



High quality and robust accessories offering durability, reliability and ease of installation



Lamp Holders & Pendants



Energy Saving Fittings





Ceiling Switches

Fluorescent Starters

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Cat No.	Description	Inner Carton	Outer Carto
.ow Energ	y Batten Holder		
63ES13W	13 Watt (excluding lamp)	1	10
	<ul> <li>Product conforms to all relevant British and European Stand EMC requirements</li> <li>G24q lamp holder</li> <li>Low energy consumption</li> <li>13 Watt equivalent to 60 Watt incandescent</li> <li>Manufactured to BS EN 60598</li> </ul>	dards and	RoHS
			COMPLIAN
	Iders Enclosed (T2)	10	
63	2 terminal body, 3 terminals + earth in base, PVC tails, HO skirt	10	100
63		10 10	100 100
	2 terminal body, 3 terminals + earth in base, PVC tails, HO skirt	10	

Batten H	olders (T2)		
752	3 terminals with short skirt	10	100
753	3 terminals with HO skirt	10	100
747	3 terminal angled with HO skirt	10	100
748	3 terminal angled with short skirt	10	100
201E	Back plate-deep type, 6 knockouts + earth terminal, suitable for 747 and 748	20	200

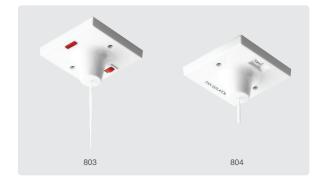




· Manufactured to BS EN 61184

Cat No.	Description	Inner Carton	Outer Carton
Ceiling Sw	itches		
801	6 amp 1 way	10	10
802	6 amp 2 way	10	10
803	45 amp double pole with power indicator	10	10
804	10 amp triple pole fan isolator	10	10
801PC	Replacement pull cord, 1.5m	20	20

Supplied with approximately 1.5 metres of cord
Individually bagged
Manufactured to BS EN 60669-01





Decorative	Decorative Ceiling Roses and Switches				
802BRG	6 amp 2 way ceiling switch Brass finish	5	50		
802CH	6 amp 2 way ceiling switch Chrome finish	5	50		
802ST	6 amp 2 way ceiling switch Steel finish	5	50		
661BRG	Brass finish cover with polycarbonate 3" diameter base.	5	50		
661CH	Chrome finish cover with polycarbonate 3" diameter base.	5	50		
661ST	Steel finish cover with polycarbonate 3" diameter base.	5	50		

Supplied with approximately 1.5 metres of cordIndividually bagged

· Manufactured to BS EN 60669-01



661CH



661ST

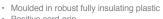


802CH



Cat No.	Description	Outer Carton	Inner Carton
Lamp Hold	lers - Heat Resistant (T2)		
720	Cord grip with short skirt	20	20
721	Cord grip with HO skirt	20	20
725	1/2" 26 BSB threaded entry with short skirt	20	20
728H	10mm threaded entry with short skirt	20	20
252	Pushbar lamp holder-switched ½" 26 BSB with threaded entry and short skirt	20	20
7368-05	Short skirt	100	1000
7369-05	HO skirt	100	1000





- Positive cord-grip
  Manufactured to BS EN 61184
  2A at 250V AC temperature rating



100

### Decorative Lamp Holders

LHBRSW-BG Push-bar switched lamp holder, 1/2" 26 BSB threaded entry with mounting kit





### Fluorescent Starters

Cat No.	Description	Inner Carton	Outer Carton
Fluoresce	ent Starters		
FSU	4-80 Watt	10	100
FS2	4-22 Watt single series	10	100
FS125	70, 75, 80, 85, 100-125 Watt	10	100



- Manufactured to BS EN 60155
  All starters are kitemarked



Lamp Type	Wattage	Circuit	FSU	FS125	FS2
Fluorescent Starte	r Specifications				
150mm	4 Watts	Single	220/250V		110/130V
		Twin Series			220/250V
225mm	6 Watts	Single	220/250V		110/130V
		Twin Series			220/250V
300mm	8 Watts	Single	220/250V		110/130V
		Twin Series			220/250V
525mm	13 Watts	Single	220/250V		
450mm	15 Watts	Single	220/250V		110/130V
		Twin Series			220/250V
360mm	16 Watts	Single	220/250V		110/130V
600mm	18/20 Watts	Single	220/250V		110/130V
		Twin Series			220/250V
Circline	22 Watts	Single	220/250V		110/130V
900mm	30 Watts	Single	220/250V		
Circline	32 Watts	Single	220/250V		
600mm	40 Watts	Single	220/250V		
1200mm	36/40 Watts	Single	220/250V		
1500mm	85/80 Watts	Single	220/250V	240/250V	
1800mm	70/85 Watts	Single	220/250V	240/250V	
2400mm	100/125 Watts	Single		240/250V	

# Fluorescent Starters

Cat No.	Description	Inner Carton	Outer Carton
Pulsestart	er		
EFS120	Pulsestarter	10	100
EFS120P	Pulsestarter potted	10	100
EFS600	Pulsestarter	10	100
EFS600P	Pulsestarter potted	10	100
EFS300	Rapid start	10	100
EFS400	Cold start	10	100



Lamp Wattage	Linear G13 T12	Linear G13 T8	Linear G5	Circular G10q	Compact TC-S G23	Compact TC-D/TC-TG24 /GX24	Compact TC-L/F 2G11	TC-DD GR10Q
Pulsestarter S	Selection Guide							
5					EFS 120			
7					EFS 120			
8			EFS 120					
9					EFS 120			
10						EFS 600		EFS 600
11					EFS 600			
13			EFS 600			EFS 600		
15	EFS120							
16								EFS 120
18	EFS 120					EFS 600	EFS 600	
20		EFS 120						
21								
22				EFS 120				
24								
26							EFS 600	
28								EFS 600
30	EFS 600	EFS 600						
32				EFS 600				
34						EFS 600		
36	EFS 600					EFS 600		
38	EFS 600							EFS 600
40		EFS 600						
58	EFS 600							
60				EFS 600				
65		EFS 600						
70	EFS 600							
75		EFS 600						
80		EFS 600						
85		EFS 600						
125		EFS 600						

Pulsestarter is not recommended for use with lamps below 15W

• Pulsestarter is not compatible with 2400mm 100W T12 lamps

### **Technical Information**

#### Pulsestarter EFS 120

Lamp types: Linear fluorescent lamps from 450mm 15W to 600mm 20W, T8 (26mm) or T12 (38mm) diameter.

- 16W 4 pin 2D lamps with GR 10g bases.
- · 22W circular lamps.
- · Supply voltage: 110-250V ac RMS 50/60 Hz
- Operating temperature: -30°C + 75°C
- · Preheat: 2.8 seconds nominal at 25°C ambient. Sinusoidal
- · H.V. pulsing: Single pulse (1300V nominal) when striking healthy lamp in normal room ambients.
- Starter will supply additional pulses if lamp fails to conduct on first pulse (e.g in extremes of temperature, or in worn lamp situations).
- · Safety Shutdown: Within 3.5 seconds at 25°C ambient.

#### Pulsestarter EFS 120P

- · Potted Pulsestarter
- Technical details as EFS 120
- BASEEFA 02ATEX 0135LL
- EN 50021: 1999.
- Temperature to 75°C
- · Complete with 6 inch tails

#### Pulsestarter EFS 600

Lamp types: Linear fluorescent lamps from 900mm 30W to 2400mm 125W, T8 (26mm) or T12 (38mm) diameter. (Excluding 2400mm 85W and 100W and 1500mm 115W - 140W sunbed lamps)

- · 18W to 36W compact fluorescent lamps with 4 pin 2G11 and G24 bases.
- · 28W and 38W 4 pin 2D lamps with GR 10q bases.
- Supply voltage: 200-260V ac RMS 50/60 HZ
- Operating temperature: -30°C + 75°C
- · Preheat: 2.3 seconds nominal at 25°C ambient. Sinusoidal
- · H.V. pulsing: Single pulse (1300V nominal) when striking healthy lamp in normal room ambients.
- Starter will supply additional pulses if lamp fails to conduct on first pulse (e.g in extremes of temperature, or in worn lamp situations).
- · Safety Shutdown: Within 3 seconds at 25°C ambient.

#### Pulsestarter EFS 600P

- · Potted Pulsestarter
- Technical details as EFS 600
- BASEEFA 02ATEX 0135LL
- EN 50021: 1999.
- Temperature to 75°C
- · Complete with 6 inch tails

#### Pulsestarter EFS 300

Lamp types: 4-85W and 125W linear lamps T8/T12, 16-38w TC-DD 18-26w TC-DE/TE, 24-36w TC-L 22-60w circular and U-tubes

- Supply voltage: 200-260V AV 50/60 HZ single lamps
- Operating temperature: 5°C TO + 75°C
- Preheat: 0.3s nominal @ 20°C
- H.V. pulsing: Single pulse 1500V maximum
- Safety Shutdown: Within 1 second @ 20°C
- Markings: CE

### Technical Information

### Pulsestarter EFS 400

- Lamp types: 18-65W linear lamps T8/T12, 16-38w tc-dd, 18-26w TC-DE, 24-36w tc-l 22-60w circular and U-tubes
- · Supply voltage: 200-260V AC 50/60 HZ single lamps
- Operating temperature: -40°C to +75°C
- Preheat: 2.0S nominal @ 20°C
- 3.0S nominal @ -40°C
- · HV pulsing: Single pulse 1500V maximum
- Safety shutdown: Within 2.5 seconds @ 20°C, Within 3.5 seconds @ -40°C
- Markings: CE and ENC 12

#### Pulsestarter Technical Section

More than 20 years research, development and production, provides the most reliably proven Electronic Starter for fluorescent lamps in the world.

Specified for many prestigious projects worldwide, the Pulsestarter has set international performance standards which are still to be equalled.

The Pulsestarter offers a number of advantages in relation to conventional devices:

- Fully optimised electronic ignition sequence
- Significantly extends standard lamp life
- · Improved lumen maintenance
- Automatic failed lamp safety shut down
- Automatic reset
- · Smooth no flicker starting
- · Low temperature starting
- Long life perdormance

The Pulsestarter increases lamp life and therefore significantly reduces harmful mercury waste.

The Pulsestarter is environmentally friendly.

Pulsestarter was the world's first electronic starter to provide a fully optimised programmed strike mode for fluorescent lamps. It has been much refined since its conception in the 1980s.

T8 (26mm) lamps are more difficult to strike than their T12 (38mm) predecessors, and have less robust cathode assemblies. Cathode wear during starting is the limiting factor on tube life, and with the introduction of energy saving T8 lamps, this has increased.

When a tube reaches the end of its life, a lamp failure monitoring circuit shuts the starter down until the lamp is replaced - avoiding repeated attempts to strike failed or faulty lamps and preventing excessive heat build up in the control gear and intrusive flashing.

Although more costly than the unit it replaces, Pulsestarter offers in real terms a 70% reduction in fluorescent maintenance labour costs, as well as extending tube life by over 50%.

At the 7,500 hours nominal life quoted by most lamp manufacturers, the user can expect to have suffered 30% failures due to cathode damage. At this point the light output has fallen to only 90% of design lumens.

The Pulsestarter programme strike mode was developed to ensure that the new lamps delivered a real saving - and not just an energy saving which could be cancelled by increased maintenance costs.

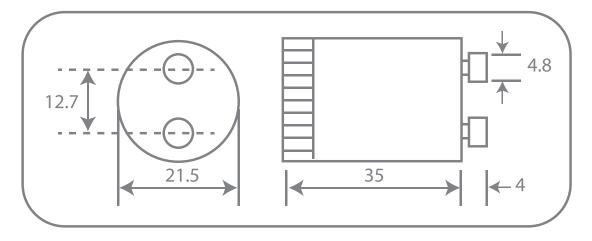
Pulsestarter avoids the problem of cold striking by fully heating the cathodes to optimum operating temperature before applying a controlled striking pulse. Therefore wear during starting is virtually eliminated, and tube life is extended to the point where lumen deficiency determines replacement. If the Pulsestarter had been fitted, the early cathode failures would have been eliminated, and the user could have chosen to relamp at a point when lamp output had fallen to a predetermined level. Typically, if 85% of design lumen output was considered the minimum acceptable level, the lamps could be changed at 15,000 hours. With Pulsestarter, the cathodes would still be functioning 100%.

Using solid state construction, Pulsestarter offers long life performance, and need not be replaced during planned lighting maintenance - saving the cost of replacement starter switches.

Our policy of achieving international approvals is your assurance of our consistent quality.

# Fluorescent Starters

### Pulsestarter Technical Section



Canister to BSEN 60155: Nominal dimensions in millimetres Canister and Base materials: Polycarbonate. VO rated

Pin material: Brass.

An encapsulated two wire connection version is also available.

Approved to group two non-incentive (N) License No. BASEEFA 02 ATEX 0135LL

### Circuits

The circuit is optimised for use in standard lagging power factor switch start fluorescent circuits, and all of the parameters quoted relate to use in this configuration.

# Lighting Accessories

Cat No.	Description	Wattage	Inner Carton	Outer Carton
Link Lights				
T46W	Miniature fluorescent	6 Watt	-	12
T410W	Miniature fluorescent	10 Watt	-	12
T416W	Miniature fluorescent	16 Watt	-	12
T420W	Miniature fluorescent	20 Watt	-	12
T430W	Miniature fluorescent	30 Watt	-	20



Designed to BS EN 60598-2

IP20, indoor use only CE marked ٠

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٠ Complete with lamp .

F marked

· Units are individually switched

· Supplied with 2 metre lead with female connector



Link Light L	Link Light Lamps				
T4SL6W	6W Triphosphor lamp	6 Watt	-	100	
T4SL10W	10W Triphosphor lamp	10 Watt	-	100	
T4SL16W	16W Triphosphor lamp	16 Watt	-	100	
T4SL20W	20W Triphosphor lamp	20 Watt	-	100	
T4SL30W	30W Triphosphor lamp	30 Watt	-	100	

Replacement lamps