1 CHANNEL SHUTTER ACTUATOR OR

2 CHANNELS SWITCHING ACTUATOR

IT KNT 001

INSTRUCTIONS MANUAL

General Description

. This device consists in a switching actuator which can operate as:

- 1-channel Shutter Actuator (Fig. 1).
- 2-channel Switching Actuator (Fig. 2).

. Maximum output switching rating of up to 16A per channel with potential-free contacts.

. Integrated bus coupling unit (BCU).

. Modular installation device for DIN 17,5mm rail.

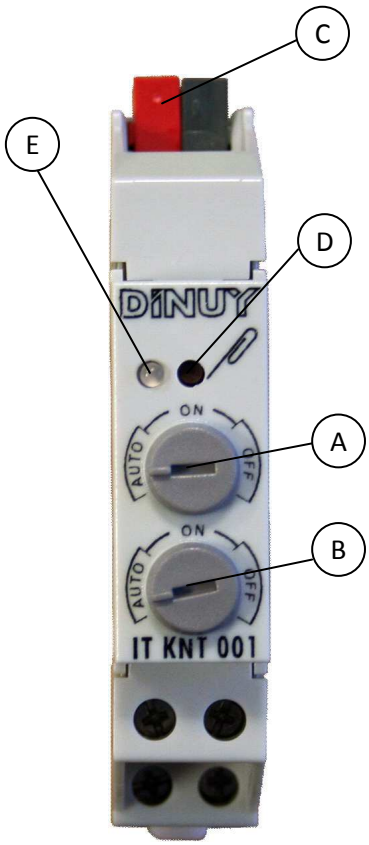
. It incorporates two Potentiometers (A & B), each one for each output channel. It allows manual output control, for a provisional operation, when it works as switching actuator without being connected to the KNX Bus:

· ON: Permanent Manual ON mode.

· OFF: Permanent Manual OFF mode.

· Auto: Bus operation.

. Programmation and commissioning by ETS4. It has a KNX standard connecting terminal (C).



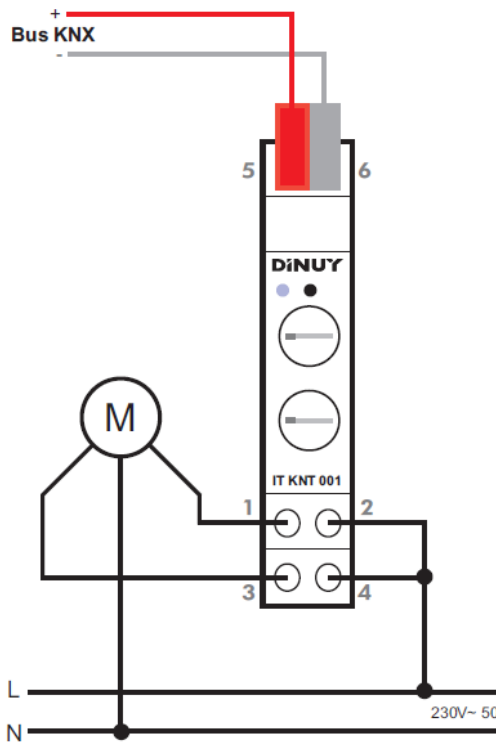


Fig. 1

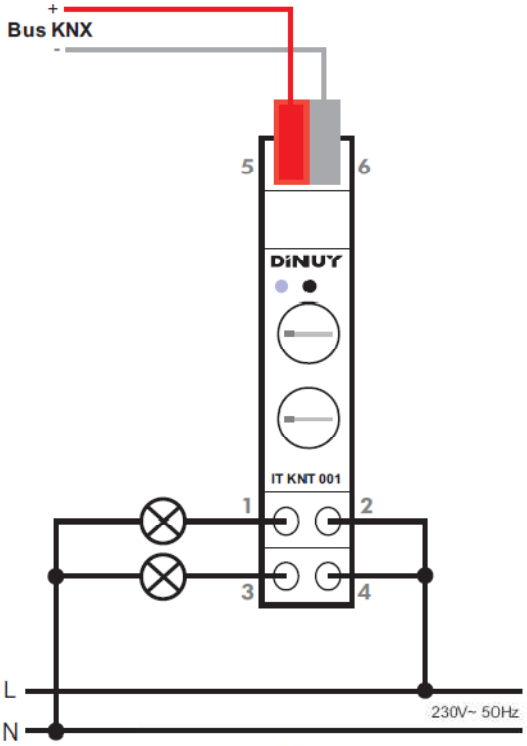


Fig. 2

Technical Data

Nominal voltage	230 V~ 50Hz
Supply from KNX bus	21 ~ 32 Vdc (via Bus)
Connection	Connecting terminal
Commissioning	ETS3 or ETS4
KNX Media	TP1
Channels	1 – Shutter or 2 – Switches
Commissioning mode	System mode
Insulation voltage	4KVac (bus/mains voltage)
Load	16A per channel, 2 bistable relays
Dimensions	1 module, 17,5mm x 60mm
Mounting	DIN 46277 rail
Working Temperature	-5ºC ~ +45ºC
Storage Temperature	-30ºC ~ +70ºC
Protection degree	IP20 (EN60529)
Directives	Low-voltage 73/23/EEC EMC 204/108/EC
According to the Standards	KNX Standard 2.0 EN60669-1, 2-1 & 2-3
Marking	EIB/KNX

Installation and wiring

Follow these steps for installation (Fig. 1 - Shutter Control or Fig. 2 – Switching Control):

1) Connect the KNX bus to the connecting terminal (C).

2) Connect the lamps to the actuator.

3) Connect the mains voltage.

4) Connect the bus voltage.

Commissioning

Performance of the product is subject to the parameterization made by ETS. You can download the application software from our website: www.dinuy.com.

For the commissioning of the actuator, follow these steps:

1) Allocate the physical address and parameterize the application software from the ETS.

2) Press the programming key (D). The green programming LED (E) will be on and the actuator will be ready for loading the application software into the device. This programming will take around 30sec and the red programming LED (E) will go on.

3) The programming LED (E) will go off: the application has been loaded successfully and the dimmer is ready for working.

Programming key (D) and Led (E)

In addition to enabling to set the actuator into operation, it is also useful to inform about a blocking problem of the dimmer, lighting permanently red. This can only be due to incorrect programming from ETS.

In case of this problem, it would be necessary to reset the device, pressing the programming key (D) for 5sec. Moreover, after this step, it should be reprogrammed by the ETS.

Cautions and limitations

· The mains supply must be protected according to existing rules.

· Electrical equipment must be installed and fitted by qualified electricians only and without power supply.

· Disconnect the mains to handle the load, replacing burned-out lightbulbs, removing or adding new ones.

· Do not exceed the maximum load of the device.

Project Development and Commissioning

Channel Type	Number	Name	Object Function	Lenght	C	R	W	T	U	Date Type	Priority
2 CHANNELS SWITCHING	0	Output A	Status Switch A	1 bit	√	√	–	√	–	on/off	Low
	1	Output A	Switch A	1 bit	√	–	√	–	–	on/off	Low
	2	Output A	Permanent ON A	1 bit	√	–	√	–	–	on/off	Low
	3	Output A	Enable Time Function	1 bit	√	–	√	–	–	Enable	Low
	4	Output A	Change threshold value A	1 byte	√	–	√	–	–	Pulses	Low
	5	Output A	Threshold input A	1 byte	√	–	√	–	–	Counter pulses (0…255)	Low
	6	Output A	Forced Positioning A	2 bits	√	–	√	–	–		Low
	7	Output A	Logical connection 1 A	1 bit	√	–	√	–	–	Boolean	Low
	8	Output A	Logical connection 2 A	1 bit	√	–	√	–	–	Boolean	Low
	9	Output A	8-Bit-Scene A	1 Byte	√	–	√	–	–		Low
	10	Output A	Sell preset 1/2 A	1 bit	√	–	√	–	–	1-bit	Low
	11	Output A	Call preset 1/2 A	1 bit	√	–	√	–	–	Enable	Low
	12	Output A	Warning stair lighting A	1 bit	√	–	–	√	–		Low
	13	Output A	Duration of staircase light A	2 bytes	√	√	√	–	–	pulses	Low
	14	Output B	Status Switch B	1 bit	√	√	–	√	–	on/off	Low
	15	Output B	Switch B	1 bit	√	–	√	–	–	on/off	Low
	16	Output B	Permanent ON B	1 bit	√	–	√	–	–	on/off	Low
	17	Output B	Enable Time Function	1 bit	√	–	√	–	–	Enable	Low
	18	Output B	Change threshold value B	1 byte	√	–	√	–	–	Pulses	Low
	19	Output B	Threshold input B	1 byte	√	–	√	–	–	Counter pulses (0…255)	Low
	20	Output B	Forced Positioning B	2 bits	√	–	√	–	–		Low
	21	Output B	Logical connection 1 B	1 bit	√	–	√	–	–	Boolean	Low
	22	Output B	Logical connection 2 B	1 bit	√	–	√	–	–	Boolean	Low
	23	Output B	8-Bit-Scene B	1 Byte	√	–	√	–	–		Low
	24	Output B	Sell preset 1/2 B	1 bit	√	–	√	–	–	1-bit	Low
	25	Output B	Call preset 1/2 B	1 bit	√	–	√	–	–	Enable	Low
	26	Output B	Warning stair lighting B	1 bit	√	–	–	√	–		Low
	27	Output B	Duration of staircase light B	2 bytes	√	√	√	–	–	pulses	Low

Tipo Canal	Número	Nombre	Función Objeto	Longitud	C	R	W	T	U	Tipo Datos	Prioridad
1 CHANNEL SHUTTER	28	Roller control	Roller Move Up/Down	1 bit	√	–	√	–	–	up/down	Low
	29	Roller control	Roller Stop Step Up/Down	1 bit	√	–	√	–	–	up/down	Low
	30	Forced input	Forced object	2 bits	√	–	√	–	–	Switch control	High
	31	Wind Alarm	Wind Alarm 1 input	1 bit	√	–	√	–	–	Boolean	Low
	32	Rain Alarm	Rain alarm input	1 bit	√	–	√	–	–	Boolean	Low
	33	Scene	Scene input	1 byte	√	–	√	–	–		Low
	34	Info movement	Info movement Up/down	1 bit	√	–	–	–	–	Up/down	Low
	35	Wind Alarm	Wind Alarm 2 input	1 bit	√	–	√	–	–	Boolean	Low
	36	Wind Alarm	Wind Alarm 3 input	1 bit	√	–	√	–	–	Boolean	Low
	37	Frost Alarm	Frost alarm input	1 bit	√	–	√	–	–	Boolean	Low
	38	Roller position	Roller position object input	1 Byte	√	√	√	√	√	Percentage (0..100%)	Low
	39	Slaps position	Slaps position objet input	1 Byte	√	√	√	√	√	Percentage (0..100%)	Low
	40	Info roller position	Roller position object info	1 Byte	√	–	–	√	–	Percentage (0..100%)	Low
	41	Info slaps position	Slaps position object info	1 Byte	√	–	–	√	–	Percentage (0..100%)	Low
	42	Solar protection	Object (on/off)	1 bit	√	–	√	–	–	Boolean	Low