



Technical Data

Dimmer Switches – Push type

Brief product description:

BG's Neo Slimline range of wiring accessories, sleek polycarbonate with screwless clip-on front plate, available in gloss white and decoarative finishes.

Features:

- Manufactured to BS EN 60669-2-1
- Minimum mounting box depth 25mm
- Suitable for compact fluorescent lamps(CFL) and LED Dimming
- There can be issues with dimming CFL and LED lamps at a low lighting level. The Nexus dimmer products have an adjustable minimum level feature which can be used to adjust the lighting output at a low level, to stabilise the load.

Product Images



PCWH81



PCWH82



PCWH85

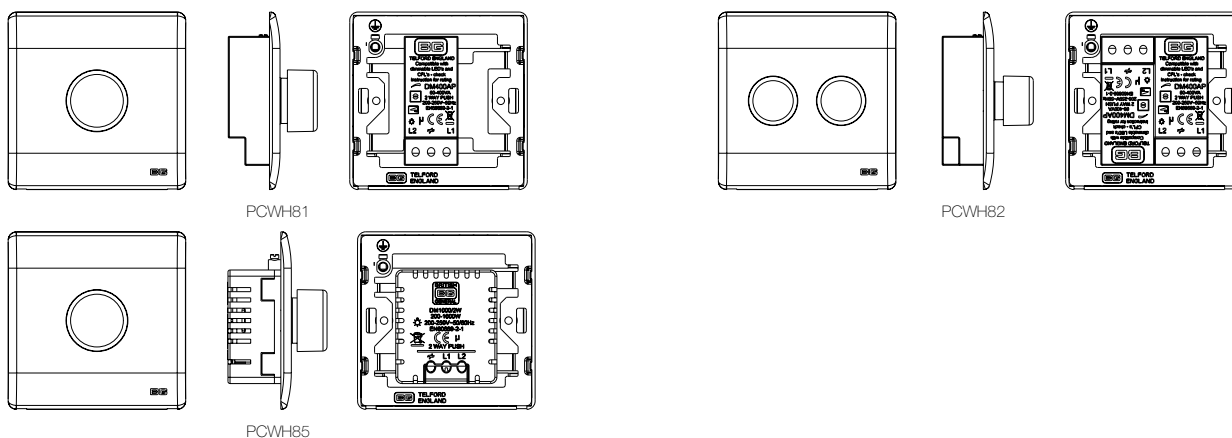
Technical Specifications

Standard(s)	BS EN 60669-2-1
ASTA Approval	License Number 1019
Voltage	200-250V AC
Load Ratings(Max/Min per module)	
Tungsten lamp	60-400W
Halogen lamp(Mains Voltage)	50-400W
Halogen lamp(Low Voltage, 12V)	35-350W
Dimmable LED	5-50W
Dimmable Compact Fluorescent (CFL)	10-100W
Type	Leading Edge
Terminal Capacity	3×1mm ² , 2×1.5mm ² & 1×2.5mm ²
RoHS Directive	No
WEEE Directive	No
Mounting Box Depth (min)	25mm
Fixing Centres	60.3mm
Size	86mm×86mm×43mm (PCxx81, PCxx82); 86mm×86mm×50mm (PCxx85)



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Line Diagrams



Packaging Information

Cat No.	Description	Packaging Type			Pack Quantity		
		Product	Inner Box	Outer Box	Each	Inner Box	Outer Box
PCxx81	1 Gang 2-Way 400W Dimmer Switch	BG Printed Bag	BG Printed Box	BG Brown Carton	1	10	100
PCxx82	2 Gang 2-Way 400W Dimmer Switch	BG Printed Bag	BG Printed Box	BG Brown Carton	1	10	100
PCxx85	1 Gang 1,000W Dimmer Switch	BG Printed Bag	BG Printed Box	BG Brown Carton	1	10	100

Weights & Dimensions

Cat No.	Description	Dimension (W x L x H) cm			Weight (g)			CMB (m ³)
		Product	Inner Box	Outer Box	Each	Inner Box	Outer Box	Outer Box
PCxx81	1g 2w	4.3x13x24.3	9.5x18.5x29.5	32x39.5x50	100	1140	12900	0.63
PCxx82	2g 2w	4.3x13x24.3	9.5x18.5x29.5	32x39.5x50	153	1580	17300	0.63
PCxx85	1g 1000W	5x13x24.3	9.5x18.5x29.5	32x39.5x50	126	1310	14600	0.63

Barcodes

Cat No.	Description	White (WH)			Champagne (CH)		
		Product	Inner Box	Outer Box	Product	Inner Box	Outer Box
PCxx81	1g 2w	5050765039581	5050765039901	5050765040228	5050765041447	5050765041713	5050765041447
PCxx82	2g 2w	5050765039598	5050765039918	5050765040235	5050765041454	5050765041720	5050765041454
PCxx85	1g 1000W	5050765039604	5050765039925	5050765040242	5050765041461	5050765041737	5050765041461

Barcodes

Cat No.	Description	Silver (SL)			Pearl White (PW)		
		Product	Inner Box	Outer Box	Product	Inner Box	Outer Box
PCxx81	1g 2w	5050765102735	5050765102773	5050765102810	5050765103909	5050765103947	5050765103985
PCxx82	2g 2w	5050765102742	5050765102780	5050765102827	5050765103913	5050765103954	5050765103992
PCxx85	1g 1000W	5050765102759	5050765102797	5050765102834	5050765103923	5050765103961	5050765104005

Installation Information

Safety Warning

Before use please read carefully and use in accordance with these safety wiring instructions.

Before commencing any electrical work ensure the supply is **switched off at the mains**. Either by switching off the consumer unit or by removing the appropriate fuse.

Wiring should be in accordance with the latest edition of the IEE regulations (BS 7671).

Wire Identification – Twin & Earth Cable

EARTH = Green/Yellow Sleaving

NEUTRAL = Black (pre Apr 04) / Blue (after Apr 04)

LIVE = Red (pre Apr 04) / Brown (after Apr 04)



The ends of the individual conductors should have the insulation removed by approx. 12mm. Any bare earth conductors should be sleeved to within 12mm of the ends. (These details are for general information only and conductor lengths may need to be trimmed in certain installations).

Technical Helpline: 03300 249 279

If in doubt consult a competent electrician.

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Installation Information

General Installation Instructions

- 1) If using the new product to replace an old one, note the cable connections and wire up new product in the same way as the old one, with Earthing as stated in these instructions.
- 2) Ensure the mounting box (metal or plastic) for either flush or surface mounting is the appropriate size for the product.
- 3) Route the cable through the most suitable entry point of the mounting box. If a metal box is used, a protective cable grommet should be used.
- 4) Cables should be prepared so a sufficient conductor length reaches the terminals. Strip the ends of the individual conductors so that an adequate length enters the terminals.
- 5) Carefully arrange the wiring to lie along the edges of the product or box, keeping the central area clear.
- 6) To assist with the correct installation please consult the appropriate wiring diagram on this leaflet.
- 7) When connecting the new accessory ensure that only the bare end of the wire enters the terminal, and no bare wires are visible.

Always tighten the terminal screws securely, but do not over-tighten.

An earth connection should always be made between the mounting box earth terminal, and the accessory earth terminal, where fitted. If this earth wire is bare, it is essential that it is sheathed with a length of green/yellow sleeving.

8) Carefully position the accessory into the wall box, ensuring that no wires are trapped between the plate and the wall. Do not over-tighten the screws. (Fit screw covers + clip-on)

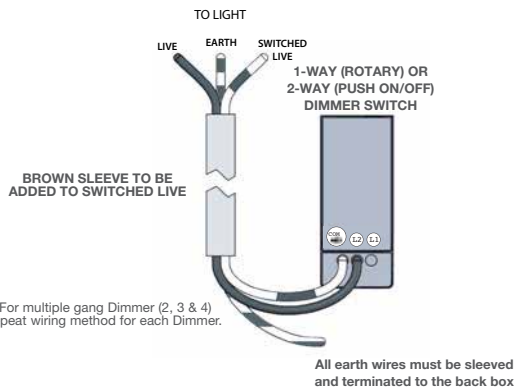
9) Once work has been completed correctly, replace the fuse for the circuit, switch the power back on, and test.

The product is now ready for use.

* Note - If your installation uses a four lug metal mounting box, remove the top and bottom lugs or bend fully back.

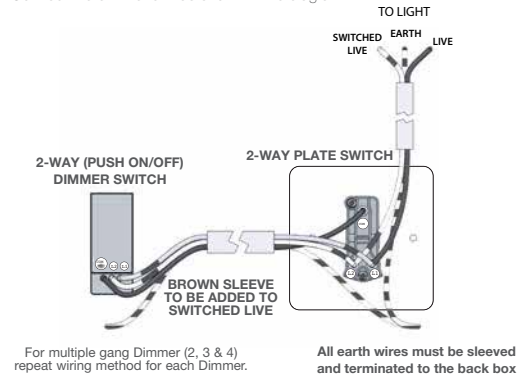
One Way Switching

One way switching is used in installations where the lights are switched from just one position. Connect the dimmer unit as shown in the diagram.



Two Way Switching

Two way switching is used in installations where a light is controlled from two separate positions. The dimmer may replace only one of these switches, and may be fitted in either position. Connect the dimmer unit as shown in the diagram.



1000W Dimmer (Export Only)

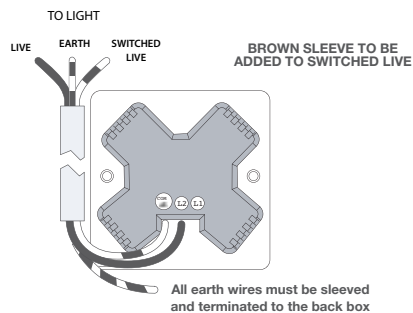


Plate Size	No. of Dimmers	Max. each Dimmers	Min. each Dimmers	Max. total per plate
Square plates 86mm x 86mm	1	250W	40W	250W
	1	400W	60W	400W
	1	630W	60W	630W
	2	250W	40W	250W
	2	400W	60W	630W*
*Maximum load of 630W for the plate should not be exceeded.				
Plate Size	No. of Dimmers	Max. each Dimmers	Min. each Dimmers	Max. total per plate
Rectangular plates 86mm X 146mm	1	1000W	150W	1000W
	2	630W	60W	1000W*
	3	250W	40W	750W
	3	400W	60W	1000W*
	4	250W	40W	1000W*
4	400W	60W	1000W*	
*Maximum load of 630W for the plate should not be exceeded.				

Please Note:

The dimmer is a LEADING EDGE type.

The dimmer unit will emit a faint buzz and may become warm while in operation, this is quite normal and no cause for concern.

Tungsten Lighting

Tungsten dimmers are not suitable for dimming any transformer, low voltage, fluorescent or motor loads.

Mains voltage tungsten halogen lamps may be dimmed, but the maximum rating of the dimmer must be de-rated by 50% (i.e., a 40-250W dimmer must be treated as 40-125W, a 60-400W dimmer as 60-200W, etc.)

Low Voltage Lighting

2-Way (Push ON/OFF) low voltage dimmers are only suitable for dimming wire wound laminated and some dimmable electronic transformers.

They are not suitable for dimming toroidal transformers, Fluorescent or Tungsten Lamps. Many electronic transformers are not dimmable and many which claim to be dimmable may not be compatible. Most UK dimmers, use a 'leading edge' principle, therefore, transformers which require a 'trailing edge', 'falling edge', 'phase lagging' or 'transistor' dimmer, must not be used. To dim any compatible transformer, a low-voltage (inductive) dimmer must always be used.

These are not 'inductive only' dimmers.

The dimmer VA rating refers to the total circuit load, not lamp load. Allow for transformer losses. Typically 20% (or 15% for electronic transformers). Therefore, maximum load for 400VA dimmer becomes 330W (350W electronic), and 250VA becomes 210W (215W for electronic).

Low voltage dimmers should be connected on the 'mains side' of the transformer.

Load resistors are not required.

Transformers should be installed in accordance with the manufacturer's instructions. If setup with laminated transformer either buzzes excessively or lights flicker, it may be necessary to install a snubber circuit across the transformer primary. (one per dimmer circuit).