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innolectric D3C

The most versatile charge controller

HIGHLIGHTS

- Easy integration by simple CAN interface
- Communication according to DIN SPEC 70121, ISO 15118-20 to allow value added services
- All necessary peripherals can be controlled from the D3C, including DC contactors
- AC charging up to 11 kW available, Megawatt Charging System (MCS) in preparation

Full charging communication

State-of-the-art DC charging according to the latest standards requires fast, accurate and intelligent communication. The innolectric D3C can be used as the central communication unit in the electric vehicle.

The component complies with the relevant standards IEC 61851, DIN SPEC 70121 and ISO 15118-20 for charging communication. Thus it ensures reliable interoperability with other charging technology components and international compability.

The DC Charging Controller is suitable for electric vehicles with high battery capacity. This includes the majority of the commercial vehicles. It can also be used in compact work vehicles with limited installation space.

The D3C supports the international charging standards Type 1 / CCS1, Type 2 / CCS2 and NACS.

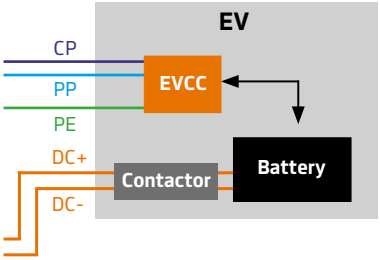
It supports AC charging up to 11kW via controlling an external onboard charger or AC/DC converter in the vehicle via CAN and providing the necessary signals for AC charging.

The MCS standard to allow megawatt charging is in preparation.

Application in different types of electric vehicles

Heavy E-vehicles

Compact and light working machinery



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Simple integration

The D3C is an intelligent stand-alone charge controller that manages the communication for a seamless DC charging process. It is suitable for electric vehicles, thanks to its wide LV input range. The D3C has been designed with a focus on easy „plug & play“ system integration for the customer. In addition, the intelligence of the communication controller in the application makes it a total solution rather than a simple vehicle component. The D3C is tested in a wide range of different environmental conditions to ensure reliable long-term operation.

Technical Data of the D3C	
Charging standard	AC: Type 1, Type 2, NACS DC: CCS1, CCS2, NACS available MCS in preparation
Charging communication	AC (IEC 61851, J1772) DC (DIN SPEC 70121, ISO 15118-20, IS 17017)
Interfaces	1x CAN J1939, 1x Service CAN
Degree of Protection	IP67
Dimensions (l x w x h)	with housing 197 x 44 x 154 mm PCB solo 165 x 32 x 130 mm
Weight	with housing 0,9 kg PCB solo 0,3 kg
Operating Temperature	-40 to +65 °C

State of the art technology

Updateable software

Charging communication and charging standards, as well as customer requirements can evolve over time. Thanks to over-the-air updates via EV-CAN, it is always possible to keep the DC charging controller up to date with the latest standards and requirements. All communication protocols are continuously updated by innolectric to acommondate future standard updates. The D3C can be updated to the latest version at any time.

Additional services

Depending on the requirements and the application, the respective additional function can be integrated after consultation with innolectric. The D3C provides a communication bridge whose functionalities can be implemented by innolectric as part of a development effort. This can include CAN protocol adaptations or support for different certificates to support standard-compliant charging, e.g.

innolectric supports its customers with integration assistance by engineering services. The intensity is defined by the need of the customer: We offer remote support on request as well as on-site support by our Customer Care team.

Cutting-edge solutions

innolectric drives forward electromobility and develops component solutions for electrically powered vehicles. We focus on the charging process as well as engineering services. innolectric offers efficient charging technology for on-board and off-board applications. It can be used in cars, trucks, all other commercial and construction vehicles for all relevant standards.

In addition to the D3C, we also offer the innolectric On-Board Charger for more complex requirements. The On-board Charger provides an integrated charging solution with all the functionality of the D3C. In addition to the DC charging standard PLC (DIN SPEC 70121 and ISO 15118-20), the OBC supports AC charging up to 22 kW. Users benefit from a turnkey solution that requires only a single integration of the system application on the user side, as the power electronics and charging communication are perfectly matched.

Customer benefits

The D3C has many other features to meet the customers‘ needs:

- Designed under consideration of relevant automotive standards to ensure safety and reliability in the LV and HV bordnet of the EV
- Full interoperability with all standards compliant EVSEs and EVs
- The D3C can also be purchased as PCB with connectors
- The housing of the D3C can be customized. White label delivery is also possible.

Ready to experience the future of EV charging?

Contact the innolectric sales team today to learn more about the functionality of the D3C. We are happy to assist you with your requirements and integration in your solution!
Contact us via email at sales@innolectric.ag.

All provided information without guarantee.

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