

EV FACT SHEET

Mercedes EQV

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Mercedes EQV people mover. Image: Mercedes INTRODUCTION

The Mercedes EQV is classified by VFACTS as a People Mover. The EQV is in fact based on the same body as their eVito commercial van and eVito Tourer. As such, whilst it sports a more luxurious interior and driver's display than the eVito Tourer, the body and drivetrain are identical apart from a few cosmetic differences to the exterior.

Competitors to the EQV are few, but currently there are either its stablemate the Mercedes eVito Tourer or the LDV Mifa9 electric.

If looking a little further afield, there are also two small commuter bus alternatives - these being the Joylong E6 14 seater and the Skywell EC 11 11 seater.

DRIVING RANGE

Currently, the official Australian ADR 81/02 test cycle is based on the outdated (and highly over-optimistic) European NEDC test cycle. However few manufacturers now give this figure for their new releases. Instead, they often (but not always) quote the more achievable ranges found using the newer European WLTP test cycle.

Therefore, to avoid disappointment always check which test cycle has been used when assessing an EV for your needs. As a guide, NEDC is generally 30% too high, WLTP a good estimate if doing mostly urban and outer suburban driving and US EPA the better guide if doing mostly outer suburban to regional driving.

National testing system range estimates					
NEDC (Aust)	WLTP (Euro)	US EPA			
418	363 ¹	Not yet rated			

Table 1: comparison of mandated test cycle driving ranges for the EQV.

DRIVING RANGE (continued)

Using a conservative WLTP range, the Mercedes EQV should manage a return day-trip from the Melbourne GPO to Wye River on Victoria's south coast, provided the heater or air conditioner are not heavily used. For this sort of trip, a 10 to 15 min DC fast-charge at the RACV Torquay resort in Jan Juc, or the (soon to be completed – check Plugshare.com for updates) Waurn Ponds charger.

For further charging options and locations, visit: https://www.plugshare.com/



Image: Google maps.

CHARGING SPEEDS/REQUIREMENTS

Charging port

The EQV is fitted with a CCS2 socket allowing it to charge via Type 2 AC chargers² as well as via CCS2 DC fast-chargers.



CCS2 charging plug and socket

Notes: 1. in 'normal' drive mode

 The Mercedes EQV can be charged at any AC EVSE, however an adaptor will be needed to use the (very few) remaining older EVSEs fitted with Type 1 (J1772) plugs.

AC charging:

Like all new EVs sold in Australia, the Mercedes EQV is fitted with a type 2 AC socket as part of the CCS2 AC/DC charge plug system.

Charging rates:

Single phase: maximum of 7.4 kW (32A) Three phase: maximum of 11 kW (16A per phase)

Charging speeds and times vary on the capacity of the EVSE (Electric Vehicle Supply Equipment) it is connected to and the chosen battery size. Approximate charging times for the Mercedes EQV are shown in table 2 below.

(a) AC: 0 – 100% time			DC: 0 – 80% time		
10 A (power point)	15 A 1 phase (Caravan outlet)	32 A (1 phase Home EVSE)	16 or 32 A (3 phase public AC EVSE)	DC Fast charge (50kW)	DC Fast charge (110+kW)
45h	29h	14h	10h	1.5h	45m

Table 2: Approximate charging times for the Mercedes EQV.

DC fast charging:

The Mercedes EQV uses the CCS2 DC fast-charge connector and can charge at up to 110 kW DC.

V2X capability:

The EQV is not capable of V2L, V2H or V2G. Notes:

V2X is the generic term covering the options of getting 230V AC power from the battery and supplying it as:

- V2L: vehicle to load (230V power available from outlet in car)
- V2H: vehicle to home (supply home only via special connection)
- V2G: vehicle to grid (supply home/grid via special connection)

HOME CHARGING CONSIDERATIONS

General

To get the shortest home charging time for the EQV, an 11kW three phase AC EVSE would be needed.

However, depending on your existing power supply and/or charging needs, a lower rated EVSE may only be practicable, or needed. (See notes below). Lower capacity EVSEs will increase charging times, as shown in table 2 above.

Note: Unlike most EVs for sale in Australia, the EQV does **NOT** come with a Mode 2 portable EVSE for use with a 10A power point. These however are easily bought from aftermarket EVSE retailers. Prices for portable EVSEs start from \$400 for a 2kW unit to \$2000 for a fully flexible 1.6 to 22kW unit with adaptors. If using a 2kW portable charger with a standard power point, a Mercedes EQV will take approximately 45hrs for a 0 – 100% charge.

Important notes for any EVSE installation:

- 1. High charging rates are generally not needed for overnight charging.
- 2. Homes do not normally have three phase AC connected.
- Switchboard and/or electrical supply upgrades may be needed if your home or business is more than 20 years old. For more information on this item - read EV Information articles at *EVchoice.com.au* or see:
 - (a) Renew magazine edition 143. (EVSE wiring)
 - (b) Renew magazine edition 156. (EVSE buyer's guide)

SPECIFICATIONS

Seating capacity: 6, 7 or 8 depending on option selection.

Internal dimensions:

2nd and 3rd row seats up (litres)	Not stated
3rd row seats folded – second row up (litres)	Not stated
2nd and 3rd row seats – folded (litres)	3600
Cargo area length (mm) – 3rd row (mm)	489
Cargo area length (mm) – 3rd row seats folded	1443
Cargo area lth (mm) – seat rows 2 & 3 folded	2335
Cargo area height (mm)	1326
Cargo area width between wheel arches (mm)	1205
Rear hatch opening height (mm)	1195
Rear hatch opening width (mm)	1337
Side door opening height (mm)	1220
Side door opening width (mm)	837

'Froot' (under bonnet 'front boot'): NA

Dimensions:

- Overall length: 5140 mm
- Overall width:
 - o 1928 mm (mirrors in)
 - o 2244 mm (mirrors out)
- Overall height: 1901 mm

Battery:

• 100 kWh (90 kWh usable)

Charging:

- 1 phase AC: 7.4 kW (maximum)
- 3 phase AC: 11 kW (maximum)
- DC: 110 kW (maximum)

Charge port location:

• Left-hand front corner (just under headlamp)

Vehicle to Load connection (position and power):

• Not V2X capable

Energy consumption: (WLTP):

27.6 kWh/100km (EU rating)

Weights:

- Kerb: 2,535 kg
- Gross Vehicle Mass (GVM): 3,500 kg

Drive configuration:

• Front wheel drive

Towing:

• Not rated for towing

Performance:

- Maximum power: 150 kW
- 0 100km/hr: not specified.

IMPORTANT NOTES:

Always check for the latest vehicle specifications with the manufacturer prior to any purchase. No responsibility accepted by AEVA or Bryce Gaton (EV Choice) for errors factual or due to reproduction in this Fact Sheet. Whilst all efforts are made to ensure the accuracy of the material in this Fact Sheet, manufacturers regularly make changes (often unannounced) to their model ranges and specifications.

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