

A photograph of two men from behind, looking at a wall covered with various smart home devices. The wall is blue and has many small water droplets on it. The devices include smart switches, smart outlets, and smart displays. Some displays show temperature readings like 23.5, 23.7, 23.6, and 53.3. The man on the left is wearing a dark shirt, and the man on the right is wearing a grey jacket.

Manage the invisible

PRODUCT CATALOGUE

Welcome to our product catalogue

We want to be the easiest company to work with

A product catalogue is more than a list of devices; it is a toolkit for your daily operations.

At Produal, we design and manufacture sensible, high-performing devices for building automation and HVAC. Our products are built to deliver accurate measurement, reliable control and seamless integration, helping you improve indoor conditions, optimise energy use and keep building performance on track.

What makes our offering strong is not only the quality of our devices, but also the way we work. We manage the supply chain, develop our solutions with care and support our customers with agile, reliable service throughout the journey. From specification and selection to installation, commissioning and lifecycle support, we want to be the easiest company to work with.

We never compromise on safety or sustainability. We prioritise the well-being of people and partners, the safety of our products, operations and users. Together we make decisions that reduce the environmental impact of buildings.

This is how we deliver high quality.

With customer-centric collaboration and operational excellence, we create value through sensible solutions, responsive service and dependable processes. Guided by honesty, curiosity and joy, we work openly, keep our promises and continuously refine our operations and products to meet changing customer needs.

Manage the invisible.



subsidiary



partner/distributor

Produal ProTemp® Technology

Always the right indoor temperature

Our factories in Finland are ISO 9001 and 14001 certified.



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We give buildings the ability to sense and help projects succeed

We develop and produce user-friendly measurement and control devices for building automation and the HVAC industry as well as for the specific needs of OEMs.

Control & comfort for all room spaces

°C, rH, CO₂, VOC, PM, PIR



Outdoor circumstances

lx, rH, ☀, °C, H₂O



Technical spaces, warehouses & industrial facilities

Pa, bar, m/s, m³/s, °C, rH, CO₂, VOC, CO



R&D

Our extensive R&D team focuses on innovative digital solutions and customised products.



Manufactured in-house

We design, manufacture and market measurement and room control devices to our partners, OEMs and system integrators.



Local service, global distribution

Solution-oriented service ensures flexibility, efficiency, and fast delivery. Our experts support you from design to implementation.



Sensible measurement and control solutions for OEMs

Our solutions combine the right devices with accurate data communication. By working closely with our partners, we help develop intelligent, reliable and sustainable buildings – from everyday spaces to industry-specific facilities.

An extensive offering and training service

Our product portfolio covers a complete range of measurement and control solutions – from rooms and ducts to structures and outdoor environments. To ensure full potential of the solutions we offer both classroom training and modified training modules to match your specific competence development needs.

Agile adaptation service

Our adaptation service includes a wide range of solutions to speed up your building automation projects, to match the visual appearance of products to specific requirements, or to add additional logos or markings to products.

- ▶ White labelling, additional stickers and markings (e.g. position marking)
- ▶ Pre-configuration of controllers and bus products, pre-setting of valves
- ▶ Adjustment of cable or probe length
- ▶ Calibration certificates
- ▶ Modification of the software functionality
- ▶ Special colouring of the products

Our sales is happy to help with pricing and order quantity questions.



HVAC | Air handling units
Fan coil units



Air extraction units
Spray booths



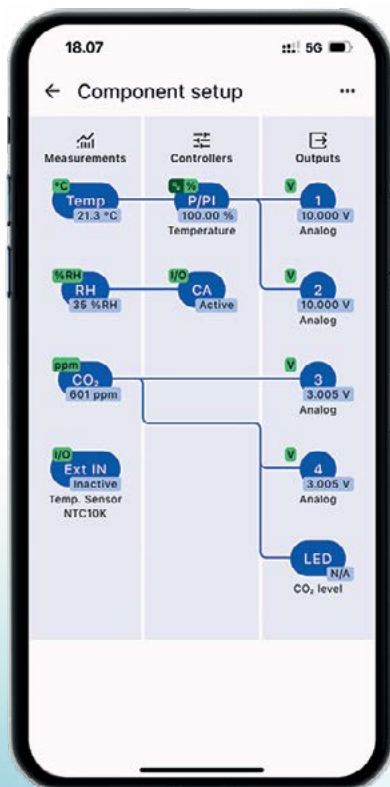
Cleanrooms | Pharmaceutical
Isolators | Glove Boxes

Quick and easy configuration with MyProdual



MyProdual – the revolution in implementation

MyProdual app provides more possibilities than ever to manage and control all our next-generation products, such as RTX, RCX, CU, and wireless product families.



Control complex setups effortlessly

Visualised device configuration gives you a clear overview and makes even complex applications easier to understand and configure.

MyProdual projects make it easy to share installations within your organisation and efficiently manage larger numbers of devices, including wireless installations.

The MyProdual browser version provides a new way to manage your projects and products. Create projects and prepare configurations in advance, so installers can easily transfer the required configurations to devices in the field.

Coming soon: manage, configure and update devices in the field via Modbus RTU with MyProdual for Windows 11.

Quick access to device configurations and history

The latest device configurations are always available in the cloud, making it easy to verify installations remotely. All configuration changes are saved, providing a clear history of each device.

Configure the RTX-D display your way

With MyProdual, you can easily configure the RTX-D display and choose what information is shown on the screen to suit your application.



“

We designed the MyProdual user interface with usability in mind.

Mikko Sinisalo Sales Director
Antti Salli Product Manager

► Download the app or register at MyProdual.com



Controllers

A wide range of multifunctional and reliable controllers is available for all types of building automation applications, from chilled beams, radiators and fan coils to VAV and beyond. Our range covers single-room or zone control, integration with intelligent building automation systems and interoperability with overall smart building management in larger or smaller scale applications. Our selection and designs cater to all budgets, covering both bus and stand-alone products.

The room controllers include all intelligence and connections in the same unit, covering various controller types for different requirements, with an add-on sensor, button capability and full-screen touch display. Touchscreen controllers have an additional light and blinds control interface.

Our control units cover controllers for false ceiling mounting or other hidden installations, minimising the need for cables run through walls, and universal controllers for a wide range of applications in heating, ventilation, pressure, and humidity control.

The user-friendly room units are available for various needs and budgets, from high-class applications to simple yet stylish solutions. Add-on capabilities for the desired functions in one housing remove the need for separate sensors in the room and make the systems flexible and future-proof.

Please note that most of our transmitters are equipped with control output and can be used as single-sequence controllers for heating/cooling or ventilation.



Control unit CU



Control unit CU-LH



Room unit RU



Room unit ROU



Touchscreen room controller TRC



Room controller XRC-D

Room controllers

New!

XRC-D

- T, rh%, CO₂, PIR, 3 x inputs, 4 x outputs
- Produal ProTemp® patented temperature compensation
- ± 0.3 °C temperature accuracy
- IQS Index (Installation Quality Score)
- 3 independent P/PI controllers
- intuitive 2.8" multicolour touchscreen display
- customizable user interface
- commissioning with MyProdual or Modbus
- standard application: cool, heat, 3-step EC fan, VAV
- galvanic isolated RS-485 (Modbus)



Indoor air eXperience

- The most accurate temperature measurement on the market
- Flexible configuration options
- Modern design and touchscreen display
- Easy commissioning

Room controllers

TRC



TRC touchscreen room controllers have been designed for climate control in room spaces. The controllers have up to two heating and cooling temperature control stages, fan speed control, optional CO₂ level control and humidity control. The units can be used in various climate control applications, fan coil units, chilled ceilings and zone heating/cooling systems. Light and blinds control are also available. The devices provide accurate energy saving PI control and an intuitive, slim line 3.5" colour touchscreen interface.



Temperature measurement range	0...50 °C
Temperature measurement accuracy	±0.5 °C (25 °C)
Mounting	on a flush mounting box (60 mm hole distance)
Materials	PC plastic



Read more



Watch video



Ordering guide		Type	0	1	2	3	4	5	6
0 Touchscreen room controllers			6001						
1 Device type	Room controller, 2RI/DI, 1DI, 3AO	TRC-3A	C						
	Room controller, 1RI/DI, 1DI, 2AO, 3RO, 7A	TRC-H-2A3R	E						
	Room controller, 2RI/DI, 1DI, 1AO, 2DO	TRC-1A2T	F						
	Room controller, 2RI/DI, 1DI, 3RO, 2DO, 7A	TRC-H-3R2T	H						
	Room controller, 2RI/DI, 1DI, 1AO, 2RO, 7A	TRC-H-1A2R	V						
2 Communication	Modbus RTU	-MOD		M					
	BACnet MS/TP	-BAC		B					
3 Power supply	24 Vac/dc (not available for TRC-H-1A2R)	-24				2			
	90...250 Vac (only TRC-H-1A2R)	-230				M			
4 Additional measurements	No additional measurement						0		
	Relative humidity	-RH					1		
	CO ₂	-CO ₂					2		
	Relative humidity and CO ₂	-RH-CO ₂					3		
5 Advanced options	No advanced options							0	
	0...10 Vdc input(s) (replaces existing RI input(s))	-AI						1	
	Control extension	-CE						2	
	0...10 Vdc input(s) (replaces existing RI input(s))								2
	+ Control extension	-AI-CE						3	
6 Body colour	White (RAL 9010)	-W							W
	Black (RAL 8022)	-B							B

Ordering guide explanation:

RI resistance input
DI digital input

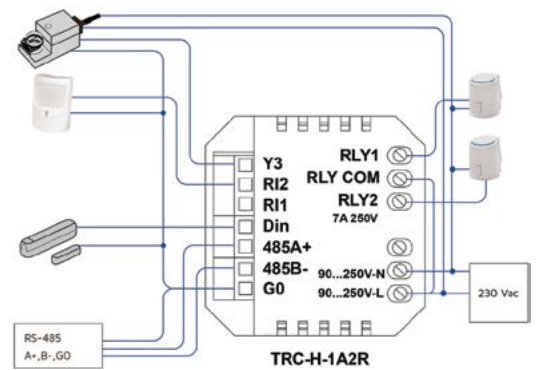
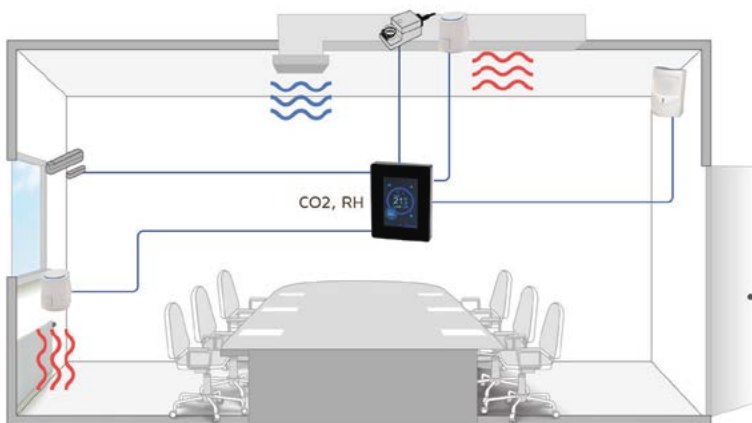
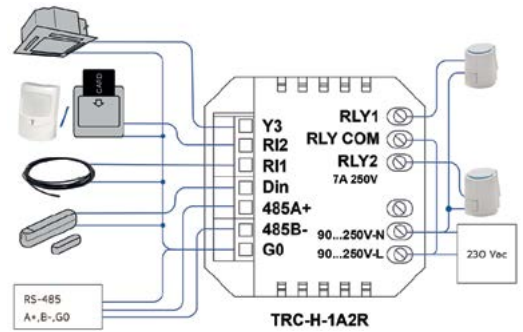
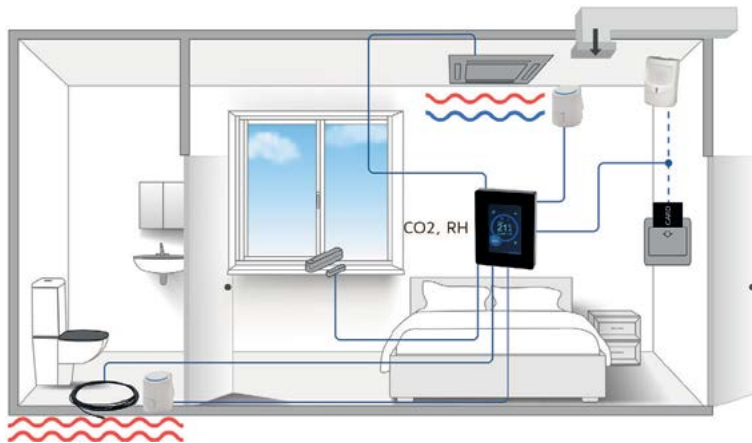
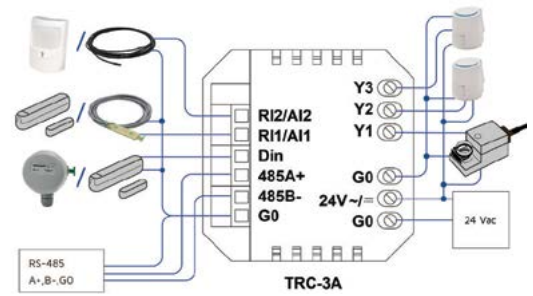
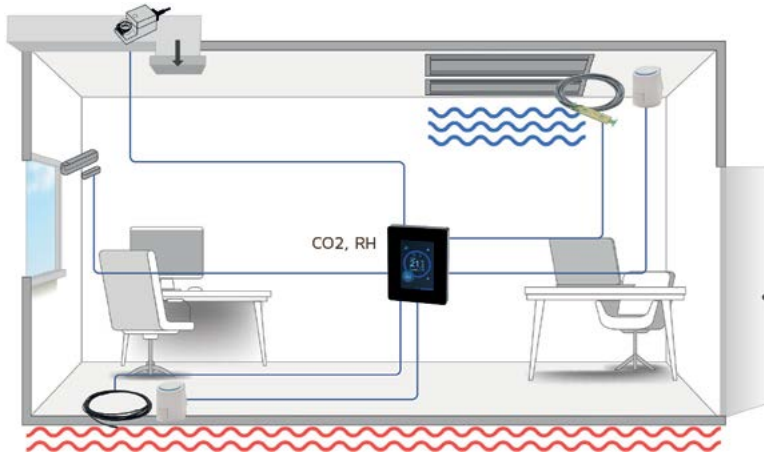
RO relay output (230 V)
AO analogue output (0...10 Vdc)

DO PWM output (24 Vac)

TOOLS

SW-DCT-USB	1139040	configuration cable
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Room controllers



Room controllers

TRC-A-3A



24 V

IP20

0...50 °C

0...95 %rH

rH

CO₂

The TRC-A-3A series room controllers have been designed for apartment climate control. They have a sharp, slim-line 3.5" colour touchscreen interface. The controllers have heating and/or cooling controls with summer/winter change-over. With the Home / Away / Boost operation button, the user can set the apartment conditions to the required state with a simple press of a button. Combined with extractor fans, the TRC-A-3A series controllers can control the supply and extract air flow in the apartment, maintaining comfortable and correctly pressurized climatic conditions in all operating conditions. Available with both Modbus RTU and BACnet MS/TP communication.



Consumption data view is a new feature available in -CD models. This view can display, for example, water, energy and heating consumption details to the user. The BMS system reads this data from the different sensors in the building and sends it to the TRC-A-3A controller via Modbus or BACnet.



Read more



Watch video



Temperature measurement range	0...50 °C
Temperature measurement accuracy	±0.5 °C (25 °C)
Mounting	on a flush mounting box (60 mm hole distance)
Materials	PC plastic

Ordering guide		Type	0	1	2	3	4	5	6
0 Touchscreen room controllers			6001						
1 Device type	Touchscreen apartment controller, 2RI, 1DI, 3AO	TRC-A-3A		B					
2 Communication	Modbus RTU	-MOD			M				
	BACnet MS/TP	-BAC			B				
3 Power supply	24 Vac/dc	-24				2			
4 Additional measurements	No additional measurement						0		
	Relative humidity	-RH					1		
	CO ₂	-CO ₂					2		
	Relative humidity and CO ₂	-RH-CO ₂					3		
5 Advanced options	No advanced options							0	
	0...10 Vdc inputs, replace existing RI inputs	-AI						1	
	Consumption data view	-CD						5	
6 Body colour	White (RAL 9010)	-W							W
	Black (RAL 8022)	-B							B

Ordering guide explanation:

RI resistance input

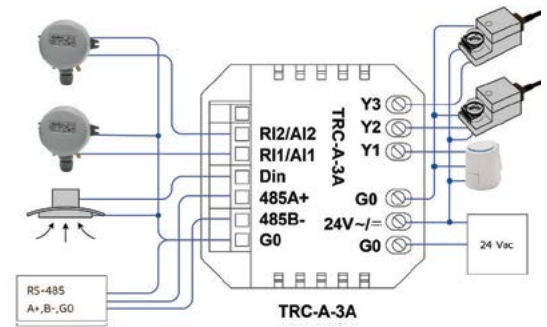
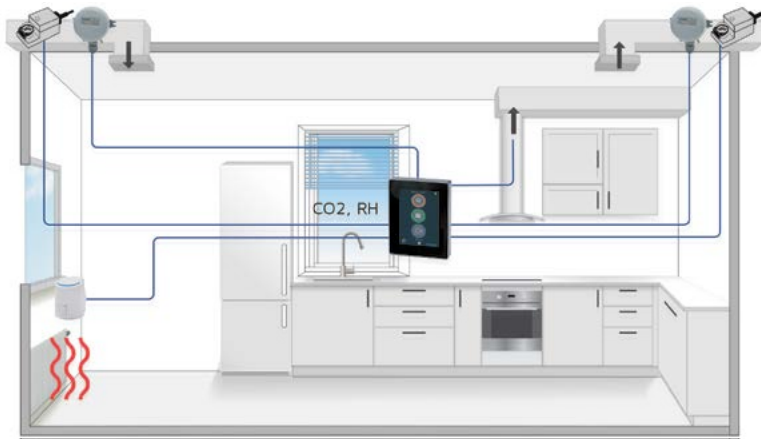
DI digital input

AO analogue output (0...10 Vdc)

TOOLS

SW-DCT-USB	1139040	configuration cable
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Room controllers



Room controllers

TRC-P



TRC-P touchscreen room controllers have been designed for climate control in room spaces. The controllers have up to two heating and cooling temperature control stages, fan speed control, optional CO₂ level control and humidity control, and 7-day clock for scheduling operation modes. The units can be used in various climate control applications, fan coil units, chilled ceilings and zone heating/cooling systems. Light and blinds control are also available. The devices provide accurate energy saving PI control and an intuitive, slim line 3.5" colour touchscreen interface.



Temperature measurement range	0...50 °C
Temperature measurement accuracy	±0.5 °C (25 °C)
Mounting	on a flush mounting box (60 mm hole distance)
Materials	PC plastic



Read more



Watch video



Ordering guide		Type	0	1	2	3	4	5	6
0 Touchscreen room controllers			6001						
1 Device type	Room controller, 2RI/DI, 1DI, 3AO, schedule	TRC-P-3A		N					
	Room controller, 1RI/DI, 1DI, 2AO, 3RO, 7A, schedule	TRC-P-H-2A3R		Q					
	Room controller, 2RI/DI, 1DI, 1AO, 2DO, schedule	TRC-P-1A2T		R					
	Room controller, 2RI/DI, 1DI, 3RO, 2DO, 7A, schedule	TRC-P-H-3R2T		T					
	Room controller, 2RI/DI, 1DI, 1AO, 2RO, 7A, schedule	TRC-P-H-1A2R		X					
2 Communication	Modbus RTU	-MOD			M				
	BACnet MS/TP	-BAC			B				
3 Power supply	24 Vac/dc (not available for TRC-P-H-1A2R)	-24				2			
	90...250 Vac (only TRC-P-H-1A2R)	-230				M			
4 Additional measurements	No additional measurement						0		
	Relative humidity	-RH					1		
	CO ₂	-CO2					2		
	Relative humidity and CO ₂	-RH-CO2					3		
5 Advanced options	No advanced options							0	
	0...10 Vdc input(s) (replaces existing RI input(s))	-AI						1	
6 Body colour	White (RAL 9010)	-W							W
	Black (RAL 8022)	-B							B

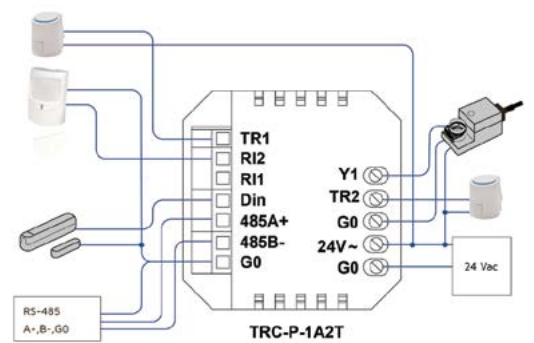
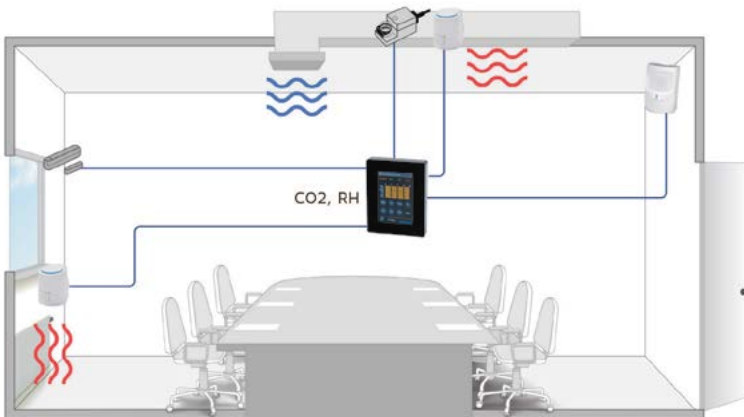
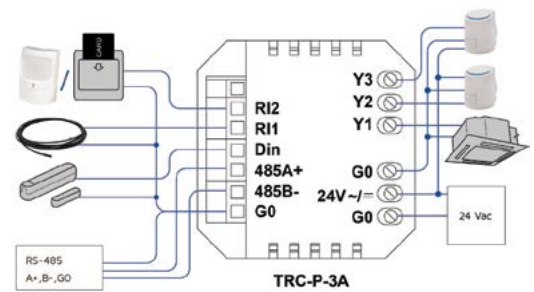
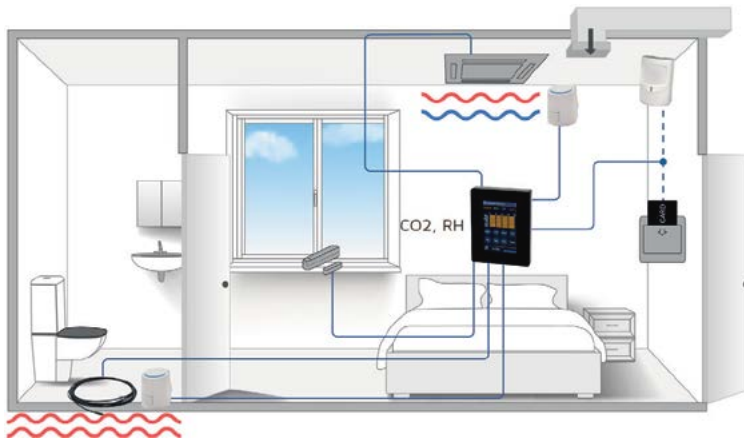
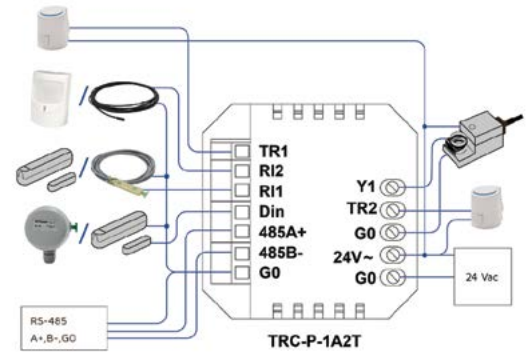
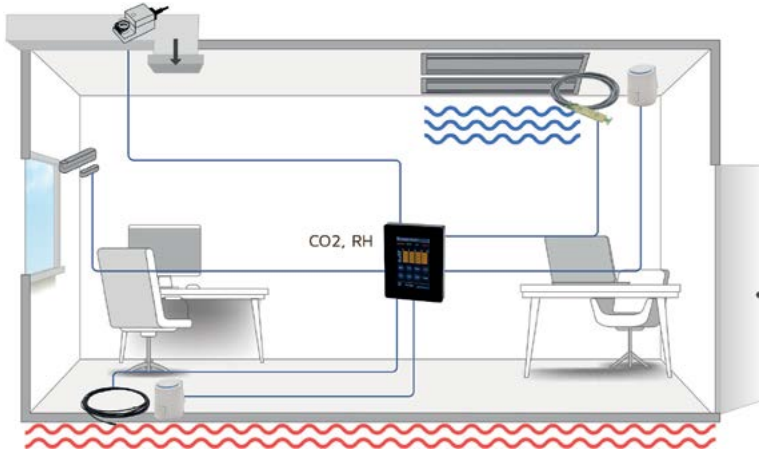
Ordering guide explanation:

RI resistance input	RO relay output (230 V)	DO PWM output (24 Vac)
DI digital input	AO analogue output (0...10 Vdc)	

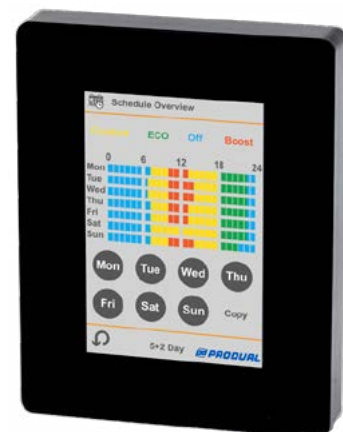
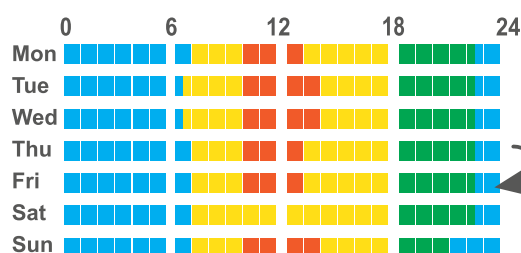
TOOLS

SW-DCT-USB	1139040	configuration cable
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Room controllers



Comfort ECO Off Boost



Room controllers

HLS 44, HLS 45



24 V

IP20

0...50 °C

0...85 %rH

CO₂

HLS 44 multifunctional controller family is specifically designed for individual room temperature and zone control applications. All controllers include the basic control functionalities, such as temperature, VAV, and fan control. The controllers have a built-in, galvanic isolated RS-485 channel for Modbus RTU communication.

HLS 44-SE includes advanced functionalities, e.g., 6-way valve control, adjustable 3-speed fan voltages, dimming the display with a timer, and changing the display to show + and - instead of the set temperature (relative setpoint adjustment).

All HLS 44 product variants can be ordered with our adaptation service. With the service you can order the product preconfigured with all the settings that are required by the application.

HLS 45 is excellent for both 2-pipe FCU and floor heating and cooling applications.


[Read more](#)

[Watch video](#)


CO ₂ measurement range	0...2000 ppm
Temperature measurement accuracy	±0.5 °C
CO ₂ measurement accuracy	typ. ±40 ppm +3 % of value
Mounting	with screws on wall or on a junction box (hole distance 60 mm)
Materials	ABS plastic
Product dimensions (w x h x d)	87 x 86 x 32 mm

TYPE	PRODUCT NO.	
HLS 44-CO ₂	1150370	room temperature controller, Modbus communication, built-in CO ₂ sensor
HLS 44-SE	1150400	room temperature controller, Modbus communication
HLS 44-V	1150260	room temperature controller, Modbus communication, lighting control
HLS 44-3P	1150280	room temperature controller, Modbus communication, 3-point actuator control
HLS 45	1150270	room temperature controller, Modbus communication, floor heating and cooling control

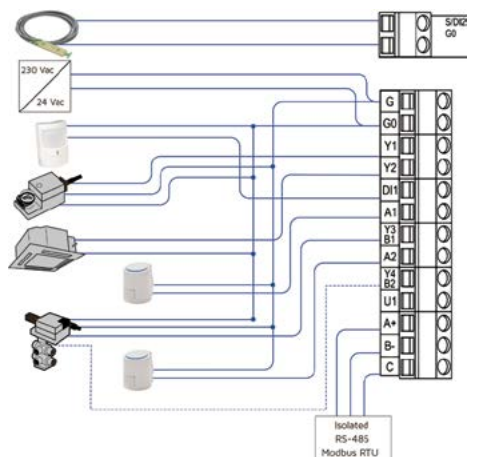
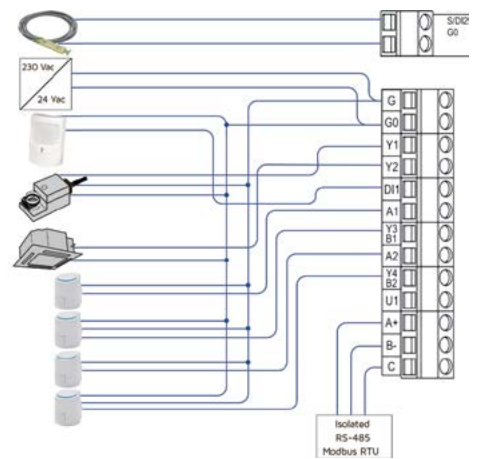
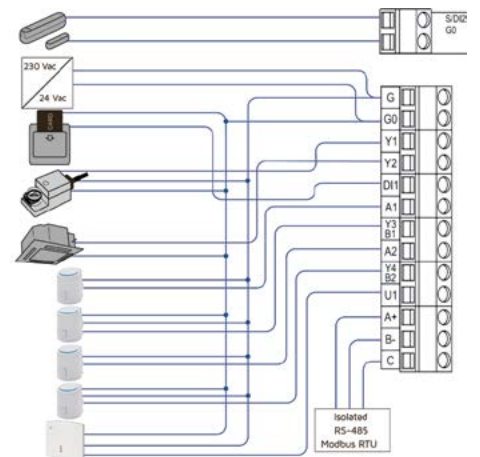
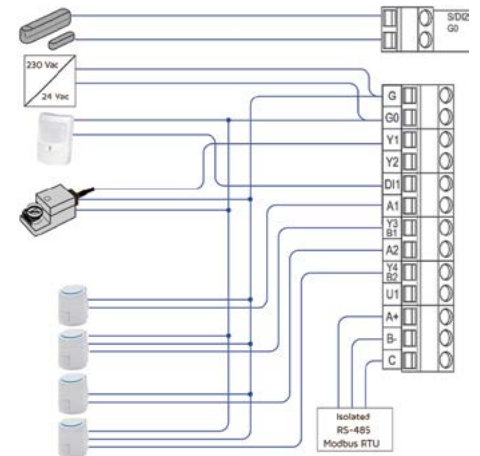
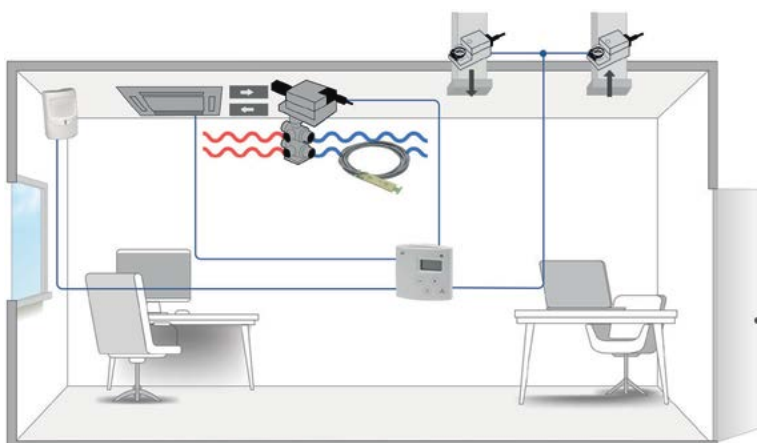
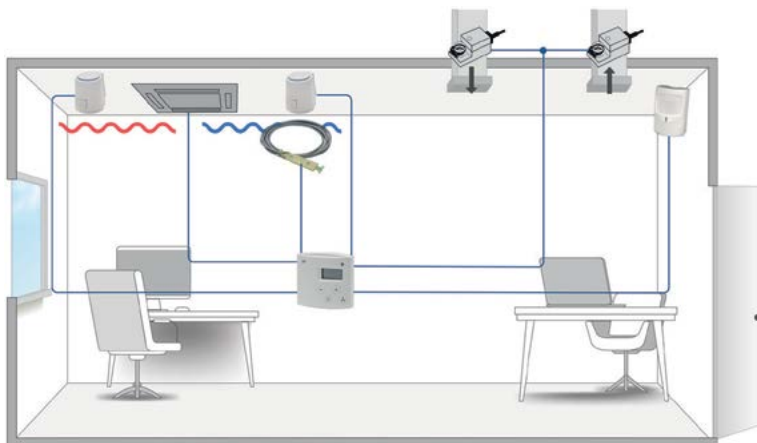
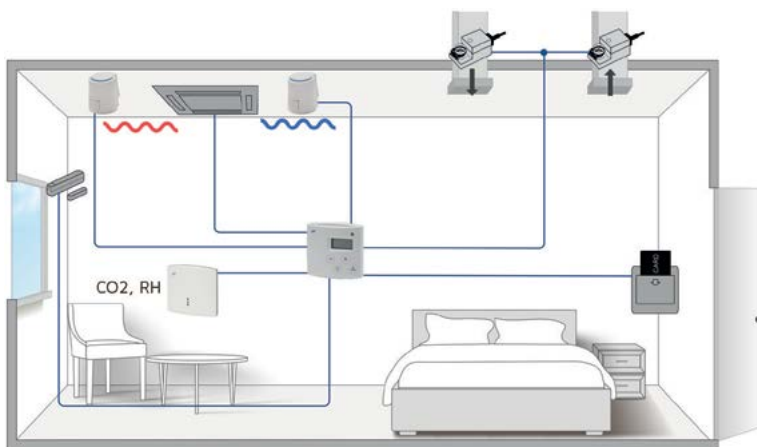
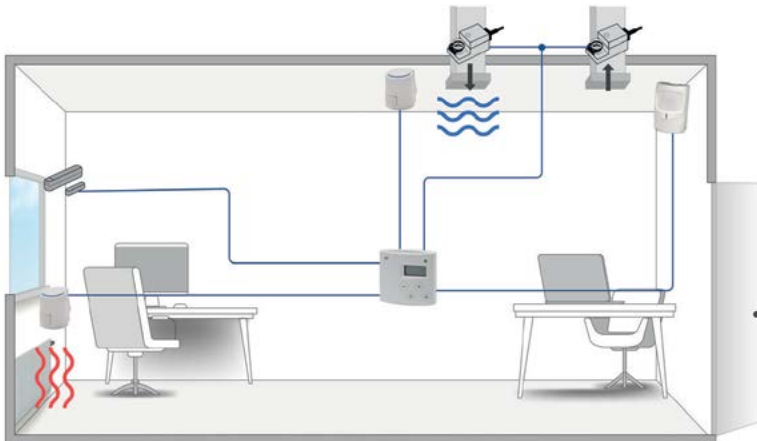
TOOLS

HLS 44-SER	1150251	configuration tool for HLS 44-V
HLS 45-SER	1150271	configuration tool for HLS 45
HLS 44-3P-SER	1150281	configuration tool for HLS 44-3P
HLS 44-CO ₂ -SER	1150371	configuration tool for HLS 44-CO ₂
HLS 44-SE-SER	1150401	configuration tool for HLS 44-SE

OPTIONS

RYVA16	1183060	relay for fluorescent lamps, 10 A (inrush current < 80 A, < 2,5 ms)
FCRY 3	1183070	fan coil relay, input 0...10 Vdc
TH5	1183090	driver for thermal actuators, 5 outputs

Room controllers



Room controllers

HLS 44-SE-P



24 V

IP20

0...50 °C

0...85 %rH



HLS 44-SE-P is the latest arrival to the HLS 44 multifunctional controller family. As the other tried-and-true members of this family, it is designed for individual room temperature and zone control applications. Unlike the other models, HLS 44-SE-P has a potentiometer for easy setpoint adjustment. The controller includes the basic control functionalities, such as temperature, VAV and fan control. It supports 0...10 V controlled actuators and/or thermal actuators, and 0...10 V controlled dampers.

The controller also has day and night operating modes. These operating modes can be controlled by an external card switch, occupancy detector and via Modbus. The controller has a built-in, galvanic isolated RS-485 channel for Modbus RTU communication.


[Read more](#)


Setpoint	18...26 °C, ±3 °C (day mode), 8...50 °C (night mode)
Temperature measurement range	0...50 °C
Temperature measurement accuracy	±0.5 °C
Voltage input	1 x 0...10 Vdc
Resistive input	1 x NTC10 / DI
Voltage output	4 x 0...10 Vdc, 2 mA
Triac output	2 x 24 Vac, 1 A
Mounting	with screws on wall or on a junction box (hole distance 60 mm)
Materials	ABS plastic
Product dimensions (w x h x d)	87 x 86 x 33 mm

TYPE	PRODUCT NO.	
HLS 44-SE-P	1150440	room temperature controller, Modbus communication, white
HLS 44-SEB-P	1150460	room temperature controller, Modbus communication, black
TOOLS		
HLS 44-SE-SER	1150401	configuration tool for HLS 44-SE
OPTIONS		
FCRY 3	1183070	fan coil relay, input 0...10 Vdc
TH 5	1183090	driver for thermal actuators, 5 outputs

Room controllers

HLS 33



HLS 33 is a room temperature controller with 2 or 3 stages. One stage is for heating and up to two stages for cooling. The controllers can be used with 0...10 V, 3-point or thermal (PWM) actuators.

Temperature measurement range	0...50 °C
Temperature measurement accuracy	±0.5 °C
Voltage output	2 x 0...10 Vdc, 2 mA, for heating and cooling
Triac output	2 x 24 Vac, 1 A, 0,6 A cont. / 1 A max, for heating and cooling
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	ABS plastic
Product dimensions (w x h x d)	86 x 86 x 32 mm



[Read more](#)



TYPE	PRODUCT NO.	
HLS 33	1150090	room controller, internal temperature sensor
HLS 33-N	1150091	room controller with display, internal temperature sensor
HLS 33-EXT	1150092	room controller, for an external NTC10 temperature sensor
HLS 33-N-EXT	1150093	room controller with display, for an external NTC10 temperature sensor

OPTIONS

TH 5	1183090	driver for thermal actuators, 5 outputs
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Smart thermostats

TRT



230 V

24 V

IP20

0...50 °C

0...95 %rH



The slim design of the flush-mounted TRT smart thermostat gives a modern look and feel to heating or cooling control applications. TRT series thermostats have a 3.5" backlit colour touchscreen and provide a wide range of power options. The MOD models have built-in Modbus RTU communication. The BAC models provide BACnet MS/TP communication. TRT smart thermostats can also be used as lighting and/or air conditioning interfaces. The thermostats are also available with 7-day schedule with multiple setpoints.



Temperature measurement range	0...50 °C
Temperature measurement accuracy	±0.5 °C (25 °C)
Digital input	1x potential free input
Resistive input	2x NTC 10 or potential free digital input
Relay output	230 Vac, 7 A (res.) / 1.3 A (inductive) or 115 Vac, 7 A (res.) / 2.2 A (inductive)
Mounting	on a flush mounting box (60 mm hole distance)
Materials	PC plastic
Product dimensions (w x h x d)	88 x 112 x 43 mm

[Read more](#)


Ordering guide		Type	0	1	2	3	4	5	6
0 Touchscreen room thermostats			6001					0	
1 Device type	Room thermostat, 2RI/DI, 1DI, 1RO	TRT-1R		1					
	Room thermostat, 2RI/DI, 1DI, 1RO, 7-day schedule	TRT-P-1R		2					
2 Communication	Modbus RTU	-MOD			M				
	BACnet MS/TP	-BAC			B				
3 Power supply	24 Vac/dc	-24				2			
	90...250 Vac	-230				M			
4 Additional measurements	No additional measurement						0		
	Relative humidity	-RH					1		
5 Reserved								0	
6 Body colour	White (RAL 9010)	-W							W
	Black (RAL 8022)	-B							B

Ordering guide explanation:

RI resistance input

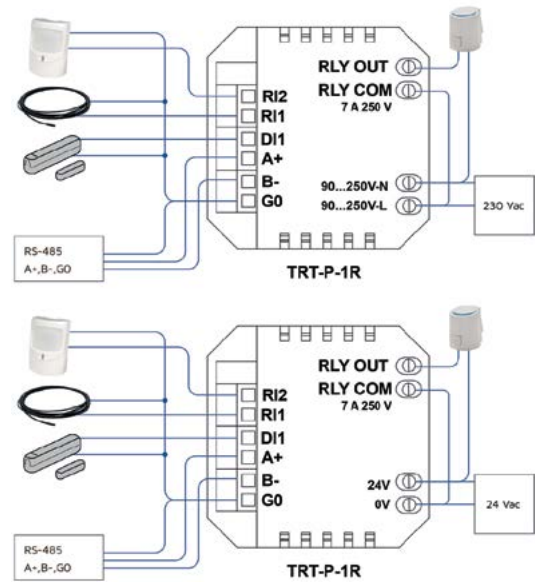
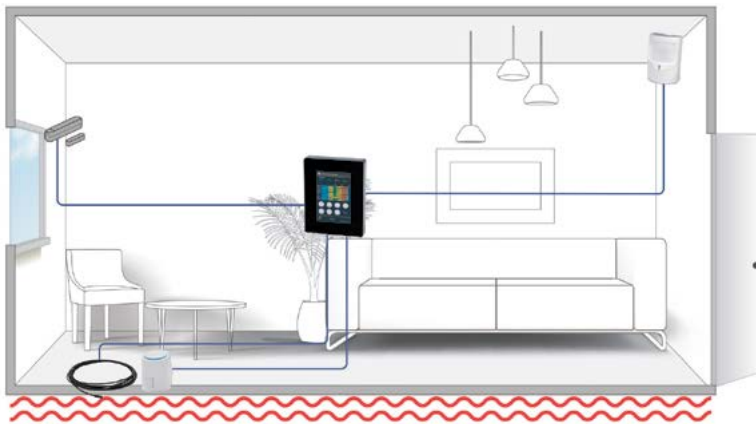
DI digital input

RO relay output (230 V)

TOOLS

SW-DCT-USB	1139040	configuration cable
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Smart thermostats



Smart thermostats

TRM

TRM room thermostat measures and controls room temperature. You can use it as a controller in many traditional HVAC applications, including 2- and 4-pipe fan coil applications, and air conditioning with heating and cooling functions. It has a backlit, easy-to-read LCD display, timer and buttons for adjusting the temperature setpoint. The thermostat supports Modbus communication. Compatible with the 503 flush mounting boxes.

Setpoint	10...30 °C, default 22 °C
Temperature measurement range	10...30 °C
Temperature measurement accuracy	±1 °C (25 °C)
Resistive input	1x NTC 50 and 1x NTC 50 / potential free digital input
Voltage output	0...10 Vdc
Relay output	3 x 230 Vac, 3A (3-speed fan), 2 x 230 Vac, 0.5 A (valve control), 1 x 230 Vac, 0.5 A (pump/heater)
Nominal resistance	50 kΩ (25 °C)
Mounting	with screws on a 503 flush mounting box
Materials	PC and ABS plastic
Product dimensions (w x h x d)	119 x 80 x 45 mm



Read more



TYPE	PRODUCT NO.	
TRM-MOD-230	1281010001	room thermostat, Modbus

Control units

CU

CU is a multifunctional control unit designed especially for room and zone control applications. The control unit supports the following communication protocols: Modbus RTU, Modbus TCP, BACnet MS/TP and BACnet IP. Two rooms can be controlled with one control unit by connecting two room units.

Multifunctional input	6 x NTC 10 / Pt1000 / Resistive / Digital / 0...10 Vdc
Multifunctional output	4 x 0...10 Vdc, 2 mA / 24 Vac, 1 A (PWM) and 2 x 0...10 Vdc, 2 mA / 0...20 mA, 700 Ω
Supply output	2 x 24 Vac, total load < 8 A
Mounting	on the wall surface or on 35 mm DIN rail
Materials	PC plastic
Product dimensions (w x h x d)	186 x 136 x 55 mm



[Read more](#)



TYPE	PRODUCT NO.	
CU	5201010000	multifunctional control unit, white
CUB	5201010003	multifunctional control unit, black

TOOLS

MyProdual	5100030000	MyProdual mobile application for configuring and commissioning Produal next-generation products (Android and iOS)
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OPTIONS

TH 5	1183090	driver for thermal actuators, 5 outputs
CUCC	5201010400	cable covers for Proxima CU and WBU (includes two covers and four fixing screws)

The control unit can be used in many different room control applications with several Produal products. Here are some examples for connecting a room unit to the control unit:

TRI

The versatile and customizable touchscreen room unit can be connected to the room unit port on the control unit.

ROU

The advanced touchscreen room unit can be connected to the room unit port on the control unit.

RU

The customizable room unit can be connected to the room unit port on the control unit.

RTX-CO₂-MOD

This room CO₂ transmitter can be connected to the room unit port on the control unit for setpoint, temperature, CO₂, and motion detection (PIR).

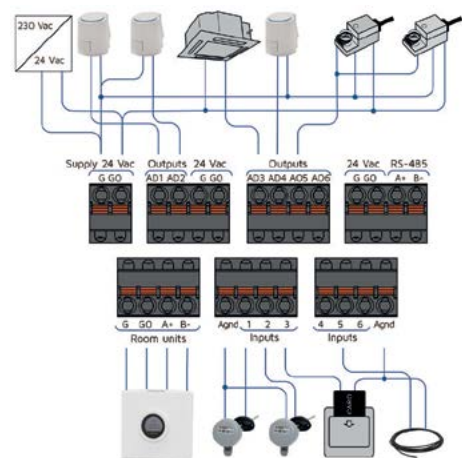
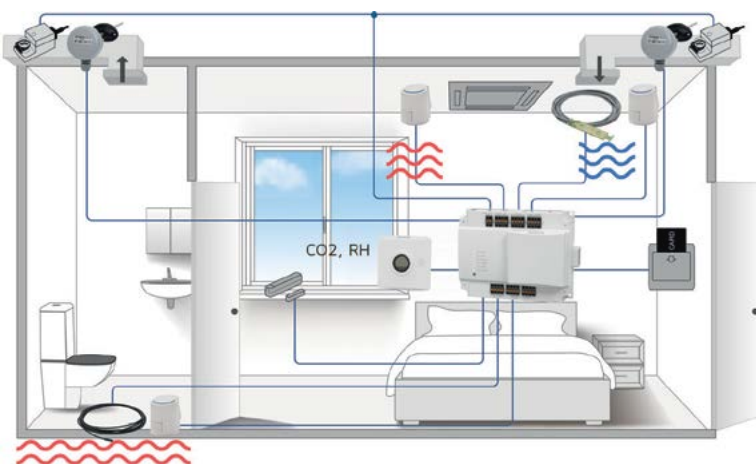
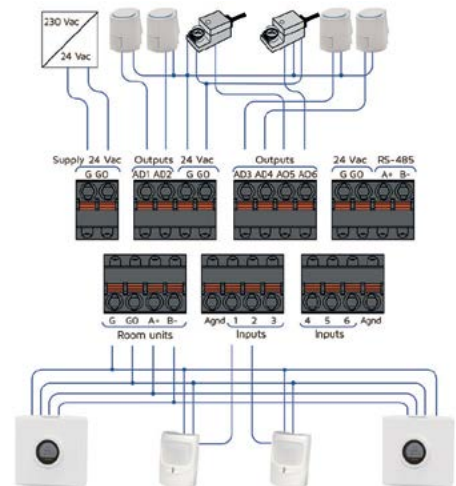
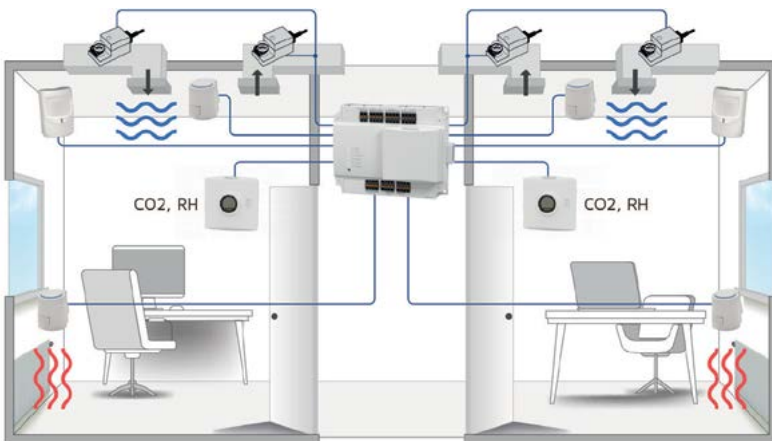
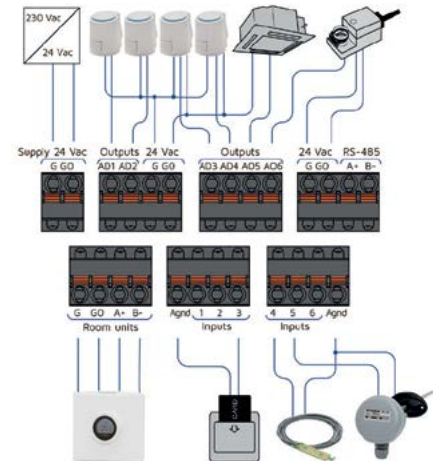
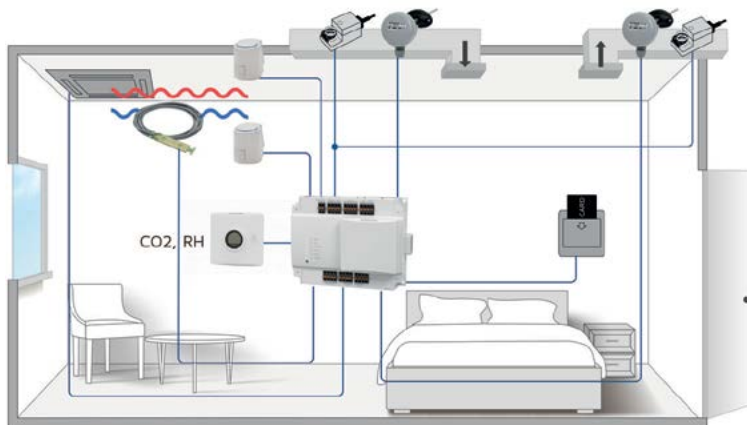
TEHR NTC 10-P

Room temperature sensor with passive potentiometer can be connected to input terminals on the control unit for setpoint and temperature. You may need to adjust the potentiometer resistance levels in the control unit.

TEHR LU-PU

Room temperature transmitter with active potentiometer can be connected to input terminals on the control unit for setpoint and temperature.

Control units



Control units

CU-LH

CU-LH control unit combines all the flexibility and power of Produal CU into a compact package, especially optimized for individual room temperature, VAV and zone control applications. The control unit supports the following communication protocols: Modbus RTU (MOD models) and BACnet MS/TP (BAC models). The BAC models also support Modbus RTU. The control unit is equipped with two separate control loops and a cascade controller loop. The unit has three operation modes for energy saving control functions. The outputs, setpoints and the controller dead zone can be configured separately for each operation mode.



Read more



Multifunctional input	3 x NTC 10 / Resistive / Potential free contact / 0...10 Vdc
Multifunctional output	2 x 0...10 Vdc, 2 mA / 24 Vac, 1 A (PWM) and 2 x 0...10 Vdc, 2 mA
Supply output	2 x 24 Vac, total load < 6 A
Mounting	on the wall surface or on 35 mm DIN rail
Materials	PC plastic
Product dimensions (w x h x d)	116 x 128 x 47 mm

TYPE	PRODUCT NO.	
CU-LHB-MOD	52011B1000	control unit, black, Modbus RTU
CU-LHB-BAC	52011B2000	control unit, black, BACnet MS/TP and Modbus RTU
CU-LH-MOD	52011W1000	control unit, white, Modbus RTU
CU-LH-BAC	52011W2000	control unit, white, BACnet MS/TP and Modbus RTU

TOOLS

MYT-CON	5100020000	MyTool Connect, a Bluetooth dongle for Produal MyTool® and MyProdual connection
MyProdual	5100030000	MyProdual mobile application for configuring and commissioning Produal next-generation products (Android and iOS)

OPTIONS

TH 5	1183090	driver for thermal actuators, 5 outputs
CA-SR	5201A00S00	cable strain relief set

The control unit can be used in many different room control applications with several Produal products. Here are some examples for connecting a room unit to the control unit:

TRI

The versatile and customizable touchscreen room unit can be connected to the room unit port on the control unit.

ROU

The advanced touchscreen room unit can be connected to the room unit port on the control unit.

RU

The customizable room unit can be connected to the room unit port on the control unit.

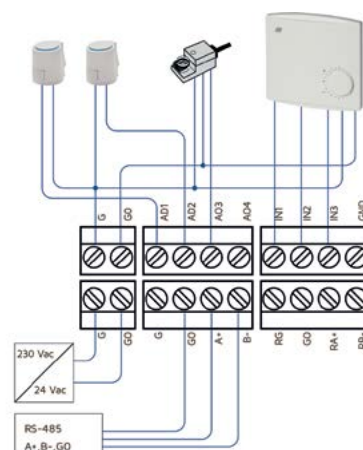
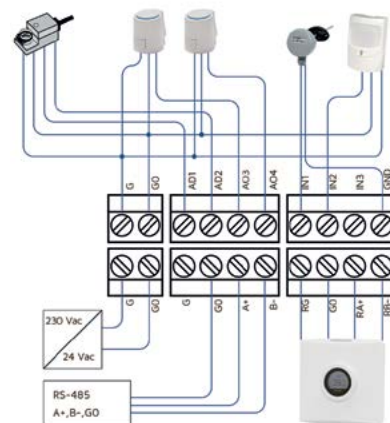
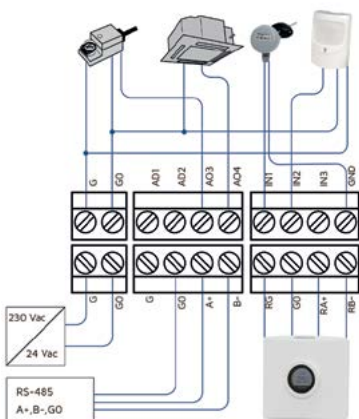
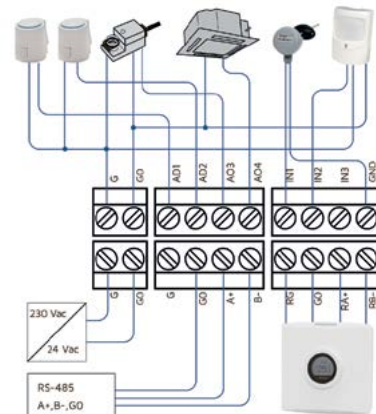
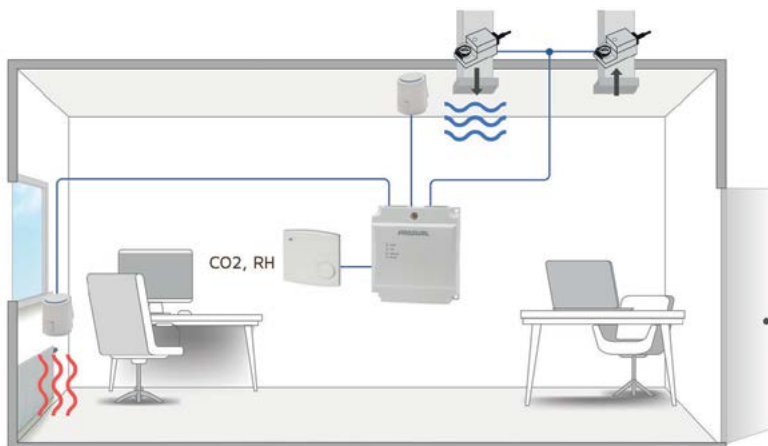
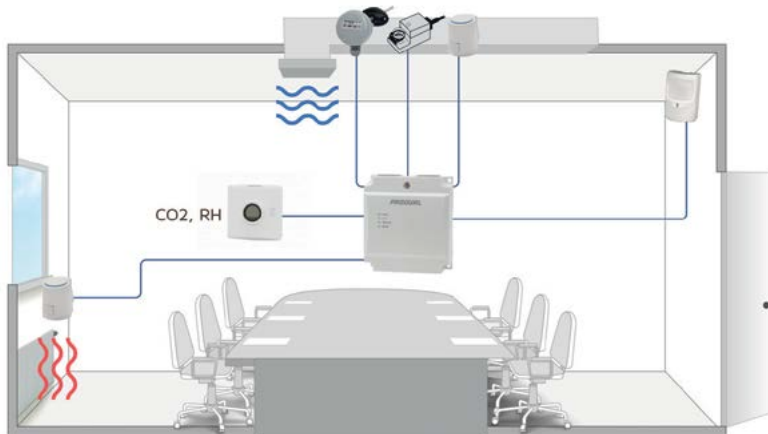
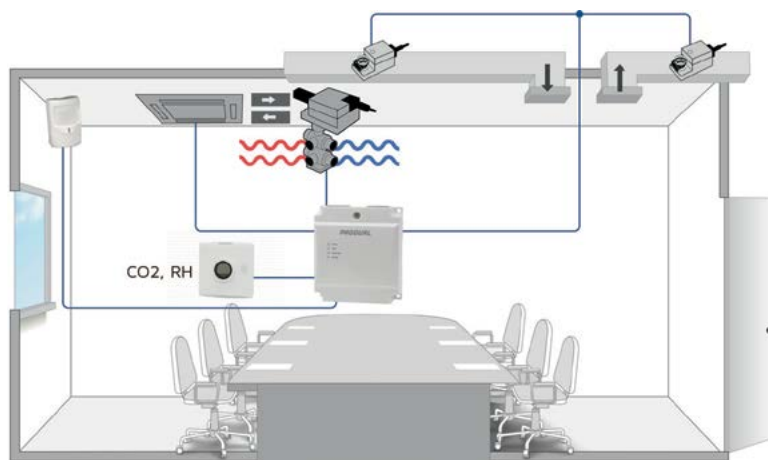
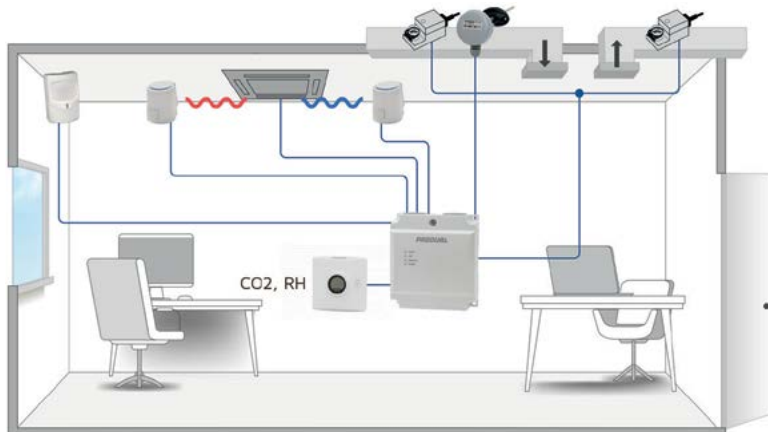
RTX-CO2-MOD

This room CO₂ transmitter can be connected to the room unit port on the control unit for setpoint, temperature, CO₂, and motion detection (PIR).

TEHR NTC 10-P

Room temperature sensor with passive potentiometer can be connected to input terminals on the control unit for setpoint and temperature. You may need to adjust the potentiometer resistance levels in the control unit.

Control units



Room units

TRI



TRI touchscreen room units provide an intuitive user interface and a sensor for room control applications. The devices are connected to CU or CU-LH control units, or linked to BMS. Users can change the control settings, including the setpoint, fan speed, and operation mode. They can switch lights and air conditioning units on/off, or activate the Boost mode to improve ventilation. All TRI units have additional measurement inputs/outputs that can be used as inputs/outputs in the BMS (can be controlled over the network).



Read more



Temperature measurement range	0...50 °C
Temperature measurement accuracy	±0.5 °C (25 °C)
Digital input	1x potential free input
Resistive input	2 x NTC 10
Relay output	230 Vac, 7 A (res.) / 1.3 A (inductive) or 115 Vac, 7 A (res.) / 2.2 A (inductive)
Mounting	on a flush mounting box (60 mm hole distance)
Materials	PC plastic
Product dimensions (w x h x d)	88 x 112 x 43 mm

Ordering guide		Type	0	1	2	3	4	5	6
0 Touchscreen room units			6001					0	
1 Device type	Room unit, 2RI, 1DI, 1RO	TRI-1R		6					
	Room unit, 2RI, 1DI, 1RO, 7-days schedule	TRI-P-1R		7					
	Room unit, 2RI, 1DI, 3AO	TRI-3A		8					
2 Communication	Modbus RTU	-MOD			M				
	BACnet MS/TP	-BAC			B				
3 Power supply	24 Vac/dc	-24				2			
4 Additional measurements	No additional measurement						0		
	Relative humidity	-RH					1		
	CO ₂	-CO2					2		
	Relative humidity and CO ₂	-RH-CO2					3		
5 Reserved								0	
6 Body colour	White (RAL 9010)	-W							W
	Black (RAL 8022)	-B							B

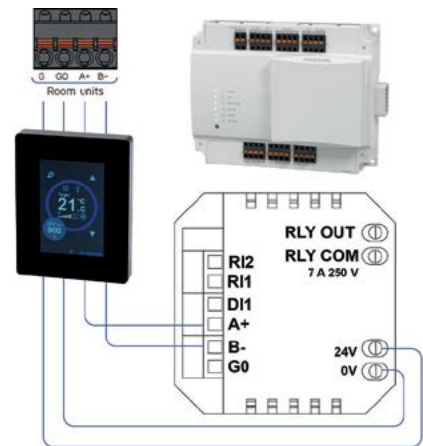
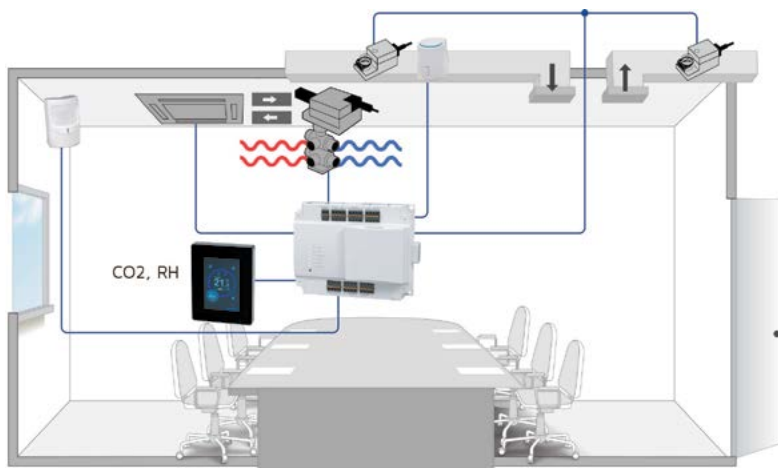
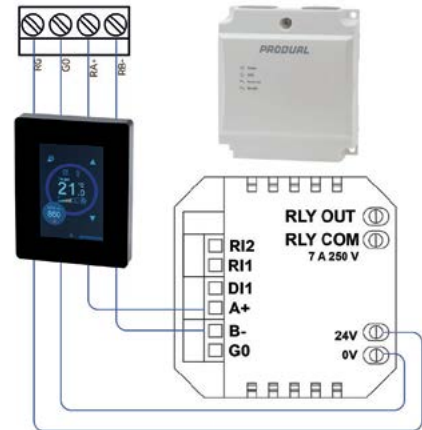
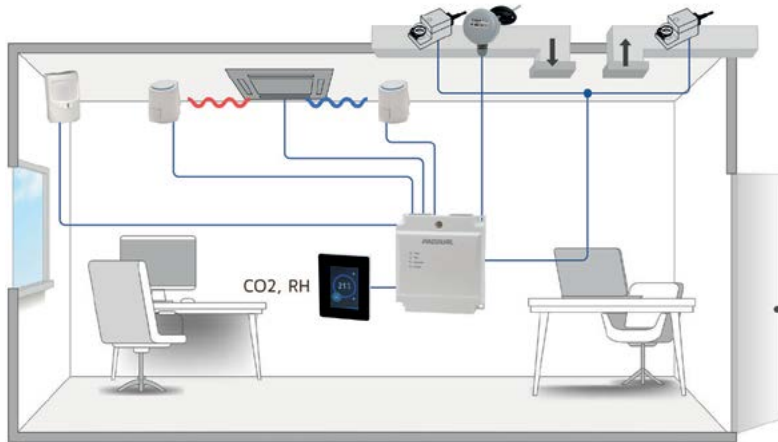
Ordering guide explanation:

RI resistance input	RO relay output (230 V)
DI digital input	AO analogue output (0...10 Vdc)

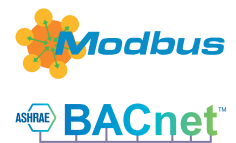
TOOLS

SW-DCT-USB	1139040	configuration cable
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Room units



BMS



Room units

RU



RU is a simple Modbus room unit designed to be used with CU control units or other control units. It has a built-in temperature sensor and a continuously rotating setpoint knob. The unit is also available with fan control and a man-in-house button. The indicator lights indicate the temperature setpoint and fan speed.



Read more



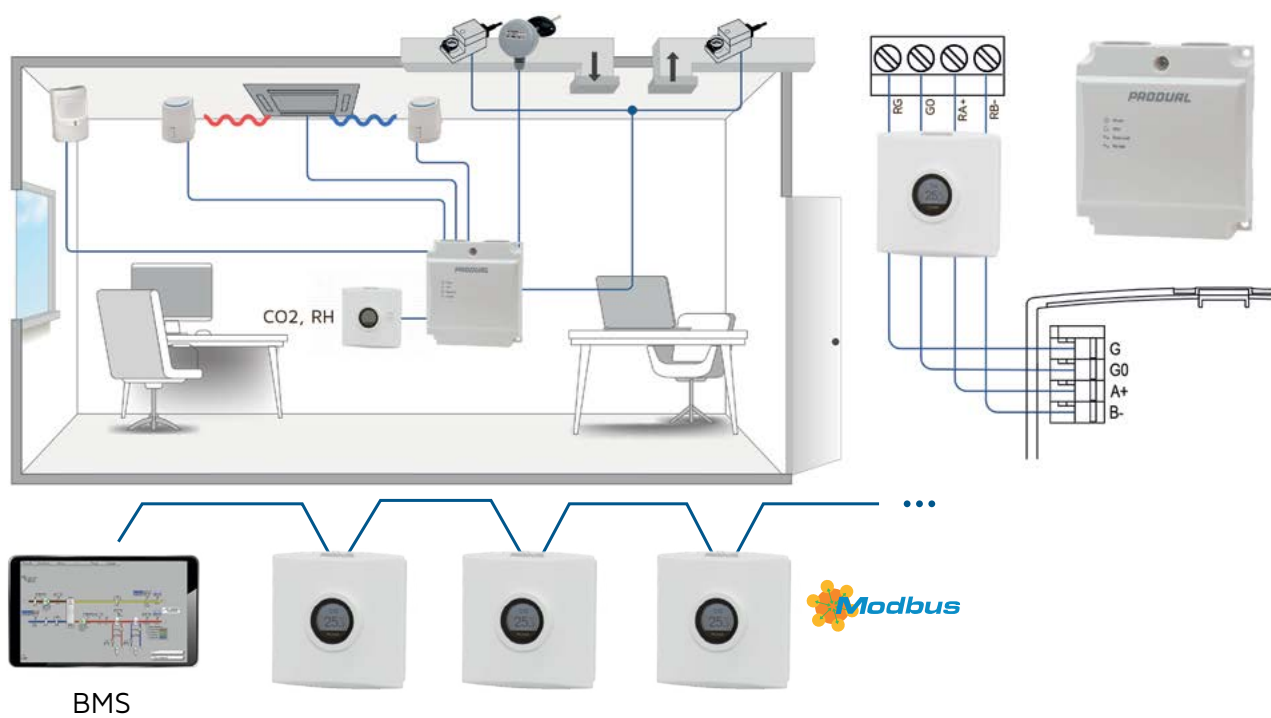
Setpoint	18...26 °C
Temperature measurement range	0...50 °C
Temperature measurement accuracy	±0.5 °C (18...26 °C)
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	PC plastic
Product dimensions (w x h x d)	97 x 97 x 33 mm

Ordering guide		Type	0	1	2	3	4	5	6
0	Room unit		5202					0	0
1	Body colour	White	RU	W					
		Black	RUB	B					
2	Buttons	No buttons			0				
		1 button (fan speed)	1F		1				
		1 button (man in house)	1M		2				
		2 buttons (fan speed and man in house)	2FM		3				
3	Display / user interface	No display (indicator lights only)				0			
		Display (indicator lights are also included)	-D			D			
		Blank cover, no indicator lights (buttons unavailable with -BC option)	-BC			C			
4	Additional measurements	No additional measurements					0		
		Relative humidity	-RH				1		
		CO ₂	-CO ₂				3		
		Relative humidity and CO ₂	-RH-CO ₂				5		

OPTIONS

SMB-RXB	9000571	surface mounting box, black
SMB-RX	9000570	surface mounting box, white

Room units



Room units

ROU



ROU is an advanced room unit with an easy-to-use touchscreen. It is designed for above-the-ceiling control units. The basic model includes temperature measurement. Other measurements, including CO₂, RH and PIR, are available as options. ROU can be used as a room unit for CU and CU-LH, or as a Modbus slave unit.

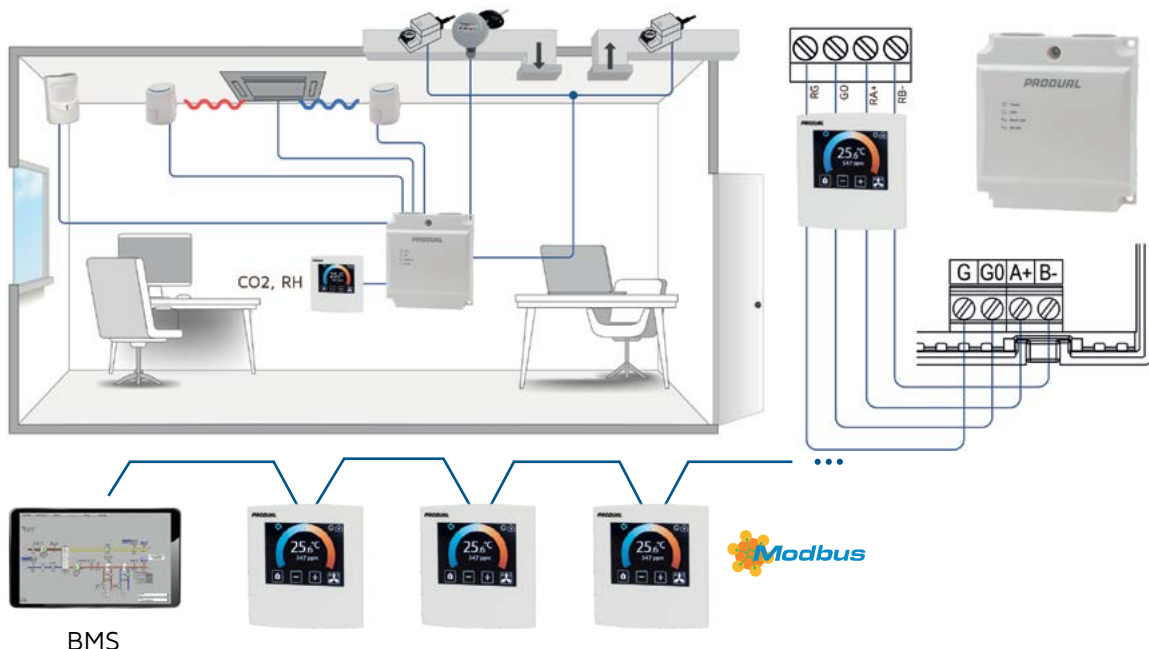
Setpoint	18...26 °C
Temperature measurement range	0...50 °C
Temperature measurement accuracy	±0.5 °C
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	ABS plastic
Product dimensions (w x h x d)	100 x 105 x 20 mm



Read more



Ordering guide		Type	0	1	2	3	4
0	Room unit		115038			0	0
1	Body colour	White	ROU-S	0			
		Black	ROU-S-B	4			
2	Additional measurements	No additional measurements			0		
		Relative humidity	-RH		1		
		Movement detection (PIR)	-PIR		2		
		CO ₂	-CO ₂		3		
		Relative humidity and PIR	-RH-PIR		4		
		Relative humidity and CO ₂	-RH-CO ₂		5		
		PIR and CO ₂	-PIR-CO ₂		6		
		Relative humidity, occupancy detection and CO ₂	-RH-PIR-CO ₂		7		



Universal controllers

HS 2.2-M



24 V

IP20

0...50
°C0...85
%rH

rH

Pa

bar

CO₂

m/s

HS 2.2-M is a universal controller designed for HVAC applications. It can be used for controlling e.g. pressure, differential pressure, temperature or illumination level. Display is possible to scale according to the measurement. Controller has a galvanically isolated RS-485 connection for Modbus RTU communication.


[Read more](#)


Temperature measurement range	0...50 °C
Temperature measurement accuracy	±0.5 °C
Voltage input	0...10 Vdc, 10 kΩ
Digital input	2 x potential free contact
Voltage output	3 x 0...10 Vdc, 2 mA
Triac output	24 Vac, 1 A, for thermal actuator or 3-point actuator
Output	10 Vdc, error signal
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	ABS plastic
Product dimensions (w x h x d)	86 x 86 x 32 mm

TYPE	PRODUCT NO.	
HS 2.2-M	1150290	universal controller, room housing

OPTIONS

TH 5	1183090	driver for thermal actuators, 5 outputs
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Transmitters

Versatile high-quality transmitters for measuring a wide range of parameters in different demanding HVAC applications: accurate measurement of differential pressure, air quality, temperature, humidity, water pressure, air velocity, illuminance or wind speed etc. Several measured properties are also possible with one device. The devices are available with different measurement ranges and with or without a display.

- ▶ Wide range of measured properties
- ▶ Several measurements with one device
- ▶ 0...10 V, 4...20 mA
- ▶ Wide range of Modbus and BACnet products for interoperability
- ▶ Control output on selected products

Note: Temperature transmitters are in the Temperature measurement section



Touchscreen room transmitter RTX-D



Differential pressure transmitter DPT-Priima



Differential pressure transmitter PEL-N



Duct CO₂ transmitter HDK



Water pressure transmitter VPL



Room transmitter RTX

Differential pressure transmitters for air

PEL



PEL is a pressure transmitter for measuring pressures and pressure differences in air handling systems. The pressure measurement is temperature compensated according to the ambient temperature.

Differential air pressure measurement ranges	0...1000 Pa, 0...100 Pa, 0...200 Pa, 0...500 Pa, ± 100 Pa, ± 250 Pa, ± 500 Pa, ± 50 Pa, Custom
Time constant	2 s or *8 s
Voltage output	0...10 V / 2...10 V / 0...5 V
Current output	4...20 / 0...20 mA, $< 700 \Omega$
Cable gland	M16
Mounting	with screws, external lugs
Materials	PC and PBT plastic
Product dimensions (w x h x d)	105 x 102 x 46 mm



[Read more](#)



TYPE	PRODUCT NO.	
PEL	1131110	differential pressure transmitter, automatic zeroing
PEL-N	1131111	differential pressure transmitter with display, automatic zeroing
PEL-M	1131360	Modbus differential pressure transmitter, automatic zeroing
PEL-M-N	1131361	Modbus differential pressure transmitter with display, automatic zeroing

TOOLS

ML-SER	1139010	transmitter commissioning tool
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OPTIONS

PEL-USK	1131020	protective cover for pressure hose
DP-AK	1241000001	differential pressure measurement accessory kit

Differential pressure transmitters for air

PEL 2500



PEL 2500 is a pressure transmitter for measuring pressures and pressure differences in air handling systems. The pressure measurement is temperature compensated according to the ambient temperature.

Differential air pressure measurement ranges	0...1000 Pa, 0...100 Pa, 0...1500 Pa, 0...2000 Pa, 0...200 Pa, 0...2500 Pa, 0...500 Pa, ± 100 Pa, Custom
Time constant	2 s or *8 s
Voltage output	0...10 V / 2...10 V / 0...5 V
Current output	4...20 / 0...20 mA, 700 Ω
Cable gland	M16
Mounting	with screws, external lugs
Materials	PC and PBT plastic
Product dimensions (w x h x d)	106 x 102 x 46 mm



Read more



Watch video



TYPE	PRODUCT NO.	
PEL 2500	1131210	differential pressure transmitter, automatic zeroing
PEL 2500-N	1131211	differential pressure transmitter with display, automatic zeroing
PEL 2500-M	1131370	Modbus differential pressure transmitter, automatic zeroing
PEL 2500-M-N	1131371	Modbus differential pressure transmitter with display, automatic zeroing

TOOLS

ML-SER	1139010	transmitter commissioning tool
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OPTIONS

PEL-USK	1131020	protective cover for pressure hose
DP-AK	1241000001	differential pressure measurement accessory kit

Differential pressure transmitters for air

PEL2500-MZ



PEL 2500-MZ is a pressure transmitter for measuring pressures and pressure differences in air handling systems. The pressure measurement is temperature compensated according to the ambient temperature.

Differential air pressure measurement ranges	0...1000 Pa, 0...100 Pa, 0...1500 Pa, 0...2000 Pa, 0...200 Pa, 0...2500 Pa, 0...500 Pa, ± 100 Pa, Custom
Time constant	2 s or *8 s
Voltage output	0...10 / 2...10 / 0...5 Vdc, < 2 mA
Current output	4...20 / 0...20 mA, 700 Ω
Cable gland	M16
Mounting	with screws, external lugs
Materials	PC and PBT plastic
Product dimensions (w x h x d)	105 x 102 x 46 mm



[Read more](#)



TYPE	PRODUCT NO.	
PEL 2500-MZ	1131460	differential pressure transmitter, manual zeroing
PEL 2500-MZ-N	1131461	differential pressure transmitter with display, manual zeroing
PEL 2500-M-MZ	1131470	Modbus differential pressure transmitter, manual zeroing
PEL 2500-M-MZ-N	1131471	Modbus differential pressure transmitter with display, manual zeroing

OPTIONS

DP-AK	1241000001	differential pressure measurement accessory kit
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Differential pressure transmitters for air

PEL 1000



24 V

IP54

0...50
°C0...95
%rH

Pa

PEL 1000 is a pressure transmitter for measuring pressures and pressure differences in air handling systems. The proper measuring range can be chosen at commissioning

Differential air pressure measurement ranges	0...1000 Pa, 0...500 Pa, Custom
Time constant	3 s
Voltage output	0...10 V / 2...10 V / 0...5 V
Cable gland	M16
Mounting	with screws, external lugs
Materials	PC and PBT plastic
Product dimensions (w x h x d)	89 x 95 x 44 mm


[Read more](#)


TYPE	PRODUCT NO.	
PEL 1000	1131140	differential pressure transmitter, manual zeroing
PEL 1000-N	1131141	differential pressure transmitter with display, manual zeroing
PEL 1000-M	1131380	Modbus differential pressure transmitter, manual zeroing
PEL 1000-M-N	1131381	Modbus differential pressure transmitter with display, manual zeroing

TOOLS

ML-SER	1139010	transmitter commissioning tool
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OPTIONS

PEL-USK	1131020	protective cover for pressure hose
DP-AK	1241000001	differential pressure measurement accessory kit

Differential pressure transmitters for air

PEL 8K



PEL 8K is a pressure transmitter for measuring pressures and pressure differences in air handling systems. The pressure measurement is temperature compensated according to the ambient temperature.

Differential air pressure measurement ranges	0...1000 Pa, 0...1500 Pa, 0...2000 Pa, 0...2500 Pa, 0...3000 Pa, 0...4000 Pa, 0...5000 Pa, 0...8000 Pa, Custom
Time constant	2 s or *8 s
Voltage output	0...10 V / 2...10 V / 0...5 V
Current output	4...20 / 0...20 mA, 700 Ω
Cable gland	M16
Mounting	with screws, external lugs
Materials	PC and PBT plastic
Product dimensions (w x h x d)	105 x 102 x 46 mm



[Read more](#)



TYPE	PRODUCT NO.	
PEL 8K	1131350	differential pressure transmitter, automatic zeroing
PEL 8K-N	1131351	differential pressure transmitter with display, automatic zeroing

TOOLS		
ML-SER	1139010	transmitter commissioning tool

OPTIONS		
DP-AK	1241000001	differential pressure measurement accessory kit

Differential pressure transmitters for air

New!

PEL 10K



24 V

IP54

0...45
°C0...95
%rH

Pa

PEL 10K differential pressure transmitter is designed for measuring static pressure, pressure differences and air volume flow in air handling systems. It provides eight fixed pressure measurement ranges selectable with jumpers and a custom range configurable with the ML-SER commissioning tool. Regular automatic zeroing removes output signal drift.



Differential air pressure measurement ranges	0...1000 Pa, 0...200 Pa, 0...2500 Pa, 0...5000 Pa, 0...10000 Pa, ±500 Pa, Custom, -2500...0 Pa, ±1000 Pa
Time constant	2 s or *8 s
Voltage output	0...10 / 2...10 / 0...5 Vdc, < 2 mA
Current output	4...20 / 0...20 mA, 700 Ω
Zeroing	automatic; regularly eliminates the possible zero point drifting
Mounting	with screws, external lugs
Materials	PC and PBT plastic
Product dimensions (w x h x d)	106 x 102 x 46 mm

[Read more](#)


TYPE	PRODUCT NO.	
PEL 10K	1131490	differential pressure transmitter, 8 fixed ranges and custom range, 0...10000 Pa
PEL 10K-N	1131491	differential pressure transmitter with display, 8 fixed ranges and custom range, 0...10000 Pa

TOOLS

ML-SER	1139010	transmitter commissioning tool
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OPTIONS

DP-AK	1241000001	differential pressure measurement accessory kit
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Differential pressure transmitters for air

KPEL



KPEL is a pressure transmitter for measuring pressures and pressure differences of the air-handling system. The transmitter has two separate temperature compensated pressure measurements. The pressure range can be selected separately for both measurements.

Differential air pressure measurement ranges	0...1000 Pa, 0...100 Pa, 0...1500 Pa, 0...2000 Pa, 0...200 Pa, 0...2500 Pa, 0...500 Pa, ± 100 Pa, Custom
Time constant	2 s or *8 s
Voltage output	2 x 0...10 Vdc, 2 mA
Current output	2 x 4...20 mA, < 700 Ω
Zeroing	manually by using the push button
Cable gland	M16
Mounting	with screws, external lugs
Product dimensions (w x h x d)	105 x 102 x 46 mm



[Read more](#)



TYPE	PRODUCT NO.	
KPEL-M	1131260	dual differential pressure transmitter, Modbus, manual zeroing
KPEL-M-N	1131261	dual differential pressure transmitter with display, Modbus, manual zeroing
KPEL	1131310	dual differential pressure transmitter, manual zeroing
KPEL-N	1131311	dual differential pressure transmitter with display, manual zeroing

OPTIONS

DP-AK	1241000001	differential pressure measurement accessory kit
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Differential pressure transmitters for air

DPT-Ctrl-MOD



DPT-Ctrl-MOD Modbus differential pressure or airflow controllers are designed for building automation systems. Controller can control constant pressure or flow of fans, VAV systems or dampers. When controlling air flow, it is possible to select a fan manufacturer or a common measuring probe that has a K-value.

DPT-Ctrl-MOD includes an Input terminal that enables the reading of multiple signals, such as temperature or control relays over Modbus. The Input terminal has one input channel designed to accept 0-10 V, NTC10k, Pt1000, Ni1000/(-LG), and BIN IN (potential free contact) signals.



Time constant	1...20 s
Control output	0...10 Vdc
Cable gland	M20
Mounting	with screws, external lugs
Materials	ABS, PC
Product dimensions (w x h x d)	102 x 72 x 36 mm

Read more



TYPE	PRODUCT NO.	
DPT-Ctrl-MOD-2500-D	114.003.020	differential pressure or airflow transmitter/controller, Modbus, range 0...2500 Pa, manual zeroing
DPT-Ctrl-MOD-7000-D	114.009.010	differential pressure or airflow transmitter/controller, Modbus, range 0...7000 Pa, manual zeroing

OPTIONS		
DP-AK	1241000001	differential pressure measurement accessory kit

Differential pressure transmitters for air

DPT-Ctrl



DPT-Ctrl differential pressure or airflow controllers are designed for building automation systems. Controller can control constant pressure or flow of fans, VAV systems or dampers. When controlling air flow, it is possible to select a fan manufacturer or a common measuring probe that has a K-value.



[Read more](#)



Time constant	1...20 s
Voltage output	0...10 V / 2...10 V, R > 1 kΩ
Current output	4...20 mA, 20 Ω < R < 500 Ω
Cable gland	M16
Mounting	with screws, external lugs
Materials	ABS, PC
Product dimensions (w x h x d)	90 x 95 x 36 mm

TYPE	PRODUCT NO.	
DPT-Ctrl-2500-D	103.007.232	differential pressure or airflow transmitter/controller, range 0...2500 Pa, manual zeroing
DPT-Ctrl-2500-AZ-D	103.007.233	differential pressure or airflow transmitter/controller, range 0...2500 Pa, automatic zeroing
DPT-Ctrl-2500-D-40C	103.007.234	differential pressure or airflow transmitter/controller, range 0...2500 Pa, manual zeroing, extended ambient temperature range (-40...50 °C)
DPT-Ctrl-7000-D	103.016.108	differential pressure or airflow transmitter/controller, range 0...7000 Pa, manual zeroing
DPT-Ctrl-7000-AZ-D	103.016.109	differential pressure or airflow transmitter/controller, range 0...7000 Pa, automatic zeroing
DPT-Ctrl-7000-D-40C	103.016.110	differential pressure or airflow transmitter/controller, range 0...7000 Pa, manual zeroing, extended ambient temperature range (-40...50 °C)
OPTIONS		
DP-AK	1241000001	differential pressure measurement accessory kit

Differential pressure transmitters for air

DPT-R8



DPT-R8 differential pressure transmitters provide exceptional performance, high quality and competitive pricing. Because of the high accuracy of the devices, it is usually not necessary to narrow down the range to get accurate measurements. These transmitters are used for measuring low pressures of air and non-combustible gases in order to monitor building automation, HVAC and cleanroom systems.



[Read more](#)



Voltage output	0...10 V / 2...10 V, R > 1 kΩ
Current output	4...20 mA, 20...500 Ω
Cable gland	M16
Mounting	with screws, external lugs
Materials	ABS and PC plastic, tubing silicone
Product dimensions (w x h x d)	90 x 95 x 36 mm

TYPE	PRODUCT NO.	
DPT250-R8	103.004.014	differential pressure transmitter, range 0...250 Pa, manual zeroing
DPT250-R8-D	103.004.015	differential pressure transmitter with display, range 0...250 Pa, manual zeroing
DPT250-R8-AZ	103.004.016	differential pressure transmitter, range 0...250 Pa, automatic zeroing
DPT250-R8-AZ-D	103.004.017	differential pressure transmitter with display, range 0...250 Pa, automatic zeroing
DPT250-R8-AZ-S	103.004.018	differential pressure transmitter, range 0...250 Pa, automatic zeroing, span point adjustment
DPT250-R8-AZ-D-S	103.004.019	differential pressure transmitter with display, range 0...250 Pa, automatic zeroing, span point adjustment
DPT2500-R8	103.007.023	differential pressure transmitter, range 0...2500 Pa, manual zeroing
DPT2500-R8-D	103.007.024	differential pressure transmitter with display, range 0...2500 Pa, manual zeroing
DPT2500-R8-AZ	103.007.025	differential pressure transmitter, range 0...2500 Pa, automatic zeroing
DPT2500-R8-AZ-D	103.007.026	differential pressure transmitter with display, range 0...2500 Pa, automatic zeroing
DPT2500-R8-40C	103.007.069	differential pressure transmitter, range 0...2500 Pa, manual zeroing, extended ambient temperature range (-40...50 °C)
DPT2500-R8-D-40C	103.007.104	differential pressure transmitter with display, range 0...2500 Pa, manual zeroing, extended ambient temperature range (-40...50 °C)
DPT7000-R8	103.016.003	differential pressure transmitter, range 0...7000 Pa, manual zeroing
DPT7000-R8-D	103.016.004	differential pressure transmitter with display, range 7000 Pa, manual zeroing
DPT7000-R8-AZ	103.016.005	differential pressure transmitter, range 0...7000 Pa, automatic zeroing
DPT7000-R8-AZ-D	103.016.006	differential pressure transmitter with display, range 0...7000 Pa, automatic zeroing
DPT7000-R8-D-40C	103.016.070	differential pressure transmitter, range 0...7000 Pa, manual zeroing, extended ambient temperature range (-40...50 °C)
DPT7000-R8-40C	103.016.072	differential pressure transmitter with display, range 0...7000 Pa, manual zeroing, extended ambient temperature range (-40...50 °C)

OPTIONS

DP-AK	1241000001	differential pressure measurement accessory kit
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Differential pressure transmitters for air

DPT-Priima-MOD



DPT-Priima-MOD differential pressure transmitter is designed for high-accuracy applications. It also measures airflow and supports Modbus communication. DPT-Priima-MOD has an extremely accurate sensor, automatic zeroing, and an optional calibration certificate.

The most common applications include pressure monitoring in cleanrooms and pressure difference monitoring across the building envelope. DPT-Priima-MOD can also be used with FloXact and other airflow probes, pitot tube, and air dampers.



Differential air pressure measurement ranges	±120 Pa, ±1240 Pa, ±240 Pa, ±2490 Pa, ±620 Pa
Time constant	0,4 s / 1...20 s
Cable gland	M20
Mounting	with screws, external lugs
Materials	ABS and PC plastic (housing), silicone (tubing)
Product dimensions (w x h x d)	102 x 95 x 36 mm

[Read more](#)



TYPE	PRODUCT NO.	
DPT-Priima-MOD-AZ-D	102.012.004	high-accuracy differential pressure transmitter with display, Modbus RTU, and automatic zeroing
OPTIONS		
DP-AK	1241000001	differential pressure measurement accessory kit

Differential pressure transmitters for air

DPT-Priima



24 V

IP54

-5...50 °C

0...95 %rH

Pa

DPT-Priima differential pressure transmitters are designed for high-accuracy applications. They are typically used for pressure monitoring in cleanrooms and pressure difference monitoring across the building envelope.

DPT-Priima has an extremely accurate sensor, automatic zeroing, and optional span point calibration and calibration certificate.


[Read more](#)


Differential air pressure measurement ranges	0...1000 Pa, 0...250 Pa, 0...25 Pa, 0...50 Pa, ±100 Pa, ±25 Pa, ±500 Pa, ±50 Pa
Time constant	0.4 s / 8.0 s
Voltage output	0...10 V / 2...10 V, R > 1 kΩ
Current output	4...20 mA, 20...500 Ω
Cable gland	M16
Mounting	with screws, external lugs
Materials	ABS and PC plastic (housing), silicone (tubing)
Product dimensions (w x h x d)	90 x 95 x 36 mm

TYPE	PRODUCT NO.	
DPT-Priima-AZ	103.039.001	high-accuracy differential pressure transmitter, automatic zeroing
DPT-Priima-AZ-D	103.039.002	high-accuracy differential pressure transmitter with display, automatic zeroing
DPT-Priima-AZ-S	103.039.003	high-accuracy differential pressure transmitter, automatic zeroing and span point calibration
DPT-Priima-AZ-D-S	103.039.004	high-accuracy differential pressure transmitter with display, automatic zeroing and span point calibration
OPTIONS		
DP-AK	1241000001	differential pressure measurement accessory kit

Differential pressure transmitters for air

DPT-2W



DPT-2W differential pressure transmitters are 2-wire transmitters for measuring differential pressure in ventilation ducts. These most technologically advanced transmitters on the market measure static and differential pressure, and have a field selectable measurement range.



[Read more](#)



Time constant	0.8 s / 4 s
Current output	4...20 mA, > 20 Ω
Zeroing	Manually by push button
Cable gland	M16
Mounting	with screws, external lugs
Materials	ABS, PC
Product dimensions (w x h x d)	90 x 95 x 36 mm

TYPE	PRODUCT NO.	
DPT-2W-250-R8	104.004.011	2-wire differential pressure transmitter, 0...250 Pa
DPT-2W-250-R8-D	104.004.012	2-wire differential pressure transmitter with display, 0...250 Pa
DPT-2W-2500-R8	104.007.041	2-wire differential pressure transmitter, 0...2500 Pa
DPT-2W-2500-R8-D	104.007.042	2-wire differential pressure transmitter with display, 0...2500 Pa
DPT-2W-7000-R8	104.015.007	2-wire differential pressure transmitter, 0...7000 Pa
DPT-2W-7000-R8-D	104.015.008	2-wire differential pressure transmitter with display, 0...7000 Pa

OPTIONS

DP-AK	1241000001	differential pressure measurement accessory kit
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Differential pressure transmitters for air

DPT-IO-MOD



DPT-IO-MOD differential pressure transmitter for air is designed for Modbus (RTU) communication network. It has two multifunctional inputs for reading 0...10 V, digital and resistive signals from external devices. For example, you can connect two temperature sensors to the inputs. Very precise pressure sensor and easily operated user interface make the device reliable and user-friendly.

Time constant	1...20 s
Multifunctional input	2 x 0...10 V / digital / Pt1000 / Ni1000 / Ni1000-LG / NTC 10
Zeroing	manually by a pushbutton or via Modbus communication
Cable gland	M20
Mounting	with screws, external lugs
Materials	ABS and PC plastic, tubing silicone
Product dimensions (w x h x d)	102 x 95 x 36 mm



Read more



TYPE	PRODUCT NO.	
DPT-IO-MOD-2500-D	114.003.002	differential pressure transmitter, Modbus RTU, range -250...2500 Pa, manual zeroing
DPT-IO-MOD-7000-D	114.009.002	differential pressure transmitter, Modbus RTU, range -700...7000 Pa, manual zeroing
OPTIONS		
DP-AK	1241000001	differential pressure measurement accessory kit

Differential pressure transmitters for air

DPT-CR-MOD



DPT-CR-MOD is a differential pressure transmitter designed especially for cleanroom monitoring. In addition to differential pressure, this device enables monitoring temperature and relative humidity. You can connect an external humidity and temperature transmitter to the multifunctional input. In this case, all three measured values (differential pressure, relative humidity, temperature) can be shown simultaneously on the display. Alternatively, you can connect a passive temperature sensor to the multifunctional input.



Read more



Differential air pressure measurement ranges	-250...2500 Pa
Time constant	1...20 s
Multifunctional input	2 x 0...10 V / Pt1000 / Ni1000 / Ni1000-LG / NTC10
Zeroing	manually by a pushbutton or via Modbus communication
Cable gland	M20
Mounting	with screws, external lugs
Materials	ABS and PC plastic, tubing silicone
Product dimensions (w x h x d)	102 x 95 x 36 mm

TYPE	PRODUCT NO.	
DPT-CR-MOD-D	114.010.001	differential pressure transmitter with display, Modbus RTU, range -250...2500 Pa, manual zeroing
OPTIONS		
DP-AK	1241000001	differential pressure measurement accessory kit



DPT-CR-MOD measures the pressure difference between the cleanroom and the anteroom and sends the information to the automation system via Modbus to maintain optimal conditions in the cleanroom. DPT-CR-MOD is connected to the RTX-D-RH indoor air quality transmitter that measures relative humidity and temperature. RTX-D-RH sends the information to DPT-CR-MOD that shows it on its display, together with differential pressure measurement.

Differential pressure transmitters for air

DPT-Dual-MOD



DPT-Dual-MOD combines two differential pressure transmitters into one device. It is ideal for measuring static or differential pressure from two measurement points. It has two multifunctional inputs for reading 0...10 V, digital and resistive signals from external devices. You can save in costs by using temperature sensors instead of temperature transmitters. Supports the Modbus RTU communication protocol.



Time constant	1...20 s
Multifunctional input	2 x 0...10 V / digital / Pt1000 / Ni1000 / Ni1000-LG / NTC 10
Cable gland	M20
Mounting	with screws, external lugs
Materials	ABS and PC plastic, tubing silicone
Product dimensions (w x h x d)	102 x 95 x 36 mm

Read more



TYPE	PRODUCT NO.	
DPT-Dual-MOD-2500-D	120.007.028	differential pressure transmitter, range -250...2500 Pa
DPT-Dual-MOD-7000-D	120.016.027	differential pressure transmitter, range -700...7000 Pa
OPTIONS		
DP-AK	1241000001	differential pressure measurement accessory kit

Differential pressure transmitters for air

DPT-Dual-MOD-AHU



24 V

IP54

-20...50
°C

0...95
%rH

m³/s

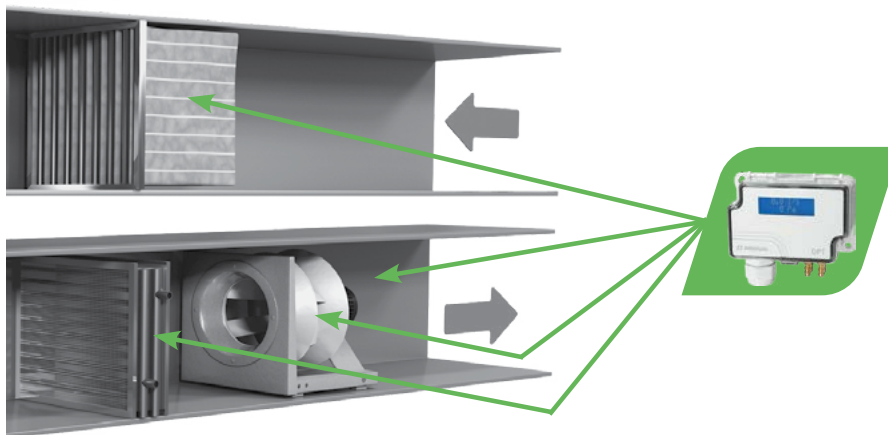
Pa

DPT-Dual-MOD-AHU Modbus differential pressure transmitter is especially designed for air handling units. It has two pressure sensors with different measurement ranges, and is ideal for measuring pressure from two measurement points. It also measures airflow rate. In a typical air handling unit application, one sensor monitors the airflow across the centrifugal fan while the other sensor monitors the filter cleanliness. This transmitter has two multifunctional inputs for reading 0...10 V, digital and resistive signals from external devices.


[Read more](#)


Differential air pressure measurement ranges	-250...2500 Pa, -700...7000 Pa
Time constant	1...20 s
Multifunctional input	2 x 0...10 V / digital / Pt1000 / Ni1000 / Ni1000-LG / NTC 10
Cable gland	M20
Mounting	2 x Ø4.3 mm screw holes, one slotted
Materials	ABS and PC plastic (housing), silicone (tubing)
Product dimensions (w x h x d)	102 x 95 x 36 mm

TYPE	PRODUCT NO.	
DPT-Dual-MOD-AHU-D	120.016.013	differential pressure transmitter for air handling units, ranges -250...2500 Pa and -700...7000 Pa
OPTIONS		
DP-AK	1241000001	differential pressure measurement accessory kit



DPT-Dual-MOD-AHU transmitters can be used to measure four different types of data, for example air flow, filter condition, heating coil and air temperature.

Differential pressure transmitters for air

DPT-Dual



24 V

IP54

-20...50
°C0...95
%rH

Pa

DPT-Dual series differential pressure transmitters are engineered for building automation in the HVAC/R industry. DPT-Dual is a technologically advanced transmitter measuring static and differential pressure from two different measurement points, with field selectable units, range and output, all in a single device.

Time constant	0.8 s / 4.0 s
Cable gland	M20
Mounting	with screws, external lugs
Materials	ABS and PC plastic, tubing silicone
Product dimensions (w x h x d)	102 x 95 x 36 mm


[Read more](#)


TYPE	PRODUCT NO.	
DPT-Dual-2500	120.007.001	differential pressure transmitter, range -100...2500 Pa
DPT-Dual-2500-D	120.007.002	differential pressure transmitter with display, range -100...2500 Pa
DPT-Dual-7000	120.016.001	differential pressure transmitter, range 0...7000 Pa
DPT-Dual-7000-D	120.016.002	differential pressure transmitter with display, range 0...7000 Pa
OPTIONS		
DP-AK	1241000001	differential pressure measurement accessory kit

Differential pressure transmitters for air

DPI-24



Technologically advanced and versatile DPI-24 differential pressure switches and transmitters are typically used in HVAC/R systems for fan, blower and filter monitoring, staircase pressure monitoring and alarm, pressure monitoring in cleanrooms, and boiler pressure monitoring and alarm. 8 measurement ranges per model.

Options include display, three different pressure measurement ranges, one or two relays and manual or automatic zero point calibration. The switch can control the relays based on differential pressure or air flow.

DPI-24-BT is easy to commission with a MyTool Connect Bluetooth dongle and mobile application.



[Read more](#)



Relay output	30 Vdc, 6 A
Output	1x 0...10 V, R > 1 kΩ / 1x 4...20 mA, 20...500 Ω
Cable gland	M20
Mounting	with screws, external lugs
Materials	ABS and PC plastic, tubing PVC
Product dimensions (w x h x d)	102 x 96 x 36 mm

Ordering guide		Type	0	1	2	3	4	5	6
0 Differential pressure transmitters for air			113A						0
1 Device type	Differential pressure switch	DPI-24		1					
	Differential pressure switch with Bluetooth connector	DPI-24-BT		2					
2 Range	±500 Pa	-±500			0				
	0...2500 Pa	-2500			1				
	0...7000 Pa	-7000			2				
3 Relay	1 relay	-R				0			
	2 relays	-2R				1			
4 Autozero	No autozero function						0		
	Autozero function	-AZ					1		
5 Display	No display (option not available for DPI-24)							0	
	Display	-D						1	
6 Reserved									0

TOOLS

MYT-CON	5100020000	MyTool Connect, a Bluetooth dongle for Produal MyTool® and MyProdual connection
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OPTIONS

DP-AK	1241000001	differential pressure measurement accessory kit
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Airflow transmitters

DPT-Flow-MOD



24 V

IP54

-20...50 °C

0...95 %rH

m³/s

Pa

DPT-Flow-MOD air flow transmitters are designed for building automation systems. These technologically advanced transmitters can measure volume flow, velocity, and static and differential pressure. The transmitters can be connected directly to the pressure measurement points of a centrifugal fan, providing accurate flow measurement. The user interface enables easy selection of settings according to the selected fan or measurement probe. The transmitters have an RS-485 channel for Modbus RTU communication.


[Read more](#)

[Watch video](#)


Differential air pressure measurement ranges	-250...2500 Pa
Air velocity measurement range	0...1000 m/s
Time constant	1...20 s
Zeroing	manually by pushbutton or via Modbus communication
Cable gland	M16
Mounting	with screws, external lugs, 2 x Ø4 mm screw holes, one slotted
Materials	ABS and PC plastic (housing), silicone (tubing)
Product dimensions (w x h x d)	90 x 95 x 36 mm

TYPE	PRODUCT NO.	
DPT-Flow-MOD-2500-D	102.011.033	air flow transmitter, Modbus, range 0...2500 Pa, manual zeroing
DPT-Flow-MOD-2500-AZ-D	102.011.034	air flow transmitter, Modbus, range 0...2500 Pa, automatic zeroing
DPT-Flow-MOD-2500-D-40C	102.011.035	air flow transmitter, Modbus, range 0...2500 Pa, manual zeroing, extended ambient temperature range (-40...50 °C)
DPT-Flow-MOD-7000-D	102.006.072	air flow transmitter, Modbus, range 0...7000 Pa, manual zeroing
DPT-Flow-MOD-7000-AZ-D	102.006.073	air flow transmitter, Modbus, range 0...7000 Pa, automatic zeroing
DPT-Flow-MOD-7000-D-40C	102.006.074	air flow transmitter, Modbus, range 0...7000 Pa, manual zeroing, extended ambient temperature range (-40...50 °C)

OPTIONS

DP-AK	1241000001	differential pressure measurement accessory kit
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Airflow transmitters

DPT-Flow



DPT-Flow air flow transmitters are designed for building automation systems. These technologically advanced transmitters can measure volume flow, velocity, and static and differential pressure. The transmitters can be connected directly to the pressure measurement points of a centrifugal fan, providing accurate flow measurement. The user interface enables easy selection of settings according to the selected fan or measurement probe.



Time constant	1...20 s
Voltage output	0...10 V / 2...10 V, R > 1 kΩ
Current output	4...20 mA, 20 Ω < R < 500 Ω
Cable gland	M16
Mounting	with screws, external lugs
Materials	ABS, PC
Product dimensions (w x h x d)	90 x 95 x 36 mm

[Read more](#)

[Watch video](#)


TYPE	PRODUCT NO.	
DPT-Flow-1000-D	102.001.067	air flow transmitter, range 0...1000 Pa, manual zeroing
DPT-Flow-1000-AZ-D	102.001.068	air flow transmitter, range 0...1000 Pa, automatic zeroing
DPT-Flow-1000-D-40C	102.001.069	air flow transmitter, range 0...1000 Pa, manual zeroing, extended ambient temperature range (-40...50 °C)
DPT-Flow-2000-D	102.002.056	air flow transmitter, range 0...2000 Pa, manual zeroing
DPT-Flow-2000-AZ-D	102.002.057	air flow transmitter, range 0...2000 Pa, automatic zeroing
DPT-Flow-2000-D-40C	102.002.058	air flow transmitter, range 0...2000 Pa, manual zeroing, extended ambient temperature range (-40...50 °C)
DPT-Flow-5000-D	102.004.061	air flow transmitter, range 0...5000 Pa, manual zeroing
DPT-Flow-5000-AZ-D	102.004.062	air flow transmitter, range 0...5000 Pa, automatic zeroing
DPT-Flow-5000-D-40C	102.004.063	air flow transmitter, range 0...5000 Pa, manual zeroing, extended ambient temperature range (-40...50 °C)
DPT-Flow-7000-D	102.006.067	air flow transmitter, range 0...7000 Pa, manual zeroing
DPT-Flow-7000-AZ-D	102.006.068	air flow transmitter, range 0...7000 Pa, automatic zeroing
DPT-Flow-7000-D-40C	102.006.069	air flow transmitter, range 0...7000 Pa, manual zeroing, extended ambient temperature range (-40...50 °C)

OPTIONS

DP-AK	1241000001	differential pressure measurement accessory kit
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Airflow transmitters

DPT-FLOW-Batt



DPT-Flow-Batt is an user-friendly on-site display for airflow or differential pressure monitoring in environments and applications where electricity is not available. It is designed for air handling units to measure the airflow on centrifugal fans. It can also be used in the duct system as an on-site display for flow. This device can be used with several different measurement probes such as FloXact or pitot tube, and air dampers. The requirement is that the K-value of the measurement probe or damper is known.



Differential air pressure measurement ranges	0...7000 Pa
Time constant	1.0...10 s
Mounting	with screws, external lugs
Materials	ABS and PC plastic, tubing silicone
Product dimensions (w x h x d)	102 x 95 x 36 mm

Read more



TYPE	PRODUCT NO.	
DPT-FLOW-Batt-7000-D	102.006.031	battery-powered airflow meter with display, range 0...7000 Pa, manual zeroing
OPTIONS		
DP-AK	1241000001	differential pressure measurement accessory kit

Filter guard

PEL 2500–SV



PEL 2500–SV filter guard is designed for filter monitoring in systems that handle air and other non-flammable gases. The device has three indicator lights that indicate the filter status.



[Read more](#)



Differential air pressure measurement ranges	0...1000 Pa, 0...100 Pa, 0...1500 Pa, 0...2000 Pa, 0...200 Pa, 0...2500 Pa, 0...500 Pa, ± 100 Pa
Time constant	2 s or *8 s
Voltage output	0...10 / 2...10 / 0...5 Vdc, < 2 mA (pressure)
Current output	4...20 / 0...20 mA, 700 Ω (pressure)
Output	3 x potential free contact (filter status)
Zeroing	automatic; regularly eliminates the possible zero point drifting
Mounting	with screws, external lugs
Materials	polycarbonate
Product dimensions (w x h x d)	105 x 102 x 46 mm

TYPE	PRODUCT NO.	
PEL 2500–SV	2240170	filter guard

Pressure transmitter accessories

ML-SER, PEL-USK, DP-AK

DP-AK is an accessory kit that can be used for transmitter process connections.

ML-SER commissioning tool is designed for easy commission and configuration of the Produal transmitter products. The ML-SER shows device-specific configuration menus when the connector is plugged in the master device.

PEL-USK is designed to protect pressure measurement hose from pressure shocks caused by wind and other outdoor environmental influences.



[Read more](#)



TYPE	PRODUCT NO.	
DP-AK	1241000001	differential pressure measurement accessory kit
ML-SER	1139010	transmitter commissioning tool
PEL-USK	1131020	protective cover for pressure hose

OPTIONS

T-CON	1240301	T connector
T-CON100	1240302	T connector, 100 pcs
Y-CON	1240303	Y connector
Y-CON100	1240304	Y connector, 100 pcs
PVC-HOSE	1240305	PVC hose (4/7), 200 m
SPC-85-P	1241000005	plastic duct connector for static pressure measurement, 85 mm
SPC-40-M	1241000006	steel duct connector for static pressure measurement, 40 mm
SPC-100-M	1241000007	steel duct connector for static pressure measurement, 100 mm



DP-AK



SPC



PVC-HOSE



T-CON



T-CON 100



Y-CON



Y-CON 100

Air flow probes

FloXact

The FloXact airflow volume probes are designed for airflow volume measurement, operating together with air volume transmitters or other transmitters with an airflow output. They are also easy to install to existing ventilation ducts. These probes have different models for round and rectangular ducts.

Airflow measurement accuracy	±2 % (air speed > 1 m/s)
Materials	T3015 aluminium



[Read more](#)



Ordering guide		Type	0	1	2	3
0	Airflow volume probe	FloXact	1251			
1	Probe type	For round duct, aluminium, connectors for 4 mm hose	-R	R		
		For rectangular duct, aluminium, connectors for 4 mm hose	-L	L		
		For round duct, stainless steel, connectors for 4 mm hose	-RS	A		
		For rectangular duct, stainless steel, connectors for 4 mm hose	-LS	B		
		For round duct, aluminium, connectors for 6 mm hose	-6R	C		
		For rectangular duct, aluminium, connectors for 6 mm hose	-6L	D		
		For round duct, stainless steel, connectors for 6 mm hose	-6RS	E		
		For rectangular duct, stainless steel, connectors for 6 mm hose	-6LS	F		
2	Length ¹⁾	XXXX			XXXX	
3	Length unit	Millimeters				A
		Inches				B

¹⁾ Write the length in millimeters or inches and select the length unit in section 3. Add leading zeros to the product number column but not to the type column. For example, the product number for a 400 mm probe FloXact-6LS400 is 1251F0400A.

NOTE: The minimum length is 80 mm and the maximum length 1525 mm. The minimum length for -RS, -LS, -6RS and -6LS models is 250 mm.

OTHER LENGTHS ALSO AVAILABLE

Air velocity transmitters

AVT



24 V

IP54

-25...50 °C

0...95 %rH

m/s



AVT air velocity transmitters measure air velocity and temperature in ventilation ducts. They are commonly used in HVAC/R systems for in-duct temperature monitoring, in-duct air flow and velocity monitoring, and VAV applications. The transmitters have separate readings and outputs for air velocity and temperature. The -BT models are easy to commission with a MyTool Connect Bluetooth dongle and mobile application. The -MOD models have Modbus communication instead of analogue outputs.



Read more



Watch video



Temperature measurement range	-25...50 °C (probe)
Air velocity measurement range	0...2 m/s, 0...10 m/s, 0...20 m/s, freely selectable
Temperature measurement accuracy	±0.5 °C (25 °C, air velocity > 0.5 m/s)
Probe	Ø10 x 100 / 200 / 400 mm
Temperature output	0...10 Vdc, load > 1 kΩ / 4...20 mA, load 20...400 Ω
Air velocity output	0...10 Vdc, load > 1 kΩ / 4...20 mA, load 20...400 Ω
Mounting	with flange, adjustable probe depth
Materials	ABS, PC, LLPDP and stainless steel
Product dimensions (w x h x d)	86 x 93 x 263 mm

Ordering guide		Type	0	1	2	3	4	5	6
0 Air velocity transmitter			1138		0		0	0	0
1 Device type	Air velocity and temperature transmitter	AVT		1					
	Air velocity and temperature transmitter with display	AVT-D		2					
	Air velocity and temperature transmitter with display and relay	AVT-D-R		3					
	Air velocity and temperature transmitter with display and Modbus communication	AVT-MOD-D		4					
	Air velocity and temperature transmitter with Bluetooth connector	AVT-BT		5					
	Air velocity and temperature transmitter with Bluetooth connector and display	AVT-BT-D		6					
	Air velocity and temperature transmitter with Bluetooth connector and relay	AVT-BT-R		7					
	Air velocity and temperature transmitter with display, Bluetooth connector and relay	AVT-BT-D-R		8					
	Air velocity and temperature transmitter with Bluetooth connector and Modbus communication	AVT-BT-MOD		9					
	Air velocity and temperature transmitter with display, Bluetooth connector and Modbus communication	AVT-BT-MOD-D		A					
2 Reserved					0				
3 Probe length	200 mm					0			
	100 mm	-100				1			
	400 mm	-400				2			

TOOLS

MYT-CON	5100020000	MyTool Connect, a Bluetooth dongle for Produl MyTool® and MyProdual connection
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Air velocity transmitters

IVLJ



IVLJ air velocity transmitters are designed for measuring air velocity and temperature inside air ducts. The probe is attached to a cable for more flexible positioning on the duct.

The minimum installation depth in the duct is 50 mm for all probe lengths. The maximum installation depth is 10 mm less than the probe length. For example, if the probe length is 200 mm, the installation depth is 50...190 mm.



[Read more](#)



Temperature measurement range	0...50 °C
Temperature measurement accuracy	±0.5 °C
Temperature output	0...10 Vdc, 2 mA / 4...20 mA < 600 Ω
Air velocity output	0...10 Vdc, 2 mA / 4...20 mA, 600 Ω
Cable gland	2 X M16
Mounting	probe: by a flange, adjustable depth; transmitter: with screws, external lugs
Materials	PBT, PC, PA and stainless steel
Cable length	2,0 m

TYPE	PRODUCT NO.	
IVLJ 02	1130040	air velocity transmitter 0...2 m/s, probe Ø 10 x 200 mm
IVLJ 02-N	1130044	air velocity transmitter with display, 0...2 m/s, probe Ø 10 x 200 mm
IVLJ 02-400	1130042	air velocity transmitter, 0...20 m/s, probe Ø 10 x 400 mm
IVLJ 02-400-N	1130043	air velocity transmitter with display, 0...20 m/s, probe Ø 10 x 400 mm
IVLJ 10	1130090	air velocity transmitter 0...10 m/s, probe Ø 10 x 200 mm
IVLJ 10-N	1130096	air velocity transmitter with display, 0...10 m/s, probe Ø 10 x 200 mm
IVLJ 10-400	1130095	air velocity transmitter, 0...10 m/s, probe Ø 10 x 400 mm
IVLJ 10-400-N	1130093	air velocity transmitter with display, 0...10 m/s, probe Ø 10 x 400 mm
IVLJ 20	1130100	air velocity transmitter 0...20 m/s, probe Ø 10 x 200 mm
IVLJ 20-N	1130101	air velocity transmitter with display, 0...20 m/s, probe Ø 10 x 200 mm
IVLJ 20-400	1130103	air velocity transmitter, 0...20 m/s, probe Ø 10 x 400 mm
IVLJ 20-400-N	1130104	air velocity transmitter with display, 0...20 m/s, probe Ø 10 x 400 mm

Humidity transmitters

RTX-RH



24 V

IP30

0...50 °C

0...95 %rH

rH

VOC

PIR

RTX-RH room transmitters provide improved temperature, humidity and VOC measurement as well as motion detection (PIR). Standard features include temperature and relative humidity measurement, built-in P/PI controller, condensation guard feature, seamless integration with existing devices and systems, and easy commissioning and configuration with MyProdual mobile application.


[Read more](#)


Temperature measurement range	0...50 °C
Humidity measurement range	0...100 %rH
Temperature measurement accuracy	±0.3 °C (20...25 °C)
Humidity measurement accuracy	typ. ±2 %rH (30...75 %rH, 20...25 °C), max. ±3 %rH
Multifunctional input	1xNTC10 / Pt1000 / Resistive / Digital / 0...10 Vdc
Multifunctional output	4x0...10 Vdc, 2 mA
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	ABS plastic
Product dimensions (w x h x d)	97 x 97 x 27 mm

Ordering guide		Type	0	1	2	3	4	5	6
0 Room transmitters			5301						0
1 Device type	Room transmitter with temperature measurement	RTX		1					
	Room transmitter with temperature and CO ₂ measurement	RTX-CO2		2					
2 Body colour	White				W				
	Black	B			B				
3 Display	No display					0			
	LED indicator	-L				L			
	LED indicator with custom text	-LT				2			
4 Additional measurements	No additional measurement						0		
	Relative humidity	-RH					H		
	Volatile organic compounds (VOC)	-VOC					V		
	Movement detection (PIR)	-PIR					P		
	Relative humidity and PIR	-RH-PIR					6		
	Relative humidity, VOC and PIR	-RH-VOC-PIR					7		
	Relative humidity and VOC	-RH-VOC					8		
	VOC and PIR	-VOC-PIR					9		
5 Advanced options	No advanced options							0	
	Modbus	-MOD						M	
	BACnet	-BAC						B	
	Relay	-R						R	
	Modbus and relay	-MOD-R						1	
	BACnet and relay	-BAC-R						2	
6 Reserved									0

TOOLS

MYT-CON	5100020000	MyTool Connect, a Bluetooth dongle for Produal MyTool® and MyProdual connection
MyProdual	5100030000	MyProdual mobile application for configuring and commissioning Produal next-generation products (Android and iOS)

Humidity transmitters

KLH



KLH room humidity transmitters are designed for measuring and controlling indoor relative humidity and temperature.

Temperature measurement range	0...50 °C
Humidity measurement range	0...100 %rH
Temperature measurement accuracy	±0.5 °C
Humidity measurement accuracy	±2 %rH
Control output	0...10 Vdc, 2 mA
Temperature output	0...10 Vdc, 2 mA
Humidity output	0...10 Vdc, 2 mA
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	ABS plastic
Product dimensions (w x h x d)	87 x 86 x 30 mm



[Read more](#)



TYPE	PRODUCT NO.	
KLH100	1132210	room humidity transmitter
KLH100-N	1132211	room transmitter with display
KLH100-N-PU	1132211A00	room transmitter with display, 0...10 V potentiometer
KLH100-R	1132210010	room humidity transmitter, relay output (24 Vac 1 A)
KLH100-N-R	1132211010	room transmitter with display, relay output (24 Vac 1 A)
KLH100-N-PU-R	1132211A10	room transmitter with display, 0...10 V potentiometer, relay output (24 Vac 1 A)
KLH100-5V-PT1000	1132620	room humidity transmitter, Pt1000 sensor, 0...5 V outputs
KLH-M	1132600	Modbus room humidity transmitter
KLH-M-N	1132601	Modbus room humidity transmitter with display (humidity and/or temperature display)
KLH-M-R	1132600010	Modbus room humidity transmitter, relay output (24 Vac 1 A)
KLH100-NTC10	1132230	room humidity transmitter, NTC 10 sensor
KLH100-NTC 20	1132310	room humidity transmitter, NTC 20 sensor
KLH100-PT1000	1132320	room humidity transmitter, Pt1000 sensor

TOOLS

ML-SER	1139010	transmitter commissioning tool
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OPTIONS

HD-P	passive potentiometer (not available for Modbus models)
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Humidity transmitters

KLH 420

KLH 420 is a 2-wire humidity transmitter designed for measuring indoor relative humidity.

Humidity measurement range	0...100 %rH
Humidity measurement accuracy	±3 %rH
Humidity output	4...20 mA < 500 Ω (24 Vdc)
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	ABS plastic
Product dimensions (w x h x d)	87 x 86 x 30 mm



Read more



TYPE	PRODUCT NO.	
KLH 420	1132280	room humidity transmitter
KLH 420-N	1132281	room humidity transmitter with display

Humidity transmitters

KLHJ 100



KLHJ 100 transmitters are designed for measuring relative humidity and temperature. The probe cable length is 2 m.

Temperature measurement range	-50...50 °C
Humidity measurement range	0...100 %rH
Temperature measurement accuracy	±0.5 °C
Humidity measurement accuracy	±2 %rH
Temperature output	0...10 Vdc, 2 mA / 4...20 mA < 600 Ω
Humidity output	0...10 Vdc, 2 mA / 4...20 mA < 600 Ω
Cable gland	M16
Mounting	transmitter with screws (external lugs), sensor with flange, adjustable probe depth < 150 mm
Materials	PBT, PC, PA and stainless steel
Cable length	2,0 m



[Read more](#)



TYPE	PRODUCT NO.	
KLHJ 100	1132260	humidity and temperature transmitter
KLHJ 100-N	1132261	humidity and temperature transmitter with display

Humidity transmitters

KLK 100



24 V

IP54

-30...50 °C

0...90 %rH

rH



KLK duct humidity transmitters are designed for measuring relative humidity and temperature inside ventilation ducts.

Temperature measurement range	-50...50 °C
Humidity measurement range	0...100 %rH
Temperature measurement accuracy	±0.5 °C
Humidity measurement accuracy	typ. ±2 %rH (20...80 %rH), max. ±3 %rH
Control output	humidity or temperature output can be configured to control output
Temperature output	0...10 Vdc, 2 mA / 4...20 mA ≤ 500 Ω
Humidity output	0...10 Vdc, 2 mA / 4...20 mA ≤ 500 Ω
Cable gland	M16
Mounting	with flange, probe depth adjustable < 150 mm
Materials	PBT, PC, PA and stainless steel


[Read more](#)


TYPE	PRODUCT NO.	
KLK 100	1132240	duct humidity transmitter
KLK 100-N	1132241	duct humidity transmitter with display
KLK 100-R	1132240A00	duct humidity transmitter, relay (24 Vac 1 A)
KLK 100-NTC 10	1132240B00	duct humidity transmitter with NTC 10 temperature sensor
KLK-M	1132610	Modbus duct humidity transmitter
KLK-M-N	1132611	Modbus duct humidity transmitter with display

TOOLS		
ML-SER	1139010	transmitter commissioning tool

Humidity transmitters

New!

KLU



KLU transmitters are designed to measure and control relative humidity and temperature in demanding circumstances. KLU has a P/PI controller and a longer probe for improved temperature measurement accuracy.

Temperature measurement range	-50...50 °C
Humidity measurement range	0...100 %rH
Temperature measurement accuracy	±0.5 °C
Humidity measurement accuracy	±2 %rH
Temperature output	0...10 Vdc, 2 mA / 4...20 mA ≤ 500 Ω
Humidity output	0...10 Vdc, 2 mA / 4...20 mA ≤ 500 Ω
Cable gland	1X M16
Mounting	on a wall with screws, external lugs
Materials	PC and PBT plastic
Product dimensions (w x h x d)	106 x 153 x 46 mm


[Read more](#)


TYPE	PRODUCT NO.	
KLU	113BA0A0A0	outdoor humidity transmitter
KLU-N	113BA1A0A0	outdoor humidity transmitter with a display
KLU-R	113BA0A1A0	outdoor humidity transmitter, relay (24 Vdc, 1 A res.)
KLU-R-2G	113BA0A1B0	outdoor humidity transmitter, relay (24 Vdc, 1 A res.), 2 x M16
KLU-N-R	113BA1A1A0	outdoor humidity transmitter with display, relay (24 Vdc, 1 A res.)
KLU-N-R-2G	113BA1A1B0	outdoor humidity transmitter with display, relay (24 Vdc, 1 A res.), 2 x M16
KLU-M	113BA0B0A0	Modbus outdoor humidity transmitter
KLU-M-2G	113BA0B0B0	Modbus outdoor humidity transmitter, 2 x M16
KLU-M-N	113BA1B0A0	Modbus outdoor humidity transmitter with display
KLU-M-N-2G	113BA1B0B0	Modbus outdoor humidity transmitter with display, 2 x M16
KLU-M-R	113BA0B1A0	Modbus outdoor humidity transmitter, relay (24 Vdc, 1 A res.)
KLU-M-R-2G	113BA0B1B0	Modbus outdoor humidity transmitter, relay (24 Vdc, 1 A res.), 2 x M16
KLU-M-N-R	113BA1B1A0	Modbus outdoor humidity transmitter with display, relay (24 Vdc, 1 A res.)
KLU-M-N-R-2G	113BA1B1B0	Modbus outdoor humidity transmitter with display, relay (24 Vdc, 1 A res.), 2 x M16

TOOLS

ML-SER	1139010	transmitter commissioning tool
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CO₂ transmitters

RTX-CO₂



24 V

IP30

0...50 °C

0...95 %rH

CO₂

rH

PIR

RTX-CO₂ room transmitters provide improved temperature, CO₂, humidity and VOC measurement as well as motion detection (PIR). Standard features include temperature and CO₂ measurement, built-in P/PI controller, seamless integration with existing devices and systems, and easy commissioning and configuration with MyProdual mobile application.


[Read more](#)


Temperature measurement range	0...50 °C
CO ₂ measurement range	0...5000 ppm
Time constant	adjustable (> 1 min)
Temperature measurement accuracy	±0.3 °C (20...25 °C)
CO ₂ measurement accuracy	With ABC calibration typ. ±40 ppm +2 % from reading, max. ±50 ppm +2 % from reading (15...35 °C / 0...80 %rH)
Multifunctional input	1xNTC10 / Pt1000 / Resistive / Digital / 0...10 Vdc
Multifunctional output	4x0...10 Vdc, 2 mA
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	ABS plastic
Product dimensions (w x h x d)	97 x 97 x 27 mm

Ordering guide		Type	0	1	2	3	4	5	6
0 Room transmitters			5301						0
1 Device type	Room transmitter with temperature measurement	RTX		1					
	Room transmitter with temperature and CO ₂ measurement	RTX-CO ₂		2					
2 Body colour	White				W				
	Black	B			B				
3 Display	No display					0			
	LED indicator	-L				L			
	LED indicator with custom text	-LT				2			
4 Additional measurements	No additional measurement						0		
	Relative humidity	-RH					H		
	Volatile organic compounds (VOC)	-VOC					V		
	Movement detection (PIR)	-PIR					P		
	Relative humidity and PIR	-RH-PIR					6		
	Relative humidity, VOC and PIR	-RH-VOC-PIR					7		
	Relative humidity and VOC	-RH-VOC					8		
	VOC and PIR	-VOC-PIR					9		
5 Advanced options	No advanced options							0	
	Modbus	-MOD						M	
	BACnet	-BAC						B	
	Relay	-R						R	
	Modbus and relay	-MOD-R						1	
	BACnet and relay	-BAC-R						2	
6 Reserved									0

TOOLS

MYT-CON	5100020000	MyTool Connect, a Bluetooth dongle for Produal MyTool® and MyProdual connection
MyProdual	5100030000	MyProdual mobile application for configuring and commissioning Produal next-generation products (Android and iOS)

CO₂ transmitters

RT-CO₂



RT-CO₂ transmitters are versatile room temperature and CO₂ transmitters best suited for simple measuring applications in building automation. Their outputs can be configured separately for each measurement. Easy to install to a wall or on a flush mounting box, RT-CO₂ transmitters are also quick to commission with MyProdual mobile phone application and MyTool Connect commissioning tool.



Read more



Temperature measurement range	0...50 °C
CO ₂ measurement range	0...2000 ppm
Time constant	adjustable (> 1 min)
Temperature measurement accuracy	±0.5 °C (25 °C)
CO ₂ measurement accuracy	typ. ±50 ppm +5 % of value (25 °C / 50 %rH)
Output	3 x 0...10 Vdc, 2 mA (Note: -MOD models do not have analogue outputs)
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	ABS plastic
Product dimensions (w x h x d)	97 x 97 x 27 mm

Ordering guide		Type	0	1	2	3	4	5	6
0 Room transmitters			5302			0			0
1 Device type	Room transmitter with temperature and CO ₂ measurement	RT-CO ₂		2					
2 Body colour	White				W				
	Black	B			B				
3 Display	No display					0			
4 Additional measurements	No additional measurement						0		
	Relative humidity	-RH					H		
5 Advanced options	No advanced options							0	
	Modbus	-MOD						M	
	BACnet	-BAC						B	
6 Reserved									0

TOOLS

MYT-CON	5100020000	MyTool Connect, a Bluetooth dongle for Produal MyTool® and MyProdual connection
MyProdual	5100030000	MyProdual mobile application for configuring and commissioning Produal next-generation products (Android and iOS)

OPTIONS

SMB-RXB	9000571	surface mounting box, black
SMB-RX	9000570	surface mounting box, white

CO₂ transmitters

HDH



24 V

IP20

0...50 °C

0...85 %rH

CO₂

rH

HDH transmitters are designed for measuring and controlling CO₂, temperature and humidity in dry room spaces. ABCLogic™ self-calibration method eliminates the possible long term drift.

Temperature measurement range	0...50 °C
Time constant	< 2 min
Temperature measurement accuracy	±0.5 °C
CO ₂ measurement accuracy	typ. ±40 ppm +3 % of value
Relay output	None
Control output	0...10 Vdc, 2 mA
Temperature output	0...10 Vdc, 2 mA
CO ₂ output	0...10 Vdc, 2 mA
Output	0...10 Vdc, 2 mA (humidity output in -RH models)
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	ABS plastic
Product dimensions (w x h x d)	87 x 86 x 30 mm


[Read more](#)

[Watch video](#)


Ordering guide			Type	0	1	2	3	4	5	6
0 Room transmitter				1135						
1 Device type	Room transmitter, CO ₂ and °C, range 0...2000 ppm	HDH		0	4	0				
	Room transmitter, display, CO ₂ and °C, 0...2000 ppm	HDH-N		0	4	1				
	Room transmitter, CO ₂ , °C and %rH, 0...2000 ppm	HDH-RH		0	4	4				
	Room transmitter, display, CO ₂ , °C and %rH, 0...2000 ppm	HDH-RH-N		0	4	5				
	Modbus room transmitter, CO ₂ and °C, 0...2000 ppm	HDH-M		1	0	0				
	Modbus room transmitter, display, CO ₂ and °C, 0...2000 ppm	HDH-M-N		1	0	1				
	Modbus room transmitter, CO ₂ , °C and %rH, 0...2000 ppm	HDH-M-RH		1	0	2				
	Modbus room transmitter, display, CO ₂ , °C, %rH, 0...2000 ppm	HDH-M-RH-N		1	0	3				
	Room transmitter, CO ₂ and °C, 0...10000 ppm	HDH 10K		1	1	0				
	Room transmitter, display, CO ₂ and °C, 0...10000 ppm	HDH 10K-N		1	1	1				
	Room transmitter, CO ₂ , °C and %rH, 0...10000 ppm	HDH 10K-RH		1	1	2				
	Room transmitter, display, CO ₂ , °C, %rH, 0...10000 ppm	HDH 10K-RH-N		1	1	3				
	Room transmitter, CO ₂ and °C, 0...5 V outputs, 0...2000 ppm	HDH-5V		1	9	0				
	Room transmitter, display, CO ₂ , °C, 0...5 V outputs, 0...2000 ppm	HDH-5V-N		1	9	1				
	Room transmitter, CO ₂ , °C, %rH, 0...5 V outputs, 0...2000 ppm	HDH-5V-RH		1	9	2				
	Room transmitter, display, CO ₂ , °C, %rH, 0...5 V outputs	HDH-5V-RH-N		1	9	3				
	Room transmitter, CO ₂ and °C, PIR, range 0...2000 ppm	HDH-PIR		2	4	0				
	Room transmitter, display, CO ₂ and °C, PIR, 0...2000 ppm	HDH-PIR-N		2	4	1				
	Room transmitter, CO ₂ , °C and %rH, PIR, 0...2000 ppm	HDH-RH-PIR		2	5	0				
	Room transmitter, display, CO ₂ , °C and %rH, PIR, 0...2000 ppm	HDH-RH-PIR-N		2	5	1				
	Modbus room transmitter, CO ₂ , °C and PIR, 0...2000 ppm	HDH-M-PIR		2	6	0				
	Modbus room transmitter, display, CO ₂ , °C and PIR, 0...2000 ppm	HDH-M-PIR-N		2	6	1				
	Modbus room transmitter, CO ₂ , °C and %rH, PIR, 0...2000 ppm	HDH-M-RH-PIR		2	7	0				
	Modbus room transmitter, display, CO ₂ , °C and %rH, PIR, 0...2000 ppm	HDH-M-RH-PIR-N		2	7	1				
2 Potentiometer options	No potentiometer								0	
	Active potentiometer (0...10 V)	-PU							A	
	Potentiometer 10 kΩ (not on -M models)	-P10K							B	
	Potentiometer 10 kΩ with resistors (not on -M models)	-P10KR							C	
	Potentiometer 1 kΩ (not on -M models)	-P1K							D	
	Potentiometer 1 kΩ with resistors (not on -M models)	-P1KR							E	
	Potentiometer 4.7 kΩ (not on -M models)	-P4K7							F	
	Potentiometer 4.7 kΩ with resistors (not on -M models)	-P4K7R							G	
	Potentiometer 22 kΩ (not on -M models)	-P22K							H	
	Potentiometer 22 kΩ with resistors (not on -M models)	-P22KR							J	
	Custom potentiometer with resistors (not on -M models)	-PC							K	
3 Additional options	No additional options									0
	Relay 24 Vac 1 A	-R								1
	Indicator light, 3 pcs	-AL3								2
	Relay 24 Vac 1 A + Indicator light, 3 pcs	-R-AL3								3
4 Body colour	White (RAL 9010)									0
	Grey Light (RAL 7004)									1
	Grey Dark (RAL 7012)									2
	Black (RAL 9005) painted									B
	Custom painted color									C

TOOLS

ML-SER	1139010	transmitter commissioning tool
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CO₂ transmitters

HDH-Passive



24 V

IP20

0...50 °C

0...85 %rH

CO₂

rH

HDH-Passive transmitters are designed for measuring and controlling CO₂, temperature and humidity in dry room spaces. ABCLogic™ self-calibration method eliminates the possible long term drift.



Temperature measurement range	0...50 °C
Time constant	< 2 min
Temperature measurement accuracy	±0.5 °C (25 °C)
CO ₂ measurement accuracy	typ. ±40 ppm +3 % of value
Relay output	None
Control output	0...10 Vdc, 2 mA
Temperature output	0...10 Vdc, 2 mA
CO ₂ output	0...10 Vdc, 2 mA
Output	1x passive output (NO/NC) for temperature
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	ABS plastic
Product dimensions (w x h x d)	87 x 86 x 30 mm

[Read more](#)

[Watch video](#)


TYPE	PRODUCT NO.	
HDH-PT1000	1135280	room transmitter, CO ₂ and °C measurement, range 0...2000 ppm, PT1000 sensor
HDH-PT1000-N	1135281	room transmitter with display, CO ₂ and °C measurement, range 0...2000 ppm, PT1000 sensor
HDH-NTC1.8	1135650	room transmitter, CO ₂ and °C measurement, range 0...2000 ppm, NTC1.8 sensor
HDH-NTC1.8-N	1135651	room transmitter with display, CO ₂ and °C measurement, range 0...2000 ppm, NTC1.8 sensor
HDH-NTC10	1135180	room transmitter, CO ₂ and °C measurement, range 0...2000 ppm, NTC10 sensor
HDH-NTC10-RH	1135182	room transmitter with display, CO ₂ , °C and humidity measurement, range 0...2000 ppm, NTC10 sensor
HDH-NTC20	2200041	room transmitter, CO ₂ and °C measurement, range 0...2000 ppm, NTC20 sensor
HDH-NTC20-N	2200041	room transmitter with display, CO ₂ and °C measurement, range 0...2000 ppm, NTC20 sensor
HDH-NTC20-RH	2200043	room transmitter with display, CO ₂ , °C and humidity measurement, range 0...2000 ppm, NTC20 sensor

TOOLS

ML-SER	1139010	transmitter commissioning tool
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CO₂ transmitters

HDK



HDK transmitters are designed for measuring and controlling CO₂, temperature and humidity inside ventilation ducts. Automatic self-calibration method eliminates the possible long term drift.

Temperature measurement range	0...50 °C
Time constant	< 2 min
Temperature measurement accuracy	±0.5 °C
CO ₂ measurement accuracy	typ. ±40 ppm +3 % of value
Relay output	None
Control output	0...10 Vdc, 2 mA
Temperature output	0...10 Vdc, 2 mA
CO ₂ output	0...10 Vdc, 2 mA
Mounting	in a Ø10 mm hole, with screws, external lugs
Materials	PC plastic
Product dimensions (w x h x d)	105 x 104 x 155 mm



Read more



TYPE	PRODUCT NO.	
HDK	1135050	duct transmitter, CO ₂ and °C measurement, range 0...2000 ppm
HDK-R	1135050A00	duct transmitter, CO ₂ and °C measurement, range 0...2000 ppm, relay (24 Vac 1 A)
HDK-N	1135051	duct transmitter with display, CO ₂ and °C measurement, range 0...2000 ppm
HDK-RH	1135054	duct transmitter, CO ₂ , °C and %rH measurement, range 0...2000 ppm
HDK-RH-N	1135055	duct transmitter with display, CO ₂ , °C and %rH measurement, range 0...2000 ppm
HDK-M	1135120	Modbus duct transmitter, CO ₂ and °C measurement, range 0...2000 ppm
HDK-M-N	1135121	Modbus duct transmitter with display, CO ₂ and °C measurement, range 0...2000 ppm
HDK-M-RH	1135122	Modbus duct transmitter, CO ₂ , °C and %rH measurement, range 0...2000 ppm
HDK-M-RH-N	1135123	Modbus duct transmitter with display, CO ₂ , °C and %rH measurement, range 0...2000 ppm
HDK10K	1135130	duct transmitter, CO ₂ and °C measurement, range 0...10000 ppm
HDK10K-N	1135131	duct transmitter with display, CO ₂ and °C measurement, range 0...10000 ppm
HDK10K-RH	1135132	duct transmitter, CO ₂ , °C and %rH measurement, range 0...10000 ppm
HDK10K-RH-N	1135133	duct transmitter with display, CO ₂ , °C and %rH measurement, range 0...10000 ppm
HDK10K-M	1135140	Modbus duct transmitter, CO ₂ and °C measurement, range 0...10000 ppm
HDK10K-M-N	1135141	Modbus duct transmitter with display, CO ₂ and °C measurement, range 0...10000 ppm
HDK10K-M-RH	1135142	Modbus duct transmitter, CO ₂ , °C and %rH measurement, range 0...10000 ppm
HDK10K-M-RH-N	1135143	Modbus duct transmitter with display, CO ₂ , °C and %rH measurement, range 0...10000 ppm

TOOLS

ML-SER	1139010	transmitter commissioning tool
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OPTIONS

HD-R		relay, 24 Vac 1 A
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CO₂ transmitters

HDU



HDU transmitters are designed for measuring and controlling CO₂ concentration and temperature in underground parking garages and parking halls (NOTE: limited UV resistance in outdoor environment). Automatic self-calibration method eliminates the possible long term drift.



[Read more](#)



Temperature measurement range	-50...50 °C
Temperature measurement accuracy	±0.5 °C
CO ₂ measurement accuracy	typ. ±40 ppm +3 % of value
Relay output	None
Temperature output	0...10 Vdc, 2 mA
CO ₂ output	0...10 Vdc, 2 mA
Cable gland	M16
Mounting	with screws, external lugs
Materials	PC plastic
Product dimensions (w x h x d)	105 x 110 x 46 mm

TYPE	PRODUCT NO.	
HDU	1135090	CO ₂ transmitter for cold spaces, range 0...2000 ppm
HDU-R	1135090A00	CO ₂ transmitter for cold spaces, range 0...2000 ppm, relay (24 Vac 1A)
HDU-N	1135091	CO ₂ transmitter with display, range 0...2000 ppm
HDU-M	1135150	Modbus CO ₂ transmitter for cold spaces, range 0...2000 ppm
HDU-M-N	1135151	Modbus CO ₂ transmitter with display, range 0...2000 ppm
HDU 5K	1135160	CO ₂ transmitter for cold spaces, range 0...5000 ppm
HDU 5K-R	1135160A00	CO ₂ transmitter for cold spaces, range 0...5000 ppm, relay (24 Vac 1A)
HDU 5K-N	1135161	CO ₂ transmitter with display, range 0...5000 ppm
HDU 5K-M	1135170	Modbus CO ₂ transmitter for cold spaces, range 0...5000 ppm
HDU 5K-M-N	1135171	Modbus CO ₂ transmitter with display, range 0...5000 ppm
HDU 10K	1135220	CO ₂ transmitter for cold spaces, range 0...10000 ppm
HDU 10K-N	1135221	CO ₂ transmitter with display, range 0...10000 ppm
HDU 10K-M	1135290	Modbus CO ₂ transmitter for cold spaces, range 0...10000 ppm
HDU 10K-M-N	1135291	Modbus CO ₂ transmitter with display, range 0...10000 ppm

TOOLS

ML-SER	1139010	transmitter commissioning tool
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OPTIONS

HD-R		relay, 24 Vac 1A
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Air quality transmitters

New!

IAQRM



The IAQRM air quality transmitter has up to six measurements that include particulate matter (PM1, PM2.5, PM4 and PM10), volatile organic compounds (VOC), carbon dioxide, formaldehyde, humidity and temperature. The transmitter has a full-colour capacitive touchscreen display and a configurable alarm relay output.



Read more



VOC measurement range	VOC Index 0...500 / TVOC 0...1300 ppb (0...6000 µg/m³)
Temperature measurement range	0...60 °C
Humidity measurement range	0...100 %rH
CO2 measurement range	0...10000 ppm
Temperature measurement accuracy	±0.2 °C
Humidity measurement accuracy	±1.5 %rH
CO2 measurement accuracy	typ. ±30 ppm +3 % of value
Relay output	24 Vac/dc, 2 A
Mounting	with screws on a flush mounting box
Materials	ABS, PC
Product dimensions (w x h x d)	95 x 125 x 29 mm

TYPE	PRODUCT NO.	
IAQRM6FV-P	5040010001	air quality transmitter with formaldehyde measurement, viewable touchscreen
IAQRM5XV-P	5040010002	air quality transmitter, viewable touchscreen
IAQRM6FC-P	5040010003	air quality transmitter with formaldehyde measurement, concealed touchscreen
IAQRM5XC-P	5040010004	air quality transmitter, concealed touchscreen

Air quality transmitters

New!

RTX-D



24 V

IP30

0...60 °C

0...95 %rH

CO₂

rH

VOC

PIR

RTX-D touchscreen room transmitters make indoor air quality monitoring and controlling accurate and efficient, helping you to create healthy and comfortable indoor environments and meet tightening regulations. Transmitter's intuitive 2.8" touchscreen with customisable user interface shows real-time measurement values at a glance. Patented temperature compensation and Installation Quality Score index guarantee accurate temperature readings. The built-in P/PI controller can control heating, cooling, ventilation, or VAV applications. Optional measurements include relative humidity, carbon dioxide, and volatile organic compounds for efficient IAQ monitoring.



Read more



Temperature measurement range	0...50 °C
Time constant	60...3600 s
Multifunctional input	1x NTC 10 / Pt1000 / Resistive / Digital / 0...10 Vdc and 1x NTC 10 / Resistive / Digital
Multifunctional output	4x 0...10 Vdc, 2 mA
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	ABS plastic
Product dimensions (w x h x d)	99 x 99 x 27 mm

Ordering guide		Type	0	1	2	3	4	5	6
0 Room transmitter			5301			D			0
1 Device type	Room transmitter with temperature measurement	RTX		1					
	Room transmitter with temperature and CO ₂ measurement	RTX-CO2		2					
2 Body colour	White (RAL9016)				W				
	Black (RAL9011)	B			B				
3 Display	Touchscreen display	-D				D			
4 Additional measurements	No additional measurement						0		
	Relative humidity	-RH					H		
	Volatile organic compounds (VOC)	-VOC					V		
	Occupancy detection (PIR)	-PIR					P		
	Relative humidity and PIR	-RH-PIR					6		
	Relative humidity, VOC and PIR	-RH-VOC-PIR					7		
	Relative humidity and VOC	-RH-VOC					8		
5 Advanced options	VOC and PIR	-VOC-PIR					9		
	No advanced options							0	
	Modbus RTU	-MOD						M	
	BACnet MS/TP	-BAC						B	
	Relay output	-R						R	
	Modbus RTU and relay output	-MOD-R						1	
6 Reserved	BACnet MS/TP and relay output	-BAC-R						2	
									0

TOOLS

MYT-CON	5100020000	MyTool Connect, a Bluetooth dongle for Produal MyTool® and MyProdual connection
MyProdual	5100030000	MyProdual mobile application for configuring and commissioning Produal next-generation products (Android and iOS)

Air quality transmitters

RTX-VOC



RTX-VOC room transmitters provide improved temperature and VOC measurement as well as motion detection (PIR). Standard features include temperature and VOC measurement, built-in P/PI controller, seamless integration with existing devices and systems, and easy commissioning and configuration with MyProdual mobile application.



Read more



VOC measurement range	0...65000 ppb (CO ₂ equivalent: 400...2000 ppm)
Temperature measurement range	0...50 °C
Time constant	adjustable (> 1 min)
Temperature measurement accuracy	±0.5 °C (25 °C)
Multifunctional input	1xNTC10 / Pt1000 / Resistive / Digital / 0...10 Vdc
Multifunctional output	4x0...10 Vdc, 2 mA
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	ABS plastic
Product dimensions (w x h x d)	97 x 97 x 29 mm

Ordering guide		Type	0	1	2	3	4	5	6
0 Room transmitters			5301						0
1 Device type	Room transmitter with temperature measurement	RTX		1					
	Room transmitter with temperature and CO ₂ measurement	RTX-CO ₂		2					
2 Body colour	White				W				
	Black	B			B				
3 Display	No display					0			
	LED indicator	-L				L			
	LED indicator with custom text	-LT				2			
4 Additional measurements	No additional measurement						0		
	Relative humidity	-RH					H		
	Volatile organic compounds (VOC)	-VOC					V		
	Movement detection (PIR)	-PIR					P		
	Relative humidity and PIR	-RH-PIR					6		
	Relative humidity, VOC and PIR	-RH-VOC-PIR					7		
	Relative humidity and VOC	-RH-VOC					8		
5 Advanced options	VOC and PIR	-VOC-PIR					9		
	No advanced options							0	
	Modbus	-MOD						M	
	BACnet	-BAC						B	
	Relay	-R						R	
6 Reserved	Modbus and relay	-MOD-R						1	
	BACnet and relay	-BAC-R						2	
6 Reserved									0

TOOLS

MYT-CON	5100020000	MyTool Connect, a Bluetooth dongle for Produal MyTool® and MyProdual connection
MyProdual	5100030000	MyProdual mobile application for configuring and commissioning Produal next-generation products (Android and iOS)

Air quality transmitters

ILK



24 V

IP54

0...50 °C

0...85 %rH

VOC

rH

ILK transmitters are designed for measuring and controlling VOC (Volatile Organic Compound) level, temperature and humidity inside ventilation ducts. The metal oxide sensor technology (MOX) and four sensing elements ensure reliable VOC level measurement.

VOC measurement range	450...2000 ppm (CO ₂ equivalent)
Temperature measurement range	0...50 °C
Temperature measurement accuracy	±0.5 °C
Relay output	None
Control output	0...10 Vdc, 2 mA
Temperature output	0...10 Vdc, 2 mA
Cable gland	M16
Mounting	in a Ø 10 mm hole, with screws, external lugs
Materials	PC and PBT plastic
Product dimensions (w x h x d)	106 x 102 x 157 mm


[Read more](#)


TYPE	PRODUCT NO.	
ILK	1135630	duct transmitter with VOC and °C measurement
ILK-N	1135631	duct transmitter with display, VOC and °C measurement
ILK-RH	1135632	duct transmitter with VOC, °C and %rH measurement
ILK-RH-N	1135633	duct transmitter with display, VOC, °C and %rH measurement
ILK-M	1135640	Modbus duct transmitter with VOC and °C measurement
ILK-M-N	1135641	Modbus duct transmitter with display, VOC and °C measurement
ILK-M-RH	1135642	Modbus duct transmitter with VOC, °C and %rH measurement
ILK-M-RH-N	1135643	Modbus duct transmitter with display, VOC, °C and %rH measurement
ILK-M-RH-R-N	1135643A00	Modbus duct transmitter with VOC, °C and %rH measurement, relay and display

TOOLS

ML-SER	1139010	transmitter commissioning tool
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OPTIONS

HD-R		relay, 24 Vac 1A
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Carbon monoxide transmitters

HML

HML transmitters are designed for measuring carbon monoxide concentration in underground parking garages and parking halls. The measuring is based on electro-chemical cell. The transmitter measuring range is 0...100 or 0...300 ppm.

CO measurement range	0...100 ppm / 0...300 ppm
Time constant	1.5 min
CO measurement accuracy	± 10 ppm for < 70 ppm value; ± 15 % of value for > 70 ppm value
Voltage output	0...10 Vdc, < 1 mA
Current output	4...20 mA, < 500 Ω
Output	0...10 Vdc, 1 mA / 4...20 mA, < 500 Ω
Cable gland	M16
Mounting	with screws, external lugs
Materials	PC plastic
Product dimensions (w x h x d)	106 x 113 x 46 mm



[Read more](#)



TYPE	PRODUCT NO.	
HML	1135520	CO transmitter
HML-N	1135521	CO transmitter with display
OPTIONS		
HMV	1135510	exchange kit for HML

Light level transmitters

LUX 34

LUX 34 is designed for measuring outdoor light level and temperature. Measured values can be used for controlling lighting and heating.

Temperature measurement range	-50...50 °C
Temperature output	0...10 Vdc, 1 mA
Light level output	0...10 Vdc, 1 mA
Cable gland	M16
Mounting	with screws, external lugs
Materials	PBT, PC, PA
Product dimensions (w x h x d)	90 x 94 x 44 mm



[Read more](#)



TYPE	PRODUCT NO.	
LUX 34	1133310	light level transmitter, selectable range 0...1000 lx or 0...10000 lx
LUX 34-100	1133311	light level transmitter, selectable range 0...100 lx or 0...500 lx
OPTIONS		
WS-1	9000520	weather shield

Light intensity transmitter

MMSP1

MMSP1 is designed for measuring sun light intensity.

Light level range	0...1500 W/m ²
Light level accuracy	±5 % (annual mean)
Voltage output	0...10 Vdc / 0...3.125 Vdc / 0...150 mVdc, the supply voltage must be at least 12 V
Current output	4...20 mA
Cable gland	M16
Product dimensions (w x h x d)	80 x 150 x 60 mm



[Read more](#)



TYPE	PRODUCT NO.	
MMSP1	1133360	sun light intensity transmitter

Differential pressure transmitters for water

VPEL



VPEL differential pressure transmitter is designed for measuring water/glycol pressures in heating and cooling systems.

Differential water pressure measurement accuracy	±2.5 % from the full scale
Voltage output	0...10 Vdc, 5 mA
Current output	4...20 mA, < 500 Ω
Zeroing	manually by using the push button
Process connection	8 mm compression fittings for copper pipes
Cable gland	M16
Mounting	with screws, external lugs, position allowed only process connectors downwards
Materials	PC plastic
Product dimensions (w x h x d)	118 x 113 x 46 mm



[Read more](#)



TYPE	PRODUCT NO.	
VPEL 1.0/2.5	1134060	differential water pressure transmitter, range 0...1.0 or 0...2.5 bar
VPEL 1.0/2.5-N	1134061	differential water pressure transmitter with display, range 0...1.0 or 0...2.5 bar
VPEL 4.0/6.0	1134070	differential water pressure transmitter, range 0...4.0 or 0...6.0 bar
VPEL 4.0/6.0-N	1134071	differential water pressure transmitter with display, range 0...4.0 or 0...6.0 bar

Pressure transmitters for water

VPL



24 V

IP54

0...60 °C

0...95 %rH

bar

VPL pressure transmitter (3-wire) is designed for measuring fluid pressures in heating and cooling systems.

Voltage output	0...10 Vdc, 2 mA
Current output	4...20 mA, 800 Ω
Cable gland	M16
Mounting	R½"
Materials	PBT, PC, PA and stainless steel
Product dimensions (w x h x d)	70 x 95 x 81 mm



Read more



TYPE	PRODUCT NO.	
VPL 16	1134050	water pressure transmitter, range 0...2.5, 0...6, 0...10 or 0...16 bar
VPL 16-N	1134051	water pressure transmitter with display, range 0...2.5, 0...6, 0...10 or 0...16 bar

Pressure transmitters for water

PTL



The PTL transmitters measure liquid pressure in heating and cooling systems. They are designed for extreme conditions where condensation is a common problem. These transmitters have a two-layer protection for electronics to protect electronics from condensation problems. These transmitters are also suitable for refrigerants and non-aggressive gases. The PTL transmitters have an analogue output signal for pressure measurement.



[Read more](#)



Water pressure measurement accuracy	±1 % of the full measurement range
Voltage output	0...10 Vdc
Mounting	G1/2" thread
Materials	Stainless steel
Cable length	1,0 m
Product dimensions (w x h x d)	39 x 22 x 78 mm

TYPE	PRODUCT NO.	
PTL-6-V-C1	11341A0A1A	pressure transmitter for liquids, range 0...6 bar, voltage output
PTL-6-A-C1	11341A0B1A	pressure transmitter for liquids, range 0...6 bar, current output
PTL-10-V-C1	11341B0A1A	pressure transmitter for liquids, range 0...10 bar, voltage output
PTL-10-A-C1	11341B0B1A	pressure transmitter for liquids, range 0...10 bar, current output
PTL-16-V-C1	11341C0A1A	pressure transmitter for liquids, range 0...16 bar, voltage output
PTL-16-A-C1	11341C0B1A	pressure transmitter for liquids, range 0...16 bar, current output

Rain sensor

RV2-24

RV2-24 is a rain sensor designed for HVAC and building automation systems to detect precipitation (rain/snow).

Rain output	relay, max. 230 Vac, 3 A
Cable gland	1X M16
Product dimensions (w x h x d)	80 x 82 x 55 mm



[Read more](#)



TYPE	PRODUCT NO.	
RV2-24	1136070	rain sensor

Wind sensors

UV7



UV7+UV7-VV ultrasonic wind transmitter is designed for measuring wind speed and direction in HVAC applications. The sensor is robust and stable.

Air direction measurement range	0...359 degrees
Air velocity measurement range	0...15 m/s / 0...40 m/s
Time constant	1, 2, 4, 8, 16 s
Air direction measurement accuracy	±1°
Voltage output	3 x 0...10 Vdc
Output	RS232 NMEA0183®
Cable	25 m



[Read more](#)



TYPE	PRODUCT NO.	
UV7	1136030	wind sensor
UV7-VV	1136032	transmitter module for wind sensor
UV7+UV7-VV	1136033	wind sensor and transmitter module

Wind sensors

VS 3000, VH 1000, VR 1000

VS 3000 wind sensor is designed for measuring wind speed and direction in HVAC applications.

Air direction measurement range	0...359 degrees
Air velocity measurement range	0...35 m/s
Air direction measurement accuracy	±1°
Air velocity measurement accuracy	±1m/s
Air direction measurement output	0...10 Vdc
Air velocity output	0...10 Vdc
Mounting	< Ø 50 mm
Cable	10 m



[Read more](#)



TYPE	PRODUCT NO.	
VS 3000	1136040	wind speed and direction sensor
VH 1000	1136050	wind speed sensor
VR 1000	1136060	wind direction sensor

Wind speed detector

TUNA 20



TUNA 20 is designed for measuring wind speed and outside air temperature.

Temperature measurement range	-50...50 °C
Air velocity measurement range	0...20 m/s
Voltage output	0...10 Vdc, 2 mA
Current output	4...20 mA, 600 Ω
Cable gland	M16
Mounting	with screws on wall
Materials	PBT, PC, PA, painted steel



[Read more](#)



TYPE	PRODUCT NO.	
TUNA 20	1136010	wind speed detector

Smoke detectors

KRM-2-X

KRM-X-2 duct smoke detector is designed for smoke detection in ventilation ducts. The detector is a combination of a smoke detector and an adapter system. The adapter system has been specially designed for optimal air flow through the smoke detector. KRM-X-2 detectors are for 24 Vac/dc supply voltage.

Probe	160 mm
Sensor	Optical RM3.3-X (ALN-E)
Alarm output	250 Vac / 24 Vdc, 8 A, change-over contact and 250 Vac / 24 Vdc, 8 A, NC contact
Contamination output	250 Vac / 24 Vdc, 6 A, NC contact
Cable gland	3 X M16
Materials	ABS plastic, aluminium
Product dimensions (w x h x d)	172 x 271 x 85 mm



[Read more](#)



TYPE	PRODUCT NO.	
KRM-X-2-0,16	1137060	duct smoke detector
KRM-X-2-MOD-0,16	1137070	Modbus duct smoke detector
KRM-X-2-BAC-0,16	1137080	BACnet duct smoke detector

OPTIONS

KS-X	1137093	mounting plate for round or insulated ducts
WDG-X	1137094	protective insulating housing with alarm display for outdoor installation
KS-WDG-X	1137095	mounting plate for round or insulated ducts (with WDG-X)
ASR-A10	1137096	test gas
KRM-RM3.3-X	1137097	smoke sensor (spare part)

Smoke detectors

KRM-X-1

KRM-X-1 duct smoke detector is designed for smoke detection in ventilation ducts. The detector is a combination of a smoke detector and an adapter system. The adapter system has been specially designed for optimal air flow through the smoke detector. KRM-X-1 detector is for 230 Vac supply voltage.

Probe	160 mm
Sensor	Optical RM3.3-X(ALN-E)
Alarm output	250 Vac / 24 Vdc, 8 A, change-over contact and 250 Vac / 24 Vdc, 8 A, NC contact
Contamination output	250 Vac / 24 Vdc, 6 A, NC contact
Cable gland	M16
Materials	ABS plastic, aluminium
Product dimensions (w x h x d)	172 x 271 x 85 mm



[Read more](#)



TYPE	PRODUCT NO.	
KRM-X-1-0,16	1137050	duct smoke detector
OPTIONS		
KS-X	1137093	mounting plate for round or insulated ducts
WDG-X	1137094	protective insulating housing with alarm display for outdoor installation
KS-WDG-X	1137095	mounting plate for round or insulated ducts (with WDG-X)
ASR-A10	1137096	test gas
KRM-RM3.3-X	1137097	smoke sensor (spare part)

Wireless solutions

Wireless functionality is one of the fastest-growing trends globally – and this is also the case in building automation. Produal has been a pioneer in offering wireless solutions for this market.

Our reliable, fully battery-operated Produal Proxima® MESH 2.4 GHz solution offers unparalleled reliability for wireless building automation. It is based on the intelligent and self-healing MESH network, using the best available communication frequencies dynamically in the building. The patented technology minimizes the likelihood of interference by or with other wireless systems. The wireless Produal MESH allows you to share the network connection across a wider area than ever before, and dedicated wireless applications can be built and commissioned easily.

Wireless Modbus MiraMesh technology allows the creation of a wireless Modbus RTU network that maintains the standardization of the protocol. As a result, you can reduce materials and workload by converting any Modbus RTU device to a wireless MiraMesh network and sending your Modbus measurement messages wirelessly with low latency.

We also offer transmitters for your long-range wireless LoRaWAN network. Our range makes it possible to convert Modbus RTU device communications to wireless LoRaWAN network communications, as well as to measure a wide range of properties and transmit the measurements as small-size payloads over long distances. LoRaWAN is a beneficial technology, especially in various IoT solutions.



Wireless Proxima MESH
base unit WBU



Wireless Proxima MESH
transmitter WTR



Wireless Proxima MESH
transmitter WTR-AK



Wireless LoRaWAN
transmitter ERS CO2 Lite
LoRa



Wireless Modbus bridge
W-Modbus DIN



Wireless Modbus bridge
W-Modbus

Wireless base unit

WBU

WBU is a base station for wireless Produa Proxima® MESH network transmitters and input modules. The transmitter information can be read via Modbus or through the 6 analogue outputs. The base unit supports Modbus RTU and Modbus TCP.

Frequency	2,4 GHz
Input	100 wireless transmitters and 6 analogue inputs
Supply output	2 x 24 Vac, total load < 8 A
Output	6 x analogue output
Mounting	with screws on wall or on 35 mm DIN rail
Materials	PC plastic
Product dimensions (w x h x d)	186 x 136 x 55 mm



Read more



Watch video



TYPE	PRODUCT NO.	
WBU	54011W0000	wireless base unit, white
WBUB	54011B0000	wireless base unit, black

TOOLS

MyProdua	5100030000	MyProdua mobile application for configuring and commissioning Produa next-generation products (Android and iOS)
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OPTIONS

CUCC	5201010400	cable covers for Proxima CU and WBU (includes two covers and four fixing screws)
WA-AS1	5401900010	extension cable and base for WBU antenna, 3 m cable

Wireless room transmitters

WTR



WTR battery operated wireless transmitters are designed for measuring indoor temperature and humidity. Transmitters are compatible with the wireless Produal Proxima® MESH network.

Frequency	2.4 GHz (2400...2483.5 MHz)
Temperature measurement range	0...50 °C
Humidity measurement range	0...100 %rH
Temperature measurement accuracy	±0.2 °C
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	PC plastic
Product dimensions (w x h x d)	97 x 97 x 30 mm



Read more



Watch video



Ordering guide		Type	0	1	2	3	4	5	6
0 Wireless room transmitter			5401	3				0	0
1 Device type	Battery powered wireless transmitter	WTR		3					
2 Body colour	White				W				
	Black	B			B				
3 Display	No display					0			
	Advanced setpoint knob with display, menu button	-AK				1			
	Setpoint knob	-PK				2			
	Setpoint knob with custom print	-PKC				P			
	Display, menu button	-D				3			
4 Additional measurements	No additional measurement						0		
	CO ₂ (not with -PK)	-CO2					C		
	Relative humidity	-RH					H		
	Movement detection (not with -PK)	-PIR					P		
	Relative humidity and movement detection (not with -PK)	-RH-PIR					1		
	CO ₂ and relative humidity (not with -PK)	-CO2-RH					2		
	CO ₂ and movement detection (not with -PK)	-CO2-PIR					3		
	CO ₂ , relative humidity and movement detection (not with -PK)	-CO2-RH-PIR					4		

TOOLS

MyProdual	5100030000	MyProdual mobile application for configuring and commissioning Produal next-generation products (Android and iOS)
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OPTIONS

Battery Li-SOCI2 3.6V 3.6Ah A	5910A06556	3.6 V A lithium battery
VP-PROX	9000460	protective casing for Produal next-generation room products

Wireless room transmitters

WTR24



WTR24 wireless transmitters are designed for measuring indoor temperature and humidity. Transmitters are compatible with the wireless Produa Proxima® MESH network.

Frequency	2,4 GHz
Temperature measurement range	0...50 °C
Temperature measurement accuracy	±0,5 °C (25 °C) or ±1 °C (25 °C, CO ₂ models)
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	PC plastic
Product dimensions (w x h x d)	97 x 97 x 30 mm



Read more



Watch video



Ordering guide		Type	0	1	2	3	4	5	6
0 Wireless room transmitter			5401					0	0
1 Device type	Wireless transmitter, 24 Vac supply	WTR24		4					
2 Body colour	White				W				
	Black	B			B				
3 Display	No display					0			
	Advanced setpoint knob with display, menu button	-AK				1			
	Display, menu button	-D				3			
4 Additional measurements	No additional measurement						0		
	Relative humidity	-RH					H		
	Movement detection (PIR)	-PIR					P		
	CO ₂	-CO ₂					C		
	Relative humidity and PIR	-RH-PIR					1		
	CO ₂ and relative humidity	-CO ₂ -RH					2		
	CO ₂ and PIR	-CO ₂ -PIR					3		
	CO ₂ , relative humidity and PIR	-CO ₂ -RH-PIR					4		

TOOLS

MyProdua	5100030000	MyProdua mobile application for configuring and commissioning Produa next-generation products (Android and iOS)
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OPTIONS

VP-PROX	9000460	protective casing for Produa next-generation room products
SMB-RXB	9000571	surface mounting box, black
SMB-RX	9000570	surface mounting box, white

Wireless input module

WTR-IM



WTR-IM is a wireless input module that reads values from three inputs. The input module includes also temperature and humidity measurements. The module is compatible with the wireless Pro dual Proxima® MESH network.



Read more



Watch video



Frequency	2,4 GHz
Temperature measurement range	0...50 °C
Humidity measurement range	0...100 %rH
Temperature measurement accuracy	±0.5 °C (25 °C)
Humidity measurement accuracy	±3 %rH (25 °C)
Multifunctional input	3 x 0...10 V or NTC 10 or resistive or digital
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	PC plastic
Product dimensions (w x h x d)	97 x 97 x 26 mm

TYPE	PRODUCT NO.	
WTR-IM	54015W0000	wireless input module, white
WTRB-IM	54015B0000	wireless input module, black

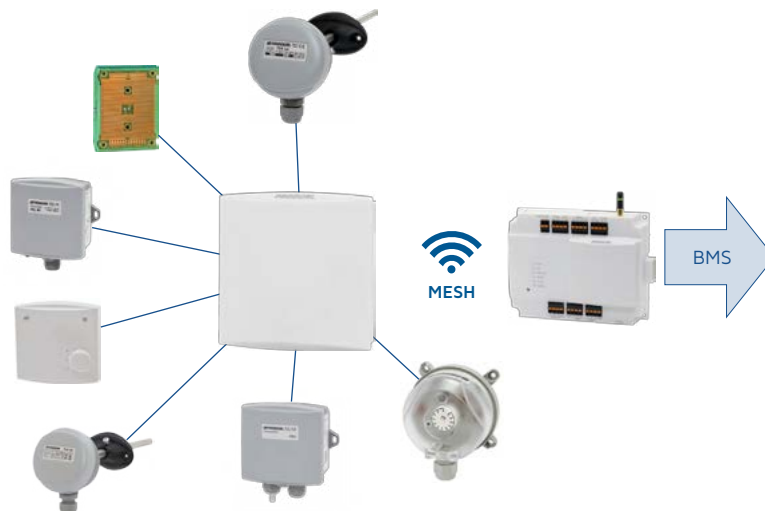
TOOLS

MyPro dual	5100030000	MyPro dual mobile application for configuring and commissioning Pro dual next-generation products (Android and iOS)
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OPTIONS

Battery Li-SOCI2 3.6V 3.6AhA	5910A06556	3.6 V A lithium battery
SMB-RX	9000570	surface mounting box, white
SMB-RXB	9000571	surface mounting box, black

CONVERT THE WIRED MEASUREMENTS TO WIRELESS MESSAGES FOR ALMOST UNLIMITED APPLICATIONS.



Wireless Modbus bridge

W-Modbus

W-Modbus converts the communication of Modbus RTU devices to wireless communication. W-Modbus supports up to 100 devices in one Modbus network. W-Modbus PRO supports up to four Modbus servers and up to 247 devices in one Modbus network. W-Modbus Compact is used as a node in the network. Compatible with all Modbus RTU devices.

Frequency	2.45 GHz, ISM band (2400...2483 MHz)
Supply output	24 Vac/dc, <10 VA
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	ABS plastic
Product dimensions (w x h x d)	86 x 86 x 26 mm



[Read more](#)



TYPE	PRODUCT NO.	
W-Modbus	50201W0000	wireless Modbus bridge
W-Modbus PRO	50201W0100	wireless Modbus bridge for up to 4 Modbus servers and 247 devices
W-Modbus COMPACT	50201W0700	compact wireless Modbus bridge

Wireless Modbus bridge

W-Modbus DIN

W-Modbus DIN is designed to be mounted on a DIN rail in an electrical cabinet. It converts the communication of Modbus RTU devices to wireless communication. The device supports up to 100 devices in one Modbus network. Compatible with all Modbus RTU devices.

Frequency	2.45 GHz, ISM band (2400...2483 MHz)
Mounting	for 35 mm DIN rail
Materials	ABS plastic
Product dimensions (w x h x d)	36.5 x 93 x 59 mm



[Read more](#)



TYPE	PRODUCT NO.	
W-Modbus DIN	50202W0000	wireless Modbus bridge for DIN rail mounting

Wireless BACnet bridge

W-BACnet

W-BACnet converts the communication of BACnet MS/TP devices to wireless communication. W-BACnet supports up to 100 devices in one BACnet network. W-BACnet PRO supports up to 400 devices in one BACnet network. W-BACnet Compact is used only as a node in the network. Compatible with all BACnet MS/TP devices

Frequency	2.45 GHz, ISM band (2400...2483 MHz)
Supply output	24 Vac/dc, < 10 VA
Mounting	on the wall surface or on a flush mounting box
Materials	ABS plastic
Product dimensions (w x h x d)	86 x 86 x 26 mm



[Read more](#)



TYPE	PRODUCT NO.	
W-BACnet	50201W0200	wireless BACnet bridge
W-BACnet PRO	50201W0300	wireless BACnet bridge for up to 400 devices
W-BACnet COMPACT	50201W0800	compact wireless BACnet bridge

Wireless BACnet bridge

W-BACnet DIN

W-BACnet DIN is designed to be mounted on a DIN rail in an electrical cabinet. It converts the communication of BACnet MS/TP devices to wireless communication. The device supports up to 100 devices in one BACnet network.

Frequency	2.45 GHz, ISM band (2400...2483 MHz)
Mounting	for 35 mm DIN rail
Materials	ABS plastic
Product dimensions (w x h x d)	36.5 x 93 x 59 mm



[Read more](#)



TYPE	PRODUCT NO.	
W-BACnet DIN	50202W0200	wireless BACnet bridge for DIN rail mounting

Wireless Modbus LoRaWAN bridge

MLB

MLB is a Class A LoRaWAN device that can operate in a public or private network. MLB is designed for converting Modbus RTU messages to wireless LoRaWAN messages and vice versa. The device functions as a Modbus master and it can read and write up to 32 registers via Modbus RTU bus. The slave device registers can be configured freely. Up to 16 Modbus slave devices can be connected to MLB and up to 32 registers can be read and written in total. MLB can be connected to any Modbus RTU slave device, and it supports two-way communication.

Frequency	863...870 MHz (868 MHz)
Cable gland	2 X M16
Product dimensions (w x h x d)	106 x 102 x 46 mm

[Read more](#)[Watch video](#)

TYPE	PRODUCT NO.	
MLB	5010100000	wireless Modbus LoRaWAN bridge, internal antenna
MLB-ANT	5010200000	wireless Modbus LoRaWAN bridge, external antenna

Wireless LoRaWAN room transmitters

ERS



24 V



IP20

0...50 °C

0...95 %rH

Battery-operated wireless ERS LoRaWAN transmitters are designed for measuring indoor temperature, humidity, CO₂, light, sound and occupancy.

Frequency	863...870 MHz (868 MHz)
Temperature measurement range	0...50 °C
Humidity measurement range	0...100 %rH
Light level range	0...65535 lx
Temperature measurement accuracy	±0.2 °C
Humidity measurement accuracy	±2 %rH (10...90 %rH, 25 °C)
Light level accuracy	±10 lx
Mounting	with screws or double-sided adhesive tape on the wall surface
Materials	PC and ABS plastic
Product dimensions (w x h x d)	76 x 76 x 23 mm


[Read more](#)


TYPE	PRODUCT NO.	
ERS LoRa	50301W0L00	wireless LoRaWAN transmitter, °C, %rH and light measurement, PIR
ERS Lite LoRa	50301W0M00	wireless LoRaWAN transmitter, °C and %rH
ERS CO ₂ LoRa	50301W0I00	wireless LoRaWAN transmitter, °C, %rH, CO ₂ and light measurement, PIR
ERS VOC LoRa	50301W0600	wireless LoRaWAN transmitter, °C, %rH, VOC and light measurement, PIR
ERS Eye LoRa	50301W0K00	wireless LoRaWAN transmitter, °C, %rH and light measurement, PIR and infrared
ERS Sound LoRa	50301W0J00	wireless LoRaWAN transmitter, °C, %rH, sound level and light measurement, PIR

TOOLS

ELSYS Firmware upgrade tool	5030100090	firmware upgrade tool for ERS, EMS and ELT series transmitters
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OPTIONS

BATER14505	5030100010	3.6 V AA lithium battery
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Wireless LoRaWAN room transmitters

New!

ERS Display & Interact



These battery-operated wireless ERS LoRaWAN transmitters have a 2.1" e-paper display that shows real-time sensor data. ERS Display transmitters measure indoor temperature, humidity, CO₂, light intensity, and motion depending on the model. ERS Interact transmitters measure indoor temperature and humidity. The Comfort model has temperature setpoint buttons. In the Flex model, the buttons and display are configurable.


[Read more](#)


Temperature measurement range	0...50 °C
Humidity measurement range	0...100 %rH
Temperature measurement accuracy	±0.2 °C
Humidity measurement accuracy	±2 % rH (25 °C)
Mounting	with screws or double-sided adhesive tape on the wall surface
Materials	PC and ABS plastic
Product dimensions (w x h x d)	76 x 76 x 23 mm

TYPE	PRODUCT NO.	
ERS Display Lite Lora	50301W0R00	wireless LoRaWAN transmitter with display, °C and %rH measurement
ERS Display CO2 Lite Lora	50301W0S00	wireless LoRaWAN transmitter with display, °C, %rH and CO ₂ measurement
ERS Display Lora	50301W0U00	wireless LoRaWAN transmitter with display, °C, %rH and light intensity measurement, PIR
ERS Display CO2 Lora	50301W0V00	wireless LoRaWAN transmitter with display, °C, %rH, CO ₂ and light intensity measurement, PIR
ERS Interact Lite Comfort LoRa	50301W0X00	wireless LoRaWAN transmitter with display, °C and %rH measurements, 2 setpoint buttons
ERS Interact Lite Flex LoRa	50301W0Y00	wireless LoRaWAN transmitter with configurable display, °C and %rH measurements, 3 configurable buttons

OPTIONS

BAT ER14505	5030100010	3.6 V AA lithium battery
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Wireless LoRaWAN room transmitters

New!

ECO

ECO is a wireless LoRaWAN transmitter for indoor use. It is powered by a solar cell that charges a lithium-ion capacitor. The solar cell is optimised for indoor light. ECO can operate up to 50 days in the dark.

Frequency	863...870 MHz (868 MHz)
Temperature measurement range	0...50 °C
Humidity measurement range	0...100 %rH
Light level range	0...4000 lx
Temperature measurement accuracy	±0.2 °C
Humidity measurement accuracy	±2 %rH (10...90 %rH, 25 °C)
Light level accuracy	±10 lx ±2 % of reading
Mounting	with screws or double-sided adhesive tape on the wall surface
Materials	biodegradable material (Biodolomer®)
Product dimensions (w x h x d)	66 x 66 x 17 mm


[Read more](#)


TYPE	PRODUCT NO.	
ERS Eco Lite LoRa	50301W0000	wireless LoRaWAN transmitter, °C, %rH and light measurement
ERS Eco CO2 Lite Lora	50301W0P00	wireless LoRaWAN transmitter, °C, %rH, CO2 and light measurement

TOOLS

ELSYS Firmware upgrade tool	5030100090	firmware upgrade tool for ERS, EMS and ELT series transmitters
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Wireless LoRaWAN room transmitters

New!

EMS



Wireless EMS LoRaWAN transmitters are ideal for applications where size matters. These compact, battery-operated transmitters are slightly larger than an AA battery. EMS transmitters measure temperature and humidity, and have an accelerometer, a leak detector and a door switch.

Wireless EMS Lite transmitters measure temperature and humidity, and have a leak detector.

Wireless EMS Desk transmitters are designed for desk occupancy detection in offices. They measure temperature and humidity, and have an occupancy sensor.

Wireless EMS Door transmitters detect when a door opens or an object moves.


[Read more](#)


Frequency	863...870 MHz (868 MHz)
Temperature measurement range	0...50 °C
Humidity measurement range	0...100 %rH
Temperature measurement accuracy	±0.2 °C
Humidity measurement accuracy	±2 %rH (10...90 %rH, 25 °C)
Mounting	with double-sided adhesive tape
Materials	PC and ABS plastic
Product dimensions (w x h x d)	21.2 x 74.9 x 20.8 mm

TYPE	PRODUCT NO.	
EMS LoRa	50301W0800	wireless LoRaWAN transmitter, °C, %rH, water leakage detection, acceleration, door activity
EMS Lite LoRa	50301W0A00	wireless LoRaWAN transmitter, °C, %rH and water leakage detection
EMS2 Desk	50301W0900	wireless LoRaWAN transmitter, °C, %rH and PIR
EMS Door LoRa	50301W0B00	wireless LoRaWAN transmitter for detecting acceleration and door activity

TOOLS

ELSYS Firmware upgrade tool	5030100090	firmware upgrade tool for ERS, EMS and ELT series transmitters
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OPTIONS

EMS Magnet	503010000H	a magnet for EMS and EMS2 Door transmitter for detecting door activity
BATER14505	5030100010	3.6 V AA lithium battery

Wireless LoRaWAN outdoor transmitters

New!

ELT-2



ELT-2 is a 2-channel wireless transceiver with a supply voltage output for external sensors. It is a long-range device designed to be mounted outside, and it can tolerate extreme weather conditions. ELT-2 measures temperature, humidity, atmospheric pressure, and acceleration. Multifunctional input for connecting external sensors and equipment.

Frequency	863...870 MHz (868 MHz)
Temperature measurement range	-40...60 °C
Humidity measurement range	0...100 %rH
Temperature measurement accuracy	±0.2 °C
Humidity measurement accuracy	±2 %rH (10...90 %rH, 25 °C)
Input	2x Resistive / Digital / 0...3 V / 0...10 V / 4...20 mA
Multifunctional input	2x Resistive / Digital / 0...3 V / 0...10 V / 4...20 mA
Mounting	with screws, external lugs
Materials	PC plastic


[Read more](#)


TYPE	PRODUCT NO.	
ELT LoRa	50301G0C00	wireless LoRaWAN outdoor transceiver, measures °C, %rH, acceleration and atmospheric pressure. Connector for external antenna (antenna sold separately).
ELT Internal antenna LoRa	50301G0D00	wireless LoRaWAN outdoor transceiver, internal antenna, measures °C, %rH, acceleration, atmospheric pressure

TOOLS

ELSYS Firmware upgrade tool	5030100090	firmware upgrade tool for ERS, EMS and ELT series transmitters
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OPTIONS

BAT ER14505	5030100010	3.6 V AA lithium battery
ELTmembrane	5030100020	breathable weatherproof membrane for ELT-2 and ELT-Ultrasonic
ELT Whip Antenna 868Mhz	5030100030	half-wave 868 MHz antenna for ELT-2, ELT-Lite and ELT-Ultrasonic
ELT EXT Module	5030100040	extension module for ELT-2: external power supply input. Lighting, actuator and relay control
Teros 10	5030100050	soil moisture sensor for ELT
ELT Soil Moisture sensor Teros 12	5030100060	advanced soil moisture sensor for ELT-2, equires Step Up Module
ELT ADC Module	5030100080	extension module for ELT-2: Pt1000 input, bridge amplifier
ELT Water Leak Detection cable	50301000E0	water leakage detection cable for ELT
ELT Maxbotix Distance Sensor	50301000F0	ultrasonic distance sensor for ELT-2 and ELT-Ultrasonic
ELT Step-Up Module	50301000G0	extension module for ELT-2 to boost battery voltage to 5 V

Wireless LoRaWAN outdoor transmitters

New!

ELT-Lite

ELT-Lite is a 1-channel wireless transceiver. It is a long-range device designed to be mounted outside, and it can tolerate extreme weather conditions. It is intended to be used with external sensors.

Frequency	863...870 MHz (868 MHz)
Input	1x Resistive / Digital / 0...3 V / 0...10 V / 4...20 mA
Multifunctional input	1x Resistive / Digital / 0...3 V / 0...10 V / 4...20 mA
Mounting	with screws, external lugs
Materials	PC plastic
Product dimensions (w x h x d)	94 x 59 x 35 mm


[Read more](#)


TYPE	PRODUCT NO.	
ELT Lite LoRa	50301G0E00	wireless LoRaWAN outdoor transceiver, external antenna, input for external sensors
TOOLS		
ELSYS Firmware upgrade tool	5030100090	firmware upgrade tool for ERS, EMS and ELT series transmitters
OPTIONS		
BATER14505	5030100010	3.6 V AA lithium battery
ELT Whip Antenna 868Mhz	5030100030	half-wave 868 MHz antenna for ELT-2, ELT-Lite and ELT-Ultrasonic
Teros 10	5030100050	soil moisture sensor for ELT
ELT Water Leak Detection cable	50301000E0	water leakage detection cable for ELT

Wireless LoRaWAN outdoor transmitters

New!

ELT-Ultrasonic



ELT-Ultrasonic is a wireless distance transmitter for outdoor use. It is a long-range device that can tolerate extreme weather conditions. It measures temperature, humidity, atmospheric pressure, acceleration and distance. ELT-Ultrasonic Snow is tuned for measuring distance against snow.


[Read more](#)


Frequency	863...870 MHz (868 MHz)
Temperature measurement range	-40...125 °C
Humidity measurement range	0...100 %rH
Temperature measurement accuracy	±0.3 °C
Humidity measurement accuracy	±2 %rH (10...90 %rH, 25 °C)
Mounting	with screws, external lugs
Materials	PC plastic
Product dimensions (w x h x d)	94 x 59 x 35 mm

TYPE	PRODUCT NO.	
ELT Ultrasonic 5m LoRa	50301G0F00	wireless distance transmitter, range 5 m
ELT Ultrasonic Snow LoRa	50301G0G00	wireless distance transmitter, range 5 m, optimised for snow
ELT Ultrasonic 10m LoRa	50301G0H00	wireless distance transmitter, range 10 m

TOOLS

ELSYS Firmware upgrade tool	5030100090	firmware upgrade tool for ERS, EMS and ELT series transmitters
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OPTIONS

BATER14505	5030100010	3.6 V AA lithium battery
ELTmembrane	5030100020	breathable weatherproof membrane for ELT-2 and ELT-Ultrasonic
ELT Whip Antenna 868Mhz	5030100030	half-wave 868 MHz antenna for ELT-2, ELT-Lite and ELT-Ultrasonic
ELT Maxbotix Distance Sensor	50301000F0	ultrasonic distance sensor for ELT-2 and ELT-Ultrasonic

Wireless NB-IoT room transmitters

New!

ERS NB-IoT/LTE-M



The battery-operated wireless ERS NB-IoT/LTE-M room transmitters measure indoor temperature, humidity, CO₂, light intensity, and motion depending on the model. They are compatible with nano SIM cards or eSIM.


[Read more](#)


Temperature measurement range	-40...125 °C
Humidity measurement range	0...100 %rH
Temperature measurement accuracy	±0.2 °C
Humidity measurement accuracy	±2 %rH
Mounting	with screws or double-sided adhesive tape on the wall surface
Materials	PC and ABS plastic
Product dimensions (w x h x d)	86 x 86 x 26 mm

TYPE	PRODUCT NO.	
ERS Lite NB-IoT/LTE-M	50302W0100	wireless NB-IoT/LTE-M transmitter, °C and %rH measurement
ERS CO ₂ NB-IoT/LTE-M	50302W0300	wireless NB-IoT/LTE-M transmitter, °C, %rH, CO ₂ and light intensity measurement, PIR
OPTIONS		
BATER14505	5030100010	3.6 V AA lithium battery

Wireless M-Bus room transmitters

New!

ERS wM-Bus



The battery-powered ERS TEMP wM-Bus room transmitter measures indoor temperature. It communicates using the wireless M-Bus communication protocol. All wireless communication is encrypted at the radio layer, ensuring secure and reliable data transmission.

Frequency	868.95 MHz
Temperature measurement range	-40...125 °C
Temperature measurement accuracy	±0.2 °C
Mounting	with screws or double-sided adhesive tape on the wall surface
Materials	PC and ABS plastic
Product dimensions (w x h x d)	76 x 76 x 23 mm



Read more



TYPE	PRODUCT NO.	
ERSTEMP vM-Bus	50303W0100	wireless M-Bus room transmitter, °C
OPTIONS		
BAT ER14505	5030100010	3.6 V AA lithium battery

Temperature measurement

Comprehensive range of temperature sensors for different applications in buildings' control and heating, cooling and air-conditioning systems. Thanks to the unique housing design, the sensors are easy to install, which offers major advantages during commissioning. Our sensor range covers the most commonly used passive temperature sensor elements and transmitters. Versatile installation options covering ducts, pipes, construction, ground, room and exterior.

- ▶ Wide range of HVAC temperature measurements
- ▶ Sensor element options include PT, NTC and NI series
- ▶ On transmitters 0...10 V, 4...20 mA
- ▶ Heating / cooling control
- ▶ Modbus communication with override feature



Room temperature
sensor RS



Immersion temperature
sensor TEAT + sensor
pocket AT



Duct temperature
sensor TEK



Average temperature
sensor TEKA



Cable temperature
sensor TEKY6S



Outdoor temperature
sensor TEU

Heating/cooling water sensors

TEAT

TEAT temperature sensors are designed for measuring heating and cooling water temperatures in HVAC automation systems. The sensors can also be used for air temperature measurements from ventilation ducts, for example.

Temperature measurement response time	5 s
Cable gland	M16
Mounting	water applications: with Produal pocket (R $\frac{1}{2}$ "), air applications: with flange
Mounting depth	80 mm; 50, 100, 150, 200, 250, 300, 350 and 450 mm mounting depths also available. To order these sensors, add the depth to the product type (e.g. TEAT PT100-300).
Materials	PBT, PC, PA, acid proof steel



Read more



TYPE	PRODUCT NO.	
TEAT PT100	1173070	100 Ω / 0 °C, accuracy ± 0.3 °C / 0 °C, EN 60751/B
TEAT PT1000	1174070	1000 Ω / 0 °C, accuracy ± 0.3 °C / 0 °C (Honeywell, Danfoss equivalent)
TEAT NTC1.8	117E070	1800 Ω / 25 °C, accuracy ± 0.3 °C / 25 °C (TAC/Schneider equivalent)
TEAT NTC 10	1175070	10 k Ω / 25 °C, accuracy ± 0.2 °C / 25 °C (Trend, Distech equivalent)
TEAT NTC 10-C	117M070	10 k Ω / 25 °C, accuracy ± 0.25 °C / 25 °C (Carel equivalent)
TEAT NTC 20	1176070	20 k Ω / 25 °C, accuracy ± 0.2 °C / 25 °C (Honeywell equivalent)
TEAT NI1000	117C070	1000 Ω / 0 °C, accuracy ± 0.4 °C / 0 °C (Sauter equivalent)
TEAT NI1000-LG	1178070	1000 Ω / 0 °C, accuracy ± 0.4 °C / 0 °C (Siemens equivalent)
TEAT KP 10	117J070	LM235Z, 10 mV/K, 2,98 V / 25 °C

OPTIONS

Duct Flange 6mm	5910MX9002	duct flange (6 mm)
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POCKETS (PRESSURE RATING = PN16)

Pocket material	TEAT mounting depth								
	50	80	100	150	200	250	300	350	450
Stainless steel AISI 300	AT 50 1170011	AT 80 1170010							
Brass MS 362	ATM 50 1170031	ATM 80 1170030	ATM 100 1170037	ATM 150 1170032	ATM 200 1170033	ATM 250 1170034	ATM 300 1170038	ATM 350 1170035	ATM 450 1170036
Acid proof steel AISI 316L		ATH 80 1170020	ATH 100 1170027	ATH 150 1170022	ATH 200 1170023	ATH 250 1170024	ATH 300 1170021	ATH 350 1170025	ATH 450 1170026

Heating/cooling water transmitters

TEAT LL, LU, -M

TEAT temperature transmitters are designed for measuring and controlling the temperature of heating and cooling water. The transmitters can also be used for air temperature measurements from ventilation ducts, for example.

Temperature measurement range	0...100 °C, 0...50 °C, -50...150 °C, -50...50 °C
Temperature measurement accuracy	±0.5 °C
Sensor	Pt1000 EN 60751/B
Cable gland	M16
Mounting	water applications: with Produal pocket (R $\frac{1}{2}$ "), air applications: with flange
Mounting depth	80 mm; 50, 100, 150, 200, 250, 300, 350 and 450 mm mounting depths also available. To order these sensors, add the depth to the product type (e.g. TEAT-M-300)
Materials	PBT, PC, PA, acid proof steel



[Read more](#)



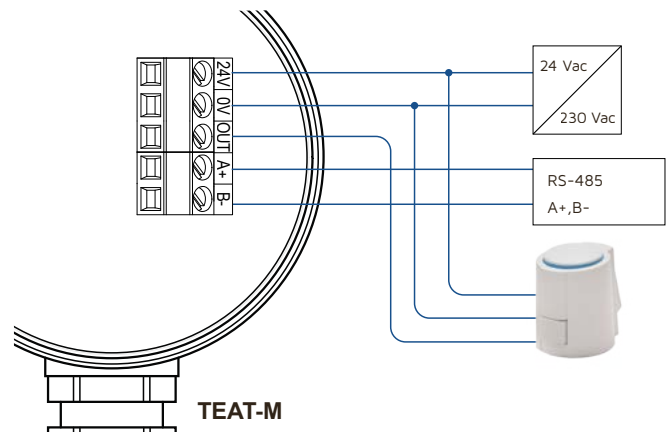
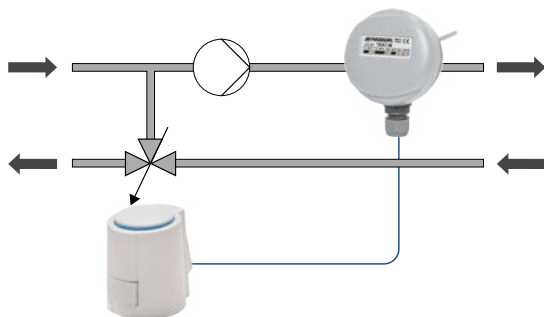
TYPE	PRODUCT NO.	
TEAT LL	1177070	2-wire transmitter/controller, supply 15...35 Vdc, output 4...20 mA
TEAT LU	1179070	3-wire transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA
TEAT-M	117Z070	Modbus transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA

TOOLS

ML-SER	1139010	transmitter commissioning tool
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OPTIONS

Duct Flange 6mm	5910MX9002	duct flange (6 mm)
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Hot domestic water sensors

TENA



TENA sensors are designed for measuring hot domestic water temperatures with fast response.

Temperature measurement response time	2.5 s
Probe	Ø 4.1 x 80 / 50 / 210 mm
Cable gland	M16
Mounting	R 1/2"
Mounting depth	80 mm. 50 and 210 mm mounting depths also available. To order these sensors, add the depth to the product type (e.g. TENAPT100-210).
Pressure rating	PN16
Materials	PBT, PC, PA, stainless steel



[Read more](#)



TYPE	PRODUCT NO.	
TENAPT100	1173050	100 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, probe 80 mm
TENAPT100-50	1173051	100 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, probe 50 mm
TENAPT100-210	1173052	100 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, probe 210 mm
TENAPT1000	1174050	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, probe 80 mm
TENAPT1000-50	1174051	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, probe 50 mm
TENAPT1000-210	1174052	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, probe 210 mm
TENANTC1.8	117E050	1800 Ω / 25 °C, accuracy ±0.3 °C / 25 °C, probe 80 mm
TENANTC1.8-50	117E051	1800 Ω / 25 °C, accuracy ±0.3 °C / 25 °C, probe 50 mm
TENANTC1.8-210	117E052	1800 Ω / 25 °C, accuracy ±0.3 °C / 25 °C, probe 210 mm
TENANTC2.2	1172050	2252 Ω / 25 °C, accuracy ±0.25 °C / 25 °C, probe 80 mm
TENANTC10	1175050	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C, probe 80 mm
TENANTC10-50	1175051	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C, probe 50 mm
TENANTC10-210	1175052	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C, probe 210 mm
TENANTC10-AN	117H050	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C, probe 80 mm
TENANTC10-AN-50	117H051	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C, probe 50 mm
TENANTC10-C	117M050	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C, probe 80 mm
TENANTC10-KB	117B050	5025 Ω / 25 °C, accuracy ±0.5 °C / 25 °C, probe 80 mm
TENANTC20	1176050	20 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C, probe 80 mm
TENANTC20-50	1176051	20 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C, probe 50 mm
TENANTC20-210	1176052	20 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C, probe 210 mm
TENANI1000	117C050	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C, probe 80 mm
TENANI1000-LG	1178050	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C, probe 80 mm
TENANI1000-LG-50	1178051	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C, probe 50 mm
TENANI1000-LG-210	1178052	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C, probe 210 mm
TENAT1	117V050	2226 Ω / 0 °C, accuracy ±0.4 °C / 0 °C, probe 80 mm
TENAT1-50	117V051	2226 Ω / 0 °C, accuracy ±0.4 °C / 0 °C, probe 50 mm

Hot domestic water transmitters

TENA LL, LU, -M

TENA temperature transmitters are designed for measuring and controlling hot domestic water temperature.

Temperature measurement range	0...100 °C, 0...50 °C, -50...150 °C, -50...50 °C
Temperature measurement accuracy	±0.5 °C
Probe	Ø 4.1 x 80 / 50 / 120 / 210 mm
Cable gland	M16
Mounting	R ½"
Materials	PBT, PC, PA, acid proof steel



[Read more](#)



TYPE	PRODUCT NO.	
TENA LL	1177050	2-wire transmitter/controller, supply 15...35 Vdc, output 4...20 mA, probe 80 mm
TENA LL-50	1177051	2-wire transmitter/controller, supply 15...35 Vdc, output 4...20 mA, probe 50 mm
TENA LL-50-N	1177051N00	2-wire transmitter/controller with display, supply 15...35 Vdc, output 4...20 mA, probe 50 mm
TENA LL-120	1177052	2-wire transmitter/controller, supply 15...35 Vdc, output 4...20 mA, probe 120 mm
TENA LL-210	1177053	2-wire transmitter/controller, supply 15...35 Vdc, output 4...20 mA, probe 210 mm
TENA LU	1179050	3-wire transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA
TENA LU-N	1179050N00	3-wire transmitter/controller with display, supply 24 Vac/dc, output 0...10 V < 2 mA
TENA LU-50	1179051	3-wire transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA, probe 50 mm
TENA LU-50-N	1179051N00	3-wire transmitter/controller with display, supply 24 Vac/dc, output 0...10 V < 2 mA
TENA LU-120	1179052	3-wire transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA, probe 120 mm
TENA LU-210	1179053	3-wire transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA, probe 210 mm
TENA-M	117Z050	Modbus transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA, probe 80 mm
TENA-M-50	117Z051	Modbus transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA, probe 50 mm
TENA-M-210	117Z052	Modbus transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA, probe 210 mm

TOOLS

ML-SER	1139010	transmitter commissioning tool
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Frost guard sensors

TEKV



TEKV sensors are designed for frost protection and for applications with fast response.

Temperature measurement response time	2.5 s
Probe	Ø 4x200 / 400 mm
Cable gland	M16
Mounting	R 1/4"
Mounting depth	< 200 mm (also available < 400 mm)
Pressure rating	PN16
Materials	PBT, PC, PA, stainless steel, brass



[Read more](#)



TYPE	PRODUCT NO.	
TEKVPT100	1173120	100 Ω / 0 °C, accuracy ±0.3 °C / 0 °C
TEKVPT1000	1174120	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C
TEKVPT1000-400	1174121	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, probe 400 mm
TEKVNTC1.8	117E120	1800 Ω / 25 °C, accuracy ±0.3 °C / 25 °C
TEKVNTC2.2	1172120	2252 Ω / 25 °C, accuracy ±0.25 °C / 25 °C
TEKVNTC10	1175120	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C
TEKVNTC10-400	1175121	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C, probe 400 mm
TEKVNTC10-AN	117H120	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C
TEKVNTC10-C	117M120	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C
TEKVNTC10-KB	117B120	5025 Ω / 25 °C, accuracy ±0.5 °C / 25 °C
TEKVNTC20	1176120	20 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C
TEKVNI1000	117C120	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C
TEKVNI1000-LG	1178120	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C

Frost guard sensors

TEV



TEV sensors are designed for frost protection and for applications with fast response.

Temperature measurement response time	2.5 s
Probe	Ø 4 x 200 / 400 mm
Mounting	R 1/4"
Mounting depth	< 200 mm (also available < 400 mm)
Pressure rating	PN16
Materials	acid proof steel, brass
Cable	Ø 3.2 mm x 2 m (LIYY 2 x 0.14 mm ²)



[Read more](#)



TYPE	PRODUCT NO.	
TEVPT100	1173020	100 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, EN 60751/B
TEVPT1000	1174020	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C (Honeywell, Danfoss equivalent)
TEVPT1000-400	1174021	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, probe 400 mm, (Honeywell, Danfoss equivalent)
TEVNTC1.8	117E020	1800 Ω / 25 °C, accuracy ±0.3 °C / 25 °C (TAC/Schneider equivalent)
TEVNTC1.8-400	117E021	1800 Ω / 25 °C, accuracy ±0.3 °C / 25 °C, probe 400 mm, (TAC/Schneider equivalent)
TEVNTC2.2	1172020	2252 Ω / 25 °C, accuracy ±0.25 °C / 25 °C (Johnson equivalent)
TEVNTC10	1175020	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Trend, Distech equivalent)
TEVNTC10-400	1175021	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C, probe 400 mm, (Trend, Distech equivalent)
TEVNTC10-AN	117H020	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Schneider/Andover equivalent)
TEVNTC10-C	117M020	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Carel equivalent)
TEVNTC10-KB	117B020	5025 Ω / 25 °C, accuracy ±0.5 °C / 25 °C (Satchwell equivalent)
TEVNTC20	1176020	20 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Honeywell equivalent)
TEVNTC20-400	1176021	20 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C, probe 400 mm, (Honeywell equivalent)
TEVNI1000	117C020	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Sauter equivalent)
TEVNI1000-LG	1178020	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Siemens equivalent)
TEVNI1000-LG-400	1178024	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C, probe 400 mm, (Siemens equivalent)

Frost guard transmitters

TEKV LL, LU, -M

TEKV temperature transmitters are designed for measuring and controlling air heater radiator temperature in frost protection applications.

Temperature measurement range	0...100 °C, 0...50 °C, -50...150 °C, -50...50 °C
Temperature measurement accuracy	±0.5 °C
Probe	Ø 4x200 / 400 mm
Sensor	Pt1000 EN 60751/B
Cable gland	M16
Mounting	R 1/4"
Pressure rating	PN16
Materials	PBT, PC, PA, stainless steel, brass



[Read more](#)



TYPE	PRODUCT NO.	
TEKV LL	1177120	2-wire transmitter/controller, supply 15...35 Vdc, output 4...20 mA
TEKV LU	1179120	3-wire transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA
TEKV LU-N	1179120N00	3-wire transmitter/controller with display, supply 24 Vac/dc, output 0...10 V < 2 mA
TEKV-M	117Z120	Modbus transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA

TOOLS

ML-SER	1139010	transmitter commissioning tool
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Frost guard transmitters

TEV LL, LU

TEV temperature transmitters are designed for measuring and controlling air heater radiator temperature in frost protection applications. The transmitters are suitable also for domestic water applications due the short time constant.

Temperature measurement range	0...100 °C, 0...50 °C, -50...150 °C, -50...50 °C
Temperature measurement accuracy	±0.5 °C
Probe	Ø 4x200 / 400 mm
Sensor	Pt1000 EN 60751/B
Cable gland	M16
Mounting	probe: R $\frac{1}{4}$ ", housing: with screws
Pressure rating	PN16
Materials	acid proof steel, brass, PC plastic



[Read more](#)



TYPE	PRODUCT NO.	
TEVLL	1177020	2-wire transmitter/controller, supply 15...35 Vdc, output 4...20 mA
TEVLU	1179020	3-wire transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA
TOOLS		
ML-SER	1139010	transmitter commissioning tool

Strap-on sensors

TEP



TEP sensors are designed for pipe strap-on installations.

Temperature measurement range	-50...120 °C
Probe	41 x 16 x 6 mm
Cable gland	M16
Mounting	by a band on the pipe (diam. 40...90 mm)
Materials	PBT, PC, PA, zink casting



[Read more](#)



TYPE	PRODUCT NO.	
TEP PT100	1173080	100 Ω / 0 °C, accuracy ±0,3 °C / 0 °C, EN 60751/B
TEP PT1000	1174080	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C (Honeywell, Danfoss equivalent)
TEP NTC1.8	117E080	1800 Ω / 25 °C, accuracy ±0.3 °C / 25 °C (TAC/Schneider equivalent)
TEP NTC2.2	1172080	2252 Ω / 25 °C, accuracy ±0.25 °C / 25 °C (Johnson equivalent)
TEP NTC10	1175080	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Trend, Distech equivalent)
TEP NTC10-AN	117H080	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Schneider/Andover equivalent)
TEP NTC10-C	117M080	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C
TEP NTC10-KB	117B080	5025 Ω / 25 °C, accuracy ±0.5 °C / 25 °C (Satchwell equivalent)
TEP NTC20	1176080	20 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Honeywell equivalent)
TEP NI1000	117C080	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Sauter equivalent)
TEP NI1000-LG	1178080	1000 Ω / 0 °C, accuracy ±0.5 °C / 0 °C (Siemens equivalent)
TEP KP10	117J080	LM235Z, 10 mV/K, 2.98 V / 25 °C
TEP T1	117V080	2226 Ω / 0 °C, accuracy ±0.4 °C / 0 °C

Strap-on sensors

TEPK



TEPK sensors are designed for pipe strap-on installations.

Temperature measurement range	-20...80 °C
Probe	41x15x6 mm
Mounting	by a plastic band on the pipe (Ø10...100 mm)
Materials	probe: zinc casting
Cable	Ø 3.2 mm x 2 m (LIYY 2 x 0.14 mm ²)



[Read more](#)



TYPE	PRODUCT NO.	
TEPKPT100	1173240	100 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, EN 60751/B
TEPKPT1000	1174240	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C (Honeywell, Danfoss equivalent)
TEPKNTC1.8	117E240	1800 Ω / 25 °C, accuracy ±0.3 °C / 25 °C (TAC/Schneider equivalent)
TEPKNTC2.2	1172240	2252 Ω / 25 °C, accuracy ±0.25 °C / 25 °C (Johnson equivalent)
TEPKNTC10	1175240	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Trend, Distech equivalent)
TEPKNTC10-AN	117H240	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Schneider/Andover equivalent)
TEPKNTC10-C	117M240	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Carelequivalent)
TEPKNTC10-KB	117B240	5025 Ω / 25 °C, accuracy ±0.5 °C / 25 °C (Satchwell equivalent)
TEPKNTC20	1176240	20 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Honeywell equivalent)
TEPKNI1000	117C240	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Sauter equivalent)
TEPKNI1000-LG	1178240	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Siemens equivalent)
TEPKT1	117V240	2226 Ω / 0 °C, accuracy ±0.4 °C / 0 °C

Strap-on transmitters

TEP LL, LU, -M

TEP temperature transmitters are designed for pipe strap-on installations. Transmitters can be used for measuring and controlling temperature.

Temperature measurement range	0...100 °C, 0...50 °C, -50...150 °C, -50...50 °C
Temperature measurement accuracy	±0.5 °C
Probe	41 x 15 x 6 mm
Sensor	Pt1000 EN 60751/B
Cable gland	M16
Mounting	by a band on the pipe (diam. 40...90 mm)
Materials	PBT, PC, PA, zink casting

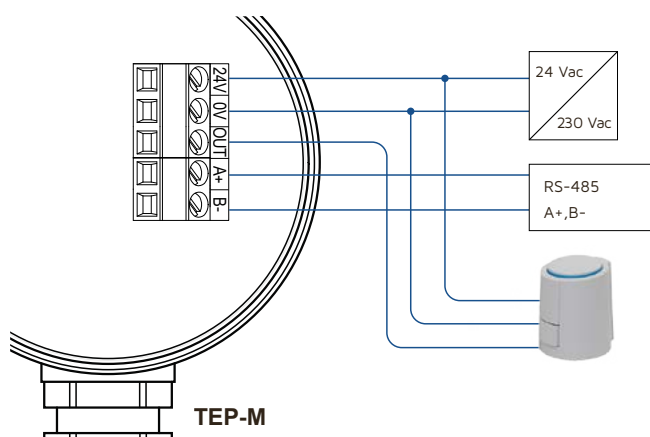
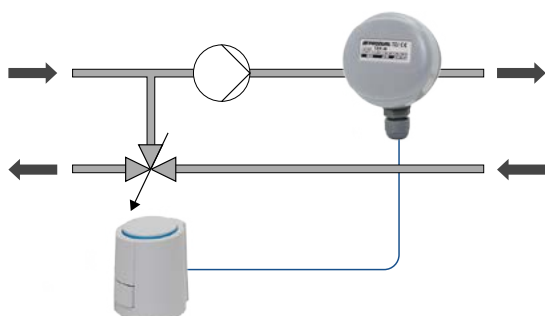


[Read more](#)



TYPE	PRODUCT NO.	
TEP LL	1177080	2-wire transmitter/controller, supply 15...35 Vdc, output 4...20 mA
TEP LU	1179080	3-wire transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA
TEP-M	117Z080	Modbus transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA

TOOLS		
ML-SER	1139010	transmitter commissioning tool



Strap-on transmitters

TEPK LL, LU, -M

TEPK temperature transmitters are designed for pipe strap-on installations. Transmitters can be used for measuring and controlling temperature.

Temperature measurement range	0...100 °C, 0...50 °C, -50...150 °C, -50...50 °C
Temperature measurement accuracy	±0.5 °C
Probe	41x15x6 mm
Sensor	Pt1000 EN 60751/B
Cable gland	M16
Mounting	probe: by a plastic band on the pipe (Ø10...100 mm), housing: by screws
Materials	PBT, PC, PA, zink casting



[Read more](#)



TYPE	PRODUCT NO.	
TEPKLL	1177240	2-wire transmitter/controller, supply 15...35 Vdc, output 4...20 mA
TEPKLU	1179240	3-wire transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA
TEPK-M	117Z240	Modbus transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA
TOOLS		
ML-SER	1139010	transmitter commissioning tool

Duct sensors

TEKHA



IP67



TEKHA sensors are designed for measuring temperatures inside small ventilation ducts.

Temperature measurement range	-50...70 °C
Probe	Ø 6 mm x 100 mm, acid proof steel
Mounting	with flange, adjustable < 90 mm
Mounting depth	< 90 mm
Materials	probe: acid proof steel
Cable	Ø 4.7 mm x 2 m (LIYY 2 x 0.5 mm ²), other lengths also available


[Read more](#)


TYPE	PRODUCT NO.	
TEKHAPT100	1173290	100 Ω / 0 °C, accuracy ±0,3 °C / 0 °C, EN 60751/B
TEKHAPT1000	1174290	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C (Honeywell, Danfoss equivalent)
TEKHANTC1.8	117E290	1800 Ω / 25 °C, accuracy ±0.3 °C / 25 °C (TAC/Schneider equivalent)
TEKHANTC 2.2	1172290	2252 Ω / 25 °C, accuracy ±0.25 °C / 25 °C (Johnson equivalent)
TEKHANTC10	1175290	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Trend, Distech equivalent)
TEKHANTC10-AN	117H290	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Schneider/Andover equivalent)
TEKHANTC10-C	117M290	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Carel equivalent)
TEKHANTC 20	1176290	20 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Honeywell equivalent)
TEKHANI1000	117C290	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Sauter equivalent)
TEKHANI1000-LG	1178290	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Siemens equivalent)
TEKHAKP10	117J290	LM235Z, 10 mV/K, 2,98 V / 25 °C

Duct sensors

TEK



TEK sensors are designed for measuring temperatures inside ventilation ducts.

Temperature measurement range	-50...70 °C
Probe	Ø 8 x 200 / 500 mm
Cable gland	M16
Mounting	with flange
Mounting depth	adjustable < 200 mm, other mounting depths also available
Materials	PBT, PC, PA, stainless steel



[Read more](#)



TYPE	PRODUCT NO.	
TEKPT100	1173040	100 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, EN 60751/B
TEKPT1000	1174040	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C (Honeywell, Danfoss equivalent)
TEKPT1000-500	1174041	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, probe length is 500 mm
TEKNTC1.8	117E040	1800 Ω / 25 °C, accuracy ±0.3 °C / 25 °C (TAC/Schneider equivalent)
TEKNTC2.2	1172040	2252 Ω / 25 °C, accuracy ±0.25 °C / 25 °C (Johnson equivalent)
TEKNTC10	1175040	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Trend, Distech equivalent)
TEKNTC10-500	1175041	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C, probe length is 500 mm
TEKNTC10-AN	117H040	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Schneider/Andover equivalent)
TEKNTC10-C	117M040	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Carel equivalent)
TEKNTC10-KB	117B040	5025 Ω / 25 °C, accuracy ±0.5 °C / 25 °C
TEKNTC20	1176040	20 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Honeywell equivalent)
TEKN11000	117C040	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Sauter equivalent)
TEKN11000-LG	1178040	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Siemens equivalent)
TEKKP10	117J040	LM235Z, 10 mV/K, 2.98 V / 25 °C
TEKT1	117V040	2226 Ω / 0 °C, accuracy ±0.4 °C / 0 °C

Duct sensors

TEKA

TEKA sensors are designed for detecting temperatures inside large ducts. Sensor's mechanical construction ensures accurate average temperature measurement.

Temperature measurement range	-50...70 °C
Probe	Ø10 x 3000 mm
Probe length	3 m
Cable gland	M16
Mounting	with flange and springs
Materials	PBT, PC, PA, stainless steel



IP54


[Read more](#)


TYPE	PRODUCT NO.	
TEKAPT100	1173130	100 Ω / 0 °C, accuracy ±0,3 °C / 0 °C, EN 60751/B
TEKAPT1000	1174130	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C (Honeywell, Danfoss equivalent)
TEKANTC1.8	117E130	1800 Ω / 25 °C, accuracy ±0.3 °C / 25 °C (TAC/Schneider equivalent)
TEKANTC2.2	1172130	2252 Ω / 25 °C, accuracy ±0.25 °C / 25 °C (Johnson equivalent)
TEKANTC10	1175130	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Trend, Distech equivalent)
TEKANTC10-AN	117H130	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Schneider/Andover equivalent)
TEKANTC10-C	117M130	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Carel equivalent)
TEKANTC10-KB	117B130	5025 Ω / 25 °C, accuracy ±0.5 °C / 25 °C (Satchwell equivalent)
TEKANTC20	1176130	20 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Honeywell equivalent)
TEKANI1000	117C130	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Sauter equivalent)
TEKANI1000-LG	1178130	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Siemens equivalent)

Duct sensors

TEKA-500

TEKA-500 sensors are designed for detecting temperatures inside ventilation ducts. Sensor detects the average temperature with 4 sensor elements.

Temperature measurement range	-50...70 °C
Probe	Ø 8.2 x 497 mm
Cable gland	M16
Mounting	with flange
Materials	PBT, PC, PA, stainless steel



[Read more](#)



TYPE	PRODUCT NO.	
TEKAPT100-500	1173170	100 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, EN 60751/B
TEKAPT1000-500	1174170	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C (Honeywell, Danfoss equivalent)
TEKANTC1.8-500	117E170	1800 Ω / 25 °C, accuracy ±0.3 °C / 25 °C (TAC/Schneider equivalent)
TEKANTC2.2-500	1172170	2252 Ω / 25 °C, accuracy ±0.25 °C / 25 °C (Johnson equivalent)
TEKANTC10-500	1175170	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Trend, Distech equivalent)
TEKANTC10-AN-500	117H170	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Schneider/Andover equivalent)
TEKANTC10-C-500	117M170	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Carel equivalent)
TEKANTC10-KB-500	117B170	5025 Ω / 25 °C, accuracy ±0.5 °C / 25 °C (Satchwell equivalent)
TEKANTC20-500	1176170	20 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Honeywell equivalent)
TEKANI1000-500	117C170	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Sauter equivalent)
TEKANI1000-LG-500	1178170	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Siemens equivalent)

Duct transmitters

TEK LL, LU, -M

TEK temperature transmitters are designed for automatic ventilating systems to measure and control duct temperatures.

Temperature measurement range	0...100 °C, 0...50 °C, -50...150 °C, -50...50 °C
Temperature measurement accuracy	±0.5 °C
Probe	Ø 8 x 200 mm
Probe length	200 mm
Sensor	Pt1000 EN 60751/B
Cable gland	M16
Mounting	with flange
Materials	PBT, PC, PA, stainless steel



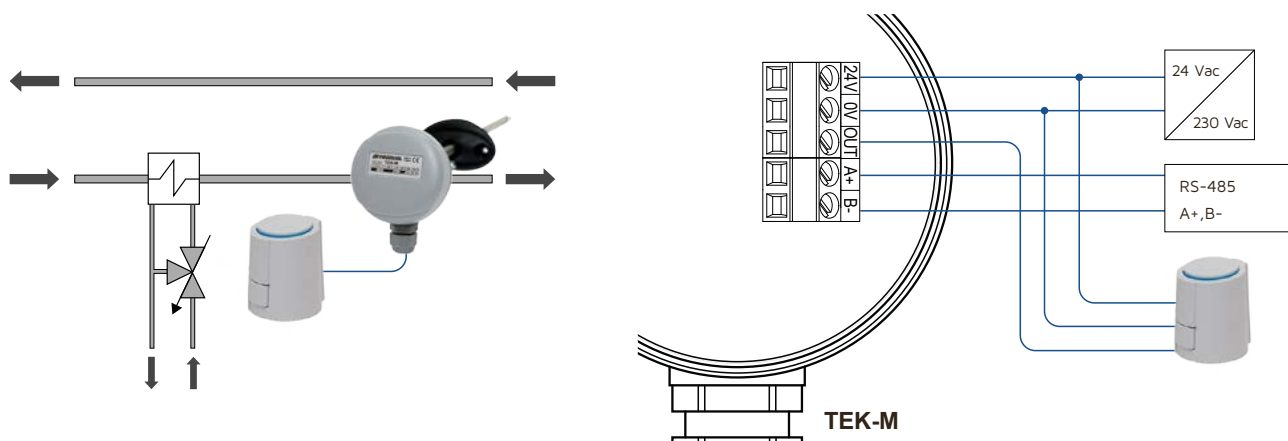
[Read more](#)



TYPE	PRODUCT NO.	
TEK LL	1177040	2-wire transmitter/controller, supply 15...35 Vdc, output 4...20 mA
TEK LL-N	1177040N00	2-wire transmitter/controller with display, supply 15...35 Vdc, output 4...20 mA
TEK LU	1179040	3-wire transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA
TEK LU-N	1179040N00	3-wire transmitter/controller with display, supply 24 Vac/dc, output 0...10 V < 2 mA
TEK-M	117Z040	Modbus transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA
TEK-M-N	117Z040N00	Modbus transmitter/controller with display, supply 24 Vac/dc, output 0...10 V < 2 mA

TOOLS

ML-SER	1139010	transmitter commissioning tool
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Duct transmitters

TEKA LL, LU, -M

TEKA average temperature transmitters are designed for measuring and controlling large air duct temperatures. Transmitter's mechanical construction ensures accurate average temperature measurement.

Temperature measurement range	0...100 °C, 0...50 °C, -50...150 °C, -50...50 °C
Temperature measurement accuracy	±0.5 °C
Probe	Ø10 x 3000 mm
Probe length	3 m
Sensor	Pt1000 EN 60751/B
Current output	4...20 mA (temperature or controller)
Cable gland	M16
Mounting	with flange and springs
Materials	PBT, PC, PA, stainless steel



[Read more](#)



TYPE	PRODUCT NO.	
TEKALL	1177130	2-wire transmitter/controller, supply 15...35 Vdc, output 4...20 mA
TEKA LU	1179130	3-wire transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA
TEKA-M	117Z130	Modbus transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA

TOOLS		
ML-SER	1139010	transmitter commissioning tool

Duct transmitters

TEKA LL-500, TEKA LU-500,
TEKA-M-500

TEKA-500 transmitters are designed for measuring and controlling temperatures inside ventilation ducts. The transmitter measures the average temperature with 4 sensor elements.

Temperature measurement range	0...100 °C, 0...50 °C, -50...150 °C, -50...50 °C
Temperature measurement accuracy	±0.5 °C
Probe	Ø 8.2 x 497 mm
Sensor	Pt1000 EN 60751/B
Cable gland	M16
Mounting	with flange
Materials	PBT, PC, PA, stainless steel



Read more



TYPE	PRODUCT NO.	
TEKALL-500	1177170	2-wire transmitter/controller, supply 15...35 Vdc, output 4...20 mA
TEKALU-500	1179170	3-wire transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA
TEKA-M-500	117Z170	Modbus transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA

TOOLS

ML-SER	1139010	transmitter commissioning tool
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Combustion gas sensors

TESK

IP54



TESK sensors are designed for measuring combustion gas temperatures.

Temperature measurement range	0...400 °C
Probe	Ø10 x 265 mm
Cable gland	PG16
Mounting	R 1/2" or with flange on order
Mounting depth	< 265 mm
Pressure rating	PN16
Materials	silumin cast



Read more



TYPE	PRODUCT NO.	
TESKPT100	1173160	100 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, EN 60751/B
TESKPT1000	1174160	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C (Honeywell, Danfoss equivalent)
OPTIONS		
Duct Flange 10 mm Brass	5910MT4357	duct flange, brass, 10 mm

Combustion gas transmitters

TESK LL, LU

IP54



TESK temperature transmitters are designed for temperature measurement in combustion gas from boilers and boiler plants.

Temperature measurement range	0...400 °C
Temperature measurement accuracy	±0.5 °C
Probe	Ø10 x 265 mm
Sensor	Pt1000 EN 60751/B
Cable gland	PG16
Mounting	R 1/2" or with flange on order
Pressure rating	PN16
Materials	silumin cast


[Read more](#)


TYPE	PRODUCT NO.	
TESK LL 0/400	1177160	2-wire transmitter, supply 15...35 Vdc, output 4...20 mA
TESK LU 0/400	1179160	3-wire transmitter, supply 24 Vac/dc, output 0...10 V < 2 mA

OPTIONS

Duct Flange 10 mm Brass	5910MT4357	duct flange, brass, 10 mm
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Cable temperature sensors

TEKY4

IP67



TEKY4 temperature sensors are designed for measuring temperatures in automatic HVAC systems. The rolled stainless steel sleeve provides good protection against water and dust.



Temperature measurement range	-30...80 °C
Probe	Ø 4 mm x 30 mm, stainless steel
Materials	PVC, stainless steel
Cable	Ø 3,2 mm x 2,3 m (LIYY 2 x 0,14 mm ²)
Cable length	2,3 m

[Read more](#)


TYPE	PRODUCT NO.	
TEKY4PT100	1173330	100 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, EN 60751/B
TEKY4PT1000	1174330	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C (Honeywell, Danfoss equivalent)
TEKY4NTC1.8	117E330	1800 Ω / 25 °C, accuracy ±0.3 °C / 25 °C (TAC/Schneider equivalent)
TEKY4NTC2.2	1172330	2252 Ω / 25 °C, accuracy ±0,25 °C / 25 °C (Johnson equivalent)
TEKY4NTC10	1175330	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Trend, Distech equivalent)
TEKY4NTC10-5m	1175331	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C, cable 5 m (Trend, Distech equivalent)
TEKY4NTC10-AN	117H330	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Schneider/Andover equivalent)
TEKY4NTC10-C	117M330	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Carel equivalent)
TEKY4NTC10-KB	117B330	5025 Ω / 25 °C, accuracy ±0.5 °C / 25 °C (Satchwell equivalent)
TEKY4NTC20	1176330	20 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Honeywell equivalent)
TEKY4NI1000	117C330	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Sauter equivalent)
TEKY4NI1000-LG	1178330	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Siemens equivalent)
TEKY4T1	117V330	2226 Ω / 0 °C, accuracy ±0.4 °C / 0 °C

OTHER CABLE LENGTHS AVAILABLE ON REQUEST.

Cable temperature sensors

TEKY6S

IP67



TEKY6S temperature sensors are designed for detecting temperatures in automatic HVAC systems. The rolled stainless steel sleeve provides good protection against water and dust.

Temperature measurement range	-50...150 °C
Probe	Ø 6 mm x 45 mm, stainless steel
Materials	silicone, stainless steel
Cable	Ø 4,8 mm x 2,3 m (SIHF 2 x 0,25 mm ²)
Cable length	2,3 m


[Read more](#)


TYPE	PRODUCT NO.	
TEKY6SPT100	1173340	100 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, EN 60751/B
TEKY6SPT1000	1174340	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C (Honeywell, Danfoss equivalent)
TEKY6SNTC1.8	117E340	1800 Ω / 25 °C, accuracy ±0.3 °C / 25 °C (TAC/Schneider equivalent)
TEKY6SNTC2.2	1172340	2252 Ω / 25 °C, accuracy ±0.25 °C / 25 °C (Johnson equivalent)
TEKY6SNTC10	1175340	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Trend, Distech equivalent)
TEKY6SNTC10-AN	117H340	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Schneider/Andover equivalent)
TEKY6SNTC10-C	117M340	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Carel equivalent)
TEKY6SNTC10-KB	117B340	5025 Ω / 25 °C, accuracy ±0.5 °C / 25 °C (Satchwell equivalent)
TEKY6SNTC20	1176340	20 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Honeywell equivalent)
TEKY6SNI1000	117C340	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Sauter equivalent)
TEKY6SNI1000-LG	1178340	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Siemens equivalent)

Cable temperature sensors

TEKY6

IP67



TEKY6 temperature sensors are designed for detecting temperatures in automatic HVAC systems. The rolled stainless steel sleeve provides good protection against water and dust. Cable length is 2.3 m, some models also available with 5 m cable.



Temperature measurement range	-30...80 °C
Probe	Ø 6 mm x 45 mm, stainless steel
Materials	PVC, stainless steel

[Read more](#)


TYPE	PRODUCT NO.	
TEKY6 PT100	1173320	100 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, EN 60751/B
TEKY6 PT100	1173320-5M	100 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, EN 60751/B, cable 5 m
TEKY6 PT1000	1174320	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C (Honeywell, Danfoss equivalent)
TEKY6 NTC1.8	117E320	1800 Ω / 25 °C, accuracy ±0.3 °C / 25 °C (TAC/Schneider equivalent)
TEKY6 NTC 2.2	1172320	2252 Ω / 25 °C, accuracy ±0.25 °C / 25 °C (Johnson equivalent)
TEKY6 NTC10	1175320	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Trend, Distech equivalent)
TEKY6 NTC10-5m	1175321	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C, cable 5 m (Trend, Distech equivalent)
TEKY6 NTC10-AN	117H320	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Schneider/Andover equivalent)
TEKY6 NTC10-C	117M320	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Carel equivalent)
TEKY6 NTC10-KB	117B320	5025 Ω / 25 °C, accuracy ±0.5 °C / 25 °C (Satchwell equivalent)
TEKY6 NTC 20	1176320	20 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Honeywell equivalent)
TEKY6 NI 1000	117C320	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Sauter equivalent)
TEKY6 NI 1000-LG	1178320	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Siemens equivalent)
TEKY6 KP10	117J320	LM335Z, 2.98 V / 25 °C, 10 mV/K, accuracy ±0.5 °C / 25 °C
TEKY6 T1	117V320	2226 Ω / 0 °C, accuracy ±0.4 °C / 0 °C

OTHER CABLE LENGTHS AVAILABLE ON REQUEST.

Cable temperature sensors

TE

0...85
%rH



TE cable temperature sensors are designed for measuring temperatures in automatic HVAC systems. The sensor can be used in dry, non-condensing surroundings.

Temperature measurement range	-30...80 °C
Cable	NTC: 0.05 mm ² x 300 mm; PT: 0.08 mm ² x 300 mm



[Read more](#)



TYPE	PRODUCT NO.	
TEPT100	1173000	100 Ω / 0 °C, accuracy ±0.3 °C / 0 °C
TEPT1000	1174000	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C
TENTC10	1175000	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C
TENTC20	1176000	20 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C

Cable temperature transmitters

TEKY4 LL, LU, -M

TEKY4 temperature transmitters are designed for measuring and controlling temperatures in automatic HVAC systems. The rolled stainless steel sleeve provides good protection against water and dust for the sensor.

Temperature measurement range	0...100 °C, 0...50 °C, -50...150 °C, -50...50 °C
Temperature measurement accuracy	±0.5 °C (0 °C)
Probe	Ø 4 mm x 30 mm, stainless steel
Sensor	Pt1000 EN 60751/B
Cable gland	M16
Mounting	housing: with screws on wall, external lugs
Materials	PBT, PC, PA

24 V

IP54

[Read more](#)

TYPE	PRODUCT NO.	
TEKY4 LL	1177330	2-wire transmitter/controller, supply 15...35 Vdc, output 4...20 mA
TEKY4 LU	1179330	3-wire transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA
TEKY4-M	117Z330	Modbus transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA

TOOLS		
ML-SER	1139010	transmitter commissioning tool

Cable temperature transmitters

TEKY6S LL, LU, -M

TEKY6S temperature transmitters are designed for measuring and controlling temperatures in automatic HVAC systems. The rolled stainless steel sleeve provides good protection against water and dust for the sensor.

Temperature measurement range	0...100 °C, 0...50 °C, -50...150 °C, -50...50 °C
Temperature measurement accuracy	±0.5 °C
Probe	Ø 6 mm x 45 mm, stainless steel
Sensor	Pt1000 EN 60751/B
Cable gland	M16
Mounting	housing: with screws on wall, external lugs
Materials	PBT, PC, PA

TYPE	PRODUCT NO.	
TEKY6S LL	1177340	2-wire transmitter/controller, supply 15...35 Vdc, output 4...20 mA
TEKY6S LU	1179340	3-wire transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA
TEKY6S-M	117Z340	Modbus transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA

TOOLS

ML-SER	1139010	transmitter commissioning tool
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Read more



Cable temperature transmitters

TEKY6 LL, LU, -M

24 V

IP54



TEKY6 temperature transmitters are designed for measuring and controlling temperatures in automatic HVAC systems. The rolled stainless steel sleeve provides good protection against water and dust for the sensor.

Temperature measurement range	0...100 °C, 0...50 °C, -50...150 °C, -50...50 °C
Temperature measurement accuracy	±0.5 °C (0 °C)
Probe	Ø 6 mm x 45 mm, stainless steel
Sensor	Pt1000 EN 60751/B
Cable gland	M16
Mounting	housing: with screws on wall, external lugs
Materials	PBT, PC, PA


[Read more](#)


TYPE	PRODUCT NO.	
TEKY6 LL	1177320	2-wire transmitter/controller, supply 15...35 Vdc, output 4...20 mA
TEKY6 LU	1179320	3-wire transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA
TEKY6-M	117Z320	Modbus transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA

TOOLS

ML-SER	1139010	transmitter commissioning tool
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Cable temperature sensors

TEL



TEL sensors are designed for measuring floor temperatures. The sensor is installed in the cable duct inside the floor construction.

Temperature measurement range	-30...80 °C
Probe	Ø 7 mm x 28 mm
Cable	Ø 4.7 mm x 2.3 m (LIYY 2 x 0,5 mm²)



Read more



TYPE	PRODUCT NO.	
TEL PT100	1173280	100 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, EN 60751/B
TEL PT1000	1174280	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C (Honeywell, Danfoss equivalent)
TEL NTC 1.8	117E280	1800 Ω / 25 °C, accuracy ±0.3 °C / 25 °C (TAC/Schneider equivalent)
TEL NTC 2.2	1172280	2252 Ω / 25 °C, accuracy ±0.25 °C / 25 °C (Johnson equivalent)
TEL NTC 10-AN	117H280	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Schneider/Andover equivalent)
TEL NTC 10-C	117M280	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Carel equivalent)
TEL NI1000	117C280	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Sauter equivalent)
TEL NI1000-LG	11782800	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Siemens equivalent)

Cable temperature sensors

TEL 5M

IP68



TEL 5M sensors are designed for measuring floor temperatures. The sensor is installed in the cable duct inside the floor construction.

Temperature measurement range	-50...105 °C
Probe	Ø 5 mm x 20 mm
Cable	Ø 3 mm x 5 m, 2 x AWG24
Cable length	5,0 m



[Read more](#)



TYPE	PRODUCT NO.	
TEL NTC 10-5m	1175281	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C, cable 5 m (Trend, Distech equivalent)
TEL NTC 20-5m	1176281	20 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C, cable 5 m (Honeywell equivalent)

Cable temperature sensors

TEM

IP54



TEM sensors are designed for measuring temperatures in road ramps and street constructions. The sensor must be protected against mechanical stress.

Temperature measurement range	-30...80 °C
Probe	Ø 9 mm
Cable	Ø 6 mm x 5 m (PUR 2 x 0,75 mm ²), other lengths also available


[Read more](#)


TYPE	PRODUCT NO.	
TEMPT100	1173310	100 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, EN 60751/B
TEMPT1000	1174310	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C (Honeywell, Danfoss equivalent)
TEMNTC1.8	117E310	1800 Ω / 25 °C, accuracy ±0.3 °C / 25 °C (TAC/Schneider equivalent)
TEMNTC2.2	1172310	2252 Ω / 25 °C, accuracy ±0.25 °C / 25 °C (Johnson equivalent)
TEMNTC10	1175310	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Trend, Distech equivalent)
TEMNTC10-AN	117H310	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Schneider/Andover equivalent)
TEMNTC10-C	117M310	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Carel equivalent)
TEMNTC20	1176310	20 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Honeywell equivalent)
TEMNI1000	117C310	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Sauter equivalent)
TEMNI1000-LG	1178310	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Siemens equivalent)

Window temperature sensor

TEIK



TEIK temperature sensor are made for automatic HVAC systems to detect window surface temperatures.

Temperature measurement range	-20...60 °C
Probe	50x20x8 mm
Mounting	by adhesive paste
Materials	probe: aluminum
Cable	Ø 3.2 mm x 2 m (LIYY 2 x 0.14 mm ²)



[Read more](#)



TYPE	PRODUCT NO.	
TEIKPT100	1173220	100 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, EN 60751/B
TEIKPT1000	1174220	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C (Honeywell, Danfoss equivalent)
TEIKNTC1.8	117E220	1800 Ω / 25 °C, accuracy ±0.3 °C / 25 °C (TAC/Schneider equivalent)
TEIKNTC10	1175220	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Trend, Distech equivalent)
TEIKNTC20	1176220	20 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Honeywell equivalent)
TEIKNI1000-LG	1178220	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Siemens equivalent)

Room temperature sensors

RS



RS room temperature sensor is designed for measuring room temperature in indoor conditions. The sensor is built in a modern design plastic housing with a smooth snap-on cover. The sensor is suitable for surface installation and on a flush mounting box.



Temperature measurement range	-30...70 °C
Sensor	Pt100 EN 60751B
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	PC plastic
Product dimensions (w x h x d)	97 x 97 x 26 mm

[Read more](#)



TYPE	PRODUCT NO.	
RS-PT100	5501W50000	100 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, white
RSB-PT100	5501B50000	100 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, black
RS-PT1000	5501W00000	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, white
RSB-PT1000	5501B00000	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, black
RS-PT1000F015	5501W30000	1000 Ω / 0 °C, accuracy ±0.15 °C / 0 °C, white
RSB-PT1000F015	5501B30000	1000 Ω / 0 °C, accuracy ±0.15 °C / 0 °C, black
RS-NTC1.8	5501W60000	1800 Ω / 25 °C, accuracy ±0.2 °C / 25 °C, white
RSB-NTC1.8	5501B60000	1800 Ω / 25 °C, accuracy ±0.2 °C / 25 °C, black
RS-NTC10	5501W10000	10 kΩ / 25 °C, accuracy ±0.23 °C / 25 °C, white
RSB-NTC10	5501B10000	10 kΩ / 25 °C, accuracy ±0.23 °C / 25 °C, black
RS-NTC10-C	5501W70000	10 kΩ / 25 °C, accuracy ±0.27 °C / 25 °C, white
RSB-NTC10-C	5501B70000	10 kΩ / 25 °C, accuracy ±0.27 °C / 25 °C, black
RS-NTC20	5501W20000	20 kΩ / 25 °C, accuracy ±0.21 °C / 25 °C, white
RSB-NTC20	5501B20000	20 kΩ / 25 °C, accuracy ±0.21 °C / 25 °C, black
RS-NI1000	5501W80000	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C, white
RSB-NI1000	5501B80000	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C, black
RS-NI1000 LG	5501W40000	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C, white
RSB-NI1000 LG	5501B40000	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C, black

OPTIONS

SMB-RXB	9000571	surface mounting box, black
SMB-RX	9000570	surface mounting box, white

Room temperature sensors

TEHR



TEHR sensors are designed for measuring room temperatures.

Temperature measurement range	0...50 °C
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	ABS plastic
Product dimensions (w x h x d)	87 x 86 x 30 mm



[Read more](#)



TYPE	PRODUCT NO.	
TEHRPT100	1173190	100 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, EN 60751/B
TEHRPT1000	1174190	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C (Honeywell, Danfoss equivalent)
TEHRNTC1.8	117E190	1800 Ω / 25 °C, accuracy ±0.3 °C / 25 °C (TAC/Schneider equivalent)
TEHRNTC2.2	1172190	2252 Ω / 25 °C, accuracy ±0.25 °C / 25 °C (Johnson equivalent)
TEHRNTC10	1175190	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Trend, Distech equivalent)
TEHRNTC10-AN	117H190	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Schneider/Andover equivalent)
TEHRNTC10-C	117M190	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Carelequivalent)
TEHRNTC10-KB	117B190	5025 Ω / 25 °C, accuracy ±0.5 °C / 25 °C (Satchwell equivalent)
TEHRNTC20	1176190	20 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Honeywell equivalent)
TEHRNI1000	117C190	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Sauter equivalent)
TEHRNI1000-LG	1178190	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Siemens equivalent)
TEHRKP10	117J190	LM235Z, 10 mV/K, 2.98 V / 25 °C
TEHRT1	117V190	2226 Ω / 0 °C, accuracy ±0.4 °C / 0 °C

OPTIONS

TEHR-S	push button (no / nc) 24 Vac/dc
TEHR-N	digital display, input 0...10 V = 0...50 °C

Room temperature sensors

TEHR-P



TEHR-P sensors are designed for measuring room temperatures and adjusting the temperature setpoint. The potentiometer value and the fitting resistor values can be defined in the order.

Temperature measurement range	0...50 °C
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	ABS plastic
Product dimensions (w x h x d)	87 x 86 x 32 mm



[Read more](#)



TYPE	PRODUCT NO.	
TEHRPT100-P	1173230	100 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, EN 60751/B
TEHRPT1000-P	1174230	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C (Honeywell, Danfoss equivalent)
TEHRNTC1.8-P	117E230	1800 Ω / 25 °C, accuracy ±0.3 °C / 25 °C (TAC/Schneider equivalent)
TEHRNTC2.2-P	1172230	2252 Ω / 25 °C, accuracy ±0.25 °C / 25 °C (Johnson equivalent)
TEHRNTC10-P	1175230	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Trend, Distech equivalent)
TEHRNTC10-PU	1175350	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C, 0...10 V potentiometer
TEHRNTC10-AN-P	117H230	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Schneider/Andover equivalent)
TEHRNTC10-C-P	117M230	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Carel equivalent)
TEHRNTC20-P	1176230	20 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Honeywell equivalent)
TEHRNI1000-P	117C230	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Sauter equivalent)
TEHRNI1000-LG-P	1178230	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Siemens equivalent)
TEHRKP10-P	117J230	LM235Z, 10 mV/K, 2,98 V / 25 °C

OPTIONS

TEHR-S	push button (no / nc) 24 Vac/dc
TEHR-N	digital display, input 0...10 V = 0...50 °C

Room temperature transmitters

RTX



RTX room transmitters provide improved temperature measurement as well as motion detection (PIR). Standard features include temperature measurement, built-in P/PI controller, seamless integration with existing devices and systems, and easy commissioning and configuration with MyProdual mobile application.



Read more



Temperature measurement range	0...50 °C
Temperature measurement accuracy	±0.3 °C (20...25 °C)
Multifunctional input	1xNTC10 / Pt1000 / Resistive / Digital / 0...10 Vdc
Multifunctional output	4x 0...10 Vdc, 2 mA
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	ABS plastic
Product dimensions (w x h x d)	97 x 97 x 27 mm

Ordering guide		Type	0	1	2	3	4	5	6
0 Room transmitters			5301						0
1 Device type	Room transmitter with temperature measurement	RTX		1					
	Room transmitter with temperature and CO ₂ measurement	RTX-CO2		2					
2 Body colour	White				W				
	Black	B			B				
3 Display	No display					0			
	LED indicator	-L				L			
	LED indicator with custom text	-LT				2			
4 Additional measurements	No additional measurement						0		
	Relative humidity	-RH					H		
	Volatile organic compounds (VOC)	-VOC					V		
	Movement detection (PIR)	-PIR					P		
	Relative humidity and PIR	-RH-PIR					6		
	Relative humidity, VOC and PIR	-RH-VOC-PIR					7		
	Relative humidity and VOC	-RH-VOC					8		
	VOC and PIR	-VOC-PIR					9		
5 Advanced options	No advanced options							0	
	Modbus	-MOD						M	
	BACnet	-BAC						B	
	Relay	-R						R	
	Modbus and relay	-MOD-R						1	
	BACnet and relay	-BAC-R						2	
6 Reserved									0

TOOLS

MYT-CON	5100020000	MyTool Connect, a Bluetooth dongle for Produal MyTool® and MyProdual connection
MyProdual	5100030000	MyProdual mobile application for configuring and commissioning Produal next-generation products (Android and iOS)

Room temperature transmitters

TEHR LL, LU, -M

TEHR LL (2-wire, 4...20 mA) and TEHR LU (3-wire, 0...10 V) are temperature transmitters for dry room spaces. The output range is selectable. TEHR-M output is available via Modbus and as a 0...10 V signal.

Temperature measurement range	0...100 °C, 0...50 °C, -50...150 °C, -50...50 °C
Temperature measurement accuracy	±0.5 °C
Sensor	Pt1000 EN 60751/B
Current output	4...20 mA (temperature or controller)
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	ABS plastic
Product dimensions (w x h x d)	87 x 86 x 30 mm



Read more



TYPE	PRODUCT NO.	
TEHR LL	1177190	2-wire transmitter/controller, supply 15...35 Vdc, output 4...20 mA
TEHR LL-N	1177191	2-wire transmitter/controller with display, supply 15...35 Vdc, output 4...20 mA
TEHR LL-P	1177230	2-wire transmitter/controller, supply 15...35 Vdc, output 4...20 mA, passive potentiometer
TEHR LU	1179190	3-wire transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA
TEHR LU-N	1179191	3-wire transmitter/controller with display, supply 24 Vac/dc, output 0...10 V < 2 mA
TEHR LU-N-P	1179191B00	3-wire transmitter/controller with display, supply 24 Vac/dc, output 0...10 V < 2 mA, passive potentiometer
TEHR LU-P	1179230	3-wire transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA, passive potentiometer
TEHR LU-PU	1179350	3-wire transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA, 0...10 V potentiometer
TEHR LU-PU-N	1179351	3-wire transmitter/controller with display, supply 24 Vac/dc, output 0...10 V < 2 mA, 0...10 V potentiometer
TEHR-M	117Z190	Modbus transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA
TEHR-M-N	117Z191	Modbus transmitter/controller with display, supply 24 Vac/dc, output 0...10 V < 2 mA, 0...10 V potentiometer
TEHR-M-PU	117Z350	Modbus transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA, 0...10 V potentiometer
TEHR-M-PU-N	117Z351	Modbus transmitter/controller with display, supply 24 Vac/dc, output 0...10 V < 2 mA, 0...10 V potentiometer

TOOLS

ML-SER	1139010	transmitter commissioning tool
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OPTIONS

TEHR-K5	5-position rotary switch (1, 2, 3, 0, A) 24 Vac/dc
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Outdoor temperature sensors

TEU



TEU sensors are designed for measuring outdoor temperatures.

Temperature measurement range	-50...50 °C
Cable gland	M16
Mounting	with screws on wall, external lugs
Materials	PBT, PC, PA
Product dimensions (w x h x d)	89 x 95 x 44 mm



[Read more](#)



TYPE	PRODUCT NO.	
TEUPT100	1173090	100 Ω / 0 °C, accuracy ± 0.3 °C / 0 °C, EN 60751/B
TEUPT1000	1174090	1000 Ω / 0 °C, accuracy ± 0.3 °C / 0 °C (Honeywell, Danfoss equivalent)
TEUNTC1.8	117E090	1800 Ω / 25 °C, accuracy ± 0.3 °C / 25 °C (TAC/Schneider equivalent)
TEUNTC2.2	1172090	2252 Ω / 25 °C, accuracy ± 0.25 °C / 25 °C (Johnson equivalent)
TEUNTC10	1175090	10 k Ω / 25 °C, accuracy ± 0.2 °C / 25 °C (Trend, Distech equivalent)
TEUNTC10-AN	117H090	10 k Ω / 25 °C, accuracy ± 0.25 °C / 25 °C (Schneider/Andover equivalent)
TEUNTC10-C	117M090	10 k Ω / 25 °C, accuracy ± 0.25 °C / 25 °C (Carelequivalent)
TEUNTC10-KB	117B090	5025 Ω / 25 °C, accuracy ± 0.5 °C / 25 °C (Satchwell equivalent)
TEUNTC20	1176090	20 k Ω / 25 °C, accuracy ± 0.2 °C / 25 °C (Honeywell equivalent)
TEUNI1000	117C090	1000 Ω / 0 °C, accuracy ± 0.4 °C / 0 °C (Sauter equivalent)
TEUNI1000-LG	1178090	1000 Ω / 0 °C, accuracy ± 0.4 °C / 0 °C (Siemens equivalent)
TEUKP10	117J090	LM235Z, 10 mV/K, 2.98 V / 25 °C
TEUT1	117V090	2226 Ω / 0 °C, accuracy ± 0.4 °C / 0 °C

Outdoor temperature transmitters

TEU LL, LU, -M



TEU transmitters are designed for measuring outdoor temperatures.

Temperature measurement range	0...100 °C, 0...50 °C, -50...150 °C, -50...50 °C
Temperature measurement accuracy	±0.5 °C
Sensor	Pt1000 EN 60751/B
Cable gland	M16
Mounting	with screws on wall, external lugs
Materials	PBT, PC, PA
Product dimensions (w x h x d)	115 x 115 x 45 mm



[Read more](#)



TYPE	PRODUCT NO.	
TEU LL	1177090	2-wire transmitter, supply 22...35 Vdc, output 4...20 mA, accuracy ±0,5 °C
TEU LL-N	1177090N00	2-wire transmitter with display, supply 22...35 Vdc, output 4...20 mA, accuracy ±0,5 °C
TEU LU	1179090	3-wire transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA
TEU LU-N	1179090N00	3-wire transmitter/controller with display, supply 24 Vac/dc, output 0...10 V < 2 mA
TEU-M	117Z090	Modbus transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA
TEU-M-N	117Z090N00	Modbus transmitter/controller with display, supply 24 Vac/dc, output 0...10 V < 2 mA

TOOLS

ML-SER	1139010	transmitter commissioning tool
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Industrial temperature sensors

TES

IP67

-50...120
°C

TES sensors are designed for measuring temperatures in dusty, hot and wet (industrial) spaces.

Temperature measurement range	-50...120 °C
Cable gland	PG11
Mounting	with screws on wall
Materials	Silumin cast
Product dimensions (w x h x d)	98 x 90 x 36 mm


[Read more](#)


TYPE	PRODUCT NO.	
TES PT100	1173100	100 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, EN 60751/B
TES PT1000	1174100	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C (Honeywell, Danfoss equivalent)
TES NTC 1.8	117E100	1800 Ω / 25 °C, accuracy ±0.3 °C / 25 °C (TAC/Schneider equivalent)
TES NTC 2.2	1172100	2252 Ω / 25 °C, accuracy ±0.25 °C / 25 °C (Johnson equivalent)
TES NTC 10	1175100	10 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Trend, Distech equivalent)
TES NTC 10-AN	117H100	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Schneider/Andover equivalent)
TES NTC 10-C	117M100	10 kΩ / 25 °C, accuracy ±0.25 °C / 25 °C (Carele equivalent)
TES NTC 10-KB	117B100	5025 Ω / 25 °C, accuracy ±0.5 °C / 25 °C (Satchwell equivalent)
TES NTC 20	1176100	20 kΩ / 25 °C, accuracy ±0.2 °C / 25 °C (Honeywell equivalent)
TES NI1000	117C100	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Sauter equivalent)
TES NI1000-LG	1178100	1000 Ω / 0 °C, accuracy ±0.4 °C / 0 °C (Siemens equivalent)
TES KP10	117J100	LM235Z, 10 mV/K, 2.98 V / 25 °C

Temperature transmitters

LLK V2, LUK V2

LLK V2 and LUK V2 are transmitters for temperature measuring. LLK V2 is a 2-wire transmitter converting the sensor resistance to the 4...20 mA signal. LUK V2 is a 3-wire transmitter converting the sensor signal to the 0...10 V signal. The transmitter needs a separate Pt1000 sensor.

Temperature measurement range	0...100 °C, 0...50 °C, -50...150 °C, -50...50 °C
Temperature measurement accuracy	±0.5 °C
Sensor	PT1000 EN60751/B (not included)
Cable gland	2 X M16
Product dimensions (w x h x d)	106 x 102 x 46 mm



[Read more](#)



TYPE	PRODUCT NO.	
LLK V2	1182230	2-wire transmitter/controller, supply 22...35 Vdc, output 4...20 mA
LLK-NV2	1182231	2-wire transmitter/controller with display, supply 22...35 Vdc, output 4...20 mA
LUK V2	1182240	3-wire transmitter/controller, supply 24 Vac/dc, output 0...10 V < 2 mA
LUK-NV2	1182241	3-wire transmitter/controller with display, supply 24 Vac/dc, output 0...10 V < 2 mA

TOOLS

ML-SER	1139010	transmitter commissioning tool
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Temperature sensor simulator

TESIM

IP54

TESIM sensor simulators are designed for simulating temperature sensor when testing a control system.

Temperature measurement range	5 selectable temperature values (-50, -20, 0, 20, 50 °C)
Temperature measurement accuracy	±0.15 °C
Cable	0,9 m, banana jacks



Read more



TYPE	PRODUCT NO.	
TESIMPT1000	1170220	Pt1000 simulator
TESIMNTC 10	1170230	NTC 10 simulator

Special measurement and detection

The special measurement and detection products cover protective thermostats for heating coils' freezing protection, safety components for water leakage monitoring, thermometers, differential pressure switches, filter guards and occupancy sensors. With these components, you can complete your installation to secure air conditioning heaters, avoid water leakage damage, save energy with occupancy sensors and schedule the replacement of filters.

- ▶ Protection units
- ▶ Adjustable limits
- ▶ Mechanical measurements



Frost guard JVS 24



Water leakage relay
LPH 10



Water leakage sensor
VVK



Differential pressure
switch PS



Condensation switch KA



Occupancy sensor LA 14E

Frost protection thermostats

JVA, JVS



Frost protection thermostats are protective devices for preventing heating coils from freezing in the air handling units.

Temperature measurement range	0...100 °C
Voltage input	1x0...10 Vdc
Control output	230 Vac, 8 A, res.
Alarm output	60 Vdc, 1 A
Actuator output	0...10 Vdc, 10 mA
Mounting	For 35 mm DIN rail
Product dimensions (w x h x d)	53 x 90 x 59 mm



[Read more](#)



TYPE	PRODUCT NO.	
JVA 24-en	1110111	forecasting, regulating; selectable sensor type (Pt1000, Ni1000-LG, PTC 1000/2000)
JVS 24-en	1110121	adjustable forecasting, regulating; selectable sensor type (Pt1000, Ni1000-LG, PTC 1000/2000)

OPTIONS

TEVPT1000	1174020	1000 Ω / 0 °C, accuracy ± 0.3 °C / 0 °C (Honeywell, Danfoss equivalent)
TEVPT1000-400	1174021	1000 Ω / 0 °C, accuracy ± 0.3 °C / 0 °C, probe 400 mm, (Honeywell, Danfoss equivalent)
TEKVPT1000	1174120	1000 Ω / 0 °C, accuracy ± 0.3 °C / 0 °C
TEKVPT1000-400	1174121	1000 Ω / 0 °C, accuracy ± 0.3 °C / 0 °C, probe 400 mm
TEVNI1000-LG	1178020	1000 Ω / 0 °C, accuracy ± 0.4 °C / 0 °C (Siemens equivalent)
TEVNI1000-LG-400	1178024	1000 Ω / 0 °C, accuracy ± 0.4 °C / 0 °C, probe 400 mm, (Siemens equivalent)
TEKVNI1000-LG	1178120	1000 Ω / 0 °C, accuracy ± 0.4 °C / 0 °C

Frost protection thermostats

JV 24-PT, EJV 24-PT

24 V

IP20

Frost protection thermostats are protective devices for preventing heating coils from freezing in the air handling units.

Temperature measurement range	0...100 °C
Voltage input	0...10 V / 2...10 V, 10 mA
Control output	50 Vac, 6 A, res.
Alarm output	24 Vdc, 1A
Actuator output	0...10 Vdc, 10 mA
Mounting	11-pole relay housing
Product dimensions (w x h x d)	35 x 79 x 95 mm



Read more



TYPE	PRODUCT NO.	
EJV 24-PT-en	1110081	for Pt1000 sensor (1000 Ω / 0 °C), AR1 relay included
JV 24-PT-en	1110091	for Pt1000 sensor (1000 Ω / 0 °C), contact output 50 Vac 6 A res.
OPTIONS		
TEV PT1000	1174020	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C (Honeywell, Danfoss equivalent)
TEV PT1000-400	1174021	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, probe 400 mm, (Honeywell, Danfoss equivalent)
TEKV PT1000	1174120	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C
TEKV PT1000-400	1174121	1000 Ω / 0 °C, accuracy ±0.3 °C / 0 °C, probe 400 mm

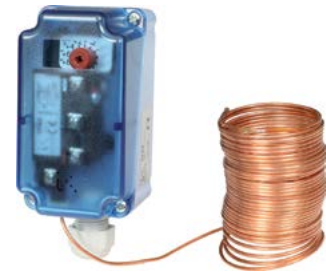
Thermostats

TF



TF capillary thermostats are protective devices for preventing heating coils from freezing in the air handling units.

Temperature measurement range	-10...10 °C
Temperature measurement accuracy	±1 °C
Alarm output	24...250 Vac, 15 A
Product dimensions (w x h x d)	65 x 140 x 62 mm



[Read more](#)



TYPE	PRODUCT NO.	
TF18	1240230	thermostat, capillary element length 1.8 m, automatic reset
TF18R	1240231	thermostat, capillary element length 1.8 m, manual reset
TF30	1240220	thermostat, capillary element length 3 m, automatic reset
TF30R	1240221	thermostat, capillary element length 3 m, manual reset
TF60	1240210	thermostat, capillary element length 6 m, automatic reset
TF60R	1240211	thermostat, capillary element length 6 m, manual reset

OPTIONS

DBZ-05	1240200	capillary element mounting bracket
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Condensation switch

KA 10



Condensation switch KA 10 is designed for detecting water condensation in cooling systems, for example in cooling beams. With the condensation switch it is possible to control the cooling water supply when the water starts to condensate on the pipe. The KA 10-EXT model has an external condensation sensor.

Relay output	24 Vac/dc, 1 A
Condensation output	0...10 Vdc
Cable gland	M16
Mounting	with two cable ties on the side or under the pipe (Ø10...100 mm)



[Read more](#)



TYPE	PRODUCT NO.	
KA 10	1187030	condensation switch
KA 10-EXT	1187031	condensation switch with external sensor, cable length 2 m

Condensation sensor

KEK 1



KEK 1 condensation sensor detects water condensation in cooling systems, for example in cooling beams. You can use the measuring information from the condensation sensor to stop the cooling water supply when moisture starts to condensate on the cooling pipe.

Probe	84 x 15 x 2 mm
Nominal resistance	approx. 100 kΩ at condensation point
Mounting	with two cable ties on the side or under the pipe (Ø10...100 mm)



[Read more](#)



TYPE	PRODUCT NO.	
KEK 1-1m	1187044	condensation sensor, 1 m cable
KEK 1	1187040	condensation sensor, 2 m cable
KEK 1-3m	1187041	condensation sensor, 3 m cable
KEK 1-5m	1187042	condensation sensor, 5 m cable
KEK 1-10m	1187043	condensation sensor, 10 m cable

Water leakage relay

VVK 2

VVK 2 monitors the status of the water leakage sensors connected to the relay. When the sensor becomes wet, the resistance decreases and the alarm relay will be activated. Also the sensor circuit is monitored (alarms if $R > 330\text{ k}\Omega$).

Relay output	60 Vdc, 2 A, res.
Mounting	On 35 mm DIN rail
Product dimensions (w x h x d)	53 x 90 x 61 mm



Read more



TYPE	PRODUCT NO.	
VVK 2	1187024	water leakage relay
OPTIONS		
VVA 1	1187020	sensor with connection box, e.g. on floor and dip tray
VVA 2	1187021	sensor with 2.3 m cable
VVA 3	1187026	sensor (25 x 200 mm) with 2.3 m cable and adhesive tape

Water leakage relay

LPH 10



24 V

IP20

LPH 10 monitors the resistance of the connected sensor. When the sensor becomes wet the resistance decreases. If the resistance decreases below the alarm limit, the alarm relay, indicator light and buzzer activate. The buzzer can be muted by pressing the button, but the relay and indicator light stay active until the sensor resistance increases over the alarm limit.


[Read more](#)


Setpoint	approx. 10 kΩ
Relay output	Changeover
Alarm output	60 Vdc, 300 mA, res. change-over contact. Alarm is also indicated with an indicator light and buzzer.
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	ABS plastic
Product dimensions (w x h x d)	87 x 86 x 32 mm

TYPE	PRODUCT NO.	
LPH 10	1187010	water leakage relay
OPTIONS		
VVA 1	1187020	sensor with connection box, e.g. on floor and dip tray
VVA 2	1187021	sensor with 2.3 m cable
VVA 3	1187026	sensor (25 x 200 mm) with 2.3 m cable and adhesive tape

Water leakage sensors

VVA, VVN

VVA and VVN sensors will be used with VVK 2 and LPH 10. The sensors can be installed on the floor and VVN also e.g. on the side of the pipe monitoring possible condensation.

Nominal resistance approx. 300 kΩ when dry



[Read more](#)



TYPE	PRODUCT NO.	
VVA 1	1187020	sensor with connection box, e.g. on floor and dip tray
VVA 2	1187021	sensor with 2.3 m cable
VVA 3	1187026	sensor (25 x 200 mm) with 2.3 m cable and adhesive tape
VVN 1	1187025	sensor, 1 m sensor band and 2.3 m cable
VVN 2	1187023	sensor, 2 m sensor band and 2.3 m cable
VVN 3	1187029	sensor, 3 m sensor band and 2.3 m cable

Thermometers

DTM-S

DTM-S is a mechanical thermometer for duct installation. The thermometer can be used for indoor applications. Two scales are available. The thermometers have an adjustment screw for tuning.

Temperature measurement accuracy	±2 °C
Probe	Ø 9 x 200 mm
Mounting	by a flange
Product dimensions (w x h x d)	100 x 100 x 230 mm



[Read more](#)



TYPE	PRODUCT NO.	
DTM-S -40/40	1240070	duct thermometer -40...40 °C
DTM-S 0/60	1240080	duct thermometer 0...60 °C

Thermometers

DTM

DTM is a mechanical thermometer for duct installation. It can be used in indoor applications. This meter is factory-calibrated.

Temperature measurement accuracy	±2 °C
Probe	Ø 9 x 200 mm
Mounting	by a flange
Materials	Class 2 copper alloy (probe), galvanized steel (flange), plastic (housing), SAN plastic (front window)
Product dimensions (w x h x d)	100 x 100 x 220 mm



[Read more](#)



TYPE	PRODUCT NO.	
DTM -40/60	1240090	duct thermometer -40...60 °C

Air pressure gauges

DPG



DPG is a standard pressure gauge for measuring overpressure and differential pressure. The DPG series devices include field adjustable zero point calibration and overpressure protection.

Materials	ABS and PC plastic (housing), aluminium and steel (machinery), silicone (membrane)
Product dimensions (w x h x d)	120 x 120 x 63 mm



[Read more](#)



TYPE	PRODUCT NO.	
DPG60	106.001.001	differential pressure gauge, range 0...60 Pa, accuracy $< \pm 5\%$, surface mounting
DPG100	106.002.001	differential pressure gauge, range 0...100 Pa, accuracy $< \pm 4\%$, surface mounting
DPG120	106.003.001	differential pressure gauge, range 0...120 Pa, accuracy $< \pm 3\%$, surface mounting
DPG200	106.004.001	differential pressure gauge, range 0...200 Pa, accuracy $< \pm 3\%$, surface mounting
DPG250	106.005.001	differential pressure gauge, range 0...250 Pa, accuracy $< \pm 3\%$, surface mounting
DPG300	106.006.001	differential pressure gauge, range 0...300 Pa, accuracy $< \pm 3\%$, surface mounting
DPG400	106.022.001	differential pressure gauge, range 0...400 Pa, accuracy $< \pm 3\%$, surface mounting
DPG500	106.007.001	differential pressure gauge, range 0...500 Pa, accuracy $< \pm 3\%$, surface mounting
DPG600	106.008.001	differential pressure gauge, range 0...600 Pa, accuracy $< \pm 3\%$, surface mounting
DPG800	106.009.001	differential pressure gauge, range 0...800 Pa, accuracy $< \pm 3\%$, surface mounting
DPG1K	106.010.001	differential pressure gauge, range 0...1000 Pa, accuracy $< \pm 3\%$, surface mounting
DPG1,5K	106.011.001	differential pressure gauge, range 0...1500 Pa, accuracy $< \pm 3\%$, surface mounting
DPG2K	106.012.001	differential pressure gauge, range 0...2000 Pa, accuracy $< \pm 3\%$, surface mounting
DPG3K	106.013.001	differential pressure gauge, range 0...3000 Pa, accuracy $< \pm 3\%$, surface mounting
DPG5K	106.014.001	differential pressure gauge, range 0...5000 Pa, accuracy $< \pm 3\%$, surface mounting

FLUSH MOUNTING OPTION (-F) IS AVAILABLE FOR ALL MODELS.

Manometers

MM

MM liquid column manometers measure differential air pressure, overpressure and underpressure. Adjusting the zero point is easy by turning the zeroing knob. The special structure of the manometer prevents the gauge fluid from leaking out in high overpressure situations.

Differential air pressure measurement ranges	-100...500 Pa
Mounting	with screws to the wall using the mounting points
Materials	ABS (housing), PC (zeroing knob and fill plug), PMMA (cover), nitrile rubber (fill plug O-ring)
Product dimensions (w x h x d)	212 x 140 x 34 mm



Read more



TYPE	PRODUCT NO.	
MM±100500-B	107.003.016	liquid column manometer, range -100...100...500 Pa, accuracy ±2 Pa / ±25 Pa
MM200600-B	107.004.045	liquid column manometer, range 0...200...600 Pa, accuracy ±5 Pa / ±25 Pa
OPTIONS		
Gauge fluid red 30ml	1241000012	gauge fluid, red, 30 ml bottle, s.g. 0.78 kg/dm³ (15 °C)

Manometers

YM-3

YM-3 overpressure meter is developed especially for civil defence shelters and military shelters. It is used for measuring and monitoring overpressure in the shelter. It is protected against strong vibration, blast shock and static pressure loads. Certified as a shelter product in Finland.

Differential air pressure measurement ranges	-100...500 Pa
Mounting	with screws to the wall using the mounting points
Materials	ABS (housing, zeroing knob and fill plug), PMMA (cover)
Product dimensions (w x h x d)	212 x 152 x 34 mm



[Read more](#)



TYPE

PRODUCT NO.

YM-3	107.003.012	overpressure meter, installation accessories and gauge fluid
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OPTIONS

Gauge fluid red 30ml	1241000012	gauge fluid, red, 30 ml bottle, s.g. 0.78 kg/dm ³ (15 °C)
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Manometers

MMU

Traditional U-tube manometer with easy zero point calibration. Inexpensive pressure meter for measuring and indicating small overpressure, underpressure and differential pressure of air and non-aggressive gases in low pressure ranges.

Differential air pressure measurement ranges	±500 Pa
Mounting	with screws
Materials	ABS and PC plastic, locking screw brass/steel
Product dimensions (w x h x d)	45 x 190 x 25 mm



[Read more](#)



TYPE	PRODUCT NO.	
MMU±500	113.002.001	U-tube manometer, range ±500 Pa

Differential pressure switches

PS



PS differential pressure switches are designed for monitoring over and under pressures and pressure differences in systems that handle air and other non-aggressive gases. PS switches offer a cost-effective solution for filter, fan and duct pressure monitoring for building automation systems. The switching point can be adjusted manually.


[Read more](#)


Switching accuracy	max. ±15 %
Relay output	250 Vac, 0.1 A, res. Changeover
Output	250 Vac, 3 A, res. (0.1 A, res. in PS200)
Cable gland	M16
Product dimensions (w x h x d)	90 x 105 x 63 mm

TYPE	PRODUCT NO.	
PS200	105.001.061	differential pressure switch, range 20...200 Pa
PS300	105.002.065	differential pressure switch, range 30...300 Pa
PS500	105.003.070	differential pressure switch, range 30...500 Pa
PS600	105.004.063	differential pressure switch, range 40...600 Pa
PS1500	105.005.068	differential pressure switch, range 100...1500 Pa
PS4500	105.006.050	differential pressure switch, range 500...4500 Pa

OPTIONS

DP-AK	1241000001	differential pressure measurement accessory kit
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Filter guards

DPG/PS

DPG/PS filter guards are designed for filter monitoring in systems that handle air and other non-flammable gases. The guards include a pressure gauge and a differential pressure switch. The differential pressure switch switching point is adjustable.

Gauge accuracy	±2 % from the full scale
Relay output	250 Vac, 0.1 A, res. Changeover
Cable gland	M16
Mounting	vertically (with screws)
Product dimensions (w x h x d)	219 x 136 x 68 mm



[Read more](#)



TYPE	PRODUCT NO.	
DPG200/PS200	109.001.005	filter guard, 200 Pa
DPG300/PS300	109.005.005	filter guard, 300 Pa
DPG500/PS500	109.004.008	filter guard, 500 Pa
DPG600/PS600	109.002.010	filter guard, 600 Pa
DPG1,5K/PS1500	109.003.007	filter guard, 1500 Pa

Filter guards

MM/PS

MM/PS filter guard combines a liquid column manometer and a differential pressure switch into a practical solution that provides visual indication of pressure and a switching point signal.

Cable gland	M16
Mounting	with screws
Materials	ABS, PC and PMMA plastic, sheet metal base
Product dimensions (w x h x d)	290 x 140 x 65 mm



[Read more](#)



TYPE	PRODUCT NO.	
MM200600/PS600	110.001.001	filter guard, MM range 0...600 Pa, PS range 40...600 Pa

Occupancy sensors

LA 14E

LA 14E is an occupancy sensor for controlling ventilation and lighting. Intelligent, processor-based logic prevents false functions while being very sensitive. Relay function is quiet and the release delay is adjustable.

Relay output	60 Vdc, 100 mA, delay is selectable (2 s, 2 min, 10 min or 20 min) [NC or NO]
Mounting	flush (surface mounting casing optional)
Materials	white plastic
Product dimensions (w x h x d)	85 x 85 x 34 mm



Read more



TYPE	PRODUCT NO.	
LA 14E	1185130	occupancy sensor

OPTIONS		
LA-RAJ-E	1185071	180° area guard for occupancy sensor
SMB1E	9000470	casing for surface mounting

Occupancy sensors

LA 15E

LA 15E is designed for controlling lighting. Up to 1.5 A continuous fluorescent lighting load is allowed.

Relay output	60 Vdc, 100 mA, delay 2 s. NC or NO
Lighting output	250 Vac, 1.5 VA, hold on time is selectable (2 s, 2 min, 10 min or 20 min)
Mounting	flush (surface mounting casing optional)
Materials	white plastic
Product dimensions (w x h x d)	85 x 85 x 34 mm



[Read more](#)



TYPE	PRODUCT NO.	
LA 15E	1185140	movement / occupancy sensor for switching lighting on/off
OPTIONS		
LA-RAJ-E	1185071	180° area guard for occupancy sensor
SMB 1E	9000470	casing for surface mounting

Occupancy sensors

PLT24

PLT 24 is a detector for monitoring occupancy through body heat and movements. The passive infrared PIR detector reacts to temperature changes in the range of the detection beams. Mounting bracket and screws are included to the delivery.

Relay output	60 Vdc, 100 mA, delay is selectable (2 s, 2 min, 10 min or 20 min) NC or NO
Product dimensions (w x h x d)	64 x 95 x 50 mm



[Read more](#)



TYPE	PRODUCT NO.
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PLT 24	1185040	occupancy detector
PLT 24-K	1185045	occupancy detector, ceiling mounting

Occupancy sensors

PLT 12

PLT 12 is a detector for monitoring occupancy through body heat and movements. The passive infrared PIR detector reacts to temperature changes in the range of the detection beams. Mounting bracket and screws are included to the delivery.

Relay output	12 Vdc, 100 mA NC
Product dimensions (w x h x d)	64 x 95 x 50 mm



[Read more](#)



TYPE	PRODUCT NO.
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PLT 12	1185080	occupancy detector
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Valves and actuators

Valves, valve actuators and damper actuators designed for building automation needs complement our wide product offering for automated HVAC management systems.

- ▶ Complementary products for all HVAC systems
- ▶ Valves and valve actuators for heating and cooling applications
- ▶ Damper actuators for smooth, accurate airflow control
- ▶ Adapters for almost all manufacturers' valves



Thermal actuator A +
valve adapters VA 80



Terminal valve NV



2-way control valve
VVG44



Motorized valve actuator
SAX



Damper actuator GLB1E



Solenoid valve MV

2-way valves

NV2D



2-way valves with different sizes and with different Kvs values for HVAC applications are available. Valves can be used for controlling heating and cooling. A VA 80 adapter is needed for connecting a NV valve with a thermal actuator.



[Read more](#)



TYPE	PRODUCT NO.	
NV2D10	1230100	valve 3/8" (DN10) fixed Kvs 1,20
NV2D10V	1230101	valve 3/8" (DN10) adjustable Kvs 0,09...0,77
NV2D10F	1230102	valve 3/8" (DN10) adjustable Kvs 0,05...0,35
NV2D15	1230150	valve 1/2" (DN15) fixed Kvs 1,20
NV2D15V	1230151	valve 1/2" (DN15) adjustable Kvs 0,09...0,85
NV2D15F	1230152	valve 1/2" (DN15) adjustable Kvs 0,05...0,35
NV2D20	1230200	valve 3/4" (DN20) fixed Kvs 1,20
NV2D20V	1230201	valve 3/4" (DN20) adjustable Kvs 0,09...0,85

OPTIONS

VA 80	1220010	adapter for Produal NV valves
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2-way valves

New!

VAG60



These 2-way shut-off ball valves are suitable for heating and cooling systems with closed circuits. They are typically used as shut-off valves in heating, ventilation, and air conditioning applications. External mounting threads. Rotational angle 90°. Suitable for pressure class PN 40 applications.

Mounting	G 1 B external threads according to ISO 228/1
Pressure rating	PN 40
Materials	CW602N (brass parts), peroxide-cured EPDM (seals)
Product dimensions (w x h x d)	87 x 54 x 42 mm



Read more



TYPE	PRODUCT NO.	
VAG60.15-9	123S610100	2-way shut-off ball valve, external threads, DN15, Kvs 9
VAG60.20-17	123S610200	2-way shut-off ball valve, external threads, DN20, Kvs 17
VAG60.25-22	123S610300	2-way shut-off ball valve, external threads, DN25, Kvs 22
VAG60.32-35	123S610400	2-way shut-off ball valve, external threads, DN32, Kvs 35
VAG60.40-68	123S610500	2-way shut-off ball valve, external threads, DN40, Kvs 68
VAG60.50-96	123S610600	2-way shut-off ball valve, external threads, DN50, Kvs 96

2-way valves

New!

VAI60



These 2-way shut-off ball valves are suitable for heating and cooling systems with closed circuits. They are typically used as open/close valves in heating, ventilation, and air conditioning applications. Internal mounting threads. Rotational angle 90°. Suitable for pressure class PN 40 applications.



Mounting	Rp 1/2 internal threads according to ISO 7/1
Pressure rating	PN 40
Materials	UNS C35330 (brass parts), peroxide-cured EPDM (seals)
Product dimensions (w x h x d)	62 x 53 x 42 mm

[Read more](#)


TYPE	PRODUCT NO.	
VAI60.15-15	123S620100	2-way shut-off ball valve, internal threads, DN15, Kvs 15
VAI60.20-22	123S620200	2-way shut-off ball valve, internal threads, DN20, Kvs 22
VAI60.25-22	123S620300	2-way shut-off ball valve, internal threads, DN25, Kvs 22
VAI60.32-35	123S620400	2-way shut-off ball valve, internal threads, DN32, Kvs 35
VAI60.40-68	123S620500	2-way shut-off ball valve, internal threads, DN40, Kvs 68
VAI60.50-96	123S620600	2-way shut-off ball valve, internal threads, DN50, Kvs 96

2-way valves

New!

VAG61



These 2-way control ball valves are suitable for heating and cooling systems with closed circuits. They are typically used as control valves in heating, ventilation, and air conditioning applications. External mounting threads. Rotational angle 90°. Suitable for pressure class PN 40 applications.



Mounting	G 1 B external threads according to ISO 228/1
Pressure rating	PN 40
Materials	CW602N (brass parts), peroxide-cured EPDM (seals)
Product dimensions (w x h x d)	87 x 54 x 42 mm

[Read more](#)


TYPE	PRODUCT NO.	
VAG61.15-1	123S510100	2-way control ball valve, external threads, DN15, Kvs 1.0
VAG61.15-1.6	123S510200	2-way control ball valve, external threads, DN15, Kvs 1.6
VAG61.15-2.5	123S510300	2-way control ball valve, external threads, DN15, Kvs 2.5
VAG61.15-4	123S510400	2-way control ball valve, external threads, DN15, Kvs 4.0
VAG61.15-6.3	123S510500	2-way control ball valve, external threads, DN15, Kvs 6.3
VAG61.20-10	123S510600	2-way control ball valve, external threads, DN20, Kvs 10
VAG61.20-4	123S510700	2-way control ball valve, external threads, DN20, Kvs 4.0
VAG61.20-6.3	123S510800	2-way control ball valve, external threads, DN20, Kvs 6.3
VAG61.25-10	123S510900	2-way control ball valve, external threads, DN25, Kvs 10
VAG61.25-16	123S510A00	2-way control ball valve, external threads, DN25, Kvs 16
VAG61.25-6.3	123S510B00	2-way control ball valve, external threads, DN25, Kvs 6.3
VAG61.32-10	123S510C00	2-way control ball valve, external threads, DN32, Kvs 10
VAG61.32-16	123S510D00	2-way control ball valve, external threads, DN32, Kvs 16
VAG61.32-25	123S510E00	2-way control ball valve, external threads, DN32, Kvs 25
VAG61.40-16	123S510F00	2-way control ball valve, external threads, DN40, Kvs 16
VAG61.40-25	123S510G00	2-way control ball valve, external threads, DN40, Kvs 25
VAG61.40-40	123S510H00	2-way control ball valve, external threads, DN40, Kvs 40
VAG61.50-25	123S510J00	2-way control ball valve, external threads, DN50, Kvs 25
VAG61.50-40	123S510K00	2-way control ball valve, external threads, DN50, Kvs 40

2-way valves

New!

VAI61



These 2-way control ball valves are suitable for heating and cooling systems with closed circuits. They are typically used as control valves in heating, ventilation, and air conditioning applications. Internal mounting threads. Rotational angle 90°. Suitable for pressure class PN 40 applications.



Mounting	Rp 1/2 internal threads according to ISO 7/1
Pressure rating	PN 40
Materials	UNS C35330 (brass parts), peroxide-cured EPDM (seals)
Product dimensions (w x h x d)	62 x 53 x 42 mm

[Read more](#)


TYPE	PRODUCT NO.	
VAI61.15-1	123S520100	2-way control ball valve, internal threads, DN15, Kvs 1.0
VAI61.15-1.6	123S520200	2-way control ball valve, internal threads, DN15, Kvs 1.6
VAI61.15-10	123S520300	2-way control ball valve, internal threads, DN15, Kvs 10
VAI61.15-2.5	123S520400	2-way control ball valve, internal threads, DN15, Kvs 2.5
VAI61.15-4	123S520500	2-way control ball valve, internal threads, DN15, Kvs 4.0
VAI61.15-6.3	123S520600	2-way control ball valve, internal threads, DN15, Kvs 6.3
VAI61.20-10	123S520700	2-way control ball valve, internal threads, DN20, Kvs 10
VAI61.20-4	123S520800	2-way control ball valve, internal threads, DN20, Kvs 4.0
VAI61.20-6.3	123S520900	2-way control ball valve, internal threads, DN20, Kvs 6.3
VAI61.25-10	123S520A00	2-way control ball valve, internal threads, DN25, Kvs 10
VAI61.25-16	123S520B00	2-way control ball valve, internal threads, DN25, Kvs 16
VAI61.25-6.3	123S520C00	2-way control ball valve, internal threads, DN25, Kvs 6.3
VAI61.32-10	123S520D00	2-way control ball valve, internal threads, DN32, Kvs 10
VAI61.32-16	123S520E00	2-way control ball valve, internal threads, DN32, Kvs 16
VAI61.32-25	123S520F00	2-way control ball valve, internal threads, DN32, Kvs 25
VAI61.40-16	123S520G00	2-way control ball valve, internal threads, DN40, Kvs 16
VAI61.40-25	123S520H00	2-way control ball valve, internal threads, DN40, Kvs 25
VAI61.40-40	123S520J00	2-way control ball valve, internal threads, DN40, Kvs 40
VAI61.50-25	123S520K00	2-way control ball valve, internal threads, DN50, Kvs 25
VAI61.50-40	123S520L00	2-way control ball valve, internal threads, DN50, Kvs 40
VAI61.50-63	123S520M00	2-way control ball valve, internal threads, DN50, Kvs 63

2-way valves

New!

VVP45



These 2-way control valves are suitable for heating and cooling systems with closed circuits. They are typically used as control valves in zone heating systems and chilled ceilings. External mounting threads. Suitable for pressure class PN 16 applications.

Mounting	G 1/2 B external threads according to ISO 228/1
Pressure rating	PN 16
Materials	Bronze CC499K (valve body), stainless steel (stem), brass (plug, seat gland), EPDM (seals)
Product dimensions (w x h x d)	60 x 74 x 36 mm


[Read more](#)


TYPE	PRODUCT NO.	
VVP45.10-0.4	123S130100	2-way control valve, external threads, DN10, Kvs 0.4
VVP45.10-0.63	123S130200	2-way control valve, external threads, DN10, Kvs 0.63
VVP45.10-1	123S130300	2-way control valve, external threads, DN10, Kvs 1.0
VVP45.10-1.6	123S130400	2-way control valve, external threads, DN10, Kvs 1.6
VVP45.15-2.5	123S130500	2-way control valve, external threads, DN15, Kvs 2.5
VVP45.20-4	123S130600	2-way control valve, external threads, DN20, Kvs 4.0
VVP45.25-6.3	123S130700	2-way control valve, external threads, DN25, Kvs 6.3
VVP45.25-10	123S130800	2-way control valve, external threads, DN25, Kvs 10
VVP45.32-16	123S130900	2-way control valve, external threads, DN32, Kvs 16
VVP45.40-25	123S130A00	2-way control valve, external threads, DN40, Kvs 25

2-way valves

New!

VPP46



These pressure-independent 2-way control valves are suitable for heating and cooling systems with closed circuits. They are typically used for controlling differential water pressure and for automatic hydraulic balancing of terminal units, for example, fan coil units, induction units, and heat exchangers. External mounting threads. Suitable for pressure class PN 25 applications.

Mounting	G 1/2 B external threads according to ISO 228/1
Pressure rating	PN 25
Materials	CW602N (valve body, port, seat, sealing gland and test points), stainless steel (stem, spring), EPDM (seals)
Product dimensions (w x h x d)	65 x 94 x 38 mm



Read more



TYPE	PRODUCT NO.	
VPP46.10LO.2	123S220100	2-way pressure independent control valve, external threads, DN10, 30...200 l/h
VPP46.10LO.2Q	123S220200	2-way pressure independent control valve, external threads, DN10, 30...200 l/h, pressure test points
VPP46.10LO.4	123S220300	2-way pressure independent control valve, external threads, DN10, 65...370 l/h
VPP46.10LO.4Q	123S220400	2-way pressure independent control valve, external threads, DN10, 65...370 l/h, pressure test points
VPP46.15LO.2	123S220500	2-way pressure independent control valve, external threads, DN15, 30...200 l/h
VPP46.15LO.2Q	123S220600	2-way pressure independent control valve, external threads, DN15, 30...200 l/h, pressure test points
VPP46.15LO.6	123S220700	2-way pressure independent control valve, external threads, DN15, 100...575 l/h
VPP46.15LO.6Q	123S220800	2-way pressure independent control valve, external threads, DN15, 100...575 l/h, pressure test points
VPP46.20F1.4	123S220900	2-way pressure independent control valve, external threads, DN20, 220...1330 l/h
VPP46.20F1.4Q	123S220A00	2-way pressure independent control valve, external threads, DN20, 220...1330 l/h, pressure test points
VPP46.25F1.8	123S220B00	2-way pressure independent control valve, external threads, DN25, 260...1670 l/h
VPP46.25F1.8Q	123S220C00	2-way pressure independent control valve, external threads, DN25, 260...1670 l/h, pressure test points
VPP46.32F4	123S220D00	2-way pressure independent control valve, external threads, DN32, 510...3700 l/h
VPP46.32F4Q	123S220E00	2-way pressure independent control valve, external threads, DN32, 510...3700 l/h, pressure test points

2-way valves

New!

VPI46



These pressure-independent 2-way control valves are suitable for heating and cooling systems with closed circuits. They are typically used for controlling differential water pressure and for automatic hydraulic balancing of terminal units, for example, fan coil units, induction units, and heat exchangers. Internal mounting threads. Suitable for pressure class PN 25 applications.

Mounting	Rp 1/2 internal threads according to ISO 7/1
Pressure rating	PN 25
Materials	CW602N (valve body, port, seat, sealing gland and test points), stainless steel (stem, spring), EPDM (seals)
Product dimensions (w x h x d)	75 x 98 x 38 mm


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TYPE	PRODUCT NO.	
VPI46.15L0.2	123S210100	2-way pressure independent control valve, internal threads, DN15, 30...200 l/h
VPI46.15L0.2Q	123S210200	2-way pressure independent control valve, internal threads, DN15, 30...200 l/h, pressure test points
VPI46.15L0.6	123S210300	2-way pressure independent control valve, internal threads, DN15, 65...370 l/h
VPI46.15L0.6Q	123S210400	2-way pressure independent control valve, internal threads, DN15, 65...370 l/h, pressure test points
VPI46.20F1.4	123S210500	2-way pressure independent control valve, internal threads, DN20, 220...1330 l/h
VPI46.20F1.4Q	123S210600	2-way pressure independent control valve, internal threads, DN20, 220...1330 l/h, pressure test points
VPI46.25F1.8	123S210700	2-way pressure independent control valve, internal threads, DN25, 260...1670 l/h
VPI46.25F1.8Q	123S210800	2-way pressure independent control valve, internal threads, DN25, 260...1670 l/h, pressure test points
VPI46.32F4	123S210900	2-way pressure independent control valve, internal threads, DN32, 510...3700 l/h
VPI46.32F4Q	123S210A00	2-way pressure independent control valve, internal threads, DN32, 510...3700 l/h, pressure test points
VPI46.40F9.5Q	123S210B00	2-way pressure independent control valve, internal threads, DN40, 1370...9500 l/h, pressure test points
VPI46.50F12Q	123S210C00	2-way pressure independent control valve, internal threads, DN50, 1400...11500 l/h, pressure test points

2-way valves

New!

VVG44



These 2-way control valves are suitable for small- and medium-sized heating and cooling systems with closed circuits. They are typically used as control valves for mixing and diverting functions or as shut-off valves. External mounting threads. Suitable for pressure class PN 16 applications.

Mounting	G 1 B external threads according to ISO 228/1
Pressure rating	PN16
Materials	Bronze CC499K (valve body), CrNi steel (stem), CrNi steel or brass (plug), brass (sealing gland), EPDM (seals)


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TYPE	PRODUCT NO.	
VVG44.15-0.25	123S150100	2-way control valve, external threads, DN15, Kvs 0.25
VVG44.15-0.4	123S150200	2-way control valve, external threads, DN15, Kvs 0.4
VVG44.15-0.63	123S150300	2-way control valve, external threads, DN15, Kvs 0.63
VVG44.15-1	123S150400	2-way control valve, external threads, DN15, Kvs 1.0
VVG44.15-1.6	123S150500	2-way control valve, external threads, DN15, Kvs 1.6
VVG44.15-2.5	123S150600	2-way control valve, external threads, DN15, Kvs 2.5
VVG44.15-4	123S150700	2-way control valve, external threads, DN15, Kvs 4.0
VVG44.20-6.3	123S150800	2-way control valve, external threads, DN20, Kvs 6.3
VVG44.25-10	123S150900	2-way control valve, external threads, DN25, Kvs 10
VVG44.32-16	123S150A00	2-way control valve, external threads, DN32, Kvs 16
VVG44.40-25	123S150B00	2-way control valve, external threads, DN40, Kvs 25

2-way valves

New!

VVF32

-15...55
°C5...95
%rH

These 2-way control valves are suitable for heating and cooling systems with closed circuits. They are typically used as control or shut-off valves in boiler, district heating and refrigeration plants, and ventilation and air-handling units. They have flanged process connections. Suitable for pressure class PN10 applications.



Mounting	Flanged connections, design B of type 21 (ISO 7005)
Pressure rating	PN10
Materials	Grey cast iron EN-GJL-250 (valve body), stainless steel (stem), brass/bronze (plug), brass (sealing gland), EPDM (seals), PTFE (sealing sleeve), silicon-free grease, steel S235JRG2 (blank flange)

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TYPE	PRODUCT NO.	
VVF32.15-1.6	123S170100	2-way control valve, flanged connections, DN15, Kvs 1.6
VVF32.15-2.5	123S170200	2-way control valve, flanged connections, DN15, Kvs 2.5
VVF32.15-4	123S170300	2-way control valve, flanged connections, DN15, Kvs 4.0
VVF32.25-6.3	123S170400	2-way control valve, flanged connections, DN25, Kvs 6.3
VVF32.25-10	123S170500	2-way control valve, flanged connections, DN25, Kvs 10
VVF32.40-16	123S170600	2-way control valve, flanged connections, DN40, Kvs 16
VVF32.40-25	123S170700	2-way control valve, flanged connections, DN40, Kvs 25
VVF32.50-40	123S170800	2-way control valve, flanged connections, DN50, Kvs 40
VVF32.65-63	123S170900	2-way control valve, flanged connections, DN65, Kvs 63
VVF32.80-100	123S170A00	2-way control valve, flanged connections, DN80, Kvs 100
VVF32.100-160	123S170B00	2-way control valve, flanged connections, DN100, Kvs 160
VVF32.125-250	123S170C00	2-way control valve, flanged connections, DN125, Kvs 250
VVF32.150-400	123S170D00	2-way control valve, flanged connections, DN150, Kvs 400

2-way valves

New!

VVF42



These 2-way control valves are suitable for heating and cooling systems with closed circuits. They are typically used as control or shut-off valves in boiler, district heating and refrigeration plants, and ventilation and air-handling units. They have flanged process connections. Suitable for pressure class PN 16 applications.



Read more



Mounting	Flanged connections, design B of type 21 (ISO 7005)
Pressure rating	PN16
Materials	Grey cast iron EN-GJL-250 (valve body), stainless steel (stem), brass/bronze (plug), brass (sealing gland), EPDM (seals), PTFE (sealing sleeve), silicon-free grease, steel S235JRG2 (blank flange)

TYPE	PRODUCT NO.	
VVF42.15-1.6	123S180100	2-way control valve, flanged connections, DN15, Kvs 1.6
VVF42.15-2.5	123S180200	2-way control valve, flanged connections, DN15, Kvs 2.5
VVF42.15-4	123S180300	2-way control valve, flanged connections, DN15, Kvs 4.0
VVF42.20-6.3	123S180400	2-way control valve, flanged connections, DN20, Kvs 6.3
VVF42.25-6.3	123S180500	2-way control valve, flanged connections, DN25, Kvs 6.3
VVF42.25-10	123S180600	2-way control valve, flanged connections, DN25, Kvs 10
VVF42.32-16	123S180700	2-way control valve, flanged connections, DN32, Kvs 16
VVF42.40-16	123S180800	2-way control valve, flanged connections, DN40, Kvs 16
VVF42.40-25	123S180900	2-way control valve, flanged connections, DN40, Kvs 25
VVF42.50-31.5	123S180A00	2-way control valve, flanged connections, DN50, Kvs 31.5
VVF42.50-40	123S180B00	2-way control valve, flanged connections, DN50, Kvs 40
VVF42.65-50	123S180C00	2-way control valve, flanged connections, DN50, Kvs 50
VVF42.65-63	123S180D00	2-way control valve, flanged connections, DN65, Kvs 63
VVF42.80-80	123S180E00	2-way control valve, flanged connections, DN80, Kvs 80
VVF42.80-100	123S180F00	2-way control valve, flanged connections, DN80, Kvs 100
VVF42.100-125	123S180G00	2-way control valve, flanged connections, DN100, Kvs 125
VVF42.100-160	123S180H00	2-way control valve, flanged connections, DN100, Kvs 160
VVF42.125-200	123S180J00	2-way control valve, flanged connections, DN125, Kvs 200
VVF42.125-250	123S180K00	2-way control valve, flanged connections, DN125, Kvs 250
VVF42.150-315	123S180L00	2-way control valve, flanged connections, DN150, Kvs 315
VVF42.150-400	123S180M00	2-way control valve, flanged connections, DN150, Kvs 400

2-way valves

New!

VVF53

-15...55
°C5...95
%rH

These 2-way control valves are suitable for heating and cooling systems with open or closed hydraulic circuits. They are typically used as control or shut-off valves in boiler, district heating and refrigeration plants, cooling towers, heating groups, and air-handling units. They have flanged process connections. Suitable for pressure class PN 25 applications.



Read more



Mounting	Flange type 21, flange design B
Pressure rating	PN 25
Materials	EN-GJS-400-18-LT (valve body), P265GH (blank flange), stainless steel (stem, eat, plug), silicone-free FEPM (seals)
Product dimensions (w x h x d)	130 x 247 x 76 mm

TYPE	PRODUCT NO.	
VVF53.15-0.4	123S120100	2-way control or shut-off valve, flange connection, DN15, Kvs 0.4
VVF53.15-0.63	123S120200	2-way control or shut-off valve, flange connection, DN15, Kvs 0.63
VVF53.15-1	123S120300	2-way control or shut-off valve, flange connection, DN15, Kvs 1
VVF53.15-1.6	123S120400	2-way control or shut-off valve, flange connection, DN15, Kvs 1.6
VVF53.15-2.5	123S120500	2-way control or shut-off valve, flange connection, DN15, Kvs 2.5
VVF53.15-4	123S120600	2-way control or shut-off valve, flange connection, DN15, Kvs 4
VVF53.20-6.3	123S120700	2-way control or shut-off valve, flange connection, DN20, Kvs 6.3
VVF53.25-10	123S120800	2-way control or shut-off valve, flange connection, DN25, Kvs 10
VVF53.32-16	123S120900	2-way control or shut-off valve, flange connection, DN32, Kvs 16

2-way valves

New!

VVG549



These 2-way control valves are suitable for heating applications with closed circuits. They are typically used as control or shut-off valves in district heating and heating plants. External mounting threads. Suitable for pressure class PN 25 applications.

Mounting	G 3/4 B external threads according to ISO 228/1
Pressure rating	PN 25
Materials	Bronze CuSn5Zn5Pb2 (valve body), stainless steel (internal parts), brass (sealing gland), EPDM (seals)
Product dimensions (w x h x d)	65 x 97 x 33 mm


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TYPE	PRODUCT NO.	
VVG549.15-0.25	123S110100	2-way control valve, external threads, DN15, Kvs 0.25
VVG549.15-0.4	123S110200	2-way control valve, external threads, DN15, Kvs 0.4
VVG549.15-0.63	123S110300	2-way control valve, external threads, DN15, Kvs 0.63
VVG549.15-1	123S110400	2-way control valve, external threads, DN15, Kvs 1.0
VVG549.15-1.6	123S110500	2-way control valve, external threads, DN15, Kvs 1.6
VVG549.15-2.5	123S110600	2-way control valve, external threads, DN15, Kvs 2.5
VVG549.20-4K	123S110700	2-way control valve, external threads, pressure compensation, DN20, Kvs 4.0
VVG549.25-6.3K	123S110800	2-way control valve, external threads, pressure compensation, DN25, Kvs 6.3

3-way valves

New!

VBG61



These 3-way control ball valves are suitable for heating and cooling systems with closed circuits. They are typically used as control valves in heating, ventilation and air conditioning applications. External mounting threads. Rotational angle 90°. Suitable for pressure class PN 40 applications.


[Read more](#)


Mounting	G 1 B external threads according to ISO 228/1
Pressure rating	PN 40
Materials	CW602N (brass parts), peroxide-cured EPDM (seals)
Product dimensions (w x h x d)	87 x 51 x 60 mm

TYPE	PRODUCT NO.	
VBG61.15-1.6	123S530100	3-way control ball valve, external threads, DN15, Kvs 1.6
VBG61.15-2.5	123S530200	3-way control ball valve, external threads, DN15, Kvs 2.5
VBG61.15-4	123S530300	3-way control ball valve, external threads, DN15, Kvs 4.0
VBG61.15-6.3	123S530400	3-way control ball valve, external threads, DN15, Kvs 6.3
VBG61.20-4	123S530500	3-way control ball valve, external threads, DN20, Kvs 4.0
VBG61.20-6.3	123S530600	3-way control ball valve, external threads, DN20, Kvs 6.3
VBG61.25-10	123S530700	3-way control ball valve, external threads, DN25, Kvs 10
VBG61.32-16	123S530800	3-way control ball valve, external threads, DN32, Kvs 16
VBG61.40-25	123S530900	3-way control ball valve, external threads, DN40, Kvs 25
VBG61.50-40	123S530A00	3-way control ball valve, external threads, DN50, Kvs 40

3-way valves

New!

VBI61



These 3-way control ball valves are suitable for heating and cooling systems with closed circuits. They are typically used as control valves in heating, ventilation and air conditioning applications. Internal mounting threads. Rotational angle 90°. Suitable for pressure class PN 40 applications.


[Read more](#)


Mounting	Rp 1/2 internal threads according to ISO 7/1
Pressure rating	PN 40
Materials	UNS C35330 (brass parts), peroxide-cured EPDM (seals)
Product dimensions (w x h x d)	67 x 47 x 49 mm

TYPE	PRODUCT NO.	
VBI61.15-1.6	123S540100	3-way control ball valve, internal threads, DN15, Kvs 1.6
VBI61.15-2.5	123S540200	3-way control ball valve, internal threads, DN15, Kvs 2.5
VBI61.15-4	123S540300	3-way control ball valve, internal threads, DN15, Kvs 4.0
VBI61.15-6.3	123S540400	3-way control ball valve, internal threads, DN15, Kvs 1.6
VBI61.20-4	123S540500	3-way control ball valve, internal threads, DN20, Kvs 4.0
VBI61.20-6.3	123S540600	3-way control ball valve, internal threads, DN20, Kvs 6.3
VBI61.25-10	123S540700	3-way control ball valve, internal threads, DN25, Kvs 10
VBI61.32-16	123S540800	3-way control ball valve, internal threads, DN32, Kvs 16
VBI61.40-25	123S540900	3-way control ball valve, internal threads, DN40, Kvs 25
VBI61.50-40	123S540A00	3-way control ball valve, internal threads, DN50, Kvs 40
VBI61.50-63	123S540B00	3-way control ball valve, internal threads, DN50, Kvs 63

3-way valves

New!

VBG60



These T-type 3-way changeover ball valves are suitable for heating and cooling systems with closed circuits. They are typically used as changeover valves. External mounting threads. Rotational angle 90°. Suitable for pressure class PN 40 applications.

Mounting	G1B external threads according to ISO 228/1
Pressure rating	PN 40
Materials	CW602N (brass parts), peroxide-cured EPDM (seals)
Product dimensions (w x h x d)	89 x 55 x 61 mm



Read more



TYPE	PRODUCT NO.	
VBG60.15-8T	123S630100	T-type 3-way changeover ball valve, external threads, DN15, Kvs 8
VBG60.20-13T	123S630200	T-type 3-way changeover ball valve, external threads, DN20, Kvs 13
VBG60.25-13T	123S630300	T-type 3-way changeover ball valve, external threads, DN25, Kvs 13
VBG60.32-25T	123S630400	T-type 3-way changeover ball valve, external threads, DN32, Kvs 25
VBG60.40-49T	123S630500	T-type 3-way changeover ball valve, external threads, DN40, Kvs 49
VBG60.50-73T	123S630600	T-type 3-way changeover ball valve, external threads, DN50, Kvs 73

3-way valves

New!

VBI60



These 3-way changeover ball valves are suitable for heating and cooling systems with closed circuits. They are typically used as changeover valves. Internal mounting threads. Rotational angle 90°. Suitable for pressure class PN 40 applications.



Mounting	Rp 1/2 internal threads according to ISO 7/1
Pressure rating	PN 40
Materials	UNS C35330 (brass parts), peroxide-cured EPDM (seals)
Product dimensions (w x h x d)	67 x 51 x 50 mm

[Read more](#)


TYPE	PRODUCT NO.	
VBI60.15-12T	123S640100	T-type 3-way changeover ball valve, internal threads, DN15, Kvs 12
VBI60.15-5L	123S640200	L-type 3-way changeover ball valve, internal threads, DN15, Kvs 5
VBI60.20-16T	123S640300	T-type 3-way changeover ball valve, internal threads, DN20, Kvs 16
VBI60.20-9L	123S640400	L-type 3-way changeover ball valve, internal threads, DN20, Kvs 9
VBI60.25-16T	123S640500	T-type 3-way changeover ball valve, internal threads, DN25, Kvs 16
VBI60.25-9L	123S640600	L-type 3-way changeover ball valve, internal threads, DN25, Kvs 9
VBI60.32-13L	123S640700	L-type 3-way changeover ball valve, internal threads, DN32, Kvs 13
VBI60.32-25T	123S640800	T-type 3-way changeover ball valve, internal threads, DN32, Kvs 25
VBI60.40-25L	123S640900	L-type 3-way changeover ball valve, internal threads, DN40, Kvs 25
VBI60.40-49T	123S640A00	T-type 3-way changeover ball valve, internal threads, DN40, Kvs 49
VBI60.50-37L	123S640B00	L-type 3-way changeover ball valve, internal threads, DN50, Kvs 37
VBI60.50-73T	123S640C00	T-type 3-way changeover ball valve, internal threads, DN50, Kvs 73

3-way valves

New!

VXP45



These 3-way control valves are suitable for heating and cooling systems with closed circuits. They are typically used as control valves in zone heating systems and chilled ceilings. External mounting threads. Suitable for pressure class PN 16 applications.

Mounting	G 1/2 B external threads according to ISO 228/1
Pressure rating	PN16
Materials	Bronze CC499K (valve body), stainless steel (stem), brass (plug, seat gland), EPDM (seals)
Product dimensions (w x h x d)	60 x 84 x 36 mm



Read more



TYPE	PRODUCT NO.	
VXP45.10-0.4	123S140100	3-way control valve, external threads, DN10, Kvs 0.4
VXP45.10-0.63	123S140200	3-way control valve, external threads, DN10, Kvs 0.63
VXP45.10-1	123S140300	3-way control valve, external threads, DN10, Kvs 1.0
VXP45.10-1.6	123S140400	3-way control valve, external threads, DN10, Kvs 1.6
VXP45.15-2.5	123S140500	3-way control valve, external threads, DN15, Kvs 2.5
VXP45.20-4	123S140600	3-way control valve, external threads, DN20, Kvs 4.0
VXP45.25-6.3	123S140700	3-way control valve, external threads, DN25, Kvs 6.3
VXP45.25-10	123S140800	3-way control valve, external threads, DN25, Kvs 10
VXP45.32-16	123S140900	3-way control valve, external threads, DN32, Kvs 16
VXP45.40-25	123S140A00	3-way control valve, external threads, DN40, Kvs 25

3-way valves

New!

VXG44



These 3-way control valves are suitable for small- and medium-sized heating and cooling systems with closed circuits. They are typically used as control valves for mixing and diverting functions or as shut-off valves. External mounting threads. Suitable for pressure class PN 16 applications.

Mounting	G1B external threads according to ISO 228/1
Pressure rating	PN16
Materials	Bronze CC499K (valve body), CrNi steel (stem), CrNi steel or brass (plug), brass (sealing gland), EPDM (seals)


[Read more](#)


TYPE	PRODUCT NO.	
VXG44.15-0.25	123S160100	3-way control valve, external threads, DN15, Kvs 0.25
VXG44.15-0.4	123S160200	3-way control valve, external threads, DN15, Kvs 0.4
VXG44.15-0.63	123S160300	3-way control valve, external threads, DN15, Kvs 0.63
VXG44.15-1	123S160400	3-way control valve, external threads, DN15, Kvs 1.0
VXG44.15-1.6	123S160500	3-way control valve, external threads, DN15, Kvs 1.6
VXG44.15-2.5	123S160600	3-way control valve, external threads, DN15, Kvs 2.5
VXG44.15-4	123S160700	3-way control valve, external threads, DN15, Kvs 4.0
VXG44.20-6.3	123S160800	3-way control valve, external threads, DN20, Kvs 6.3
VXG44.25-10	123S160900	3-way control valve, external threads, DN25, Kvs 10
VXG44.32-16	123S160A00	3-way control valve, external threads, DN32, Kvs 16
VXG44.40-25	123S160B00	3-way control valve, external threads, DN40, Kvs 25

3-way valves

New!

VXF32

-15...55
°C5...95
%rH

These 3-way control valves are suitable for heating and cooling systems with closed circuits. They are typically used as control or shut-off valves in boiler, district heating and refrigeration plants, and ventilation and air-handling units. They have flanged process connections. Suitable for pressure class PN10 applications.



Read more



Mounting	Flanged connections, design B of type 21 (ISO 7005)
Pressure rating	PN10
Materials	Grey cast iron EN-GJL-250 (valve body), stainless steel (stem), brass/bronze (plug), brass (sealing gland), EPDM (seals), PTFE (sealing sleeve), silicon-free grease

TYPE	PRODUCT NO.	
VXF32.15-1.6	123S190100	3-way control valve, flanged connections, DN15, Kvs 1.6
VXF32.15-2.5	123S190200	3-way control valve, flanged connections, DN15, Kvs 2.5
VXF32.15-4	123S190300	3-way control valve, flanged connections, DN15, Kvs 4.0
VXF32.25-6.3	123S190400	3-way control valve, flanged connections, DN25, Kvs 6.3
VXF32.25-10	123S190500	3-way control valve, flanged connections, DN25, Kvs 10
VXF32.40-16	123S190600	3-way control valve, flanged connections, DN40, Kvs 16
VXF32.40-25	123S190700	3-way control valve, flanged connections, DN40, Kvs 25
VXF32.50-40	123S190800	3-way control valve, flanged connections, DN50, Kvs 40
VXF32.65-63	123S190900	3-way control valve, flanged connections, DN65, Kvs 63
VXF32.80-100	123S190A00	3-way control valve, flanged connections, DN80, Kvs 100
VXF32.100-160	123S190B00	3-way control valve, flanged connections, DN100, Kvs 160
VXF32.125-250	123S190C00	3-way control valve, flanged connections, DN125, Kvs 250
VXF32.150-400	123S190D00	3-way control valve, flanged connections, DN150, Kvs 400

3-way valves

New!

VXF42



These 3-way control valves are suitable for heating and cooling systems with closed circuits. They are typically used as control or shut-off valves in boiler, district heating and refrigeration plants, and ventilation and air-handling units. They have flanged process connections. Suitable for pressure class PN 16 applications.



Read more



Mounting	Flanged connections, design B of type 21 (ISO 7005)
Pressure rating	PN16
Materials	Grey cast iron EN-GJL-250 (valve body), stainless steel (stem), brass/bronze (plug), brass (sealing gland), EPDM (seals), PTFE (sealing sleeve), silicon-free grease

TYPE	PRODUCT NO.	
VXF42.15-1.6	123S1A0100	3-way control valve, flanged connections, DN15, Kvs 1.6
VXF42.15-2.5	123S1A0200	3-way control valve, flanged connections, DN15, Kvs 2.5
VXF42.15-4	123S1A0300	3-way control valve, flanged connections, DN15, Kvs 4.0
VXF42.20-6.3	123S1A0400	3-way control valve, flanged connections, DN20, Kvs 6.3
VXF42.25-6.3	123S1A0500	3-way control valve, flanged connections, DN25, Kvs 6.3
VXF42.25-10	123S1A0600	3-way control valve, flanged connections, DN25, Kvs 10
VXF42.32-16	123S1A0700	3-way control valve, flanged connections, DN32, Kvs 16
VXF42.40-16	123S1A0800	3-way control valve, flanged connections, DN40, Kvs 16
VXF42.40-25	123S1A0900	3-way control valve, flanged connections, DN40, Kvs 25
VXF42.50-31.5	123S1A0A00	3-way control valve, flanged connections, DN50, Kvs 31.5
VXF42.50-40	123S1A0B00	3-way control valve, flanged connections, DN50, Kvs 40
VXF42.65-50	123S1A0C00	3-way control valve, flanged connections, DN65, Kvs 50
VXF42.65-63	123S1A0D00	3-way control valve, flanged connections, DN65, Kvs 63
VXF42.80-80	123S1A0E00	3-way control valve, flanged connections, DN80, Kvs 80
VXF42.80-100	123S1A0F00	3-way control valve, flanged connections, DN80, Kvs 100
VXF42.100-125	123S1A0G00	3-way control valve, flanged connections, DN100, Kvs 125
VXF42.100-160	123S1A0H00	3-way control valve, flanged connections, DN100, Kvs 160
VXF42.125-200	123S1A0J00	3-way control valve, flanged connections, DN125, Kvs 200
VXF42.125-250	123S1A0K00	3-way control valve, flanged connections, DN125, Kvs 250
VXF42.150-315	123S1A0L00	3-way control valve, flanged connections, DN150, Kvs 315
VXF42.150-400	123S1A0M00	3-way control valve, flanged connections, DN150, Kvs 400

6-way valves

New!

VWG42



These 6-way control ball valves are suitable for heating and cooling systems with closed circuits. They are cost-efficient because one valve with an actuator can control a heated/chilled ceiling and fan coil. External mounting threads allow various connections. Rotational angle 90°. This DN10 valve is suitable for pressure class PN 16 applications.



Mounting	G 1/2 external threads according to ISO 228/1
Pressure rating	PN16
Materials	CW617N (valve body), chrome plated brass (cartridge), stainless steel (stem), EPDM (seals), PA66 GF 30 / Aluminium alloy (adapter plate)

Read more



TYPE	PRODUCT NO.	
VWG42.10-0.25-0.4	123S320100	6-way control ball valve, DN10, Kvs 0.25 (left) and 0.4 (right)
VWG42.10-0.25-0.65	123S320200	6-way control ball valve, DN10, Kvs 0.25 (left) and 0.65 (right)
VWG42.10-0.25-1.0	123S320300	6-way control ball valve, DN10, Kvs 0.25 (left) and 1.0 (right)
VWG42.10-0.4-0.65	123S320400	6-way control ball valve, DN10, Kvs 0.4 (left) and 0.65 (right)
VWG42.10-0.4-1.0	123S320500	6-way control ball valve, DN10, Kvs 0.4 (left) and 1.0 (right)
VWG42.10-0.4-1.3	123S320600	6-way control ball valve, DN10, Kvs 0.4 (left) and 1.3 (right)
VWG42.10-0.4-1.6	123S320700	6-way control ball valve, DN10, Kvs 0.4 (left) and 1.6 (right)
VWG42.10-0.65-1.0	123S320800	6-way control ball valve, DN10, Kvs 0.65 (left) and 1.0 (right)
VWG42.10-0.65-1.3	123S320900	6-way control ball valve, DN10, Kvs 0.65 (left) and 1.3 (right)
VWG42.10-0.65-1.6	123S320A00	6-way control ball valve, DN10, Kvs 0.65 (left) and 1.6 (right)
VWG42.10-1.0-1.3	123S320B00	6-way control ball valve, DN10, Kvs 1.0 (left) and 1.3 (right)
VWG42.10-1.0-1.6	123S320C00	6-way control ball valve, DN10, Kvs 1.0 (left) and 1.6 (right)
VWG42.10-1.0-1.95	123S320D00	6-way control ball valve, DN10, Kvs 1.0 (left) and 1.95 (right)
VWG42.10-1.3-1.6	123S320E00	6-way control ball valve, DN10, Kvs 1.3 (left) and 1.6 (right)
VWG42.10-1.3-1.95	123S320F00	6-way control ball valve, DN10, Kvs 1.3 (left) and 1.95 (right)
VWG42.10-1.6-1.95	123S320G00	6-way control ball valve, DN10, Kvs 1.6 (left) and 1.95 (right)
VWG42.10-1.95-1.95	123S320H00	6-way control ball valve, DN10, Kvs 1.95 (left) and 1.95 (right)

6-way valves

New!

VWG41



These 6-way control ball valves are suitable for heating and cooling systems with closed circuits. They are cost-efficient because one valve with an actuator can control a heated/chilled ceiling and fan coil. External mounting threads allow various connections. Rotational angle 90°. This DN20 valve is suitable for pressure class PN 16 applications.



Mounting	G1 external threads according to ISO 228/1
Pressure rating	PN16
Materials	CW617N (valve body), chrome plated brass (cartridge), stainless steel (stem), EPDM (seals), PA66 GF 30 / Aluminium alloy (adapter plate)

[Read more](#)


TYPE	PRODUCT NO.	
VWG41.20-0.65-2.5	123S310K00	6-way control ball valve, DN20, Kvs 0.65 (left) and 2.5 (right)
VWG41.20-1.0-2.5	123S310L00	6-way control ball valve, DN20, Kvs 1.0 (left) and 2.5 (right)
VWG41.20-1.6-2.5	123S310M00	6-way control ball valve, DN20, Kvs 1.6 (left) and 2.5 (right)
VWG41.20-1.6-3.45	123S310N00	6-way control ball valve, DN20, Kvs 1.6 (left) and 3.45 (right)
VWG41.20-2.5-3.45	123S310P00	6-way control ball valve, DN20, Kvs 2.5 (left) and 3.45 (right)
VWG41.20-2.5-4.25	123S310Q00	6-way control ball valve, DN20, Kvs 2.5 (left) and 4.25 (right)
VWG41.20-4.25-4.25	123S310R00	6-way control ball valve, DN20, Kvs 4.25 (left) and 4.25 (right)

6-way valves

New!

VWPG51



These 6-way pressure independent control ball valves are suitable for heating and cooling systems with closed circuits. They are equipped with automatic hydraulic balancing. They are cost-efficient because one valve with an actuator can control a heated/chilled ceiling and fan coil. External mounting threads allow various connections. Rotational angle 90°. Suitable for pressure class PN 25 applications.


[Read more](#)


Mounting	G 3/4 external threads according to ISO 228/1
Pressure rating	PN 25
Materials	CW602N (valve body, ball), PTFE (gasket), PPS GF40 (mounting plate, regulator), HNBR (diaphragm), PPO (rotator), stainless steel (stem, spring), EPDM (seals)

TYPE	PRODUCT NO.	
VWPG51.15L0.9Q	123S410100	6-way pressure independent control ball valve, DN15, 35...820 l/h, pressure test connections
VWPG51.15L0.9	123S410200	6-way pressure independent control ball valve, DN15, 35...820 l/h
VWPG51.15F1.2Q	123S410300	6-way pressure independent control ball valve, DN15, 210...1200 l/h, pressure test connections
VWPG51.15F1.2	123S410400	6-way pressure independent control ball valve, DN15, 210...1200 l/h
VWPG51.20F4.3Q	123S410500	6-way pressure independent control ball valve, DN20, 460...4250 l/h, pressure test connections
VWPG51.20F4.3	123S410600	6-way pressure independent control ball valve, DN20, 460...4250 l/h

Solenoid valves

MV

MV solenoid valves are designed for building automation needs of the water control, for example in heating and cooling systems with closed circuit (valves are not suitable for domestic water circuit). Solenoid valves work in zero pressure difference and the valves are either normally closed (NC) or normally open (NO). Standard coils are for 230 Vac supply and 24 Vac or 24 Vdc coils are available as options. The valve coils are not designed for continuously energized applications.



Materials brass

[Read more](#)



TYPE	PRODUCT NO.	
MV1/2 NC 230	1260220	1/2" solenoid valve (NC, DN15)
MV1/2 NO 230	1260250	1/2" solenoid valve (NO, DN15)
MV 3/4 NC 230	1260230	3/4" solenoid valve (NC, DN20)
MV 3/4 NO 230	1260260	3/4" solenoid valve (NO, DN20)
MV1 NC 230	1260240	1" solenoid valve (NC, DN25)
MV1 1/4 NC 230	1260290	1 1/4" solenoid valve (NC, DN32)
MV1 1/2 NC 230	1260300	1 1/2" solenoid valve (NC, DN40)

OPTIONS

MV-VK 24 VAC-8W	1260280	changeable coil 24 Vac for the solenoid valves (sizes 1/2" - 1")
MV-VK 24 VDC-8W	1260281	changeable coil 24 Vac for the solenoid valves (sizes 1/2" - 1")
MV-VK 24 VDC-14W	1260282	changeable coil 24 Vac for the solenoid valves (sizes 1/2" - 1")

Thermal actuators

A, APV, AST, APR

Valve actuators are available for 24 Vac/dc and for 230 Vac supply with a NC or NO function. Control signal may be a PWM or a 0...10 Vdc signal. Connection cables may be fixed or removable. Different lengths of removable cables are available. An adapter between the valve and the actuator is always needed.



[Read more](#)



TYPE	PRODUCT NO.	
A 20405-00N00-1S	1210027	thermal actuator 230 V NC, fixed cable 1 m
A 21405-10N00-1S	1210028	thermal actuator 230 V NO, fixed cable 1 m
A 40405-00N00-1S	1210011	thermal actuator 24 V, NC, fixed cable (1 m)
A 40405-00N00-3S	1210012	thermal actuator 24 V, NC, fixed cable (3 m)
A 40505-00N00-1S	1210070	thermal actuator 24 V, NC, 5 mm stroke, fixed cable (1 m)
A 41405-10N00-1S	1210021	thermal actuator 24 V, NO, fixed cable (1 m)
A 41405-10N00-3S	1210022	thermal actuator 24 V, NO, fixed cable (3 m)
A 41505-10N00-1S	1210071	thermal actuator 24 V, NO, 5 mm stroke, fixed cable (1 m)
AST 20405-00N00-0	1210031	thermal actuator 230 V NC, removable cable (sold separately)
AST 21405-10N00-0	1210032	thermal actuator 230 V NO, removable cable (sold separately)
AST 40405-00N00-0	1210041	thermal actuator 24 V NC, removable cable (sold separately)
AST 41405-10N00-0	1210046	thermal actuator 24 V NO, removable cable (sold separately)
APR 40405-00N00-0	1210061	thermal actuator 0...10 Vdc, NC, removable cable (sold separately)
APR 40405-01N00-0	1210052	thermal actuator 2...10 Vdc, NC, removable cable (sold separately)
APR 40625-20N00-1S	1210081	thermal actuator 0...10 Vac, NC, 6.5 mm stroke, fixed cable (1 m)
APR 42405-00N00-0	1210053	thermal actuator 0...10 Vdc, NC, removable cable (sold separately)
APV 41405-10N00-0	1210090	thermal actuator 0...10 Vdc NO, valve stem travel detection, removable cable (sold separately)
OPTIONS		
VA 80	1220010	adapter for Produal NV valves
AA.SK.1004.N	1220090	protection cover for thermal actuator

Motorized valve actuators

MPV, M3P

The motorized valve actuators are designed for applications that need short response time for the valve control. The actuators are equipped with removable cable (1 m) and they are available for 3-point control and 0...10 V control. An adapter between the valve and the actuator is always needed.

Running time	30 s/mm
Mounting	On a valve using a valve adapter
Materials	Polyamide (housing), PC plastic (cover), PVC (cable)
Cable	1 m, 3 x 0,22 mm ² (PVC)
Product dimensions (w x h x d)	45 x 65 x 90 mm



[Read more](#)



TYPE	PRODUCT NO.	
M3P-46845-20N00-1S	1210120	motorized valve actuator, 3-point control, running time 30 s/mm
OPTIONS		
BA-ALL.5.3.01	1220031	3-wire actuator cable, 1 m
BA-ALL.5.3.02	1220032	3-wire actuator cable, 2 m
BA-ALL.5.3.03	1220033	3-wire actuator cable, 3 m
BA-ALL.5.3.05	1220035	3-wire actuator cable, 5 m
BA-ALL.5.3.10	1220036	3-wire actuator cable, 10 m
BA-ALL.5.3.15	1220037	3-wire actuator cable, 15 m
BA-ALL.5.3.20	1220038	3-wire actuator cable, 20 m

Motorized valve actuators

New!

GSD



These rotary valve actuators can be used for on/off control of ball valves in HVAC applications. They are typically used in heating, ventilation and air conditioning plants. Actuation force is 2 N. Supported valves include: 2-way control ball valves VAG61 and VAI61 and 3-way control ball valves VBG61 and VBI61.



Running time	30 s
Mounting	Direct mounting to valve, adjustment is not needed
Cable	0.9 m cable
Product dimensions (w x h x d)	80 x 136 x 113 mm

Read more



TYPE	PRODUCT NO.	
GSD141.9A	121S255010	Rotary valve actuator for DN15...DN25 control ball valves, 3-point control, 24 Vac and 24...48 Vdc control signals
GSD161.9A	121S255020	Rotary valve actuator for DN15...DN25 control ball valves, 0...10 Vdc control control signal, position feedback
GSD341.9A	121S255030	Rotary valve actuator for DN15...DN25 control ball valves, 2-point control, 230 Vac control signal

Motorized valve actuators

New!

GQD



These rotary valve actuators with spring return fail-safe function are an excellent choice for HVAC applications requiring precise control of ball valves. They can be used for 2-point, 3-point or modulating control. They are typically used in heating, ventilation and air conditioning plants. Actuation force is 2 N. Supported valves include: 2-way control ball valves VAG61 and VAI61, 3-way control ball valves VBG61 and VBI61, 2-way shut-off ball valves VAI60 and VAG60, and 3-way changeover ball valves VBI60 and VBG60.



Running time	30 s
Mounting	Direct mounting to valve, adjustment is not needed
Cable	0.9 m cable
Product dimensions (w x h x d)	75 x 136 x 113 mm

[Read more](#)


TYPE	PRODUCT NO.	
GQD121.9A	121S254010	Rotary valve actuator for control ball valves, 2-point control, 24 Vac and 24...48 Vdc control signals, spring return
GQD131.9A	121S254020	Rotary valve actuator for control ball valves, 3-point control, 24 Vac and 24...48 Vdc control signals, spring return
GQD161.9A	121S254030	Rotary valve actuator for control ball valves, 0...10 Vdc control control signal, position feedback, spring return
GQD321.9A	121S254040	Rotary valve actuator for control ball valves, 2-point control, 230 Vac control signal, spring return

Motorized valve actuators

New!

GDB



230 V

24 V

IP54

-32...55
°C5...95
%rH

These rotary valve actuators are designed for HVAC applications requiring precise control of control ball valves. They can be used for open/close, 3-point or modulating control. They are typically used in heating, ventilation and air conditioning plants. Actuation force is 5 N. Supported valves include: 2-way control ball valves VAG61 and VAI61, 3-way control ball valves VBG61 and VBI61, 2-way shut-off ball valves VAI60 and VAG60, and 3-way changeover ball valves VBI60 and VBG60.


[Read more](#)


Running time	150 s
Mounting	Direct mounting to valve, adjustment is not needed
Cable	0.9 m cable
Product dimensions (w x h x d)	74 x 144 x 113 mm

TYPE	PRODUCT NO.	
GDB111.9E/MO	121S251010	Rotary valve actuator for DN15...DN50 control ball valves, Modbus, position feedback
GDB141.9E	121S251020	Rotary valve actuator for DN15...DN25 control ball valves, 2-point or 3-point control, 24 Vac and 24...48 Vdc control signals
GDB161.9E	121S251030	Rotary valve actuator for DN15...DN25 control ball valves, 0...10 Vdc control, position feedback
GDB161.9E/6P	121S251040	Rotary valve actuator for 6-way PICV control ball valves, 0...10 Vdc control, position feedback, manual presetting for flow
GDB161.9E/6W	121S251050	Rotary valve actuator for 6-way control ball valves, 0...10 Vdc control, position feedback
GDB161.9E/MO	121S251060	Rotary valve actuator for DN15...DN25 control ball valves, Modbus, position feedback
GDB341.9E	121S251070	Rotary valve actuator for DN15...DN25 control ball valves, 2-point or 3-point control, 100...240 Vac control signal.
GDB111.9E/KN	121S251080	Rotary valve actuator for DN15...DN50 control ball valves, KNX, position feedback

Motorized valve actuators

New!

GMA



These rotary valve actuators with spring return fail-safe function are an excellent choice for HVAC applications requiring precise control of ball valves. They can be used for 2-point, 3-point or modulating control. They are typically used in heating, ventilation and air conditioning plants. Actuation force is 7 N. Supported valves include: 2-way control ball valves VAG61 and VAI61, 3-way control ball valves VBG61 and VBI61, 2-way shut-off ball valves VAI60 and VAG60, and 3-way changeover ball valves VBI60 and VBG60.


[Read more](#)


Running time	90 s
Mounting	Direct mounting to valve, adjustment is not needed
Cable	0.9 m cable
Product dimensions (w x h x d)	85 x 184 x 113 mm

TYPE	PRODUCT NO.	
GMA121.9E	121S253010	Rotary valve actuator for DN15...DN50 control ball valves, 2-point control, 24 Vac and 24...48 Vdc control signals, position feedback
GMA131.9E	121S253020	Rotary valve actuator for DN15...DN50 control ball valves, 3-point control, 24 Vac and 24...48 Vdc control signals, position feedback
GMA161.9E	121S253030	Rotary valve actuator for DN15...DN50 control ball valves, 0...10 Vdc control, position feedback
GMA161.9E/MO	121S253040	Rotary valve actuator for DN15...DN50 control ball valves, Modbus, position feedback
GMA321.9E	121S253050	Rotary valve actuator for DN15...DN50 control ball valves, 3-point control, 230 Vac control signal.

Motorized valve actuators

New!

GLB 9E



230 V

24 V

IP54

-32...55
°C5...95
%rH

These rotary valve actuators are an excellent choice for HVAC applications requiring precise control of control ball valves. They can be used for open/close, 3-point or modulating control. They are typically used in heating, ventilation and air conditioning plants. Actuation force is 10 N. Supported valves include: 2-way control ball valves VAG61 and VAI61, 3-way control ball valves VBG61 and VBI61, 2-way shut-off ball valves VAI60 and VAG60, and 3-way changeover ball valves VBI60 and VBG60.


[Read more](#)


Running time	150 s
Mounting	Direct mounting to valve, adjustment is not needed
Cable	0.9 m cable
Product dimensions (w x h x d)	74 x 144 x 113 mm

TYPE	PRODUCT NO.	
GLB111.9E/MO	121S252010	Rotary valve actuator for DN15...DN50 control ball valves, Modbus, position feedback
GLB141.9E	121S252020	Rotary valve actuator for DN15...DN50 control ball valves, 2-point or 3-point control, 24 Vac and 24...48 Vdc control signals
GLB161.9E	121S252030	Rotary valve actuator for DN15...DN50 control ball valves, 0...10 Vdc control, position feedback
GLB161.9E/MO	121S252040	Rotary valve actuator for DN15...DN50 control ball valves, Modbus, position feedback
GLB341.9E	121S252050	Rotary valve actuator for DN15...DN50 control ball valves, 2-point or 3-point control, 100...240 Vac control signal.

Motorized valve actuators

New!

SSA



These motorized valve actuators can operate, for example, radiator valves (M30 × 1.5) and pressure-independent control valves VPP46 and VPI46. They are typically used in radiator, chilled ceiling, fan coil unit and VAV applications. Their actuation force is 100 N, and they allow parallel operation of several actuators.



Running time	27 s/mm
Mounting	Mounting with a nut, no tools required
Cable	Fixed 1.5 m cable
Product dimensions (w x h x d)	87 x 81 x 52 mm

[Read more](#)


TYPE	PRODUCT NO.	
SSA131.00	121S235010	24 Vac/dc motorized valve actuator, 3-point control
SSA161.05	121S235020	24 Vac/dc motorized valve actuator, 0...10 Vdc control
SSA161.05HF	121S235030	24 Vac/dc motorized valve actuator, 0...10 Vdc control, position feedback
SSA331.00	121S235040	230 Vac motorized valve actuator, 3-point control

Motorized valve actuators

New!

SSB



This motorized valve actuator is designed for HVAC applications requiring modulating valve control of small valves. It supports 0...10 Vdc control signal. It has positioning feedback and its actuation force is 200 N. This actuator is typically used in chilled ceiling, VAV and fan coil unit applications. Supported valves include 2-way control valve series VVP45 and 3-way control valve series VXP45.



Running time	5 s/mm
Cable	Removable 1.5 m cable
Product dimensions (w x h x d)	105 x 96 x 49 mm

[Read more](#)


TYPE	PRODUCT NO.	
SSB161.05HF	121S236010	24 Vac/dc motorized valve actuator, 0...10 Vdc control, position feedback

Motorized valve actuators

New!

SSC

This motorized valve actuator is designed for HVAC applications requiring modulating valve control of medium valves. It supports 0...10 Vdc control signal. It has positioning feedback and its actuation force is 300 N. This actuator is typically used in chilled ceiling, VAV and fan coil unit applications. Supported valves include 2-way control valve series VVP45 and 3-way control valve series VXP45.

Running time	5 s/mm
Cable	Removable 1.5 m cable
Product dimensions (w x h x d)	105 x 96 x 49 mm



Read more



TYPE	PRODUCT NO.	
SSC161.05HF	121S237010	24 Vac/dc motorized valve actuator, 0...10 Vdc control, position feedback

Motorized valve actuators

New!

SSF

This motorized valve actuator is designed for HVAC applications requiring modulating valve control of large valves. It supports 0...10 Vdc control signal. It has positioning feedback and its actuation force is 200 N. This actuator is typically used in chilled ceiling, VAV and fan coil unit applications.

Running time	5 s/mm
Cable	Removable 1.5 m cable
Product dimensions (w x h x d)	105 x 96 x 49 mm



Read more



TYPE	PRODUCT NO.	
SSF161.05HF	121S238010	24 Vac/dc motorized valve actuator, 0...10 Vdc control, position feedback

Motorized valve actuators

New!

SAS, SAT

These motorized valve actuators are designed for HVAC applications requiring fast and precise modulating valve control. They support 0...10 V, 4...20 mA and 0...1000 Ω control signals. They are typically used as shut-off or control valves in heating and ventilation plants. Supported valves for SAS include 2-way control valves VVG44 and VVG549, and 3-way valve VXG44. SAT supports VVG549.

Running time	30 s
Product dimensions (w x h x d)	80 x 151 x 93 mm


[Read more](#)


TYPE	PRODUCT NO.	
SAS61.03	121S231010	24 Vac/dc motorized valve actuator, stroke 5.5 mm, actuation force 400 N
SAT61.008	121S232010	24 Vac/dc motorized valve actuator, stroke 5.5 mm, actuation force 300 N

Motorized valve actuators

New!

SAY

These motorized valve actuators are designed for 3-point and modulating valve control of large valves. They are typically used in ventilation, air conditioning, district heating and refrigeration plants. Their stroke is 15 mm and actuation force 200 N. Supported valves include 2-way control valves VPI46.40F9.5Q and VPI46.50F12Q.

Running time	30 s
Mounting	Direct mounting to valve, adjustment is not needed
Product dimensions (w x h x d)	124 x 242 x 150 mm


[Read more](#)


TYPE	PRODUCT NO.	
SAY31P03	121S234010	230 Vac motorized valve actuator, 3-point control
SAY61P03	121S234020	24 Vac/dc motorized valve actuator, 0...10 Vdc control
SAY81P03	121S234030	24 Vac/dc motorized valve actuator, 3-point control

Motorized valve actuators

New!

SAX

This motorized valve actuator is designed for HVAC applications requiring modulating valve control of large valves. It supports 0...10 V, 4...20 mA and 0...1000 Ω control signals. It is typically used in ventilation, air conditioning and heating systems. Its actuation force is 200 N. Supported valves include 2-way control valves VVF32, VVF42 and VVF53, and 3-way valves VXF32 and VXF42.



24 V

IP54

-5...55
°C5...95
%rH
[Read more](#)


TYPE	PRODUCT NO.	
SAX61.03	121S233010	24 Vac/dc motorized valve actuator, stroke 20 mm

Electro-hydraulic valve actuators

New!

SKB

SKB electro-hydraulic valve actuators are designed for HVAC applications requiring precise modulating control for medium-sized or large control valves with 20 mm stroke. They support 0...10 V, 4...20 mA and 0...1000 Ω control signals. Their actuation force is 2800 N. They are typically used in heating, ventilation and air conditioning plants. Supported valves include: 2-way control valves in VVF and VVG series, and 3-way control valves in VXF and VXG series.



24 V

IP54

-15...50
°C5...95
%rH
[Read more](#)


TYPE	PRODUCT NO.	
SKB60	121S242010	Electro-hydraulic valve actuator for long-stroke control valves
SKB62	121S242020	Electro-hydraulic valve actuator for long-stroke control valves, spring return

Running time	Opening 120 s, closing 10 s
Mounting	Direct mounting to valve, adjustment is not needed
Product dimensions (w x h x d)	178 x 375 x 226 mm

Electro-hydraulic valve actuators

New!

SKC

SKC electro-hydraulic valve actuators are designed for HVAC applications requiring precise modulating control for very large control valves with 40 mm stroke. They support 0...10 V, 4...20 mA and 0...1000 Ω control signals. Their actuation force is 2800 N. They are typically used in heating, ventilation and air conditioning plants. Supported valves include: 2-way control valves in VVF series, and 3-way control valves in VXF series.

Running time	Opening 120 s, closing 20 s
Mounting	Direct mounting to valve, adjustment is not needed
Product dimensions (w x h x d)	178 x 375 x 226 mm


[Read more](#)


TYPE	PRODUCT NO.	
SKC60	121S243010	Electro-hydraulic valve actuator for long-stroke control valves
SKC62	121S243020	Electro-hydraulic valve actuator for long-stroke control valves, spring return

Electro-hydraulic valve actuators

New!

SKD

SKD electro-hydraulic valve actuators are designed for HVAC applications requiring precise modulating control for small and medium-sized control valves with 20 mm stroke. They support 0...10 V, 4...20 mA and 0...1000 Ω control signals. Their actuation force is 1000 N. They are typically used in heating, ventilation and air conditioning plants. Supported valves include: 2-way control valves in VVF and VVG series, and 3-way control valves in VXF and VXG series.

Running time	Opening 30 s, closing 15 s
Mounting	Direct mounting to valve, adjustment is not needed
Product dimensions (w x h x d)	127 x 300 x 169 mm


[Read more](#)


TYPE	PRODUCT NO.	
SKD60	121S241010	Electro-hydraulic valve actuator for long-stroke control valves
SKD62	121S241020	Electro-hydraulic valve actuator for long-stroke control valves, spring return

Damper actuators

New!

GDB 1E

These damper actuators are designed for HVAC applications requiring precise 2–point, 3–point or modulating control for up to a 0.8 m² damper. These actuators have position indication and adjustable mechanical stop. Their actuation force is 5 Nm. They are typically used in ventilation and air conditioning plants to regulate and shut off dampers.

Running time	150 s
Mounting	Direct mounting to damper
Cable	0.9 m cable
Product dimensions (w x h x d)	137 x 61 x 71 mm



Read more



TYPE	PRODUCT NO.	
GDB141.1E	121S121010	Damper actuator for up to a 0.8 m ² damper, 3–point or 2–point control, 24 Vac and 24...48 Vdc control signals
GDB146.1E	121S121020	Damper actuator for up to a 0.8 m ² damper, 3–point or 2–point control, 24 Vac and 24...48 Vdc control signals, two adjustable switches
GDB161.1E	121S121030	Damper actuator for up to a 0.8 m ² damper, 0...10 Vdc control, position feedback
GDB166.1E	121S121040	Damper actuator for up to a 0.8 m ² damper, 0...10 Vdc control, position feedback, two adjustable switches
GDB111.1E/MO	121S121050	Damper actuator for up to a 0.8 m ² damper, Modbus, position feedback

Damper actuators

New!

GLB 1E

These damper actuators are designed for HVAC applications requiring precise 2–point, 3–point or modulating control for up to a 1.5 m² damper. These actuators have position indication, adjustable mechanical stop and a button for enabling manual control. Their actuation force is 10 Nm. They are typically used in ventilation and air conditioning plants to control dampers or air throttles.

Running time	150 s
Mounting	Direct mounting to damper
Cable	0.9 m cable
Product dimensions (w x h x d)	137 x 61 x 71 mm


[Read more](#)


TYPE	PRODUCT NO.	
GLB141.1E	121S122010	Damper actuator for up to a 1.5 m ² damper, 3–point or 2–point control, 24 Vac and 24...48 Vdc control signals
GLB146.1E	121S122020	Damper actuator for up to a 1.5 m ² damper, 3–point or 2–point control, 24 Vac and 24...48 Vdc control signals, two adjustable switches
GLB161.1E	121S122030	Damper actuator for up to a 1.5 m ² damper, 0...10 Vdc control, position feedback
GLB166.1E	121S122040	Damper actuator for up to a 1.5 m ² damper, 0...10 Vdc control, position feedback, two adjustable switches
GLB111.1E/MO	121S122050	Damper actuator for up to a 1.5 m ² damper, Modbus, position feedback

Damper actuators

New!

GMA 1E

These spring-return damper actuators are designed for HVAC applications requiring precise 2-point or modulating control for up to a 1.5 m² damper. These actuators have position indication, adjustable mechanical stop, and manual override. Their actuation force is 7 Nm. They are typically used in ventilation duct sections where the actuator must move to the emergency position during a power failure.

Running time	90 s
Mounting	Direct mounting to damper
Cable	0.9 m cable
Product dimensions (w x h x d)	192 x 63 x 81 mm



Read more



TYPE	PRODUCT NO.	
GMA121.1E	121S111010	Damper actuator for up to a 1.5 m ² damper, 2-point control, 24 Vac and 24...48 Vdc control signals, spring-return
GMA126.1E	121S111020	Damper actuator for up to a 1.5 m ² damper, 2-point control, 24 Vac and 24...48 Vdc control signals, spring-return, two adjustable switches
GMA161.1E	121S111030	Damper actuator for up to a 1.5 m ² damper, 0...10 Vdc control, spring-return, position feedback
GMA166.1E	121S111040	Damper actuator for up to a 1.5 m ² damper, 0...10 Vdc control, position feedback, spring-return, two adjustable switches

Damper actuators

New!

GCA 1E



These spring-return damper actuators are designed for HVAC applications requiring precise 2-point or modulating control for up to a 3 m² damper. These actuators have position indication, adjustable mechanical stop and manual override. Their actuation force is 18 Nm. They are typically used in ventilation duct sections where the actuator must move to the emergency position during a power failure.

Running time	90 s
Mounting	Direct mounting to damper
Cable	0.9 m cable
Product dimensions (w x h x d)	300 x 72 x 100 mm


[Read more](#)


TYPE	PRODUCT NO.	
GCA121.1E	121S112010	Damper actuator for up to a 3 m ² damper, 3-point or 2-point control, 24 Vac and 24...48 Vdc control signals, spring-return
GCA126.1E	121S112020	Damper actuator for up to a 3 m ² damper, 3-point or 2-point control, 24 Vac and 24...48 Vdc control signals, spring-return, two adjustable switches
GCA161.1E	121S112030	Damper actuator for up to a 3 m ² damper, 0...10 Vdc control, position feedback, spring-return
GCA166.1E	121S112040	Damper actuator for up to a 3 m ² damper, 0...10 Vdc control, position feedback, spring-return, two adjustable switches

Damper actuators

New!

GEB 1E

These damper actuators are designed for HVAC applications requiring precise 2–point, 3–point or modulating control for up to a 4 m² damper. These actuators have position indication and adjustable mechanical stop. Their actuation force is 20 Nm. They are typically used in ventilation and air conditioning plants to regulate and shut off dampers.

Running time	150 s
Mounting	Direct mounting to damper
Cable	0.9 m cable
Product dimensions (w x h x d)	192 x 63 x 82 mm



Read more



TYPE	PRODUCT NO.	
GEB141.1E	121S123010	Damper actuator for up to a 4 m ² damper, 3– point or 2–point control, 24 Vac and 24...48 Vdc control signals
GEB146.1E	121S123020	Damper actuator for up to a 4 m ² damper, 3– point or 2–point control, 24 Vac and 24...48 Vdc control signals, two adjustable switches
GEB161.1E	121S123030	Damper actuator for up to a 4 m ² damper, 0...10 Vdc control, position feedback
GEB166.1E	121S123040	Damper actuator for up to a 4 m ² damper, 0...10 Vdc control, position feedback, two adjustable switches
GEB161.1E/MO	121S123050	Damper actuator for up to a 4 m ² damper, Modbus, position feedback

Damper actuators

New!

GBB 1E



These damper actuators are designed for HVAC applications requiring precise 2–point, 3–point or modulating control for up to a 5 m² damper. These actuators have position indication, adjustable mechanical stop and a button for enabling manual control. Their actuation force is 25 Nm. They are typically used in ventilation and air conditioning plants to regulate and shut off dampers.



Running time	150 s
Mounting	Direct mounting to damper
Cable	0.9 m cable
Product dimensions (w x h x d)	300 x 71 x 100 mm

[Read more](#)


TYPE	PRODUCT NO.	
GBB141.1E	121S124010	Damper actuator for up to a 5 m ² damper, 3–point or 2–point control, 24 Vac and 24...48 Vdc control signals
GBB146.1E	121S124020	Damper actuator for up to a 5 m ² damper, 3–point or 2–point control, 24 Vac and 24...48 Vdc control signals, two adjustable switches
GBB161.1E	121S124030	Damper actuator for up to a 5 m ² damper, 0...10 Vdc control, position feedback
GBB166.1E	121S124040	Damper actuator for up to a 5 m ² damper, 0...10 Vdc control, position feedback, two adjustable switches

Damper actuators

New!

GIB 1E

These damper actuators are designed for HVAC applications requiring precise 2–point, 3–point or modulating control for up to a 6 m² damper. These actuators have position indication, adjustable mechanical stop and a button for enabling manual control. Their actuation force is 35 Nm. They are typically used in ventilation and air conditioning plants to regulate and shut off dampers.

Running time	150 s
Mounting	Direct mounting to damper
Cable	0.9 m cable
Product dimensions (w x h x d)	300 x 71 x 100 mm


[Read more](#)


TYPE	PRODUCT NO.	
GIB141.1E	121S125010	Damper actuator for up to a 6 m ² damper, 3–point or 2–point control, 24 Vac and 24...48 Vdc control signals
GIB146.1E	121S125020	Damper actuator for up to a 6 m ² damper, 3–point or 2–point control, 24 Vac and 24...48 Vdc control signals, two adjustable switches
GIB161.1E	121S125030	Damper actuator for up to a 6 m ² damper, 0...10 Vdc control, position feedback
GIB166.1E	121S125040	Damper actuator for up to a 6 m ² damper, 0...10 Vdc control, position feedback, two adjustable switches
GIB161.1E/MO	121S125050	Damper actuator for up to a 6 m ² damper, Modbus, position feedback

Transducers and accessories

Our wide selection of transducers and accessories helps you finalize regulation and control solutions. For example, I/O modules, dividers and transducers allow various signal type changes between Modbus, digital, analogue and 3-point signals. Transformers and electric power regulators with relay modules and solid state relays are useful for voltage supply and control load power. Our wide range of input signals and adjustable setpoints on relay modules enable applications like control fan coils, heaters and actuators.

- ▶ Useful devices for finalizing building automation projects
- ▶ Galvanic isolation
- ▶ Inputs 0...10 V, 2...10 V, 0...20 mA, 4...20 mA
- ▶ Outputs 0...10 V, 2...10 V, 0...20 mA, 4...20 mA, relay



Control relay FCRY3



Connection box CBOX



Electronic timer ETT6



Electronic timer LAP 5E



Relay unit RY



Transformer T20

Converters

DA 6

DA 6 converts 1...6 digital (contact) inputs into one analogue 0...10 V or 4...20 mA output. The state of each contact can be identified by the control system software.

Digital input	6 x potential free input
Voltage output	0...10 Vdc, 2 mA
Current output	4...20 mA, 500 Ω
Mounting	for 35 mm DIN rail
Product dimensions (w x h x d)	68 x 77 x 42 mm



[Read more](#)



TYPE	PRODUCT NO.	
DA 6	1182040	DI/AO converter

Converters

ISO 10

ISO 10 provides galvanic isolation between input and output signals and supply. Signal can also be converted, e.g. a 0...10 V signal into a 4...20 mA signal.

Voltage input	0...1 Vdc / 0...10 Vdc / 2...10 Vdc
Voltage output	0...10 Vdc, 2 mA / 2...10 Vdc, 2 mA
Current output	0...20 mA, 500 Ω / 4...20 mA, 500 Ω
Mounting	for 35 mm DIN rail
Product dimensions (w x h x d)	12.5 x 90 x 112 mm



[Read more](#)



TYPE	PRODUCT NO.	
ISO 10	1182060	signal isolator

Converters

PMU 3

PMU 3 converts a 0...10 Vdc signal into a 24 Vac 3-point control signal.

Voltage input	0...10 Vdc, 1 mA
Actuator output	24 Vac, 2 A, 3-speed actuator
Running time	adjustable, 15...240 s
Mounting	11-pole relay housing
Product dimensions (w x h x d)	35 x 78 x 103 mm



[Read more](#)



TYPE	PRODUCT NO.	
PMU 3	1182120	from 0...10 V to 3-point converter

Converters

UMP 3

UMP 3 converts a 3-point control signal into a 0...10 Vdc signal.

Voltage input	10...40 Vac/dc
Voltage output	0...10 Vdc, 1 mA
Output change speed	adjustable, 15...240 s
Mounting	11-pole relay housing
Product dimensions (w x h x d)	35 x 78 x 103 mm



[Read more](#)



TYPE	PRODUCT NO.	
UMP 3	1182150	from 3-point to 0...10 V converter

Converters

UV 10

UV10 is an amplifier and inverter for 0...10 V signals. UV10 can also be used for controlling fluorescent lamps with electronic transformers.

Voltage input	0...10 V / 2...10 V, 0.5 mA
Voltage output	0...10 V / 2...10 V / 10...0 V / 10...2 V, < 20 mA
Mounting	for 35 mm DIN rail
Product dimensions (w x h x d)	23 x 77 x 42 mm



Read more



TYPE	PRODUCT NO.	
UV10	1182160	signal amplifier

Converters

AO

AO 2 and AO 3 are signal converters designed for HVAC applications. The converters divide one 0...10 V signal to two (AO 2) or three (AO 3) 0...10 V signals.

Voltage input	0...10 Vdc, 0.2 mA
Mounting	for 35 mm DIN rail
Product dimensions (w x h x d)	23 x 77 x 41 mm



Read more



TYPE	PRODUCT NO.	
AO 3	1182210	signal divider, 3 outputs
AO 2	1182220	signal divider, 2 outputs

Electric power regulation

BAK 64



BAK 64 binary step controller is designed for controlling electric heating power. It can be used with all systems with 0...10 V outputs. Relays like AR1 or RY1 are needed for contact outputs. Power steps must be in binary sequence e.g. 1, 2, 4, 8, 16, 32 kW.

Voltage input	0...10 Vdc or 10...0 Vdc
Voltage output	40 Vdc, 100 mA, for AR1 and RY1 relays
Step delay	adjustable, 0.7...60 s
Mounting	11-pole relay housing
Product dimensions (w x h x d)	39 x 78 x 103 mm



Read more



TYPE	PRODUCT NO.	
BAK 64	1140010	binary step controller
OPTIONS		
AR1	1183010	relay with normally open (NO) contact, width 13 mm
RY1	1183020	relay with change-over contact, width 23 mm, screw terminals

Electric power regulation

STS4



STS 4 converts 0...10 V signal to one time proportional and up to 3 contact outputs. Each step must be identical in power.

Voltage input	0...10 Vdc, 1 mA
Voltage output	3 x 35 Vdc, 100 mA, for AR1 and RY1 relays
Relay output	25 Vdc, 50 mA, for solid state relay, time proportional
Number of steps	selectable, 1...4 pcs
Mounting	11-pole relay housing
Product dimensions (w x h x d)	39 x 78 x 103 mm



Read more



TYPE	PRODUCT NO.	
STS 4	1140020	electric power controller
OPTIONS		
PR50/440	1140030	solid state relay 230...400 Vac, < 25 A, input 3...32 Vdc
PRMK	1140070	solid state relay control signal converter, Vac -> Vdc
AR1	1183010	relay with normally open (NO) contact, width 13 mm
RY1	1183020	relay with change-over contact, width 23 mm, screw terminals

Relay modules

AR 1, RY 1, RYVA 16

24 V

IP20

RY 1 and AR 1 are relays with a 24 Vac/dc coil voltage. RYVA 16 can be used for lighting control because it withstands a short-term inrush current peak.

Control signal	24 Vac/dc, 0.5 VA
Relay output	250 Vac, 10 A, res. NO
Mounting	on 35 mm DIN rail


[Read more](#)


TYPE	PRODUCT NO.	
AR 1	1183010	relay with normally open (NO) contact, width 13 mm
RY 1	1183020	relay with change-over contact, width 23 mm, screw terminals
RY 1-K	1183021	relay with change-over contact, width 23 mm, plug-in screw terminals
RYVA 16	1183060	relay for fluorescent lamps, 10 A (inrush current < 80 A, < 2,5 ms)

Relay modules

RY 1-U



24 V

IP20

RY 1-U and RY 1-U-K are voltage controlled relays with 0...10 V input.

Setpoint	adjustable, 0...10 V
Control signal	0...10 Vdc, 0.2 mA
Relay output	250 Vac, 8 A, res. Changeover
Mounting	on 35 mm DIN rail
Product dimensions (w x h x d)	23 x 77 x 41 mm


[Read more](#)


TYPE	PRODUCT NO.	
RY 1-U	1183040	voltage controlled relay
RY 1-U-K	1183041	voltage controlled relay, socket connection at the output

Relay modules

FCRY 3

FCRY 3 is a 3-speed fan coil control relay, with 0...10 Vdc control input.

Setpoint	adjustable, factory settings 2,5 V, 5,0 V and 7,5 V
Control signal	0...10 Vdc, 0.2 mA
Relay output	3 x 230 Vac, 8 A, res. NO (interlocked)
Mounting	on 35 mm DIN rail
Product dimensions (w x h x d)	45 x 90 x 48 mm



[Read more](#)



TYPE	PRODUCT NO.	
FCRY 3	1183070	fan coil relay, input 0...10 Vdc

Relay modules

RYM 8-KK

RYM 8-KK is a relay module with eight relay outputs that can be controlled manually (switch in OFF or ON position) or by using control signal (switch in A position). The manual control is useful for example in commissioning and in fault situations.

Input type	24 V
Control signal	8 x 24 Vdc
Relay output	8 x 230 Vac, 4 A res. Changeover
Mounting	on 35 mm DIN rail
Product dimensions (w x h x d)	136 x 90 x 65 mm



[Read more](#)



TYPE	PRODUCT NO.	
RYM 8-KK	1181110	relay module, 8 outputs, 24 Vdc control
RYM 8-KK-0	1181111	relay module, 8 outputs, 0 Vdc control

Relay modules

TH 5



TH5 is a surface mounted driver that can drive several parallel connected thermal actuators.

Control signal	5...30 Vac/dc, 10 mA
Output	5 x 24 Vac, 0.6 A, total load max. 3 A
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	PP plastic
Product dimensions (w x h x d)	76 x 76 x 52 mm



[Read more](#)



TYPE	PRODUCT NO.	
TH 5	1183090	driver for thermal actuators, 5 outputs

Set point selectors

LC-P24-P



The setpoint selector is designed to control for example temperature, humidity, lights or ventilation. The device can be mounted in a splash water proof surface mounted housing or on a flush mounting box. The selector provides a proportional 0...10 Vdc output signal that can be adjusted with internal trimmers. The selector has also off position.

Setpoint scale	0...100 %
Voltage output	0...10 Vdc
Mounting	On a flush mounting box or surface mounting
Product dimensions (w x h x d)	82 x 82 x 65 mm



[Read more](#)



TYPE	PRODUCT NO.	
LC-P24-P	1182250	set point selector, scale 0...100 %

Transformers

JY

JY is a switch mode power supply converting a 24 Vac/dc supply into a lower DC voltage supply. Electronic protection for overloading.

Voltage input	24 Vac/dc, < 30 VA
Voltage output	3.6...24 Vdc, 1 A (0...12 V); 0.5 A (12...24 V)
Mounting	on 35 mm DIN rail
Product dimensions (w x h x d)	45 x 90 x 58 mm



Read more



TYPE	PRODUCT NO.	
JY	1184020	AC/DC to DC transformer

Transformers

M230/24-12



M230/24-12 transforms 230 Vac supply to 24 Vdc 12 VA supply.

Voltage input	230 Vac, < 12 VA
Voltage output	24 Vdc, 12 VA
Cable	2 m



Read more



TYPE	PRODUCT NO.	
M230/24-12	1184160	230 Vac/24 Vdc 12 VA power supply

Transformers

M230/24-15

M230/24-15 transforms 230 Vac supply to 12/24 Vac supply.

Voltage input	230 Vac, < 15 VA
Voltage output	24 Vac, 15 VA, / 12 Vac, 7.5 VA
Mounting	on 35 mm DIN rail
Product dimensions (w x h x d)	35 x 87 x 60 mm



[Read more](#)



TYPE	PRODUCT NO.	
M230/24-15	1184090	transformer

Transformers

M230/24-30

M230/24-30 transforms 230 Vac supply to 12/24 Vac supply.

Voltage input	230 Vac, < 30 VA
Voltage output	24 Vac, 30 VA, / 12 Vac, 15 VA
Mounting	on 35 mm DIN rail
Product dimensions (w x h x d)	54 x 87 x 60 mm



[Read more](#)



TYPE	PRODUCT NO.	
M230/24-30	1184050	transformer

Transformers

T20

T20 transforms 230 Vac supply to 24 Vac supply.

Voltage input	230 Vac, < 20 VA
Voltage output	24 Vac, 20 VA
Cable	3 m, AMP connector (cable delivered with the transformer)
Product dimensions (w x h x d)	61 x 85 x 50 mm

230 V

IP33

0...40 °C



Read more



TYPE	PRODUCT NO.	
T20	1184100	transformer

Transformers

T35

T35 transforms 230 Vac supply to 24 Vac supply.

Voltage input	230 Vac, < 35 VA
Voltage output	24 Vac, 35 VA
Mounting	with screws
Cable	300 mm on both sides
Product dimensions (w x h x d)	63 x 103 x 55 mm

230 V

IP44

0...40 °C



Read more



TYPE	PRODUCT NO.	
T35	1184111	transformer

Transformers

T40

230 V

IP54

0...40
°C

T40 transforms 230 Vac supply to 24 Vac supply.

Voltage input	230 Vac, < 38 VA
Voltage output	24 Vac, 38 VA
Mounting	with screws
Product dimensions (w x h x d)	77 x 123 x 70 mm


[Read more](#)


TYPE	PRODUCT NO.	
T40	1184120	transformer

Transformers

T60

230 V

IP54

0...40
°C

T60 transforms 230 Vac supply to 24 Vac supply.

Voltage input	230 Vac, < 60 VA
Voltage output	24 Vac, 60 VA
Mounting	with screws
Product dimensions (w x h x d)	77 x 123 x 70 mm


[Read more](#)


TYPE	PRODUCT NO.	
T60	1184130	transformer

Transformers

T120

T120 transforms 230 Vac supply to 24 Vac supply.

Voltage input	230 Vac, < 120 VA
Voltage output	24 Vac, 120 VA
Mounting	with screws
Product dimensions (w x h x d)	89 x 174 x 92 mm

230 V

IP54

0...40 °C



Read more



TYPE	PRODUCT NO.	
T120	1184140	transformer

Transformers

T220

T220 transforms 230 Vac supply to 24 Vac supply.

Voltage input	230 Vac, < 220 VA
Voltage output	24 Vac, 220 VA
Mounting	with screws
Product dimensions (w x h x d)	104 x 168 x 105 mm

230 V

IP54

0...40 °C



Read more



TYPE	PRODUCT NO.	
T220	1184150	transformer

Indicator lights

LEKA 24E

LEKA 24E is an indicator light device with green and red light.

Control signal	2 x 24 Vac/dc
Mounting	flush (surface mounting casing optional)
Product dimensions (w x h x d)	85 x 85 x 28 mm

24 VIP200...50 °C0...85 %rH



Read more



TYPE		PRODUCT NO.	
LEKA 24E		1185150	indicator light
OPTIONS			
SMB1E		9000470	casing for surface mounting

Timers

ETT



ETT electronic timers are designed for energy saving and boosting functions in ventilation and lighting applications. The timer functions can be used for example in office applications, if enhanced ventilation is needed outside the normal working hours.

Timer accuracy	±10 s/h
Relay output	250 Vac, 10 A Changeover
Mounting	on the wall surface or on a flush mounting box (60 mm hole distance)
Materials	PC plastic
Product dimensions (w x h x d)	97 x 97 x 27 mm



Read more



TYPE	PRODUCT NO.	
ETT1	560011W000	electronic timer, white, 10...60 min
ETT1B	560011B000	electronic timer, black, 10...60 min
ETT6	560012W000	electronic timer, white, 1...6 h
ETT6B	560012B000	electronic timer, black, 1...6 h
ETT12	560013W000	electronic timer, white, 2...12 h
ETT12B	560013B000	electronic timer, black, 2...12 h

Timers

LAP



LAP timers are designed for extending plant operating hours by pushing a button. The selected time is indicated by an indicator light.

Timer accuracy	±10 s/h
Relay output	250 Vac, 8 A, res. Changeover
Mounting	flush (surface mounting casing optional)
Product dimensions (w x h x d)	85 x 85 x 30 mm



Read more

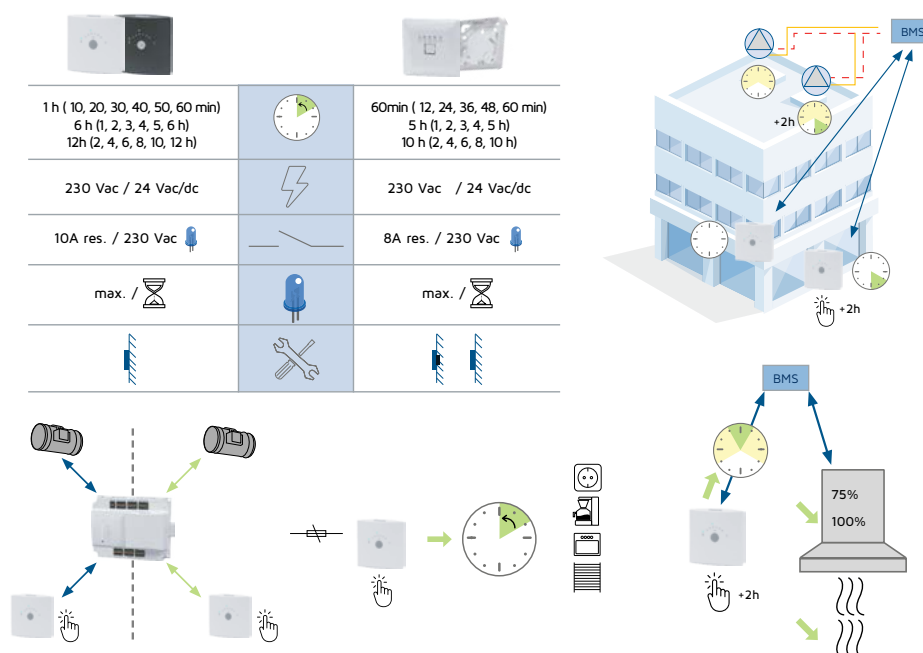


TYPE	PRODUCT NO.	
LAP 1E	1185110	12...60 minutes (max. time can be restricted to 12...36 minutes)
LAP 5E	1185111	1...5 hours (max. time can be restricted to 1...3 hours)
LAP 10E	1185112	2...10 hours (max. time can be restricted to 2...6 hours)

OPTIONS

SMB 1E	9000470	casing for surface mounting
--------	---------	-----------------------------

TIMERS



Push buttons

PJP

PJP is a low voltage push button device with 1, 2 or 4 buttons and indicator lights. The indicator lights are controlled externally.

Mounting	flush (surface mounting casing optional)
Product dimensions (w x h x d)	85 x 85 x 30 mm



Read more



TYPE	PRODUCT NO.	
PJP 1E	1185120	1 push button and 1 indicator light
PJP 2E	1185121	2 push buttons and 2 indicator lights
PJP 4E	1185122	4 push buttons and 4 indicator lights
OPTIONS		
SMB 1E	9000470	casing for surface mounting

I/O modules

MIO 12

MIO 12 I/O modules can read analogue and/or digital inputs, and control thermal or 3-point actuators and also 0...10 V analogue outputs. The module has RS-485 connection for Modbus RTU communication.

Voltage output	4 x 0...10 Vdc, 2 mA
Triac output	4 x 24 Vac, 1 A, for thermal actuators or two 3-point actuators
Mounting	on 35 mm DIN rail
Product dimensions (w x h x d)	53 x 90 x 58 mm



[Read more](#)



TYPE	PRODUCT NO.	
MIO 12-PT	1181300	Modbus I/O, 4 analogue inputs (Pt1000) or potential free digital inputs
MIO 12-V	1181310	Modbus I/O, 4 analogue inputs (0...10 V) or potential free digital inputs
MIO 12-NILG	1181320	Modbus I/O, 4 analogue inputs (Ni1000-LG) or potential free digital inputs

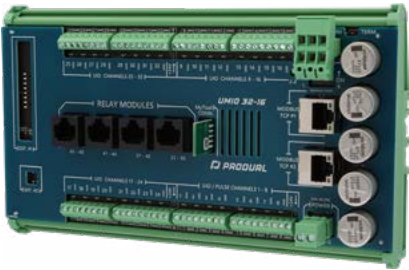
I/O modules

New!

UMIO 32-16

UMIO 32-16 is a DIN rail mounted Modbus I/O module that has 32 multifunctional inputs or outputs. In addition, it has 16 control outputs for relay modules, allowing you to connect 4 relay modules that each contain 4 relays to the I/O module. The I/O module supports Modbus RTU and Modbus TCP protocols.

Digital input	potential free contact or open collector
Supply output	4 x 24 Vdc. Summary supply current max. 400 mA including relay modules and 24 V supply output connectors.
Mounting	on a 35 mm DIN rail
Materials	PVC and PA66 plastic (housing), PCB FR4 (touch protection cover)
Product dimensions (w x h x d)	210 x 125 x 70 mm



Read more



TYPE	PRODUCT NO.	
UMIO 32-16	1181330	Modbus I/O module, 32 multifunctional inputs/outputs, 4x4 control outputs for relay modules
TOOLS		
MYT-CON	5100020000	MyTool Connect, a Bluetooth dongle for Produal MyTool® and MyProdual connection
MyProdual	5100030000	MyProdual mobile application for configuring and commissioning Produal next-generation products (Android and iOS)

Installation boxes

CBOX

IP54

-5...60
°C0...95
%rH

Connection boxes for zone control applications. Terminals are labelled according to RT, RTX, HDH and HLS 44 product families. You can use the connection box as a collection point for your devices and connect the wires from the room device, VAV dampers, and actuators to the box. These boxes simplify wiring and save time. CBOX-T and CBOX-T-L include a 230 Vac to 24 Vac transformer. The 24 Vac output is protected with a 2 A fuse.

Materials	ABS
Product dimensions (w x h x d)	122 x 120 x 55 mm

[Read more](#)

TYPE	PRODUCT NO.	
CBOX	9000560	connection box, 10 terminals
CBOX-T	9000561	connection box, 14 terminals, 230 Vac to 24 Vac transformer
CBOX-T-L	9000562	connection box with extra DIN rail, 14 terminals, 230 Vac to 24 Vac transformer

Table stand

TMS

A table stand for Produal's room products. Fixing screws (2 pcs) are included in the delivery.

Materials	stainless steel
Product dimensions (w x h x d)	78 x 90 x 52 mm

[Read more](#)

TYPE	PRODUCT NO.	
TMS	9000480	table stand for room products

Accessories

KO IVS, VP-PROX

0...50
°C

KO IVS and VP-PROX are protective casings for room products in spaces like sports halls. Casing is transparent and with a lock.

Mounting	with screws (included)
Materials	PC plastic
Product dimensions (w x h x d)	136 x 136 x 40 mm



Read more



TYPE	PRODUCT NO.	
VP-PROX	9000460	protective casing for Produal next-generation room products
KO IVS	9000550	protective casing for room products

Accessories

WS-1

WS-1 weather shield is designed to protect Produal's outdoor products from sun, rain and snow.

Materials	stainless steel, AISI 304 (1.4301)
Product dimensions (w x h x d)	171 x 170 x 80 mm



Read more



TYPE	PRODUCT NO.	
WS-1	9000520	weather shield

Accessories

New!

NeoTable

-20...45
°C

NeoTable is a transportable worktable that you can mount directly on a magnetic surface or on a smooth surface using suction cups (not included in the delivery).

Materials	PC/ABS FR
Product dimensions (w x h x d)	351 x 37 x 353 mm



Read more



TYPE	PRODUCT NO.	
NeoTable	12TD000431	Worktable

Sensor characteristics

Sensor element	Pt100	Pt1000	Ni1000	Ni1000-LG	NTC 1.8 $\beta_{25/85} = 3500$	NTC 2.2 $\beta_{25/85} = 3947$	NTC 10 $\beta_{25/85} = 3977$	NTC 20 $\beta_{25/85} = 4262$	NTC10-AN $\beta_{25/70} = 3670$	NTC 10-C $\beta_{25/85} = 3435$	NTC10-KB	KP 10	TI
Tol.	±0.3°C / 0°C ±0.15°C / 0°C EN60751B	±0.3°C / 0°C ±0.15°C / 0°C EN60751B	±0.4°C / 0°C DIN43760	±0.4°C / 0°C tcr 5000ppm Siemens	±0.3°C / 25°C TAC / Schneider	±0.25°C / 25°C Johnson	±0.25°C / 25°C Trend / Distech	±0.25°C / 25°C Honeywell	±0.25°C / 25°C Schneider Andover	±0.25°C / 25°C Carel	±0.5°C / 25°C Satchwell	LM235Z 10 mV/K	±0.4°C / 0°C
Temp. °C	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	V	Ω
140	153.38	1533.8	1909	1737	66	53	235	351	298	381	324		
130	149.82	1498.2	1833	1675	82	68	301	459	377	474	385		3675
120	146.06	1460.6	1760	1615	103	90	389	609	483	597	467		3552
110	142.29	1422.9	1688	1557	131	115	511	818	624	758	576		3430
100	138.50	1385	1618	1500	168	153	679	1114	817	973	723	3.73	3311
95	136.60	1366	1583	1472	192	178	787	1307	940	1108	815	3.68	3252
90	134.70	1347	1549	1444	219	207	916	1541	1084	1266	923	3.63	3194
85	132.80	1328	1516	1417	252	241	1071	1823	1255	1451	1048	3.58	3136
80	130.89	1308.9	1483	1390	290	283	1256	2166	1458	1668	1194	3.53	3079
75	128.98	1289.8	1450	1364	335	334	1480	2585	1700	1924	1364	3.48	3022
70	127.07	1270.7	1417	1337	389	395	1751	3099	1990	2228	1562	3.43	2966
65	125.16	1251.6	1385	1311	453	469	2082	3732	2339	2588	1791	3.38	2910
60	123.24	1232.4	1353	1285	529	560	2488	4517	2760	3020	2056	3.33	2855
55	121.32	1213.2	1322	1260	622	673	2986	5494	3271	3536	2358	3.28	2800
50	119.40	1194	1291	1235	733	811	3600	6718	3893	4160	2702	3.23	2745
45	117.47	1174.7	1260	1210	869	984	4365	8259	4656	4911	3088	3.18	2692
40	115.54	1155.4	1230	1186	1034	1200	5323	10211	5594	5827	3517	3.13	2638
35	113.61	1136.1	1200	1162	1238	1471	6528	12698	6754	6940	3987	3.08	2585
30	111.67	1116.7	1171	1138	1489	1814	8054	15887	8197	8313	4492	3.03	2532
29	111.28	1112.8	1165	1132	1546	1893	8408	16628	8525	8622	4597	3.02	2522
28	110.90	1109	1159	1128	1605	1977	8777	17407	8869	8944	4703	3.01	2512
27	110.51	1105.1	1153	1123	1667	2064	9165	18228	9229	9281	4809	3.00	2501
26	110.12	1101.2	1147	1119	1732	2156	9572	19092	9606	9632	4917	2.99	2491
25	109.73	1097.3	1141	1114	1800	2252	10000	20000	10000	10000	5025	2.98	2480
24	109.35	1093.5	1136	1109	1871	2353	10452	20962	10413	10380	5134	2.97	2470
23	108.96	1089.6	1130	1105	1945	2458	10923	21973	10845	10780	5243	2.96	2460
22	108.57	1085.7	1124	1100	2023	2572	11417	23039	11297	11200	5353	2.95	2449
21	108.18	1081.8	1118	1095	2104	2689	11938	24164	11771	11630	5462	2.94	2439
20	107.79	1077.9	1112	1091	2189	2813	12490	25350	12268	12090	5573	2.93	2429
15	105.85	1058.5	1084	1068	2678	3538	15710	32346	15136	14690	6126	2.88	2377
10	103.90	1039	1056	1045	3296	4482	19900	41567	18787	17960	6667	2.83	2326
5	101.95	1019.5	1028	1022	4081	5718	25400	53812	23462	22050	7183	2.78	2276
0	100.00	1000	1000	1000	5087	7353	32660	70203	29490	27280	7661	2.73	2226
-5	98.04	980.4	973	978	6386	9533	42340	92322	37316	33900	8093	2.68	2176
-10	96.09	960.9	946	956	8076	12460	55340	122431	47549	42470	8472	2.63	2127
-15	94.12	941.2	919	935	10291	16428	72980	163777	61030	53410	8796	2.58	2078
-20	92.16	921.6	893	914	13218	21860	97120	221088	78930	67770	9067	2.53	2030
-25	90.19	901.9	867	893	17120	29398	130400	301297	102890	86430	9288	2.48	1982
-30	88.22	882.2	842	872	22357	39908	177000	414698	135233	111300	9466	2.43	1934
-35	86.25	862.5	816	851	29496	54751	243120	576763	179280		9605	2.38	
-40	84.27	842.7	791	831	39247	75953	337270	810861	239831		9712	2.33	
-45	82.29	822.9	767	811		106603	473370	1152992	323859		9793		
-50	80.31	803.1	743	791		151470	672600	1659082	441667		9854		



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