

## SBA Type - Automatically Controlled Capacitor Modules

These automatic modules are designed to fit into existing switchgear, control panels or pre-installed Power Factor Correction units.

Control is provided automatically, via an independent or existing Power Factor control relay.

The equipment incorporates a soft-switching contactor arrangement to minimise system disturbance caused by capacitor switching.

A pre-connection resistor system is integrated within the contactors, which reduces the effect of current inrush to a minimum.



- Highly reliable, low loss capacitors with self healing properties
- Safety protection system built into each capacitor element
- Modular capacitor tray arrangement
- The desired kVAr rating is built up in step sizes as required by the customer
- The interconnection of trays is achievable with minimal wiring requirements
- Main and control fusing as standard
- Capacitor modules can be designed specifically to suit the customers required dimensions and ratings

### Construction

The capacitor unit is constructed from the required number of individual capacitor elements. These elements are manufactured from impregnated metallized polypropylene and have a self-healing capability. Each element incorporates a fail-safe protection device and discharge resistors.

### Permissible Overloads

For our standard 400 / 415 Volt capacitor products:

Voltage:	440V	permanently
	484V	8 hours per day
	506V	30 minutes per day
	528V	5 minutes per day
	572V	1 minute per day
Current:	2 x $I_n$	continuously @400V

Other products available upon request.

### Permissible Temperature Range

Ambient  $-40$  to  $+60^{\circ}\text{C}$ .

### Losses

Dielectric loss 0.2 Watts per kVAr  
Total Capacitor losses 0.5 Watts per kVAr.

### Discharge Devices

Capacitor terminal voltage reduced to 50 Volts within 1 minute (exceeding BS EN 60831).

### Paint Specification

RAL 7032 (Eurogrey) as standard.  
Alternative specifications supplied upon request.

### Rating

Rated at 415 Volts 3 phase 50 Hertz.  
Up to 129.6 kVAr per module as standard.

### Standards

PFC equipment manufactured to:

VDE 0560 part 41,	BS EN 60831-1,
BS EN 61921,	BS EN 60831-2.

# SBC Type - Statically Controlled Capacitor Modules

Static Power Factor Correction modules for placement within an existing control panel, switchgear cubicle or Power Factor Correction unit.

These modules can be independently switched, if required, via customers own controlgear.

- Highly reliable, low loss capacitors with self healing properties
- Safety protection system incorporated into each capacitor element
- For switchgear and control panel manufacturers wishing to install Power Factor Correction within their own enclosures
- Desired kVAr rating can be built up in step sizes dictated by the customer's own requirements
- Custom built capacitor trays designed for special applications
- Terminal blocks or flying leads and fixing holes provided for ease of installation



## Fully or partially enclosed Capacitor Modules

These modules are specifically designed for customers who wish to integrate Power Factor Correction within switchgear or control cubicles.

The low losses associated with these capacitors allow the units to be contained within their own enclosure. This is applicable for installations in extreme or dusty atmospheres.

## Construction

The capacitor unit is constructed from the required number of individual capacitor elements. These elements are manufactured from impregnated metallized polypropylene and have a self-healing capability. Each element incorporates a fail-safe protection device and discharge resistors.

## Permissible Overloads

For our standard 400 / 415 Volt capacitor products:

Voltage:	440V	permanently
	484V	8 hours per day
	506V	30 minutes per day
	528V	5 minutes per day
	572V	1 minute per day
Current:	2 x In	continuously @400V

Other products available upon request.

## Permissible Temperature Range

Ambient -40 to +60°C

## Losses

Dielectric loss 0.2 Watts per kVAr

Total Capacitor losses 0.5 Watts per kVAr

## Discharge Devices

Capacitor terminal voltage reduced to 50 Volts within 1 minute (exceeding BS EN 60831)

## Paint Specification

RAL 7032 (Eurogrey) as standard.

Alternative specifications supplied upon request

## Rating

Rated at 415 Volts

3 phase 50 Hertz.

Up to 162 kVAr per module as standard.

## Standards

PFC equipment manufactured to:

VDE 0560 part 41,

BS EN 60831-1,

BS EN 61921,

BS EN 60831-2.



Our policy is one of continuous improvement and we reserve the right to alter any details of design from that shown in this leaflet without prior notice.