

### Universal Dimmer



# Load Compatability

LOAD SYMBOL	COMPATIBLE LOADS	TRANSPARENT C-THRU COLOUR
, <u> </u>	Incandescent Lighting	450W
	Lighting with Electronic Transformers	450W
<i>†††††</i>	Dimmable LED	300W
<i>↑↑</i> →>	Non-Dimmable LED	Not compatible
M	Small Motor Loads -Exhaust fans (shaded pole induction motors)Ceiling fans (split- phase induction motors).	450W

- Dimming performance may vary between lamp manufactures.
- Use only dimmable load, compatible with phase angle control dimming techniques.
- Some lamps may exhibit unexpected performance characteristics when cold. Dimming performance should improve once the lamp warms up.
- It is recommended that when using electronic transformers, each be loaded at least 75% of its maximum rated load. This reduces the possibility of lamp flicker when dimming which is common with some transformers. Refer to the manufacture's specifications for the transformer being used.
- When controlling small motor loads, occasionally audible noise (hum) may be heard as a characteristic of normal operation. This is largely a function of the motor construction, and is consequently excluded from the warranty conditions provided with this product.

## Derating

No of Dimmers	Max. Incandescent per Dimmer	Max LED per Dimmer
1	450W	300W
2	350W	250W
3	250W	200W

### Customer Care

#### **Warranty Information**

We warrant this product for 2 years. See warranty links below.

## Schneider Electric (Australia) Pty Ltd

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Warranty: https://www.se.com/au/en/about-us/

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legal/terms-and-conditions.jsp

www.se.com

# For Your Safety

## **A** A DANGER

### HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- It is illegal for persons other than an appropriately licensed electrical contractors or other persons authorised by legislation to work on the fixed wiring of any electrical installation.
- To comply with all safety standards, the device must be used only for the purpose described in this instruction
  and must be installed in accordance with the wiring rules and regulations in the location where it is installed.
- Lock out and tag the input circuit before accessing the wiring connections.
- The Locking Bar on the grids must be set to the closed position to ensure that the device cannot be removed during normal operation.
- There are no user serviceable parts inside the device.

Failure to follow these instructions will result in death or serious injury.

## **A** CAUTION

#### HAZARD OF EQUIPMENT DAMAGE

Install the device according to instructions in this document.

- · Pay attention to the specifications and wiring diagrams related to the installation.
- Do not use the device for any other purpose than specified in this document.
- Dropping the device may damage the internal components. Check that the device operates after being dropped
  or if physical damage is shown.

Failure to follow these instructions can result in minor injuries, or equipment damage.

### NOTICE

## **EQUIPMENT DAMAGE HAZARD (LOAD AND OPERATION))**

- Operation of the device at elevated temperatures or voltages outside of specification (240V a.c and 25°C) may
  cause the over-temperature protection circuitry to operate. Operating with significant overload may activate
  thermal shut-down. In extreme cases, the thermal fuse may blow and render the device inoperable.
- · Reduce the size of the connected load or use a different brand of lamp to prevent recurrence.
- Do not operate the product for prolonged periods in extreme conditions.
- This product is rated for indoor use only and not suitable for outdoor use or installation in a roof space.

Failure to follow these instructions can result in equipment damage or malfunction.

#### NOTICE

### **MAXIMUM LOAD RATINGS APPLY**

Ensure that the number of low voltage lighting transformers connected to a single device does not xceed the maximum load rating of the device.

Failure to follow these instructions can result in equipment damage or malfunction.

#### NOTICE

# MIX LOAD

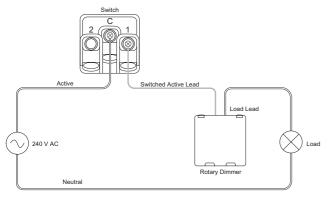
It is not recommended to mix load ttypes as this may cause unexpected performance, and may cause the dimmer to operate in an incompatible mode, potentially causing a product issue.

Failure to follow these instructions can result in equipment damage or malfunction.

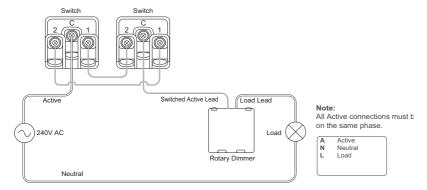
## Installation Instructions

### 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 and fit fascia.
- (5) Reconnect power.
- (6) Fit dimmer knob to shaft (ensure correctly aligned with shaft).
- (7) Turn switch on and check dimmer operation by turning control knob through full rang.



#### A. One-Way Application



### B. Two-Way Application

# Note:

- If the unit is wired for two-way operation it can be switched ON or OFF 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.
- · Dimmer mechanism wiring is NOT polarity sensitive.

### Disclaimer

Schneider Electric reserves the right to change specifications, modify designs and discontinue items without incurring obligation and whilst every effort is made to ensure that descriptions, specifications and other information in these instructions are correct, no warranty is given in respect thereby and the company shall not be liable for any error therein.

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## **Using the Dimmer**

### Ripple Injection Interference

In some regions of the country a slight flicker may be experienced when luminaire is dimmed. This is due to power line signals sent by the electricity supply authorities to assist with switching utilities, for example hot water services or changing tariff rates. This effect is not a malfunction of the luminaire or dimmer but a result of local installation conditions changing during the day. If this occurs, adjusting the dimmer back to maximum brightness will help minimize flickering.

### LED Compatability

The dimming performance will depend on the type and brand of the LEDs that are connected and the installation conditions. Clipsal dimmers are designed for optimum performance with Clipsal branded LEDs. Some alternate brand LEDs may not operate as expected. This depends on the number of LEDs, the type of driver and the power quality supplied from the supply network. A 31LCDA load correction device may resolve some of these issues. A 31LCDA may be required if controlling a single LED load.

### Soft-Start Feature

The Universal Dimmer incorporates a soft-start feature providing a noticeably smooth lamp illumination at turn on. This feature also minimizes lamp filament start up stress, which may increase lamp life.

### **Overload and Short Circuit Protection Facilities**

Thermal Overload Protection- Two Levels	Thermal Overload Protection Automatically reduces lamp brightness if the dimmer is inadvertently overloaded. Extreme overloads will result in the load turning Off (primary defence against overload). The Thermal Overload Protection resets automatically once overload conditions are corrected.
	Thermal Cut-Out  The Dimmer contains a non-resettable thermal fuse device designed to blow in case of circuit failure. This is a secondary protection measure intended to operate as a backup in case of persistent or prolonged overload conditions. If the thermal cut-out fuse blows, the unit will be rendered permanently inoperable and must be replaced.
	<b>Note:</b> The thermal fuse device is not replaceable by the user. Any significant overload should be avoided in order to prevent damage to the load, fixed wiring of the installation or other hardware connected to the affected circuit.
Short Circuit Protection	Designed to protect the dimmer under most abnormal operating conditions, short circuit protection helps the dimmer withstand wiring faults or failure of the load. The short circuit protection mechanism resets automatically once the short circuit condition is removed.

# Electrical Specification

Parameter	Value		
Nominal Operating Voltage	220 - 240V~		
Nominal Operating Frequency	50Hz		
Maximum Load	450W @ 240V~ 400W @ 220V~ Derate for multi-gang applications		
Minimum Load	10W		
Dimming Technique	Leading Edge/Trailing Edge Phase Control (dynamically auto-selected)		
Mounting Centres	84mm Australian Pattern PLate		
Shipping Weight	25g Dimmer Mechanism only		
Specifications Typical @ 240V ~ 25°C			
Suitable for Indoor Use only			
No User Serviceable Parts Inside			
Plate information: 4062E450UDM is for Saturn plate range and 32E450UDM is for C2000 plate range.			

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