Room Automation Solution System Components Product Bulletin

LIT-12013527

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Introduction

System components products are part of the Johnson Controls® Room Automation Solution. System components products include router interfaces, power supplies, line couplers, and USB interfaces.

Product list

- GRRIN01-KNX
- GRIPIN01-S-KNX
- GRRIN01-S-KNX
- GRPSU064J01-KNX
- GRLCU-J02-KNX
- GRUSBIN01-KNX
- GRTPPSU-12V-KNX

Contact your Johnson Controls sales representative to order a product listed in Table 8.

Features and benefits

GRRIN01-KNX router interface

Use the compact KNX IP Router GRRIN01-KNX to quickly transfer telegrams between different lines through a LAN (IP). Use this device to connect a PC to the KNX network, for example, for ETS® programming.

Figure 1: GRRIN01-KNX router interface

Product features

- Obtain the IP address with a DHCP server or by manual configuration (ETS) respectively
- This device works according to the KNXnet or IP specification that uses the core, the device management, the tunneling, and the routing part
- The KNX IP Router GRRIN01-KNX has a filter table (8 KB) and can buffer up to 150 telegrams
- The KNX bus supplies power

Technical specifications

Table 1: GRRIN01-KNX technical specifications

Specification	Description
Mounting	1 DIN module
Power supply	USB to KNX interface: USB < 15 mA KNX < 3 mA IP to IP router or KNX: KNX approximately 15 mA
Controls and indicators	USB to KNX interface: 2 LEDs, multicolor IP or IP router or KNX: 2 LEDs, multicolor 2 buttons and 3 LEDs multicolor

GRIPIN01-S-KNX router interface

The KNX IP Interface GRIPIN01-S-KNX is a compact interface that you can use to connect a PC to the KNX network. The connection is made through LAN (IP). The KNX bus supplies power. Obtain the IP address by a DHCP server or by manual configuration (ETS®).

Figure 2: GRIPIN01-S-KNX router interface

Product features

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

Technical specifications

Table 2: GRIPIN01-S-KNX technical specifications

Specification	Description
Mounting	1 DIN module, width 18 mm
Power supply	KNX approximately 20 mA
Connectors	Connector for KNX TP bus, red or black LAN RJ-45 socket
Electrical safety	IP 20 (EN 60529)
Bus safety extra low voltage	SELVDC 29 V

GRRIN01-S-KNX IP router

Use the compact KNX IP Router GRRIN01-KNX to forward telegrams between different lines through a LAN (IP). In addition, use the device to connect a PC to the KNX network, for example, for ETS programming.

Figure 3: GRRIN01-S-KNX IP router

Product features

- Obtain the IP address by a DHCP server or by manual configuration (ETS)
- 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 KB) and can buffer up to 150 telegrams
- The KNX bus supplies power

Technical specifications

Table 3: GRRIN01-S-KNX technical specifications

Specification	Description
Mounting	1 DIN module, width 18 mm
Power supply	KNX approximately 15 mA
Connectors	Connector for KNX TP bus, red or black LAN RJ-45 socket
Electrical safety	IP 20 (EN 60529)
Bus safety extra low voltage	SELVDC 29 V

GRPSU064J01-KNX power supply

This power supply unit provides the system power necessary for the KNX/EIB bus. The bus line connects through the bus connection block located on the front side. The integrated choke prevents the data telegrams from short-circuiting on the bus line. You need at least one GRPSU064J01-KNX device for each bus line. You can attach two power supply units to a single bus line. The distance between a GRPSU064J01-KNX power supply and any of its bus devices must not exceed 350 m. When you press the built-in reset button for at least 20 seconds, the KNX bus resets and the bus devices return to their initial state.

For each bus line, you need at least one GRPSU064J01-KNX power supply unit. You can attach up to two power supply units 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 short-circuit proof. Bridge short power failures with a backup interval of 200 ms. The power supply unit can supply DC 30 V power from an additional pair of terminals.

Figure 4: GRPSU064J01-KNX power supply

Product features

- Voltage and current regulation
- Short-circuit proof
- Can supply DC 30 V power from an additional pair of terminals
- To reset the device to default settings, press and hold **Reset** for 20 seconds

Technical specifications

Table 4: GRPSU064J01-KNX technical specifications

Specification	Description
Dimensions	3 SU, 1 SU = 18mm
Weight	215 g
Input voltage	AC 180 VAC to 264 VAC, 50/60Hz
Output voltage	DC 30 V SELV
Output current	640 mA
Degree of protection	IP20 EN 60529
Operating temperature	23°F to 122°F (-5°C to 50°C)

GRLCU-J02-KNX line coupler

The compact GRLCU-J02-KNX line coupler connects two KNX bus segments, for example, a KNX line with a KNX area.

Figure 5: GRLCU-J02-KNX line coupler

Product features

- 8 KB filter table ensures galvanic isolation between lines
- Supports KNX longframes, compatible with the ETS® software, ETS4.2 or higher
- Buttons on the front panel to disable the telegram filter for testing purposes
- Power supply through the KNX bus main line
- LEDs indicate operating conditions and communication errors on the KNX bus
- LED visual feedback

Technical specifications

Table 5: GRLCU-J02-KNX technical specifications

Specification	Description
Supply voltage	KNX main line: approximately 5 mA KNX sub line: approximately 3 mA
Controls and indicators	2 buttons and 3 LEDs multicolor
Housing	Plastic PC

Table 5: GRLCU-J02-KNX technical specifications

Specification	Description
DIN rail mounted device	Width: 1 unit 18 mm
Mounting	40 g
Degree of protection	IP20 EN 60529
Operating temperature	23°F to 113°F (-5°C to 45°C)

GRUSBIN01-KNX USB interface

The device enables the KNX bus system interface to a PC with a USB 1.1 or USB 2 port to program or manage through appropriate software. Use the device 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. LEDs on the device indicate the operating status and communication errors on the bus. The USB connector is galvanically isolated from the KNX bus.

Figure 6: GRUSBIN01-KNX USB interface

Product features

- KNX or USB 1.1 or USB 2.0 interface for direct communication with a computer
- KNX or IP interface for direct or LAN connection to program or to supervise the KNX system
- KNX or IP router, for connectionless and simultaneous transmission of KNX telegrams to several devices, or as a programming interface KNX bus system

Technical specifications

Table 6: GRUSBIN01-KNX technical specifications

Specification	Description
Supply voltage	USB or KNX Interface: USB < 15 mA to KNX < 3 mAIP to IP Router or KNX: KNX approximately 15 mA
Controls and indicators	USB to KNX interface: 2 LEDs, multicolorIP to IP Router or KNX: 2 LEDs, multicolor, 2 buttons and 3 LEDs multicolor
Mounting	1 DIN module
Connections	USB to KNX interface: Connector for KNX TP bus, red or black USB: connector type B Maximum cable length: 5 m IP to IP Router or KNX: Connector for KNX TP bus, red or black LAN RJ-45 socket

GRTPPSU-12V-KNX power supply

Power supply: 12 V 15 W.

Figure 7: GRTPPSU-12V-KNX power supply

Related documentation

Refer to the installation guides in Table 7 for details on how to install and operate the products.

Table 7: Installation guides

Document number	Document title
LIT-12013589	*GRIPIN01-S-KNXKNX IP Secure Interface*
LIT-12013597	*GRLCU-J02-KNX Compact KNX LINE Coupler*
LIT-12013599	*GRPSU-064J01-KNX Power Supply Unit*
LIT-12013600	*GRRIN01-KNX IP Router*

Repair information

If a product fails to operate within its specifications, replace the unit. For replacements, contact your Johnson Controls representative.

Ordering information

Contact your Johnson Controls sales representative to order a product listed in the following table.

Table 8: Selection chart

Product order code	Description
GRRIN01-KNX	Router interface
GRIPIN01-S-KNX	Tunneling KNX secure interface
GRRIN01-S-KNX	Routing KNX secure interface
GRPSU064J01-KNX	Power supply, 640 mA
GRLCU-J02-KNX	Line coupler
GRUSBIN01-KNX	USB interface
GRTPPSU-12V-KNX	Power supply, 12 V or 15 W

The performance specifications are nominal and conform to acceptable industry standards. For application at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls shall not be liable for damages resulting from misapplication or misuse of its products.

Product warranty

This product is covered by a limited warranty, details of which can be found at www.johnsoncontrols.com/buildingswarranty.

Software terms

Use of the software that is in (or constitutes) this product, or access to the cloud, or hosted services applicable to this product, if any, is subject to applicable end-user license, open-source software information, and other terms set forth at www.johnsoncontrols.com/techterms. Your use of this product constitutes an agreement to such terms.

Patents

Patents: https://jcipat.com

Single point of contact

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