

Marine Systems

NC 1.1 Nitrogen Cabinet

Shipboard Nitrogen Membrane Systems

The NC 1.1 Nitrogen Cabinet is a PRISM® membrane-based nitrogen generator which is designed specifically for shipboard use. This robust cabinet system has the capacity to supply up to 420 cubic meters (420 Nm³/h) of nitrogen per hour, is DNV Type-A approved, and meets demanding international marine standards.

The unique cabinet system warms up and delivers nitrogen quickly while automatically adjusting the purity even with variable feed inlet pressure. The compact design makes installation easy and all components are protected by the rugged enclosure.

An easy-to-understand, solid-state, LED user interface is integrated into the front panel where the operator can access all status signals, process parameters and alarms. There is also the option to interface the unit directly into ships IAS using a standard serial communication (MODBUS) connection which eliminates multi-core cables. The NC 1.1 system will even remind you about routine maintenance and provide instant access to our service and parts department for simplified ordering.



NC 1.1 Compact Nitrogen Cabinet

Features

Operator terminal.

Feed air pre-treatment.

All necessary control valves and accessories.

Air Products PRISM® Membranes.

Online oxygen analyzer.

Feed air pre-treatment.

Product dew-point analyzer.

Remote monitoring. Prepared for telemetry.

Flange connections according to DIN or JIS standards Dual System LNG.

Approvals by D.N.V. and all major Classification Societies

Operator terminal functions:

Monitor process and status indication.

Monitor alarms and alarm set points.

Start / Stop the nitrogen generator.

Select working range (auto start/stop) for operation on nitrogen discharge pressure.



NC 1.1 User Interface

Specifications

El. Power consumption [kW]	1.5 - 7.0
Inlet air pressure [barg]	5.0 - 13.0
N ₂ product pressure [barg]	≤ 10.0
Nitrogen purity [% N ₂]	95.0 – 99.9

Maximum capacities

At 95% nitrogen purity :	420 Nm³/h
At 97% nitrogen purity :	330 Nm³/h
At 99% nitrogen purity :	120 Nm³ /h
At 99.9% nitrogen purity :	70 Nm³/h

Dimensions/Connections:

Cabinet size, L×W×H [mm]	1600-2000 × 810 × 2200
Maximum weight [kg]:	450 — 1100
Flange connections:	ANSI B16.5 150 Lb
Color (powder coat):	Munsell 7.5BG 7/2



The NC 1.1 Nitrogen Cabinet System incorporates PRISM® Membrane separation technology to generate nitrogen. PRISM Membranes are lightweight, durable, and efficient molecular separators.

 $\mathtt{PRISM}^{\textcircled{\$}}$ is a registered trademark of Air Products and Chemicals, Inc.

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Air Products Nitrogen cabinets meet the exacting requirement for shipboard use and have been certified for this application

