

**Newsletter:****Smart Compressor Technology – Converts fixed speed compressors to variable speed**

Our manufacturer has launched Aersave, a groundbreaking compressor technology that can protect customers from rising energy costs by improving the energy efficiency of their chillers and deliver up to 50% energy savings.

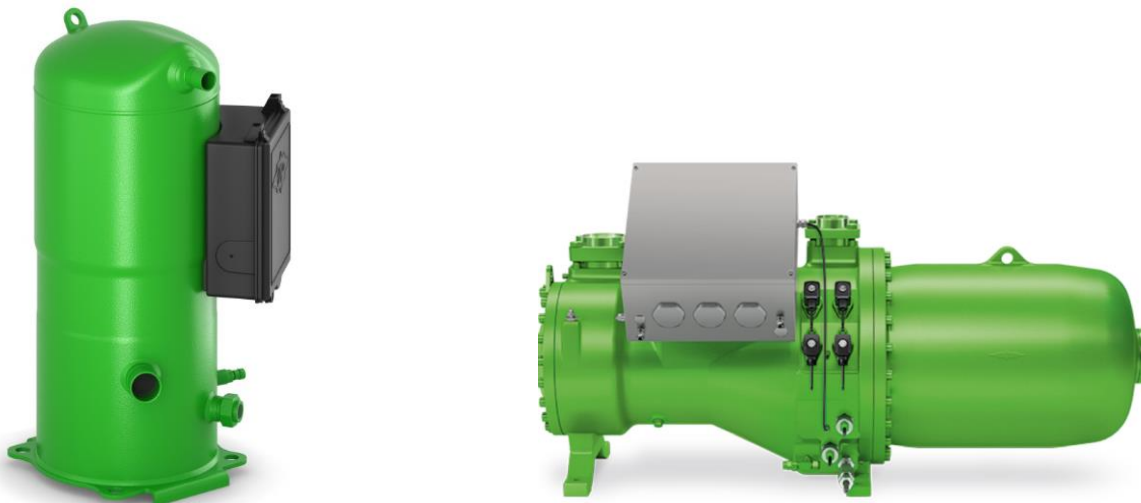
Compressors on chillers are large energy users and replacing them with more energy efficient systems is primarily the only solution. But now there's an alternative – Aersave, the latest addition to our portfolio of chiller technologies.

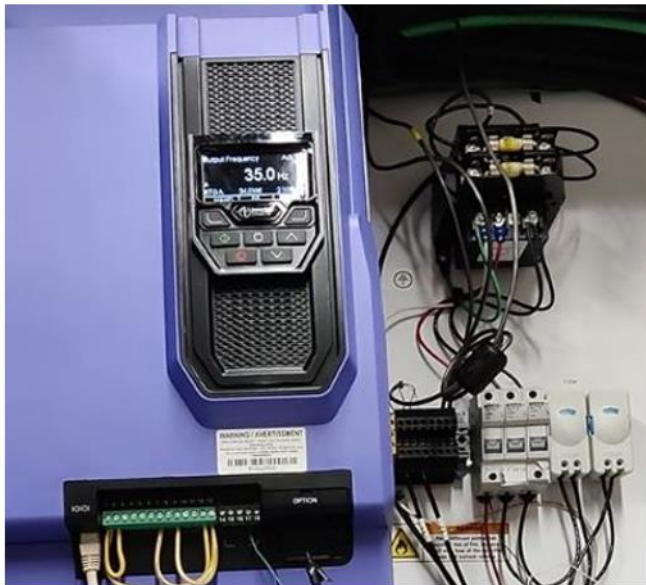
Aersave can help businesses significantly improve the energy efficiency of their chillers by as much as 50% whilst increasing their lifespan and boosting their ROI.

The Aersave smart compressor controller converts any 3-phase fixed speed compressor to a variable speed compressor.

Aersave can be used on any manufacturers' chillers, operates with any refrigerant and is compatible with all brands of BMS systems.

**Any 3Ph Fixed Speed compressor + Aersave = Variable speed compressor**





## Aersave Smart Compressor



50% energy savings



Increase chiller longevity



Compatibility with other brands

### Key features:

- Converts any 3-phase fixed speed compressor to a variable speed
- Controls and monitors the compressor with temperature sensors
- Protects the compressor from working with abnormally high discharge temperatures
- Decreased noise levels
- Precise room temperature and humidity control
- Protects compressor from short cycling
- No interference with existing controls
- Voltage optimisation and eliminates inrush current
- Protects the compressor from working with abnormally high discharge temperatures.
- Aersave can be used with any manufacturers' chillers
- Aersave operates with any refrigerant
- Aersave is compatible with all brands of BMS systems

## Operation

Aersave comprises two sensors instead of pressure transducers. One connects onto the suction line of the compressor, the other to the discharge line.

Its unique compressor control gathers the temperature from the two sensors' points, together with gathering data via Modbus from the device via the compressor, which are then input to an algorithm, which calculates what speed and compressor capacity is required for the complete system to achieve its demand capacity.

While working on lower frequency for prolonged periods of time an oil return sequence brings the oil back to the compressor to protect it.

Aersave also has multiple dip switch settings that can be switched dependent on the compressor type whether it is a reciprocating or scroll. It also controls the fan motor whether it is a condenser or evaporator fan motor.

As the technology can work with any type of refrigerant, there is no need to cut into the refrigerant line.

## Implementation site

The compressor technology was successfully implemented by one of the largest fresh food manufacturers in Europe where the chiller delivered a reduction in electrical consumption of 41%.