

EV FACT SHEET

Mazda MX-30 E35

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Image: Mazda

INTRODUCTION

The Mazda MX-30 E35 small SUV is Mazda's first foray into the all-electric world. It has received praise for its comfort and handling as well as its use of natural and recycled materials in the interior. The MX-30 E35 also features double opening 'clamshell' side doors with no B pillar, as previously used on their RX-8 sports car.

The MX-30 E35 does however come with one major limitation. In a world of EVs with 300 to 500 plus km driving ranges, the BEV version¹ of the MX-30 offers a mere 200km (WLTP), giving it the shortest range of all the BEVs currently on the Australian market. On top of this, rather than competing in price against its direct small SUV competitors (such as the standard range Kona electric or the MG ZS EV) the MX-30 is priced similarly to BEVs with twice or more driving range. As such, until the range or pricing issues are addressed, the MX-30 is likely to remain a niche player in the Australian vehicle market.

DRIVING RANGE

Australian test standards are currently in a state of flux, with the Green Vehicle Guide² showing some vehicle driving ranges using either the old (and highly over optimistic) European NEDC test cycle figure or the newer European WLTP test cycle figure. Worse still, for recent additions to the Australian market the GVG often gives no data is given at all! Around town, the WLTP figure is the best guide to range or, if doing outer suburban to regional driving – use the US EPA figure.

DRIVING RANGE (continued)

National testing system range estimates (km)					
NEDC (Aust)	WLTP (Euro)	US EPA			
237	200	161			

Table 1: Driving range estimates for the Mazda MX-30 E35

Using the WLTP range – a Mazda MX-30 would be capable of a return trip from the Melbourne GPO to Ocean Grove on Victoria's Bellarine Peninsula, provided the heating or air conditioning are not heavily used. For this sort of trip, a top-up charge at the public AC or DC chargers in Ocean Grove would be recommended. (See Plugshare.com for more charging options).

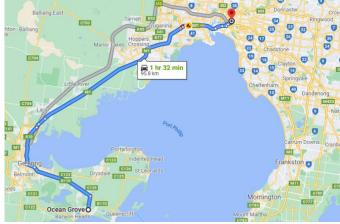


Image: Google maps

CHARGING SPEEDS/REQUIREMENTS

Charging port

The MX-30 E35 is fitted with a CCS2 socket allowing it to charge via Type 2 AC chargers³ as well as CCS2 DC fast-chargers.





CCS2 charging plug and socket

Notes:

- The MX-30 is offered here in both full battery EV (BEV) and mild-hybrid (HEV) versions. Only the BEV version is covered in this Fact Sheet.
- 2. https://www.greenvehicleguide.gov.au
- The MX 30 E35 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:

Although fitted with the 3 phase type 2 AC socket as part of the CCS2 system, the Mazda MX-30 E35 charges using single phase AC only at a maximum of 6.6 kW.

Charging speeds and times vary on the capacity of the EVSE (Electric Vehicle Supply Equipment) the EV is connected to. Approximate charging times for the Mazda MX-30 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)	32 A (3 phase public AC EVSE)	DC Fast charge (50kW)	DC Fast charge (350kW)
14h	9h 20m	5h	5h	50m	50m

Table 2: Approximate charging times for the Mazda MX-30 E35

DC fast charging:

Like all new BEVs sold in Australia (except the Nissan Leaf), the MX-30 uses the CCS2 DC fast-charge connector and can charge at up to 37 kW at a DC fast-charger.

HOME CHARGING CONSIDERATIONS

General

To get the shortest home charging time for the MX-30 requires a 6.6kW or greater single phase AC EVSE. 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.

The MX-30 also comes with a Mode 2 portable EVSE for plugging into a standard 10A power point. Charging a MX-30 with this EVSE will take around 14hrs for a 0-100% charge.

Important notes for any home EVSE installation:

- 1. High charging rates are generally not needed for overnight charging.
- 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. (For more information on this item read articles in:
 - (a) Renew magazine edition 143. (EVSE wiring)
 - (b) Renew magazine edition 156. (EVSE buyer's guide)

SPECIFICATIONS

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

Seats up: 366 LSeats down: 1171 L

Dimensions:

Overall length: 4390 mm

• Overall width:

1795 mm (mirrors in)2035 mm (mirrors out)

Overall height: 1570 mm

Battery:

• 35.5 kWh (Approx. 32 kWh useable)

Charging:

• 1 phase AC: 6.6 kW max. (32 km charged/h)

• DC: 37 kW max. (180 km charged/h)

Charge port location:

• Right-hand rear.

Energy consumption: (WLTP)

• 190 Wh/km

Kerb weight:

• 1659 kg

Drive configuration:

Front wheel drive.

Towing:

Not rated for towing

Performance:

Maximum power: 105 kW0 to 100km/h: 9.7 sec

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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