COMPRAG®

positive displacement

CATALOG
#1

STATIONARY
Screw Compressors
AV-series

Index

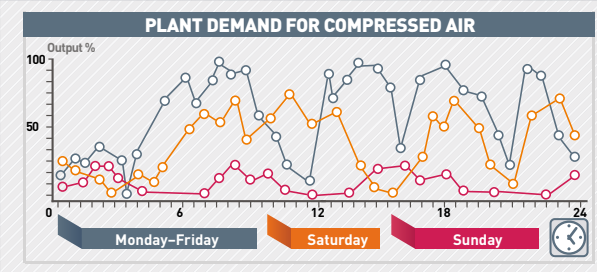
Index	2
AV-series frequency control	3
Screw Compressors A-Series with capacity to 5,9 m³/min	4
Screw Compressors A-Series with capacity to 8,7 m³/min	8
Screw Compressors A-Series with capacity to 14,3 m³/min	12

This Catalogue is valid from 01.09.2019.
All previous catalogues lose their validity with the publication of the new catalogue.
Technical characteristics, specifications and details published in this catalogue are subject to change without notice.
Comprag GmbH.

The latest catalogue version is available for download on our web page
www.comprag.com

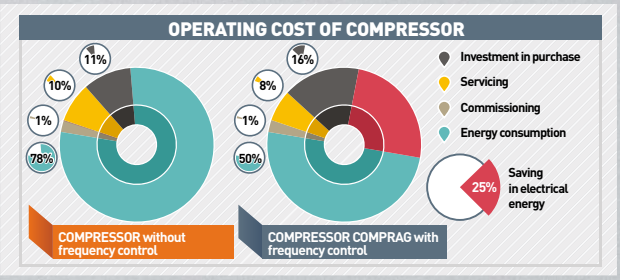
Copyright © Comprag GmbH. All rights reserved.

AV-series frequency control



A plant's demand for compressed air varies throughout the day - from zero demand to peak demand.

Conventional screw compressors are not able to switch between operating modes according to a plant's current demand for compressed air. Owing to constant switching between loading/unloading modes or the idle running of compressors, conventional screw compressors consume consistently large amounts of electrical energy when operating. The Comprag AV compressor series with frequency control has been created for economical compressor operation where there is varying demand.

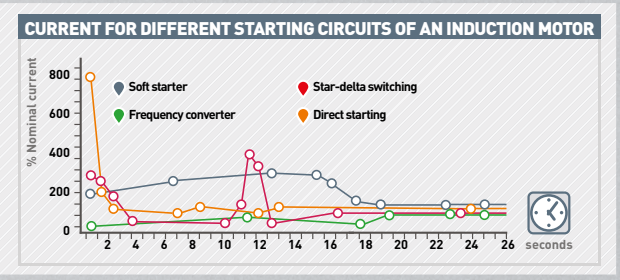


AV compressors are provided with a frequency converter for continuous control of compressor output according to the current demand for compressed air. They provide a plant with the necessary amount of compressed air at a given moment and at a constant set pressure, while consuming only as much electrical energy as there is demand for compressed air. This mode of operation conserves as much energy as possible.

Comprag compressors with frequency control allow a 25% saving in electrical energy consumption.

Mechanism of compressor with frequency control:

Varying compressed-air demand involves a change in pressure in a plant's compressed-air system. A pressure sensor installed in the compressor brings about a change in system pressure by means of a corresponding signal sent to the compressor's controller. Via the frequency converter, the controller sets a speed for the electric motor to match the compressor's required output. In this way, the plant's compressed-air system pressure is kept at a constant value.



The frequency converter means that compressor start-up is associated with very low starting currents. This has a positive effect on the service life of the electrical motor and the electrics.

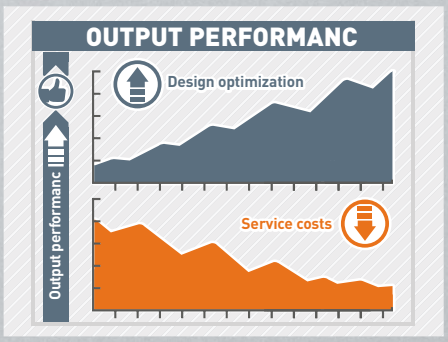
Screw Compressors AV-Series with capacity to 5,9 m³/min

Comparg AV-Series oil filled screw compressors are designed for smooth and economical production of compressed air in industrial plants.They feature a compact logically laid-out design, high quality materials and workmanship, and key components from leading manufacturers.

version (AV)

Features:

AV-Series compressors have been developed to offer an optimal balance between performance, energy saving solutions, and offer increased servicing intervals to reduce your running costs. AV-Series compressors are most efficient in class.



- Low operating cost
- Only as much electrical energy is required as compressed air
- No electrical energy consumption during idling
- Constant system pressure
- No loading/unloading modes
- No pulsation and pressure drops
- Low maximum system pressure
- Less compressed-air leakage
- Conserved electrical energy owing to no excess pressure in system

Design and technical characteristics

AV-Series screw oil-filled compressors produce industrial compressed air with supreme air treatment, class 4 according to DIN ISO 8573-1.

Features screw compressors AV-Series: professional controller (A), effective and reliable electric motor (B), screw air-end (C), effective separation system (D).

Professional controller v-Log (A)

The professional controller **v-Log** controls operation of the compressor in automatic mode, and also provides the user with necessary information on the working pressure, temperature of the air oil mixture, compressor's operation time, need for servicing, etc.

The professional controller allows several compressors to be combined into a joint system and be controlled remotely.

Reliable electric motor (B)

AV-Series compressors are fitted with quality electric motors with a high efficiency coefficient and world-class bearings from leading manufacturers.

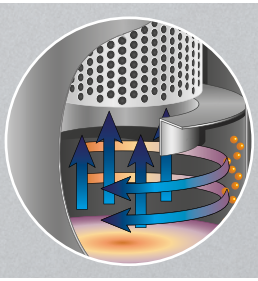
The motors are not overloaded, but have a power reserve and overheat protection for windings.

Screw air-end (C)

The air end has a contemporary energy-efficient screw shape.

This increases compressor efficiency and reduces maintenance and replacement costs.

Separation system (D)

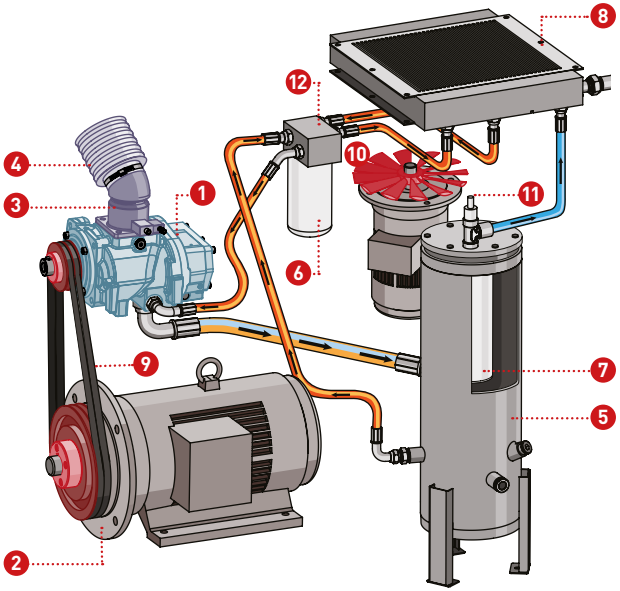


AV-Series compressors are fitted with an effective three-phase separation system. Most of the oil is separated under centrifugal force in the separator tank. Some of the oil is separated by gravitational force during movement of oil inside the separator.

The remaining amount of oil is separated by a quality separation element. The total amount of oil in compressed air at the outlet of the compressor does not exceed 3 mg/m³.

Flow chart of compressor

-OIL
-OIL+AIR
-AIR



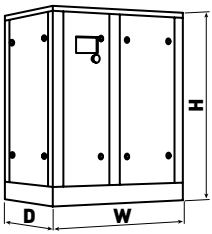
1. Screw air-end
2. Electric motor
3. Air intake valve
4. Air filter
5. Separation vessel
6. Spin-On oil filter
7. Internal separator
8. Heat exchanger
9. Belt drive
10. Cooling Fan
11. Minimum pressure valve
12. Thermostatic valve

Table of models AV-Series

Article	Model	Drive power (kW)	Max. working pressure (bar)	Capacity* (m³/min)	Rated voltage (phase/V/Hz)	Sound pressure level** dB(A)	Screw connection
11100064	AV3008	30	5-8	4,7	3/380/50	72	1 1/4"
11100065	AV3010		5-10	4,0		72	
11100074	AV3708	37	5-8	5,9	3/380/50	72	1 1/4"
11100075	AV3710		5-10	5,1		72	

* Measured according to ISO 1217
** Measured according to ISO 3744

Dimensions AV-Series



Model	Height H (mm)	Width W (mm)	Depth D (mm)	Weight (kg)
AV30	1500	1400	1000	725
AV37				765

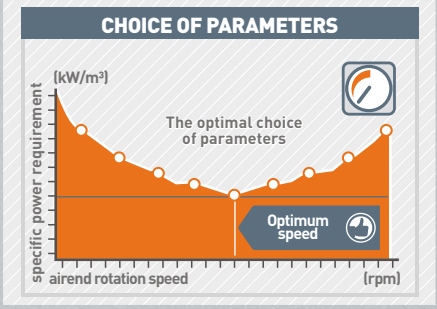
Screw Compressors AV-Series with capacity to 8,7 m³/min

Comparg AV-Series oil filled screw compressors are designed for smooth and economical production of compressed air in industrial plants.They feature a compact logically laid-out design, high quality materials and workmanship, and key components from leading manufacturers.

version (AV)

Features:

The rotation speed of the helical screw rotor unit is selected on the basis of the specific optimal performance. All compressor components have been designed according to parameters chosen for optimal performance and low operating costs. Comparg AV-Series offer some of the lowest specific production costs of compressed air.



- Low operating cost
- Only as much electrical energy is required as compressed air
- No electrical energy consumption during idling
- Constant system pressure
- No loading/unloading modes
- No pulsation and pressure drops
- Low maximum system pressure
- Less compressed-air leakage
- Conserved electrical energy owing to no excess pressure in system

Design and technical characteristics

AV-Series screw oil-filled compressors produce industrial compressed air with supreme air treatment, class 4 according to DIN ISO 8573-1.

Features screw compressors AV-Series: professional controller (A), effective and reliable electric motor (B), screw air-end (C), effective separation system (D).

Professional controller v-Log (A)

The professional controller **v-Log** controls operation of the compressor in automatic mode, and also provides the user with necessary information on the working pressure, temperature of the air oil mixture, compressor's operation time, need for servicing, etc.

The professional controller allows several compressors to be combined into a joint system and be controlled remotely.

Reliable electric motor (B)

AV-Series compressors are fitted with quality electric motors with a high efficiency coefficient and world-class bearings from leading manufacturers.

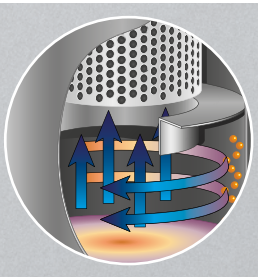
The motors are not overloaded, but have a power reserve and overheat protection for windings.

Screw air-end (C)

The air end has a contemporary energy-efficient screw shape.

This increases compressor efficiency and reduces maintenance and replacement costs.

Separation system (D)

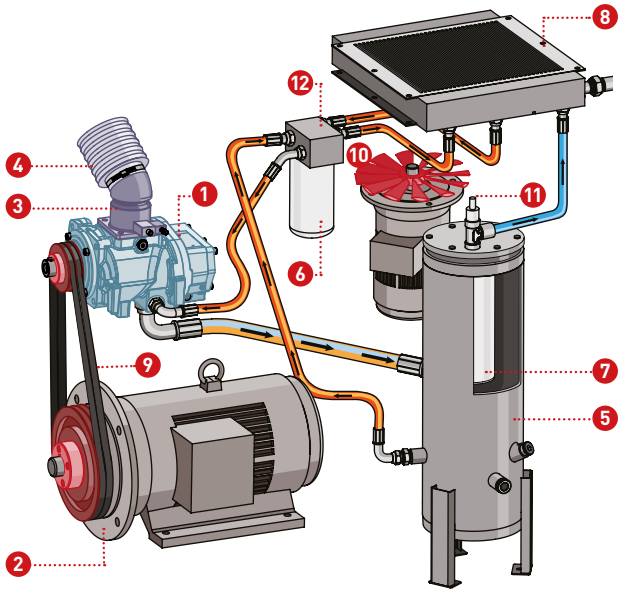


AV-Series compressors are fitted with an effective three-phase separation system. Most of the oil is separated under centrifugal force in the separator tank. Some of the oil is separated by gravitational force during movement of oil inside the separator.

The remaining amount of oil is separated by a quality separation element. The total amount of oil in compressed air at the outlet of the compressor does not exceed 3 mg/m³.

Flow chart of compressor

-OIL
-OIL+AIR
-AIR



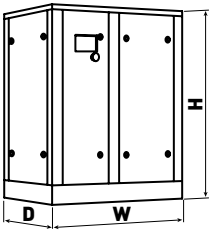
1. Screw air-end
2. Electric motor
3. Air intake valve
4. Air filter
5. Separation vessel
6. Spin-On oil filter
7. Internal separator
8. Heat exchanger
9. Belt drive
10. Cooling Fan
11. Minimum pressure valve
12. Thermostatic valve

Table of models AV-Series

Article	Model	Drive power (kW)	Max. working pressure (bar)	Capacity* (m^3/min)	Rated voltage (phase/V/Hz)	Sound pressure level** dB(A)	Screw connection
11100084	AV4508	45	5-8	7,0	3/380/50	75	1 1/2"
11100085	AV4510		5-10	6,2		75	
11100094	AV5508	55	5-8	8,7	3/380/50	75	1 1/2"
11100095	AV5510		5-10	7,7		75	

* Measured according to ISO 1217
** Measured according to ISO 3744

Dimensions AV-Series



Model	Height H (mm)	Width W (mm)	Depth D (mm)	Weight (kg)
AV45	1720	1650	1250	1015
AV55				1190

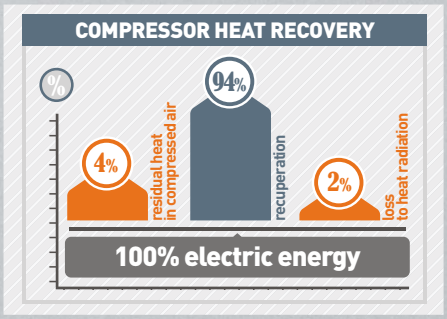
Screw Compressors AV-Series with capacity to 14,3 m³/min

Comparg AV-Series oil filled screw compressors are designed for smooth and economical production of compressed air in industrial plants.They feature a compact logically laid-out design, high quality materials and workmanship, and key components from leading manufacturers.

version (AV)

Features:

Up to **94%** of the electric energy expended in driving a compressor may be used again in the form of recuperated heat. AV-Series compressors allow heated air to be used efficiently by recovering it for production or storage facilities.



100% - electric energy consumed by compressor
4% - residual heat in compressed air
2% - loss to heat radiation

- Low operating cost
- Only as much electrical energy is required as compressed air
- No electrical energy consumption during idling
- Constant system pressure
- No loading/unloading modes
- No pulsation and pressure drops
- Low maximum system pressure
- Less compressed-air leakage
- Conserved electrical energy owing to no excess pressure in system

Design and technical characteristics

AV-Series screw oil-filled compressors produce industrial compressed air with supreme air treatment, class 4 according to DIN ISO 8573-1.

Features screw compressors AV-Series: professional controller (A), effective and reliable electric motor (B), screw air-end (C), effective separation system (D).

Professional controller v-Log (A)

The professional controller **v-Log** controls operation of the compressor in automatic mode, and also provides the user with necessary information on the working pressure, temperature of the air oil mixture, compressor's operation time, need for servicing, etc.

The professional controller allows several compressors to be combined into a joint system and be controlled remotely.

Reliable electric motor (B)

AV-Series compressors are fitted with quality electric motors with a high efficiency coefficient and world-class bearings from leading manufacturers.

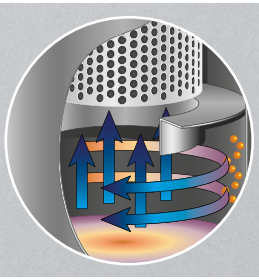
The motors are not overloaded, but have a power reserve and overheat protection for windings.

Screw air-end (C)

The air end has a contemporary energy-efficient screw shape.

This increases compressor efficiency and reduces maintenance and replacement costs.

Separation system (D)

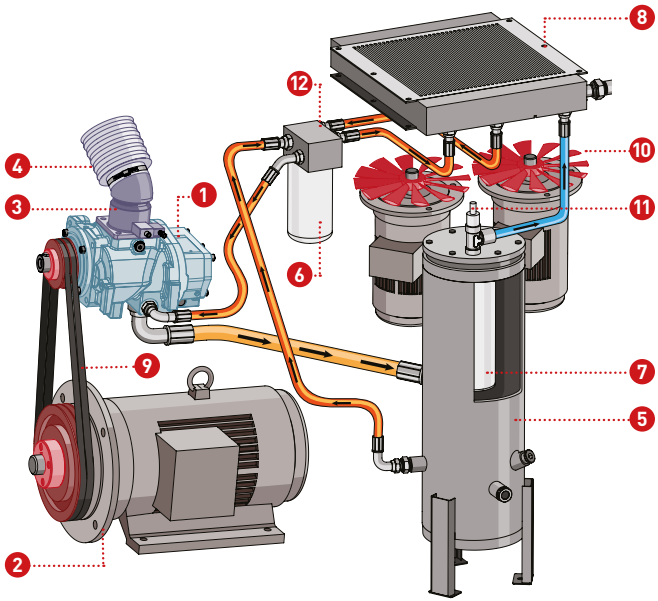


AV-Series compressors are fitted with an effective three-phase separation system. Most of the oil is separated under centrifugal force in the separator tank. Some of the oil is separated by gravitational force during movement of oil inside the separator.

The remaining amount of oil is separated by a quality separation element. The total amount of oil in compressed air at the outlet of the compressor does not exceed 3 mg/m³.

Flow chart of compressor

-OIL
-OIL+AIR
-AIR



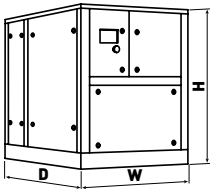
1. Screw air-end
2. Electric motor
3. Air intake valve
4. Air filter
5. Separation vessel
6. Spin-On oil filter
7. Internal separator
8. Heat exchanger
9. Belt drive
10. Cooling Fan
11. Minimum pressure valve
12. Thermostatic valve

Table of models AV-Series

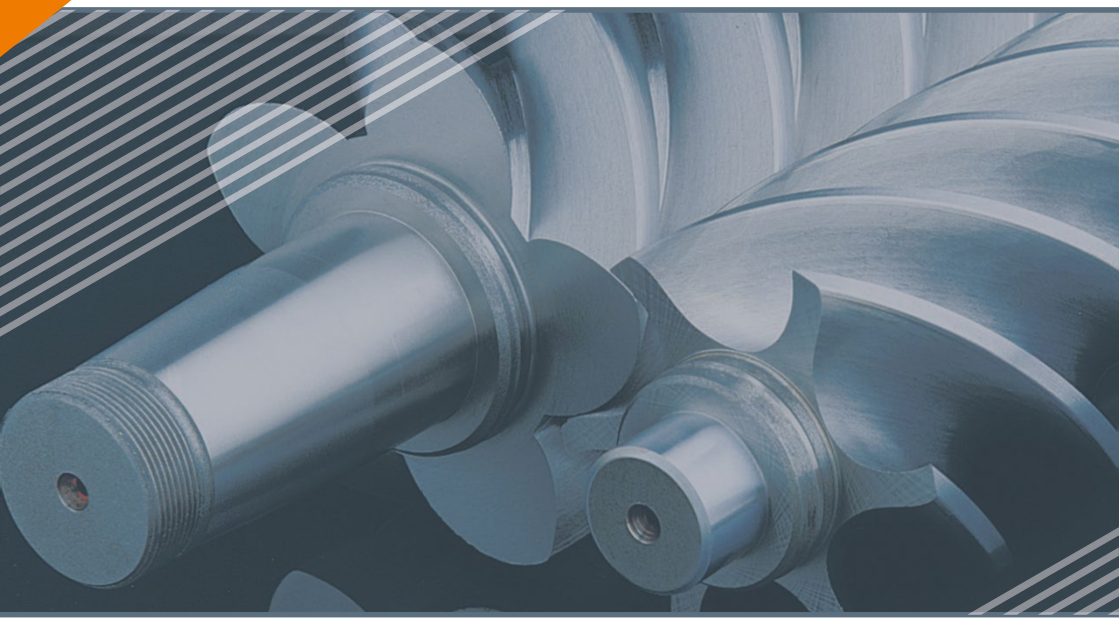
Article	Model	Drive power (kW)	Max. working pressure (bar)	Capacity* (m^3/min)	Rated voltage (phase/V/Hz)	Sound pressure level** dB(A)	Screw connection
11100104	AV7508	75	5-8	11,8	3/380/50	75	2"
11100105	AV7510		5-10	10,7		75	
11100114	AV9008	90	5-8	14,3	3/380/50	75	2"
11100115	AV9010		5-10	12,9		75	

* Measured according to ISO 1217
** Measured according to ISO 3744

Dimensions AV-Series



Model	Height H (mm)	Width W (mm)	Depth D (mm)	Weight (kg)
AV75	1790	1490	1790	1580
AV90				1690



Comprag GmbH
www.comprag.com