

## Product summary

The NOMOS N-Series family is a transformer control cabinet “off-the-shelf” solution for most power transformers, autotransformers and shunt reactors. These control cabinets were engineered according to the most up-to-date IEEE standards for transformer control cabinets. Each series in the product family can be configured by choosing from a list of models in order to match particular requirements. The cabinets are already manufactured and waiting for the addition of the final options before testing and shipping, thus allowing extremely competitive lead times.

						
<b>Legend</b>			Essential	Essential+	Limited	Premium
✓ = Standard    Opt. = Optional    — = Not available			○	○	○	○
<b>Typical applications</b>	Shunt reactors, ONAN power transformers		✓	—	—	—
	ONAN/ONAF power transformers with optional LTC control		—	✓	—	—
	ONAN/ONAF/OFAF power transformers		—	—	✓	—
	ONAN/ONAF/OFAF power transformers with optional LTC control		—	—	—	✓
<b>Drawings</b>	As-manufactured drawing set	Schematic diagram				
		Physical views	✓	✓	✓	✓
		Internal wiring diagram with external connection point available				
<b>Electrical</b>	Power input	120/240 VAC, 60 Hz, 1φ, 3 W	✓	—	—	—
		240 VAC, 60 Hz, 2-3φ, 3 W	—	✓	—	✓
		480 VAC, 60 Hz, 3φ, 3(4) W	—	—	✓	—
	CT blocks	Molded shorting type	✓	✓	✓	✓
		Maximum quantity of current test switches for hot-spot CTs	6	8	8	8
		Maximum quantity of bushing CTs	16	20	24	32
	Temperature controller	49 W (winding temperature gauge)	Opt.	Opt.	Opt.	Opt.
		Electronic temperature monitor and controller (top oil + up to 3 windings + OLTC + ambient or bottom oil temperature); standard on all cabinets	✓	✓	✓	✓
	Cooling control capability	Max. 2 stages of cooling (15 A max. of controlled equipment per stage)	—	✓	✓	✓
		Max. 2 stages of cooling (2x 15 A max. of controlled equipment per stage)	—	—	Opt.	Opt.
	Annunciator	Seekirk B1000 series	1	1	2	2
	Pump	Pump package with oil flow and control/overload	—	—	Opt.	Opt.
	Internal cabinet lighting	LED bulb, 60 W equivalent				
	Terminal blocks	Screw type blocks for ring tongue wire terminals				
	Wire	SIS 90C 600 VAC VW-1 grey cable				
Equipment identification	Lamicoid tag/nameplate on every device					
Mode selector for cooling group	Man/Off/Auto selector for each cooling stage to facilitate maintenance and operation	✓	✓	✓	✓	
Cooling breaker(s)	Thermal magnetic type, rated 600 V					
Lead group selector	Used to choose which cooling group works first to spread usage evenly on fans/pumps					
Heaters	Anti-condensation heater					

			Essential	Essential+	Limited	Premium
Communication	Serial communication	DNP / Modbus over RS-485	✓	✓	✓	✓
		DNP / Modbus over ST multimode fiber				
	Ethernet communication	DNP / Modbus / IEC 61850 over RJ45 copper				
On-load tap changer monitoring and control	LTC controller	Beckwith M-2001D	—	✓	—	✓
	LTC position indicator	Incon 1250B				
	OLTC equipment (oil level, temperature sensor, etc.)	Terminal strip / 12 points available to bring the desired signals				
	Complete remote control capabilities	Yes				
	OLTC monitor and tap position	Optional sensorless tap position, protection against contacts coking and rapid OLTC heating events				
Transformer device interaction capability/ alarm	Oil level gauge, main tank	High oil level (main tank)	✓	✓	✓	✓
		Low oil level (main tank)				
	Pressure relief device (63-PRD)	High pressure				
	Sudden pressure relay (63-SP)	Fault pressure				
	Gas accumulation relay (63GD)	Gas detection				
	Buchholz relay (63B)	Oil flow trip				
	Oil temperature sensors (26Q)	Two terminal strips for oil temperature sensors				
	PRD	Pressure relief alarm				
	Maintenance-free dehydrating breather or Inertiaire (main tank)	Terminal strip for alarms with a provisional breaker for power				
	Loss of voltage relay	Alarm on terminal for loss of voltage in main supply				
On-line gas and moisture monitor	120 V 15 A breaker	1 x 6-point terminal block for alarms				
Materials	Enclosure size	Approximate enclosure dimensions (inches) *subject to change* H x W x D	56 x 54 x 20	66 x 65 x 20	69 x 81 x 20	76 x 85 x 20
	Casing	11-gauge stainless steel (ANSI 70 paint)	✓	✓	✓	✓
	Backplate	12-gauge cold rolled steel (painted white)				
	Swing panel(s)	12-gauge cold rolled steel (painted white)				
	Lifting eyes	Stainless steel				
	Hardware/hinges	Stainless steel				
Mechanical	NEMA type	3R	✓	✓	✓	✓
	Mounting bracket	Double L-shaped steel beam, universal bracket				
	Exterior doors	3-point latch mechanism, pad lockable, single handle				
	Interior doors	Equipped with support wheels to reduce stress on hinges when in closed position				
		Unique locking mechanism for secured transport				
	Gland plate	Bolted at the bottom, installed prior to shipping				
	Breather and drain NEMA type	3R to protect against insect ingress				