Satel
MADE TO PROTECT

Data sheet

KNX-**BIN24**

Universal binary input module

www.**satel**.eu

KNX-BIN24 - universal binary input module

KNX-BIN24 is a universal module of KNX binary inputs that enables electrical (voltage) signals to be converted into control telegrams for other devices on the bus. These signals may be generated by conventional ON/OFF buttons (to operate lighting, etc.) or by potential-free contacts of devices such as reed switches or sensors of various types of physical quantities (e.g. temperature).

The module has 8 physical inputs which allow it to handle 8 independent signals ranging from 0 to 30 V DC and AC.

Features

- communication with the KNX bus via integrated bus connector
- definable channel polarity (NO / NC)
- configurable time of short / long button press
- virtual channels for receiving 1-bit telegrams from other KNX bus devices
- virtual logic channels for creating logical links between module channels
- virtual timer channels for creating time links
- possibility to define 20 function blocks that perform one of the available functions:
  - » switch / value transmitter
  - » edge response
  - » dimmer
  - » shutter controller
  - » switching sequence
  - » counter
  - » scene controller
- possibility to control each function block using any channel
- control of several function blocks using one channel
- control of lighting and shutters using 1 or 2 buttons (channels)
- ability to call a scene from any channel by using 8-bit commands
- manual operation of physical channels status by using buttons on the enclosure
- LEDs to indicate status of physical channels
- module configuration using ETS program
- suitable for mounting on DIN rail (35 mm)

Specifications

Power supply

Supply voltage (KNX bus)	20…30 V DC
Power consumption from KNX bus	< 15 mA

Inputs

Number of inputs	8
Input current I_n	< 15 mA
Permitted voltage range U_n	0…30 V AC/DC
Signal level for U_{n0} signal	0…4 V AC/DC
Signal level for U_{n1} signal	9…30 V AC/DC

Input current

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

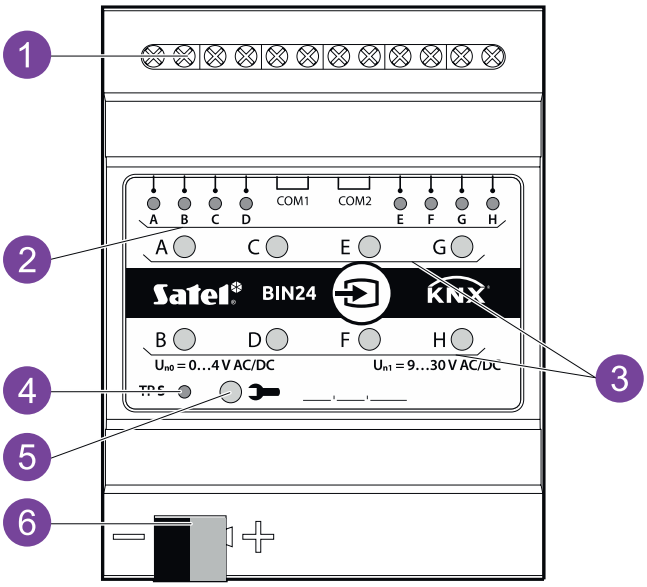
KNX parameters

Maximum time of reaction to telegram	<20 ms
Maximum number of communication objects	108
Maximum number of group addresses	256
Maximum number of associations	256

Other parameters

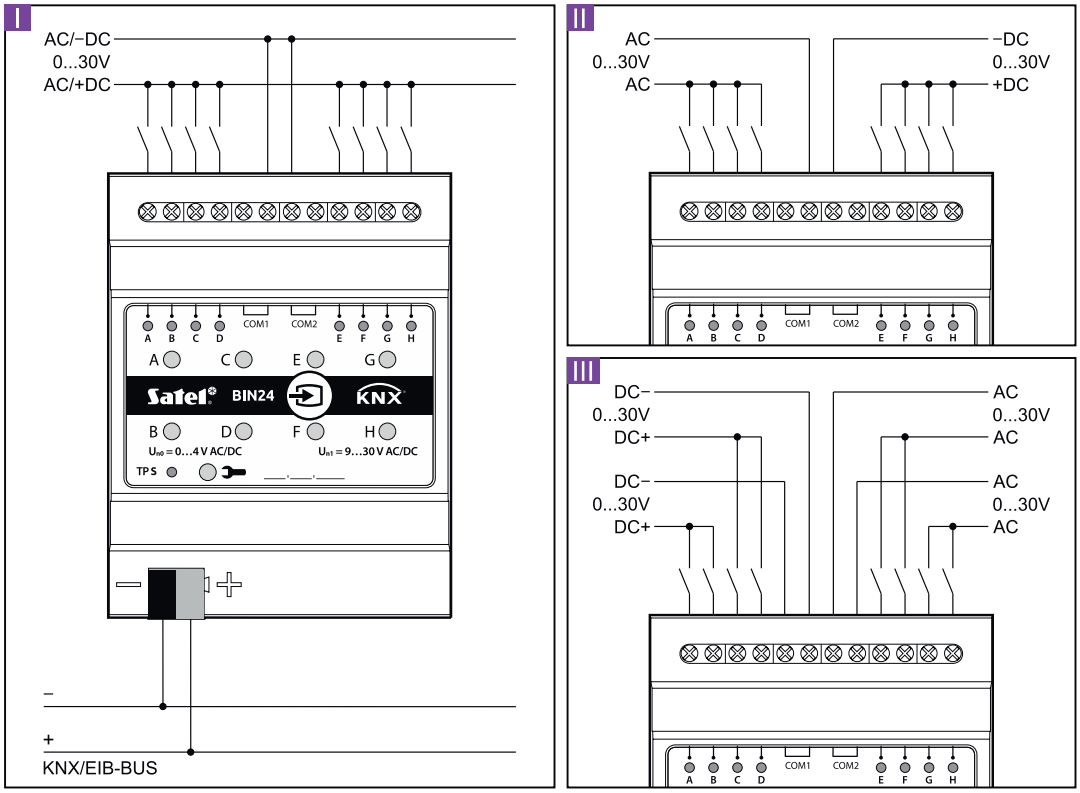
Operating temperature range	0 °C...+45 °C
Storage/transport temperature range	-25 °C...+70 °C
IP code	IP20
Number of units on DIN rail	4
Enclosure dimensions	70 x 92 x 60 mm
Weight	144 g

Device appearance



1. Physical input terminals.
2. Green LEDs indicating the status of module physical channels. One channel status LED is assigned to each channel:
   - » ON – channel is ON,
   - » OFF – channel is OFF.
3. Buttons to manually switch the state of physical channels (to simulate changes on physical inputs).
4. Red LED – is ON when physical address is being set using the ETS program. Setting the address may be activated remotely from the ETS program or manually, using the button on the enclosure.
5. Programming button (used when setting the physical address).
6. Terminal to connect KNX bus.

Wiring diagram



I. Voltage from one source, AC or DC, is applied to all inputs of the module.

II. Voltage from two different sources is applied to inputs of circuits 1 and 2 (DC voltage is applied to inputs of one circuit, and AC voltage to inputs of the other circuit).

III. Voltage from different sources is applied to inputs within one circuit (DC voltage is applied to inputs of one circuit, and AC voltage to inputs of the other circuit).