Australian Electric Vehicle Association

EV FACT SHEET

Mercedes EQC 400

Image: Mercedes-Benz

INTRODUCTION

The first all-electric model from Mercedes-Benz, the EQC 400 was first shown in production form in late 2018 and released in 2019for sale in Europe. Officially introduced into Australia in December 2019, sales only really kicked off here in 2020. Whilst it is currently the only all-electric vehicle in the Mercedes stable, the EQC range is expected to expand to seven models by 2023.

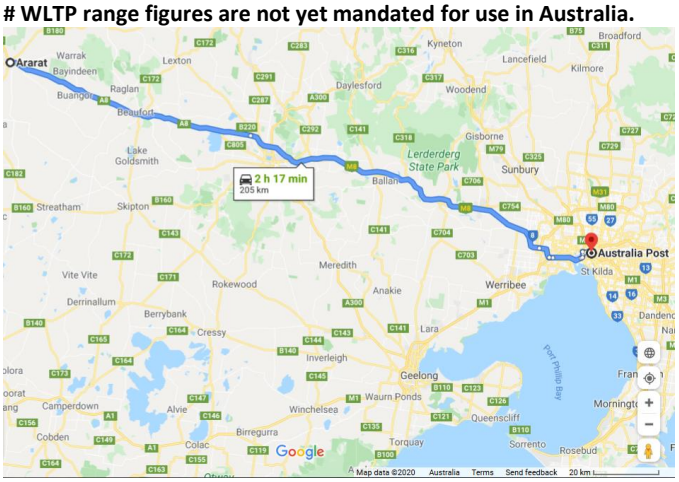
The EQC 400 is medium to large SUV based on the same platform as the ICE powered GLC. As such, it is similar in size to the Jaguar I-Pace, but about 300mm shorter than the Tesla Model X. It uses an on-demand all-wheel drive using front-wheel drive for all normal driving.

DRIVING RANGE

The EQC has a quoted range of 417 km under the latest European WLTP test cycle# and 471 using the current Australian mandated (NEDC) test cycle.

For instance, the EQC would, at its limit, make a round-trip from the Melbourne CBD to Ararat (in western Victoria) and back – provided the heating or air conditioning were not heavily used. For this sort of trip, a 30 min to 1hr top-up AC charge over lunch or a minimum 5 to 10 minute charge at the Ballarat DC fast charger site would be recommended.

 # WLTP range figures are not yet mandated for use in Australia.



EQC Melbourne GPO return trip range. Image: Google maps

CHARGING SPEEDS/REQUIREMENTS

Charging port

The EQC is fitted with a CCS2 socket allowing it to charge via Type 2 AC chargers as well as via CCS2 DC fast-chargers.

CCS2 charging plug and socket

Note: the EQC can be charged at any AC EVSE, however an adaptor will be needed to use EVSEs fitted with Type 1 (J1772) plugs.

CHARGING SPEEDS/REQUIREMENTS (CONTINUED)

AC charging:

Although fitted with the 3 phase type 2 AC socket as part of the CCS2 system, the EQC charges using single phase AC only at a maximum rate of 7.4kW.

Charging speeds vary on the capacity of the EVSE (Electric Vehicle Supply Equipment) it is connected to. Approximate AC charging times for 0 – 100% and DC 0 – 80% are shown in table 1 below.

EVSE type:						
10 A socket	16 A 1 phase (3.6 kW)	32 A 1 phase (7.4 kW)	16 A 3 phase (11 kW)	32A 3 phase (22 kW)	DC fast ch (50 kW)	DC fast ch (150 kW)
35h	22h	11h	11h	11h	81min to 80%	37min to 80%

Table 1: Charging times for the Mercedes EQC

DC fast charging

The EQC uses the CCS2 fast-charge connector. This connector is fitted to all new EVs sold in Australian except the Nissan Leaf and Mitsubishi Outlander PHEV. (CCS has become the main DC fast-charge system in both Australia and overseas).

HOME CHARGING CONSIDERATIONS

General

To get the shortest home charging time for the EQC, a 7.4kW AC EVSE would be needed.
However, depending on your existing power supply and/or charging needs, it may only be practicable to fit a lower rated EVSE. (See notes below). Lower capacity EVSEs will increase charging times, as shown in table 1 above.

Important notes for any home EVSE installation:

1. High charging rates are generally not needed for overnight charging.
2. Homes do not normally have three phase AC connected.
3. Switchboard and/or electrical supply upgrades may be needed if your home is more than 20 years old. (See fact-sheet on '*Making your home EV ready*', or read articles in:
   (a) EV News, (AEVA newsletter) issue 231, or
   (b) ReNew, (renew magazine) edition 143.

SPECIFICATIONS

Boot volumes in litres (1 litre = 10 x 10 x 10 cm)

- Boot under parcel shelf: 500
- Rear seat folded, loading space to roof: **not specified**

Dimensions:

- Overall length: 4,771 mm
- Overall height: 1622mm
- Ground clearance: 142mm
- Overall width (edge of doors): 1,884 mm
- Overall width (edge of mirrors): 2,096 mm
- Max. boot access width **not specified**
- Lower boot access width **not specified**
- Interior width between wheel arches **not specified**
- Boot opening height 658 mm
- Max. loading length with rear bench seat folded down: 1,557 mm
- Height under parcel shelf: **not specified**
- Loading length behind bench seat 1,033 mm

Battery:

- 80 kWh, Lithium-ion

Energy consumption: (Australian/NEDC test cycle)

- 21.4 KWh/100km

Kerb weight:

- 2,500 kg

Drive configuration:

- Front-wheel drive normally
- All-wheel drive on demand

Maximum power:

- Two motors, 150kW per end.

0-100 km/h time:

- 5.1 sec

WHERE TO BUY

The EQC 400 can be purchased in either of two ways.

1. Through normal dealer channels, or
2. direct from the manufacturer via an online portal. In this second case, the dealer is only involved in the delivery and servicing of the vehicle.

Note: