smart #3

PRO+ ELECTRIC RWD AUTOMATIC

2024 ★★★★★ 95%

10.0 /10	9.2 /10	9.4 /10
Clean Air Index	**Energy Efficiency Index**	**Greenhouse Gas Index**

10.0 /10 Clean Air Tests

	Laboratory Test	NMHC	NO_x	NH_3	CO	PN
10.0/10	Cold Test	●	●	●	●	●
10.0/10	Warm Test	●	●	●	●	●
10.0/10	Highway	●	●	●	●	●
10.0/10	Cold Ambient Test	●	●	●	●	●
	Road Test					
10.0/10	On-Road Drive	●	●	●	●	●
5.0/5	On-Road Short Trip	●	●	●	●	●
8.0/8	On-Road Heavy Load	●	●	●	●	●
5.0/5	On-Road Light Load	●	●	●	●	●
2.0/2	Congestion	●	●	●	●	●

● n.a. ● good ● adequate ● marginal ● weak ● poor

Comments

With no tailpipe emissions, the electric smart #3 naturally scores the full 10 points in the Clean Air part of the assessment.

9.2 /10 Energy Efficiency Tests

	Laboratory Test	Energy		
10.0/10	Cold Test		→	19.8 kWh/100 km
10.0/10	Warm Test		→	18.9 kWh/100 km
8.9/10	Highway		→	27.7 kWh/100 km
8.1/10	Cold Ambient Test		→	33.5 kWh/100 km

	Consumption	Driving Range
Average	22.1 kWh/100 km	359 km
Worst-case	33.5 kWh/100 km	230 km

n.a. good adequate marginal weak poor

Comments

The smart #3 shows low consumption in the Cold and Warm Laboratory Tests – ca. 19 kWh/100 km from the charging socket. In the Highway cycle, the electric SUV uses significantly more – 27.7 kWh/100 km, corresponding to a range of 279 km. The On-Road Drive was performed at around 15°C and the smart needed about 21 kWh/100 km, leading to a range of around 369 km. The compact SUV shows average energy demand in the -7°C Cold Ambient Test – 33.5 kWh/100 km.

9.4 /10 Greenhouse Gases Tests

	Greenhouse gases	CO_2	N_20	CH_4
10.0/10	Cold Test			
10.0/10	Warm Test			
9.4/10	Highway			
8.5/10	Cold Ambient Test			

n.a. good adequate marginal weak poor

Comments

This Index is based on a Well-to-Wheel+ approach, meaning that the GHG emissions related to the supply of the energy are added to those of the tailpipe. The vehicle's production is not yet included in the assessment due to the implicit limitations of generic data about global supply chains. As the smart #3 is purely electric, its GHG emissions originate only from electricity supply – ca. 53-95 g CO_2-eq./km, depending on the test consumption.

Our Verdict

The new smart vehicles which are manufactured in China are newcomers to the European market and arrive with a range of attractive electric models in the compact and subcompact segment. Tested here is the smart #3 – a compact SUV with a maximum power of 200 kW and a declared battery capacity of 65 kWh. The mass of the empty vehicle is 1.780 kg. The measured test consumption values are creditable and the vehicle shows good comfort for the passengers in cold and warm environment in its default “comfort” driving mode. A PTC-heater is used for cabin heating, while better-equipped variants come with an additional heat pump. For the battery capacity test the vehicle was charged with 11 kW charging power. With 68.2 kWh, the measured usable battery capacity surpasses the declared figure of 65 kWh, and it should be noted that the manufacturer states the available battery capacity depends on the charging speed. A full battery recharge takes 77.2 kWh from the electricity grid, which results in a reasonable grid-to-battery output efficiency of 88.4 %. Overall, the smart #3 finishes with an Average Score of 95%, easily collects all 5 Green Stars and challenges the popular EV brands in the European market.

Disclaimer

Specification

Tested Car
HESCR1C43PS15xxxx

Publication Date	Vehicle Class	Tyres	Emissions Class
02 2024	Small Family Car	245/45 R19	Euro 6 AX

Mass	Engine Size	System Power/Torque	Declared CO_2
1,780 kg	n.a.	200 kW/343 Nm	n.a.

Declared Battery Capacity
65.0 kWh

Declared Driving Range
Overall 435 km
City 601 km

Declared Consumption
16.8 kWh/100 km

Heating Concept
PTC

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