

# **EV FACT SHEET**

## LDV Mifa9 electric

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LDV Mifa9 electric. Image: LDV INTRODUCTION

The LDV Mifa9 electric is classified by VFACTS as a People Mover. Released in 2022 with seven seats, LDV are expected to offer an eight seat version sometime in 2023.

Interestingly, this segment is becoming increasingly competitive with three seven or eight seat people movers becoming available in late 2022. These include the (slightly) more utilitarian Mercedes eVito Tourer and the luxury Mercedes EQV. There are also the two slightly larger commuter bus options of the 14 seat Joylong E6 and 12 seat Skywell EC11.

#### **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Currently, the official Australian ADR 81/02 test cycle is based on the outdated (and highly over-optimistic) European NEDC test cycle.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 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 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. (Currently, only WLTP figures are available for the Mifa9 electric).

National testing system range estimates					
NEDC (Aust)	WLTP (Euro)	US EPA			
Not rated	435 <sup>1</sup>	Not sold in US			

Table 1: comparison of mandated test cycle driving ranges.

#### **DRIVING RANGE (CONTINUED)**

Using a conservative WLTP range, the Mifa9 electric should manage a return day-trip from the Melbourne GPO to Ararat (in Victoria's west), provided the heater or air conditioner are not heavily used. For this sort of trip, a one to two hr top-up AC charge over lunch at the 3 phase AC charger in Ararat's Elizabeth Park, or a DC fast charge in Ballarat Central or the Shell service station just east of Ballarat would be recommended. For further charging options and locations, visit: https://www.plugshare.com/



Image: Google maps.

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

#### **Charging port**

The Mifa9 electric is fitted with a CCS2 socket allowing it to charge via Type 2 AC chargers<sup>2</sup> as well as via CCS2 DC fast-chargers.



CCS2 charging plug and socket

### Notes:

 The Mifa9 electric can be charged at any AC EVSE, however an adaptor will be needed to use the (very few) remaining older EVSEs fitted with Type 1 (J1772) plugs.

#### CHARGING SPEEDS/REQUIREMENTS (CONTINUED)

#### AC charging:

Like all new EVs sold in Australia, the Mifa9 electric is fitted with a type 2 AC socket as part of the CCS2 AC/DC charge plug system.

#### Charging rates:

Single phase: maximum of 7.4 kW (32A) Three phase: maximum of 11 kW (16A per phase)

Charging speeds and times vary on the capacity of the EVSE (Electric Vehicle Supply Equipment) it is connected to and the chosen battery size. Approximate charging times for the Mifa9 electric are shown in table 2 below.

	(a) AC: 0 -	– 100% tim	е	DC: 0 – 8	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 (120+kW)
45h	25h	13.5h	9h	1.6h	1h

Table 2: Approximate charging times for the Mifa9 electric

#### DC fast charging:

The Mifa9 electric uses the CCS2 DC fast-charge connector and can charge at up to 120 kW.

#### V2X capability:

As of release (December 2022), the Executive and Luxe versions of the Mifa9 electric include a 220V outlet for V2L. It is not capable of V2H or V2G.

#### 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 Mifa9 electric, an 11kW three phase AC EVSE would be needed. 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 Mifa9 electric also comes with a Mode 2 portable EVSE for use with a 10A power point. Charging a Mifa9 electric with this EVSE will take around 44 hrs for a 0 - 100% charge.

#### Important notes for any 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 or business is more than 20 years old. For more information on this item - read EV Information articles at *EVchoice.com.au* or see:
  - (a) Renew magazine edition 143. (EVSE wiring)
  - (b) Renew magazine edition 156. (EVSE buyer's guide)

#### SPECIFICATIONS

#### Seating capacity: 7 (updating to 8 sometime in 2023).

#### Internal dimensions:

2nd and 3rd row seats up (litres)	466.2
3rd row seats folded – second row up (litres)	1702.7
2nd and 3rd row seats – folded (litres)	2017
Cargo area length (mm) – 3rd row (min-max)	375-810
Cargo area length (mm) – 3rd row seats folded	1380
Cargo area lth (mm) – seat rows 2 & 3 folded	2280
Cargo area height (mm)*	1150/1090/1090
Cargo area width between wheel arches (mm)	1144
Rear hatch opening height (mm)	1859
Rear hatch opening width (mm)	1275

\* Mode/Executive/Luxe versions

#### 'Froot' (under bonnet 'front boot'):

• Yes (volume not specified)

#### Dimensions:

- Overall length: 5270 mm
- Overall width: 2000 mm
- Overall height: 1840 mm

#### **Battery:**

• 90 kWh

#### Charging:

- 1 phase AC: 7.4 kW (maximum)
- 3 phase AC: 11kW (maximum)
- DC: 120 kW (maximum)

#### Charge port location:

Left-hand rear (above wheel arch)

#### Vehicle to Load connection (position and power):

• Rear end of front row passenger console. (Available power level not specified).

#### Energy consumption: (WLTP):

 21.3 / 21.5 / 21.8 kWh/100km (Mode/Executive/Luxe versions)

#### Kerb weight:

 2310/2410/2535 kg (Mode/Executive/Luxe versions)

#### Drive configuration:

• Front wheel drive

#### Towing:

- Braked trailer: 1,000 kg
- Non-braked trailer: 750 kg

#### Performance:

- Maximum power: 180 kW
- 0 100km/hr: not specified.

#### **IMPORTANT NOTES:**

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