# **EV FACT SHEET** MG ZS EV (2023 update)

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2022 update MG ZS EV. Image: MG Motor UK

# **INTRODUCTION**

The ZS EV is the first production electric car from MG. Fully built in China (MG are currently owned by the Chinese SAIC Motor Group), the ZS EV was revealed at the 2018 Guangzhou Motor Show. It is worth noting that the ZS EV is not built on a dedicated EV platform, rather it is based on the existing petrol MG ZS small SUV.

#### 2022 update:

Originally released with a 44.5 kWh battery, in 2022 it was refreshed here with a new grille and the introduction of a 51 kWh 'Long-Range' battery.

#### 2023 update:

In mid-2023, the 44.5 kWh battery version was dropped and a 72.6 kWh battery introduced as the new 'Long Range' version with a WLTP range of 440km. AC charging was also updated to 11 kW as standard and V2L added.

### **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Currently, the official Australian ADR 81/02 test cycle is based on the outdated (and highly over-optimistic) European NEDC test cycle.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			
44.5 kWh <sup>1</sup>	320 km	263 km	NA <sup>1</sup>			
51.1 kWh	360 km	320 km	NA <sup>1</sup>			
72.6 kWh	505 km	440 km	NA <sup>1</sup>			

Table 1: Driving range estimates for the MG ZS EV.

Using the WLTP rating (with a slight discount for extended highway use) the MG ZS EV would, at its limit, make a round-trip 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 topup 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: <u>https://www.plugshare.com/</u>).



Typical ZS EV return trip range. Image: Google maps

# CHARGING SPEEDS/REQUIREMENTS

#### **Charging port**

The ZS EV 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.



CCS2 charging plug and socket

#### Notes:

- 1. The MG ZS EV is not sold in the USA.
- The ZS EV 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:

Both MG ZS EV battery sizes come standard with an inbuilt 11 kW single phase AC charger.

Charging speeds vary on the capacity of the EVSE (Electric Vehicle Supply Equipment) the car is connected to. Approximate AC charging times for 0 - 100% and DC 0 - 80% 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)
51kWh: 34h	14h	7.5h	16A: 5h	54m	45m
73kWh: 36h	20.5h	10.5h	16A: 8h	63m	40m

Table 2: Approx. charging times for the 51.1 and 72.6 kWh ZS EV versions

# **DC fast charging**

The MG ZS EV uses the CCS2 DC fast-charge connector and can charge at up to 75kW DC for the Standard Range (51kWh) version and 94 kW DC for the Long Range.

# V2X capability:

The ZS EV offers V2L functionality up to 9A (2200W) 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 a 2023 update ZS EV, 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 <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**

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

- Boot under parcel shelf: 470
- Rear seat folded, loading space to roof: 1166

# **Dimensions:**

- Overall length: 4,323 mm
- Overall height: 1649 mm
- Ground clearance: 161 mm
- Overall width (edge of doors): 1809 mm
- Overall width (edge of mirrors): 2048 mm

# **Battery:**

- Standard Range: 51.1 kWh (49 kWh usable)
- Long Range: 72.6 kWh (68.3 usable)
- Superseded model: 44.5 kWh (42.5 usable)

# Energy consumption: (WLTP)

• 17.3 kWh/100km

# Kerb weight:

• 1620 kg

# Charging:

- 1 phase AC: 7.2 kW max.
- 3 phase AC: 11 kW max.
- DC: 75/94 kW max (SR/LR).

# Charge port location:

• Middle front.

# Drive configuration:

• Front-wheel drive

#### Towing:

500kg/500kg (Braked/unbraked)

## Performance:

	Max. Power	0 to 100km/h
Variant:	(kW)	(Sec)
51.1 kWh	130	8.2
72.6 kWh	115	8.5

#### **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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