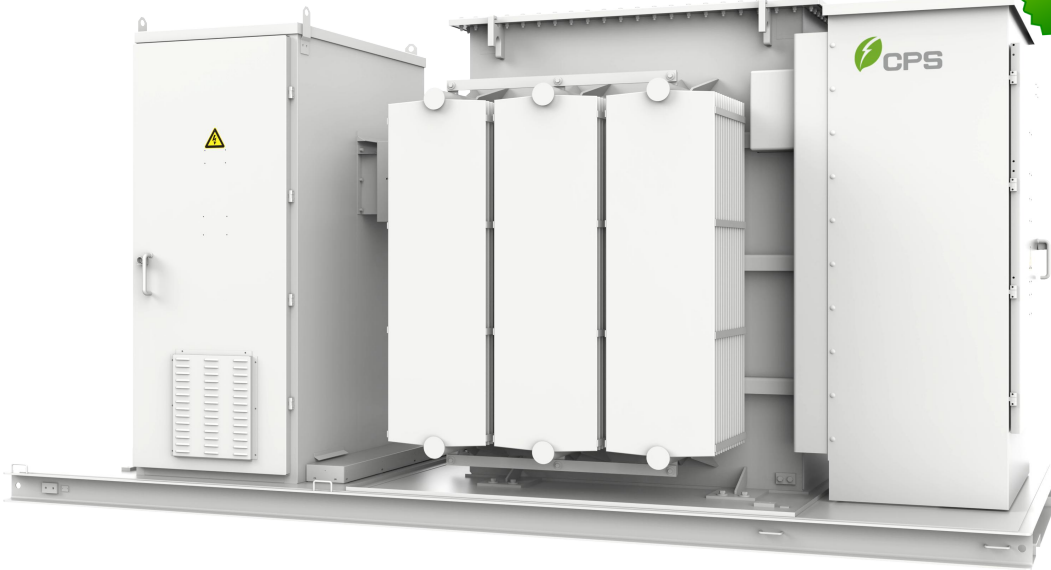
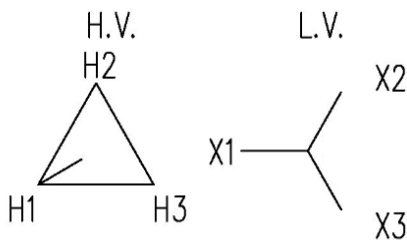


4.2 MVA Medium Voltage Transformer Skid

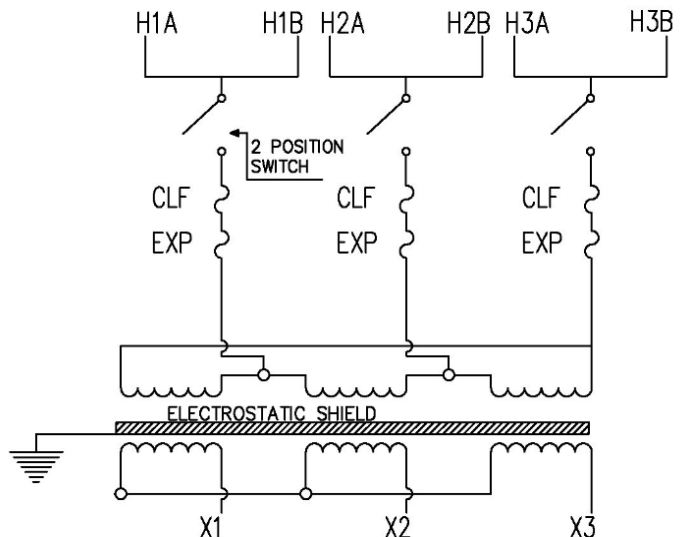


The CPS three-phase 4.2 MVA Medium-Voltage Transformer Skid Solution is the last step in the conversion chain that brings electrical energy to the power grid. The transformers are designed for superior reliability, efficiency, and environmental performance. A modular architecture paired with design options ensures cost efficiency and easy, minimal maintenance. The Skid Solution includes the Low-Voltage Cabinet, Auxiliary Transformer, communications and controls.

Phasor Diagram



Connection Diagram



Model Name	TX4200-34.5/0.8-Dy1	TX4200-13.8/0.8-Dy1
Electrical Ratings		
Rated power	4.2 MVA	
Low voltage rating	800 Vac	
Medium voltage rating	34.5 kV	13.8kV
No-load loss @ 20°C	4.9 kW	
Load loss @ 85°C	33.6 kW	
Impedance (low-voltage to high-voltage)	Two windings typ. $\approx 7.0\% \pm 7.5\%$	Two windings typ. $\approx 9.0\% \pm 7.5\%$
Average winding temperature rise	65°C	
Frequency	60 Hz	
Efficiency	99.32% @ 50% load; 99% @ full Load	
Vector group	Dy1	
Configuration		
Cooling class	KNAN	
Number of windings	2	
Electrostatic shielding	Electrostatic shield between high-voltage and low-voltage windings (2 windings)	
Insulating fluid	Biodegradable oil, FR3 type or equivalent	
High-voltage conductor material	Aluminum	
Voltage taps	2-2.5% taps above, and 2-2.5% taps below nominal voltage	
High-voltage bushing	600A, 35 kV deadbreak bushing, 150 kV BIL (quantity: 6)	
Low-voltage bushing	4 holes, blade type 4515 A, 30 kV BIL	
High-voltage configuration	Loop-feed, dead front	
Load-break switching	630A 2-position load-break switch	
Overcurrent protection	38 kV bayonet fuses 120A	15 kV bayonet fuses 230A
	38 kV partial-range CLF 100A x 2	15 kV partial-range CLF 180A x 2
Standard Accessories		
Liquid level gauge with alarm contacts	Included	
Liquid temperature indicator with alarm contacts	Included	
Pressure vacuum gauge with alarm contacts	Included	
Off-load tap changer	Included	
Pressure relief valve	Included	
Oil filling tube	Included	
Drain valve with sampler	Included	
Nitrogen blanket	Included	
Environment		
Enclosure protection degree	NEMA Type 3S	
Total weight	25353 lb / 11500 kg (approx.)	
Coatings	RAL 7035	
Operating temperature range	-22°F to +104°F / -30°C to +40°C	
Operating humidity	0 to 95%	
Operating altitude	3280 ft / 1000 m (optional: 6560 ft / 2000 m)	
Dimensions	4800(W)x2476(H)x2200(D)	
Safety		
Certifications and standards	UL certified to IEEE C57.12.00, IEEE C57.12.28, IEEE C57.12.90, CSA C2.1-06, CAN / CSA-C227.3, C227.4	
Warranty		
Standard	3 year	
Extended terms	5 years	