



S a u e r

C o m p r e s s o r s

for Shipping

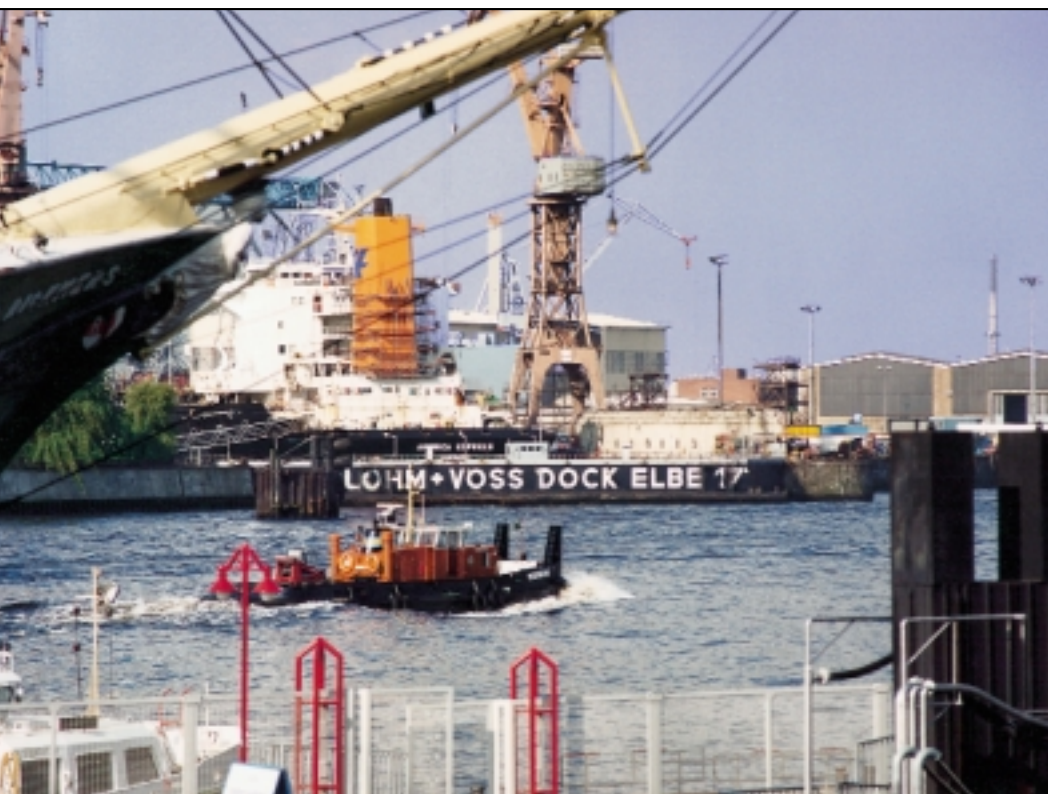
- **reliable**
- **low maintenance**
- **compact**



Sauer Compressors



International shipping with its most stringent requirements for quality and reliability is Sauer's traditional field of activities. Our starting-air and working-air compressors have proven to be reliable in this demanding market. They count among the most modern and most economic compressors available today. In particular the 3-stage air-cooled starting-air compressors – in comparison to the traditionally used 2-stage water-cooled compressors – contribute significantly to modern ship operation concepts. With these products Sauer became one of the leading manufacturers of compressors for shipping and off-shore technology world-wide.



for shipping



Our product range

*2-stage air-cooled
starting-air compressors*

4



*3-stage air-cooled
starting-air compressors*

6



*2-stage water-cooled starting-air
and working-air compressors*

8



*Control- and
working-air compressors*

10





2-stage *air-cooled*

Today, the principle of air-cooling belongs to international shipbuilding standards when starting-air compressors of smaller performance are concerned. Already in the 50ies, Sauer started with the development of air-cooled compressors in this performance range as an alternative to the water-cooled ones which are maintenance-intensive and more susceptible to failures.

Today, after having been completely redesigned, the 2-stage air-cooled starting-air compressors of Sauer & Sohn count among the most modern and maintenance-friendly compressors available world-wide.

If you require references, please do not hesitate to contact us!

Technical Data

2-stage air-cooled starting-air compressors											
Type	Final pressure max. bar	Stages	Cylinder	Speed rpm	Technical Data for a final pressure of 30 bar			Weight kg	Dimensions		
					Charging Capacity m ³ /h	Power consumption kW	Heat Dissipation kJ/sec		Length mm	Width mm	Height mm
WP 15 L	40	2	2	1150	12,0	2,7	3,0	120	812	600	630
				1450	15,0	3,4	3,7				
				1750	18,1	4,1	4,5				
WP 22 L	40	2	2	1150	16,6	3,5	3,9	135	852	600	630
				1450	21,0	4,4	4,8				
				1750	25,3	5,4	5,9				
WP 33 L	35	2	2	1150	25,0	5,1	5,6	145	860	600	630
				1450	31,5	6,5	7,1				
				1750	38,0	7,8	8,6				
WP 45 L	40	2	2	1170	40,0	7,6	8,4	310	1210	745	820
				1470	50,0	9,6	10,6				
				1770	60,0	11,5	12,6				
WP 65 L	40	2	2	1170	52,0	10,2	11,2	320	1250	745	820
				1470	66,0	12,8	14,0				
				1770	80,0	15,4	17,0				
H 25	40	2	2	50 double-strokes/min	1,8	Hand air compressor		28	315	230	340

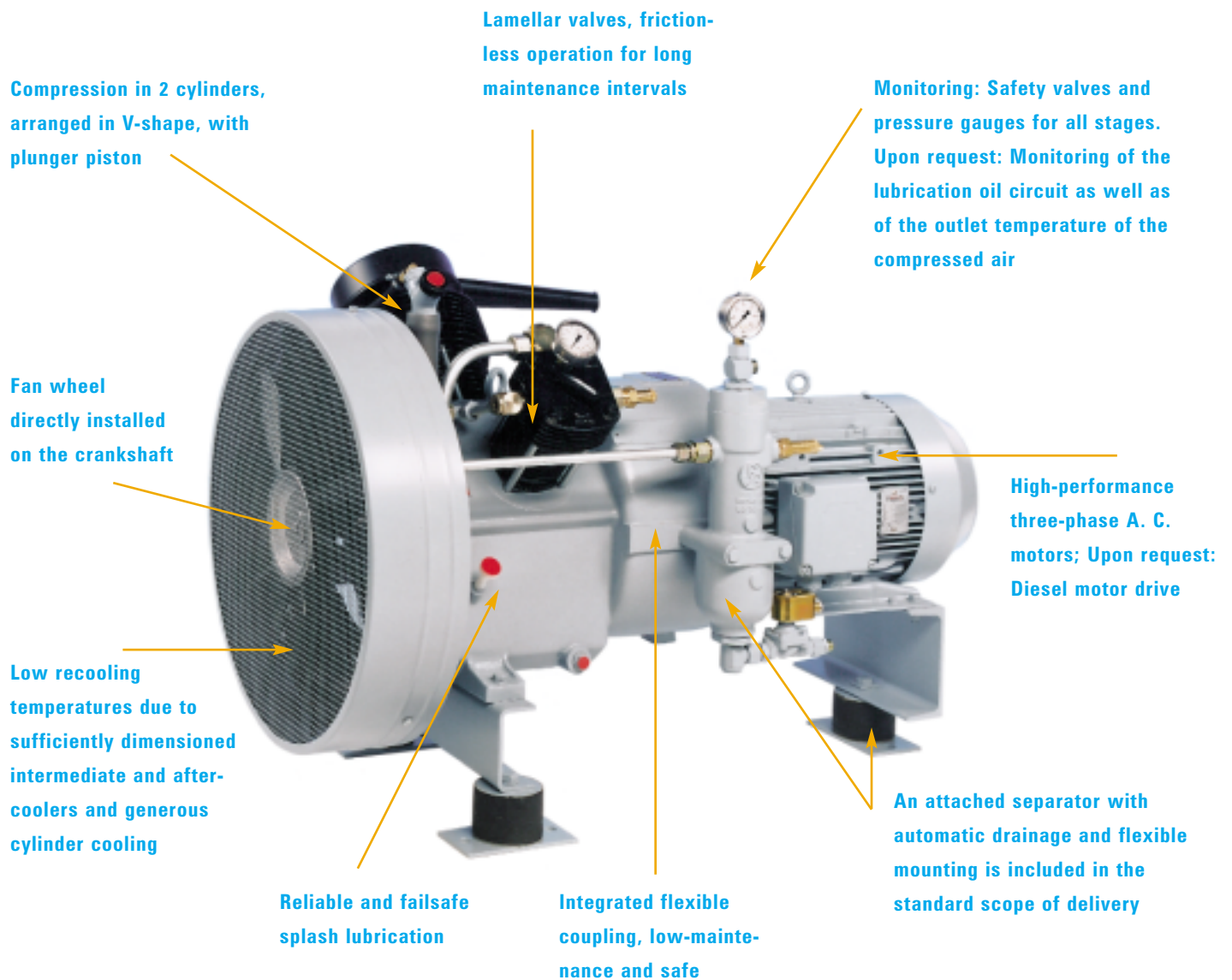
Performance data with 5% tolerance, referred to 20° C and an air pressure of 1013 mbar.

Charging Capacity according to ship building regulations.

Performance data on final pressure deviating from 30 bar will be provided upon request.

Weights and dimensions for standard units with three-phase A. C. motor, IP 54, and flexible mounting.

H 25 is also available with 30 and 63 l vessel.



General advantages

- Low installation costs due to missing cooling water circuit
- Lightest weight and small installation space
- Reliable and safe to operate also at ambient temperatures up to 60°C



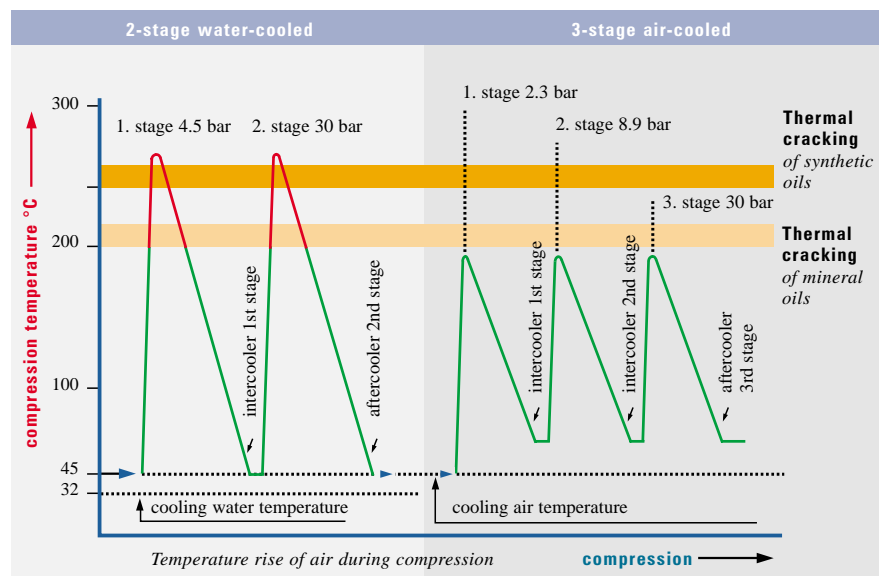
3-stage air-cooled

At the beginning of the 70ies, Sauer & Sohn developed the 3-stage air-cooled compressor in collaboration with wellknown German shipping companies in order to cover the increasing demand for low-maintenance auxiliary machines used in international shipping – a branch which suffered considerable pressure of costs. Due to the 3-stage air-principle, general advantages of the air-cooled system could also be used for bigger compressor capacities.

In addition, the division of the pressure ratio into 3 stages – instead of 2 stages as in traditionally used water-cooled compressors – considerably decreases compression temperatures.

The consequence: Even when standard mineral oil is used, as e.g. circulating oil in main engines, any carbonization of compressor valves belongs to the past.

If you require references, please do not hesitate to contact us!



Technical Data

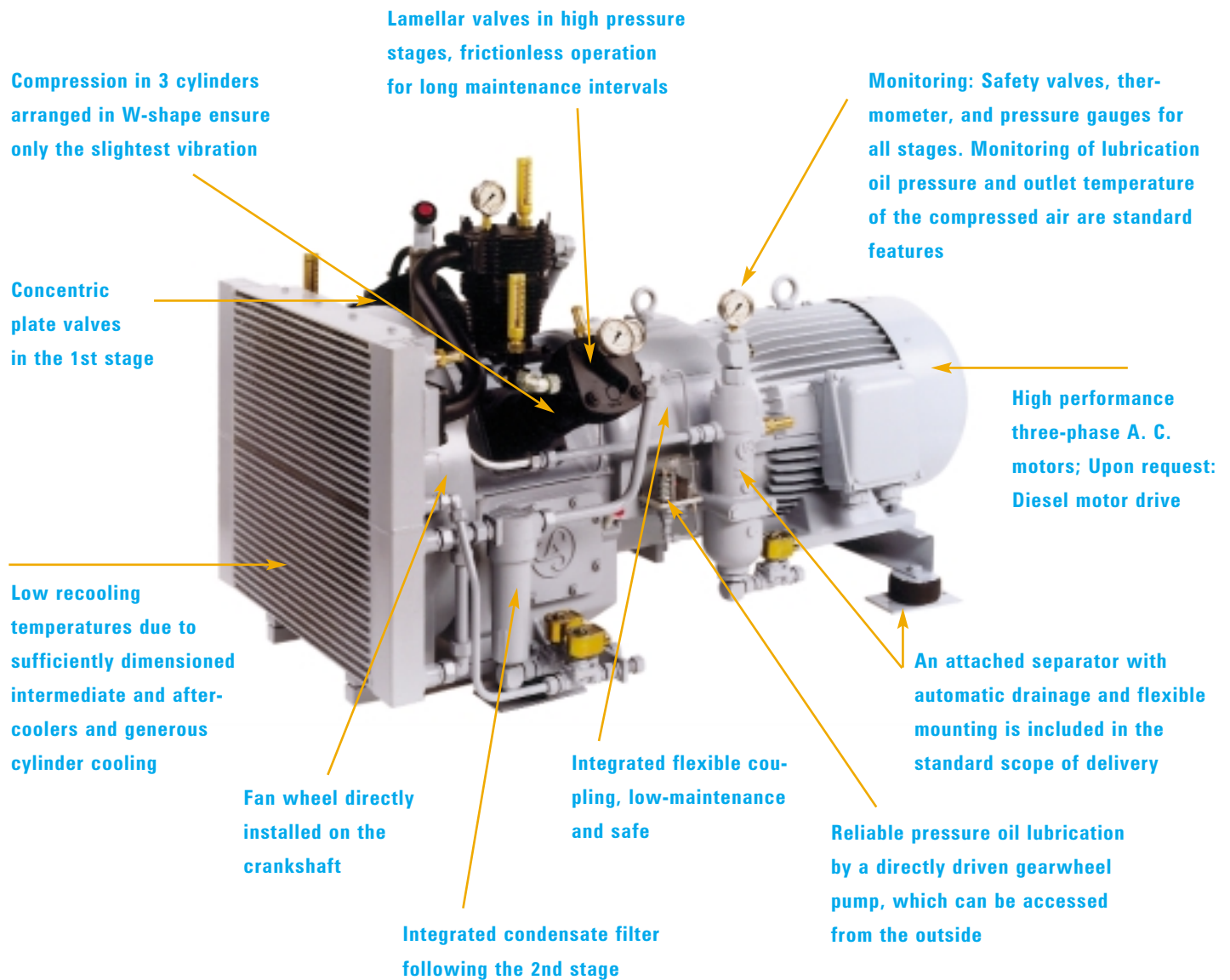
3-stage air-cooled starting-air compressors					Technical Data for a final pressure of 30 bar				Dimensions		
Type	Final pressure max. bar	Stages	Cylinder	Speed rpm	Charging Capacity m ³ /h	Power consumption kW	Heat Dissipation kJ/sec	Weight kg	Length mm	Width mm	Height mm
WP 81 L	45	3	3	1170	66,0	13	14,3	415	1345	945	900
				1470	82,5	15	17,6				
				1770	100,0	18	20,9				
WP 101 L	45	3	3	1170	83,0	16	17,6	430	1385	945	900
				1470	101,0	20	22,0				
				1770	121,0	24	26,4				
WP 121 L	45	3	3	1170	98,0	19	20,9	655	1565	925	955
				1470	121,0	24	26,4				
				1770	145,0	30	33,0				
WP 151 L	45	3	3	1170	119,0	23	25,3	700	1575	925	955
				1470	150,0	30	33,0				
				1770	180,0	38	41,7				
WP 271 L	45	3	4	1170	180,0	33	36,0	900	1765	1068	1077
				1470	225,0	41	45,0				
				1770	275,0	49	54,0				
WP 311 L	45	3	4	1170	240,0	38	42,0	960	1865	1068	1077
				1470	300,0	50	55,0				
				1770	360,0	63	67,0				

Performance data with 5% tolerance, referred to 20° C and an air pressure of 1013 mbar.

Charging Capacity according to ship building regulations.

Performance data on final pressure deviating from 30 bar upon request.

Weights and dimensions for standard units with three-phase A. C. motor, IP 54, and flexible mounting.



General advantages

- Lowest compression temperatures due to division of the pressure ratio into 3 stages.
- Cost reduction of up to 5,000 USD due to missing cooling water circuit.
- Standard warranty period of 24 months.
- Maintenance intervals of at least 2000 operation hours for the compressor valves. Covered by warranty even when standard motor oil is used.
- Reliable and safe to operate also at an ambient temperature of up to 60°C.

2-stage water-cooled starting-air



Towards the middle of the 90ies Sauer & Sohn developed a new series of 2-stage water-cooled compressors for the traditional use in shipping and thus can offer today the most modern compressor of this design throughout the world. Based on our experience during the past 25 years in the production of 2- and 3-stage air-cooled compressors, operating at a speed of 1800 rpm. with the cylinders arranged in V-shape, we are now able to offer a series of maintenance-friendly and reliable water-cooled units. Today, the 2-stage water-cooled starting-air and working-air compressors produced by Sauer & Sohn form part of international ship-building and shipping standard.

If you require references, please do not hesitate to contact us!

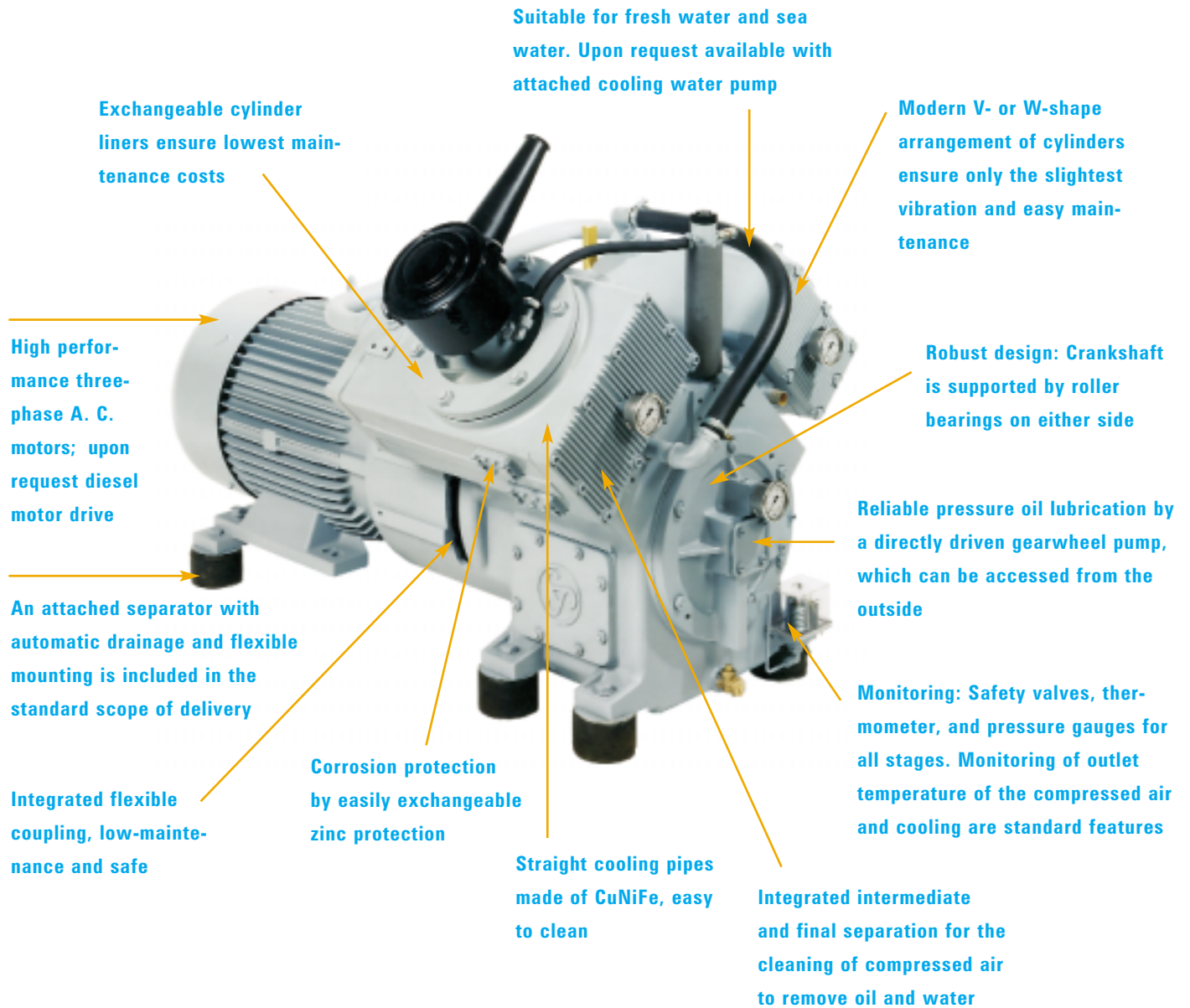
Technical Data

2-stage water-cooled starting-air and working-air compressors											
Starting-air											
Type	Final pressure max. bar	Stages	Cylinder	Speed rpm	Technical Data for a final pressure of 30 bar				Dimensions		
					Charging Capacity m ³ /h	Power consumption kW	CW-Requirement l/min	Weight kg	Length mm	Width mm	Height mm
WP 200	30	2	2	970	110	21	28	770	1500	1000	890
				1170	135	25	33				
				1470	165	31	40	800	1500	1000	890
				1770	200	38	50				
WP 240	30	2	2	970	130	25	33	850	1540	1000	890
				1170	160	31	40				
				1470	200	38	50				
				1770	240	46	60				
WP 400	30	2	3	970	235	43	60	1350	1725	1165	1090
				1170	280	52	70				
				1470	355	70	85				
				1770	430	84	110				

Working-/control-air											
Type	Final pressure max. bar	Stages	Cylinder	Speed rpm	Technical Data for a final pressure of 8 bar				Dimensions		
					Charging Capacity m ³ /h	Power consumption kW	CW-Requirement l/min	Weight kg	Length mm	Width mm	Height mm
WP 200	30	2	2	970	117	19,0	26	770	1500	1000	890
				1170	144	22,5	30				
				1470	177	28,0	37	800	1500	1000	890
				1770	214	34,0	45				
WP 240	30	2	2	970	139	22,5	30	850	1540	1000	890
				1170	171	28,0	37				
				1470	214	34,5	46				
				1770	257	41,5	55				
WP 400	30	2	3	970	251	39,0	52	1350	1725	1165	1090
				1170	300	47,0	62				
				1470	380	63,0	77				
				1770	460	75,0	94				

Performance data with 5% tolerance, referred to 20° C and an air pressure of 1013 mbar. Charging Capacity according to shipbuilding regulations. Performance data on final pressure deviating from 30 bar upon request.

Weights and dimensions for standard units with three-phase A. C. motor, IP 54, and flexible mounting. Cooling water requirement referred to a $\Delta t = 10 K$

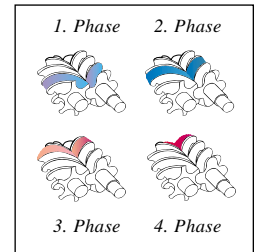


General advantages

- Low vibration.
- Reliable pressure oil lubrication.
- Exchangeable cylinder liner.
- Short stroke machine for compact dimensions.



Screw-type compressors – unlike oscillating reciprocating compressors – compress air in rotating screws, operating without valves. Consequently considerably less maintenance is necessary. In addition to the rotating screws the machines are more compact, noise is low, and there is only slight vibration.



The Sauer-Alup screw-type compressor are far more than industry compressors since they are the synthesis of thousands of industry compressors delivered by Alup annually and of our fundamental knowledge of the requirements of international shipping. The particular design features of Sauer-Alup screw-type compressors enables a trouble-free operation on the seven seas.

If you require references, please do not hesitate to contact us!

Technical Data

Screw-type compressor, air-cooled				Technical Data for a final pressure of 8 bar				Dimensions		
Type	Version	Final pressure max. bar	Motor U/min	Capacity* m ³ /h	Power consumption kW	Heat Dissipation kJ/sec	Weight kg	Length mm	Width mm	Height mm
SCK 22	MA 50	12	2920	80	10,9	11,8	220	945	605	900
	MA 60		3520	100	13,5	15,0				
SCK 26	MA 50	12	2930	120	17,4	18,5	450	1270	795	1070
	MA 60		3530	150	20,1	22,0				
SCK 31	MA 50	12	2940	170	18,5	20,0	450	1270	795	1070
	MA 60		3540	200	22,9	23,5				
SCK 42	MA 50	12	2960	210	24,1	26,5	580	1270	795	1070
	MA 60		3550	250	30,4	34,0				
SCK 52	MA 50	12	2980	250	29,3	33,5	940	1520	850	1780
	MA 60		3555	300	37,9	40,5				
SCK 61	MA 50	12	2965	380	41,4	44,4	1100	1520	850	1780
	MA 60		3565	420	47,9	52,0				
SCK 76	MA 50	12	2960	450	50,9	53,5	1200	1520	850	1780
	MA 60		3565	500	57,7	63,4				

Piston compressor, air-cooled					Technical Data for a final pressure of 8 bar				Dimensions		
Type	Final pressure max. bar	Stages	Cylinder	Speed rpm	Charging Capacity m ³ /h	Power consumption kW	Heat Dissipation kJ/sec	Weight kg	Length mm	Width mm	Height mm
WP 225 L	12	2	3	1170	180	23	25	840	1517	960	1060
				1470	245	30	33	850			
				1770	280	38	42	850			
WP 295 L	12	2	3	1170	240	29	32	870	1735	960	1030
				1470	300	37	41	880			
				1770	360	46	51	880			

Piston compressors, water-cooled see page 8/9

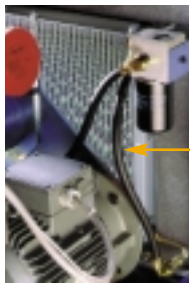
Performance data with 5% tolerance, referred to 20° C and an air pressure of 1013 mbar.

Capacity of screw-type compressors according to DIN-ISO 1945.

Weights and dimensions for standard units with three-phase A. C. motor, IP 54, and flexible mounting. Water-cooled screw-type compressors upon request.

* Larger capacity up to 2000 m³/h or capacity for other final pressures upon request.

All units are easy to access – even from the rear of the machine. Maintenance-friendly

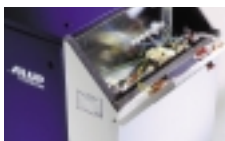


High-performance air and oil cooler: Fresh water or sea water cooling upon request



Oil temperature controller: Ensures optimal oil temperature in each operation phase; operation temperature is quickly reached

Sturdy asynchronous motor: In ISO-class "F" only used according to "B"



Integrated switching cabinet according to ship building regulations, ready for connection and equipped with the ALUP AIR CONTROL micro-processor control



V-belt drive: Simple adjustment of the V-belt tension without a special tool. The V-belts are designed for a long life time



Oil drainage including ball cock: Excellent oil pre-separation of up to 98%. Low residuary oil content, long life time of oil separator cartridge, clean oil change without special equipment



Separator box: Low residuary oil content of 2 to 4 mg/m³ is ensured. The oil separator cartridge can be very quickly exchanged –, flanges and pipes need not be loosened –, no loss of oil

General advantages

- Super noise insulation: Standard for all machine types.
- Ergonomically arranged operating panel, featuring ALUP AIR CONTROL with illuminated plain text indication.
- Easy to handle, simple monitoring of all functions.
- Approved by all classification societies.
- Access to the intake filter is easy, thus it is easy to exchange.

Your local agent:



Ein Mitglied der
SAUER-Gruppe

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