

## NITROGEN SERIES COMPRESSOR SYSTEMS



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

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**

## STANDARD NITROGEN COMPRESSOR 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

- Logo 8 PLC with panel mounted 4" x 4" TDE 4 line screen showing compressor fault data
- Low oil switch alarm and screen display of the fault
- High temperature RTD alarm and screen display of the fault
- Final transmitter set for customers required shut down pressure
- Inlet pressure transmitter
- Auto-run and manual mode operation with emergency shut down button
- Panel mounted pressure gauge display for final pressure and oil pressure
- Inter-stage pressure gauges are mounted on the block and visible at the back side of the compressor
- Inlet solenoid and pressure gauge
- Nationally certified CRN registered final coalescing oil/water separator with a filter cartridge and the silent collection tank
- Nationally certified CRN registered 1100 PSIG final coalescing oil/water separator with a filter cartridge on 580/720 PSIG units and with a silent collection tank
- Final separator cycle counter to ensure filter system safety and record pressure cycles
- The hour meter is mounted on the door of the MCC control box
- The separator pressure cycle counter is mounted on the door of the MCC control box
- Final separator life rated for 15 years or a pressure cycle value, contact Jordair for more information
- Automatic condensates drain and silent collection system
- Inlet filter for compressor intake protection

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.

## NITROGEN COMPRESSORS

### 5300 PSIG COMPRESSORS

MODEL	FLOW RATE	MOTOR	FILTER SYSTEM	WEIGHT	SIZE (IN) H x D x W
N5-100-1E	4.4 SCFM	5.0 HP	JS-7300-A-1008	485 LBS	62" x 33" x 42.5"
N5-100-3E	4.4 SCFM	5.0 HP	JS-7300-A-1008	485 LBS	62" x 33" x 42.5"
N5-120-1E	7.6 SCFM	7.5 HP	JS-7300-A-1008	550 LBS	62" x 33" x 42.5"
N5-120-3E	7.6 SCFM	7.5 HP	JS-7300-A-1008	550 LBS	62" x 33" x 42.5"
N5-1214-1E	10.3 SCFM	10.0 HP	JS-7300-A-1008	705 LBS	62" x 33" x 42.5"
N5-1214-3E	10.3 SCFM	10.0 HP	JS-7300-A-1008	705 LBS	62" x 33" x 42.5"
N5-151-3E	15.0 SCFM	15.0 HP	JS-7300-A-1008	840 LBS	62" x 33" x 42.5"
N5-150-3E	18.0 SCFM	15.0 HP	JS-7300-A-1008	840 LBS	62" x 33" x 42.5"
N5-180-3E	22.0 SCFM	20.0 HP	JS-7300-A-1008	880 LBS	62" x 33" x 42.5"
N5-220-3E	33.0 SCFM	30.0 HP	JS-7300-A-1008	N/A*	N/A*
N5-230-3E	52.0 SCFM	50.0 HP	JS-7300-A-1008	N/A*	N/A*
N5-250-3E	67.0 SCFM	75.0 HP	JS-7300-A-1008	N/A*	N/A*
N5-280-3E	125.0 SCFM	100.0 HP	JS-7300-A-1008	N/A*	N/A*

All 5300 PSIG systems are supplied with the new Jordair 7300 PSIG filter system and protected with a 5300 PSIG relief valve. Please specify if a lower setting is required.

### 6100 PSIG

MODEL	FLOW RATE	MOTOR	FILTER SYSTEM	WEIGHT	SIZE (IN) H x D x W
N6-100-1E	3.5 SCFM	5.0 HP	JS-7300-A-1008	485 LBS	62" x 33" x 42.5"
N6-100-3E	3.5 SCFM	5.0 HP	JS-7300-A-1008	485 LBS	62" x 33" x 42.5"
N6-120-1E	6.0 SCFM	7.5 HP	JS-7300-A-1008	550 LBS	62" x 33" x 42.5"
N6-120-3E	6.0 SCFM	7.5 HP	JS-7300-A-1008	550 LBS	62" x 33" x 42.5"
N6-1214-1E	10.3 SCFM	10.0 HP	JS-7300-A-1008	705 LBS	62" x 33" x 42.5"
N6-1214-3E	10.3 SCFM	10.0 HP	JS-7300-A-1008	705 LBS	62" x 33" x 42.5"
N6-1511-3E	15.0 SCFM	15.0 HP	JS-7300-A-1008	840 LBS	62" x 33" x 42.5"
N6-181-3E	19.5 SCFM	20.0 HP	JS-7300-A-1008	880 LBS	62" x 33" x 42.5"
N6-220-3E	33.0 SCFM	30.0 HP	JS-7300-A-1008	N/A*	N/A*

All 6100 PSIG systems are supplied with the new Jordair 7300 PSIG filter system and protected with a 6500 PSIG relief valve. Please specify if a lower setting is required.

### 7300 PSIG COMPRESSORS

MODEL	FLOW RATE	MOTOR	FILTER SYSTEM	WEIGHT	SIZE (IN) H x D x W
N7-1511-3E	15.0 SCFM	15 HP	JS-7300-A-1008	840 LBS	62" x 33" x 42.5"
N7-181-3E	18.0 SCFM	20 HP	JS-7300-A-1008	880 LBS	62" x 33" x 42.5"

**Note:** Crated size will add 6" to all unit dimensions and 100 lbs to unit weight

\*Information available upon request

## NITROGEN BOOSTER COMPRESSORS

### 720 PSIG COMPRESSORS

MODEL	FLOW RATE	MOTOR	SUCTION PRESSURE	FINAL PRESSURE	FILTER SYSTEM	WEIGHT	SIZE (IN) H x D x W
NB720-123-1E	16/26 SCFM	7.5 HP	72 PSIG	217/580 PSIG	JS-7300-A-1008	705 LBS	62" x 33" x 42.5"
NB720-123-3E	16/26 SCFM	7.5 HP	72 PSIG	217/580 PSIG	JS-7300-A-1008	705 LBS	62" x 33" x 42.5"
NB720-123-1E	42/25 SCFM	7.5 HP	109 PSIG	217/720 PSIG	JS-7300-A-1008	705 LBS	62" x 33" x 42.5"
NB720-123-3E	42/25 SCFM	7.5 HP	109 PSIG	217/720 PSIG	JS-7300-A-1008	705 LBS	62" x 33" x 42.5"
NB720-123-1E	55/38 SCFM	7.5 HP	145 PSIG	290/720 PSIG	JS-7300-A-1008	705 LBS	62" x 33" x 42.5"
NB720-123-3E	55/38 SCFM	7.5 HP	145 PSIG	290/720 PSIG	JS-7300-A-1008	705 LBS	62" x 33" x 42.5"
NB720-124-1E	70/54 SCFM	10.0 HP	188 PSIG	362/720 PSIG	JS-7300-A-1008	705 LBS	62" x 33" x 42.5"
NB720-124-3E	70/54 SCFM	10.0 HP	188 PSIG	362/720 PSIG	JS-7300-A-1008	705 LBS	62" x 33" x 42.5"

### 5000 PSIG COMPRESSORS

MODEL	FLOW RATE	MOTOR	SUCTION PRESSURE	FINAL PRESSURE	FILTER SYSTEM	WEIGHT	SIZE (IN) H x D x W
NB5-122-1E	7.0 SCFM	7.5 HP	72 PSIG	5000 PSIG	JS-7300-A-1008	705 LBS	62" x 33" x 42.5"
NB5-122-3E	7.0 SCFM	7.5 HP	72 PSIG	5000 PSIG	JS-7300-A-1008	705 LBS	62" x 33" x 42.5"
NB5-122-1E	10.4 SCFM	7.5 HP	101 PSIG	5000 PSIG	JS-7300-A-1008	705 LBS	62" x 33" x 42.5"
NB5-122-3E	10.4 SCFM	7.5 HP	101 PSIG	5000 PSIG	JS-7300-A-1008	705 LBS	62" x 33" x 42.5"
NB5-122-1E	13.8 SCFM	7.5 HP	130 PSIG	5000 PSIG	JS-7300-A-1008	705 LBS	62" x 33" x 42.5"
NB5-122-3E	13.8 SCFM	7.5 HP	130 PSIG	5000 PSIG	JS-7300-A-1008	705 LBS	62" x 33" x 42.5"
NB5-122-1E	17.0 SCFM	7.5 HP	159 PSIG	5000 PSIG	JS-7300-A-1008	705 LBS	62" x 33" x 42.5"
NB5-122-3E	17.0 SCFM	7.5 HP	159 PSIG	5000 PSIG	JS-7300-A-1008	705 LBS	62" x 33" x 42.5"
NB5-153-3E	18.0 SCFM	15.0 HP	101 PSIG	5000 PSIG	JS-7300-A-1008	840 LBS	62" x 33" x 42.5"
NB5-153-3E	21.0 SCFM	15.0 HP	116 PSIG	5000 PSIG	JS-7300-A-1008	840 LBS	62" x 33" x 42.5"
NB5-153-3E	23.0 SCFM	15.0 HP	130 PSIG	5000 PSIG	JS-7300-A-1008	840 LBS	62" x 33" x 42.5"
NB5-153-3E	26.0 SCFM	15.0 HP	145 PSIG	5000 PSIG	JS-7300-A-1008	840 LBS	62" x 33" x 42.5"
NB5-1541-3E	16.0 SCFM	15.0 HP	30 PSIG	5000 PSIG	JS-7300-A-1008	N/A*	N/A*
NB5-1541-3E	21.0 SCFM	15.0 HP	45 PSIG	5000 PSIG	JS-7300-A-1008	N/A*	N/A*
NB5-1541-3E	27.0 SCFM	20.0 HP	60 PSIG	5000 PSIG	JS-7300-A-1008	N/A*	N/A*

\*Information available upon request

## TECHNICAL DATA

### CAPACITY CALCULATIONS

Compressor Flow Rate is based on filling a one hour 88 cubic (ft<sup>3</sup>) cylinders from the zero pressure to 4500 PSIG. Note: Technical specifications subject to change without notice

### 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*

## COMPRESSOR UPGRADE OPTIONS

### COMPRESSOR FRAME COLOUR:

<b>J-PCU</b>	Change compressor frame powder coating color
<b>J-USP-LF</b>	Complete set of Enclosed Panels - Non Insulated (Large Frame) - 151 to 181
<b>J-CFIP-LF</b>	Complete silent insulation package for the compressor frame
<b>J-E-FAN-20-A-1/2</b>	Auxiliary cooling fan for fully enclosed unit - 100 to 1214
<b>J-E-FAN-20-A-1</b>	Auxiliary cooling fan for fully enclosed unit - 151 to 181
<b>J-ODP-HNS</b>	Outdoor Nitrogen Package (See brochure for full scope)
<b>J-IDP-HNS</b>	Indoor Nitrogen Package (See brochure for full scope)

**Note: when enclosing a compressor frame, include the auxiliary fan for perfect cooling of the unit**

### 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-IDP-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

**VARIABLE SPEED DRIVES:**

<b>6SL3210-1PC22-2ULO</b>	Variable Speed Drive for 5 HP models
<b>6SL3210-1PC22-8ULO</b>	Variable Speed Drive for 7.5 HP models
<b>6SL3210-1PC24-2ULO</b>	Variable Speed Drive for 10 HP models
<b>6SL3210-1PC25-4ULO</b>	Variable Speed Drive for 15 HP models
<b>6SL3210-1PC26-8ULO</b>	Variable Speed Drive for 20 HP models

**COMPRESSOR CONTROLS & INLET ACCESSORIES:**

<b>J-BASE-SKID</b>	Base skid for mounting of auxiliary components (required for certain add-ons)
<b>J-TANK-60</b>	Inlet Buffer Tank and Fittings with Gauge and Drain Valve
<b>J-PG-PM-CBM-2.5-30+30-D</b>	Inlet Pressure Gauge - (-30 to 30 PSI)
<b>J-PR-125-1.5-3.5-3.8</b>	Inlet Pressure Regulator - 1.5-3.5 PSI Outlet

**COMPRESSOR FILTRATION SYSTEM:**

<b>JBF-7300-6-16-A</b>	Add bare filter chamber and fittings - 7300 PSIG, 16" Barrel
<b>JBF-7300-6-22-A</b>	Add bare filter chamber and fittings - 7300 PSIG, 22" Barrel
<b>JBF-7300-6-22-S-A</b>	Add bare filter chamber and fittings - 7300 PSIG, 22" Barrel, Securus Cap
<b>JBF-7300-6-32-A</b>	Add bare filter chamber and fittings - 7300 PSIG, 32" Barrel
<b>JBF-7300-6-32-S-A</b>	Add bare filter chamber and fittings - 7300 PSIG, 32" Barrel, Securus Cap
<b>JBF-1100-6.5-33-A</b>	Jumbo Filter Chamber - 1100 PSIG, 33" Barrel
<b>JBF-6400-9.5-BRL-35</b>	Jumbo Filter Chamber - 6400 psig, 35" Barrel
<b>N15096-C</b>	Securus Moisture Monitor
<b>N15096-CU</b>	Securus upgrade from the JBP41 to the JBP61 filter system

**FILTER CARTRIDGES:**

<b>FC-1008-SE</b>	Separator Coalescing Element
<b>FC-1008-SE-HF</b>	Separator Coalescing Element, for high purity and oil removal
<b>FC-NFFF12-R</b>	High purity, high capacity separator element for Air, Nitrogen & Helium 0.01 micron
<b>80100</b>	Cartridge, Bauer, For 16" Chamber, Drying & Oil
<b>62504</b>	Cartridge, Bauer, For 22" Chamber, Drying
<b>62565</b>	Cartridge, Bauer, For 22" Chamber, Drying & Oil
<b>61686</b>	Cartridge, Bauer, For 22" Chamber, Drying & Oil, Securus
<b>58825</b>	Cartridge, Bauer, For 32" Chamber, Drying
<b>58826</b>	Cartridge, Bauer, For 32" Chamber, for wet gases and oil removal
<b>68622</b>	Cartridge, Bauer, For 32" Chamber, for dry gases and oil removal
<b>60036</b>	Cartridge, Bauer, For 32" Chamber, Drying & Oil, Securus
<b>67867</b>	Cartridge, Bauer, Super Jumbo, For P141 System, Drying & Oil Removal

## COMPRESSOR SERVICE PARTS LISTS

**Note:** The following service parts list are for the default model of compressor, models with any changes or upgrades to the filtration system will differ. Consult your compressors original Test Report in the manual to find your systems service parts.

For IK 100, 120, 1214 Models

QTY	Part Name	Part Number
1	Oil Filter	N25326
1	Separator Element	FC-1008-SE
2	Separator O-Ring	J-OR-2-334
2	Separator Backup Ring	J-OR-8-334
1	Synthetic Oil 4 Litre	J-C751-4

For 151, 1511, 150, 180, 181 Models

QTY	Part Name	Part Number
1	Oil Filter	N25326
1	Separator Element	FC-1008-SE
2	Separator O-Ring	J-OR-2-334
2	Separator Backup Ring	J-OR-8-334
2	Synthetic Oil 4 Litre	J-C751-4

**Note:** Jordair recommends changing both O-rings and backup rings for the filter and separator top and base caps during service as well as inspecting the barrels from both sides for any damage or deterioration. It also provides the opportunity to ensure all threads are in good condition and lubricated.

## COMPRESSOR BLOCK TECHNICAL DATA

### 5000 PSIG BLOCKS

COMPRESSOR BLOCK	SPEED	FLOW RATE	STAGES	MOTOR		FINAL PRESSURE
				HP	KW	
IK100	1270	4.4 SCFM	3	5.0	3.6	5000 PSIG
IK120	1470	7.6 SCFM	3	7.5	5.5	5000 PSIG
IK1214	1470	10.3 SCFM	4	10.0	7.3	5000 PSIG
IK151	1320	15.0 SCFM	4	15.0	11.0	5000 PSIG
IK150	1230	18.0 SCFM	4	15.0	11.0	5000 PSIG
IK180	1320	22.0 SCFM	4	20.0	14.7	5000 PSIG
IK220	1320	33.0 SCFM	4	30.0	20.5	5000 PSIG
IK230	1400	52.0 SCFM	4	50.0	34.0	5000 PSIG
IK250	1180	67.0 SCFM	4	75.0	41.0	5000 PSIG
IK280	1180	125.0 SCFM	4	100.0	72.0	5000 PSIG

### 6000 PSIG BLOCKS

COMPRESSOR BLOCK	SPEED	FLOW RATE	STAGES	MOTOR		FINAL PRESSURE
				HP	KW	
IK100	1050	3.5 SCFM	3	5.0	3.6	6000 PSIG
IK120	1200	6.0 SCFM	3	7.5	5.5	6000 PSIG
IK1214	1470	10.3 SCFM	4	10.0	7.3	6000 PSIG
IK1511	1320	15.0 SCFM	4	15 HP	11.0	6000 PSIG
IK181	1490	19.5 SCFM	5	20 HP	15.0	6000 PSIG
IK220	1320	33.0 SCFM	4	30 HP	22.0	6000 PSIG

### 6500 PSIG BLOCKS

COMPRESSOR BLOCK	SPEED	FLOW RATE	STAGES	MOTOR		FINAL PRESSURE
				HP	KW	
IK1511	1320	10.0 SCFM	4	10.0	7.3	6500 PSIG
IK1511	1320	15.0 SCFM	4	15.0	11.0	6500 PSIG
IK181	1320	18.0 SCFM	5	20.0	15.0	6500 PSIG

### 7000 PSIG BLOCKS

COMPRESSOR BLOCK	SPEED	FLOW RATE	STAGES	MOTOR		FINAL PRESSURE
				HP	KW	
IK1511	1320	10.0 SCFM	4	20.0	14.7	7000 PSIG
IK1511	1320	15.0 SCFM	4	15.0	11.0	7000 PSIG
IK181	1320	19.5 SCFM	5	20.0	14.7	7000 PSIG
IK259	1180	67.0 SCFM	5	60.0	45.0	7000 PSIG
IK2518	1100	80.0 SCFM	5	75.0	55.0	7000 PSIG



**720 PSIG BOOSTER BLOCKS**

COMPRESSOR BLOCK	SPEED	FLOW RATE	STAGES	MOTOR		SUCTION PRESSURE	FINAL PRESSURE
				HP	kW		
<b>BK123*</b>	1300 RPM	16/26 SCFM	1	7.5	5.5	72 PSIG	217/580 PSIG
<b>BK123</b>	1300 RPM	42/25 SCFM	1	7.5	5.5	109 PSIG	217/720 PSIG
<b>BK123</b>	1300 RPM	55/38 SCFM	1	7.5	5.5	145 PSIG	290/720 PSIG
<b>BK124</b>	1300 RPM	70/54 SCFM	1	10.0	7.3	188 PSIG	362/720 PSIG

**5000 PSIG BOOSTER BLOCKS**

COMPRESSOR BLOCK	SPEED	FLOW RATE	STAGES	MOTOR		SUCTION PRESSURE	FINAL PRESSURE
				HP	kW		
<b>BK122</b>	1230 RPM	7.0 SCFM	2	7.5	5.5	72 PSIG	5000 PSIG
<b>BK122</b>	1230 RPM	10.4 SCFM	2	7.5	5.5	101 PSIG	5000 PSIG
<b>BK122</b>	1230 RPM	13.8 SCFM	2	7.5	5.5	130 PSIG	5000 PSIG
<b>BK122</b>	1230 RPM	17.0 SCFM	2	7.5	5.5	159 PSIG	5000 PSIG
<b>BK153</b>	1140 RPM	18.0 SCFM	2	15.0	11.0	101 PSIG	5000 PSIG
<b>BK153</b>	1140 RPM	21.0 SCFM	2	15.0	11.0	116 PSIG	5000 PSIG
<b>BK153</b>	1140 RPM	23.0 SCFM	2	15.0	11.0	130 PSIG	5000 PSIG
<b>BK153</b>	1140 RPM	26.0 SCFM	2	15.0	11.0	145 PSIG	5000 PSIG

\* Paired rows share the same compressor block. The model number with the \* is the actual block number. The other compressor blocks run at different speeds and therefore have been given a different number.

## BAUER COMPRESSOR BLOCK FEATURES

- High velocity, full flow cooling fan assembly that produces high velocity airflow over the coolers, pressure cylinders and crankcase to cool the compressed air and lubricating oil.
- Drive gear designed for an operating life of up to 30,000 hours.
- Stainless steel inter-coolers and after-coolers for high efficiency cooling and corrosion free operation.
- Cylinders are hardened through a plasma-nitrate process for up to 10,000 hours of operating life and low wear with excellent lubricating oil retention.
- Redesigned rings for the HP piston are synthetic material for low wear and a long operating life with very little oil carry over.
- Single-piece crankcase made of a high strength aluminum alloy for higher stability, larger oil capacity, and low vibration.
- Full flow oil system with a crankshaft-driven gear pump and full flow oil filter.
- Visual oil level indicator is designed show the accurate oil level.
- Reed valve on the first stage which offers higher efficiency and redesigned intake filter reduces intake valve noise.
- Final stage oil cooled cylinder and cylinder-head for lower air discharge temperature.
- Bauer compressor blocks provide the highest level of reliability and virtually no oil carryover into the compressed gas stream. This ensures perfect filtration with original Bauer filter cartridges and the longest cartridge life.

**IK100, IK100-420**



**IK120, IK120-420**



**IK1214**



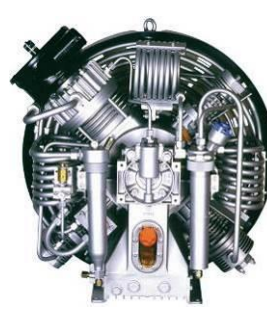
**IK151, IK1511**



**IK150, IK180**



**IK181**



**IK220**



NOTE: Jordair reserves the right to change models or scope of supply at its own discretion and without notice; obtaining current factory quotations and technical product descriptions is highly recommended.