

G-DRIVE T

Highest efficiency in class

With the two stage G-Drive T series ALMiG sets new standards in energy efficiency. By compressing air in two stages they achieve a specific performance which is at the highest level. Therefore, the G-Drive T compressor series offers a higher volume flow with a lower input power consumption, in comparison to an equivalent single stage compressor. Low rotational speeds and lower internal compression ratios within the compressor stages increase the efficiency, reliability and lifetime of the compressor elements. State of the art efficiency, coupled with a low sound level and low service costs, makes the two-stage technology very interesting for industrial compressed air users.

The G-Drive T offers all these benefits, plus a compact footprint due to its well-thought-out design. With a look to Industry 4.0, the controller of the compressor has all the required functionalities to communicate with common industrial company systems. Or simply use the web server to monitor the compressor from anywhere.

Advantages:

- Due to the high efficiency of the compressor maximum energy savings can be achieved and the life cycle costs of the machine can be reduced
- Up to 15% greater energy savings in comparison to a single stage compressor
- Durable and reliable
- Low differential pressures
- Reduced heat load
- Easy maintenance and service

The unique design of the airend integrates the first and second stage into one compressor element. The rotors of both air ends achieve the optimal speed due to the gear drive.

An efficient compression is achieved by using a cooling oil mist for interstage cooling. This controlled amount of oil enables at the same time to avoid condensate in the second stage. A complicated and expensive separate interstage cooling is not necessary and reliability increases.

Application

Industry

Power output

90 - 315 kW

Volume flow acc. to ISO 1217
(Annex C-2009)

14.9 - 62.7 m³/min

Operating pressure

5 - 13 bar

Cooling

Air-cooled

Drive

Gear

Motor

Energy efficiency class IE 3; IP 55
protection, protection class F



+ Efficient screw compressor technology

+ Low rotational speeds together with lower internal pressure ratios ensure a long durability

+ Efficiency and ease of maintenance made for lower life cycle costs

Heavy duty suction filter

Best possible filtration and easy maintenance

Oil lubricated two stage compression

Best possible efficiency, integrated gear drive and robust durable design

Industry 4.0

Smart controller that monitors, visualises and documents

Energy-efficient IE3 Motor

with long bearing life

Stable base frame

With vibration dampeners

AIR CONTROL HE



Standard

Controllers starting on p. 50

G-DRIVE T

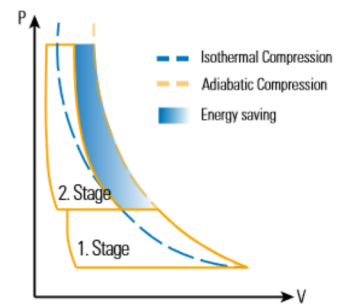
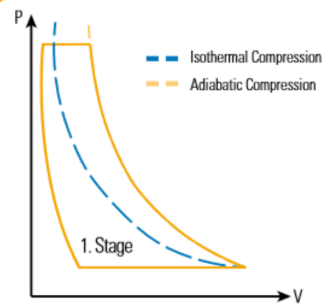
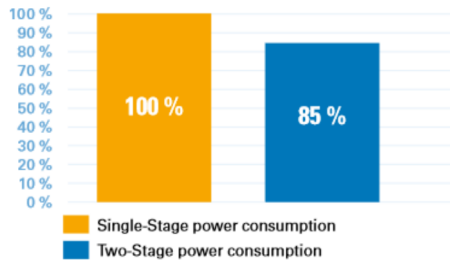


G-DRIVE T

50 Hz								
G-DRIVE T	Volume flow acc. to ISO 1217 (Annex C-2009)			Rated motor power	Length	Width	Height	Weight
	8 bar	10 bar	13 bar					
Modell	m³/min	m³/min	m³/min	kW	mm	mm	mm	kg
20	18.9	16.8	14.9	90	3250	1800	1868	5600
24	22.7	19.9	16.8	110	3250	1800	1868	5600
28	27.2	23.3	21.8	132	3881	2250	2438	5900
34	33.0	29.3	26.3	160	3881	2250	2438	5950
42	41.1	36.2	31.0	200	4531	2250	2438	8500
52	51.5	45.5	40.2	250	4531	2250	2438	9300
64	62.7	55.4	50.2	315	4531	2250	2438	9800

Setting standards in enAIRgy efficiency

The two-stage compression is almost isothermal and requires up to 15% less power consumption than single-stage compression.



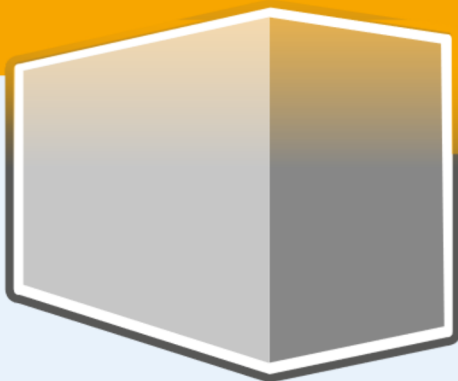
Single-Stage Compressor

FAD @8,0bar	46.50 m ³ /min
Input Power	300 kW
P _{spec.}	6.45 kW/(m ³ /min)
Air demand/Year*	22 320 000 m ³
„Load“ h/Year	8 000 h
Energy costs	0.10 €
„Load“ c/Year	240 000 €
Ø Net Price	70 000 €



G-DRIVE T 52

FAD @8,0bar	51.50 m ³ /min
Input Power	300.50 kW
P _{spec.}	5.83 kW/(m ³ /min)
Air demand/Year*	22 320 000 m ³
„Load“ h/Year	7 223 h
Energy costs	0.10 €
„Load“ c/Year	217 060 €
„Load“ savings/Year	22 940 €
„Load“ savings/Month	1 912 €
„Load“ savings/Day	64 €
Ø Net Price	90 000 €
Price Balance	20 000 €
Payback Time	0.87 years / 10 months



**Two-stage
compression**



High efficient IE3 Motor

Smart controller 4.0

Variable Speed cooling fan

Low service and maintenance costs

Optional heat recovery



*8000 operating hours per year, starting from the compressor with the lower delivery quantity.