

Inrush Limiter



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It is important to understand that the control gear (drivers) used for LEDs do not have the same characteristics as conventional control gear used with traditional light sources.

The short term inrush current of some modern LED drivers can be significantly higher than that of conventional high frequency control gear. This can cause problems with nuisance tripping within the circuit protection (MCBs) and can damage devices used to control/switch the lighting load. Therefore it is important that the electrical circuit design is appropriate for the luminaires and the circuit has the required electrical protection. This is especially important when looking to replace existing traditional luminaires.

Electrical characteristics vary dependent on the luminaire type and LED driver used. Our recommendations for the selection of the maximum number of luminaires which can be connected to different circuit breaker types are available on request.

It should be noted that although figures are listed for type B and C breakers, we would recommend that C type breakers are used.

With the need for protection against excessive inrush currents to protect against circuit breaker tripping and damage to switching devices, we have taken the proactive step to introduce a new device, the PCL16A inrush peak current limiter.

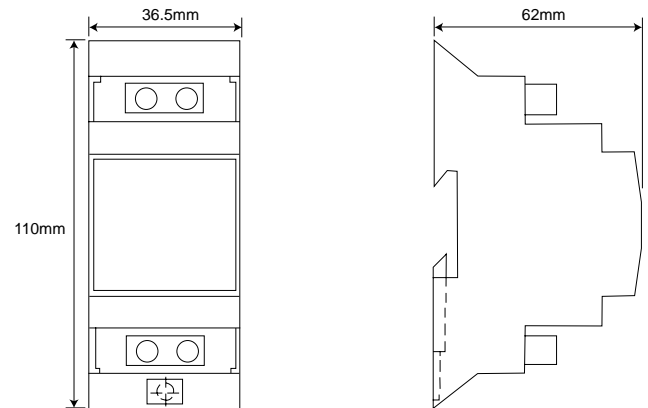
This device can be easily installed as part of the final distribution components, it is simply connected between the supply circuit breaker and the load (i.e. luminaire circuit). It protects the circuit from inductive and capacitive loads. Rated at 16A for continuous operation, it allows a circuit to be loaded to 16A with inrush surges then managed by the device.

The PCL16A device is available as an individual Din-rail mount component or with up to 3 supplied pre-fitted into a remote enclosure to further simplify installation.

Features

- The peak inrush limiter protects circuits and allows more luminaires to be installed on existing circuit breakers reducing installation costs
- Circuit switching/control devices do not have to be overated to be able to control the high inrush load
- Simple to install with surface mount screw holes and DIN-rail mounting feature
- Available with up to three units pre-fitted into an enclosure to minimise installation time
- Integrated thermal protection to prevent overheating
- Very low power consumption

Dimensions



Specification

Device:	Peak / RMS Current Limiter
Voltage:	184-265V AC range 230V AC continuous
Current Rating:	16A Continuous
Capacity Load:	1.500uf (max)
Frequency:	16.33Hz to 440Hz
Mounting:	DIN-rail TS35mm EN60715 (TS35/7.5 and TS35/15) or 2 screw holes for surface mounting. (Do not mount the unit on its side, only with the unit vertical or base down on a horizontal surface)
Terminals:	Spring Type: 0.5-6mm ² / 21-10AWG
Housing:	ABS UL94V-0 IP20 Rated, with Ventilation Slots
Ambient Temperature:	-40°C to +70°C with Integrated Temperature Protection

Catalogue Numbers

Description	Cat No	Weight (kg)
1 x 16A peak inrush current limiter - unit only	PCL16A	0.12
1 x 16A peak inrush current limiter - c/w enclosure	PCL16A-ENC1	0.72
2 x 16A peak inrush current limiter - c/w enclosure	PCL16A-ENC2	0.84
3 x 16A peak inrush current limiter - c/w enclosure	PCL16A-ENC3	0.96