



New - 1kW to 50kW smart reversible DCDC converter

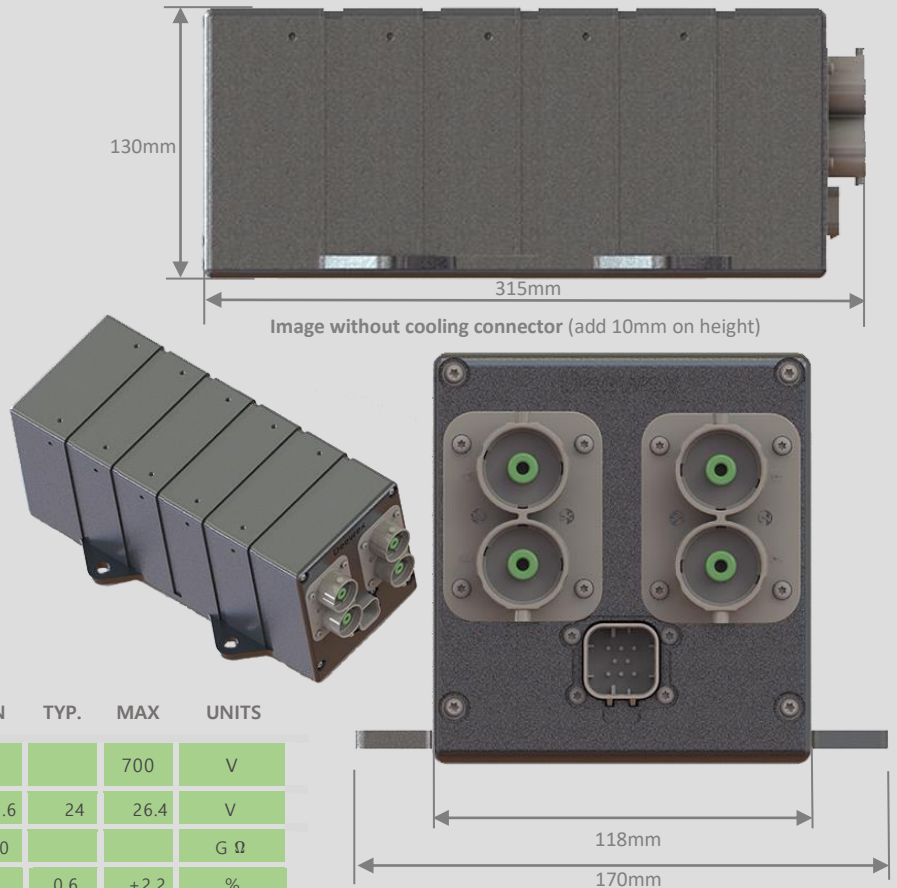
Ultra-Compact, Light, Ruggedized, Sophisticated DCDC converter

FEATURES

- Reversible Buck/Boost converter
- Low/High side voltage 24V..700V, current ..160A
- Very compact and high density (15kW/liter)
- Form factor for better integration
- Weight less than 7kg
- Regulation on voltage, current or power
- 3 profiles of conversion (fixed, typical, specific)
- Monitoring thru CAN 2.0B, 100ms at 1Mbit/s
- Integrated Active/passive discharge device
- Integrated High-voltage interlock Loop (HVIL)
- Using liquid cooling (optional)

APPLICATIONS

- Electric vehicles (car, truck, bus)
- HV smart grids, Battery
- Fuel Cell, Solar panel, Marine
- Chargers, Power stations



ELECTRICAL CHARACTERISTICS @ 25°C to 70°C

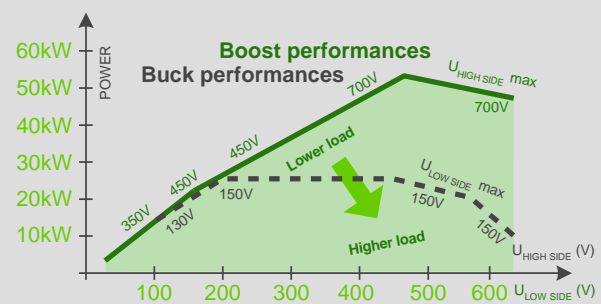
	MIN	TYP.	MAX	UNITS
Buck/Boost voltage (High side & Low side)	24		700	V
24V Control Power Supply (8 Watts)	21.6	24	26.4	V
Isolation 3kV (HV/service) up to 4000m – 60 seconds	10			G Ω
Voltage measurement (Low side & High side)		0.6	+2.2	%
Current measurement (Low side & High side)		1	+3.4	%
Temperature measurement		0.5	+1.5	°C
Operating and Storage temperature	-25		70	°C

INTERFACE & CONTROLS

Input/Output Voltage setpoint: 0V to 700V, 0.1V resolution (limits are not settable)
Input /Output Current setpoint: 0A to 160A, 1A resolution (limits are not settable)
Matching: Amphenol power plugs PL182 and PL282, TE connectivity plug 776276-1
Aluminum chassis fixation with screw M12 and grounding with screw M6

STANDARDS USED FOR DESIGN ONLY

Designed with respect to	Safety	ECE R100, IEC 61508-2
	Insulation/Isolation	IEC60664-1, NF EN 62477-1
	Ingress Protection	IP67
	EMC/EMI	ECE R10, EN55022
Mean Time Between Failure (MTBF)	> 250,000 hours	



SIMPLIFIED ORDERING INFORMATION

ECNV - $U_{HV} U_{LV} I_{HC} I_{LC}$ - CONVERSION

$U_{HV} U_{LV} I_{HV} I_{LV}$ are limits for Voltage/current on both sides

Conversion* : FC= Fixed conversion profile, TC=Typical conversion profile (Battery, Fuel cell, solar panel), CS= specific conversion profile (non-typical)

*For profiles TC and CS, more precise data will be required

Data presented in this document is subject to change without notice as it is part of continuous development.

DEEWEX™ is an manufacturer of advanced power Systems. For a complete description of our activities and sales contact, please visit our website <http://www.deewex.com> / +33 (0)6 51 68 21 73 (France, Poitiers).

