NE-4000-MV-UL

Medium Voltage Substation for **Aqua-C2.5S** Liquid-Cooled Energy Storage System

* The illustration is for reference only. The actual product's appearance might vary depending on the configurations.

Model	NE-4000-MV-UL
MV transformer	
Nominal power	4050 kVA
MV/LV voltage	12.47 kV/0.69 kV
Vector group	Ynd1
Winding	2 windings
Rated frequency	60 Hz
Impedance	9% (±7.5 %, IEEE tolerance)
Efficiency standard	≥ 99% @ 100% load 10 CFR Part 431 (optional)
Material of winding (MV/LV)	Aluminum/Aluminum
Overcurrent protection	Expulsion fuses in series with partial-range current-limiting fuses
Cooling type	ONAN KNAN (optional)
NEMA type	Type 3R
Smart control cabinet	
Protection	AC breaker
Surge protection	Type II
AC insulation detection	Supported (optional)
Cooling method	Air cooling and HVAC
UPS	0.5 h

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	2 h (optional)
General data	
Dimension (W × D × H)	6058 × 2438 × 2896 mm
Weight	≤ 15000 kg
Cable entry	Wiring in from bottom
NEMA type	Type 3R
Anti-corrosion degree	C4 C5 (optional)
Seismic level	IEEE 693 moderate seismic level qualification IEEE 693 high seismic level qualification (optional)
Operating temperature range	–25℃ to +45℃ (> 45℃ derating)
Operating humidity range	0%–100% (non-condensing)
Max. operating altitude	2000 m 3000 m (optional)
Communication	RS485, CAN, Ethernet
Standard compliance	UL 891, IEEE C57.12.00, IEEE C57.12.80, IEEE C57.12.90

* A single MVS can support a maximum of four Aqua-C2.5S units in parallel. The power capacity of the medium-voltage transformer can be adjusted to match the system's requirements, with options ranging from 2 to 8 hours of operation.