Evolution™

Rotary Screw Air Compressors

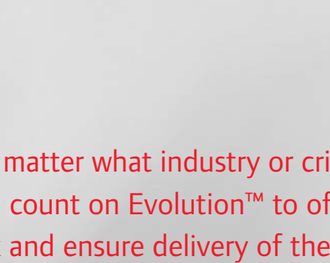
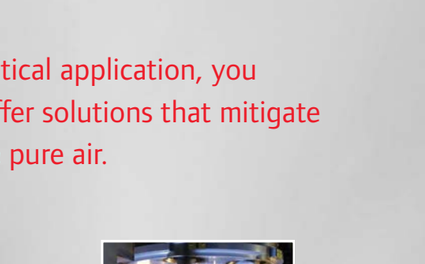
Productivity. Efficiency. Reliability.

No matter what industry or critical application, you can count on Evolution™ to offer solutions that mitigate risk and ensure delivery of the pure air.








- Textile Industries
- Food and Processing Industry
- Automobile Industry
- Iron & Metal Industry
- Paint/Colour Industry
- General Manufacturing

  and more...

Evolution™

Rotary Screw Air Compressors

Price is what you pay. Value is what you get.

– Warren Buffett
(American business magnate, investor and philanthropist)

Evolution™, true value for money!

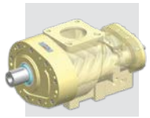
Evolution™, a brand of Ingersoll Rand, comes with a commitment to stand behind the customers in all aspects of what it does. We bring peace of mind that allows our customers to focus on their primary objective: moving their businesses forward. Thus, it continues to advance in compressed air technology and Services to maximize reliability, efficiency and productivity for our customers.

For affordable and reliable air supply…

Evolution™, for easy and reliable air supply

Evolution™ rotary screw air compressors are designed to provide ease of operation, low maintenance and reliable air supply. When you choose Evolution™, you have selected the compressor rated highly for its performance and reliability.

Features



Value for Money
Designed with advanced technology to produce more volume of air, makes it a cost effective solution.

Long Life Synthetic Ultra Coolant™
Biodegradable synthetic Ultra Coolant™ with 8,000 hours long life help you to reduce maintenance cost and increase productivity.

Advanced Cooling
Optimally designed blower reduces power cost by eliminating the need for extra fan motor and provides efficient cooling in 46°C ambient environment.

Evolution™ 4 – 11 kW

Evolution™ 15 – 22 kW

One Stop Solution
Complete solution for compressor and accessories including air receivers, air dryers and air filters.

Xe-Series Controller
High-tech Xe-Series controller, satisfies all-around requirements from our customers.
Increases efficiency and stabilizes pressure by sequencing upto 4 Xe-controlled compressors without additional hardware.

Dual-Control Operation
Reliable and effective load/no-load control with automatic stop and restart facility for maximum flexibility.

Ease of Serviceability
All key maintenance components have been grouped to provide ease of serviceability.

Rotary Technology
Installed with progressive rotary technology which delivers more CFM/kW and provides higher efficiency than reciprocating compressors.

Power Saving Control
Automatic stop and restart facility for maximum flexibility in operating machine.

Evolution™

2.2 – 11 kW Rotary Screw Air Compressors

Model	Power	Capacity	Pressure in psig		Dimension in mm			Weight	Tank
	kW	cfm	rated	max.	length	width	height	kg	litre
N2-7-200	2.2	9.5	100	110	1403	560	1134	174	200
N2-10-200	2.2	8.5	145	152	1403	560	1134	174	200
N4-7-200	4	21.4	100	110	1403	560	1134	183	200
N4-10-200	4	16.5	145	152	1403	560	1134	183	200
N5-7-200 SD	5.5	27	100	110	1403	560	1134	188	200
N5-10-200 SD	5.5	22	145	152	1403	560	1134	188	200
N2-7-200-D	2.2	9.5	100	110	1403	560	1134	218	200
N2-10-200-D	2.2	8.5	145	152	1403	560	1134	218	200
N4-7-200-D	4	21.4	100	110	1403	560	1134	227	200
N4-10-200-D	4	16.5	145	152	1403	560	1134	227	200
N5-7-200 SD-D	5.5	27	100	110	1403	560	1134	250	200
N5-10-200 SD-D	5.5	22	145	152	1403	560	1134	250	200
N7-7	7	37.4	95	102	850	790	810	280	-
N7-8	7	35.3	109	116	850	790	810	280	-
N7-10	7	30	138	145	850	790	810	280	-
N11-7	11	54.4	95	102	850	790	810	280	-
N11-8	11	51.2	109	116	850	790	810	280	-
N11-10	11	44.1	138	145	850	790	810	280	-
N7-7-272	7	37.4	95	102	850	1470	1550	450	272
N7-8-272	7	35.3	109	116	850	1470	1550	450	272
N7-10-272	7	30	138	145	850	1470	1550	450	272
N11-7-272	11	54.4	95	102	850	1470	1550	450	272
N11-8-272	11	51.2	109	116	850	1470	1550	450	272
N11-10-272	11	44.1	138	145	850	1470	1550	450	272

Additional Features ☑ Pressure Regulator Switch ☑ Integrated Compact System

Quiet Operation
Integrated construction with less number of fasteners benefits you to reduce noise in workshop.

Efficient Inlet Filter
Efficient inlet air filter to ensure compressed air does not carry more than 3 micron particles. This helps to increase dust holding capacity as well as filter life.

Quick service support
We offer a wide network of certified and well trained technicians and engineers capable of supporting you with cost effective service solutions to keep your compressed air system at peak performance.

15 – 22 kW Rotary Screw Air Compressors

Model	Power	Capacity	Pressure in psig		Dimension in mm			Weight
	kW	cfm	rated	max.	length	width	height	kg
N15 7	15	95	100	110	1245	1150	1150	470
N15 8	15	89.5	115	125	1245	1150	1150	470
N15 10	15	82	135	145	1245	1150	1150	470
N18 7	18.5	112	100	110	1245	1150	1150	490
N18 8	18.5	106	115	125	1245	1150	1150	490
N18 10	18.5	98	135	145	1245	1150	1150	490
N22 7	22	133	100	110	1245	1150	1150	500
N22 8	22	127	115	125	1245	1150	1150	500
N22 10	22	118.5	135	145	1245	1150	1150	500

Conversion Details : 1 cfm = 0.02831 m³/min · 1 psi = 0.07031 kg/cm² · 1 m³ = 1000 litres · 1 hp = 0.746 kW
FAD (Free Air Delivery) Tested per ISO 1217 : 2009 Annex C

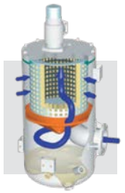
Evolution™ 30 – 37 kW

Additional Features

Time-Proven Reliable and Robust Airends

Used in compressors worldwide, Ingersoll Rand single-stage airends have proven to be the market leader in both reliability and efficiency.

- Precision machined rotors.
- Highest quality tapered roller bearings.
- Integrated coolant flow to eliminate leak paths.



Efficient 3 Stage Separation System

Our Patented Vertical 3-Stage conical baffle separator element minimizes coolant carryover to customer plant and reduces the amount of make up replaced. This design also reduces the impact that overfilling or under filling can have on coolant carryover.

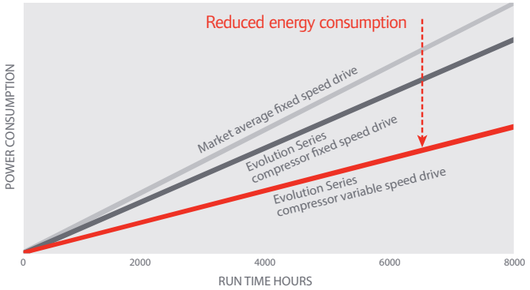
Xe-Series Controller

High-tech Xe-Series controller, satisfies all-around requirements from our customers. Increases efficiency and stabilizes pressure by sequencing upto 4 Xe-controlled compressors without additional hardware.

Driving Towards Maximum Efficiency using Variable Speed Drives (VSD's)

When approx. 20-25% of the total electrical energy is used by Industry to run compressors, it makes compressed air 10 times costlier than electricity. This increases the need to improve efficiency and reduce the wastage of power.

Advanced IE3 efficiency motor. For even more efficiency, optional Variable Speed Drive can help you save 35% of the energy cost.



VFD Option is available for complete Evolution range of Rotary Screew Air Compressors

Evolution™

Evolution™ 45 – 75 kW

High-efficient Gear Driven System

Highly efficient gear driven system that is efficient and stable functioning to increase service life. It's the only drive system that is maintenance free and totally isolated from the environment.

Compartment for Effective Cooling –

Specifically designed extended compartment for effective cooling. It helps to keep overall compressor package temperature at minimum level.

Designed for Trouble Free Maintenance –

Evolution™ is designed for Indian tropical conditions at 46°C. All major components are designed and assembled to provide ease of access and serviceability.

30 – 37 kW Rotary Screw Air Compressors

Model	Power	Capacity	Pressure in psig		Dimension in mm			Weight
	kW	cfm	rated	max.	length	width	height	kg
N30i	30	205	100	110	2046	1051	1265	885
N30i	30	197	115	125	2046	1051	1265	885
N30i	30	185	135	145	2046	1051	1265	885
N37i	37	250	100	110	2046	1051	1265	905
N37i	37	228	115	125	2046	1051	1265	905
N37i	37	218	135	145	2046	1051	1265	905

45 – 75 kW Rotary Screw Air Compressors

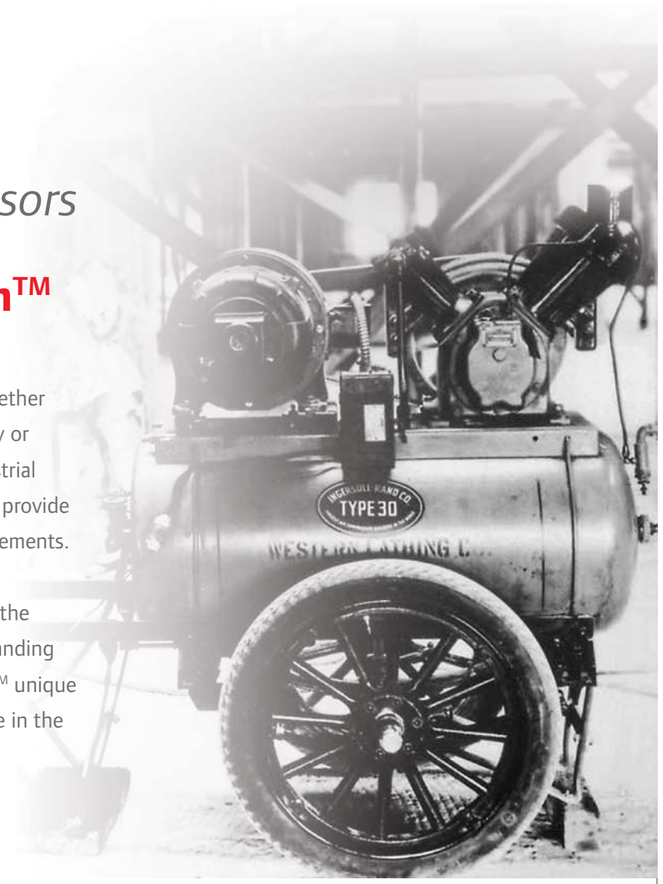
Model	Power	Capacity	Pressure in psig		Dimension in meter			Weight
	kW	cfm	rated	max.	length	width	height	kg
N45 7	45	275	100	110	2.05	1.14	1.2	950
N45 8	45	260	115	125	2.05	1.14	1.2	950
N45 10	45	240	135	145	2.05	1.14	1.2	950
N55 7	55	360	100	110	2.65	1.32	1.43	1450
N55 8	55	333	115	125	2.65	1.32	1.43	1450
N55 10	55	303	135	145	2.65	1.32	1.43	1450
N75 7	75	520	100	110	2.65	1.32	1.43	1640
N75 8	75	475	115	125	2.65	1.32	1.43	1640
N75 10	75	435	135	145	2.65	1.32	1.43	1640

Conversion Details : 1 cfm = 0.02831 m³/min · 1 psi = 0.07031 kg/cm² · 1 m³ = 1000 litres · 1 hp = 0.746 kW

* FAD (Free Air Delivery) m³/min are full-package performance ratings in accordance with CAGI/Pneurop acceptance test standard PN2CPTC2 or ISO 1217.

Evolution™

Reciprocating Air Compressors



Ingersoll Rand - Evolution™

A leader in its class

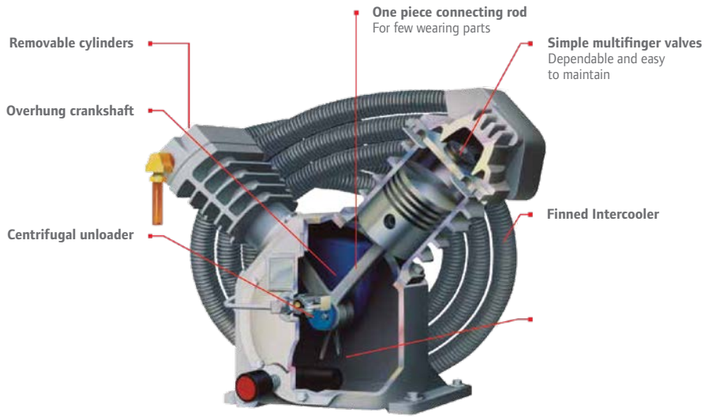
The Ingersoll Rand Evolution™ is a leader in its class. Whether this is measured by reliability, efficiency, rugged flexibility or maintainability, it has no equal. Designed for heavy industrial applications, the two stage reciprocating air compressors provide the quality and performance that exceed customer requirements.

Others may claim to handle heavy duty applications, but the Evolution™ defines the concept. Run it in the most demanding intermediate duty application imaginable. The Evolution™ unique and ideal to meet your demands of a compressor package in the 3-40 HP range.

After all, we've been doing this for over 100 years!

The Inside Story

A two-stage model (1) compresses air to an intermediate pressure in the first stage, (2) removes heat of compression through an intercooler, and (3) compresses air to a final pressure in a second compression stage. Two-stage compressors are more efficient and are generally used for pressures above 100 PSI (maximum pressure to 175 PSI).



No other Reciprocating Compressor offers these efficient, cost-saving features:

A durable cast iron pump which provides 15,000+ hours of trouble-free service

A 100% copper finned intercooler lowers operating temperatures and extends pump life

An overhung crankshaft and single-piece connecting rod allow access to the running gear for easy maintenance

Individually cast cylinders provide flexible, less expensive maintenance on just one cylinder at a time rather than servicing the entire pump

S T A T I O N A R Y

Electric-Driven Two Stage – Air Cooled

Designed for heavy shop or industrial use, Ingersoll Rand Two-Stage electric air compressors provide the quality and performance that are ideal for most applications and users, including: automotive service and body shops; fleet maintenance; machine shops; production and manufacturing lines; construction; wood working shops; dry cleaners; car washes; maintenance/repair shops and farms.

Value Packaged

Economically priced, Ingersoll Rand Two-Stage Value Packaged air compressors are perfect for automotive, commercial or light industrial applications where a dependable air supply is required. The value package includes the added features of a mounted and wired starter, automatic start/stop pressure switch control with suitable size receiver tank.

- Durable cast-iron, tw o-stage design offers extended pump life for years of trouble-free service
- Automatic start/stop control/pressure switch operation
- 175 PSI maximum operating pressure
- 100% continuous duty for tough applications
- Includes motor starter, oil sight glass (10-15 HP only), manual drain

Model	Motor	Capacity	Pressure in psig	Air Receiver	Starter Type meter	Control
	hp	cfm	rated	litre		
N 2340F3	3	8.65	175	150	Direct Online	Automatic Start Stop
N 2475C5	5	13.99	175	225	Direct Online	Automatic Start Stop
N 2475C 7.5	7.5	17.77	175	225	Direct Online	Automatic Start Stop
N2545D 7.5	7.5	24.18	175	300	Direct Online	Automatic Start Stop
N2545D 7.5	7.5	24.18	175	300	Direct Online	Constant Speed control
N 2545D 10	10	30	175	300	Direct Online	Automatic Start Stop
N 2545E 10	10	30	175	500	Direct Online	Constant Speed control
N 2545E 12.5	12.5	35	175	500	Automatic Star Delta	Automatic Start Stop
N 7100E15	15	42.91	125	500	Automatic Star Delta	Automatic Start Stop

All performance details subject to tolerance as per IS–5456.

S T A T I O N A R Y

Electric-Driven Two & Three Stage – High Pressure

Evolution™ Reciprocating multi-stage high pressure air compressors are designed for high pressure applications. These compressors have extra heavy-duty components and are designed for minimum maintenance and maximum performance. High pressure air compressors are widely used in power generation plant, PET blow moulding industry, military, diving and component testing.

- Durable cast-iron with two, three and four stage design
- Intermediate duty applications
- Extended pump life for years of trouble-free service

High Pressure Receiver Mounted Package

Model	Motor	Free Air Delivery cfm at Working Pressure	
	hp	350 psig	35.1 kg/cm²g
251 Package	5	–	6.45
7T2 Package	10 – 12.5	–	21.60
15T2 Package	20	–	37.70
15T2 Duplex Package	40	–	75.40
15T Package	20	50	–
15T Duplex Package	40	100	–

For high pressure operation, adequate care must be taken for proper selection. Our distributors would be happy to assist you in correct selection of model. Models are also available for higher working pressures upto 351 kg/cm² g. Details available on request.

S T A T I O N A R Y

Electric-Driven Single Stage – Air Cooled

Our Single-Stage electric air compressors are ideal for most professional compressor user. Each air compressor features durable cast-iron construction, 100% continuous duty cycle for the toughest applications and extended pump life for years of trouble-free service.

- Industrial quality design
- Durable cast-iron construction
- 125 PSI maximum operating pressure

Standard Pressure Receiver Mounted Package

Model	Motor	Piston Displacement		Maximum Working Pressure		Air Receiver Option
	hp	m³/hr	cfm	bar	psig	ltr
SS-1	1	06.99	04.12	8.62	125	60/100
SS-2	2	14.01	08.25	8.62	125	100/150
SS-3	3	23.36	13.75	8.62	125	100/150
SS-5	5	42.57	25.06	8.62	125	150

All performance details subject to tolerance as per IS-5456. Above models are available with single phase motor also.

Evolution™ Refrigerated Air Dryers

Clean and dry compressed air is important in applications where moisture or contamination can cause system corrosion, damage to pneumatic tools or degradation of products or processes that come in contact with compressed air. When you choose Evolution™*, you have selected air dryer rated highly for its performance.*

Evolution™ refrigerated air dryer offers multiple design features to ensure consistent dew point at all load levels and delivers continuous dry air that satisfies ISO 8573 industry standards.

Evolution™ Air Dryer Specifications

Model	Flow Rate	Air Connection	Power Supply	Weight
	cfm (FAD)	in/out (inch) BSPT	V / Ph / HZ	kg
ND42-IN	42	½	230/1/50	26
ND85-IN	85	¾	230/1/50	34
ND105-IN	106	¾	230/1/50	43
ND140-IN	141	1½	230/1/50	76
ND180-IN	177	1½	230/1/50	87
ND210-IN	212	1½	230/1/50	87
ND280-IN	282	1½	230/1/50	110
ND355IN-i	353	1½	230/1/50	145
ND460IN-i	459	1½	230/1/50	150
ND560IN-i	559	2	230/1/50	162
ND760IN-i	765	ANSI 3",#150 LBS	415/3/50	245
ND830IN-i	829	ANSI 3",#150 LBS	415/3/50	259
ND1110IN-i	1112	ANSI 3",#150 LBS	415/3/50	315
ND1480IN-i	1482	ANSI 4",#150 LBS	415/3/50	345
ND1765IN-i	1764	ANSI 5",#150 LBS	415/3/50	487
ND2470IN-i	2470	ANSI 5",#150 LBS	415/3/50	579
ND2820IN-i	2823	ANSI 6",#150 LBS	415/3/50	622
ND3175IN-i	3176	ANSI 6",#150 LBS	415/3/50	635

- First of its kind - 3 in 1 Cross flow compact high efficiency aluminum plate & fin type of heat exchanger with improved pre-cooling.
- Anti-freezing/energy saving mode for efficient functioning of dryer
- Low pressure drop design
- Variable speed fan for stable dew point control (upto ND280-IN)
- No Loss Drain valve as standard feature starting from ND760IN-i
- Full feature controls permits precise control in varying conditions
- Remote connectivity / alarm / display / alarm history
- Self diagnostic software, anticipates possible faults option
- Control panel operated drain valve
- Environment friendly refrigerant

Refrigerant Gas R134a for Model upto ND280-IN and R407c for bigger models
Maximum Working Pressure 14 barg
Maximum ambient temperature 50°C

Evolution™ Filters

Integrating Evolution™ refrigerated air dryer with air filter provides you clean air by removing suspended particles down to 0.01 micron including coalesced liquid water and oil.*

** With Grade 'H' filter*

Air Filter Specifications

Filter Grade	Flow rate@100 psig	Pipe Size	Weight
G, H, A	cfm (FAD)	BSPT	kg
NF0020	20	⅜	0.6
NF0040	41	½	0.6
NF0065	64	¾	0.7
NF0105	106	¾	0.7
NF0120	120	1	1.1
NF0175	176	1	1.2
NF0255	254	1 ½	1.3
NF0370	370	1 ½	1.4
NF0450	450	2	3.7
NF0580	582	2	3.8
NF0670	671	2 ½	4.8

P - Prefilter (Grade G), A - Afterfilter (Grade H)

Grade G (Prefilter)
General Purpose Protection
Particle removal down to 1 micron including coalesced liquid water and oil, providing a maximum remaining oil aerosol content of 0.1 mg / m³.

Grade H (Afterfilter)
High Efficiency Oil Removal Filtration
Particle removal down to 0.01 micron including water & oil aerosols, providing a maximum remaining oil aerosol content of 0.01mg / m³.

Operating Conditions
Maximum Operating Pressure 232 psig (16 bar)
Maximum Recommended Operating Temperature (Grade G, H,) 176°F (80°C)
Minimum Recommended Operating Temperature 34°F (1°C)

Ingersoll Rand (NYSE:IR) advances the quality of life by creating comfortable, sustainable and efficient environments. Our people and our family of brands—including Club Car®, Ingersoll Rand®, Thermo King® and Trane®—work together to enhance the quality and comfort of air in homes and buildings; transport and protect food and perishables; and increase industrial productivity and efficiency. Ingersoll Rand products range from complete compressed air systems, tools and pumps to material handling systems. The diverse and innovative products, services and solutions enhance our customers' energy efficiency, productivity and operations. Ingersoll Rand is a $14 billion global business committed to a world of sustainable progress and enduring results.

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