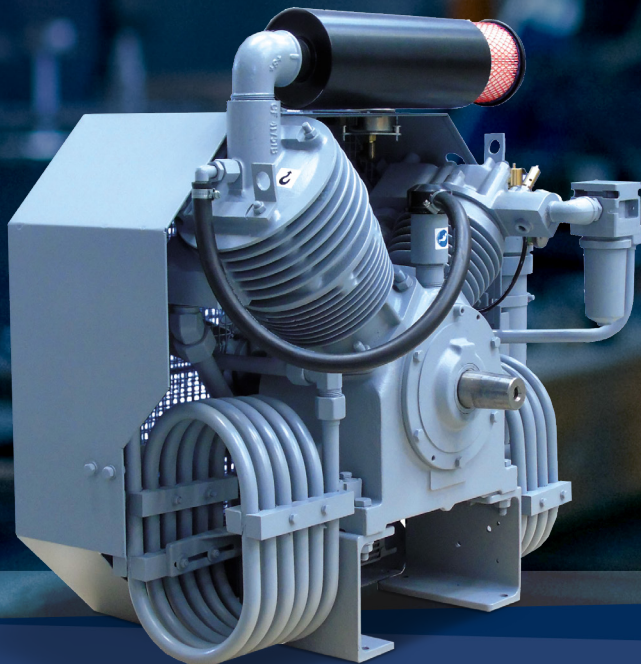


Reavell®

An Ingersoll Rand Business

High Pressure Compressors For Engine Start

Reliable & Compact Solutions For Integration



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Reavell a trusted partner for engine start applications

Compact, maintainable, and designed for integration
Perfect your start with Reavell

Staying Ahead With Reavell

For more than **130** years, Reavell has been at the forefront of compressed air technology. The engineers behind the first Scott-Reavell steam engine, patented in 1894, probably wouldn't recognise today's high pressure compressor range, but they would certainly identify with our relentless drive for technical excellence.

As part of the global **Ingersoll Rand** High-Pressure Division, we continually invest in research and development, with the goal of ever-improving reliability and efficiency. Our compact solutions are designed to offer maximum output with minimum size and weight – delivering performance and peace of mind for customers in demanding, competitive environments, at sea, on land and underground.



The Benefits of Reavell Compressors



Design is focused on minimising time to complete component changes from valves to piston rings.



Reavell 5209 offers 72.2 m³/hr/m²



Can cater for a variety of pressure and volumetric flow requirements



Compressor and drive design maximises the high pressure air delivered for the input power.



Robust design which minimises the frequency of servicing and component changes.



Premium quality components with best in class lifetime



Engine start overview

High pressure compressed air is used in a variety of sectors to start large capacity engines. Some of critical steps and components in this application are indicated below:

Reciprocating compressor: An air compressor is used to compress air to a high pressure.

Storage: The pressurized air is stored in a storage tank until it is needed for starting the engine.

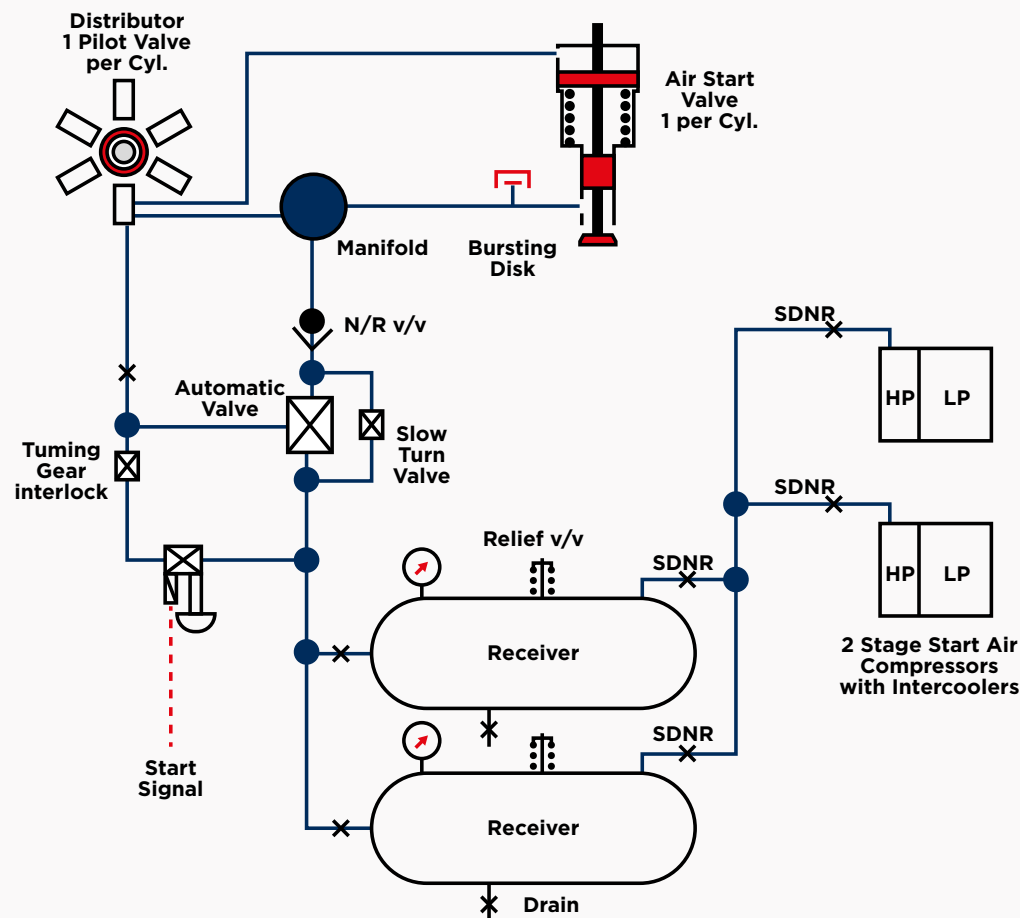
Delivery: When the engine start button is pressed, high-pressure air is released from the tank and delivered to the engine's cylinders.

Increased density: The high-pressure air increases the density of the air-fuel mixture in the engine's cylinders. This results in a more complete combustion of the fuel.

Engine rotation: The increased combustion provides the energy needed to turn the engine's crankshaft.

Air starter motor or turbine: The exact process of delivering high pressure air to the engine's cylinders can vary depending on the engine design. It typically involves the use of an air starter motor or a turbine.

Engine running: Once the engine has started and is running under its own power, the high-pressure air system is no longer needed. The compressed air is either released or used for other purposes. This process allows engines with high compression ratios to start quickly and reliably. High-pressure air starting systems are well suited for use in applications such as in ships and power generation plants.



Reavell Engine Start Compressor Solutions

Reavell air start compressors offer best in class footprint and weight per compressor flowrate for a wide range of applications, delivering power when you need it most.

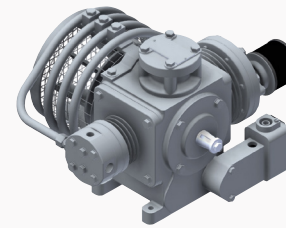
- A comprehensive range of both air and water cooled air start compressors
- Suitable for all diesel applications, including power generation, marine, offshore and emergency services
- Safe, reliable starting, even in the most extreme conditions
- Space saving, 'small footprint', with best in class output per square metre
- Easy installation, reduced maintenance, lower total cost of ownership
- Global service and support network, as part of the Ingersoll Rand High Pressure Division

Whatever the technology, we aim to deliver the highest possible flow rate from the most compact equipment possible. Giving you more space for equipment or maintenance, and lower transportation and installation costs.

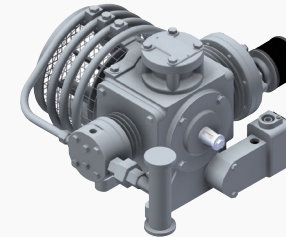
For example, the Reavell 5209 provides 19% more air, but with a 25% smaller footprint and 29% less weight than competitor products – saving valuable space and improving accessibility.

[LEARN MORE](#)

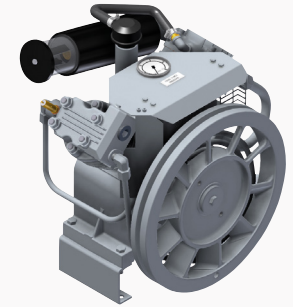
Air Cooled



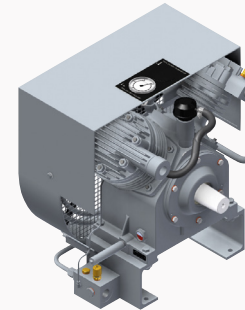
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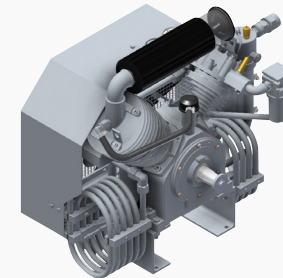
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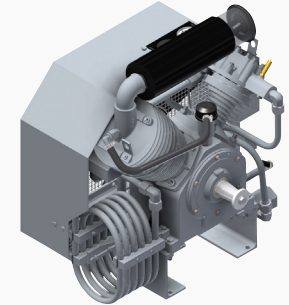
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^ 5209

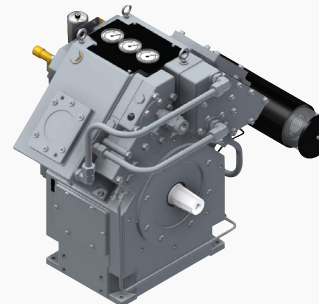


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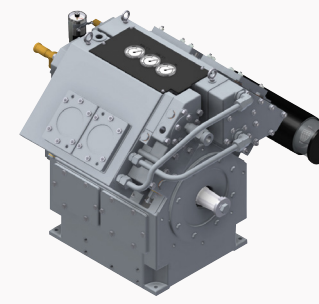


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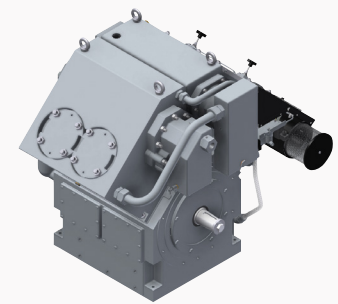
Water Cooled



^ 5212



^ 5217



^ 5236

Product Specifications

Find your Reavell air start solution

Model Number	Block Only			Motor Power at Maximum Performance	Speed		Delivery Pressure		Direct Drive						Belt Drive		Final Separator	
									50 Hz			60 Hz						
	Bare Shaft	Direct Drive Flywheel	Belt Drive Flywheel		kW	Min rpm	Max rpm	Min barG	Max barG	750 rpm	1000 rpm	1500 rpm	900 rpm	1200 rpm	1800 rpm	Min Speed		Max Speed
										Flow rate at maximum delivery pressure and specified nominal motor speed shown in m³/hr								
AIR COOLED																		
5204	●	●	●	2.2	600	1500	16	40	3.4	4.6	6.9	4.1	5.5	-	2.8	>	6.9	○
5205	●	●	●	4	600	1500	16	40	6.7	9.1	14.2	8.1	11.1	-	5.3	>	14.2	○
5207	●	-	●	7.5	750	1700	16	40	-	-	-	-	-	-	11.8	>	24.3	○
5209	●	●	●	11	1000	1800	16	40	-	24.3	34.7	22.1	28.6	40.4	24.3	>	40.4	○
5211	●	●	●	15	750	1800	20	45	23.9	31.8	47.6	28.6	38.1	57.0	23.9	>	57.0	●
5213	●	●	●	15	750	1800	16	31	26.3	35.2	53.1	31.7	42.4	64.0	26.3	>	64	●
WATER COOLED																		
5212	●	●	●	15	750	1800	10	35	22.3	30.3	47.3	27.1	37.0	58.1	22.3	>	58.1	●
5217	●	●	●	30	750	1800	10	40	49.8	67.4	103.8	60.3	81.7	126.6	49.8	>	126.6	●
5236	●	●	●	75	750	1800	10	40	125.4	165.9	244.8	149.8	197.8	290.9	125.4	>	290.9	●

Standard document pack including GA, P&ID, Manual, Test Certificate and Certificate of Conformance. 3rd party hydrostatic and performance testing available on request.

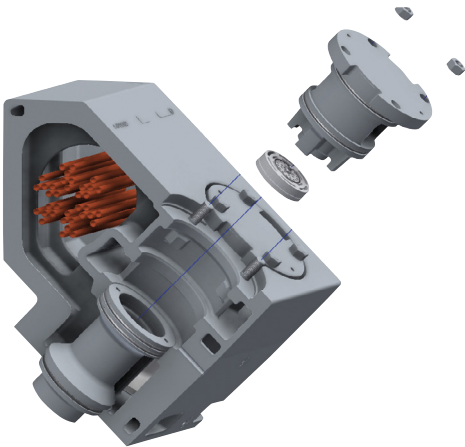
All models suitable for industrial and marine use. Condensate system available on all models.

Diesel engine drive available on all models. Water valve, water pump, air blast radiator and sea water heat exchanger available on water cooled models.

- AVAILABLE AS STANDARD
- OPTIONAL EXTRA
- NOT AVAILABLE

Model Number	Nominal Dimensions											
	Bare Block				Direct Drive				Belt Drive			
	H (mm)	W (mm)	D (mm)	Mass (kg)	H (mm)	W (mm)	D (mm)	Mass (kg)	H (mm)	W (mm)	D (mm)	Mass (kg)
AIR COOLED												
5204	265	430	320	26	340	480	950	102	-	-	-	-
5205	330	530	390	45	430	535	970	140	-	-	-	-
5207	540	520	370	65	-	-	-	-	680	1025	540	275
5209	540	520	470	86	595	625	1045	210	905	1200	625	300
5211	750	635	500	125	825	860	1230	320	875	1430	760	420
5213	750	635	500	118	810	660	1140	330	750	1280	800	420
WATER COOLED												
5212	770	850	645	380	770	860	1220	500	790	1310	715	630
5217	810	860	810	464	770	860	1470	680	770	1290	870	731
5236	1020	1230	990	1100	1050	1210	1800	1400	1065	1760	970	1400

Compact size, outstanding power-to-weight, and low maintenance – Reavell air start compressors are superbly engineered for outstanding all-round performance.



SINGLE TOOL VALVE REPLACEMENT

Unique Technology Solutions

The Reavell engine start compressor range offers a variety of innovative and patented technology solutions which have evolved in line with the increasing demands and challenges within the sectors that they serve. Our design engineers have worked closely with customers to ensure technical solutions deliver real and unique value for engine start applications.

Compact Footprint

With an outstanding power-to-weight ratio, Reavell high pressure air systems are the ideal way to save cost and improve accessibility. Offering 25% greater air output in a smaller footprint than competitors, our compressors will help save valuable space without sacrificing performance.

Efficiency Begins With High Pressure Air Systems

At Reavell we are focused on designing and manufacturing compressors which have inherent low inertias and deliver high compressed air outputs from relatively low power inputs.

Our air systems offer proven, effective engine-starting in even the most demanding environments. Each Reavell high pressure air system is engineered to provide maximum efficiency and ease of integration. Combined with our world-class global support capabilities, Reavell high pressure air systems ensure safe and dependable performance.



Compliance and Certification

Quality - When It Matters Most

At Reavell we are not like other air start compressor manufacturers, in that we have a specialism and focus on high pressure applications. We can offer complete solutions that deliver on your performance requirements, while minimising cost of ownership.

All of our compressors are designed and manufactured in our factory in the UK, meaning we don't purchase 3rd party compressor components or sub-assemblies.

Because we design and specify every component to our exacting standards we know the limits of our machines, and we are happy to take our air start compressors further than anyone else - whether it's explosive environments, sub-zero temperatures, or any other critical application, you can be sure that with a Reavell compressor, we've got you covered.



Compressor Certification

All compressor designs have gone through DNV type approval and can also be offered with ATEX certification at a T2 temperature rating.

3.1 Material Certificates

For critical applications, 3.1 material certificates are available on pressure retaining parts across the range, giving complete material traceability

Operation Below 0°C Ambient

All compressors can operate at ambient temperatures down to -10°C, with sump heaters available on all models rated above 5 kW

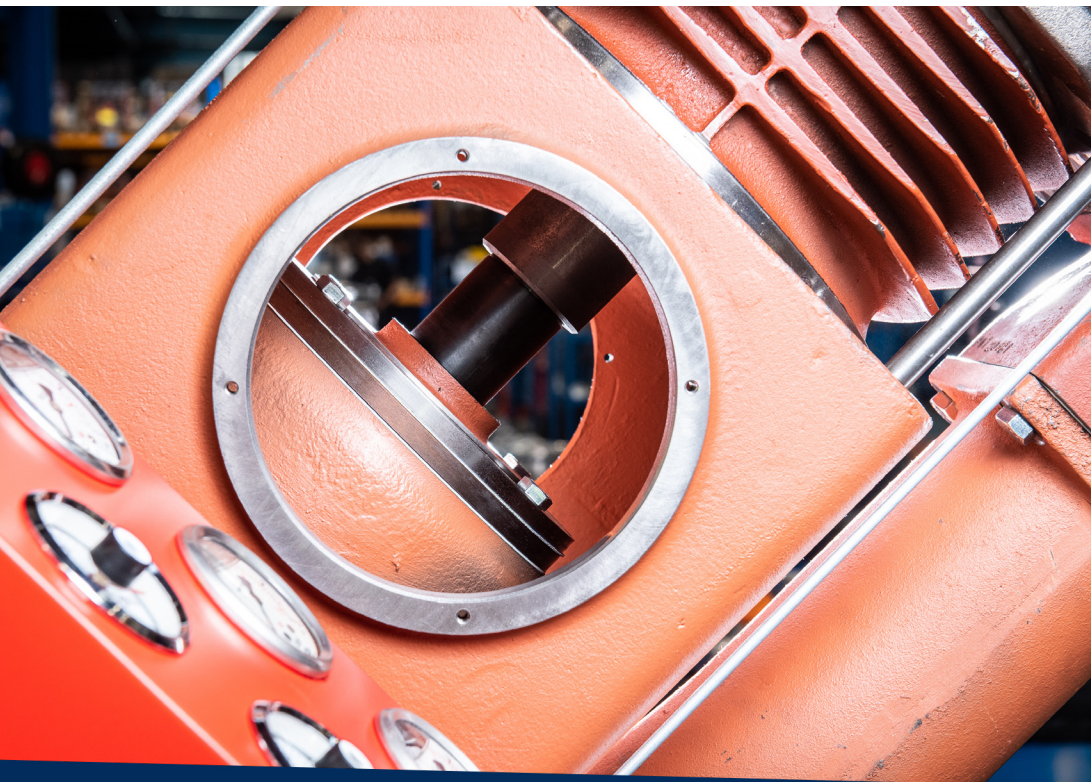
DNV Type Approved Units

DNV GL rules for the classification

Service & Training

Servicing and Maintenance - 1,500 Hour Service intervals

Our compressors come with market leading service intervals up to 1,500 hours. We provide preventative maintenance kits designed to minimise costs, covering minor air end servicing right down to running gear overhauls - so not only will your machine run longer between services, but it will also keep on running long after the competition machines have been replaced.



Comprehensive parts stock holding

Stock holding around the globe means parts can be dispatched from our support centres within hours of order.

Aftermarket products and services

- Fixed cost preventative maintenance
- Compressor and component refurbishment
- Enhanced product upgrades
- On site commissioning and training
- Full turn-key installations
- Unrivalled product & technical support

Reavell Training Days

At Reavell we're proud of our products - and we like to show them off!

Our range of factory training days cover everything from important health and safety considerations and high pressure air basics right up to in depth machine maintenance and market and application focussed sales training.

What's more, because we value our partners we can design a bespoke training course around your requirements. So whether it's sales training centered on technical features and USPs or hands-on maintenance training for your engineers, we can offer the course for you.

Customisation & OEM Support

CUSTOMISATION

The Engine start portfolio of compressors are offered with a range of standard control and drives which meet a variety of applications. However complete packages can be customised to meet your particular application requirements.

All our units can be installed as floor mounted compressors with all ancillary equipment fixed on a baseplate, complete with all interconnecting pipework and electrical wiring, with options for acoustic enclosures

TURN-KEY INSTALLATION, COMMISSIONING AND TRAINING

Correct installation is essential in providing long-term compressor reliability. Reavell provides full turn-key solutions from initial site surveys through to design, installation and final commissioning. Our fully qualified engineers assess all critical factors such as location, radiated heat, noise and air inlet conditions to ensure the complete compressor installation functions reliably whatever the environment.

OEM Supply Specialists

Reavell have supplied high pressure piston compressors for over 130 years. And not only that, throughout our history we have offered solutions at every level of industry, supplying air ends to OEMs, semi complete packages to integrators, and complete turnkey packages to end users.

This unique position means we understand the market requirements at every level, and know the challenges faced by package designers. So our unique air start packages offer you the flexibility to develop a solution unique to your brand, but with all of the reliability of a premium air start machine built in - that's why all of our compressors can be delivered with extra or modified equipment to ensure they fit into your system as efficiently as possible.

What's more, our engineers have minimised the module footprint, giving you maximum freedom to ensure your package is lightweight, compact, and includes plenty of space for maintenance.

Speak to your local Reavell sales representative today to find out more about our range of world class air start packages.

Sales/distribution network

GLOBAL EXPERTISE

For more information about the Reavell High Pressure compressor ranges please contact your local Reavell Sales & Service Centre, or see below for details of our High Pressure Centre of Excellence.

REAVELL CENTRE OF EXCELLENCE

Reavell main manufacturing and design centre is located in the UK at purpose built facility in Redditch.

Address and contact details are:

Claybrook Drive, Redditch,
Worcestershire, B98 0DS, UK

T: +44 (0) 1527 838 600, F: +44 (0) 1527 838 630

E: highpressure@irco.com

W: www.gardnerdenver.com

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