

LEADAIR



LEADAIR: COMPRESSOR MANAGEMENT CONTROLLER

Depending on the installation, control requirements and the number of compressors that need to be managed centrally, Pneumatech now offers LEADAIR with a range of models tailored to your needs. Most of the time, air usage is not fixed, hence the fluctuation of network pressure. To best answer instant demand, optimizing the operation of multiple compressors with different flows and technologies is a requirement. LEADAIR continuously measures network pressure and uses the best suited equipment to cover the required demand, taking into account technical parameters and possible savings.

Standard Features

LEADAIR	L3	L4	L12	L24	L24 MAX
Number of compressor	up to 3	up to 4	up to 12	up to 24	up to 24
Number of VSD or VD	0	0	up to 12	up to 12	up to 12
Compressor room	1	1	1	multiple	multiple
I/O monitoring	NA	option	option	option	option
Ancillary control (on/off)	NA	with I/O	with I/O	Standard	Standard
Communication option	NA	TX	TX	TX	Integrated
Max pressure	< 232 psig	> 232psig	> 232 psig	> 232 psig	> 232 psig
Pressure bands	1	3	4	6	6
Pressure timer	NA	28	28	28	28
Timer rotation	Yes	Yes	Yes	Yes	Yes
Equal running hours	No	Yes	Yes	Yes	Yes
Energy control algorithm	No	No	Yes	Yes	Yes
Pre-fill function	No	Yes	Yes	Yes	Yes
ARAVF	Yes	Yes	Yes	Yes	Yes
Remote alarm	1	2	2	2	2
Graphic touch screen	No	No	No	No	Yes



LEADAIR 3



LEADAIR 3

- Up to 3 fix speed compressors
- Timer rotation mode
- Display of pressure (tight pressure band min/max 3psi)
- On/Off button and navigation button to enter menu (parameter changes and validation)
- Alarm signals for each compressor, pressure transducer and LEADAIR

LEADAIR 4



LEADAIR 4

- Up to 4 fix speed compressors
- 2 control modes: timer rotation, equal running hours
- Real time clock with compressor priority and pressure programming (any time throughout the week)
- Remote monitoring option

LEADAIR 12



LEADAIR 12

- Up to 12 compressors including variable speed or variable displacement
- 3 control modes: 2 modes of LEADAIR 4 + energy control algorithm (selecting most efficient combination of compressors in function of air demand)
- Intelligent pre-fill function for energy efficient start up
- Possible management of one or more variable speed compressors (or variable displacement)

LEADAIR 24



LEADAIR 24

- Up to 24 Compressors including variable speed or variable displacement
- Same functions as LEADAIR 12
- Multiple compressor room control (pressure balancing and zoning)
- Ancillary equipment control (ex: dryers, pump start up) and basic monitoring (I/O board included)

LEADAIR 24 MAX

- Most advanced solution based on LEADAIR 24 with color touchscreen 15" graphic controller for on site visualization and analysis

OPTIONS



LEADAIR I/O module

- Monitoring of ancillary equipment (like dryers, filters, drains...)
- Monitoring of dew point, flow, kW, ambient room temperature, pressure, etc.
- Control of ancillary equipment can be linked to status of compressors

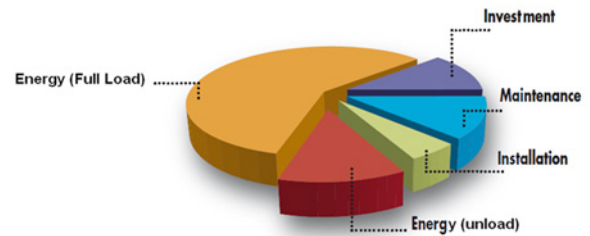
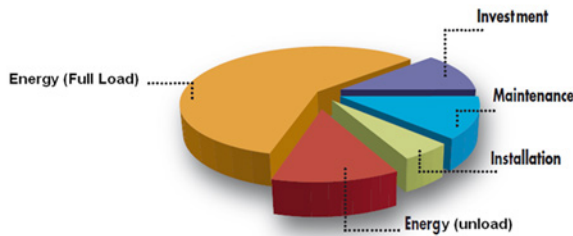
LEADAIR RC module

- Remote advanced visualization (TCP/IP), analysis and trending
- Data logging (1 month) and reporting (history can be saved to PC monthly)
- Email/text capability for alarm signal

LEADAIR: SAVINGS THROUGH HARMONY AND CONTROL

Electrical cost is the most important part of a compressor installation budget over the years. To help you reduce the energy cost linked to your compressed air installation is part of our priorities at Pneumatech. Our engineers have this goal in mind when designing our products, as well as our sales representatives when they present you with an offer. That's why we added to our portfolio the LEADAIR range, which was developed to address multi compressors room optimization and offers solutions adapted to basically any configuration. LEADAIR is an intelligent room monitoring and control system that can reduce your energy bill, mostly in 3 ways:

REDUCE LOAD/UNLOAD

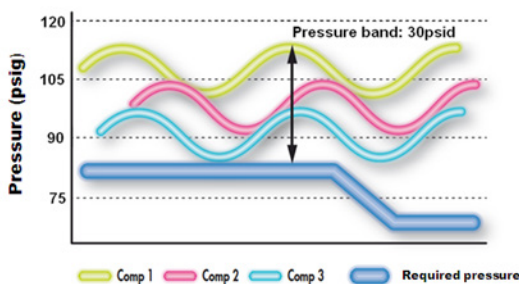


Unload operation can represent up to 20% of the energy used at full load. By controlling efficiently compressors' priority and network pressure, energy waste can be avoided.

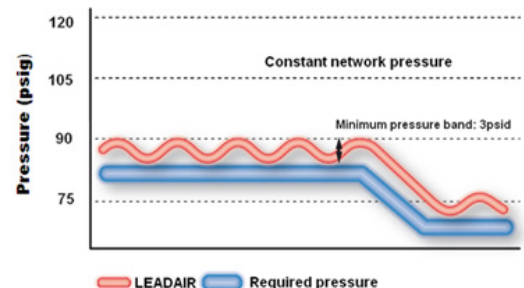
Optimizing the load on each compressor of the network, LEADAIR can reduce the unload time during which a compressor does not supply air. The energy consumption during unload that is prevented is hence converted into savings.

REDUCE PRESSURE DIFFERENTIAL

Pressure Cascading Regulation without LEADAIR



Single Pressure Band with LEADAIR



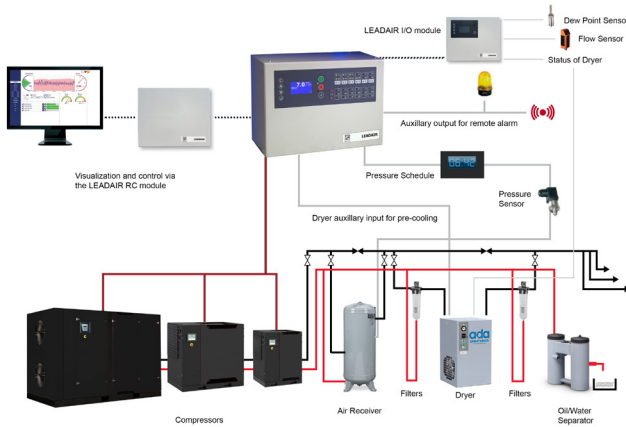
Regardless of the number of compressors, the unique pressure sensor used by LEADAIR prevents pressure cascading of classic regulation: these generate extra energy cost linked to pressure fluctuation in the network. With a pressure differential as low as 3psig, LEADAIR provides a tight pressure control irrespective of the air demand. A pressure reduction of 14.5 psig (1bar), is equivalent to 7% in energy savings. By programming the pressure in function of the days and hours, the right pressure can be assigned.

REDUCE RUNNING HOURS

Directly linked to a decrease in unloading time, total hours of operation can significantly drop which extend the lifetime of internal components of your compressor installation and reduce maintenance cost.

LEDAIR 4 and up: TAILORED PROGRAMMING FOR EACH TYPE OF INSTALLATION

Typical Installation:

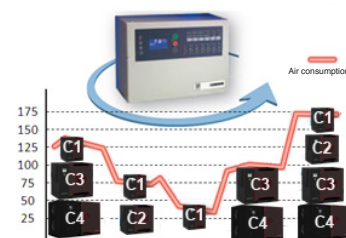


Energy Savings:

- Reduce unload time
- Improved energy efficiency

Ideal when compressors have different flow output, LEDAIR will select the proper combination of compressors (fix speed and variable speed) in order to reach the target pressure for the minimum operating cost. It will also insure same size compressors have equal running hours.

Air requirement

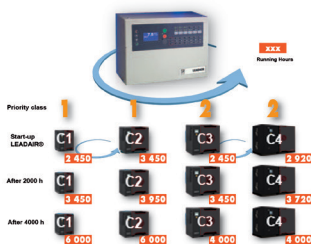


Equal Running Time:

- Equilibrium of use of each compressor
- Same maintenance time for all compressors
- Lower service cost
- Increased life time of the whole installation

Designed for installations where compressors' capacities are identical, LEDAIR will force an equal number of load hours on each compressor, while respecting priority classes.

Running hours

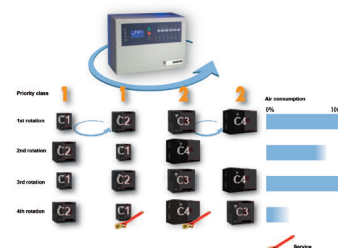


Timer Rotation:

- Flexibility of operation with double priority

Using a classic and simple method, the system operates rotation of compressors based on their priority class and at regular intervals that can be set between 1 and 168 hours. Priority classes can be allocated in function of the age or running mode of the compressors.

Air use / service



Pneumatech reserves the right to change or revise specifications and product design in connection with any features of our products. Such changes do not entitle the buyer to corresponding changes, improvements, additions or replacements for equipment previously sold or shipped.

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