Product data sheet

# HYC150





75 kW / 150 kW Rapid charging point for electric vehicles

## **Key features**



- Maximum output current up to 500 A
- Full performance from 300 V battery voltage
- Future-proof output voltage range from 150 V to 1000 V
- Highly integrated power electronics in an ultra-compact design
- Option for parallel DC charging
- hypercharger Power-Stack concept enables scalable and retrofittable power levels

\*Details in mm

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## Technical data

| SYSTEM SPECIFICATIONS                     |  |  |
|---|--|--|
| DC interfaces                             | CCS2 up to 500 A<br>CHAdeMO up to 200 A  |  |
| AC interfaces                             | 22 kW AC socket/cable (optional)   |  |
| Payment system                            | Choose between different card readers for credit cards or EC cards   |  |
| Load and charging management              | Smart, dynamic allocation of power modules and distribution of charging power to charging points   |  |
| Environmental conditions, in operation    | -30° up to +55° C (derating from 40° C), Operating height $\leq$ 2,000 m   |  |
| Environmental conditions, in storage      | -40° up to +55° C (1K22*/1Z2/1B1/1C1/1S10/1M10)<br>* Minimum temperature in deviation from the standard  |  |
| Environmental conditions, under transport | -40° up to +70° C (2K12*/2B1/2C1/2S1/2M4)<br>* Minimum temperature in deviation from the standard  |  |
| Humidity (in operation, storage)          | 0% - 95% relative (non-condensing)   |  |
| Efficiency                                | >94% at full charge  |  |
| Protective class                          | Class I (protective earth connection)  |  |
| Degree of pollution                       | Class 3  |  |
| Noise emission                            | <62 dB(A) at 1m distance @22° C, at full charging<br>(average value throughout entire charging process)<br>Option to set parameters for Silent Mode<br>(reduction of noise emissions by means of power derating) |  |
| Installation location                     | Indoor and outdoor installation  |  |
| Type of installation                      | Floor mounted on plinth or base (optional foundation base in concrete)   |  |
| Protection rating                         | IP54   |  |
| Impact resistance                         | IK10 in accordance with IEC 62262  |  |
| Dimensions (H x W x D)                    | 2235 x 420 x 663 mm (footprint)  |  |
| Weight                                    | 325 kg up to 462 kg  |  |
| Accessibility                             | optional, barrier-free design for the operating elements and plugs in terms of installation height (1,050 mm each) is possible (in accordance with DIN 18040-3)  |  |

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| POWER SUPPLY                           |   |  |
|--|---|--|
| AC input voltage                       | 3x 230 V (400 V) / 50 Hz  |  |
| Mains type                             | TN-C, TN-S, TN-C-S or TT  |  |
| AC Input current and power (line-side) | 233 A, 160 kW (model) at 150 kW DC output power, maximum 250 A  |  |
| THDi (Total harmonic distortion)       | <5% at nominal power  |  |
| Power factor                           | >0.99 (active PFC input level)  |  |
| Overvoltage category                   | OVC III, DIN EN 60664-1   |  |
| Integrated lightning protection        | Lightning protection module type 1 + type 2 + type 3  |  |
| Standby power consumption              | ≤60 W*<br>*dependent upon the number of power modules   |  |
| CHARGING INTERFACE                     |   |  |
| Maximum total DC output power          | 75 kW (one Power-Stack), max. 250 A<br>150 kW (two Power-Stacks), max. 500 A  |  |
| Output DC voltage range                | 150Vdc - 1000Vdc  |  |
| Output AC voltage range                | 3-phase, max. 32 A or 22 kW   |  |
| Charging connection options            | DC-Option: max. two cables to be combined from DC cable options<br>CCS2 @250 A<br>CCS2 @400 A (including 500 A boost mode)<br>CCS2 @500 A (water-cooled) max. 1 x<br>CHAdeMO @125 A or 200 A max. 1 x<br>CCS1 @200 A<br>GB/T @250 A max. 1 x<br>IEC 62196<br>AC-Option:<br>AC charging socket type 2 (with a hinged cover and lock)<br>AC charging cable type 2 (3.5 m or 5 m)<br>IEC 62196 |  |
| Cable lengths                          | 3.5 m or 5 m, specific lengths and cable management available on reques   |  |
| NORMS AND STANDARDS                    |   |  |
| Certifications                         | CE, RED   |  |
| EU Directives                          | 2014/35/EU (Low Voltage Directive), 2011/65/EU (RoHS),<br>2017/2102 (RoHS2), 2012/19/EU (WEEE), 1907/2006 (REACH Regulation)  |  |
| Charging and safety standards          | IEC 61851-1, IEC 61851-23, IEC 62477-1, IEC 61439-1, IEC TS 61439-7,<br>EN 62311, EN 50364  |  |
| EMV                                    | IEC 61000-4-2/-3/-4/-5/-6 (Noise immunity, Industrial field, Class A)<br>IEC 61851-21-2 (Emissions, Class A)<br>IEC 61000-3-12 (Harmonic currents)  |  |
| EMV radio installations                | EN 301 489-1/-3, EN 301 489-52, EN 300 330, EN 301 511, EN 301 908-1/-2/-13   |  |

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| GENERAL   |   |
|---|---|
| DC standard protocol (communications with the vehicle)  | CCS1/2: SAE J1772 / EN 61851-23/DIN SPEC 70121; ISO 15118<br>CHAdeMO 1.2<br>GB/T 27930 (for vehicle multicharger)   |
| RFID system   | ISO/IEC 14443A:<br>MIFARE Classic EV1 <sup>4</sup> , MIFARE Classic, MIFARE Mini,<br>MIFARE DESFire EV1 <sup>1</sup> , MIFARE Plus S <sup>2</sup> , X <sup>2</sup> , MIFARE Pro<br>X <sup>1</sup> , MIFARE Smart MX <sup>1</sup> , MIFARE Ultralight, MIFARE<br>Ultralight C <sup>3</sup> , MIFARE Ultralight EV1 <sup>4</sup> , NTAG2xx <sup>4</sup> , PayPass <sup>1</sup> ,<br>SLE44R35 <sup>1</sup> , SLE66Rxx (my-d move) <sup>1</sup> , LEGIC Advant <sup>1</sup> )<br><sup>1</sup> only UID <sup>2</sup> Security level support <sup>3</sup> without encryption <sup>4</sup> r/w extended security<br>options available upon request |
| Network connections                                     | 2G/3G/4G GSM-/CDMA modem, 10/100Base T-ethernet   |
| Communications protocol for the charging infrastructure | Open Charge Point Protocol (OCPP) 1.6 JSON  |
| User interface  | 15.6" display, 4 buttons  |
| Useful life   | min. 10 years (not including wear parts)  |
| CONFIGURATION OPTIONS                                   |   |
| Branding  | Options for custom colours (powder coating), foil application and stickers  |
| Law on Weights and Measurements                         | DC and AC meters available in accordance with German Law on Weights and Measurements  |
| Parametrisation of noise levels                         | Parameters can be set for the maximum noise level for day and night operation (eg. for use in sensitive areas)  |
| Additional safety features                              | Emergency stop button (optional), external emergency stop, crash<br>(tilt) sensor, door switc   |
| Remote Management                                       | Remote access, diagnostics, software updates  |

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