DIN-RAIL PANEL PRODUCTS

Touch dimmer



TOUCH DIMMER Universal control voltage 8 to 230 V UC, R, L and C loads 400 W Dimmable ESL 100 W Dimmable LED, 230 V 100 W

1 M

ITEM	WEIGHT	PACKING
NO.	g/EACH	UNIT

96

TDU500

Electronic universal touch dimmer for R, L and C loads

Universal control voltage 8..230 V UC, galvanically separated from supply and switching voltage 230 V.

Short control commands switch on/off, permanent activation adjusts brightness up to the maximum value.

A brief interruption of the activation alters the dimming direction. The set level of brightness remains saved when switched off.

With switches for children's rooms:

When switching on and pressing the button for at least 1 second, the light will switch on at the lowest brightness level and slowly increase brightness, without altering the last brightness level saved.

With sleep function:

The lighting is dimmed from its current brightness and switches off when it receives a double impulse. The maximum dimming time of 60 minutes is dependent on the current brightness and can be shortened accordingly.

Switching-off during the dimming procedure is always possible by pressing the button briefly. Pressing the button for a longer time during the dimming procedure turns up the light and ends the sleep function.

Defined switch-off during electricity failure.
From 110 V control voltage, glow lamp current 30 mA
With the % 🔆 -rotary switch the minimum brightness
can be set (completely dimmed) e.g. for dimmable
energy-saving lamps.

The **dim speed rotary switch** can be used to set the dimming speed. At the same time the duration of the soft ON and soft OFF is altered. The **+ESL** settings take into consideration the special conditions for dimmable energy-saving lamps: The switching-on procedure is optimised and the dimming rate is altered logorithmically. The children's room switch is not possible in these settings and wound (inductive) transformers are not allowed to be dimmed

Function

Rotary switch

Memory is switched off in the **–ESL** setting. This can be advantageous with ESL, since cold ESL require a higher minimum brightness than might be stored in the memory with warm ESL.

The **LED** settings take into account the special conditions for dimmable 230V LED lamps. Different dimming curves can be selected. In these settings, no wound (inductive) transformers may be dimmed.

Automatic electronic overload protection and thermal overload switch-off.

L loads (inductive loads, e.g. wound transformers) and C loads (capacitor loads, e.g. electronic transformers) must not be mixed.
L and C loads can be mixed as desired with R loads (ohmic loads, e.g. 230 V incandescent and halogen lamps).

Technical data for dimmer TDU500 1)		
Incandescent lamps 230 V (R)	400 W	
Halogen lamps 230 V (R)	400 W	
Inductive transformers (L)	400 W ^{2) 3)}	
Electronic transformers (C)	400 W ^{2) 3)}	
Dimmable energy-saving lamps ESL	100 W ⁴⁾	
Dimmable LED 230 V	100 W	
Temperature at the installation location max. / min.	+50°C / -20°C ⁵⁾	
Control voltage area	0.9 bis 1.1 x U _n	
Constant current supply	12 mA	

The parallel operation of inductive (wound) and capacitive (electronic) transformers is not allowed!

- 1) For loads greater than 300 W, a ventilation interval of 1/2 module is to be maintained to devices mounted next to each other.
- 2) A maximum of two inductive (wound) transformers are allowed per universal dimmer switch and only the same types may be used; in addition, secondary-side idling is not allowed. Otherwise the universal

dimmer switch may be destroyed!

Therefore no secondary-side load switch-off allowed.

- 3) When calculating loads, 20% loss for inductive (wound) transformers and 5% loss for capacitive (electronic) transformers must be taken into account in addition to the lamp load.
- 4) In the ESL settings, no inductive (wound) transformers may be dimmed.
- 5) Influences the maximum switching capacity.

Connection example



