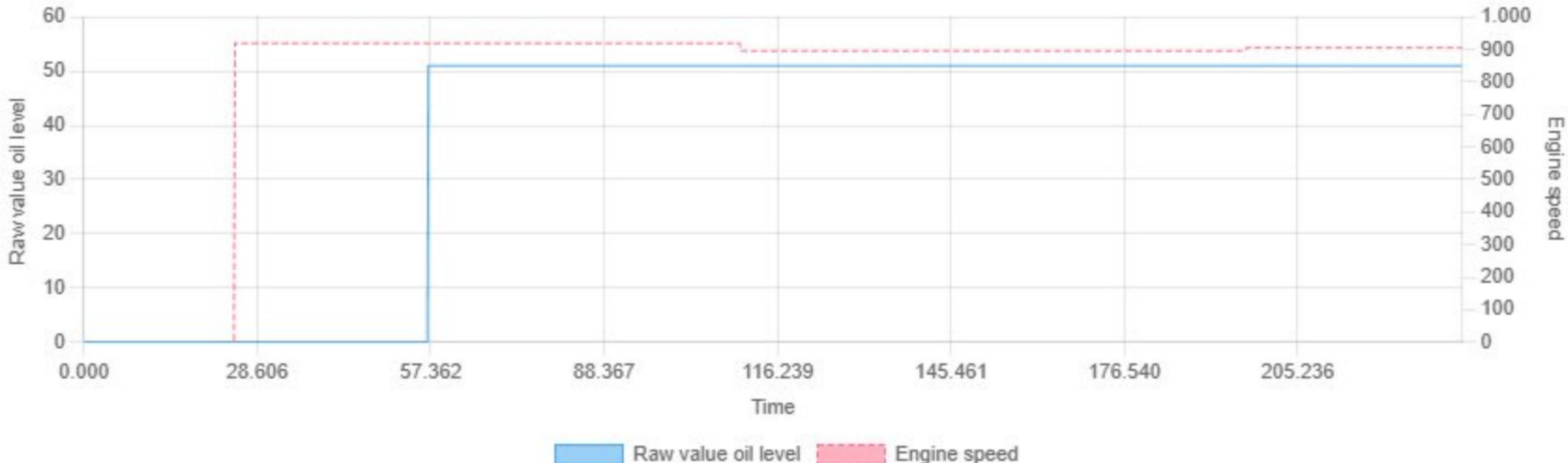
Min: 0.00 | Max: 7.00 | Avg: 5.27

## Raw pressure value pressure sensor gasoline particle filter vs Engine speed

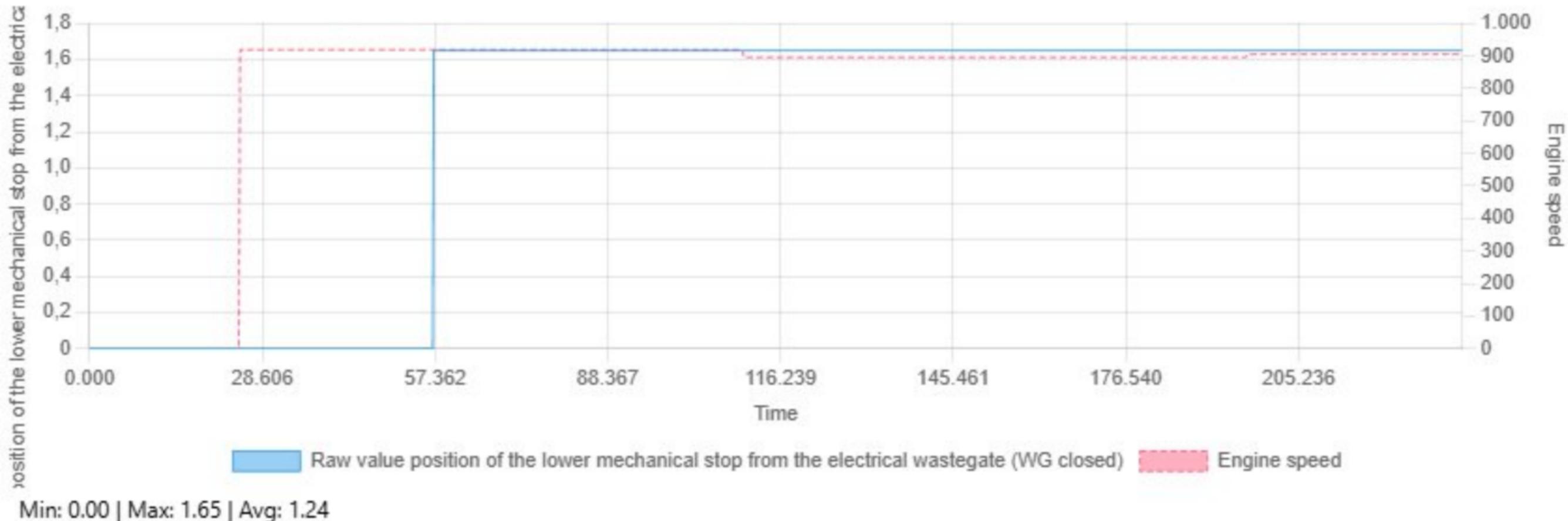


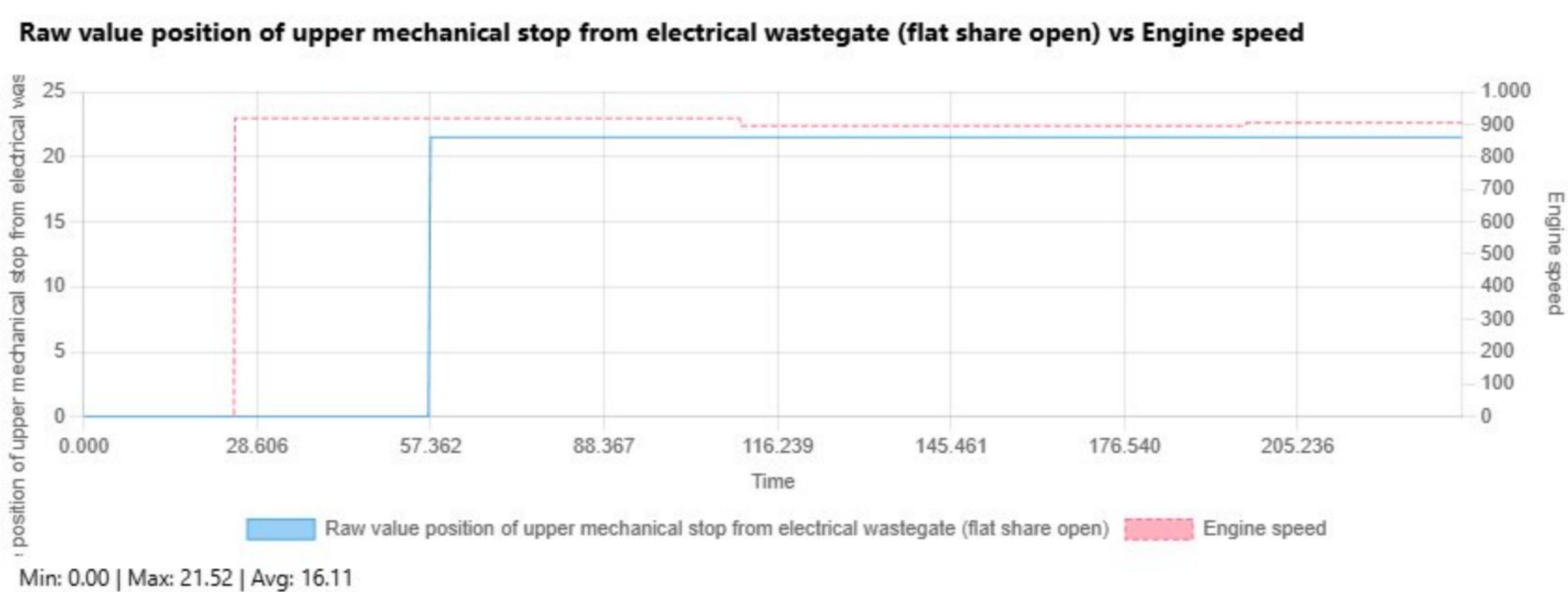
Min: 0.00 | Max: 0.03 | Avg: 0.02

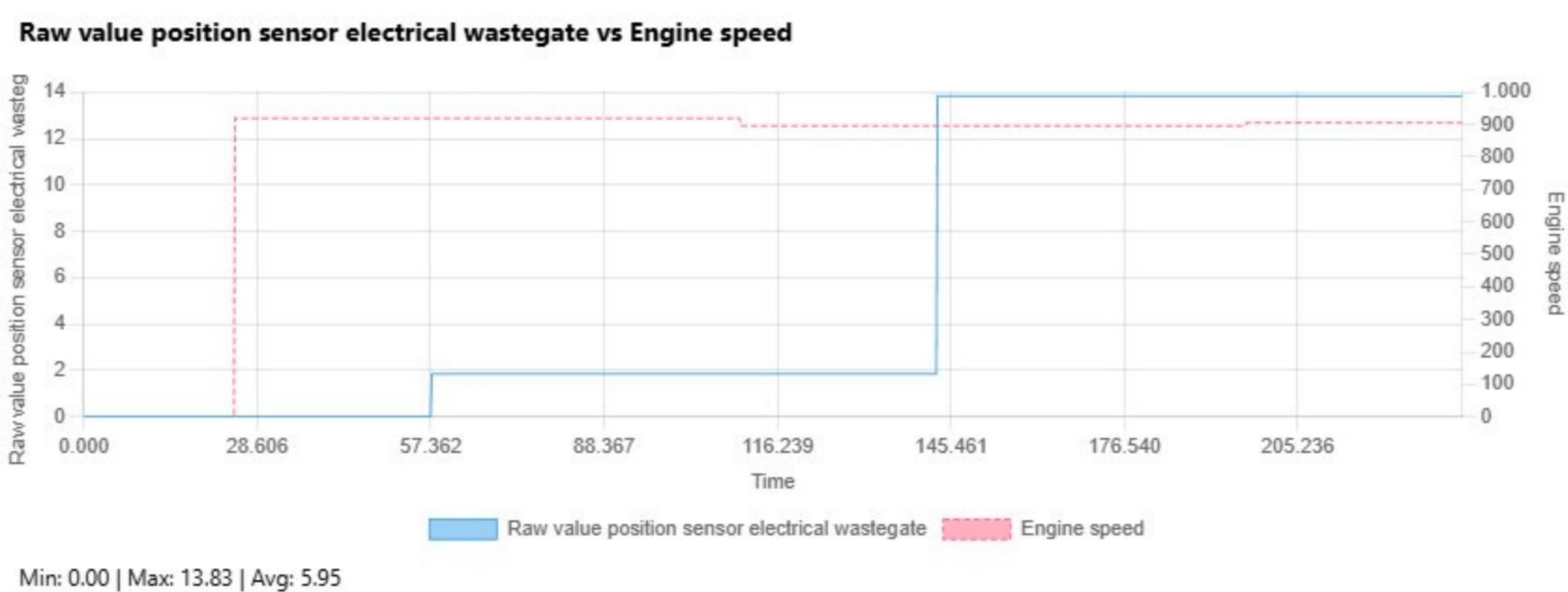
## Raw value oil level vs Engine speed



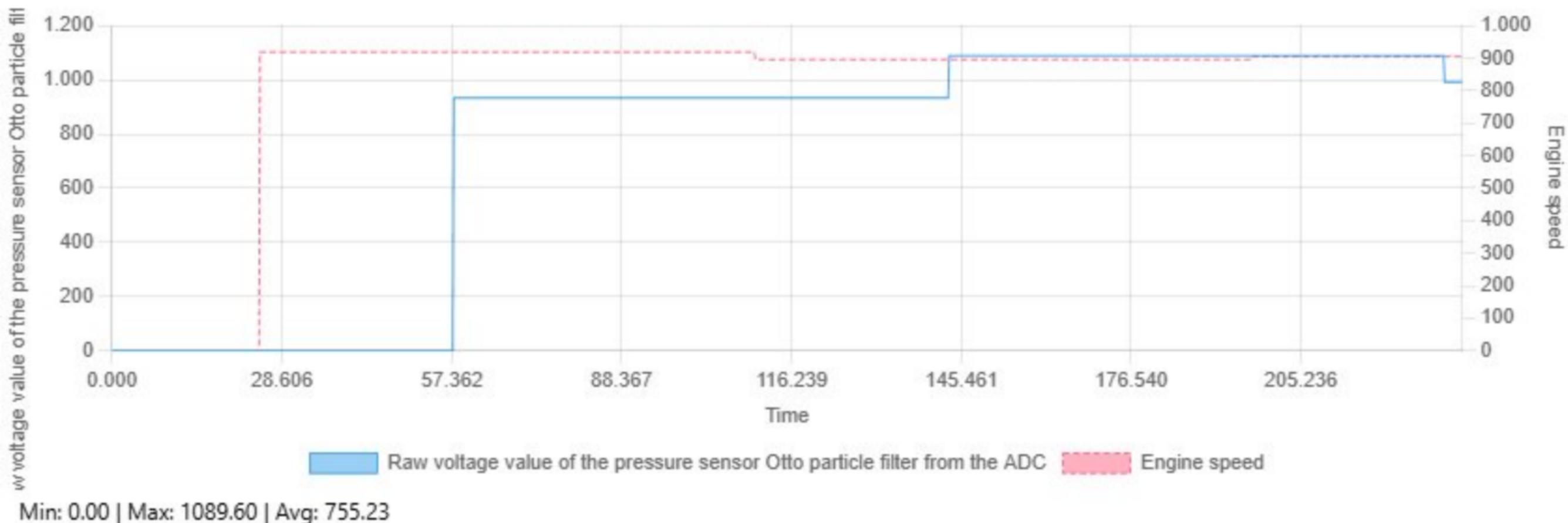
## Raw value position of the lower mechanical stop from the electrical wastegate (WG closed) vs Engine speed



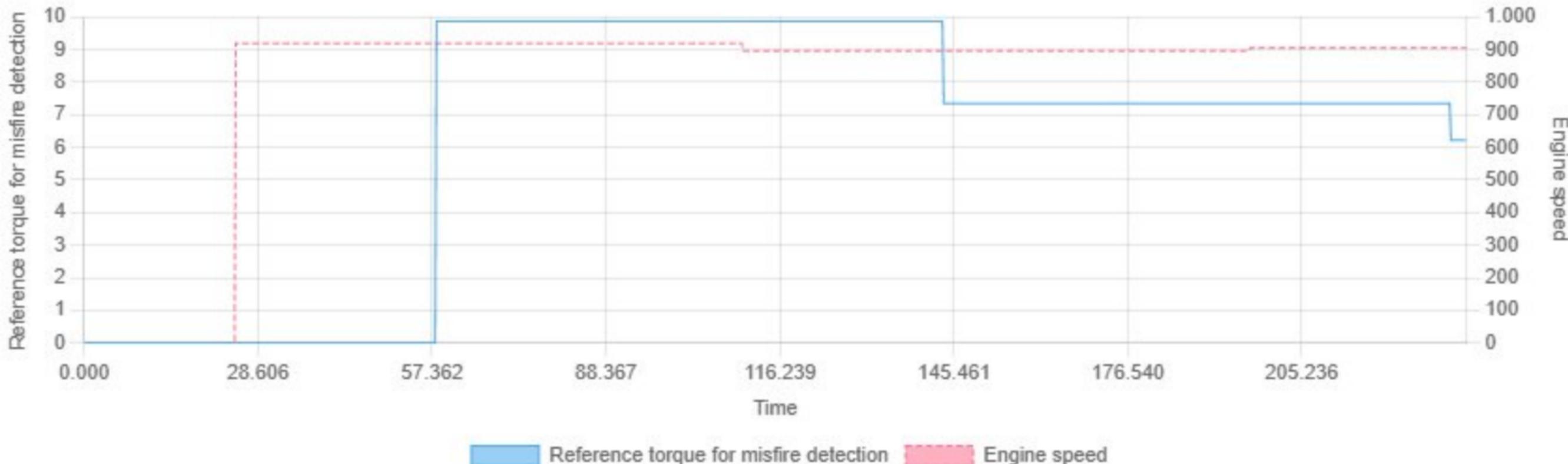




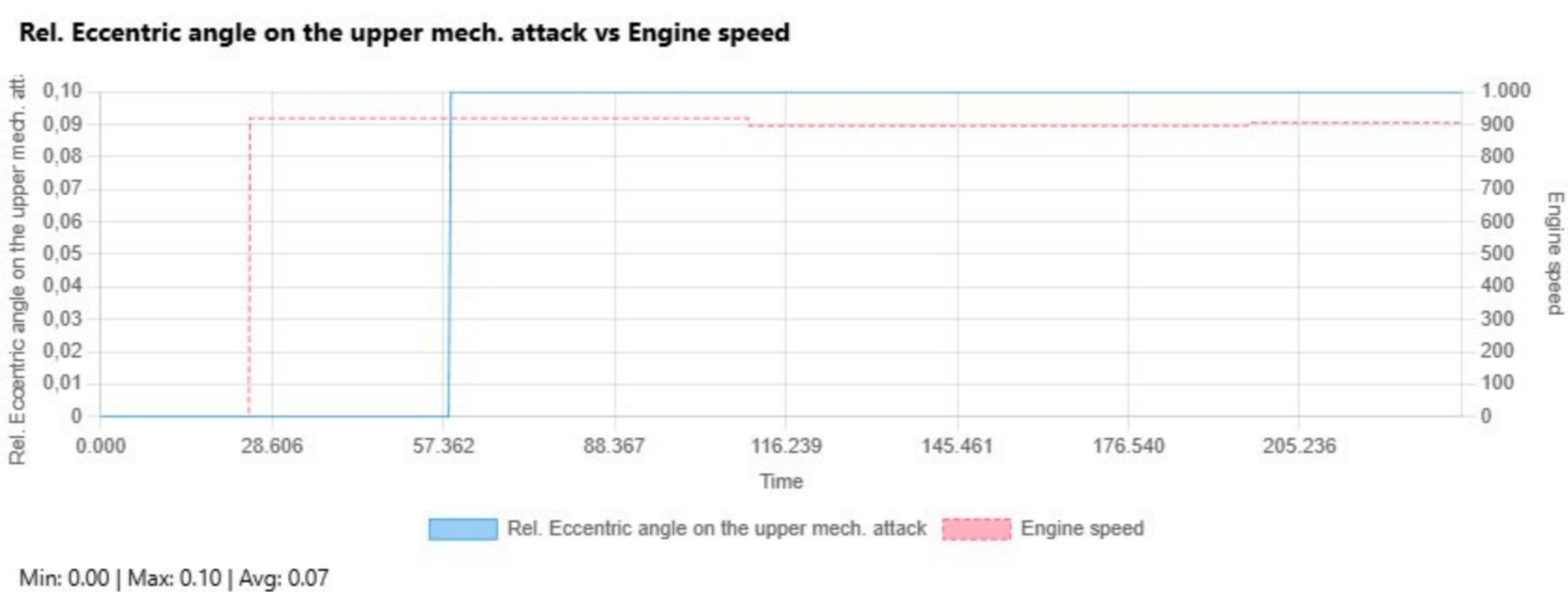
## Raw voltage value of the pressure sensor Otto particle filter from the ADC vs Engine speed



## Reference torque for misfire detection vs Engine speed



Min: 0.00 | Max: 9.87 | Avg: 6.39

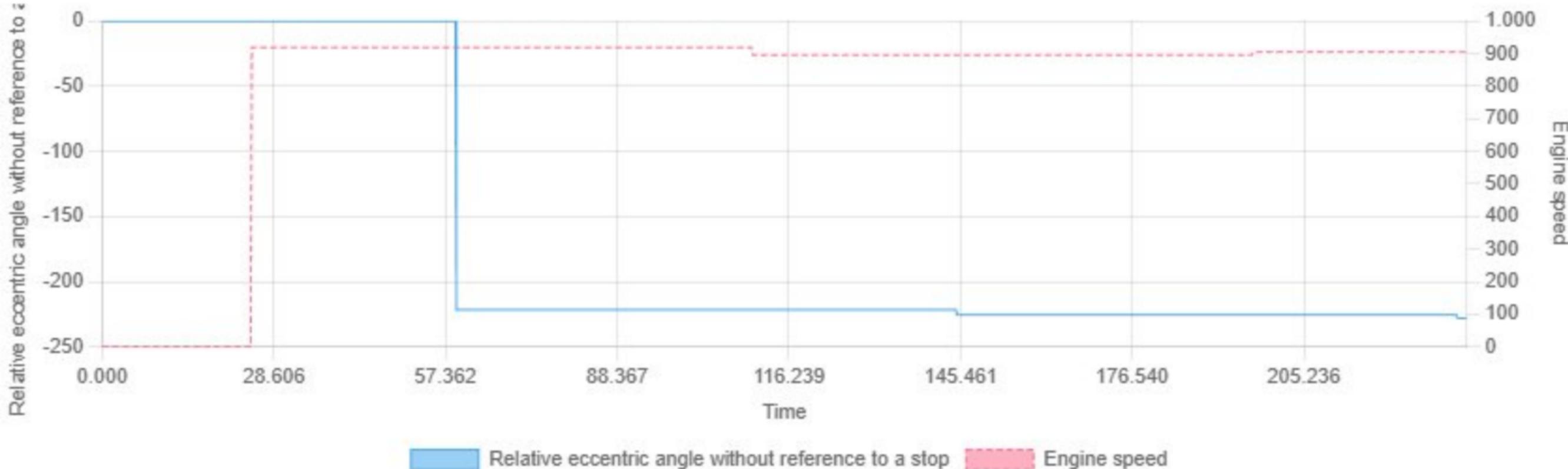


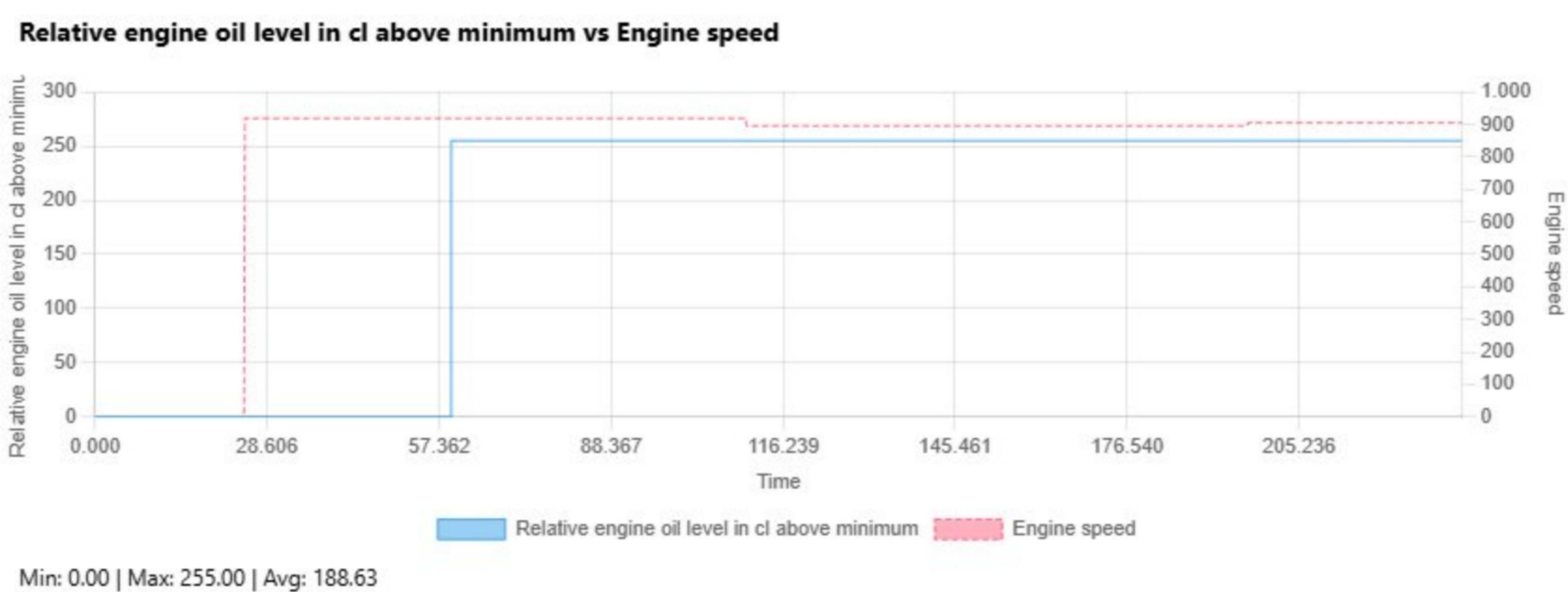
## Relative air filling vs Engine speed



Min: 0.00 | Max: 27.00 | Avg: 18.30

## Relative eccentric angle without reference to a stop vs Engine speed



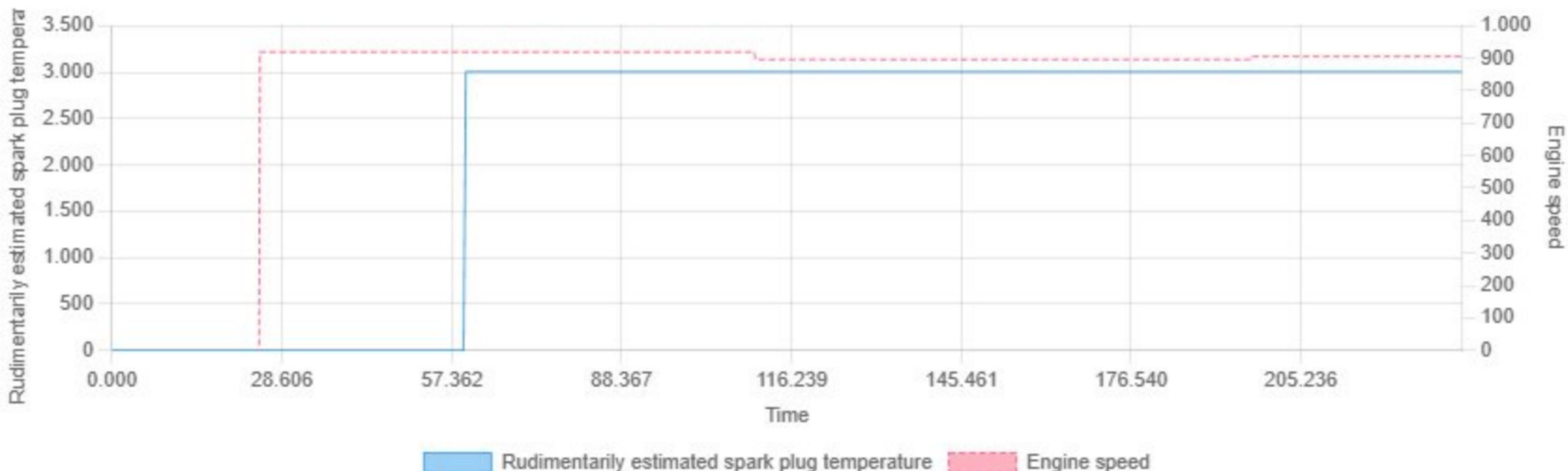


## Relative fuel mass vs Engine speed

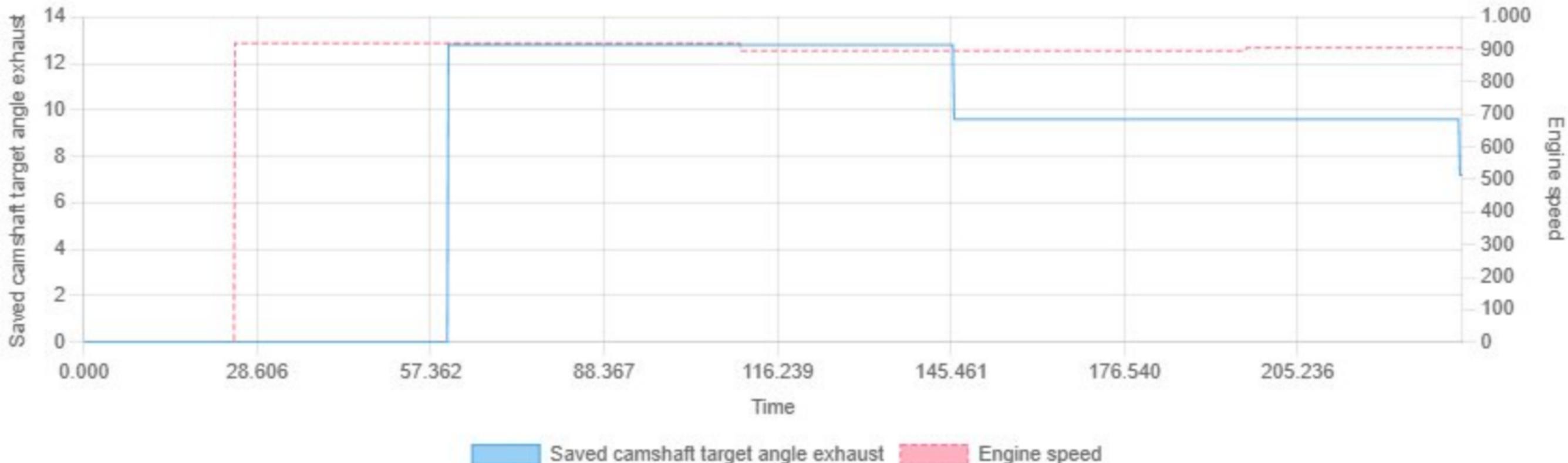


Min: 0.00 | Max: 27.09 | Avg: 18.31

## Rudimentarily estimated spark plug temperature vs Engine speed



## Saved camshaft target angle exhaust vs Engine speed

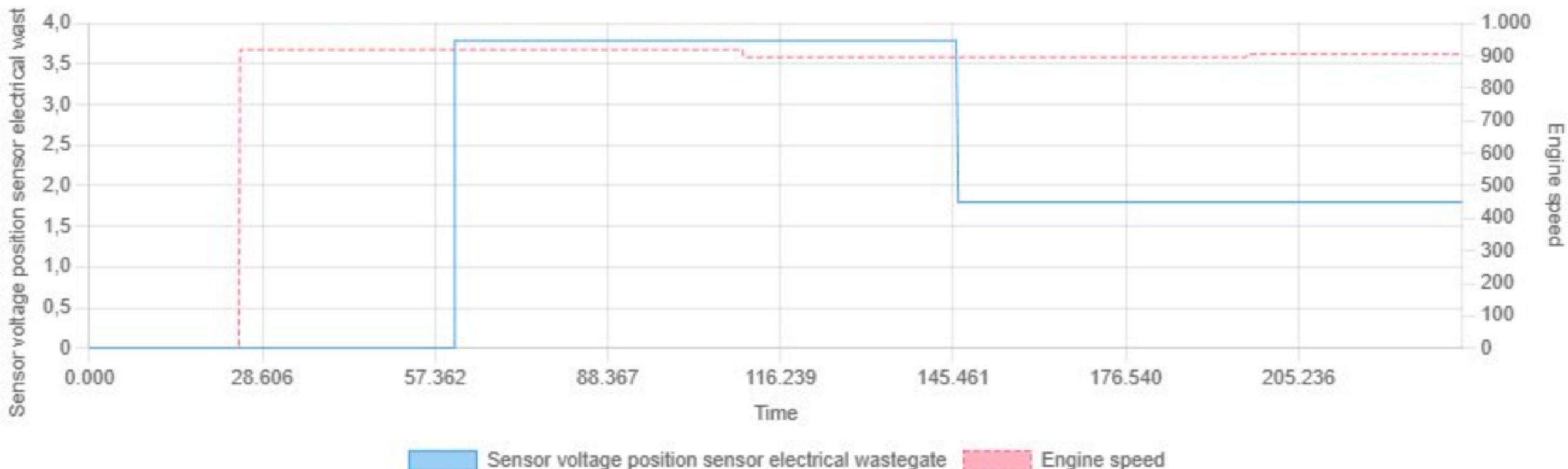


## Sensor temperature vs Engine speed



Min: 0,00 | Max: 5,00 | Avg: 3,67

## Sensor voltage position sensor electrical wastegate vs Engine speed

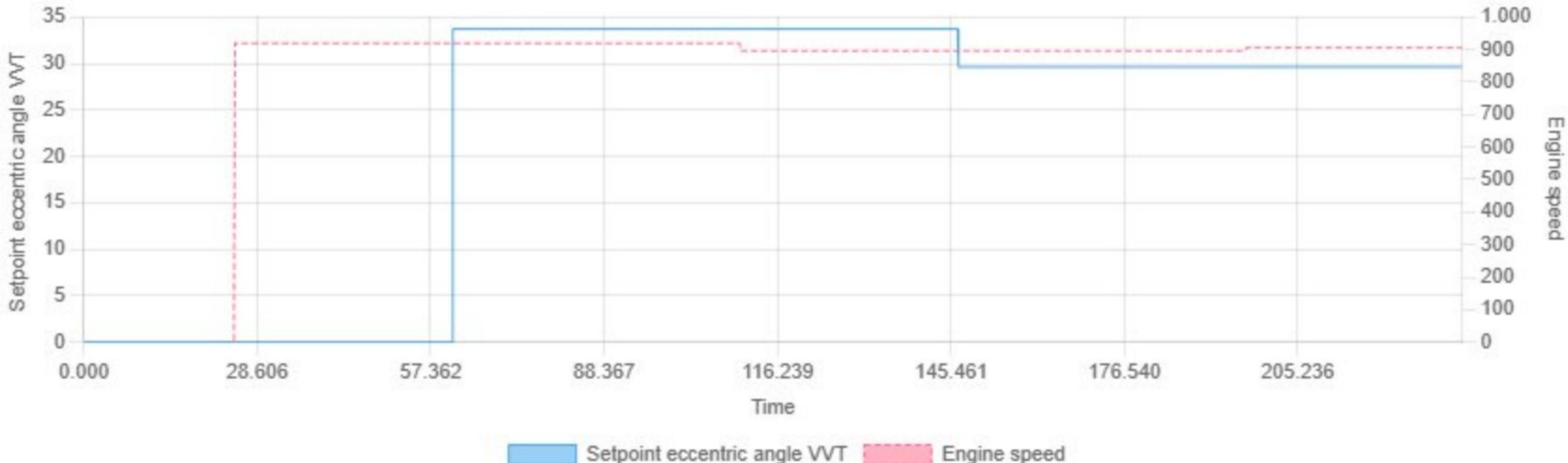


Sensor voltage position sensor electrical wastegate

Engine speed

Min: 0.00 | Max: 3.79 | Avg: 2.05

## Setpoint eccentric angle VVT vs Engine speed

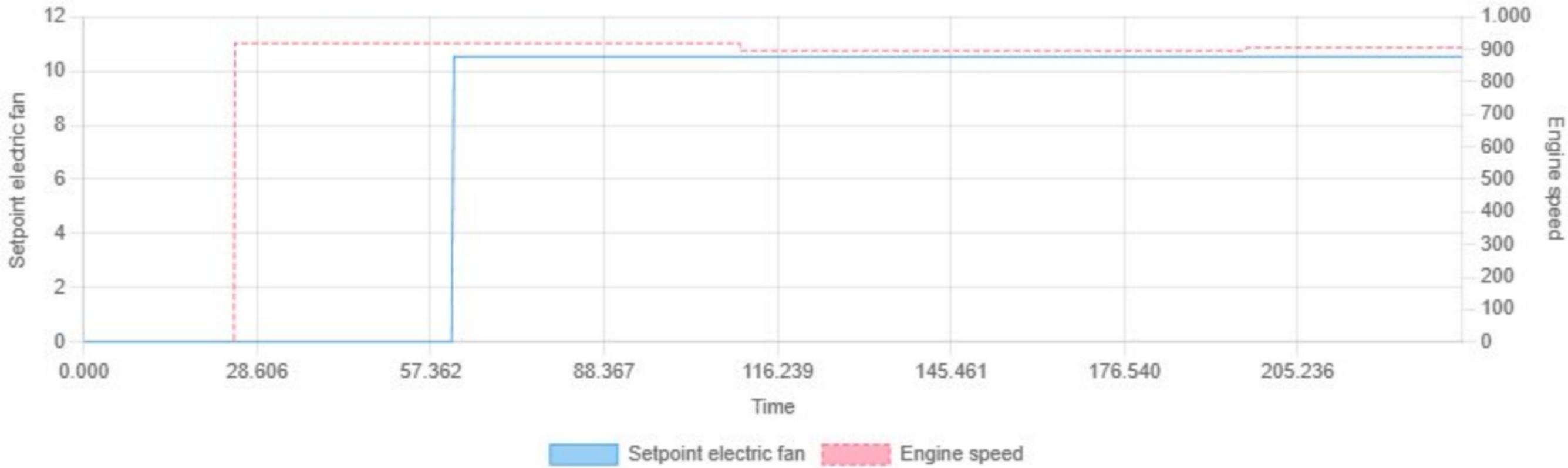


Setpoint eccentric angle VVT

Engine speed

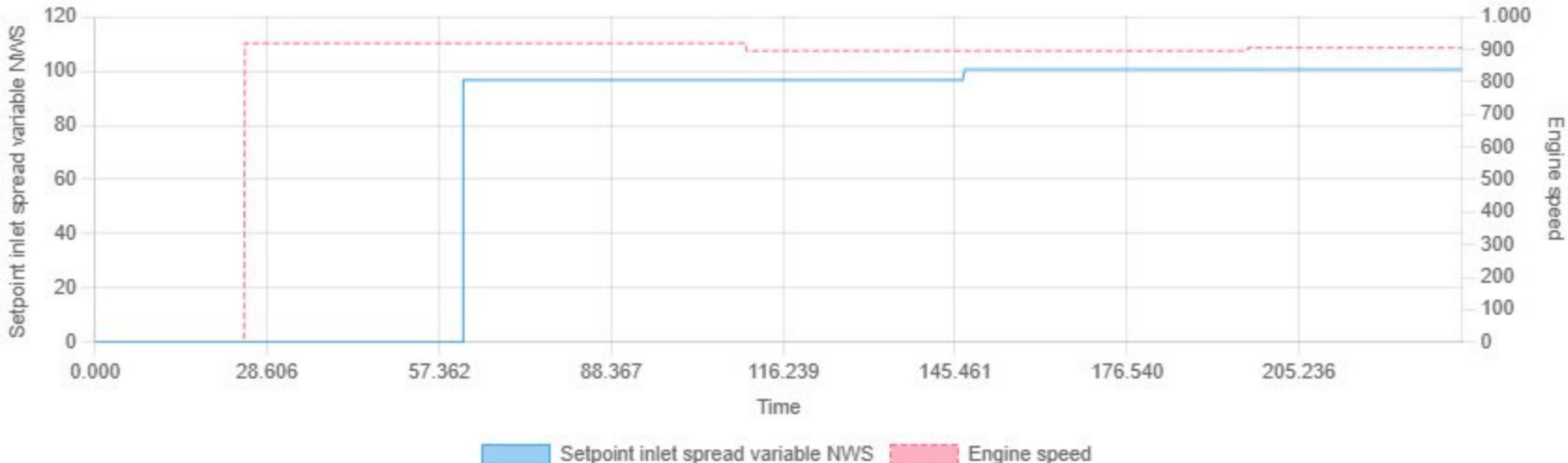
Min: 0.00 | Max: 33.70 | Avg: 23.18

## Setpoint electric fan vs Engine speed



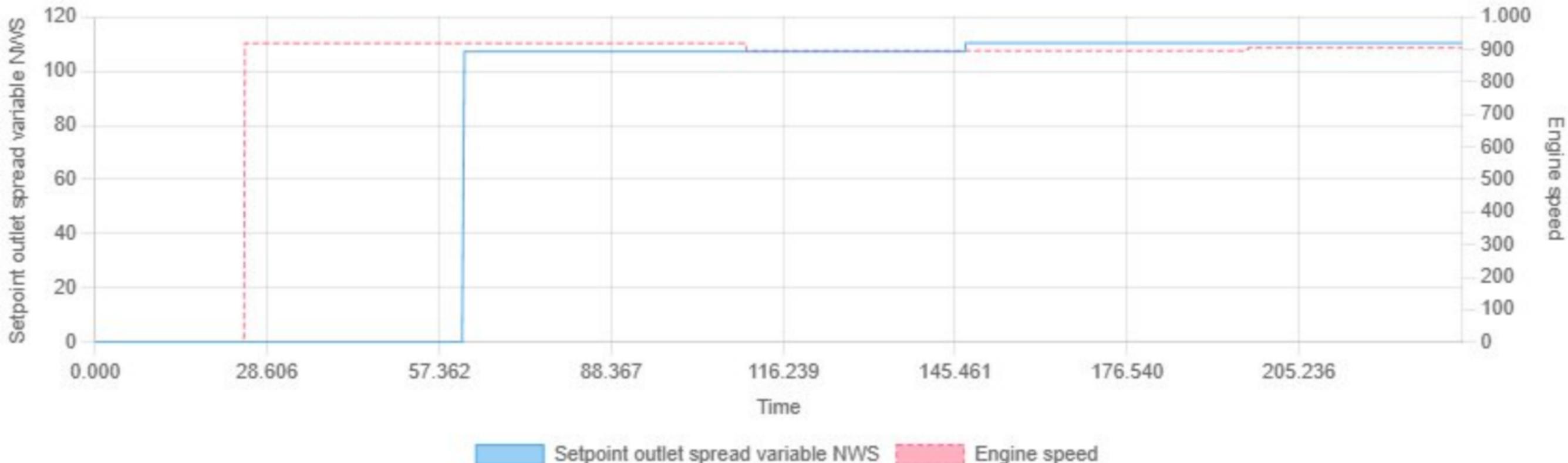
Min: 0.00 | Max: 10.54 | Avg: 7.71

## Setpoint inlet spread variable NWS vs Engine speed

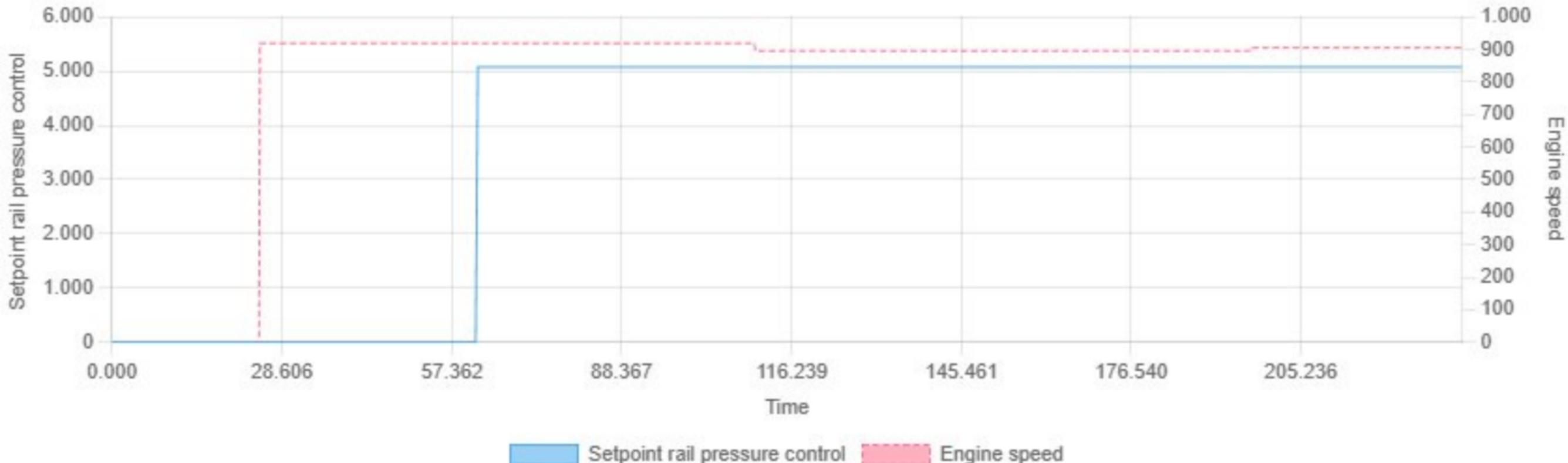


Min: 0.00 | Max: 100.70 | Avg: 72.13

## Setpoint outlet spread variable NWS vs Engine speed

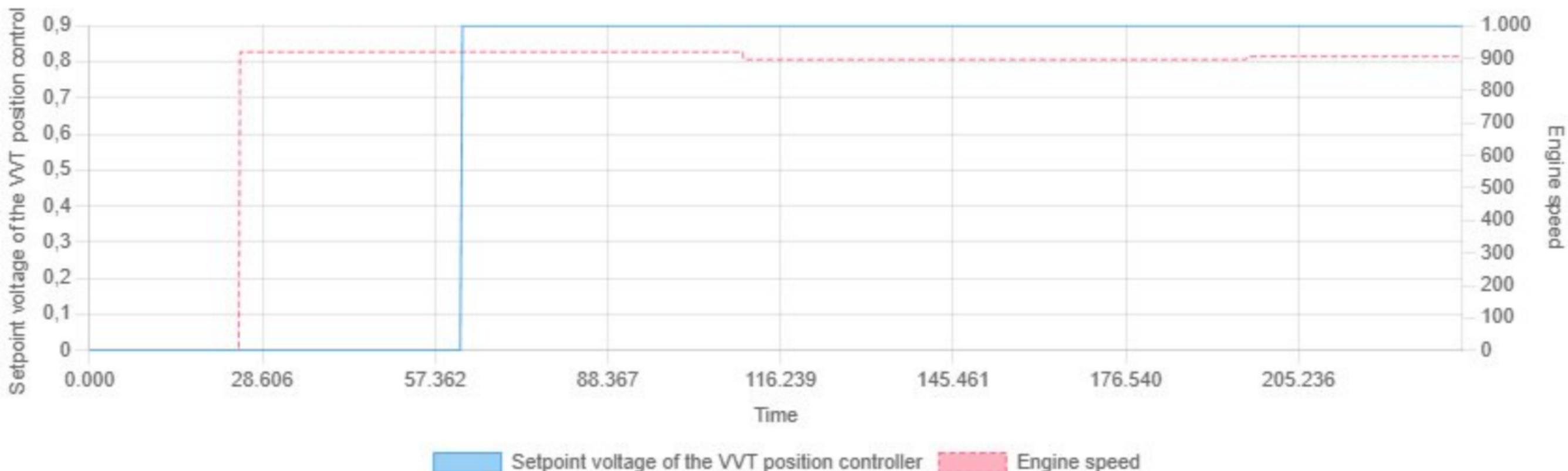


## Setpoint rail pressure control vs Engine speed



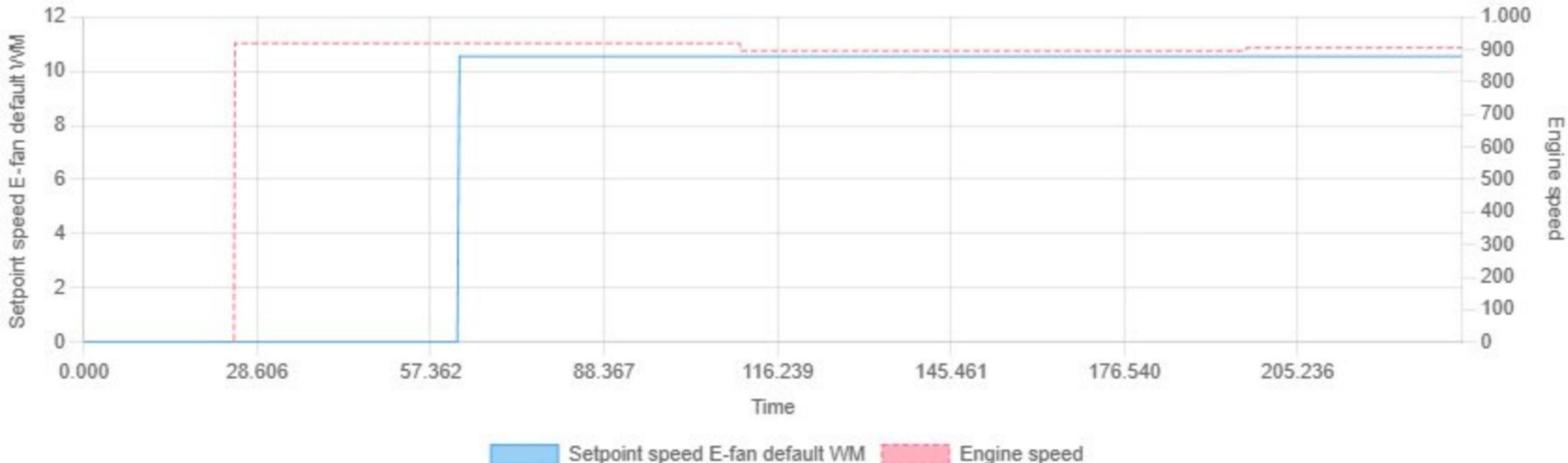
Min: 0.00 | Max: 5076.33 | Avg: 3701.92

## Setpoint voltage of the VVT position controller vs Engine speed



Min: 0.00 | Max: 0.90 | Avg: 0.66

## Setpoint speed E-fan default WM vs Engine speed



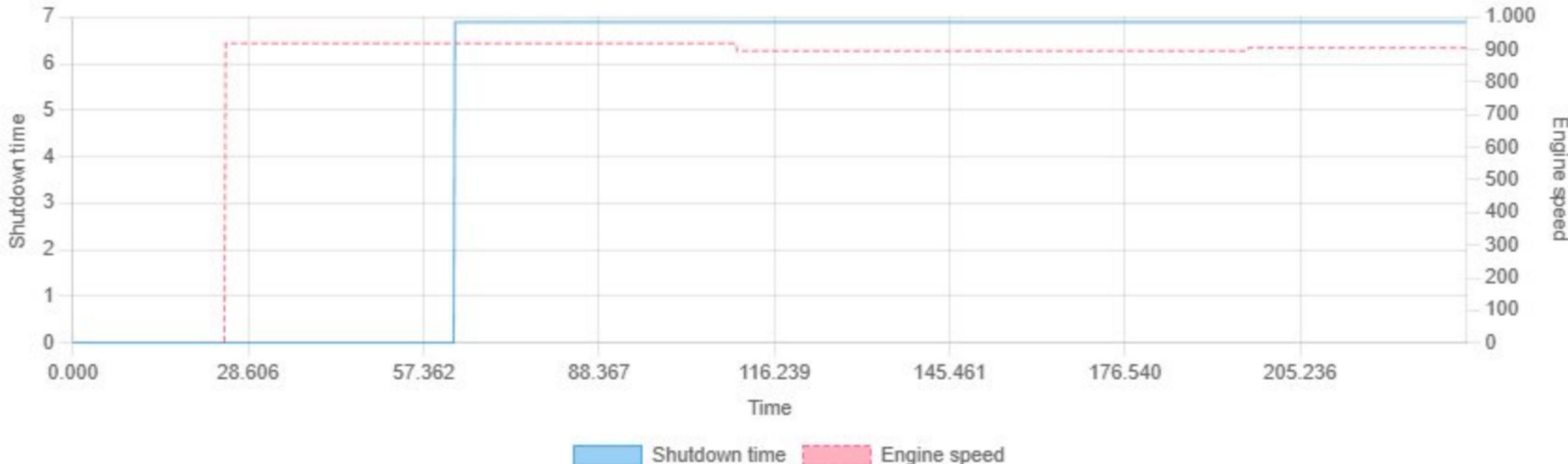
Min: 0.00 | Max: 10.55 | Avg: 7.68

## Should position EEC vs Engine speed



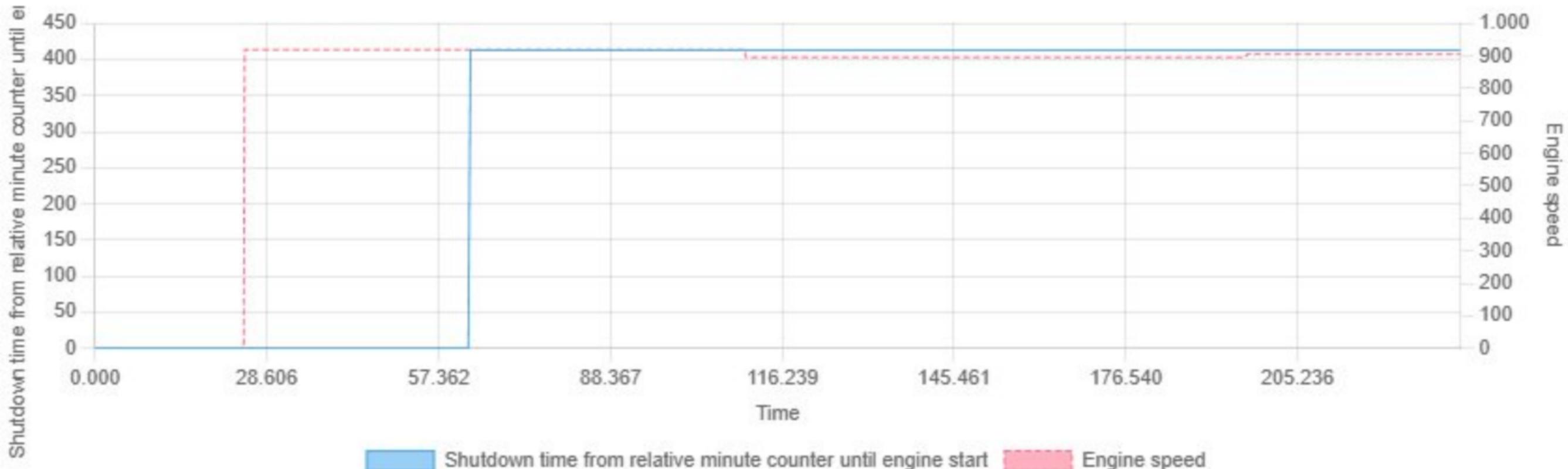
Min: 0.00 | Max: 12.00 | Avg: 4.32

## Shutdown time vs Engine speed

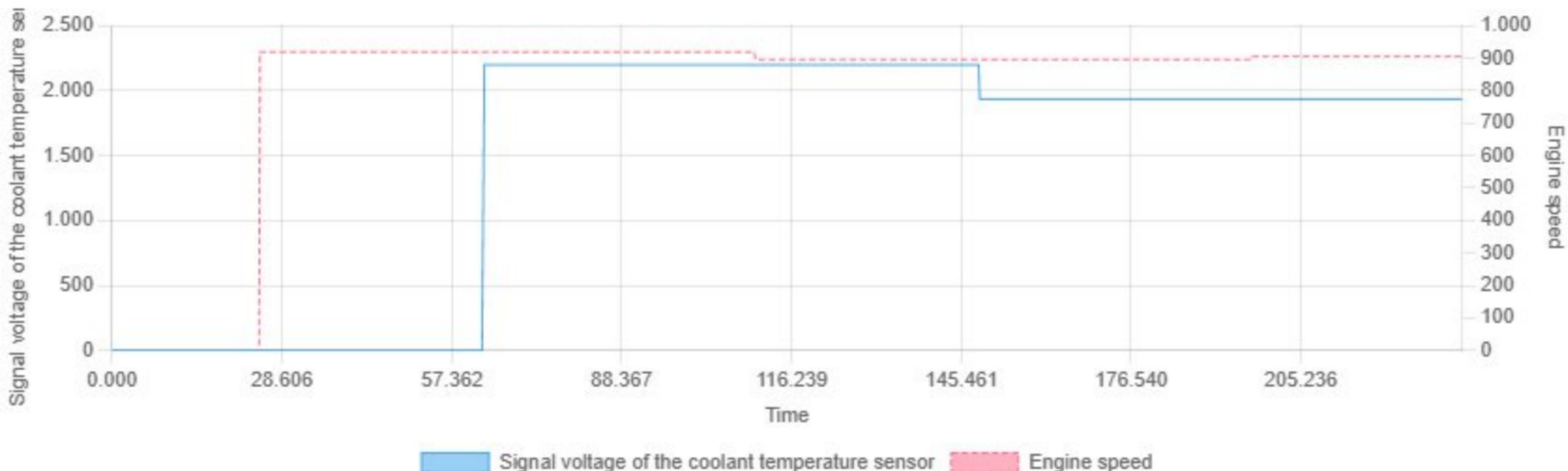


Min: 0.00 | Max: 6.89 | Avg: 5.00

## Shutdown time from relative minute counter until engine start vs Engine speed



## Signal voltage of the coolant temperature sensor vs Engine speed



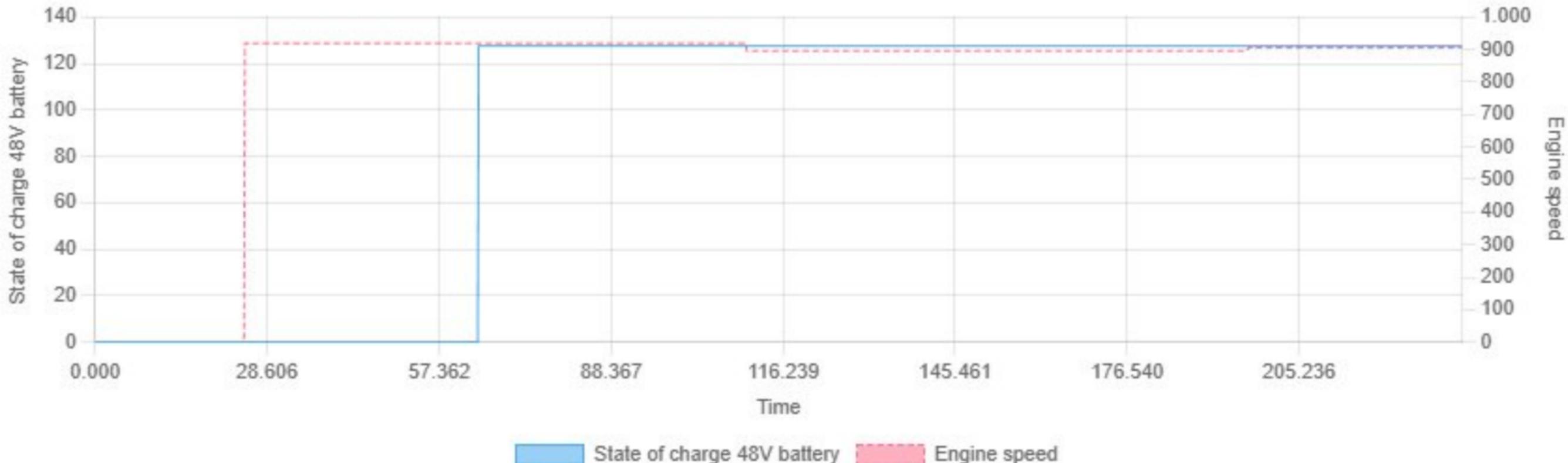
Min: 0.00 | Max: 2199.40 | Avg: 1498.83

## Soot mass in OPF Bank 1 vs Engine speed



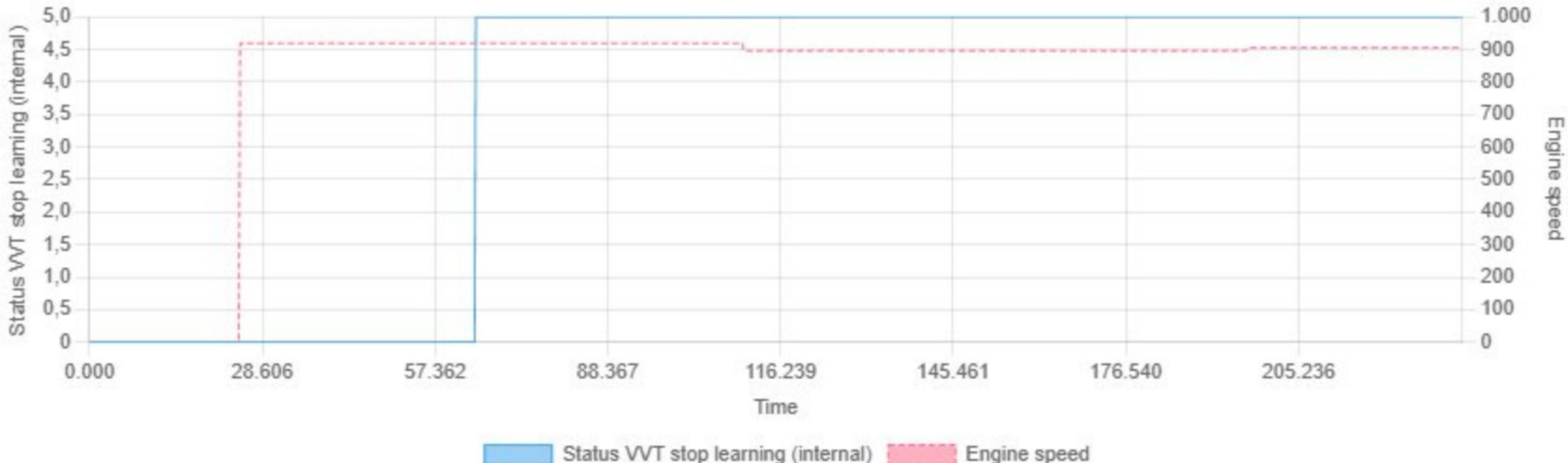
Min: 0.00 | Max: 0.03 | Avg: 0.02

## State of charge 48V battery vs Engine speed



Min: 0.00 | Max: 127.50 | Avg: 91.75

## Status VVT stop learning (internal) vs Engine speed

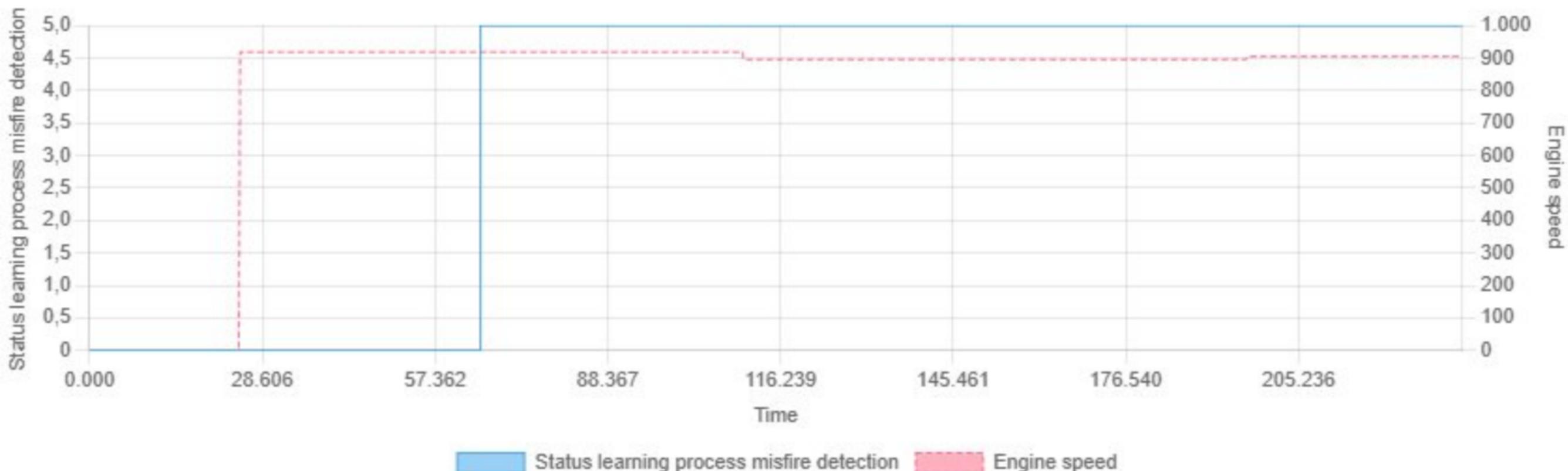


Min: 0.00 | Max: 5.00 | Avg: 3.59

## Status error overload VVT1 vs Engine speed

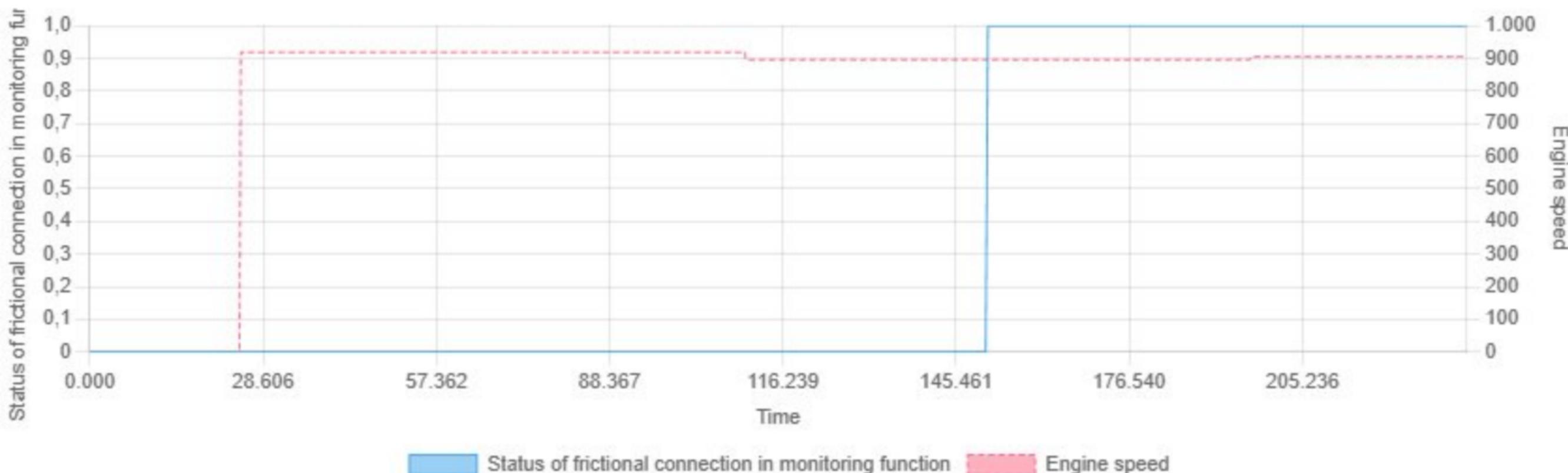


## Status learning process misfire detection vs Engine speed



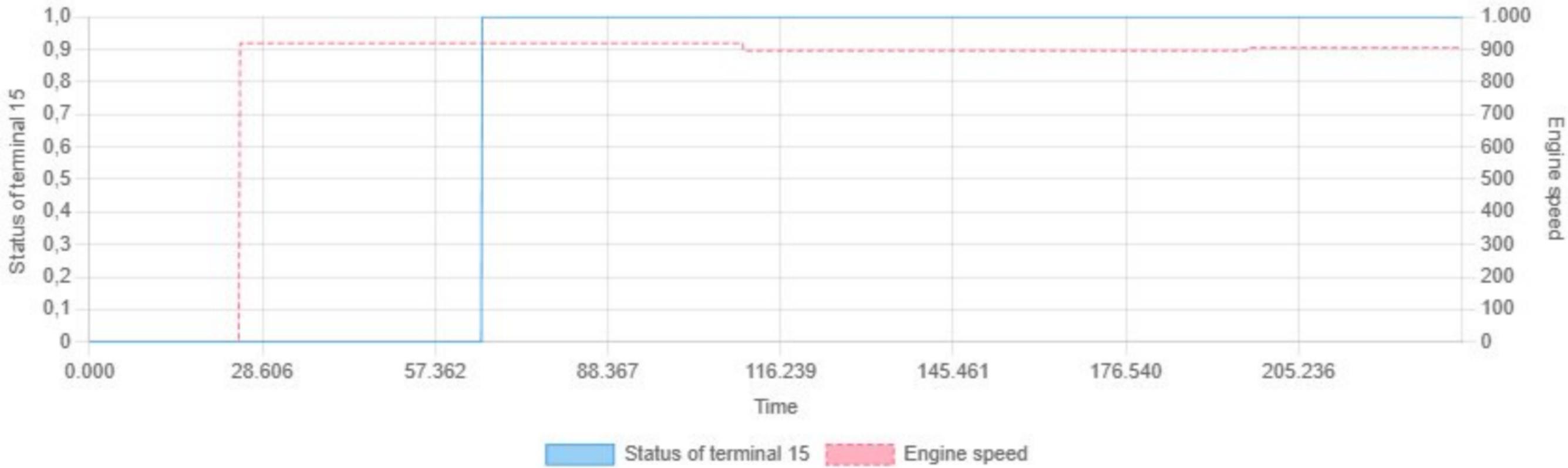
Min: 0.00 | Max: 5.00 | Avg: 3.58

## Status of frictional connection in monitoring function vs Engine speed



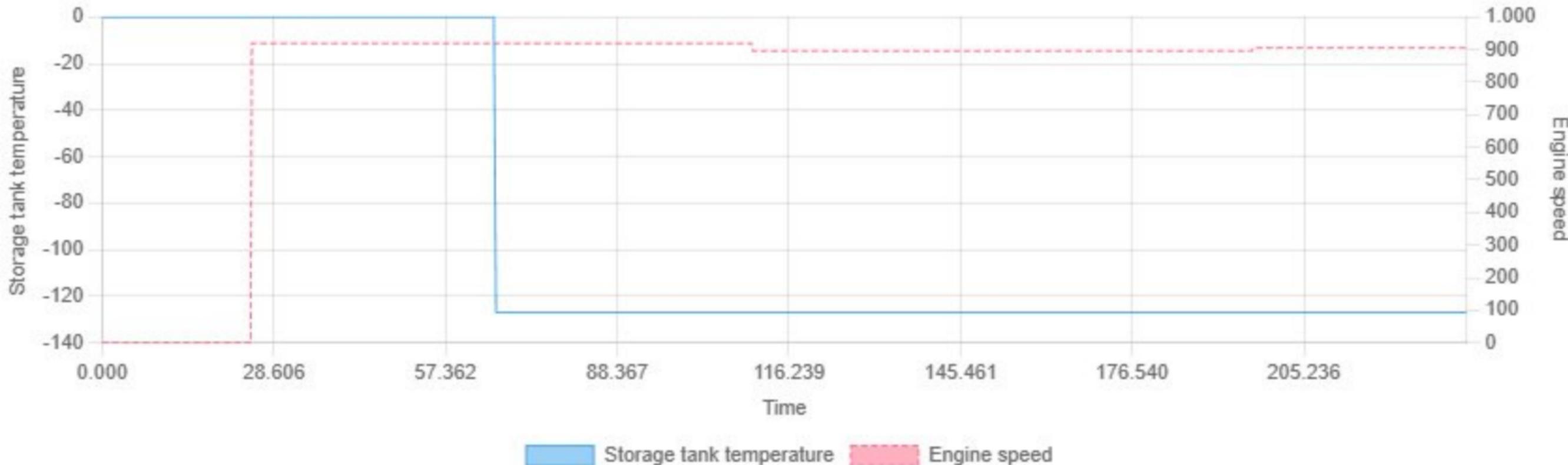
Min: 0.00 | Max: 1.00 | Avg: 0.35

## Status of terminal 15 vs Engine speed



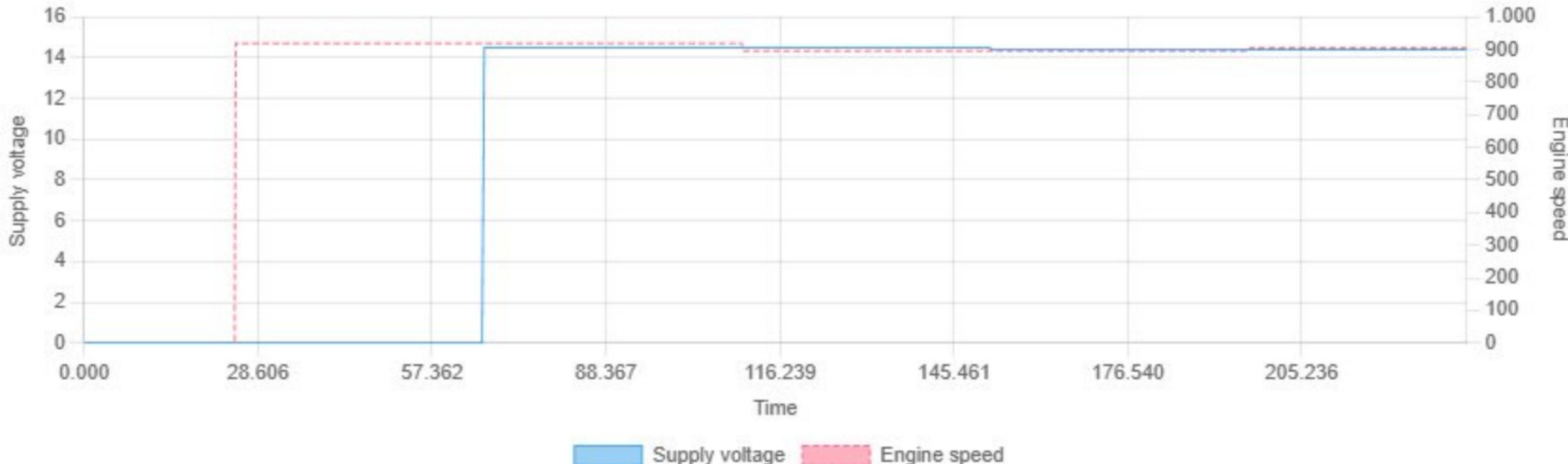
Min: 0.00 | Max: 1.00 | Avg: 0.71

## Storage tank temperature vs Engine speed



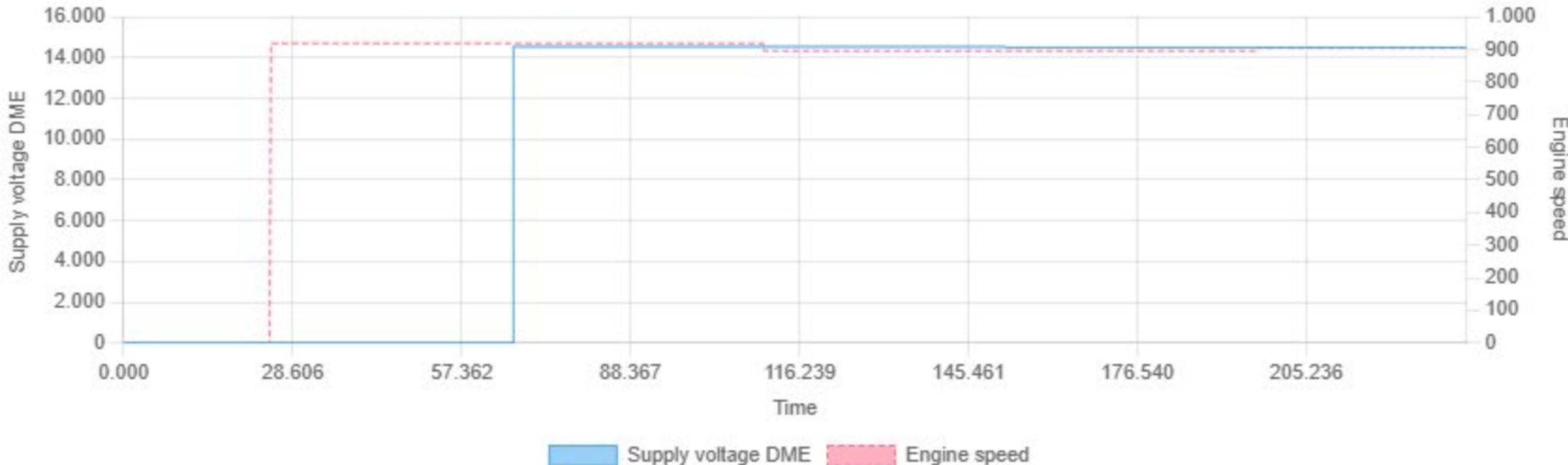
Min: -127.00 | Max: 0.00 | Avg: -90.36

## Supply voltage vs Engine speed

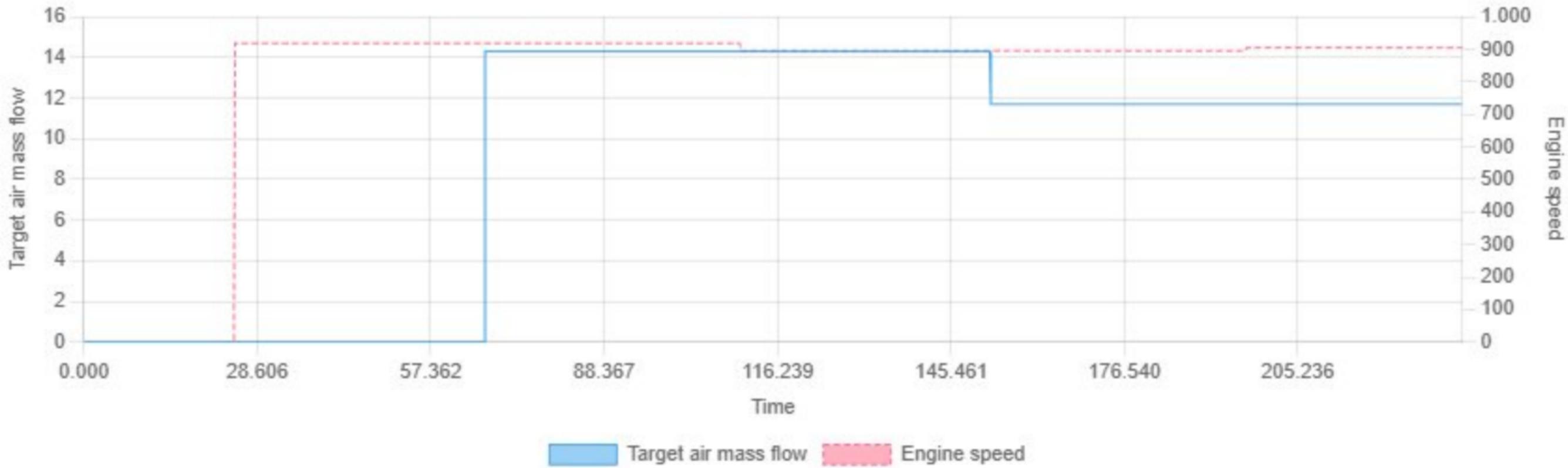


Min: 0.00 | Max: 14.50 | Avg: 10.27

## Supply voltage DME vs Engine speed



## Target air mass flow vs Engine speed

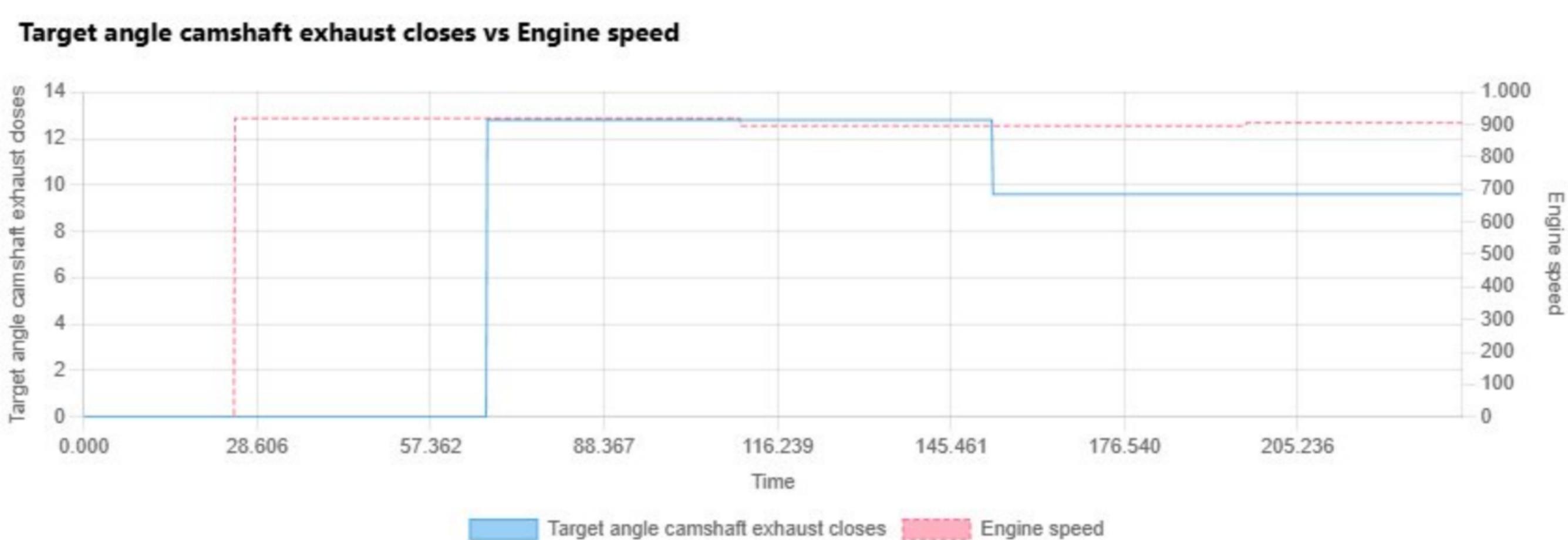


Min: 0.00 | Max: 14.30 | Avg: 9.25

## Target angle (inlet VANOS) vs Engine speed



Min: -25.70 | Max: 0.00 | Avg: -16.84



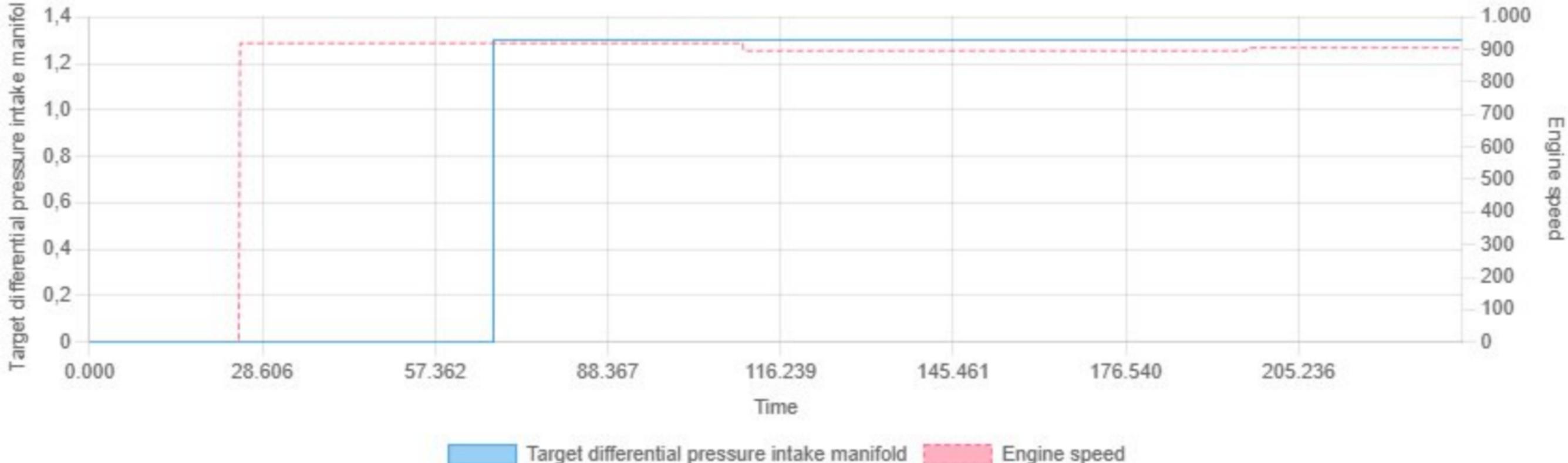
Min: 0.00 | Max: 12.80 | Avg: 7.96

## Target angle camshaft inlet opens vs Engine speed



Min: -25.70 | Max: 0.00 | Avg: -16.80

## Target differential pressure intake manifold vs Engine speed



Min: 0.00 | Max: 1.30 | Avg: 0.92

## Target filling vs Engine speed

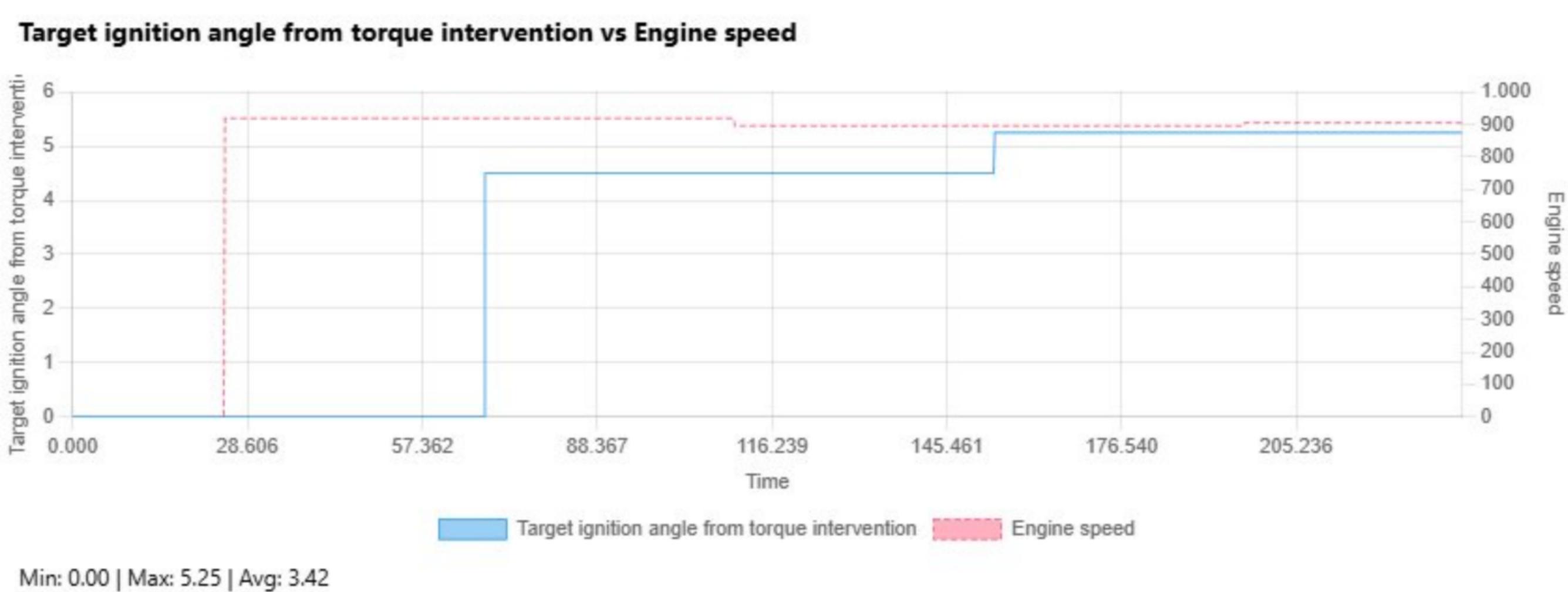


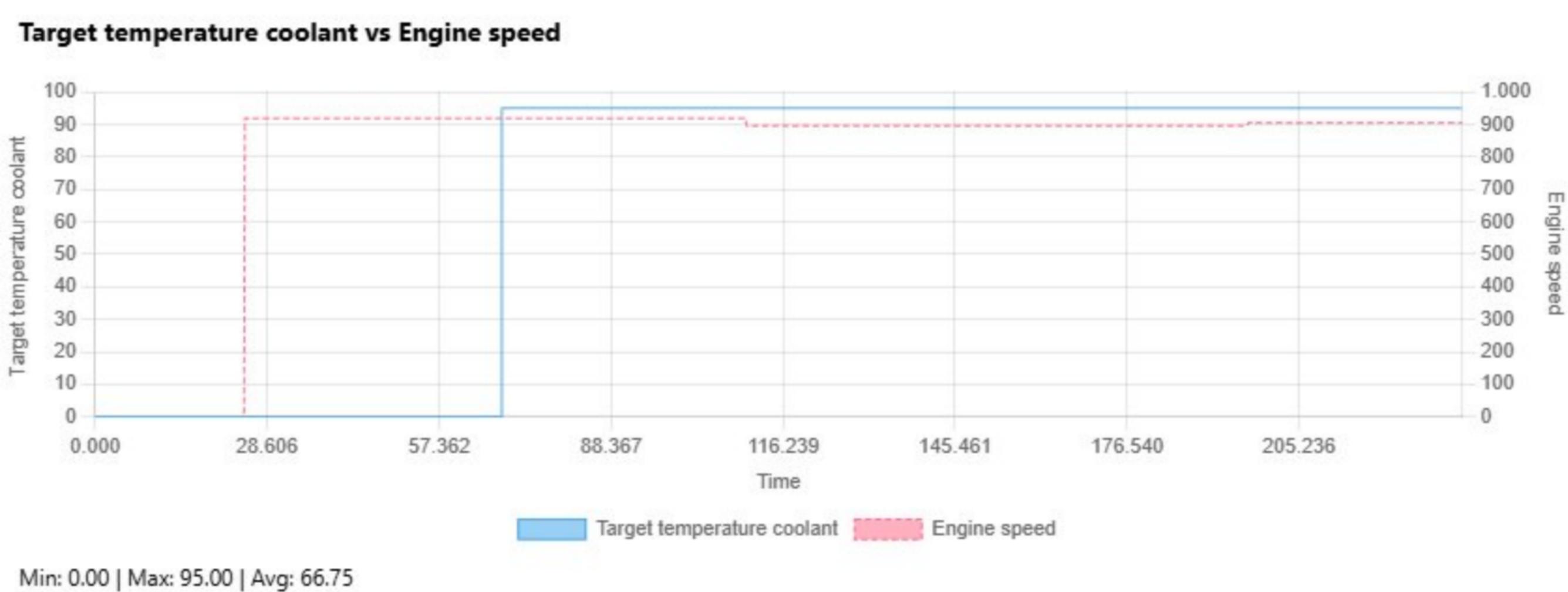
Min: 0.00 | Max: 26.62 | Avg: 17.44

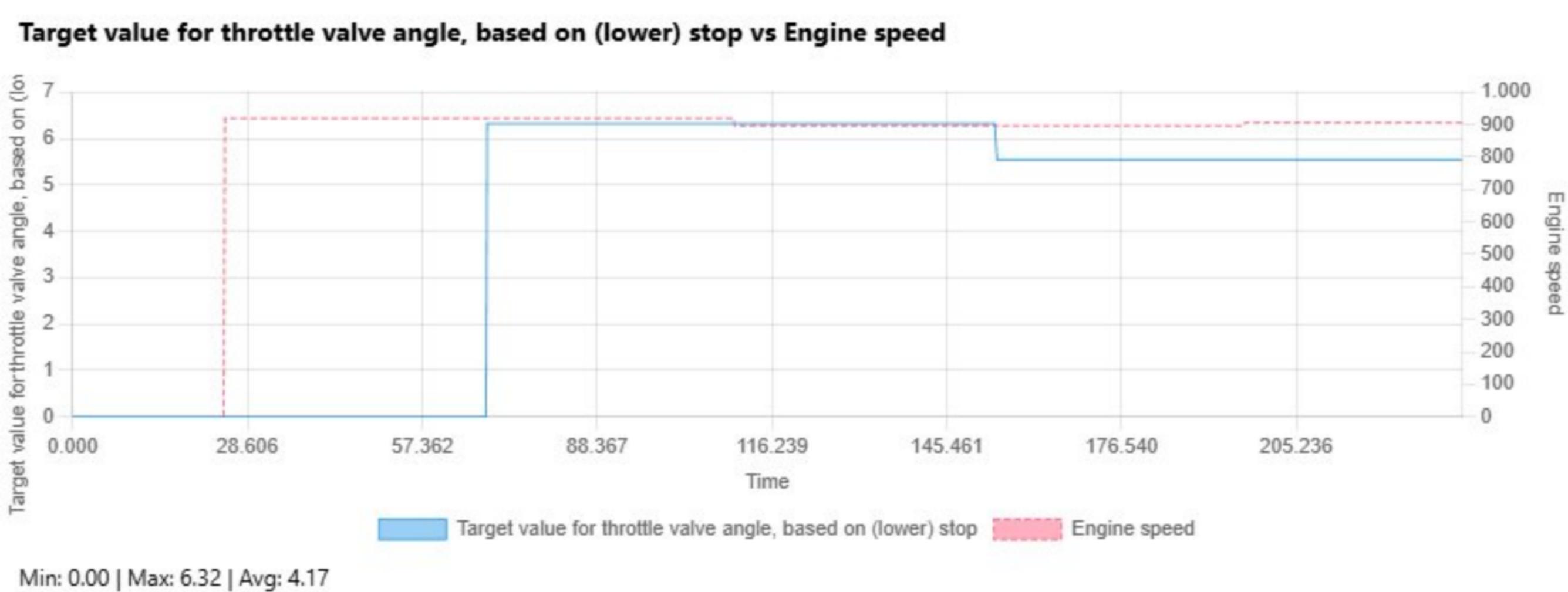
## Target idle speed vs Engine speed

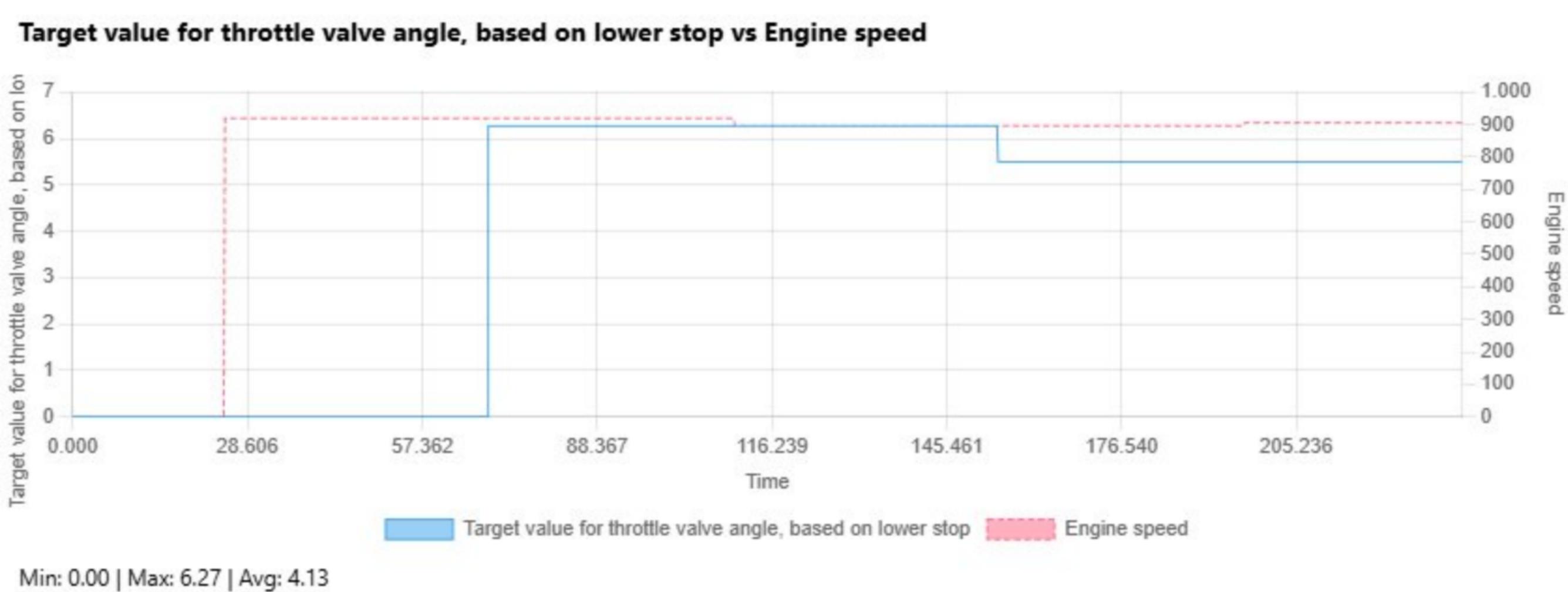


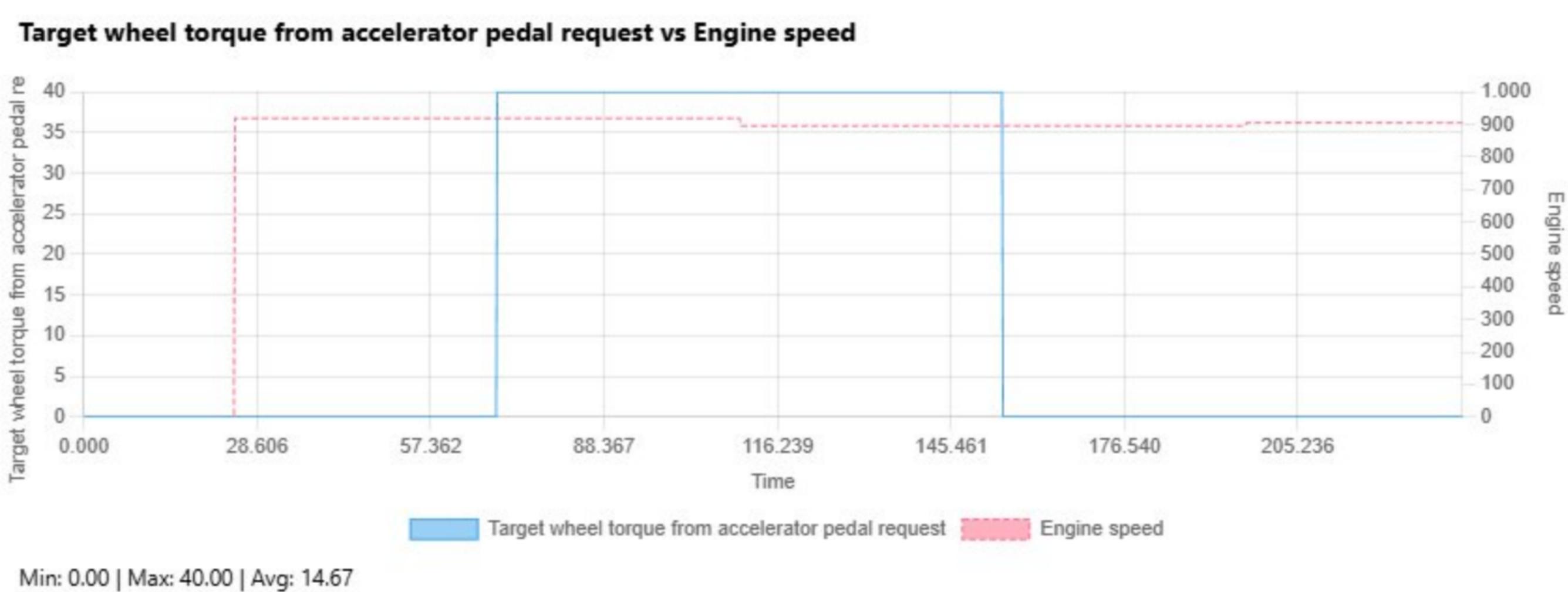
Min: 0.00 | Max: 900.00 | Avg: 633.84



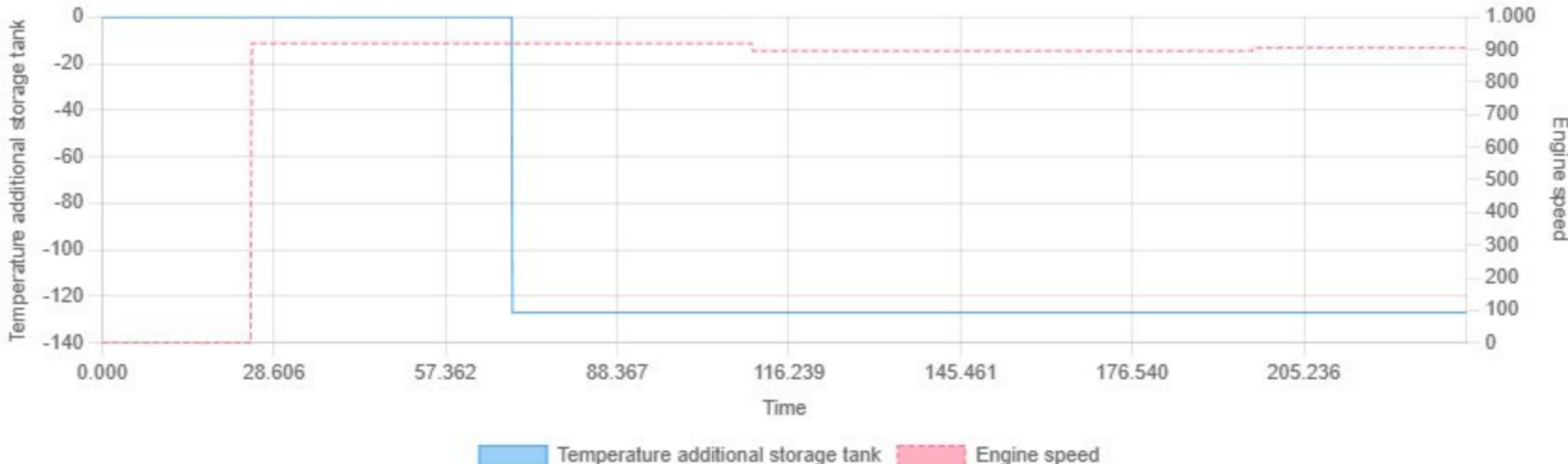






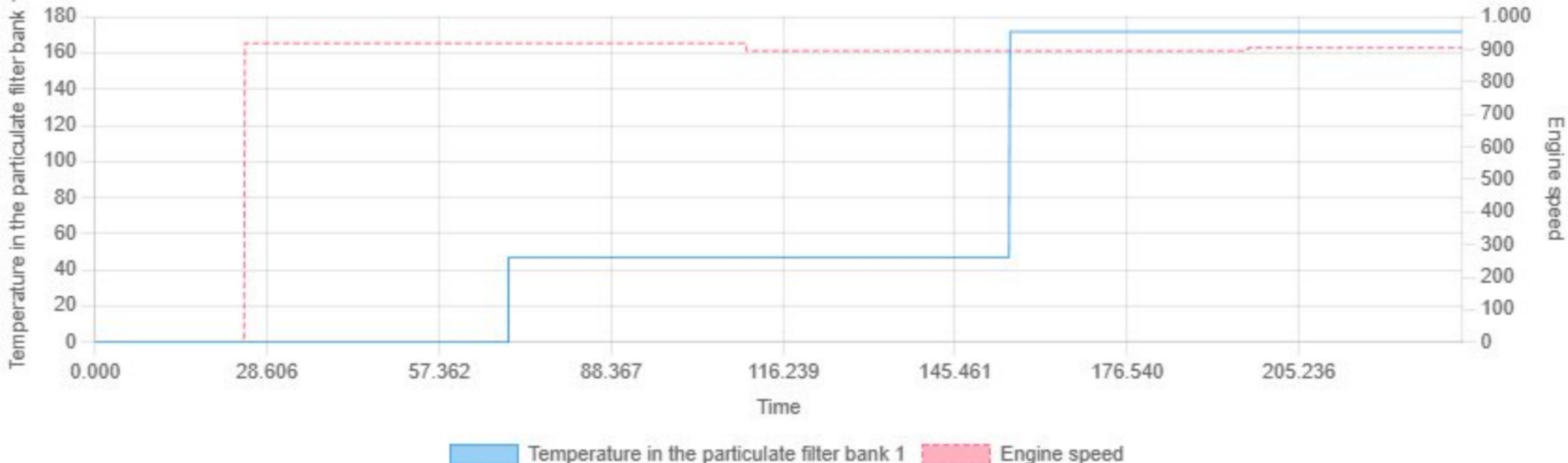


## Temperature additional storage tank vs Engine speed



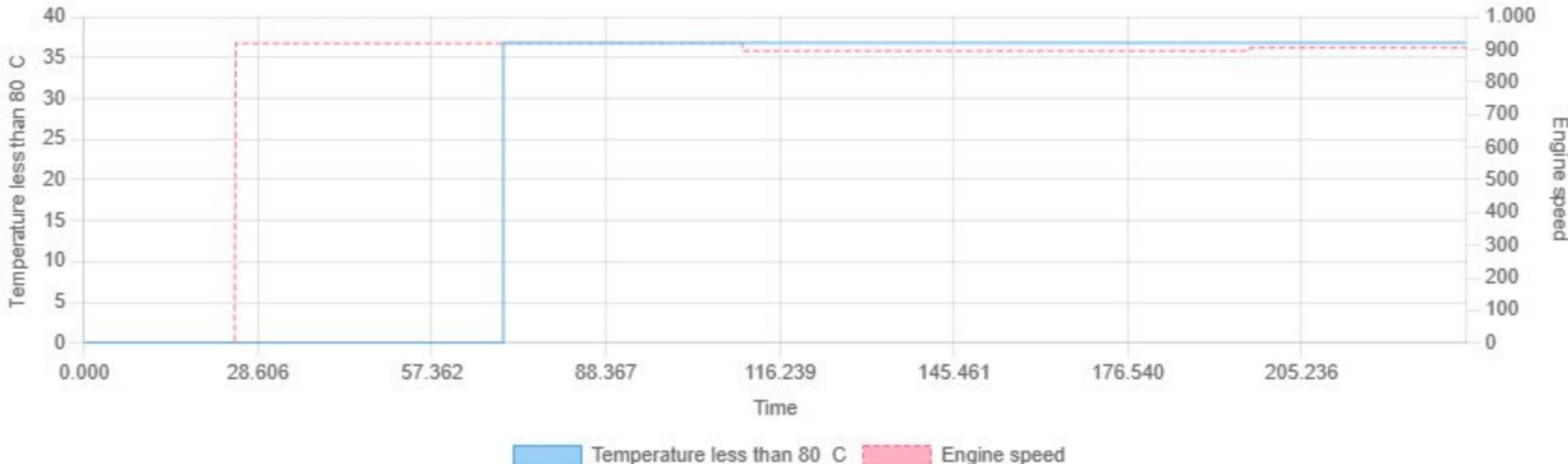
Min: -127.00 | Max: 0.00 | Avg: -88.83

## Temperature in the particulate filter bank 1 vs Engine speed

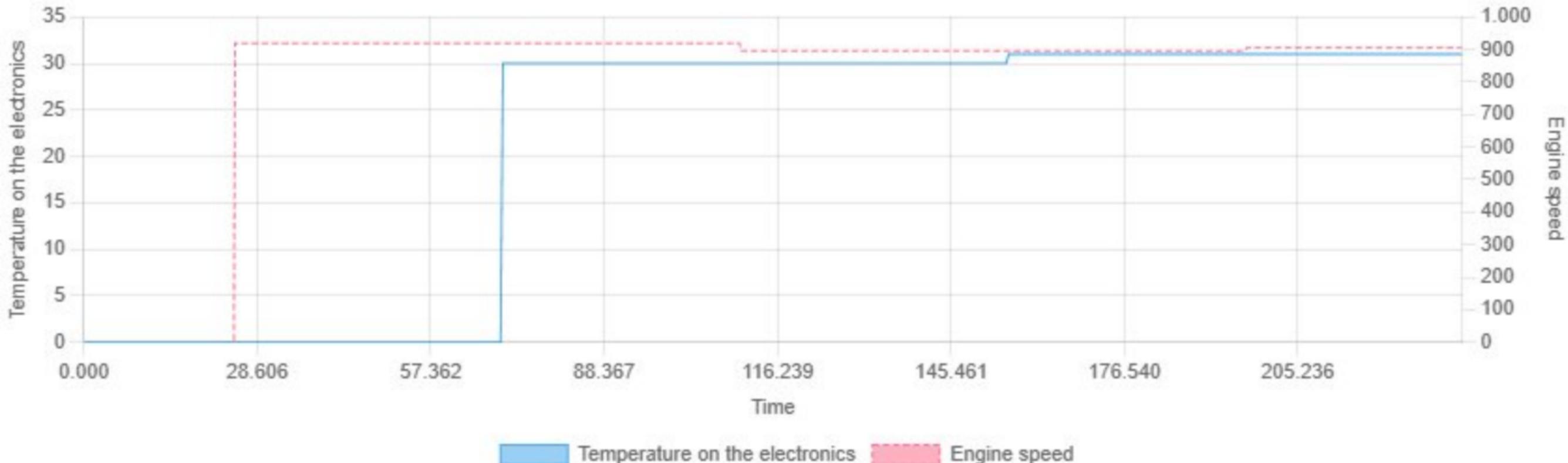


Min: 0.00 | Max: 171.86 | Avg: 74.10

## Temperature less than 80 C vs Engine speed

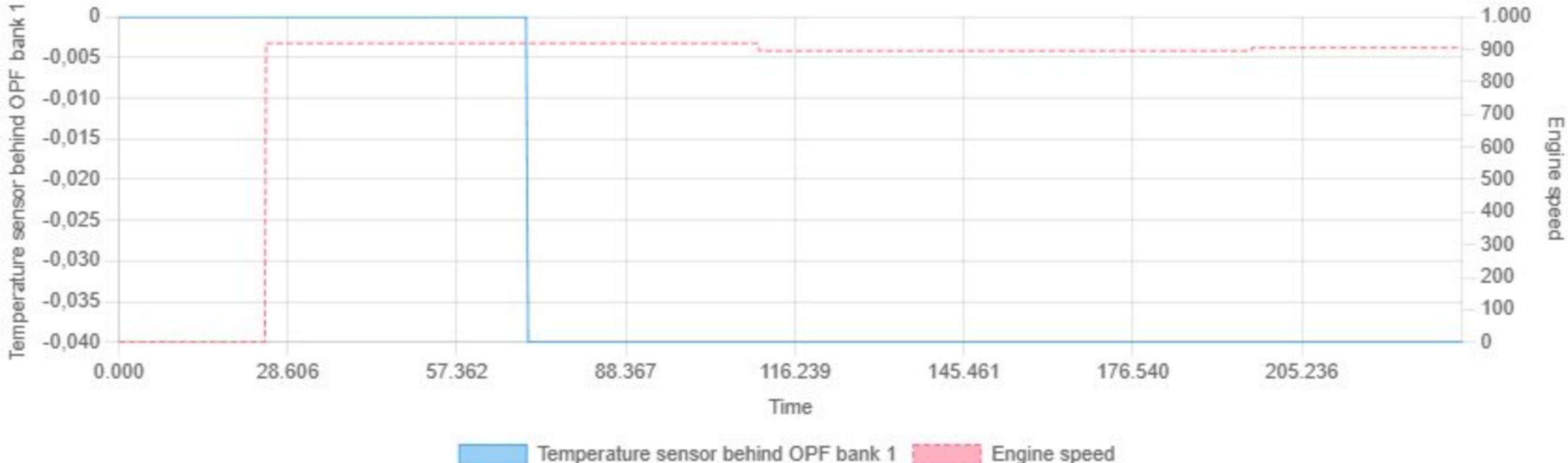


## Temperature on the electronics vs Engine speed

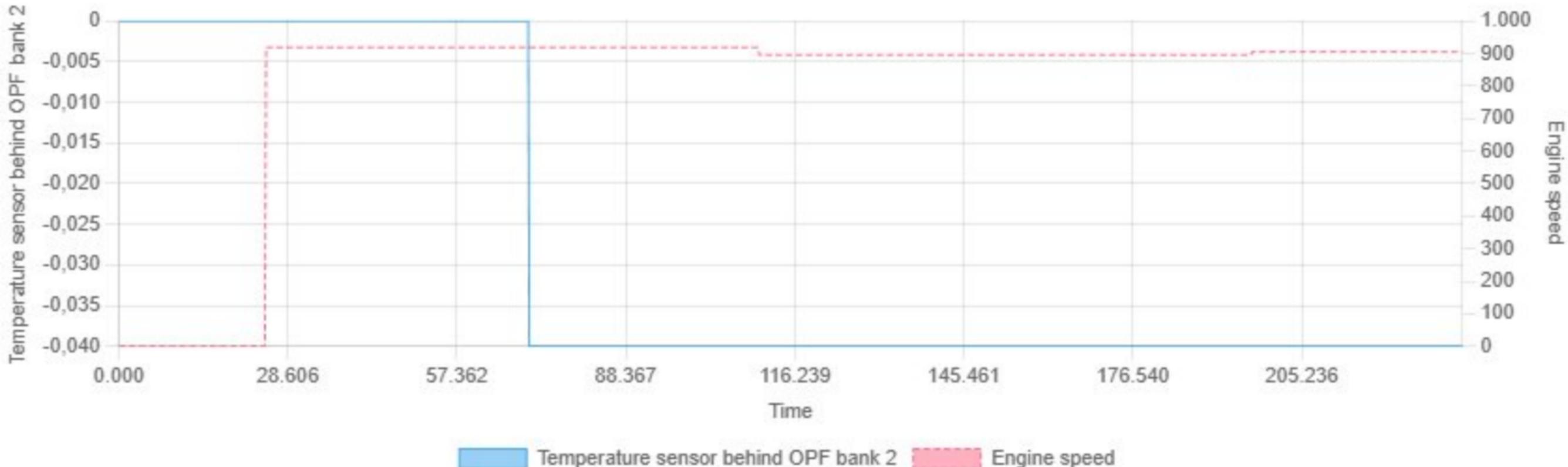


Min: 0.00 | Max: 31.00 | Avg: 21.22

## Temperature sensor behind OPF bank 1 vs Engine speed

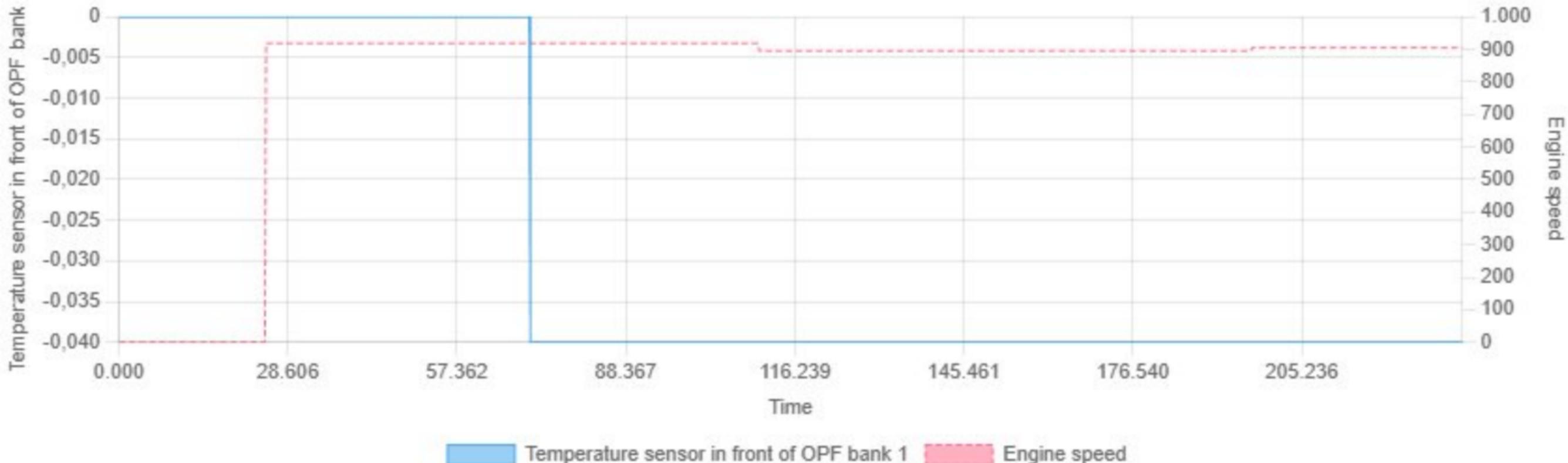


## Temperature sensor behind OPF bank 2 vs Engine speed



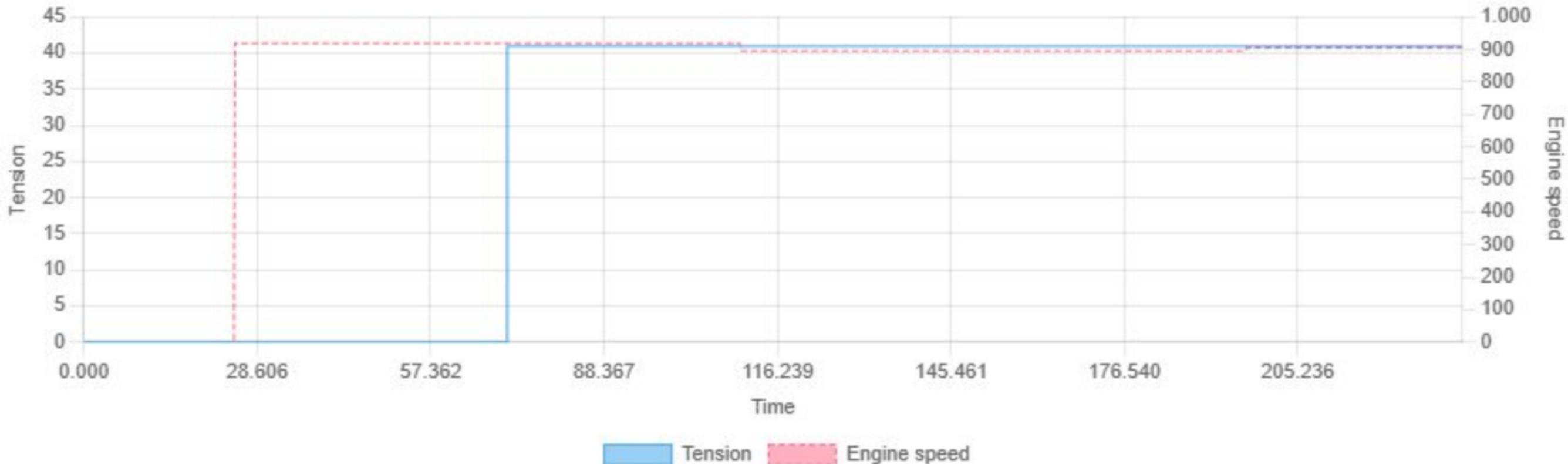
Min: -0.04 | Max: 0.00 | Avg: -0.03

## Temperature sensor in front of OPF bank 1 vs Engine speed



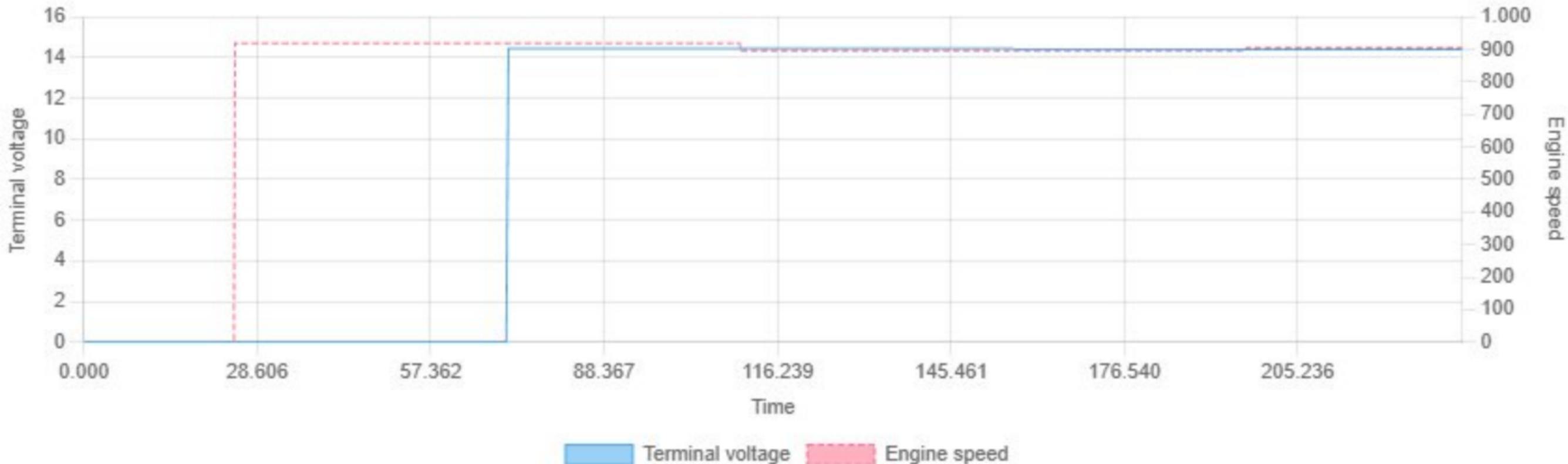
Min: -0.04 | Max: 0.00 | Avg: -0.03

## Tension vs Engine speed

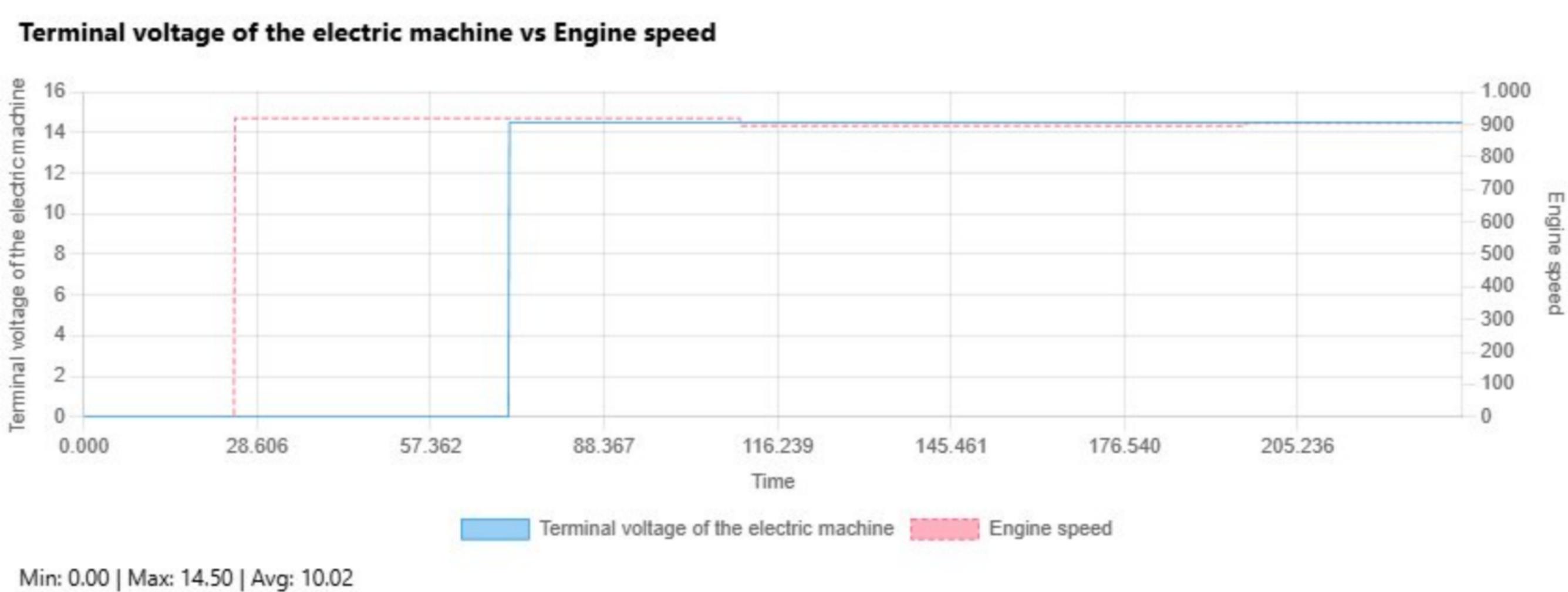


Min: 0.00 | Max: 40.95 | Avg: 28.38

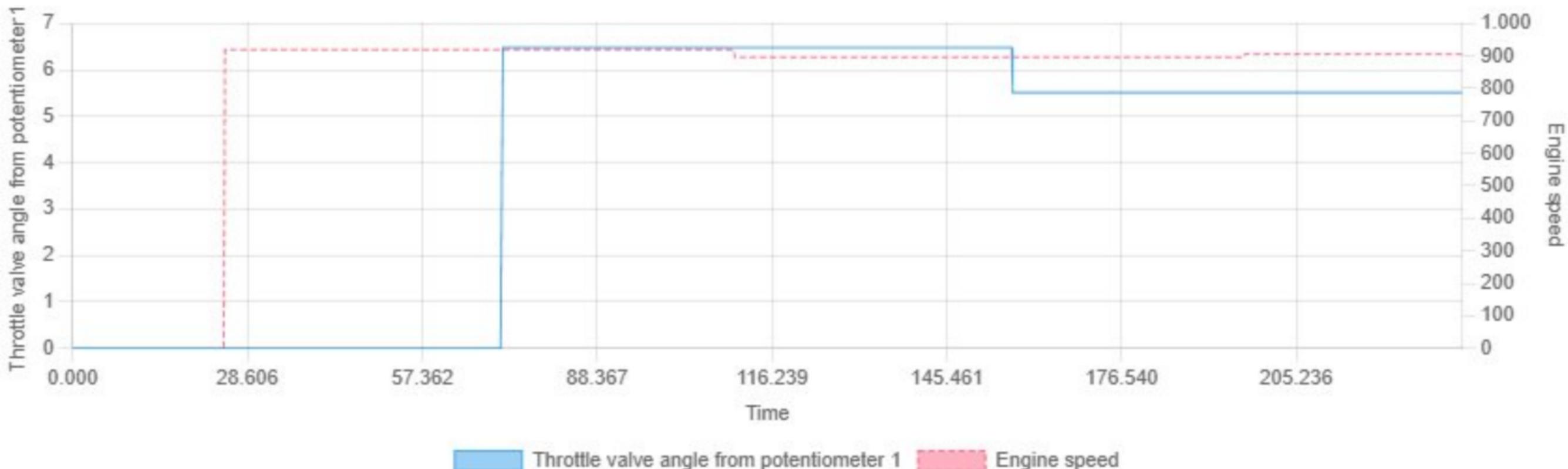
## Terminal voltage vs Engine speed



Min: 0.00 | Max: 14.44 | Avg: 9.98

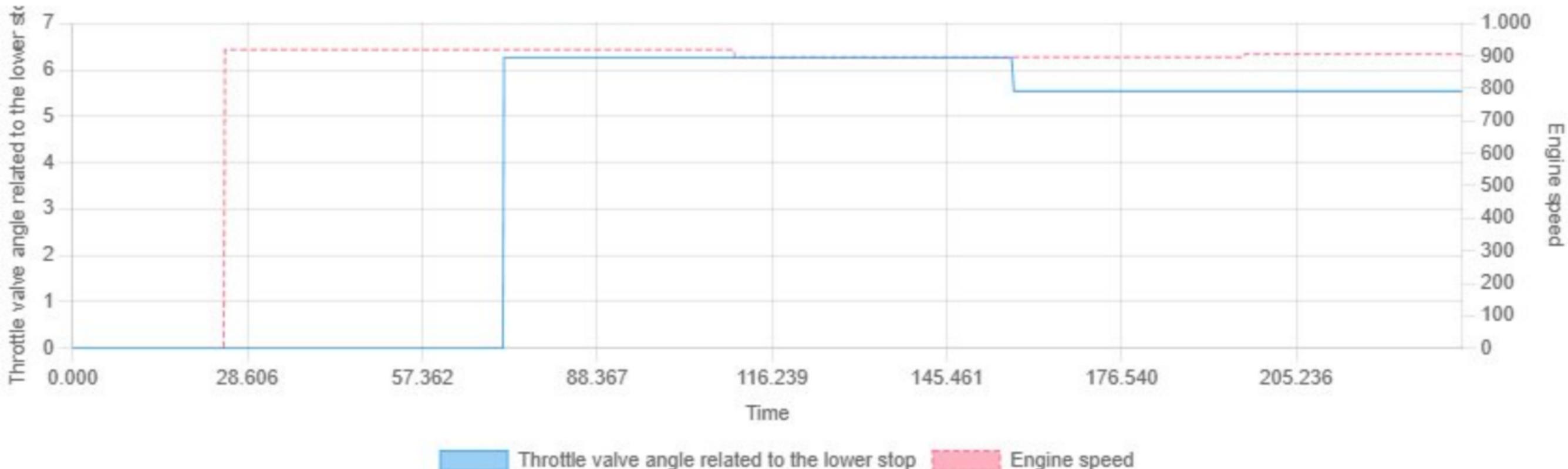


## Throttle valve angle from potentiometer 1 vs Engine speed



Min: 0.00 | Max: 6.48 | Avg: 4.16

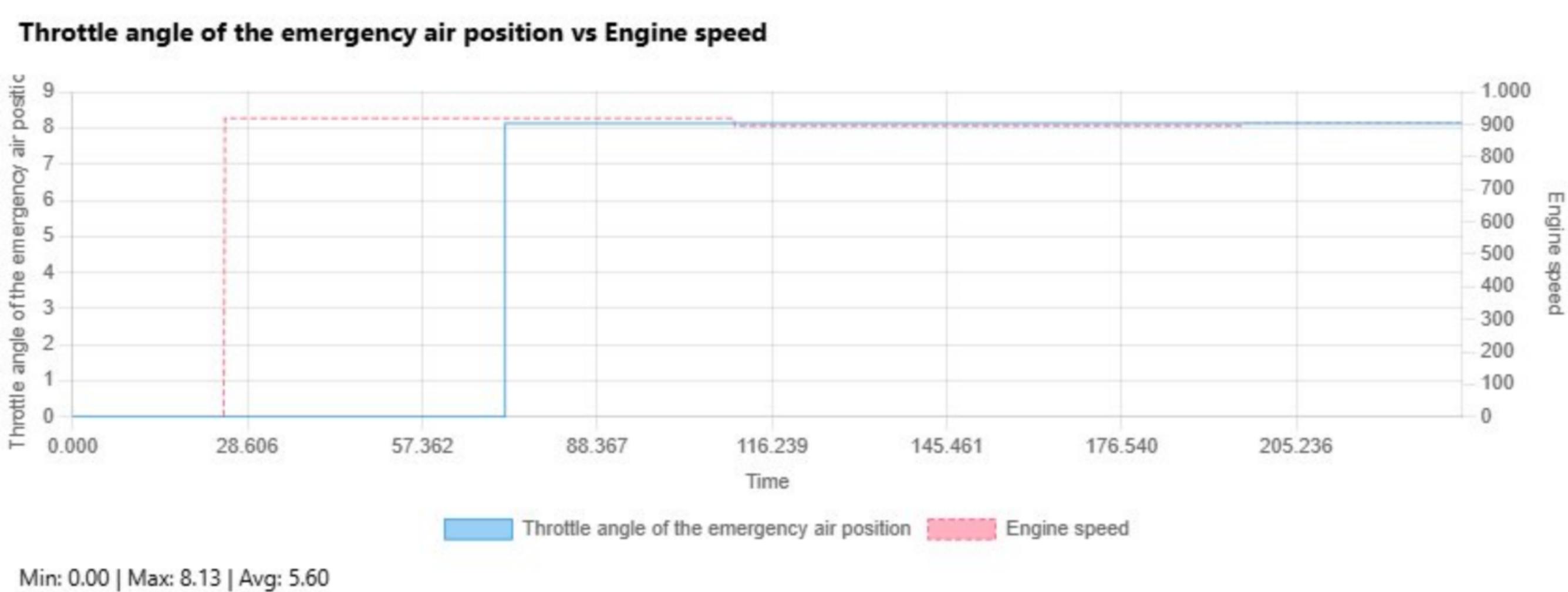
## Throttle valve angle related to the lower stop vs Engine speed

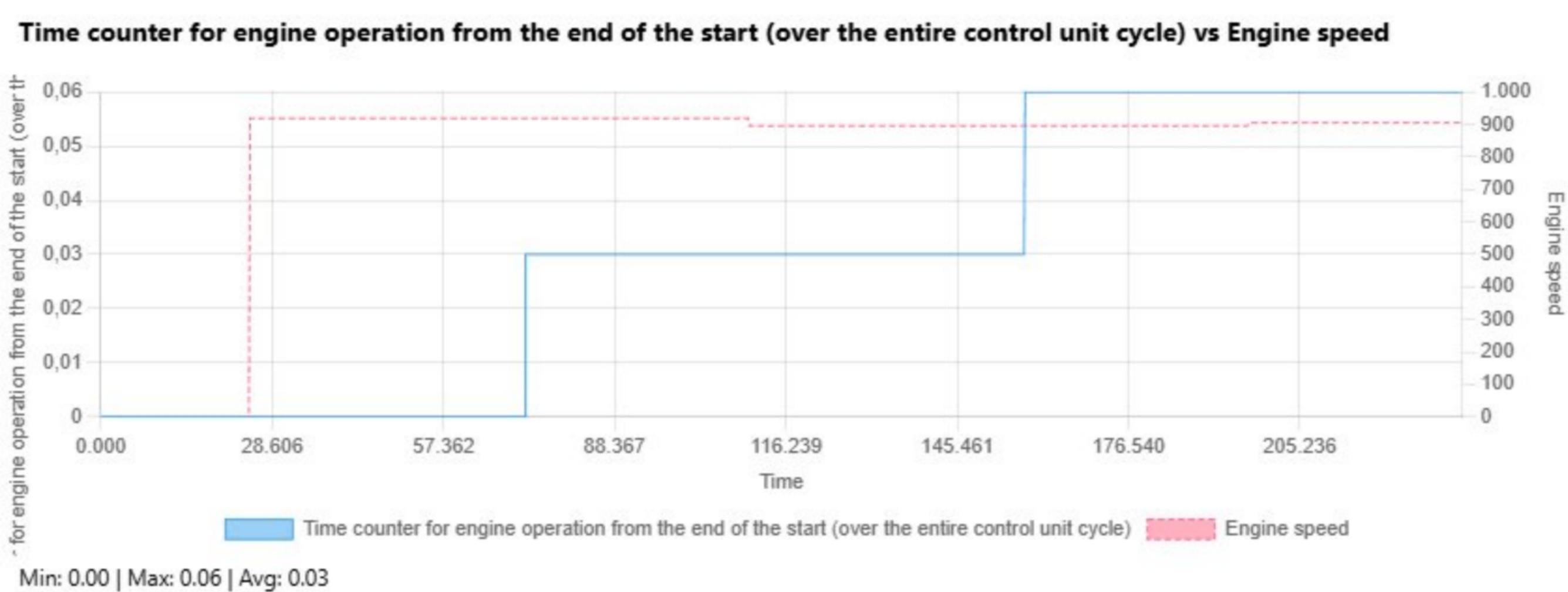


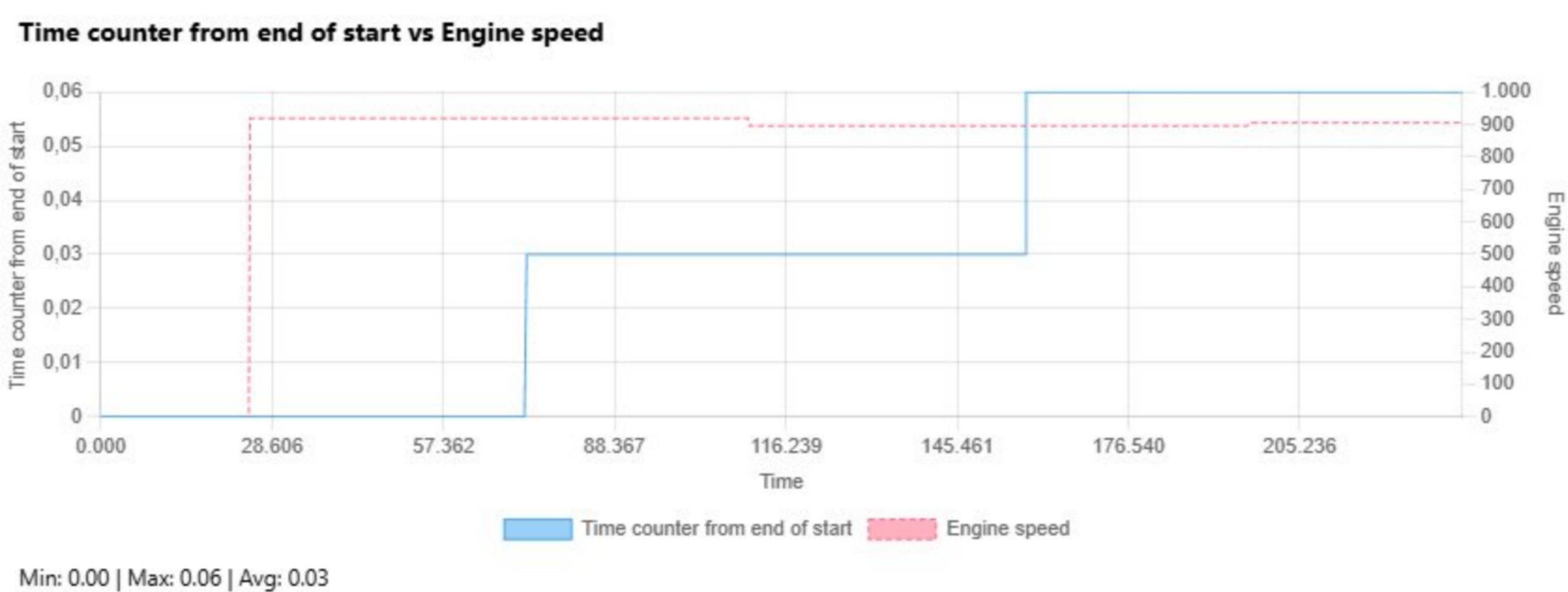
Throttle valve angle related to the lower stop

Engine speed

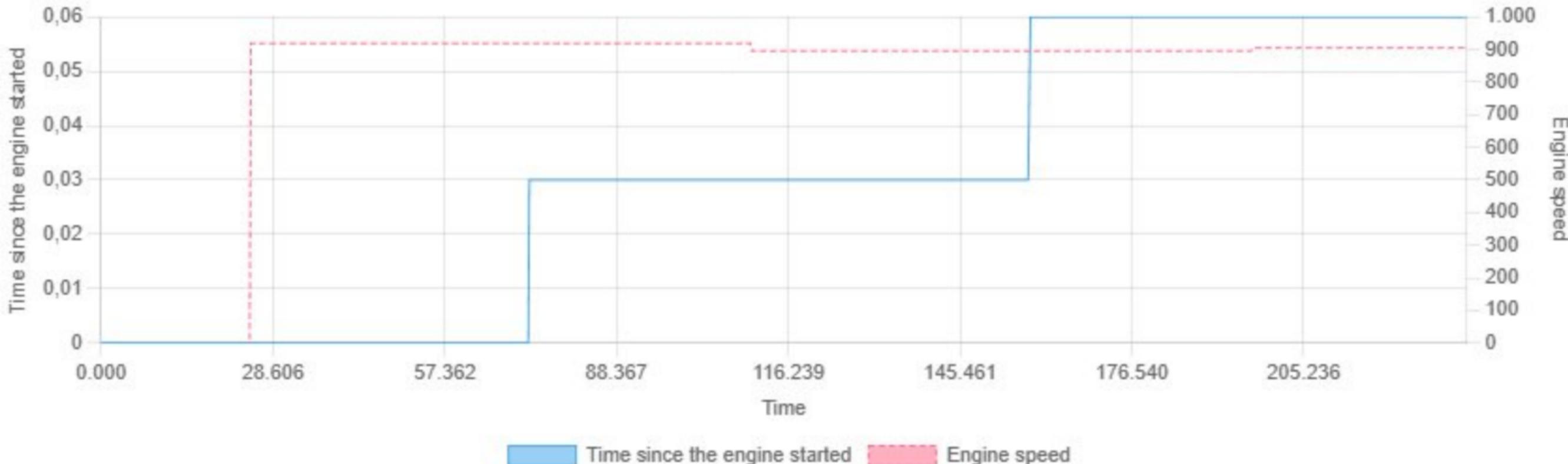
Min: 0.00 | Max: 6.26 | Avg: 4.09





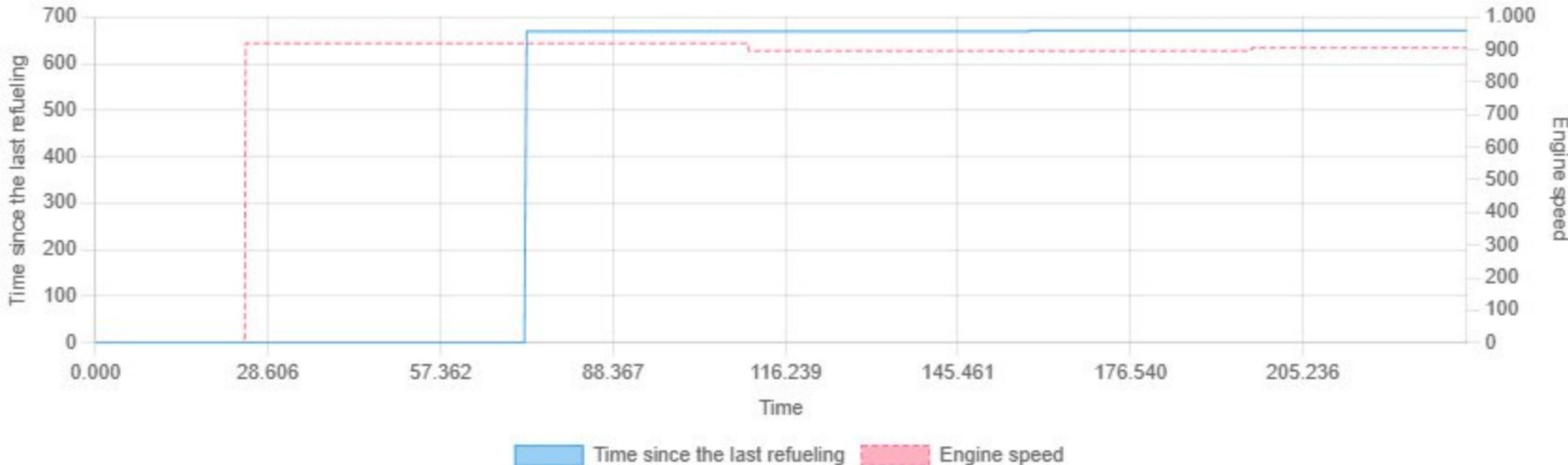


## Time since the engine started vs Engine speed

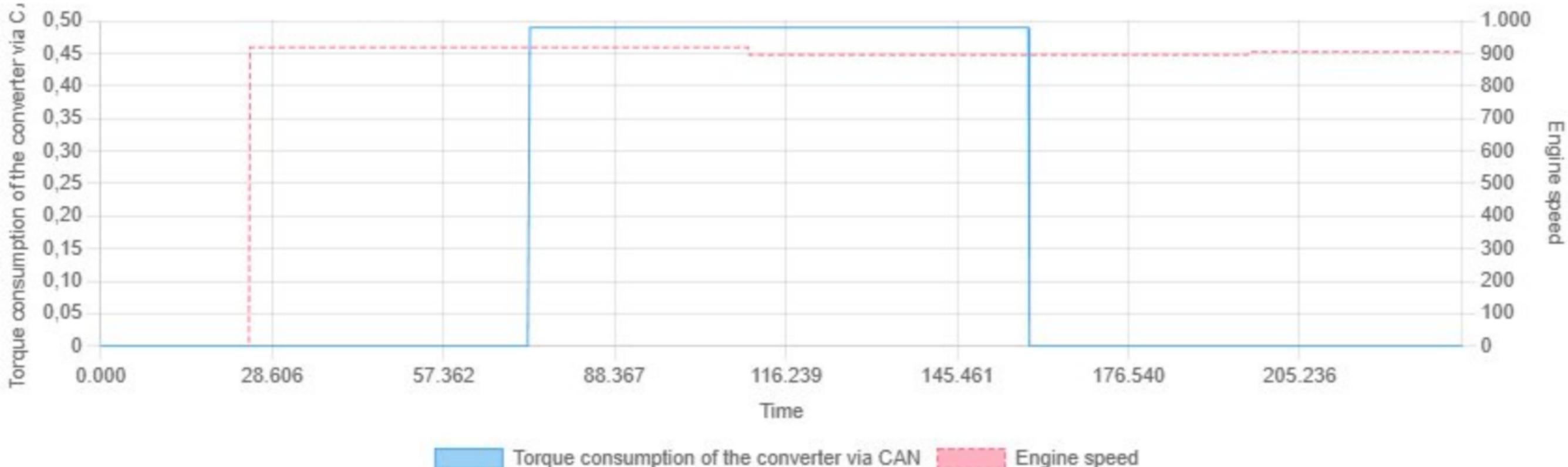


Min: 0.00 | Max: 0.06 | Avg: 0.03

## Time since the last refueling vs Engine speed

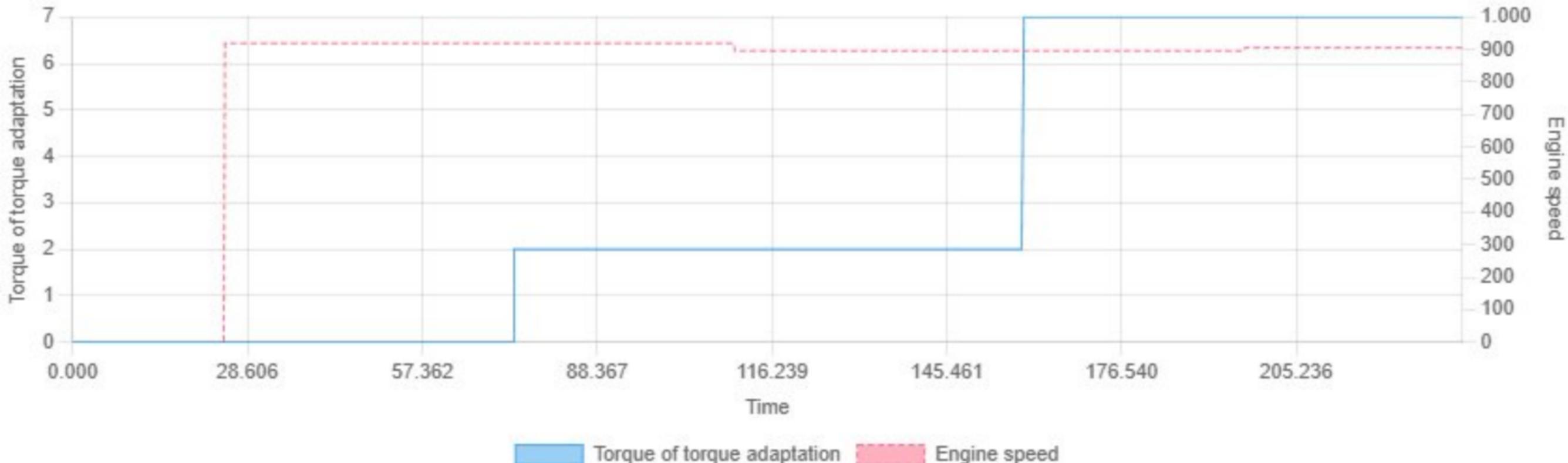


## Torque consumption of the converter via CAN vs Engine speed



Min: 0.00 | Max: 0.49 | Avg: 0.18

## Torque of torque adaptation vs Engine speed



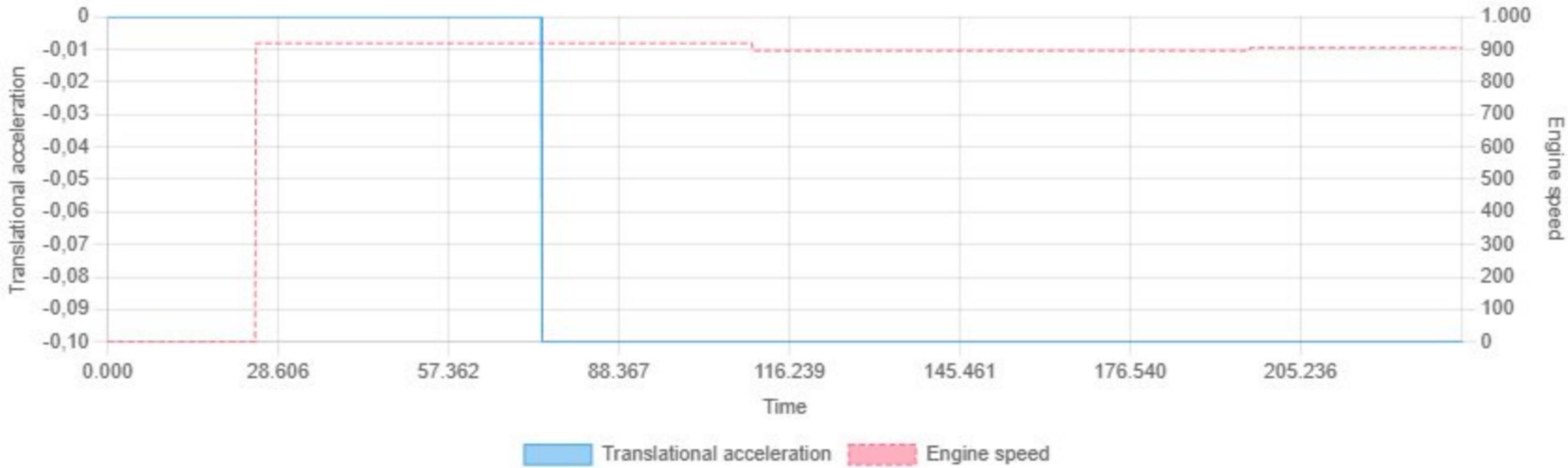
Min: 0.00 | Max: 7.00 | Avg: 2.94

## Total start counter vs Engine speed



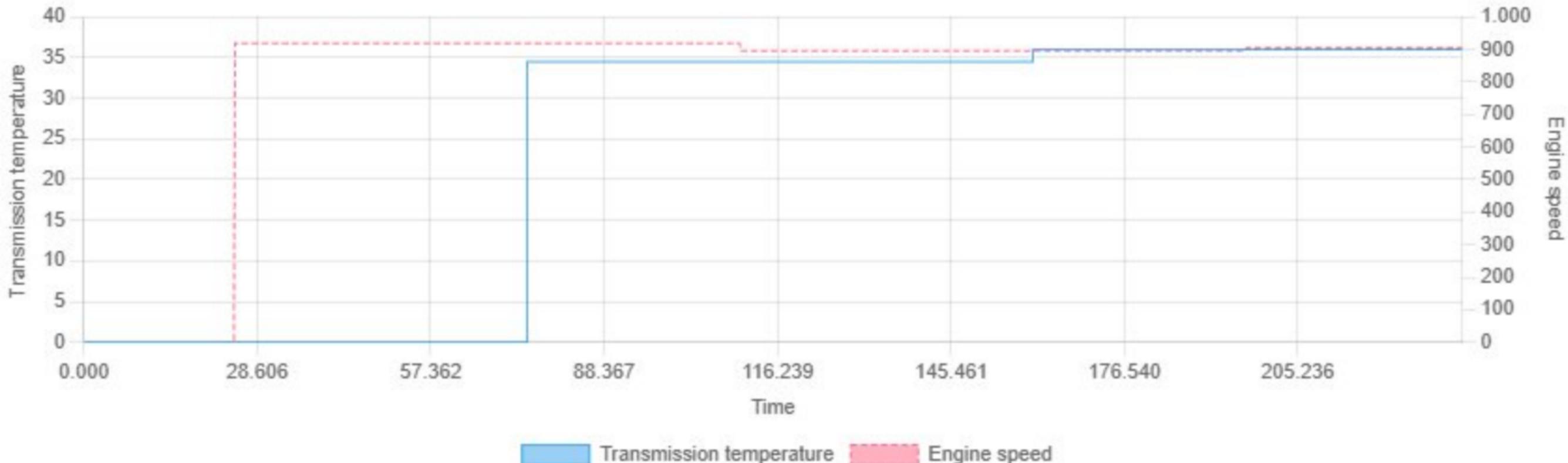
Min: 0.00 | Max: 16958.00 | Avg: 11546.74

## Translational acceleration vs Engine speed



Min: -0.10 | Max: 0.00 | Avg: -0.07

## Transmission temperature vs Engine speed

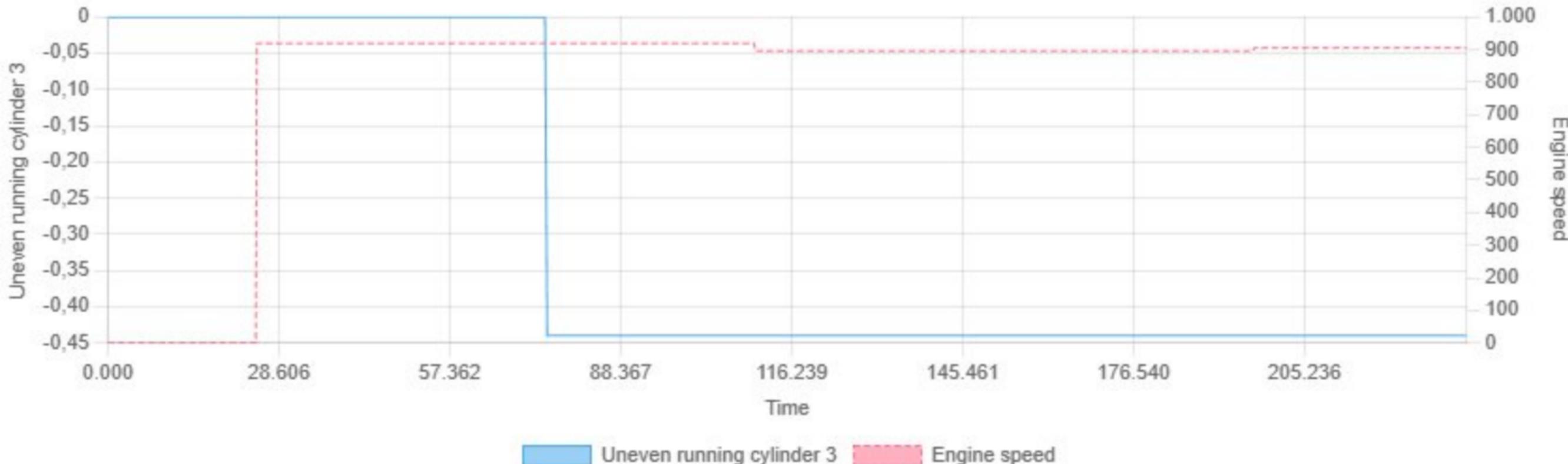


## Uneven running cylinder 2 vs Engine speed



Min: -5.12 | Max: 0.81 | Avg: -1.30

## Uneven running cylinder 3 vs Engine speed



## Uneven running cylinder 4 vs Engine speed



Min: -0.06 | Max: 0.00 | Avg: -0.04

## Uneven running cylinder 5 vs Engine speed



Min: -0.06 | Max: 0.00 | Avg: -0.04

## Uneven running cylinder 6 vs Engine speed



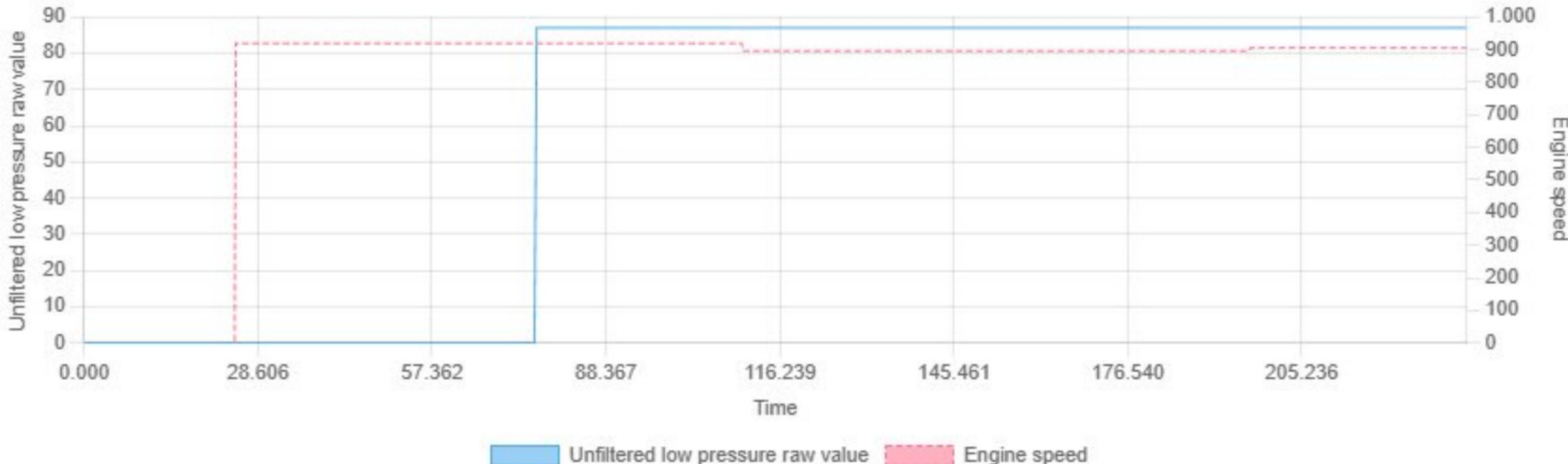
Min: -0.06 | Max: 0.00 | Avg: -0.04

## Uneven running of cylinder 1 vs Engine speed

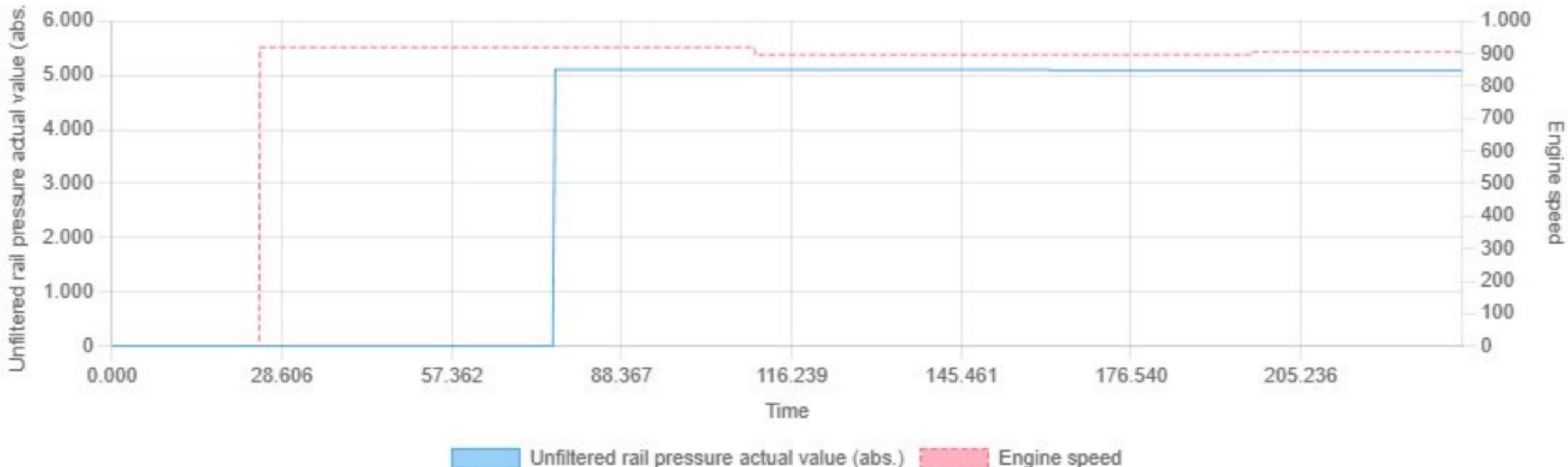


Min: 0.00 | Max: 1.62 | Avg: 1.03

## Unfiltered low pressure raw value vs Engine speed

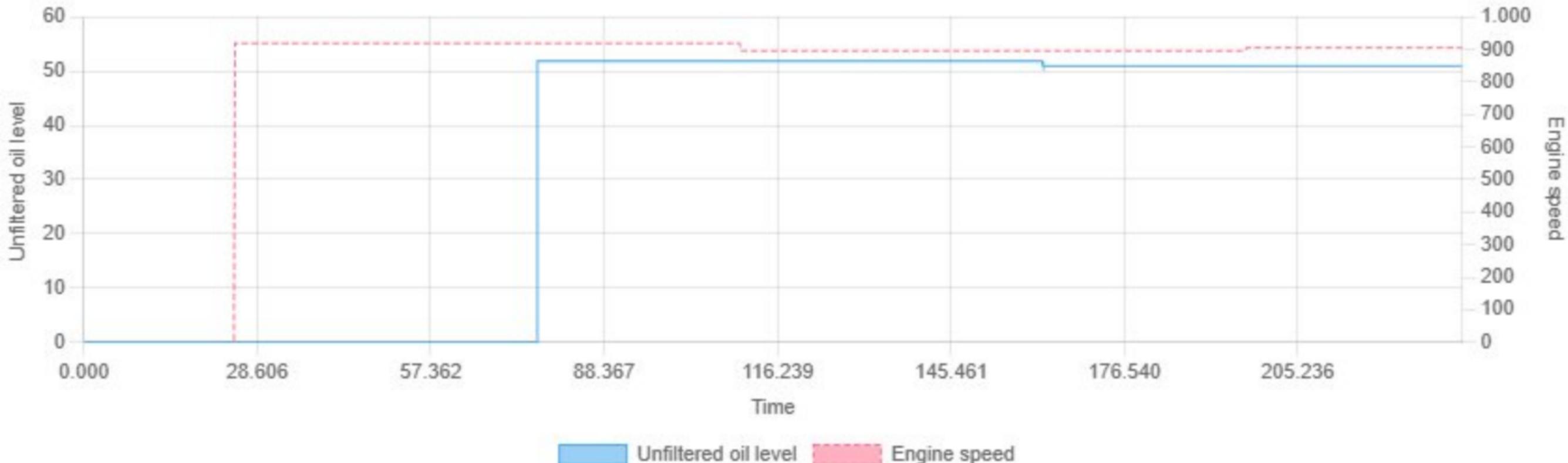


## Unfiltered rail pressure actual value (abs.) vs Engine speed



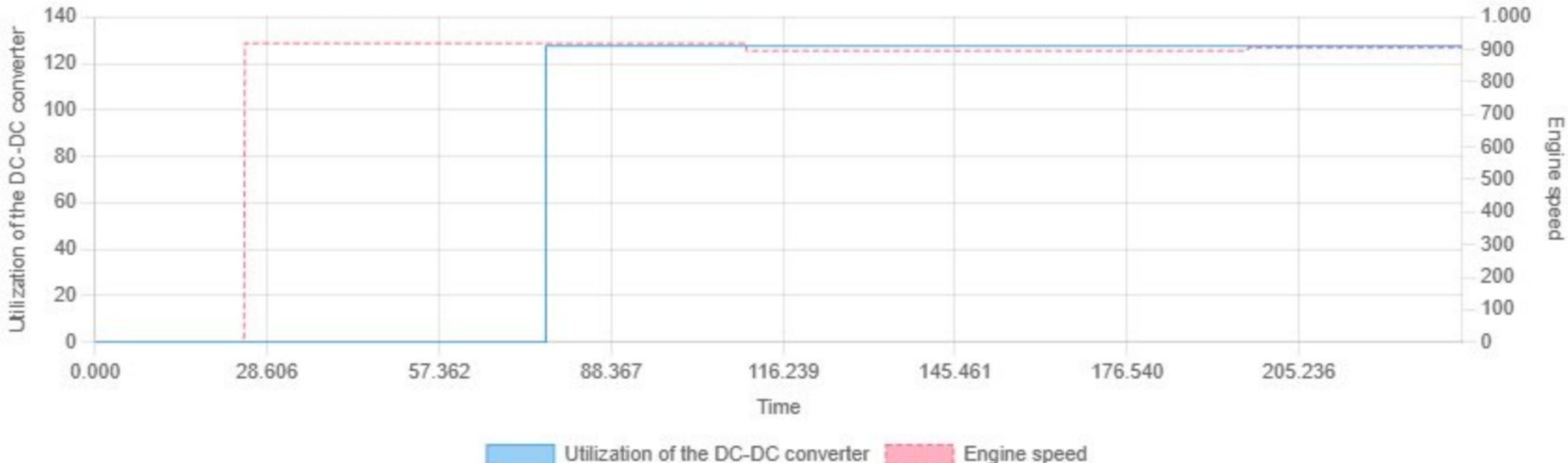
Min: 0.00 | Max: 5105.05 | Avg: 3423.70

## Unfiltered oil level vs Engine speed



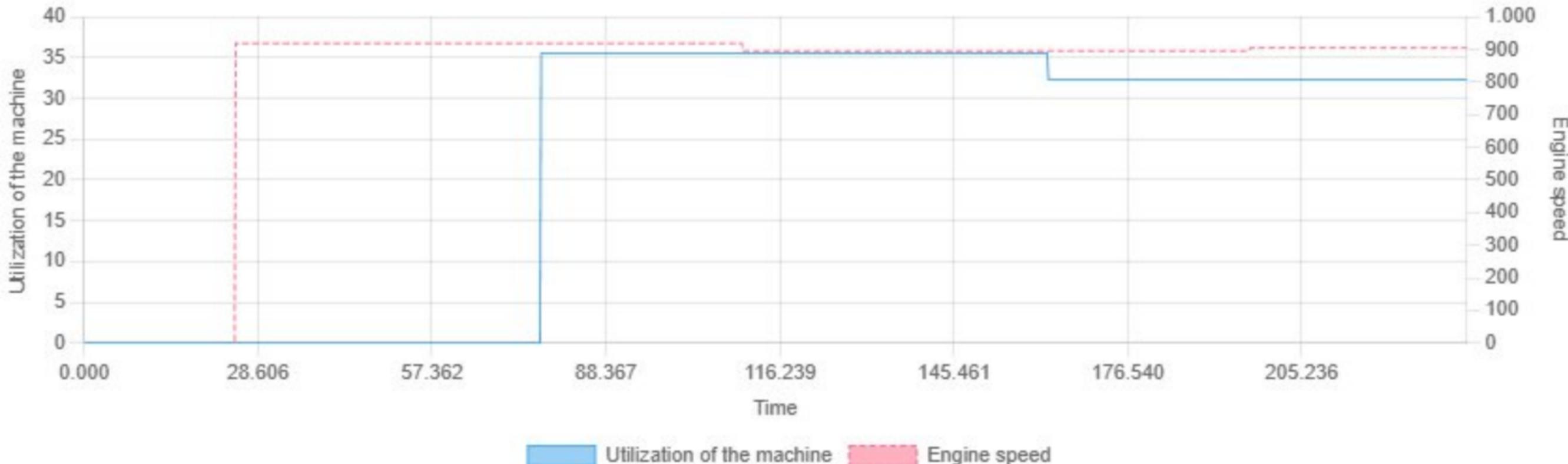
Min: 0.00 | Max: 51.85 | Avg: 34.54

## Utilization of the DC-DC converter vs Engine speed



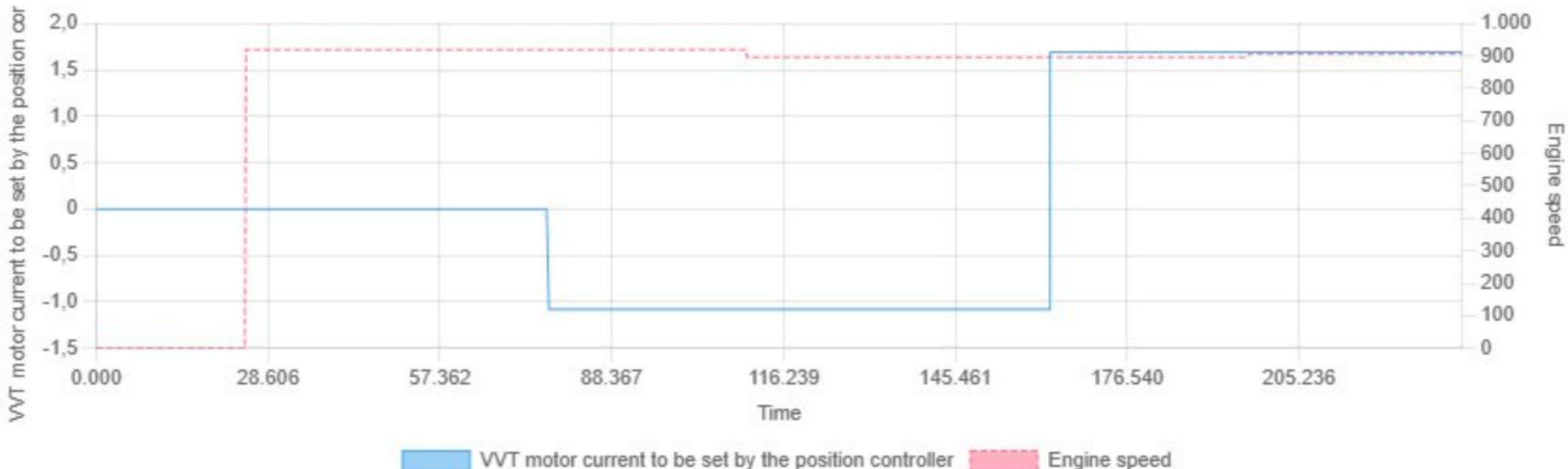
Min: 0.00 | Max: 127.50 | Avg: 85.48

## Utilization of the machine vs Engine speed



Min: 0.00 | Max: 35.53 | Avg: 22.81

## VVT motor current to be set by the position controller vs Engine speed

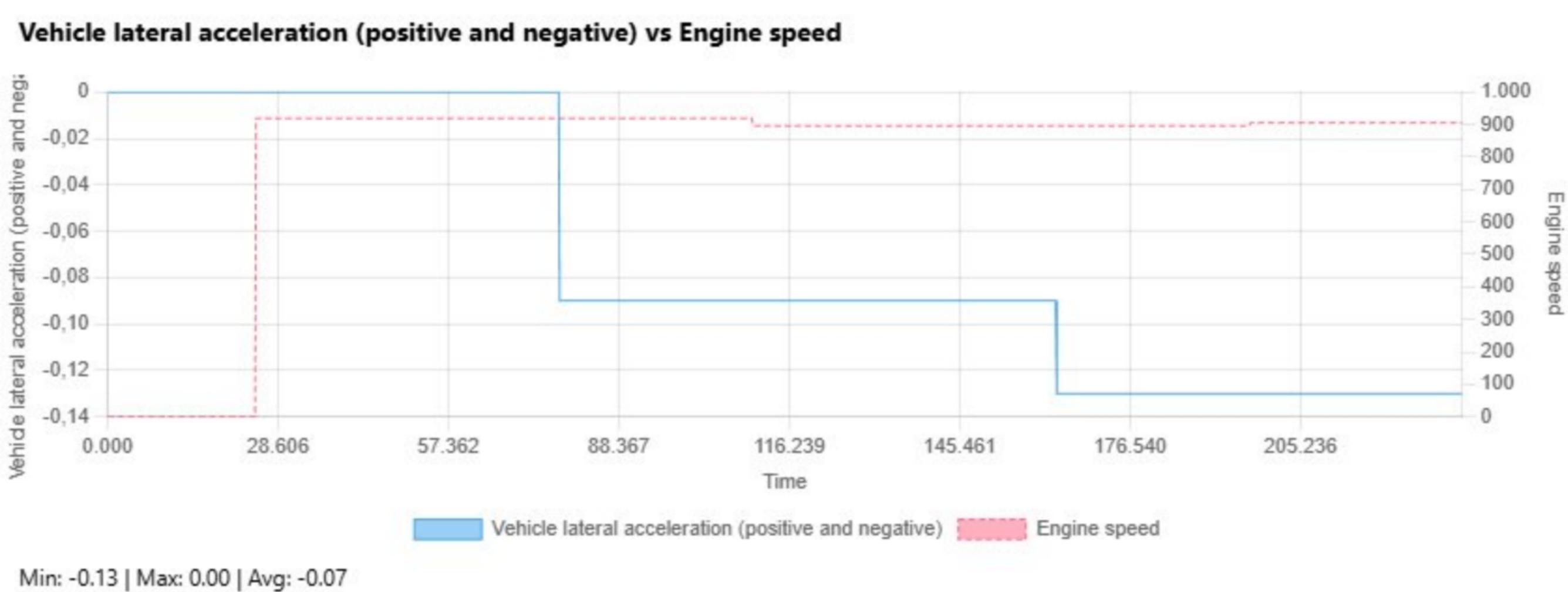


Min: -1.08 | Max: 1.69 | Avg: 0.11

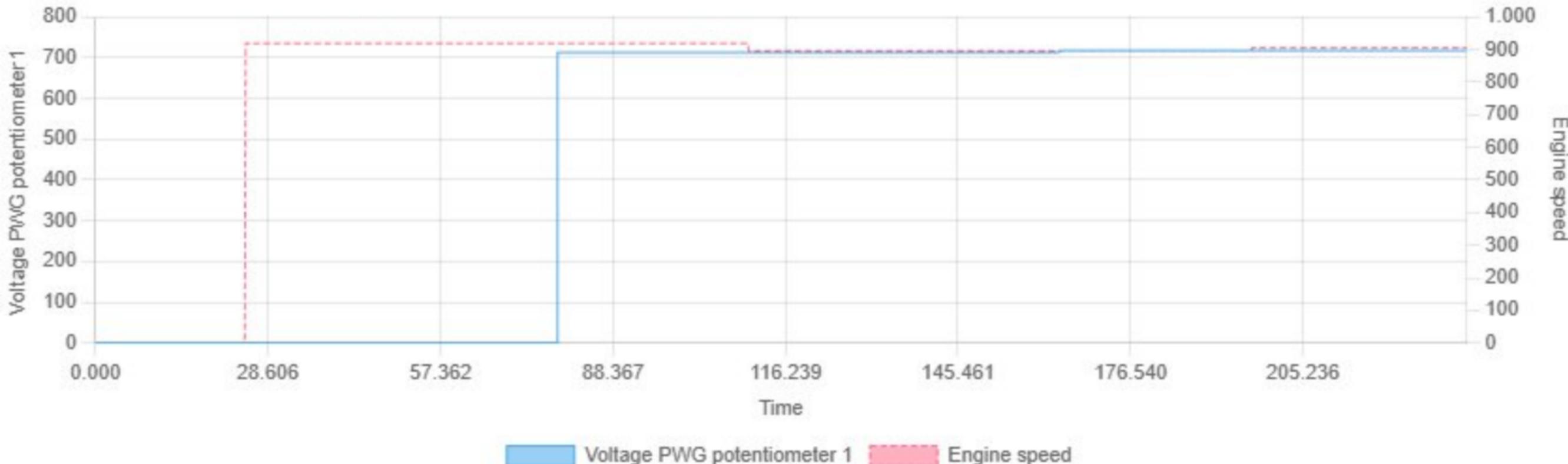
## VVT motor rotor angle vs Engine speed



Min: 0.00 | Max: 240.00 | Avg: 142.24

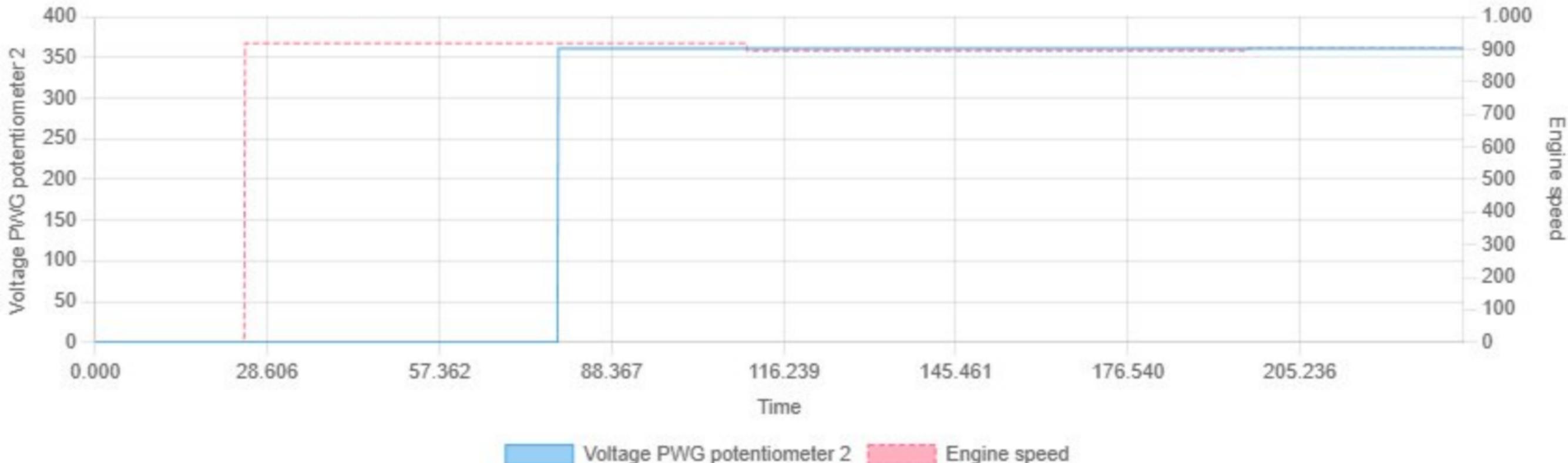


## Voltage PWG potentiometer 1 vs Engine speed



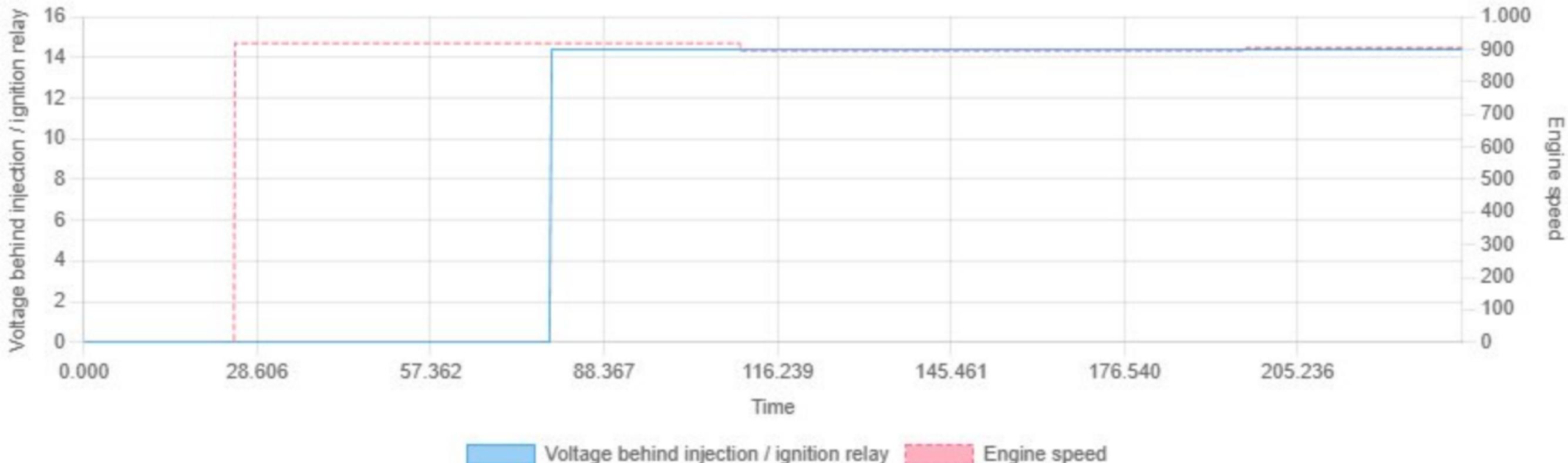
Min: 0.00 | Max: 717.60 | Avg: 474.13

## Voltage PWG potentiometer 2 vs Engine speed



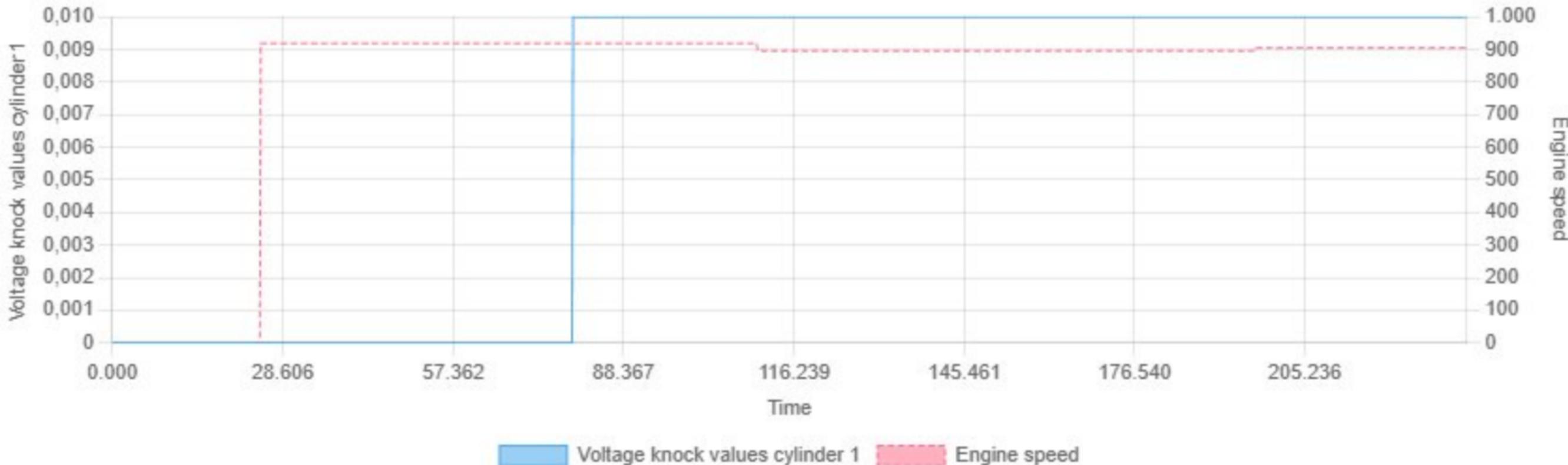
Min: 0.00 | Max: 361.20 | Avg: 238.96

## Voltage behind injection / ignition relay vs Engine speed



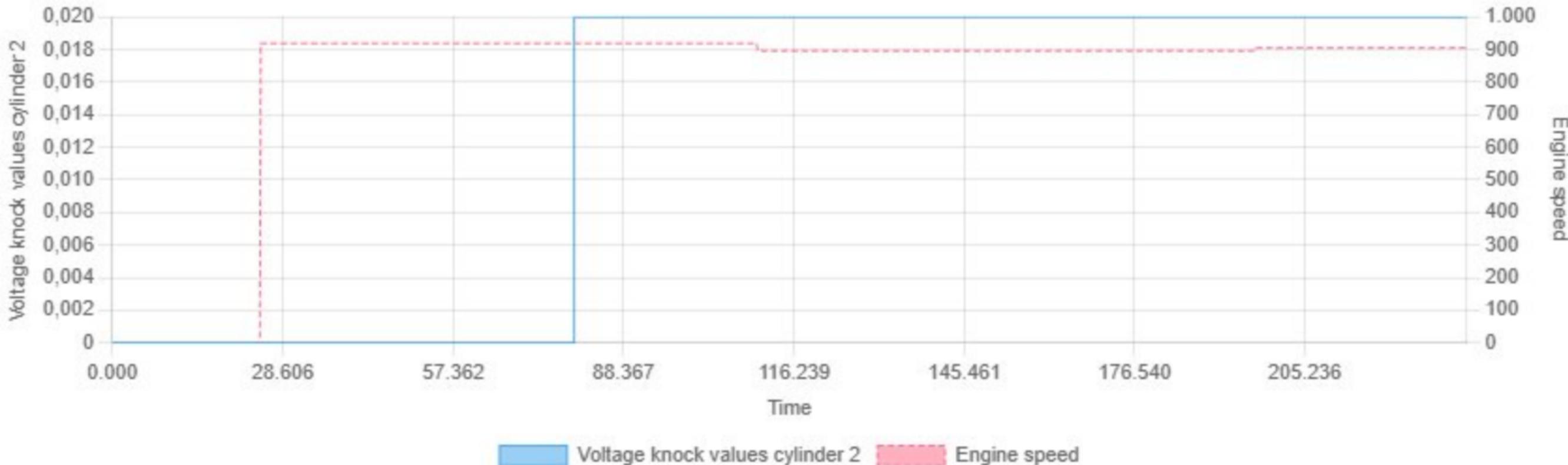
Min: 0.00 | Max: 14.40 | Avg: 9.51

## Voltage knock values cylinder 1 vs Engine speed

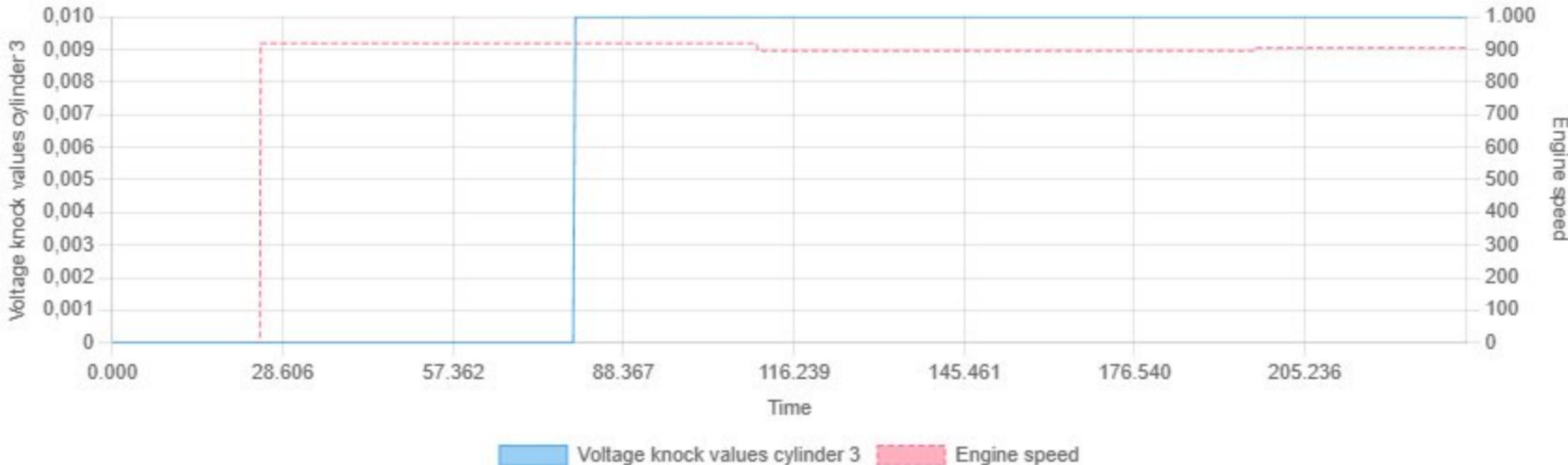


Min: 0.00 | Max: 0.01 | Avg: 0.01

## Voltage knock values cylinder 2 vs Engine speed

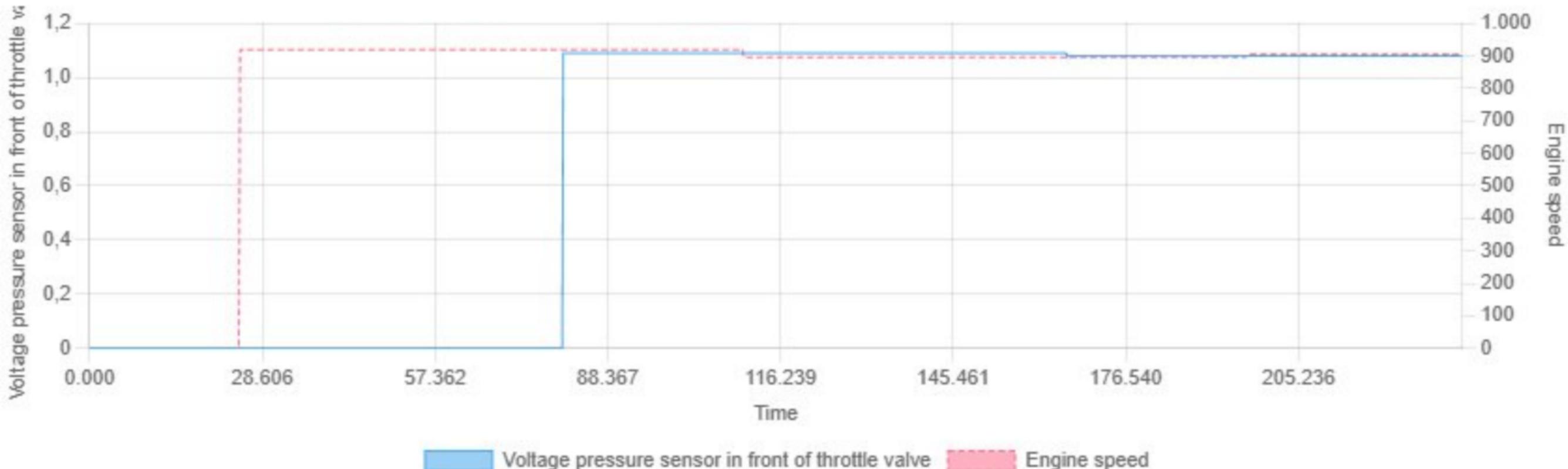


## Voltage knock values cylinder 3 vs Engine speed

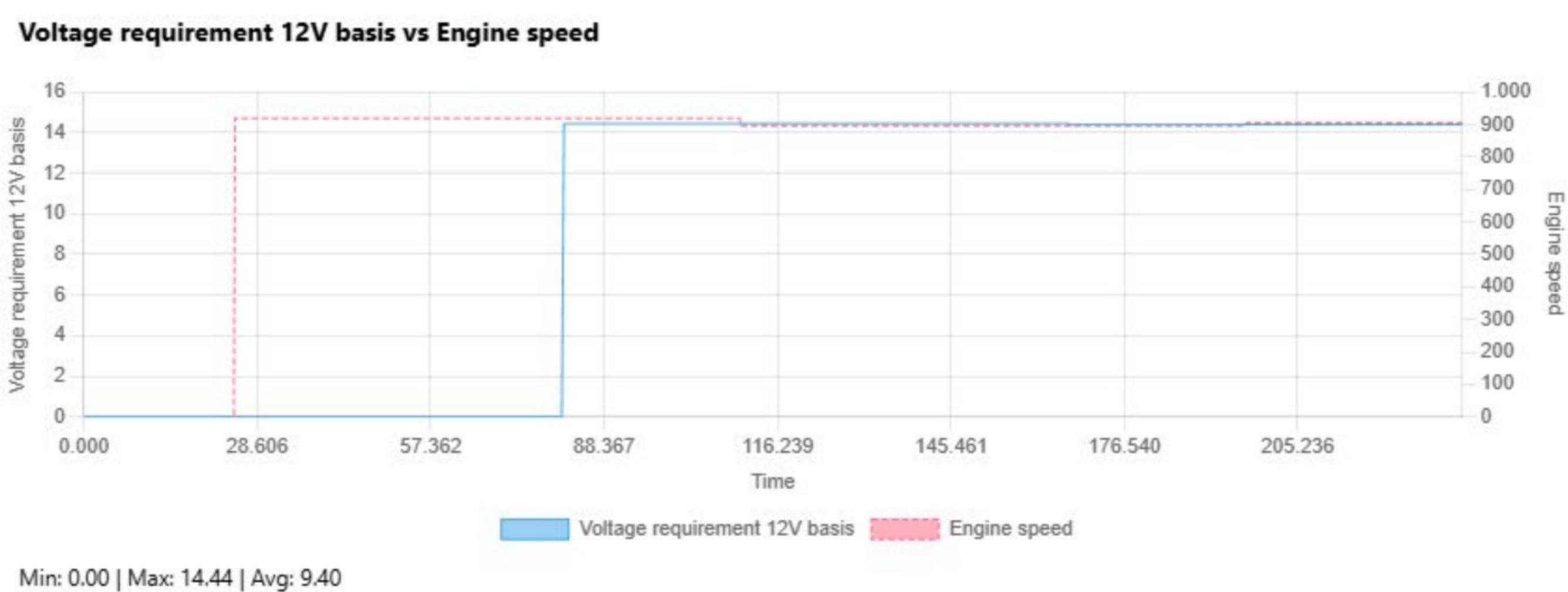


Min: 0.00 | Max: 0.01 | Avg: 0.01

## Voltage pressure sensor in front of throttle valve vs Engine speed



Min: 0.00 | Max: 1.09 | Avg: 0.71

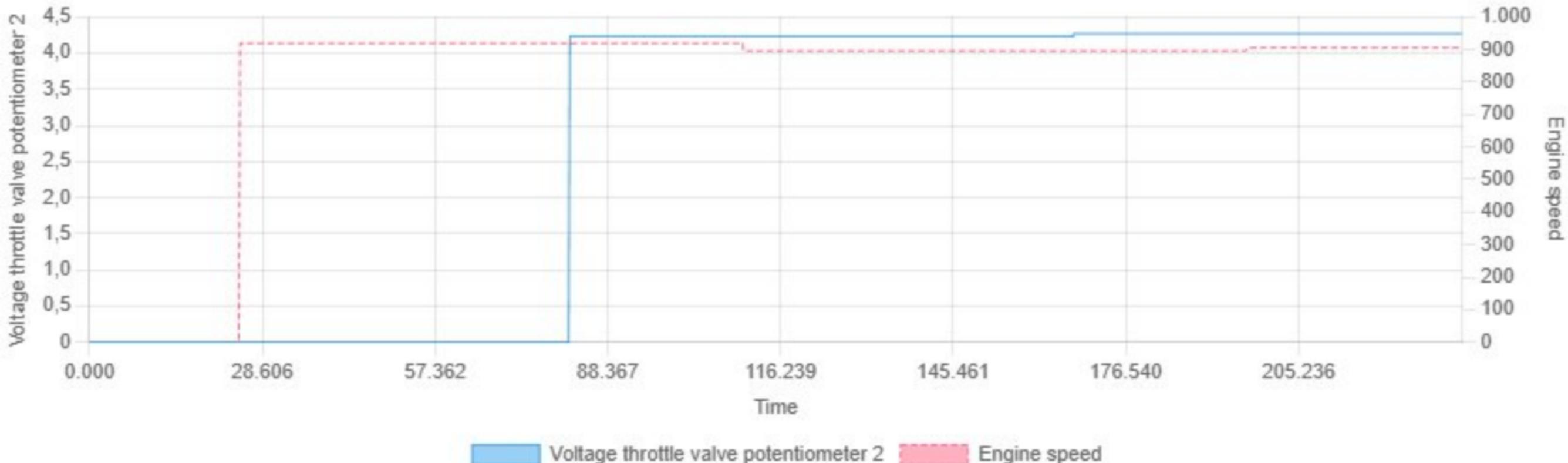


## Voltage throttle valve potentiometer 1 vs Engine speed



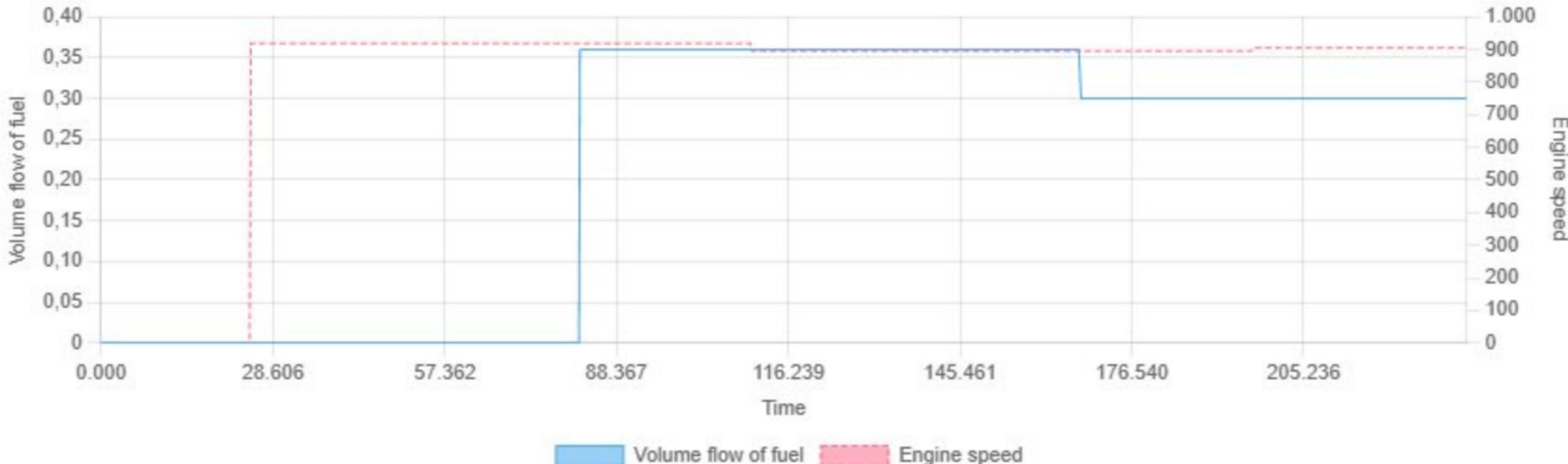
Min: 0.00 | Max: 0.78 | Avg: 0.49

## Voltage throttle valve potentiometer 2 vs Engine speed

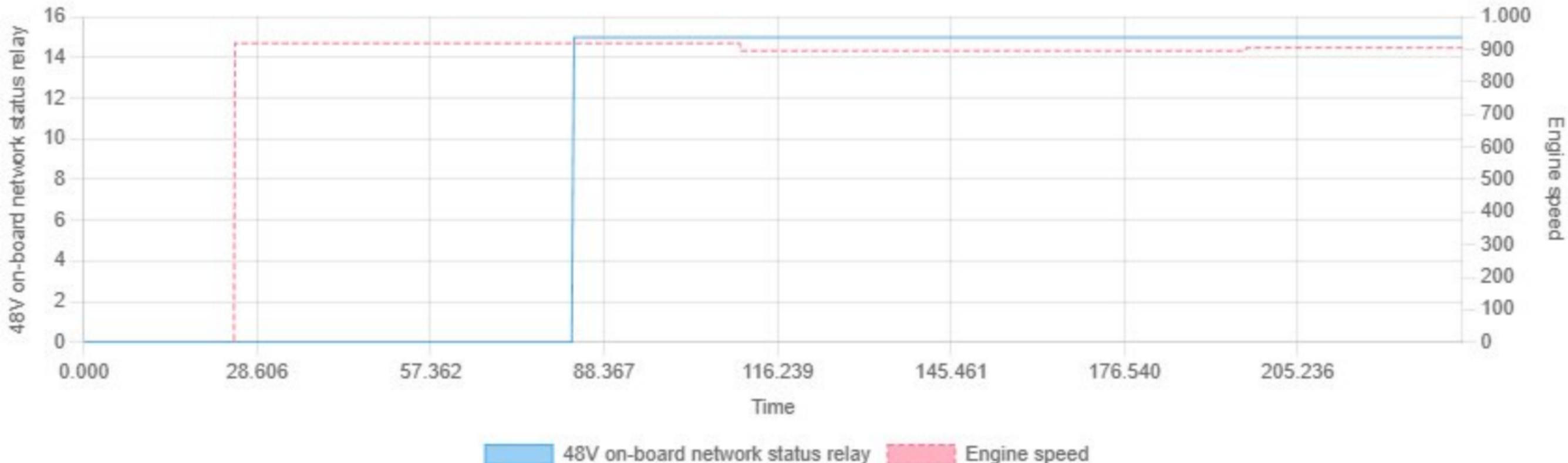


Min: 0.00 | Max: 4.27 | Avg: 2.76

## Volume flow of fuel vs Engine speed



## 48V on-board network status relay vs Engine speed



Min: 0.00 | Max: 15.00 | Avg: 9.67