



FORMULA

Rotary screw compressors

kW 110 - 132 - 160 - 200
bar 8 - 10 - 13



FORMULA

FORMULA 110 - 200

Unrivalled performance meeting the demands of the larger users of compressed air throughout industry:

- ♦ Available as V-belt drive or directly coupled versions
- ♦ Powerful and robust designed for even the most severe application
- ♦ Extremely efficient in all conditions
- ♦ Durable, reliable and economical
- ♦ Sophisticated microprocessor based controls



The sum of technology

Drive systems

FORMULA offers 2 rugged drive systems to meet industry's requirement for reliability, operating safety and energy saving compressed air systems production.



FORMULA:

FORMULA offers a low maintenance, dependable and highly effective V-belt drive. The variable V-belt drive means that the transmission ratio between the drive motor and the air end can be set by the manufacturer prior to delivery to provide the required air pressure is perfectly matched to the customer's operating demands.

FORMULA.D:

FORMULA.D uses a direct coupled drive, with a torsionally elastic coupling between the compressor and the motor for providing:

- ♦ a virtually loss-free drive system
- ♦ a final delivered air pressure of 8, 10 or 13 bar



MC2 controller

Latest generation microprocessor based multi-controller, with easy to use menu driven operation with backlit display, message box and fault log, special functions and emergency warning.

The MC2 controller also features:

- ♦ optional hardware expansion
- ♦ ability to interface with other compressors using the optional interface card.

Daily and/or weekly operational programming of up to 4 compressors allowing start/stop switching and sequencing control.

- ♦ Remote control
- ♦ Auto-restart
- ♦ Programmed routine maintenance
- ♦ Diagnostic functions with fault log



Air-ends

The ABAC screw compressors are equipped with energy saving air-ends. These performance-optimized air-ends provide the highest efficiency and durability.



The advantages

Simple maintenance High quality air Reduced costs

The ideal positioning of all service items along with the simple and quick access allow service work to be carried out quickly and safely. The extended service intervals help to reduce costs further. The FORMULA compressor provides high quality compressed air through proven multi-stage separation. The oil content within the delivered compressed air is less than 3 mg. per cubic meter.



Efficient air Inlet filtration

One of the most important factors in achieving increased performance and longer service life with all rotary screw compressors is the quality of the inlet air. Based on this reason, the FORMULA utilises a highly efficient air suction filter. This ensures that the air entering the compressor element is cleaned efficiently, thus providing a considerably longer service life to the whole compressor.



Switch cabinet

The switch cabinet is built according to DIN and VDE. The generously sized cabinet with clear logical lay out allows simple access to all components with plenty of space for additional items if required.



Design and technology



1 Air end
The latest design providing durability with excellent efficiency

2 MC2 controller
The compressor's intelligence which thinks, monitors and records

3 Drive system
FORMULA
Highly efficient and completely reliable V-belt drive
FORMULA.D
Direct drive from compressor to the motor providing lower power losses

4 Air/oil separation system
The highest quality compressed air is achieved through proven multi-stage separation

5 Cooling system
The large surface area cooler allows for the lowest compressed air outlet temperature and optimum coolant temperatures

FORMULA.D



6 Cooling fan
Thermostatically controlled cooling fan for improved cooling efficiency

7 Drive motor
The high quality and robust drive motor with power in reserve, provides lower power consumption.

8 Star Delta starter IP54

9 Thermostatic valve

10 Air intake filter

11 Oil filters

12 Minimum pressure and check valve

13 Air intake valve

14 Antivibration pads

Technical data

FORMULA V-Belt drive

| Model | Pressure bar psi | | Capacity m³/min CFM | | Motor Power kW/Hp | Dimensions mm Length x Width x Height | Weight Kg |
|-------------|---------------------|-----|------------------------|---------|----------------------|--|--------------|
| FORMULA 110 | 8 | 113 | 18,24 | 644,05 | 110/150 | 2300 x 1400 x 1525 | 2300 |
| | 10 | 141 | 16,06 | 567,08 | | | |
| | 13 | 184 | 14,25 | 503,17 | | | |
| FORMULA 132 | 8 | 113 | 21,79 | 769,40 | 132/180 | 2300 x 1400 x 1525 | 2800 |
| | 10 | 141 | 19,33 | 682,54 | | | |
| | 13 | 184 | 16,87 | 595,68 | | | |
| FORMULA 160 | 8 | 113 | 26,84 | 947,72 | 160/220 | 2300 x 1400 x 1525 | 3200 |
| | 10 | 141 | 24,65 | 870,39 | | | |
| | 13 | 184 | 21,18 | 747,87 | | | |
| FORMULA 200 | 8 | 113 | 31,32 | 1105,91 | 200/270 | 3000 x 1650 x 2025 | 3900 |
| | 10 | 141 | 27,97 | 987,62 | | | |
| | 13 | 184 | 23,88 | 843,20 | | | |

FORMULA 110 - 200

air-cooled, water cooling optional, intermediate pressure levels upon request

FORMULA.D Direct drive

| Model | Pressure bar psi | | Capacity* m³/min CFM | | Motor Power kW/Hp | Dimensions mm Length x Width x Height | Weight Kg |
|---------------|---------------------|-----|-------------------------|---------|----------------------|--|--------------|
| FORMULA.D 110 | 8 | 113 | 19,10 | 674,42 | 110/150 | 2300 x 1400 x 1525 | 2720 |
| | 10 | 141 | 16,46 | 581,20 | | | |
| | 13 | 184 | 13,10 | 642,56 | | | |
| FORMULA.D 132 | 8 | 113 | 22,68 | 800,83 | 132/180 | 2300 x 1400 x 1525 | 3050 |
| | 10 | 141 | 19,67 | 694,55 | | | |
| | 13 | 184 | 16,36 | 577,67 | | | |
| FORMULA.D 160 | 8 | 113 | 27,01 | 953,73 | 160/220 | 2300 x 1400 x 1525 | 3300 |
| | 10 | 141 | 24,16 | 853,09 | | | |
| | 13 | 184 | 19,62 | 692,78 | | | |
| FORMULA.D 200 | 8 | 113 | 36,00 | 1271,16 | 200/270 | 3000 x 1650 x 2025 | 3900 |
| | 10 | 141 | 32,00 | 1129,92 | | | |
| | 13 | 184 | 26,14 | 923,00 | | | |

Technical data may vary without notice

FORMULA.D 110 - 200

air-cooled, water cooling optional, intermediate pressure levels upon request

* Min/max free air delivery values for variable speed refer to 8 bar

WORKING CONDITIONS:
- Intake air pressure 1 bar
- Air temperature at intake 20°C
- FAD as per ISO 1217
- Sound levels as per ISO 3744



SPARE PARTS

| | |
|---------|---|
| 8234194 | Filter kit FORMULA 110 kW 8-10-13 bar |
| 8234195 | Filter kit FORMULA 132 kW 8-10-13 bar |
| 8234196 | Filter kit FORMULA 160 kW 8-10-13 bar |
| 8234197 | Filter kit FORMULA 200 kW 8-10-13 bar |
| 8234201 | Filter kit FORMULA.D 110 kW 8-10-13 bar |
| 8234202 | Filter kit FORMULA.D 132 kW 8-10-13 bar |
| 8234203 | Filter kit FORMULA.D 160 kW 8-10-13 bar |
| 8234204 | Filter kit FORMULA.D 200 kW 8-10-13 bar |
| 9280026 | Mineral coolant BLU FORMULA 10 l. |
| 9280027 | Mineral coolant BLU FORMULA 20 l. |
| 9280029 | Synthetic coolant DURALUBE 46 10 l. |
| 9280030 | Synthetic coolant DURALUBE 46 20 l. |

CUSTOMER SERVICE

A full product support package is available to all of our customers throughout the world. Qualified technical advice and support is provided in strategic locations and in all major countries. Advice on installation, selection, additional equipment, maintenance management and environmental issues is available on request.

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ABAC air compressors are manufactured in compliance with:
98/37/CE machinery Directive;
87/404/CE simple pressure vessels Directive;
73/23/CE low voltage Directive;
89/336/CE electromagnetic compatibility;
2000/14/CE noise level.



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ABAC product range



ROTARY SCREW COMPRESSORS

From 2.2 to 200 kW (from 3,0 to 270 Hp),
from 8 to 15 bar

VARIABLE SPEED VERSION

From 11 to 75 kW (from 15 to 100 Hp),
from 6 to 13 bar



PISTON COMPRESSORS

- Direct drive oilfree and lubricated from 1,5 to 3 Hp, up to 100 liter air receiver, working pressure from 1 to 10 bar
- Belt driven, lubricated, single stage, two stage from 2 to 25 Hp, from 27 to 1000 liter air receiver, max pressure 15 bar
- Silenced, belt driven, single stage, two stage from 2 to 10 hp, up to 500 liter air receiver, working pressure from 1 to 11 bar



COMPRESSED AIR TREATMENT

- Refrigeration dryer from 16 to 6.000 m3/h
- Oil filters from 3 to 0,01 micron and carbon filter from 400 to 60.000 l/min
- Cyclonic separators from 30 to 1.200 m3/h
- Oil-water separators from 120 to 1.800 m3/h
- Air receiver from 100 to 5.000 liter



PNEUMATIC TOOLS

Full range of professional air tools for automotive, building, mechanical, wood working, nailing and stapling

Distributor