

Smart DC/DC Converter Reversible

CONVY productline - Air cooled version

FEATURES

- Programmable DC/DC Smart Converter as current or voltage source
- Regulation according to Voltage, Current or Power
- Regulation of the Input or the Output
- Buck / Boost transition controlled by CAN command
- Parallel operations of several modules for higher power delivery without limitations (in current source mode only)
- Air cooled
- 19" form factor available
- Insulated CAN 2.0B connectivity

APPLICATIONS

- Fuel cells
- Electrical vehicles range extenders
- Super capacitors
- Battery systems



PERMANENT MAX POWER & REFERENCES

		Vhighside				Eff. @Pmax	Main reference (1) xx = 02 for 12 V Service power Supply xx = 03 for 24 V Service power Supply
		70 - 110 V	300 - 450 V	500 - 700 V	600 - 950 V		
Vlowside	24 - 40 V	3.5 kW				90%	CONV-DCDC-3KW5-AABC-xx-H
	40 - 60 V	3.5 kW				95%	CONV-DCDC-3KW5-ABBC-xx-H
	35 - 70 V		5 kW			92%	CONV-DCDC-05KW-ABFI-xx-H
	50 - 100 V			5 kW		91%	CONV-DCDC-05KW-ABJN-xx-H
	80 - 150 V		8 kW			95%	CONV-DCDC-08KW-BCFI-xx-H
	150 - 250 V			15 kW		96%	CONV-DCDC-15KW-CEJN-xx-H
	300 - 400 V			25 kW		97%	CONV-DCDC-25KW-FHJN-xx-H
	350 - 450 V				16 kW	96%	CONV-DCDC-16KW-GILS-xx-H

(1) : multiple units and 19" rack mounted units, please consult us.

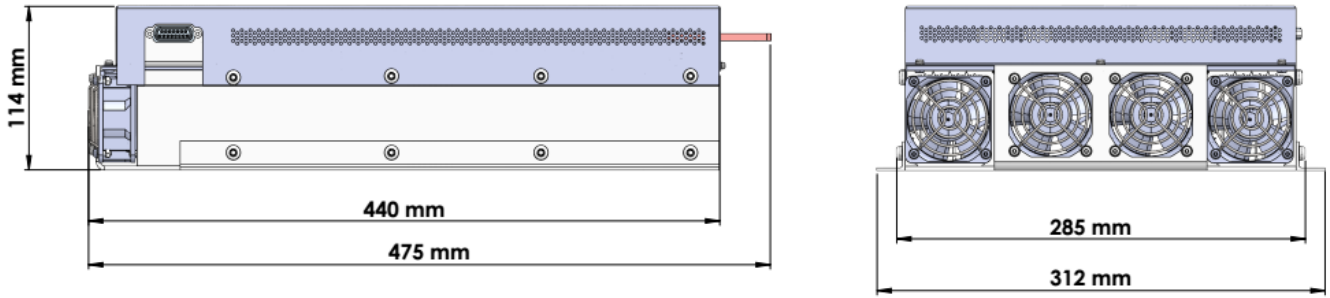
REGULATION MODES

	LOW SIDE	HIGH SIDE
Current	Available	Available
Voltage	Available	Available
Power	Available	Available

COMMUNICATION AND MONITORING

	MIN	TYP.	MAX	UNITS
CAN 2.0B bus speed	125		500	Kb/s
CAN periodicity		100		ms
Measured voltages accuracy		±0.7	±2	% of full scale
Measured Low Side current accuracy		±1.9	±3	% of full scale
Measured High Side current accuracy		±1.7	±2.5	% of full scale
Measured internal temperature accuracy		±1	±3	°C
Service Power Supply - Voltage (12V option)	9	12	13.5	V
Service Power Supply - Voltage (24V option)	18	24	28	V
Service Power Supply - Power consumption (fans included)	1		30	W

MECHANICAL DATA



SINGLE unit (Weight : 11 kg)

CONNECTORS

V Low side	Copper Bus bar 5 x 16 mm section
V High side	
CAN + Service voltage	DB15

COOLING PARAMETERS

	MIN	TYP.	MAX	UNITS
Air flow rate (permanent)			268	m ³ /h
Inlet air temperature			55	°C

ENVIRONMENT DATA

	MIN	TYP.	MAX	UNITS
Galvanic insulation between power circuit and chassis-control interface (1min test)			3.0	kV
Insulation resistance	2			MΩ
Ambient temperature (operating)	-40		55	°C
Ingress Protection			IP20	-

STANDARDS USED FOR DESIGN

EMC	R10
EMC (04KW-AABC only)	2004/108/CE
Control circuit supply voltage	ISO 16750-2 mode D
Mechanical loads	ISO 16750-3
Climatic loads	ISO 16750-4 code G

MOUNTING CONFIGURATIONS in 19" CABINET



Quadruple unit, 19" rack mounting

Single unit 3U – 19" rack mounting