

EV FACT SHEET

Kia EV6

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Image: Kia INTRODUCTION

The Kia EV6 is classified by VFACTS as a medium SUV and is built in South Korea. The EV6 was released to the Australian market in early 2022. As the EV6 is built on parent company Hyundai's new E-GMP (Electric Global Modular Platform), it shares the drivetrain and battery system with the Hyundai Ioniq 5 and Genesis GV60. As such, intending buyers may wish to compare the Kia EV6 with the Hyundai Ioniq 5 and Genesis GV60. Like its sibling the Ioniq 5, the EV6 also offers Vehicle to Load (V2L) functionality.

The EV6 offers up to 11 kW AC charging and a class leading 233 kW maximum DC fast-charge rate. At that DC rate, it can recharge 100 km of range in just over 4.5 minutes.

In 2023 a GT version of the EV6 was released here. With sports seats, significantly upgraded suspension, brakes and electric motors – the GT version in GT mode has upped the stakes in 'affordable' performance/track use EV offerings with a zero to 100 time of a mere 3.5 sec!

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Currently, the official Australian ADR 81/02 test cycle is based on the outdated (and highly over-optimistic) European NEDC test cycle.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 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.

DRIVING RANGE (continued)

Testing system range estimates:					
	ADR 81/02	WLTP	EPA		
Variant	(Australia)	(Europe)	(USA)		
Air 2WD	Not yet rated	528	496		
GT Line 2WD	Not yet rated	504	496		
GT Line 4WD	Not yet rated	484	438		
EV6 GT	Not yet rated	424	330 (TBC)		

Table 1: Driving range estimates for the Kia EV6 variants

Using the US EPA range – a two-wheel drive EV6 should be capable of a return trip from the Melbourne GPO to Stawell in Victoria's central west, provided the heating or air conditioning were not heavily used. For this sort of trip, a short top-up DC charge at Ballarat or Melton would be recommended. Alternative AC charge options include Ararat and Ballarat. (For further charging options, see <u>https://www.plugshare.com/</u>).



Image: Google maps

CHARGING SPEEDS/REQUIREMENTS

Charging port

Notes:

The EV6 is fitted with a CCS2 socket allowing it to charge via Type 2 AC chargers² as well as CCS2 DC fast-chargers.



CCS2 charging plug and socket

1. https://www.greenvehicleguide.gov.au

The EV6 can be charged at any AC EVSE, however an adaptor will be needed to use the (few) remaining older EVSEs fitted with Type 1 (J1772) plugs.

CHARGING SPEEDS/REQUIREMENTS (CONTINUED)

AC charging:

Like all new EVs sold in Australia, the EV6 is fitted with a type 2 AC socket.

Charging rates:

Single phase: maximum of 7.4 kW (32A) Three phase: 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 EV6 are shown in table 2 below.

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 (350kW)
33h	21.5h	10.7h	7h	1.6h	18m

Table 2: Approximate charging times for the Kia EV6.

DC fast charging:

The EV6 uses the CCS2 DC fast-charge connector and can charge at up to 233 kW.

V2X capability:

The EV6 offers V2L functionality up to 15A (3600W) through a plug-in adaptor for the AC charge socket. **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 via special connection)
- V2G: vehicle to grid (supply home or grid via spec. connection)

HOME CHARGING CONSIDERATIONS

General

To get the shortest home charging time for an EV6, 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 1 above.

The EV6 also comes with a Mode 2 portable EVSE for plugging into a 10A power point. Charging an EV6 with this EVSE will take around 33 hrs 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 <u>http://evchoice.com.au/</u> or see:
 - (a) Renew magazine edition 143. (EVSE wiring)
 - (b) Renew magazine edition 156. (EVSE buyer's guide)

SPECIFICATIONS

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

- Seats up: 690 L (to roof)
- Seats down: 1322 L

Front boot ('froot'):

- 57 L (2WD)
- 24 L (AWD)

Dimensions:

- Overall length: 4680 mm
- Overall width:
 - 1890 mm (mirrors in)
 - o 2152 mm (mirrors out)
 - Overall height: 1545 mm

Battery:

• 77.4 kWh (Approximately 72.5 useable)

Charging:

- 1 phase AC: 7.4 kW max.
- 3 phase AC: 11 kW max.
- DC: 233 kW max.

Charge port location:

• Right-hand rear.

Energy consumption: (WLTP)

- 16.5 kWh/100 km (Air 2WD)
- 20.6 kWh/100 km (GT)

Kerb weight:

- 2000 kg (2WD Air, GT Line)
- 2105 kg (GT Line AWD)
- 2185 kg (GT)

Drive configuration:

- Rear wheel drive Air 2WD.
- All Wheel Drive (AWD) all other variants.

Towing:

• 1600 kg braked (1800 kg for GT)/750 kg unbraked.

Performance:

	Max. Power	0 to 100 km/h
Variant	(kW)	(Sec)
Air 2WD	168	7.3
GT Line 2WD	168	7.3
GT Line 4WD	239	5.2
EV6 GT	430	3.5

IMPORTANT NOTES:

Always check the specifications with the manufacturer prior to any purchase. No responsibility accepted by AEVA or Bryce Gaton 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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