

# EV FACT SHEET

# Mercedes EQC 400

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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 2019 for 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 Australian Mercedes stable, the EQC range will soon to be joined here by the EQA in mid-2021, followed by the EQS in early 2022. The Mercedes BEV range is also projected 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<sup>#</sup> and 471 using the current Australian mandated (NEDC) test cycle.

For instance, the EQC would, at its limit, make a roundtrip 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:

EQCs built up to early 2021 came fitted with a 7.4kW single phase AC charger, although change is afoot. Mercedes Global Communications have recently (April 2021) announced they were now fitting a more powerful AC charger supplying a maximum of 11kW when using a three phase AC capable charger. **Note: if ordering a new EQC400, you will need to check** with the supplier to see if this charger is fitted, as changes overseas often take some time to flow through to Australian delivered models.

**Note:** 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: * = time using new 11kW on-board charger						
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	22h 7.5h*	11h 7.5h*	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.
- 4. For more information on home EV charging see articles in:
  - (a) EV News, (AEVA newsletter) issue 231, or
  - (b) ReNew magazine, edition 143
  - (c) Renew magazine, edition 156.

# **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.

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