# Largo & Allegro ° Air Compressors



LARGO 11-30 & ALLEGRO 15-30





#### Alup

#### Driven by technology. Designed by experience.

Alup Kompressoren has over 85 years of industrial experience. It is our ambition to offer compressed air solutions that ensure we are first in choice for our customers. To reach this goal we need continuous investment in our product development to make sure that we are always able to offer:

- High performance and excellent quality
- · Integrated engineered solutions
- Full energy efficiency
- Total cost of ownership
- Environmental care



# The power of the Largo & Allegro range

Largo 11-30 & Allegro 15-30 screw compressors provide compressed air relying on high efficiency and very low noise levels thanks to the gearbox transmission. Today the Largo & Allegro can also be installed on an air vessel complete with refrigerant dryer and many options to improve efficiency and air quality.

#### High efficiency gear transmission

- · Reduced energy consumption compared to belt driven technology.
- Low noise levels: the Largo & Allegro can be installed close to the workplace.
- Long service intervals.

#### **Smart controllers**

- Easy to read thanks to the graphic screen (standard on IVR and optional on fixed speed machines).
- Energy saver with intelligent load/unload cycle control.
- Easily programmed with the working time you need 24/7.
- Complete with hardwire digital input and outstanding communication features.
- Fully compatible with Infologic and Airlogic family.

#### **Complete installation**

- Available up to 30 hp installed on tank with dryer.
- · Save on installation costs and space thanks to the compact footprint.
- Reduced risk of air leakages.









# The range that meets all your requirements

With the Largo 11-30 & Allegro 15-30 you obtain a compressor that matches your precise needs.

#### A wide offer

- Available power size: from 15 up to 40 hp.
- 4 pressure variants.
- 4 Largo & Allegro V variants.
- All compressors up to 30 hp can be installed on an air vessel with refrigerant dryers.

# Highly efficient air filtration & oil separation

- High level air intake preventing larger dust particles from entering.
- Air intake on the cold part of the compressor ensures an optimum running temperature.
- 2 micron encapsulated filter guarantees only clean air enters the compressor, improving overall reliability.
- Oil separator ensures 3 ppm of oil carry over thanks to cyclonic, gravity and filter separation.

#### Easy accessibility and installation

- Easy to service thanks to the large hinged doors (Floor-mounted units - FM) and removable panels (Tank-mounted units - TM).
- · Low maintenance costs.
- The units are accessible with a forklift from 3
   (FM) and 2 sides (TM).

#### The options you need

- Integrated dryers available on all models up to Largo & Allegro 30.
- Integrated central controller to increase efficiency and ensure better communication between the different compressors in the room.
- Two compressed air filters to improve the air quality.
- Energy recovery to recuperate a part of the invested energy.





#### **Energy audit**

To optimize your energy efficiency, you need to select the right compressor. Contact your local Alup Kompressoren representative and we will perform a simulation based on your parameters to help you get the perfect compressed air solution.

# mproved efficiency

# The right fit for each customer

Check out these innovative features of the Largo 11-30 & Allegro 15-30 range and see how they provide you with a complete offer: high efficiency, easy maintenance and a low noise level.

#### High quality drive train (gear transmission)

- · Gearbox technology for outstanding energy efficiency and reliability.
- No long-term loss thanks to the combination of screw and gearbox technology.
- · All units incorporate adapted gear sets for optimal efficiency.
- In-house designed element with high performance (energy and FAD).
- · Motor brand with high reputation for all the models.
- IP 55 class F standard IE 2.



#### **Integrated inverter**

- Easy accessible integrated inverter drive.
- Optimum FAD range control.
- New cubicle cooling system to improve electrical device reliability.









#### Highly efficient air intake filtration and oil separation

- Fresh air taken from the cold side of the compressor to improve efficiency.
- Two micron incapsulated intake filters guarantee only clean air enters the compressor.
- Easy access for servicing.





#### Optimum ventilation and oversized cooler

- Improved cooling flow results in a lower working temperature.
- A separated air flow offers you an efficient motor and inverter cooling together with a long life time of oil, components and compressor.
- Optimum ventilation flow is assured with low energy consumption.
- Oversized oil and air cooler for better cooling and lower operating temperature.





#### **Quiet operation**

Thanks to the improved noise insulation, the compressor works very quietly and can be placed near the workplace.



# All-in-one tank-mounted solution

- · Smaller footprint compared to a traditional installation.
- · Simplified and cheap installation.
- · High air quality improvement thanks to dryer and filters (option).
- Reduced risk of air leakages.





# Tank-mounted offer, the complete package

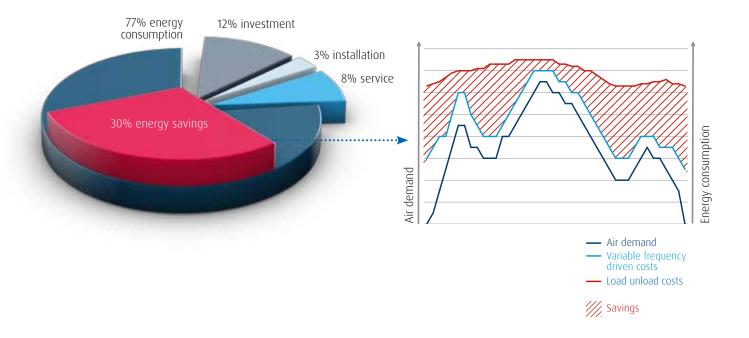
- High air quality is assured by oversized integrated refrigeration dryer (also available for FM unit).
- The 16 bar PED certified dry vessel reduces corrosion inside.
- Tank-mounted models with inverter drive available up to 30 hp.
- 2 line filters (option) to decrease oil and particle content in the compressed air down to 0.01 ppm.



### **ENERGY EFFICIENCY PACK**

# Optimize your energy efficiency

Energy costs represent about 70% of the total operating cost of your compressor over a 5-year period. That is why reducing the operating cost of a compressed air solution is a major focus. The Largo & Allegro V inverter driven compressor can cut the energy bill of your compressor by up to 30%.





The Largo & Allegro V reduces energy consumption in the following ways:

- The variable frequency drive compressor (inverter technology) guarantees a fixed set pressure operation and matches air supply with air demand.
- No unload cycles above 20% load.
- No current peak due to soft start.

#### **Electronic controllers**

The Air Control controllers allow you to operate the compressor in an easy and organized way.





#### Air Control 5.0

- Standard on fixed speed machines.
- Stop/start timers do not rely on the operator's action to save energy, but program the Infologic controller to operate as your factory operates.
- Dual pressure band time scheduling for operation with different pressure bands, leading to energy savings.
- Automatic restart after a power failure with sequence restart avoids simultaneous starts in the compressor network, extending reliability.
- Off-load cycle delay postponement.
- Service indicator and fault management provide comprehensive messages to ease service diagnostics.
- Visualization through web browser using a simple Ethernet connection.

#### **Air Control 5.1 Graphic**

Air Control 5.1 Graphic provides the following functionalities:

- Standard on inverter driven machines and optional for fixed speed machines.
- User-friendly screens, data logging and storage on a memory card.
- Connectivity to ensure efficient pressure regulation when combining a variable speed and fixed speed compressor.
- Air Control 5.1 Graphic functions as a master control to all other fixed speed compressors in the room, harmonizing their operations.



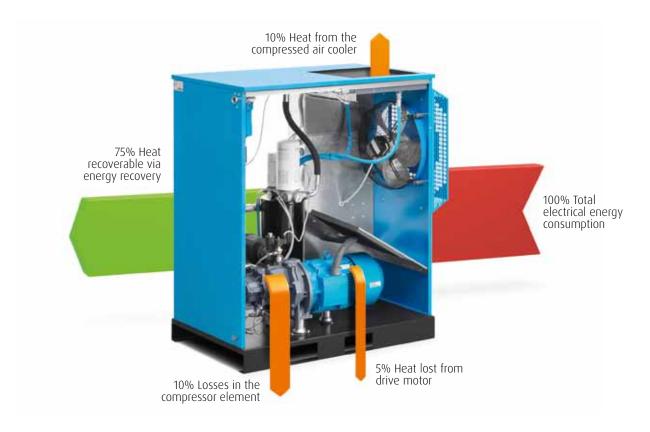






#### Improve your energy recovery

When air is compressed, heat is formed. The excess heat can be captured with an energy recovery option and channeled to other applications allowing you to save energy and cut costs.



#### Water cooling recovery

In the energy recovery units (optional) the oil circuit is pre-cooled with an oil/water heat exchanger. Water then becomes the fluid transport media to recover the oil temperature. The hot water resulting from this process can be used to heat radiators or water boilers, pre-heat supply water or hot tap water, and other industrial applications.

The energy recovery option integrates a heat exchanger on the oil circuit, which heats up the continuously pressurized water flow. The system is regulated automatically, and in case of limited water cooling capacity, the standard cooling system of the compressor will operate and backup the energy recovery device.

The energy recovery option is a simple mechanical system that requires no maintenance or electricity consumption, but offers you significant reductions in your energy costs.



# Options to optimize your operations



A wide range of options enables you to get the most out of your Largo 11-30 & Allegro 15-30 compressor.

- Internal water separator with automatic drain reduces up to 90% of the compressed air moisture.
- High efficiency air cooling pre-filtration panel avoids dust entering the compressor, protecting internal components and extending compressor lifetime.
- Energy recovery pack to recover up to 70% of the electrical energy consumption as warm water for showers, boilers etc.
- IE3 motors increase compressor efficiency resulting in lower energy consumption and cost savings.
- Phase sequence control protects the compressor and avoids motor damages when the power supply is not reliable.
- Remote monitoring for additional convenience.
- Line filters for oil and dust removal down to 0.01 ppm.
- **Canopy heater** for low temperature installation.
- Heavy duty air intake filtration prevents dust entering the pneumatic circuit in very dusty environments.

For further information on how our options can optimize your operations, please contact your local representative.



# **Technical specifications**

#### Fixed Speed

		Max. working	Free Air Delivery @ reference			Mater	power	Noise	Cooling air	Weight			
		pressure		conditions		Motor	powei	level **	flow	FM	FM T	TM	
Model		bar	m³/h	I/s	cfm	kW	hp	dB(A)	m³/h	kg			
Largo 11	Α	7.5	116	32.2	68.3	- - 11 -	15	61	2300	460	520	719	
	8 bar	8	110	30.6	64.8								
	В	10	91	25.3	53.6							/ 19	
	C	13	72	20.0	42.4								
Largo 15	Α	7.5	162	45.0	95.4		20	62	2300	470	530		
	8 bar	8	149	41.4	87.8	- 15 -						728	
	В	10	132	36.7	77.8							720	
	С	13	109	30.3	64.2								
Largo 19	Α	7.5	197	54.7	116.1	- 18,5	25	63	2300	490	550		
	8 bar	8	190	52.8	111.9							737	
	В	10	162	45.0	95.4							/3/	
	С	13	139	38.6	81.9								
Largo 22	Α	7.5	227	63.1	133.7		30	64	4800	496	566		
	8 bar	8	220	61.1	129.6	- - 22 -						7/5	
	В	10	194	53.9	114.3							765	
	C	13	169	46.9	99.6								
Largo 30	Α	7,5	276	76.7	162.6	- - 30	40	65	4800	542	602		
	8 bar	8	273	75.8	160.8							NA	
	В	10	256	71.1	150.8							IVA	
	С	13	221	61.4	130.2								

#### Variable Speed

	Max.	Free Air Delivery @ reference conditions*										Noise	Cooling					
Variable Speed	working pressure	Min. FAD*		Max. FAD*							Motor power		level	flow	Weight			
	bar	m³/h	I/s	m³/h	cfm	m³/h	cfm	m³/h	cfm	m³/h	cfm	kW	ho	dB(A)	m³/h	FM	FM T	TM
Model	Dai	7 bar		4 bar		7 bar		9.5 bar		12.5 bar		KW	hp	UB(A)	/!!	kg		
Allegro 15 V	10	43	25	189	111	169	100	145	85	-	-	- 15	20	62	2300	490	550	748
V HP	13	32	19	-	-	134	79	132	78	119	70	15	20	02	2300	490	550	740
Allegro 19 V	10	36	21	200	118	196	116	178	105	-	-	- 18.5 25	63	2200	510	F70	757	
V HP	13	34	20	-	-	152	90	151	89	142	83		25	63	2300	510	570	151
Allegro 22 V	10	44	26	235	139	234	138	209	123	-	-	- 22	30	64	4800	516	506	785
V HP	13	31	18	-	-	183	108	181	107	176	103		30	04	4800	516	586	/85
Allegro 30 V	10	36	21	274	162	273	161	245	144	-	-	- 30	40	<b>(</b> E	4000	5(2	(22	NA
V HP	13	36	21	-	-	233	138	232	137	219	129	- 50	40	65	4800	562	632	IVA

 $<sup>\</sup>ensuremath{^{*}}$  Unit performance measured according to ISO 1217, Annex C, latest edition.

#### Dimensions (mm)

#### Fixed Speed and Variable Speed

	Length	Width	Height		
Floor-mounted units all power sizes	1400	780	1555		
Tank-mounted units all power sizes	1977	810	1841		



<sup>\*\*</sup> Noise level measured according to ISO 2151 2004.



#### DRIVEN BY TECHNOLOGY DESIGNED BY EXPERIENCE

