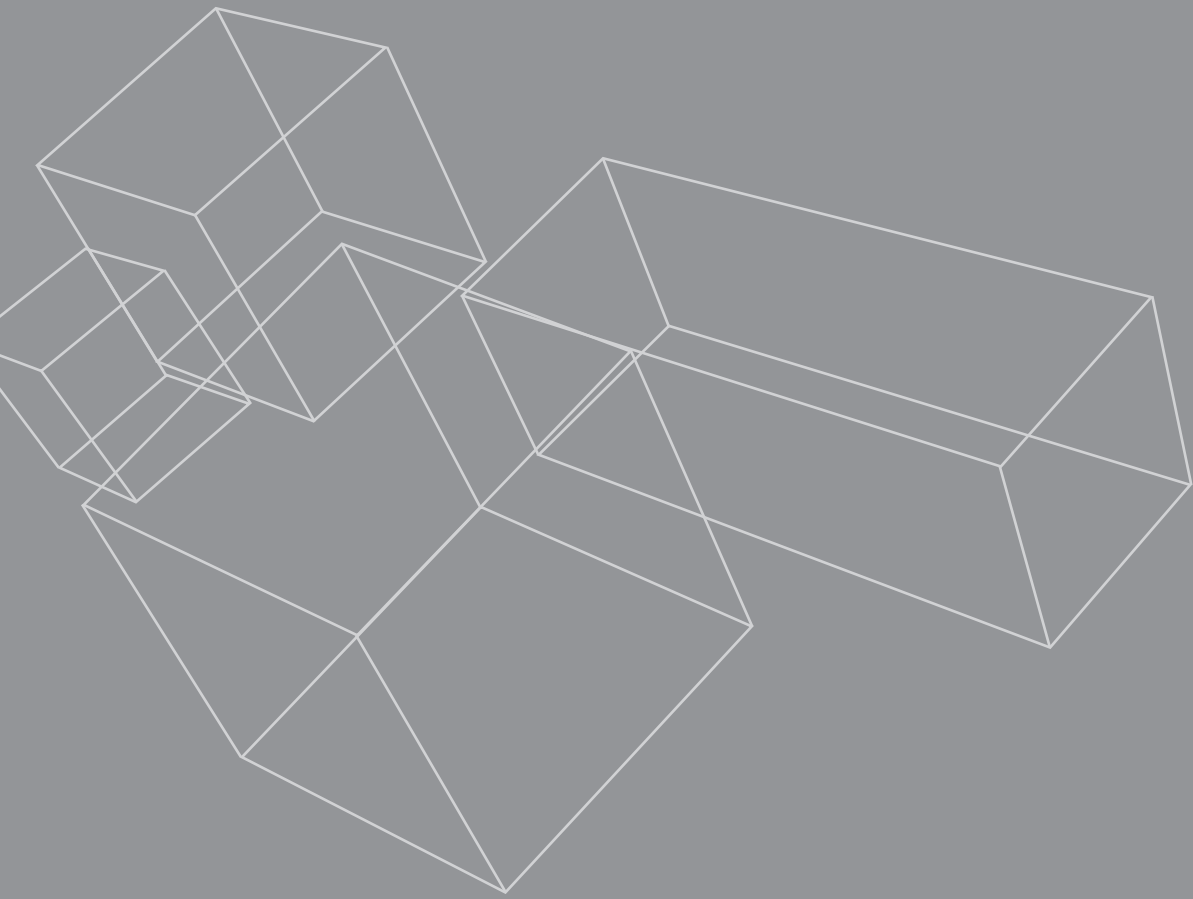


**GREEN POWER**

**BLAKLEY**  
E L E C T R I C S



## GreenPower Products



**THE POWER PROFESSIONALS**

**HIGHER POWER** **TRANS POWER** **SAFE POWER** **TEM POWER** **PRO POWER** **GREEN POWER**



Cert. No. 902091

## Sub-Metering and Data Logging

In order to manage consumption effectively it is imperative to know where power is being used, which necessitates measuring it. This philosophy is a main tenet of Part L of the Building Regulations, where the preferred approach is the widespread deployment of sub-metering, targeted at individual, significant loads. We are able to incorporate power meters on incoming and outgoing circuits of our Mains Distribution Assemblies (MDAs) and within Crane Isolators, which enables data on consumption and maximum demand to be measured.

If very detailed data is required on power consumption, we can incorporate meters within MDAs that have an RS485 link to an integral Remote Data Collection Unit (RDCU). The RDCU can be connected to a modem or PC, allowing power consumption data to be monitored in real time or stored for later analysis.

We can also arrange for power surveys to be carried out for an agreed period of time, which will provide an overview of the overall power consumed by the site, when it was consumed and the power factor. A detailed analysis of the data and Power Management recommendations are provided as part of the survey package.

See data sheet TMPDS33 for further details on Sub-Metering and Data Logging.



## Power Factor Correction (PFC)

PFC is a widely adopted and well established practice in Industry but it has not been widely used in the Construction sector. For a basic introduction to PFC, please refer to our PFC data sheet. The adoption of PFC can significantly reduce the size of supply required by a site, with the dual benefits of reduced cost and reduced carbon emissions.



Capacitor Load Bank accessed via rear door of assembly.

We have two methods of providing Power Factor Correction for construction sites. Firstly, through the supply of a main PFC assembly to be installed at the site intake. Secondly, through "local" PFC units to supply individual pieces of plant, such as tower cranes. The advantage of "local" correction is that savings are achieved within the site itself through the use of smaller supply cables, etc.

## Lighting Control

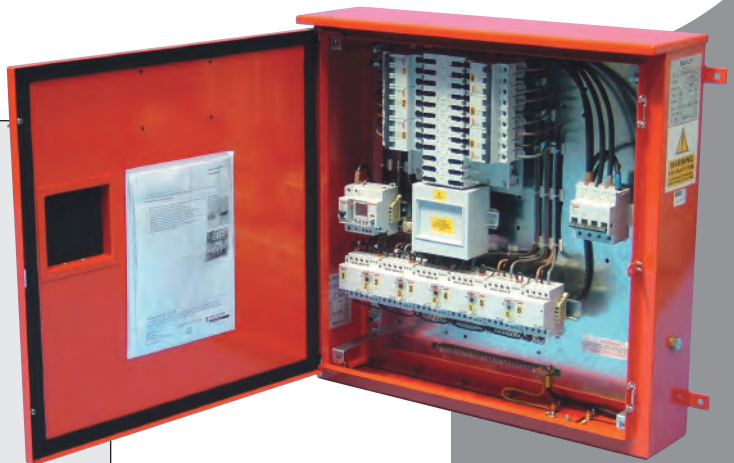
Switching off non-essential lighting when shifts have finished results in substantial energy savings. There are two good reasons why this has not been common practice on construction projects.

Firstly, irrevocable damage is done to batteries and tubes within emergency light fittings if their supply is routinely switched off at the end of every shift (and the batteries are allowed to discharge).

Secondly, once discharged, batteries in emergency fittings take over 24 hours to recharge fully. Therefore, if an emergency evacuation has to take place shortly after a shift has started and the batteries have not fully recharged, the emergency lighting will only operate for a short period (when fully charged they will provide illumination for 3 hours).

We have a range of solutions for these problems, which can be tailored to suit the requirements of most sites. They can be summarised as follows:

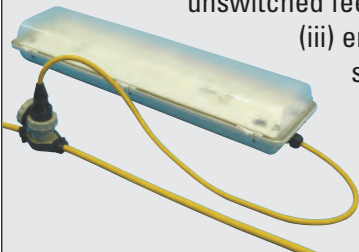
- (i) Mains Distribution Assemblies with time clock controlled MCBs to feed transformers that are dedicated to non-emergency fittings and separate MCBs to feed transformers that are dedicated to emergency fittings, which remain ON permanently. See data sheet ref. TMPDS24 for details.
- (ii) Site Transformers with time clock controlled MCBs to feed non-emergency fittings and separate MCBs to feed emergency fittings, which remain ON permanently. See data sheet ref. HPDS26 for details.
- (iii) 4 core wiring systems to provide unswitched supplies to emergency packs, enabling emergency lights to be turned OFF without damaging tubes or batteries. The same circuit can feed non-emergency fittings and emergency fittings that are to be switched OFF at the end of a shift and emergency fittings that are to remain ON at all times to provide security and safety illumination.



## Flori-67 4C

The all new Flori-67 plug-in fluorescent lighting system incorporates a 4 core supply cable and 4 pin plugs and sockets. This system combines the benefits of off site pre-wiring of fittings, with the speed and flexibility of a plug-in installation system, and the ability to have switched and unswitched feeds to fittings on the same circuit. See separate data sheet on Flori 67 4C.

Pre-wired fittings are available in three formats:  
(i) non-emergency; (ii) emergency with unswitched feed to the tube circuit;  
(iii) emergency with switched feed to the tube circuit.



Available from  
early 2008.



Patent applied for.

## Low Energy Lighting

We have a broad range of low energy lighting products and data sheets are available for most items.

### Fluorescent Lighting

All of our 110V fluorescent fittings incorporate power factor correction.

### Floodlighting

A competitively priced range of 110V and 230V Sodium and Metal Halide floodlights in ratings of 70W, 150W, 250W and 400W.

### Portable Task Lighting

We have a wide range of portable, low energy, 110V Task Lights utilising 1 x 38W 2D and 3 x 24W PL compact fluorescents, as well as 1 x 58W and 2 x 18W tubular fluorescents.

### Festoon and Bulkhead Lights

From early 2008 we will stock a range of 110V compact fluorescent lamps which can be used as a direct replacement for ES and BC GLS lamps used in festoon lighting strings and bulkhead lights.



## GREEN POWER

**BLAKLEY**  
ELECTRICS

The GreenPower range of products has been developed to help the construction industry meet its obligations in reducing energy consumption and emissions. Like many industries there is great scope for reducing energy consumption in the construction sector and our comprehensive range of products can be tailored to meet the needs of all sizes of project.

Blakley Electrics has unrivalled experience in the design and manufacture of equipment for temporary installations. The new GreenPower range encompasses a variety of diverse products including Sub-Metering and Data Logging, Power Factor Correction, Lighting Control Systems and Low Energy Lighting. We are confident that the adoption of GreenPower products will result in significant energy consumption reduction.

We are able to provide practical, realistic advice on the adoption of GreenPower products and we welcome the opportunity to discuss energy reduction for projects that are still at the planning stage or for projects where construction has already begun on site.



## Product Data Sheets

A comprehensive data sheet is available for the product groups within the GreenPower range. Details include the technical specification, photographs and the standard range available. The data sheets are available and can be downloaded from our website.



The Company reserves the right to change products without prior notice.

# THE POWER PROFESSIONALS

## **HIGHER POWER**

110V Portable Power & Lighting Products

## **TRANS POWER**

Power Transformers up to 50kVA for Indoor and Outdoor Applications

## **SAFE POWER**

Safe Supply Units, Sensor Based RCD Protection plus RCD & Monitored Earth Protected Sockets for Industry and Education

## **TEM POWER**

Temporary Distribution Assemblies for Construction, Events, Film & TV and the Military

## **PRO POWER**

Permanent Distribution Assemblies for Outdoor, Arduous or Special Applications

## **GREEN POWER**

Distribution and Lighting Equipment Designed to Provide Reduced Energy Consumption

- **SOUTH** 1 Thomas Road, Optima Park, Crayford, Kent DA1 4GA  
Tel: 0845 074 0084 Fax: 0845 074 0085
- **NORTH** Unit 55, Monckton Road Ind Estate, Wakefield WF2 7AL  
Tel: 0845 074 0086 Fax: 0845 074 0087

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