

Homematic IP Wired

Smart Living, Simply Exciting.



homematic ^{IP}
wired



Homematic IP makes the latest smart home technology available to everyone. The innovative system of eQ-3 was developed specifically for the needs of the customer and is one thing above all: easy. And that without compromises in functionality, security and data protection. This helps to overcome barriers and accelerates the users acceptance. The latest development of eQ-3 is a bus variant of the smart home system, the product line **Homematic IP Wired**. This is mainly characterised by its robustness and immunity to interference. The initial installation

is best carried out by a specialist retailer for new buildings or in the course of a house renovation. Retrofitting of wireless components can be carried out by the customer himself at any time. Also cable system extensions are still possible afterwards – allowing a long-term customer loyalty for the professional installer. All Homematic and Homematic IP devices – whether wireless or wired – are compatible and can be connected with each other. This makes Homematic IP the ideal solution for a smart home.

✓ Simply installed. ✓ Simply expanded. ✓ Simply secure.

WHAT MAKES HOMEMATIC IP SO SPECIAL

The Homematic IP system is an open platform that can be flexibly used and expanded by the customer. The communication of the devices is based on the Internet Protocol, IPv6, and is thus ideally equipped for the Internet of Things. In addition to its proven wireless product line, eQ-3 now also provides a wired smart home solution with Homematic IP Wired.

Maximum reliability

All Homematic IP devices are characterised by very high reliability. The wireless components work at a frequency of 868 MHz with constant bi-directional communication, ensuring confirmation of all radio commands. In Homematic IP Wired, the components are connected to each other by a bus line. This makes it possible to establish direct links between the devices. For most functions, the devices communicate directly with each other and commands must no longer necessarily converge at a central point. This makes the entire system particularly fail-safe.

Robustness and immunity to interference

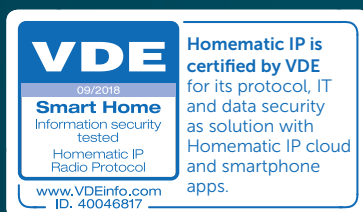
During the development of each single Homematic IP component, the immunity to interference is especially important. The wireless devices undergo numerous tests, so that interference caused by WiFi networks, video streaming or other users can be excluded. The wired system is characterised by a so-called ring topology: The bus is always connected from the Homematic IP Wired Access Point to the next device and finally back to the Access Point. If the wire is interrupted at one point, the topology automatically changes to two independent bus lines. This makes sure that the device still continues to work.

Security and data protection at the highest level

During installation of the system, the communication of Homematic IP is secure and cannot be manipulated. At no time, entering of personal data is required. The system is completely anonymous, respects the privacy of the user and thereby ensures the protection of data. The transmission of information is encrypted and authenticated at all times. Reading, changing or other types of attacks are excluded.

Intuitive handling

Homematic IP has been designed for simplicity and usability. The wireless devices can easily be installed and operated via plug and play without technical knowledge. With a free smartphone app, the system can be operated intuitively. The Homematic IP Wired products are connected to each other via bus line. The Access Point is used for connection either to a smart home Central Control Unit in the house or the cloud service on the Internet.



HOMEMATIC IP WIRED – THE NEXT SMART HOME GENERATION

With the introduction of Homematic IP Wired, eQ-3 provides an innovative smart home system, offering new opportunities for specialist companies as well as consumers. The direct communication of the devices via cable connections ensures a high level of robustness and immunity – advantages that make Homematic IP Wired the ideal solution.

Interference-proof

Homematic IP Wired is particularly reliable and resistant to interferences. Through the direct connection of the devices via cable, external influences such as radio waves for example do not interfere the communication. This allows for a reliable data transmission at any time. Commands do not necessarily converge at a central point, but for most functions they can instead be exchanged directly between the devices involved. This has the advantage that the failure of one single device does not cause the entire system to collapse – as is the case with many other smart home systems. The direct connection also increases data transmission speed to 50 to 150 milliseconds.

Robust

For the first time, Homematic IP Wired offers easy installation of fault-tolerant networks for a building bus system. In contrast to other bus systems, it works by means of a so-called ring topology: The bus is always connected from the Homematic IP Wired Access Point to the next device and finally back to the Access Point. If the wire is interrupted at one point of the ring, the topology automatically changes to two independent bus lines. This ensures that the devices remain in operation even in case of a cable error. During the installation, branches in this ring topology can be flexibly arranged. Even multiple loops are possible with Homematic IP Wired.

Secure

Homematic IP Wired offers a very high level of security. All products are encrypted and authenticated in the factory settings. The teach-in of new devices is cryptographically protected. At no point the customer will be asked to enter personal data. The system is completely anonymous and respects the privacy of its users in an exemplary way. At the same time, there is no risk of targeted attacks by data theft in the cloud. All Homematic IP Wired products for DIN rail mount are reviewed and awarded comprehensively, neutral and independently by the German Technical Association VDE regarding security, electromagnetic compatibility and the fulfilment of legal protection requirements.

Compatible

Most of the wired devices can be combined with more than 60 wireless Homematic IP components available. This allows the user to easily expand an "old" system by new devices. For larger houses, it is also possible to set up a decentralised distribution with one or more sub-distributions. Similar to the wireless devices, the communication of the bus system is based on the new generation of the standardised Internet Protocol IPv6. This is a major advantage, because it makes Homematic IP Wired an open platform that can be flexibly expanded with other devices.

Cost-effective

Homematic IP Wired offers great value for money: The innovative system helps to save money while, for the first time, it is possible to equip a house with smart home technology more cost-effective than with today's prevailing electrical technology. And all this without any quality impairments for the user. A complete house installation with Homematic IP in new buildings can be realised for less than €3,000. For comparison: A conventional installation typically costs between 10,000 and 35,000 Euro. These cost savings are made possible by a new software technology and most modern microelectronics.

SMART HOME AS OPPORTUNITY FOR SPECIALIST RETAILERS

Specialist companies hardly offer complex smart home solutions due to the work required. eQ-3 now offers the possibility with its new product line Homematic IP Wired to enter this field and maximise the profit. The system is fundamentally different from other smart home solutions and therefore suitable for installers as well as end customers.

Thanks to the advanced technology, planning, installation and configuration of the system are as easy as never before. Most specialist companies can take over these tasks after training and a brief instruction. For long-term configuration and system maintenance, additional services can be offered, ensuring further profit. The broad product spectrum of Homematic IP also offers many possibilities for extensions – both at initial installation, as well as for retrofitting at a later point in time.

Installation:

Homematic IP Wired devices are mounted on DIN rails in the distribution board. They are connected to the bus system with pre-assembled plug connectors. The rail-mounted devices have a width of only four module units, making the installation very flexible. The vertical wiring space between the devices is not restricted – this makes the installation faster, clearer, less error-prone and, above all, more secure. The correct wiring can be tested after installation without prior configuration and programming, directly at the device itself. The installation can be approved without any time delay.

Configuration:

Setting-up the Homematic IP Wired devices is very easy and can be done by any specialist after a training and brief instruction. The Central Control Unit CCU3 offers the opportunity to realise a basic configuration. After approving the installation, the password can be provided to the customer for further configuration. Many customers are interested in taking care of further configuration by themselves. Nevertheless, should problems arise, the specialist can easily provide support – also by remote maintenance.

For the customer, Homematic IP Wired is especially interesting because it is good value for money – in comparison even significantly cheaper than a normal electrical installation. Homematic IP Wired can help to save money in operations such as switching and dimming of light sources, controlling of floor heating systems and shutter control according to the sunlight. These sales arguments make it particularly easy for the installer to convince the customers by the benefits of the system. At the same time the installer can position himself as modern provider and gain competitive advantages. In this way, specialists can directly profit from the mega-trend smart home and the emerging industrial transformation of domestic electrical systems.

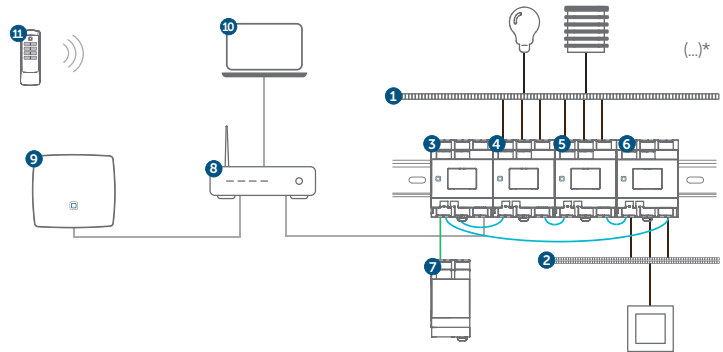


WHAT KIND OF CONFIGURATIONS ARE POSSIBLE?

The connection is established via the Homematic IP Wired Access Point either to the local smart home Central Control Unit in the house or the Homematic IP cloud service on the Internet. Specialist companies and customers can choose between two basic configuration variants:

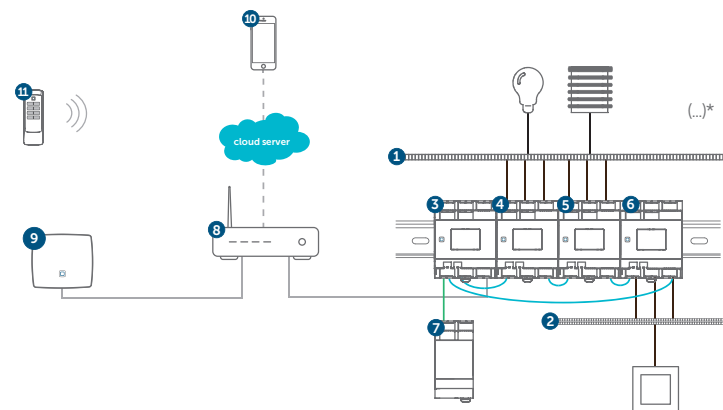
Control via Access Point and CCU3 with PC or remote control:

In this case, the installation and configuration is carried out locally with the smart home Central Control Unit CCU3 or, alternatively, the control unit of a Homematic IP partner. For configuration a web browser is used. Over VPN solutions in DSL/Internet routers or secure remote access solutions from partners, the system can be controlled from anywhere in the world.



Control of wireless and wired devices in combination with two connected Access Points of both variants:

Now it is possible to connect existing wireless Homematic IP systems with the wired version or to expand a Homematic IP Wired solution by wireless components. The devices are then controlled via the smartphone app or, thanks to the wireless Access Points, using a remote control.



Legend:

- 1) Installation terminal
- 2) Terminal strip for push-buttons/switch contact inputs, e.g. LSA
- 3) Homematic IP Wired Access Point
- 4) Homematic IP Wired Switch Actuator
- 5) Homematic IP Wired Blind Actuator
- 6) Homematic IP Wired Input Module – 16 channels/32 channels
- 7) 24 V power supply unit

- 8) Network router
- 9) Homematic IP CCU3 | Access Point
- 10) User interface WebUI via PC | Homematic IP smartphone app
- 11) a) CCU3: Integration of Homematic IP and/or Homematic wireless components
b) Access Point: Integration of Homematic IP wireless components
- (...)* exemplary illustration; flexible extension

- Bus connection cable
- Ethernet cable
- 24 V connection
- Input and load channels



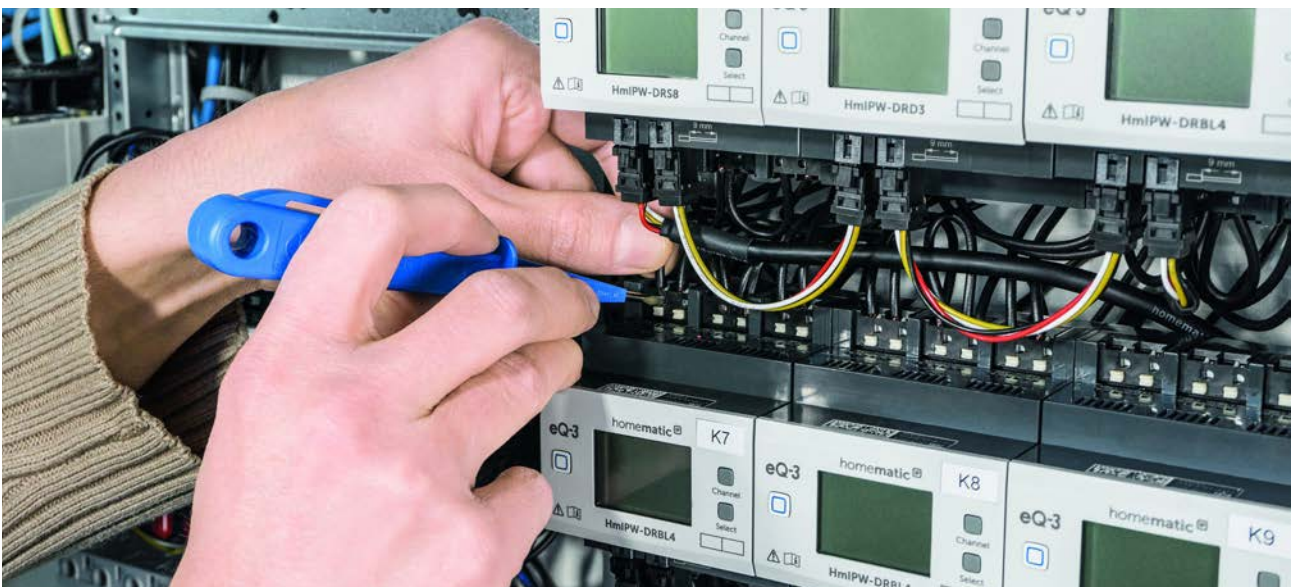
Central Control Unit for smart home professionals:

The CCU3 is the next generation of the tried and tested CCU and CCU2. It can be used in connection with an Access Point as an alternative to the cloud for local communication of devices in your own house. This cloud depended information exchange offers advantages such as greater stability and performance, as well as a higher speed.

INSTALLATION: CONNECTION OF MODULES AND SENSORS

Homematic IP Wired devices for DIN rail are connected with up to 16 or 32 buttons or switches. For installation outside of the distribution, standard flush-mounted push-buttons or switches can be used. This allows Homematic IP Wired to be integrated into brand switches of leading manufacturers. For the connection of input/output modules and sensors, the installer has three options that can be flexibly combined with each other:

- 1. Combination with the wireless Homematic IP solution:** Homematic IP Wired sensors and switches can be combined flexibly with any of the previous wireless solution. The location of the switches no longer needs to be defined in the construction phase, because wireless devices can be used at any time – even at later date. With Homematic IP Wired Switching and Dimming Actuators, light sources in the smart home can be switched on and off or dimmed. Shading elements such as shutters, blinds and awnings can be controlled depending on the current time or weather.
- 2. Installation with low-voltage inputs and switches:** Since the inputs are electrically isolated from the 230/400 Volt mains voltage, the wiring can be realised particularly easy and cost-effective with simple phone lines or low-voltage lines. Complicated opening of walls for NYM line slots can be avoided. This results in considerable cost advantages.
- 3. Installation of the Homematic IP Wired bus system throughout the building:** In this case, the Homematic IP Wired bus is not only installed in the electrical distribution board, but lead trough the house to sensors and input/output modules. A first Homematic IP Wired device for installation outside the distribution board is a module with six channels. Standard push-buttons and switches for flush-mounting can be connected.



HOMEMATIC IP AT A GLANCE

The Homematic IP product range is steadily growing. With its broad portfolio, the smart home system not only offers convenience in the everyday life, but also increases the security within your own four walls. Homematic IP can be expanded at any time – not only with products from the own range, but also with over 80 components of the origin Homematic system.



Climate control

Entering a warm bathroom in the morning – who wouldn't want that? The climate control devices of Homematic IP can be easily adjusted to personal preferences. This allows a high living comfort and energy cost savings of up to 30 percent at the same time. With the free app, individual heating profiles can be created for every single room. Afterwards, your heating will be controlled automatically and makes the everyday life easier.



Security & alarms

With Homematic IP security components, no burglar can enter unnoticed. In alarm mode, window and door contacts immediately inform about unusual activities. Motion and presence detectors reliably monitor the surroundings while sirens and smoke alarms trigger an alarm that cannot be ignored when detecting a burglar or fire. Just a quick glance at the own smartphone is all it takes for the house owner to see that everything is in the best order at home. In this way, owners can feel safe even when being away from home.



Light & shade

The right lighting makes the own house a cozy home. With Homematic IP, lights can be switched and dimmed easily and quickly from the sofa. In a few single steps the right mood for an evening in front of the TV is created. Devices for shutter and awning control create privacy and increase the security at the same time. Control via the app makes it possible to create individual heating profiles.






Weather & environment






The weather sensors are the latest highlight from the Homematic IP product range. With the weather sensors, the system is automatically adjusted to the current weather condition. The sensors measure external influences such as temperature, wind strength or rain, the system captures these data and evaluates them. In connection with other Homematic IP devices, the sensors trigger the automated moving of awnings or shutters, depending on the current weather. This actively protects the house from environmental influences.

















The Homematic IP products can be easily and conveniently controlled via Google Assistant or Amazon Alexa. Voice commands offer intuitive operation of the smart home.

Gateways & control units		Part no.
	Access Point HmIP-HAP	140887A0
	Smart Home Central Control Unit CCU3 HmIP-CCU3	151965A0

Security & alarms		Part no.
	Motion Detector with Brightness Sensor – indoor HmIP-SMI	142722A0
	Passage Sensor with Direction Recognition HmIP-SPDR	151159A0
	Window and Door Contact – optical HmIP-SWDO	140733A0
	Window / Door Contact – invisible installation HmIP-SWDO-I	151039A0
	Window Handle Sensor HmIP-SRH	142800A0
	Smoke Alarm with Q-label HmIP-SWSD	142685A0
	Alarm Siren HmIP-ASIR	142801A0
	Water Sensor HmIP-SWD	151694A0

Shutter Control		Part no.
	Shutter Actuator for brand switches HmIP-BROLL (500 VA)	151322A0
	Shutter Actuator – flush-mount HmIP-FROLL (500 VA)	151347A0
	Blind Actuator for brand switches HmIP-BBL (500 VA)	151333A0
	Blind Actuator – flush-mount HmIP-FBL (500 VA)	151398A0
	Light Sensor – outdoor HmIP-SLO	151566A0




Weather & the environment		Part no.
	Temperature and Humidity Sensor – outdoor HmIP-STHO	150573A0
	Temperature and Humidity Sensor – outdoor, anthracite HmIP-STHO-A	150574A0
	Weather Sensor – basic HmIP-SWO-B	152056A0
	Weather Sensor – plus HmIP-SWO-PL	152057A0
	Weather Sensor – pro HmIP-SWO-PR	151821A0









Climate Control		Part no.
	Radiator Thermostat HmIP-eTRV-2	140280A0
	Radiator Thermostat – compact HmIP-eTRV-C	151239A0
	Wall Thermostat with Humidity Sensor HmIP-WTH-2	143159A0
	Wall Thermostat with switching output – for brand switches HmIP-BWTH (1 A)	150628A0
	Wall Thermostat with switching output – for brand switches, 24 V HmIP-BWTH24 (1 A)	150697A0
	Temperature and Humidity Sensor with display – indoor HmIP-STHD	150180A0
	Temperature and Humidity Sensor – indoor HmIP-STH	150181A0
	Floor Heating Actuator – 10 channels, 230 V HmIP-FAL230-C10	142981A0
	Floor Heating Actuator – 6 channels, 230 V HmIP-FAL230-C6	142974A0
	Floor Heating Actuator – 10 channels, 24 V HmIP-FAL24-C10	143238A0
	Floor Heating Actuator – 6 channels, 24 V HmIP-FAL24-C6	143237A0
	Transformer for Floor Heating Actuators, 24 V HmIP-FAL24-TR (36 VA)	150646A0
	Multi IO Box HmIP-MIOB	142988A0
	Switch Actuator for heating systems – 2 channels HmIP-WHS2	150842A0



Light control		Part no.
	Pluggable Dimmer – trailing edge HmIP-PDT (3 - 80 VA)	150327A0
	Dimming Actuator for brand switches – trailing edge HmIP-BDT (3 - 80 VA)	143166A0
	Dimming Actuator flush-mount – trailing edge HmIP-FDT (3 - 80 VA)	150609A0
	Motion Detector with Brightness Sensor – outdoor HmIP-SMO	142809A0
	Motion Detector with Brightness Sensor – outdoor, anthracite HmIP-SMO-A	150320A0
	Presence Sensor – indoor HmIP-SPI	150587A0
	Motion Detector for 55mm frames – indoor HmIP-SMI55	151769A0

Starter sets		Part no.
	Starter Set Climate Control HmIP-SK1	142546A0
	Starter Set Smoke Alarm HmIP-SK4	150788A0
	Starter Set Shutter Control HmIP-SK5	151670A0
	Starter Set Light HmIP-SK6	151671A0
	Starter Set Alarm HmIP-SK7	153348A0
	Starter Set Water Alarm HmIP-SK8	153405A0










Switching & metering		Part no.
	Pluggable switch HmIP-PS (16 A)	141836A0
	Pluggable Switch and Meter HmIP-PSM (16 A)	140666A0
	Switch Actuator and Meter for brand switches HmIP-BSM (5 A)	142720A0
	Switch Actuator for brand switches – with signal lamp HmIP-BSL	152020A0
	Switch Actuator and Meter – flush-mount HmIP-FSM (5 A)	142721A0
	Switch Actuator and Meter (16 A) – flush-mount HmIP-FSM16 (16 A)	150239A0
	Switch Circuit Board HmIP-PCBS (potential-free switching contact)	150776A0









Remote controls & push-buttons		Part no.
	Wall-mount Remote Control – 2 buttons HmIP-WRC2	140665A0
	Wall-mount Remote Control – 6 buttons HmIP-WRC6	142308A0
	Wall-mount Remote Control for brand switches – 2 channels HmIP-BRC2	152000A0
	Key Ring Remote Control – 4 buttons HmIP-KRC4	140740A0
	Key Ring Remote Control – alarm HmIP-KRCA	142562A0
	Remote Control – 8 buttons HmIP-RC8	142307A0
	Garage Door Controller HmIP-WGC	150586A0
	Contact Interface flush-mount HmIP-FCI1	153489A0

Wired		Part no.
	Wired Access Point HmIPW-DRAP	152465A0
	Wired Blind Actuator – 4 channels HmIPW-DRBL4	152431A0
	Wired Dimming Actuator – 3 channels HmIPW-DRD3	152626A0
	Wired Input Module – 16 channels HmIPW-DRI16	152250A0
	Wired Input Module – 32 channels HmIPW-DRI32	152263A0
	Wired Switch Actuator – 4 channels HmIPW-DRS4	152419A0
	Wired Switch Actuator – 8 channels HmIPW-DRS8	151677A0
	Wired IO Module flush-mount – 6 channels HmIPW-FIO6	152482A0
	Wired Bus Cable Connector HmIPW-BCC	153390A0
	Wired Bus Connection Cable – 10 cm HmIPW-BC10	153704A2
	Wired Bus Connection Cable – 22 cm HmIPW-BC22	153706A2
	Wired Bus Connection Cable – 39 cm HmIPW-BC39	153709A2
	Wired Bus Connection Cable – 62 cm HmIPW-BC62	153712A2

Exclusive for EU

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Wired Access Point
www.VDEinfo.com
ID. 40048603

Accessory components	Part no.
 Desk Stand HmIP-DS55	141743A0
 Power Supply Unit for brand switches HmIP-BPS	151197A0
 Button Rocker for brand switch systems – universal HmIP-BRU	153003A0
 Button Rocker for brand switch systems – with arrows HmIP-BRA	153001A0
 Clip-on frame – small HmIP-SF-2	151996A0
 DIN-Rail Adapter for Multi IO Box HmIP-DRA	150123A2
 Disassembly Protection – compact, set of 5 HmIP-eTRV-C-TP	153740A1
New!  Valve Drive 230 V 24 V	170016/ 170017
 Valve adapter VA80 for valve drives, 5 pcs.	154373A2

Accessory components	Part no.
 Inrush Current Limiter ESB1	130366
 Adapter set Danfoss	76146
 Adapter Herz, Comap (M28 x 1,5)	76030
 Adapter Oventrop	76029
 Adapter Vaillant	76028
 Theft protection for radiator thermostats	103012
 Adapter Berker (B1) 1 piece set of 20	103094A2 103094A1
 Adapter Berker (B2) 1 piece set of 20	103263A2 103263A1
 Adapter Busch-Jaeger 1 piece set of 20	103090A2 103090A1

Accessory components	Part no.
 Adapter Düwi 1 piece set of 20	103097A2 103097A1
 Adapter Gira 55 1 piece set of 20	103091A2 103091A1
 Adapter Gira Standard 1 piece set of 20	103092A2 103092A1
 Adapter Jung (J1) 1 piece set of 20	103095A2 103095A1
 Adapter Jung (J2) 1 piece set of 20	103478A2 103478A1
 Adapter Kopp 1 piece set of 20	103096A2 103478A1
 Adapter Merten 1 piece set of 20	103093A2 103093A1
 Adapter ELSO Joy 1 piece set of 20	152993A2 152993A1

A list of all matching switch series to our adapters can be found in the data sheet or online at www.homematic-ip.com.

For further information about international product variants please refer to www.homematic-ip.com

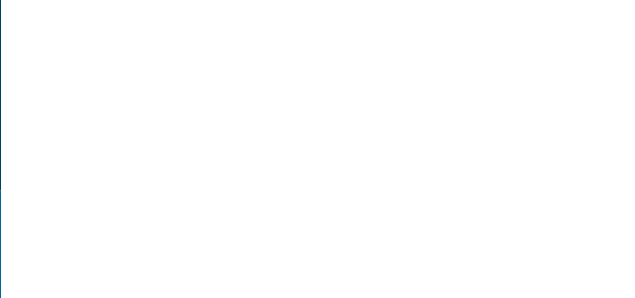
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