DATA SHEET

LED.Commercial 12W LED DD

12W GR8 (2-pin) & GR10q (4-pin) LED DD Lamp

Product Overview

Kosnic's range of LED DD lamps takes a fresh approach to functional lighting with a design philosophy offering plug-in emergency packs and optional microwave sensor versions so that there are no barriers to retrofitting LEDs in commercial fittings. The products bring the energy saving capabilities of LED technology to the commercial environment and the lamps can quickly replace fluorescent DD lamps with little or no rewiring.

Features

- Save energy up to 65% compared with a fluorescent DD lamp with magnetic ballast.
- For maximum energy savings, bypass all control gear and supply directly from the mains.
- Single side high lumen output for light only where it's needed.
- Long life of 30,000h.
- Optional microwave sensor. Latest version includes 10% dimming corridor function.
- Compatible with Kosnic's KTC27EME-DD emergency module.
- Instant start.
- Negligible UV output.
- Mercury free.

Optional Microwave Sensor

The LED DD lamp is available with a built-in microwave motion sensor. The sensor can be adjusted to control the sensor's ambient light level threshold, detection range and illumination time. The latest version includes a dimming corridor function which can be set to keep the lamp on at 10% when not in use.

Emergency Module Compatible

The LED DD lamp is compatible with the Kosnic emergency module, which provides power in the event of a cut in the supply and must be wired to the un-switched supply through the un-switched Live terminal. The battery will supply the lamp for over 3 hours at a reduced output.

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Specifications – Standard Lamp

Product Code	KLED12STD/2P-W40	KLED12STD/4P-W27	KLED12STD/4P-W40	KLED12STD/4P-W65
Lamp Cap	GR8	GR10q	GR10q	GR10q
Lamp Shape	DD	DD	DD	DD
Nominal Power (W)	12	12	12	12
Voltage	220-240Vac 50-60Hz	220-240Vac 50-60Hz	220-240Vac 50-60Hz	220-240Vac 50-60Hz
Current (mA)	58	58	58	58
Nominal Luminous Flux (lm)	1200	1200	1200	1200
CCT (K)	4000K Cool White	2700K Warm White	4000K Cool White	6500K Day Light
Nominal Lifetime (h)	30000	30000	30000	30000
Dimmable	No	No	No	No
Switching Cycles	50000	50000	50000	50000
Warm-up time to 60% (S)	Instant full light	Instant full light	Instant full light	Instant full light
Length (mm)	192	192	192	192
Width (mm)	192	192	192	192
Mercury (mg)	0	0	0	0
Clean-up instructions	N/A	N/A	N/A	N/A
Retrofit	Yes	Yes	Yes	Yes
Rated Power (W)	12.0	12.0	12.0	12.0
Rated Luminous Flux (lm)	1200	1200	1200	1200
Rated Lifetime (h)	30000	30000	30000	30000
Power Factor	0.90	0.90	0.90	0.90
Rated Peak Candelas (cd)	350	350	350	350
Lumen Maintenance Factor at Nominal Lifetime	0.75	0.75	0.75	0.75
SDCM of CCT	<6	<6	<6	<6
CRI	82	82	82	82
Start Time (s)	0.39	0.39	0.39	0.39
Ambient Temperature (°C)	-20 to 40	-20 to 40	-20 to 40	-20 to 40
Compatible Emergency Module	KTC27EME-DD	KTC27EME-DD	KTC27EME-DD	KTC27EME-DD
Emergency Luminous Flux (lm)	230	230	230	230

Energy Label - Standard Lamp

Manufacturer	Kosnic	Kosnic	Kosnic	Kosnic
Product Code	KLED12STD/2P-W40	KLED12STD/4P-W27	KLED12STD/4P-W40	KLED12STD/4P-W65
Energy Class	A+	A+	A+	A+
Energy Consumption (kWh/1000h)	12	12	12	12

Product Markings – Standard Lamp

Manufacturer	Kosnic	Kosnic	Kosnic	Kosnic
Product Code	KLED12STD/2P-W40	KLED12STD/4P-W27	KLED12STD/4P-W40	KLED12STD/4P-W65
Voltage	220-240Vac 50-60Hz	220-240Vac 50-60Hz	220-240Vac 50-60Hz	220-240Vac 50-60Hz
Nominal Power (W)	12	12	12	12
Current (mA)	58	58	58	58
CE Mark	Yes	Yes	Yes	Yes
WEEE Mark	Yes	Yes	Yes	Yes
Batch Code	Yes	Yes	Yes	Yes

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Specifications – Sensor Lamp

Product Code	**KLED12LSD/4P-W40**	**KLED12CRD/4P-W40**
Lamp Cap	GR10q	GR10q
Lamp Shape	DD	DD
Nominal Power (W)	12	12
Voltage	220-240Vac 50-60Hz	220-240Vac 50-60Hz
Current (mA)	98	98
Nominal Luminous Flux (lm)	1200	1200
CCT (K)	4000K Cool White	4000K Cool White
Nominal Lifetime (h)	30000	30000
Dimmable	**No**	**Corridor Function (10% Standby Option)**
Switching Cycles	50000	50000
Warm-up time to 60% (S)	Instant full light	Instant full light
Length (mm)	192	192
Width (mm)	192	192
Mercury (mg)	0	0
Clean-up instructions	N/A	N/A
Retrofit	Yes	Yes
Rated Power (W)	12.0	12.0
Rated Luminous Flux (lm)	1200	1200
Rated Lifetime (h)	30000	30000
Power Factor	0.53	0.53
Rated Peak Candelas (cd)	350	350
Lumen Maintenance Factor at Nominal Lifetime	0.75	0.75
SDCM of CCT	<6	<6
CRI	82	82
Start Time (s)	0.39	0.39
Ambient Temperature (°C)	-20 to 40	-20 to 40
Compatible Emergency Module	KTC27EME-DD	KTC27EME-DD
Emergency Luminous Flux (lm)	230	230
Sensor Type	Microwave	Microwave
Detection Range (m)	1-12	1-12
Detection Angle (°)	360	360
Operation Time	8sec–30min	8sec–30min
Ambient Light Threshold (lux)	10-2000	10-2000
Standby Power (W)	1.2	1.2
HF System	5.8GHz	5.8GHz
Sensor Output (mW)	<0.2	<0.2

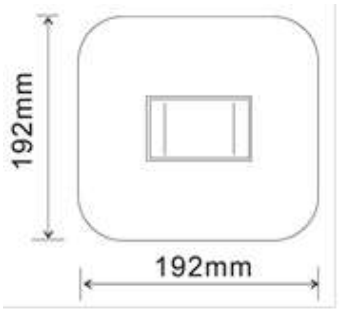
Energy Label - Sensor Lamp

Manufacturer	Kosnic	Kosnic
Product Code	KLED12LSD/4P-W40	KLED12CRD/4P-W40
Energy Class	A+	A+
Energy Consumption (kWh/1000h)	12	12

Product Markings – Sensor Lamp

Manufacturer	Kosnic	Kosnic
Product Code	KLED12LSD/4P-W40	KLED12CRD/4P-W40
Voltage	220-240Vac 50-60Hz	220-240Vac 50-60Hz
Nominal Power (W)	12	12
Current (mA)	98	98
CE Mark	Yes	Yes
WEEE Mark	Yes	Yes
Batch Code	Yes	Yes

Dimensions

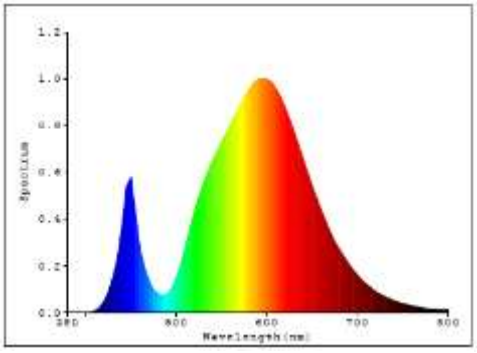


Safety and Maintenance

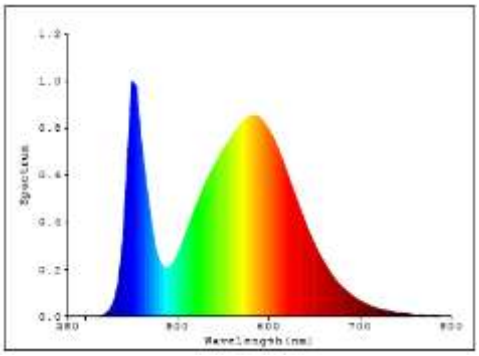
- Switch off supply before installing or removing lamp. Allow to cool before handling.
- Do not dispose of in household waste.
- Dispose of in appropriate section of local civic amenity site or recycling centre.

Photometric Information

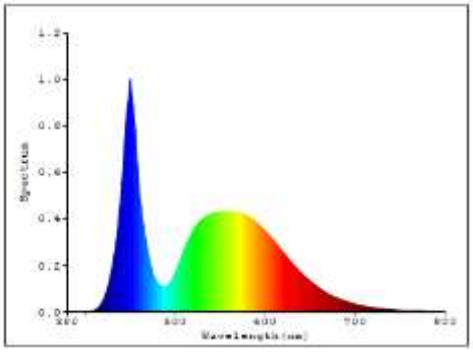
2700K



4000K



6500K



Fitting Conversion

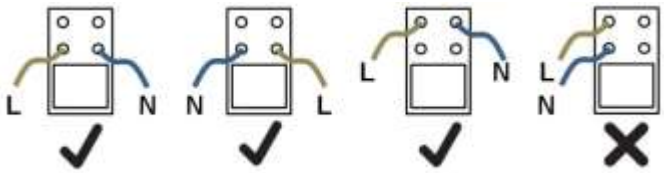
The existing fitting must be switched off and isolated at the mains before commencing electrical work. It is the responsibility of the converter to ensure the fitting continues to meet safety requirements. If in doubt consult a qualified electrician. For maximum energy savings, bypass all control gear and wire from the mains to the lampholder as for an electronic high frequency ballast conversion.

Magnetic Ballast (Choke):

- Remove the starter and any power factor capacitor. The capacitor may be left in place but the energy savings will be less.
- Plug the LED DD lamp directly into the lampholder.

Electronic Ballast (High Frequency) Conversion:

- The electronic ballast is not required so it must be removed or bypassed.
- Wire the Live and Neutral directly from the supply to the lampholder terminals as per below.
- The Live and Neutral must be wired to opposite terminals on the lampholder and not be wired to terminals on the same side.
- A 1A fuse may be added between the Live supply and the lampholder to prevent the circuit from cutting-out in the event of a fault in a single luminaire.



Add an indelible warning label, visible when changing the lamp, showing the substance of:
Warning - not for use with fluorescent lamp, use only Kosnic LED DD lamp.

Optional Emergency Module

An optional emergency module for the LED DD lamp can be installed within the fitting to provide a back-up supply in the event of a power cut. The emergency module requires a permanent live un-switched supply to maintain the battery charge. In the event of a power cut the battery within the emergency module will supply the LED DD lamp at a reduced voltage through the supplementary socket provided for this purpose. The supplementary socket also connects the emergency module to the green charging indicator on the LED DD lamp.