

Kaptein NMC Specifications Sheet

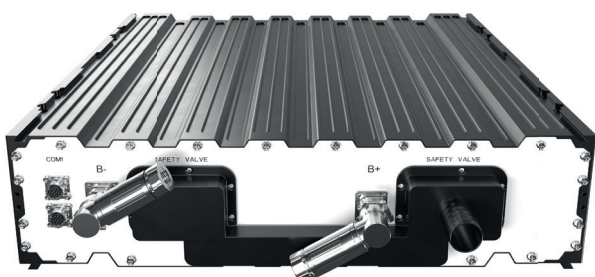
Kaptein NMC Series - Compass: Smart size. Strong performance.

The Kaptein NMC Compass is the lightweight champion of TESVOLT OCEAN's maritime energy storage portfolio. Engineered for vessels where every kilogram and every centimetre matter, it delivers maximum power in minimal space.

With just 75 kg per module and an outstanding 5.0 kg/kWh, the Compass sets new benchmarks in handling, efficiency, and flexibility. Its energy density of 197 Wh/kg (gravimetric) and 260 Wh/L (volumetric) redefines what's possible in terms of weight and space efficiency for marine energy systems.

Built for fast charging and compact retrofits, the Compass fits wherever space is tight – with the same trusted DNA as the rest of the Kaptein Series.

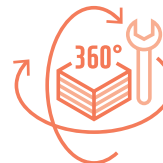
Find the marine energy solution you've been looking for with the Compass.



Ultra-Lightweight



Exceeding DNV
Standards



Any Angle
Mounting



Exceptional
Reliability



Vibration
Resistant



High Energy
Density

Technical Datasheet

Kaptein NMC Compass

TESVOLT OCEAN

Kaptein NMC Compass

Characteristic	Value	Unit
VDC min*	84	V
VDC max	127,5	V
VDC nominal	110,7	V
Energy gross**	14,8	kWh
Energy nom	12,8	kWh
Discharge C-rate cont.***	4	C
Charge C-rate cont.***	4C (for 15%<SOC<80% and project specific cooling)	
Module weight	75	kg
Module height [stacked]	151	mm
Module width	624	mm
Module depth	605	mm
Module volume	57,0	l
Volumetric energy density	259,6	Wh/l
Gravimetric energy density	197,3	Wh/kg
full cycles at 80% DoD 1C/1C	6.000	full cycles
IP class	67	
Operating temperature	-20 to +55	°C
Mounting/ fixation	any angle/ rack free	
Internal fire extinguisher	aerosol	
Air cooling***	< 2C	
Liquid cooling (optional)****	mandatory at >2C	

* technical minimum voltage

** max. voltage x cell capacity

*** aircooled units limited to 1,5C cont. and 2C pulse 2 min

**** depending on application

Kaptein NMC Compass

Modules per string	Energy string gross** kWh	Energy string nom kWh	Voltage string min* VDC	Voltage string nom VDC	Voltage string max VDC	Weight string kg	Weight string incl. PDU kg	Volume string l
1	14,8	12,8	84,0	110,7	127,5	75	125	57
2	29,6	25,6	168,0	221,4	255,0	150	200	114
3	44,4	38,4	252,0	332,1	382,5	225	275	171
4	59,2	51,2	336,0	442,8	510,0	300	350	228
5	74,0	64,0	420,0	553,5	637,5	375	425	285
6	88,8	76,8	504,0	664,2	765,0	450	500	342
7	103,6	89,6	588,0	774,9	892,5	525	575	399
8	118,4	102,4	672,0	885,6	1020,0	600	650	456

TESVOLT OCEAN GmbH

Maria-Goeppert-Straße 3

23562 Lübeck

Germany

info@tesvolt-ocean.com | www.tesvolt-ocean.com

This data sheet is strictly informational and is not legally binding. The exact specifications and/or product features (particularly in case of further development of the product) may differ slightly from the information provided here. Subject to errors and changes. Please read the safety and installation instructions carefully and completely before using the product. In case of purchase, the currently valid guarantee policies and the general terms and conditions of TESSVOLT OCEAN GmbH apply.