

Husqvarna Motorcycles – Electric Minicycles Model Year 2023

Media Information

Husqvarna Motorcycles introduces its 2023 electric minicycle line-up consisting of two models, the EE 3 and EE 5, designed to meet the needs of young motocross riders from around the age of four years and up, and near-silent electric operation makes ideal where noise emissions are restricted.

Both models feature an intelligent, state-of-the-art control unit to deliver instant power with perfect control. The electric motor in each machine gives permanent drive, eliminating the need for a clutch or gearbox, making for a simple riding experience for youngsters.

Beginners and young riders growing their skills will find the high level of quality expected of Husqvarna Motorcycles in the all-new EE 3. Its electric motor delivers novice rider-friendly power of 3.8 kW. Lightweight, cutting-edge design, including a chromium molybdenum chassis, durable non-adjustable WP suspension, and 10" wheels make the EE 3 a perfect first-choice electric minicycle.

Inspired by the TC 50 motocross machine, the EE 5 has a 5 kW electric motor with performance comparable to its combustion engine counterpart. Advanced lightweight construction, a chromium molybdenum frame, premium WP adjustable suspension and 12" front wheel are central to the EE 5's comprehensive specification, making it a fully-fledged competition motorcycle.

The 2023 electric minicycles are instantly distinguishable with their striking new, modern graphics in white, blue and electric yellow accents. Drawing on the long motocross tradition and winning DNA of Husqvarna Motorcycles and their Swedish-inspired design to set a new benchmark for electric minicycles, the EE 3 and EE 5 are perfect for younger riders serious about having fun in their electric-powered offroad riding.

2023 Technical Highlights

- State-of-the-art electric motors with 3.8 kW (EE 3) and 5 kW (EE 5) peak output
- Six different ride modes
- 648 Wh (EE 3) and 907 Wh (EE 5) lithium-ion batteries
- Quick charging
- High-end chassis with race proven technology
- New MAXXIS MAXXCROSS MX-ST tyres give predictable grip on a variety of terrain
- EE 3 features durable WP suspension providing advanced performance and control
- EE 5 is equipped with the latest WP XACT air fork and a WP rear shock providing advanced performance and control
- Swedish-inspired design and striking new, modern graphics in white, blue and electric yellow accents
- Ergonomics are adjustable to suit rider size

Technical information by model

EE 3

Based on the EE 5 and delivering the same high-level of quality as its competition focused counterpart, the EE 3 is fitted with an electric power pack delivering negligible noise emissions. Featuring the same chromium molybdenum frame, as well as durable suspension and advanced lightweight construction, the EE 3 differs significantly from the many 'toy'-like electric minicycles on the market. The EE 3 is a fully-fledged motorcycle aimed at beginners and recreational riders alike. Additionally, near-silent operation makes the EE 3 more accessible to younger riders and better accepted in areas where noise emissions are restricted.

Drivetrain

The permanent magnet electric motor features advanced design and excellent reliability. The motor is powered by 60 Li-Ion cells providing a capacity of 648 Wh in a low 48 V configuration.

An intelligent, state-of-the-art control unit is integrated within the package and guarantees instant but controllable power delivery. The use of an electric motor means there is a permanent drive eliminating the need for a clutch or gearbox, resulting in a simple and uncomplicated riding experience for young riders.

Electric motor

Producing peak power of 3.8 kW, the permanent magnet motor features an extremely compact and slim design well-suited to a smaller chassis. It is air-cooled and its dust and waterproof layout make the motor wear- and maintenance-free. The Integrated Control Unit (ECU) guarantees a direct, but very controllable power delivery.

Battery

The EE 3 is fitted with 60 modern lithium-ion cells in a robust die-cast aluminium casing mounted just above the motor. The stored energy is 648 Wh, enough for more than two hours of riding for a beginner or up to 30 min for the fastest riders, depending on the terrain and conditions.

The integrated Battery Management System (BMS) ensures the safety and longevity of the battery pack.

Multi-functional instrument

A multi-functional instrument located between steering head and seat allows the user to select six different ride modes with different power characteristics suited to both beginners and advanced riders. In addition, the instrument displays the remaining charge of the battery.

Charger

An external worldwide charger supplying up to 900 W can be connected to any 110- or 230-Volt socket and plugs directly into the battery pack for easy charging.

Charging time 0 - 80% = 30 minutes

Charging time 0 – 100% = 60 minutes

Safety

The EE 3 is fitted with a Rollover Sensor (ROS) to cut the power in the event of a crash or tip over. A wrist lanyard key (connection between wrist and kill switch) stops the motor in the event of a riding scenario where control is lost. The ride modes can be set using a dongle located below the seat to preventing younger riders selecting more powerful ride modes on their own.

Bodywork

The bodywork of the EE 3 is modelled after the successful full-size motocross range. This means that when scaled down, smaller riders experience the same ergonomics instilling confidence and comfort in all riding conditions. Additionally, the ergonomics and comfort allow riders to perform at their peak for extended periods of time.

Frame

The high-strength chromium molybdenum steel frame is specifically designed to house the electric drivetrain and integrates carefully calculated parameters of longitudinal flex and torsional rigidity to benefit handling and suspension functionality. It guarantees easy handling and precise cornering, along with outstanding stability.

Front suspension

Featuring advanced suspension technology, the EE 3 is fitted with WP XACT 35 mm forks. Besides being very light weight, the non-adjustable 35 mm USD forks feature exceptional damping and comfort characteristics allowing the rider to push their limit with complete confidence. With 144 mm of wheel travel, the fork is able to conquer the most challenging track conditions and let the rider concentrate on the ride.

Rear suspension

Linked directly to the swingarm, the WP monoshock is matched perfectly to the front forks for exceptional balance and damping characteristics. Additionally, the non-adjustable rear shock offers 133 mm of suspension travel providing advanced comfort on challenging track conditions.

Brakes

Featuring the same level of technology offered on the full-size motocross range, the EE 3 is fitted with hydraulically operated brake callipers and wave brake discs front and rear. Both brakes are hand actuated and ensure advanced brake feel and stopping performance in all conditions, while allowing young riders intuitive control.

Wheels

Mirroring the full-size motocross range, the EE 3 uses lightweight, black anodised, aluminium rims providing the highest strength and reliability. For the EE 3, these are 10" diameter. As on the EE 5, MAXXIS MAXXCROSS MX-ST tyres provide progressive grip on a variety of terrain.

Seat height

The EE 3 allows the seat height to be adjusted at multiple levels. The standard model comes with a seat height of 600 mm, which can be easily reduced in two steps to 555 mm by lowering the bodywork/seat, mounting the rear shock in an alternative position, and lowering the front fork in the triple clamps.

Handlebars

The tapered NEKEN handlebar is made of high-quality aluminium alloy ensuring the best stability and safety. Its diameter reduces from 28 mm in the central area to 22 mm at the bends, going down to cylindrical ends of 18 mm at the controls. Here, a thinner lock-on ODI grip is mounted on the left side while an innovative throttle assembly for the electronic drive with a vulcanized ODI grip is mounted on the right. The thinner diameter is a major benefit to youth riders, affording better grasp while riding increasing control and drastically reducing fatigue. A crash pad on the handlebar protects the rider from impacts.

Graphics

Modelled after the full-size motocross bikes, the EE 3 features striking, modern graphics in white, yellow and light blue, echoing its Swedish brand heritage and differentiating its electric drive. Additionally, the graphics are applied using an in-mould process to ensure the best durability and quality.

EE 5

Based on the TC 50 and delivering the equivalent high-level performance as its combustion engine counterpart, the EE 5 is fitted with an electric power pack delivering negligible noise emissions. Featuring a chromium molybdenum frame similar to that of the TC 50, premium WP suspension and advanced lightweight construction, the EE 5 differs significantly from the many 'toy'-like electric minicycles on the market, and is a fully-fledged competition motorcycle aimed at beginners and seasoned racers alike. Additionally, near-silent operation makes the EE 5 more accessible to younger riders and better accepted in areas where noise emissions are restricted.

Drivetrain

The permanent magnet electric motor features an advanced design and excellent reliability. Producing peak power of 5 kW, the motor is powered by 84 Li-Ion cells providing a capacity of 907 Wh in a low 48 V configuration.

An intelligent, state-of-the-art control unit is integrated within the package and guarantees instant but controllable power delivery. The use of an electric motor means there is a permanent drive eliminating the need for a clutch or gearbox, resulting in a simple and uncomplicated riding experience for young riders.

Electric motor

Producing peak power of 5 kW, the permanent magnet motor features an extremely compact and slim design well-suited to a smaller chassis. It is air-cooled and its dust and waterproof layout make the motor wear- and maintenance-free. The Integrated Control Unit (ECU) guarantees direct but very controllable power delivery.

Battery

The EE 5 is fitted with 84 modern lithium-ion cells in a robust die-cast aluminium casing, mounted just above the motor. The stored energy is 907 Wh, enough for more than two hours of riding for a beginner or up to 25 min for the fastest riders, depending on the terrain and conditions.

The integrated Battery Management System (BMS) ensures the safety and longevity of the battery pack.

Multi-functional instrument

A multi-functional instrument located between steering head and seat allows the user to select six different ride modes with different power characteristics suited to both beginners and experienced racers. In addition, the instrument displays the remaining charge of the battery.

Charger

An external worldwide charger supplying up to 900 W can be connected to any 110- or 230-Volt socket and plugs directly into the battery pack for easy charging.

Charging time 45 minutes (80%).

Charging time 70 minutes (100%).

Safety

The EE 5 is fitted with a Rollover Sensor (ROS) to cut the power in the event of a crash or tip-over. A wrist lanyard key (connection between wrist and kill switch) stops the motor in the event of a riding scenario where control is lost. Ride modes can be set using a dongle located below the seat to prevent younger riders selecting more powerful ride modes on their own.

Bodywork

The bodywork of the EE 5 reflects years of motocross testing and experience to offer perfect ergonomics and instill confidence and comfort in all riding conditions. Additionally, the ergonomics and comfort allow riders to perform at their peak for extended periods of time.

Frame

The high-strength chromoly steel frame has been adapted slightly to house the electric drivetrain and integrates carefully calculated parameters of longitudinal flex and torsional rigidity to benefit handling and suspension functionality. It guarantees easy handling and precise cornering, along with outstanding stability.

Front suspension

Featuring the latest in suspension technology, the EE 5 is fitted with a revolutionary WP XACT fork. As well as being very lightweight, the 35 mm USD forks feature exceptional damping and comfort characteristics, allowing the rider to push the limit with complete confidence. With 205 mm of wheel travel, the air unit in the left fork leg can also be easily adjusted with the use of an air pump to suit rider preference, weight or track conditions, affording the rider more riding time and less time spent setting up the suspension.

Rear suspension

Linked directly to the swingarm, the WP monoshock is matched perfectly to the front forks for perfect balance and damping characteristics. Additionally, the rear shock offers 185 mm of suspension travel and is fully adjustable, allowing it to be tailored to rider preferences or track conditions.

Brakes

Featuring the same level of technology offered on the full-size motocross range, the EE 5 is fitted with hydraulically operated brake callipers and wave brake discs front and rear. The system ensures advanced brake feel and stopping performance in all conditions.

Wheels

Mirroring the full-size motocross range, the EE 5 uses lightweight, black anodised, aluminium rims, providing the highest strength and reliability, while the new MAXXIS MAXXCROSS MX-ST tyres provide advanced grip on a variety of terrain.

Seat height

The EE 5 allows the seat height to be adjusted to multiple levels. The standard model comes with a seat height of 665 mm. This can be easily reduced to 615 mm by lowering the bodywork/seat, mounting the rear shock in an alternative position, and lowering the front fork in the triple clamps.

In addition, with a Suspension Lowering Kit from the Technical Accessories catalogue, the suspension units can be further lowered for a minimum seat height of just 550 mm to accommodate the smallest of riders of four years old or even younger.

Handlebar

The tapered NEKEN handlebar is made of high-quality aluminium alloy ensuring the best stability and safety. Its diameter reduces from 28 mm in the central area to 22 mm at the bends, going down to cylindrical ends of 18 mm at the controls. Here, a thinner lock-on ODI grip is mounted on the left side while an innovative throttle assembly for the electronic drive with a vulcanized ODI grip is mounted on the right. The thinner diameter is a major benefit to youth riders, affording better grasp while riding increasing control and drastically reducing fatigue. A crash pad on the handlebar protects the rider from impacts.

Graphics

The EE 5 features striking, modern graphics in white, blue and electric yellow accents echoing its Swedish brand heritage and differentiating its electric drive. Additionally, the graphics are applied using an in-mould process to ensure the best durability and quality.

Technical Accessories

Ensuring young riders have the technical products needed for their machines to perform and look their very best, Husqvarna Motorcycles' Technical Accessories further enhance the performance and aesthetics of the EE 3 and EE 5 models. The Technical Accessories range combines innovative technology with premium quality and ease of fitment to make personalising each of the Husqvarna models simple, rewarding and beneficial.

Handlebar

Made of high-strength aluminium and evaluated in complex and specially-developed test cycles, the Technical Accessories Handlebar for the EE 3 and EE 5 has a width of 670 mm and a rise of 76 mm. Its dimensions are carefully selected for optimum control and ergonomics.

Rear Sprocket

Made of high-strength, yet extremely lightweight aluminium with a sophisticated anodised surface finish, the Technical Accessories Rear Sprocket reduces rotating mass and vibration for optimum power transmission efficiency. Precisely ground to 0.002 mm, the rear sprocket offers a straight and impact-free chain track.

Chain Guide

A precision-moulded, competition-developed guide helps to keep the drive train tracking true on the sprockets to prevent it from jumping. The Chain Guide is a high quality and incredibly long-lasting upgrade designed to withstand the toughest of offroad conditions.

Frame Protection Sticker Kit

For EE 3 and EE 5 minicycles used in tough conditions, there is a Frame Protection Sticker Kit to prevent damage to vulnerable areas of the chassis. They have been carefully designed to work with the slim lines of both models.

Valve Cap Set

Anodised high-strength aluminium valve caps are both stylish and durable, improving overall aesthetics and providing a factory racing team appearance.

Factory Adjuster Wheel

CNC-milled from high-strength aluminium, the compression adjuster guarantees quick and easy changes to the damping characteristics of the WP XACT air fork fitted to the EE 5, enhancing the overall look of the minicycle.

Kids Functional Apparel

The 2022 Husqvarna Motorcycles Functional Apparel range features a number of items for EE 3 and EE 5 riders, to take them from their first rides to the podium. The collection boasts many innovative technical features to deliver the highest levels of comfort, durability and protection. Mirroring the styles of Husqvarna Motorcycles' adult Functional Apparel line, all kids items are also styled to complement the striking design of the EE 3 and EE 5 electric minicycles.

Kids Railed Helmet

Developed to fit young heads and to offer day-long comfort and protection, the new Kids Railed Helmet is an offroad design with a dual-density EPS inner shell. Other features include: a removable, washable, moisture-wicking inner lining and cheek pads; screw-adjustable peak; and emergency 'help' tabs for the removable cheek pads. The outer edges of the helmet are optimised to fit with a neck brace and offer the security all youngsters need.

Kids Strata Goggles

Exclusively designed and manufactured for Husqvarna Motorcycles by 100%, the Kids Strata Goggles have anti-fog technology and an anti-scratch coating to keep young riders focussed on the prize. There is a two-layer, fleece-foam lining for comfort while adhesive silicone strips in the headband keep the goggles positioned on the rider's helmet.

Kids Railed Shirt

Pure offroad race style in the new Kids Railed Shirt, with mesh inserts and perforated ventilation zones to keep young riders cool and look good. The PE fabric of the shirt is finely ventilated too, and decorated with UV-resistant, fade-proof sublimation prints.

Kids Railed Pants

Performance offroad pants for kids to match the Kids Railed Shirt. The Kids Railed Pants are reinforced with Cordura® and have a heatproof and abrasion-resistant Kevlar® knee structure. Mesh inserts keep junior riders cool while elasticised panels in movement-intensive areas ensure maximum mobility.

Kids iTrack Railed Gloves

Another exclusive for Husqvarna Motorcycles by 100%, the Kids iTrack Railed Gloves are truly lightweight performance motocross garments. With perforated palms and mesh between the fingers for ventilation, they also have silicone print for better grip and control.

Kids Flame Boots

Leading motorcycle footwear manufacturer SIDI developed these offroad boots especially for kids, and they are exclusive to Husqvarna Motorcycles. As expected of both brands, there is a host of safety, comfort and design features including: internal polyurethane protection for vulnerable parts of the foot; metal toe caps; a fixed shin plate; and an anatomical, non-deformable rigid heel. Each boot has three replaceable buckles and memory-regulation straps. SIDI's Flex system allows for safe movement and comfort, and there is a nylon inner sole with a removable foot bed.