



DVCH

DC/DC converter for hybrid and electric vehicles

For hybrid and electric vehicles, electronic components such as high-voltage energy storage, electric motors etc. have an important role. Depending on the degree of electrification of the vehicle, components from conventional drive concepts are replaced by more efficient ones. Thus, in hybrid or electric vehicles, the generator can be saved, which supplies the 12V/24V/48V electrical system. Instead, a DC/DC converter is required, which changes the voltage of the high-voltage energy storage device to the voltage of the electrical system.

The DVCH converter meet the requirements occurring in a vehicle and also impress with extremely low construction volume and very high efficiency.

Benefits

- Very high efficiency of typ. 95 %
- Very small construction volume
- Galvanic separation up to 4,25kV
- Conduction-cooled
- CAN-Standard and J1939 protocol



DEUTRONIC [®]
EDWANZ group

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Design

- DC wide range input
- Several protection and self-protection functions (short-circuit protection, overtemperature protection and no load protection)
- Protection against unfavorable environmental conditions (IP protection)
- Customized changes possible
- Various voltage ranges and power (controllable, e.g. CAN)
- Interlock function



Technical Data

Type	Output power	Input voltage	Output voltage	Max. output current	Control inputs
DVCH451-370-14	450W	180–450VDC	14,2VDC	27A (boost 30A)	Optional: ITO, Power Good
DVCH451-500-14	450W	270–600VDC	14,2VDC	27A (boost 30A)	Optional: ITO, Power Good
DVCH500-245-13,8	500W	195–290VDC	13,8VDC	35A (boost 42A)	Optional: ITO, Power Good
DVCH1503-400-12	1500W	200–480VDC	0–15VDC	112A	CAN
DVCH1503-400-24	1500W	200–480VDC	0–30VDC	56A	CAN
DVCH1503-700-12	1500W	380–800VDC	0–15VDC	112A	CAN
DVCH1503-700-24	1500W	380–800VDC	0–30VDC	56A	CAN
DVCH3003-400-12	3000W	200–480VDC	0–15VDC	224A	CAN
DVCH3003-400-24	3000W	200–480VDC	0–30VDC	112A	CAN
DVCH3003-700-12	3000W	380–800VDC	0–15VDC	224A	CAN
DVCH3003-700-24	3000W	380–800VDC	0–30VDC	112A	CAN

