

# **BeaconMedaes Solutions Provider**

The Laboratory Enclosed Scroll compressed air systems from BeaconMedaes provide the right solution for your high quality air needs.

Providing cost efficient, high quality air in a compact, quiet package, the LES compressed air systems are an ideal choice for point of use or central supply applications. The LES products are simple, easy to use and extremely reliable. With Service Support, BeaconMedaes brings the complete solution for your laboratory and non-medical air needs.

# Complete Service & Support

We offer the industry's most comprehensive technical support. Whether you need a question answered, a solution for an application, medical or laboratory gas equipment repaired, or a preventive maintenance program, BeaconMedaes is there for you. Service is available 24 hours a day, 7 days a week.

- Experienced and knowledgeable design experts
- Comprehensive technical and service support
   24/7





# 100% Oil-Free Air

Applications within medical and laboratory facilities cannot risk any chance of oil contamination in the processes, so it is essential that the compressed air is 100% oil-free. The LES provides 100% oil free, clean air by preventing oil from entering your compressed air system. With no metal-to-metal contact between compression scrolls, there is no need for oil lubrication in the compression chamber. The scroll compression principle guarantees high quality, oil-free air.

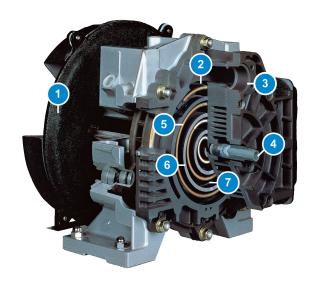


With ISO 8573-1 Class 0 certified quality air, the risk of oil is eliminated.

# **Scroll Compressor**

Air compression is achieved through the orbital motion of two scrolls. One being fixed, the second mobile. In a regular and continuous way, the mobile scroll compresses the air through a reduction of the volume.

- Minimal moving parts ensure a long operating life with minimum number of service interventions
- As the scrolls never make contact, there is no need for oil lubrication in the compression chamber, guaranteeing high-quality, oil-free air
- The scroll elements are belt driven, eliminating the need for a gearbox. Oil-free in every way.



- 1. Cooling fan
- 2. Suction chamber
- 3. Suction opening
- 4. Delivery opening
- 5. Fixed scroll
- 6. Orbiting scroll
- 7. Compression chamber

# LES 2-7.5: Complete Range

The LES mono unit is a complete package, including the element, drive motor, aftercooler and starter in a super silent acoustic enclosure to be installed directly into the work environment. Available with an integrated refrigerant dryer and with two receiver options, the LES mono unit is a total workplace solution with a minimal footprint.

# State-of-the-art element

- Highly efficient profile
- Robust, reliable design and easy access for service
- Low vibration levels



# Motor efficiency

- High-efficiency motor IE3/NEMA Premium as standard
- Totally enclosed air-cooled IP 55 class F motor for heavy duty operation



## Integrated Refrigerant dryer

 Compact & optimized integrated refrigerant dryer, ensuring the delivery of dry air, preventing rust and corrosion in your compressed air network



#### Silent insulated canopy

 A sound insulated canopy makes extremely low noise levels as low as 55 dB(A) possible, allowing for installation of the unit closer to the point of use

## Cool canopy

- Increased ventilation due to the vertical design
- Lower element & air outlet temperatures
- Oversized cooler improving the performance of the unit
- Improved canopy design: better dryer performance and easy access



# Integrated receiver

Plug and play solution, lower installation costs with
 30 liter (8 gallon) intergrated receiver and 270 liter (71 gallon) tank-mounted option



# LES 10-30: Modular & Flexible

The LES multi-scroll units bring in the benefits and flexibility of a modular system utilizing two to four compressor modules integrated into one canopy. The controller continuously monitors the status of each element and starts and stops the compression elements, thereby ensuring that the compressed air output matches the air demand.

#### Air inlet filter

High efficiency paper cartridge air inlet filter eliminating dust and particles down to 1 μm

# High efficiency scroll element

• Air-cooled scroll compressor elements with 8 and 10 bar (116 and 145 psig) variants, offering proven durability and reliability in operation, in addition to superior efficiency

#### Energy efficiency

• Totally enclosed & air-cooled IP55 Class F motors, complying with IE3 Premium efficiency standards

#### Refrigerant dryer

• Compact & optimized integrated refrigerant dryer ensuring the delivery of dry air, preventing rust and corrosion in the installed compressed air network

# Silent Canopy

 To Thanks to the low-noise scroll element, optimized super-silent fan and sound-insulated canopy, best in class noise levels possible are achieved



#### Intelligent graphic controller

While running the Variable Air Delivery algorithm, the graphic controller matches the required air demand, eliminating unload power consumption



#### Optimized cooler & piping

• The air cooler is fine tuned for improved performance, while the use of aluminum & stainless steel pipes improve reliability over lifetime and assure the high quality of compressed air

#### Smart design

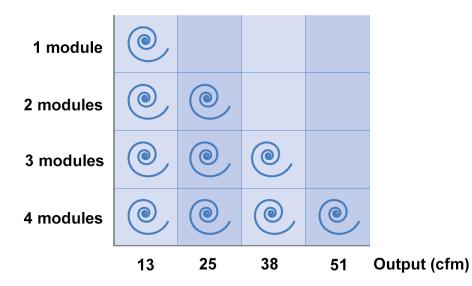
• Outstanding user-friendly design, with safety in operation & ease of serviceability in mind

#### Variable air delivery

- The LES multi units (10-30 Hp) are equipped with multiple scroll modules. The units utilize Variable Air

  Delivery technology which controls the required number of modules depending on the air demand. The LES multi units adjust to demand fluctuations and provide maximum flexibility of air delivery
- The intelligent controller prevents simultaneous start of the modules and ensures a very narrow pressure band is maintained. This optimizes the efficiency of the compressor and guarantees a very stable system pressure

# **Variable Air Delivery**





LES 2 - 7.5 Technical Specifications											
Model Number	Max. Working Pressure		Free Air Delivery		Motor Power		Noise Level				
	Bar	Psig	Cfm	l/s	Нр	Kw	db(A)				
LES03	8	116	8.9	4.2	3	2.2	55				
	10	145	7.2	3.4	3	2.2	55				
LES05	8	116	14.2	6.7	5	2.7	F-7				
	10	145	12.5	5.9	5	3.7	57				
LES07	8	116	20.8	9.8	7.5	5.5	59				
	10	145	16.1	7.6							

LES 10 - 30 Technical Specifications											
Model Number	Max. Working Pressure		Free Air Delivery		Motor Power		Noise Level				
	Bar	Psig	Cfm	l/s	Нр	Kw	db(A)				
LES10	8	116	28.4	13.4	2 x 5	2.2	63				
	10	145	24.2	11.4	2 X 3	2.2	05				
LES15	8	116	43.0	20.3	275	2.7	(2)				
	10	145	31.8	15.0	2 x 7.5	3.7	63				
LES20	8	116	55.9	26.4	4 x 5	5.5	63				
	10	145	48.7	23.0							
LES22	8	116	65.7	31.0	3 x 7.5	3 x 5.5	64				
	10	145	50.2	23.7							
LES30	8	116	86.5	40.8	4 x 7.5	4 x 5.5	65				
	10	145	63.6	30.0							

