



Mercedes-Benz E-Class/CLS-Class
Standard Safety Equipment

2016



Adult Occupant



95%

Child Occupant



90%

Pedestrian



77%

Safety Assist



62%

SPECIFICATION

Tested Model	Mercedes-Benz E 220 d Avantgarde, LHD
Body Type	- 4 door saloon
Year Of Publication	2016
Kerb Weight	1680kg
VIN From Which Rating Applies	- all E-Class and CLS-Class variants
Class	Executive

X Rating Expired

General comments

Data reviewed by Euro NCAP, together with additional tests, demonstrate that the rating of the E-Class also applies to the CLS-Class.

ADVANCED REWARDS

- 2011 - Mercedes-Benz Attention Assist
- 2010 - Mercedes-Benz PRE-SAFE®

SAFETY EQUIPMENT

	Driver	Passenger	Rear
FRONTAL CRASH PROTECTION			
Frontal airbag	●	●	✘
Belt pretensioner	●	●	●
Belt loadlimiter	●	●	●
Knee airbag	●	✘	✘
SIDE CRASH PROTECTION			
Side head airbag	●	●	●
Side chest airbag	●	●	○
Side pelvis airbag	●	●	—
CHILD PROTECTION			
Isofix/i-Size	—	✘	●
Integrated CRS	—	✘	✘
Airbag cut-off switch	—	●	—
SAFETY ASSIST			
Seat Belt Reminder	●	●	●
OTHER SYSTEMS			
Active Bonnet (Hood)	●		
AEB Pedestrian	●		
AEB City	●		
AEB Inter-Urban	●		
Speed Assistance System	●		
Lane Assist System	○		

Note: Other equipment may be available on the vehicle but was not considered in the test year.


- Fitted to the vehicle as standard ○ Fitted to the vehicle as part of the safety pack
 ○ Not fitted to the test vehicle but available as option or as part of the safety pack ✘ Not available — Not applicable

ADULT OCCUPANT

Total 36.3 Pts / 95%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Frontal Offset Deformable Barrier 7.3 Pts




Passenger Driver

Frontal Full Width 7.5 Pts




Rear Passenger Driver

Whiplash Rear Impact 2.5 Pts



Front seat Rear seat

Lateral Impact 15.9 Pts



Car Pole

AEB City 3.0

Performance: ■ Good



ADULT OCCUPANT

Total 36.3 Pts / 95%



GOOD



ADEQUATE



MARGINAL



WEAK



POOR

 ADULT OCCUPANT

Total 36.3 Pts / 95%

Comments

The E-Class is fitted as standard with Mercedes Benz's 'PRE SAFE' system which senses when an accident is about to occur and primes the restraint and protection systems in readiness for the collision. In Euro NCAP's frontal and side barrier impacts, the PRE-SAFE System was not activated. The passenger compartment of the E-Class remained stable in the offset frontal impact test. Dummy readings indicated good protection of the knees and femurs for both the driver and passenger dummies. Mercedes-Benz demonstrated that a similar level of protection would be provided to occupants of different sizes and to those sat in different positions. In the full-width rigid barrier test, protection of the dummies was good for all critical body areas except the chest, protection of which was adequate for the driver and marginal for the rear passenger. In the side barrier test, the E-Class scored maximum points with good protection of all critical body areas. In the more severe side pole impact, protection of the chest was adequate and that of all other body areas was good. Tests showed that the front seats and head restraints provided good protection against whiplash injury in the event of a rear-end collision, and a geometric assessment of the rear seats also indicated good protection. Additional protection against whiplash injuries is provided by the autonomous emergency braking system which operates at the low speeds typical of city driving. Impact against a stationary car was avoided at all test speeds and the E-Class scored maximum points for this part of its assessment.

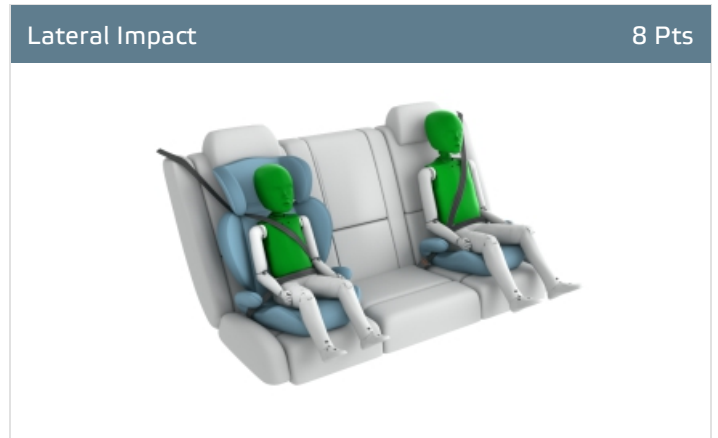
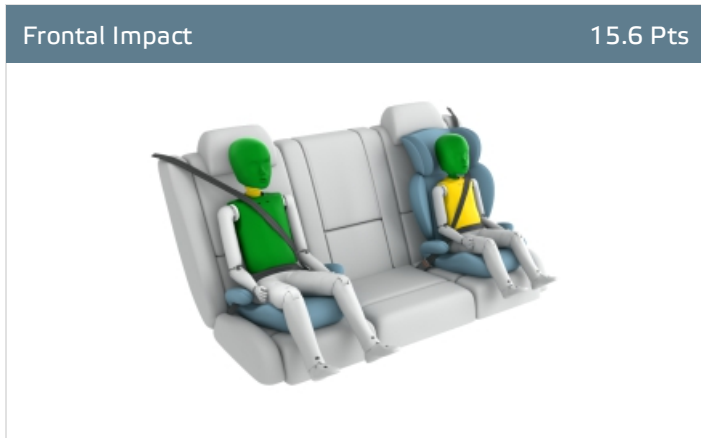
CHILD OCCUPANT

Total 44.6 Pts / 90%

GOOD
 ADEQUATE
 MARGINAL
 WEAK
 POOR

Crash Test Performance based on 6 & 10 year old children

23.6 Pts



Restraint for 6 year old child: *Mercedes-BenzKidfix XP (manufactured by Britax Römer)*
 Restraint for 10 year old child: *Mercedes-BenzKidfix XP (manufactured by Britax Römer)*

Safety Features

9.0 Pts

	Front Passenger	2nd row outboard	2nd row center
Isifix	✘	●	✘
i-Size	✘	●	✘
Integrated CRS	✘	✘	✘

Fitted to test car as standard
 Not on test car but available as option
 ✘ Not available

CRS Installation Check

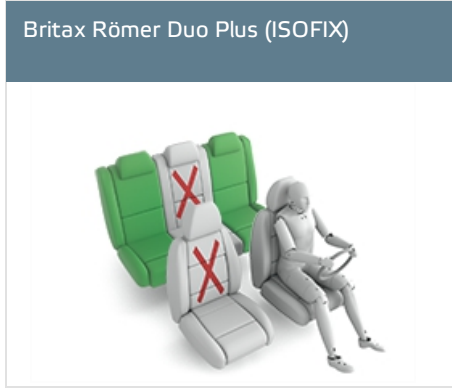
12.0 Pts

- Install without problem
- Install with care
- Safety critical problem
- ✗ Installation not allowed

■ i-Size CRS



■ ISOFIX CRS



 CHILD OCCUPANT

Total 44.6 Pts / 90%

■ Universal Belted CRS

Maxi Cosi Cabriofix (Belt)



Maxi Cosi Cabriofix & EasyBase2 (Belt)



Britax Römer King II LS (Belt)



Britax Römer KidFix XP (Belt)



CHILD OCCUPANT

Total 44.6 Pts / 90%

	Seat Position			
	Front	2nd row		
	PASSENGER	LEFT	CENTER	RIGHT
Maxi Cosi 2way Pearl & 2wayFix (rearward) (iSize)	—	●	—	●
Maxi Cosi 2way Pearl & 2wayFix (forward) (iSize)	—	●	—	●
BeSafe iZi Kid X1 i-Size (iSize)	—	●	—	●
Maxi Cosi Cabriofix & FamilyFix (ISOFIX)	—	●	—	●
BeSafe iZi Kid X3 ISOfix (ISOFIX)	—	●	—	●
Britax Römer Duo Plus (ISOFIX)	—	●	—	●
Britax Römer KidFix XP (ISOFIX)	—	●	—	●
Maxi Cosi Cabriofix (Belt)	●	●	●	●
Maxi Cosi Cabriofix & EasyBase2 (Belt)	●	●	✘	●
Britax Römer King II LS (Belt)	●	●	●	●
Britax Römer KidFix XP (Belt)	●	●	●	●

● Install without problem
 ● Install with care
 ● Safety critical problem
 ✘ Installation not allowed
 — Not available

Comments

In the offset frontal test, protection of the 6 and 10 year dummies was good or adequate. In the side barrier test, protection was good for all critical body areas for both dummies. The E-Class has an automatic airbag deactivation system which switches off the front passenger airbag when a rearward-facing child restraint is used in that seating position but switches it on again when the seat is occupied by a large child or an adult. All of the restraint types for which the E-Class is designed could be properly installed and accommodated in the car.

PEDESTRIAN

Total 32.5 Pts / 77%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Pedestrian		28.3 Pts						
	<table border="1"> <tr> <td>Head Impact</td> <td style="text-align: right;">22.2 Pts</td> </tr> <tr> <td>Pelvis Impact</td> <td style="text-align: right;">0.1 Pts</td> </tr> <tr> <td>Leg Impact</td> <td style="text-align: right;">6.0 Pts</td> </tr> </table>	Head Impact	22.2 Pts	Pelvis Impact	0.1 Pts	Leg Impact	6.0 Pts	
Head Impact	22.2 Pts							
Pelvis Impact	0.1 Pts							
Leg Impact	6.0 Pts							

AEB Pedestrian		4.2 Pts
System Name	Active Brake Assist	
Type	Auto-Brake with Forward Collision Warning	
Operational From	7 km/h	
Additional Information	Defaults on for every journey; operates in low ambient light	

PERFORMANCE		
	Autobrake Function	
	Avoidance	Mitigation
Running Adult crossing from Farside	Collision avoided up to 20 km/h	Impact mitigated up to 45 km/h
Walking Adult crossing from Nearside -25%	Collision avoided up to 40 km/h	Impact mitigated up to 45 km/h
Walking Adult crossing from Nearside -75%	Collision avoided up to 40 km/h	Impact mitigated up to 60 km/h
Running Child from behind parked vehicles	Collision avoided up to 30 km/h	Impact mitigated up to 55 km/h

Comments

The E-Class has an active bonnet. Sensors in the bumper detect when a pedestrian has been struck and actuators lift the bonnet to provide greater clearance between the bonnet surface and the hard structures in the engine compartment. Mercedes-Benz showed that the system worked over a range of speeds and for a variety of pedestrian statures, so the system was tested in the deployed (raised) position. Good results were recorded over almost the entire bonnet surface, showing a high level of protection to the head of a struck pedestrian. The bumper also offered good protection to pedestrians' legs. However, protection of the pelvis was poor in all tested areas. The standard-fit autonomous emergency braking system is capable of detecting pedestrians and showed good results in Euro NCAP's tests of this functionality.

 SAFETY ASSIST

Total 7.4 Pts / 62%

GOOD
 ADEQUATE
 MARGINAL
 WEAK
 POOR

Speed Assistance

1.5 Pts

System Name	SPEEDTRONIC Cruise Control with Variable Speed Limiter
Warning Function	Active braking (no warning necessary)
Speed Limitation Function	Manually set (accurate to 5km/h)

Seatbelt Reminder

3.0 Pts

Applies To	All seats		
	Driver Seat	Front Passenger(s)	Rear Passenger(s)
Warning			
Visual	●	●	●
Audible	●	●	●

● Pass
 ● Fail
 — Not available

Lane Support

0 Pts

 SAFETY ASSIST

Total 7.4 Pts / 62%

AEB Inter-Urban

2.9 Pts

System Name	Active Brake Assist
Type	Forward Collision Warning with Auto-Brake
Operational From	7 km/h
Additional Information	Default On; Supplementary Warning; Seatbelt Activation

PERFORMANCE | 

	Autobrake Function Only	Driver reacts to warning
Operational Speed	7-200 km/h	7-250 km/h
Approaching a stationary car	See AEB City	Crash avoided up to 70km/h. Crash speed reduced up to 80km/h.
Approaching a slower moving car	Crash avoided up to 70km/h.	Crash avoided up to 80km/h.
FOLLOWING A CAR AT SHORT DISTANCE		
Car in front brakes gently	Avoidance	Avoidance
Car in front brakes harshly	Mitigation	Avoidance
FOLLOWING A CAR AT LONG DISTANCE		
Car in front brakes gently	Avoidance	Avoidance
Car in front brakes harshly	Avoidance	Avoidance

Comments

The E-Class has a standard seatbelt reminder system for the front and rear seats. The car is also equipped with a standard driver-set speed limitation system. The autonomous emergency braking system demonstrated good results in Euro NCAP's tests of its performance at highway speeds.

RATING VALIDITY

Variants of Model Range

Annual Reviews and Facelifts

Date	Event	Outcome
September 2016	Rating Published	2016 ★ ★ ★ ★ ★ ✓
September 2017	Annual Review	2016 ★ ★ ★ ★ ★ ✓
December 2018	Inclusions of CLS-Class	2016 ★ ★ ★ ★ ★ ✓
September 2019	Annual Review	2016 ★ ★ ★ ★ ★ ✓
September 2020	Facelift Review	2016 ★ ★ ★ ★ ★ ✓
September 2021	Annual Review	2016 ★ ★ ★ ★ ★ ✓