Wireless Actuator Universal Dimmer Switch FUD12NPN

1-channel expansion, 500W power MOSFET. Only 0.3 watt standby loss.
With adjustable minimum brightness and dimming speed. With switching operation for light alarm clocks, children's rooms and snooze function.
Also for dimmable energy saving lamps.
Modular device for DIN-EN 60715 TH35 rail mounting. 1 modul = 18mm wide, 58mm deep.
Universal dimmer switch for R, L and C loads up to 500 watt, depending on ventilation conditions. Dimmable energy saving lamps ESL up to 100 watt. Automatic detection of load R+L or R+C. ESL is manually settable.
Zero passage switching with soft ON and soft OFF to protect lamps.
Switching voltage 230V. No minimum load required.
The brightness level is stored on switch-off (memory).
In case of a power failure the switch position and the brightness stage are stored and may be switched on when the power supply is restored.
Automatic electronic overload protection and overtemperature switch-off.
Connection to the RS485 interface (terminals RSA/RSB) of the upstream wireless antenna switching actuator FAA12 or FAB12. Up to a total of 128 channels from FUD12NPN, FSG12, FSA12 and FSB12 can be added in this way.
The minimum brightness (fully dimmed) is adjustable with the % rotary switch. In the setting LRN up to 35 wireless pushbuttons can be assigned therefrom one ore more central pushbuttons.
The dimming speed is adjustable using the dimming speed rotary switch. At the same time, the soft ON and soft OFF periods are changed.
The settings ESL consider the special conditions regarding dimmable energy saving lamps: The starting operation is optimized and the dimm speed changes logarithmically. In these settings the special switching operation for children’s rooms is not possible and no wound (inductive) transformer must be dimmed. In position -ESL Memory is switched off. This can be of advantage for energy saving lamps because cold energy saving lamps require a higher minimum brightness as it will possibly be stored in Memory for warmer energy saving lamps.
The wireless pushbuttons can be taught-in either as direction switches or universal switches: As a direction switch, press up is brighter and press down is darker respectively above short pressing means switch ON and below short pressing switch OFF. A double click above activates automatic updimming until full brightness with dim speed. A double click below activates snooze function. The children's room function will be realized with the upper switch.
As a universal switch, change the direction by briefly releasing the pushbutton. With switching operation for children's rooms and snooze function.
Switching for light alarm clocks: A wireless signal of a time clock which was taught-in accordingly starts the wake up function by switching on the light at the lowest brightness level and dims up slowly until the maximum level is reached. Dependent on the set dim speed the wake up time is between 30 and 60 minutes. By pressing shortly e.g. of a hand-held transmitter the dimming process is stopped. The contact of the timer must conect terminals +12V and LW at least 0.2 seconds. At setting ESL is no switching for light alarm clocks possible
Switching operation for children's rooms: If the light is switched on by holding down the push-button (universal switch or direction switch above), it starts at the lowest brightness level after approx. 1 second and dims up slowly as long as the pushbutton is held down without modifying the last stored brightness level.
Snooze function (universal switch or direction switch below): With a double impulse the lighting is dimmed down from the current dimming position to the minimum brightness level and switched off. The current dimming position as well as the adjustable minimum brightness level determine the dimming time (max. = 60 minutes) which can be reduced as required. It can be switched off at any time by short-time control commands during the lighting is dimmed down.
The LED performs during the teach-in process according to the operation manual. It shows wireless control commands by short flickering during operation.