

NITROGEN BOOSTER SERIES COMPRESSOR SYSTEMS



(NOTE: Above shown model is the Duplex version)

Features a 1-year System and 2-year Block Warranty

STANDARD NITROGEN BOOSTER FEATURES

The standard system includes a full customer screen TDE with real time monitoring of oil pressure switch, inlet pressure transmitter, final pressure transmitter and final stage discharge temperature.

Compressor service is accessible from a front removable panel for drive belt access and a rear compressor service access. The inlet and inter-stage gauges are located and installed on the compressor block.

SCOPE OF SUPPLY AND OPTIONS

- Inlet solenoid valve
- Control panel with MCC (direct start) and Siemens TP700 screen
- Suction pressure transmitter
- Discharge pressure transmitter
- Oil pressure switch
- Suction low pressure switch
- Block mounted gauges for service
- Auto drain system with collection tank for any liquids
- Final separator JS-7300-A-1008 with relief valve and high-capacity cartridge
- Separator cycle counter
- Final check valve
- Hour meter
- Final temperature RTD

For Duplex only:

- Two blocks in a single frame, belt driven by a single motor
- Individual manual inlet shut off valves
- Individual manual discharge shut off valves



Larger capacity compressors up to 250 KW are available upon request. Please consult with a Jordair Compressors representative for technical data and factory quote.

Technical specifications and new models are subject to document change and updates to correct information as released by Bauer and Jordair.

The compressor models shown in this brochure and their electrical controls are registered under CSA and certified accordingly. Changes to any of the electrical controls or components will void the existing CSA certification. A Special Inspection will need to be performed by CSA to certify any custom compressor package. Please consult a Jordair representative for CSA Special Inspection pricing.

Please consult a Jordair representative for a breakdown of all additional costs that may be incurred on a custom compressor.

Jordair Nitrogen compressors and filter systems meet or exceed the latest CSA standard

NITROGEN BOOSTER COMPRESSORS

217/720 PSIG - SINGLE STAGE BOOSTER COMPRESSORS

MODEL	COMPRESSOR CAPACITY (*)	MOTOR	INLET PRESSURE	OIL & WATER SEPARATOR	WEIGHT	SIZE (IN) H x D x W
NB720-123-1E	16 - 55 SCFM	7.5 HP	72-145 PSIG	JS-7300-A-1008	***	***
NB720-123-3E	16 - 55 SCFM	7.5 HP	72-145 PSIG	JS-7300-A-1008	***	***
NB720-124-1E	55 – 70 SCFM	10 HP	145-188 PSIG	JS-7300-A-1008	***	***
NB720-124-3E	55 – 70 SCFM	10 HP	145-188 PSIG	JS-7300-A-1008	***	***

217/720 PSIG – DUPLEX BOOSTER COMPRESSOR

Duplex systems utilize two blocks with one motor

NB720-123-3ED	32 - 110 SCFM	15 HP	109 PSIG	JS-7300-A-1008	705 LBS	62" x 33" x 43.5"
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5300 PSIG TWO & THREE STAGE BOOSTER COMPRESSORS

NB5-122-1E	7.0 – 17.0 SCFM	7.5 HP	72-159 PSIG	JS-7300-A-1008	705 LBS	62" x 33" x 43.5"
NB5-122-3E	7.0 – 17.0 SCFM	7.5 HP	72-159 PSIG	JS-7300-A-1008	705 LBS	62" x 33" x 43.5"
NB5-153-10-1E	15.8 - 23.2 SCFM	10 HP	101-145 PSIG	JS-7300-A-1008	840 LBS	62" x 33" x 43.5"
NB5-153-10-3E	15.8 - 23.2 SCFM	10 HP	101-145 PSIG	JS-7300-A-1008	840 LBS	62" x 33" x 43.5"
NB5-153-15-3E	18.0 - 26.5 SCFM	15 HP	101-145 PSIG	JS-7300-A-1008	840 LBS	62" x 33" x 43.5"
NB5-153-20-3E (**)	23.3 - 33.5 SCFM	20 HP	101-145 PSIG	JS-7300-A-1008	840 LBS	62" x 33" x 43.5"
NB5-1541-20-3E	16.0 - 27.0 SCFM	20 HP	29-58 PSIG	JS-7300-A-1008	***	***

5300 PSIG – DUPLEX BOOSTER COMPRESSOR

Duplex systems utilize two blocks with one motor

NB5-122-3ED	14.0 - 34.0 SCFM	15 HP	72-159 PSIG	JS-7300-A-1008	***	***
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(*) See detailed performances hereafter. JORDAIR recommends upsizing the nitrogen generator capacity by +10%.

(**) The NB5-153-20-3EUS is limited to 40 degC maximum ambient temperature, instead of 45 degC for other units

(***) Information available on request, contact your sales rep

TECHNICAL DATA

FILTRATION SYSTEM DESCRIPTION

The JS-7300-A-1008 separators are standard for all Nitrogen models. Separator element should be changed every three months in order to minimize oil carry over in the nitrogen stream.

ORDERING INFORMATION

Single Phase Voltages Available: **(-1E)** 208V, 230V
 Three Phase Voltages Available: **(-3E)** 208V, 230V, 460V, 575V

*When placing an order, add the voltage at the end of the model number (eg. IAB720-123-1E-230V)
 Standard production is 60Hz, consult the factory for 50 Hz requirements and other voltages*

CAPACITY CALCULATIONS

Volume flow rate correction factor for deviations in medium: **L Me**

Medium	Helium	Air	Nitrogen	Methane
L Me	Approx. 0.8	1	1	0.9

Volume flow rate correction factor for deviations in intake temperature: **L Te**

Temperature (°C)	5	10	15	20	25	30	35	40	45
L Te	1.04	1.027	1.013	1	0.987	0.975	0.962	0.950	0.939

Volume flow rate correction factor for deviations in cooling medium temperature: **L Km**

Temperature (°C)	5	10	15	20	25	30	35	40	45	50	55	60
L Km	1.008	1.006	1.003	1	0.997	0.995	0.992	0.989	0.987	0.984	0.981	0.979

Volume flow rate correction factor for deviations in altitude: **L alt**

Altitude (m), above sea level	500	1000	1500	2000
L alt	0.95	0.89	0.84	0.78

*Numerical correction factor as reference value. Not applicable to boosters.
 Compressor operation at altitudes > 1000 m: on request*

The expected actual volume flow rate is calculated as follows: volume flow rate × **L Me** × **L Te** × **L Km** × **L alt**

COMPRESSOR UPGRADE OPTIONS

COMPRESSOR FRAME OPTIONS (Single units only - Does not apply to Duplex):

J-PCU	Change compressor frame powder coating colour
J-PCU-D	Change compressor frame colour, check availability of the desired color (DUPLEX SYSTEM)
J-USP-LF	Complete set of Enclosed Panels - Non-Insulated - FOR SINGLE BLOCK SYSTEM*
J-CFIP-LF	Complete silent insulation package - FOR SINGLE BLOCK SYSTEM
J-USP-LF-D	Complete set of Enclosed Panels - Non-Insulated - FOR DUPLEX SYSTEM*
J-CFIP-LF-D	Complete silent insulation package - FOR DUPLEX SYSTEM
J-E-FAN-20-1/2	Auxiliary cooling fan (1/2 HP) for fully enclosed units - For 10 HP and smaller models
J-E-FAN-20-1	Auxiliary cooling fan (1 HP) for fully enclosed units - For 15 HP and larger models
J-ODP-HNS	Outdoor Industrial Package**
J-IDP-HNS	Indoor Industrial Package**
CSA INSPECTION	CSA Special Inspection for non-standard custom designed systems

**When enclosing a compressor frame include the auxiliary fan for perfect cooling of the unit*

***ODP and IDP only available for single block systems*

Outdoor Package Features (J-ODP-HNS)

- Fully enclosed silent temperature insulated compressor frame mounted on an extended base
- Structural walls and roof covering the complete system with cooling air duct and louver
- 1500 Watt heater
- Internal temperature monitor and auxiliary fan inter-lock
- Inlet filter/buffer
- Inlet pressure gauge, solenoid, manual valve and relief valve
- Gas recovery tank with feedback to inlet

Indoor Package Features (J-ODP-HNS)

- Fully enclosed silent temperature insulated compressor frame mounted on an extended base
- Structural walls and roof covering the complete system with cooling air duct and louver
- 1500 Watt heater
- Internal temperature monitor and auxiliary fan inter-lock
- Inlet filter/buffer
- Inlet pressure gauge, solenoid, manual valve and relief valve
- Gas recovery tank with feedback to inlet

COMPRESSOR FILTRATION SYSTEM:

JBF-7300-6-16-A	Add bare filter chamber and fittings - 7300 PSIG, 16" Barrel
JBF-7300-6-22-A	Add bare filter chamber and fittings - 7300 PSIG, 22" Barrel
JBF-7300-6-22-S-A	Add bare filter chamber and fittings - 7300 PSIG, 22" Barrel, Securus Cap
JBF-7300-6-32-A	Add bare filter chamber and fittings - 7300 PSIG, 32" Barrel
JBF-7300-6-32-S-A	Add bare filter chamber and fittings - 7300 PSIG, 32" Barrel, Securus Cap
JBF-1100-6.5-33-A	Jumbo Filter Chamber - 1100 PSIG, 33" Barrel
JBF-6400-9.5-BRL-35	Jumbo Filter Chamber - 6400 psig, 35" Barrel