

iQ - Intelligent Dimmer Switches

Employ the latest, state of the art, microcontroller 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.

All iQ Intelligent Dimmer Switches

employ one pole change over switches to facilitate two way switching.
iQ Intelligent Dimmer Switches are

NOT suitable for use with Fluorescent Loads, including Energy Saving Lamps.

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.

☐ **Unidirectional current sensing.**

While being used with wire-wound transformers for low voltage lighting, these dimmer switches continuously monitor the drive conditions to the transformers, which require essentially, bi-directional a.c. supply at their input terminals. If, due to some fault condition, the supply to the wirewound transformer is detected to be unidirectional, which could result in over-heating and/or damaging the transformer, the dimmer switches' circuitry automatically stops supplying the transformer after a few cycles of detected unidirectional supply.

☐ **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.

Overload reaction

Case Approximate load Power output to load when dimmer control is on the dimmer as set to maximum a percentage of its maximum rating

- 1 Up to 125 Load will receive maximum power continuously.
- 2 >125 to 150 Output to load will be reduced to 50% of the maximum after a delay of approximately 20 seconds after switch on.
- 3 >150 to 200 Output to load will be reduced to the minimum setting of the dimmer after a delay of approximately 20 seconds after switch on.
- 4 >200 Output will be disabled (load will be switched off) almost instantaneously after switch on.

iQ Dimmers:

Fused GLS Tungsten Filament lamps to BS161, rated at 230/240V. Dimmable wire wound or electronic Low Voltage Transformers of good quality.

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.