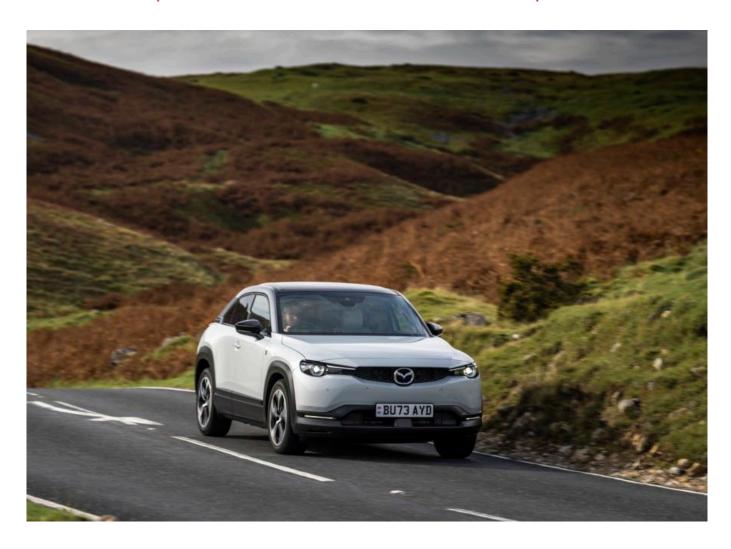


Mazda MX-30 E-EV Crossover – News and First Impressions

Published: November 6, 2023

Author:



News and brief Views about the new Mazda MX-30 R-EV Crossover.



By Robin Roberts (and Miles Better News Agency).

News

Mazda is never afraid to be different and it shows in their latest MX-30 R-EV Crossover launched to the UK's motoring media recently.

Keeping its quirky 'suicide' rear passenger doors for easy access to the back seats the real change is up front under the bonnet in the newcomer.

This slideshow requires JavaScript.

It joins the pure battery MX-30 and the CX-60 PHEV in the marque's range with a PHEV powertrain which utilises a sub-900cc rotary (Wankel type) petrol engine acting as a generator to power the electric motors for the wheels as there is no direct mechanical link.





With a 17.8 kW traction battery range of about 53 miles the rotary petrol engine will kick in when needed to deliver a combined range over 400 miles. So you have no real worries about range anxiety as maybe the case in a pure battery electric vehicle.

It has three driving modes - ev, normal and charge - so a user can maximise economy or power and have something in between.

Prices are £31,250, £33,150 and £36,600 for the entry level Prime, Exclusive and Makota versions.

Mazda selected the rotary powerplant due to its unique ability to produce the required output from a small, light and easily packaged unit and is neatly placed alongside the



generator and high-output motor in the engine bay. The combination of the 17.8 kWh battery and 50-litre fuel tank create a unique series plug-in hybrid with a flexible total range of over 400 miles, while a WLTP $\rm CO_2$ output of just 21 g/km ensures class-leading environmental performance.

Compatibility with both AC charging and rapid DC charging is another benefit, meaning 3-phase AC charging takes around 50 mins, while for maximum customer flexibility, DC rapid charging can be completed in around 25 minutes. The Mazda MX-30 R-EV thanks to a 125 kW/170 PS output, it delivers slightly better acceleration performance than the 145 PS fully electric MX-30.

Offered in the same highly specified grades as the all-electric e-Skyactiv MX-30: Prime-Line, Exclusive-Line and Makoto – the Mazda MX-30 R-EV was unveiled at the Brussels Motor Show in January 2023, the limited-edition Mazda MX-30 R-EV Edition R has sold out in the UK, but some early order UK customers will be taking delivery of this rare launch model.

All versions of the Mazda MX-30 e-Skyactiv R-EV feature a rotor badge on the front wings and an e-Skyactiv R-EV badge on the tailgate. Unique wheels differentiate the R-EV: Prime-Line with a dark grey finish and Exclusive-Line and Makoto a black/silver diamond cut finish.

Between the launch of the Mazda Cosmo in 1967 and production of the RX-8 ending in 2012, Mazda mass-produced close to 2 million rotary engines and it is now back being used as a power generator rather than a drive unit.

The new 8C rotary engine is an 830 cc single rotor with a 120 mm (4.72 in) rotor radius and 76 mm (2.99 in) rotor width, its compact size enables coaxial placement and integration with the electric motor, decelerator and generator to achieve a unit with an overall width of less than 840 mm (33 in), allowing it to fit under the bonnet without changes to the MX-30 body frame.

The aluminium engine is over 15 kg (33 lb) lighter than the twin-rotor Renesis engine used



in the RX-8. The use of direct fuel injection reduces emissions and increases fuel economy, while the engine also features an Exhaust Gas Recirculation (EGR) system to improve efficiency at low RPM and low load running.

A 17.8 kWh battery was chosen to ensure enough capacity for a 53-mile electric-only driving range while at the same time considering the environmental impact of the battery over the entire vehicle lifecycle.

The generator will activate when battery charge drops below the specified reserve level, charge the battery to the set level, and maintain that level of charge. Once battery charge is above the set level, the car will operate in the equivalent to Normal mode until the battery depletes to the specified level. It will then use the rotary engine generator to keep the battery at that level.

Jeremy Thomson, Managing Director Mazda Motors UK, said before the launch of the new model over scenic North Wales roads, "I'm really excited about the new MX-30 R-EV joining our electrified line-up.

"It's a great example of Mazda's challenger spirit, thanks to its unique technological approach; it's a car that's the perfect solution for customers who want an electric car for everyday usage but the flexibility to undertake longer journeys without the reliance on charging infrastructure."

First Drive Views









First impressions of the Mazda MX30 R-EV were of a truly smooth experience through the powertrain, with good pick-up, strong acceleration and seamless swopping between pure-ev and petrol-enhanced performance.



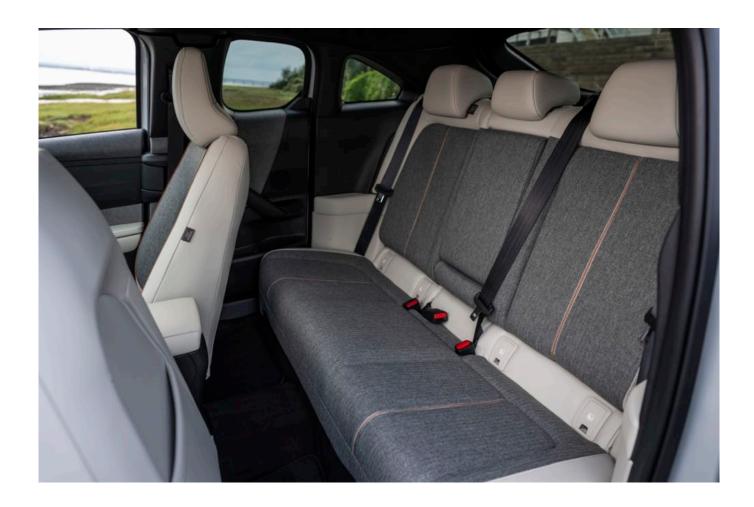


Steering and brakes gave excellent feedback too and the ride was reasonable over some poor surfaces if a bit noisy. It was smoother and quieter with the smaller wheels and tyres in the Exclusive specification and we achieved 39 mpg with that.

Overall, our top Makota version returned 36.5 mpg over a mixture of dual carriageway, A and B-class roads and 120 miles route.

Like its stablemate MX-30 BEV, the car offers good front seat room but had far more restricted legroom in the back and the shape of the rear roofline and high waistline produced small rear side-windows and a dark, unwelcoming experience for younger users even if the rear-hinged back-doors made entry and exit easy once the front doors were open.





Tech. Spec. in Brief:









Model: Mazda MX-30 R-EV Makoto

Price: £36,000

Powertrain: 0.8-litre single-rotor petrol PHEV, 17.8 kWh battery, 1x e-motor 170 PS

Transmission:Single-speed automatic, front-wheel drive

0 - 62 mph: 9.1 seconds

Top speed: 87 mph

EV range: 53 miles



Economy: WLTP official cycle 282.5 mpg (36.5 mpg on our road test)

CO2: 21 g/km