

Report of Installation on Air Handling Unit at The Banque Togolaise Pour Le Commerce Et L'Industrie. Togo December 2004.

Savings of >17%. Payback < 1.5 Years

The Banque Togolaise Pour Le Commerce Et L'Industrie is one of the principal banks in Togo, (Gold Coast of Africa).

Air handling and air conditioning area key power consumer within such bank facilities. The EnviroStart was fitted to a small a small air handling system to prove the unit capa-



The AHU Showing the Motor and the Belt Drive.

The original switchgear was simply DOL, (direct on line), however this had historically created problems because of the motor driving the fan through belts and also, because of power limitations at certain times of day, starting DOL systems placed the supply lines at risk.

EnviroStart overcame the belt drive problems through soft start management and by also limiting the peak current, (through the use of the current limiting feature), it was possible to make the system to which it was fitted, suitable for use throughout the day.

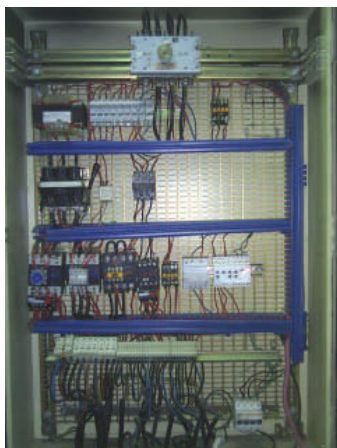
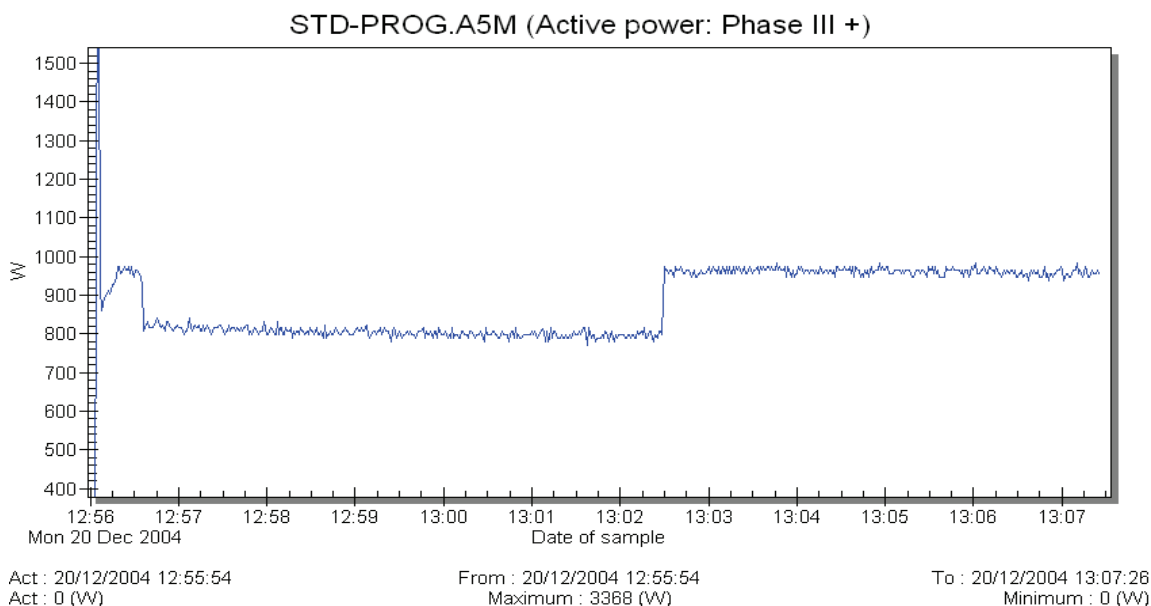
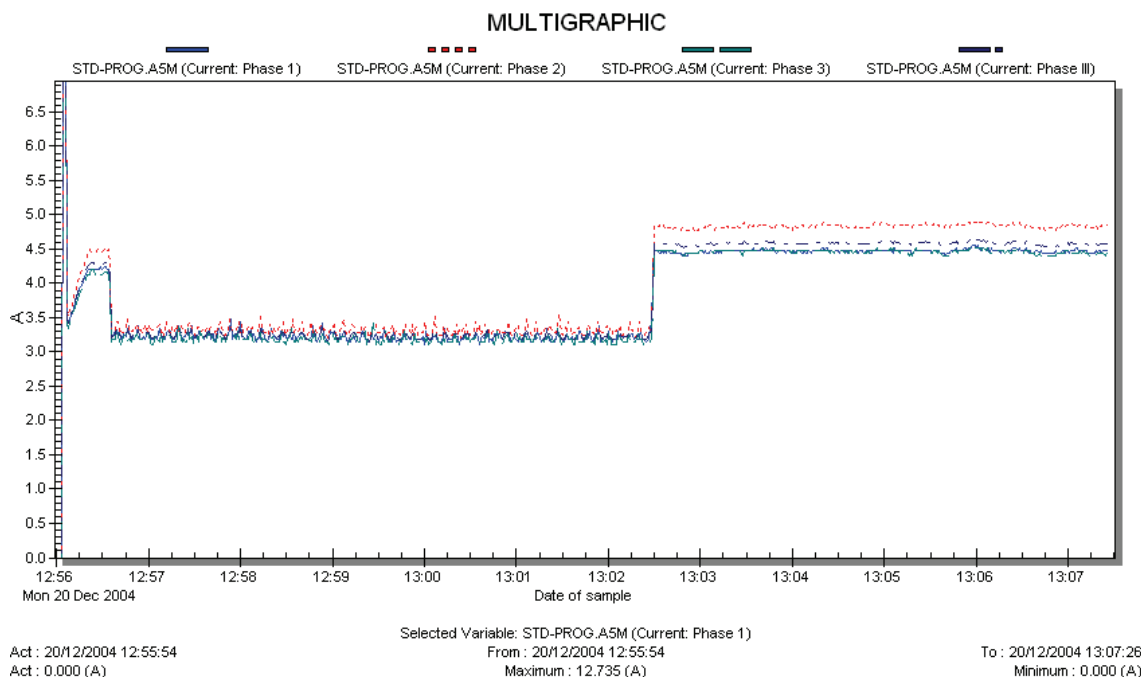
Humidity and wide operating temperature range were key to the installation being successful. Humidity levels over 98% RH are regularly encountered in Togo and within confined areas such as the plant room shown above, temperatures could easily increase to 45°C. EnviroStart units supplied into markets such as Togo are all conformally coated to ensure reliability and life under such conditions.



Power availability is limited in Togo and power is consequently proportionally expensive. EnviroStart within this application demonstrated the ability to overcome peak demand excursions and also to provide substantial energy consumption savings, (>17%), which would allow increase in the utilisation of available systems, (that is the Bank could have more systems running at any one time), and they could reduce their overall power consumption figures.



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The graphs above show the consumption of the motor both with EnviroStart fitted and also without EnviroStart fitted. Overall savings can be seen to be in the region of 17-20%.

You will notice that there is a gentle downward slope on the power consumption of the motor in the initial period, this is created by the motor cooling as a result of EnviroStart being fitted.

**Report compiled by
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