ROOM AUTOMATION SOLUTION 2021

The power behind **your mission**

Johnson Controls

ROOM AUTOMATION SOLUTION

GUEST ROOM MANAGEMENT

ACCESS CONTROL

BEDSIDE PANEL

DOOR PANEL ELECTRONIC AND COVERS

ACCESS CONTROL SOFTWARE

IO INTERFACES / MODULES

DALI-KNX GATEWAY

FAN COIL CONTROLLER

UNIVERSAL MODULE

IO INTERFACES

DIMMER

HEATING MODULES

LINE GLASS SERIES

CAPACITIVE SWITCH COMPOSED BY ELECTRONIC AND GLASS

CAPACITIVE THERMOSTAT COMPOSED BY ELECTRONIC & GLASS

KNX SENSORS

PRESENCE & MOVEMENT SENSOR

HUMIDITY - TEMPERATURE CONTROLLER

MULTISENSOR CONTROLLER CO^2 - HUMIDITY - TEMPERATURE

METEO STATION

REAL TIME CLOCK

SWITCH - MINIPAD TOUCH PANEL

TOUCH PANEL 3.5"

SWITCH

MINISWITCH ACCESSORIES

MINIPAD

SYSTEM COMPONENTS

ROUTER INTERFACE

POWER SUPPLY

LINE COUPLER

USB INTERFACE

WEBSERVER

USB SUPERVISION

GRTR-J0x-KNX

TRANSPONDER READER WITH PLEXI SUPPORT FRAME

The Transponder Reader GRTR-J0x-KNX is an EIB/KNX wall mounting device suitable to access control applications.

This device can be used in any kind of building (Hotel, Hospital, Offices, Parking) where the access control application is required. The device is equipped with two binary inputs (dry contacts) that can be used, for instance, to control the door status or other signals coming from external switches/contacts (i.e. windows, bathroom emergency alarms).
The transponder reader is equipped also with two output relays which can be used for general purposes, typically to open the door or turning on the courtesy light inside the room. The product provides on the front side four LEDs in order to enlighten 4 icons to display the following states (e.g. in case of Hotel management): SOS request, Service Call, Client status ("Busy room" or "Do not Disturb").

The LEDs and icons can be configured in association with other alarms or events. The transponder reader can reads cards or keys at a maximum distance of 30 mm from the front side.

ORDERING INFORMATION

CODE	DESCRIPTION
GRTR-J02-KNX	Transponder reader with plexi support frame - Black
GRTR-J01-KNX	Transponder reader with plexi support frame - White

TECHNICAL SPECIFICATIONS

Dimensions	(H x W x D) 78 x 110 x 37 mm
Mounting	Inwall mounting on squared or round boxes Ø 60mm
Connections	Input and output screw clamps, conductor section max. 1,5 mm²
Power Supply	From bus KNX 21..30 Vcc SELV Supplementary 12-24V AC/DC ± 10% 150mA Max
Input Features	2 type ON/OFF clean contacts Max lenght of connection cable10mt
Output Features	Number 2 with capacity of the contact relay: 24 VAC/DC 2 A AC1
Control Elements	1 red LED for ETS programming Frontal signalling 1 LED: Access denied /allowed 3 LED: freely configurable

Note

For more information, refer to pertinent documentation

GRTH-J0x-KNX

TRANSPONDER HOLDER WITH PLEXI SUPPORT FRAME

The Transponder Holder GRTH-J0x-KNX is an EIB/KNX wall mounting device suitable to access control applications. It can be used for detecting and monitoring the presence of guests or service staff in a room. The device is equipped with two binary inputs (dry contacts) that can be used, for instance, to control the door status or other signals coming from external switches/contacts (i.e. windows, bathroom emergency alarms).

On the front of the transponder holder there is a blue light LED that is useful to help the guest to insert card in the device. Removing the card, after a programmable time, all the room services are switched off to preserve energy.

ORDERING INFORMATION

CODE	DESCRIPTION
GRTH-J02-KNX	Transponder holder with plexi support frame - Black
GRTH-J01-KNX	Transponder holder with plexi support frame - White

TECHNICAL SPECIFICATIONS

Dimensions	(H x W x D) 78 x 110 x 37 mm
Mounting	Inwall mounting on squared or round boxes Ø 60mm
Connections	Input and output screw clamps, conductor section max. 1,5 mm²
Power Supply	KNX bus 21 ... 30 VDC SELV Additional 12-24V AC / DC ± 10%, 150mA max
Input Features	2 ON/OFF dry contacts Max lenght of connection cable 10mt
Output Features	2 contact relays: 24VAC/DC 2 A AC1
Control Elements	1 blue guiding light 1 button for ETS programming

Note

For more information, refer to pertinent documentation

GRTPE-J02-KNX

TRANSPONDER ENCODER USB - BLACK

The encoder is a device that writes / reads RFID tag. The device is surface mounting in on a 3 modules special box, equipped with a USB interface that also provide the power supply. The device is provided with a driver to allow writing and reading functionality.

ORDERING INFORMATION

CODE	DESCRIPTION
GRTPE-J02-KNX	Transponder encoder USB - Black

TECHNICAL SPECIFICATIONS

Dimensions	(H x W x D) 87 x 142 x 107 mm
Mounting	Placed on desk
Connections	USB type A connector
Power Supply	From the PC's USB port: 5V - 150mA
Communication	USB 1.1

Note

For more information, refer to pertinent documentation

GRTC-B-J0x & GRTKH-B-J01

TRANSPONDER CARDS AND KEY HOLDER

FEATURES

- **Transponder Card:**

  Complies with ISO 7810 (85.6 x 54 x 0.76 mm)
  Possibility of serigraphy on both sides (on request)
  Dual technology version (RFID and magnetic stripe on request)

- **Key Holder:**

  Dimensions and Material: ABS 38 x 34 x 6 mm
  Frequency: 125KHz
  Temperature: from -10°C to 50°C

ORDERING INFORMATION

CODE	DESCRIPTION
GRTC-B-J01	Transponder card – White - 50 pcs
GRTC-B-J02	Transponder card – White – 250 pcs
GRTKH-B-J01	Transponder keyholder- 50 pcs

Note

For more information, refer to pertinent documentation

GUEST ROOM
MANAGEMENT

BEDSIDE PANEL

GREBPx-J0x-ACC

CUSTOM BEDSIDE PANEL PLATE

The KNX® switch range consists of 2 – 4 – 6 - 8 – 10 channels (2 modules version) or 4 - 8- 10 channels (3 modules version) capacitive buttons.
Each button can be configured to manage on/off commands, dimming, shutters and venetians control, scene recall and control or objects sequences.

Device includes a 2 stage Room Temperature Controller with integrated PI to control heating and cooling equipments, valves, 2 and 4 pipes fan coils.

Device has an embedded temperature sensor and a rear 2 poles connector configurable as digital or analog input.
It's possible to connect an additional NTC temperature probe to perform a direct temperature measurement.

The range has a RGB led bar on the front side in order to visualize feedbacks or other values available over the KNX bus (function available on the RGB range).

Devices are available in 2 ranges: STANDARD and CUSTOM; using glasses in CUSTOM version is possible to light up custom and interchangeable icons matching with the associated function.

The KNX® range is mounted in 2 or 3 modules box and is compliant with main standards (British, German, Italian).

Device is equipped with KNX communication interface.

ORDERING INFORMATION

CODE	DESCRIPTION
GREBPR-J01-ACC	Custom bedside panel plate – 2 sockets – Right white
GREBPR-J05-ACC	Custom bedside panel plate – 2 sockets – Right black
GREBPL-J01-ACC	Custom bedside panel plate – 2 sockets – Left white
GREBPL-J05-ACC	Custom bedside panel plate – 2 sockets – Left black

Note

The electronics, sockets, and USB connection must be ordered separately.

For more information, refer to pertinent documentation

GUEST ROOM MANAGEMENT

DOOR PANEL ELECTRONIC AND COVERS

GRESCDPJ0x-KNX & GREPES2CHJx-ACC

DOOR PANEL ELECTRONIC AND DOOR PANEL COVERS - RGB DND/MUR + BELL RANGE

The KNX® capacitive doorpanel is a capacitive switch with RGB led bar; it is used in combination with the glass covers available in black or white; these cover glasses can be ordered in a specific version for the required application. The upper part of the glass can have a personalized, backlit room number; the lower part provides a key for the bell function, one for the 'do not disturb' function (DND) and one for the 'make up room' function (MUR). 2 other buttons customizable on request are available.

Device includes a 2 stage Room Temperature Controller with integrated PI to control heating and cooling equipments, valves, 2 and 4 pipes fan coils.
Device has an embedded temperature sensor and a rear 2 poles connector configurable as digital or analog input.
It's possible to connect an additional NTC temperature probe (codes GRTE-SEN or GRTE-SEN2 - not included) to perform a direct temperature measurement.

Device has a RGB led bar on the front side in order to visualize feedbacks or other values available over the KNX bus (function available on the RGB range).

The KNX® range is mounted in 2 or 3 modules box and is compliant with main standards (British, German, Italian, etc).

Device is equipped with KNX communication interface.

ORDERING INFORMATION

CODE	DESCRIPTION
DOOR PANEL ELECTRONIC	
GRESCDPJ01-KNX	Capacitive switch door panel - White
GRESCDPJ05-KNX	Capacitive switch door panel - Black
DOOR PANEL COVERS - RGB DND/MUR + BELL RANGE	
GREPES2CHJ1-ACC	Door panel - 2 CH - White + RGB
GREPES2CHJ5-ACC	Door panel - 2 CH - Black + RGB

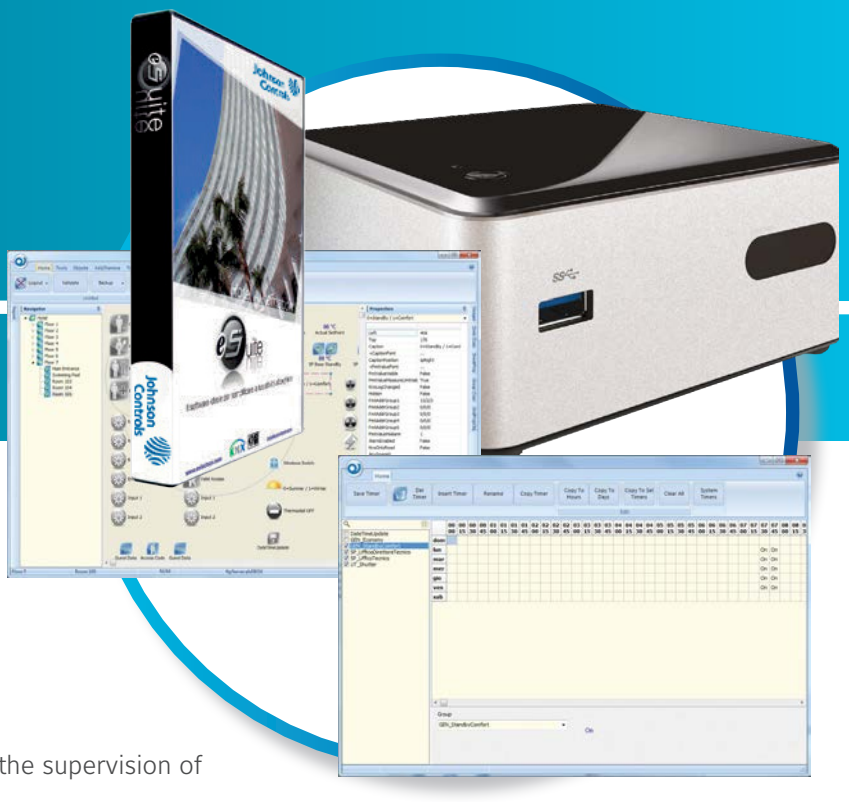
Note

For more information, refer to pertinent documentation.
In case of special requirements for customization, please reach out to Product Management.

ROOM AUTOMATION SOLUTION

GUEST ROOM MANAGEMENT

ACCESS CONTROL SOFTWARE



GRSW-xxx-KNX

JSUITE SOFTWARE

JSuite software is dedicated for hotel management, for the supervision of KNX environments, access control and alarms.

The software can be interfaced with BMS. Client remote management can be done via Internet or Ethernet.

The package is available with Embedded PC including 2 clients.

FEATURES

- Number of rooms / common area according to installed license.
- Client workstation accordin to installed license
- Profiling privileges unlimited
- Using KNX functions of timing events available
- **Generation KNX groups of objects available**

  Automatically import object available from ETS KNX
- **Automatically back up data available**

  Use filters to search event logs available
  Export data into CSV files / XLS / DOC available
  Connection to the bus using Falcon library
  PMS connection available

ORDERING INFORMATION

CODE	DESCRIPTION
GRSW-40-2C-KNX	Embedded PC with software – Up to 40 rooms – Full package – 2 clients
GRSW-100-2C-KNX	Embedded PC with software – Up to 100 rooms – Full package – 2 clients
GRSW-150-2C-KNX	Embedded PC with software – Up to 150 rooms – Full package – 2 clients
GRSW-UL-2C-KNX	Embedded PC with software – Over to 150 rooms – Full package – 2 clients
GRSW-AC-KNX	Additional client
GRSW-SWI-KNX	Interface to management

Note

For more information, refer to pertinent documentation

GRDALI-TWGW-KNX

KNX DALI GATEWAY PLUS TUNABLE WHITE

The DALI Gateway is an interface between a KNX installation and a DALI lighting system (Digital Addressable Lighting Interface). The DALI Gateway allows the switching and dimming of a maximum of 64 lights with a DALI operating device. Up to 6 different addressing types of the DALI Gateway allow grouporientated and individually-address control of DALI lights via KNX telegrams. This allows the integration of room-specific light controls, for example, of open-plan offices, multipurpose spaces, production facilities, training and conference rooms into the higher-level of KNX building management.

Depending on the configuration, up to 32 independent DALI groups are available for group addressing. For alternative control, these can be supplemented with 64 individually-addressable DALI device channels, as necessary. Optionally, master control of all connected DALI components is possible (broadcast). This means that there is no need to commission DALI, the lighting systems with few functions can be started up quickly and easily (simplified configuration without DALI commissioning).

The DALI Gateway is supplied completely via the mains voltage connection and makes the DALI system voltage (typ. DC 16 V) available. The device is designed for mounting on DIN rails.

OUTPUT FEATURES

- Control of up to 64 DALI devices
- Automatic ECG replacement
- Individual, group or central addressing
- Emergency lighting management
- Effect control for dynamic lighting and color effects
- Manual operation of the DALI groups
- Disabling function for each DALI group
- Operating hours counter
- DALI: 16 V DC

GRDALI-TWGW-KNX - KNX DALI GATEWAY PLUS TUNABLE WHITE

ORDERING INFORMATION

CODE	DESCRIPTION
GRDALI-TWGW-KNX	KNX DALI Gateway PLUS tunable - White

TECHNICAL SPECIFICATIONS

Dimensions	(H x W x D) 90 x 72 x 58 mm
Mounting	4 DIN modules
Connections	2 screw connectors by channel max 4mm^2
Power Supply	From KNX bus 21 ..32 V DC SELV, 110...240 V AC (50/60 Hz), 110....240 V DC

Note

For more information, refer to pertinent documentation

IO INTERFACES / MODULES

FAN COIL CONTROLLER

GRFCU-PR57-KNX

FCU 0-10V /3 X 16A RELAY

The GRFCU-PR57-KNX device is a DIN rail EIB / KNX interface for fan coil units control. The device has 3 0-10 V outputs and 3x16 A relays. Two 0-10 V outputs are dedicated to the management of proportional valves, variable speed management be done with the third 0-10 V output or with the 3 relays on board.

If relays are not used for speeds, they can activate lights or other loads. An input is also available for reading 0-10V or 4-20mA signals to interface external probes for temperature, humidity, CO_2 , etc; the third 0-10 V output can also be configured in this mode, as input. There are also 5 digital inputs for dry contacts in order to connect buttons, window contacts, alarms; 2 inputs can be connected to NTC temperature probes (codes GRTE-SEN and GRTE-SEN-2).

The logic inside the device can manage a 2/4 pipes fan coil with an internal 2-stage PI algorithm. A sophisticated parameterization allows its use in modern systems that require a differentiation of the behavior between speed and valves (independent regulation differentials), ventilation to avoid air stratification, logics for efficient maintenance of comfort and energy saving.

ORDERING INFORMATION

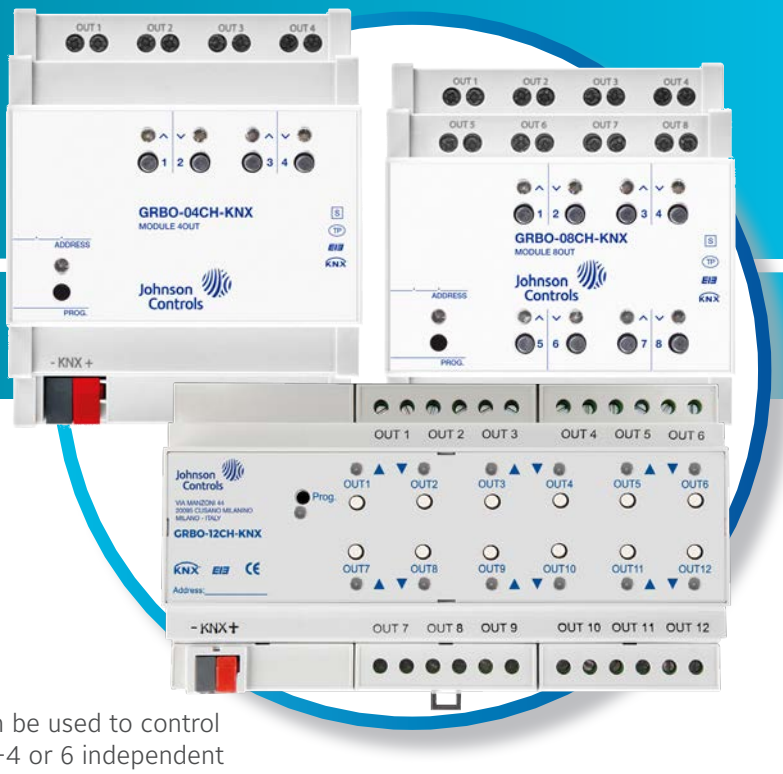
CODE	DESCRIPTION
GRFCU-PR57-KNX	Fancoil Controller Unit 0-10V / 3 x 16A relay

TECHNICAL SPECIFICATIONS

Dimensions	(H x W x D) 90 x 105 x 60 mm
Mounting	DIN rail: 6 modules
Connections	Load circuits: screw terminal slotted head / 0.2...4 mm^2 stranded
Power Supply	From KNX bus 21 ..32 V DC SELV Dynamic current consumption <20 mA Static current consumption <5 mA
Input Temperature Sensor	Local sensor: digital sensor / max 7 sensors / max cable lenght 50 m via KNX: 1 or 2 group objects
Output relay 16A	3
Output 0-10V	2
Output 0-10V / Input 0-10 or 4-20mA	1
Input 0-10V or 4-20mA	1
Input digital or analog for NTC probe	2
Input digital	3

Note

For more information, refer to pertinent documentation



GRBO-xxCH-KNX

UNIVERSAL MODULE 04CH - 08CH - 12CH

GRBO are Din Rail 4-8-12 outputs 16 A actuators, they can be used to control up to 4-8 or 12 independent loads / lights, control up to 2-4 or 6 independent blind / roller shutters with mechanical end position.

This device is intended to be installed on DIN rail.

ORDERING INFORMATION

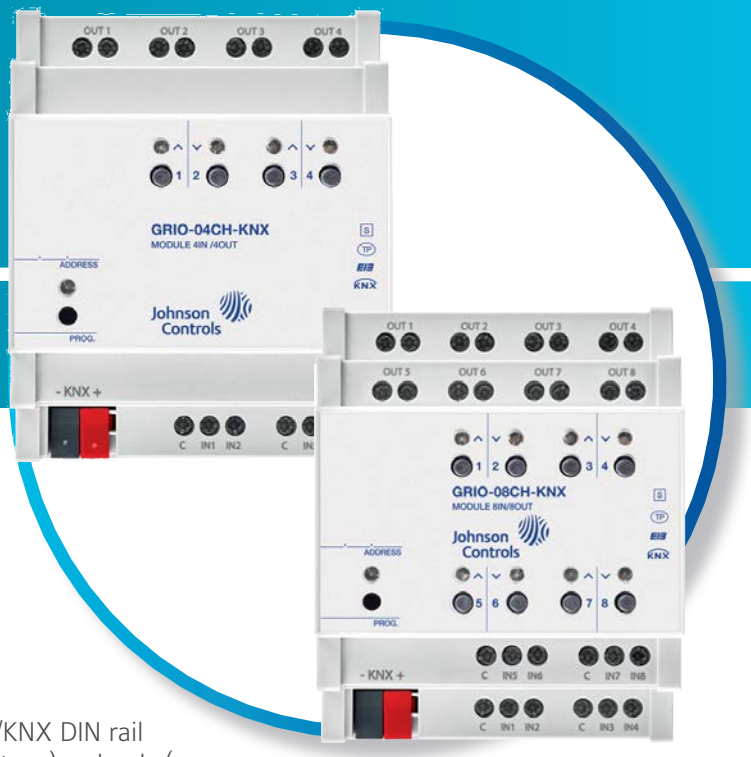
CODE	DESCRIPTION
GRBO-04CH-KNX	Universal module 4 OUT PLUS
GRBO-08CH-KNX	Universal module 8 OUT PLUS
GRBO-08CHSD-KNX	Universal module 8 OUT PLUS + SD CARD
GRBO-12CH-KNX	Universal module 12 OUT PLUS

TECHNICAL SPECIFICATIONS

Dimensions	**GRBO-04CH-KNX and GRBO-08CH-KNX:** (H x W x D) 90 x 72 x 58 mm **GRBO-12CH-KNX:** (H x W x D) 90 x 159 x 58 mm
Mounting	**GRBO-04CH-KNX and GRBO-08CH-KNX:** 4 DIN modules **GRBO-12CH-KNX:** 9 DIN modules
Connection	Outputs: 2 screw connectors for channel max 4 mm^2
Power Supply	From KNX bus 21...32 V DC SELV
Specific outputs	Resistive loads: max 16 A Incandescent Lamps: max 10 A Motors & motoreductor: max 10 A Fluorescent light transformer electronic: max 4 A Fluorescent Lamps: (max 140 µF) max 3A (700W)

Note

For more information, refer to pertinent documentation



GRIO-0xCH-KNX

UNIVERSAL MODULE 04CH - 08CH

The products GRIO-04CH-KNX & GRIO-08CH-KNX are an EIB/KNX DIN rail mounting devices useful to interface commands (e.g. push buttons) or loads (e.g. lamps) for any kind of applications. The devices are equipped with 4 or 8 binary inputs (clean contacts) and 4 or 8 binary relay outputs.

Inputs can be connected to conventional switching devices, e.g. push buttons, switches, floating contacts, for switching functions with pulse edge evaluation (e.g. rising or falling edge, toggle). Inputs can be configured with ETS SW, as output to drive Leds. Inputs can be used to for on/off commands, dimming, shutter control, scenarios; outputs include switching function, scenarios and control logic function.

ORDERING INFORMATION

CODE	DESCRIPTION
GRIO-04CH-KNX	Universal module 4 IN 4 OUT PLUS
GRIO-08CH-KNX	Universal module 8 IN 8 OUT PLUS
GRIO-08CHSD-KNX	Universal module 8 IN 8 OUT PLUS + SD CARD

TECHNICAL SPECIFICATIONS

Dimensions	(H x W x D) 90 x 72 x 58 mm
Mounting	4 DIN modules
Connection	Outputs: 2 screw terminals for channel max. section 4 mm² Inputs: 3 screw terminals every 2 inputs, max. section 4 mm²
Power Supply	From Bus KNX 21...32 V DC SELV
Specific input	4 or 8 binary inputs for dry contacts Max length 30m twisted cables
Specific output	Resistive loads: 16 A Max Incandescent lamps: 10 A Max Motors and motor reductors: 10 A Max Fluorescent lamps with electronic transformer: max 6 A Fluorescent lamps (Max. 140 µF) max 3 A

Note

For more information, refer to pertinent documentation

GRBO-16CHxx-KNX

UNIVERSAL MODULE 16 OUT PLUS

The DIN RAIL 16 Output Module is an EIB/KNX DIN rail mounting device with 16 relays outputs 16A-230 V AC.

Outputs can be configured for:

- up to 16 independent load/light controls
- up to 16 independent PWM control electric valves (solenoid actuators)
- up to 8 independent shutter/venetian
- up to 8 independent solenoid valves with 3-point control (or ventilating grille)
- up to 4 independent 2 pipes fan coil actuators
- up to 2 independent 4 pipes fan coil actuators

Device includes manual push buttons for local relays switching and leds for operation indication.

ORDERING INFORMATION

CODE	DESCRIPTION
GRBO-16CH-KNX	Universal module 16 OUT PLUS
GRBO-16CHSD-KNX	Universal module 16 OUT PLUS + SD card

TECHNICAL SPECIFICATIONS

Dimensions	(H x W x D) 90 x 144 x 60 mm
Mounting	8 DIN modules
Power Supply	From KNX bus 21...32 V DC SELV
Input	For NTC temperature probe code GRTE-SEN (range from -20°C to +100°C) GRTE-SEN-2 (range from -50°C to +60°C) Max. length of Connecting Cable: ≤ 30 m (twisted cable)
Relay Output	Pure resistive loads: max 16 A Incandescent Lamps: max 10 A Motors and motor reductors : max 10 A Fluorescent lamps with electronic transformer: max 4 A Fluorescent lamps: (max 140 µF) max 3 A (700W)

Note

For more information, refer to pertinent documentation

GRIO-16CHxx-KNX

UNIVERSAL MODULE 16 IN / 16 OUT PLUS

The DIN RAIL 16 Input / 16 Output Module is an EIB/KNX DIN rail mounting device. Device has 16 inputs (potential free) and 16 relays outputs 16A-230V AC.
Inputs are for dry contacts (potential free) and can be connected to push buttons, switches or as output for leds. Inputs can be used for on/off commands, dimming, shutters control, scenes, sequences, step by step on/off. Between 16 input 4 are configurable as analogical to be connected to NTC temperature probes and achieve up to 4 temperature sensor modules.

Outputs can be configured for:

- up to 16 independent load/light controls
- up to 16 independent PWM control electric valves (solenoid actuators)
- up to 8 independent shutter/venetian
- up to 8 independent solenoid valves with 3-point control (or ventilating grille)
- up to 4 independent 2 pipes fan coil actuators

It is also possible to combine 2 or 3 relays together with interlock to achieve 4 pipes/3 speeds fan coil actuators.

Device includes manual push buttons for local relays switching and leds for operation indication.

ORDERING INFORMATION

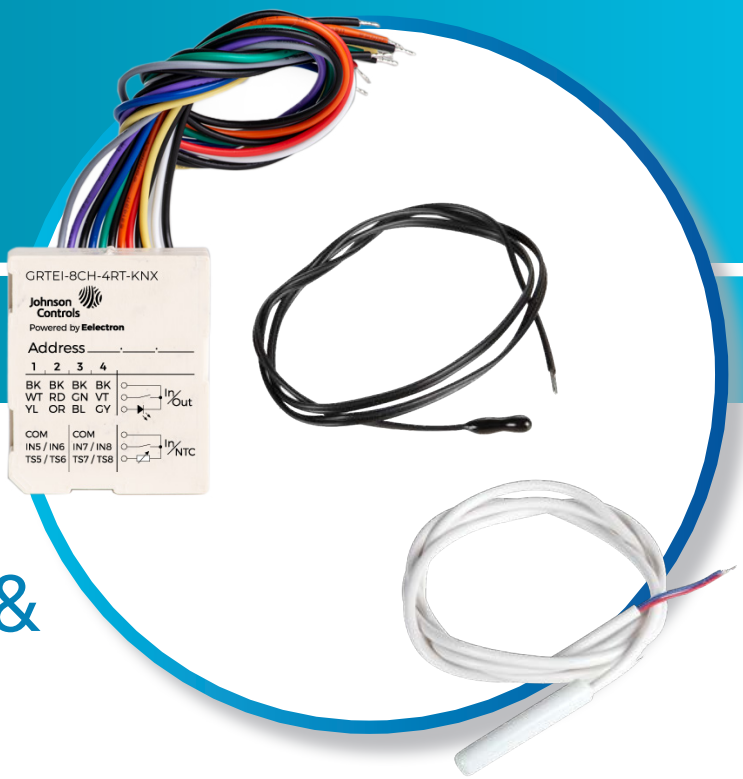
CODE	DESCRIPTION
GRIO-16CH-KNX	Universal module 16 IN / 16 OUT PLUS
GRIO-16CHSD-KNX	Universal module 16 IN / 16 OUT PLUS + SD card

TECHNICAL SPECIFICATIONS

Dimensions	(H x W x D) 90 x 144 x 60 mm
Mounting	8 DIN modules
Power Supply	From KNX bus 21...32 V DC SELV
Input	16 binary inputs for potential free contacts 4 inputs configurable as analogical
Relay Output Features	Pure resistive loads: max 16 A Incandescent Lamps: max 10 A Motors and motor reductors : max 10 A Fluorescent lamps with electronic transformer: max 4 A Fluorescent lamps: (max 140 µF) max 3 A (700W)

Note

For more information, refer to pertinent documentation



GRTEI8CH4RT-KNX & GRTE-SEN

ANALOG-DIGITAL MODULE 8 IN / 4 LED OUT

The module includes 4 digital inputs to interface dry contacts and 4 analog or digital inputs for dry contacts or temperature sensors and 4 led outputs.

Digital inputs can interface sensors, traditional buttons; 4 low voltage/current outputs channels to drive LED signal indicator lamps. Inputs 5 to 8, set as analog inputs, enable up to 2 temperature probes (with On/Off threshold) and 2 thermostats to control heating and cooling systems valves, 2 and 4 pipes fan coils.

ORDERING INFORMATION

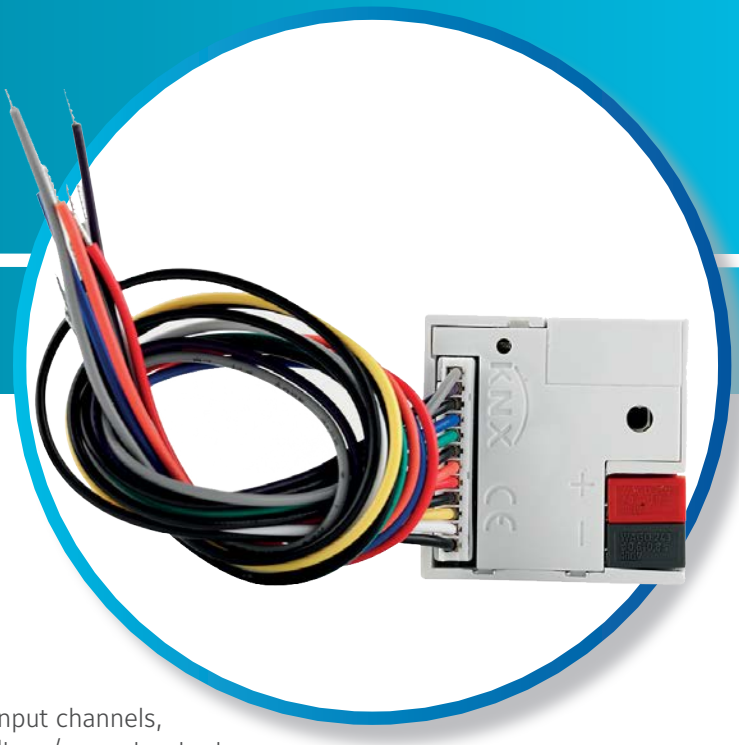
CODE	DESCRIPTION
GRTEI8CH4RT-KNX	Analog / Digital module 8 IN / 4 LED OUT – 4 thermostats
GRTE-SEN	Temperature probe
GRTE-SEN-2	External temperature probe

TECHNICAL SPECIFICATIONS

Dimensions	(H x W x D) 43 x 36 x 24 mm
Digital Input	8 channels [01 ÷ 08] for dry contacts Maximum length 30 m twisted wires - input [01 ÷ 04] Maximum length 10 m of twisted wires - inputs [05 ÷ 08] Wired with 0,2 mm² - 18 cm length - inputs [01 ÷ 04] Connection through 6-pin screw terminal - inputs [05 ÷ 08]
Analog Inputs	4 Channels [05 ÷ 08] Configurable as temperature sensor with NTC sensor 2 Channels [05 ÷ 06] Configurable as thermostat
Digital Outputs	4 outputs for driving LED 0.3 mA / channel Use with LED
Heating and cooling modes	Controls with HVAC mode or setpoint Setpoint modification through KNX bus 2 points ON / OFF and PWM control algorithm 3-speeds fancoil control OFF mode on window open detection

Note

For more information, refer to pertinent documentation



GRIO-xCH-SI-KNX

2 AND 4CH SWITCH INTERFACE - LED OUTPUTS

The device is dedicated to interface dry contacts with 2 or 4 input channels, such as sensors, conventional push buttons and 2 or 4 low voltage/current output channels to drive LED signal indicator lamps. These devices are extremely compact size (only 34 x 34 x 11 mm) and can also be used in installations where the inwall space available is reduced. The digital inputs can interface sensors, traditional buttons, etc; the 4 low- voltage output channels can drive LEDs for synoptic panels or switches. Outputs can drive low voltage LED.

There are also 8 blocks of logic functions freely configurable by ETS. Device is equipped with KNX communication interface.

ORDERING INFORMATION

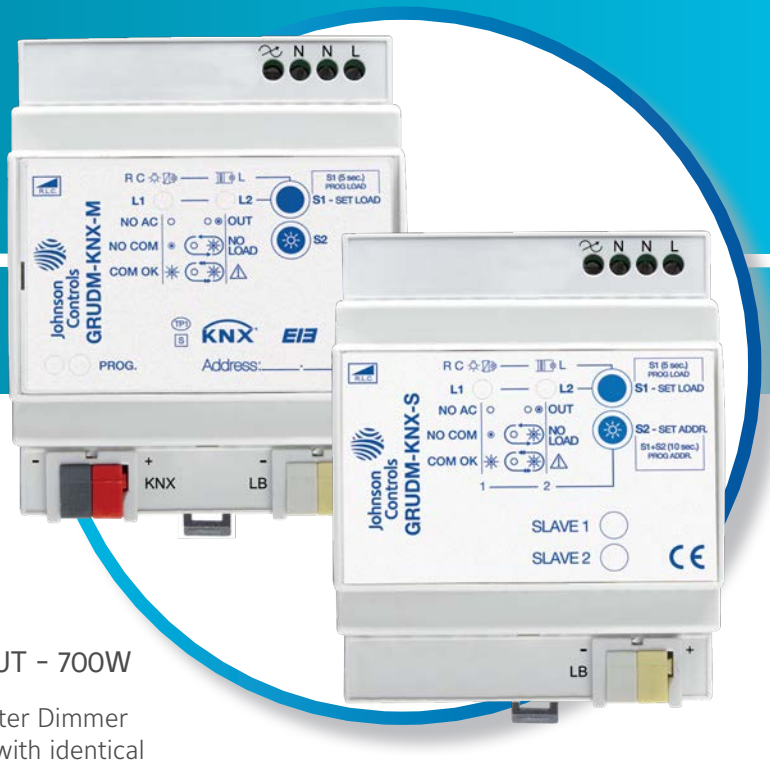
CODE	DESCRIPTION
GRIO-4CH-SI-KNX	4 channels switch interface - led outputs
GRIO-2CH-SI-KNX	2 channels switch interface - led outputs

TECHNICAL SPECIFICATIONS

Dimensions	(H x W x D) 34 x 34 x 11 mm
Mounting	Flush mounted wall box
Connection	Inputs and outputs: 12-pin cable connector AWG24
Power Supply	From KNX bus 21...32 V DC SELV
Specific inputs	2 or 4 digital inputs for dry contacts Maximum length 10 meters twisted cables Reading voltage: 3,3 V DC (internally Generated)
Specific outputs	2 or 4 outputs for driving LED Current / voltage for leds : 0.5mA / 3.3 V

Note

For more information, refer to pertinent documentation



GRUDM-KNX-x

UNIVERSAL DIMMER MASTER/SUBORDINATE-DIN 1 OUT - 700W

GRUDM is a KNX power dimmer 1-channel acting as a Master Dimmer to which you can connect up to two Subordinate Modules with identical characteristics to the Master power dimmer and connected to it by a local two wires bus.

Dimmer GRUDM can be used in one of the following configurations:

Trailing Edge: the dimmer turns off part of the final part of the waveform of the input voltage resulting in reduced lamp output. This load regulation is used for resistive or capacitive loads (typically halogen lamps with electronic transformer or incandescent lamps).

Leading Edge: the dimmer turns off part of the initial part of the waveform of the input voltage, resulting in reduced lamp output. This load regulation is used for inductive loads (typically ferromagnetic transformers or toroidal).

The three channels are independent and can therefore operate on different phases of the same three phase systems respecting the limit of 230 V AC between phase and neutral.

ORDERING INFORMATION

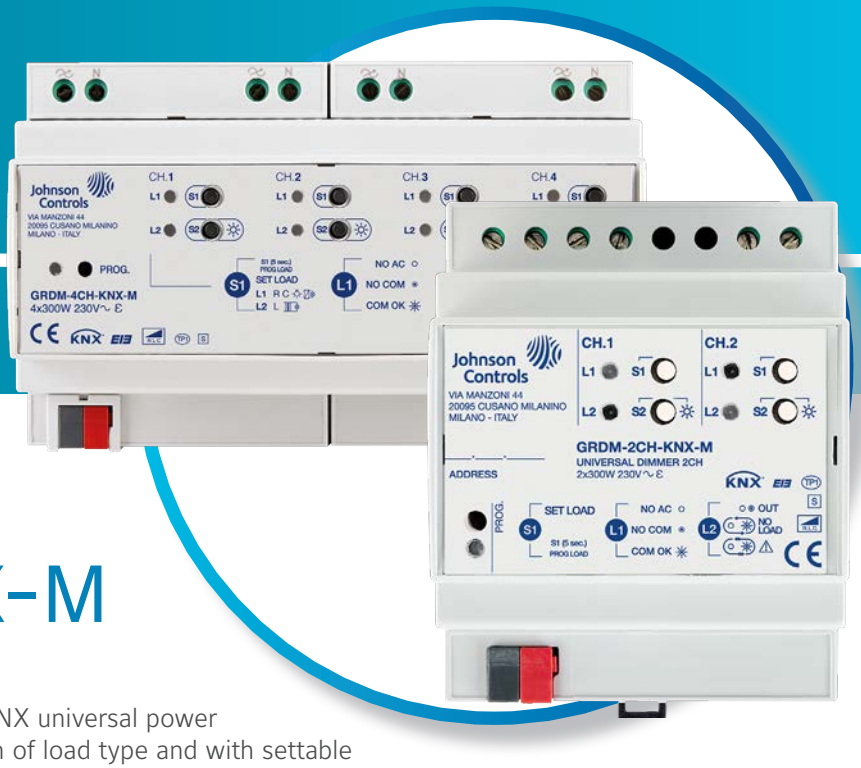
CODE	DESCRIPTION
GRUDM-KNX-M	Universal dimmer master - DIN 1 OUT - 700 W
GRUDM-KNX-S	Universal dimmer subordinate - DIN 1 OUT - 700W

TECHNICAL SPECIFICATIONS

Dimensions	(H x W x D) 90 x 72 x 58 mm
Mounting	4 DIN modules
Connection	Power supply & load cable: max 2,5 mm^2 Local bus length: max 2 m between 2 modules
Power Supply	From KNX bus 21...32 V DC SELV 230 V AC 50/60 Hz
Specific outputs	Incandescent or halogen lamps: 20-700 W Ferromagnetic transformer 20-700 VA Electronic transformer: 20-700 VA Dimmable LED Lamps: Max 160 W Compact flouorescent lamps (ESL/CFL): Max 160 W

Note

For more information, refer to pertinent documentation



GRDM-xCH-KNX-M

DIMMER 2/4 CHANNELS FOR 300W

GRDM-2CH-KNX-M and GRDM-4CH-KNX-M are KNX universal power dimmers 2/4-channels with automatic identification of load type and with settable parameters to optimize control of different lamps like LED, incandescent and halogen, CFL dimmable lights, low voltage lamps with electronic or ferromagnetic transformer.

Load control is possible in leading and trailing edge.

ORDERING INFORMATION

CODE	DESCRIPTION
GRDM-4CH-KNX-M	Dimmer 4 OUT 300 W / 2 OUT 300 W
GRDM-2CH-KNX-M	Dimmer 2 OUT 300 W / 1 OUT 300 W

TECHNICAL SPECIFICATIONS

Dimensions	**GRDM-2CH-KNX-M:** (H x W x D) 90 x 72 x 58 mm **GRDM-4CH-KNX-M:** (H x W x D) 90 x 142 x 62 mm
Mounting	**GRDM-2CH-KNX-M:** 4 DIN modules **GRDM-4CH-KNX-M:** 8 DIN modules
Connection	Power supply / load cable: max 4 mm^2 – AWG 11
Power Supply	From EIB/KNX bus: 21..32 V DC Current consumption from KNX: ≤ 10mA From mains: 230 V AC 50/60 Hz Dissipated power: 3.5W – GRDM-2CH-KNX-M Dissipated power: 6.8W max (1.7W x channel) – GRDM-4CH-KNX-M
Allowed loads	Incandescent or halogen lamps: 300W max - 230 V AC 50/60Hz • Ferromagnetic transformer suitable for dimming with secondary winding closed on resistive load (Halogen lamps 12/24V): 200 VA max - 230 V AC 50/60Hz • Electronic transformers with secondary winding closed on resistive load (Halogen lamps 12/24V): 300 VA max - 230 V AC 50/60Hz • Dimmable LED Lamps: 230 V AC - max 60W • Compact Fluorescent Lamps (ESL/CFL): 230 V AC - max 60W

Note

For more information, refer to pertinent documentation

GRUDM4CH110-KNX

DIMMER 4 CHANNELS 1-10V

GRUDM-4CH-1-10-KNX is a KNX 4 channel dimmer with switching and brightness setting for lamps with operating devices with 110V interface.

FEATURES

- Manual switching of the relays is independent of the Bus
- Switching of capacitive loads and the resulting high switchon currents
- Flexible assignment of control inputs to switching outputs, e.g. to control RGBW lamps
- Operation of the switching outputs as a switching actuator
- Connection of various external conductors
- No additional power supply necessary
- Feedback of switching state and brightness value
- Switch position display
- Burn-in function for fluorescent lamps
- Switch on and dimming behaviour can be set
- Time functions: switchon delay, switchoff, delay, staircase lighting timer with runon time · Integration into light scenes
- Operating hours counter.

GRUDM4CH110-KNX - DIMMER 4 CHANNELS 1-10V

ORDERING INFORMATION

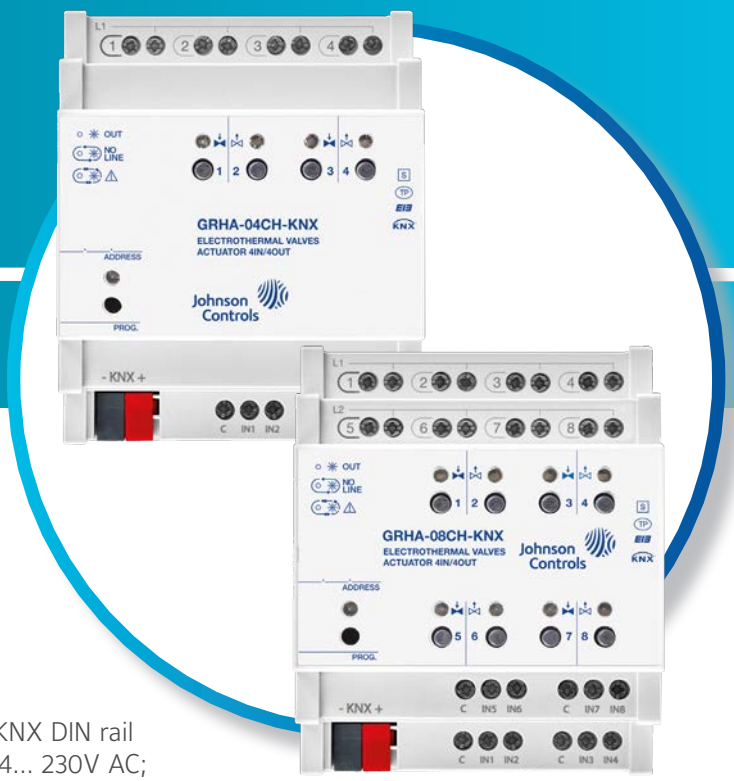
CODE	DESCRIPTION
GRUDM4CH110-KNX	Dimmer 4 CH 1-10 V

TECHNICAL SPECIFICATIONS

Dimensions	86 x 72 x 66 mm
Mounting	4 DIN modules
Connection	Power supply & load cable : max 2,5 mm^2
Power Supply	From EIB/KNX bus: 21...32 V DC Current Consumption from KNX: max 6 mA
Allowed loads	Lamp loads Incandescent lamps 3680 W HV halogen lamps 3680 W LV halogen lamps with inductive transformer 2000 VA LV halogen lamps with Tronic transformer 2500 W Fluorescent lamps T5/T8 uncompensated 3680 W parallel compensated 2500 W / 200 µF twinlamp circuit 3680 W / 200 µF Compact fluorescent lamps uncompensated 3680 W parallel compensated 2500 W / 200 µF Mercury vapour lamps uncompensated 3680 W parallel compensated 3680 W / 200 µF

Note

For more information, refer to pertinent documentation



GRHA-0xCH-KNX

ELECTROTHERMAL VALVES

The GRHA-04CH-KNX and GRHA-08CH-KNX devices are EIB/KNX DIN rail modules for electrothermal valves with 8 (4) Triac outputs at 24... 230V AC; the devices include 8 (4) inputs for dry (potential-free) contacts.

The outputs can be configured as:

- 8 (4) channels for valve control in ON/OFF or PWM
- 4 (2) channels for 3-points valve control.

FEATURES

- Inputs can be connected to buttons or switches (potential-free) and can be used for on / off commands, dimming, shutters or blinds / scenarios, sequences, step commands.
- Inputs from 1 to 4 can be configured as outputs to activate single signaling LEDs or can be configured as analogue inputs for the connection of NTC temperature probes with which to send 4 temperature measurements on the bus or to manage 4 complete thermostat modules.
- Each thermostat module manages 2 stages with an integrated PI controller for controlling heating and cooling equipment, valves, 2 and 4 pipe fan coils.
- Additional 4 thermostat modules are available in the device for a total of 8.
- Moreover, 8 logic blocks are available to implement simple expressions with logical or threshold operator or complex expressions with algebraic and conditional operators.
  It's possible to use predefined algorithms as proportional controls of temperature and humidity or dew point calculation.
- Device is equipped with KNX communication interface and is intended for installation on DIN rail in LV distribution cabinets.

GRHA-0xCH-KNX - ELECTROTHERMAL VALVES

ORDERING INFORMATION

CODE	DESCRIPTION
GRHA-04CH-KNX	Electrothermal Valves actuator 4 IN 4 OUT
GRHA-08CH-KNX	Electrothermal Valves actuator 8 IN 8 OUT

TECHNICAL SPECIFICATIONS

Mounting	4 DIN Modules
Connection	Maximum wire gauge solid and stranded: 2.5 mm^2
Power Supply	From Bus KNX 21...32 V DC SELV
Specific input	For free potential contacts (dry contacts) Max. length of Cables (twisted): ≤ 30 m
Specific output	Voltage 24 V AC .. 230 V AC 50/60Hz Rated current (per output): 500 mA Inrush current (every group of 4 outputs): 4A Max valves per output @ 24 V AC ≤ 3 Max valves per output @ 230 V AC ≤ 4

Note

For more information, refer to pertinent documentation

ROOM AUTOMATION SOLUTION

LINE GLASS SERIES

CAPACITIVE SWITCH COMPOSED BY ELECTRONIC AND GLASS

GRES

CAPACITIVE SWITCH COMPOSED BY ELECTRONIC AND GLASS

The GRES switch range consists of 2 – 4 – 6 - 8 – 10 channels capacitive buttons. Each button can be configured to manage ON/OFF commands, dimming, shutters and venetians control, scene recall and control, objects sequences.

FEATURES

- Device includes a 2 stage room temperature controller with integrated PI to control heating and cooling equipments, valves, 2 and 4 pipes fan coils.
- Device has an embedded temperature sensor and a rear 2 poles connector configurable as digital or analog input. It's possible to connect an additional NTC temperature probe (GRTE-SEN or GRTE-SEN-2 not included) to perform a direct temperature measurement.
- GRES has an RGB led bar on the front side in order to visualize feedbacks or other values available over the KNX bus (function available on the RGB range).
- Two ranges available: STANDARD and RGB.
- Each range may have glasses in CUSTOM version. Using glasses in CUSTOM version is possible to light up custom and interchangeable icons matching with the associated function.
- The range is mounted in 2 module box and is compliant with main standards (British, German, Italian).
- Device is equipped with KNX communication interface.

LINE GLASS SERIES

GRES - CAPACITIVE SWITCH COMPOSED BY ELECTRONIC AND GLASS

ORDERING INFORMATION

CODE	DESCRIPTION
Capacitive Switch	
GRES-CS-J01-KNX	Capacitive Switch - White
GRES-CS-J05-KNX	Capacitive Switch - Black
Switch Covers - Single Line Glass Series RGB Range	
GRESG2CHJ01-ACC	Single line glass series - 2 Channels – White + RGB
GRESG4CHJ01-ACC	Single line glass series - 4 Channels – White + RGB
GRESG6CHJ01-ACC	Single line glass series - 6 Channels – White + RGB
GRESG8CHJ01-ACC	Single line glass series - 8 Channels – White + RGB
GRESG1CHJ01-ACC	Single line glass series - 10 Channels – White + RGB
GRESG2CHJ05-ACC	Single line glass series - 2 Channels – Black + RGB
GRESG4CHJ05-ACC	Single line glass series - 4 Channels – Black + RGB
GRESG6CHJ05-ACC	Single line glass series - 6 Channels – Black + RGB
GRESG8CHJ05-ACC	Single line glass series - 8 Channels – Black + RGB
GRESG1CHJ05-ACC	Single line glass series - 10 Channels – Black + RGB
Switch Covers - Custom Single Glass RGB Range	
GRESG1CHJ04-ACC	Custom Single Glass – White + RGB
GRESG1CHJ08-ACC	Custom Single Glass – Black + RGB

TECHNICAL SPECIFICATIONS

Dimensions	(H x W x D) 96 x 96 x 36 mm
Weight (with glass)	130g (220g)
Power Supply	Via bus EIB/KNX cable: 21...32V DC
Rear Input (digital mode)	For free potential contacts (dry contacts) Max. length of Connecting Cables ≤ 10 m (twisted cable) Voltage Scanning 3,3 V DC (internally generated
Rear Input (analog mode for temperature probe)	For NTC temperature probe JC code: GRTE-SEN (range from -20°C to +100°C) GRTE-SEN-2 (range from -50°C to +60°C) Max. length of Connecting Cable: ≤ 20 m (twisted cable)

Note

For more information, refer to pertinent documentation
In case of special requirements for customization, please reach out to Product Management.

ROOM AUTOMATION SOLUTION

LINE GLASS SERIES

CAPACITIVE THERMOSTAT COMPOSED BY ELECTRONIC & GLASS

GRET

CAPACITIVE SWITCH COMPOSED BY ELECTRONIC AND GLASS

The GRET thermostat is a KNX® room temperature controller that includes configurable capacitive buttons for On/Off, dimming, rolling shutters and venetian controls, scene recall and control, object sequences, local thermostat controls.

FEATURES

- Device offers a 2 stage thermostat with integrated PI controller to control heating and cooling equipments, valves, 2 and 4 pipes fan coils.
- Device has an embedded temperature sensor and a rear 2 poles connector, configurable as digital or analog input. It's possible to connect an additional NTCtemperature probe (GRTE-SEN or GRTE-SEN-2 not included) to perform a direct temperature measurement.
- A version with integrated temperature and relative humidity sensor is available usable for controlling actuators for ambient humidity control.
- GRET range has a RGB led bar on the front side in order to visualize thermostat operating modes or feedbacks and other values available over the KNX bus.
- The device includes an RGB led bar on the front to display status or other values available on the KNX bus.
- Glass covers are available for HOTEL or RESIDENTIAL applications; both covers can be in CUSTOM version. Using glasses in CUSTOM version is possible to light up custom and interchangeable icons matching with the associated function.
- The GRET range is mounted in 2 module box and is compliant with mainstandards (British, German, Italian).
- Device is equipped with KNX communication interface.

LINE GLASS SERIES

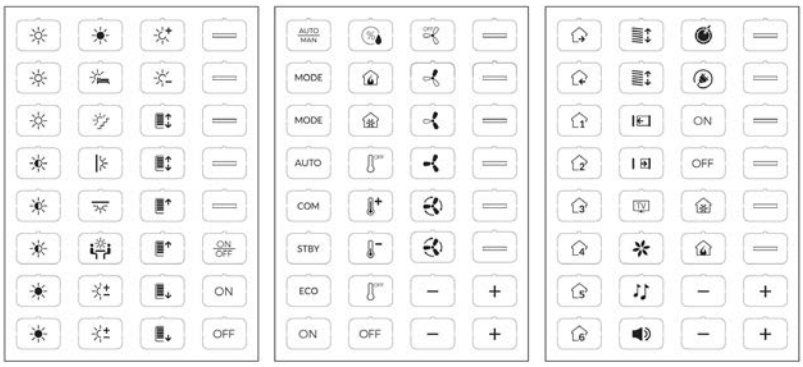
GRET - CAPACITIVE SWITCH COMPOSED BY ELECTRONIC AND GLASS

ORDERING INFORMATION

CODE	DESCRIPTION
Capacitive Thermostat/Humidistat	
GRET-CT-J01-KNX	Capacitive Thermostat - White
GRET-CT-J02-KNX	Capacitive Thermostat - Black
GRETCTHJ01-KNX	Capacitive Thermostat/Humidistat - White
GRETCTHJ02-KNX	Capacitive Thermostat/Humidistat - Black
Thermostat/Humidistat Covers - Single Line Glass Standard Range + RGB	
GRETGCTJ03-ACC	Single glass - Residential display - White + RGB
GRETGCTJ04-ACC	Single glass - Residential display - Black + RGB
GRETGCTHJ03-ACC	Single glass - Hotel display - White + RGB
GRETGCTHJ04-ACC	Single glass - Hotel display - Black + RGB
GRETGCTJ01-ACC	Custom single glass - Residential display - White + RGB
GRETGCTJ02-ACC	Custom single glass - Residential display - Black + RGB
GRETGCTHJ01-ACC	Custom single glass - Hotel display - White + RGB
GRETGCTHJ02-ACC	Custom single glass - Hotel display - Black + RGB
32 ICON Set Sheets	
GRETISA-J01-ACC	ICON set sheet - Set A - White - 32 ICONS
GRETISB-J01-ACC	ICON set sheet - Set B - White - 32 ICONS
GRETISC-J01-ACC	ICON set sheet - Set C - White - 32 ICONS
GRETISD-J01-ACC	ICON set sheet - Set D - White - 32 ICONS
GRETISE-J01-ACC	ICON set sheet - Set E - White - 32 ICONS
GRETISF-J01-ACC	ICON set sheet - Set F - White - 32 ICONS
GRETISH-J01-ACC	ICON set sheet - Set H - White - 32 ICONS
GRETISA-J03-ACC	ICON set sheet - Set A - Black - 32 ICONS
GRETISB-J03-ACC	ICON set sheet - Set B - Black - 32 ICONS
GRETISC-J03-ACC	ICON set sheet - Set C - Black - 32 ICONS
GRETISD-J03-ACC	ICON set sheet - Set D - Black - 32 ICONS
GRETISE-J03-ACC	ICON set sheet - Set E - Black - 32 ICONS
GRETISF-J03-ACC	ICON set sheet - Set F - Black - 32 ICONS
GRETISH-J03-ACC	ICON set sheet - Set H - Black - 32 ICONS

GRET - CAPACITIVE SWITCH COMPOSED BY ELECTRONIC AND GLASS

ICON SET SHEETS



TECHNICAL SPECIFICATIONS

Dimensions	(H x W x D) 96 x 96 x 36 mm
Weight (with glass)	130g (220g)
Power Supply	Via bus EIB/KNX cable: 21...32V DC
Rear Input (digital mode)	For free potential contacts (dry contacts) Max. length of Connecting Cables ≤ 10 m (twisted cable) Voltage Scanning 3,3 V DC (internally generated
Rear Input (analog mode for temperature probe)	For NTC temperature probe JC code: GRTE-SEN (range from -20°C to +100°C) GRTE-SEN-2 (range from -50°C to +60°C) Max. length of Connecting Cable: ≤ 20 m (twisted cable)

Note

For more information, refer to pertinent documentation

In case of special requirements for customization, please reach out to Product Management.

ROOM AUTOMATION SOLUTION

KNX SENSORS

PRESENCE & MOVEMENT SENSOR

GRPD-xx-IWM-KNX

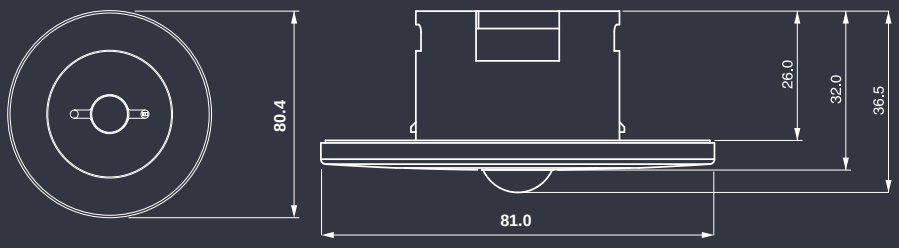
MULTI.SENSOR KNX

The new range of sensors, combining information on presence, brightness, humidity, temperature and sound, manages effectively heating, cooling, lighting, shading control and room optimization, complying with Leed®, Breeam® and Well® requirements for buildings.

FEATURES

- Innovative, smart, reliable
- Elegant flat design: top functionality combined with design
- Flexible installation
  Ceiling installation. Stability granted by the spring clips, hidden by the ceiling mounting.
  Flush-mounted with Box mounting frame.
  Surface installation with the surface mounting enclosure.
- Lighting comfort closer to reality thanks to the “CIRCADIAN RHYTHM” logic with which brightness and color temperature are imposed on the basis of predefined curves or on the basis of the real position of the sun during the day with respect to a terrestrial coordinate.
- Human Centric Lighting is a lighting concept based on color variation, light intensity and proper lighting that mimics the natural daylight to enhance comfort, health, wellbeing and human performance.
  Multi.Sensor directly provides HCL control in different formats according to the controlled device.
- Wide detection area
- Complete detection thanks to the sound sensor it is the ideal solution for rooms with parts not totally visible to the infrared sensor.
- Optimized for small movements

DESIGN PLUS
powered by: light+building
2020



GRPD-xx-IWM-KNX - MULTI.SENSOR KNX

ORDERING INFORMATION

CODE	DESCRIPTION
GRPD-00-IWM-KNX	KNX Presence detector Basic
GRPD-01-IWM-KNX	KNX Presence detector standard with lighting control
GRPD-02-IWM-KNX	KNX Presence detector standard with lighting control, themperatur, humidity, sound sensor
GRPD-09-IWM-KNX	KNX High bay presence detector with lighting control
GRPD-20-IWM-ACC	Accessory: Surface mounting enclosure

TECHNICAL SPECIFICATIONS

Dimensions	(Ø × H): 81 x 37 mm
Lighting sensor (Standard - MULTI version)	Range: 50 ÷ 20000 LUX (Standard - MULTI version)
Temperature sensor (MULTI version)	Range: -5°C + 45°C Resolution: 0.1°C Tolerance typ. (max.): ± 0.2°C
Humidity sensor (MULTI version)	Range: 0 ÷ 100 %RH Resolution: 0.1 %RH Tolerance typ. (max.): ± 2 %RH (± 3 %RH)
Operating temperature	-5°C + 45°C

Note

For more information, refer to pertinent documentation

KNX
SENSORS

PRESENCE & MOVEMENT
SENSOR

PIR-SENS-2CH

CONVENTIONAL PRESENCE AND LIGHT SENSOR
2 CHANNELS IN WALL MOUTING

Is a ceiling flush mount PIR detector. The load will be switched on automatically when the movement is detected and the ambient light level is below the Lux setting value. Until there is no movement detected and the pre-set delay time has been expired, load will be switched off automatically. User can pre-set the desired Lux and Time values by VR or IR setting for automatic control lighting on / off with low initial cost and great energy saving potential.

PIR-SENS-2CH can also be used in many different places for automation control.

They can be widely used in home, office, conference room, classrooms, hotel, corridor and underground parking lots.

ORDERING INFORMATION

CODE	DESCRIPTION
PIR-SENS-2CH	Conventional presence and light sensor 2 channels in wall mouting

TECHNICAL SPECIFICATIONS

Dimensions	(Ø × H): 80 x 64 mm
Load I (CH1) For Lighting: µ	· **Incandescent Lamp**: Max. 2000W · **AC Halogen Lamp**: Max. 1000W · **LV Halogen Lamp:** Max. 1000VA / 600W (traditional) - Max. 1000VA / 900W (electronics) · **Fluorescent Lamp**: Max. 1000VA / 600W (uncompensated) - Max. 900VA / 100µF 25 x (1 x 18W); 12 x (2 x 18W); 15 x (1 x 36W); 7 x (2 x 36W); 10 x (1 x 58W); 5 x (2 x 58W) · **LED Lamp**: Max. 400W · **Energy Saving Lamp**: Max. 600VA / 400W (include CFL and PL lamp)
Load II (CH2) For Automation Control	(Lux is invalid): Max. 5A (cosϕ=1) for 250VAC Max. 5A for 30VDC Max. 1A (cosϕ=0.4) for 250VAC
Detection area	360° circular
Range	up to Ø12 m at height of 2.5 m
Operating temperature	-20°C to +50°C

Note

For more information, refer to pertinent documentation

ROOM AUTOMATION SOLUTION

KNX SENSORS

HUMIDITY - TEMPERATURE CONTROLLER

GRHC-J0x-KNX & GREHF-J0x-ACC

HUMIDITY SENSOR-THERMOSTAT AND SINGLE LINE GLASS

The environmental sensors GRHC-J01-KNX and GRHC-J03-KNX are devices of the Line Glass series, they are wall-mounted and are finished with a white or black glass.

The GRHC-J0x-KNX device integrates humidity and temperature sensors.The GRHC-J01-KNX device integrates humidity and temperature sensors.

The devices are also equipped with a 2-way connector on the rear side that can be configured as a digital or analogue input; in fact it is possible to connect an additional NTC probe to the device (GRTE-SEN or GRTE-SEN-2 - not included) to obtain a second temperature measurement.

FEATURES

- The device includes 2 double-stage thermostats for controlling two distinct areas, both with an integrated PI controller for driving heating and cooling equipment, valves, 6-way valves, 2 and 4-pipe fan coils, etc ..;
- The humidity sensor manages the reading of the relative humidity in the environment and allows threshold control with hysteresis of humidification and dehumidification equipments.
- The devices embed 6 capacitive keys for the management of on / off commands, dimmers, shutters and blinds, execution and learning of scenarios, object sequences, local thermostat controls, etc.
- The device includes a RGB LED on the front side for displaying status (temperature and humidity) or other quantities available on the KNX bus.
- Device is intended to be used in British, German or Italian 2 module electrical box.
- Device is equipped with KNX communication interface.

GRHC-J0x-KNX & GREHF-J0x-ACC
HUMIDITY SENSOR-THERMOSTAT AND SINGLE LINE GLASS

ORDERING INFORMATION

CODE	DESCRIPTION
GRHC-J01-KNX	HUMIDITY SENSOR + Tstats INWALL - NO DISPLAY white
GRHC-J03-KNX	HUMIDITY SENSOR + Tstats INWALL - NO DISPLAY black
GREHF-J01-ACC	SINGLE LINE GLASS - HS White Display
GREHF-J03-ACC	SINGLE LINE GLASS - HS Black Display

TECHNICAL SPECIFICATIONS

Dimensions	(H x W x D) 96 x 96 x 36 mm
Weight	50 g
Power Supply	Via bus EIB/KNX cable: 21 ÷ 32V DC / Current consumption: ≤ 10 mA
Input - digital mode	For free potential contacts: (dry contacts) Max. length of Cables (twisted): ≤ 10 m Voltage Scanning: 3,3 V DC
Input - analog mode for temperature probe	For NTC temperature probe code: GRTE-SEN: (range from -20°C to +100°C) GRTE-SEN-2: (range from -50°C to +60°C) Max. length of Connecting Cable: ≤ 30 m (twisted cable)
Temperature sensor (included)	Range: -5°C + 45°C Resolution: 0.1°C Tolerance typ. (max.): ≤± 0.2°C
Humidity sensor (included)	Range: 0 ÷ 100 %RH Resolution: 0.1 %RH Tolerance typ. (max.): ± 2 %RH (± 3 %RH)

Note

For more information, refer to pertinent documentation
In case of special requirements for customization, please reach out to Product Management.

ROOM AUTOMATION SOLUTION

KNX SENSORS

MULTISENSOR CONTROLLER
CO^2 - HUMIDITY - TEMPERATURE

GRMC-J0x-KNX & GREMF-J0x-ACC

MULTISENSOR AND SINGLE LINE GLASS

The environmental sensors GRMC-J01-KNX and GRMC-J03-KNX are devices of the Line Glass series, they are wall-mounted and are finished with a white or black glass.

In the GRMC-J0x-KNX device there are 3 sensors available: temperature, humidity and CO^2, this measure is detected by using an integrated probe specially designed to detect CO^2 data directly and not through calculations based on other sensors.

The devices are also equipped with a 2-way connector on the rear side that can be configured as a digital or analogue input; in fact it is possible to connect an additional NTC probe to the device (GRTE-SEN or GRTE-SEN-2 - not included) to obtain a second temperature measurement.

FEATURES

- The device includes 2 double-stage thermostats for controlling two distinct areas, both with an integrated PI controller for driving heating and cooling equipment, valves, 6-way valves, 2 and 4-pipe fan coils, etc ..;
- The humidity sensor manages the reading of the relative humidity in the environment and allows threshold control with hysteresis of humidification and dehumidification equipments.
- The devices embed 6 capacitive keys for the management of on / off commands, dimmers, shutters and blinds, execution and learning of scenarios, object sequences, local thermostat controls, etc.
- The device includes a RGB LED on the front side for displaying status (temperature, humidity and CO^2) or other quantities available on the KNX bus.
- Device is intended to be used in British, German or Italian 2 module electrical box.
- Device is equipped with KNX communication interface.

GRMC-J0x-KNX & GREMF-J0x-ACC
MULTISENSOR AND SINGLE LINE GLASS

ORDERING INFORMATION

CODE	DESCRIPTION
GRMC-J01-KNX	MULTISENSOR CO^2 + Humidity and Temperature INWALL - NO DISPLAY white
GRMC-J03-KNX	MULTISENSOR CO^2 + Humidity and Temperature INWALL - NO DISPLAY black
GREMF-J01-ACC	SINGLE LINE GLASS - CO^2 White display
GREMF-J03-ACC	SINGLE LINE GLASS - CO^2 Black display

TECHNICAL SPECIFICATIONS

Dimensions	(H x W x D) 96 x 96 x 36 mm
Weight	50 g
Power Supply	Via bus EIB/KNX cable: 21 ÷ 32V DC / Current consumption: ≤ 10 mA
Input - digital mode	For free potential contacts: (dry contacts) Max. length of Cables (twisted): ≤ 10 m Voltage Scanning: 3,3 V DC
Input - analog mode for temperature probe	For NTC temperature probe code: GRTE-SEN: (range from -20°C to +100°C) GRTE-SEN-2: (range from -50°C to +60°C) Max. length of Connecting Cable: ≤ 30 m (twisted cable)
Temperature sensor (included)	Range: -5°C + 45°C Resolution: 0.1°C Tolerance typ. (max.): ≤± 0.2°C
Humidity sensor (included)	Range: 0 ÷ 100 %RH Resolution: 0.1 %RH Tolerance typ. (max.): ± 2 %RH (± 3 %RH)
CO^2 sensor (included)	Range: 360 ÷ 5000 ppm Accuracy: ± (50 ppm + 3%)

Note

For more information, refer to pertinent documentation

ROOM AUTOMATION SOLUTION

KNX SENSORS

METEO STATION

WS00A01KNX

WEATHER STATION WIND, BRIGHTNESS, TEMPERATURE, AIR

Measurement and evaluation of weather data: Wind speed, Wind direction, Precipitation, Brightness, Global radiation Twilight, Temperature, Relative air humidity and Air pressure.

FEATURES

- Installation on the outside of buildings, preferable in the roof and facade area
- Operation with additional power supply product characteristics
- Integrated GPS/GLONASS receiver for automated positioning
- Calculation of additional weather data: absolute air humidity, chill temperature, comfort
- Function for shading control
- Integrated KNX bus coupling unit
- Measurement data acquisition and limit value monitoring
- Software logic modules for linking events
- Integrated heating

ORDERING INFORMATION

CODE	DESCRIPTION
WS00A01KNX	Weather station wind, brightness, temperature, air

WS00A01KNX - WEATHER STATION WIND, BRIGHTNESS, TEMPERATURE, AIR

TECHNICAL SPECIFICATIONS

Dimensions	(Ø × H) 130 × 68 mm
Power Supply	Rated voltage AC 24 V SELV (± 10%) Rated voltage DC 21 ... 32 V SELV Current consumption 100 ... 400 mA (dependent on the weather) Protection class III
Connection cable	Cable type LiYCY 4xAWG26 Cable length 5 m Total length per line 15 m Number of weather stations max. 3 (per line)
KNX	KNX medium TP Commissioning mode S-mode Rated voltage KNX DC 21 ... 32 V SELV Current consumption KNX max. 5 mA
Ambient conditions	Ambient temperature -30 ... +60°C Storage/transport temperature -25 ... +70°C Degree of protection IP 44 (in position for use)
Wind direction sensor	Measuring range 1 ... 360° Resolution 1° Accuracy ±10° (Please select laminar wind stream)
Wind speed sensor	Measuring range approx. 0 ... 40 m/s Resolution 0.1 m/s Accuracy (≤ 10 m/s) ± 1 m/s Accuracy (>10 m/s) ± 5 %

Note

For more information, refer to pertinent documentation

ES01A00KNX

TIME ASTRONOMICAL MASTER EVENTS SCHEDULE, BATTERY

The real time clock is a digital electronic switch for time management of electrical utilities. It allows time programming (daily, weekly or yearly) or astronomical.

It can control 9 different channels on bus KNX. The programming of channel 1 is also replicated on the relay located on the device. Each channel can be associated with a different programming (time or astronomical).

The real time clock also offers the possibility of connecting via BUS a GPS module, ES01A00ACC (available as an accessory), which allows the acquisition of the time and the position through the satellite system, ensuring greater accuracy over time. The backup battery allows you to keep the settings even in case of blackout and can be replaced through the cover (sealable).

FEATURES

- Time programming (daily, weekly, monthly or yearly) or astronomical programming
- Available programs: on/off, pulse, holiday, random, night (astronomical)
- 9 different channels on bus KNX (the behaviour of the first channel is replicated on the on-board relay)
- Maximum number of storable programs: 450 (900 events) allocable on 9 channels
- Possibility to automatically capture date, time and geographical position connecting the additional ES01A00ACC module
- Automatic time update (DST)
- Correction of the calculated sunrise and sunset time: ± 120 minutes
- Random switching function of the outputs
- Channels status manual override (temporary or permanent)
- Possibility to copy the programs of one channel on other channels
- Menu in five languages: Italian, English, Spanish, German, French
- Keypad lock by password
- Backup battery (CR 14250 type) replaceable without removing the device

ES01A00KNX - TIME ASTRONOMICAL MASTER EVENTS SCHEDULE, BATTERY

ORDERING INFORMATION

CODE	DESCRIPTION
ES01A00KNX	Time Astronomical Master Events schedule, battery
ES01A00ACC	GPS probe add-on for ES01A00KNX

TECHNICAL SPECIFICATIONS

Dimensions	3 DIN (EN 60715) Modules
Power Supply	115 ÷ 230 V AC 50/60 Hz
Outputs	Number 1 relay in monostable change-over Switching voltage AC 250 / 400 V Capacity at 250 V AC 16 A Lamp loads Incandescent lamps 2000 W Fluorescent lamps (compensated) 250 VA Low voltage halogen lamps 11000 VA Halogen lamps at 240V 2000 W Low consumption lamps (CFL) 200 VA Low consumption lamps (Downlights) 200 VA LED 25 VA
Operating temperature	0 ÷ +50°C
Storage temperature	- 10°C + 70°C

Note

For more information, refer to pertinent documentation

SWITCH - MINIPAD TOUCH PANEL

TOUCH PANEL 3.5"

GRTP-J0x-KNX

3.5" TOUCH PANEL KNX

Powerful control in a distinctive shape. With a couloured display, dimming, status, values, lighting, shutters and timers are controlled and password protected when needed. Using the embedded temperature sensor, chrono or fancoil controlling functions are managed. DMX couloured Led or lights are controlled with the optional DMX interface, and load control with automatic cut off of prioritised functions is performed with the available power meter. Based on Linux® OS but ETS programmed, the 3.5" touch panel has Led indicator for status display and an audio signal for alarm functions and is available in three colours.

ORDERING INFORMATION

CODE	DESCRIPTION
GRTP-J02-KNX	3.5" Touch panel KNX – Matte black
GRTP-J01-KNX	3.5" Touch panel KNX – Ceramic white
GRTP-J07-KNX	3.5" Touch panel KNX - Square Plexy - White
GRTP-J09-KNX	3.5" Touch panel KNX - Square Plexy - Black

TECHNICAL SPECIFICATIONS

Dimensions	(H x W x D): 112 x 110 x 48 mm
Weight	250g
Power Supply	Auxiliary supply: 9...32V DC Current Consumption: 55mA @24V DC From KNX bus 21...31V DC SELV Current consumption from KNX <5mA
Mounting	Inwall box: 2 or 3 modules italian, german box, swiss box
Connections and terminals	Wago red/grey to connect to EIB/KNX bus Wago white/yellow to connect to aux supply

Note

For more information, refer to pertinent documentation

SWITCH - MINIPAD
TOUCH PANEL
SWITCH

GRTS

KNX SWITCH 4 CHANNELS + THERMOSTAT

GRTS is a KNX tactile 4 channels push button which can be configured to manage On/Off commands, dimming, shutters and venetians control, scene recall and control, sequences of 3 objects. Device includes a 2 stage Room Temperature Controller with integrated PI to control heating and cooling equipments, valves, 2 and 4 pipes fan coils. Device has a rear connector (2 poles) configurable as digital or analog input. It's possible to connect a NTC temperature probe (codes GRTE-SEN or GRTESEN-2 - not included) to have a direct temperature measurement. The switch has a RGB led bar on the front side in order to visualize feedbacks or other values available over the KNX bus.

GRTS is intended to be used in british box, german box or italian 2 modules box. Device is equipped with KNX communication interface.

ORDERING INFORMATION

CODE	DESCRIPTION
GRTS4CJ01-KNX	KNX switch 4 channels + thermostat 55 x 55 mm - White - Plastic
GRTS4CHJ02-KNX	KNX switch 4 channels + thermostat 55 x 55 mm - Black - Plastic
GRTS-CP-J01	Plastic plate 55 x 55 mm - White
GRTS-CP-J02	Plastic plate 55 x 55 mm - Black

TECHNICAL SPECIFICATIONS

Dimensions	(H x W x D): 55 x 55 x 37 mm
Weight	50g
Power Supply	From KNX bus 21..32V DC Current Comsumption EIB/KNX <10mA
Connections	Rear input in digital mode / analog input for temperature probe

Note

For more information, refer to pertinent documentation.

In case of special requirements for customization, please reach out to Product Management.

SWITCH - MINIPAD
TOUCH PANEL
SWITCH

GRCS

MINISWITCH 1CH - 2CH - 4CH

The GRCS button range of KNX devices is divided in 3 different models based on the number of switch.

Product has buttons which can be configured to manage on/off lights, dimmers, shutters, scenarios, sequences of commands.

It has led's in the front side, two for each button, each led freely configurable by ets (one white and one blue for each button).

The device is equipped with appropriate communication interface with the bus type TP1 (twisted pair) KNX European standard, according CEI EN 50090.

ORDERING INFORMATION

CODE	DESCRIPTION
GRCS1CHJ03-KNX	MINISWITCH 1 CH - KNX ANTHRACITE
GRCS2CHJ03-KNX	MINISWITCH 2 CH - KNX ANTHRACITE
GRCS4CHJ03-KNX	MINISWITCH 4 CH - KNX ANTHRACITE
GRCS1CHJ01-KNX	MINISWITCH 1 CH - KNX WHITE
GRCS2CHJ01-KNX	MINISWITCH 2 CH - KNX WHITE
GRCS4CHJ01-KNX	MINISWITCH 4 CH - KNX WHITE
GRF-2M-J02	2 MODULES 60mm - FRAME - BLACK
GRC-2-BOX	INWALL BOX - 2 MODULES

TECHNICAL SPECIFICATIONS

Dimensions	(H x W x D) 45 x 43 x 42 mm
Weight	40 g
Power Supply	**Via bus EIB/KNX cable:** Voltage: 21...30V DC / Current Consumption EIB/KNX: ≤ 5mA
Output	Number: 2 or 8 led's / Color: white and blue
Connections	2 Terminals for connections bus

Note

For more information, refer to pertinent documentation

GRCS MINISWITCH 1CH - 2CH - 4CH

MANDATORY ACCESSORIES

ORDERING INFORMATION

CODE	DESCRIPTION
GRF-2M-J02	2 MODULES 60mm - FRAME - BLACK
GRC-2-BOX	INWALL BOX - 2 MODULES

SWITCH - MINIPAD
TOUCH PANEL

MINISWITCH ACCESSORIES

GRSP-2M-J0x

SOCKET PLATE 2 MODULES

ORDERING INFORMATION

CODE	DESCRIPTION
GRSP-2M-J01	Socket plate 2 modules - White
GRSP-2M-J02	Socket plate 2 modules – Matte black

SWITCH - MINIPAD
TOUCH PANEL
MINIPAD

GRMPxCHJ1TS-KNX

KNX MINIPAD

GRMP minipad has 4 (8) push buttons which can be configured to manage lights, dimmers, shutters, etc; and 4 inputs (where present) on the backside to interface free potential contacts (for example sensors, traditional buttons).

It has 5 white led in the front side, each led freely configurable by ETS and a temperature sensor included which can be configured as a room thermostat.

ORDERING INFORMATION

CODE	DESCRIPTION
GRMP4CHJ1TS-KNX	KNX Minipad 4 channels - 4 IN - Temperature Sensor - Complete - White - Black cross
GRMP8CHJ1TS-KNX	KNX Minipad 8 channels - Temperature Sensor - Complete - White - Black cross

TECHNICAL SPECIFICATIONS

Dimensions	(H x W x D): 90 x 90 x 48 mm
Power Supply	Via bus EIB/KNX cable 21...32V DC
Weight	130g
Inputs	4 inputs for free potential contacts; max. cable length: 10m; scanning current/ Voltage <1mA/3,3V DC
Output	5 white LEDs

Note

For more information, refer to pertinent documentation.

In case of special requirements for customization, please reach out to Product Management.

GRRIN01-KNX

ROUTER INTERFACE

The compact KNX IP Router GRRIN01-KNX allows forwarding of telegrams between different lines through a LAN (IP) as a fast backbone. In addition this device is suited to connect a PC to the KNX network e.g. for ETS® programming.

FEATURES

- The IP address can be obtained by a DHCP server or by manual configuration (ETS®) respectively.
- This device works according to the KNXnet/IP specification using the core, the device management, the tunneling and the routing part.
- The KNX IP Router GRRIN01-KNX has a filter table (8 kByte) and is able to buffer up to 150 telegrams.
- Power is supplied via the KNX bus.

ORDERING INFORMATION

CODE	DESCRIPTION
GRRIN01-KNX	Router interface

TECHNICAL SPECIFICATIONS

Mounting	1 DIN module
Power Supply	USB - KNX Interface: USB < 15 mA KNX < 3 mA IP - IP Router / KNX: KNX approx 15mA
Controls and Indicators	USB - KNX Interface: 2 LEDs, multicolor IP - IP Router / KNX: 2 LEDs, multicolor 2 buttons and 3 LEDs multicolor

Note

For more information, refer to pertinent documentation

GRIPIN01-S-KNX

KNX IP INTERFACE SECURE

The KNX IP Interface GRIPIN01-S-KNX is a compact interface used to connect a PC to the KNX network. The connection is made through LAN (IP). Power is supplied via the KNX bus. The IP address can be obtained by a DHCP server or by manual configuration (ETS®) respectively.

FEATURES

- This device works according to the KNXnet/IP specification using the core, the device management and the tunneling part.
- The device supports KNX Secure which can be enabled in ETS. With its interface functionality (tunneling) KNX security prevents from unauthorized access.
- The buttons are for diagnostic purposes.
- The LEDs indicate the operating status and communication errors on the bus.

ORDERING INFORMATION

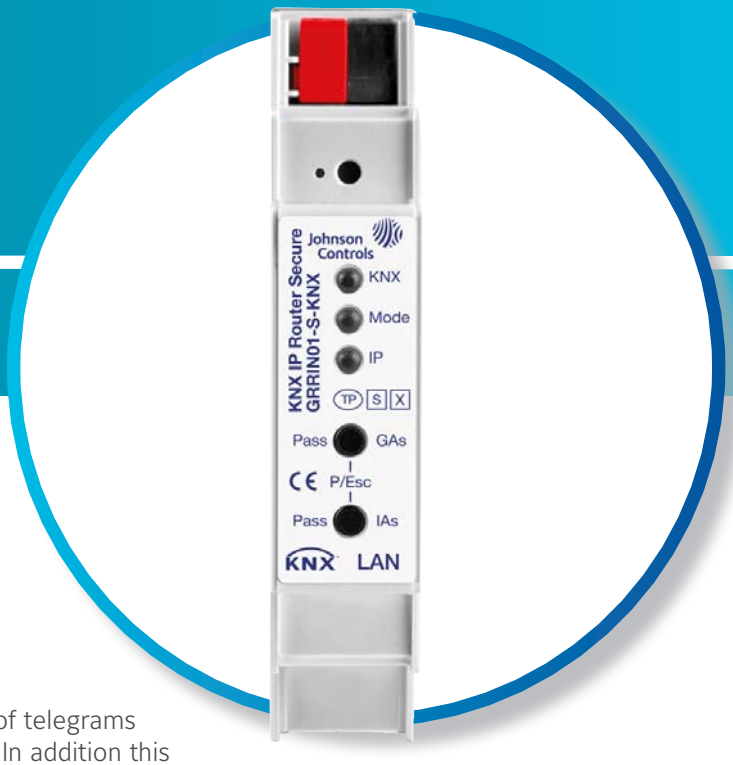
CODE	DESCRIPTION
GRIPIN01-S-KNX	Tunneling KNX secure interface

TECHNICAL SPECIFICATIONS

DIN rail mounted device, width	1 unit (18 mm)
Power Supply	KNX approx 20mA
Connectors	Connector for KNX TP Bus (red/black) LAN RJ-45 socket
Electrical safety	IP 20 (EN 60529)
Bus safety extra low voltage	SELV DC 29 V

Note

For more information, refer to pertinent documentation



GRRIN01-S-KNX

KNX IP ROUTER

The compact KNX IP Router GRRIN01-KNX allows forwarding of telegrams between different lines through a LAN (IP) as a fast backbone. In addition this device is suited to connect a PC to the KNX network e.g. for ETS® programming.

FEATURES

- The IP address can be obtained by a DHCP server or by manual configuration (ETS®) respectively
- This device works according to the KNXnet/IP specification using the core, the device management, the tunneling and the routing part.
- The KNX IP Router GRRIN01-KNX has a filter table (8 kByte) and is able to buffer up to 150 telegrams.
- Power is supplied via the KNX bus.

ORDERING INFORMATION

CODE	DESCRIPTION
GRRIN01-S-KNX	Routing KNX secure interface

TECHNICAL SPECIFICATIONS

DIN rail mounted device, width	1 unit (18 mm)
Power Supply	KNX approx <15 mA
Connectors	Connector for KNX TP Bus (red/black) LAN RJ-45 socket
Electrical safety	IP 20 (EN 60529)
Bus safety extra low voltage	SELV DC 29 V

Note

For more information, refer to pertinent documentation

GRPSU064J01-KNX

POWER SUPPLY - 640 mA

The power supply unit GRPSU064J01-KNX provides the system power necessary for the KNX/EIB bus. The connection to the bus line is via the bus connection block located on the front side.

The integrated choke prevents the data telegrams from shortcircuiting on the bus line. When the built-in reset button is operated (press the RESET button for at least 20 seconds to reset the KNX Bus), the bus devices are returned to their initial state.

For each bus line, at least one power supply unit GRPSU064J01-KNX is needed. Up to two power supply units may be attached to a single bus line. The distance between power supply unit GRPSU064J01-KNX and any of its bus devices must not exceed 350 m.

The power supply unit has a voltage and current regulation and is therefore short-circuit proof. Short power failures can be bridged with a backup interval of approximately 200 ms.

The power supply unit can supply DC 30 V power from an additional pair of terminals.

ORDERING INFORMATION

CODE	DESCRIPTION
GRPSU064J01-KNX	Power supply - 640 mA

TECHNICAL SPECIFICATIONS

Dimensions (Width)	3 SU (1 SU = 18 mm)
Weight	215 g
Input Voltage	AC 180 ÷ 264 V AC, 50/60Hz
Output Voltage	DC 30 V (SELV)
Output current	640 mA
Degree of protection	IP20 (EN 60529)
Operating temperature	-5°C +50°C

Note

For more information, refer to pertinent documentation

GRTPPSU-12V-KNX

POWER SUPPLY - 12 V 15 W

ORDERING INFORMATION

CODE	DESCRIPTION
GRTPPSU-12V-KNX	Power supply - 12 V 15 W

GRLCU-J02-KNX

LINE COUPLER

The GRLCU-J02-KNX line coupler has been made in a compact design. It connects two KNX bus segments (for example, a KNX line with a KNX area).

FEATURES

- The device has a filter table (8kbytes) and ensures a galvanic isolation between the lines.
- The coupler supports KNX longframes and is compatible with the ETS® software (ETS4.2 or higher).
- The buttons on the front panel allow disabling the telegram filter for testing purposes.
- The LEDs indicate operating conditions as well as communication errors on the KNX bus.
- The power is supplied via the KNX bus (main line).

ORDERING INFORMATION

CODE	DESCRIPTION
GRLCU-J02-KNX	Line coupler

TECHNICAL SPECIFICATIONS

Supply Voltage	KNX main line: approximately 5 mA KNX sub line: approximately 3 mA
Controls and Indicators	2 buttons and 3 LEDs multicolors
Housing	Plastic (PC)
DIN rail mounted device	Width: 1 unit (18 mm)
Weight	40 g
Degree of protection	IP20 (EN 60529)
Operating temperature	-5°C +45°C

Note

For more information, refer to pertinent documentation

GRUSBIN01-KNX

USB INTERFACE

The device enables the KNX bus system to be interfaced to a PC equipped with a USB 1.1 or USB 2 port for programming or managing through appropriate software.

FEATURES

- It can be used as a programming interface for ETS® Software Version 3 (or higher) and supports KNX long frames.
- Long telegrams enable a faster download to devices that can receive these telegrams.
- The LEDs on the device indicate the operating status and communication errors on the bus.
- The USB connector is galvanic isolated from the KNX bus.

ORDERING INFORMATION

CODE	DESCRIPTION
GRUSBIN01-KNX	USB interface

TECHNICAL SPECIFICATIONS

Supply Voltage	USB - KNX Interface: USB < 15 mA - KNX < 3 mA
Controls and Indicators	USB - KNX Interface: 2 LEDs, multicolor
Mounting	1 DIN module
Connections	Connector for KNX TP Bus (red/black) • USB: Connector type B • max. cable length: 5 m

Note

For more information, refer to pertinent documentation

ROOM AUTOMATION SOLUTION

WEBSERVER

USB SUPERVISION

IN00-B02-WEB

HORIZONE WEB SERVER

HORIZONE is a webserver specifically engineered for supervision and monitoring of Home & Building Automation systems. Based on KNX standard and suitable for integration with Modbus standard and other technologies used in intelligent buildings, alarm systems, fire and smoke detections systems, audio/video distribution systems. Compatible with operating system Mac OS X, Microsoft Windows, Apple iOS and Google Android, the configuration and use of HORIZONE takes place directly through its web interface, which can be accessed through a the most popular browser on the market browser from any device (pc/mac, smartphone e tablet) or with free app available on iOS and Android store. HORIZONE has been designed to fit on DIN rail with a compact dimension as 5 module.

ORDERING INFORMATION

CODE	DESCRIPTION
IN00-B02-WEB	Horizone Web server
IN00-B03-UPG	Upgrade 800 Points
IN00-B04-UPG	Upgrade 1400 Points
IN00-B10-UPG	Upgrade 2000 Points
IN00-B06-UPG	Upgrade 2500 Points

TECHNICAL SPECIFICATIONS

Supply Voltage	12 ... 24VDC
Power consumption	180mA @12V; 110mA @24V
Dimensions	88x90x62 mm; 5 DIN modules

Note

For more information, refer to pertinent documentation