

EV FACT SHEET

Hyundai Kona Electric

Aust. Delivered: 2019 - 2023

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2021 Kona electric. Image: Hyundai

INTRODUCTION

Worldwide sales of the Kona electric began in late 2018 with Australian deliveries beginning in March 2019. Sales of the first version ended here at the end of 2023 with the arrival of an all-new (and slightly larger) Kona.

Described as a small 'crossover' SUV, in electric guise it is front-wheel drive only, unlike the petrol version which has an AWD option.

Australian model updates:

- 2020: 200mm touchscreen widened to 250mm.
- 2021: minor model update.
 - Different (smoother) nose treatment resulting in a
 25mm increase in overall length;
 - Addition of 39 kWh, 100 kW motor 'Standard Range' version. (Available overseas since 2018).

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Currently, the official Australian ADR 81/02 test cycle is based on the outdated (and highly over-optimistic) European NEDC test cycle.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

National testing system range estimates (km)					
Version	NEDC (Aust)	WLTP (Euro)	US EPA		
Std range (39kWh)	N/A	305	N/A		
Long range (64kWh)	557	484	415		

Table 1: Driving range estimates for the Hyundai Kona electric

On arrival, the Kona electric had a very respectable 484 km driving range on the WLTP test cycle. Owners of this model attest to the reliability of the WLTP figure, achieving this number (and more) around town, as well as the 415 km US EPA figure holding up well for highway travel.

The original Kona electric was offered with a resistive element cabin heater. As a result, if travelling in cold weather, drivers can notice a 15% to 20% reduction in range if using this heater heavily. Overseas, a cold climate version was sold with a heat-pump climate system that was much more efficient, resulting in a 5% to 10% range reduction only. It is worth noting that the new model (2024) Kona electric comes standard with a heat-pump system.

BUYING SECOND-HAND

1. Portable EVSE

The Kona electric was sold with a portable Mode 2 charger. Check this EVSE is both supplied with the car and is working.

2. General assessment of a second-hand EV

For more information on how to assess the condition of a second-hand EV see Jan – Mar 2022 Renew magazine (edition 158) for article on 'How to make a pre-purchase assessment of a second-hand EV' or go to: https://evchoice.com.au/ev-information.html

3. Battery recall

Hyundai recalled and replaced the batteries in certain Kona electrics produced between January 31st 2018 and March 2nd 2020. Most (if not all) of these should now have been done. However, if buying one built in this period check the lower drivers A-pillar for the appropriate recall sticker or with Hyundai itself if it is not there. If it is one of the affected models, it must be done ASAP as there is a (very small) fire risk from the affected batteries.

CHARGING SPEEDS/REQUIREMENTS (CONTINUED)

AC charging:

The Kona electric is fitted with a type 2 AC socket as part of the CCS2 AC/DC charge plug system.

Charging rates for 2019 – 2023 Kona electric:

Single phase: maximum of 7.4 kW (32A) **Three phase:** 7.4 kW (Single phase rate only).

Charging speeds and times vary on the capacity of the EVSE (Electric Vehicle Supply Equipment) it is connected to and the chosen battery size. Charging times for the Kona electric with the Long-Range (64kWh) battery 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 (100kW)
28h	19h	9.5h	16A: 19h 32A: 9.5h	75m	54m

Table 2: Charging times for the Hyundai Kona electric with LR battery

DC fast charging:

The Kona electric uses the CCS2 DC fast-charge connector. The 2019 – 2023 model charges at up to 77kW DC.

V2X capability:

The 2019 – 2023 Kona electric did not include any V2X capability. (2024 model comes with V2L at up to 3.6kW) 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 the 2019 – 2023 model Kona electric, a 7 kW single phase AC charger 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 2.

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.
- Switchboard and/or electrical supply upgrades may be needed if your home is more than 20 years old. For more information on this item – see information pages at <u>EVchoice.com.au</u> or read articles in:
 - (a) Renew magazine edition 143. (EVSE wiring)
 - (b) Renew magazine edition 156. (EVSE buyer's guide)

SPECIFICATIONS OF 2019 – 2023 KONA ELECTRIC

Seating: 5

Boot volumes in litres (1 litre = $10 \times 10 \times 10 \text{ cm}$)

Boot: 332 L

Rear seat folded, loading space to roof: 1,114 L

Dimensions:

Overall length: 4,205 mm
Overall height: 1,570 mm
Ground clearance: 158 mm

Overall width (edge of doors): 1,800 mmOverall width (edge of mirrors): 2,070 mm

Battery:

Standard range: 39 kWhLong range: 64 kWh

Energy consumption: (WLTP)

• 13.1 kWh/100km

Kerb weight:

Standard range: 1,535kgLong range: 1,685 kg

Charging:

• 1 phase AC: 7.4 kW maximum

DC: 77 kW maximum

Charge port location:

• Front, left of centre.

Drive configuration:

• Front wheel drive.

Towing:

• The 2019 – 2023 model was not rated for towing.

Performance:

	Max. Power	0 to 100km/h
Variant	(kW)	(Sec)
Standard range	100	9.9
Long-range	150	7.9

IMPORTANT NOTE

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