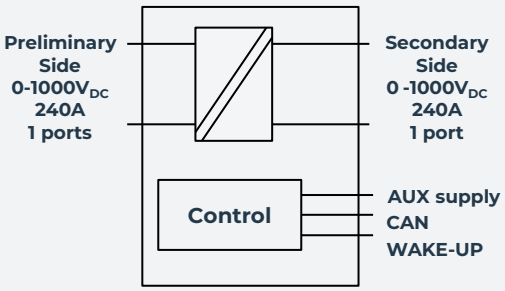
HEAVY DUTY APPLICATIONS

HVI MP

HIGH FREQUENCY DC Galvanic Isolator
Input-output galvanic isolation
Voltage up to 1000V_{DC}, current 240A
Cutting-edge power density

KEY FEATURES

- **Input and output range: 0 to 1000V_{DC}**
- **Bidirectional current capability**
- **Isolated stage: 240A / 200kW max**
- **Ultra-high end-to-end efficiency**
- **CAN remote communication and monitoring**
- **Liquid cooling**
- **Weight: <12kg**
- **Can be paralleled for increased power**
- **Connectors and Busbars options for electrical interface**



TECHNICAL SPECIFICATION

Power	
Max number of ports	1 each side
Voltage range	100V_{DC} to 1000V_{DC}
Voltage ratio	1:1
Voltage accuracy	+/-1% of full scale
Current capability	+/-240A
Current accuracy	<3% of full scale
Short circuit protection	Short-circuit protected
X Capacitance	Primary side and Secondary side : 2µF No inrush current limitation (precharge needed)
Y Capacitance	<1µF
Passive discharge time	<5 min to reach 60V
Efficiency	99% at full load
Control	
Auxiliary supply	9V_{DC} – 60V_{DC} <100µA disable mode current consumption <30W
$\overline{\text{Enable}}$ function	ON/OFF signal. Tie to ground for start-up. Internal pull up
Inrush current limitation	Not included
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
Dielectric withstand	
HV - case isolation	1950V_{DC} Basic isolation
HV - LV isolation	2500V_{DC} Reinforced isolation

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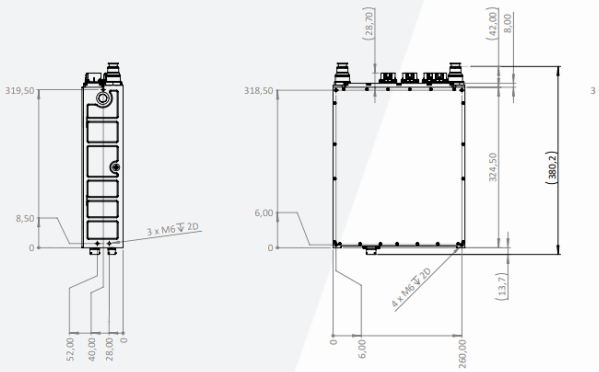
TECHNICAL SPECIFICATION

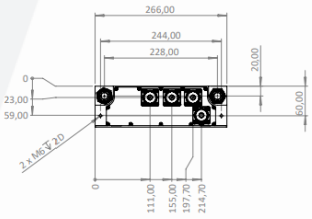
CAN Interface	
Bus speed	125Kbps to 1Mbps (set by CAN)
Controls	Primary side Current limit +/-240A, 2A resolution
	Primary Side Voltage set point 0V to 950V, 1V resolution
	Secondary side Current limit +/-240A, 2A resolution
	Secondary side Voltage set point 0V to 950V, 1V resolution
	Power ON/OFF
	Discharge request
Monitoring	DC Galvanic Isolator Status
	Voltages and currents
	Internal auxiliary power supplies voltage
	Internal temperatures
	Internal protections
Identification	Software & Hardware revision
Software Update	CAN Bootloader
Liquid cooling	
Pressure loss	<200mBar TBC
Maximum operating pressure*	2 barg
Maximum testing pressure	3.5 barg
Hydraulic connector	NORMAQUICK PS3 VDA (Mounted on NORMAQUICK PS3 NW 16-xx)
Mechanical	
Dimensions	< 320 x 280 x 80mm + connectors
Weight	<12kg
Interface	M8 fixations on each sides
Housing	Aluminum with conductive anti-corrosion treatment
Power connectors options	Amphenol PL500 & PL300 with HVIL Amphenol PL082 & PL084 with HVIL Bus bar connection
Signals connector	8STA family (SOURIAU)

**: for higher pressure application, please contact us*

OUTLINE DRAWING



Dimensions in mm



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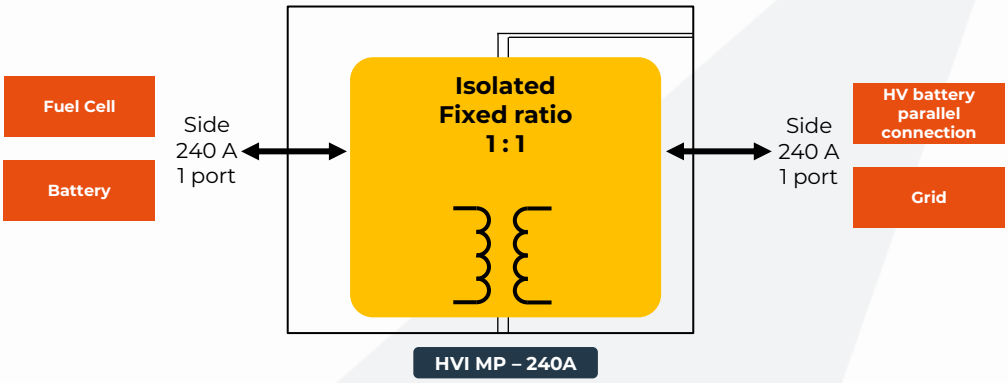
Ordering code logic



Part number example :

HV	I	M	P	S	S	LC
1	2	3	4	5	6	7

1 – Product family		**2 – Voltage**	
DC	Galvanic Isolator	HV	1000V_{DC} max
3 – Galvanic isolation			
I	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	S	Single
8 – Number of ports on side C		**9 – Cooling option**	
S	Single	LC	Liquid cooling

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