

## Smart DCDC Converter Reversible

CONVY productline - Air cooled version

### FEATURES

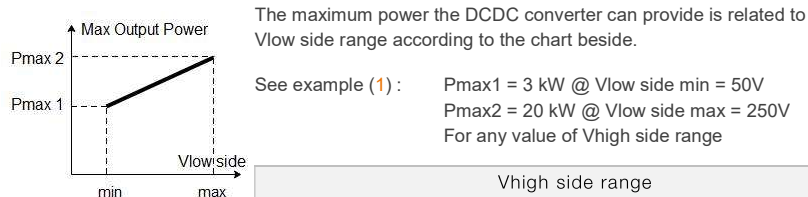
- Programmable DCDC Smart Converter as current or voltage source
- Regulation according to Voltage, Current or Power
- Regulation of the Input or the Output
- Buck / Boost transition controlled by CAN command
- Parallel operations of several modules for higher power delivery (current source or power source modes only)
- Air cooled
- Insulated CAN 2.0B connectivity

### APPLICATIONS

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



### PERMANENT MAX OUTPUT POWER



		Vhigh side range					Eff. @Pmax	Size	Reference
		200 ... 400V	300 ... 500V	500 ... 700V	600 ... 700V	550 ... 950V			
Vlow side range	35 ... 140V	3 - 6kW (*)					98%	SINGLE	CONV-DCDC-06KW-ACDH-xx-H
	50 ... 250V		3 - 20kW (1)				98%	SINGLE	CONV-DCDC-20KW-AEFJ-xx-H
	50 ... 300V			4 - 20kW			98%	SINGLE	CONV-DCDC-20KW-AFJN-xx-H
	150 ... 400V			12 - 25kW			98%	SINGLE	CONV-DCDC-25KW-CHJN-xx-H
	300 ... 400V				28 - 32 kW		97%	SINGLE	CONV-DCDC-32KW-FHLN-xx-H
	100 ... 450V					5.5 - 17kW	98%	SINGLE	CONV-DCDC-17KW-BIKS-xx-H

(\*) : Boost only

### COMMUNICATION AND MONITORING

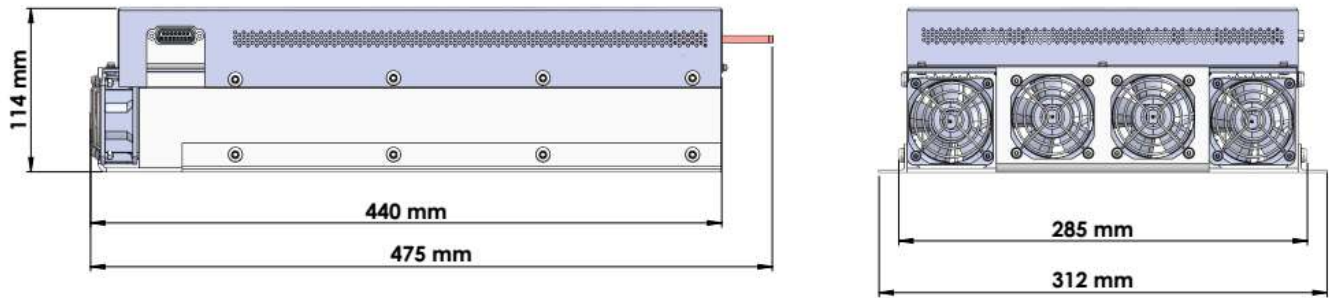
	MIN	TYP.	MAX	UNITS
CAN 2.0B bus speed	125		500	Kb/s
CAN periodicity		100		ms
Measured voltages accuracy		±0.7	±2	% of full scale
Measured Low Side current accuracy		±1.9	±3	% of full scale
Measured High Side current accuracy		±1.7	±2.5	% of full scale
Measured internal temperature accuracy		±1	±3	°C
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

### REGULATION MODES

	CURRENT	VOLTAGE	POWER
According to Low side	✓	✓	✓
According to High side	✓	✓	✓

## 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 <sup>3</sup> /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
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**