

COOLMIX AR-01 energy optimization 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.

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

COOLMIX 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 **COOLMIX 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 **COOLMIX 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 failure (audible alarms can be silenced by an operator or turned off if not required).

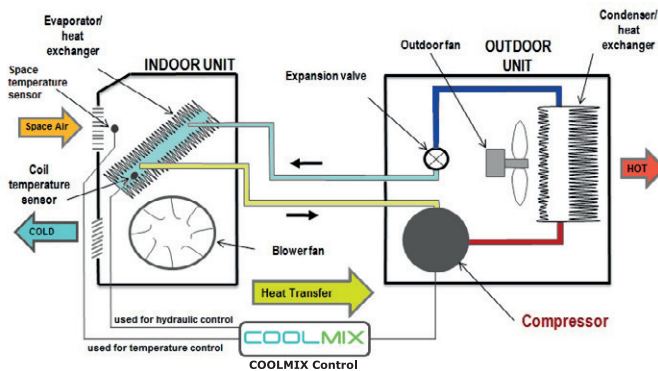
What is COOLMIX ORS?

COOLMIX ORS is our revolutionary, patented design for optimizing 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 **COOLMIX ORS** design approach recognises that the useful work done by a compressor is actually **hydraulic** in nature, and not thermodynamic.

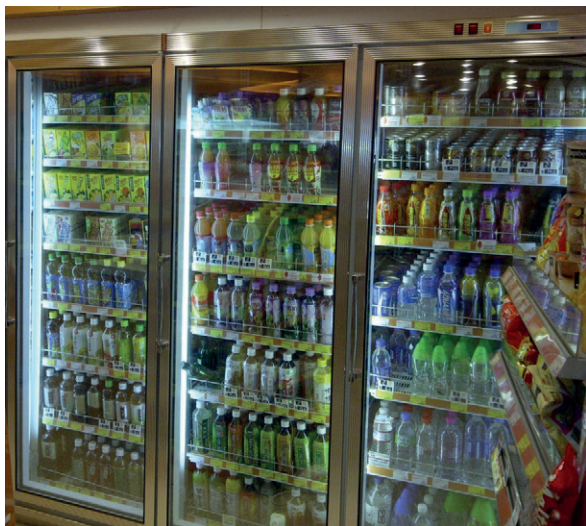
The compressor's hydraulic work provides a supply of high pressure liquid refrigerant that can be used for cooling. Once the hydraulic work has been completed and the space being cooled is at the correct temperature then keeping the compressor running is actually wasting energy.

The **COOLMIX ORS** internationally patented algorithm is called **Optimized Refrigerant Supply**.



COOLMIX ORS uses a combination of **thermodynamic (temperature)** and **hydraulic optimization** to assure temperature levels and optimize running costs. All refrigerant based systems employing our patented technology are required to show the distinctive label below:

with **COOLMIX**



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