

**Description KrinnAir Premium Line NITROX Systems**

The fully automatic, internally piped and wired Nitrox compact system features a unique method of operation that was technologically impossible in the past. In particular, the combination of compressed air heating with the appropriate regulation and the previous dehydration by means of a refrigerant type drier make for more convenient handling of the system. On the one hand, extremely reliable dehydration of the compressed air is now possible. On the other, it is possible to perfectly adjust the operating points of the oxygen membranes regarding pressure and temperature.

Four high power filters are responsible for the filtration of the compressed air. Oversized filter surfaces and activated carbon filters with an activated carbon bed and integrated particle filters facilitate a service life of 500 operating hours. Filter elements are validated and certified according to the ISO 12.500-1:2007 quality standard.

KrinnAir Nitrox systems boast a universal field of application. Almost complete independence from environmental circumstances such as temperature or air humidity. A clearly defined condition of the compressed air injected into the membrane is ensured even in the event of profound fluctuations in environmental conditions. This results in increased efficiency of the device with regard to the nitrox output and durability of the compact system.

The cutting-edge regulation ensures that a strain-and-relief operation and fluctuations in the compressed air in the attached rotary screw compressor can be avoided. This increases the durability of the rotary screw compressor and reduces wear and tear to a minimum. An additional compressed air container is not required. Furthermore, the state of the art construction of the device ensures compressed air according to the ISO 8573-1 1.4.1 quality standard for reliable operation of the membrane system. Operating conditions regarding breathing air quality, temperature and pressure at the point of injection into the membrane can be regulated exactly and independently of environmental conditions.

**Technical specifications:**

Model	Premium Line K01	Premium Line K02	Premium Line K03
NITROX	21 – 40%	21 – 40%	21 – 40%
Volume delivered	200 – 320 litres/min	300 – 450 litres/min	450 – 600 litres/min
Operating pressure	7 – 10 bar	7 – 10 bar	7 – 10 bar
Electrical connection	230V/50Hz	230V/50Hz	230V/50Hz
Power consumption	0.9 KW	0.9 KW	2.1 KW
Dimensions in mm D/W/H	830 / 650 / 1255	830 / 650 / 1255	830 / 650 / 1255
Weight: net	170 kg	170 kg	170 kg



**Connection Data:**

**Model Premium**

**K01**

**K02**

**K03**

	Voltage / Hz	230 V / 50	230 V / 50	230 V / 50
Electrical supply				
Total installed capacity	kW	1,9	1,9	2,55
Power requirement	kW	0,6 - 0,9	0,6 - 0,9	0,9 - 2,1
Cooling air quantity	m³/h	350	350	600
Refrigerant type		R 134A	R 134A	R 404A
Refrigerant amount	kg	0,44	0,44	0,42
Sound pressure level	dB(A)	68	68	69

**Limits compressed air inlet:**

	Liter/min	1650	2000	3300
Flow compressed air max.				
Operating pressure max.	bar	7,0 to 10,0	7,0 to 10,0	7,0 to 10,0
Air inlet temperature	°C	+10 to +46	+10 to +46	+10 to +46
Humidity	100%	100%	100%	100%
Residual oil content	mg/m³	max.10 mg	max.10 mg	max.10 mg
Ambient temperature	°C	+10 to +40	+10 to +40	+10 to +40

**Dimension, Weight and Connection:**

Dimensions: depth / width / height	830 / 650 / 1255	mm
Weight: net	145	kg
Pipe connection:	Compressed air inlet	G 1"
	Nitrox outlet	G 1"
	Nitrogen outlet	G 1/2"
	Condensate inlet	G 1/2"
	Condensate outlet	G 1/2"

**Scope of Delivery**

- Functional and state of the art housing for an assembly not requiring foundations
- Construction in stainless steel V4A (1.4404), salt-water proof
- Stainless steel piping of compressed air and nitrox pipes
- Volume-current-regulation with overflow valve and compensation tank
- 4-level filtration with automatic condensate-drain
- Integrated refrigerate type drier with condensate-drain
- Compressed air heating with automatic temperature regulation and observation
- Oxygen membrane for nitrox gas production
- Operating pressure and nitrox regulation with pressure gauge
- Oxygen controller with sensor
- Easy to maintain housing with removable hatches
- Integrated electric control box, completely wired IP54
- Operating and malfunction notices
- Integrated condensate processing and additional connection for compressor condensate
- Optional: remote ON/OFF and compressor controls

Every system is subjected to a test run at the factory.  
 Inspection certificate after successful acceptance.

The nitrox system outlined above conforms to the CE-norm and the EC machine directive 2006/42/EG.

*Engineering design and brand protection*