

OIL-FREE, WATER-INJECTED SCREW COMPRESSORS

Volumetric flow rate: 0.86 - 19.50 m³/min • 36 - 689 acfm







INTELLIGENTE DRUCKLUFT MADE IN GERMANY

ALMiG Kompressoren GmbH

A name that guarantees top-grade technology in the compressed air sector. ALMiG has emerged from a company with a long tradition whose products in the compressed air industry have always stood for quality, innovation and consideration of its customers.

Today ALMiG is an extremely flexible company which can react fast to special customer requests. It stands by its customers as a competent partner, giving advice and practical support. It goes without saying that as one of the leading suppliers of advanced compressed air systems, our commitment to continuous research and development forms the basis for all the plants we manufacture.

They meet the acceptance criteria in compliance with:

- ISO 1217-3 Annex C-1996
- ASME
- OSHA

and comply with the CE guidelines.

Even the most stringent acceptance criteria such as:

- DET NORSKE VERITAS
- GERMANISCHER LLOYD
- BUREAU VERITAS
- · LLOYD's REGISTER OF SHIPPING
- ABS

is a matter of course for us.

The company ALMiG is certified in compliance with:

• IRIS 02

• ISO 9001: 2008

• ISO 14001: 2004

Our motto is:

If you have stopped improving, you have stopped being good!

Clean compressed air, economically produced:

- 100 % oil-free compressed air by means of the unique waterinjection technology
- 8573-1 class 0; therefore top quality compressed air guaranteed
- certified in compliance with ISO
- enormous potential energy control with fixed speed
- savings by combining speed
- totally reliable thanks to the advanced basic components
- flexible operating pressure, infinitely adjustable









INTELLIGENT WATER INJECTION TECHNOLOGY

LENTO -

super compressed air quality owing to multiplestage treatment

- the injected water is "recovered" by the integrated refrigerant dryer in the form of condensate (=water of the highest quality)
- the condensate/water "washes" out the dust particles contained in the intake air
- furthermore, the germs, spores and bacteria sucked in are removed from the compressed air down to a value below the detection limit
- several reputable, independent institutes have confirmed this in various elaborate test series









Airend 1

single-stage, water-injected • the housing made from stainless alloy encompasses the two rotors for economical compression (male and female rotors) • minimal final compression temperatures below 60°C (hence close to the isotherm - i.e. economically efficient compression)

SCD motor 2

highly efficient drive motor • IP 55 protection class ISO F • compact, powerful and reliable in operation

Integrated refrigerant dryer 3

with triple tasking: produces fresh water for the permanent generation and circulation of the coolant required • for optimum biological and chemical water quality • provides dry compressed air on entering the compressed air network

Water circuit 4

closed water circuit with independent, integrated water treatment • multi-stage separation for dry compressed air

SCD direct drive 5

loss-free power transmission, optimal cost savings

SCD frequency converter 6

the integrated power pack, conforms to EMC ordinances, of course

Air Control 7

the compressor's intelligence; thinks, monitors and records

The "LENTO concept" from ALMiG:

oil-free, direct drive and speed-controlled









INTELLIGENT COMPRESSOR ARRANGEMENT



INTELLIGENT TECHNOLOGY AT THE POINT OF DELIVERY!

The LENTO concept offers technological advantages with no compromises:

1

High quality, 100 % oil-free compressed air is demanded not only in the pharmaceuticals, food, electrical engineering and medical industries, but is very important in all applications where top grade products are manufactured

2

Only water, the most natural of all raw materials, is used in the compression process. The result is:

- clean, environmentally friendly compressed air with no oil; dirt and other dust particles drawn in are washed out by the water
- clean condensate (pure water) can be fed directly into the sewage system

 lowest temperatures during compression thanks to optimal heat removal via the water and hence extremely low energy consumption for compressed air production

3

The LENTO range of speed-controlled direct drive compressors provide optimum economy by:

- adjusting the volumetric flow rate exactly to the respective compressed air requirements
- avoids switching operations and the consequent costly no-load running periods
- energy-saving start-up, with no current peaks
- operating pressure can be selected freely in 0.1-bar (1.5 psig) stages.

The consequent reduction in pressure saves you money!

4

The "Energy-Saving Duo" is an unbeatable combination:

- the LENTO with "fixed speed" covers the base load for a compressor station
- the LENTO with "variable speed" takes care of any additional requirement

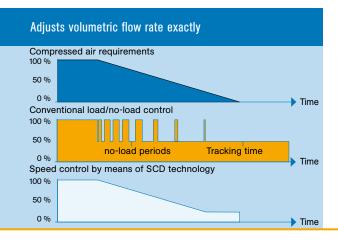
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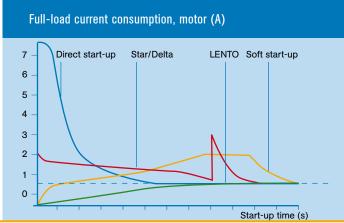
The integrated refrigerant dryer:

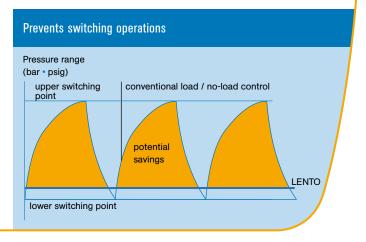
- ensures minimum compressed air outlet temperatures, i. e. a separate dryer is not required
- cuts out the costs for fresh water and water treatment

6

Minimised service and maintenance costs compared with other oil-free compression systems







FACTS AND FIGURES

LENTO				Z									60 Hz					
LEINIO	Operating over- pressure	according	w rate* to ISO 1217 C-1996) max.	Rated motor output	Length	Width	Height	Weight		LENTO	Operating over- pressure	Vol. flo according (annex min.	to ISO 1217	Rated motor output	Length	Width	Height	Weight
	bar	m³/min	m³/min	kW	mm	mm	mm	kg			psig	acfm	acfm	HP	inch	inch	inch	lbs
			Speed-cont	rolled									Speed-co	ontrolled				
15	5 - 10	1.01	2.34	15	1880	850	1660	850		15 / 20	75 - 145	36	83	20	74	33.5	65.4	1875
18	5 - 10	1.01	2.87	18	1880	850	1660	860		18 / 25	75 - 145	36	103	25	74	33.5	65.4	1895
22	5 - 10	1.01	3.38	22	1880	850	1660	870		22 / 30	75 - 145	36	120	30	74	33.5	65.4	1920
30	5 - 10	1.01	4.30	30	1880	850	1660	920	7	30 / 40	75 - 145	36	153	40	74	33.5	65.4	2030
31	5 - 10	2.04	5.08	30	2300	1400	1560	1470		31 / 41	75 - 145	72	179	40	90.6	55.1	61.4	3240
37	5 - 10	2.04	6.14	37	2300	1400	1560	1520		37 / 50	75 - 145	72	220	50	90.6	55.1	61.4	3350
45	5 - 10	2.04	7.13	45	2300	1400	1560	1550		45 / 60	75 - 145	72	255	60	90.6	55.1	61.4	3420
55	5 - 10	2.04	8.19	55	2300	1400	1560	1590		55 / 75	75 - 145	72	304	75	90.6	55.1	61.4	3510
46	5 - 13	2.51	8.58	45	2300	1400	1560	1700		46 / 61	75 - 190	87	286	60	90.6	55.1	61.4	3750
56	5 - 13	2.51	9.97	55	2300	1400	1560	1750		56 / 76	75 - 190	87	340	75	90.6	55.1	61.4	3860
70	5 - 13	2.51	11.56	70	2300	1400	1560	1800		70 / 95	75 - 190	87	393	95	90.6	55.1	61.4	3970
80	5 - 13	2.51	12.28	80	2300	1400	1560	1850		80 / 105	75 - 190	87	430	105	90.6	55.1	61.4	4080
81	5 - 13	4.3	15.5	80	2600	1400	1860	2830		81 / 106	75 - 190	152	547	105	102.4	55.1	73.2	6240
90	5 - 13	4.3	17.2	90	2600	1400	1860	2900		90 / 125	75 - 190	152	607	125	102.4	55.1	73.2	6394
110	5 - 13	4.3	19.5	110	2600	1400	1860	2950		110 / 150	75 - 190	152	689	150	102.4	55.1	73.2	6500
			Fixed spe	eed									Fixed	speed				
18 D	5 - 7		2.68	18	1880	850	1660	840										
22 D	5 - 10		2.53	22	1880	850	1660	850		22 / 30 D	75 - 100		108	30	74	33.5	65.4	1870
31 D	5 - 8		4.84	30	2300	1400	1560	1450										
37 D	5 - 10		4.72	37	2300	1400	1560	1500		37 / 50 D	75 - 100		201	50	90.6	55.1	61.4	3300
38 D	5 - 10		5.47	37	2300	1400	1560	1500		38 / 51 D	75 - 145		193	50	90.6	55.1	61.4	3300
46 D	5 - 13		5.41	45	2300	1400	1560	1500		46 / 61 D	75 - 190		191	60	90.6	55.1	61.4	3300
75 D	5 - 10		11.3	75	2600	1400	1860	2700	4	75 / 100 D	75 - 145		399	100	102.4	55.1	73.2	5952

V in relation to the operating overpressure: 7 bars at 50 Hz / 100 psig at 60 Hz
 LENTO 15 - 70 (15 / 20 - 70 / 95) water-cooled as standard, air-cooled as an option
 LENTO 75 D (75 / 100 D) and LENTO 80 - 110 (LENTO 80 / 105 - 110 / 150) only water-cooled version available.









INTELLIGENTE DRUCKLUFT MADE IN GERMANY

In line with the customer's needs

With our innovative system concepts we offer customised solutions for almost all applications.

Our endeavour lies not only in supplying compressors, we

offer ourselves as a competent system provider capable of offering solutions to all users of compressed air.

That does not only apply to the consultation and installa-

tion phase of your new compressor(s), but naturally continues in all areas of service, maintenance and visualisation.

Challenge us!

Screw compressors 2,2 - 500 kW	Piston compressors 1,5 – 55 kW	Turbocompressors 200 - 2000 kW	Blower 1,5 - 55 kW	Complete accessories	Control, regulate, monitor
 Fixed speed With energy-saving speed control Oil-free, with water injection Oil-free, 2-stage Available drive types: V-belt Gearbox Direct 	 Oil-lubricated Oil-free Normal pressure, medium pressure, high-pressure Booster Mobile / stationary Available drive types: V-belt Direct 	 Oil-free Radial, 3-stage compression With / without sound-absorbing housing Available drive types: Gearbox 	 Fixed speed With energy-saving speed control Available drive types: V-belt Direct 	 Refrigerant dryers Desiccant dryers, heatless and heat-regenerative HOC (heat of compression) Activated carbon adsorbers Filters, all particle sizes Condensate management Heat recovery systems Pipework Systems All components are optimally matched to the compressors 	 Base load changeover controls Consumption-related controls Visualisation (we display your compressed airstation on the PC) Telemonitoring (the hotline of your compressed air station)



















Your expert advisor