

Building automation.
fast. simple. smart.



Lingg  Janke



The smart home	4
The quick principle	5
Examples of use	8
Documentation, group addresses and visualization	10
Quick Smart Metering	12
Special solutions	14
Product overview	16





The smart home

The intelligence of a smart home should be evident not only in its functions – but also through its low-cost commissioning as well as flexible and easy options for customization.

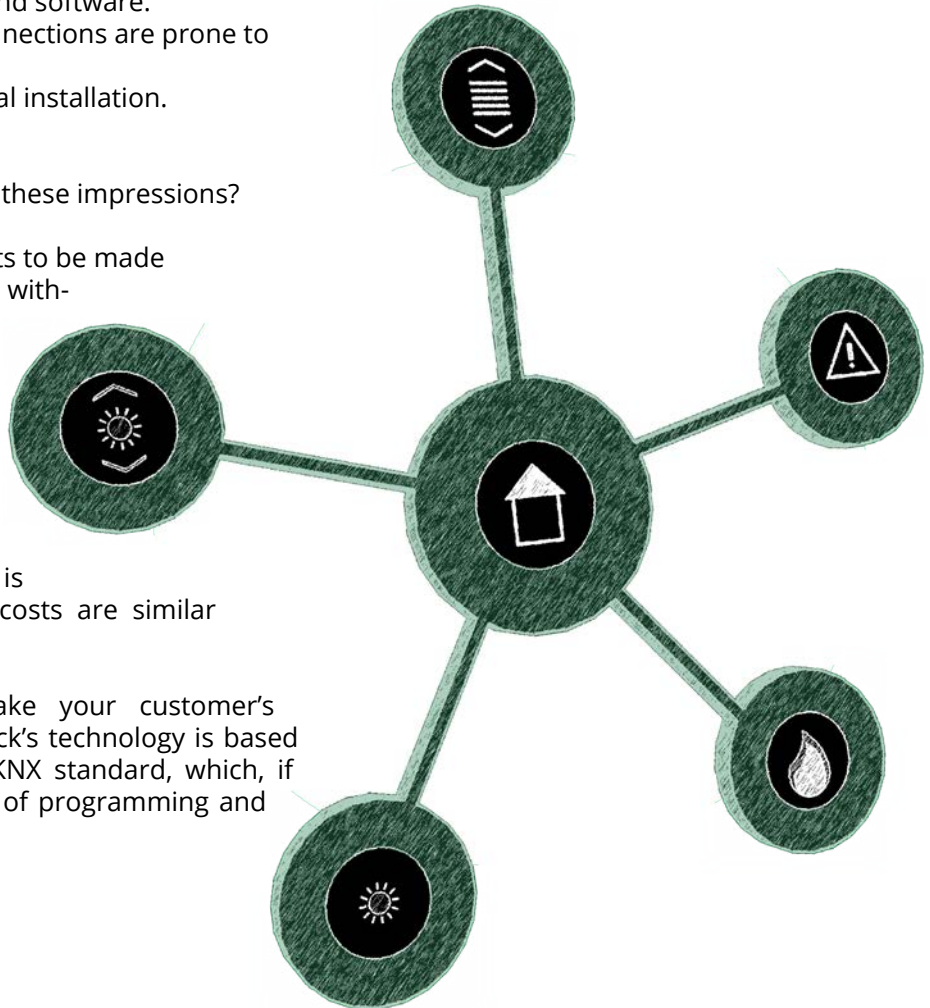
Unfortunately, smart homes still conjure up thoughts of:

- No customizability by the customer.
- High barriers because of training and software.
- Radio communication systems' connections are prone to malfunction.
- The lack of flexibility of conventional installation.
- High commissioning costs.

How do quick's offerings differ from these impressions?

- Easy operation enables adjustments to be made at any time – by the customer, and without the need for intensive training.
- The proven wired KNX standard means you can use tried-and-tested connections, and decide just how much access via Intranet and Internet is possible.
- Since neither software nor training is needed to start the system up, costs are similar to standard installation.

The only tool you need to make your customer's building smart is a screwdriver. quick's technology is based on the internationally recognised KNX standard, which, if desired, can open up a wide range of programming and combination possibilities.



The quick principle

In the intelligent building control via the KNX bus, connected bus devices are divided into sensors and actuators. Sensors are KNX devices that receive the information and transmit it to the KNX bus.

Actuators are devices that take information from the KNX bus – and use it to execute actions in the building.

For example, a touch sensor and a switching actuator are required to turn a ceiling light on. These KNX devices must be connected virtually via the ETS software in order to be able to communicate with each other.

The cost of putting a system into operation using ETS software is, especially for small bus systems, quite high. This means it is often a barrier that leads to smart building control systems not being implemented.

This is where quick comes in:

Lingg & Janke's quick system lives up to its name:

The use of coding switches allow installations in small and medium-sized buildings even without the use of programming software.

The only tool you need is a screwdriver!

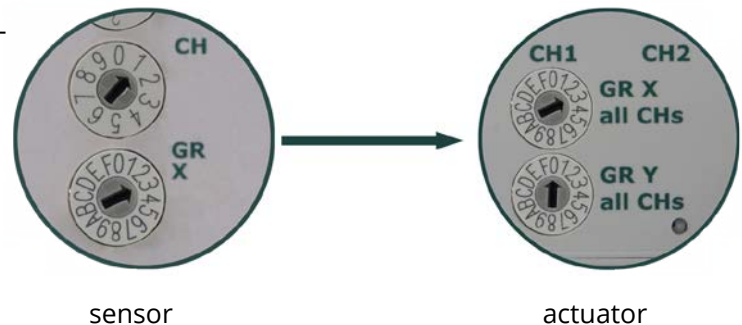
KNX parameterisation is already included in the devices and is selected through the coding switches.



What you need to know to put a quick system into operation

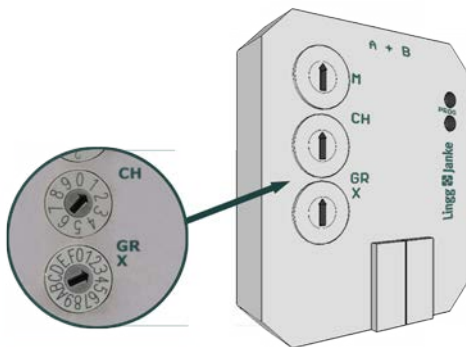
The quick system is a wired KNX system. The wiring of the installation is carried out according to a standard KNX system. As with any KNX bus system, a power supply that supplies power to the devices connected to the bus is required.

Programming is done using the coding switches located on each bus device. They are used to establish a connection between sensor and actuator by means of the same connection numbers. Actuators have multiple outputs to control the connected users (channels 1 to 9). That is why the connection number is composed of a channel number (CH) and a group number (GR).



sensor

actuator

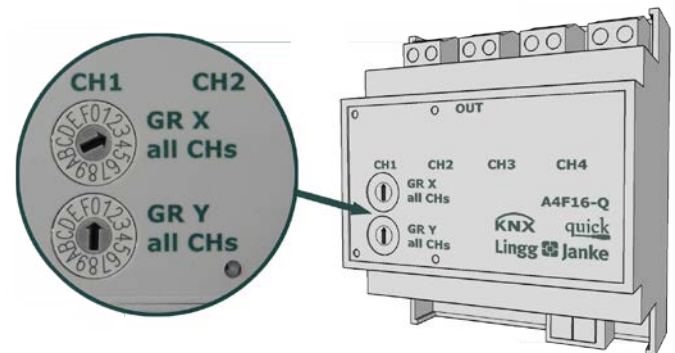


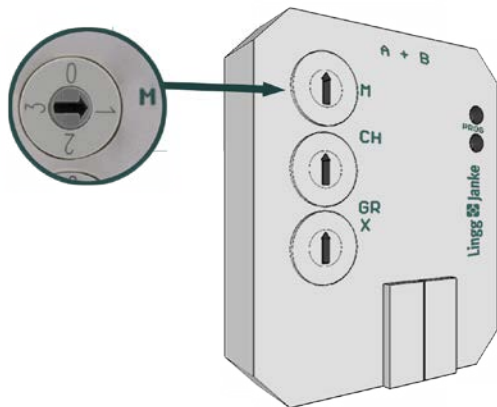
Each sensor has one coding switch for each of the two numbers (CH and GR) which can be variably set.

If the channel number is set to 0 on a sensor, then all the channels of all the actuators that are in the same group (e.g. group 3) are activated.

The channel need not be set on an actuator since the number of available channels is determined by their order on the actuator.

In addition, all actuators have a second coding switch for a further group (GR Y). With this second group, all channels of the actuator – or individual channels – can be activated by a second sensor with a different group number. When a group is set to 0, it is deactivated.





In addition, there is a coding switch on the sensors that provides them with information on the type of actuators to be activated. Here, for example, if number 1 is set, only switching actuators are activated.

This kind of coding switch is likewise located on the blind/shutter actuator. This is where the actuator is given the information about whether it should control a blind or a shutter.

To complement the product range, a switching actuator with time delay via a coding switch is available in order to, for example, carry out staircase lighting functions easily. This function enables even the customer to effortlessly customise switching times.

In order to define the settings in the programming, the programming button on any device must be pressed at the end.

It only takes a few seconds to program the quick system's components – the process is finished when the LED on the programming button stops shining.



The number of groups is limited to 15 per actuator type (switching, blinds/ shutters, dimmer). An actuator can have up to 9 channels. This results in a maximum number of usable channels of 135 for switching, 90 for blind control, and 60 for dimming. The capability of the power supply used should always be considered.

A change in programming works in exactly the same way: set the coding switch as desired and press the programming button. Within seconds, you can customise your connections and reassign, for example, button assignments on the light switch.

If you set all the coding switches of a quick device to 0, you can program the device via the ETS, as with all other KNX components.

This allows you to use the quick system's functions with other KNX system components in a house at the same time to get the best possible combination of flexibility and convenience.

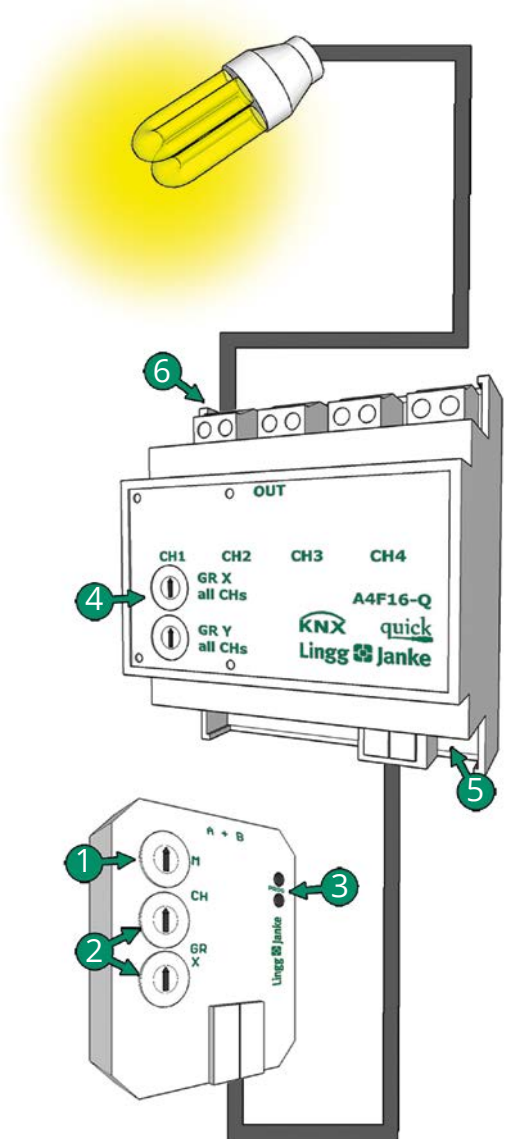
Examples of use

Programming a light on/off switch

1. Set the function of the rocker. 1 means that the top button turns the light on and the lower button turns the light off.
2. Then number 1 is set on the coding switch for the (CH) channel, and number 2 is set on the coding switch for the (GR X) group.
3. To program, press the programming button on the push button interface. Each switching actuator has 2 coding switches used to set up to 2 communication groups.
4. 2 is set for the first group (GR X) on the coding switch. GR Y remains at 0.
5. To program, press the programming button on the actuator.
6. Connect the end device to be switched on, such as a lamp, to channel 1.
7. Connect the push button interface with the push button sensor module using the supplied connection cable.

These 7 easy steps mean you have now programmed a light circuit.

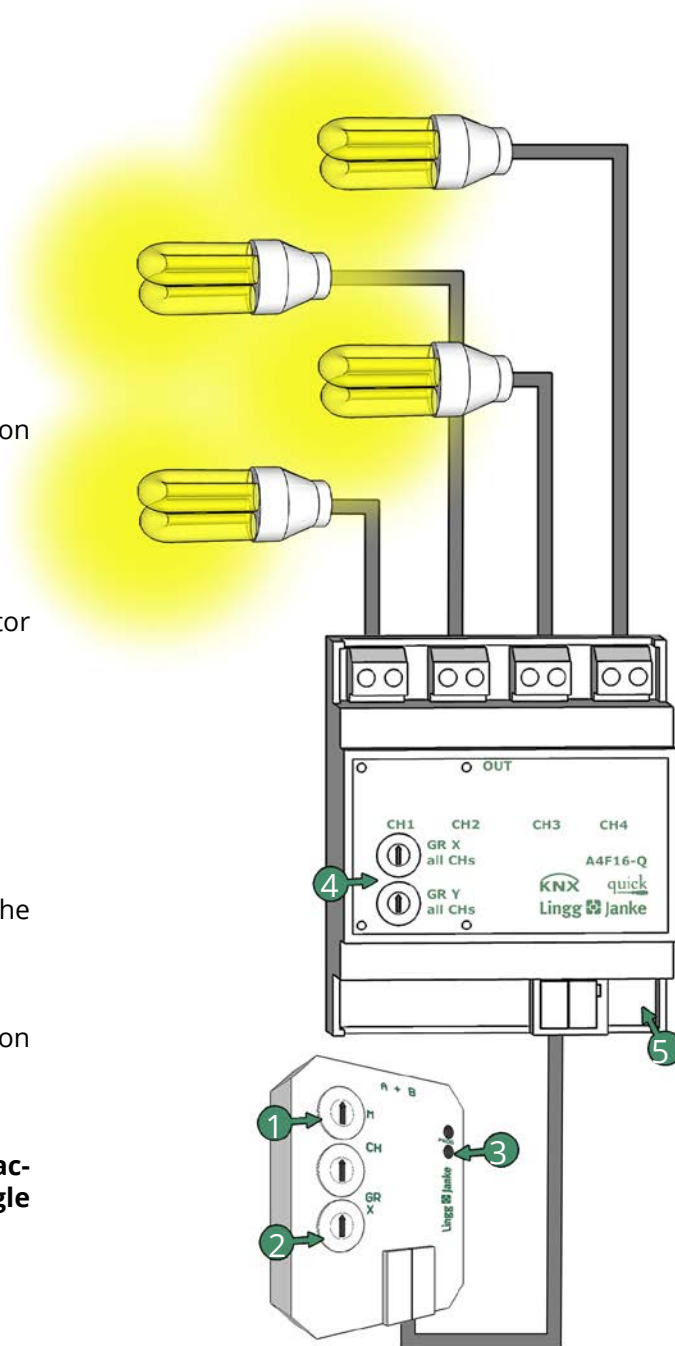
It is just as easy to program a blind operating unit or a dimmer. The only difference is that the switching actuator is replaced by a shutter actuator or dimmer, and the pushbutton interface must be set to 'shutter' or 'dimmer'.



Programming a central switch

1. Set the function of the rocker. 1 means that the top button turns the light on and the lower button turns the light off.
2. Then number 0 is set on the coding switch for the (CH) channel, and number 2 is set on the coding switch for the (GR X) group. This setting activates all the channels of an actuator on which group 2 is set.
3. To program, press the programming button on the push button interface.
4. Number 2 is set for the first (GR X) group on the coding switch. GR Y remains at 0.
5. To program, press the programming button on the actuator.
6. Connect the push button interface with the push button sensor module using the supplied connection cable.

All consumers now connected to this switching actuator can be switched centrally by pressing a single button.



Documentation, group addresses and visualization



It is not possible to, for example, specify scenes or fixed dimming states using the coding switch. A commercial KNX visualization software program can, however, expand the possibilities of the quick coding switch if desired. The group addresses required to set the visualization can be obtained from an Excel file, which we will provide you with.

There are various software packages that may be used to visualize, for example Callidomus, ELVIS, IP Symcon and others. In these packages group numbers are already preset and may be used easily. This makes visualization simpler then ever.

floor	room	What will be controlled?	function	Sensor	CH	GR X	Actuator
1	dining room	ceiling light	switching	touch sensor beside doorway dining room left rocker	1	1	switching actuator 1
1	living room	ceiling light	switching	touch sensor beside doorway living room left rocker	2	1	switching actuator 1
1	dining + living room	all ceiling light	switching	touch sensor beside doorway central switch	0 (all)		switching actuator 1
1	dining room	standard lamp	dimming	touch sensor beside doorway dining room right rocker	1	1	dimming actuator 1
1	living room	standard lamp	dimming	touch sensor beside doorway living room right rocker	2	1	dimming actuator 1
1	dining + living room	all standard lamp	dimming	touch sensor beside doorway central switch	0 (all)		dimming actuator 1
1	dining room	shutters	shutter / blinds	2nd touch sensor beside doorway dining room	1	1	shutter / blinds actuator 1
1	living room	shutters	shutter / blinds	2nd touch sensor beside doorway living room	2	1	shutter / blinds actuator 1
1	dining + living room	all shutters	shutter / blinds	2nd touch sensor beside doorway all blinds up/down	0 (all)		shutter / blinds actuator 1

In addition you will find an Excel file which allows you to document your project fast and easy on our homepage.

You just need to add the function, channel and group to get the suitable group address. Further you can write other informations about actuator, sensor, place of sensor and information of what will be controlled.

KNX-group addresses						
switching	dimming			shutter		
switching	switching	dimming	value	up/ down	lamella	
15/0/17						
15/0/18						
15/0/240						
	15/2/17	15/3/17	15/4/17			
	15/2/18	15/3/18	15/4/18			
	15/2/240	15/3/240	15/4/240			
				14/0/17	14/1/17	
				14/0/18	14/1/18	
				14/0/240	14/1/240	1



quick Smart Metering

In addition to standard functions like switching, dimming and shadowing, smart metering solutions are available with KNX quick. Measuring of consumption never had been this easy. The meters just need to be build in, and the coding switches need to be set, literally like "plug and play".

Each meter obtains a group number (1...F) and a channel number (1...9). This results in a maximum amount of usable meters of 135. If you set all the coding switches of a quick device to 0, you can program the device via the ETS, as with all other KNX components. In quick mode all meters are sending their meter readings, and, depending on type of the meter instantaneous values like power, flow rate or temperature.

The meter readings will be transmitted to the KNX bus every 5 minutes, instantaneous values are sent cyclically every 15 to 30 seconds.



Beside the measuring of consumption also measuring of temperature is important.

On our temperature sensors you will also find 2 coding switches to set a group and a channel number. The coding switches are located inside the case on the PCB. To set the coding switches you need to unscrew and remove the top and to close the top after programming.

The quick network coupler

The network coupler “quick” offers the possibility to display consumption values fast and easy. Because of the pre-installed ETS-application it is possible to visualize up to 8 meters. The meters need to be set to group 1 and channel 1 to 8, because the suitable group addresses are pre-programmed.

SETUP			
Lingg & Janke			
CHART 1A SETUP	present setting	new setting	
meter type	NOT USED	select	SET
comm. objects:			
meter number	\$A1value	select	SET
meter status	\$A2value	select	SET
meter value	\$Q1value	select	SET
meter value hires	\$Q2value	select	SET
RETURN	TEST		

Energy Analyzer

Meter readings are now displayed in charts.

The network coupler provides value recording for 10 years, which allows long term data comparison to detect possible energy savings.

Quick Smart Metering SA 30.01.2016 10:23:53 KW04 Lingg & Janke

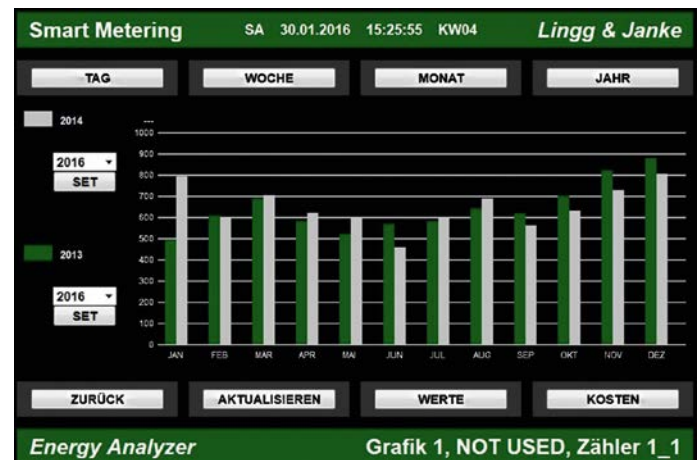
Zähler 1_1 Zähler 1_2 Zähler 1_3 Zähler 1_4

Zähler 1_5 Zähler 1_6 Zähler 1_7 Zähler 1_8

ZURÜCK HILFE Übersicht EINRICHTEN

Energy Analyzer

In a second step the network coupler is configured for the type of meter (electricity, heat, water or gas) and the required unit (kWh, litre,...).



special solutions

Lingg & Janke’s quick system enables high comfort levels without any programming. However, this sometimes requires some forethought regarding the functions you want the various products to perform before you actually go and purchase devices for the system. Lingg & Janke offers numerous solutions for this, too.

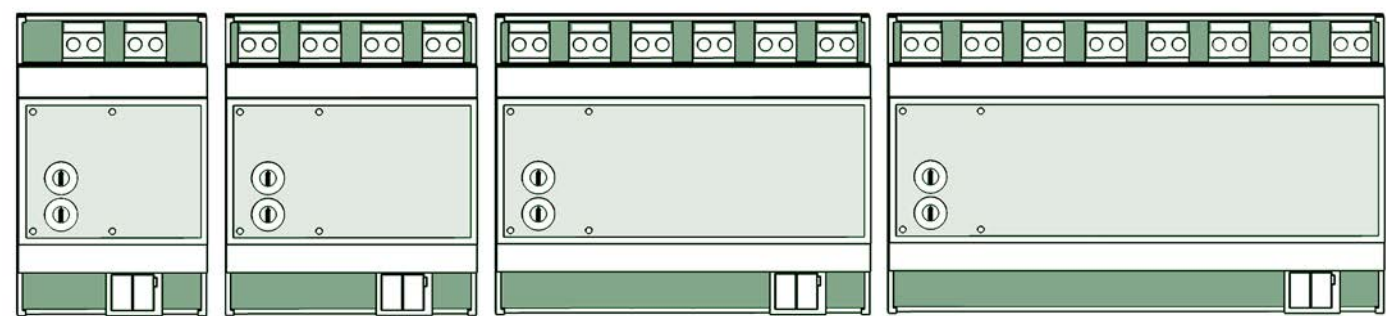
If, for example, you want automatic stopping times in a stairwell or in an automatic toilet ventilation system, you can use the switching actuator with the staircase lighting function.

switching times of the switching actuator with staircase lighting function

0	switching times off	8	3 minutes
1	5 seconds	9	4 minutes
2	10 seconds	A	2 minutes with pre-warning
3	15 seconds	B	3 minutes with pre-warning
4	20 seconds	C	4 minutes with pre-warning
5	40 seconds	D	5 minutes
6	1 minutes	E	10 minutes
7	2 minutes	F	20 minutes

Since blind/shutter actuators require information about what they control, an actuator is available, which, per channel and not just per actuator, can be set to blind or shutter.

Also the number of group switches have to be defined in advance. If you want a central off switch for the entire house and you also require group circuits in individual rooms, these rooms have to be connected to one actuator. Unassigned channels on these actuators cannot be allocated, otherwise other rooms will be controlled by central switch. This might increase the number of actuators required. Therefore a huge number of actuators with different kinds of channels are available.



Operating modes of the push button interfaces and binary inputs

But not only a variety of actuators offer flexibility. The variety of push button interfaces and binary inputs offers maximum flexibility, depending on the functions and programming effort you require.

In addition to the choice of operating modes on the push button interfaces you may also select if the interface is able to operate LEDs, how many buttons are connected and if single operation or rocker function is required.



push button interface with rocker function

	0	switching and dimming 0 (central off)
	1	switching on / off
	2	dimming
	3	shutter / blinds

binary input

switching	0	rising edge switch 0
	1	rising edge switch 1
	2	rising edge switch 0, falling edge switch 1
	3	rising edge switch 1, falling edge switch 0
dimming	4	short push switch off, long push dim down
	5	short push switch on, long push dim up
shutter / blinds	6	short push lamella down / long push blind/shutter down
	7	short push lamella up / long push blind/shutter up
	8	blind/shutter down
	9	blind/shutter up

push button interface with single button operation

switching	0	switching and dimming 0 (central off)
	1	rising edge switch 0
	2	rising edge switch 1
	3	rising edge switch 0-1
	4	rising edge switch 0, rising edge switch 1
dimming	5	rising edge switch 1, rising edge switch 0
	6	short push switch off, long push dim down
	7	short push shwitch on, long push dim up
shutter / blinds	8	short push switch on / off, long push dim up / down
	9	short push lamella down / long push blind/shutter down
	A	short push lamella up / long push blind/shutter up
	B	short push lamella up / down long push blind/shutter up / down
heating	C	blind/shutter down
	D	blind/shutter up
	E	rising edge valve close rising edge valve open
	F	rising edge valve open rising edge valve close

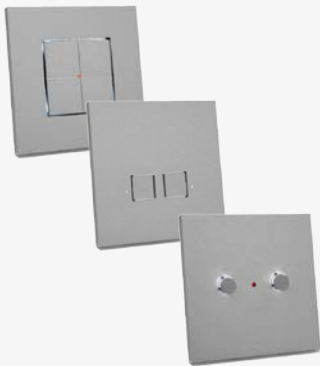
product overview



push button sensor module with system connector

- 4-button-module without bus coupling unit
- requires push button interface
- including pre-fabricated connection cable to connect to push button interface

	required interface	order-no.
push button interface without LEDs (TAKP2F-SAT)	TS2F-1-QW / TS4F-1-QW	Q77898



design switch with system connector

- including pre-fabricated connection cable to connect to push button interface
- requires push button interface

	required interface	order-no.
Lola Carre with 2 buttons, with LED colour: Aluminium natural	TS2FL-1-QW	Q6100211
Lola Carre with 4 buttons, with LED colour: Aluminium natural	TS4FL-1-QW	Q6100411
Lara Carre with 2/4 buttons, with LED colour: Aluminium natural	TS2F-1-QW / TS4F-1-QW / TS2FL-1-QW / TS4FL-1-QW	Q6400211
Zita Carre with 2 buttons, with LED colour: Aluminium natural	TS2FL-1-QW	Q6300211
Zita Carre with 4 buttons, with LED colour: Aluminium natural	TS4FL-1-QW	Q6300411
Mona Carre with 2 buttons, with LED colour: Aluminium natural	TS2FL-1-QW	Q6200211
Mona Carre with 4 buttons, with LED colour: Aluminium natural	TS4FL-1-QW	Q6200411
Lola Carre with 2 buttons, without LED colour: Aluminium natural	TS2F-1-QW	Q6100211
Lola Carre with 4 buttons, without LED colour: Aluminium natural	TS4F-1-QW	Q6100411
Zita Carre with 2 buttons, without LED colour: Aluminium natural	TS2F-1-QW	Q6300211
Zita Carre with 4 buttons, without LED colour: Aluminium natural	TS4F-1-QW	Q6300411
Mona Carre with 2 buttons, without LED colour: Aluminium natural	TS2F-1-QW	Q6200211
Mona Carre with 4 buttons, without LED colour: Aluminium natural	TS4F-1-QW	Q6200411

All switches are available in further colours and design variation. For details please ask our sales staff.



push button interface with rocker function

- with system connector suitable for design switches or push button sensor module

	type	order-no.
push button interface for single rocker	TS2F-1-QW	Q77890
push button interface for double rocker	TS4F-1-QW	Q77891
push button interface for 2x double rocker	TS8F-1-QW	Q77894



push button interface with rocker function and LED

- with system connector suitable for design switches or push button sensor module with LED
- LED is listening to central control commands (via GR Y)

	type	order-no.
push button interface for single rocker and LED	TS2FL-1-QW	Q77892
push button interface for double rocker and LED	TS4FL-1-QW	Q77893



push button interface for single button operation

- with separate single connectors
- rocker function or single switching points are programmable

	type	order-no.
push button interface for 4 single buttons	TS4F-2-QU	Q77880
push button interface for 4 single buttons and LED	TS4FL-2-QU	Q77881
push button interface for 8 single buttons	TS8F-2-QU	Q77882



push button interface for rocker function and single conductor

- with separate single connectors
- rocker function is programmable

	type	order-no.
push button interface for double rocker	TS4F-2-QW	Q77895
push button interface for double rocker and LED	TS4FL-2-QW	Q77896

sensors



Frames are not included.

rocker units, pure white, RAL 9010 alike

	order-no.
single rocker unit, without labeling	87820
single rocker unit, with label for light	87821
single rocker unit, with label for shutter	87822
double rocker unit, without labeling	87823
double rocker unit, with label for light	87824
double rocker unit, with label for shutter	87825

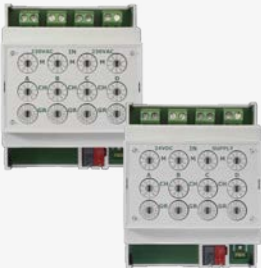


Rocker units, push button sensor modules and push button interfaces are not included.

Frames Exclusiv 55

	order-no.
Exclusiv 55 frame, pure white, RAL 9010 alike, 1-gang	86221
Exclusiv 55 frame, pure white, RAL 9010 alike, 2-gang	86222
Exclusiv 55 frame, pure white, RAL 9010 alike, 3-gang	86223
Exclusiv 55 frame, white glass, 1-gang	86321
Exclusiv 55 frame, white glass, 2-gang	86322
Exclusiv 55 frame, white glass, 3-gang	86323
Exclusiv 55 frame, mint glass, 1-gang	86331
Exclusiv 55 frame, mint glass, 2-gang	86332
Exclusiv 55 frame, mint glass, 3-gang	86333
Exclusiv 55 frame, black glass, 1-gang	86341
Exclusiv 55 frame, black glass, 2-gang	86342
Exclusiv 55 frame, black glass, 3-gang	86343
Exclusiv 55 frame, umbra glass, 1-gang	86351
Exclusiv 55 frame, umbra glass, 2-gang	86352
Exclusiv 55 frame, umbra glass, 3-gang	86353

All frames are available in further colours and design variation. For details please ask our sales staff.



binary input 4-gang

- variations:
 - for switches with potential free contacts - max. cable length 100 m
 - 230 V, signal voltage per input 230V AC/DC
- 4 independent inputs

	typ	RU	order-no.
binary input for switches	BE4FK-Q	4	Q79531
binary input 230 V	BE4F230-Q	4	Q79532

without picture

binary in-/output 4-gang

- variations:
 - for switches with potential free contacts - max. cable length 100 m
 - 230 V, signal voltage per input 230V AC/DC
- switching capacity 16 A at 250 V AC
- suitable for C-load

	typ	RU	order-no.
binary in-/ output for switches 4-gang	BEA4FK16-Q	6	Q79243
binary in-/ output 230 V 4-gang	BEA4F230-Q	6	Q79244

available as of 2nd quarter 2016
available as of 2nd quarter 2016



binary in-/output 8-gang

- variations:
 - for switches with potential free contacts - max. cable length 100 m
 - 230 V, signal voltage per input 230V AC/DC
- switching capacity 16 A at 250 V AC
- suitable for C-load

	typ	RU	order-no.
binary in-/ output for switches 8-gang	BEA8FK16-Q	9	Q79241
binary in-/ output 230 V 8-gang	BEA8F230-Q	9	Q79242

available as of 2nd quarter 2016

actuators



switching actuator 2-gang

- 2 channels
- 3 rail units
- switching capacity 16 A at 250 V AC
- suitable for C-load

type	RU	order-no.
A2F16-Q	3	Q79231



switching actuator 4-gang

- 4 channels
- 4 rail units
- switching capacity 16 A at 250 V AC
- suitable for C-load

type	RU	order-no.
A4F16-Q	4	Q79232



switching actuator 6-gang

- 6 channels
- 6 rail units
- switching capacity 16 A at 250 V AC
- suitable for C-load

type	RU	order-no.
A6F16-Q	6	Q79234



switching actuator 9-gang

- 9 channels
- 9 rail units
- switching capacity 16 A at 250 V AC
- suitable for C-load

type	RU	order-no.
A9F16-Q	9	Q79235



switching actuator 4-gang with staircase function

- 4 channels with selectable switch off times period:
from 5 seconds up to 20 minutes
- 4 rail units
- switching capacity 16 A at 250 V AC
- suitable for C-load

type	RU	order-no.
A4F16-Q	4	Q79233



Universal dimming actuator 4 x 2,5A / 570W

- 4 channels
- 100% short-circuit proof
- for all dimmable light sources
- can be used for dimmable LED retrofit lamps
- can be used for dimmable energy saving lamps
- flicker-free dimming range 0-100%

type	RU	order-no.
DIM4FU-2-FW-Q	12	Q77601



Blind / shutter actuator 2-gang

- 2 independent drives
- switching capacity 6 A at 250 V AC

type	RU	order-no.
J2F6-Q	3	Q79431



Blind / shutter actuator 4-gang

- 4 independent drives
- switching capacity 6 A at 250 V AC

type	RU	order-no.
J4F6-Q	4	Q79432

actuators / accessories



Blind / shutter actuator 6-gang

- 6 independent drives
- switching capacity 6 A at 250 V AC

type	RU	order-no.
J6F6-Q	6	Q79434



Blind / shutter actuator 4-gang with individual channel control

- blind or shutter mode is individually selectable for each of the 4 channels, provides maximum flexibility in your installation
- switching capacity 6 A at 250 V AC

type	RU	order-no.
J4F6-QA	4	Q79433



Power supply unit 640, 320, 160 mA

- KNX power supply unit with choke
- bus voltage output via bus connectors
- separate voltage output - decoupled

type		RU	order-no.
NT640-62	640 mA	6	88405
NT320-42	320 mA	4	88406
NT160-42	160 mA	4	88407



Wind sensor

- including external KNX quick evaluation unit

type	order-no.
coming soon	Q78902



network coupler

- provides all FacilityWeb functions like TCP/IP access, FTP access for KNX bus devices.
- graphical presentation of up to 8 meters is a bar diagram
 - bar diagram for day/ week/ month and year
 - comparison / summary of 2 days / weeks / months / years
 - display of consumption data / feed-in and cost / earnings, today / yesterday, this week / last week, this year / last year
- meters need to be set on group 1 and channel 1 to 8
- records up to 8 meter readings hourly for 10 years
- interface for the FacilityWeb devices
- also available with integrated power supply with 80 mA (small KNX arrangement, max. 5 devices)
- REG devices with 6 rail units

	type	order-no.
FacilityWeb network coupler - quick	NK-FW-graphic-quick	Q87350
FacilityWeb network coupler - quick with integrated KNX-power supply unit 80mA	NT80NK-FW-graphic-quick	Q87351

For meters with quick-functionality see main pricelist.



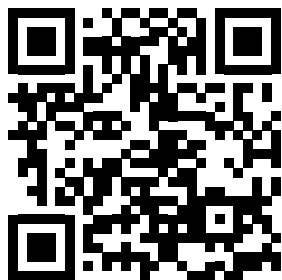
temperature sensors

- complete FacilityWeb functionality (via NK-FW)
- including integrated KNX bus coupler
- integrated data logger for temperature thresholds, status
- temperature range -55 ... +125°C
- TCP/IP-protocol, dedicated homepage (via NK-FW)
- immersion sleeve and mounting accessories on request

	type	order-no.
pipe mounting sensor	ANF99-FW	87130
duct sensor	KTF99-135-FW 135 mm	87101
duct sensor	KTF99-240-FW 240 mm	87102
duct sensor	KTF99-392-FW 392 mm	87103
cable sensor	LTF02-1m-FW	87104
cable sensor	LTF02-3m-FW	87105
damp environment sensor	FRF99-FW	87120
indoor sensor	RTF99-FW	87140



Lingg  Janke

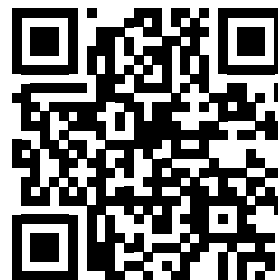


www.lingg-janke.de

Lingg & Janke
Zeppelinstraße 30
D-78315 Radolfzell

tel: +49 (0) 7732 945 57 50
fax: +49 (0) 7732 945 57 99
e-mail: info@lingg-janke.de
web: www.lingg-janke.de

Subject to technical modification / errors excepted. Released 03/2016.



www.knx-quick.de