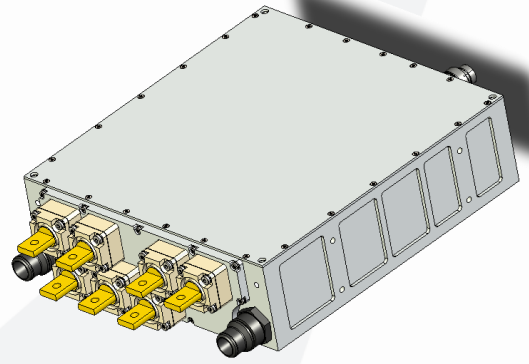


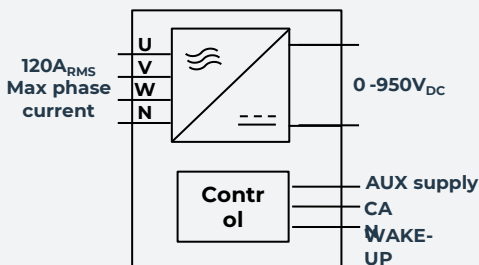
ACHV MP

Ultra-versatile reversible 3Ph + N inverter
 Built-in input-output galvanic isolation
 $120A_{RMS}$ / phase, max power
 $80kW@400V_{AC}$
 Perfect for grid and island configurations,
 or High Power On-board Charger



KEY FEATURES

- > Built-in magnetics, inductors and transformers included
- > DC range 0-950V_{DC}, AC range 0-400V_{AC}
- > Non-overlapping topology : $V_{DC} > \hat{V}_{ph-ph}$
- > $120A_{RMS}$ max phase current
- > Output power of 80kW at 400V_{AC}
- > Perfect for high power On-Board Charger application (OBC)
- > Seamless transition between grid-tied (CSI) and grid-forming (VSI) inverter and PFC rectifier
- > On-the-fly adjustment of harmonics corrections
- > PLL synchronization on external grid
- > Flexible controls allow inverter operation as independent single-phase, balanced three-phase, or unbalanced with neutral connection
- > AC compliant load sharing algorithm for easy parallelization
- > Cutting-edge power density, weight < 25kg
- > Connectors and Busbars options for electrical interface



TECHNICAL SPECIFICATION

Power	
AC ports	3 phases + neutral, 400V _{AC} / 950V _{DC} max
DC port	0V to 950V _{DC}
AC Frequency range	0-1000Hz
Power factor	> 0.95 @ 50Hz
Harmonic distortion	<1% @ 50Hz
Phase unbalance	0-100% with neutral connection
Control modes	Grid forming inverter
	Grid tied inverter
	PFC rectifier
	Active harmonics correction
Current capability	120A _{RMS} per phase
Current accuracy	<3% of full scale
Efficiency	>96% at full load
Control	
Auxiliary supply	9V _{DC} – 75V _{DC}
	<100μA disable mode current consumption
Enable function	ON/OFF signal. Tie to ground for start-up. Internal pull up
Parallelization	Active current sharing
Switching synchronization	Internal, between paralleled converters
	External, with a synchronization signal
Safety discharge	CAN-settable phase shift
Safety discharge	<5sec to reach 60V
Environment	
Environmental protection	IP67
Altitude	Up to 4000m
Max cooling temperature	65°C outlet
Operating temperature range	From -40°C to 70°C ambient
Storage temperature range	From -40°C to 100°C

BrightLoop Converters

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 75020 Paris – France
 Tel +33 1 83 62 63 59

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TECHNICAL SPECIFICATION

OUTLINE DRAWING



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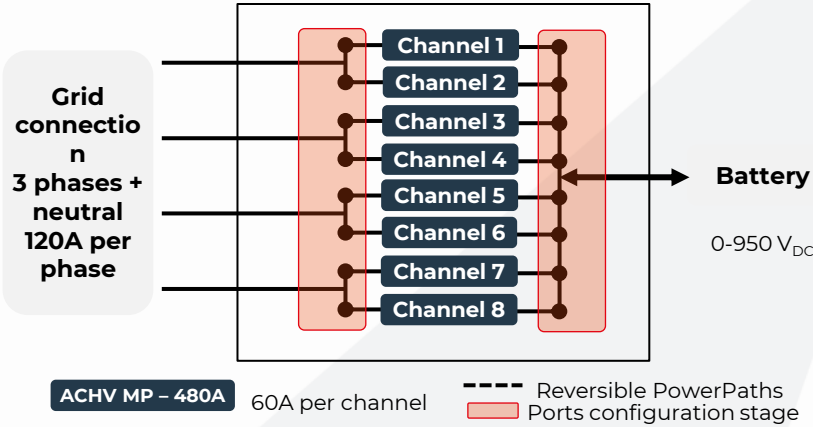


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Ordering code logic

Port examples
Individually CAN
Settable

Port examples
Individually CAN
Settable



Part number example :

AC	HV	Ø	M	P	S	Ø	S	LC
1	2	3	4	5	6	7	8	9
1 – Product family				2 – Voltage				
AC	HV-HV isolated ACDC conv. inv.			H V	950V _{DC} max			
3 – Isolated								
I	Galvanically isolated							
4 – Package size				5 – Product line				
M	Medium			P	Performance			
6 – Number of ports on side A				7 – Number of ports on side B				
S	Single			Ø	None			
D	Dual			S	Single			
T	Triple			D	Dual			
Q	Quadruple			T	Triple			
P	Penta			Q	Quadruple			
H	Six			P	Penta			
O	Octo (eight)			H	Six			
8 – Number of ports on side C				9 – Cooling option				
S	Single			LC	Liquid cooling			

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