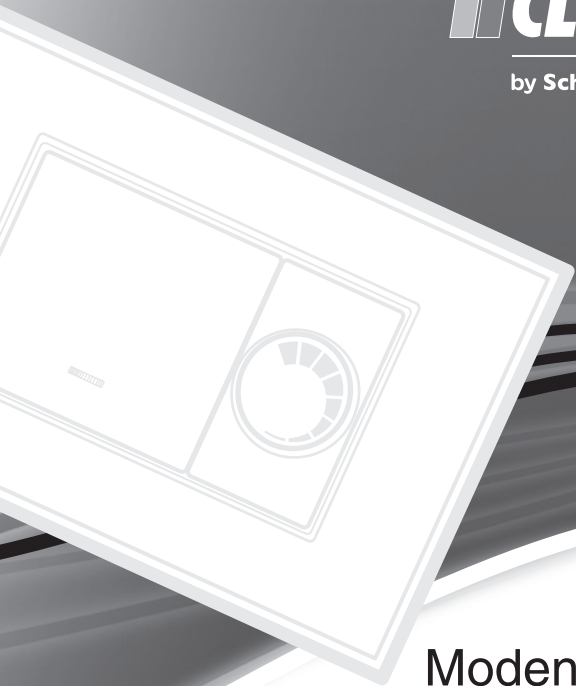




**CLIPSAL**<sup>®</sup>

by **Schneider** Electric



# Modena/Strato Leading Edge Dimmer

**8000**  
Series



Installation Instructions  
REGISTERED DESIGN • REGISTERED PATENT

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## 1.0 Product Range

<b>80E450LM</b>	Dimmer, Leading Edge, 220-240V a.c, 50Hz, 450W (80 Series Mechanism)
<b>M8082E450L</b>	Dimmer, Leading Edge, 220-240V a.c, 50Hz, 450W (Modena 8000 Series)
<b>S8082E450L</b>	Dimmer, Leading Edge, 220-240V a.c, 50Hz, 450W (Strato 8000 Series)

\*Please note that these products are also available in other configurations and in a wide range of colours. For further information, please contact your nearest Clipsal Sales Representative.

## 2.0 Description





The Clipsal 8000 Series Dimmer is a separately switched, compact, modular dimming mechanism rated at 450W (1.8A). The unit utilises state-of-the-art leading edge dimming technology to provide full control of incandescent lighting and iron-core (wire wound) transformer based low voltage lighting.

The 8000 Series Dimmer is suitable for use in any new installation, but is also retro fittable, and may be used to replace a standard switch in any existing installation.

## 3.0 Features

- Separately switched, compact, modular dimming mechanism
- 450W rating
- Suitable for one-way or two-way operation
- Suitable for incandescent (tungsten filament) lamps
- Suitable for low voltage downlights using iron-core (wire wound) transformers
- Soft start operation and preset minimum brightness
- Over-temperature compensation
- Fitted with suppressors to minimise radio frequency interference
- Complies with Australian and International EMC Standards.

## 4.0 Load Compatibility

LOAD SYMBOL	COMPATIBLE LOADS	80E450L	80E450T	80E500F	80E45UD
		LEADING EDGE DIMMER	TRAILING EDGE DIMMER	FAN SPEED CONTROLLER	UNIVERSAL DIMMER
		450W	450W	500W	450W
	Incandescent Lighting Halogen/Dichroic 240V Lamps	✓	✓	✗	✓
	Low Voltage Halogen/Dichroic Lighting with Iron-Core Transformers	✓	✗	✗	✓
	Low Voltage Halogen/Dichroic Lighting with Electronic Transformers	✗	✓	✗	✓
	Small Motor Loads Exhaust Fans Ceiling Fans	✗	✗	✓	✓

### IMPORTANT NOTES:

- Low voltage downlights include (but are not limited to) dichroic types.
- Any number of iron-core transformers can be used, providing the total lamp wattage does not exceed the maximum load rating of the dimmer. The unit does not need to be derated for use with iron core transformers.
- Iron-core low voltage light transformers may produce audible noise ('buzz') at some or all light level settings. While this is generally a function of the transformer design and manufacture, the effect can be exacerbated by mounting the transformer on a ceiling panel or joist that acts as a sound amplifier. The effect can be minimised by isolating the transformer from the structure material around it (wrapping in sound insulation is not recommended).
- Use only iron-core transformers compatible with electronic switches/phase controlled dimmers as recommended by the manufacturer.
- The various electrical characteristics of the dimmer, its wiring, transformer (if used) and lamp occasionally form a tuned circuit that can cause the dimmer or lamp to emit a high pitched audible noise. Usually any noise from the dimmer is very low and can only be heard when very close. Lamps can emit a sound that is audible to someone standing under it. Some lamp makes are more prone than others. Changing to a premium brand of lamp usually solves this problem.
- Losses in iron-core low voltage light transformers cause a significant amount of heat to be generated. Iron-core transformers should not be covered (by loft insulation, for example) or mounted in enclosed areas, as it will cause the transformer to overheat. Some low voltage transformers are fitted with over-temperature protection and will automatically turn off until their temperature drops to acceptable levels.

## 5.0 Incompatible Loads

Under NO CIRCUMSTANCES should the 8000 Series Leading Edge Dimmer be used for incompatible load types such as low voltage lighting with electronic transformers, fluorescent lighting, or fan motors. Failure to comply with this instruction will void any warranty associated with the product.

## 6.0 Important Warning

It is illegal for persons other than an appropriately licensed electrical contractor or other persons authorised by legislation to work on the fixed wiring of any electrical installation. Penalties for conviction are severe.

## 7.0 Installation Instruction

### 7.1 Wiring Details

1. Disconnect power to the relevant circuit at the main switchboard.
2. Remove existing switch from wall.
3. Connect the dimmer in accordance with the wiring diagrams shown over the page.
4. Refit switch plate to wall.
5. Reconnect power.
6. Turn switch on and check dimmer operation by turning control knob through full range.

### 7.2 Soft Start Feature

The leading edge dimmer incorporates a soft start feature providing a noticeably smooth lamp illumination at turn on. This feature also minimises lamp filament start up stress, which may increase lamp life.

### 7.3 Minimum Brightness Settings

The minimum brightness level has been factory preset to suit most applications.

### 7.4 Multi-Gang Derating

For applications where 8000 Series Dimmers are multi-ganged, derate the maximum load rating of the unit according to the derating table shown at right.

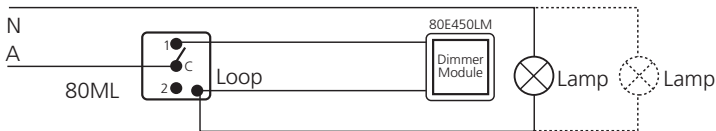
Number of Dimmers	Maximum Incandescent Load per Dimmer
1	450W
2	350W
3	250W

### 7.5 Thermal Overload Compensation

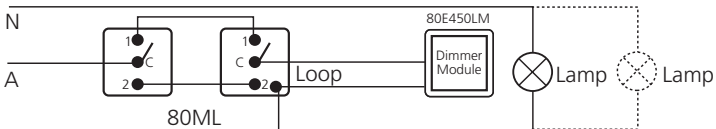
The 8000 Series Dimmers incorporate thermal overload protection circuitry designed to compensate for abnormal operating conditions. The dimmer output brightness will automatically be reduced should the unit be inadvertently overloaded. It resets automatically once overload conditions have been corrected. Excessive or persistent overload conditions may cause catastrophic failure of the dimmer, and must be avoided.

## 8.0 Wiring Diagrams

### 8.1 One-Way Operation








### 8.2 Two-Way Operation



#### NOTE:

- If the unit is wired for two-way operation it can be switched ON or OFF from either location, but the lamp brightness can only be adjusted from one location.
- Two or more dimmers cannot be connected in parallel or series to control the same load from two different locations.
- It is recommended that incandescent lamps always be mounted in the normal position. Lamp failure when mounted in the upright position (terminals at bottom) may short out the lamp terminals and cause damage to the dimmer mechanism.
- Dimmer mechanism wiring is not polarity sensitive.

## 9.0 Product Specifications

Parameter	Value	
Nominal Operating Voltage	220 - 240V~	
Nominal Operating Frequency	50Hz	
Maximum Load	450W @ 240V~, 400W @ 220V~ Derate for multi-gang applications	
Minimum Load	20W	
Dimming Technique	Leading edge phase control	
Compatible Loads		Incandescent lighting Halogen 240V lamps
		Low voltage lighting with iron-core transformers
Incompatible Loads		Fluorescent lighting
		Low voltage lighting with electronic transformers
		Exhaust fans (shaded pole induction motors) Ceiling fans (split-phase induction motors)
Operating Temperature Range	0 to 40°C	
Operating Humidity Range	10 to 90% RH	
Mounting Centres	84mm Australian Pattern Plate	
Shipping Weight	25g dimmer mechanism only	
Safety Compliance	AS/NZS3100, IEC60669-2-1	
EMC Emission Compliance	AS/NZS CISPR15:2002	
Specifications Typical @ 240V~, 25°C		
No User Serviceable Parts Inside		

### WARNING

Operation at temperatures or voltages outside of specification (240V~ 25°C) may cause the thermal protection circuitry to operate. Decrease the size of the connected load to prevent reoccurrence.

## 10.0 Warranty Statement

1. The benefits conferred herein are in addition to, and in no way shall be deemed to derogate; either expressly or by implication, any or all other rights and remedies in respect to the Clipsal by Schneider Electric product, which the consumer has under the Commonwealth Competition and Consumer Act or any other similar State or Territory Laws.
2. The warrantor is Schneider Electric (Australia) Pty Ltd of 33 - 37 Port Wakefield Road, Gepps Cross, South Australia 5094. With registered offices in all Australian States.
3. This Clipsal by Schneider Electric product is guaranteed against faulty workmanship and materials for a period of two (2) years from the date of installation.
4. Schneider Electric (Australia) Pty Ltd reserves the right, at its discretion, to either repair free of parts and labour charges, replace or offer refund in respect to any article found to be faulty due to materials, parts or workmanship.
5. This warranty is expressly subject to the Clipsal by Schneider Electric product being installed, wired, tested, operated and used in accordance with the manufacturer's instructions.
6. All costs of a claim shall be met by Schneider Electric (Australia) Pty Ltd, however, should the product that is the subject of the claim be found to be in good working order all such costs shall be met by the claimant.
7. When making a claim the consumer shall forward the Clipsal by Schneider Electric product to the nearest office of Clipsal by Schneider Electric office with adequate particulars of the defect within 28 days of the fault occurring. The product should be returned securely packed, complete with details of the date and place of purchase, description of load, and circumstances of malfunction.

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**Schneider Electric (Australia) Pty Ltd**

**clipsal.com**

Contact us: [clipsal.com/feedback](http://clipsal.com/feedback)

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