COOLNOMIX

The Art of Cool

Product Brochure COOLNOMIX AC-01®

How is this possible?

Internationally patented **COOLNOMIX Optimized Refrigerant Supply (ORS®)** encompasses two key processes:

- delivery of the required fixed-minimum room temperature
- optimisation of the running-time of the compressor to minimize energy consumption

Since the compressor consumes about 95% of all the energy used by an air-conditioner, **ORS®**'s minimization of its running-time delivers world-beating energy savings at an average 40% worldwide.

COOLNOMIX® applications

COOLNOMIX® delivers these awesome savings through being retro-fitted to existing air-conditioners of any size and any kind in which the refrigerant is used to cool the air directly (Note 1). Retrofitting takes about one hour to complete and there are zero maintenance requirements. **COOLNOMIX®** is already delivering energy savings around the world on:

- commercial split-type air-conditioners (e.g. wall mounted and cassette based)
- package based and double expansion (DX) units up to the largest sizes available
- ducted air-conditioners with AHU's
- inverter based (VRV and VRF) air-conditioners

Even inverter based (VRV and VRF) air-conditioners are enjoying an average 40% saving!

COOLNOMIX® benefits

- Average energy savings of 40%.
- Elimination of dripping from air-conditioners.
- Improved room temperature stability.

support@coolnomix.com
www.coolnomix.com

about COOLNOMIX®

COOLNOMIX® is an internationally patented product of Agile8 Consulting Limited. Our objective for COOLNOMIX® is to reduce worldwide running costs of refrigerant based cooling systems by 30%.

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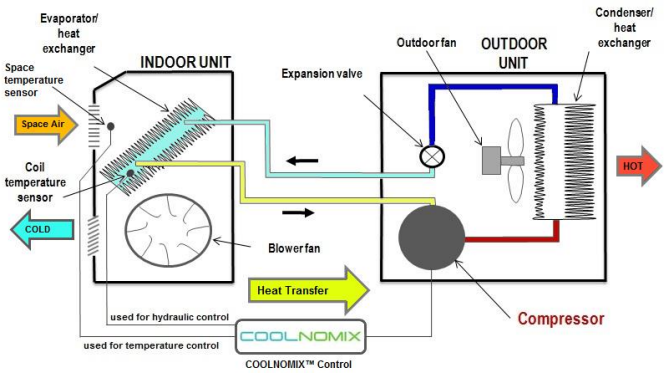
More about Optimized Refrigerant Supply (ORS®)

Air-conditioner manufacturers make use of **thermodynamic** (temperature) thermostats alone when controlling compressors. Even with modern inverter drives this approach delivers limited opportunities for energy savings. **COOLNOMIX ORS®** employs data from two temperature sensors for determining when work is needed from the air-conditioner's compressor.

- the first sensor replicates the function of the thermodynamic (temperature) thermostat and is employed by **COOLNOMIX ORS®** to deliver the required fixed-minimum room temperature as a priority
- the second sensor measures the temperature of the cold-supply air from the air-conditioner and this is used as a proxy to determine when the compressor has completed its **hydraulic** work of fully compressing the refrigerant gas

Of course, once the refrigerant gas is fully compressed, continuing to run the compressor is a waste of energy and yet this is what use of **thermodynamic** measurement alone persists in doing.

With the additional information derived from its second sensor, **COOLNOMIX ORS®** is able to stop (non-inverter) or slow down (inverter) the compressor whilst the air-conditioner uses the reservoir of cooling capacity that has been created to cool the room. Once **COOLNOMIX ORS®** determines that further cooling capacity is needed, the compressor is started (non-inverter) or speeded up (inverter) again until its **hydraulic** work has been completed once more.



All air-conditioners using **COOLNOMIX ORS®** to deliver energy savings are required to display our distinctive label as below:

with COOLNOMIX ORS

More information

COOLNOMIX® products are developed and manufactured by Agile8 Consulting Limited ("Agile8").

For more information, including Case Studies, Data Sheets and Customer Testimonials, contact Agile8 at:

support@coolnomix.com

or visit our Contact Us page at:

www.coolnomix.com/contact-us

Note 1: **COOLNOMIX®** is not currently retro-fitted to Centralised Water Chillers unless there are exceptional circumstances. To discuss these exceptional circumstances contact Agile8.

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