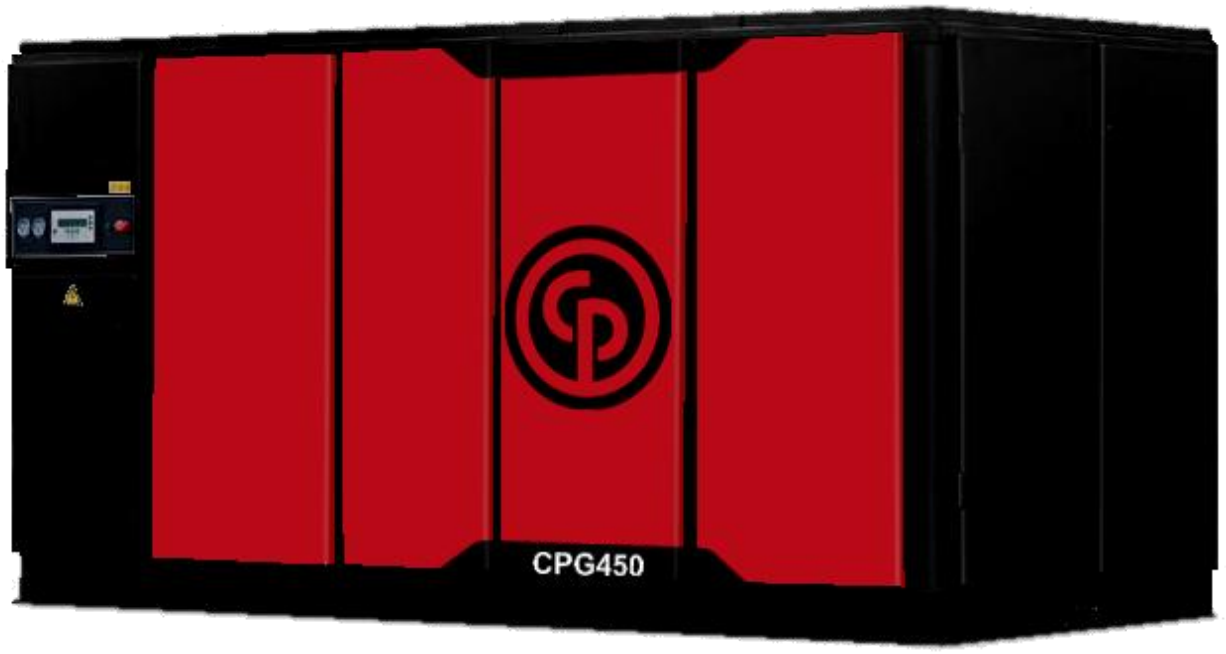
Compressores Elétricos
CPG

Chicago Pneumatic

2011

Compressor Elétrico de Parafuso CPG

CPG 380 – 450 – 480 hp



Applications

- Every industry needs compressed air
- Approximately 60-70% of the manufacturing processes can run with compressed air produced by oil-injected compressors



- Cement



- Chemicals/ Power plants



- Automotive



- Paper



- Glass Industries

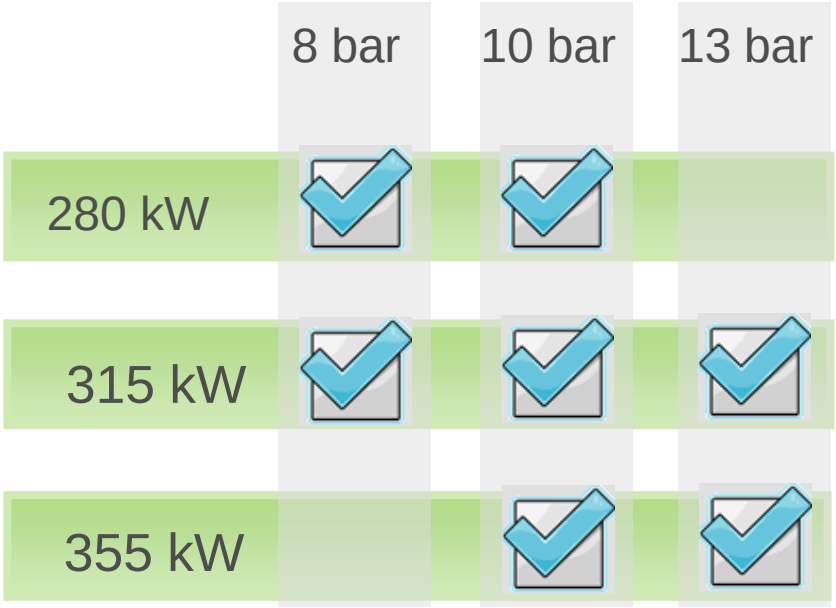


- Oil and Gas

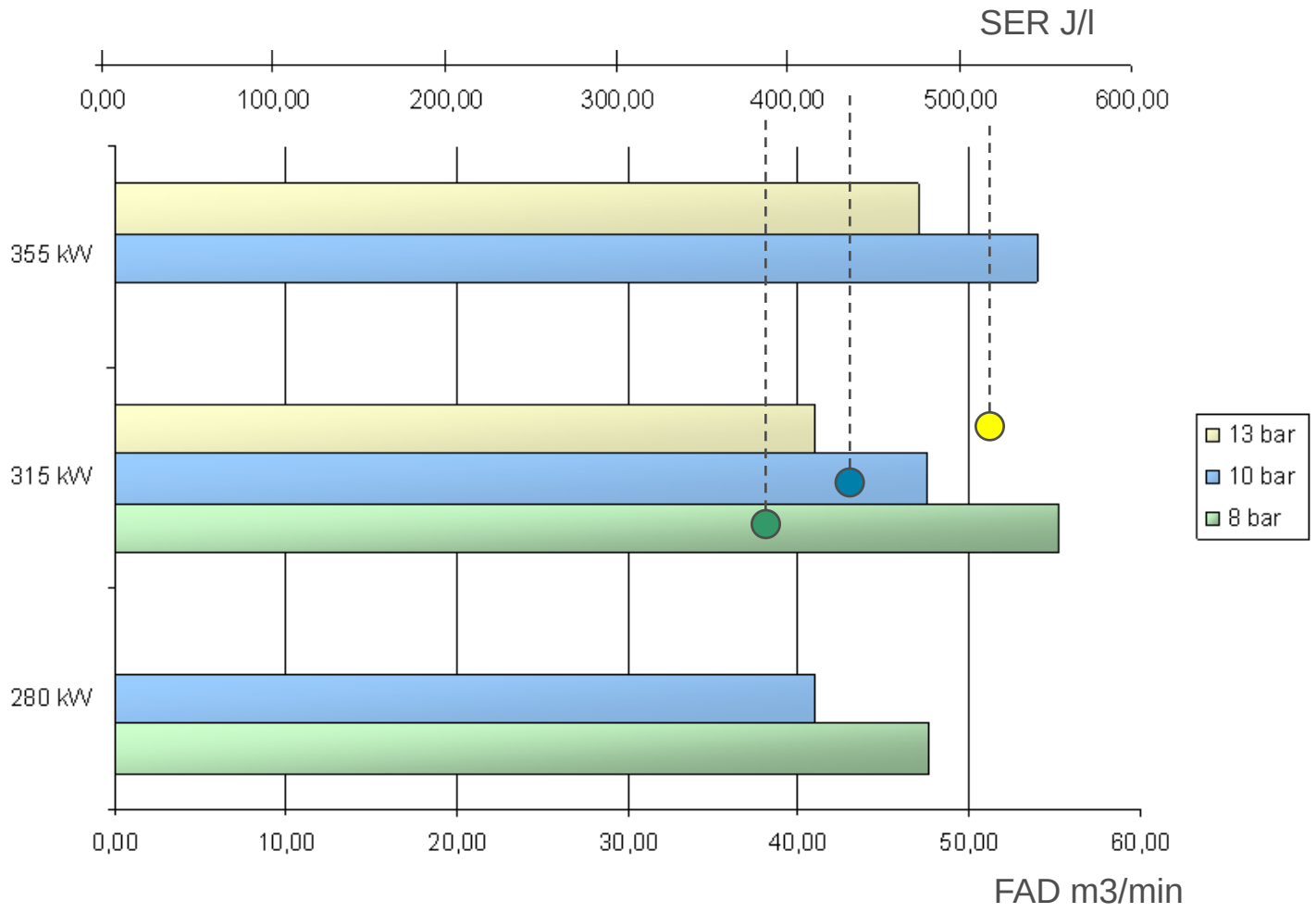
A clear product portfolio from 280 to 355 kW

Several variants available to meet all the needs.
Machines in compliance with local requirement of the targeted markets. (CE, ASME, UL)

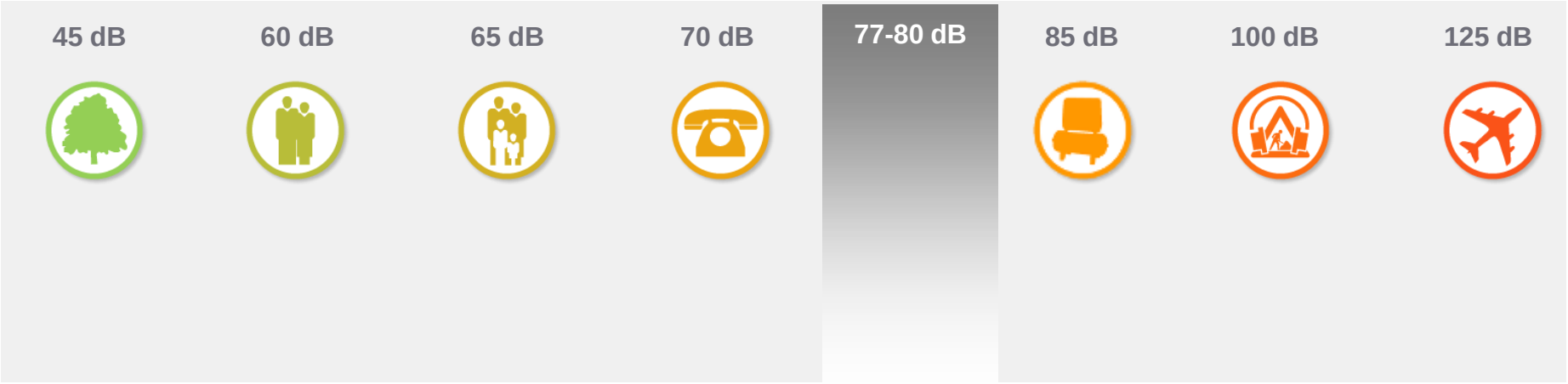
- Pressure variants: 8,10,13 bar
- Regulation : on/off
- Ambient temp : 46°C
- Cooling : water cooled
- Water separator drain included
- No integrated dryer



Technical datas @ 50 Hz



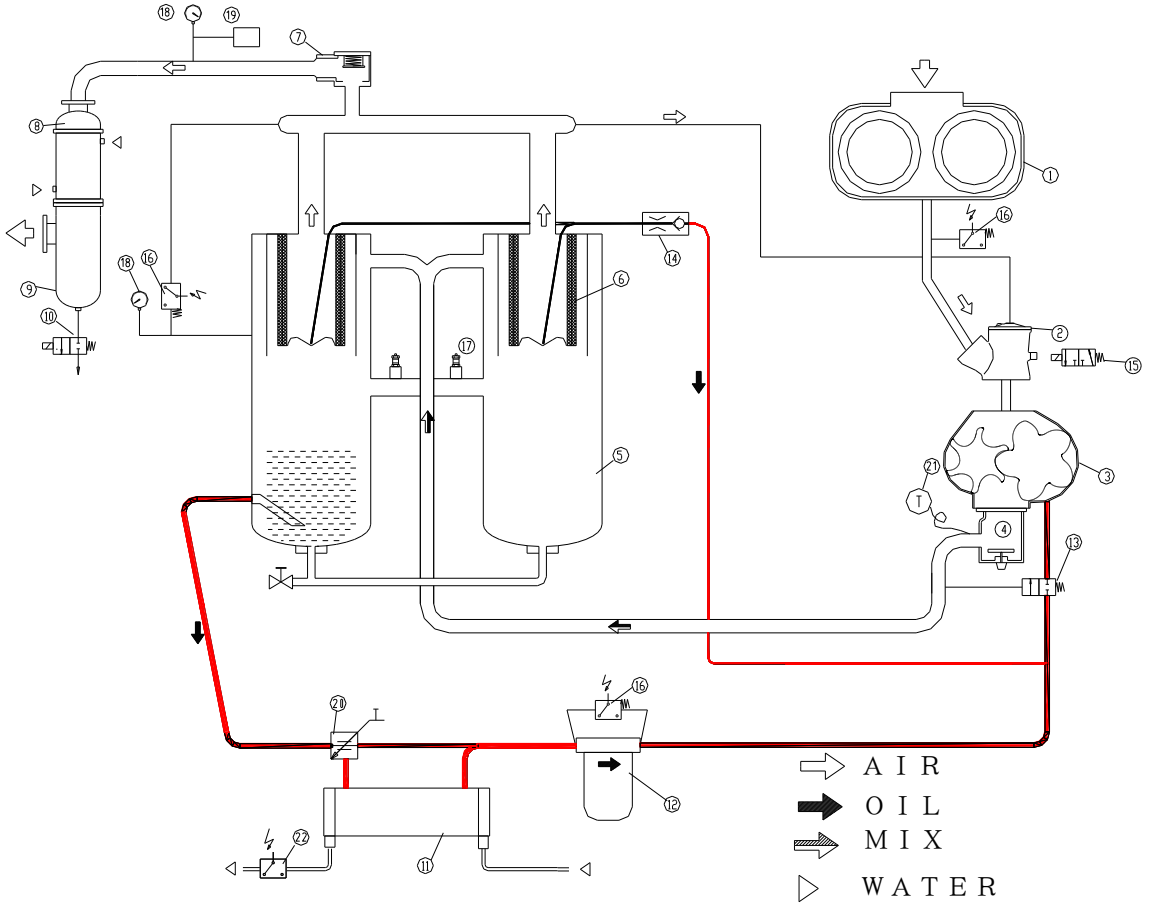
Low Noise Level: Respect of the Environment



Low noise level by design : high quality insulation foam, low rotation speed of the fan, compact and integrated canopy.

Product Presentation

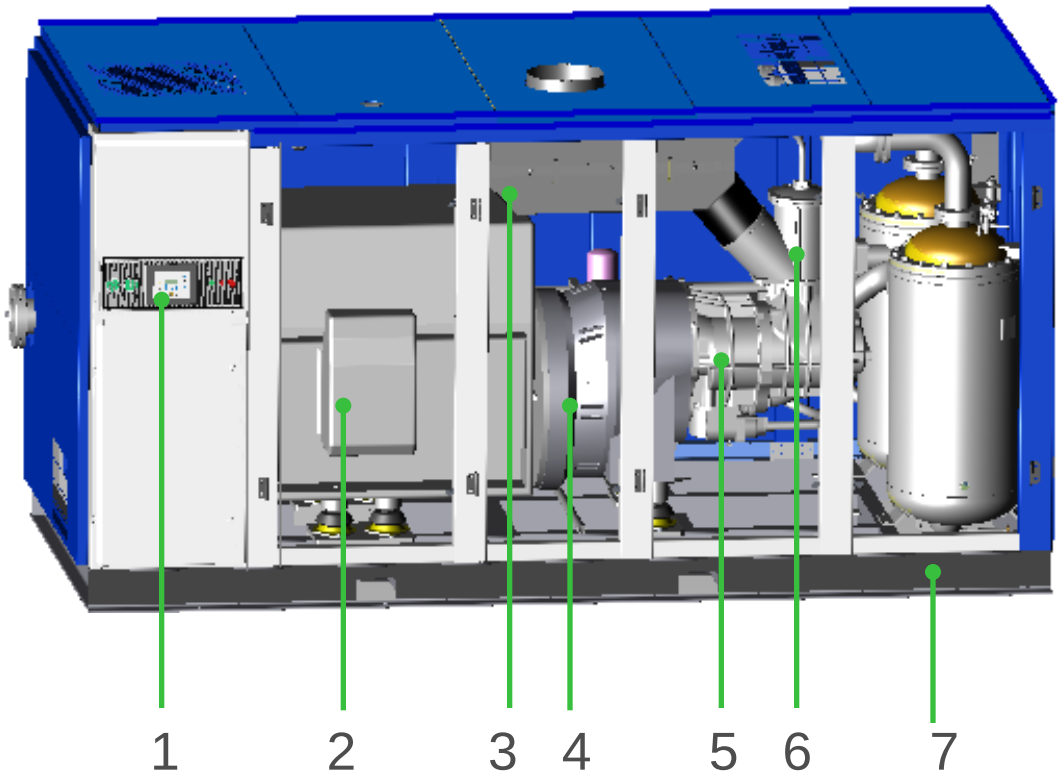
- Canopy
- Oil vessel
- Air filtration
- Controller
- Motor
- Unloader
- Element
- Transmission



Compressor Layout (1/4)

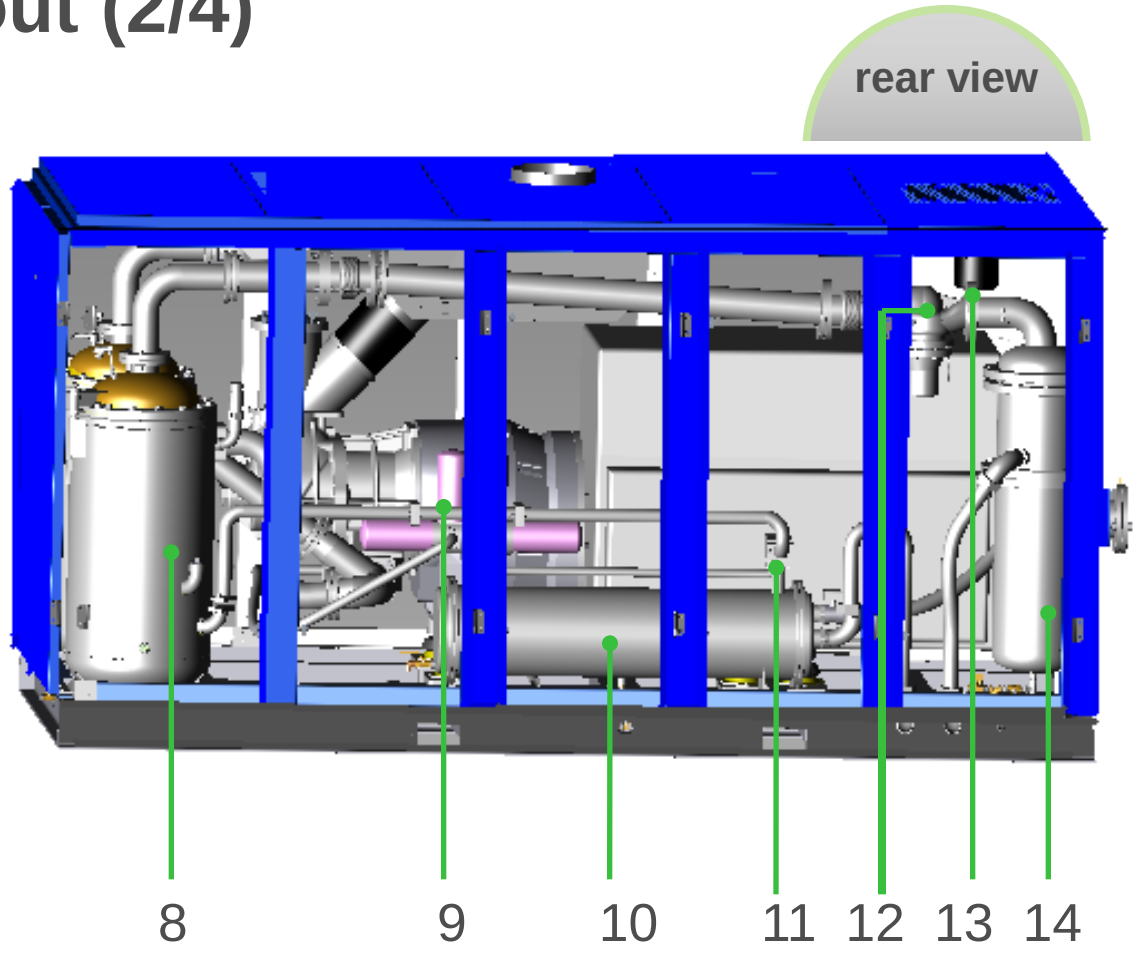
front view

	Description
1	Controler
2	Motor
3	Air filter
4	Coupling
5	Screw element
6	Unloader
7	Frame



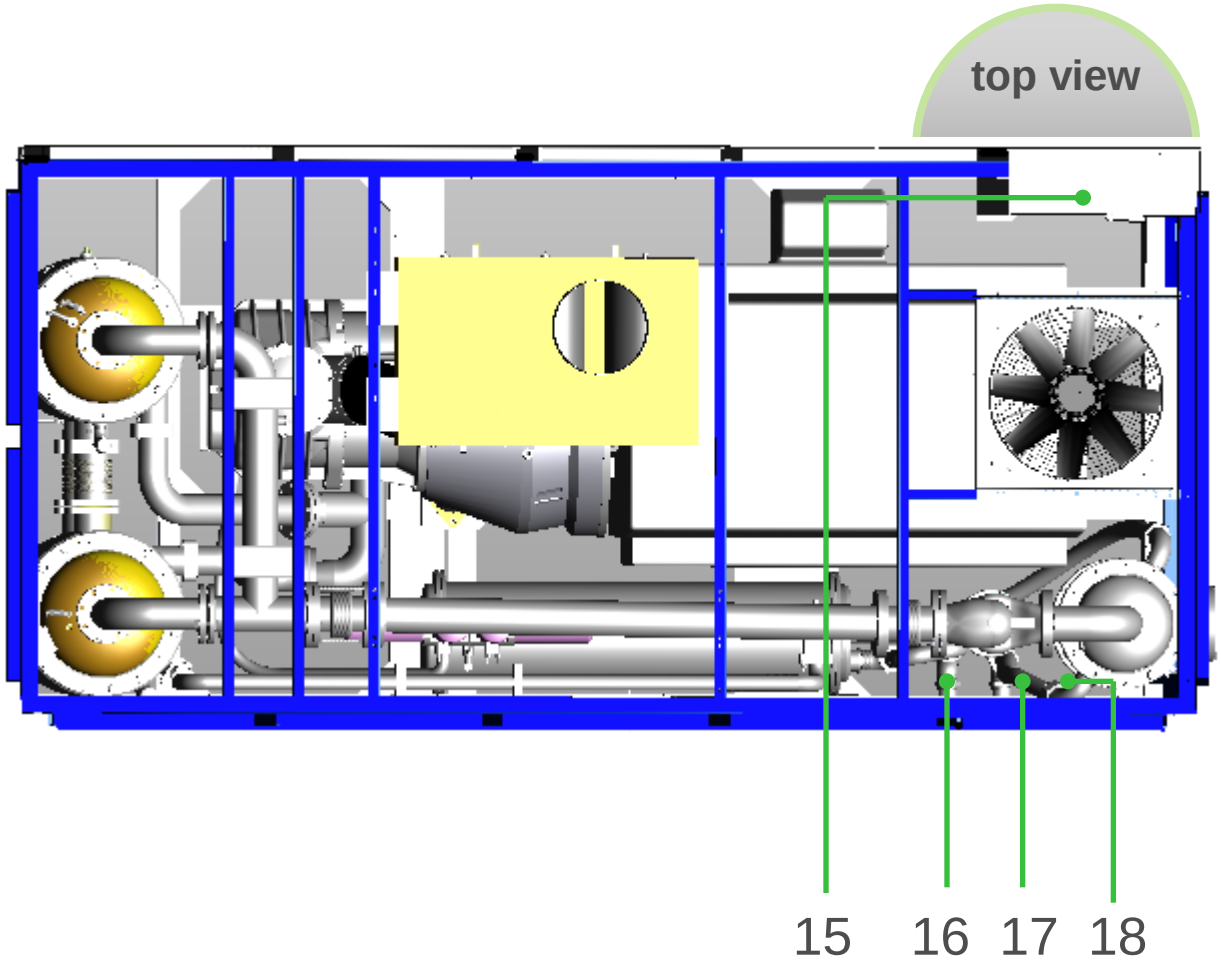
Compressor Layout (2/4)

	Description
8	Receiver
9	Oil filter
10	Oil cooler
11	Thermostatic valve
12	Minimum pressure valve
13	Fan
14	Water separator



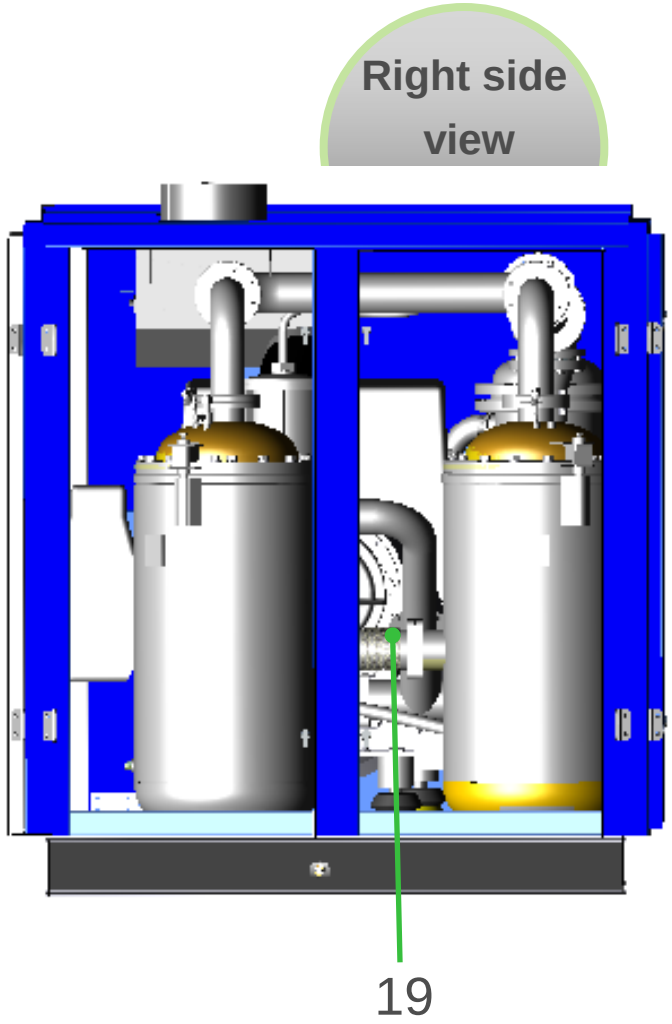
Compressor Layout (3/4)

	Description
15	Electrical cubicle
16	Water outlet G2
17	Water inlet G2
18	Drain tap G1/2



Compressor Layout (4/4)

	Description
19	Safety valve



Robust and industrial canopy

Function = robust and industrial canopy design

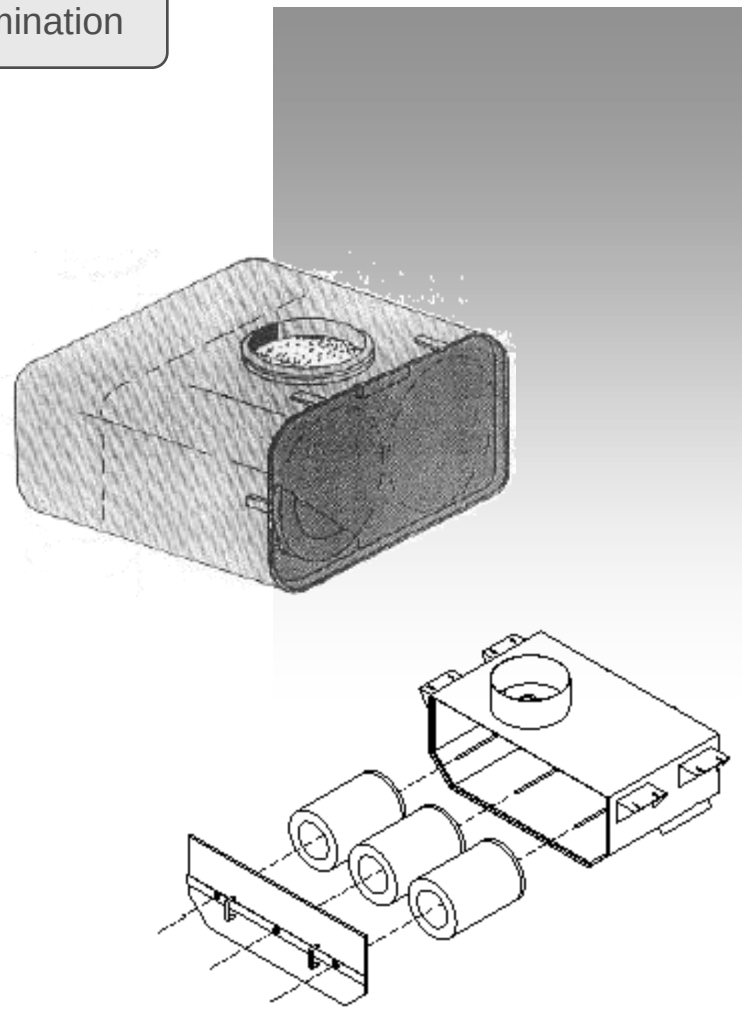
- All models fit in one canopy size
- Large panels on the front and the back
- Robust and industrial design
- Footprint = 9,5 m2



High efficiency air filtration

Function = preserve the internal components against contamination

- Air inlet filter is composed of filter element and filter housing :
  - Larger filtration surface area
  - Expand filter life time over 4000 h
  - Rapid access for maintenance
- Protect your machine against dust contamination:
  - Cyclonic pre-filtration
  - 2-micron pleated air filter
  - Possible ducting of the air inlet



Advanced controller for optimum efficiency

Function : improved management of the compressor with user friendly access to all settings

- User friendly interface :

– Choice of 3 languages out of 27 available

– Service schedule with automatic warnings



- Advanced monitoring system :

– Permanent monitoring: temperature/outlet pressure

– Faults control : High oil T°C / overload / High pressure ...

– Automatic restart: Standard

– Start/Stop timers: Standard, up to 8/day

- Communication possibilities :

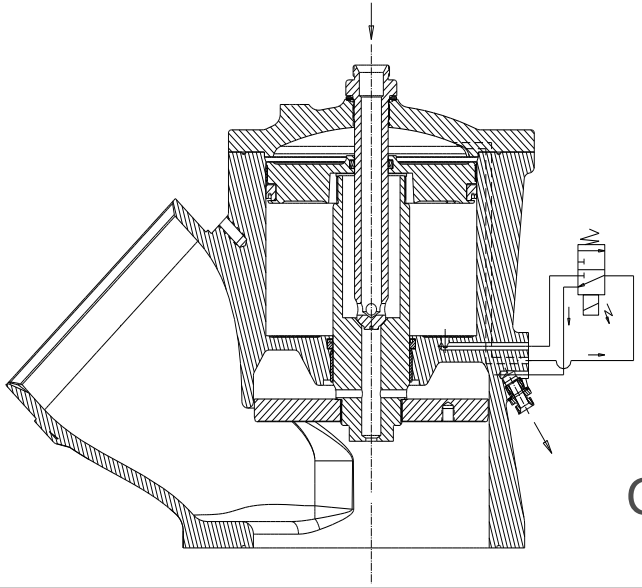
– CAN network (up to 4 compressors) or Multilogic Box

Air suction unloader

Function : accurate regulation with a pneumatic suction valve

- Built to last unloaders
  - Simpler and less parts: valve housing, plunger, spring, seal rings and solenoid valve.
  - Optimized design for accurate control through a SV
  - Easy maintenance and improved lifetime (8000 hrs)

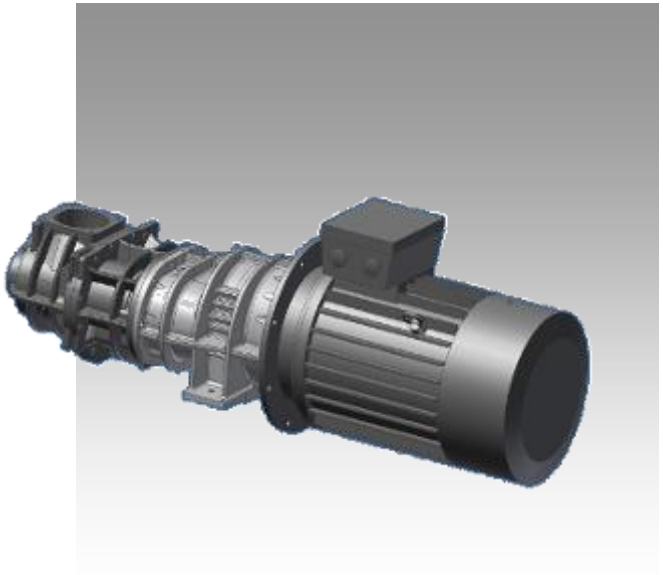




Cut view

Gear driven transmission for total reliability

Function : energy efficiency and reliabilty over lifetime



- Increased efficiency:

–3% higher efficiency compared with belt driven machine

– no loss in a long term running

- Total reliability over time :

– no risk of misalignment

– increase lifetime of the element (the most expensive component in a compressor) thanks to antivibration pads

– reduced maintenance costs. No periodic change

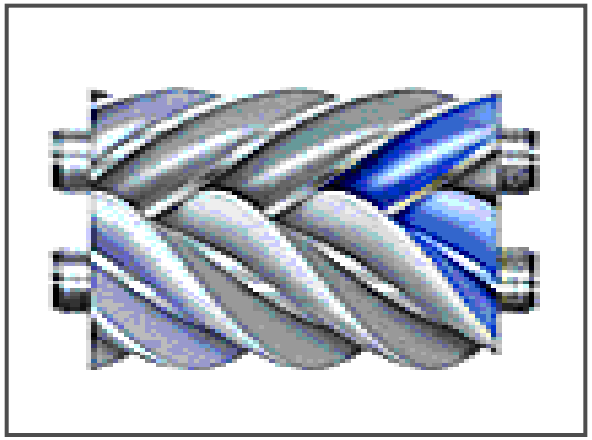


High efficiency element

Function : deliver more compressed air for minimum energy consumption



- High level of reliability: thanks to a selection of high quality material (rotors, bearings…)
- Oil injection flow for long operating life
- Energy efficiency :
  - Low speed air end for delivering more compressed air at same power
  - State of the art technology with minimize specific energy requirement

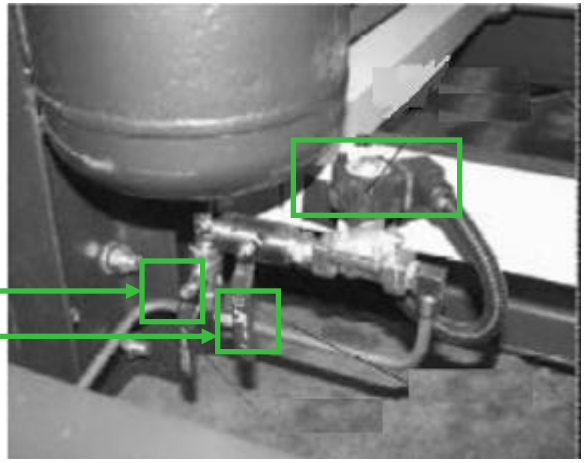


Water separator for high air quality

Function : insure water is removed from compressed air



- Separator fitted as standard
  - Mounted as standard after the cooler system : no need for additionnal cost for external condensate treatment
  - Protect the reliability on the customer installation : air in contact with products is clean and dry.
- Cyclonic separator
  - Automatic drain (solenoid valve) or manual drain (ball valve)
  - Protection of the environment



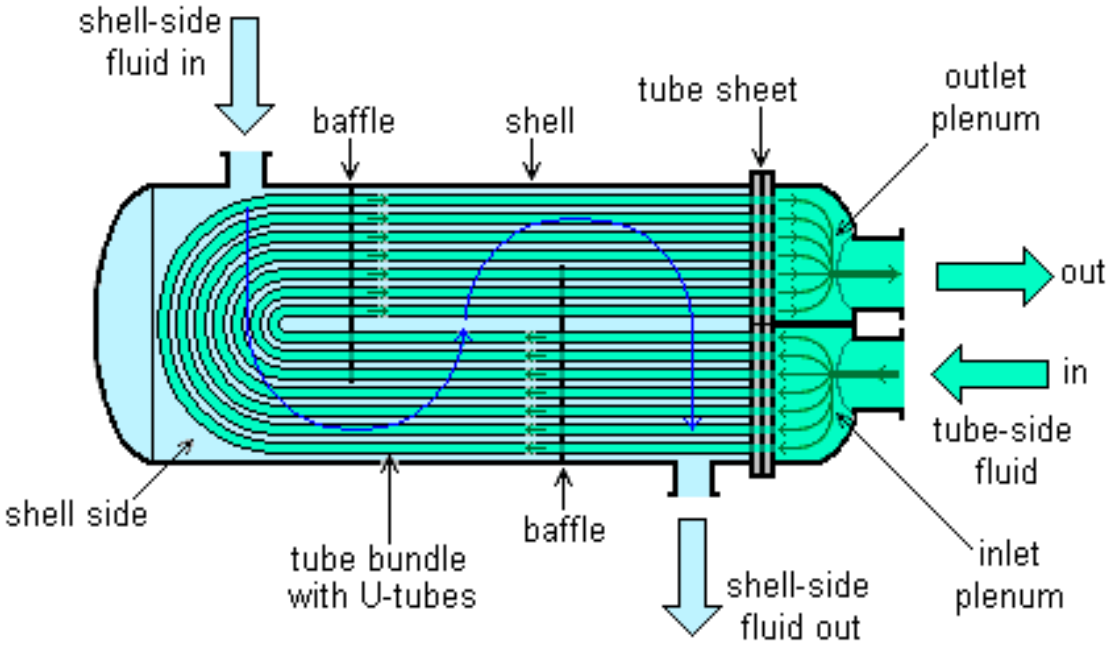
Cooling system : Tube heat exchanger

Function : water cooling system for improved operating temperature



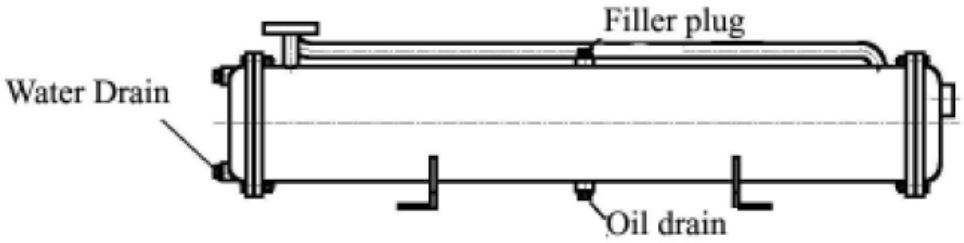
- Long lifetime solution
  - Tubular system
  - Simple system , easy to maintain and repair
  - Large exchange surface
  - High thermal effciency rate
- Technology that fullfil the needs:
  - Well known technology (used in cemistry…), very reliable.
  - Compact solution
  - Fullfiil requirements for fluid under pressure, and system with temperature variation

Cooling system : Tube heat exchanger



Heat exchanger :

working principle



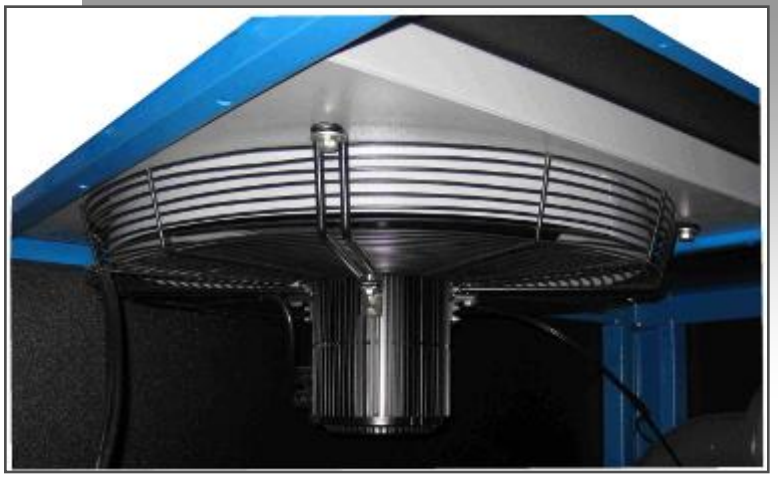
Water drain tap :

In winter, the water must be drained to protect the system from freezing

Cooling system : optimized air ventilation flow

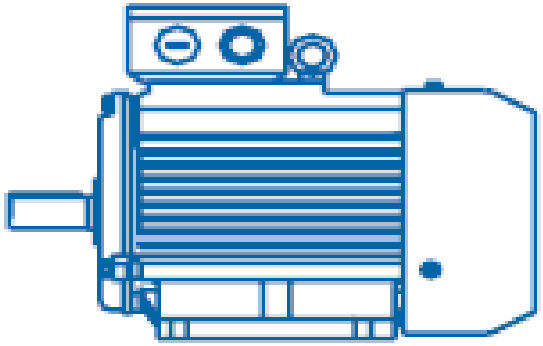
Function : axial fan for optimized cooling flow

- Improved efficiency (thanks to low energy consumption)
- Easy maintenance and cleaning
- Low noise level
- Optimal ventilation capacity



High efficient motor

Function : motor with high efficiency and reliability

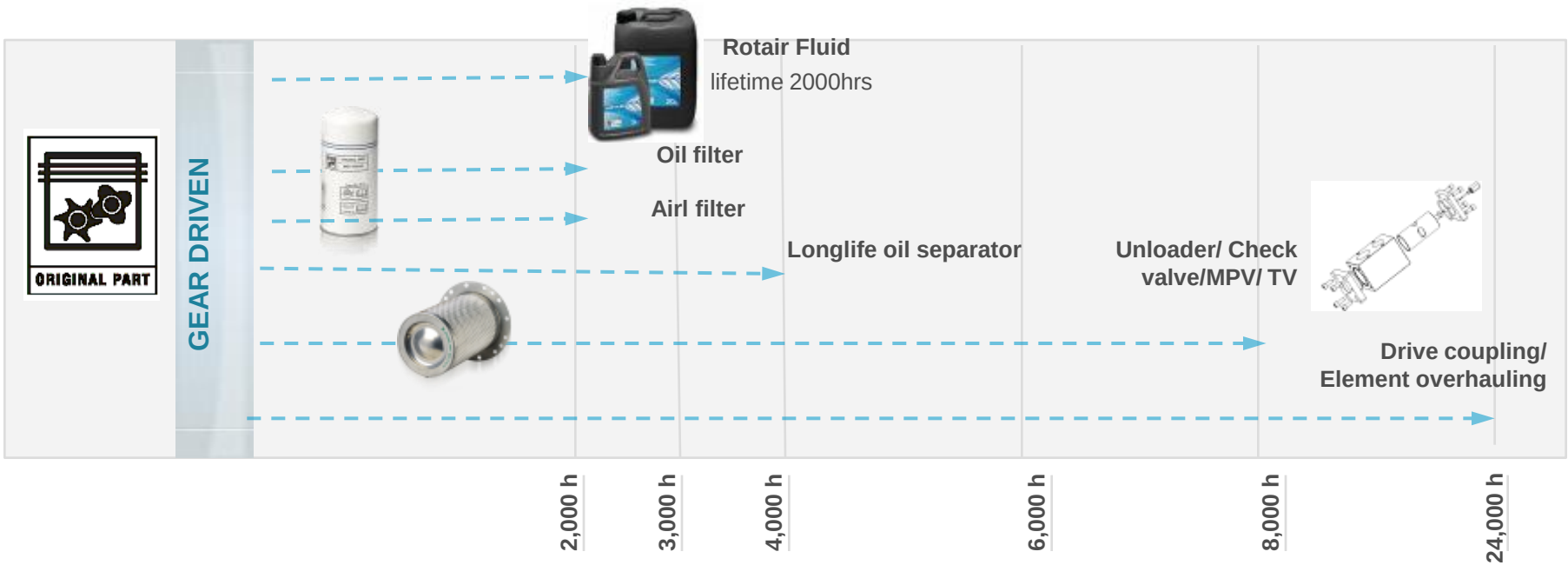




- Internal fan increase motor cooling capacity
- High efficiency motor with efficiency ratio @ 0,95.
- 4 pole motor, SF= 1,15
- Manufacturer present in Europe for technical service and support
- Approvals : CE, UL
- Low and medium voltages available (6kV, 10kV…)

Lifecycle cost

Function : clear maintenance schedule to keep max effciency over lifetime



- Service kits for easier management
- Identifier parts: original and qualified components
- Schedule given in the electronic controler

- Service Level A each 2000Hrs
- Service Level B each 6000Hrs
- Service Level C each 8000Hrs
- Service level D each 24000Hrs

Service kits

Function : ease the maintenance with clear information on service parts

ORIGINAL PART

Service kit	Article number
Oil	6215714600
Oil filter	6211473550
Filter kit	2205433806
Oil separator kit	2205406516
Unloader valve kit	2906 0772 00
MPV Kit	2205490584
Thermostatic valve Kit	2205490593
Air stop valve Kit	2906 0693 00
Oil stop valve Kit	2906 0694 00

Maintenance/ Repair



Easy access on the rear



Easy access on the front

Maintenance/ Repair

Function : accessibility to the service parts and components

Rear side

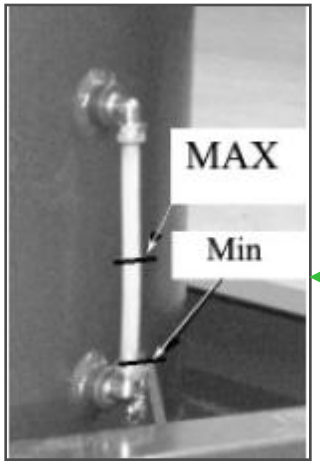


- Canopy with large doors on front and back sides
- Easy access to all parts for maintenance
- Easy access to components for repair

Ex: oil separation system



Easy replacement of the oil separator



Easy control of the oil level



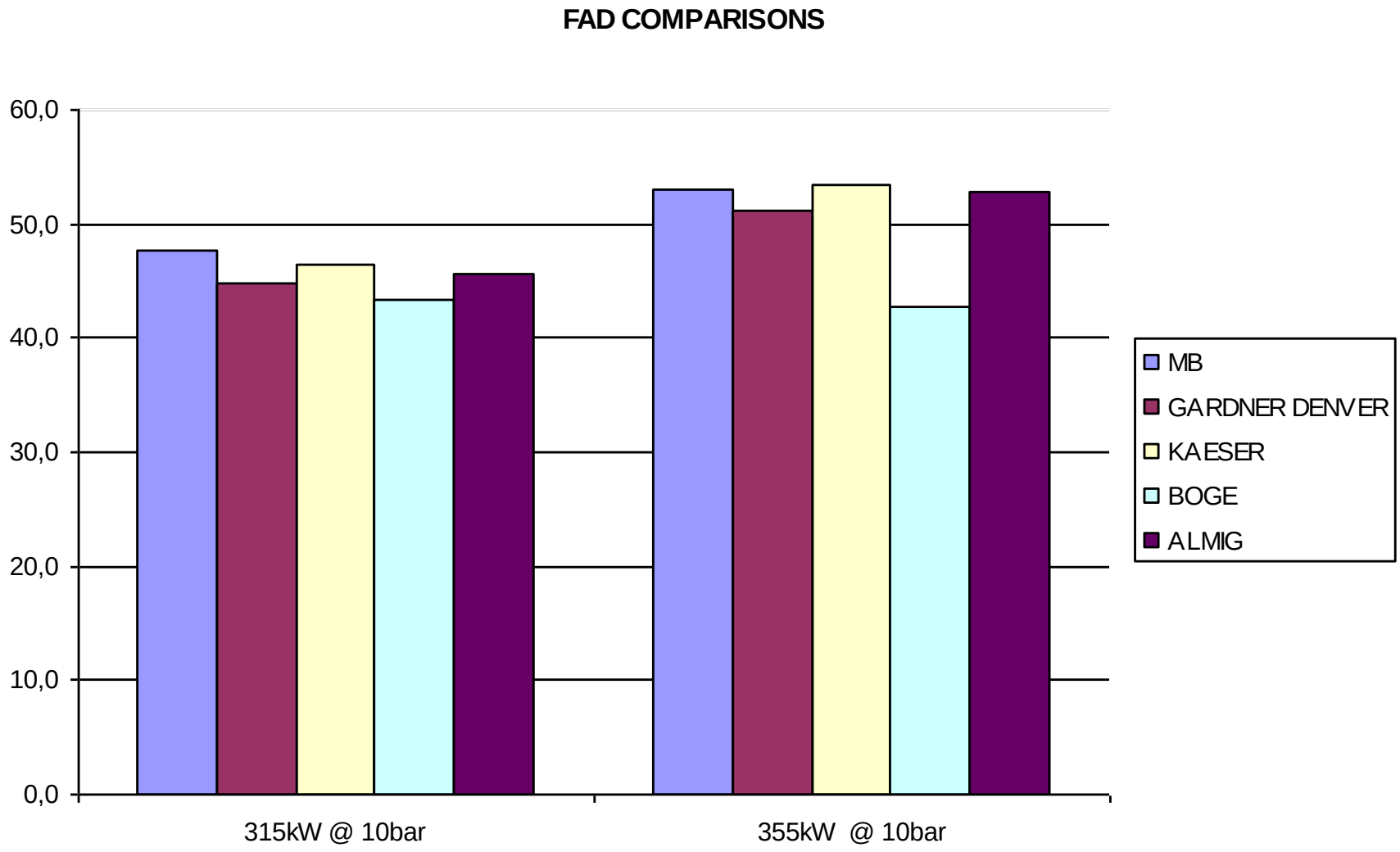
Comparison on : the product portfolio

	Kaeser FSD-HSD Series	Sullair TS Series	Gardner Denver- ESD-ESG Series
280 kW	NA	NA	NA
315 kW	Single stage	Double stage	Single stage
355 kW	Double stage	Double stage	Double stage

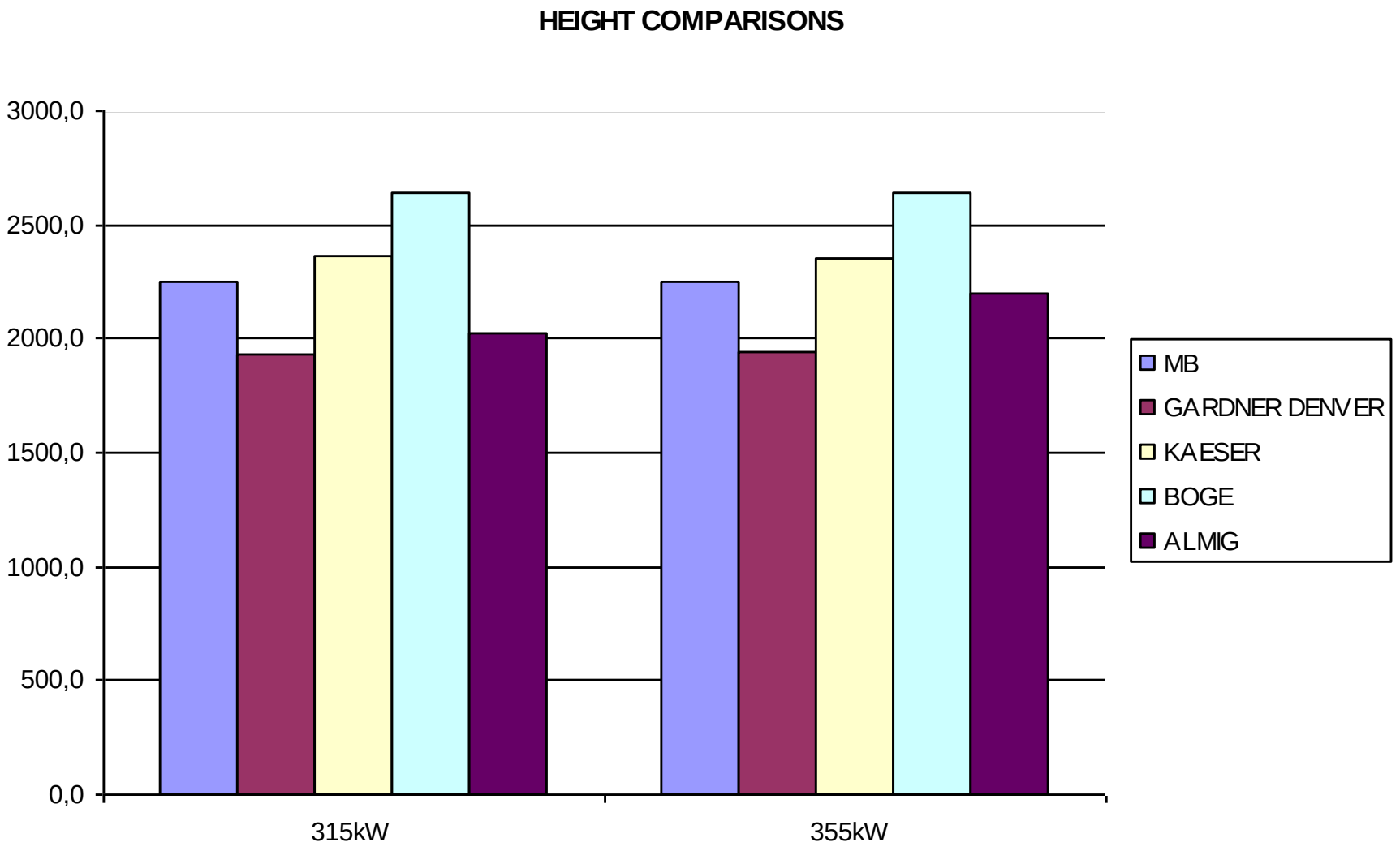
Our strenghts

- We can offer a 280 kW machine
- The 3 MB machines are all based on the same canopy and are all single stage machines

Comparison on : the technical data (FAD)



Comparison on : Dimensions



Sum up : key benefits

- Reliable and time proven compressed air system
- Advanced electronic microprocessor for optimized management
- High efficiency cooling system for low operating temperature
- Energy savings : potential for energy recovery system
- Easy to install with simple connections for compressed air and electrical supply
- Low noise level
- Easy to maintain : access to all service points through large opening doors, long lifetime components…



Products availble from now !!!!
SELL !!

