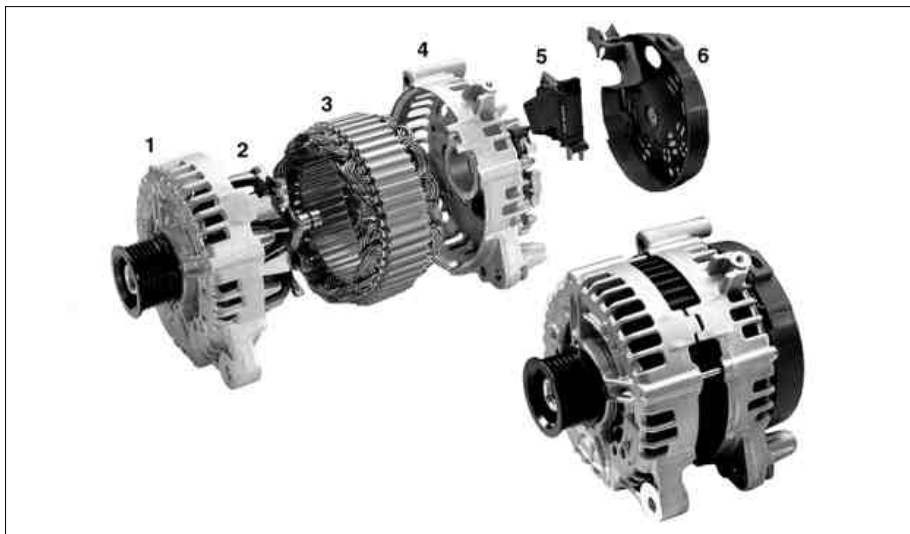


- ENGINE 112, 113 in MODEL 203, 209, 211, 220, 230
only valid with engine control unit variant ME 2.8
- ENGINE 113 in MODEL 164, 171, 215, 219, 251
only valid with engine control unit variant ME 2.8
- ENGINE 155 in MODEL 199
only valid with engine control unit variant ME 2.8
- ENGINE 266 in MODEL 169, 245
only valid with engine control unit variant SIM 266
- ENGINE 271 in MODEL 203, 209, 211, 171
only valid with engine control unit variant SIM 4
- ENGINE 272 in MODEL 164, 171, 203, 209, 211, 219, 221, 230, 251
only valid with engine control unit variant ME 9.7
- ENGINE 273 in MODEL 211, 219, 221, 230
only valid with engine control unit variant ME 9.7
- ENGINE 275 in MODEL 216, 221, 230
only valid with engine control unit variant ME 2.7.1, ME 2.7.2
- ENGINE 285 in MODEL 240
only valid with engine control unit variant ME 2.7.1
- ENGINE 628 in MODEL 163, 211, 220
only valid with engine control unit variant CDI V1
- ENGINE 629 in MODEL 164, 211, 221
only valid with engine control unit variant CDI 5
- ENGINE 640 in MODEL 169, 245
only valid with engine control unit variant CDI A
- ENGINE 642 in MODEL 164, 203, 209, 211, 219, 221, 251
only valid with engine control unit variant CDI 4
- ENGINE 646 in MODEL 203, 209, 211
only valid with engine control unit variant CDI 3, CDI 3 (UP), CDI D
- ENGINE 647 in MODEL 211
only valid with engine control unit variant CDI 3
- ENGINE 648 in MODEL 211, 220
only valid with engine control unit variant CDI 3, CDI 3 (UP)
- ENGINE 642 in MODEL 463 up to 31.5.12
only valid with engine control unit variant CDI 4

- 1 Drive end shield
- 2 Rotor with excitation coil
- 3 Stators with three stator windings
- 4 Rear end fitting with diode carrier
- 5 Multifunction regulator
- 6 Cover



P15.40-2368-05

Assignment of connection for signal lines

Connector on alternator, pin 1:

- Alternator with multifunctional regulator without interface:
Connection for alternator (G2) to driver-side SAM control unit with fuse and relay module (N10/1)
- Alternators with bit synchronous data interface (BSS):
Connection for alternator to engine control unit ME (N3/10) or CDI (N3/9)
- Alternators with local interconnect network interface (LIN):
Connection for alternator to engine control unit ME or CDI

Connector on alternator, pin 2:

- This is a Dynamo Field Monitor (DFM) signal. It provides information about the load condition of the alternator. This signal is used for electrical control of the engine heater booster. In model series 211 the AAC [KLA] control and operating unit (N22) evaluates the signal and regulates the heater booster (R22/3) depending on the alternator load.

at Pin 1 of the alternator takes place:

- for multifunction regulator without interface with a discrete signal from the driver-side SAM control unit with fuse and relay module
- for BSS or LIN interface with a valid message from the engine control unit

Excitation power circuit

Alternator are self-exciting power generators. The excitation current builds up the magnetic field in the excitation coil of the rotor. It is branched off from the current flowing in the three-phase AC winding.

Charge power circuit

The charge power circuit supplies the on-board electrical system with electrical energy.

Control

Regulation of alternator with multifunction regulator takes place by integral electronics depending on the rotational speed and on-board

Pre-excitation power circuit

Alternators receive the pre- or excitation current directly from the battery (G1), via circuit B+ at the alternator. The switch-on signal

power supply voltage.

For alternators with BSS or a LIN interface the engine management intervenes in the regulation.

	Overview of system components On-board electrical system power supply		GF15.40-P-9999A
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