

# Epiroc charging products

A flexible solution for all types of battery electric vehicles



# Flexible charging for battery powered machines

Epiroc offers flexible charging solutions for all types of battery electric vehicles. This also includes giving input for design of charging bays as well as offering lifting tools for Epiroc batteries.

All power cabinets are built up by a common plug and play 40 kW power module

## Main benefits

**Powerful cabinets** in order to ensure that machines in all sizes are supported and can be charged within reasonable time.

**Mobile model** to ensure that battery powered machines have the possibility for charging at any given time or place.

**Flexible** to fit all applications and machines, in any given environment.

Possibility to connect up to 4 charging posts for each charging cabinet

For a 160 kW power cabinet a multi voltage transformer is offered as an option

Robust design with plexiglass to protect against contact with high voltage. Electronic coating to protect against the harshest of environments.





All chargers are CE and CSA/UL certified.



Charging products are offered and supported globally by trained Epiroc service technicians. Service agreements on different levels are also available.



Power is adjustable per charging post in 20 kW increments. For example 160 kW from one charging cabinet can be split into 80+40+20+20 kW among 4 charging posts.





# Supporting a zero-emission future

The mining industry is moving towards zero-emission and we are offering several machine models with a battery powered driveline. To support your investments in this new technology, we offer a wide range of chargers and charging posts that can be customized for your individual needs.



## + Charging products

Every time you are designing your charging bay in the mine, a flexible solution is needed. Therefore we can offer you charging products with a numerous amount of options. These products are created to suit all types of operations no matter when and where.



## + Service agreements

Service agreements are available for our charging products. The customer is given several options of service at 3 different levels. This will give a good maintenance plan for a long lasting high performance product.



## + Connectivity

There is a lot of advantages of having your charger connected. As a customer it will be easy for you to monitor your charging products remotely through a cloud service. When a new software is available or if the system needs any attention, it can be updated remotely by an Epiroc service technician.



## Batteries as a Service

With Batteries as a Service we eliminate the risks of owning batteries and provide all the benefits of electrical power. We will take full responsibility for the batteries, from certification to maintenance and technology upgrades, using a truly circular business model.

The batteries can be used in Epiroc equipment and with other Original Equipment Manufacturers (OEMs).

## Charging bays

Epiroc charging products is more than just chargers. There needs to be a dedicated area in the mine where machines are charged. We call it charging bays; they can be designed in many different configurations depending on the equipment and battery fleet size. To support efficiency we offer charging bay design support to ensure maximum output of your battery equipment. 3D models can be created to illustrate the future charging bay to suit your specific needs.

## Lifting tools

When swapping batteries safety is of outmost importance. This is one of the reasons why we have developed a customized lifting tool for each battery model. The lifting tool secures the weight and balance, to keep the battery steady when swapping. This makes the swap safer as well as more efficient for the operator.

# Technical specifications

## Measurements and part numbers

| Models              | 160 kW Power cabinet | 160 kW Power cabinet MV | 320 kW Power cabinet | Charging post  | Mobile charger   |
|---------------------|----------------------|-------------------------|----------------------|--|--|
| Space claim (DxWxH) | 825 x 650 x 2195 mm  | 825 x 1250 x 2195 mm    | 825 x 1250 x 2195 mm | 420 x 420 x 1800 mm  | 670 x 640 x 1220 mm  |
| Mass                | 400 kg               | 680 kg                  | 800 kg               | 80 kg  | 130 kg   |
| Part number         | 9464 9000 16         | 9464 9000 17            | 9464 9000 01         | 9464 9000 06<br>(CCS 2.0 combo 1)<br><br>9464 9000 07<br>(CCS 2.0 combo 2) | 9464900008<br>(CCS 2.0 combo 1)<br><br>9464 9000 09<br>(CCS 2.0 combo 2) |

## Technical information

| Models   | 160 kW Power cabinet                     | 160 kW Power cabinet MV                  | 320 kW Power cabinet                     | Charging post  | Mobile charger       |
|--|--|--|--|----------------|----------------------|
| CCS 2.0 combo 1  | N/A                                      | N/A                                      | N/A                                      | Yes            | Yes                  |
| CCS 2.0 combo 2  | N/A                                      | N/A                                      | N/A                                      | Yes            | Yes                  |
| MV transformer built in  | No                                       | Yes                                      | No                                       | N/A            | No                   |
| Charging cables  | N/A                                      | N/A                                      | N/A                                      | 1              | 1                    |
| Length charging cables   | N/A                                      | N/A                                      | N/A                                      | 7 meters       | 5 meters             |
| Input voltage levels   | 380-480 V @ 50-60 Hz                     | 480-1000 V @ 50-60 Hz                    | 380-480 V @ 50-60 Hz                     | N/A            | 380-480 V @ 50-60 Hz |
| Nominal input power  | 174 kVa                                  | 174 kVa                                  | 347 kVa                                  | N/A            | 44 kVa               |
| Nominal input current  | 250 A                                    | Depending on input voltage               | 500 A                                    | N/A            | 63 A                 |
| Max output power   | 160 kW                                   | 160 kW                                   | 320 kW                                   | N/A            | 40 kW                |
| Max output current   | See max output current for charging post | See max output current for charging post | See max output current for charging post | 200 A          | 60 A                 |
| Output voltage levels  | 200 - 800 V DC                           | 200 - 800 V DC                           | 200 - 800 V DC                           | N/A            | 200 - 800 V DC       |
| Normal operational temperature (Works with less power over and under limits) | -30°C to +40°C                           | -30°C to +40°C                           | -30°C to +40°C                           | -30°C to +40°C | -30°C to +40°C       |
| IP class   | IP54                                     | IP54                                     | IP54                                     | IP54           | IP54                 |

## Certifications

| Models | 160 kW Power cabinet | 160 kW Power cabinet MV | 320 kW Power cabinet | Mobile charger | Charging post |
|--------|----------------------|-------------------------|----------------------|----------------|---------------|
| CE     | Yes                  | Yes                     | Yes                  | Yes            | Yes           |
| CSA    | Yes                  | Yes                     | Yes                  | Yes            | Yes           |
| UL     | Yes                  | Yes                     | Yes                  | Yes            | Yes           |







# United in performance. Inspired by innovation.

Performance unites us, innovation inspires us, and commitment drives us to keep moving forward. Count on Epiroc to deliver the solutions you need to succeed today and the technology to lead tomorrow.  
**[epiroc.com](https://epiroc.com)**

