APDS-1000

Phase dimmer 40-1000VA, control cabinet

Art. no. 22154223

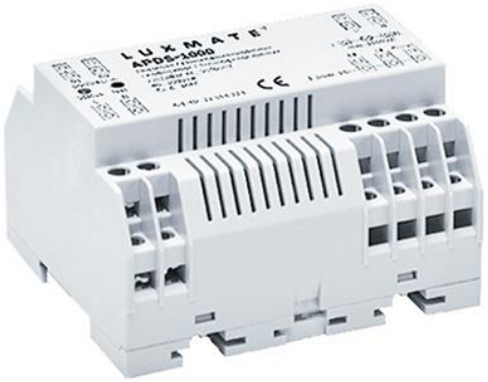
Phase dimmer with automatic load detection - phase or reverse phase. Control by means of a DSI or DALI signal or via momentary action switch. Total connected load 40 - 1000VA. Light value memory (Preset function)

Application

With the digital phase dimmer, it is possible to dim LV tungsten-halogen lamps in connection with electronic or magnetic transformers, as well as ohmic light sources (incandescent lamps and HV tungsten-halogen lamps) with a total connected load of 40 – 1000VA.

The device is actuated by means of a DSI or DALI signal, or with momentary action light switches.

In addition, the APDS-1000 allows for the storage and recall of any desired light value (preset function).



Design notes

- The APDS 1000 can be controlled either via a DSI or DALI signal or via directly connected momentary action light switches.
- Automatic detection is performed after every power reset. If magnetic and electronic transformers are connected to an APDS 1000 at the same time, this will destroy the dimmer.
- If the joint operation of several APDS 1000 is desired, control must be accomplished via a DSI or DALI signal.
- Please provide for sufficient heat abduction from within the switch cabinet, since the admissible ambient temperature of the APDS 1000 must not exceed 40°C. The APDS 1000VA must be mounted in an upright position on a horizontal top-hat rail only, so that the natural cooling throught the slits in the housing is not obstructed.

Functional description

The APDS 1000VA can be controlled via a DSI or DALI signal. This is the preferred option when several APDS 1000VAs are to be controlled synchronously. In this case, operation takes place only via the device from which the APDS 1000VA receives the DSI or DALI signal, e.g. LM-DSI or LM-DALI...

As an alternative to operation by means of a DSI or DALI signal, the APDS 1000VA can be operated via a locally connected momentary action switch. The lighting can be switched or dimmed by means of the momentary action switch inputs T+ or T-.

Double momentary action switch control:

ON/OFF:	Short key press on T+ or T-
Dim the lighting UP:	Long key press on T+
Dim the lighting DOWN:	Long key press on T-

Single momentary action switch control:

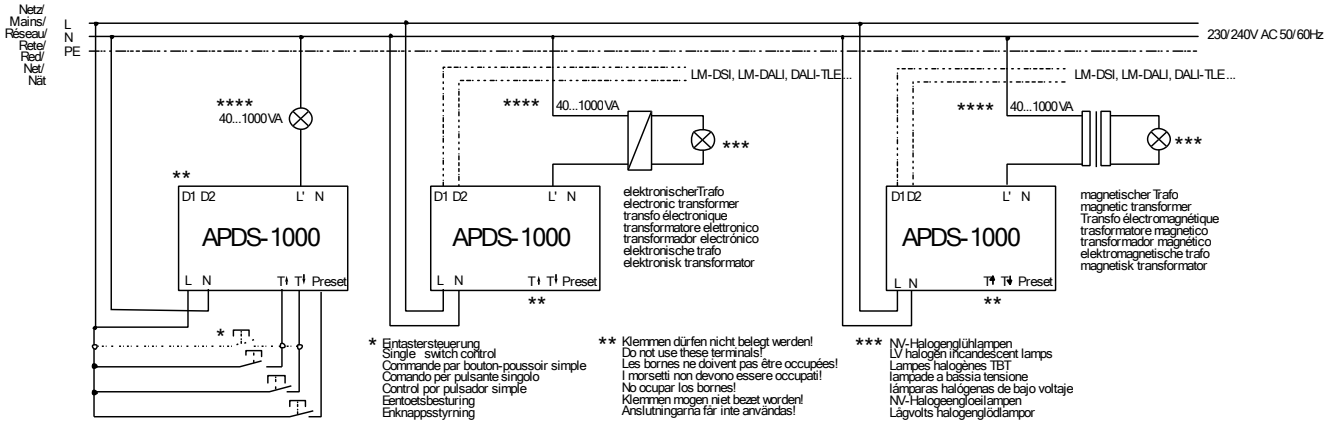
ON/OFF:	Short key press
dim the lighting UP/DOWN:	Long key press (changing dimming direction at each key press)

Preset Function

By connecting a commercially available momentary action switch to the "Preset" input, it is possible to save and call up any light value at any time.

Saving and calling up of a light value:
Adjust the light value by means of the momentary action switch T+ or T- and then press the "Preset momentary action switch" for a long time (> 5 seconds).
Call-up of the stored light value is performed by pressing the "Preset momentary action switch" for a short time (< 5 seconds) .

Wiring scheme

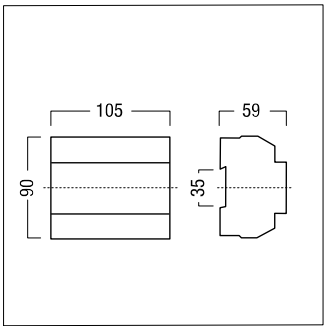


**** Ist der Nullleiter extern (nicht der N-Anschluss am APDS-1000) verbunden, dann ist auf Phasengleichheit zu achten!
If the zero conductor is connected externally (i.e. not to the N connection of the APDS-1000), ensure phase balance!
Si le conducteur neutre est raccordé en externe (pas le raccordement N du APDS-1000), bien respecter la concordance des phases.
Se il conduttore neutro è collegato esternamente (non il collegamento N al APDS-1000), prestare attenzione al bilanciamento di fase!
Si el conductor neutro (no la conexión N en APDS-1000) está conectado externamente, entonces se deberá prestar atención a la coincidencia de fases.
Indien de nulleider extern (niet met de N-aansluiting van de APDS-1000) is aangesloten, dan moet worden gelet op de fasegelijkheid!
Om nolledaren är ansluten externt (inte N-anslutningen på APDS-1000), måste man kontrollera att det råder fasiikhet!

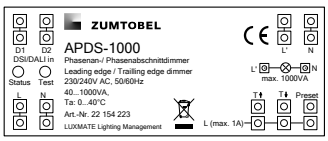
Mounting and installation instructions

- The power is connected to the L and N terminals without a switch.
- If necessary, several momentary action switches can be wired in parallel. The phase position of all connected devices must be identical.
- In the case of single momentary action switch control the two terminals T+ and T- are connected with a wire bridge.

Dimension



Label/connections



Technical data

Nominal voltage	230/240 V AC, 50/60 Hz
Permitted input voltage	207 ... 264 V AC, 50 ... 60 Hz
Connected load	40-1000 VA
max. output current	4,5A true RMS
Power loss	2 W (15 W at full load)
Inputs	1 DALI/DSI control input, current consumption 2 mA (1 DALI load) 1 momentary action switch input for retrieving preset function 1 single or double momentary action switch
Outputs	1 dimmed phase
DSI/DALI control wiring	H05VV-U 2 x 1.5 mm², max. 250 m per output
DSI signal	12 V clocking (Manchester code)
DALI signal	16 V clocked (Manchester code)
Control range	DSI: 0; 1-100 % (relative luminous intensity) DALI: 0; 0,1-100 % (relative luminous intensity)
Terminals	0,75 ... 2,5 mm²
Protection type	IP20
Housing material	polycarbonate, halogen-free, flame retardant
Installation	On 35 mm top-hat rail according to EN 50022 Horizontally in switch cabinet
Dimensions	6 units at 17,5 mm 105 x 90 x 59 (L x W x H, in mm)
Permissible ambient temperature ta	0 °C ... +40 °C
Weight	Approx. 0.4 kg
Miscellaneous	Status LED for indication of operating state 5 AT microfuse In the event of mains on/off, the device is controllable after 1 second