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Cutting the cost of lighting

COMPANIES could be saving up to 30% on the energy required to run fluorescent lighting and other lighting types such as sodium and mercury vapour with the new Fluoresave.

Cold stores, distribution warehouses and retail outlets are just some of the areas which are high users of fluorescent lighting. For these companies the Fluoresave offers an opportunity to both reduce energy costs and increase the life of fluorescent tubes.

Conventional fluorescent tubes require maximum voltage for ignition, but once ignited there is no need to keep the voltage at such a high level.

Recognising this, the Fluoresave works by monitoring the lighting circuit and when the fluorescent lights reach stable operation, the Fluoresave switches to an energy-saving voltage. More specifically, the voltage is reduced by 15%, leading to a 15% drop in amperage and a subsequent 30% reduction in energy demand.

During operation Fluoresave continues to monitor the variation in the output of the current and mains voltage. When additional lights within the circuit are switched on, Fluoresave reverts back to mains voltage for ignition before returning to the energy-saving mode once the current current has stabilised.

Independent tests have confirmed savings ranging between 25% and 35% depending on the number of lights being switched on and off, age of the fittings and tubes and the age and performance of the capacitors.

The reduction in light output when in energy-saving mode is said to be indiscernible and other benefits accrue to the end-user such as the life of the fluorescent tubes is extended by up to 25% and less heat is emitted.

Fluoresave is available in three sizes – 12A, 20A and 32A – and can be simply retrofitted to existing conventional fluorescent lighting circuits, requiring no modification to light fittings. One unit can control up to 300 fluorescent lamps.

Although high frequency fluorescent lighting can achieve savings of around 15% over conventional fluorescent lighting, these have a substantially higher capital cost and, according to managing director Michael Dolphin, have a poor reputation for reliability and attract higher maintenance costs. "Fluoresave when used in conjunction with conventional fluorescent lighting now offers a real alternative to changing over to high frequency fluorescent lighting for those seeking to improve their energy efficiency at approximately half the capital cost," says Michael Dolphin. "Payback is normally within two years depending upon the number of hours the lighting is operated and the price paid for electricity," he claims. In some cases, paybacks have been achieved in as little as eight months.

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Designed and developed in Australia six years ago, Fluoresave is now manufactured in China and boasts an extensive list of installations throughout South-East Asia, Australia and South Africa. In the UK, headway has been made with installations in airports, banks, car parks, factories, offices and retail outlets.

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