



Data sheet

KNX-DIM21

Universal two-channel dimming actuator



KNX-DIM21 - universal two-channel dimming actuator

The KNX-DIM21 module is a universal two-channel dimming KNX actuator that allows stepless control of light sources up to 300 W per channel. The light can be turned on / off, dimmed down (darker) / dimmed up (brighter), set by using a predefined scene or another function via the KNX bus. The actuator can be used with resistive, inductive and capacitive loads (R, L, C).

The module is designed for use with 230 V AC voltage.

Features

- communication with KNX bus via integrated bus connector
- automatic recognition of the connected load type
- adjustable lighting characteristic to suit the load type
- two-stage, firmware-hardware overheating protection system
- overload protection
- feedback on status of module and individual channels
- definable reaction of each channel in case of KNX voltage loss and recovery
- definable reaction of each channel in case of voltage recovery
- time functions (switching delay, staircase function with warning option and operating time change)
- value forcing function
- option to call scenes for each channel by using 1- and 8-bit commands
- manual operation of each channel status by using buttons on the enclosure
- LEDs to indicate each channel status and signal troubles
- module configuration using ETS software
- suitable for mounting on DIN rail (35 mm)

Specifications

Power supply

Supply voltage (KNX bus)	20...30 V DC
Current consumption from KNXbus	< 10 mA

Load circuit

Rated voltage U_n	230 V AC
Mains frequency	50/60 Hz
Maximum power loss	4 W
Standby power loss	0,8 W
Contact type	ϵ , MOSFET

Maximum output load

Incandescent lamps	300 W
HV halogen lamps	300 VA
Inductive transformers	300 W
Tronic (electronic) transformers	300 W
HV-LED lamps	typical 3...60 W
Compact fluorescent lamps	typical 3...60 W

Mixed load

resistive-inductive	20...300 VA
resistive-capacitive	20...300 W
Maximum device load	600 W / VA

Connections

Maximum wire cross section	2.5 mm ²
Maximum tightening torque	0.5 Nm

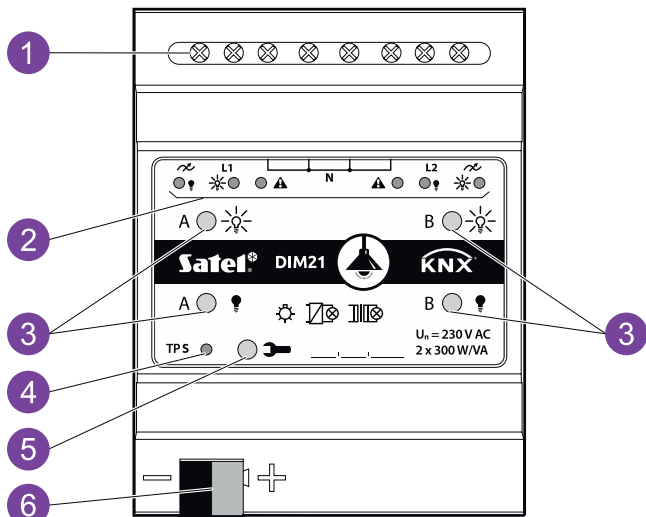
KNX parameters

Maximum time of reaction to telegram	<20 ms
Maximum number of communication objects	58
Maximum number of group addresses	256
Maximum number of associations	256

Other parameters

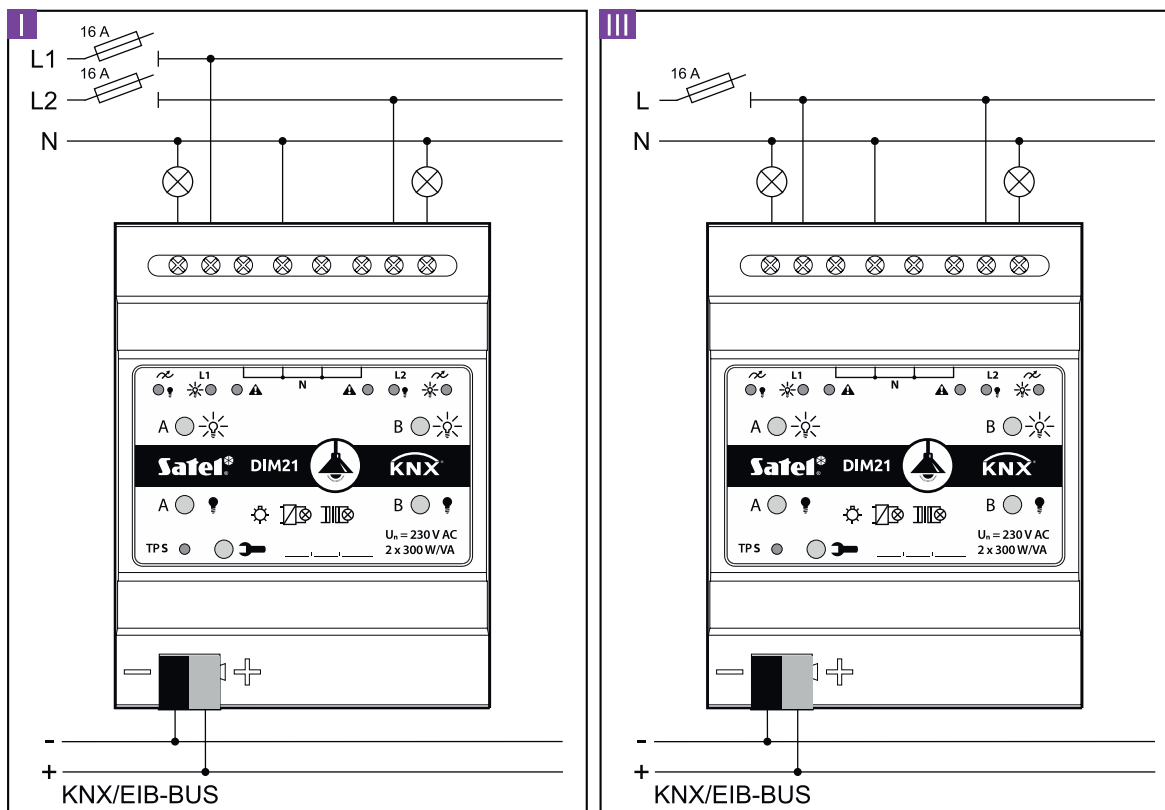
Operating temperature range	0 °C...+45°C
Storage/transport temperature range	-25 °C...+70°C
IP code	IP20
Number of units on DIN rail	4
Enclosure dimensions	70 x 92 x 60 mm
Weight	160 g

Device appearance



1. Load circuit terminals L1, L2, N,
2. LEDs to indicate channel status / troubles.
3. Buttons for manual control of the channels.
4. Red LED – ON when a physical address is being assigned by using the ETS program. The address assignment can be activated remotely from the ETS program or manually with the button on the enclosure.
5. Programming button (to be used to assign the physical address).
6. Terminal to connect the KNX bus.

Selected ways of connecting the loads to the modules



- I. Multi-phase mode.
- III. Single-phase mode.