 **Mercedes-Benz C-Class**
Active Distance Assist DISTRONIC

2024


VERY GOOD



ASSISTANCE
COMPETENCE

85%

SAFETY
BACKUP



97%

SPECIFICATIONS

SYSTEM NAME	Active Distance Assist DISTRONIC
Version Tested	C300 Estate
Intended Operation Design Domain	● Highway ● Inter-Urban ✘ Urban

● RECOMMENDED
 ✘ NOT RECOMMENDED

Comments

Mercedes-Benz's appropriately named 'Active Distance Assist DISTRONIC' accurately portrays system functionality. The promotional material and the handbook correctly indicate the limitations of the system capabilities. System status information is clearly displayed in the driver's direct line, in the instrument cluster and via by a head-up display. The C-Class checks that the driver's hands are kept on the steering wheel, and acts appropriately if they are not, but a direct driver monitoring system is not used. The system balances driver steering input with lane guidance, promoting co-operative driving.

The C-Class combines map-based speed limit information with real time camera inputs to manage fixed, variable and temporary speed limit signs. The system adapts speed for upcoming road features such as curves and junctions. The C-Class responds to avoid a collision in almost all of the ACC test scenarios. The driver is supported through the S-Bend, staying within the lane at all test speeds. The vehicle has an Active Blindspot system designed to prevent lane changing into adjacent vehicles. A lane-change assist function is provided. In case of an unresponsive driver, the C-Class automatically moves to the slowest lane and performs a controlled stop. If the radar or camera is blocked the car provides a timely warning and prevents system activation.

The C-Class from Mercedes-Benz provides very good Vehicle Assistance with a similar level of Driver Engagement. Combined with excellent safety back-up, the system, overall, offers Very Good highway assistance.

Disclaimer

When using Assisted Driving Systems (also known as SAE Level 2 systems), a driver's responsibilities include monitoring the system's control of speed, braking and steering at all times, strict compliance with traffic rules, and maintaining situational awareness throughout the journey.

Certain situations might negatively influence the system's performance (e.g. poor weather, faded lane markings, construction zones, exiting a tunnel), resulting in a sudden interruption of the lateral and/or longitudinal support (system disengagement). Moreover, the system may fail to detect certain road users such as motorcyclists not directly in front of the vehicle, or stationary objects.

Appropriate fitness to drive is critical for safe travel, even when using Assisted Driving Systems. Visual distraction (e.g. eyes off the road), impairment (e.g. drowsiness, intoxication) as well as unresponsiveness, poses high risks. It is highly recommended to keep your hands on the steering wheel at all times to ensure immediate reaction when the system disengages.

ASSISTANCE COMPETENCE

Total 85%

DRIVER ENGAGEMENT

85.0 / 100 PTS

CONSUMER INFORMATION 25.0 / 25 PTS

System Name	Active Distance Assist DISTRONIC
Marketing Material	Active Distance Assist DISTRONIC Viewed 14 October 2024
Quick Start Guide	
Vehicle Handbook	Viewed 14 October 2024

SYSTEM STATUS 25.0 / 25 Pts

Continuous System Status Indicator	
System Status Change Indicator	

DRIVER MONITORING 10.0 / 20 PTS

Hands-on Monitoring	
Direct Driver Monitoring	

DRIVING COLLABORATION 25.0 / 25 Pts

Increase in Steering Torque	
Override response	
System continues to assist while driver steers to avoid obstacle	

GOOD
 ADEQUATE
 MARGINAL
 WEAK
 POOR

 ASSISTANCE COMPETENCE

Total 85%

 VEHICLE ASSISTANCE



93.1 / 100 PTS

SPEED ASSISTANCE  19.8 / 25 PTS













SPEED ASSIST SYSTEMS

Vehicle response to fixed Speed limits	At speed at sign
Vehicle response to variable Speed limits	Slowing down at sign


SPEED LIMIT INFORMATION FUNCTION

General requirements	Compliant
Conditional Speed Limits	
Road Features	
Local Hazards	
System Updates	Quarterly

ADAPTIVE CRUISE CONTROL PERFORMANCE  38.3 / 40 PTS

SCENARIOS		
Approaching a stationary target		
Approaching a slower moving target		
Approaching a braking target		
Target cutting-in in front		
Car cutting-out in front to expose target		

UNDERTAKE PREVENTION	
Undertake prevention at speeds over 90 km/h	




ADAPTIVE CRUISE CONTROL AUTO-RESUME	
Assistance maintained after coming to a full stop	
System assistance maintained by	Automatic resume with collision prevention by external sensors

 GOOD
  ADEQUATE
  MARGINAL
  WEAK
  POOR



 ASSISTANCE COMPETENCE

Total 85%

STEERING ASSISTANCE  35.0 / 35 PTS

SCENARIOS	
80 km/h	 Vehicle stays in lane
100 km/h	 Vehicle stays in lane
120 km/h	 Vehicle stays in lane

Lane Change Assist	
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 FITTED TO THE VEHICLE  NOT FITTED TO THE VEHICLE

 GOOD  ADEQUATE  MARGINAL  WEAK  POOR

SAFETY BACKUP

Total 97%

SYSTEM FAILURE 25.0 / 25 PTS

	ENGAGEMENT	WARNING
SENSOR BLOCKED AT START-UP		
Camera	Full blockage after a 5 minute drive	Yes after sensor blocking
Radar	Partial blockage after a 5 minute drive	Yes after sensor blocking
SENSOR BLOCKED WITH VEHICLE IN MOTION, SYSTEM INACTIVE		
Camera	Full blockage after a 5 minute drive	Yes after sensor blocking
Radar	After a 5 minute drive	After sensor blocking
SENSOR BLOCKED WITH VEHICLE IN MOTION, SYSTEM ACTIVE		
Camera	Full blockage within 2 minutes after blocking	After sensor blocking
Radar	Partial blockage after sensor blocking	After sensor blocking

UNRESPONSIVE DRIVER INTERVENTION 23.0 / 25 PTS

Hands Off Warning Timeline



COLLISION AVOIDANCE 49.2 / 50 PTS

SCENARIOS			
Approaching a stationary target	GOOD	GOOD	—
Approaching a slower moving target	GOOD	GOOD	—
Approaching a braking target	GOOD	GOOD	—
Target cutting-in in front	GOOD	GOOD	—
Car cutting-out in front to expose target	GOOD	GOOD	—
Approaching the target along the roadside	—	—	GOOD

GOOD
 ADEQUATE
 MARGINAL
 WEAK
 POOR