

The Vito E-CELL

The city breathes again

Have we aroused your curiosity?

Find out details from your sales advisor or by calling 0845 602 4321 or visiting www.mbvans.co.uk

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The Vito E-CELL

Driving for a sustainable future



Mercedes-Benz

The future

The city breathes again

Profit from the future today. With the Vito E-CELL

BLUE EFFICIENCY

As pioneer of motor vehicle manufacture, Mercedes-Benz aspires to ensure the mobility of the future with progressive technologies and sustainability. The emphasis is on ecologically justifiable drive technologies, which are subsumed at Mercedes-Benz under the heading "BlueEFFICIENCY". With the new Vito E-CELL we have achieved our stated goal: locally emission-free driving.

But much more important is that you as customer profit in a variety of ways from the Vito E-CELL. It offers you the quiet, clean and environment-friendly mobility of the future today. Not forgetting the very favourable operating costs: compared with vehicles powered by internal combustion engines. Furthermore the free access to many parts of city centres enables optimum trip planning and thus high productivity. There's no difference, on the other hand, as regards to reliability, manufacturing quality and safety equipment of the Vito E-CELL: it, of course, has all the strong points that have always distinguished the vans from Mercedes-Benz.

With the Vito E-CELL you exploit the many advantages of electric mobility – and demonstrate as an enterprise your sense of responsibility for people and the environment. A signal that will be favourably registered also by your customers.



“ We are convinced that electric drive is a viable technology for the future. Within city centres in particular it can help us meet the challenges in the area of environmental protection and sustainability. With its innovative all-electric drive the Vito E-CELL affords the opportunity to significantly reduce CO₂ pollutant levels and the noise pollution caused by vehicle fleets. In letter and parcel delivery the Vito E-CELL already is demonstrating its capabilities today under realistic everyday conditions. All in all, alternative drives are an important element of our GoGreen environmental programme, which seeks to improve our CO₂ efficiency by 30 percent by the year 2020. ”

Dr. Joachim Wessels, Deutsche Post DHL, Member of the Mail Divisional Board



begins today

A good feeling as standard

A breath of fresh air as standard

100% loading space as standard

The city breathes again. With the new Vito E-CELL

Locally emission-free – what does this mean?

As a battery-powered electric van, the Vito E-CELL does not produce any environmentally harmful exhaust gases whatsoever when operating – Carbon Dioxide (CO₂), Carbon Monoxide (CO), Nitrogen Oxides (NO_x) therefore it operates emission-free.

Supplying the vehicle through the electricity mains decouples energy use in the vehicle from energy generation, enabling a free choice from the different available energy sources.

If the batteries of the Vito E-CELL are charged with energy from renewable sources (e.g. from wind, solar or hydroelectric power plants), the vehicle's operation is completely CO₂-neutral.

The first ex-works emission-free battery-powered electric van is ideal for operation in city centres and particularly environmentally sensitive locations. In conjunction with tried-and-tested series engineering from Mercedes-Benz and a specifically tailored contract hire model the Vito sets a milestone: it signals the start of carefree electric mobility for vans – with maximum customer benefits.

In cities and environmentally-sensitive areas the future belongs to emission-free driving. As a pioneer of electric mobility for vans – Mercedes-Benz developed its first electricity-powered van back in 1972 – the brand is putting a further demonstration of its innovative power on the streets: the Vito E-CELL.

The sustainable solution for urban transport tasks.

Driven by a powerful yet almost noiseless electric motor, depending on equipment the Vito E-CELL carries a payload of up to 775 kg – entirely emission-free. Since no pollutants whatsoever are produced at the place of use, in many cases the van also can be used where conventionally powered vehicles frequently have no entry, for example in inner cities with restricted access, on the grounds of

airports, in environmentally sensitive areas like pedestrian precincts, health resorts and parks, or in closed exhibition halls. Therefore It is aimed at commercial customers who use their vans mainly in urban areas and short-range journeys. They include mainly fleet operators, public institutions, delivery firms, express and parcel services, but also the environment-conscious, innovative small enterprise. In all these fields the Vito E-Cell excels in tough everyday operation with the same reliability and practicality as a conventionally powered Vito. And it attains the same exemplary safety level as well – thanks to specially protected high-voltage equipment and the innovative dynamic handling control system ESP® with integral RBS recuperative brake system.





The concept: lots of room for innovation

The Vito E-CELL is based on the long variant of the Vito panel van. It is distinguished from a conventionally powered Vito mainly by the components of the drive train, by the lithium-ion battery, arranged in the crash-protected area between the axles underfloor, and by the change from rear-wheel drive to front-wheel drive. As regards functionality, variability and ease of loading, on the other hand: the Vito remains a Vito. With its outstandingly usable load compartment, just as big as that of the Vito with a conventional diesel engine, its large door openings and the low load compartment sill, the Vito E-CELL is perfectly well prepared to tackle the challenges of urban transport.

High practicality as standard. A payload of around 775 kg (depending on equipment) for a vehicle with an acceptable gross weight of 3050 kg makes the Vito E-CELL suitable for the widest range of applications. It was possible to implement this surprisingly large payload for an electric vehicle as the lithium ion battery is relatively compact and light thanks to its high energy density. Another reason is that it was possible to dispense with many components of a conventional drive train thanks to the vehicle's front-wheel electric drive – for instance the driveshaft to the rear axle and the fuel tank.

Basic data and standard equipment (selection)

- ▶ Wheelbase 3200 mm
- ▶ Vehicle length 5008 mm
- ▶ Payload as much as 775 kg
- ▶ Cargo volume 5.7 m³
- ▶ Load area 3.76 m²
- ▶ Wide sliding doors (920 mm x 1240 mm) on right and left
- ▶ Forklift loading possible at the side of the vehicle
- ▶ Through-loading width of 1277 mm between the wheel arches, Europallets can be loaded sideways
- ▶ Full-width bulkhead

Optional equipment

- ▶ CARGO package with wooden floor, integral rail system, lashing rails on the side walls as well as belts and anchoring rings
- ▶ Passenger's single seat in lieu of standard twin seat



Wide-opening tailgate. A tailgate with an especially wide opening angle of approx. 90° makes loading easy



Sliding doors on right and left. The two standard-fitted sliding doors provide more flexibility for loading and unloading



Should an electric van be fun?
We think it has to be



From the outside, the Vito E-CELL can only be distinguished by its “zero emission” lettering – body, ground clearance and angles of approach and departure are virtually the same as those of the Vito with internal combustion engine. The interior also impresses with tried and tested features: the car-like cockpit featuring high ergonomic ease of operation was adopted, as was the familiar display and control concept. New features include the power and charge indicator in the instrument cluster and an optical and acoustic signal indicating the high-voltage system’s operational readiness, or the separate switch for turning on the heater.

The Vito E-Cell is agile, dynamic to drive and totally uncomplicated. As familiar as it appears, it is fascinating to see how “different” it feels to drive. Its completely noiseless drive



While on the move the power display shows how much energy is used or – on every application of the brakes or during overrun how much is recovered. The battery charge indicator details the available energy reserves

goes to work with power and agility which you wouldn’t expect from the rated output of 60 kW. Since the full torque of 280 Nm is available from standstill, the Vito E-CELL delivers dynamic performance on the excellent level of state-of-the-art diesel engines and can be driven as safely and simply as a conventional Vito with automatic transmission.

We’ve thought of the other road users too. The standard-fitted reversing camera with monitor in the COMAND system and an additional reverse warning alarm assist the driver to recognise obstacles during manoeuvring, it also provides an acoustic signal to help pedestrians take notice of the quiet Vito E-CELL.



The transmission specifically developed for the Vito E-CELL enables comfortable driving and is just as easy to operate as a conventional automatic transmission

Standard equipment (selection)

- ▶ “Lima” fabric upholstery, black
- ▶ COMAND APS control and display system
- ▶ Reversing camera, reverse warning alarm
- ▶ Electric heater
- ▶ Driver’s heated seat
- ▶ Steering wheel adjustable for height and angle
- ▶ Central locking with remote control
- ▶ Electrically-operated windows

Optional equipment

- ▶ Different paint finishes
- ▶ Winter tyres



The COMAND APS control and display system with LINGUATRONIC voice-operated control system is a standard feature, as is the reversing camera

Electrifying technology

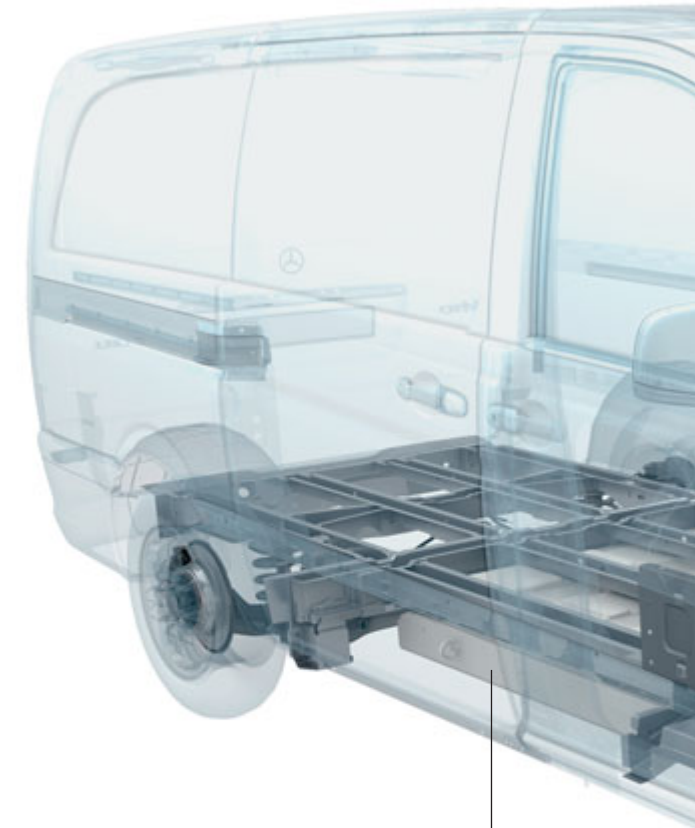
The fascinating heart of the Vito E-CELL is its entirely new battery-electric drive technology. Instead of the familiar four- and six-cylinder internal combustion engines, under the bonnet there is a powerful electric motor and its peripherals. The electric motor has a continuous output of 60 kW and a maximum torque of 280 Nm. The high pull-away torque which the motor makes available from the start and the low centre of gravity give the Vito E-CELL remarkable acceleration and excellent driving dynamics – ideal for urban traffic. The temperament of the Vito E-CELL is controlled by the dynamic handling control system ESP® with integrated RBS recuperative brake system. An innovative technology featured in this vehicle segment only by the Vito E-CELL.

A range of up to 80 miles/130 km (NEDC) thanks to powerful lithium-ion batteries. The electric motor draws its energy from a lithium-ion battery package with nominal 360 volt rating, accommodated underneath the load compartment floor. The battery has a capacity of 36 kWh and excels through high energy density. The result is a range of up to 80 miles/130 km (NEDC), allowing the Vito E-CELL to meet the requirements of vehicle fleets which average 30 to 50 miles/50 to 80 km per day per vehicle – including an adequate reserve.

Braking energy becomes electricity. In order to increase its range to the maximum possible, the batteries of the Vito E-CELL are additionally fed by recuperation during operation, i.e. energy from deceleration is converted into electricity. The Vito E-CELL recovers energy in override mode when the driver releases the accelerator, and also actively during the braking process. With this last feature the Vito E-CELL boasts a particularly innovative technology.

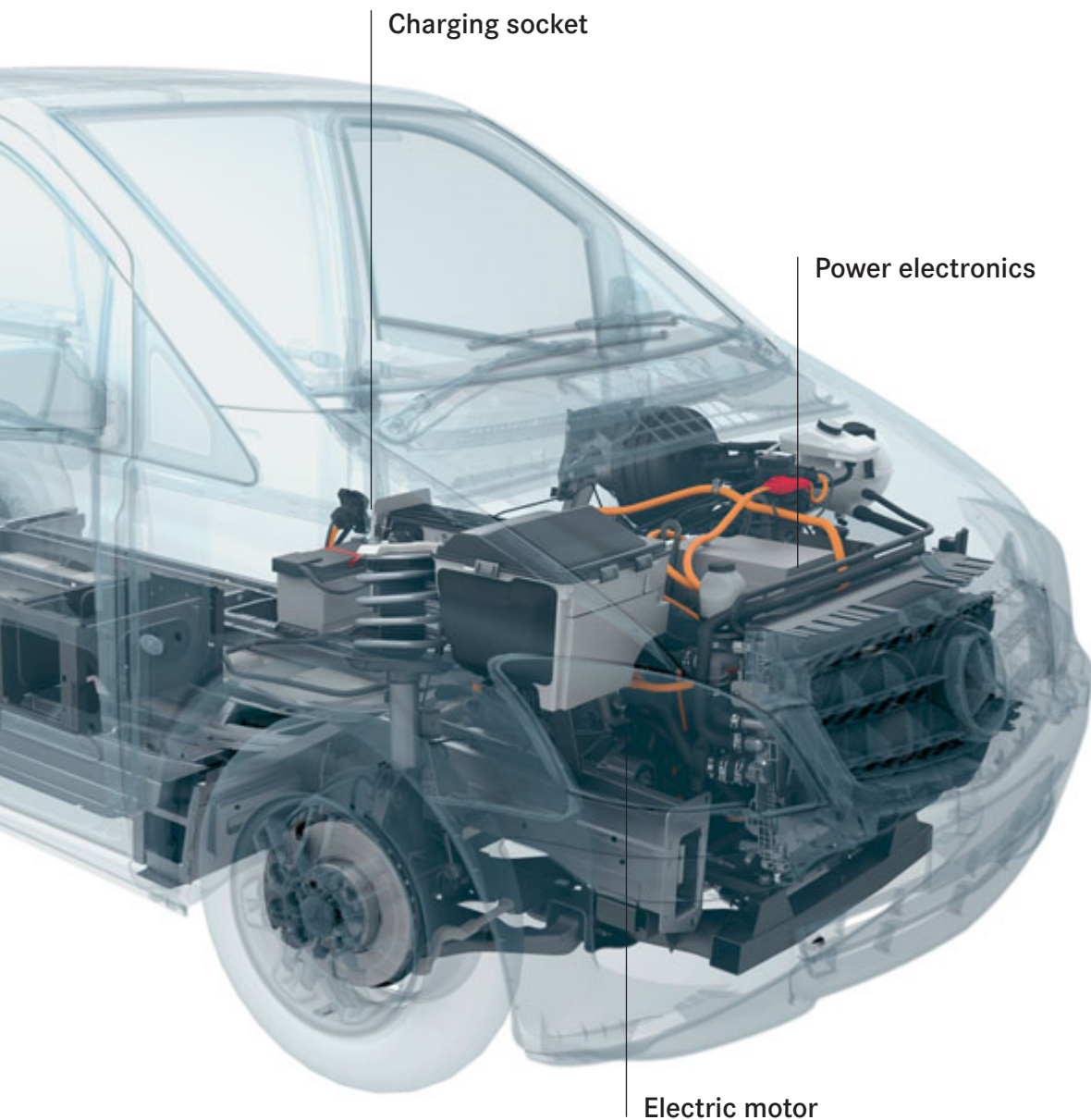
- ▶ Electric motor with 60 kW output
- ▶ Top speed 56 mph/89 km/h
- ▶ High-performance lithium-ion battery with a capacity of 36 kWh
- ▶ Range 80 miles/130 km (NEDC)
- ▶ Consumption 2.8 miles/kWh, 22 kWh/100 km (NEDC)
- ▶ Front-wheel drive
- ▶ Efficient single speed transmission

The comprehensive safety package: thanks to an integral safety concept with specially protected high-voltage equipment means the Vito E-CELL attains the same exemplary safety level as a Vito with internal combustion engine. In a collision the batteries are protected by a crash element. The high-voltage system can be temporarily or permanently deactivated, depending on the severity of the accident. In numerous crash tests and during extensive trial operation the Vito E-CELL demonstrated its high safety standard convincingly.



High-voltage battery

The drive system of the Vito E-CELL is designed for pure battery operation and thus dispenses with the drive train required by internal combustion engines. With many advantages: purely electric drive is quiet, highly efficient and emission-free



Electric drive. Underneath the bonnet, in addition to the electric motor there are further components, such as the power electronics, transducer and charging set



Recuperation. The Vito E-CELL is the only van in its segment to feature the innovative ESP® dynamic handling control system with integral RBS recuperative brake system



Adaptive brake lights. The adaptive brake lights, a standard feature, provide following traffic with a clearer warning in the event of an emergency stop, as the brake lights start to flash when the brakes are applied in an emergency. If the vehicle then comes to a halt, the hazard warning lights are switched on automatically

Now, filling up is plugging in

The supply of electricity to the Vito E-CELL batteries is effected simply, quickly and safely via a 400-volt charging station (wallbox) optionally available from a supplier commissioned by Mercedes-Benz. If requested, in cooperation with a local electrician the supplier will check whether the conditions exist for connecting the wallbox and will provide advice about suitable charging options. The battery charging socket of the vehicle is connected with the charging station by means of a seven-pin standard charging cable – recharging¹ a fully discharged battery takes only around six hours. Alternatively, the vehicle can also be recharged using the optionally-available 230 volt cable where the recharging process takes around 12 hours. In order to achieve the best possible range, the batteries are also recharged while driving through the conversion of braking energy into electricity (= recuperation).

Intelligently controlled charging. The Vito E-CELL is equipped as standard with a Smart Charge Communication Unit (SCCU), which enables intelligent recharging of the vehicle. The customer therefore can decide the time at which the vehicle is to be charged, e.g., with cheaper electricity during the night or when electricity from renewable sources (e.g. from wind energy) is available from the mains. Using this function requires an additional load management module in the wallbox.

Charging variants

Wallbox/charging station

- ▶ 400 volts charging voltage
- ▶ About 6 hours charging time
- ▶ Charging cable included
- ▶ Optional intelligent charging functions: automatic use of night rates, programming via internet
- ▶ Wall or pedestal mounted

230-volt socket

- ▶ 230 volts charging voltage
- ▶ About 12 hours charging time
- ▶ Additional charging cable¹



Charging cable. The standard equipment includes a charging cable for 400-volt current supply



Charge indicator. By means of the on-board computer the charge level of the high-voltage battery can be ascertained at any time

Charging socket (picture on right). The Vito E-CELL is connected with the power supply by means of a charging socket located under the tank flap on the left side of the vehicle

¹ Optional 230-volt charging cable due to become available from 1st quarter of 2012



Future prospects

The technical data of the Vito E-CELL

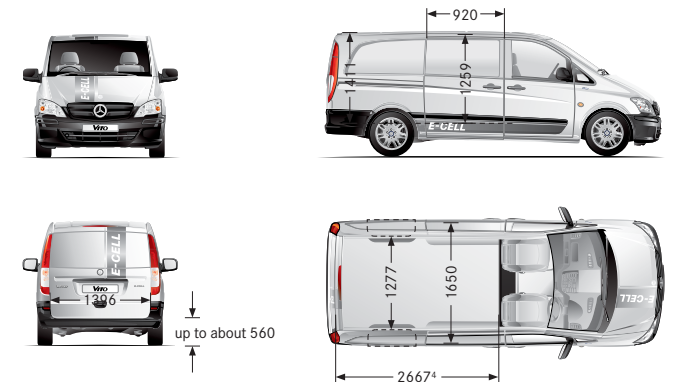
Vehicle length	5008 mm
Vehicle height	1895 mm
Vehicle width	1901 mm
Wheelbase	3200 mm
Drive system	Front-wheel drive
Battery capacity	~ 36 kWh
Range (NEDC)	80 miles/130 km
Top speed	56 mph/89 kmh ¹
Recharging time 400 V/230 V ²	6 h/12 h
Motor output	60 kW
Torque	280 Nm
GVW	3050 kg
Kerb weight³	2275 kg
Payload	775 kg

¹ The top speed is electronically limited ² Optional 230-V charging cable due to become available from 1st quarter of 2012 ³ Figures according to 92/21/EEC.

Kerb weight of vehicle in standard specification including driver at 75 kg

⁴ Measured at vehicle floor level

All dimensions in mm



The way to the Vito E-CELL: as innovative as the vehicle itself

“Easy entry into electric mobility” with the Vito E-CELL; this is a promise that Mercedes-Benz conceives as something encompassing. It therefore not only focuses on the aspects of emission-free driving, safety and suitability for everyday use, it also considers attractive conditions for operation. The basis for this is provided by a specifically tailored contract hire agreement which enables the use of the Vito E-CELL without financial risk.

The Vito E-CELL is offered exclusively within the scope of a long-term contract hire model which includes a service contract. This means: customers can hire the Vito E-CELL from Mercedes-Benz for a set monthly instalment over a contractual period of four years and a mileage of 50,000 miles/80,000 km. The monthly instalment includes all costs for maintenance and repair work as well as all wear-and-tear parts. Optionally, the scope of the service can be individually enlarged: by tyre service, vehicle insurance, and replacement vehicle provision extending beyond the usual three-year arrangement of MobilityGo. At the end of the agreed contractual period the Vito E-CELL simply goes back to Mercedes-Benz – nothing could be easier.

Maintenance and service from specialists. The maintenance jobs included in the monthly instalment are performed at selected Mercedes-Benz service stations by specially trained staff. The service intervals for the Vito E-CELL are 15,000 miles/25,000 km or 12 months, whichever event occurs first.

The basic data of the long-term rental model:

- ▶ Contractual period 4 years
- ▶ Mileage 50,000 miles/80,000 km
- ▶ Maintenance, repairs and wear-and-tear parts¹ included

Optional:

- ▶ Tyre service
- ▶ Vehicle insurance
- ▶ Provision of replacement vehicle

¹ Contents may vary from country to country

