

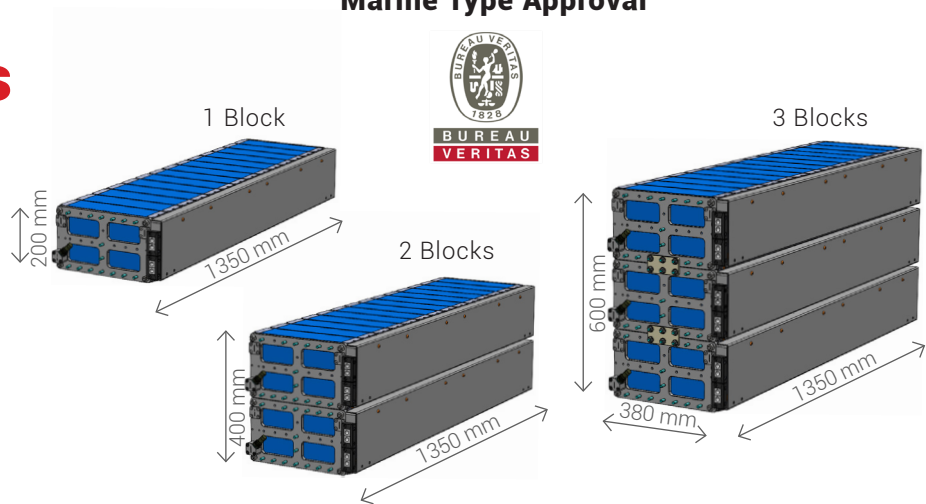
WATTALPS Maritime Packs 400 V

For hybridization or
full electric vessels

Immersion Cooling Technology

Cells and busbars fully immersed
in a dielectric fluid for the most
efficient active thermalization.

Marine Type Approval



Cells	Category	High Energy, Overnight Charge				Fast Charge & Life			
	Designation	HE01				FCL03			
Base Blocks	Per pack (*)	1 Block	2 Blocks	3 Blocks	3 Blocks High Power (**)	1 Block	2 Blocks	3 Blocks	3 Blocks High Power (**)
Voltage	Nominal	353 V			353 V	360 V			360 V
	End of discharge	294 V			294 V	294 V			294 V
	Standby fully charged	400 V			400 V	400 V			400 V
Energy	Embedded	25 kWh	49 kWh	74 kWh	74 kWh	21 kWh	41 kWh	62 kWh	62 kWh
Discharge Power	Continuous	56 kW 75 CV	85 kW 115 CV	85 kW 115 CV	118 kW 160 CV	40 kW 55 CV	79 kW 105 CV	85 kW 115 CV	118 kW 160 CV
	Peak 10s	92 kW	160 kW	160 kW	160 kW	121 kW	160 kW	160 kW	160 kW
Charging Power	Continuous	5 kW	10 kW	15 kW	15 kW	10 kW	21 kW	31kW	31 kW
	fast charge	14 kW	28 kW	42 kW	42 kW	20 kW	40 kW	59 kW	59 kW
Battery est. Weight	+/- 15% incl. thermalization	200 kg	380 kg	560 kg	560 kg	200 kg	380 kg	560 kg	560 kg
Module quantity	Per pack	14	28	42	42	14	28	42	42

(*) Based on standard pack design. Alternative designs, arrangements and form factors available on request.
(**) System fully compatible with several chargers, inverters and motor platforms, including BOSCH EDM160.

Ambient temperature for charge / discharge:
- With dynamic immersion cooling : 0°C – +50°C, including fast charges
- With static immersion cooling : 0°C – +40°C
Storage ambient temperature : -10°C - +50°C

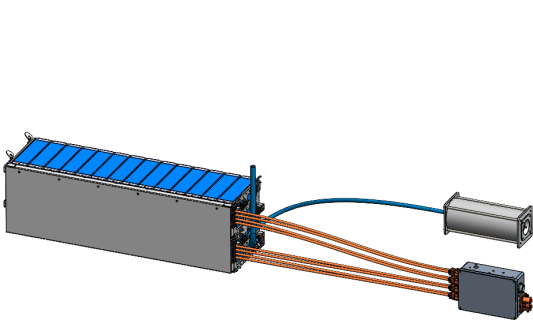


Fig.1. Static cooling

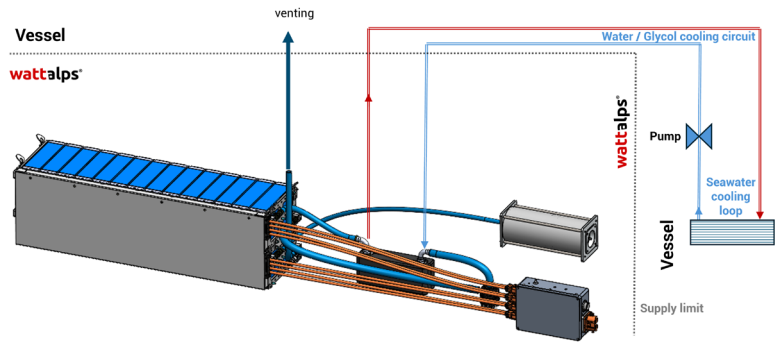


Fig.2.Dynamic cooling