

Dimmer Switches

Standards and approvals

All CE marked Decorative finishes dimmer switches comply with the EC Low Voltage Directive: 73/23/EEC, Electromagnetic Compatibility Directive: 89/336/EEC.

They also comply with BS EN 60669-2-1 and BS EN 55015.

* Non-UK dimmer switches – see note below.



Technical specification

Electrical

Mains Supply Voltage:
230V a.c. (Nominal)

220V a.c. (Nominal, Non-UK)
127V a.c. (Nominal, Non-UK)

Mains Supply Voltage Range:
216V a.c. to 253V a.c.
200V a.c. to 250V a.c.
120V a.c. to 134V a.c.

Mains Supply Frequency:
50Hz \pm 3Hz
60Hz \pm 3Hz

Type of Loads:

Standard Dimmers:
Fused GLS Tungsten Filament lamps only to BS EN 60064: 1996 and BS EN 60432-1: 2000, rated at 230/240V

Intelligent Dimmers:
Fused GLS Tungsten Filament lamps to BS EN 60064: 1996 and BS EN 60432-1,2 rated at 230/240V. Dimmable wire wound or electronic Low Voltage Transformers of good quality. Can also be used with good quality mains voltage halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability.

Note: Transformer must be suitable for dimming using phase delay (leading edge) and NOT only phase cut (trailing edge) type of dimmers.

Warning: These dimmer switches are not suitable for use with Fluorescent Lamps or Energy Saving Lamps.

Physical

Operating temperature:
0°C to +40°C

IP rating:
IP4X

Max. installation altitude:
2000 metres

Description

Albany Dimmer Switches fall into three categories:

- 1) Standard Dimmer Switches
- 2) Intelligent Dimmer Switches
- 3) Non-UK Dimmer Switches

Standard Dimmer Switches

Dimmer Switches belonging to this category employ simpler electronic circuitry and the CE marked products make use of thermal switches to conform to the very stringent requirements of the Standard BS EN 60669-2-1, for overload protection. They are only suitable for use with normal tungsten filament lamps with internal fuses, conforming to BS EN 60064: 1996 and BS EN 60432-1 standards and do not have any added features, e.g. soft start, ability to control dimmable transformers for low voltage, etc.

Standard Dimmer Switches are not suitable for use with transformers for Low Voltage Lighting or Fluorescent Loads, including Energy Saving Lamps.

Intelligent Dimmer Switches

Dimmer Switches belonging to this category, employ the latest, state of the art, micro-controller based electronic circuitry and use current sensing to compute the load conditions. These products show progressive reaction to overload conditions, depending on the extent of overload as shown in the table below. List numbers belonging to this category are identified by the suffix letters LV, e.g. K1551 MCO LV. All MK Intelligent Dimmer Switches employ one pole change over switches to facilitate two way switching.

MK Intelligent Dimmer Switches are not suitable for use with Fluorescent Loads, including Energy Saving Lamps.

Only one Dimmer Switch can be used in a two-way switching circuit.

OVERLOAD REACTION		
40-400W CIRCUIT	40-300W CIRCUIT	COMMENTS
Overload management: 40-400W nominal 40-500W function without dimming > 500-700W dim to 68V \pm 8V r.m.s. > 700W switch off	Overload management: 40-220W nominal 40-275W function without dimming > 275-375W dim to 68V \pm 8V r.m.s. > 375W switch off	This is the minimum controlled voltage

* Non-UK Dimmer Switches

Dimmer switches belonging to this category only conform to the safety parts of BS EN 60669-2-1, without conforming to the EMC requirements. Loads suitable for use with standard dimmer switches above are also suitable for use with this category of dimmer switch.

Dimmer Switches

Features

Intelligent Dimmer Switches incorporate the following advanced features

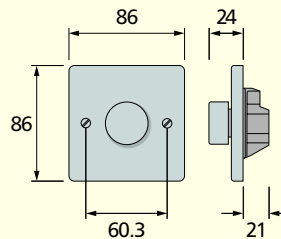
- Suitable for dimming Low Voltage Halogen lamps via good quality, fully dimmable electronic or wire-wound transformers
- Can be used with good quality mains voltage halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability
- Load current sensing:
These dimmers continuously monitor the load current to help protect against overheating in wire wound transformers and to prevent overloading of the dimmer for long term reliability
- Soft Start, which gradually increases the light output from the load over 1 to 3 seconds after switch on. The Soft Start feature is also particularly beneficial when used to dim Mains Voltage Tungsten Halogen lamps which have inherent very high inrush current at switch on

Standard Dimmer Switches

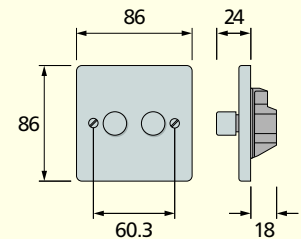
- Suitable only for use with fused GLS Tungsten Filament lamps to BSEN 60064 and BS EN 60432-1
- One way dimmer switches incorporate manual soft start
- Incorporate thermal switches for protection against overload

Dimensions (mm)

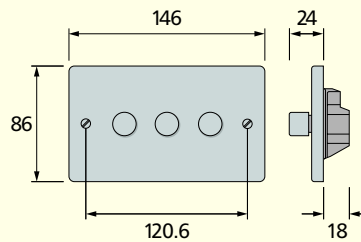
1 gang single



1 gang double



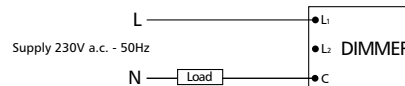
2 gang triple



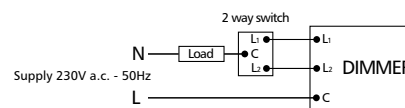
INTELLIGENT DIMMER SWITCHES

	Rating	Max No. of Transformers (total rating of all transformers must not exceed maximum VA rating of dimmer)
1 gang single dimmer	40-300W (LV and mains voltage halogen rating 40-240W/VA)	4
1 gang double dimmer	2 x 40-300W (LV and mains voltage halogen rating 2 x 40-240W/VA)	4 per dimmer
1 gang single dimmer	60-500W (LV and mains voltage halogen 60-400W/VA)	5

One-way switching



Two-way switching (only one dimmer can be used)



Wires must be connected to the correct dimmer terminals.
DO NOT connect earth to dimmer.

Please note the dimmer may be substituted for any of the Two-Way switches

BOX TYPES

	Flush	Surface
1 gang (excluding double dimmers)	861 ZIC (25mm)	—
1 gang (for double dimmers)	866 ZIC (35mm)	—
2 gang	862 ZIC (25mm)	—
1 gang switches (Albany MCO only)	—	K829 ALM/K899 ALM
2 gang switches (Albany MCO only)	—	K830 ALM/897 ALM