

# SPEED-CONTROLLED SCREW COMPRESSORS

Volumetric flow rate: 1.09 - 56.60 m<sup>3</sup>/min • 38 - 2024 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 reguests. 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!

## **Enormous potential energy savings thanks to SCD technology:**

- energy-saving speed control with loss-free direct drive
- constant net pressure infinitely variable from 5 to 13 bars
- requirements, hence avoiding
- delivery volume adjusted to expensive no-load times
- elimination of high changeover power surges







## INTELLIGENT MODULAR SYSTEM



"PLUS" version: with docked-on refrigerant compressed air dryer; can also be retrofitted

"O" version:

with docked-on refrigerant compressed air dryer and flter system consisting of 1 x depth filter and

2 x active carbon filters for the production of technically oil-free compressed air

	According to DIN ISO 8573 - 1 this means: 🕞							
;	Residual constituents in compressed air	Volume	Class					
ı	Oil	0.003 mg/m <sup>3</sup>	1					
	Particles	< 0.01 μm	1					
	Water	PDP + 3°C/37 F	4					























Separating system 1

highest compressed air quality through proven multi-stage separation

SCD frequency converter 2

the integrated power package, naturally in compliance with EMC guidelines

SCD motor 3

high-efficiency drive motor, protection class IP 55, optimum efficiency up to 96%

SCD direct drive 4

loss-free power transmission, maximum cost-savings

Air end 5

excellent efficiency over the entire control range

Cooling unit 6

large surface area radiators for lowest compressed air outlet temperatures and optimum thermostat-controlled coolant temperatures

Fan 7

powerful, efficient, high-performance

Air Control 8

the intelligence of the compressor. Thinks, monitors, records

### The ALMiG SCD concept:

Air Control 3



SCD motor



SCD direct drive



#### SCD frequency converter



# INTELLIGENT COMPONENT ARRANGEMENT



## **INTELLIGENT ANALYSIS**

## Or can you afford to give money away?

The following measurement graphs show that there is an enormous energy-saving potential!

Only on the basis of facts can decisions be made.

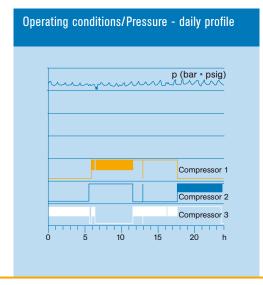
Therefore:

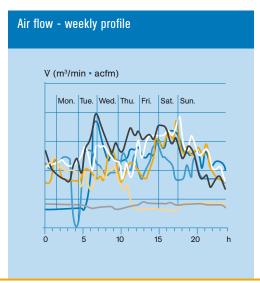
Analyse first, then decide.

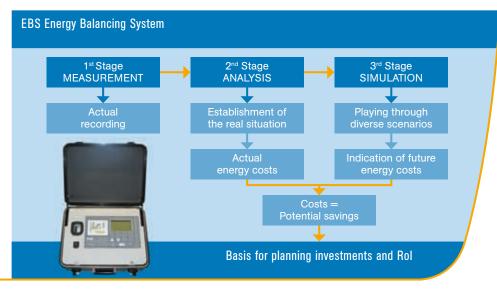
This is reason enough to allow the specialists from ALMiG to determine your current compressed air consumption and, with the help of accurate measurements, develop the optimum system solution together with you.

The directly driven, speedcontrolled VARIABLE together with the also directly driven DIRECT form an unbeatable "energy-saving duo".









# **FACTS AND FIGURES**

		100															
			50	Hz									60 Hz				
VARIABLE	Operating over- pressure	accor ISO	ow rate* ding to 1217 C-1996) max.	Rated motor output	Length	Width	Height	Weight	VARIABLE	Operating over- pressure	accord ISO	ow rate* ding to 1217 C-1996) max.	Rated motor output	Length	Width	Height	Weight
	bars	m³/min	m³/min	kW	mm	mm	mm	kg		psig	acfm	acfm	HP	inch	inch	inch	lbs
16	5 - 13	1.17	2.68	16	1270	890	1190	387	16 / 20	75 - 190	41	96	20	50	35	46.9	853
20	5 - 13	1.17	3.22	20	1270	890	1190	387	20 / 25	75 - 190	41	115	25	50	35	46.9	850
24	5 - 13	1.17	3.62	24	1270	890	1190	405	24 / 30	75 - 190	41	128	30	50	35	46.9	892
28	5 - 13	1.17	4.14	28	1270	890	1190	405	28 / 40	75 - 190	41	146	40	50	35	46.9	89:
32	5 - 13	1.96	4.93	32	1545	890	1190	545	32 / 45	75 - 190	69	176	45	60.8	35	46.9	120
34	5 - 13	1.96	5.65	38	1545	890	1190	555	34 / 50	75 - 190	69	201	50	60.8	35	46.9	122
35	5 - 13	1.07	6.02	40	2090	1080	1600	940	35 / 51	75 - 190	38	213	50	82.3	42.6	63	207
37	5 - 13	1.07	6.52	50	2090	1080	1600	980	37 / 55	75 - 190	38	229	65	82.3	42.6	63	216
55	5 - 13	2.22	9.98	60	2090	1080	1600	1160	55 / 80	75 - 190	78	356	80	82.3	42.6	63	255
65	5 - 13	2.22	10.73	80	2090	1080	1600	1240	65 / 90	75 - 190	78	376	105	82.3	42.6	63	273
70	5 - 13	2.81	12.84	85	2090	1080	1600	1270	70 / 95	75 - 190	99	450	115	82.3	42.6	63	279
90	5 - 13	4.30	16.85	100	2300	1400	1860	2050	90 / 125	75 - 190	152	602	135	90.6	55.1	73.2	451
115	5 - 13	4.30	18.28	115	2300	1400	1860	2200	115 / 155	75 - 190	152	652	155	90.6	55.1	73.2	484
130	5 - 13	4.30	20.00	130	2300	1400	1860	2200	130 / 175	75 - 190	152	706	175	90.6	55.1	73.2	484
150	5 - 13	9.40	27.25	150	2390	1510	1800	3200	150 / 200	75 - 190	332	962	200	94.2	59.5	70.9	704
210	5 - 13	9.40	30.14	210	2390	1510	1800	3450	210 / 280	75 - 190	332	1078	280	94.2	59.5	70.9	759
260	5 - 13	15.70	41.80	260	3950	1650	2025	4300	260 / 350	75 - 190	554	1476	350	155.5	65	79.7	947
315	5 - 13	15.70	53.00	315	3950	1650	2025	4800	315 / 430	75 - 190	554	1901	430	155.5	65	79.7	1058
355	5 - 10	15.70	55.55	355	3950	1650	2025	4900	355 / 480	75 - 145	554	1976	480	155.5	65	79.7	1080

<sup>\*</sup> V in relation to operating overpressure of 7 bars at 50 Hz / 100 psig at 60 Hz
- plants with standard air cooling / optional water cooling for models higher than VARIABLE 35 (VARIABLE 35/51); from model VARIABLE 315 /430 plants only available with water cooling
- heat recovery systems available for all models









# 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	Piston compressors	Turbocompressors	Blower	Complete accessories	Control, regulate, monitor
<ul> <li>constant speed 2.2 - 500 kW/5 - 13 bars</li> <li>variable speed-controlled and direct drive 2.2 - 355 kW/5 - 13 bars</li> <li>oil-free, with water injection 15 - 80 kW/5 - 13 bars</li> </ul>	<ul> <li>oil-free, up to 10 bars 1.5 – 11.4 kW</li> <li>for normal pressure up to 10 bars 1.5 – 15 kW</li> <li>for medium pressure up to 15 bars 1.5 – 15 kW</li> <li>for high pressure up to 400 bars 2.2 – 55 kW</li> <li>as a booster for an input pressure up to 10 bars and an output pressure up to 40 bars 2.2 – 18.5 kW</li> </ul>	• for oil-free compressed air 65 –1000 kW two-stage up to 9 bars three-stage up to 10 bars	<ul> <li>at constant speed 1.5 – 55 kW 300 – 1000 mbars</li> <li>with speed control and direct drive 3 – 55 kW 300 – 1000 mbars</li> </ul>	<ul> <li>refrigerant dryers         0.33 – 85 m³/min</li> <li>desiccant dryers         0.08 – 145 m³/min</li> <li>activated carbon adsorbers         0.08 – 145 m³/min</li> <li>filters, all particle sizes         0.5 – 225 m³/min</li> <li>complete condensate         management up to 120 m³/min</li> </ul>	<ul> <li>base load changeover controls</li> <li>consumption-related controls</li> <li>visualisation (we bring your compressed air to the PC)</li> <li>tele-monitoring (the hotline of your compressed air station)</li> </ul>



Your expert advisor