CLIPSAL®

by Schneider Electric

High Power Dimmer

32/1000
32/2400

Installation Instructions

Contents

1.0 Product Range **3**

2.0 Description **3**

3.0 Features **4**

3.1 Thermal cut-out 4

3.2 Soft start feature 4

4.0 Product Specifications **4**

4.1 Thermal cut-out 5

4.2 Load requirements 5

4.3 Minimum brightness setting 5

5.0 Wiring Diagrams **6**

6.0 Installation Notes **8**

7.0 Warranty Statement **8**

1.0 Product Range

32/1000 240V 1000VA Dimmer with 30 Series Remote Control.

32/2400 240V 2400VA Dimmer with 30 Series Remote Control.

2.0 Description

Clipsal high power dimmers give the user full control of lighting in domestic and commercial environments with a power rating not previously available in the Clipsal dimmer range. The models control loads as rated below:

Cat. No.	**Load**
32/1000	100VA to 1000VA
32/2400	100VA to 2400VA

In normal operation, the unit is wired in one of the options shown in either Figure 1 or Figure 2 (Figure 2 shows the basic wiring in a 2-way switching application).

Each unit incorporates a facility which allows units to be interconnected together in a master-slave configuration. This enables larger loads to be controlled by a single high power dimmer controller mechanism (potentiometer) and switch, which fits to any standard two-gang mounting pattern.

When stacking units for this master-slave configuration, each dimmer must be on the same phase. The switched active, if switched via a standard mechanism, must not be overloaded. If the switch is overloaded, alternative wiring can be used by means of a contactor or separate switch. (See Figure 3 and Figure 4.)

When operating in master-slave mode, the slave unit does not have any connection to the control terminal and the minimum brightness adjustment is controlled via the trimpot available in the master's control mechanism. If independent control of the slave is required, at least one of the master-slave connections must be broken and a second high power dimmer control mechanism must be wired in.

3.0 Features

3.1 Thermal cut-out

Built into the high power dimmer is a thermal cut-out protection circuit. This allows the unit to effectively reduce the load current if the temperature increases enough to cause any internal damage to the unit.

If this becomes activated for any reason, the unit will reduce the maximum brightness, for as long as the temperature is above limits. If failing to return to maximum brightness, the unit must be either derated or moved to a cooler position. (Refer to specifications for operating temperatures.)

3.2 Soft start feature

Another feature in the high power dimmer range is the soft start facility, which allows the load to ramp up to full brightness after the unit is first turned on. This feature increases the life of the incandescent globes.

4.0 Product Specifications

Physical Dimensions	**Value**
Dimmer	248mm x 150mm x 55mm
Remote Control Potentiometer	50mm x 22mm x 22mm Catalogue number 30POTFM (fits standard 30 Series apertures)
Voltage Rating	240V a.c. (operating range: 216V a.c. to 264V a.c.)
Current Rating	**Value**
Maximum Load - 32/1000	4A (1000VA) resistive load - max. ambient 50°C 4A (1000VA) 0.6PF (lagging) - max. ambient 50°C
Maximum Load - 32/2400	10A (2400VA) resistive load - max. ambient 50°C 10A (2400VA) 0.6PF (lagging) - max. ambient 50°C
Minimum Load	0.4A (100VA)
Maximum Half Cycle Surge	300A rms
I^2t Withstand	$450A^2$ sec
Please note: Maximum distance between master and slave = 100m.	

4.1 Thermal cut-out

Dimmer will reduce maximum brightness if temperature inside enclosure exceeds 60°C.

4.2 Load requirements

This unit can be used to control the following load types:

- incandescent lighting
- low voltage lighting* using iron-core transformers
- low voltage lighting* using electronic transformers only compatible with leading edge dimmers
- ceiling sweep fans
- exhaust fans.

* The minimum and maximum load for low voltage lighting using iron-core or electronic transformers is the same as for incandescent (resistive) loading.

When controlling low voltage lighting using electronic transformers, use only electronic transformers having 100W or higher rating. Additionally, the minimum loading for each connected electronic transformer is 100W or greater.

For best performance, it is recommended that only electronic transformer types with low input capacitance be used.

The minimum and maximum motor loads are specified for loads with power factor as low as 0.6 (See Current Rating in Specifications Table).

4.3 Minimum brightness setting

Each control mechanism (catalogue number: 30POT Series) has an adjustment hole (on the side of the box) for setting the minimum brightness to any level required by the user.

5.0 Wiring Diagrams

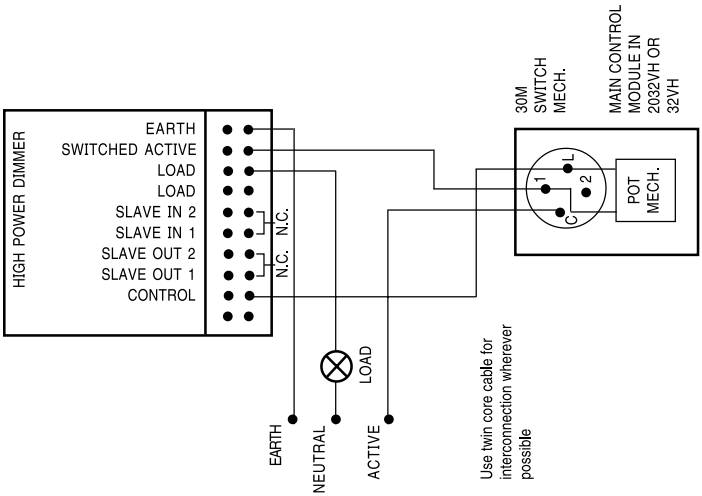

Figure 1. Basic Wiring Diagram

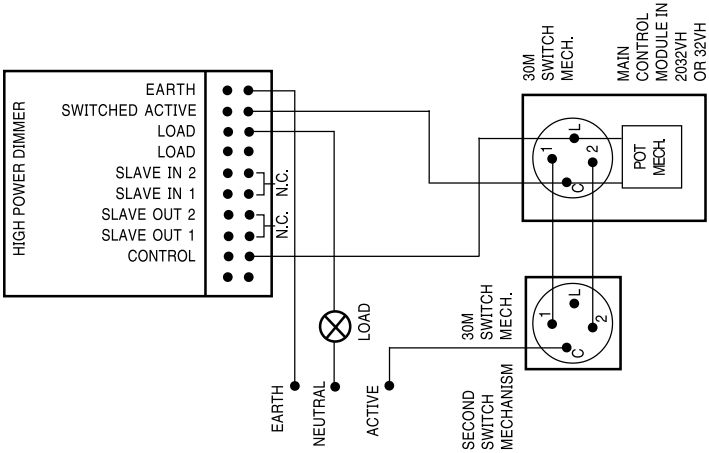

Figure 2. 2-Way Switching Option

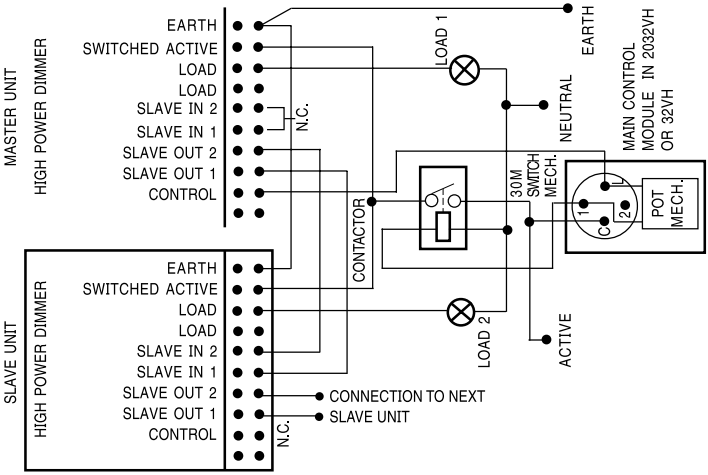

Figure 3. Master-slave Configuration using a Contactor to Switch Active

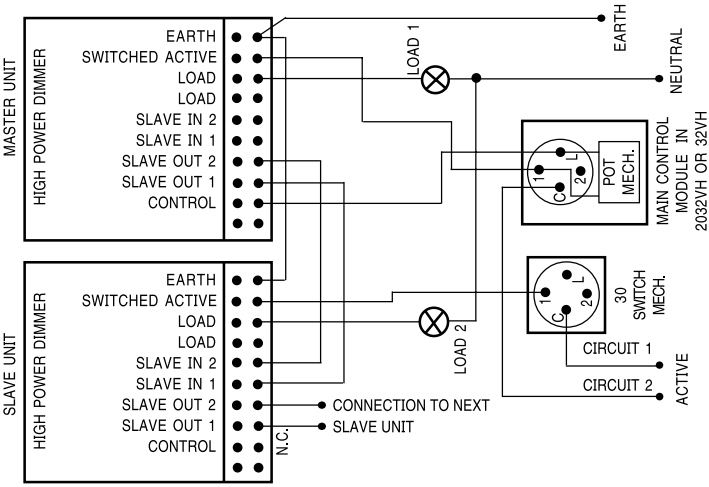

Figure 4. Master-slave Configuration using a Second Switch

6.0 Installation Notes

1. The basic dimmer wiring diagram is shown in Figure 1.
2. When installing, it must be noted that for the unit to run at its maximum load current, it must be wired with 2.5mm^2 cable.
3. Figures 1, 2, 3 and 4, show various wiring configurations for the high power dimmer range.
4. An Earth must be connected to the Earth terminal.
5. The master-slave wire must be as short as possible and must also be the same capacity as the main load wiring.
6. It is recommended that twin core cable is used for the interconnection.
7. Do not connect more than one dimmer in parallel with a single load, as they will not share the load equally.
8. The dimmer must be mounted in a position which allows free movement of air around the enclosure.
9. Control wiring length between main control module and dimmer unit must be less than 10m when using twin core cable. Greater than 10m distances can be achieved by employing twin and Earth cable (Earth wire must be Earthed at dimmer unit).

7.0 Warranty Statement

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 Schneider Electric product, which the consumer has in the location where the product is sold.

The warrantor is Schneider Electric with offices worldwide. This Schneider Electric product is guaranteed against faulty workmanship and materials for a period of two (2) years from the date of installation.

Schneider Electric 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.

This warranty is expressly subject to the Schneider Electric product being installed, wired, tested, operated and used in accordance with the manufacturer's instructions. Any alterations or modifications made to the product without permission of Schneider Electric might void the warranty.

Schneider Electric shall meet all costs of a claim. 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.

When making a claim, the consumer shall forward the Schneider Electric product to the nearest Schneider Electric office and provide 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.

Schneider Electric (Australia) Pty Ltd

Contact us: clipsal.com/feedback

National Customer Care Enquiries:

Tel 1300 2025 25

Fax 1300 2025 56

clipsal.com