

HELIUM 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 HELIUM COMPRESSOR FEATURES

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

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

SCOPE OF SUPPLY AND OPTIONS

- Fully enclosed vertical frame with front and back service access panels
- Auxiliary fan system to increase the compressor block cooling air flow by 150%
- Logo 8 PLC with panel mounted 6" x 8" HMI touch screen showing compressor fault data
- Low oil pressure transmitter with display and alarm with screen display of the fault
- High temperature RTD display with alarm and screen display of the fault
- Final pressure transmitter set for customers required shut down pressure
- Inlet pressure transmitter with display and alarm with screen display of the fault
- Inlet solenoid to close off the Helium supply at the compressor shut down
- Auto-run and stop mode operation with emergency shut down button
- Optional Flexy data modem connection to the customer and service technicians cell phone
- Pressure transmitters for real time display of the inlet pressure, final pressure and oil pressure
- Oil & inter-stage pressure gauges are mounted on the block and visible at the back side of the compressor
- Final CRN certified filter for drying and 100% removal of oil from the Helium
- Nationally certified CRN registered 7300 PSIG final coalescing separator with recovery connection for no gas loss
- Final separator cycle counter to ensure filter system safety and record pressure cycles
- Cycle count is displayed on the panel mounted display screen
- Final separator and filter life rated for 15 years
- Automatic condensate drain and silent collection system to recover all gas
- Fully enclosed frame and optional silent insulation
- Compressor sub-base for factory install of the gas recovery tank, and regulated gas return to inlet
- Inlet filter for compressor intake

HELIUM COMPRESSORS

3200 PSIG COMPRESSORS

| MODEL | FLOW RATE | MOTOR | OIL & WATER SEPARATOR | WEIGHT | SIZE (IN) H x D x W |
|-----------|-----------|--------|-----------------------|---------|------------------------|
| H3-PE-1E | 2.5 SCFM | 3 HP | JS-7300-A-1008 | 485 LBS | 62" x 33" x 42.5" |
| H3-PE-3E | 2.5 SCFM | 3 HP | JS-7300-A-1008 | 485 LBS | 62" x 33" x 42.5" |
| H3-100-1E | 3.0 SCFM | 5 HP | JS-7300-A-1008 | 485 LBS | 62" x 33" x 42.5" |
| H3-100-3E | 3.0 SCFM | 5 HP | JS-7300-A-1008 | 485 LBS | 62" x 33" x 42.5" |
| H3-120-1E | 6.0 SCFM | 7.5 HP | JS-7300-A-1008 | 550 LBS | 62" x 33" x 42.5" |
| H3-120-3E | 6.0 SCFM | 7.5 HP | JS-7300-A-1008 | 550 LBS | 62" x 33" x 42.5" |
| H3-151-3E | 14.0 SCFM | 15 HP | JS-7300-A-1008 | 840 LBS | 62" x 33" x 42.5" |
| H3-181-3E | 18.4 SCFM | 20 HP | JS-7300-A-1008 | 880 LBS | 62" x 33" x 42.5" |

5300 PSIG COMPRESSORS

| MODEL | FLOW RATE | MOTOR | OIL & WATER SEPARATOR | WEIGHT | SIZE (IN) H x D x W |
|-----------|-----------|-------|-----------------------|---------|------------------------|
| H5-151-3E | 14.0 SCFM | 15 HP | JS-7300-A-1008 | 840 LBS | 62" x 33" x 42.5" |
| H5-157-3E | 14.8 SCFM | 15 HP | JS-7300-A-1008 | 880 LBS | 62" x 33" x 42.5" |
| H5-181-3E | 18.4 SCFM | 20 HP | JS-7300-A-1008 | 880 LBS | 62" x 33" x 42.5" |

All 5300 PSIG systems are supplied with the new Jordair 6500/7300 PSIG filter system and protected with a 5500 PSIG relief valve.

6100 PSIG COMPRESSORS

| MODEL | FLOW RATE | MOTOR | OIL & WATER SEPARATOR | WEIGHT | SIZE (IN) H x D x W |
|-----------|-----------|-------|-----------------------|---------|------------------------|
| H6-151-3E | 14.8 SCFM | 15 HP | JS-7300-A-1008 | 840 LBS | 62" x 33" x 42.5" |
| H6-181-3E | 18.4 SCFM | 20 HP | JS-7300-A-1008 | 880 LBS | 62" x 33" x 42.5" |

All 6100 PSIG systems are supplied with the new Jordair 6500/7300 PSIG filter system and protected with a 6500 PSIG relief valve.

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

COMPRESSOR UPGRADE OPTIONS

COMPRESSOR FRAME COLOUR:

| | |
|-----------------------|---|
| J-PCU | Change compressor frame powder coating colour |
| J-ODP-HNS | Outdoor Helium Package (See brochure for full scope) |
| J-IDP-HNS | Indoor Helium Package (See brochure for full scope) |
| CSA INSPECTION | CSA Special Inspection for non-standard custom designed systems |

Outdoor Package Features (J-ODP-HNS)

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

VARIABLE SPEED DRIVES:

| | |
|---------------------------|--|
| 6SL3210-1PC22-2UL0 | Variable Speed Drive for 5 HP models |
| 6SL3210-1PC22-8UL0 | Variable Speed Drive for 7.5 HP models |
| 6SL3210-1PC24-2UL0 | Variable Speed Drive for 10 HP models |
| 6SL3210-1PC25-4UL0 | Variable Speed Drive for 15 HP models |
| 6SL3210-1PC26-8UL0 | Variable Speed Drive for 20 HP models |

COMPRESSOR CONTROLS & INLET ACCESSORIES:

| | |
|--------------------------------|---|
| J-BASE-SKID | Base skid for mounting of auxiliary items, inlet & recovery tanks and filters |
| J-TANK-60 | Inlet Buffer Tank and Fittings |
| J-PG-PM-CBM-2.5-30+30-D | Inlet Pressure Gauge - (-30 to 30 PSI) |
| J-PR-125-1.5-3.5-3.8 | Inlet Pressure Regulator - 1.5-3.5 PSI Outlet |
| J-E-SV-2-16-120-P | Inlet Solenoid Valve - 2 Way, 1" FNPT, 120V |
| J-E-SV-2-24-120-P | Inlet Solenoid Valve - 2 Way, 2" FNPT, 120V |
| EWON-FLEXY | Fault transmitter to report a compressor fault to Jordair, the customer, and the service provider |

COMPRESSOR FILTER 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 |
| N15096-C | Securus Moisture Monitor |
| N15096-CU | Securus upgrade form JBP41 to the JBP61 filter system |
| | |
| FC-1008-SE | Separator Coalescing Element |
| FC-1008-SE-HF | Separator Coalescing Element, high purity of oil removal |
| 80100 | Cartridge, Bauer, For 16" Chamber, Drying & Oil |
| 62504 | Cartridge, Bauer, For 22" Chamber, Drying |
| 62565 | Cartridge, Bauer, For 22" Chamber, Drying & Oil |
| 61686 | Cartridge, Bauer, For 22" Chamber, Drying & Oil, Securus |
| 58825 | Cartridge, Bauer, For 32" Chamber, Drying |
| 58826 | Cartridge, Bauer, For 32" Chamber, for wet gases and oil removal |
| 68622 | Cartridge, Bauer, For 32" Chamber, for dry gases and oil removal |
| 60036 | Cartridge, Bauer, For 32" Chamber, Drying & Oil, Securus |
| 67099 | Cartridge, Bauer, Jumbo, For P121 System, Drying |
| 67867 | Cartridge, Bauer, Super Jumbo, For P141 System, Drying & Oil Removal |
| 67812 | Cartridge, Bauer, Super Jumbo, For P141 System, Oil Removal |

ELECTRONIC MONITORS



eWON Flexy Fault Data Transmitter

The FLEXY data transmitter model provides direct access to the compressor and advises when a fault occurs. The transmitter will interface to a smart phone or to a computer system. In the event of a compressor fault and shutdown the data will be transmitted to Jordair, the customer, and the service group for the system. This assists the compressor operator to have immediate knowledge in the event a fault occurs and the shortest response time to resolve the issue.

TECHNICAL DATA

CAPACITY CALCULATIONS

Compressor Flow Rate and motor power consumption, is based on the actual flow meter measured capacity at 3000 PSIG and 20C.

Note: Technical specifications subject to change without notice

FILTRATION SYSTEM DESCRIPTION

The JS-7300-A-1008 separators are standard for all Helium models. Separator element should be changed every three months in order to minimize oil carry over in the air 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 (e.g. IAB720-123-1E-230V)

Standard production is 60Hz, consult the factory for 50 Hz requirements and other voltages

Weights and Sizes are approximations and are subject to change without notice. For exact weights and dimensions please consult a Jordair representative.

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.

(Gas only) – For IK 100, 120 Models

| QTY | Part Name | Part Number |
|-----|-----------------------|-------------|
| 1 | Oil Filter | N25326 |
| 1 | Separator Element | FC-1008-SE |
| 2 | Separator O-Ring | J-OR-2-326 |
| 2 | Separator Backup Ring | J-OR-8-326 |
| 1 | Synthetic Oil 4 Litre | J-C751-4 |

(Gas only) – For 151, 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 |

(Gas only) – For PE Model

| QTY | Part Name | Part Number |
|-----|-----------------------|-------------|
| 1 | Inlet Filter | N4823 |
| 1 | O-ring | N26701 |
| 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 1 Litre | J-C751-1 |

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**3200 PSIG BLOCKS**

| COMPRESSOR BLOCK | SPEED | FLOW RATE | STAGES | MOTOR | | FINAL PRESSURE |
|---------------------|----------|-----------|--------|-------|------|-------------------|
| | | | | HP | kW | |
| PE-100 | 2350 RPM | 2.5 SCFM | 3 | 3.0 | 2.2 | 3200 PSIG |
| IK100 | 900 RPM | 3.0 SCFM | 3 | 5.0 | 3.6 | 3200 PSIG |
| IK120 | 1250 RPM | 6.0 SCFM | 3 | 7.5 | 5.5 | 3200 PSIG |
| IK151 | 1230 RPM | 14.0 SCFM | 4 | 15.0 | 11.0 | 3200 PSIG |
| IK181 | 1320 RPM | 20.0 SCFM | 5 | 20.0 | 14.7 | 3200 PSIG |

5000 PSIG BLOCKS

| COMPRESSOR BLOCK | SPEED | FLOW RATE | STAGES | MOTOR | | FINAL PRESSURE |
|---------------------|----------|-----------|--------|-------|------|-------------------|
| | | | | HP | kW | |
| IK151 | 1230 RPM | 14.0 SCFM | 4 | 15.0 | 11.0 | 5000 PSIG |
| IK157 | 1230 RPM | 14.8 SCFM | 5 | 15.0 | 11.0 | 5000 PSIG |
| IK181 | 1320 RPM | 18.4 SCFM | 5 | 20.0 | 14.7 | 5000 PSIG |

6000 PSIG BLOCKS

| COMPRESSOR BLOCK | SPEED | FLOW RATE | STAGES | MOTOR | | FINAL PRESSURE |
|---------------------|----------|-----------|--------|-------|------|-------------------|
| | | | | HP | kW | |
| IK157 | 1230 RPM | 14.8 SCFM | 5 | 15.0 | 11.0 | 5000 PSIG |
| IK181 | 1320 RPM | 18.4 SCFM | 5 | 20.0 | 14.7 | 5000 PSIG |

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 air stream. This ensures perfect filtration with original Bauer filter cartridges and the longest cartridge life.

PE



IK100



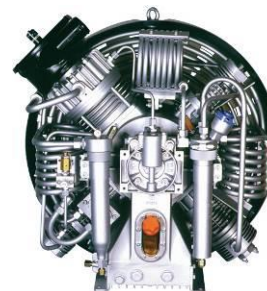
IK120



IK151



IK181



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.