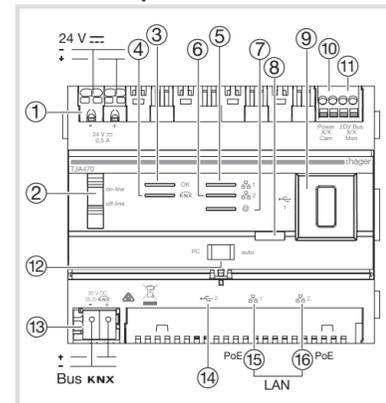


**Device components**



Picture 1: device components

- ① Connection for the external power supply (24 V DC)
- ② Switch for using the server (on-line/off-line)
- ③ On-off LED (OK)

- ④ LED for bus status (KNX)
- ⑤ LED for port 1 network connection (PoE 1)
- ⑥ LED for port 2 network connection (PoE 2)
- ⑦ LED for internet connection (@)
- ⑧ Push-button to check KNX Bus power
- ⑨ USB port for updates (←↔→)
- ⑩ Connection for the 2-wire bus / connection on the side of the outdoor panel (video input: Power X/X Cam)
- ⑪ Connection for the 2-wire bus / connection on the side of the indoor station (video output: 2DV Bus X/X Mon)
- ⑫ Network mode selection switch (DHCP) (PC/ auto)
- ⑬ Connection for the KNX bus (30V DC)
- ⑭ USB port (←↔→)
- ⑮ Connection to the local network (LAN) via port 1 RJ45 (PoE 1)
- ⑯ Connection to the local network (LAN) via port 2 RJ45 (PoE 2)

**Function**

The TJA470/TJA670 server is a server for controlling KNX products. It involves the use of two applications, the first being the Hager configuration application, Pilot, and the second being the application for the end user, domovea.

**Network interface behaviour (depending on the switches)**

The 2 Ethernet ports can be used interchangeably to connect the server to the local network. These 2 ports are 2 switched ports connected to the same logical interface on the TJA470/TJA670 (switch).

Switches	Network interface behaviour	Internet connection status	2-wire bus status
②	⑫	Network interface (Ethernet ports ⑮ and ⑯)	
On-line	Auto	<p><b>This is the normal operating mode for the TJA470/TJA670 when it is connected to an external router (ISP box).</b></p> <p>The interface is configurable with a DHCP client or fixed IP address.</p> <ul style="list-style-type: none"> <li>With a client DHCP (default factory set mode), the TJA470/TJA670 waits for an IP address coming from a DHCP server connected to the network (the router). If, after 40 seconds, no address has been attributed, the TJA470/TJA670 automatically takes the fallback address: 192.168.0.253 / 255.255.255.0.</li> <li>With a static IP address, the TJA470/TJA670 immediately recognises the settings defined in the "Configuration-Network" tab in the configurator settings menu:                             <ul style="list-style-type: none"> <li>interface IP address</li> <li>sub-network mask</li> <li>default server address</li> </ul> </li> </ul> <p>N.B. with a fixed IP address, the module does not automatically switch to the fallback address if there is an IP address conflict on the network (other device already using the IP address defined).</p>	active
	PC	<p>To use when a PC is directly connected to the TJA470/TJA670. This mode activates the DHCP server built into the module. The 2 ports are interchangeable and configured with the following parameters:</p> <ul style="list-style-type: none"> <li>Interface IP address: 192.168.0.253</li> <li>Sub-network mask: 255.255.255.0</li> <li>Default server address: 192.168.0.1</li> <li>range of IP addresses that can be attributed by the TJA470/TJA670 DHCP server: 192.168.0.10 to 192.168.0.50</li> </ul>	
off-line	Auto / PC	<p>This mode is a fallback mode in which the TJA470/TJA670 interface is configured in DHCP client mode.</p> <ul style="list-style-type: none"> <li>If no IP address is attributed by a DHCP server after a wait of 40 seconds, the TJA470/TJA670 automatically assumes the following fallback address: 192.168.0.253 / 255.255.255.0.</li> </ul>	inactive

**Operating status indicators**

LED function	LED ref.	Status	Description
Power	③	Off	No power
		Blinking green	Product start-up phase
		Lit green	Product on
		Blinking red	Product powered by reserve (10 s. max.)
		Lit red	Software loading error
Ethernet 1 and 2	⑤ and ⑥	Off	No network (or operating on power reserve (10 s. max.))
		Blinking green	No DHCP server detected, operating on fallback IP address
		Lit green	Network detected and IP address allocated
		Lit red	IP address conflict
		Blinking red	Waiting for IP address allocation
Remote access	⑦	Off	No remote connection (deactivation via software)
		Blinking green	Attempt to establish remote connection
		Lit green	Remote connection operational
		Lit red	Error in establishing remote connection

**Connection with no indoor station**

If the 2-wire bus intercom system is not equipped with an indoor station, and operates only from a mobile device (Smartphone, touch screen) via the elcom access application, then you must connect a termination resistance onto the access gate. This resistance is supplied as part of the maintenance set Ref. No. REH109X, and provided with the access gate.

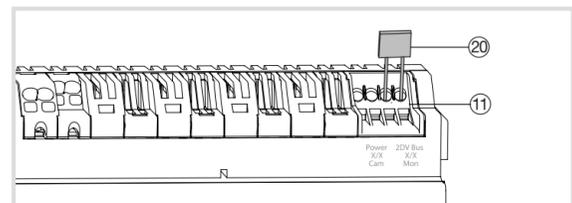


Figure 7: connection of the termination resistance

- ⑪ Connection terminal: 2DV Bus X/X Mon
- ⑳ Termination resistance

**Assembly and electrical connection**

Powered by PoE or via an external power supply, the TJA470/TJA670 server connects to an ethernet switch to join an IP network via a router.

**Assembling the device**

- Preferably install the TJA470/TJA670 in your installation's VDI box. Should the installation not include a VDI box, make sure you observe the strong/weak current separation.
- Rail-mounting in compliance with EN60715 standard.
- Only suitable for indoor use in a dry environment (IP20 / IP30 depending on the conditions).

**Connecting the device power supply**

The server power supply may either be PoE or an external power supply.

- PoE power supply: the server must be connected to a PoE Ethernet switch according to IEEE 802.3af, e.g. the Hager switch TN530 (8-port 1 Gbit/s modular switch including 4 PoE ports).
- External power supply: the server must be connected to a Hager TGA200 type power supply unit. **The TGA200 power supply unit is solely for powering one server and can under no circumstances power another product in the installation.**

**Connection to the IP network**

**Configuration**

The TJA470/TJA670 server connects to the local IP network via one of the two Ethernet ports ⑮ or ⑯. The server is integrated between an IP environment and a two-wire door interphone system through the hager Pilot application, a centralised configuration unit for the intelligence built in to the server and hager cloud infrastructure for the system's operation. To access this configuration interface, you must:

- find and download the **hager Pilot** application from the AppStore or Google Play Store,
    - Available on **App Store**
    - Available on **Google play**
    -
  - connect the server to a WIFI router,
- We strongly recommend the installer has their own DHCP router (Wifi + 3G/4G) to perform the configuration and tests on the system locally (via Wifi) or over the Internet (via 3G/4G).
- on your mobile device, go to the WIFI settings menu and select the WIFI router to which the server has just been connected,
  - launch the **hager Pilot** application and a selection window will be displayed:
    - select the installation's **TJA470/TJA670-XXXXXX** server,
    - the connection window will be displayed on the screen.
  - Enter your login to connect to the server. Login: admin and Password: 1234 are the default values.

A document to help configure the system is available to the installer in the server settings menu (⚙️).

**Use**

The server enables users to establish a link with the KNX system from the local network (LAN) and from the Internet, via the **domovea** application.



**OS compatibility**

For **hager Pilot**, the version must be no earlier than:

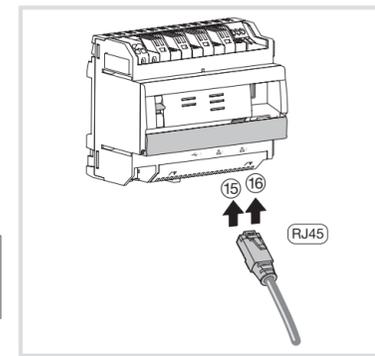
- iOS 11
- Android 6

For **domovea**, the version must be no earlier than:

- iOS 11
- Android 6

**Technical features**

KNX power supply	KNX bus SELV 30 V ⚡
Consumption on the bus line	10 mA max - 30 V ⚡
External power supply ① or PoE ⑮⑯	24 V → 30 V ⚡ via Hager SELV power supply TGA200 type or via PoE
Standard/Standby consumption on the 2-wire bus	35 mA / 12 mA - 24 V ⚡
Max consumption on the auxiliary power supply	760 mA max - 24 V ⚡
Standby consumption on the 24 V Ethernet and non-connected USB	330 mA
Maximum dissipation (24 V output)	10 W without USB, 15 W with 2 USB max
PoE power supply consumption	PoE Class 3: 13 W
Ethernet network communication	2 x 100/1000 Base T
Max 24 V power cable length	10 m
Bus connection ⑮⑯	0.2 mm <sup>2</sup> - 1.5 mm <sup>2</sup>
Power supply socket ①	0.75 - 2.5 mm <sup>2</sup>
Ethernet/IP network socket ⑮⑯	2 x RJ45
Operating temperature	-5 °C → + 45 °C
Storage temperature	- 20 °C → + 70 °C
Width (REG)	6TE
Dimensions (l x H x P)	106 x 90 x 67 mm
USB2 ⑭⑮ interface	2
Installation method	DIN rail (EN60715)
Operating altitude	< 2000 m
Pollution level	2
Surge voltage	4 kV
Protection ratings	<ul style="list-style-type: none"> <li>box: IP20</li> <li>box under faceplate: IP30</li> </ul>
Impact resistance	IK04



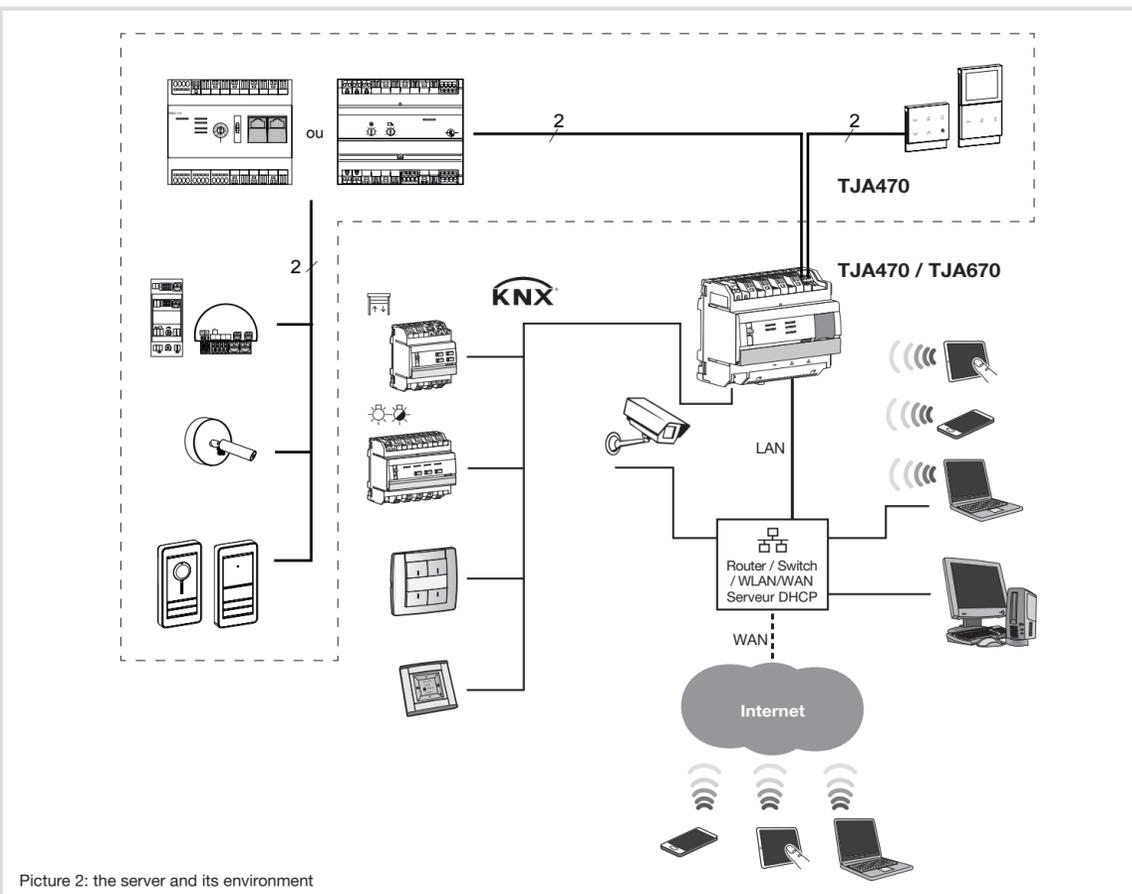
Picture 3: connection to the IP network

**TJA470 domovea expert**  
**TJA670 domovea basic**

**Safety instructions**

Device must only be installed by an electrician according to the installation standards applicable in the country.

Do not install this module outside a building.



Picture 2: the server and its environment