LED LAMP SPECIFICATIONS:	12W	18W	24W
Luminaire lumens (with diffuser): Warm White, Cool White, Daylight White	_	1900 lm 1970 lm 1900 lm	2500 lm 2530 lm
Lumens from chip (array): Warm White, Cool White, Daylight White	1410 lm 1470 lm 1400 lm		
Useful lumens (array): Warm White, Cool White, Daylight White	1130 lm 1170 lm 1130 lm	1700 lm 1780 lm 1720 lm	2250 lm 2280 lm 2270 lm
Rated Wattage	12W	18W	24W
Rated luminous flux	1130/1170/1130 lm	1700/1780/1720 lm	2250/2280/2270 lm
Nominal life time of the lamp	40,000 hrs	40,000 hrs	40,000 hrs
Colour temperature	3000/4000/6000K	3000/4000/6000K	3000/4000/6000K
Number of switching cycles before premature lamp failure	15,000	15,000	15,000
Warm-up time up to 60% of the full light output	Instant full light	Instant full light	Instant full light
Dimmable	No	No	No
Nominal beam angle	120°	120°	120°
Rated power	12W	18W	24W
Rated lamp lifetime	40,000 hrs	40,000 hrs	40,000 hrs
Displacement factor	0.979	0.977	0.972
Lumen maintenance factor at end of nominal life	≥80	≥80	≥80
Starting time	Instant full light	Instant full light	Instant full light
Colour rendering	≥80 Ra	≥80 Ra	≥80 Ra
Colour consistency	Within 6 step Macadam ellipse	Within 6 step Macadam ellipse	Within 6 step Macadam ellipse
Rated peak intensity	356/360/348cd	594/600/588cd	754/760/744cd
Rated beam angle	120°	120°	120°
Voltage / Frequency	240V~50-60Hz	240V~50-60Hz	240V~50-60Hz
Lumen efficacy Im / W	104 / 108 / 104	105 / 109 / 105	104 / 105 / 105
	Not suitable for acce	nt lighting	

See website for more information on replacability and recycling

Issue 0522





Email: sales@eterna-lighting.co.uk / technical@eterna-lighting.co.uk

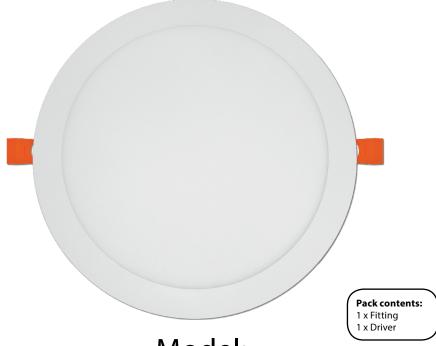
Visit our website: www.eterna-lighting.co.uk

Made in China



## **INSTALLATION INSTRUCTIONS**

### A guide for qualified electricians



# Model:

# KFLATDL12 / KFLATDL18 / KFLATDL24

#### **Colour Temperature Selectable Recessed Flat LED Downlights**

These instructions are provided as a guideline to assist you.

PLEASE READ THESE INSTRUCTIONS BEFORE INSTALLATION
AND RETAIN FOR FUTURE REFERENCE

#### **READ THIS FIRST:**

Check the pack and make sure you have all of the parts listed on the front of this booklet. If not, contact the outlet where you bought this product.

# This light fitting must be installed by a competent person in accordance with the current building and IEE wiring regulations.

As the buyer, installer and/or user of this product it is your own responsibility to ensure that this fitting is fit for the purpose for which you have intended it. Eterna Lighting cannot accept any liability for loss, damage or premature failure resulting from inappropriate use.

This product is designed and constructed according to the principles of the appropriate British Standard and is intended for normal domestic service. Using this fitting in any other environments may result in a shortened working life, for example where there is prolonged periods of use or higher than normal ambient temperatures such as lighting public or shared spaces or in nursing / care home facilities.

Switch off the mains before commencing installation and remove the appropriate circuit fuse or lock off MCR

This unit is suitable for indoor use only.

This product is suitable for installation on surfaces with normal flammability e.g. wood, plasterboard and masonry. It is not suitable for use on highly flammable surfaces (e.g. polystyrene, textiles).

Before making fixing hole(s), check that there are no obstructions hidden beneath the mounting surface such as pipes or cables.

The chosen location of your new fitting should allow for the product to be securely mounted and safely connected to the mains supply (lighting circuit).

Do not cover the fitting and/or transformer with any insulating materials.

Do not attach to surfaces which are damp, freshly painted or otherwise electrically conductive (e.g. metallic surfaces).

This product is designed for permanent connection to fixed wiring: this must be a suitable circuit (protected with the appropriate MCB or fuse).

When making connections ensure that the terminals are tightened securely and that no strands of wire protrude. Check that the terminals are tightened onto the bared conductors and not onto any insulation.

This product is double insultated. **DO NOT CONNECT ANY PART TO EARTH.** 

#### LAMP REPLACEMENT:

This luminaire has a sealed LED lamp and is maintenance free, no lamp replacement is required.

#### IMPORTANT:

You are advised at every stage of your installation to double-check any electrical connections you have made. After you have completed your installation there are electrical tests that should be carried out, these tests are specified in the current IEE wiring and building regulations.

#### **INSTALLATION:**

- 01. Locate suitable position without obstructions (allow minimum 75mm around the hole for the spring clips) and minimum ceiling void height of 150mm. (see Fig.1 opposite).
- 02. Isolate mains.
- 03. Make a round fixing hole in the ceiling (see sizes below), ensuring that the hole is cut accurately, we recommend the use of a circular hole cutter.

KFLATDL12: 155mm diameter. KFLATDL18: 220mm diameter. KFLATDL24: 280mm diameter.

**NOTE:** Ensure cut-out holes are burr free before installations.

04. Set colour temperature to the desired option by selecting the appropriate switch setting on the back of the fitting.

6000K - Daylight 4000K - Cool White 3000K - Warm White

05. Make connection to driver:

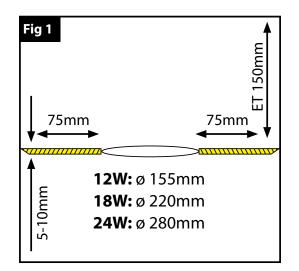
Live - Brown wire marked (L) Neutral - Blue wire marked (N)

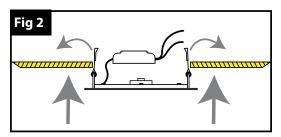
- 06. Before feeding the luminaire into the hole, ensure the large spring clips point up. (See Fig. 2).
- 07. Feed the rest of luminaire into the hole in the ceiling ensuring it is flush to the mounting surface. (See Fig. 3).
- 08. Switch on and test the luminaire.

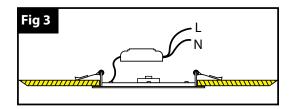
# EVENTUALLY, YOU MAY WANT TO REPLACE THIS PRODUCT:

Regulations require the recycling of Waste from Electrical and Electronic Equipment (European "WEEE Directive" effective August 2005—UK WEEE Regulations effective 2nd January 2007). Environment Agency Registered Producer: WEE/GA0248QZ.

WHEN YOUR PRODUCT COMES TO THE END OF ITS LIFE OR YOU CHOOSE TO REPLACE IT, PLEASE RECYCLE IT WHERE FACILITIES EXIST - DO NOT DISPOSE WITH HOUSEHOLD WASTE.







#### CLEANING:

Clean this fitting only with a soft dry cloth. Do not use any chemical or abrasive cleaners.

#### IF YOU EXPERIENCE PROBLEMS:

If you believe your product is defective, please return it to the place where you bought it. Our Technical Team will gladly advise on any Eterna Lighting product, but may not be able to give specific instructions regarding individual installations.