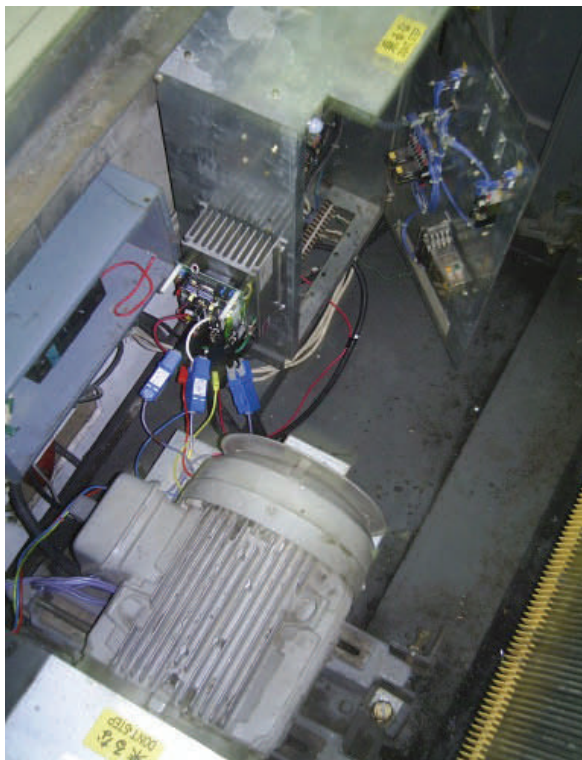


Report of Installation on Escalator at Malabon City Square Mall in Manila Savings of > 25% Payback < 18 Months

The Malabon Centre is one of the primary shopping facilities within the Malobon District approximately ten miles to the North of Manila.

The installation was on the up-bound escalator from the ground to the first floor and had been chosen for this trial as it was one of the highest use escalators within the facility.

The existing switchgear was standard Star Delta format contained within top pit of the escalator. EnviroStart, was installed in place of the Star Delta following the line contactor, using an auxiliary normally open contact on the Delta. Forward and Reverse operation were retained in this way as this was another, “must retain” requirement.



The Installed Unit at the Top “Pit” of the Escalator

Installation was completed using the default settings of the EnviroStart.



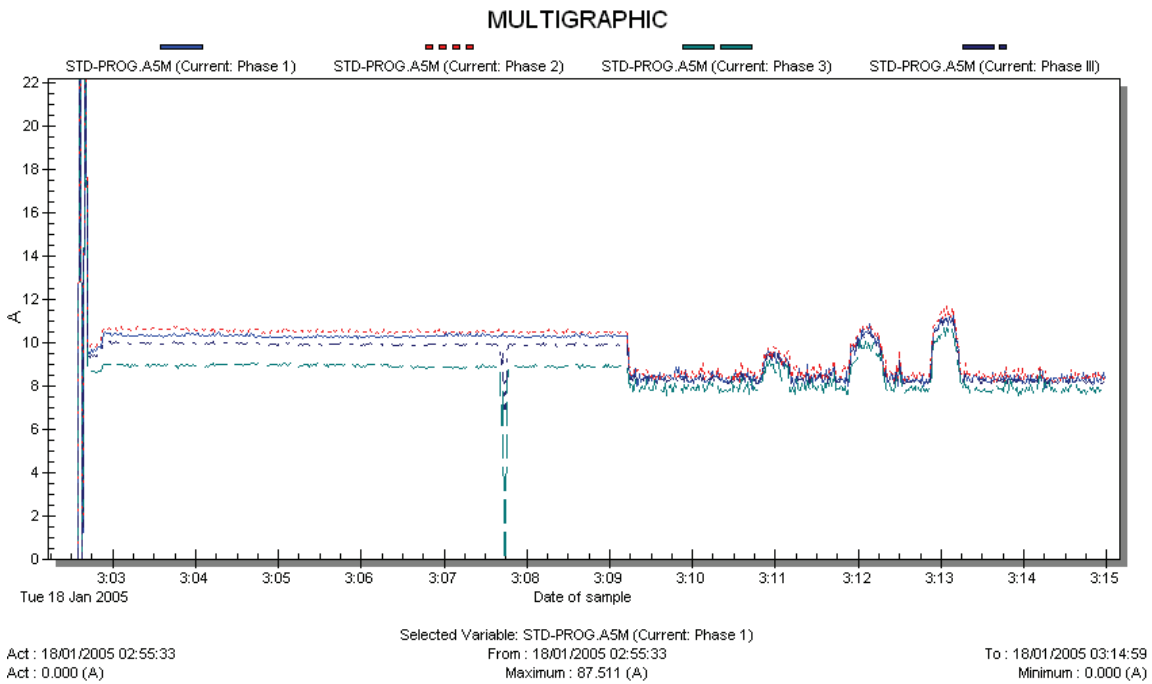
The Up-Bound Escalator on the Right was Fitted with EnviroStart

Once completed the system was tested by starting initially with no load on the escalator and then by loading the escalator on every step and starting from stationary. It was noted that the soft start feature of the EnviroStart actually improved the run from stationary to full speed making the start a lot less “jumpy”, this primarily because the drive chain linking the motor to the gearbox was now no longer distorting at start.

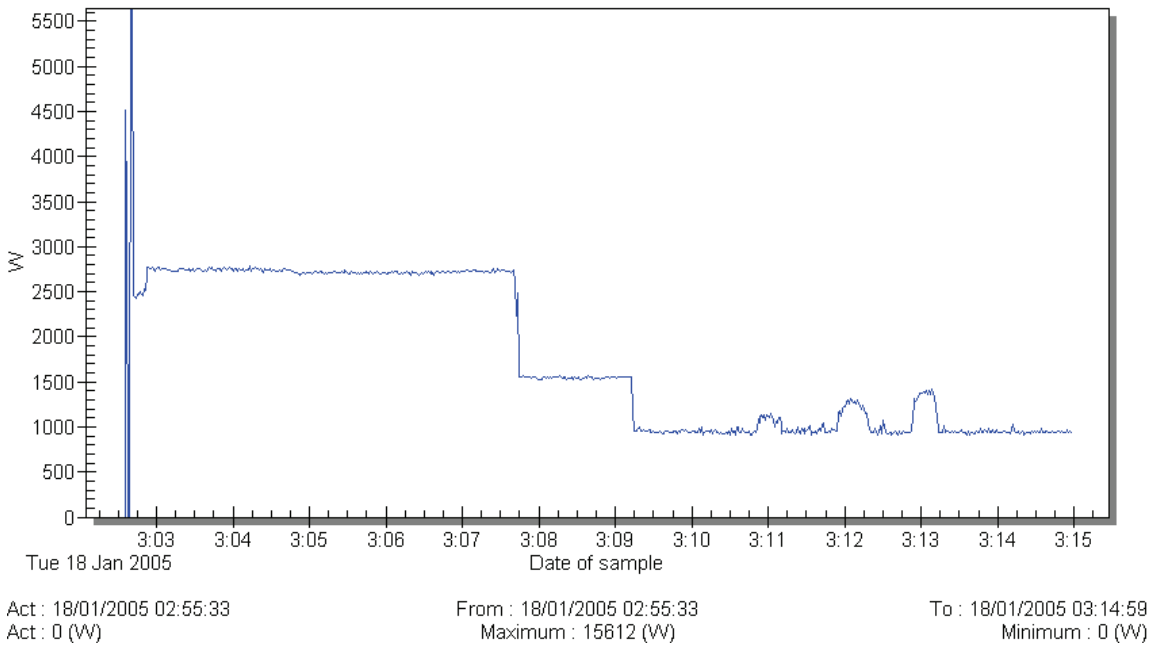
Once running the escalator was monitored during normal use and it was found that overall savings of >20% were consistently achieved throughout the period of operation.

Report of Installation on Escalator at Malabon City Square Mall in Manilla

Savings of > 25% Payback < 18 Months



STD-PROG.A5M (Active power: Phase III +)



The graphs clearly show the operational savings with EnviroStart in energy saving mode. kW savings of > 25% are consistently achieved.

**Report compiled by
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 EMS (European) Ltd 23rd March 2005**