Tesla Model Y

Standard Safety Equipment

2022

Adult Occupant 97%

Child Occupant 87%

Vulnerable Road Users 82%

Safety Assist 98%

SPECIFICATION

Tested Model	Model Y
Body Type	- 5 door SUV
Year Of Publication	2022
Kerb Weight	1979kg
VIN From Which Rating Applies	- all Model Y variants
Class	Small Off-Road

Version 280923

SAFETY EQUIPMENT

	Driver	Passenger	Rear
FRONTAL CRASH PROTECTION			
Frontal airbag	●	●	–
Belt pretensioner	●	●	●
Belt loadlimiter	●	●	●
Knee airbag	✖	✖	–
LATERAL CRASH PROTECTION			
Side head airbag	●	●	●
Side chest airbag	●	●	✖
Side pelvis airbag	●	●	✖
Centre Airbag	●	●	–

	Driver	Passenger	Rear
CHILD PROTECTION			
Isofix/i-Size	–	✖	●
Integrated CRS	–	✖	✖
Airbag cut-off switch	–	●	–
SAFETY ASSIST			
Seat Belt Reminder	●	●	●

SAFETY EQUIPMENT (NEXT)

	Driver	Passenger	Rear
CHILD PROTECTION			
Isofix/i-Size	—	✖	●
Integrated CRS	—	✖	✖
Airbag cut-off switch	—	●	—
SAFETY ASSIST			
Seat Belt Reminder	●	●	●

OTHER SYSTEMS	
Active Bonnet	✖
AEB Vulnerable Road Users	●
AEB Pedestrian - Reverse	●
AEB Car-to-Car	●
Speed Assistance	●
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 36.9 Pts / 97%

GOOD | ADEQUATE | MARGINAL | WEAK | POOR

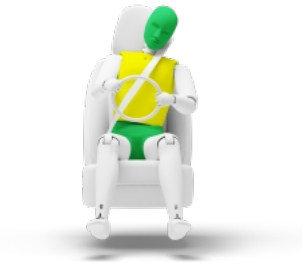
Frontal Impact — 15.0 / 16 Pts

Mobile Progressive Deformable Barrier

Full Width Rigid Barrier

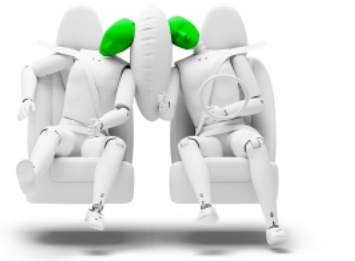
Lateral Impact — 15.8 / 16 Pts

Side Mobile Barrier



Side Pole

Far-Side Excursion



Occupant Interaction

Rear Impact — 4.0 / 4 Pts

Rear Seat

Front Seat

ADULT OCCUPANT

Total 36.9 Pts / 97%

GOOD ADEQUATE MARGINAL WEAK POOR

Rescue and Extrication	2.0 / 2 Pts
Rescue Sheet	Available, ISO compliant
Advanced eCall	Available
Multi Collision Brake	Available

Comments

The passenger compartment of the Model Y remained stable in the frontal offset test. Dummy numbers showed good protection of the knees and femurs of both the driver and passenger. Tesla showed that a similar level of protection would be provided to occupants of different sizes and to those sitting in different positions. Protection of the front passenger was good for all critical body areas. Analysis of the deceleration of the impact trolley during the test, and analysis of the deformable barrier after the test, revealed that the Model Y would be a benign impact partner in a frontal collision. In the full-width rigid barrier test, the all critical body areas were well protected for the driver and were at least adequately protected for the rear passenger. In the side barrier test, protection of all critical body areas was good and the car scored maximum points in this part of the assessment. In the more severe side pole impact, protection of all critical body areas was good or adequate. Control of excursion (the extent to which a body is thrown to the other side of the vehicle when it is hit from the far side) was found to be adequate. The Model Y has a counter-measure to mitigate against occupant to occupant injuries in such impacts and this performed well in Euro NCAP's test. Tests on the front seats and head restraints demonstrated good protection against whiplash injuries in the event of a rear-end collision. A geometric analysis of the rear seats also indicated good whiplash protection. The Model Y has an advanced eCall system which alerts the emergency services in the event of a crash. The car also has a system which applies the brakes after an impact, to avoid secondary collisions.

CHILD OCCUPANT

Total 43.0 Pts / 87%

GOOD ADEQUATE MARGINAL WEAK POOR

Crash Test Performance based on 6 & 10 year old children 24.0 / 24 Pts

Frontal Impact	16 Pts

Lateral Impact	8 Pts

Restraint for 6 year old child: *Britax Römer Kidfix I-Size*
Restraint for 10 year old child: *Peg Perego Viaggio Shuttle*

Safety Features 7.0 / 13 Pts

	Front Passenger	2nd row outboard	2nd row center
Isofix	✖	●	✖
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 / 12 Pts

Install without problem | Install with care | Safety critical problem | Installation not allowed

i-Size CRS

Maxi Cosi 2way Pearl & 2wayFix (i-Size)

Maxi Cosi 2way Pearl & 2wayFix (i-Size)

BeSafe iZi Kid X2 i-Size (i-Size)

Britax Römer TriFix2 i-Size (i-Size)

BeSafe iZi Flex FIX i-Size (i-Size)

ISOFIX CRS

BeSafe iZi Combi X4 ISOfix (ISOFIX)

Cybex Solution Z i-Fix (ISOFIX)

CHILD OCCUPANT

Total 43.0 Pts / 87%

- **Universal Belted CRS**

Maxi Cosi Cabriofix (Belt)

Maxi Cosi Cabriofix & EasyFix (Belt)

Britax Römer King II LS (Belt)

Cybex Solution Z i-Fix (Belt)

Comments

The Model Y provided good protection to both child dummies in both the frontal offset and side barrier tests, scoring maximum points for this part of the assessment. The front passenger airbag can be disabled to allow a rearward-facing child restraint to be used in that seating position. Clear information is provided to the driver regarding the status of the airbag and the system was rewarded. All of the restraint types for which the Model Y is designed could be properly installed and accommodated in the car.

CHILD OCCUPANT

Total 43.0 Pts / 87%

	Seat Position			
	Front	2nd row		
	PASSENGER	LEFT	CENTER	RIGHT
Maxi Cosi 2way Pearl & 2wayFix (i-Size)	—	●	—	●
Maxi Cosi 2way Pearl & 2wayFix (i-Size)	—	●	—	●
BeSafe iZi Kid X2 i-Size (i-Size)	—	●	—	●
Britax Römer TriFix2 i-Size (i-Size)	—	●	—	●
BeSafe iZi Flex FIX i-Size (i-Size)	—	●	—	●
BeSafe iZi Combi X4 ISOfix (ISOFIX)	—	●	—	●
Cybex Solution Z i-Fix (ISOFIX)	—	●	—	●
Maxi Cosi Cabriofix (Belt)	●	●	●	●
Maxi Cosi Cabriofix & EasyFix (Belt)	●	●	●	●
Britax Römer King II LS (Belt)	●	●	●	●
Cybex Solution Z i-Fix (Belt)	●	●	●	●

● Easy ● Difficult ● Safety critical ✖ Not allowed — Not available

Comments

The Model Y provided good protection to both child dummies in both the frontal offset and side barrier tests, scoring maximum points for this part of the assessment. The front passenger airbag can be disabled to allow a rearward-facing child restraint to be used in that seating position. Clear information is provided to the driver regarding the status of the airbag and the system was rewarded. All of the restraint types for which the Model Y is designed could be properly installed and accommodated in the car.

VULNERABLE ROAD USERS

Total 44.8 Pts / 82%

GOOD ADEQUATE MARGINAL WEAK POOR

VRU Impact Protection

28.1 / 36 Pts

Head Impact	16.1 Pts
Pelvis Impact	6.0 Pts
Leg Impact	6.0 Pts

Vulnerable Road Users

16.7 / 18 Pts

System Name	Collision Avoidance Assist
Type	Auto-Brake with Forward Collision Warning
Operational From	4 km/h

VULNERABLE ROAD USERS

Total 44.8 Pts / 82%

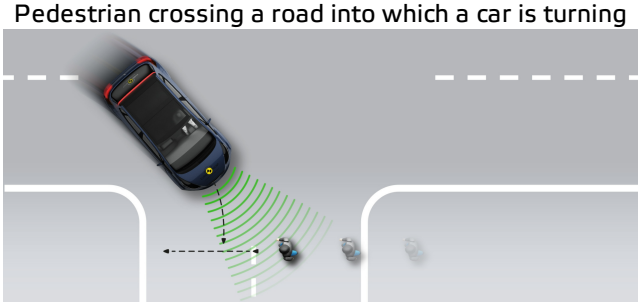
AEB Pedestrian

7.7 / 9 Pts

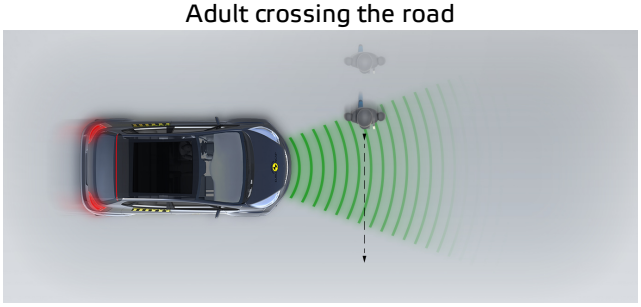
- **Day time**

Vehicle reversing into standing pedestrian

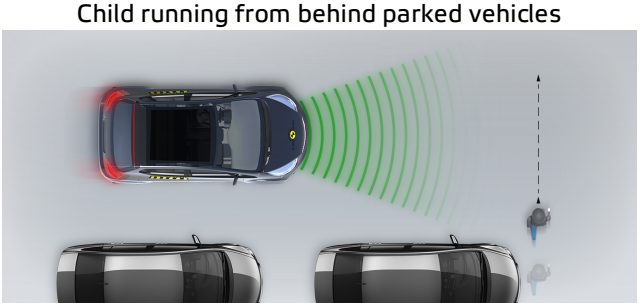
Pedestrian crossing a road into which a car is turning



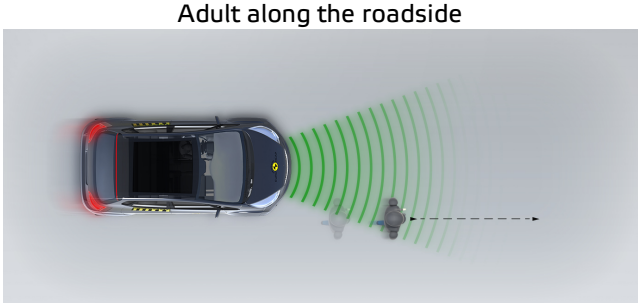
Adult crossing the road



Child running from behind parked vehicles

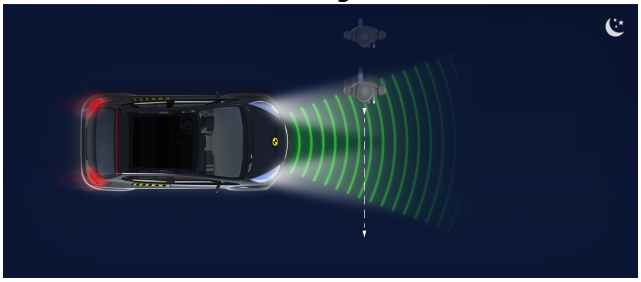


Adult along the roadside

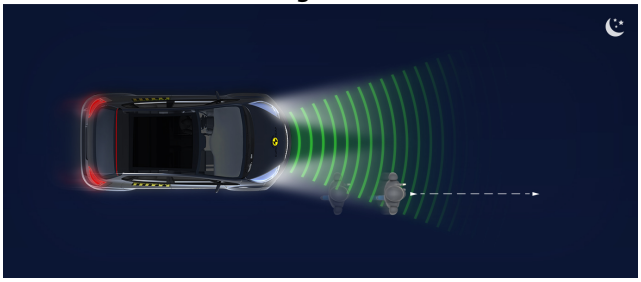


- **Night time**

Adult crossing the road



Adult along the roadside



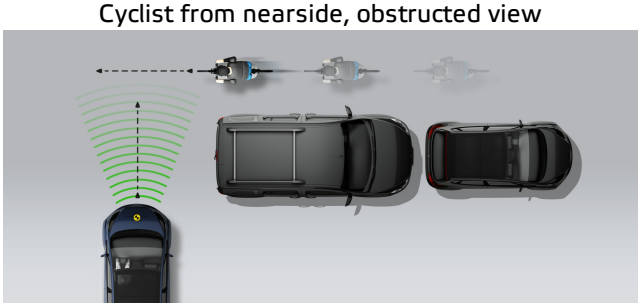
VULNERABLE ROAD USERS

Total 44.8 Pts / 82%

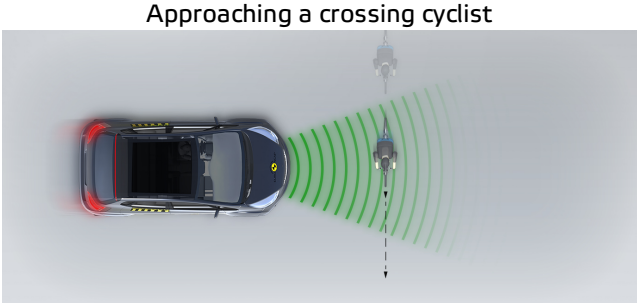
AEB Cyclist

9.0 / 9 Pts

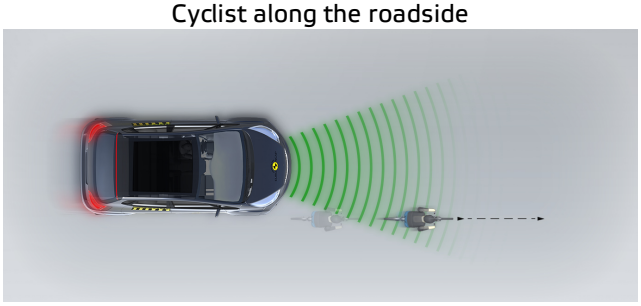
Cyclist from nearside, obstructed view



Approaching a crossing cyclist



Cyclist along the roadside



Comments

The bonnet provided good or adequate protection to the head of a struck pedestrian over almost the whole bonnet area, with weak or poor results at the base of the windscreen and on the stiff windscreen pillars. The protection offered by the bumper to pedestrians' legs was good at all test locations, as well protection of the pelvis area. The Tesla Model Y has an autonomous emergency braking (AEB) system which can detect vulnerable road users, as well as other vehicles. In tests of the system's response to pedestrians, the system performed well. In tests of the system's response to cyclists, the Model Y scored maximum points.

SAFETY ASSIST

Total 15.7 Pts / 98%

GOOD ADEQUATE MARGINAL WEAK POOR

Speed Assistance

3.0 / 3 Pts

System Name	Speed Assist
Speed Limit Information Function	Camera & Map, subsigns supported
Speed Limitation Function	System advised (accurate to 5km/h)

Occupant Status Monitoring

3.0 / 3 Pts

Seatbelt Reminder

2.0 / 2 Pts

Applies To	Front and rear seats		
Warning	Driver Seat	Front Passenger(s)	Rear Passenger(s)
Visual	●	●	●
Audible	●	●	●
Occupant Detection	—	●	●

● Pass ● Fail — Not available

Driver Monitoring

1.0 / 1 Pts

System Name	Collision Avoidance Driver Monitoring
Type	Direct eye monitoring & steering input
Operational From	4 km/h

SAFETY ASSIST

Total 15.7 Pts / 98%

Lane Support

4.0 / 4 Pts

System Name	Lane Assist
Type	LKA and ELK
Operational From	40 km/h
PERFORMANCE	
Emergency Lane Keeping	GOOD
Lane Keep Assist	GOOD
Human Machine Interface	GOOD

AEB Car-to-Car

5.7 / 6 Pts

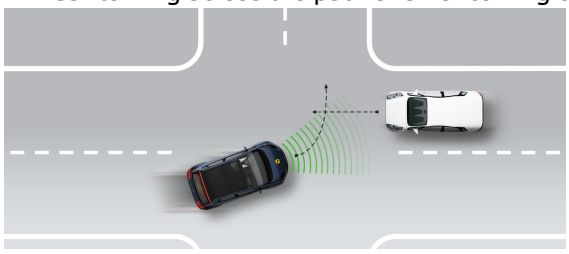
System Name	Collision Avoidance Assist
Type	Autonomous emergency braking and forward collision warning
Operational From	8 km/h
Sensor Used	Camera

SAFETY ASSIST

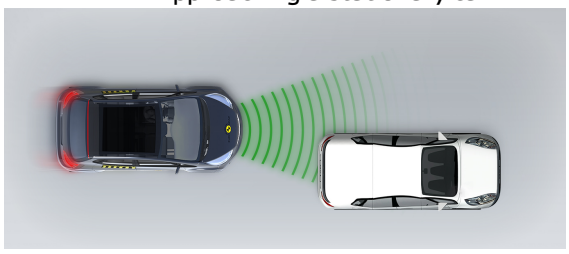
Total 15.7 Pts / 98%

- **Autobrake function only**

Car turning across the path of an oncoming car



Approaching a stationary car



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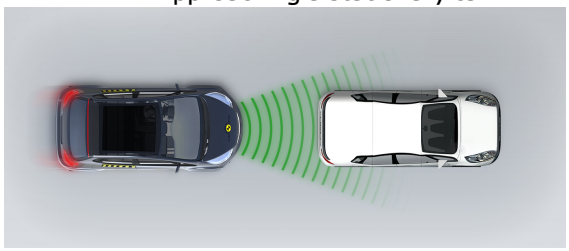

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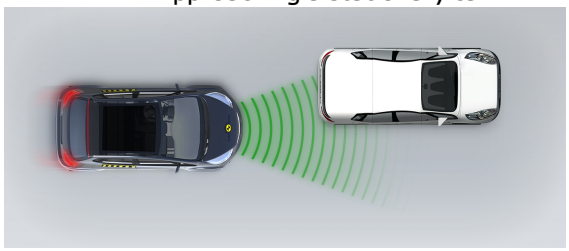
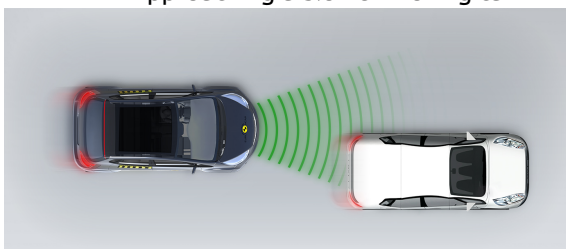
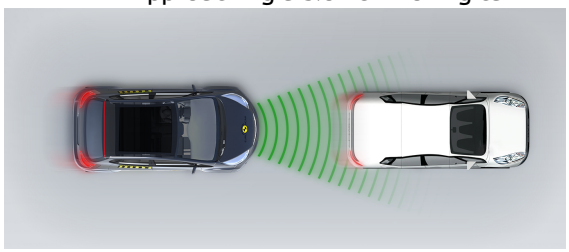


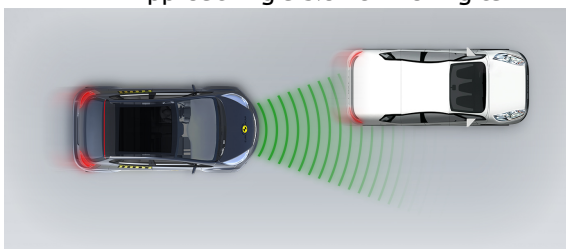
Approaching a slower moving car



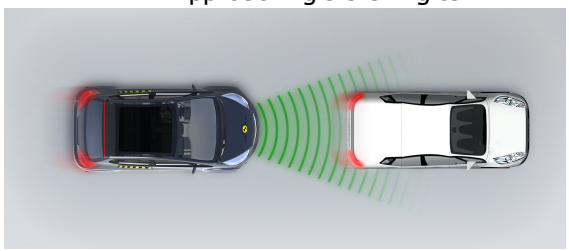
Approaching a slower moving car



Approaching a slower moving car



Approaching a braking car

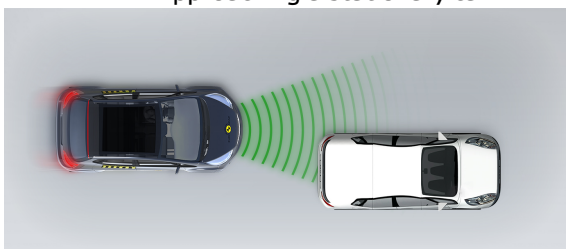


SAFETY ASSIST

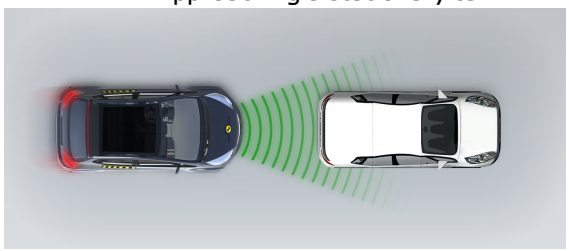
Total 15.7 Pts / 98%

- **Driver reacts to warning**

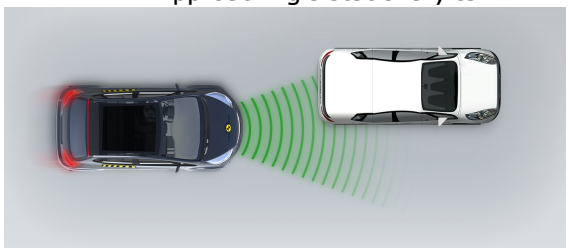
Approaching a stationary car



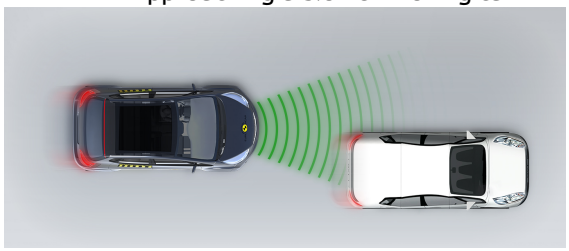
Approaching a stationary car



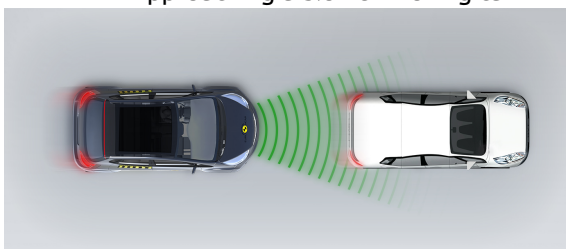
Approaching a stationary car



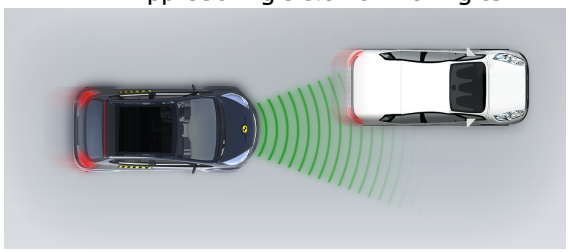
Approaching a slower moving car



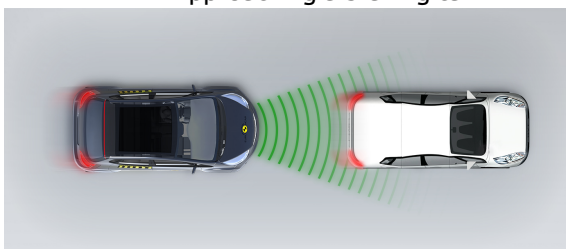
Approaching a slower moving car



Approaching a slower moving car



Approaching a braking car



SAFETY ASSIST

Total 15.7 Pts / 98%

Comments

The autonomous emergency braking (AEB) system performed well in tests of its response to other vehicles. The Model Y has a seatbelt reminder for all front and rear seats. Its 'Collision Avoidance Driver Monitoring' system uses camera-based direct monitoring to detect a distracted driver and automatically changes the sensitivity of the Forward Collision Warning System to be more reactive. The lane support system gently corrects the vehicle's path if it is drifting out of lane and intervenes more aggressively in some more critical situations, to avoid road departure. The car uses digital mapping and camera inputs to determine the local speed limit and the driver can opt to let the system limit the maximum speed accordingly.

RATING VALIDITY

Variants of Model Range

Body Type	Engine	Model Name/Code	Drivetrain	Rating Applies	
				LHD	RHD
5 door SUV	Dual Motor Electric	Long Range*	4 x 4	✓	✓
5 door SUV	Dual Motor Electric	Performance	4 x 4	✓	✓

* Tested variant

Annual Reviews and Facelifts

Date	Event	Outcome	
September 2022	Rating Published	2022 ★★★★★	✓
September 2023	Annual Review	2022 ★★★★★	✓