



[www.compair-reavell.com](http://www.compair-reavell.com)

EXCELLENCE IN **MARINE COMPRESSION**

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COMPAIR-REAVELL's policy is one of continuous improvement and we therefore reserve the right to alter specifications and prices without prior notice.  
All products are sold subject to the Company's conditions of sale.

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## COMPAIR-REAVELL AN INTEGRAL PART OF GARDNER DENVER

As a successful high pressure brand within Gardner Denver, we are part of a leading global network, providing high performance and reduced operating cost compression technology and ancillaries to a global customer base.

The forward looking competence of Gardner Denver has been built on the many famous global brands which have been the trusted standards within their industries.

## COMPAIR-REAVELL HIGH COMPRESSION EXCELLENCE

The compression of air and gas via reciprocating units to pressure between 20 and 410 bar is a highly specialised and sophisticated field of engineering.

Working to within tolerances of 1/1000th of a millimetre, uncompromising quality of material, processes and personnel is paramount.



## NAVAL DEFENCE

COMPAIR-REAVELL has been an integral part of high compression technology for defence applications since the early years of the last century.

Today, our global technology and engineering leadership prove us to be a trusted partner for the majority of the world's defence forces. Our technology will secure your operational capability, ensure your strategic and tactical mobility and secure around-the-clock operational theatre control.

Whatever your requirements, COMPAIR-REAVELL can supply a compression system to suit your specific need (be it air, fresh water or sea water cooled, lubricated or oil-free).

Fully NATO codified, we dedicate our abilities and capabilities to supporting you through the life cycle of the compression system, from design and manufacture through to installation, commissioning and long term maintenance.



## OFFSHORE & MARINE

**The quality and engineering excellence built into each and every one of our high compression units is able to stand up to even the harshest and most hostile environments.**

Right now, our systems are working on oil platforms miles from shore, naval battle groups, merchant vessels and marine applications across the globe.

For 110 years our organisation has been designing, manufacturing, commissioning and servicing compressed air & gas systems for these specialist markets making the COMPAIR-REAVELL name synonymous with the highest standards of quality and long-term support capabilities.

Our unique range of seawater, freshwater and air cooled high compression systems meet or exceed all international approval standards (e.g. ISO 9001, Lloyds Register, Det Norske Veritas, RINA and The American Bureau of Shipping).

Our research, development and engineering expertise give us an unrivalled flexibility in being able to configure specific high compression systems, tailor made to your exact requirements.



# TOTAL COMPRESSION CAPABILITIES

## Main Engine and Auxiliary Starting Air

Typically all naval and merchant vessels, to comply with marine regulations require at least two compressors for main engine start. Our range of small footprint, easily maintained and user friendly reciprocating compressors offer flexible and versatile solutions; with a choice of air, freshwater and direct seawater cooling. The 30-40 bar main starting and topping up systems are designed to withstand all of the rigours and challenges of any demanding marine environment. For Naval vessels this can include shock requirement of up to 320G. Captive marine mounts are fitted as standard, along with a choice of electric motors, diesel or petrol engine drives. We also offer electric starters and control panels, many of which can be PLC controlled along with filters, dryers and after coolers; in fact all your requirements for a complete system.

## Emergency Starting Air

Survey Regulations demand that an emergency compressor is totally independent of all other systems. In situations where 'black start' or 'dead ship' main engine starting is required COMPAIR-REAVELL has a broad range of solutions. For emergency start when ship or platform power supply has failed we would recommend a complete COMPAIR-REAVELL air start system, utilising a diesel driven air cooled compressor. With a wide selection of packages your vessels engine start requirements are easily matched.

## Breathing Air

For vessels and offshore platforms with a requirement for breathing air, it is vital to use a reliable high pressure breathing air compressor capable of filling cylinders and operating under the most arduous conditions. COMPAIR-REAVELL series breathing air sets are ideally suited for this purpose and are specifically configured to undertake these tasks. The cylinder configuration results in exceptionally high levels of stability with relatively low operating noise levels. Cooling can be by air, freshwater or seawater; add to this the range of small, lightweight, portable and frame mounted BA sets with choice of prime mover including silenced diesel, petrol, electric and hydraulic. Breathing air always has to be safe, cool and free from any noxious substances. Using 5 stage filtration units and air purity monitoring systems means that all our air and water cooled compressors offer this security, supplying air to internationally recognised standards. No matter what the application, from ocean liners, supertankers, aircraft carriers to oil platforms, COMPAIR-REAVELL guarantees the most advanced and effective solution, including those for Heliox deep sea diving.

## Control and General Service Air

Whatever your requirements, COMPAIR-REAVELL can supply a system from our range of reciprocating compression units which can be supplied as air or water cooled, lubricated or oil free packages.

Where the quality of the delivered air is vital COMPAIR-REAVELL can provide a complete range of filters and dryers to meet all requirements.

In addition, COMPAIR-REAVELL can supply control panels which allow the crew not only to control, but also monitor the compressor's performance via an electronic PLC card. This simple logic controller allows for the alteration of drain cycles and offers complete machine monitoring and protection.

## Buoyancy Control

Where water needs to be evacuated from submerged buoyancy tanks, COMPAIR-REAVELL has the technology solution suitable, from intermittent to continuous operational duty.



### Inert Gas Blanketing and Generation

When safeguarding bulk cargoes, it is usual to fill the unused space in the storage tank with an inert gas – most commonly Nitrogen. COMPAIR-REAVELL can supply a range of Nitrogen generators, boosters and storage facilities to enable easy Nitrogen blanketing. Improving gas generation, COMPAIR-REAVELL has developed an integral compressor and gas membrane system that supplies pressurised Nitrogen directly from atmospheric air. Flameproof equipment is available for hazardous environments.

### Seismic Surveying

In instances where seismic air is required for underwater geological surveys, COMPAIR-REAVELL's air and water cooled systems provide high pressure air to create the requisite shock levels for measurement and mapping purposes.

### Motion Compensation

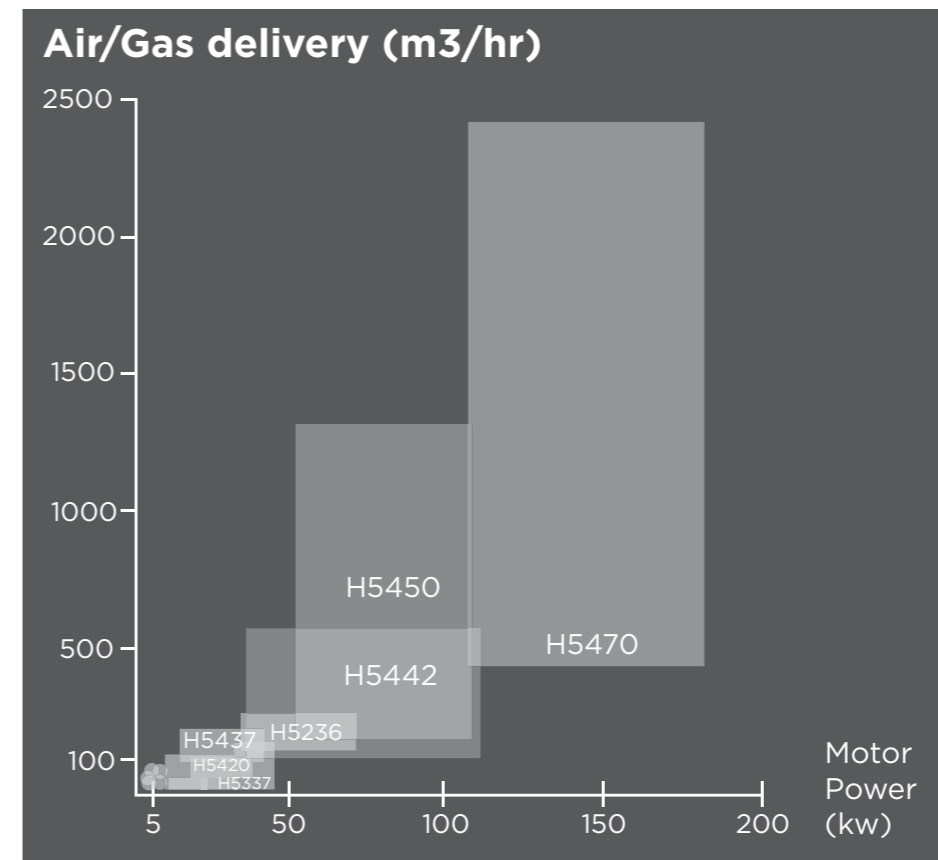
Drill string compensators are designed to nullify the effect of the drilling platform or vessel heave on the drill string or other hook supported equipment. The compensator comprises of a number of compression loaded hydraulic pneumatic cylinders that are supplied with high pressure air or Nitrogen from receivers charged by a COMPAIR-REAVELL compression system. As the platform or vessel moves the compensatory allows for the drill hook to remain in a fixed position relative to the sea bed. The COMPAIR-REAVELL four stage water cooled compression unit has become the industry standard for this gruelling application.



## ADVANCED COMPRESSOR DESIGN

- Well balanced compressor design, plus the use of anti-vibration mounts and flexible connections removes the need for special foundations and reduces vibration
- Individual, compression stage separation using COMPAIR-REAVELL designed high efficiency separators reduces moisture carryover between stages thereby increasing component life
- Complete set of safety trips and indicators, all wired to explosion proof and intrinsically safe terminal boxes, which simplifies installation
- Installation is made quick and simple through the use of flexible connections and the single outlet manifold for all pressure safety valves
- Unbeatable aftersales and global service support

## PRODUCT RANGE



## OFFSHORE & MARINE

COMPAIR-REAVELL offers a comprehensive range of high pressure systems dedicated to delivering class-leading compression technology.

# OUR PRODUCTS

Our organisation offers a comprehensive range of high pressure technology systems dedicated to delivering class-leading compression options. Our global application engineers would be delighted to discuss your specific requirements with you.

These are some of the compression units they might suggest:

## Flow Rate 5 – 10 m<sup>3</sup>



H5204

<b>Volume Output</b>	6.78 – 7 m <sup>3</sup> /hr	<b>Dimensions</b>	730 (l) x 530 (w) x 767 (h) mm
<b>Operating Pressure</b>	25 – 40 bar	<b>Weight</b>	165 kg
<b>Motor Output</b>	2 kW	<b>Cooling</b>	Air cooled

## Flow Rate up to 45 m<sup>3</sup>



H5205

<b>Volume Output</b>	13.5 – 15.7 m <sup>3</sup> /hr	<b>Dimensions</b>	730 (l) x 530 (w) x 767 (h) mm
<b>Operating Pressure</b>	25 – 40 bar	<b>Weight</b>	165 kg
<b>Motor Output</b>	4 kW	<b>Cooling</b>	Air cooled



H5207

<b>Volume Output</b>	20.4 – 25.8 m <sup>3</sup> /hr	<b>Dimensions</b>	1170 (l) x 490 (w) x 660 (h) mm
<b>Operating Pressure</b>	25 – 40 bar	<b>Weight</b>	195 kg
<b>Motor Output</b>	5.5 kW	<b>Cooling</b>	Air cooled



H5209

<b>Volume Output</b>	33.9 – 42.1 m <sup>3</sup> /hr	<b>Dimensions</b>	1170 (l) x 520 (w) x 660 (h) mm
<b>Operating Pressure</b>	25 – 40 bar	<b>Weight</b>	225 kg
<b>Motor Output</b>	7.5 – 11 kW	<b>Cooling</b>	Air cooled

## Flow Rate up to 70 m<sup>3</sup>



H5211

<b>Volume Output</b>	46.8 – 60.6 m <sup>3</sup> /hr	<b>Dimensions</b>	1280 (l) x 840 (w) x 850 (h) mm
<b>Operating Pressure</b>	30 – 45 bar	<b>Weight</b>	380 kg
<b>Motor Output</b>	11 – 15 kW	<b>Cooling</b>	Air cooled



H5213

<b>Volume Output</b>	52.2 – 64.6 m <sup>3</sup> /hr	<b>Dimensions</b>	1280 (l) x 840 (w) x 850 (h) mm
<b>Operating Pressure</b>	20 – 31 bar	<b>Weight</b>	380 kg
<b>Motor Output</b>	11 – 15 kW	<b>Cooling</b>	Air cooled



H5417

<b>Volume Output</b>	31.8 – 64.9 m <sup>3</sup> /hr	<b>Dimensions</b>	1290 (l) x 870 (w) x 770 (h) mm
<b>Operating Pressure</b>	140 – 350 bar	<b>Weight</b>	750 kg
<b>Motor Output</b>	15 – 30 kW	<b>Cooling</b>	Water cooled



H5317

<b>Volume Output</b>	34.2 – 67.2 m <sup>3</sup> /hr	<b>Dimensions</b>	1290 (l) x 870 (w) x 770 (h) mm
<b>Operating Pressure</b>	40 – 85 bar	<b>Weight</b>	730 kg
<b>Motor Output</b>	11 – 22 kW	<b>Cooling</b>	Water cooled

## Flow Rate up to 135 m<sup>3</sup>



H5420

<b>Volume Output</b>	58.1 – 85.5 m <sup>3</sup> /hr	<b>Dimensions</b>	1290 (l) x 870 (w) x 770 (h) mm
<b>Operating Pressure</b>	160 – 350 bar	<b>Weight</b>	750 kg
<b>Motor Output</b>	22 – 30 kW	<b>Cooling</b>	Water cooled



H5217

<b>Volume Output</b>	64.5 – 132 m <sup>3</sup> /hr	<b>Dimensions</b>	1290 (l) x 870 (w) x 770 (h) mm
<b>Operating Pressure</b>	10 – 40 bar	<b>Weight</b>	730 kg
<b>Motor Output</b>	11 – 30 kW	<b>Cooling</b>	Water cooled

## Flow Rate up to 315 m<sup>3</sup> (continued)



H5236

<b>Volume Output</b>	173.2 – 312.9 m <sup>3</sup> /hr	<b>Dimensions</b>	970 (l) x 1760 (w) x 1065 (h) mm
<b>Operating Pressure</b>	10 – 40 bar	<b>Weight</b>	1400 kg
<b>Motor Output</b>	37 – 75 kW	<b>Cooling</b>	Water cooled



H5442

<b>Volume Output</b>	173.2 – 312.9 m <sup>3</sup> /hr	<b>Dimensions</b>	2440 (l) x 1860 (w) x 1620 (h) mm
<b>Operating Pressure</b>	160 – 350 bar	<b>Weight</b>	3800 kg
<b>Motor Output</b>	40 – 140 kW	<b>Cooling</b>	Water cooled

## Flow Rate up to 315 m<sup>3</sup>



H5337

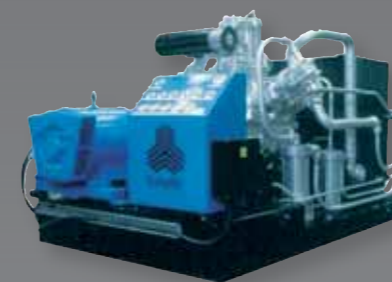
<b>Volume Output</b>	67.2 – 159.6 m <sup>3</sup> /hr	<b>Dimensions</b>	1700 (l) x 1060 (w) x 1090 (h) mm
<b>Operating Pressure</b>	40 – 85 bar	<b>Weight</b>	750 kg
<b>Motor Output</b>	22 – 45 kW	<b>Cooling</b>	Water cooled



H5437

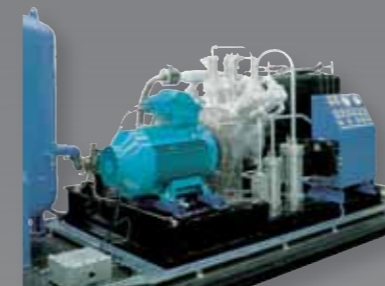
<b>Volume Output</b>	56.5 – 183.6 m <sup>3</sup> /hr	<b>Dimensions</b>	1700 (l) x 1060 (w) x 1090 (h) mm
<b>Operating Pressure</b>	140 – 414 bar	<b>Weight</b>	1600 kg
<b>Motor Output</b>	22 – 55 kW	<b>Cooling</b>	Water cooled

## Flow Rate up to 2400 m<sup>3</sup>



H5450

<b>Volume Output</b>	223.9 – 1290.1 m <sup>3</sup> /hr	<b>Dimensions</b>	2888 (l) x 1797 (w) x 1696 (h) mm
<b>Operating Pressure</b>	50 – 350 bar	<b>Weight</b>	4000 kg
<b>Motor Output</b>	55 – 110 kW	<b>Cooling</b>	Air cooled



H5470

<b>Volume Output</b>	318.4 – 2400 m <sup>3</sup> /hr	<b>Dimensions</b>	2888 (l) x 1797 (w) x 1696 (h) mm
<b>Operating Pressure</b>	50 – 350 bar	<b>Weight</b>	7000 kg
<b>Motor Output</b>	55 – 185 kW	<b>Cooling</b>	Air cooled

## SERVICE **SUPPORT**

**COMPAIR-REAVELL** combines an understanding of the challenges facing our global client base in today's changing environment and pride ourselves on exemplary support & service.

Our global teams fulfil all service requirements throughout the life cycle of your equipment. Effective maintenance of your high compression systems not only ensures uninterrupted process stability, but offers the additional security of scheduled maintenance.

Choosing our aftermarket professionals offers you a comprehensive service support package that can continue far beyond the initial installation phase.

As part of our life cycle commitment, COMPAIR-REAVELL can additionally offer you a total solution approach, providing extended warranty within a service contract framework.



### COMPAIR-REAVELL **GLOBAL HEADQUARTERS**

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