



CC160 Charger

Normet reserves the right to change
this specification without further notice

Pictures may include options and additional equipment.

INTRODUCTION



Normet SmartDrive CC160 charger cabinets provide power where you need it the most. The 160 kW DC charger cabinet provide fast charging, robust and durable design is tailor made for harsh conditions.

Key features and benefits:

- 160 kW power output
- Compatible with CCS standards
- Dynamic dual charging capability
- 7" touchscreen with user friendly user interface
- Advanced cable support system
- Cloud based back-end, service and management dashboard
- Future-proof technology

GENERAL ELECTRIC SPECIFICATION

| | |
|------------------------------------|-------------------------------|
| Input voltage | 3-phase 380 - 440 VAC +/- 10% |
| Input frequency | 50-60 Hz |
| Nominal input current | 263 A |
| Nominal input power | 182 kVA |
| Power factor at full load | 0.94 |
| Efficiency at nominal output power | 94% |
| Maximum output power | 160 kW |
| Maximum output current | 240 A |
| Output voltage range | 200-920 VDC |

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ELECTRICAL PROTECTIONS

Over/under voltage, Surge protection, Short circuit, Earth leakage current, Over temperature

ENVIRONMENTAL SPECIFICATION

| | |
|----------------------------|--------------------------|
| Operating temperature | -40°C to +55°C |
| Derating high temperatures | 1,5%/1°C (+40 to +55°C) |
| Maximum altitude | 4000 masl |
| Altitude derating | 1%/100 m above 2000 masl |
| Enclosure class | IP54, IK10 |
| Humidity | <95% relative humidity |
| Operational noise level | <55 dB |

GENERAL

| | |
|------------------------|--------------------------------|
| DC connection standard | CCS |
| Connector type | CCS type 2, 250 A, air cooled |
| DC cable length | 7 m |
| DC charging outlets | 1-2 pcs |
| Cabinet cooling | Forced air cooled |
| Electrical safety | IEC 61851-1, IEC 61851-23 |
| EMC | IEC 61851-21-2, EN 61000-1...4 |
| Connectivity | 3G/4G/LTE, WiFi, OCPP 1.6/2.0 |

ACCESSORIES

- Second DC charging outlet with dynamic charging control
 - UL/CSA approval (mandatory in US/Canada)
 - Satellite readiness with dynamic module
 - Safety protection shelter
 - Fogmaker Novec 1230 fire suppression system
- Additional equipment:
- Fire suppression service tool kit

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SERVICES

NORMET SERVICES

Our services cover the whole life cycle of your equipment. They include start-up and commissioning, genuine spare parts, upgrades & modifications, and remanufacturing, as well as rental and leasing offerings, and field services. We also offer improvement services such as operator training and process audits.

SPARE PARTS

Genuine parts from Normet Services ensure that you always have the highest quality parts available to keep your equipment up and running. Depending on your needs, we can offer everything from individual parts to complete parts contracts, and our professionals around the world have the experience to ensure that you have the parts you need when you need them.

Initial spare parts package:

Available for one year of use*. Includes periodical service, most common wearing parts and most critical safety parts.

Spare parts packages made for customer needs:

Available based on years of use*. Includes periodical service, most common wearing parts and most critical safety parts.

* Recommendations are based on average time – can vary a lot depending on work site conditions.

UPGRADES AND MODIFICATIONS

Our Upgrades and Modifications services are designed to ensure the economical, efficient and purposeful performance of your equipment over its entire life cycle. A service provided by a reliable OEM like Normet ensures the safety and performance of your equipment. Normet Upgrades and Modifications save you both time and money, while delivering the high quality you expect from us.

SERVICE CONTRACTS



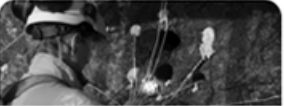

With a service agreement, Normet manages your fleet with guaranteed availability and agreed costs, giving you transparency for your life cycle costs, annual operational budget and fleet uptime. This lets you focus on your core operations. Each service agreement is built and customized to meet the individual customer's needs from our portfolio of services. Depending on the level of service agreement you need, you can choose anything from basic technical support for an individual machine all the way up to services for your entire fleet, as well as process performance. The service levels we offer are:

- Parts Availability
- Fleet Support
- Fleet Availability
- Process Performance

The content of a service level can be tailored to meet your particular requirements.

TRAINING SERVICE

Our Training Services are available for you and your operators throughout the equipment lifecycle and they include:

| |  Operation & Maintenance |  Spraying |  Charging |  Scaling |
|---------------------|---|--|---|---|
| ADVANCED | Advanced fault diagnostics & troubleshooting | Concrete chemicals, testing and preparing for EFNARC-certificate test | - | - |
| INTERMEDIATE | Troubleshooting training Foundations of electrics, hydraulics and mechanics NorSmart | Advanced training in concrete spraying Economics of concrete spraying | Advanced training in explosives Economics of charging | Advanced training in scaling Economics of scaling |
| BASIC | Operation and Maintenance Training Basic Product Training | Basic understanding of concrete spraying | Basic understanding of charging | Basic understanding of scaling |
| LEVEL | SERVICE | PROCESS KNOWLEDGE | | |

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START-UP AND COMMISSIONING

1. OPERATOR TRAINING

| | Start-up training | Commissioning |
|---|-------------------|---|
| 1.1 Classroom training | | |
| General introduction and operation of charger | Basic | No classroom training included in commissioning |
| Safety instructions | Basic | |
| Use of manuals | Basic | |
| Technical introduction of equipment | Basic | |
| Hands-on service and pre-operation checks | Basic | |
| 1.2 Practical training | | |
| Pre-operation checks | Basic | Introduction |
| Safety instructions | Basic | Introduction |
| Preparing the charger for specific operation conditions | Basic | Not covered |
| Operation | Basic | Introduction |
| Charger daily checks | Basic | Introduction |
| Troubleshooting | Basic | Not covered |

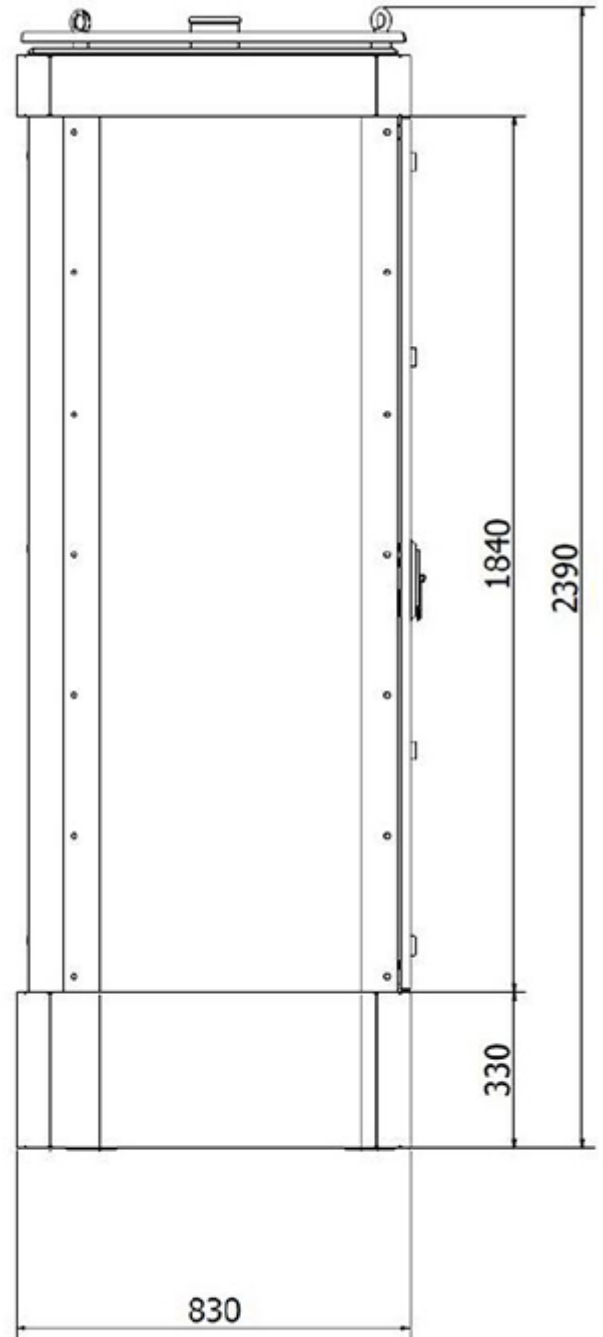
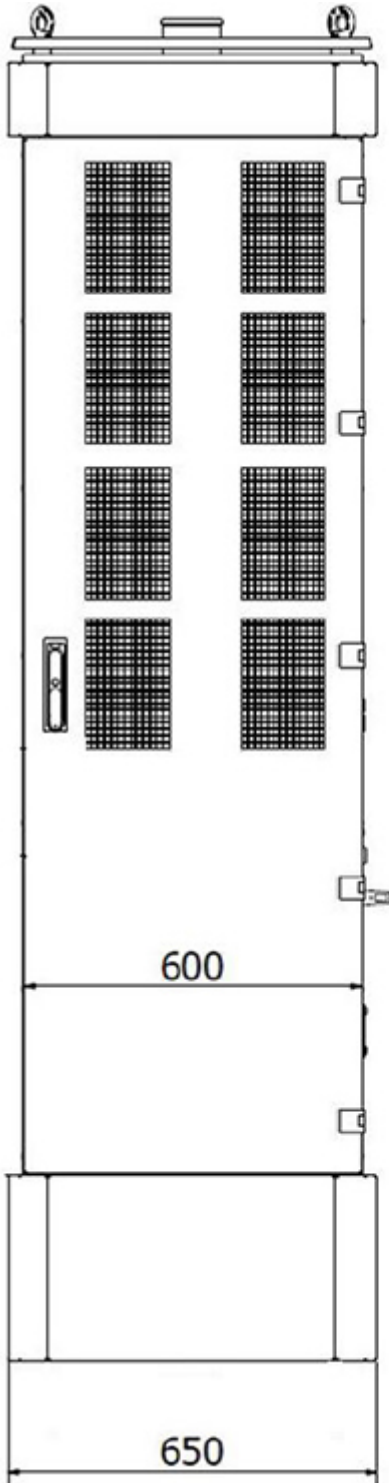
2. MAINTENANCE AND REPAIR TRAINING

| | | |
|--|-------|--------------|
| General operation of charger | Basic | Introduction |
| Symbols of drawings and codes | Basic | Not covered |
| Control systems | Basic | Introduction |
| Function of main components (depending on charger) | Basic | Introduction |
| Locations of components in the machine | Basic | Not covered |
| Periodical maintenance | Basic | Introduction |
| Troubleshooting | Basic | Not covered |
| Use of manuals and safety instructions | Basic | Introduction |
| Installation assistance | Basic | Not covered |

DIMENSIONS

| | | | |
|--------|---------|--------|--------|
| Height | 2390 mm | Depth | 650 mm |
| Width | 830 mm | Weight | 400 kg |

MECHANICAL DRAWINGS



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