



NG(A) CASTORE XL iQ

Membrane Nitrogen & dry Air generator with integrated direct drive Scroll compressor.
Electronically controlled

Main applications

- LCMS
- Solvent evaporation

The NitroGen series **NGA CASTORE XL iQ** are Membrane Nitrogen and dry air Generators. They are engineered to transform standard compressed air into a safe, regulated supply of Nitrogen up to 350 L/min with LC-MS grade purity. A channel can provide up to 150 L/min of compressed, dry and regulated air.

This NGA series is equipped with a scroll built-in oil-less compressor with inverter technology.

The new **iQ** series is equipped with the innovative direct drive motor-compressor system that results in lower noise than the previous version.

The exclusive electronic flow control combined with the compressor control by the inverter makes it possible to generate Nitrogen with a higher purity using a smaller volume at less pressure of air which results in reduced energy costs and increased lifetime of the compressor. Continuous control of the operating parameters of Nitrogen keeps the system at its maximum efficiency.

The **CASTORE XL iQ** with its dual Nitrogen and Air outlets has been developed to meet specific requirements in terms of gas, flow, purity and pressure in LC-MS applications. It can be used for the evaporation of solvents in samples being analysed.

Main advantages

- ✓ Compatible with all LCMS
- ✓ Dual Nitrogen and Air generator
- ✓ 200 cc/min UHP Nitrogen for collision cell
- ✓ Low noise
- ✓ Low maintenance
- ✓ No belts, direct drive
- ✓ Generates nitrogen on demand
- ✓ Exclusive electronic flow control
- ✓ Ultra silent technology: as low as 60 dB(A)
- ✓ Reliable – No vibrations
- ✓ Designed to run 24 hours a day



Specifications



Model:	NG CASTORE XL iQ 350	NG CASTORE XL iQ 350.480	NGA CASTORE XL iQ 250	NGA CASTORE XL iQ 350
	6920.70.350	6920.70.350.1	6920.70.251	6920.70.351
General data				
Dimensions (W x D x H)	125 x 82 x 126 cm			
Net weight	330 kg	340 kg	330 kg	340 kg
Noise level ⁽¹⁾	< 69 dB(A)		< 60 dB(A)	< 69 dB(A)
Heat value (BTU)	25600		18800	25600
Cooling air required	1100 m³/h		800 m³/h	1100 m³/h
N2 outlet				
Flow rate (Max) ⁽⁶⁾	350 L/min		100 L/min	200 L/min
Outlet pressure	8 bar (116 psi)			
N2 Purity ⁽³⁾	LCMS grade			
Dew-point ⁽⁴⁾	<-60°C (<-76°F)			
Nitrogen for collision cell ⁽²⁾	200 cc/min @ 99.9999%			
Dry Air outlet				
Free Air Delivery	-	-	150 L/min (N2 + Air: up to 250 L/min)	150 L/min (N2 + Air: up to 350 L/min)
Max operating pressure	-	-	8 bar (116 psi)	
Dew-point ⁽⁴⁾	-	-	<-20°C (<-4°F)	
Communication				
LCD with touch-screen	Standard			
RS-232	For service			
RS-485	Standard			
Digital I/O	Standard			
Electrical data				
Power supply voltage ⁽⁵⁾	Three-phases 4-wires (+ one ground wire) / Y 400 VAC ±10% 50/60 Hz			
Connection type	Power cable pre-connected with 32A plug (3m) – IEC 60309-2, 3P+N+E, 6h (400 VAC version)			
Nominal motor power (shaft)	7.5 kW		5.5 kW	7.5 kW
Connections				
N2 outlet	1/2" BSPP female fitting			
Dry Air outlet	1/2" BSPP female fitting			
N2 UHP outlet	1/4" BSPP female fitting			
Condensate drain	1/4" BSPP female fitting			

(1) Measured at front of unit at a distance of 1 m, in accordance with ISO11201 (tolerance ±3 dB).

(2) Optional, see below

(3) The purity refers to the residual oxygen, depends on flow and working pressure

(4) Atmospheric Dew Point (ADP)

(5) Adding the suffix ".1" to the standard code configures the unit for three-phase 480 VAC ±10% supply voltage

(6) Derating: rated flow rates apply up to 1000 m a.s.l. with a maximum ambient temperature of 35°C.

For installation above 1000 m or above the declared ambient temperature limit, consult the manufacturer.

Ordering codes

Gas Generators

6920.70.350 NG CASTORE XL iQ 350

6920.70.350.1 NG CASTORE XL iQ 350.480

6920.70.251 NGA CASTORE XL iQ 250

6920.70.351 NGA CASTORE XL iQ 350

Options

6920.71.90 Ultra High Purity N2 module 200 cc/min

Consumable

6930.00.152 Filter elements for NG CASTORE XL 350



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