

Technical data sheet

Deep Blue Battery 80

Available with optional cooling and / or shock protection

- + High-capacity lithium battery
- + Industry-leading volumetric density and Cell-to-Pack architecture
- + Safe, high cycle life battery chemistry (LFP)
- + ES-TRIN conform



International
Electrotechnical
Commission

IEC 62619
IEC 62620

Deep Blue Battery 80 Technical data sheet

Deep Blue Battery 80	Standard
Torqueedo item number	000-01543
Thermal management ¹	Active water/glycol cooling possible, if required Heat exchanger and refrigeration cycle kits available
Shock protection	Damping kit with 4 dampers available, if required
IP protective class	IP67
Battery type	Lithium-ion – Cell-to-Pack Architecture
Chemistry (cathode – anode)	LFP - Gr
System configuration	108S1P
Voltage (nominal)	348 V
Energy (nominal)	79,2 kWh
Energy (usable) ²	77,6 kWh
Capacity (nominal)	228 Ah
Cycle Life	4.000 cycles (75 % DoD @ 25 °C)
Peak Charge Power	95 kW (10 sec @ 25 °C) 87 kW (30 sec @ 25 °C)
Continous Charge Power ³	52 kW (cont. @ 25 °C)
Continous Discharge Power ⁴	79 kW (cont. @ 25 °C)
Volumetric energy density	278 Wh/l (w/o mounting)
Gravimetric energy density	141 Wh/kg (nominal)
Operating cell temperature ⁵	-30 ... +50 °C
Maximum storage temperature range ⁶	-40 ... +45 °C
Nominal storage temperature range	-20 ... +28 °C
Dimensions of the battery (undamped)	1800 mm x 853 mm x 236 mm
Dimensions of the battery (damped)	1800 mm x 853 mm x 336 mm
Dimensions of the installation space (damped)	2000 mm x 905 mm x 366 mm
Weight (w/ brackets, venting, w/o dampers)	562 kg
Standards	IEC 62619, IEC 62620

¹ Cooling requirement depending on load profile, ambient and sea water temperature

² Available capacity at begin of life under optimal conditions (100 % balanced, 25 °C, 0.2 C), including 11.6 kWh safety margin

³ Between 0 and 50 % SOC, linear derating at higher SOC

⁴ Between 100 and 30 % SOC, linear derating at lower SOC

⁵ IEC 62620 rated from 0 °C to +50 °C

⁶ Calendar life and warranty may be affected, ask for detailed shipment information