:hager

Hager KNX solution catalogue

B.
Berker by :hager

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Light sensitive switch

Light sensitive switch

Supply voltage	Bus 29 V
Maximum connection distance of probe	100 m
Operating range	2 to 200 lux 200 to 20000 lux
Operating temperature	0°C to 45°C
Size	2 modules

This product is mainly intended for automatic control of inside/outside lighting circuits (ON/OFF and dimming controls) and blinds or rolling shutters according to ambient lighting level.

Associated with an external probe, this lightsensitive switch measures natural lighting and controls circuits according to a preset threshold range of 2 to 20000 lux.

Several light sensitive switches may be chained to increase the number of channels. In this case, only one probe is connected to one of the light sensitive switches.

Design	Order no.	PU
without cell	**TXA025**	1
with cell	**TXA026**	1

Cell for flush mounting

Dimensions	89 x 48 x 32 mm
Connection	flexible 2 x 0.75 mm² / 1m
IP	54
Operating temperature	-30°C to 60°C

- Delivered with 1 m cable

Design	Order no.	PU
cell for flush mounting	**EE002**	1

Cell for wall mounting

Dimensions	25 x 25 x 20 mm
Connection	fixed 1 to 4 mm²
IP	54
Operating temperature	-30°C to 60°C

Design	Order no.	PU
cell for wall mounting	**EE003**	1

Physical sensors

KNX weather station

KNX weather station

Supply voltage	12-40 V DC 12-28 V AC
Consumption	max. 81 mA 24 V DC 10 % residual ripple
IP	44
Operating temperature	-30 °C to 50°C
Dimensions	96 x 77 x 118 mm

The weather station GPS-KNX TG053A measures the outdoor temperature, the wind speed and light. It detects rain and daylight fall.

The weather station gets date/time and site location data from GPS signals. It calculates also the exact position of the sun (Azimuth and Altitude) based on site coordinates and date/time data. This information (brightness level and sun position) is used to control blinds with slats based on sun tracking for up to 6 building frontages.

TG053A compact case houses all sensors, electronic data processing gear, GPS antenna and KNX bus connection.

The values measured are sent to the KNX bus as physical values (2x8 bits ou 1 bit). Each output has communication objects indicating the measured and calculated values. The state of outputs depends on one or more levels. Thresholds can be defined by settings or the communication objects.

The weather station TG 053A includes an annual clock and a weekly clock. The clock channels can switch the outputs using the communication objects. The weekly clock controls up to four different time settings for each day of the week. The annual clock can be used to define up to three periods in the year with two daily ON/OFF commands for each of them. The switching times can be defined by settings or the communication objects.

The weather station also has 8 logical AND gates and 8 logical OR gates, each with four inputs. All control events, time programs, and the 8 logical inputs (such as communication objects) can be used as inputs of logical gates. The output of each gate can be configured in 1-bit or 2 x 8-bit format.

ETS software performs KNX configuration.

Design	Order no.	PU
white	**TG053A**	1

Support for TG053 weather station

Design	Order no.	PU
big (75 x 60 x 360 mm)	**TG353**	1
small (45 x 53 x 60 mm)	**TG354**	

Power supply for TG053 weather station

Supply voltage	230 V 160 mA max 24 V DC TBTS 0.25 A max
IP	54
Operating temperature	-25 °C to 50°C
Dimensions	50 x 50 x 24 mm

Design	Order no.	PU
black	**TP110**	1

Analogue inputs

Analogue input 4gang RMD

Frequency	50/60 Hz
Operating voltage over bus	21 ... 32 V=
Auxiliary voltage	24 V~
Voltage, inputs	0-1; 0-10 V
Input impedence, voltage	18 kΩ
Sensor output voltage	24 V=
Sensor output current	max. 100 mA
Current consumption	170 mA
Inputs, current	0-20; 4-20 mA
Input impedence, current	100 Ω
Limit values	per channel 2
Operating temperature	-5 ... +45 °C
Assembling height as from DIN rail	63 mm
Dimensions (W x H x D)	72 x 90 x 70 mm
Width of rail mounted device (RMD)	4 TE

- with green/red status LED (operation/fault)
- with programming button and red programming LED
- for active sensors
- for wind, precipitation, brightness, temperature, twilight as well as humidity and temperature sensor, surface-mounted
- extendable with an analogue input module 4gang
- bus connection via connecting terminal
- inputs parameterisable can be set individually
- input 4-20 mA will be controlled for wire break
- cyclic transmission or transmission at absolute input modification settable
- with screw terminals
- with system interface for analogue input module

Suitable for	Order no.	Page
Power supply 24 V AC RMD	ST312	120

The analogue input is for the registration and treatment of independent analogue sensor signals. Depending on the input signal, limiting value messages can be transmitted via KNX.

Input signals to according to DIN IEC 381-1, -2

Design	Order no.	PU
light grey	**TYF784**	1

Wind gauge

Wind gauge

Supply voltage	230 V AC 50 Hz
contact loading capacity	230 V AC 4 A
IP	65
Operating temperature	-25 °C to 50°C
Dimensions of the enclosure	80 x 100 x 52 mm

- Adjustment of wind's speed limit : up to 55 km/h (range ex-works 25 km/h)
- Reaction time when exceeding this limit : 3 seconds (5 seconds max.)
- Close time at wind : 10 minutes (fixed)

In the system Tebis, the wind gauge TG050 is used as a protection device for solar shading equipment against strong wind. The speed of the wind is measured by the wind gauge.

If the wind's speed exceeds the value adjusted on the potentiometer for longer than three seconds, the solar shading equipment is retracted and kept in security position for 10 minutes.

After this delay, if the wind speed has decreased, the solar shading equipment can again be controlled by switches.

Design	Order no.	PU
wind gauge and connection enclosure IP65	**TG050**	1

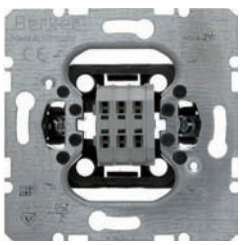
Supplementary products

Safety transformer 25VA 230V / 12-24V

Operating voltage	230 V~
Frequency	50/60 Hz
Rated power	25VA
Operating temperature	-20 ... +35 °C
Width	4 modules

- These transformers are designed to ensure personal safety, their primary winding are electrically separated from their secondary windings and they are intended to feed safety extra low voltage circuits U ≤ 50V. A thermal overload, in the primary windings, ensures that if a short circuit or an overload occurs in the output it will not damage the device.

Design	Order no.	PU
light grey	**ST312**	1



Sensor insert

- e.g. for temperature sensor PT100
- with plug-in terminals
- without spreader claws

Design	Order no.	PU
Sensor insert	**7594 10 01**	10

Central plate for sensor insert

Caution!
Use only with intermediate ring for central plate from the corresponding range.
Labelling field cannot be used.

- e.g. for temperature sensor PT100
- with slots for air circulation

Design	Order no.	PU
Berker S.1/B.3/B.7, Q.1/Q.3, K.1/K.5, Arsys		
white glossy	**7594 04 02**	1
polar white glossy	**7594 04 09**	1
polar white matt/velvety	**7594 04 89**	1
anthracite matt	**7594 04 85**	1
aluminium matt, lacquered	**7594 04 83**	1
light bronze matt, lacquered	**7594 04 04**	1
stainless steel matt, lacquered	**7594 04 03**	1

Input modules

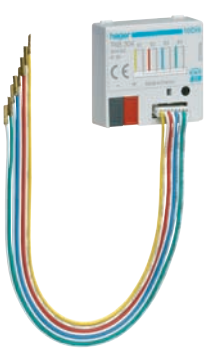
- Power supply by Bus.
- The modules are installed in a 60 mm dia. Flush mounting box in association with a pushbutton or a switch.
- Application software is used to configure the individual inputs.
- The sensors associated to the inputs (pushbuttons, switches, automatic controls) are used to control lighting, shutters, blinds.
- The Toggle Switch function changes the status of the controlled output whenever it is operated.
- This function is used for switching lighting, blind or heating circuits ON or OFF. The command may come from switches, pushbuttons or automatic controls.
- This function is used to control lighting circuits using one or two buttons
- The ON / OFF function transmits the ON / OFF object (short key-press).
- The Dimming function transmits the Dimming object (long key-press).
- This function controls a shutter or a blind using one or two push buttons.
- The Up / Down function transmits the Up / Down object (long key-press).
- The Stop / Angle function transmits the Stop / Angle object (short key-press).
- The Alarm 1 and Alarm 2 functions allow alarms coming from automatic controls to be periodically emitted (anemometer, rain detector, light sensitive switch, etc.)
- The Heating mode function is used to select a heating or air conditioning set point (Comfort, Eco, Frost protection, Absence). The command may come from switches, pushbuttons or automatic controls.
- The Value function (2 byte) is used for sending: Percentage %, Temperature °C, Luminosity level Lux, Brightness value % and Value 0-65535.
- The Scene function is used to select and storing scenes.
- The Timer function is used to switch ON or OFF a lighting circuit, shutters, heating for an adjustable time.
- The Priority function allows an input to be forced to a defined status.
- The Two Channel mode function allows controlling, with the same pushbutton, two independent circuits having different functions.
- The Jamming function is used to lock an input via an object on the bus.
- With programming button and red programming LED.

2-input universal module

Contact current	0.5 mA
Supply voltage	30V DC
Busline max consumption	15 mA
Dimensions	38 x 35 x 12 mm
Degree of protection	IP 30
Operating temperature	+0 ... +45°C
Storage temperature	-20 ... +70°C
Standards	EN 60 669-2-1 NF EN 50 428

- Universal input modules are used to interface contacts free of potential with KNX bus.
- In this way, pushbuttons, switches or conventional automatic controls can become communicating devices.
- 2 independent channels.

Design	Order no.	PU
light grey, 2gang	**TXB302**	1



4-input universal module

Contact current	0.5 mA
Supply voltage	30V DC
Busline max consumption	15 mA
Dimensions	38 x 35 x 12 mm
Degree of protection	IP 30
Operating temperature	+0 ... +45°C
Storage temperature	-20 ... +70°C
Standards	EN 60 669-2-1 NF EN 50 428

- Universal input modules are used to interface contacts free of potential with KNX bus.
- 4 independent channels.

Design	Order no.	PU
light grey, 4gang	**TXB304**	1

4 LED kit

Suitable for	Order no.	Page
2-input / 2-output indication of state	TXB322	122
4-input / 4-output indication of state	TXB344	122

Design	Order no.	PU
Ø 5mm, red	**TG308**	1

Input / output modules

- Power supply by Bus.
- Control of 2 LEDs.
- The modules are associated with push buttons or switches and are installed in a flush-mounted wall box of diameter 60mm and adapted depth.
- Connection length to push button and LEDs shall not exceed 5m.
- Physical addressing is done using push button and LED.
- Application softwares are used to configure the individual inputs of the TXB322 products.
- The products allow controlling lighting, blinds, shutters, heating and scenes.
- The Priority function sends priority-start or priority-stop commands.
- The Scene function sends group controls to different kinds of outputs to create ambiences or scenarios (leaving home scenario, reading ambience, etc.).
- The Jamming function authorizes product locking. Jamming forbids sending commands.
- The 2-channel mode function allows controlling, with the same pushbutton, 2 independent circuits having different functions.
- LED outputs (statusindication) control the lighting of standard LED signal lamps.

2-input / 2-output module LED (status indication)

LED outputs specifications	I = 850 µA U = 1.8V DC
Supply voltage	30V DC
Busline max consumption	15 mA
Dimensions	38 x 35 x 12 mm
Degree of protection	IP 30
Operating temperature	+0 ... +45°C
Storage temperature	-20 ... +70°C
Standards	EN 60 669-2-1 NF EN 50 428

- The universal input modules interface potential free contacts with KNX.
- Push buttons, switches and conventional automatisms can thus be used to drive standard LED indicators.
- Outputs can control conventional signaling LEDs.
- 2 independent channels.

Design	Order no.	PU
light grey, 2gang	**TXB322**	1

4-input / 4-output module LED (status indication)

LED outputs specifications	I = 850 µA U = 1.8V DC
Supply voltage	30V DC
Busline max consumption	15 mA
Dimensions	38 x 35 x 12 mm
Degree of protection	IP 30
Operating temperature	+0 ... +45°C
Storage temperature	-20 ... +70°C
Standards	EN 60 669-2-1 NF EN 50 428

- The universal input modules interface potential free contacts with KNX.
- 4 independent channels.

Design	Order no.	PU
light grey, 4gang	**TXB344**	1

Binary inputs

- Power failure detection is available to filter false alarms due to cut-off of all inputs connected on the same reference phase.
- Output states are displayed on the product.
- Outputs can be controlled manually from the product
- Application software is used to configure the individual inputs
- The sensors associated to the inputs (pushbuttons, switches, automatic controls) are used to control lighting, shutters, blinds
- The Toggle Switch function changes the status of the controlled output whenever it is operated
- This function is used for switching lighting, blind or heating circuits ON or OFF. The command may come from switches, pushbuttons or automatic controls
- This function is used to control lighting circuits using one or two buttons
    - The ON / OFF function transmits the ON / OFF object (short key-press)
    - The Dimming function transmits the Dimming object (long key-press)
- This function controls a shutter or a blind using one or two push buttons.
    - The Up / Down function transmits the Up / Down object (long key-press)
    - The Stop / Angle function transmits the Stop / Angle object (short key-press)
- The Alarm 1 and Alarm 2 functions allow alarms coming from automatic controls to be periodically emitted (anemometer, rain detector, light sensitive switch, etc.)
- The Heating mode function is used to select a heating or air conditioning set point (Comfort, Eco, Frost protection, Absence).
- The command may come from switches, pushbuttons or automatic controls.
- The Value function (2 byte) is used for sending: Percentage %, Temperature °C, Luminosity level Lux, Brightness value % and Value 0-65535.
- The Scene function is used to select and storing scenes.
- The Timer function is used to switch ON or OFF a lighting circuit, shutters, heating for an adjustable time
- The Priority function allows an input to be forced to a defined status
- The Two Channel mode function allows controlling, with the same pushbutton, two independent circuits having different functions.
- The Jamming function is used to lock an input via an object on the bus
- The power cut detection function is used for specific management of an input during a power cut, taking into account all the status changes which could occur during this period
- With programming button and red programming LED
- Bus connection via connecting terminal
- Quick Connection Terminal

4 channel input module

Signal voltage	230V AC 50 Hz
Maximum connection distance per input	100 m
Minimum contacts closing time	18 ms
Low signal level	0 -> 100 V
High signal level	> 195 V
Supply voltage	30V DC
Busline max consumption	4 mA
Width	4 modules
Operating temperature	0°C to +45°C
Connections	0.75 to 2.5 mm^2

- Universal input modules allow interfacing 230V AC contacts supplied by KNX bus
- In this way, pushbuttons, switches or conventional automatic controls can become communicating devices
- 4 independent channels can be connected on different phases
- It is possible to connect 10 illuminated pushbuttons per channel

Design	Order no.	PU
light grey	**TXA304**	1

6 channel input module

Signal voltage	24 ... 230V AC (50Hz)/DC
Maximum connection distance per input	100 m
Minimum contacts closing time	50 ms
Supply voltage	30V DC
Busline max consumption	7 mA
Width	6 modules
Operating temperature	0°C to +45°C
Connections	0.75 to 2.5 mm²

- Universal input modules allow interfacing contacts free of potential or supplied with 24…230V AC/DC power by bus KNX.
- In this way, pushbuttons, switches or conventional automatic controls can become communicating devices.
- 6 independent channels with automatic recognition of the type of connected circuit (24…230V AC/DC or circuit free of potential).
- It is possible to connect 5 illuminated pushbuttons per channel

Design	Order no.	PU
light grey	**TXA306**	1

10 channel input module

Signal voltage	230V AC 50 Hz max
Maximum connection distance per input	100 m
Minimum contacts closing time	18 ms
Low signal level	0 -> 100 V
High signal level	> 195 V
Supply voltage	30V DC
Busline max consumption	15 mA
Width	6 modules
Operating temperature	0°C to +45°C
Connections	0.75 to 2.5 mm²

- Universal input modules allow interfacing 230V AC contacts supplied by KNX bus
- In this way, pushbuttons, switches or conventional automatic controls can become communicating devices
- 10 independent channels can be connected on different phases

Design	Order no.	PU
light grey	**TXA310**	1

Time switches

2 channels electronic time switches weekly cycle

Supply voltage	Bus 30 V DC
Consumption	9.5 mA max (TXA022) 10 mA max (TXA023)
IP	20
Operating temperature	-5 °C to 45°C
Size	2 modules

- Product delivered with current time and date set.
- Automatic change of winter / summer time
- Programming key:
  - for permanent overrides,
  - for program copy or save
- Programming for day or group of days
- 56 program steps On, Off , 1 s to 30 min pulse or options
- Permanent overrides On or Off (permanent light on).
- ON or OFF temporary priority settings, using configuration tools
- Temporary overrides On or Off (flashing)
- Holiday mode : overrides On or Off between two dates
- Simulation of presence
- Display bar graph of daily profile for both channels.
- Keyboard locking possible
- Programmable with power off
- DCF Synchronization (only for TXA023)
- Possible transmission of date and time on the bus

Design	Order no.	PU
EASY	**TXA022**	1
with DCF	**TXA023**	1

Clock key

Avoids unrequested handling of the TXA022 and TXA023 time switches.

Design	Order no.	PU
yellow	**EG004**	1

Programming key

Allows complementary programms back-up for TXA022 and TXA023 time switches.

Design	Order no.	PU
grey	**EG005**	1

Consumption indicator and energymeters

KNX consumption indicator

Bus power supply	30 V DC (TBTS)
Mains power supply	230 V AC +10/-15% 50 Hz
Max. consumption on the bus	15 mA to 30 V DC
Dissipated output	0.5 W max
Connection capacity: - for the upper terminals - for the lower terminals	 0.75 to 2.5 mm^2 0.2 to 1.5 mm^2
IP	20
Operating temperature	-5 °C to 45°C
Size	6 modules

The consumption indicator informs users of their consumption through 4 metering channels. It is used to monitor and control energy consumption and is built into an automatic global energy management system.

- This product can be used in a single-phase or three-phase installation. In three-phase, consumption is measured phase by phase
- The data is sent on the KNX bus
- In addition to metering, the consumption indicator also has:
  - 1 tariff input T1/T2
  - a temperature input for the connection of a probe
- The system can be constructed with several TE330. This thus makes it possible to measure one or more circuits using toroids
- The consumption indicator is adapted for use with domovea. In this case, the display devices are:
  - meter (consumption)
  - meter (production)
  - energy
  - power
  - sub-counter (consumption)
- It can also be interfaced with the ambiance units or other display systems thanks to objects sent on the KNX bus
- It is used to display the current tariff and the energy consumption according to the current tariff. The tariff can also be distributed to other devices on the bus
- Includes 3 current transformers and straps.

Design	Order no.	PU
light grey	**TE330**	1

Temperature sensors

Design	Order no.	PU
outdoor sensor	**EK088**	1
indoor sensor	**EK089**	1

Three phase energymeter, direct reading 100A

Voltage	230 V AC 50/60 Hz
Starting current	40 mA
Base current	10A
Max current	63A

Energymeters are aimed to measure the active energy consumed by an installation.
They permit to have under control the real cost of an installation and to divide the consumption between the different appliances.

- Fully compliant with the european standard EN50470-3.
- Class B.
- Accuracy 1%
- Energy readout : 7 digits.
- Backlighted display
- Indication of instantaneous power consumption
- Total / partial counter (excepted MID references)
- Pulsed ouput
- unlimited saving of measures.
- LED flashing according to consumption.
- Option : tarif 1 / tarif 2.
- Three phases energymeters are adapted to all kind of networks.
- Display indication in case of bad wiring.

Design	Order no.	PU
light grey	**TE360**	1

Three phase energymeters, connection via current transformers

Voltage	230/400 V AC 50/60 Hz
Starting current	10 mA
Max current on CT secondary	6A

Energymeters are aimed to measure the active energy consumed by an installation.
They permit to have under control the real cost of an installation and to divide the consumption between the different appliances.

- Fully compliant with the european standard EN50470-3.
- Class B.
- Accuracy 1%
- Energy readout : 7 digits.
- Backlighted display
- Indication of instantaneous power consumption
- Total / partial counter (excepted MID references)
- Pulsed ouput
- unlimited saving of measures.
- LED flashing according to consumption.
- Option : tarif 1 / tarif 2.
- Three phases energymeters are adapted to all kind of networks.
- Display indication in case of bad wiring.

Design	Order no.	PU
light grey	**TE370**	1

Current transformers for TE360 and TE370

Design	Order no.	PU
50 / 5 A	**SR051**	1
100 / 5 A	**SR101**	1
150 / 5 A	**SR150**	1
200 / 5 A	**SR200**	1
250 / 5 A	**SR250**	1
300 / 5 A	**SR300**	1
400 / 5 A	**SR400**	1
600 / 5 A	**SR600**	1
800 / 5 A	**SR800**	1
1000 / 5 A	**SR850**	1
1500 / 5 A	**SR900**	1
2000 / 5 A	**SR910**	1

Switching actuators

- Common parameter of switching actuator
- Output states are displayed on the product.
- Outputs can be controlled manually from the product
- Each output to be individually configurated for Lighting or Heating
- The ON/OFF function is used to switch a lighting circuit ON or OFF
- The Status indication function displays the status of the output contact
- The Timer function is used to switch a lighting circuit ON or OFF for an adjustable time
- The Time delayed switch function combines a toggle function and a cut-off delay
- The Priority function allows overriding an output to a definite status, ON or OFF
- The Jamming function allows locking an output in its current status
- Each output may be integrated into 32 different scenes
- The Timer and Automatic controls function allow the outputs to by controlled by:
    - Timer functions: Timer/toggle change over, Switching delay, Tripping delay, Switching and tripping delay, Timer.
    - Aut omatic control functions: Authorization, Logical AND or Logical

OR

- Each output may be integrated into 32 different scenes
- Manual override, permanent or Time limited.
- Behavior in the event of bus voltage failure/Return parameterisable
- With programming button and red programming LED
- Bus connection via connecting terminal
- Quick Connection Terminal

	Max. switching capacity for switching actuators					
	TYA604A TYA606A TYA608A TYA610A	TYA604B TYA606B TYA608B TYA610B	TYA604C TYA606C TYA608C TYA610C	TYA604D TYA606D TYA608D TYA610D	TYA606E	TYB601A TYB602A
230 V incandescent and halogen lamps	800 W	1200 W	2300 W	2300 W	2300 W	600 W
Halogen ELV (12 or 24V) via ferromagnetic transformer	800 W	1200 W	1600 W	1600 W	1600 W	600 W
Halogen ELV (12 or 24V) via Electronic transformer	800 W	1000 W	1200 W	1200 W	1380 W	600 W
Fluorescent tubes non compensated	800 W	1000 W	1200 W	1200 W	800 W	600 W
Fluorescent tubes for electronic ballast	450 W	550 W	725 W	725 W	25 x 18 W	6 X 58 W
Parallel compensated fluorescent tubes	-	-	-	1500 W (200µF)	1000 W (130µF)	-
Compact fluorescent with PF < 0.6	150 W	300 W	425 W	425 W	25 x 18 W	6 X 18 W

4 channel switching actuator 4A/10A/16A/16A (Capacitive Load)

Supply voltage	30 V DC
Power dissipation	1 W (TYA204A) 3 W (TYA204B) 8 W (TYA204C) 8 W (TYA204D)
Width	4 modules
Operating temperature	0°C to +45°C
Connections	0.75 to 2.5 mm^2

- The 4-fold output module TYA604. are relays designed to interface Bus KNX with on/off electric loads
- 4 volt-free contacts

Design	Order no.	PU
switching actuator 4A	**TYA604A**	1
switching actuator 10A	**TYA604B**	1
switching actuator 16A	**TYA604C**	1
switching actuator 16A for capacitive load	**TYA604D**	1

6 channel switching actuator 4A/10A/16A/16A (Capacitive Load)

Supply voltage	30 V DC
Power dissipation	1 W (TYA206A) 5 W (TYA206B) 12 W (TYA206C) 12 W (TYA206D) 6 W (TYA206E)
Width	4 modules 6 modules (TYA606E)
Operating temperature	0°C to +45°C
Connections	0.75 to 2.5 mm^2

- The 6-fold output module TYA606. are relays designed to interface Bus KNX with on/off electric loads
- 6 volt-free contacts

Design	Order no.	PU
switching actuator 4A	**TYA606A**	1
switching actuator 10A	**TYA606B**	1
switching actuator 16A	**TYA606C**	1
switching actuator 16A for capacitive load	**TYA606D**	1
switching actuator 16A for capacitive load with current monitoring	**TYA606E**	1

8 channel switching actuator 4A/10A/16A/16A (Capacitive Load)

Supply voltage	30 V DC
Power dissipation	2 W (TYA206A) 6 W (TYA206B) 12 W (TYA206C) 12 W (TYA206D)
Width	6 modules
Operating temperature	0°C to +45°C
Connections	0.75 to 2.5 mm^2

- The 8-fold output module TYA608. are relays designed to interface Bus KNX with on/off electric loads
- 8 volt-free contacts

Design	Order no.	PU
switching actuator 4A	**TYA608A**	1
switching actuator 10A	**TYA608B**	1
switching actuator 16A	**TYA608C**	1
switching actuator 16A for capacitive load	**TYA608D**	1

10 channel switching actuator 4A/10A/16A/16A (Capacitive Load)

Supply voltage	30 V DC
Power dissipation	3 W (TYA206A) 7 W (TYA206B) 15 W (TYA206C) 15 W (TYA206D)
Width	6 modules
Operating temperature	0°C to +45°C
Connections	0.75 to 2.5 mm^2

- The 10-fold output module TYA610. are relays designed to interface Bus KNX with on/off electric loads
- 10 volt-free contacts
- Each output to be individually configurated for Lighting or Shutters/Blinds applications
- Shutters/Blinds applications required two Output Channel

Design	Order no.	PU
switching actuator 4A	**TYA610A**	1
switching actuator 10A	**TYA610B**	1
switching actuator 16A	**TYA610C**	1
switching actuator 16A for capacitive load	**TYA610D**	1

1 flush mounted output

Supply voltage	30 V DC SELV
Power dissipation	225 W
Typical consumption on the KNX bus	5.3 mA
Standby consumption on the KNX bus	4.7 mA
Dimensions	53 x 29 mm
Operating temperature	0°C to +45°C
Connections	0.75 to 2.5 mm^2
Breaking capacity	µ230 Vv 4A AC1
Surge voltage	4kV
Protection degree	IP20

- 1 channel controlled via the KNX bus (depending on features configured).
- Output state is displayed on the product.
- Output can be manually controlled using the pushbutton.

Each product feature depends on its configuration and settings.

Design	Order no.	PU
light grey	**TYB601A**	1

2 flush mounted outputs

Supply voltage	30 V DC SELV
Power dissipation	225 W
Typical consumption on the KNX bus	5.9 mA
Standby consumption on the KNX bus	4.7 mA
Dimensions	53 x 29 mm
Operating temperature	0°C to +45°C
Connections	0.75 to 2.5 mm^2
Breaking capacity	µ230 Vv 4A AC1
Surge voltage	4kV
Protection degree	IP20

- 2 channels controlled via the KNX bus (depending on features configured).
- Outputs state are displayed on the product.
- Outputs manual control option from pushbuttons.

Each product feature depends on its configuration and settings.

Design	Order no.	PU
light grey	**TYB602A**	1

Dim actuators

Universal dim actuators

- 1 dimming channels controlled by KNX bus.
- Universal dimmer with automatic load recognition
- Min/Max level local setting.
- Display of channel state on the product.
- Manual mode that allows dimming even when the bus is disconnected.
- Control button for manual mode.
- Per channels 32 light scenes with a related scene speed
- Short-circuit, over heating & overload protection with LED indication
- With programming button and red programming LED in same button.
- Bus connection via connecting terminal.
- Quick Connection Terminal.

1 channel universal dimmer 300W

Supply voltage	30 V DC 230 V AC 50/60 Hz
Busline max consumption	2.3 mA
Consumption without load	3 W
Power dissipation	4 W
Width	4 modules
Operating temperature	-5°C to +45°C
Connections	0.75 to 2.5 mm²

- 230 V incandescent and halogen lamps 300W
- Halogen ELV (12 or 24V) via ferromagnetic transformer suitable for dimming 300VA.
- Halogen ELV (12 or 24V) via electronic transformer suitable for dimming 300W
- Dimmable CFL lamp (CFLi) with integrated ballast suitable for dimming 60W
- Dimmable LED lamp(LEDi) with integrated ballast suitable for dimming 60W

Design	Order no.	PU
light grey	**TYA661A**	1

1 channel universal dimmer 600W

Supply voltage	30 V DC 230 V AC 50/60 Hz
Busline max consumption	2.3 mA
Consumption without load	3 W
Power dissipation	7.5 W
Width	4 modules
Operating temperature	-5°C to +45°C
Connections	0.75 to 2.5 mm²

- 230 V incandescent and halogen lamps 600W
- Halogen ELV (12 or 24V) via ferromagnetic transformer suitable for dimming 600VA.
- Halogen ELV (12 or 24V) via electronic transformer suitable for dimming 600W
- Dimmable CFL lamp (CFLi) with integrated ballast suitable for dimming 120W
- Dimmable LED lamp (LEDi) with integrated ballast suitable for dimming 120W

Design	Order no.	PU
light grey	**TYA661B**	1

3 channels universal dimmer 300W

Supply voltage	30 V DC 230 V AC 50/60 Hz
Busline max consumption	2.3 mA
Consumption without load	5 W
Power dissipation	8.9 W
Width	6 modules
Operating temperature	-5°C to +45°C
Connections	0.75 to 2.5 mm²

- 1, 2, or 3 dimming channels controlled by KNX bus.
- The product can control 1, 2 or 3 independent lighting circuits, the outputs number depends on the switch position.
- 230 V incandescent and halogen lamps 300W, 600W, 900W according to output selector switch per channel.
- Halogen ELV (12 or 24V) via ferromagnetic transformer suitable for dimming 300W, 600W, 900W according to output selector switch per channel.
- Halogen ELV (12 or 24V) via electronic transformer 300W, 600W, 900W according to output selector switch per channel.
- Dimmable CFL lamp (CFLi) with integrated ballast suitable for dimming 210W, 120W, 60W according to output selector switch per channel.
- Dimmable LED lamp (LEDi) with integrated ballast suitable for dimming 210W, 120W, 60W according to output selector switch per channel.

Design	Order no.	PU
light grey	**TYA663A**	1

1 - 10 V / DALI interfaces

3 channel 1 - 10 V dimmer

Supply voltage	30 V DC 230 V AC 50/60 Hz
Busline max consumption	2.3 mA
Consumption without load	3 W
Power dissipation	9 W
Control current per channel	50 mA max
Switching current	16A
230 V incandescent and halogen lamps	2300 W
Halogen ELV (12 or 24V) via ferromagnetic transformer/ electronic transformer	1500 VA / 1500 W
Electronic Ballast 1-10V	1000 W
Dimmable Electronic Ballast	50 mA max
Light Dimmer	30 max
Width	4 modules
Operating temperature	0°C to +45°C
Connections	1 to 6 mm^2 (screw terminal)

- 3 dimming channels controlled by bus KNX
- Control lighting circuits via a 1/10V connection, acting upon remote control dimmers or electronic ballasts
- Min/Max level local setting
- State of channel displayed on product
- Manual control of channels available locally on the product for Wiring, testing and start-up
- After power on, a 20-sec delay is required for the dimmer switch to perform the first control operation
- With potential-free NO contacts
- Basic brightness programmable
- Behavior in the event of bus voltage failure parameterisable
- With programming button and red programming LED
- Bus connection via connecting terminal
- With screw terminals

Design	Order no.	PU
light grey	**TX211A**	1

KNX DALI-Gateway

KNX supply voltage	21 ... 32 V DC SELV
External supply voltage	110...240 V AC +10%/-15% 50/60 Hz
Busline max consumption	typically 150 mW
Power consumption	max. 6 W
Total power loss	max. 3 W
Operating temperature	-5°C to +45°C
Connections	screw terminal preferably on top
DALI voltage	typically 16 V DC with overvoltage protection
DALI current	typically 128mA max. 200mA temporarily

- Control of a maximum of 64 DALI devices in a max. of 32 groups
- Manual control of the groups independent of the bus (site operation with broadcast control)
- Feedback of DALI error status or short-circuit and supply voltage failure message
- Central switching function
- Incorporation of the groups into up to 16 lightscenes possible
- All channel-oriented functions can be parameterized separately for each group. This feature permits independent and multi-functional control of the DALI devices
- The Staircase timer function can only be parameterized for groups 1 ... 16
- Adjusting the limit values for brightness is possible.
- Dimming response can be parameterized.
- Soft-On or Soft-Off function
- Disable function or, alternatively, forced-control position function can be parameterized for each group, with the disable function, blinking of lighting groups is possible
- Timer functions (ON-delay, OFF-delay, staircase lighting function, also with pre-warning function)
- Response to bus voltage failure and bus voltage return as well as after ETS programming can be adjusted for each group
- Automatic device replacement
- With programming button and red programming LED
- Bus connection via connecting terminal
- With screw terminals preferably on top

Design	Order no.	PU
light grey	**TYA670D**	1

3-channel LED controller

3-channel LED controller - voltage controlled

Supply voltage	12-24 V DC
Maximum charge	2.2 A / channel
Max power	12V DC 80 W 24V DC 155 W
Control mode	direct voltage
Number of channel	1-3
Control signal	KNX
Consumption on the KNX bus	Max. 12 mA
Operating temperature	-5°C to +45°C
Connections	KNX wire 0.75 to 1.5 mm^2 (screw-on terminal block)
Output signal	PWM / 600Hz
Max. cable length	10 m
Protection degree	IP20

- 3 variation channels controlled by the KNX bus
- 60 scenes called up by the KNX bus
- 4 different colour sequences including up to 12 colours per sequence.
- Short circuit protection
- Overheating protection
- Electrical surge protection
- Polarity reversal protection

The TYB673A 3-channel LED controller can be used to vary the luminosity of a voltage controlled LED module.
This product can be used more particularly to control a coloured lighting system, create lighting effects or launch a sequence of pre-programmed colours.

Design	Order no.	PU
black	**TYB673A**	1

3-channel LED controller - current controlled

Supply voltage	24 V DC
Output current	350/500/700 mA
Control mode	direct current
Max output voltage	22V DC
Number of channel	1-3
Control signal	KNX
Consumption on the KNX bus	Max. 12 mA
Operating temperature	-5°C to +45°C
Connections	KNX wire 0.75 to 1.5 mm^2 (screw-on terminal block)
Output signal	PWM / 600Hz
Max. cable length	10 m
Protection degree	IP20

- 3 variation channels controlled by the KNX bus
- 60 scenes called up by the KNX bus
- 4 different colour sequences including up to 12 colours per sequence.
- Short circuit protection
- Overheating protection
- Electrical surge protection
- Polarity reversal protection

The TYB673B 3-channel LED controller can be used to vary the luminosity of a current controlled LED module.
This product can be used more particularly to control a coloured lighting system, create lighting effects or launch a sequence of pre-programmed colours.

Design	Order no.	PU
black	**TYB673B**	1

Blind actuators RMD

- Outputs can be controlled manually from the product
- Output states are displayed on the product
- Delay time between 2 opposite directions 600 ms.
- Application softwares allow each output to be individually configurated for Shutter/Blind applications.
- The Up/Down Function allows moving up or down a shutter, a blind with inclinable slats, an awning, a Venetian blind, etc.
- The Up/Down function also allows opening and closing electric curtains.
- The Slat angle/Stop function allows inclining the slats of a blind or stopping its current movement.
- The Slat angle/Stop function allows modifying the occultation or the direction of the light beams coming from outside.
- The Stop function allows stopping the current shutter movement.
- The Position in % function allows putting a shutter or a blind in a desired position expressed in % of closure.
- The Slat angle function allows inclining the slats of a blind into a desired position expressed in degrees (0° to 180°).
- Wind alarm and rain alarm functions allow putting a shutter or a blind in a parameterisable predefined status.
- The Priority function allows forcing a shutter or a blind into a predefined position.
- The Jamming function allows locking a shutter or a blind in its current position.
- Each output may be integrated into 32 different scenes.
- The Status indication function allows sending on the bus:
  - St atus indication (1 byte): indicates the current operating mode of the output (Alarm, Priority, Jamming, and Normal)
  - Position indication in %: indicates the position of the shutter or blind
  - Slat angle indication in °: indicates the position of the shutter or blind
  - St atus indication (1Bit): indicates the last movement, up or down, of the shutter or blind

Output device for 4 shutters 230V AC

Supply voltage	30 V DC SELV
Power dissipation	2W
Typical consumption on the KNX bus	5,2 mA
Standby consumption on the KNX bus	4,5 mA
Width	4 modules
Operating temperature	-5°C to +45°C
Connections	0.75 to 2.5 mm^2
Breaking capacity	µ230 Vv 6A AC1
Surge voltage	4kV
Protection degree	IP20

- 4 independent channels controlled by bus KNX.
- Output states are displayed on the product.
- Outputs can be controlled manually from the product.

Each product feature depends on its configuration and settings.

The 4-output drivers TYA624A and TYA624C are actuators that allow interfacing Bus KNX with opening devices. They are part of the tebis Installation System and are designed to control such devices as rolling shutters, blinds with awnings, blinds with slats, etc.

Design	Order no.	PU
output device for 4 shutters	**TYA624A**	1
output device for 4 shutters and / or blinds	**TYA624C**	1

Output device for 4 shutters 24V DC

Supply voltage	30 V DC SELV
Power dissipation	2W
Typical consumption on the KNX bus	5,2 mA
Standby consumption on the KNX bus	4,5 mA
Width	4 modules
Operating temperature	-5°C to +45°C
Connections	0.75 to 2.5 mm^2
Breaking capacity	µ 24V DC 6A DC1
Surge voltage	4kV
Protection degree	IP20

- 4 independent channels controlled by bus KNX.
- Output states are displayed on the product.
- Outputs can be controlled manually from the product.

Each product feature depends on its configuration and settings.

The 4-output drivers TYA624B and TYA624D are actuators that allow interfacing Bus KNX with opening devices. They are part of the tebis Installation System and are designed to control such devices as rolling shutters, blinds with awnings, blinds with slats, etc.

Design	Order no.	PU
output device for 4 shutters	**TYA624B**	1
output device for 4 shutters and / or blinds	**TYA624D**	1

Output device for 8 shutters 230V AC

Supply voltage	30 V DC SELV
Power dissipation	2W
Typical consumption on the KNX bus	15.8 mA
Standby consumption on the KNX bus	8.8 mA
Width	6 modules
Operating temperature	-5°C to +45°C
Connections	0.75 to 2.5 mm^2
Breaking capacity	µ230 Vv 6A AC1
Surge voltage	4kV
Protection degree	IP20

- 8 independent channels controlled by bus KNX.
- Product display of outputs status with or without the presence of bus and/or main supply (230V~).
- The outputs may be switched with or without the presence of bus and/or main supply (230V~).

Each product feature depends on its configuration and settings.

The 8-output drivers TYA628A and TYA628C are actuators that allow interfacing Bus KNX with opening devices. They are part of the tebis Installation System and are designed to control such devices as rolling shutters, blinds with awnings, blinds with slats, etc.

Design	Order no.	PU
output device for 8 shutters	**TYA628A**	1
output device for 8 shutters and / or blinds	**TYA628C**	1

1-output module for shutters and/or blinds, flush mounting

Supply voltage	30 V DC SELV
Power dissipation	225 mW
Typical consumption on the KNX bus	5.9 mA
Standby consumption on the KNX bus	4.7 mA
Dimensions	53 x 29 mm
Operating temperature	-5°C to +45°C
Connections	0.75 to 2.5 mm^2
Breaking capacity	µ230Vv 4A AC1
Surge voltage	4kV
Protection degree	IP20

- 1 controlled channel.
- Visualization of the movement in progress (up/down) on the product.
- Up/down manual control option from pushbuttons.

Each product feature depends on its configuration and settings.

The 1-output controls TYB621C are actuators that enable interfacing of the KNX Bus with the opening elements. They are part of the tebis installation system. They are used to control opening elements such as shutters, awnings, venetian blinds, etc.

Design	Order no.	PU
flush mounting	**TYB621C**	1

HVAC actuators RMD

Heating actuator 6gang RMD 230 V

Operating voltage over bus	21 ... 32 V=
Auxiliary voltage	230/240 V~
Frequency	50/60 Hz
Switching current at 250 V~	max. 50 mA
Actuators per channel	max. 4
Operating temperature	-5 ... +45 °C
Assembling height as from DIN rail	58 mm
Dimensions (W x H x D)	72 x 90 x 65 mm
Width of rail mounted device (RMD)	4 TE

- valve drives for thermoelectric valve drives 230 V, closed in de-energized state
- for individual single room temperature control
- for continuous (PI) or switched (2-point) control
- with programming button and red programming LED
- bus connection via connecting terminal
- with emergency programme, e.g. for sensor or bus failure
- with screw terminals

Suitable for	Order no.	Page
Valve drive 230 V	7590 00 76	137

Design	Order no.	PU
light grey	**TYF646T**	1

Fan coil actuator 2gang RMD

Operating voltage over bus	21 ... 32 V=
Auxiliary voltage	230 V~
230 V incandescent lamps	2300 W
230 V halogen lamps	2300 W
Conventional transformers	1200 W
Electronic transformers	1500 W
Fluorescent lamps:	
- uncompensated	1000 W
- parallel compensated	1160 W /140 µF
Operating temperature	-5 ... +45 °C
Assembling height as from DIN rail	63 mm
Dimensions (W x H x D)	72 x 90 x 70 mm
Width	4 modules

Comply with the fan convector manufacturer's instructions.
Optimised for commissioning with ETS3 from version D, patch A.

- for the electric activation of fan convectors
- for converting RTR control variables into valve positions, fan stages
- activation of 1 or 2 fan channels with 6 or 3 fan stages
- for operating modes heating/cooling or heating and cooling
- manual activation of blow fans using push-buttons or the operating panel
- use of free channels to control switching loads
- 4 manual operation buttons for controlling fan stages and bus function on/off
- manual operating also possible without bus e.g. on building site
- with programming button and red programming LED
- with 8 red status LEDs and 3 red LEDs as manual actuation indication
- bus connection via connecting terminal
- with screw terminals

Design	Order no.	PU
light grey	**TYF642F**	1

Valve drives

KNX valve drive

Power supply	bus KNX 30V DC TBTS
Power consumption	< 10 mA
Run time	< 20 s/mm
Set force	> 120N
Maximal stroke	6 min
Target value display	5 LEDs
Operating temperature	0°C to +50°C
Dimensions	82 x 50 x 65 mm

- Automatic regulating apparatus and temperature collection apparatus.
- Work mode: Comfort, Standby, Night time, Frost.
- Oriented start up
- Forced service
- Summer operation

Design	Order no.	PU
white	**TX502**	1

IP54

Valve drive 230 V

Operating voltage	230 V~
Frequency	0 … 60 Hz
Power consumption	1.8 W
Running time	45 s /mm
Stroke	4 mm
Operating temperature	+0 ... +60 °C
Medium temperature	max. 0 ... 100 °C
Pre-assembled cables	≈ 1 m
Dimensions (W x H x D)	44 x 60 x 61 mm

- valve drives closed in de-energized state
- thermoelectric mode of operation
- with state indication (opened or closed)
- with overheating protection
- with anti-dismantling protection
- pluggable connection cable
- for plug-in cover

Neutral conductor necessary!

Order valve adapter separately.

Suitable for	Order no.	Page
Valve adapter for valve drive	7590 00 7.	137
Heating actuator 6gang RMD 230 V	TYF646T	136
Heating actuator 230 V flush-mounted	TYB641A	139

Design	Order no.	PU
polar white	**7590 00 76**	1

IP54

Valve drive 24 V AC/DC

Operating voltage	24 V~/=
Frequency	50/60 Hz
Power consumption	1.8 W
Running time	45 s /mm
Stroke	4 mm
Operating temperature	+0 ... +60 °C
Medium temperature	max. 0 ... 100 °C
Line length	max. 200 m
Pre-assembled cables	≈ 1 m
Dimensions (W x H x D)	44 x 60 x 61 mm

- valve drives closed in de-energized state
- thermoelectric mode of operation
- with state indication (opened or closed)
- with overheating protection
- with anti-dismantling protection
- pluggable connection cable
- for plug-in cover

Order valve adapter separately.

Suitable for	Order no.	Page
Heating actuator 6 channels	TX206H	139
Valve adapter for valve drive	7590 00 7 ..	137

Design	Order no.	PU
polar white	**7590 00 77**	1

Valve adapter for valve drive

Cap nut (M x L)	M30 x 1.5 mm
Metric thread	M30

More valve adapters upon request.

Suitable for	Order no.	Page
Valve drive 230 V	7590 00 76	137
Valve drive 24 V AC/DC	7590 00 77	137

Design	Order no.	PU
grey, VA10, Dumser/Simplex/Beulco (from 2005)	**7590 00 72**	1
dark grey, VA50, Cazzaniga/Honeywell & Braukmann/ Landis & Gyr/Frese/Reich (distributor)/KaMo	**7590 00 73**	1
light grey, VA80, Comap/Empur/Heimeier/Herb/IVAR/ MNG/Onda/Oventrop/Schlösser/Strawa/TA/Thermot	**7590 00 75**	1
polar white, VA78, flane for Danfoss valves, type: RA	**7590 00 74**	1

Analogue actuators

Analogue actuator 4gang RMD

Operating voltage over bus	21 ... 32 V=
Auxiliary voltage	24 V~
Frequency	50/60 Hz
Output load voltage	> 1 kΩ
Voltage, outputs	0 ... 1; 0 ... 10 V
Output current per channel	max. 20 mA
Current consumption	max. 170 mA
Outputs current	0 ... 20, 4 ... 20 mA
Output load current	< 500 Ω
Forced controls (1-bit objects)	per channel 2
Operating temperature	-5 ... +45 °C
Assembling height as from DIN rail	63 mm
Dimensions (W x H x D)	72 x 90 x 70 mm
Width of rail mounted device (RMD)	4 TE

The analogue actuator receives KNX telegrams and converts them into current and/or voltage signals, e.g. for heating, air conditioning and ventilation systems.
Output signals according to DIN IEC 381

- with green/red status LED (operation/fault)
- with red programming LED
- channels can be adjusted independently
- with programming button
- expandable with 4gang analogue actuator module
- bus connection via connecting terminal
- initial status via status- and/or switch object evaluable
- with 4 independant analogue outputs
- cyclic supervision of the outputs
- with screw terminals
- with system interface for analogue actuator module

Suitable for	Order no.	Page
Power supply 24 V AC RMD	ST312	120
optional		
Analogue actuator module 4gang RMD	TYF684A	138

Design	Order no.	PU
light grey	**TYF684**	1

Analogue actuator module 4gang RMD

Operating voltage over bus	21 ... 32 V=
Auxiliary voltage	24 V~
Frequency	50/60 Hz
Output load voltage	> 1 kΩ
Voltage, outputs	0 ... 1; 0 ... 10 V
Output current per channel	max. 20 mA
Current consumption	max. 170 mA
Outputs current	0 ... 20, 4 ... 20 mA
Output load current	< 500 Ω
Forced controls (1-bit objects)	per channel 2
Operating temperature	-5 ... +45 °C
Assembling height as from DIN rail	63 mm
Dimensions (W x H x D)	72 x 90 x 70 mm
Width of rail mounted device (RMD)	4 TE

Output signals according to DIN IEC 381

- with 4 yellow output status LEDs
- with green/red status LED (operation/fault)
- as extension for analogue actuator 4gang
- with 4 independant analogue outputs
- cyclic supervision of the outputs
- with screw terminals
- with system plug for connection to the analogue actuator system interface

Suitable for	Order no.	Page
Analogue actuator 4gang RMD	TYF684	138

Design	Order no.	PU
light grey	**TYF684A**	1

Actuators, flush/surface-mounted

Heating actuator 230 V flush-mounted

Operating voltage	21 ... 32 V=
Switching current for electronic outputs	max. 25 mA
Actuators per channel	max. 2
Operating temperature	-5 ... +45 °C
Load cable length	≈ 20 cm with 2 x 1,5 mm²
Cable length, bus + inputs (extendable to max. 5 m)	≈ 33 cm
Dimensions (Ø x H)	53 x 28 mm

Optimised for commissioning with ETS3 from version D, patch A.

- binary input functions: Switching, dimming, shutter control and value transmitter
- for individual single room temperature control
- for continuous (PI) or switched (2-point) control
- with programming button and red programming LED
- 1 electronic output (triac) for connection of 230V thermoelectric actuator drives
- with 3 independent binary inputs for potential-free contacts
- with emergency programme, e.g. for sensor or bus failure
- installation in flush-mounted or splash-protected junction box
- pre-assembled, with cables

Suitable for	Order no.	Page
Valve drive 230 V	7590 00 76	137

Design	Order no.	PU
light grey	**TYB641A**	1

Heating actuator 6 channels

Supply voltage	230V AC
Bus KNX	30V DC TBTS
Max. power uptake	50W
Bus power consumption	< 10mA
Standard fuse	T 2A
Max. number of actuators	13
Operating temperature	-5 to +40 °C
Dimensions (W x H x D)	302 x 75 x 70 mm
Frequency	50/60 Hz

- for valve drives 24 V, closed in de-energized state
- with on red heat request LED per channel
- with green operation LED and red programming LED
- with red fuse LED
- with integral transformer
- bus connection via connecting terminal
- with emergency programme, e.g. for sensor or bus failure
- short-circuit and overload proof (fine-wire fuse)
- with plug-in terminals
- for individual single room temperature control
- for continuous (PI) or switched (2-point) control

Suitable for	Order no.	Page
Valve drive 24 V AC/DC	7590 00 77	137

Design	Order no.	PU
grey, 6gang Triac	**TX206H**	1

KNX system units

The system components are KNX devices, which assume higher-level functions, independent of the application. They guarantee the necessary infrastructure in the building, ensuring a flawless information exchange between sensors and actuators. In addition, the system devices stand for the highest quality and functional safety in the system.

Berker by :hager

Power supplies

- With integral choke
- Short-circuit and overload protection
- The “OK” indicator lights up in normal working mode
- The “I>Imax” indicator lights up, eliminate the origin of the fault (short circuit or overload)
- Protected earth conductor must be connected
- Quick Connection Terminal

Power supply 320 mA RMD

Supply voltage	230V AC 50/60 Hz
Output voltage	30V DC
Output current max.	320 mA
Absorbed power	15 VA
Width	4 modules
Operating temperature	-5 ... +45°C
Connections	Quick Connection 0.75 to 2.5 mm²

Design	Order no.	PU
light grey	**TXA111**	1

Power supply 640 mA RMD

Supply voltage	230V AC 50/60 Hz
Output voltage	30V DC
Output current max.	640 mA
Absorbed power	24 VA
Width	4 modules
Operating temperature	-5 ... +45°C
Connections	Quick Connection 0.75 to 2.5 mm²

Design	Order no.	PU
light grey	**TXA112**	1

Power supply 160 mA RMD

Supply voltage	230V AC 50/60 Hz
Output voltage	30V DC
Output current max.	160 mA
Absorbed power	15 VA
Width	4 modules
Operating temperature	-5 ... +45°C
Connections	Quick Connection 0.75 to 2.5 mm²

Design	Order no.	PU
light grey	**TXA113**	1

Power supply 1x30V, 320 mA + 1x24V, 640 mA RMD

Supply voltage	230V AC 50/60 Hz
Output voltage	30V DC and 24 V DC
Output current max.	320 mA and 640 mA
Absorbed power	4.4 W
Width	4 modules
Operating temperature	-5 ... +45°C
Connections	Quick Connection 0.75 to 2.5 mm²

Design	Order no.	PU
light grey	**TXA114**	1

Power supply 2x30V, 320 mA RMD

Supply voltage	230V AC 50/60 Hz
Output voltage	30V DC
Output current max.	2 x 30 V DC 320 mA
Absorbed power	3.5 W
Width	4 modules
Operating temperature	-5 ... +45°C
Connections	Quick Connection 0.75 to 2.5 mm^2

- Power supply has 2 outputs KNX 30 V DC 320 mA

Design	Order no.	PU
light grey	**TXA116**	1

Couplers

Line coupler

Operating voltage	21 - 32 V DC
Width	2 modules
Operating temperature	-5 ... +45°C

- Can be used as line/area coupler or line amplifier.
- With programming button.
- With green operation LED, red programming LED and red diagnosis LED.
- With 2 yellow data traffic LEDs for higher and lower ranking line.
- Allows extension of a wire line and repeats the messages.
- Ensures a galvanic insulation between lines.
- Necessary in case of systems with more than 64 wire products.
- Line connection via connecting terminal

Design	Order no.	PU
light grey	**TYF130**	1

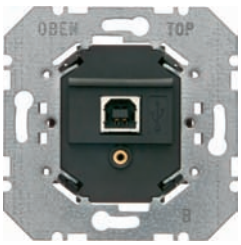
Router IP/KNX

Supply voltage	KNX bus (21 -30V DC)
External SELV power	24V AC/DC (12-30V AC/DC)
Supply:	1.6 GHz
- power usage from the bus line	10mA max 30V DC
- power usage from the auxiliary power supply	800mW max (25mA - 24V DC)
Operating temperature	-5°C to 45°C
Width	2 modules

- Quick communication of lines/areas and systems via data networks (Internet protocols).
- Needed for operation a power supply of 24 V DC.
- As interface to PCs and data processing devices.
- For reporting bus voltage failure via data networks.
- Internet protocols supported: ARP, ICMP, IGMP, UDP/IP, and DHCP.
- IP according to Konnex specifications: Core, Routing, Tunneling, Device Management.
- Can be used as line/area coupler.
- With RJ45 connection for Ethernet/IP networks.
- With programming button and red programming LED.
- With green operation LED and yellow data traffic LED.
- With green, yellow and red LEDs for indicating the IP communication.
- Line connection via connecting terminal.
- Operating voltage connection via connecting terminal.

Design	Order no.	PU
Router IP/KNX	**TH210**	1

Data interfaces



KNX data interface USB flush-mounted

Operating voltage over bus	21 ... 32 V=
Data transmission rate	max. 9.6 kBd
Operating temperature	-5 ... +45 °C
USB cable length	max. 5 m

For connection of a PC for addressing, programming and diagnosis of KNX components and for visualisation.

- programmable from ETS3, V1.0
- for addressing, programming and diagnosis of KNX components
- with B-type USB socket for data traffic (voltage supply via PC)
- compatible with USB 1.1/2.0 transmission protocols
- system requirements: Windows 2000 or later
- without spreader claws
- with flash-controller technology

Design	Order no.	PU
black	**7504 00 04**	1

Centre plate with TAE cut-out

	Suitable for KNX data interface USB flush-mounted	Order no. 7504 00 04	Page 144

Design	Order no.	PU
Berker S.1/B.3/B.7		
white glossy	**1033 89 12**	10
polar white glossy	**1033 89 19**	10
polar white matt, with 2 knock out openings	**1033 19 09**	10
anthracite matt, with 2 knock out openings	**1033 16 06**	10
aluminium matt, lacquered, with 2 knock out openings	**1033 14 04**	10

Berker Q.1/Q.3		
polar white velvety	**1033 60 89**	10
anthracite velvety, lacquered	**1033 60 86**	10

Berker K.1/K.5		
polar white glossy	**1035 70 09**	10
anthracite matt, lacquered	**1035 70 06**	10
Aluminium, aluminium anodised	**1035 70 03**	10
Stainless steel, metal matt finish	**1035 70 04**	10

Berker Arsys		
white glossy	**1035 01 02**	10
polar white glossy	**1035 01 69**	10
brown glossy	**1035 01 01**	10
light bronze matt, aluminium lacquered	**1034 00 01**	10
Stainless steel, metal matt finish	**1034 00 04**	10
gold matt, aluminium anodised	**1034 00 02**	10

Berker R.1/R.3		
polar white glossy	**1038 20 89**	10
black glossy	**1038 20 45**	10

Accessories

Data rail with connector

Operating temperature	-5 ... +45 °C	– with 4 plug-in terminals 4pole
length	214 mm	– self-adhesive
For DIN rail with depth	7.5 mm	
Width of rail mounted device (RMD)	12 TE	

For DIN rail 35 x 7.5 mm to according to DIN EN 60715

Design	Order no.	PU
Data rail with connector	**7500 00 08**	1

Cover for data rail

Operating temperature	-5 ... +45 °C	– to protect against dirt contamination and interference voltage
length	240 mm	
divisible into	0.5 TE-steps	
Width of rail mounted device (RMD)	13.5 TE	

Design	Order no.	PU
light grey	**7500 00 04**	5

Connecting terminal

Operating temperature	-5 ... +45 °C	– 2pole
Conductor Ø	0.6 ... 0.8 mm	– for the bus connection of the units
Number of conductors	2 x 4	– polarization red + black -
Dimensions (L x W x H)	10.2 x 11.5 x 10 mm	– can be used as branch terminal
		– with plug-in terminals

Design	Order no.	PU
red/black	**TG008**	50

KNX bus cable

Bus cable (ST) Y 2 x 2 x 0.8mm
(4KV test voltage)

Design	Order no.	PU
length 100 m	**TG018**	1
length 500 m	**TG019**	1
length 100 m without halogen	**TG060**	1
length 500 m without halogen	**TG061**	1

Quickconnect jumpers for KNX

Quick Connect jumpers for the tebis KNX system
for looping

Design	Order no.	PU
black	**TG200A**	50
grey	**TG200B**	50
brown	**TG200C**	50

KNX surge protection device

Nominal voltage	24 V
Nominal current (max.)	3 A
Nominal discharge current	5 kA
Limiting discharge	8 kA
Protection level at 100 V / S	≤ 350 V
Protection level at 1 kV / S	≤ 500 V
Response time	≤ 100 ms
Insulation resistance	> 10,000 MΩ
Capacity	1 pF
Operating temperature	-25 to +80°C
Bus connection	line Ø 0.8 mm, length 200 m
Ground connection	conductor 0.75 mm2, length 200 m

- The application is recommended if:
  - The bus line is laid parallel to high-performance power lines,
  - The bus line is routed in parallel to metal installation parts that can flow through the lightning currents,
  - The bus line is used building border.

Design	Order no.	PU
blue	**TG029**	1

Modular USB interface

Operating voltage	21 - 32 V DC
Data transfer rate	max. 9.6 kBaud
Operating temperature	-25 to +45°C
Width	2 modules

- For addressing, programming and diagnosis of KNX components.
- With B-type USB socket for data traffic (voltage supply via PC)
- Compatible with USB 1.1/2.0 transmission protocols.
- With flash-controller technology

Design	Order no.	PU
light grey	**TH101**	1

Kit interface USB/KNX

Operating voltage	21 - 32 V DC
Data transfer rate	max. 9.6 kBaud
Operating temperature	-25 to +45°C
USB cable length	max. 3 m
Width	2 modules

- For addressing, programming and diagnosis of KNX components.
- With B-type USB socket for data traffic (voltage supply via PC)
- Compatible with USB 1.1/2.0 transmission protocols.
- With flash-controller technology
- For connection of a PC for addressing, programming and diagnosis of instabus components to Modular USB interface

Design	Order no.	PU
light grey	**TH102**	1

USB cable

Cable length	max. 3 m

- For connection of a PC for addressing, programming and diagnosis of instabus components to Modular USB interface

Design	Order no.	PU
light grey	**TH103**	1

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