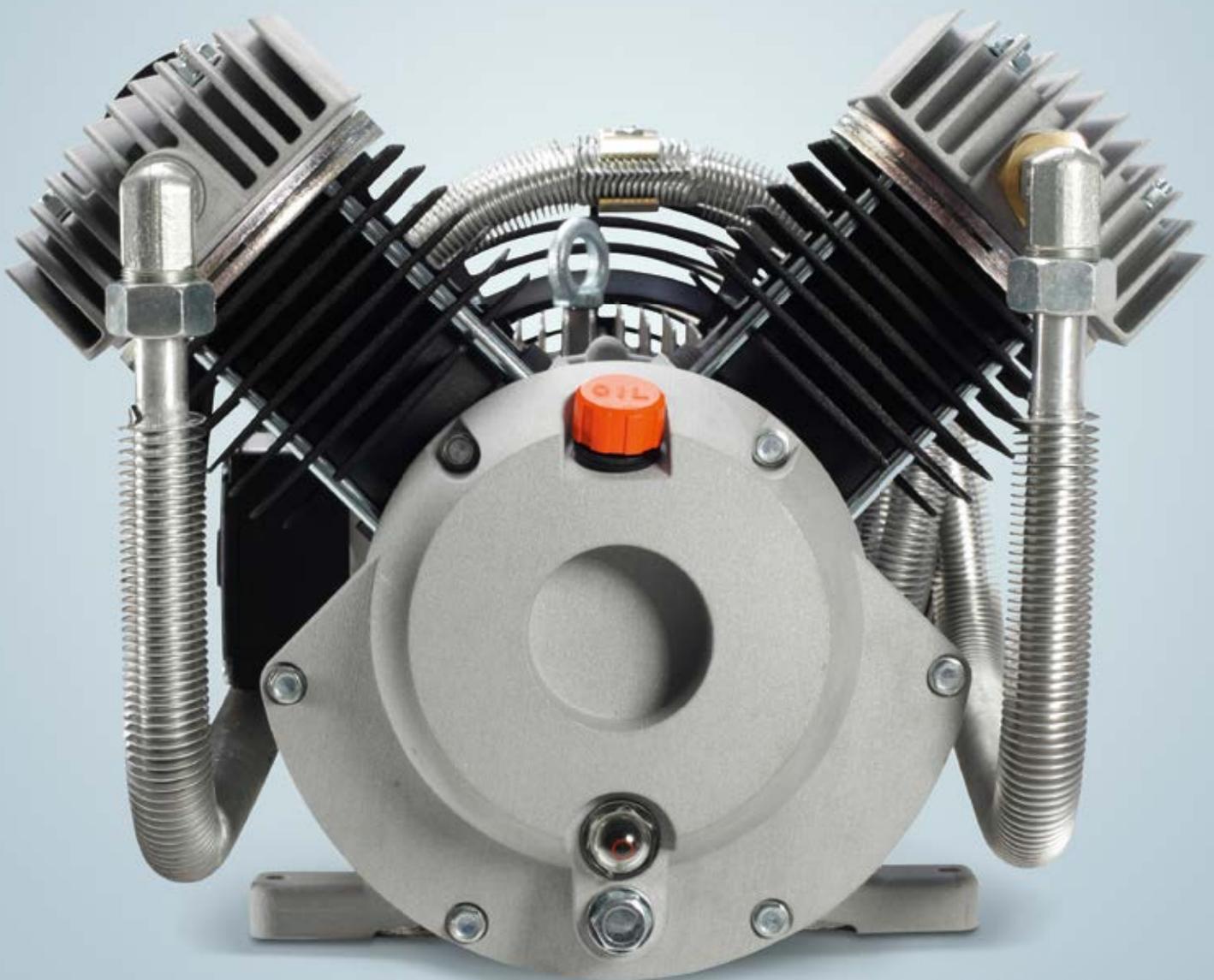


# Reciprocating compressors

The AIRKO modular construction system

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# Reciprocating compressors

Direct-driven industrial professionals: oil lubricated

## Tough in action. Economical in performance.

AIRKO, AIRKO-N and AIRKO-H industrial compressors are air-cooled, single or two-stage compressors with direct drive. They completely meet the high standards required by the industry category in all respects:

- Tried and tested construction.
- A versatile range of applications in filling stations, workshops and factories as well as individually adjustable energy sources for operating machines and systems requiring compressed air.
- Tried and tested thousands of times under the toughest conditions (such as at extremely low temperatures when used in snow cannons).

<b>m<sup>3</sup>/min</b>	0.17–1.24
<b>bar</b>	10–20
<b>KW</b>	1.5–7.6
<b>Drive</b>	Direct drive
<b>Oil lubricated</b>	Yes

**AIRKO 239**  
**AIRKO 309**



**AIRKO 469**  
**AIRKO 609**



**AIRKO 279**  
**AIRKO 559**  
**AIRKO 759**



Model	Max. over-pressure bar(g)	Intake volume		Actual delivery volume		Drive power [kW]	Cooling air volume flow [m <sup>3</sup> /h]	Nominal voltage [Volt]	Protection class	No. of stages [piece]	Rpm [min <sup>-1</sup> ]	Connection pressure pipe	Noise level with/without box ** [dB(A)]
		[l/min]	[m <sup>3</sup> /h]	[l/min]	[m <sup>3</sup> /h]								
<b>Reciprocating compressor up to 10 bar – single-stage</b>													
<b>AIRKO 309</b>	10	310	18.6	<b>190</b>	11.4	1.5	540	230/400	IP 54	1	1450	22 x 1.5	76/65
<b>AIRKO 469</b>	10	475	28.5	<b>311</b>	18.7	2.2	540	230/400	IP 54	1	1450	22 x 1.5	77/66
<b>AIRKO 609</b>	10	620	37.2	<b>423</b>	25.4	3	730	400/690	IP 54	1	1450	26 x 1.5	77/67
<b>Reciprocating compressor up to 10 bar – two-stage</b>													
<b>AIRKO-N 279</b>	10	280	16.8	<b>217</b>	13.0	1.5	510	230/400	IP 54	2	1450	22 x 1.5	74/61
<b>AIRKO-N 559</b>	10	565	33.9	<b>462</b>	27.7	3	990	400/690	IP 54	2	1450	26 x 1.5	79/67
<b>AIRKO-N 759</b>	10	765	45.9	<b>620</b>	37.2	3.8	1320	400/690	IP 54	2	1450	30 x 2	79/67
<b>Reciprocating compressor up to 15 / 20 bar</b>													
<b>AIRKO-H 309</b>	15	310	18.6	<b>170</b>	10.2	1.5	540	230/400	IP 54	1	1450	22 x 1.5	77/66
<b>AIRKO-H 279</b>	15	280	16.8	<b>203</b>	12.2	1.5	510	230/400	IP 54	2	1450	22 x 1.5	74/61
<b>AIRKO-HH 279</b>	20	280	16.8	<b>181</b>	10.9	1.5	510	230/400	IP 54	2	1450	22 x 1.5	74/61
<b>AIRKO-H 559</b>	15	565	33.9	<b>403</b>	24.2	3	990	400/690	IP 54	2	1450	26 x 1.5	79/67
<b>AIRKO-H 759</b>	15	765	45.9	<b>527</b>	31.6	3.8	1320	400/690	IP 54	2	1450	30 x 2	79/67

\* Actual Delivery quantity measured in continuous operation according to VDMA-4362 of the German Mechanical Engineering Industry Association. At 8 bar(g), for 15 bar(g) variant measured at 12 bar(g).  
\*\* Noise level according to DIN 45635 T13, at a distance of 1 metre. Subject to technical modifications.

**Professional technology in the new AIRKO Power Design:**

- Heavily ribbed cylinders constructed of high-quality grey cast iron and cylinder heads constructed of die-cast aluminium
- Aluminium finned tube aftercooler pipe in the cooling airflow
- Powerful cast iron axial fans
- Needle bearing in the two connecting rod eyes
- Branded pressure switch with operating hours counter as standard (for version on tank)
- Highly efficient, large-dimensioned intake filter and replaceable filter element
- Energy-saving, premium quality IP 54 motor, with class F protection



**Effective intake filters**, of generous dimensions



**Powerful cast iron axial fans**



**Needle bearing** in both connecting rod eyes



**Heavily ribbed grey cast iron cylinders** for a long service life



**Valve plates** (Hörbiger) made of high-quality steel with stroke limiter and a long service life



**Aluminium finned tube aftercooler pipe** in the cooling airflow



Robust, **premium quality IP 54 energy-saving motor** with 1,450 rpm for a long service life and low operating costs



# Reciprocating compressors

Direct-driven industrial professionals: oil-free



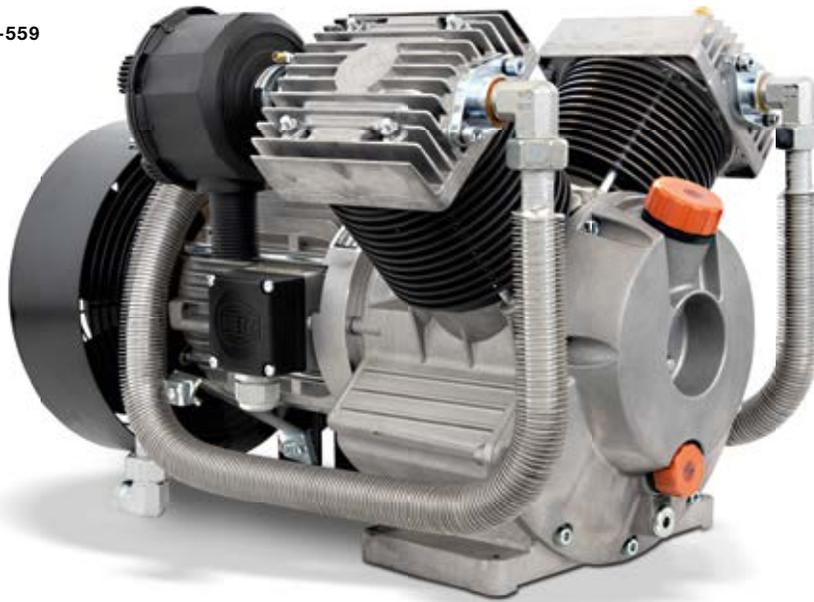
**100% oil-free. For more sensitive operations.**

The oil-free industrial compressors AIRKO-O are air-cooled, two-stage compressors with direct drive. They meet the high standards required by the industrial category for oil-free operation in all respects.

- Tried and tested construction
- A versatile range of applications in industry where there is a high demand for “clean” compressed air without any contamination through oil.
- Ideally suited to sensitive operations such as in medical technology, food technology and drinking water supply, to name but a few.

<b>m<sup>3</sup>/min</b>	0.15–1.17
<b>bar</b>	7–10
<b>KW</b>	1.5–7.6
<b>Drive</b>	Direct drive
<b>Oil-free</b>	Yes

AIRKO O-559



Model	Max. over-pressure bar(g)	Intake volume		Actual delivery volume		Drive power [kW]	Cooling air volume flow [m <sup>3</sup> /h]	Nominal voltage [Volt]	Protection class	No. of stages [piece]	Rpm [min <sup>-1</sup> ]	Connection pressure pipe	Noise level with/without box ** [dB/A]
		[l/min]	[m <sup>3</sup> /h]	[l/min]	[m <sup>3</sup> /h]								
<b>Oil-free reciprocating compressor</b>													
<b>AIRKO-O 239</b>	7	240	14.4	<b>150</b>	9.0	1.5	470	230/400	IP 54	1	1450	22 x 1.5	75/62
<b>AIRKO-O 279</b>	10	280	16.8	<b>212</b>	12.7	1.5	510	230/400	IP 54	2	1450	22 x 1.5	74/61
<b>AIRKO-O 559</b>	10	565	33.9	<b>457</b>	27.4	3	990	400/690	IP 54	2	1450	26 x 1.5	79/67
<b>AIRKO-O 759</b>	10	765	45.9	<b>587</b>	35.2	3.8	1320	400/690	IP 54	2	1450	30 x 2	79/67

\* Actual Delivery quantity measured in continuous operation according to VDMA-4362 of the German Mechanical Engineering Industry Association. At 8 bar(g), for 15 bar(g) variant measured at 12 bar(g).  
 \*\* Noise level according to DIN 45635 T13, at a distance of 1 metre. Subject to technical modifications.

**Oil-free technology in the new AIRKO Power Design:**

- Heavily ribbed cylinders constructed of high-quality aluminium and cylinder heads constructed of die-cast aluminium
- Cylinders provided with a special wear-resistant coating
- Pistons provided with Teflon coating and Teflon piston rings
- Stainless steel valve plate
- Bearings with synthetic, high-temperature lubricant
- Aluminium finned tube aftercooler pipe in the cooling airflow
- Connection bracket with zinc/nickel coating
- Powerful cast iron axial fans
- Branded pressure switch with operating hours counter as standard (for version on tank)
- Highly efficient, large-dimensioned intake filter and replaceable filter element
- Energy-saving, premium quality IP 54 motor, with class F protection
- Standard galvanized compressed air tanks (for version on tank).



Highly efficient intake filter, of large dimensions



Powerful axial fans of cast iron



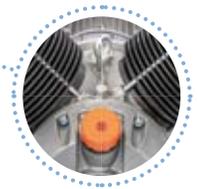
Pistons with Teflon coating and Teflon rings



Connection bracket with zinc/nickel coating



Valve plates of stainless steel (or nickel-plated) with stroke limiter for a long service life



Heavily ribbed aluminium cylinders for optimum cooling and a long service life



Robust premium-quality, energy-saving motor with IP 54 rating and 1,450 rpm for a long service life and low operating costs



Aluminium finned tube aftercooler pipe in the cooling airflow



# Reciprocating compressors

## Design Options.

### Units

#### On base frames

#### Unit on base frame

Ideal for expanding capacity, for feeding compressed air into existing stations, as a reserve compressor or where space is limited. Supplied with flexible connecting hose, with non-return valve and motor protection switch. Also available with functional and stable sound insulation box.



#### Available for all models

Model	Dimensions L x W x H [mm]
309 / 239	510 x 360 x 500
469 / 609 / 279	590 x 410 x 485
559	640 x 500 x 585
759	640 x 500 x 595



Model	Dimensions L x W x H [mm]
309 / 239	
469 / 609 / 279	795 x 515 x 650



Model	Dimensions L x W x H [mm]
559 / 759	1010 x 635 x 820

### Compressed air systems

#### with horizontal tank

#### Unit on horizontal tank

With only minimal installation effort, the ready-to-connect and ready-to-operate compressed air systems can start working immediately; plug and play. All components and equipment necessary for operation are included in the scope of delivery. Also available with functional and stable sound insulation box.



#### 50 litres, stationary

Model	Dimensions L x W x H [mm]
309	950 x 360 x 720
469 / 609	950 x 435 x 710
279	950 x 420 x 710
239	950 x 305 x 760



#### With 50 litres, mobile

Primus 5000 = 309  
Primus 6000 = 469



#### With 90 litres, mobile

Primus 6002 = 469  
Primus 7002 = 609



#### 90 litres, stationary

Model	Dimensions L x W x H [mm]
309	1150 x 380 x 790
469 / 609	1150 x 435 x 780
279	1150 x 420 x 780
239	1150 x 380 x 780



#### With 200 litres, mobile

Primus 7004 = 609  
Primus 8004 = 759



#### 270 litres, stationary

Model	Dimensions L x W x H [mm]
469 / 609	1600 x 600 x 1020
279	1600 x 600 x 1030
559	1600 x 600 x 1110
759	1600 x 600 x 1120



#### With 100 litres, mobile

Trailer 6002 = 469  
Trailer 7002 = 609



#### 500 litres, stationary

Model	Dimensions L x W x H [mm]
559	2020 x 600 x 1210
759	2020 x 600 x 1220

### Compressed air systems

#### with horizontal tank and box



#### 50 litres, stationary

Model	Dimensions L x W x H [mm]
309 / 239	950 x 515 x 880



#### 90 litres, stationary

Model	Dimensions L x W x H [mm]
309 / 239	
469 / 609 / 279	1150 x 515 x 950



#### 270 litres, stationary

Model	Dimensions L x W x H [mm]
469 / 609	1600 x 620 x 1315
279	1600 x 600 x 1180
559 / 759	1600 x 620 x 1315



#### 500 litres, stationary

Model	Dimensions L x W x H [mm]
559 / 759	2020 x 620 x 1415

## Compressed air systems

with horizontal tank, box and refrigerant dryer

Front view:



Rear view with refrigerant dryer:



### 270 litres, stationary

Model	Dimensions L x W x H [mm]
559 / 759	1650 x 860 x 1315

## Compressed air twin systems

**Two units on a horizontal tank**  
Ideal in two ways:  
– As an expandable system in the event of fluctuating demands for compressed air, or if the demand is set to rise in the near future.  
– As a twin unit with double capacity for an increased demand for compressed air, or as a 100% reserve compressor.  
Also available with sound insulation box.



### 300 litres, stationary

Model	Dimensions L x W x H [mm]
309 / 279	1750 x 620 x 975
469 / 609	1750 x 620 x 965
559 / 759	1750 x 660 x 1075



### 300 litres, stationary

Model	Dimensions L x W x H [mm]
309 / 469	1750 x 795 x 1070
609 / 279	
559	1750 x 1010 x 1300



### 500 litres, stationary

Model	Dimensions L x W x H [mm]
559 / 759	2020 x 660 x 1175



### 500 litres, stationary

Model	Dimensions L x W x H [mm]
559 / 759	2020 x 1010 x 1400

## Compressed air systems

Upright

**Unit on an upright tank**  
Space-saving and completely mounted on a 270 litre tank, ready for connection and immediate operation. Minimum installation effort. All components and equipment required for operation are included in the scope of delivery. Also available with refrigerant dryer and/or sound insulation box.



### 270 litres, stationary

Model	Dimensions L x W x H [mm]
239 / 279	680 x 780 x 1650
469 / 609	
559 / 759	680 x 780 x 1780



### 500 litres, stationary

Model	Dimensions L x W x H [mm]
239 / 279	925 x 835 x 1650
469 / 609	
559 / 759	925 x 835 x 1780



### 270 litres, stationary

Model	Dimensions L x W x H [mm]
559 / 759	700 x 1150 x 1910



### 500 litres, stationary

Model	Dimensions L x W x H [mm]
559 / 759	800 x 1150 x 2050

## Options

Retrofitting the **refrigerant dryer** is extremely simple.



The tank feet can be easily fitted with **anti-vibration elements**.



The **Airkomat attachment kit** (electronic condensate traps) are available for vertical and horizontal tanks.



The systems can also be designed with **galvanised tanks**. Oil-free systems are equipped with a galvanised tank as standard.

