Data Sheet



HYDRA DION 20kW/ 30kW/ 40kW (2x20kW Dual)

Dual

Single

Single

- Wall-mounted design (optional pedestal mount available)
- Single/ Dual CCS2 Charging Connectors
- 10" digital user interface
- Single/Dual 20kW or 30kW DC Charging
- RFID access or simple Plug and Charge
- Fabricated from sheet metal
- Three-phase (400V AC) input
- OCPP 1.6J compliant. Compatible with other platforms
- Anti-UV protection and IP55 rated
- Ethernet or 3G/4G connectivity
- No earth required (PEN Protection)
- Smart air cooling
- Optional PENSIO contactless payment solution

HE HYDRA DION FAST DC EV CHARGER provides dynamic, load balanced power distribution for two vehicles each receiving

20kW or one EV being charged at 30kW DC.

The Hydra Dion is fitted with a single or double CCS2 charging cables, according to customer requirements. It can be connected to any three-phase AC input.

A lower powered DC charger can be a very costeffective way to achieve faster charging times as it bypasses the onboard AC charger (which could be limited to 11kW) in your EV. This means an average 60kWh family EV could be fully recharged in under 3 hours instead of over 8 hours on a domestic 7kW chargepoint.

With an IP55 rated dust and waterproof design it is both suitable for outdoor use or inside a parking garage. The sleek and compact DION EV charger is perfect for installations where space is limited as it can be wall-mounted but can also be supplied with an optional pedestal mount.

Access to the charging functions can be







controlled by the built-in RFID card reader allowing only authorised users or staff members to start and stop the charging process. We also offer an optional **PENSIO CONTACTLESS PAYMENT SOLUTION** allowing simple, app-free charging functions giving you the opportunity to generate revenue from the EV charger by allowing other users to pay on demand.

The Hydra Dion can self-detect the specification of the vehicle being charged – car, van, HGV or public transport vehicle - as well as its battery charge status and displays the information on the external 5" data screen in real-time.

Like all Hydra EV charging products the DION is OCPP compliant for data transfer and communications and can be fully managed and monitored in real time via our **Hydra Cloud** or **Hydra Nexus** platforms which can monitor and manage a single device or an entire nationwide network. The Dion can connect via wired ethernet (standard) or by 3G/4G data network (optional).

Data Sheet



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VEHICLE CHARGERS

HYDRA DION 20kW/ 30kW/ 40kW (2x20kW Dual)

| Features | Installation (Hanging plug wire and plug head) | Wall-mount/Floor-stand |
|---------------------------|---|--|
| | Rated Power | 20kW / 30kW or Dual 20kW |
| | Charging Mode | Plug andcharge, RFID Card |
| Input characteristics | Input voltage | Three phase AC 380V±15%(3P+N+PE) |
| | Grid frequency | 50Hz/60Hz±1Hz |
| | Input current | 20kW – 33A 30kW – 50A 40kW – 66A |
| | Power-on input impulse current | ≤ Maximum input current 120% |
| | Input protection | Overvoltage, undervoltage protection, lightning protection, phase loss detection |
| | Input micro break | With Type A leakage micro-break |
| Output characteristics | Output current | 100A |
| | Output voltage | DC 150V~1000V |
| | Output current limit protection | Yes |
| | Output short circuit protection | Yes |
| | Stable current accuracy | ≤±1% |
| | Stable voltage accuracy | ≤±0.5% |
| | Ripple factor | ≤±0.5% |
| | Effectiveness | ≥95% |
| | Power factor | ≥0.98 |
| | Working temperature | -30°C~+50°C |
| Structural electrical | IP protection level | IP55 |
| | Size | 760 x 500 x 280mm |
| | Wind tunnel | Bottom in top out |
| | cooling method | Smart air cooling |
| | Altitude | ≤2000m |
| | Noise | ≤60dB |

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Data Sheet



R

HYDRA DION 20kW/ 30kW /40kW (2x20kW Dual)

| Connection method | Connection method | Туре С |
|-----------------------|---|--|
| | Plug standard | CCS2 |
| | Standard | EN IEC-61851-1:2019; EN61851-23:2014; EN 61851- 24:2014; EN IEC 61851-21-2:2021 |
| | Cable Length | 4m |
| User Interface | LCD | High-definition highlight industrial touch screen |
| | LED | Charging green, fault red |
| | Button | EPO(Emergency stop detection) |
| Detection function | Emergency stop detection | Emergency stop cuts off DC output |
| | DC voltage sampling | DC+, DC- output DC voltage sampling |
| | BAT battery sampling | BAT+, BAT- battery voltage sampling |
| | DC current sampling (Front end of DC contactor) | DC output current sampling |
| | Measurement accuracy | Level 1 |
| | Battery reverse connection detection | Prevent the gun tip or battery from being reversed |
| | Connection temperature | Plug temperature detection |
| | Ambient temperature | Temperature check inside the case |
| | Insulation detection | DC+ and PE, DC- and PE impedance |
| | Leakage current detection | 30mA leakage protection switch |
| | Protective function | Output short circuit protection, output over voltage protection, output over current protection, fan failure alarm |
| Maintenance | USB upgrade | Firmware upgrade |
| Other | Welding inspection | 1 second discharge below 60V |

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