

ENERGY SAVING JTL Suction Pressure Optimisation Example HT Compressor Pack H04A



Benefits of installing suction pressure optimisation.

This document shows data taken from a site after installation of suction pressure optimisation for a HT compressor pack. For the purpose of monitoring the savings the optimiser was switched on and off daily for a two week period.

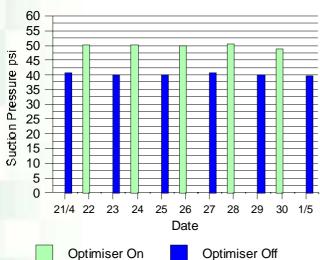
More details about the way in which JTL Suction Pressure Optimisers work are given on the sales support datasheet Doc No. 03081 - JTL Suction Pressure Optimisation Principles.

Mean Daily Suction Pressure

The following graph shows the mean daily suction pressure with the optimiser turned on and, for comparison, with the optimiser turned off.

The higher mean pressure results from a reduction in compressor run-time; this reduces energy consumption and the running cost of plant.

The higher evaporating temperatures reduce the ice burden on the evaporator coil, reducing the energy required to defrost the coil, and can improve the quality of the product displayed.

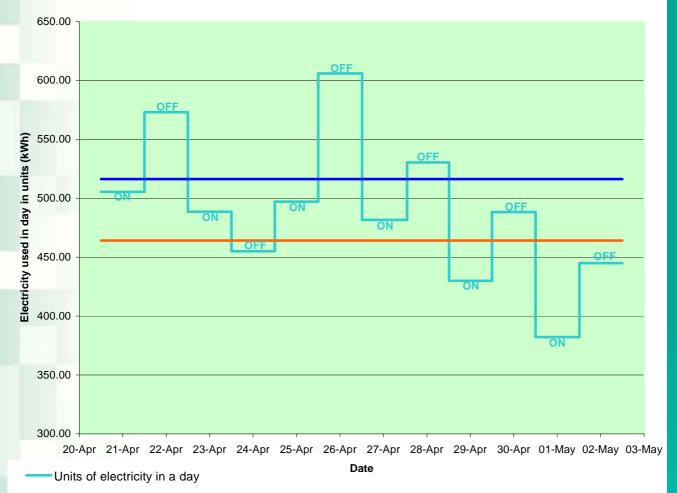


- Mean Suction Pressure with Optimiser on = 49.94 psi
- Mean Suction Pressure with Optimiser off = 40.18 psi
- Mean Suction Pressure Lift = 9 psi Refrigerant Type R404A



Energy Monitoring Data

The following graph shows the energy consumption when the optimiser is on and off over 24 hour periods.



- Average electrical units used on days when the optimiser is on
- Average electrical units used on days when the optimiser is off
 - Daily units (kWh) with Optimisation on = 464.17
 - Daily units (kWh) with Optimisation off = 516.31
 - Actual Savings = 10.1%

At 8.5 pence per unit (kWh) in this case £1618 pa

Doc No. 02891-application-htpack.pmd Issue 3 April 2004

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