coolnomix

COOLNOMIX® AR-01® energy optimisation saves up to 30% in your refrigeration energy costs!

In most refrigeration applications much energy is wasted because the compressor (the main energy component) runs longer than is needed. Heating to melt ice adds to this wastage.

COOLNOMIX® AR-01® is a new retrofit energy optimisation system to reduce running costs even with the largest compressor driven refrigeration equipment.

COOLNOMIX® AR-01® is easily fitted to existing equipment used to cool dairy products, drinks, wine, perishable foods, vegetables etc. in supermarkets and other commercial areas.

Using our worldwide patented technology called Optimized Refrigerant Supply (ORS)®, the **COOLNOMIX® AR-01®** is designed for cooling and vending machine applications where the control temperature is above 0°C (32°F).



The main features of the COOLNOMIX® AR-01® include:

- Reduced power consumption by up to 30% (in some cases even higher)
- Optimized efficiency, with shorter compressor running times and improved temperature stability (dual temperature sensor)
- Dual temperature sensor design delivering exceptional temperature stability
 - Eliminates icing of the evaporator coil—no heating required even in high humidity environments
- Sixteen user selectable operating temperatures from 0°C (32°F) to 15°C (59°F) in 1 Deg C (1.8 Deg F) steps
 - Built in audible alarm in the event of cooling

www.emissis.com



What is COOLNOMIX® ORS®?

COOLNOMIX® ORS® is our revolutionary, patented design for optimising the energy consumption in refrigerant based air conditioning, refrigeration and heating systems. Most manufacturers today make use of thermodynamic (temperature) control only when controlling compressors. Even with modern inverter drives this approach delivers limited opportunities for energy savings.

By contrast, the **COOLNOMIX® ORS®** design approach recognises that the useful work done by a compressor is actually hydraulic in nature, and not thermodynamic.

The compressor's hydraulic work provides a supply of high pressure liquid refrigerant that can be used for cooling. Once the hydraulic work has been completed and the space being cooled is at the correct temperature then keeping the compressor running is actually wasting energy.

The **COOLNOMIX® ORS®** internationally patented algorithm is called Optimised Refrigerant Supply®.

COOLNOMIX® ORS® uses a combination of thermodynamic (temperature) and hydraulic optimisation to assure temperature levels and optimise running costs.





The **COOLNOMIX® AR-01®** is excellent in reducing running costs by up to 30% in commercial walk-in coolers, vending machines and other refrigeration and cooling systems.



The **COOLNOMIX® AR-01®** eliminates evaporator coil icing and the need for de-icing heaters even in the most demanding high humidity environments.