

# IP44 11W Dimmable Sealed LED Downlights Kits

Cat. No. DLS9001, DLS9002, DLS9003, DLS9004

# **Instruction Sheet**



## 1 Description

Cat. No.	DLS9001 DLS9003	DLS9002 DLS9004
Finish	DLS9001 + DLS9002 (Matt white) & DLS9003 + DLS9004 (Brushed Chrome)	
Supply voltage	230-240	V - 50Hz
Power Factor	0.	9
Input power	11	W
Lumens Output	950	Im
Efficacy	85 lm/W	
Colour Temperature (Nominal)	3000K	4000K
Colour Rendering Index (CRI)	80+	
Beam Angle	90°	
Dimming	Dimmable via External Driver (Included)	
IP Rating	IP44*	
Ceiling Cutout Size	90mm	
Depth Into Ceiling	55mm	
Fascia Size	110mm	

\* IP Rating: Front Face when installed as per instructions.

### 2 Advantages of LED

- High efficiency (up to 80% energy saving)
- Instant 'ON'
- Long life when compared with traditional incandescent/halogen filament lamps

There is a lot of incorrect information about LED lamp life in the market today. The lamp life of LED lamps is determined by many factors; Voltage and Environmental conditions, etc. The most important factor that determines a LED lamp life is the OPERATING TEMPERATURE. It is important to know that the LED Lamp Operating Temperature is a factor that you as the customer have a degree of control over, by instructing the Electrical Contractor who is installing your fitting, about the installation type you require. (Please see diagrams below) Operating Temperature significantly determines the life of an LED lamp or LED fixture. Most LED lamps from reputable suppliers state a Rated Average Lamp Life at 25°C ambient temperature.

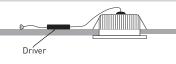
Therefore at HPM we would like to give you as much information as possible when installing your LED Downlight Kits<sup>#</sup> to get the best results.

Below you will see an example of how different types of installation can affect the operating temperature of the LED lamp and the resultant effect this has on the Rated Average Life of the LED Lamp.

## 3 LED Downlight Lamp Life

30,000Hrs

Rated Average Lamp LED Life @25°C when installed with the default insulation clearances specified by AS/NZS 3000

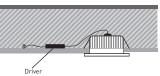


25,000Hrs

Rated Average Lamp LED Life @25°C when installed with the thermal insulation abutting and covering the fixture in accordance with the IC-4 & IC-F rating specified in AS/NZS 60598.2.2 Amendment A (NZ only). Refer to next page for further information.

ABUTTED & COVERED

Note: This form of installation complies with Wiring Rules AS/NZS 3000.



#### Dimming 4

The HPM 10W LED downlights are dimmable\* with Trailing Edge Dimmers Only. We recommend the following Dimmers only for use with HPM LED driver (HPMD001).

Legrand Excel Life EM400A3P	Max. 8 per EM400A3P	Dimming Range 100%-10%
Legrand Excel Life EM250T	Max. 5 per EM250T	Dimming Range 100%-10%
Legrand Excel Life EM400T	Max. 8 per EM400T	Dimming Range 100%-10%
Legrand Arteor AR400T	Max. 8 per AR400T	Dimming Range 100%-10%
Legrand Arteor AR400A3P	Max. 8 per AR400A3P	Dimming Range 100%-10%
HPM 250T	Max. 5 per 250T	Dimming Range 100%-10%
HPM 400T	Max. 8 per 400T	Dimming Range 100%-10%
HPM 700T	Max. 14 per 700T	Dimming Range 100%-10%
HPM 1000T	Max. 20 per 1000T	Dimming Range 100%-10%

#### 5 Some Important Facts about LED Lighting

Due to different qualities of LED lamps, wattage is no longer a good guide for the amount of light generated by the LED Lamp. Total Light output of a lamp is called 'LUMENS'.

Lumens are the quantity you should be purchasing, not Watts. When purchasing an LED lamp, you are purchasing a volume of light to meet your task required, not the power (Watts) it consumes.

As a reference for the future:

60W Standard Globe 240V (GLS)	650 Lumens^
50W 240V Halogen Reflector Lamp (GU10 Base)	350 Lumens^
50W 12V Halogen Reflector Lamp (MR16 Base)	750 Lumens^

LED Lamps come in ma	ny hues of white. This is called 'colour temperature'.
3000K Warm White:	This colour is traditionally used for domestic dwellings and is similar to the colour of light from incandescent lamps.
4000K Cool White:	This colour is very white and it creates a very crisp clean fresh atmosphere.
5000K Natural White:	This colour is paper white for a very crisp clean environment.
•	arious levels of Colour Rendering. This is the measure curately reproduce colours. This is called 'Colour

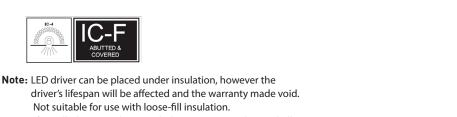
-	
CRI < 70	Colour Reproduction is not very good
70 <cri<80< td=""><td>Colour Reproduction is Good</td></cri<80<>	Colour Reproduction is Good
CRI>80	Colour Reproduction is Very Good

#### 6 **Insulation Rating IC**

This series of downlights has achieved an IC-4 and IC-F insulation rating in accordance with AS/NZS 60598.2.2.

A type IC-4 and IC-F luminaire can be installed with building insulation material that can safely be exposed continuously to temperatures up to 90°C. Such insulation can cover and abut the side of the luminaire.

Refer to diagram shown on the right for clarification.



If installed in accordance with the IC rating, insulation shall have a minimum temperature rating of 90°C.

mal Insulation abutting and covering the fixture LED Driver HCB =0mm SCB=0mm Combustible building element above fitting LED Driver

RISK OF FIRE - Required clearance from structural members and building elements. (SCB and HCB =0mm)

SCB - Side Clearance to Building element: Minimum distance between the side of the recessed luminaire and any building element. HCB - Height Clearance to Building element: Minimum distance between the top of the recessed luminaire and any building element above it.

Dimmable only with the Trailing Edge Dimmer Types listed above. Using the HPMD001 series Driver with any dimmer type not specified, will result in poor performance and reduced life. Lumen values quoted are typical and can vary at different colour temperatures and between manufacturers. Installation must be by a Registered Electrical Contractor.

### Warranty

Legrand warrants this product for a period of 6 years from the date of purchase.

These goods come with guarantees that cannot be excluded under the Australian and New Zealand Consumer Laws. You are entitled to a replacement or a refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired if the goods fail to be acceptable quality and the failure does not amount to a major failure.

See the Warranty card enclosed with this product for further details.

### Customer Service

For all Customer Service and Technical Support please call Monday to Friday during business hours.

Legrand Australia 1300 369 777 www.hpm.com.au

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