

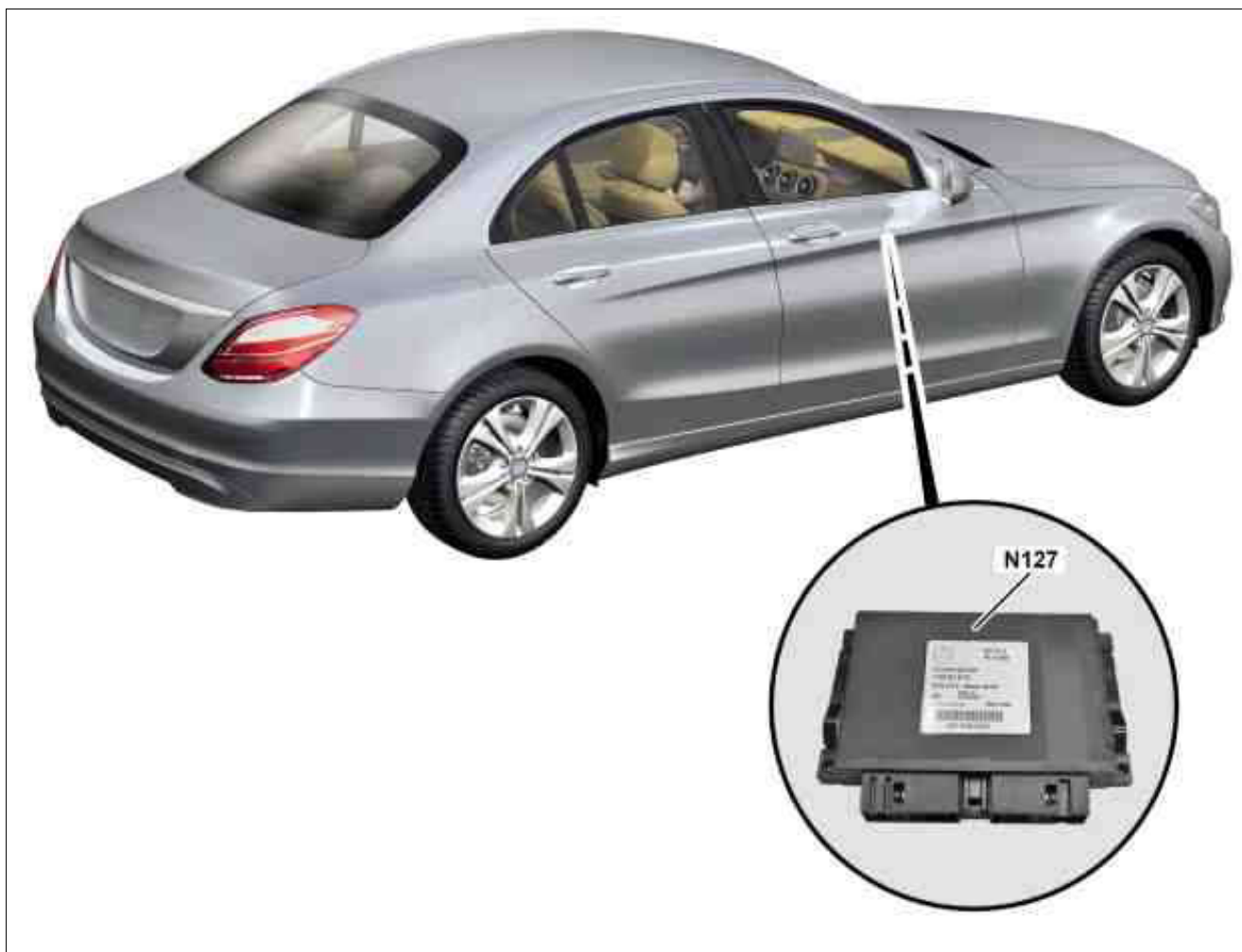
Document title Drivetrain control unit, component description

Document number gf5421p2141rf

Engine 276.8 in model 205, 253

Shown: Model 205.0

N127 Drivetrain control unit



P07.16-4011-76

Tasks

The powertrain control unit acts as an interface (gateway) between the ME-SFI [ME] control unit (N3/10) and the CAN network and it is responsible for the following tasks:

- Reading in of signals

Reading in of signals

The powertrain control unit reads the input signals via the following connections:

- Direct line
- Drive-train-LIN (LIN C3)

Output of signals and activation of components

The powertrain control unit sends output signals via the following connections:

- Direct line
- Drivetrain LIN

Location

The powertrain control unit is fastened to the partition wall to the engine compartment in the front passenger footwell.

● **Output of signals and activation of components**

Apart from this, the powertrain control unit acts as an interface between the connected CAN bus systems.

- Engine CAN (CAN C)
- Drive train CAN (CAN C1)
- Suspension FlexRay (Flex E)

The input factors that have been read in are evaluated by the integrated microprocessor and the relevant components are then actuated.

- Engine CAN
- Drive train CAN
- Chassis FlexRay

i The electronic ignition lock control unit (N73) is the central interface (gateway) for exchanging the function-relevant systems data of the control units that are connected to the various CAN bus systems.

Input factors over a direct line	Initial parameters over a direct line	Supplemental information
Low temperature circuit temperature sensor (B10/13)	-	-

Input factors over engine CAN	Output factors over engine CAN	Supplemental information
ME-SFI [ME] control unit (N3/10)	ME-SFI [ME] control unit (N3/10)	-

Input factors over drive CAN	Output factors over drive CAN	Supplemental information
ME-SFI [ME] control unit (N3/10)	ME-SFI [ME] control unit (N3/10)	-
Fuel system control unit (N118)	Fuel system control unit (N118)	-
Fully integrated transmission control unit (Y3/8n4)	Fully integrated transmission control unit (Y3/8n4)	-

Input factors over drivetrain LIN	Output factors over drivetrain LIN	Supplemental information
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Radiator trim flap actuator (M2/37)	Radiator trim flap actuator (M2/37)	With code P23 (EXCLUSIVE exterior), except code 239 (DISTRONIC PLUS), except code 23P (Driving Assistance Package)
Fan motor (M4/7)	Fan motor (M4/7)	-
Low-temperature circuit circulation pump 1 (M43/6)	Low-temperature circuit circulation pump 1 (M43/6)	-

Input factors over suspension FlexRay	Initial parameters over suspension FlexRay	Supplemental information
Electronic Stability Program control unit (N30/4)	Electronic Stability Program control unit (N30/4)	-
AIRmatic control unit (N51/3)	AIRmatic control unit (N51/3)	Model 205 with code 483 (ADVANCED AGILITY package) and code 489 (AIRMATIC)
AIR BODY CONTROL control unit (N51/3)	AIR BODY CONTROL control unit (N51/3)	Model 253 with code 489 (AIR BODY CONTROL)
Radar sensors control unit (N62/1)	Radar sensors control unit (N62/1)	Model 205 up to model year 2019 with code 23P (Driving Assistance Package), model 253 with code 23P (Driving Assistance Package)
Mercedes-Benz Intelligent Drive control unit (N62/4)	Mercedes-Benz Intelligent Drive control unit (N62/4)	Model 205 as of model year 2019 with code 23P (Driving Assistance Package)
Electronic ignition lock control unit (N73)	Electronic ignition lock control unit (N73)	-
Steering column tube module control unit (N80)	Steering column tube module control unit (N80)	-

Variants

The powertrain control unit variants such as, e.g. national, exhaust and function variants, are activated with XENTRY Diagnostics using variant coding.

	Wiring diagram for powertrain control unit	Engine 276.8 in model 205 up to model year 2019 Engine 276.8 in model 253 Engine 276.8 in model 205 as of model year 2019	PE54.21-P-2141-97FBA PE54.21-P-2141-97FBB
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