



ROTARY SCREW COMPRESSOR
DRF 150 - 180 - 220 HP

TECHNOLOGY YOU CAN TRUST

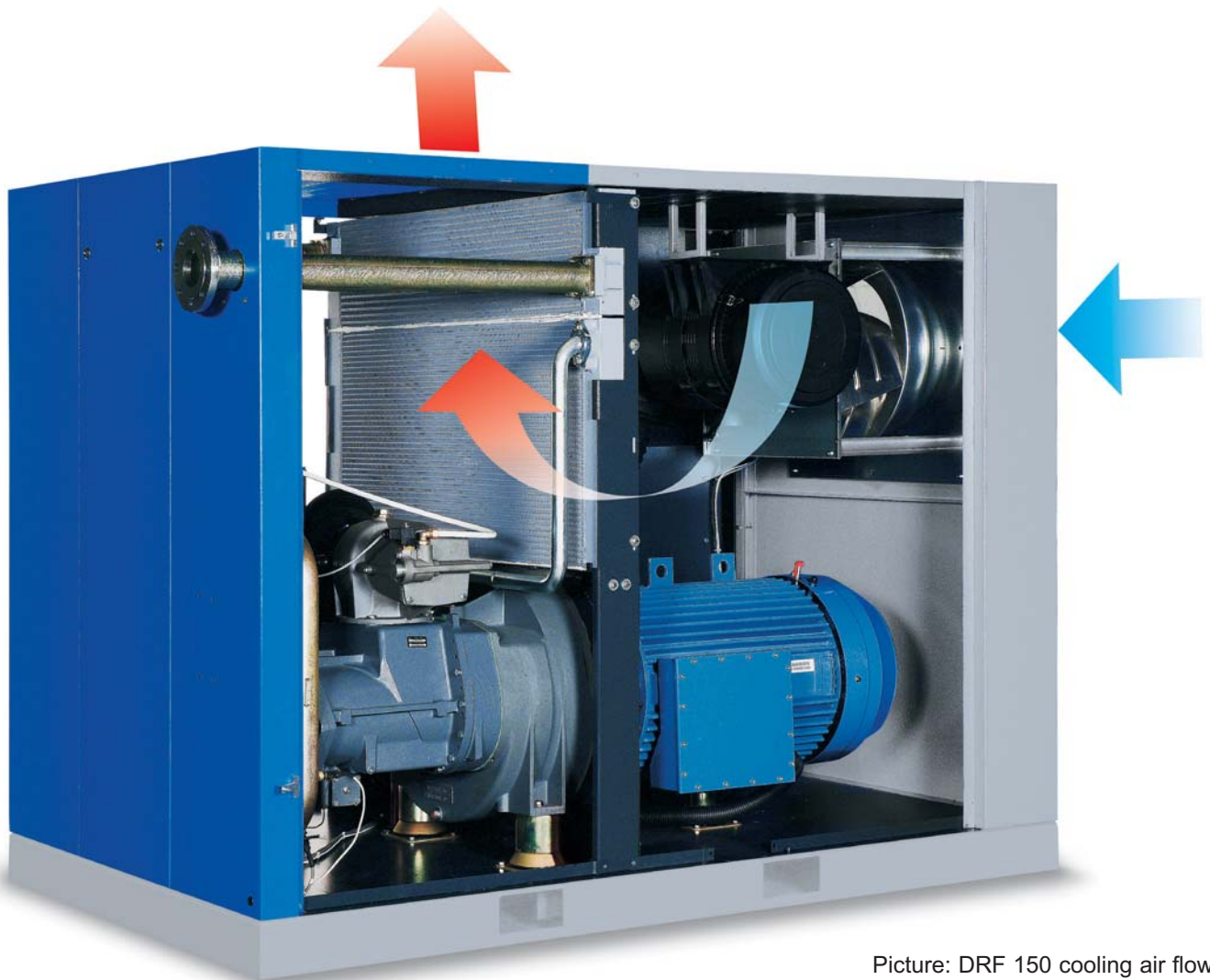
The DRF Coaxial Rotary Compressor

High Performance

High Reliability

Low Maintenance

is the result of decades of experience in the design and construction of rotary screw compressors



Picture: DRF 150 cooling air flow

Standard equipment

- Intake filter
- Capacity control device
- Screw compressor with asymmetrical profile rotors
- Direct drive with elastic coupling
- Self-aligning end cap
- 4-pole IP55 electrical motor, class F insulation
- Air/Oil separator
- Oil filter
- Air/Oil coolers
- Oil pressure regulating valve
- Star delta starter control panel
- Electronic controller
- Insulated sound cover

Reliable and functional



High efficiency filtration

Air filter. The highly efficient, robust air filter operates with a cyclonic action and maintains low leakage rates. This ensures better pump protection and high operational reliability by preventing harmful particles from entering the pump and oil circuit. The air to be compressed enters the air filter in the cold area for improved efficiency, and is then diverted through a duct to the suction valve.

To prevent damage in case of clogging, a safety device stops the unit.

Energy efficient ventilation

The DRF range is fitted with speed regulated EC (Electronic Commutation) turbines. The speed is automatically regulated to the cooling requirements of the machine.

This technology brings many benefits:

- Low noise level compared to a conventional fan.
- Increased energy savings, as the turbine is speed regulated to the cooling requirement.
- Turbine control of the oil temperature eliminates the need for a thermostatic valve, ensuring a constant temperature and reduced maintenance.



Optimised air/oil circuit

Large aluminium air and oil exchangers:

- Direct air flow from the turbine for improved efficiency; air outlet temperature never exceeds 10°C above ambient in maximum conditions.
- Vertically mounted for easy maintenance.

Vertical air/oil separator:

- Efficient, three-stage air/oil separation, (centrifugal/gravitational/coalescent).
- Quality of the separator filter ensures that residual oil content is less than 3 mg/m³.

Rigid pipes and elastic coupling:

- Durability, reduced pressure drop, and leak free.

Regulation

AIRLOGIC® - the Electronic Control



FUNCTIONS:

- Operating system configuration
- Weekly programme for two pressure fields
- Password access
- Automatic restart
- Remote control
- Fault report with a record of the last 10 cases
- Percentage calculation of operating times
- Multiple control
- Scheduled maintenance

CONTROLS:

- Input and output signals
- Delivery pressure
- Delta pressure in the air/oil separator

PREVENTS:

- Reverse rotation
- Low temperature start-ups
- Start-up under pressure
- Automatic re-start after long periods of shutdown
- Overpressure in the air/oil separator

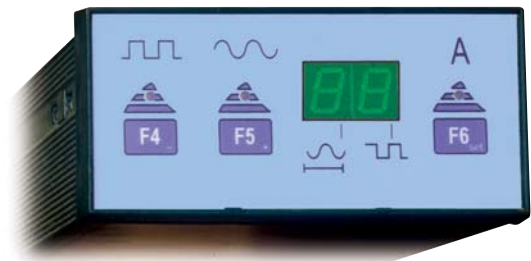
PROTECTS:

- The motor by limiting the number of start-ups
- The compressor against oil overheating

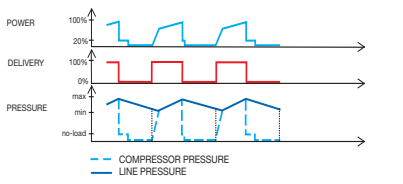
Multicontrol (optional)

Multicontrol is a simple, reliable and flexible way to regulate the range of DRF compressors.

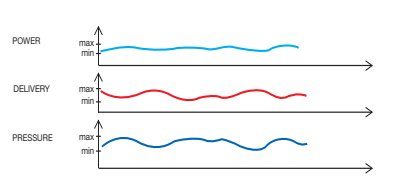
It controls air load, idling times and motor restarts, optimizing the work cycle and preventing costly and unnecessary energy wastage. Three operating modes can be selected to adapt to your specific air requirements:



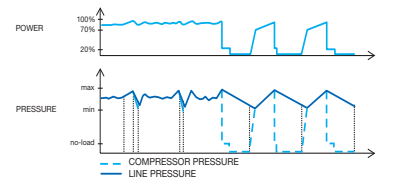
F4 INTELLIGENT ON/OFF CONTROL



F5 MODULATION



F6 AUTOMATIC CONTROL



DRF 220 IVR: variable speed

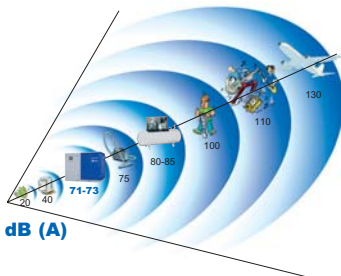
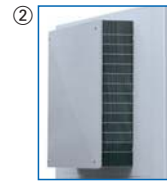
Typically up to 30% savings on your energy consumption can be achieved. The fixed speed DRF 220 is also available in a variable speed variant (IVR). The inverter, located in the cubicle, regulates the speed of the main motor to adapt the air delivery to your exact requirement. Check our IVR brochure and evaluate your potential savings.



Quality and efficiency

Options available for demanding environments

Special conditions require special care for your compressor. A carefully designed choice of optional features protect your machine or process when it is required: high efficiency external intake filter ①, dust filtration panels ②, water separator and automatic drain ③, oil heater. An energy recovery option ④ has also been engineered for reduced operating costs.



Low noise level

Years of experience in design, use of selected components and advanced technology, have been the key to reach extremely low acoustic when compared with compressors of a similar size.

With noise levels as low as 71 dB(A) for DRF 150, the unit is compatible with most operating environments.

Energy savings

A high efficiency pump, optimum motor output, EC turbine ventilation and precise pressure band setting on the AIRLOGIC® are key features that minimize energy consumption of the DRF range.






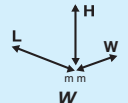

A water cooled variant is also available for any model, including the DRF 220 IVR, our energy saving variable speed model. The cooling water flow can be utilised in a variety of heat recovery applications.



Easy maintenance

Doors that open 180° and large removable panels offer easy access to all internal components, ensuring easy scheduled checks and fast routine maintenance. The careful location of components avoids the need for special tooling. The AIRLOGIC® monitors the condition of components and gives advanced warning of service operations as and when needed.

TECHNICAL DATA (IN ACCORDANCE WITH ISO 1217 AND CAGI PNEUROP PN8NTC2)

| Type |  | |  | |  | | |  |  |  | | |  |
|--------------------|---|-----|---|-----|---|-------------------|-------|---|---|---|-------|-------|---|
| | bar | psi | HP | kW | l/1' | m ³ /h | cfm | dB (A) | gas | L | W | H | Kg |
| DRF 150/7,5 | 7,5 | 108 | 150 | 110 | 2.020 | 1.214 | 715 | 71 | 3"(DN 80) | 2.627 | 1.490 | 1.938 | 2.455 |
| DRF 150/8 | 8 | 116 | 150 | 110 | 1.950 | 1.171 | 689 | 71 | 3"(DN 80) | 2.627 | 1.490 | 1.938 | 2.455 |
| DRF 150/10 | 10 | 145 | 150 | 110 | 1.720 | 1.035 | 609 | 71 | 3"(DN 80) | 2.627 | 1.490 | 1.938 | 2.455 |
| DRF 150/13 | 13 | 188 | 150 | 110 | 1.360 | 818 | 481 | 71 | 3"(DN 80) | 2.627 | 1.490 | 1.938 | 2.455 |
| DRF 180/7,5 | 7,5 | 108 | 180 | 132 | 2.450 | 1.470 | 865 | 72 | 3"(DN 80) | 2.787 | 1.490 | 1.938 | 2.565 |
| DRF 180/8 | 8 | 116 | 180 | 132 | 2.320 | 1.392 | 819 | 72 | 3"(DN 80) | 2.787 | 1.490 | 1.938 | 2.565 |
| DRF 180/10 | 10 | 145 | 180 | 132 | 2.110 | 1.265 | 745 | 72 | 3"(DN 80) | 2.787 | 1.490 | 1.938 | 2.565 |
| DRF 180/13 | 13 | 188 | 180 | 132 | 1.710 | 1.025 | 603 | 72 | 3"(DN 80) | 2.787 | 1.490 | 1.938 | 2.565 |
| DRF 220/7,5 | 7,5 | 108 | 220 | 160 | 2.860 | 1.717 | 1.011 | 73 | 3"(DN 80) | 2.963 | 1.610 | 1.992 | 2.830 |
| DRF 220/8 | 8 | 116 | 220 | 160 | 2.730 | 1.641 | 966 | 73 | 3"(DN 80) | 2.963 | 1.610 | 1.992 | 2.830 |
| DRF 220/10 | 10 | 145 | 220 | 160 | 2.480 | 1.490 | 877 | 73 | 3"(DN 80) | 2.963 | 1.610 | 1.992 | 2.830 |
| DRF 220/13 | 13 | 188 | 220 | 160 | 2.050 | 1.231 | 725 | 73 | 3"(DN 80) | 2.963 | 1.610 | 1.992 | 2.830 |

Air cooled units

Sizes and weights without packaging.

Standard version:

- Power supply 400/3/50
- Air cooling system
- AIRLOGIC® controller
- Tank in conformance with ECC standards
- Other voltages and water cooled units available upon request



CECCATO ARIA COMPRESSA S.p.A. has a policy of continuous product improvement. We reserve the right to change specifications and product design without notice.



Design
Manufacture, Sales and
Service of air compressors,
Air dryers and air filters

