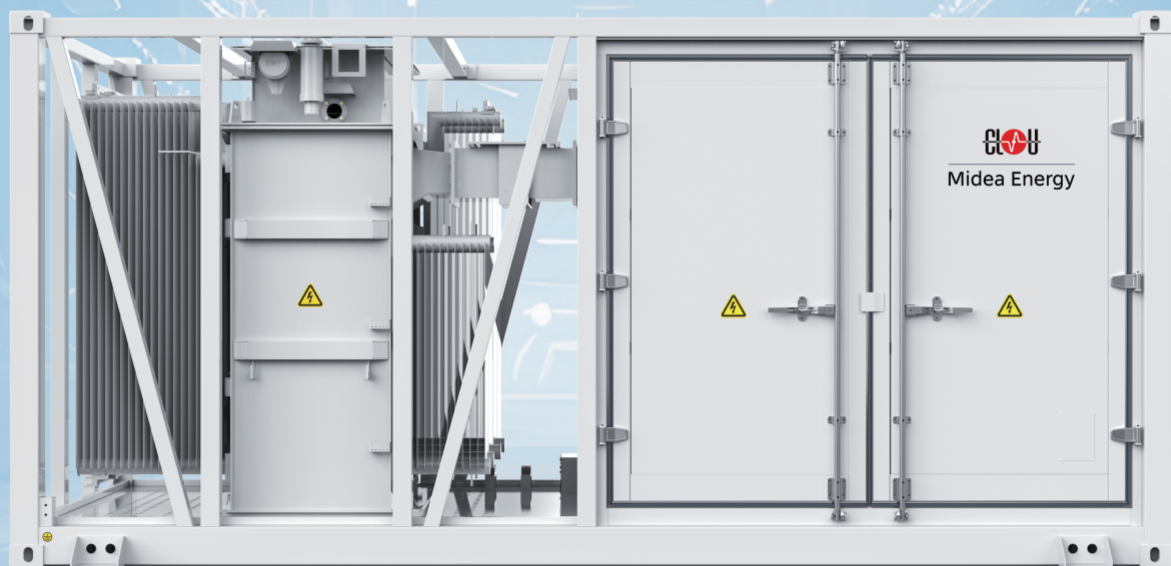




Midea Energy



NE-5000-MV Medium Voltage Substation for Aqua-C2.5S

Easy O&M

- Design for high availability and easy O&M.
- Robust design against harsh environments optimal cooling.

Simple

- Prefabricated and pre-tested, no internal cabling needed onsite.
- Compact 20' HC container design for easy transportation.

Efficient

- High efficiency transformer for higher yields.
- Lower self-consumption for higher yields.

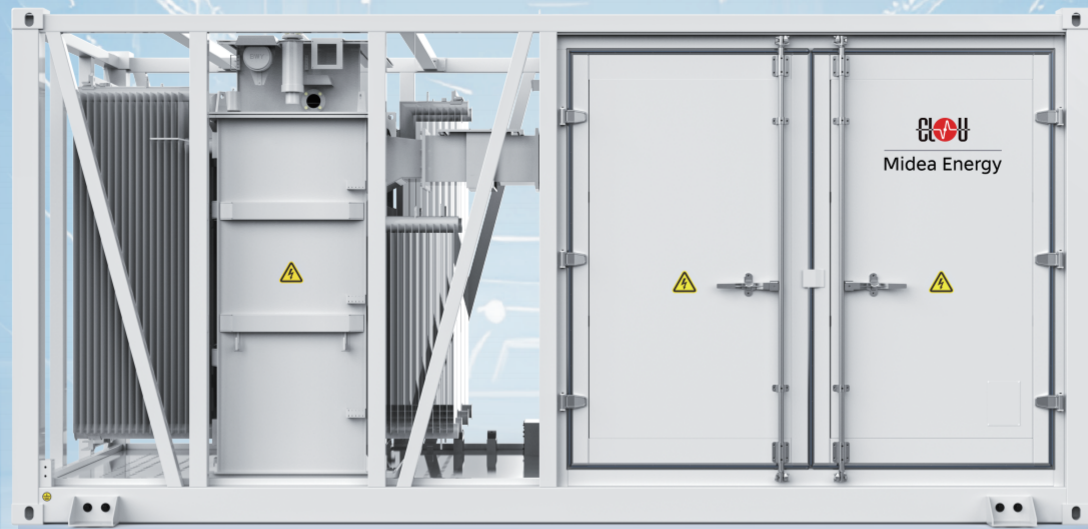
Optional Accessories

- Auxiliary services transformer (up to 200 kVA).
- Self-powered auxiliary services panel.

Type Designation	NE-5000-MV-IEC
MV Transformer	
Nominal Power	5250 kVA
MV/LV Voltage	11-33 kV / 0.69 kV
Transformer vector	Dy11
Insulation level	A
Rated frequency	50 Hz / 60 Hz
Impedance	7.5% (tolerance $\pm 10\%$)
Material of winding (MV/LV)	Aluminum / Aluminum
Cooling method	ONAN, KNAN (optional)
Efficiency	$\geq 99\%$ @100% load EU548/2014 Tier 2 (optional)
Degree of protection	IP54
Smart control cabinet	
Protection	AC Breaker
Surge protection	Type II
Meter for main circuit	Optional
AC Insulation detection	Support (optional)
Temperature control method	Air cooling and HVAC
UPS	0.5h, 2h (optional)
RMU	
Rated voltage	12 kV / 24 kV / 36 kV
Rated current	630A (50Hz) / 600A (60Hz)
Rated short-time withstand current	20kA / 3s or 25kA / 1s
Compliance	IEC 62271
General Data	
Dimensions (W*H*D)	6058*2896*2438mm
Weight	≤ 19000 kg
Cable entry	Bottom entry
Degree of protection	IP54, IP55 (optional)
Anti-corrosion degree	C4, C5 (optional)
Seismic Level	IEEE 693 Moderate design level qualification IEEE 693 High design level qualification (optional)
Operation temperature range	-35 to 60°C (> 45°C derating)
Operation humidity range	0~100%, No condensation
Max. operating altitude	2000m, 3000m (optional)
Communication	RS485, CAN, Ethernet
Compliance	IEC 62271-202, IEC 61439



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

NE-5000-MV-UL

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

Easy O&M

- Design for high availability and easy O&M.
- Robust design against harsh environments optimal cooling.

Efficient

- High efficiency transformer for higher yields.
- Lower self-consumption for higher yields.

Simple

- Prefabricated and pre-tested, no internal cabling needed onsite.
- Compact 20' HC container design for easy transportation.

Optional Accessories

- Auxiliary services transformer (up to 200 kVA).
- Self-powered auxiliary services panel.

Model	NE-5000-MV-UL
MV transformer	
Nominal power	5050 kVA
MV/LV voltage	34.5 kV/0.69 kV
Vector group	Ynd1
Winding	2 windings
Rated frequency	60 Hz
Impedance	8.5% ($\pm 7.5\%$, IEEE tolerance)
Efficiency standard	$\geq 99\%$ @ 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 2 h (optional)
General data	
Dimension (W × D × H)	6058 × 2438 × 2896 mm (238.5 × 96.0 × 114.0 in)
Weight (approx.)	19000 kg (41888 lb)
Cable entry	Wiring in from bottom
NEMA type	Type 3R Type 3S (optional)
Anti-corrosion degree	C4 C5 (optional)
Seismic level	IEEE 693 moderate seismic level qualification IEEE 693 high seismic level qualification (optional)
Operating temperature range	-30°C to +50°C (-22°F to 122°F)
Operating humidity range	0%–100% (non-condensing)
Max. operating altitude	2000 m (6561 ft) 3000 m (9843 ft, 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.