

The new BMW CE 04.

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Urban freedom

"It's early in the morning. The city is awakening. On the way to my garage I breathe in the still cool air. I'm wear a casually cut parka that's both fashionable and functional at the same time. The protectors are inconspicuous but give me a sense of security. I'm ready for the day to start.

My BMW CE 04 is in the garage. I am thrilled by its futuristic design style. The low position of the battery gives the scooter an entirely new geometry – a complete departure from previous conventions. I'm glad to see it again. It's a great feeling – every day.

For me, it's the symbol of a new era – the era of the silent revolution.

The first birds are chirping, the urban jungle is awakening. The sounds of the city begin to swell. Everything is set in motion. People move – with each other and in parallel. Paths cross.

What will the new day bring? Tapas with friends at the little bar by the river? Or the exhibition at the modern art museum? First of all there are appointments at the office. Workshops, meetings, customer visits. This is what life feels like.

I pair my smartphone with the scooter, and with a flick of my wrist I activate the parka. Its LEDs light up. I'm quiet, but I want to be seen. It's all so simple and smooth.

We're off again at last. Even when I was having my breakfast, I couldn't wait. Not even the birds notice me. I glide almost silently through my neighbourhood. I'm a part of the city again.

People start to look at me at the traffic lights. My sitting position is upright, relaxed. A new message flashes on the display, my smartphone is charging in the storage compartment.

Green light. With the scooter's torque, I can float away ahead of the rest. I'm a rocket. But a silent one.

I feel as if I was on the Bonanza bike back in the day – cool and superior, but now connected to the world and one step ahead. Technology and style. Is this freedom? Yes – only better. No traffic jams, no having to search for a parking space. For me, it's all time I save.

Acceleration, speed, bends – the BMW CE 04 doesn't just master them, it redefines them. I glide through the traffic – the seat itself seems to float. It feels just right. Surfing bends is superbly enjoyable. Pure fun, from wave to wave.

The evening was beautiful, down by the river. We laughed a lot. The city motorway doesn't forgive mistakes – my scooter sprints away and my parka glows in the dark of night. I'm clearly visible and arrive safely at my destination. Quietly, I glide into the driveway to my garage, again almost unnoticed by the birds. Good night, my city. We'll be in touch."

1. Overall concept. Short version.



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"The BMW CE 04 is our new electric star for the city. It combines an e-drive with emotion and motorcycling fun. The latest technology, and the best battery cells, which also provide power in the BMW iX. Just like the CE 04, all future new BMW Motorrad models for urban mobility will be pure electric."
Oliver Zipse, CEO of BMW AG.

The new BMW CE 04 – the silent revolution: A new chapter in electrically powered urban two-wheel mobility.

With the new BMW CE 04, BMW Motorrad continues to consistently pursue its electromobility strategy for urban conurbations. As the final series production vehicle of the BMW Motorrad Concept Link originally showcased in 2017 and the near-series BMW Motorrad Definition CE 04 unveiled in 2020, the BMW CE 04 opens up a whole new chapter in two-wheel urban mobility. With its electric drive, forward-looking design and innovative connectivity solutions, the new scooter merges transport and communication functions for a new brand of mobility in the urban environment.

Plenty of power and ample range for supreme riding in the city and in urban areas.

With a maximum output of 31 kW (42 hp), the new BMW CE 04 has a powerful motor and offers outstanding riding pleasure. For the classic "traffic light start" discipline from 0 to 50 km/h, it takes just fast 2.6 seconds. Even in the reduced output L3e-A1 vehicle class, 23 kW (31 hp) drive power is available. The maximum speed of both versions is 120 km/h – for speedy progress not just in the city but on main roads and motorway sections, too.

The new BMW CE 04 has an ample battery cell capacity of 60.6 Ah (8.9 kWh), providing a range of some 130 kilometres (reduced output version: 100 km). This enables day-to-day emission-free riding in the city, in an urban setting and for smaller-scale fun tours after work or at the weekend – with complete peace of mind.

Innovative electric drive with liquid-cooled electric motor.

The new BMW CE 04 has a permanent magnet electric motor mounted in the frame between the battery and the rear wheel, as used in a similar form in BMW cars such as the 225xe Active Tourer. BMW Motorrad conducted extensive riding tests to develop a specific type of recuperation for each riding mode, giving the rider a high-level convenience. This means that optimum performance and riding characteristics are available in every situation on the road.

Short charging times and charging technology based on the system used in cars.

The lithium-ion battery is charged using the integrated charging device either at a regular household socket, a wallbox or a public charging station. When the battery is completely flat, charging time ideally lasts 4 hours and 20 minutes. With the quick charger available as an optional extra with an output of up to 6.9 kW (2.3 kW is the standard level), charging time is reduced to just 1 hour and 40 minutes when the battery is completely flat. If the battery level is only 20 per cent and the battery is charged to 80 per cent, the charging time is reduced to just 45 minutes with the optional quick charger. Depending on the market, the standard charging cable with a charging capacity of 2.3 kW comes as standard with the BMW CE 04.

A Mode 3 charging cable is required for fast charging at the wallbox at home or at a public charging station. In the same way as with BMW automobiles, BMW Charging solutions are available for the BMW CE 04, too – for maximum flexibility based on numerous customised programmes for charging at home, on the road and at work.

Increased riding stability through slip control by means of ASC (Automatic Stability Control). DTC (Dynamic Traction Control) as an ex works option.

This traction control system is available on the new BMW CE 04, comparable to the Automatic Stability Control in BMW motorcycles with combustion engine. ASC limits engine torque in relation to rear wheel slip. Dynamic Traction Control (DTC), available as an optional extra, provides even greater riding safety. DTC enables even more safe acceleration, especially in banking position.

Three riding modes "ECO", "Rain" and "Road" for efficient, day-to-day use as standard. "Dynamic" riding mode for further enhanced riding pleasure as an ex works option.

In developing the BMW CE 04, BMW Motorrad attached particular importance to providing opportunities for the rider to make an individual choice between maximum efficiency and maximum riding fun. Accordingly, the new BMW CE 04 features the three riding modes "ECO", "Rain" and "Road" as standard. The additional "Dynamic" riding mode is also available as an ex works option, enabling the scooter to accelerate at an even swifter pace.

Directionally stable suspension with one-piece tubular steel main frame for smooth handling and a high level of ride comfort.

The main frame is a tubular steel construction. The front wheel is controlled by a telescopic fork with a slider tube diameter of 35 mm. Rear wheel control consists of a single-sided swing arm. At the rear, suspension and damping are performed by a directly controlled, fully covered spring strut. The new BMW CE 04 is fitted with generously sized tyres, with 120/70 R15 67H at the front and 160/60 R15 56H at the rear.

Powerful brake system with latest-generation ABS. ABS Pro with banking capability as an ex works option.

At the front, a twin disc brake ensures secure deceleration, supported by a single-disc system at the rear. In addition, BMW Motorrad ABS ensures a high level of active safety. ABS Pro, available as an optional extra, goes even further: By means of a banking sensor, ABS Pro also controls braking on bends, thereby offering the greatest possible safety.

10.25" TFT colour screen with integrated map navigation for convenient route planning and extensive connectivity as standard.

The new BMW CE 04 comes fitted as standard with a 10.25-inch TFT colour screen with integrated map navigation and connectivity. Its excellent readability, clear menu navigation and highly integrated operating concept put the new BMW CE 04 at the top of the scooter segment. For the first time, the new 10.25-inch colour screen makes it possible to display a navigation map in the instrument cluster, so no additional display is needed.

Powerful LED lighting units all round. Adaptive Headlight Pro and light functions as ex works options.

The lighting units on the new BMW CE 04 are based on state-of-the-art LED technology. They include a headlamp for high beam and low beam at the front. In addition to a rear light featuring LED technology, there are also LED turn indicators. The indicator lamps likewise use LED technology. Even greater safety at night is offered by the adaptive turning light Headlight Pro, available as an ex works option. Here, the rider benefits from further improved illumination of the road when cornering for even safer riding at night. Special light functions such as "Welcome" and "Good Bye" are also available as ex works options.

Future-oriented design and colour scheme.

The new BMW CE 04 embodies a new, forward-looking form of urban two-wheeled mobility in its design as well, featuring an innovative style that arouses emotions for this new drive technology while instantly identifying the scooter as a member of the BMW Motorrad family. The modern surface finish is in a striking Light White, complemented by matt black sections in the front and side areas as well as the "floating" seat.

In addition, there are trend-setting wheels (solid wheels) featuring a disc-wheel look and a side stand that is integrated in the design styling. The new BMW CE 04 in Avantgarde Style (ex works option) is a striking, colourful statement of contemporary urban mobility. In this style, the colour Magellan Grey metallic is supplemented with a black/orange seat, an orange wind deflector and various graphics.

"The new BMW CE 04 is the logical and at the same time rethought continuation of BMW Motorrad's electromobility strategy. Urban conurbations are its element. This is where it sets a new benchmark – in terms of both technology and visual style."
Florian Roemhild, Project Manager BMW CE 04.

The highlights of the new BMW CE 04:

- Rated output 15 kW (20 hp). Maximum output 31 kW (42 hp).
Reduced output version: 11 kW (15 hp) or 23 kW (31 hp).
- Ample cell capacity in the battery of 60.6 Ah (8.9 kWh).
- Range of approximately 130 kilometres,
Reduced output version: 100 km.
- Short charging times and charging technology based on the system used in cars.
- Increased riding stability due to slip control by means of ASC (Automatic Stability Control). DTC (Dynamic Traction Control) as an ex works option.
- Three riding modes "ECO", "Rain" and "Road" for efficient, day-to-day use as standard. "Dynamic" riding mode for further enhanced riding pleasure as an ex works option.
- Directionally stable suspension with one-piece tubular steel main frame.
- Powerful braking system with ABS. ABS Pro with banking capability as an ex-works option.
- 10.25-inch TFT colour screen with integrated map navigation and extensive connectivity as standard.
- Powerful LED lighting units all round. Adaptive Headlight Pro and light functions as ex works options.
- Storage compartments at the side and front. The side helmet compartment can now be operated while seated.

- Actively ventilated mobile phone charging compartment with USB-C charging port.
- Future-oriented design and colour scheme.
- Extensive range of optional extras and original BMW Motorrad Accessories as well as rider equipment.

2. Vehicle technology.



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“The new vehicle architecture with flat storage battery in the underbody is what enables the numerous smart solutions that make the CE 04 so distinctive.”

Clemens Pinnekamp, Project Manager Development BMW CE 04.

Plenty of power for supreme riding in the city and in urban areas.

The new BMW CE 04 is a practical and forward-looking everyday vehicle for the journey from home to the office or to an evening get-together with friends. In short: It is a vehicle for day-to-day use in the city. BMW Motorrad has worked closely on the design of the ride concept to suit this purpose.

With a maximum output of 31 kW (42 hp), the new BMW CE 04 has a powerful motor and offers outstanding riding pleasure. For the classic “traffic light start” discipline, it takes just fast 2.6 seconds. The reduced output L3e-A1-compliant version for the European market also offers excellent performance with a rated output of 11 kW (15 hp) and a maximum output of 23 kW (31 hp). Maximum power is achieved at 4 900 rpm and 4 000 rpm respectively. The maximum torque of over 60 Nm is available from 0 to 4 900 rpm (L3e-A1 version: 0 to 3 500 rpm). The maximum speed of both versions is 120 km/h – for speedy progress not just in the city but on main roads and motorway sections, too.

As such, the new BMW CE 04 offers supreme progress in the city and in an urban environment, as well as on trips across the country – even when carrying two people. And the new scooter can even effortlessly master hill starts with two people on board.

Long ranges of some 130 km thanks to ample battery capacity.

With 60.6 Ah (8.9 kWh), the new BMW CE 04 has an ample total battery capacity and provides a range of around 130 kilometres (reduced output version: 100 km). This enables forward-looking, emission-free riding in the city and in an urban environment as well as on smaller-scale pleasure tours after work or at the weekend.

Once again, BMW Motorrad has drawn on synergy effects with BMW Automobiles as part of the development process. For example, the new BMW CE 04 uses a lithium-ion battery module manufactured exclusively with green power, as in the current BMW iX and BMW i4. Other components for controlling the high-voltage battery system also derive from the passenger car sector.

Developers paid particular attention to the high quality and durability of the batteries here so as to ensure the rider is able to make full use of the long range even after many years of service life and in cool temperatures.

One of the main technological challenges here was to achieve optimum cooling of the high-voltage battery. On the one hand it was necessary to avoid excessively low temperatures due to the fact this results in an enormous increase in the cells' interior resistance, thereby reducing power. On the other hand, high temperatures have to be prevented since this would impact negatively on cell lifetime. In the BMW CE 04, this is taken care of by an air cooling system. Here, heat is dissipated from the high-voltage battery via a cooling plate with longitudinally arranged cooling fins on the underside of the vehicle.

Innovative electric drive with liquid-cooled electric motor.

Drive power in the new BMW CE 04 is provided by a permanent magnet EMP 156 electric motor mounted in the frame between the battery and the rear wheel, as used in a similar form in BMW cars such as the 225xe Active Tourer. The electric motor is liquid-cooled and the radiator is installed at the front of the vehicle.

The torque is transmitted via a single-stage primary gearbox and from there via the secondary drive with maintenance-free toothed belt to the rear wheel. The total gear ratio is 10.5.

The drive electronics are located directly above the electric motor. This system not only takes care of controlling the electric motor within a range of 100 to 150 volts, it also feeds in rider commands such as the position of the throttle grip. In addition, it decides whether to recuperate and how much recuperation torque, if any, is applied to the rear wheel.

One particular comfort feature of the new BMW CE 04 is the reversing aid. It is activated from the left-hand handlebar panel, and the rider's attention is drawn to it by the relevant indication in the TFT display. When the activation switch is pressed down, the BMW CE 04 can reverse at walking pace only, making it easier to manoeuvre.

Automatic recuperation during coasting.

BMW Motorrad conducted extensive riding tests to develop a specific type of recuperation for each riding mode, giving the rider a high-level convenience. The BMW CE 04 is ridden in exactly the same way as a scooter with a combustion engine. The rider does not have to actively initiate recuperation: The vehicle does so automatically whenever possible. As such, the energy recovery system extends the range and increases efficiency.

For example, recuperation commences when the throttle grip is closed, kinetic energy is converted into electrical energy and – as in a combustion engine – the generator function of the electric motor creates a drag torque which depends on the degree of recuperation. The drag torque generated by the electric motor is like the familiar "engine brake" that takes effect when removing the accelerator in a vehicle powered by a combustion engine.

Short charging times and charging technology based on the system used in cars.

The lithium-ion battery with a voltage of 147.6 V is charged via the integrated charging device, either at a regular household socket, a wallbox or a public charging station.

When the battery is completely flat, charging time ideally lasts 4 hours and 20 minutes. With the quick charger available as an optional extra with an output of 6.9 kW (2.3 kW is the standard level), charging time is reduced to just 1 hour and 40 minutes when the battery is completely flat. If the battery level is only 20 per cent and the battery is charged to 80 per cent, the charging time is reduced to 45 minutes using the optional quick charger.



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The charging socket is based on automobile standards and located underneath a cover in the front right-hand leg area. A storage compartment on the right-hand side of the vehicle houses the associated standard charging cable (Mode 2). The vehicle can be charged using standard cables, for example at public charging stations. If the BMW CE 04 is equipped with the quick charger (ex works option), charging times are significantly shorter than at a household socket. Country-specific charging sockets ensure the BMW CE 04 is equipped with the standard used in the respective market, eliminating the need for non-standard charging cable solutions.

In the same way as with BMW automobiles, BMW Charging solutions are available for the BMW CE 04, too – for maximum flexibility based on numerous customised programmes for charging at home, on the road and at work.

Synergy effects with BMW automobiles and technical safety according to car standards.

Unlike any other motorcycle manufacturer and due to its integration in the BMW Group, BMW Motorrad is able to draw on in-house experience and expertise in the automobile field in the development of electrically powered vehicles. The synergies available here range from the use of the same technical components through to high voltage technology expertise and the associated safety requirements as applicable to cables, plugs, battery electronics and safety shutdown.

In addition to drive and battery, this also includes the insulation monitoring device, the high-voltage indicator, the high-voltage distributor and the DC-DC converter which serves to convert high voltage to low voltage so as to feed the 12-volt vehicle power system, the 12-volt battery (12 V/5 Ah) and the control units. High voltage safety and functional reliability standards are applied here as established by leading automobile manufacturers (> 60 volt direct current).

Increased riding stability through slip control by means of ASC (Automatic Stability Control). DTC (Dynamic Traction Control) as an ex works option.

This traction control system is available in the new BMW CE 04, comparable to the Automatic Stability Control in BMW motorcycles with a combustion engine. ASC limits engine torque in relation to rear wheel slip.

In order to enable optimum controllability of the drive torque, the power electronics of the electric motor monitors the motor speed of the rear wheel and reduces drive torque when a plausibility level is exceeded. In this way, ASC especially supports the rider when setting off, preventing uncontrolled spinning of the rear wheel on road surfaces with a reduced friction coefficient such as wet cobblestones. In addition, ASC serves to prevent blocking of the rear wheel during intense recuperation and the resulting drag torque, especially on roads with a low friction coefficient.

Dynamic Traction Control (DTC), available as an optional extra, provides even greater riding safety resulting from excellent traction. DTC enables even more safe acceleration, especially in banking position.

Three riding modes "ECO", "Rain" and "Road" for efficient, day-to-day use as standard. "Dynamic" riding mode for further enhanced riding pleasure as an ex works option.

In developing the BMW CE 04, BMW Motorrad attached particular importance to providing opportunities for the rider to make an individual choice between maximum efficiency and maximum riding fun. Accordingly, the new BMW CE 04 features the riding modes "ECO", "Rain" and "Road" as standard. This means that optimum performance and riding characteristics are available in

every situation on the road. The additional "Dynamic" riding mode is also available as an ex works option.

ECO mode: In this mode, drag torque during coasting is significantly increased, while maximum recuperation combined with a limitation on acceleration and therefore energy consumption allows an extension of the range. The rider feels the increased drag torque as a slight intensification of deceleration torque when releasing the accelerator. This riding mode supports an energy-efficient riding style when there are a few more kilometres to cover than expected.

Rain mode: In this riding mode, there is a reduction in drag torque while coasting and during acceleration. In practice, the rider benefits from a particularly smooth and therefore very safe response of the electric drive, especially in adverse road conditions – for example when it is raining.

Road mode: Here, full acceleration is available and the BMW CE 04 is able to unleash its full temperament. The standard range is available in this mode.

Dynamic mode: In this mode, full acceleration is combined with intense recuperation via a direct set-up of the performance characteristic curve, creating a powerful "motor brake" for highly dynamic riding. In this riding mode, the new BMW CE 04 shows its sporty, dynamic side and exudes all the fascination of forward-looking electric mobility.

Directionally stable suspension with one-piece tubular steel main frame for smooth handling and a high level of ride comfort.

The foremost aim pursued by BMW Motorrad in developing the suspension of the new BMW CE 04 was to combine excellent handling qualities and a high level of comfort with directional stability at high speeds and the robustness required for day-to-day use.

The physical proximity of the electric motor output shaft and the swing arm axle minimises the moment of inertia around the swing arm centre of rotation, thereby enabling an optimum suspension/damping set-up and a sensitive response.

With a wheelbase of 1 675 mm, a steering head angle of 63.5 degrees and a castor of 120 mm, the new BMW CE 04 has basic geometrical suspension data that is quite similar to that of a motorcycle. On the road, the sophisticated overall conception of the suspension is reflected in easy manoeuvrability – especially in urban traffic – and a high level of ride stability when travelling swiftly along country roads or at even faster speeds on the motorway.

In urban traffic in particular, the riding experience is characterised by extremely light handling and excellent slow-running properties. The weight of the vehicle is comparable to that of a scooter powered by a combustion engine.

Wheel control, in addition to suspension and damping, is taken care of at the front by a single-bridge telescopic fork with a generously sized slider tube diameter of 35 mm. The rear wheel suspension consists of a single-sided swing arm. At



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the rear, suspension and damping are performed by a spring strut placed on the left-hand side, directly controlled and adjustable at the spring mount. The spring travel is 110 millimetres at front and 92 mm at the rear, thereby offering a high degree of comfort.

At the front, the new BMW CE 04 rolls on a light alloy cast wheel, size 3.5 x 15 inches, while at the rear is a light alloy disc wheel with a size of 4.5 x 15 inches. The new BMW CE 04 is fitted with generously sized tyres, with 120/70 R15 67H at the front and 160/60 R15 56H at the rear.

Powerful braking system with ABS. ABS Pro with banking capability as an ex works option.

At the front, a twin disc brake system with a diameter of 265 millimetres and two 4-piston fixed calipers ensures powerful, safe deceleration. At the rear there is a single disc system, likewise with a diameter of 265 millimetres and single-piston floating caliper. In

order to achieve a stable pressure point and optimum controllability, all brake lines are steel-wrapped. The standard parking brake is activated automatically when the side stand is folded out.

BMW Motorrad ABS ensures a high level of active safety. The Bosch 9.3 2-channel ABS allows independent regulation of the two brake circuits for the front and rear brake. The ABS Pro, which is available as an optional extra, provides even greater safety when braking. By means of a banking sensor, ABS Pro also controls braking on bends, thereby offering the greatest possible safety.

10.25" TFT colour screen with integrated map navigation for convenient route planning and extensive connectivity as standard.



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The new BMW CE 04 comes fitted as standard with a 10.25-inch TFT colour screen with integrated map navigation and connectivity. Its excellent readability, clear menu navigation and highly integrated operating concept put the new BMW CE 04 at

the top of the scooter segment. For the first time, the new 10.25-inch colour screen makes it possible to display a navigation map in the instrument cluster, so no additional display is needed.

For tough day-to-day use, the screen is fitted with a hardened and therefore extremely robust glass cover. It is anti-reflective for optimum display and protected from soiling and scratching by means of an anti-fingerprint coating. The full HD resolution screen with 1920 x 720 pixels offers unique detail and sharpness.

The screen's full capability comes into play in full screen mode. Meanwhile, the alternative split screen view allows several functions to be shown simultaneously and clearly on the screen, allowing Multicontroller operation. The main display – the "Pure Ride Screen" – shows the speedometer along with the basic functions and selection menu.

Alternatively, the navigation map is also displayed if navigation is active via the BMW Motorrad Connected app. The additional split screen shows either the on-board computer, the on-board trip computer, arrow navigation, a current phone call or media.

In addition, the screen offers a wealth of further information. This includes display of the battery charge state (SOC = State of Charge) and the energy balance. It shows the rider whether energy is currently being converted into propulsion or recuperated. This information helps the rider in their efforts to ride as efficiently as possible.

Vehicle functions such as "Settings", "Navigation" and "Communication" are operated using the standard Multicontroller. The tiles shown can be used to select the "My Motorcycle", "Navigation", "Media", "Phone" and "Settings" menus. There is seamless integration of the display and operation of the optional extras such the Dynamic riding mode (part of the Dynamic Package) and standard functions: This makes operation easy, just as for the standard functions.

With its 10.25-inch TFT colour screen, the new BMW CE 04 also provides the perfect platform for using a full interactive map view in conjunction with the navigation system of the BMW Motorrad Connected App. The navigation (map) is "mirrored" onto the screen via wireless LAN. As such, the new BMW CE 04 offers an unprecedented dimension of map navigation. The 10.25-inch TFT colour screen allows a particularly wide range of integrated navigation options to be operated via the Multicontroller. Thanks to the smartphone-based architecture, navigation is always on board: It couldn't be simpler to make route changes during a coffee break or share a route with friends.

The smartphone app provides the rider of the new BMW CE 04 with the latest navigation software and maps on an ongoing basis, as well as offering the latest functions. The app also allows maximum planning flexibility: It can be used for route planning itself, importing planned routes from Basecamp or downloading route suggestions from websites.

The BMW Motorrad Connected App can be downloaded free of charge from the Google and Apple app stores. It also comprises attractive additional functions such as route logging and the display of other travel statistics and information. In this way, logged routes can also be shared directly with other motorcyclists via the Rever community.

Telephony with smartphone connection.

In addition to the standard connectivity and the navigation map shown on the screen, the new BMW CE 04 also offers telephony with smartphone connection. A smartphone can be securely accommodated in a storage compartment on the left-hand inner side that is protected from splash water and ventilated by an electric fan, and its battery can be kept ready for use via USB connection.

The hinged storage compartment lid is automatically locked with the central locking system. Inside the storage compartment there is a holding device in which a smartphone can be securely fastened during travel by means of a flexibly sized fixture. Up to 1.5 A charging current (charging capacity up to 12 W) is available at the USB-C socket located in the storage compartment, which also enables quick charging depending on the smartphone type. A ventilation system reduces the heat generated when the smartphone is in use, while a seal on the storage compartment lid protects it from splash water.



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Powerful LED lighting units all round. Adaptive Headlight Pro and light functions as ex works options.

The lighting units on the new BMW CE 04 are based on state-of-the-art LED technology. They include a headlamp for high beam and low beam at the front. In addition to a rear light featuring LED technology, there are also LED turn indicators. The indicator lamps likewise use LED technology.

Even greater safety at night is offered by the adaptive turning light Headlight Pro, available as an ex works option. Here, the rider benefits from further improved illumination of the road when cornering for even safer riding at night. The adaptive turning light works by switching on additional LED elements in the main headlight that are fitted with their own reflectors, depending on banking angle. The turning light switches on automatically from a banking angle of more than 10° and at speeds of over 10 km/h. The additional lighting effect can be perfectly experienced up to a banking angle of 25°.



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In the new BMW CE 04, a U-shaped LED light guide, which also functions as the LED daytime running light (depending on market) provides the characteristic image of a BMW Motorrad vehicle, ensuring a high level of recognisability.

Light functions as an ex works option.

Thanks to the light functions, the riding experience on the BMW CE 04 is even more intense – and there are practical benefits, too: When the ignition is switched on, the so-called “Welcome” light is activated. The main headlamp and rear light go on, remain on for a short time and then fade into standby mode before the motor is started. Here, the transitional fading involves a dimming process in stages.

After being switched off, the front and rear lights are switched on to “Goodbye” for a brief moment before finally darkening slowly.

This function is to mark the fact that the rider is taking leave of the scooter – while at the same time making a clear statement: This is a BMW Motorrad vehicle.

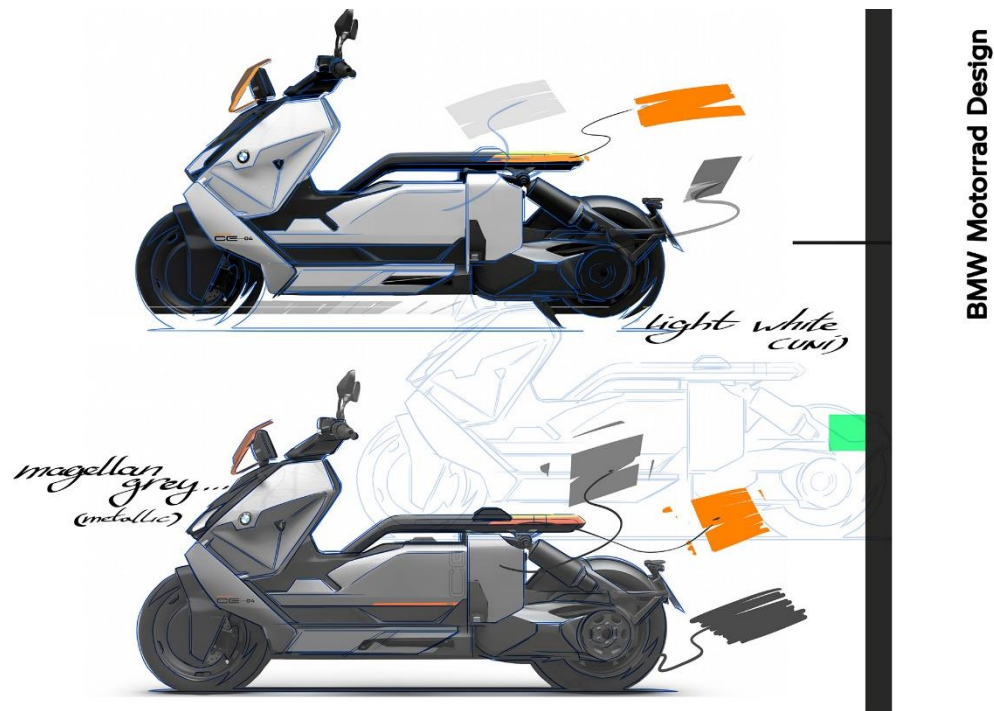
Another new function is for the purpose of guidance (“Follow me home”). After being switched off, the riding light can be activated by briefly pressing the high beam button. Other non-guidance functions and light sources remain switched off.

This function ensures optimum visibility at night, for example when manoeuvring in parking spaces or opening the garage at home.

Intelligent Emergency Call as an ex works option for further increased safety.

Ensuring the fastest possible assistance in the event of an accident or in situations of emergency and danger can save people's lives. For this reason, BMW Motorrad has developed an eCall system – "Intelligent Emergency Call" – which aims to get help to the scene of the incident as quickly as possible. This system is available as an ex works option for the BMW CE 04.

3. Design.



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"The new BMW CE 04 is the link between the user's analogue and digital worlds. It is both a means of transport and a means of communication for the big city commuter. With its forward-looking design thanks based on an innovative package, it sets out to redefine the scooter segment."

Edgar Heinrich, Head of Design BMW Motorrad.

The new BMW CE 04 embodies a new, forward-looking form of urban two-wheeled mobility in its design as well, featuring an innovative style that arouses emotions for this new drive technology while instantly identifying the scooter as a member of the BMW Motorrad family. It comes over as a design statement for the urban avant-garde. Not classic in style, but offering a synthesis between the lightness of a scooter and the technology of a motorbike – perfected for an urban setting.

Clear lines, a generous and unagitated surface design and a precisely elaborated, detailed design style underscore the future-oriented impression of the proportions.

The low, elongated vehicle body and the diagonally rising front section form a modern, uncluttered silhouette. At the same time, the flat battery in the underbody provides new freedom, such as the side-hinged and illuminated storage solution with emergency release, giving the rider easy access to the helmet as well as the charging cable. Like the storage compartment at the front of the leg area, this storage space can even be reached from a sitting position if necessary – a first among scooters.

A radically slim rear end – making for an iconic design that is entirely unique among scooters – is also ensured by the swing-arm-mounted number plate holder with lighting. In addition, the side stand is integrated in the design styling.

The avant-garde design stands in contrast to technology that is one third visible yet perfectly protected as part of the design. In the rear section of the BMW CE 04, for example, the motor, single-sided swing arm, suspension strut and toothed belt are deliberately designed to be open and visible.

The modern surface finish is in a striking Light White, complemented by matt black sections in the front and side areas as well as the “floating” seat. This underscores the visual lightness of the BMW CE 04. The standard seat already provides ideal pelvic support in most cases, and regardless of their height, riders will find an ideal seating position in the optional seats with backrest. With a total of six seats available, it is possible to perfectly adapt the seating position to individual needs (feed forward or active riding). The design also allows comfortable mounting from the rear and side.



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The wheels in black matt finish with disc-wheel look blend in harmoniously with the overall image. The new BMW CE 04 in Avantgarde Style (ex works option) is a striking, colourful statement of contemporary urban mobility that is even more future-oriented. In this style, the colour Magellan Grey metallic – a warm, refined grey tone – is supplemented with a black/orange seat, an orange wind deflector and several graphics.



4. Equipment programme.

A range of optional extras and a casual Ride & Style collection are available for further individualisation of the BMW CE 04.

The programme of optional equipment and accessories will be further expanded in the future. As is common BMW Motorrad practice, optional equipment items are supplied ex works and integrated in the production process. Original BMW Accessories are installed by the BMW Motorrad dealer or by customers themselves. This means that the BMW CE 04 can also be subsequently individualised and designed.

Options.

- Style Avantgarde (Magellan Grey metallic, seat in black/orange, wind deflector in orange, tapes).
- Comfort Package (comfort seat with backrest and seat heating, heated grips).
- Dynamic Package (ABS Pro, DTC, Headlight Pro, daytime riding light, turning light, Dynamic riding mode).

Individual options.

- Quick charger.
- Heated grips.
- Windshield, high.
- Seat variants with different backrest positions.
- Centre stand.
- DWA alarm system.
- RDC.
- E-Call (depends on market).
- Output reduction L3e-A1.

Original BMW Motorrad Accessories.

Storage.

- Luggage bridge.
- Vario Topcase Urban.
- Urban Collection side bag with holder.
- Urban Collection rear bag in two sizes.



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Charging.

- Quick charging cable 1/3-phase (Mode 3).

Design.

- Sticker kit covering parts (in "Definition CE 04 Art" look, compatible with the Basic variant in Alpinewhite uni only).
- Sticker kit for solid wheel (rear).

BMW Motorrad has also expanded its range of rider equipment to include attractive products for urban mobility to match the new BMW CE 04.

5. Rider equipment.



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"One outstanding highlight for me is the Tokyo parka! It features casual styling and its individually adjustable coloured LED light strips increase visibility while also providing protection with its integrated protectors. The parka cuts a fine figure – whether on the scooter or out and about in the city."

Ivana Cujic, Project Manager Connected Rider Equipment BMW Motorrad

To coincide with the launch of the innovative BMW CE 04, BMW Motorrad as a tradition-steeped manufacturer is adding two new, innovative items to its diverse portfolio of rider equipment. These new items are designed to be close to the pulse of city life and meet the needs of the urban rider. They are the Tokyo Connect GTX jacket and the helmet Sao Paulo, named after famous cities around the world. The outfit bridges the gap between highly functional motorbike gear and fashionable streetwear – ideal for daily commuting, both on and off the scooter.

Tokyo Connect GTX jacket.

Innovative streetwear with the protection and expertise of BMW Motorrad: The urban parka Tokyo always keeps its wearer connected to the vibrant city. The integrated Bluetooth connection to the smartphone and the BMW Motorrad Connected app can be used via an intuitive, visually discreet touch control panel in the jacket sleeve. The innovative light elements on the back and sleeves of the Tokyo Connect GTX jacket can also be activated by touch.

The light colour can be changed as required within the RGB spectrum. In addition to being a visual highlight, this also ensures improved visibility at night and in poor conditions, thereby increasing the wearer's safety.

Two options are available for the power supply of the control unit: It can be charged using a powerbank of choice or via a cable that connects directly to the BMW CE 04's 12 V socket. Not only the jacket itself can be easily charged, however: One of the three inner pockets is also designed as a charging pocket for smartphones.

The Tokyo Connect GTX jacket is equipped with flexible, lightweight protection according to protection class A, EN17092, which is hardly noticeable. The NP Flex protectors at the shoulders and elbows are removable. Preparation is provided for the additional use of a back protector. The stylish jacket is a perfect day-to-day companion off the scooter, too.

A high-strength 100% polyamide blend provides a durable upper, while three layers of waterproof, breathable Gore-Tex Pro with a 28000 mm water column provide protection from rain. Thanks to pleasant AirVent ventilation for warm days and the combination of a padded underjacket and 3-layer laminate for protection from the cold, the wearer is also perfectly prepared to face up to the wind and weather all year round.

And finally, storage space in the Tokyo Connect GTX jacket is very much a feature, too. It has three inner pockets – including the above-mentioned charging pocket for smartphone and powerbank – and two waterproof external pockets at the front that hold everything from headphones to tablet.

The Tokyo Connect GTX jacket is available in Night Blue.
Available in sizes: S to 2XL, for men only.

Sao Paulo helmet.

The new BMW Motorrad Sao Paulo jet helmet features clear, modern lines and looks dynamic. Its long visor and integrated sun shield enhance visibility and looks at the same time. The highly efficient, aerodynamic ventilation elements are integrated in the upper head section and the spoiler and can be closed if desired.

Made of glass fibre reinforcements, the helmet shell comes in two sizes (small helmet shell up to size 59, 1,350 gr). The inner pads for maximum wear comfort are removable and washable. A communication system is available for the Sao Paulo helmet which can be retrofitted.



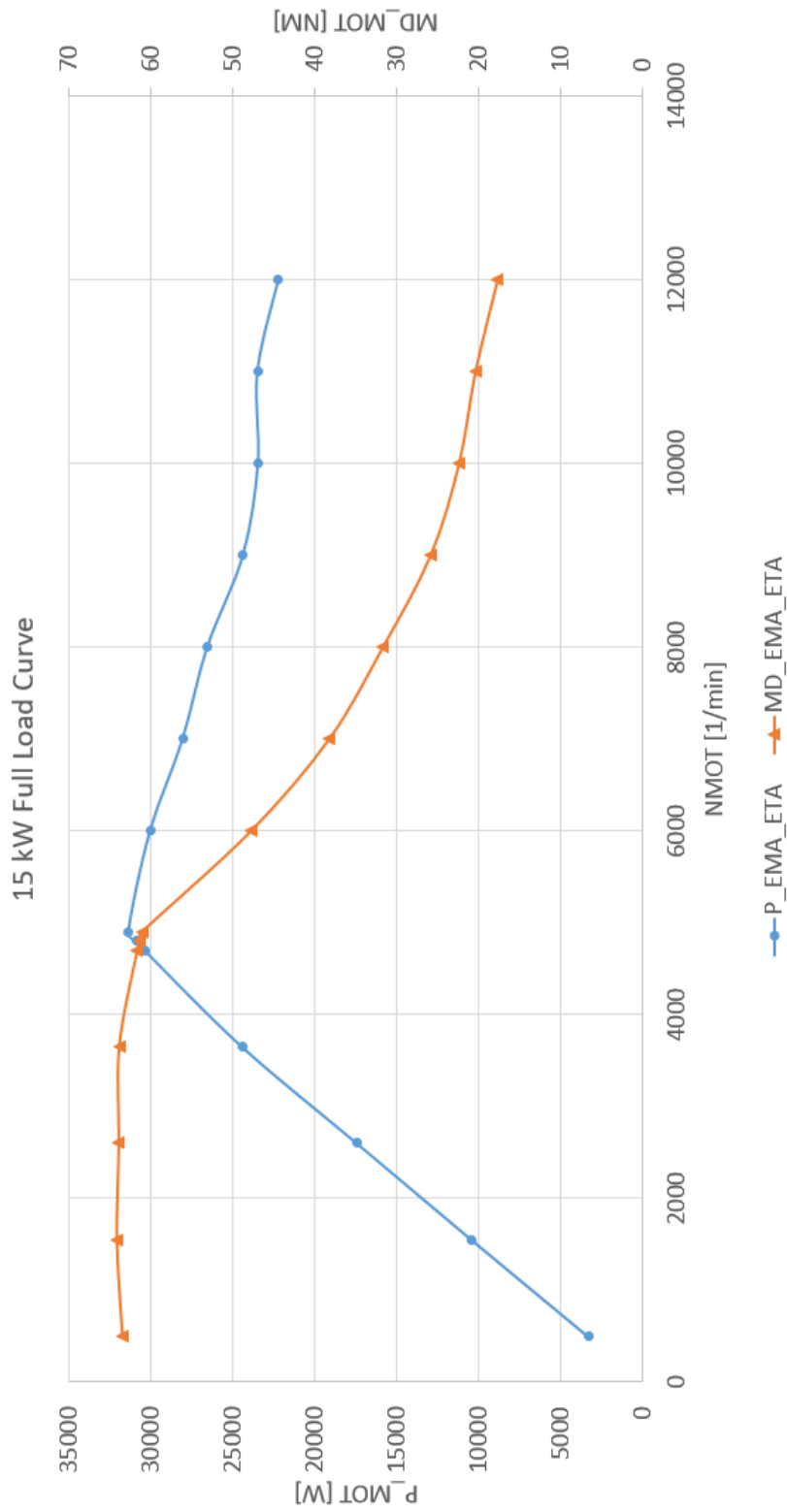
The Sao Paulo helmet is available in white, matt grey, black and neon yellow.

Decor versions: Com, Urban, Rock.

Available in sizes: 53/54 to 63/64, unisex.

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6. Motor output and torque.



7. Technical specifications.



		BMW CE 04 L3e-A1	BMW CE 04
Drive			
Rated output	kW/hp	11/15	15/20
at motor speed	rpm	4,900	4,900
Maximum output	kW/hp	23/31	31/42
at motor speed	rpm	4,000	4,900
Torque	Nm		62
at motor speed	rpm	1,500	1,500
Type	Liquid-cooled permanent magnet synchronous motor with surface magnets, max. motor speed 12,300 rpm		
Electrical system			
Drive battery	Air-cooled lithium-ion high-voltage battery		
Battery capacity	60,6 Ah (8,9 kWh)		
Battery voltage (rated)	V	147.6	
Charging capacity	kW	2.3 (6.9) (integrated charger or quick charger)	
Charging time for L3e-A2 (standard)	At 10 A charging current: approx. 4:20 h for 0-100 %, approx. 3:30 h for 0-80%.		
Charging time for L3e-A2 (optional quick charger)	At 30 A charging current: approx. 1:40 h for 0-100 %, approx. 1:05 h for 0-80 %, approx. 45 mins for 20-80 %.		
Charging time for L3e-A1 (standard)	At 10 A charging current: approx. 3:20 h for 0-100 %, approx. 2:25 h for 0-80%.		
Charging time for L3e-A1 (optional quick charger)	At 30 A charging current: approx. 1:10 h for 0-100 %, approx. 50 min for 0-80 %.		
Secondary battery	V/Ah	12/5	
Generator	W	DC/DC converter integrated in charging device	
Headlamp	LED high/low beam; LED daytime riding light/parking light		
Rear light	LED brake light/rear light		
Power transmission – gearbox			
Secondary drive	Toothed belt		
Total gear ratio	10.5		
Suspension			
Frame construction type	Tubular steel frame		
Front wheel control	Telescopic fork, Ø 35 mm		
Rear wheel control	Single-sided swing arm with directly mounted strut; Spring base infinitely adjustable		
Spring travel, front/rear	mm	110/92	
Wheel castor	mm	120	
Wheelbase	mm	1,675	
Steering head angle	°	63.5	
Brakes	Front	Hydraulically activated twin disc brake, Ø 265 mm 4-piston fixed calipers	
	Rear	Hydraulically activated single disc brake, Ø 265 mm, Single-piston floating caliper	
ABS	BMW Motorrad ABS		
Wheels	Die-cast aluminium wheels		
	Front	3.50 x 15"	
	Rear	4.50 x 15"	
Tyres	Front	120/70 R15	
	Rear	160/60 R15	

		BMW CE 04 L3e-A1	BMW CE 04
Dimensions and weights			
Total length	mm		2,285
Total width with mirrors	mm		855
Total height	mm		1,150
Seat height (without rider)	mm		780
DIN unladen weight, road ready	kg		231
Permitted total weight	kg		410
Performance figures			
Top speed	km/h		120
Acceleration			
0–50 km/h	s	2.7	2.6
0–100 km/h	s	9.9	9.1
Range according to WMTC	km	100	130
Fuel consumption according to WMTC	kWh/100km		7.7
Recuperation		Automatic recuperation during coasting	