Easy life solutions

New in the NEDIS assortment: LED dimmers

A properly working dimming solution would contribute greatly to our success in selling our HQ dimmable LED lighting assortment. This is why we teamed up with Tradim®, a company which specialises in the development and product of (LED) dimming solutions. It resulted in a series of HQ LED dimmers which we would now like to introduce at the start of the lighting season 2016 – 2017.

We offer the following LED dimming solutions through the HQ brand:

LED universal wall dimmer with 8 dimming profiles
Article number: TRAWD01
EAN: 5412810251261
5-150W
To be able to control and, more specifically, to be able to dim LED lamps, it is crucial to accurately regulate the current flow. What makes this process extra complicated is that the current flow rate varies per lamp.

This wall dimmer for dimmable (filament) LED lamps features software which allow you to choose from 8 different dimming profiles. This guarantees optimal dimming results for nearly all dimmable LED lamps on the market.
The user-friendly manual that comes with the dimmer describes clearly how to select a dimming profile.

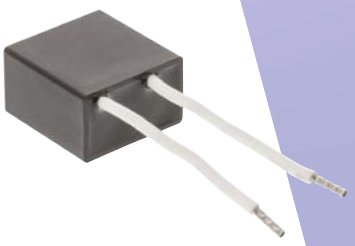
The wall dimmer guarantees an optimal result with dimmable LED lamps of 5 W and up. It is possible that dimmable LED lamps with a lower wattage are also perfectly dimmable but this depends per lamp.
Dimmable HQ (filament) LED lamps on the other hand are specifically designed to communicate with each other. This is why HQ LED lamps with a wattage of less than 5 W are smoothly dimmable as well.
Moreover, a luminaire often contains multiple bulbs so the total wattage easily exceeds 5 W.

Product features

- Compliant with all current norms/standards, such as KEMA certificate & EN60669.
- Equipped with an electronic fuse.
- Protected against peak current and power surges.
- Protected against short-circuit.
- **2-wire dimmer:** the dimmer operates with a switch wire (black wire) and a hot wire (brown), so there is no need for a neutral wire (blue). Wall dimmers normally require a zero wire to be able to work properly.
- **Extremely low minimum wattage** (5 W) which makes this dimmer suitable for most dimmable LED lamps.
- A constantly stable light source thanks to various dimming profiles.
- Self-select **dimming range between 10% and 100%** through 8 dimming profiles.
- Electronic dimmer according to **trailing edge technology:** advanced circuitry which ensures the lifespan of LED lamp and dimmer.
- **Soft start technology**, which gradually warms up (LED) lamps, increasing the lifespan of the lamp.
- **Built-in intelligence:** the 8 dimming profiles are processed in the chip via software, which means that chances are 8 times bigger to establish a proper match between lamp(s) and dimmer. Installers or consumers are able to select the dimming behaviour themselves.
- **Compatible with all popular switching line brands**, such as Peha, Busch Jager, Gira, Berker and Merten.

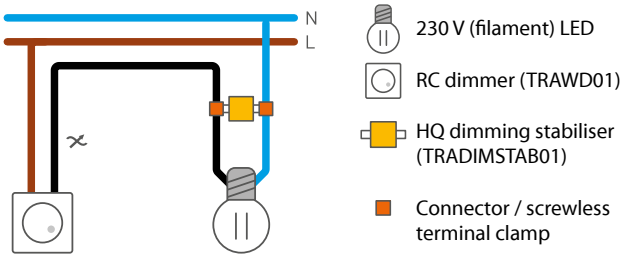
- Press the button and select a dimming profile. You can see from the number of times the LED (on the right) flashes, which profile is selected.

LED dimming stabiliser
Article number: TRADIMSTAB01
EAN: 5412810251308
If the dimming behaviour is still not optimal in spite of the various dimming profiles, this unique electronic component provides the solution. Install this dimming stabiliser in the luminaire to avoid a flickering and unstable light.



It is relatively expensive to build in this stabiliser in the HQ wall dimmer (TRAWD01) since a stabiliser is not necessary for an optimal dimming perfomance in most cases. This is why we offer this dimming stabiliser as a separate accessory. Install the compact stabiliser (approx. 2 x 2 x 1 cm) in the luminaire, as close to the light source(s) as possible. Please see the image below.

Only compatible with the LED universal wall dimmer (article number TRAWD01) if the dimming behaviour is not optimal. If you are using HQ filament LED lamps, we also advise to use this dimming stabiliser to accomplish a perfect dimming performance.



Floor dimmer
Article numbers: TRAFLDIM01B (black) and TRAFLDIM01W (white)
EAN: 5412810251292 (black) and 5412810251315 (white)
1-60W

This dimmer is particularly used in combination with standing luminaires. Although the dimmer is compatible with all types of light sources, it performs extremely well with HQ dimmable LED lamps. The minimum dimming level can be adjusted by end users, enabling them to determine the control range themselves.

Producteigenschappen
- Compliant with all current norms/standards, such as KEMA certificate & EN60669.
- Equipped with an electronic fuse.
- Protected against peak current and power surges.
- Protected against short-circuits.
- **Extremely low minimum wattage** (1 W) which makes this dimmer suitable for most dimmable LED lamps.
- **Wide dimming range of practically 0 to 100%.** As an effect, most dimmable LED lamps are compatible with this floor dimmer.
- **Perfectly suitable for dimmable filament LED lamps** thanks to the incorporated dimming technique in combination with the integrated stabiliser.

- **Stable light provided by the integrated stabiliser,** which also prevents flickering lamps.
- **Minimum dimming level** is easily adjustable with the adjustment screw.
- **Guaranteed lifespan of both lamp and dimmer** thanks to the applied technology.
- **The best LED floor dimmer** currently available in the market, according to lighting and luminaire manufactures.

Cord dimmer
Article numbers: TRACRDDIM01B (black) and TRACRDDIM01W (white)
EAN: 5412810251278 (black) and 5412810251285 (white)
1-25W

This dimmer is particularly used in combination with small standing luminaires, such as desk or table lamps or lamps used in bedrooms. The minimum dimming level can be adjusted by end users, enabling them to determine the control range themselves.

Product features
- Compliant with all current norms/standards, such as KEMA certificate & EN60669.
- Equipped with an electronic fuse.
- Protected against peak current and power surges.
- Protected against short-circuits.
- **Extremely low minimum wattage** (1 W) which makes this dimmer suitable for all dimmable LED lamps, including the ones with a low wattage.
- **Wide dimming range of practically 0 to 100%.** As an effect, most dimmable LED lamps are compatible with this cord dimmer.
- **Minimum dimming level** easily adjustable with the adjustment screw.

Technical explanation LED dimmers

Leading edge and trailing edge
It is crucial to realise that only trailing edge dimmers are suitable for dimmable LED lamps. Trailing edge dimmers are electronic dimmers, which are marked with RC or RLC.

Leading edge dimmers (marked with R or R,L) on the other hand, are completely incompatible with dimmable LED lamps. At first, they seem to be working fine but, passing enormous peak currents onto the LED lamp, they will eventually shorten the lifespan of both lamp and dimmer. Electronic dimmers are more expensive since they incorporate a technique which is more advanced.

Conclusion:
- Trailing edge dimmers / electronic dimmers (marked with RC or RLC) are suitable for dimming (filament) LED, CFL, halogen and incandescent lamps
- Leading edge dimmers / traditional dimmers (marked with R or RL) are only suitable for dimming CFL, halogen and incandescent lamps. They are completely incompatible with dimmable (filament) LED lamps.

Importance of power factor LED lamp
With regard to the maximum wattage, a distinction is made between incandescent/halogen lamps and LED lamps. This has to do with the so-called power factor (Pf) of LED lamps. It works as follows: the more efficient a LED lamp is able to convert current into light, the higher the Pf. A lot of lamps in the market have a low Pf, however. This means that a lamp with a wattage of 10 W and a Pf of 0.5, actually requires 20 W.

If you would plan to connect lamps with a poor Pf of 0.3 to a 150 W dimmer, you should only charge the dimmer with a maximum load of 50 W. Besides, dimming requires you to also take into account another +/- 20%.

This power factor does not apply to incandescent lamps, which is why an incandescent lamp of 150 W would be allowed. However, we advise to charge dimmers and transformers up to a maximum of 80%. In this case, we would advise to use incandescent or halogen lamps of up to 120 W.

To be able to come up with proper advise, you should therefore always ask for the power factor of the (HQ) lamp which is going to be used.

Power factor (Pf) per lamp	**Number of lamps in luminaire**	**Watt (W) per lamp**	**Watt (W) total**	**Total required power (W)**
			No. of lamps x watt per lamp	***Total W / power factor***
0,3	1	10	10	33,33
0,3	3	10	30	100
0,5	1	10	10	20
0,5	3	10	30	60
0,8	1	10	10	12,5
0,8	3	10	30	37,5