

# A premium offer

Compact Fluorescent Lamps that are more than just energy-savers





## CFL premium energy-savers

Energy prices are rising and the pressure is on to reduce greenhouse gas emissions. The importance of compact fluorescent lighting is therefore constantly increasing and this sector of the lighting market is growing by 60% annually.

GE's compact fluorescent (CFL) range is both efficient and versatile, offering like-for-like replacement for most legacy types of GLS bulb. The range also addresses the specific needs of the domestic market and includes products which are attractive, fast to warm up and are dimmable.







The benefits of compact fluorescent:

- Less energy used: energy class A uses 5 times less energy than incandescent
- Reduces greenhouse gas emissions
- Longer life up to 15000 hours (6 to 15 times longer life than incandescent)
- Less maintenance due to long life
- Shaped like traditional GLS: one-for-one replacement with no ballast required
- Miniaturised design & wide range of shapes: GLS, Spiral, Candle, Spherical, Reflector, Stick

#### Premium new electronic CFL lamps

The alternative to incandescent lamps



Incandescent GLS



GE Energy Smart™

The original shape



Spiral T2

Extra long life from a tiny lamp



Spiral T3 Dimmable

Create the right mood with lighting



32W Spiral T4 High Power Factor

More light, less cost

#### **Environmental lighting**

Compact fluorescent lamps give more light and less heat, which means less energy is wasted. That is why domestic and commercial users everywhere in the world are being encouraged to switch from incandescent lighting to compact fluorescent.

Incandescent lamps convert only about 5% of the energy they consume into light. The remaining 95% is wasted as heat. Compact fluorescent lamps convert up to 25% of the electricity into light. The energy that they save means less power production and less  $C0_2$  in the atmosphere - and they also save users money on their electricity bills.

Another benefit of compact fluorescent lamps, is that they last up to 15 times longer than incandescent lamps, and so reduce environmental impact.

Maintenance cost is also reduced as re-lamping is less frequent.



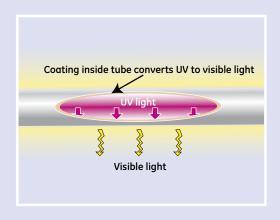
## **ecomagination**\*\* a GE commitment

Ecomagination is GE's commitment to invest in the future with innovative solutions to environmental challenges and delivers valuable products and services to customers while generating profitable growth for the company. GE works with customers, governments, non-governmental organisations and global technologists to provide products and services that help tackle some of the world's biggest challenges. These include the need for cleaner, more efficient sources of energy, reduced emissions and abundant sources of clean water.

#### How does a compact fluorescent light bulb work?

Fluorescent light bulbs (including compact fluorescents) are more energy-efficient than regular bulbs because of the different method they use to produce light. Incandescent bulbs (also known as GLS bulbs) create light by heating a filament inside the bulb; the heat makes the filament white-hot, producing the light that you see. A lot of the energy used to create the heat that lights an incandescent bulb is wasted.

A fluorescent bulb, on the other hand, contains a gas that produces invisible ultraviolet light (UV) when the gas is excited by electricity. The UV light hits the white coating inside the fluorescent bulb and the coating changes it into visible light. Because fluorescent bulbs don't use heat to create light, they are far more energy-efficient than regular incandescent bulbs.



## What's the difference between compact fluorescent and fluorescent tubes?

The primary difference is in size; compact fluorescent bulbs are made in special shapes (which require special technologies) to fit in standard household light sockets, like table lamps and ceiling fixtures. In addition, most compact fluorescent lamps have an "integral" ballast that is built into the light bulb, whereas most fluorescent tubes require a separate ballast independent of the bulb. Both types offer energy-efficient light.

#### Other new top-selling CFL products from GE

GE's range of premium compact fluorescent lamps offer a range of features that take advantage of GE's technological developments - from the dimmable T3 to the extra long life of the T2. There's also a replacement for the 150W incandescent bulb.

## **Electronic Spiral T3 Dimmable**

This premium CFL lamp is dimmable: this means that lighting can be adjusted to suit mood and also extra energy savings can be made

- 20W T3
- Fast warm-up
- 10,000 hours life

- Reduced mercury content <2mg
- 15 100% continuous dimming



### **Electronic Spiral T2**

Extra long life from this attractive class A lamp

- 15,000 hours life
- 8, 12, 15, 20, 23W range
- Reduced mercury content <2mg
- Reduced size
- Instant start
- A class energy



## 32W Electronic Spiral T4 **High Power Factor**

The alternative to 150W GLS

- Abundant light from only 32W (2100 lumen)
- High wattage lamp greater energy saving
- 10,000 hours life
- High Power Factor (0.99) for higher energy efficiency







# **GE Energy Smart**<sup>™</sup>

# At last, the New energy saving lamp that everyone's been waiting for

Exciting CFL products from GE



GE Energy Smart™ provides the perfect combination of classic bulb shape with energy-saving CFL. This premium glass product is only available from GE.

a product of **ecomagination**\*\*

- 25-100W incandescent equivalent
- 9, 11, 15, 20W
- Instant start
- Fast warm-up (9, 11W)
- Provides high in-class lumens
- Best lumen output in its class
- Mercury content less than 2mg;<1mg from 2010</li>
- No plastic housing

#### GE's smart technology



GE Energy Smart™ combines the tried-and-tested shape of traditional GLS light bulbs with the energy-saving benefits of compact fluorescent. And while there are other products that achieve a shape similar to GLS, only GE Energy Smart™ offers true like-for-like replacement.

GE's product is made possible by miniature electronics developed by GE. The technology of GE Energy Smart™ is protected by several patent applications. This miniaturisation means that the ballast which is normally housed in an unsightly and large base can be neatly enclosed in the bulb. So the classic shape of a GLS bulb is simulated in a compact fluorescent lamp.

This means that not only does GE Energy Smart™ have the aesthetics of traditional bulbs but also GE Energy Smart™ is the only compact fluorescent lamp that is a true GLS replacement. Many other GLS-style compact fluorescent lamps do not fit all sockets or light fittings.

Unique design - only from GE



#### **Specifying CFL**

Wattage [W]	Volts [V]	Cap	Description	Product code	Lumen [lm]	CCT [K]	CRI [Ra]	Life [h]	Length [mm]	Diameter [mm]	EEC	Pack Qty
9	220-240	E27	FLE9AG/T2/830/E27	97034	450	3000	82	10,000	118	60	Α	6
		B22	FLE9AG/T2/830/B22	97041	450	3000	82	10,000	120	60	Α	6
		E27	FLE9AG/T2/865/E27	97042	450	6500	82	10,000	118	60	Α	6
11	220-240	E27	FLE11AG/T2/830/E27	97044	550	3000	82	10,000	118	60	Α	6
		B22	FLE11AG/T2/830/B22	97045	550	3000	82	10,000	120	60	Α	6
		E27	FLE11AG/T2/865/E27	97052	531	6500	82	10,000	118	60	Α	6
15	220-240	E27	FLE15AG/T2/830/E27	97053	800	3000	82	10,000	118	60	Α	6
		B22	FLE15AG/T2/830/B22	97054	800	3000	82	10,000	120	60	Α	6
		E27	FLE15AG/T2/865/E27	97055	800	6500	82	10,000	118	60	Α	6
20	220-240	E27	FLE20AG/T3/830/E27	97056	1152	3000	82	8,000	138	67	Α	6
		B22	FLE20AG/T3/830/B22	97057	1152	3000	82	8,000	140	67	Α	6
		E27	FLE20AG/T3/865/E27	97058	1152	6500	82	8,000	138	67	Α	6
Electronic Sp	oiral T3 Dimmal	ole - 10,000	) hours									
20	220-240	E27	FLE20HLX/T3/827/E27 DIM	97030	1152	2700	82	10,000	138	60	Α	6
		B22	FLE20HLX/T3/827/B22 DIM	97031	1152	2700	82	10,000	138	60	Α	6
Electronic Sp	oiral T2 - 15,000	) hours										
8	220-240	E14	FLE8HLX/T2/827/E14	76153	460	2700	80	15,000	98	46	Α	8
		E27	FLE8HLX/T2/827/E27	76154	460	2700	80	15,000	86	46	Α	8
12	220-240	E14	FLE12HLX/T2/827/E14	76155	700	2700	80	15,000	112.5	53	Α	6
		E27	FLE12HLX/T2/827/E27	76157	700	2700	80	15,000	100	53	Α	6
15	220-240	E27	FLE15HLX/T2/827/E27	76156	950	2700	80	15,000	100	53	Α	6
20	220-240	E27	FLE20HLX/T2/827/E27	76158	1200	2700	80	15,000	120	57	Α	6
23	220-240	E27	FLE23HLX/T2/827/E27	76159	1380	2700	80	15,000	126	58	Α	6
32W Electro	nic Spiral T4 Hig	gh Power F	actor - 10,000 hours									
32	220-240	E27	FLE32HLX/T4/827/E27 HPF	76152	2100	2700	80	10,000	172	66	Α	6

#### Guide to product description:

 $\hbox{AG: "All Glass" bulb, the only true frosted incandescent replacement (GE Energy Smart \ref{smart})}$ 

HLX: Heliax (spiral) shaped product

DIM: Dimmable

#### Availability:

Electronic Spiral T2: October 2009

32W Electronic Spiral T4 High Power Factor: October 2009



