

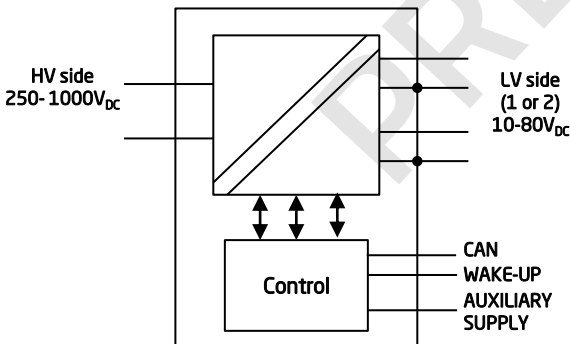
DCDC MO

Commercial & Off-Highway applications
 400V and 800V battery compliant
 Battery charger / LV network supply
 Total output power 6kW/300A



KEY FEATURES

- > Wide HV range: 250V to 1000V_{DC}
- > Wide LV range: 10 to 80V_{DC} (CLASS B1 ISO6469-3)
- > Single or dual LV connections
- > CAN Bootloader & remote communication
- > HV to LV capability for HV bus pre-charge
- > Best-in-class power density
- > Weight: <4kg



TECHNICAL SPECIFICATION

High Voltage connection

High Voltage range	0 -1000V _{DC}
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Low Voltage connection(s)

LV configuration	Single or dual
LV range	10 to 80V (set by CAN)
Static precision	0.3%
Output current limit	0 to 300A
Current limit accuracy	<3%
Short circuit protection	Yes (current regulation at setpoint value)
Continuous output power	6 000 W max
Line + load regulation	10% for 0-100% step load in 100μs (without battery)

Logic inputs

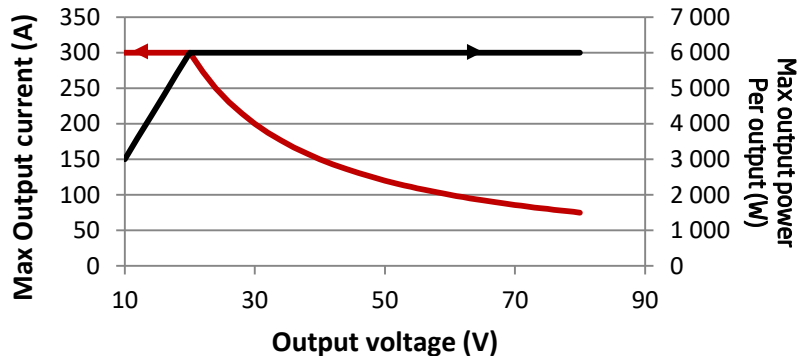
Wake-up	Logic input ON/OFF
Auxiliary Supply	10V to 75 VDC (LV124)
IDLE mode consumption	< 100μA

Efficiency

Global efficiency	> 94%
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Environment

Environmental protection	IP68 IP6K9K
Altitude	< 4 000 m (< 12 000 ft)
Cooling	Liquid temperature 65°C max
Operating temperature range	-40°C / +85°C ambient
Weight	< 4kg



BrightLoop Converters

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OPTIMUM PRODUCT LINE

CAN Interface

Bus speed	1000 (default) / 500 / 250 / 125 Kbps
Controls	LV current limit (1A resolution)
	HV current limit (0.1A resolution)
	LV voltage setpoint (0.015V resolution)
	HV voltage setpoint (1V resolution)
	Power ON/OFF per LV connection
Conversion mode	HV to LV
	LV to HV
	LV to LV (in dual LV configuration)
Monitoring	DC/DC Status and errors
	Voltages, currents, temperatures measurements
Identification	Software & Hardware revision
	CAN Bootloader

Conformity & approval

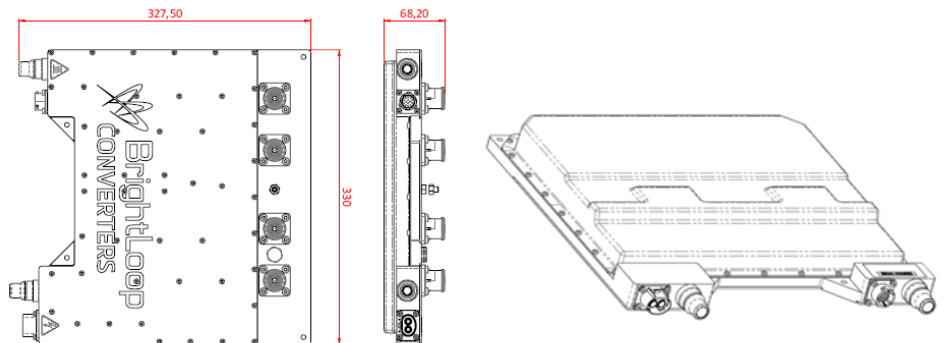
Input/output insulation	4000V _{DC} (tested 60 sec.)
Safety	EN 62368-1
	ECE R100
	ISO26262 (ASIL B)
Approvals	ECE R10
	LV124
EMC	CISPR25 with EMC option

Mechanical

Dimensions	327,5 x 330 x 68,2mm
Housing	Aluminum with conductive anti-corrosion treatment
HV Connector	Amphenol PLO82X-61-2.5 (with security loop)
Output Connectors	Amphenol SurLok Plus 10mm (SLPIRC)
Signals Connector	Souriau UTS 6JC 12E 14S
Cooling Connector	Normaquick PS3 VDA NW 12 - M18x1,5

OUTLINE DRAWING

Dimensions in mm
May vary depending on number of outputs



V22.00

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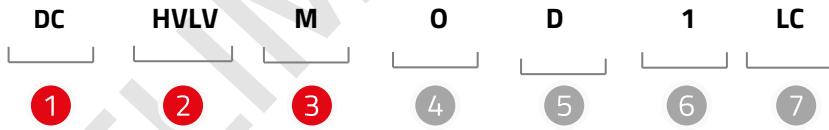
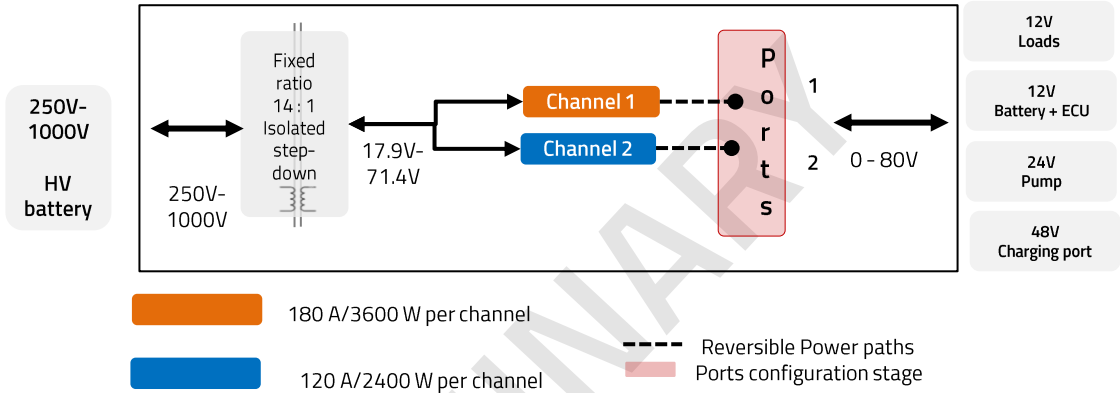
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Ordering code logic

EXAMPLE

Port examples
Individually CAN settable



1 - Product family	2 - Voltage
DC Isolated DCDC converter	HVLV 950V _{DCmax} - 80V _{DCmax}
2 - Package size	3 - Product line
L Large	0 Optimum
5 - Number of ports	6 - Cooling option
S Single	LC Liquid cooling
D Dual	

V22.03

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