

# **EV FACT SHEET**

Fiat 500e

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2023 Fiat 500e. Image: Fiat INTRODUCTION

Although only first brought to Australia in mid-2023, the Fiat 500e has a long history dating back to 2013. However, at that time Fiat sold it only as a 'compliance car' in the USA – offering it in those US states with zero emissions vehicle mandates ... and nowhere else. In fact, in 2014 the then head of Fiat-Chrysler, Sergio Marchionne, was quoted to say "I hope you don't buy it, because every time I sell one, it costs me \$14,000".

In 2020 an updated model (built in Turin, Italy) with a bigger battery and more range went on general sale in Europe - including the right-hand drive UK market. In Europe there are a number of versions – including two battery sizes (24 kWh and 42 kWh), a sliding roof 'cabrio' a four door 'suicide' rear door version plus the 600 small SUV.

Currently in Australia (as of April 2024), only the two door, 42 kWh battery size version in standard or performance Abarth is offered. The Abarth has performance modifications that include the addition of rear disc brakes plus suspension and steering tweaks plus a glass roof.

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Currently, the official Australian ADR 81/02 test cycle is based on the outdated (and highly over-optimistic) European NEDC test cycle.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

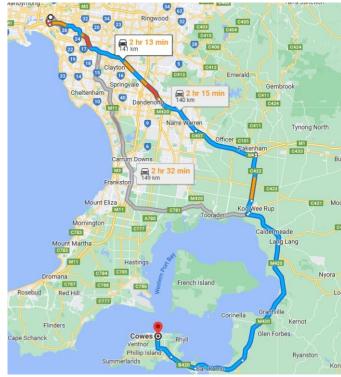
Therefore, to avoid disappointment always check which test cycle has been used when assessing an EV for your needs. As a rough guide, NEDC is generally 30% too high, WLTP a good estimate if doing mostly urban and outer suburban driving and US EPA the better guide if doing mostly outer suburban to regional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

#### **DRIVING RANGE (continued)**

National testing system range estimates:						
Version	NEDC (Aust)	WLTP (Euro)	US EPA			
500e	Not rated	311	NA <sup>1</sup>			
Abarth	Not rated	253	NA <sup>1</sup>			

Table 1: Driving range estimates for the Fiat 500e versions.

Using the WLTP rating (with a slight discount for extended highway use) a standard Fiat 500e would, at its limit, make a round-trip from the Melbourne CBD to Cowes on Phillip Island – provided the heating or air conditioning were not heavily used. For this sort of trip, a short en-route DC top-up charge would be recommended or perhaps plug-in over lunch at Tesla destination chargers (available to all EVs) in Cowes itself. (For further charging options and availability, see: https://www.plugshare.com/).



Typical Fiat 500e return trip range. Image: Google maps

#### **CHARGING SPEEDS/REQUIREMENTS**

### **Charging port**

The Fiat 500e is fitted with a CCS2 socket allowing it to charge via Type 2 AC chargers<sup>2</sup> as well as CCS2 DC fast-chargers.

#### Notes:

- 1. The new Fiat 500e is not yet sold in the US. (Release there due in 2024).
- The 500e 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 Fiat 500e 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 vary on the capacity of the EVSE (Electric Vehicle Supply Equipment) the car is connected to. Approximate AC charging times for the 500e are shown in table 2.

AC: 0 – 100% time				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 (85+kW)
21h	12h	6h	16A: 4h 32A: 4h	45m	35m

Table 2: Approx. charging times for the Fiat 500e

#### DC fast charging

The 500e uses the CCS2 DC fast-charge connector and can charge at up to 85 kW DC.

#### V2X capability:

The Fiat 500e does not include any V2X capability. **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 the 500e, 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: 4

**Dimensions:** 

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

Boot under parcel shelf: 185Rear seat folded: 550

## Overall length: 3,632 mmOverall height: 1,527 mm

• Ground clearance: 130 mm

Overall width (edge of doors): 1,683 mmOverall width (edge of mirrors): 1,900 mm

#### **Battery:**

• Dynamic: 42 kWh (37.3 kWh usable)

#### **Energy consumption: (WLTP)**

14.3 kWh/100 km (500e)

• 18.1 kWh/100 km (Abarth)

#### Kerb weight:

• 1,290 kg (500e)

• 1,335 kg (Abarth)

#### **Charging:**

1 phase AC: 7.4 kW max.

3 phase AC: 11 kW max.

DC: 85 kW max.

#### **Charge port location:**

• Right-hand rear corner.

#### **Drive configuration:**

• Front-wheel drive

#### **Towing:**

Not rated for towing

#### **Performance:**

	Max. Power	0 to 100km/h
Variant:	(kW)	(Sec)
500e	87	9.0
500e Abarth	113	7.0

#### **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.