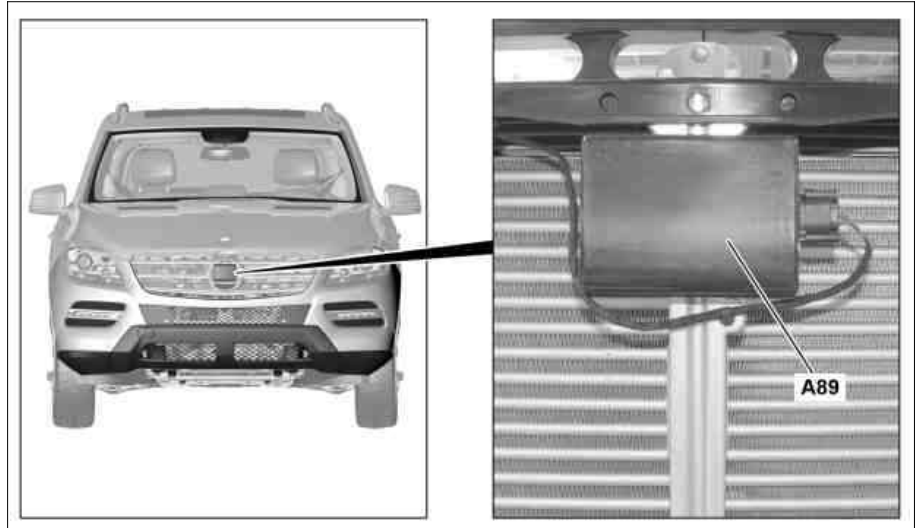


**MODEL 166**  
up to model year 2016  
with CODE 233 (DISTRONIC PLUS)

**MODEL 166**  
up to model year 2016  
with CODE 237 (Active Blind Spot Assist)

Shows model 166.0

A89 DISTRONIC electric controller unit



P30.30-2381-05

#### Task

The DISTRONIC electric controller unit has the following tasks:

- Actuation, power supply and evaluation of target data from the integral long range radar
- Control of the target evaluation (long range radar)
- Passing on of the object data for vehicle longitudinal regulation to the video and radar sensor system control unit (N62/2) (with code (233) DISTRONIC PLUS))
- Transfer of object data for traffic monitoring to the video and radar sensor system control unit (with code 237 (Active Blind Spot Assist))

The control unit integrated in the DISTRONIC electric controller unit actuates the long range radar and evaluates the target data.

The target data from the long range radar is transferred by the DISTRONIC electric controller unit via the vehicle dynamics CAN (CAN H) to the video and radar sensor system control unit.

#### Body

The DISTRONIC electric controller unit contains a control unit for actuation and evaluation of the long range radar.

Properties of the long range radar:

- Detection range of the radar sensor  $s = 0$  to 200 m for a detection angle of  $\alpha = 18^\circ$

#### View of radiator trim with integrated brand emblem

A Cover



P30.30-2382-01

#### Location

The DISTRONIC electric controller unit is located in the middle behind the front brand emblem.

#### Input and output signals:

The following input signals are received, evaluated and output signals delivered by the DISTRONIC electric controller unit via the vehicle dynamics CAN:

- **Input signals**
  - Radar request
  - Diagnosis request
- **Output signals**
  - Target data from the radar
  - Diagnostic data

- Detection range of the radar sensor  $s = 0$  to 60 m for a detection angle of  $\alpha = 60^\circ$
- 77 GHz radar sensor operating on the pulse Doppler principle for independent measurement of distance and speed

**i** The DISTRONIC electric controller unit must be newly adjusted after exchange (e.g. after an accident repair) using the integrated "service adjustment mode".

The cover for the DISTRONIC electric controller unit is designed as a radar transparent brand emblem and has the following tasks:

- Shielding against external effects (such as dirt, ice or insects)

- Ensuring optimal transmission and reception properties of the radar sensor

	Wiring diagram for Distronic (DTR) control unit	PE30.30-P-2101-97NAA
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