

REFRIGERATION

Energy Efficiency Measures

Fridges and freezers use more electricity than any other domestic appliance because they run for 24 hours a day, all year round. However, refrigeration motors only need to draw full load when they are beginning to circulate the coolant liquid. Thereafter they continue to use more power than they need for the decreasing load. SAVApugs use electronic technology to regulate the electricity to match the actual demand required by the motor. A government study suggests that typical energy savings of about 20% are possible.

Evaluation

SAVApugs simply replace the original manufactured mains electrical plug. They were made available to City Council staff at cost price. In the first four months of the scheme 175 units were purchased by employees. The resulting savings are worth up to £2,200 and 19 tonnes of carbon per year. In addition, the life expectancy of fridge motors is increased because they are running more efficiently. The Energy Efficiency Centre is now distributing SAVApugs to the public at a rate of at least five a week.



Conclusion

The basic payback period for the SAVApug in this scheme was under 2 years, making it a very attractive proposition. This is a simple and effective way of reducing energy consumption, costs and harmful atmospheric emissions.