EVFACT SHEETCreated and written by:
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2024 Hyundai Kona electric. Image: Hyundai

INTRODUCTION

The 2024 Kona is built on an entirely new platform that is marketed as an 'EV first' design that is adapted to fit the petrol engine versions. As such, an entirely new Fact Sheet has been created for the 2024 model.

Built in South Korea, the Kona electric is often described as a small 'crossover' SUV although it is classified by VFACTS as a 'small SUV'. Mind-you, the 2024 model stretches that definition a tad as it is nearly 175mm longer, 25 mm wider and 25mm taller than the outgoing model. For that increase in dimensions it does get a bigger boot (the smallness of which was a common gripe with owners of the original Kona) along with that rarest of beasts: a spare wheel. (Albeit, a space-saver one). As per the first version, in electric guise it is front-wheel drive only, unlike the petrol version which has an AWD option. Adding to the changes is a 27L 'froot' (front boot) that would make a handy and accessible storage compartment for charging leads and adaptors.

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Currently, the official Australian ADR 81/02 test cycle is based on the outdated (and highly over-optimistic) European NEDC test cycle.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:						
Version	NEDC (Aust)	WLTP (Euro)	US EPA			
48.6 kWh	Not rated	377 km	320 km			
64.8 kWh	Not rated	505 km	416 km			

Table 1: Driving range estimates for the 2024 Kona electric.

Using the US EPA rating, the new Kona electric with the extended range battery would, at its limit, make a roundtrip from the Melbourne CBD to Ararat in Victoria's central west – provided the heating or air conditioning were not heavily used. For this sort of trip, a short DC top-up charge in either Ballarat Central or Warrenheip (6.5 km east of Ballarat on the Western Highway) would be recommended or perhaps plug-in over lunch at the AC charger in Ararat itself. (For further charging options and availability, see: https://www.plugshare.com/).



Typical Kona electric return trip range. Image: Google maps

CHARGING SPEEDS/REQUIREMENTS

Charging port

The Kona electric is fitted with a CCS2 socket allowing it to charge via Type 2 AC chargers¹ as well as CCS2 DC fast-chargers.



CCS2 charging plug and socket

Notes:

 The Kona electric 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 Kona electric is fitted with a type 2 AC socket.

Charging rates:

Single phase: maximum of 7.2 kW (32A) Three phase: 10.4 kW (16A per phase)

Charging speeds vary on the capacity of the EVSE (Electric Vehicle Supply Equipment) the car is connected to. Approximate AC charging times for the Kona electric are shown in table 2.

	DC: 0 – 80% time				
10 A (power point)	15 A 1 phase (Caravan outlet)	32 A (1 ph. Home EVSE)	16 or 32 A (3 phase public AC EVSE)	DC Fast charge (50kW)	DC Fast charge (100+kW)
48.6 kWh: 24h	13.5h	6.75h	16A: 5h	73m	50m
64.8 kWh: 32h	18h	9h	16A: 7h	73m	50m

Table 2: Approx. charging times for the two battery sizes

DC fast charging

The 2024 Kona electric uses the CCS2 DC fast-charge connector. Hyundai however have not released the exact DC kW charging rates for either battery. Based on the released DC charge times, these are possibly around 77kW for the Std Range and 100kW for the Long Range.

V2X capability:

The 2024 Hyundai Kona electric offers V2L functionality at up to 3kW (13A) through a plug-in adaptor for the AC charge socket as well as via an interior 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 car outlet)
- 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 2024 Kona electric, an 11kW 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 Fact Sheets at EVchoice.com.au or read articles in:
 - (a) Renew magazine edition 143. (EVSE wiring)
 - (b) Renew magazine edition 156. (EVSE buyer's guide)

SPECIFICATIONS

Seating: 5

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

- Boot under parcel shelf: 345
- Rear seat folded, loading space to roof: 1,310

Dimensions:

- Overall length: 4,355 mm
- Overall height: 1,580 mm
- Ground clearance: 151 mm
- Overall width (edge of doors): 1,825 mm
- Overall width (edge of mirrors): 2,012 mm

Battery:

- Standard Range: 48.6 kWh
- Extended range: 64.8 kWh

Energy consumption: (WLTP)

- To Be Confirmed (48.6 kWh battery)
- To Be Confirmed (64.8 kWh battery)

Kerb weight:

- 1,690 kg (standard range)
- 1,795 kg (extended range)

Charging:

- 1 phase AC: 7.2 kW max.
- 3 phase AC: 10.4 kW max.
- DC: TBC.

Charge port location:

• Front, slightly left of centre.

Drive configuration:

• Front-wheel drive

Towing: (unbraked/braked)

- Standard range: Not rated for towing
- Extended range: 300 kg/750 kg

Performance:

	Max. Power	0 to 100km/h
Variant:	(kW)	(Sec)
Standard Range	99	TBC
Long Range	150	TBC

IMPORTANT NOTE

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