



this is not fine art...
it is a fact of life

With ACES you can save up to **30%** on air conditioning

aces
AIR CONDITIONING ENERGY SAVER

THE ENERGY SAVING BUSINESS





How does ACES work?

Air conditioning systems are usually dimensioned to cope with the extreme cooling demands of the few hottest days of the year (plus a safety margin). However, in most operational conditions, this maximum output is not required and the system is oversized. So running the system continuously until the room thermostat switches it off means that the system operates with excess capacity for most of the time.

This is where an ACES cuts in. Its sensor-driven software algorithms are designed to detect thermodynamic saturation and to optimize the compressor accordingly. When over capacity is detected, ACES switches the compressor off and avoids inefficient overcooling (see diagrams opposite).

ACES switches into "saver mode", the fan keeps running and your system makes maximum use of the stored cooling energy in the heat exchanger. Once the stored energy is used up, the compressor can work efficiently again and is switched back on. The set room temperature is reached without the inefficient parts of the cooling cycle. This results in significant energy savings without compromising cooling comfort.



Figure: Typical operating cycle of AC system controlled only by room thermostat

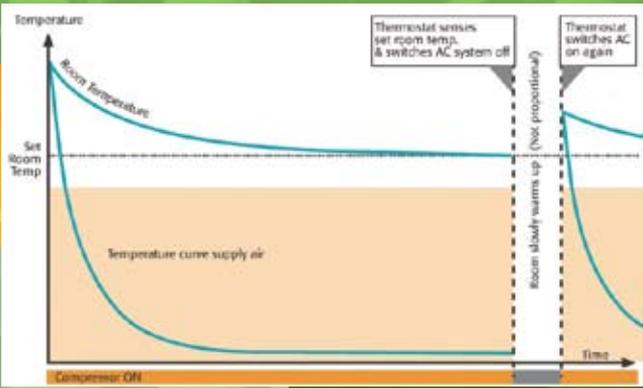
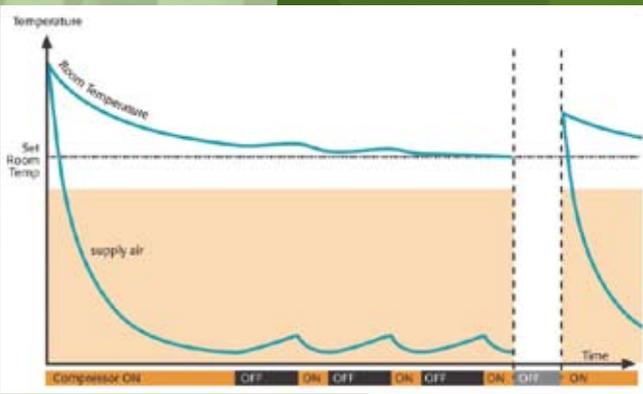


Figure: Typical operating cycle of AC system including ACES



BENEFITS OF AN ACES

- An ACES adds state-of the art intelligence to air-con systems and improves their energy efficiency.
- It achieves average energy savings of between 20% and 30% resulting in a short payback.
- It is a retro-fit product to upgrade existing units which can be installed in about 15 minutes.
- It is an excellent alternative to an expensive new system.
- It is engineered and manufactured in Europe to the highest quality standards.

CASE STUDY

An ACES was installed on a Single-Split AC unit in a hotel in the Northeastern Caribbean. Before and after readings showed ACES had delivered a kWh saving of 39% with projected financial savings approaching \$700 per year!



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Approvals may vary depending on model.