

Visualisation and control		VISU	A
Touch_IT C3	3,5" TFT Display with touchscreen for outdoor/damp room usage Visualisation and control in KNX systems	IP65	2
Touch_IT C3	3,5" TFT Display with touchscreen for indoor usage Visualisation and control in KNX systems	IP20	2
KNX Sensors for HVAC applications		HVAC	B C D
KNX Sensors Temperature		T	B
SK01-T	Room temperature measurement and control for outdoor/damp room application, on-wall mounted	IP65	1
SK02-T	Room temperature measurement and control for indoor application, on-wall mounted	IP20	8
SK03-T	Room temperature measurement and control for indoor application, in-wall mounted	IP20	8
SK08-T8	Temperature measurement and control for 8 channels ( see E: KNX Sensors for chemical and physical instrumentation )		9
KNX Sensors Temperature / humidity / climate enthalpy		TFK	C
SK01-TFK	Room temperature measurement and control for outdoor/damp room application, on-wall mounted	IP65	1
SK02-TFK	Room temperature measurement and control for indoor application, on-wall mounted	IP20	4
SK03-TFK	Room temperature measurement and control for indoor application, in-wall mounted	IP20	4
AE-TFK	Indoor room temperature measurement and control in-wall mounted Aluminium sandblasted , anodized	IP20	5
AW-TFK	Indoor room temperature measurement and control in-wall mounted Aluminium powder coated white	IP20	5
KNX Sensors Temperatur / temperature / humidity / climate enthalpy		TTFK	D
SK01-TTFK	Room temperature measurement and control for outdoor/damp room application, on-wall mounted With connection for additional temperature sensor	IP65	1
SK03-TTFK	Room temperature measurement and control for indoor application, in-wall mounted With connection for additional temperature sensor	IP20	3
KNX Sensors for physical and chemical instrumentation		S8	E
SK08-T8	Temperature measurement for 8 channels ( PT1000 ) Monitoring and control of temperatures in different locations	T8	1
SK08-WAQ	Water quality pH, ORP ( Redox potential ) for aquariums, swimming pools, ponds	WAQ	2
Air quality CO2 / temperature / humidity / climate		CO2-TF	3
AE-S8-CO2-TF	CO2 concentration ( 0 .. 5000 ppm ) / temperature / humidity / climate Aluminium sandblasted , anodized for indoor use, in-wall mounted	IP20	3
AW-S8-CO2-TF	CO2 concentration ( 0 .. 5000 ppm ) / temperature / humidity / climate Aluminium powder coated white, for indoor use, in-wall mounted	IP20	3
SK04-S8-CO2-TF	CO2 concentration ( 0 .. 5000 ppm ) / temperature / humidity / climate Plastic housing white for indoor use, on-wall mounted	IP20	3

KNX Sensors for physical and chemical instrumentation		S8	E
<b>SK08-GLBS</b>	Global radiation, spectral range 400 .. 1100 nm Monitoring of solar collectors, control of blinds, shutters etc.	<b>GLBS</b>	<b>4</b>
<b>SK08-BFT</b>	Soil moisture and temperature Irrigation control for gardens, greens etc.	<b>BFT</b>	<b>4</b>
<b>SK08-BFTLFT</b>	Soil moisture and temperature + acquisition of air temperature and humidity Irrigation control for gardens, greens etc.	<b>BFTLFT</b>	<b>4</b>
<b>Ultrasonic fill level measurement system</b>		<b>F</b>	<b>5</b>
SK01-S8-F	Ultrasonic fill level measurement system Bus coupling unit for indoor/outdoor/damp room application, on-wall mounted	IP65	<b>5</b>
REG-S8-F	Ultrasonic fill level measurement system Bus coupling unit for indoor application, DIN rail mounted	IP20	<b>5</b>
<b>SK01-S8-AN2</b>	Voltage measurement 2 × 0 .. 12V DC For Sensors with variable voltage outputs ( e.g. pressure sensors )	<b>AN2</b>	<b>6</b>
KNX Function module / Gateways		GW	F
KNX-FM	Free programmable function module/logic module	IP20	<b>1</b>
KNX-GW-DMX	KNX to DMX gateway Control of LED / RGB lighting systems	IP20	<b>1</b>
KNX-GW-RS232-RS485	KNX to RS232 and RS485 gateway Control of multimedia devices and alarm systems	IP20	<b>1</b>
KNX Smart Metering for impuls emitting meters		SM	G
KNX-IMPZ1	1-Channel impuls counter for indoor/outdoor/damp room application For gas, water, electricity, on-wall mounted	IP65	<b>2</b>
KNX-IMPZ1 REG	1-Channel impuls counter for indoor application For gas, water, electricity, DIN rail mounted	IP20	<b>2</b>
KNX-IMPZ2	2-Channel impuls counter for indoor/outdoor/damp room application For gas, water, electricity, optional as 2 tariffs counter, on-wall mounted	IP65	<b>3</b>
KNX-IMPZ2 REG	2-Channel impuls counter for indoor application For gas, water, electricity, optional as 2 tariffs counter, DIN rail mounted	IP20	<b>3</b>
KNX Smart Metering with integrated meters		SM	G
KNX-IMPZ-WZ-M	Water meter Modularis WZ-M with KNX-IMPZ1 up to 2,5 m³/h throughput, calibration included	<b>WZ-M</b>	<b>4</b>
KNX-WMZ-WZ-HY	Thermal energy meter WZ-HY with integrated KNX bus coupling unit up to 2,5 m³/h throughput, calibration included	<b>WMZ</b>	<b>5</b>
Components / replacement parts			Z

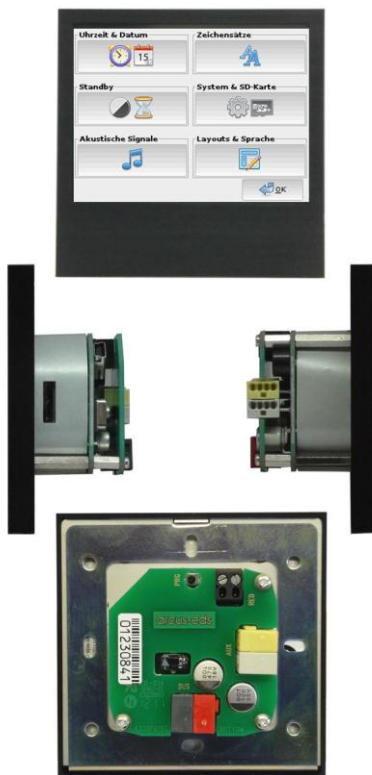
## VISU

## 3,5" TFT Display with touchscreen

3.5" TFT Display with 256K colors and touchscreen for visualisation and control in KNX systems



- Switching and dimming of lighting
- RGB control with colorchooser
- Display of the switching status in building
- Control of various devices in the KNX-Bus
- Handling of shutters/blinds
- Acoustic and optic alarm functions
- Display of object states as plain text
- Display and setting of heating control parameters
- Control of multi room audio-systems
- Display of temperatures
- Weekly clock timer
- Astronomic clock timer for sunset/sunrise driven controls
- Datalogging and on display diagram facility
- Internal scenes with 32 action objects and programmable delays
- Logic functions can be implemented in a scripting language
- Separate display page for alarm purposes
- Each page and element can be protected by global or dedicated passwords
- Different Layouts, visual styles and standby options
- Many languages available
- Character sizes and styles are selectable
- Possibility for user defined layouts, icons, screensavers etc.

**Technical Data**

- 3,5" - TFT color display with touchscreen 320 x240 RGB ( 256K colors )
- 200MHz 32-Bit ARM processor
- microSD Slot ( for SD / SDHC cards)
- mini USB Port
- Linux operating system

**Programming**

- ETS programmable
- Additional fast program upload via USB available ( ETS Plugin )
- 6 Pages with up to 8 control elements each
- Up to 4 KNX objects per control element
- USB Tool for individual upload of control icons, images, screensavers etc.

**Mounting**


- Magnetic fixture with metal frame ( included ) for 60/68mm in-wall mounting
- For swiss systems suitable ( Feller )
- Theft protection by hidden headless screw




**Environmental conditions:**






Storage: -5 .. +60 °C  
 Operating: -5 .. +55 °C  
 Humidity: max 90% not condensing

**Power supply:**

Auxiliary power: 9 .. 32 VDC  
 Consumption: Activ 1.5 W  
 Standby < 0,5 W

VISU	Article	Article description	Article no.	Product gr.
<b>Touch_IT C3 IP65</b>				
EIB/KNX, on-wall, outdoor / damp room, IP65		Document: 1101_Touch_IT-IP65_xx.pdf		
	Touch_IT C3 -AE-IP65	3,5" Display for on-wall mounting 120 x 80 x 48 mm Aluminium anodized, plastic subshell  For indoor / outdoor and damp room, IP65	22310265	1

<b>Touch_IT C3 Aluminium sandblasted</b>				
EIB/KNX, in-wall, indoor, IP20		Document: 1102_Touch_IT-UP_xx.pdf		
	Touch_IT C3 -AE	3,5" Display metal housing 82 x 82 x 8 mm with bevel Aluminium sandblasted anodized  Mounted using subplate ( included ) magnetic fixture and theft protection screw into standard in-wall pattress ( 60 / 68 mm )	22310200	1
	Touch_IT C3 -AW	3,5" Display metal housing 82 x 82 x 8 mm with bevel Aluminium sandblasted white powder-coated  Mounted using subplate ( included ) magnetic fixture and theft protection screw into standard in-wall pattress ( 60 / 68 mm )	22310201	1
	Touch_IT C3 -SAE	3,5" Display metal housing 80,5 x 80,5 x 8 mm square-edged Aluminium sandblasted anodized  Mounted using subplate ( included ) magnetic fixture and theft protection screw into standard in-wall pattress ( 60 / 68 mm )	22310300	1

VISU	Article	Article description	Article no.	Product gr.
<b>Touch_IT C3 Aluminium sanded</b>				
EIB/KNX, in-wall, indoor, IP20		Document: 1102_Touch_IT-UP_xx.pdf		
	Touch_IT C3 -SAS	3,5" Display metal housing 80,5 x 80,5 x 8 mm square-edged Aluminium sanded anodized  Mounted using subplate ( included ) magnetic fixture and theft protection screw into standard in-wall pattress ( 60 / 68 mm )	22310303	1
	Touch_IT C3 -SAB	3,5" Display metal housing 80,5 x 80,5 x 8 mm square-edged Aluminium sanded black anodized  Mounted using subplate ( included ) magnetic fixture and theft protection screw into standard in-wall pattress ( 60 / 68 mm )	22310304	1
	Touch_IT C3 -SAG	3,5" Display metal housing 80,5 x 80,5 x 8 mm square-edged Aluminium sanded steel grey anodized  Mounted using subplate ( included ) magnetic fixture and theft protection screw into standard in-wall pattress ( 60 / 68 mm )	22310305	1
<b>Touch_IT C3 Brass</b>				
EIB/KNX, in-wall, indoor, IP20		Document: 1102_Touch_IT_UP_xx.pdf		
	Touch_IT C3 -SMB	3,5" Display metal housing 80,5 x 80,5 x 8 mm square-edged Brass sanded bronzed  Mounted using subplate ( included ) magnetic fixture and theft protection screw into standard in-wall pattress ( 60 / 68 mm )	22310400	1
	Touch_IT C3 -SMG	3,5" Display metal housing 80,5 x 80,5 x 8 mm square-edged Brass polished gold plated  Mounted using subplate ( included ) magnetic fixture and theft protection screw into standard in-wall pattress ( 60 / 68 mm )	22310407	1

## KNX-Sensors Temperature

Sensor: PT1000

## T



Sensors with integrated KNX-Bus coupler for measuring and regulating temperature.  
No auxiliary voltage necessary.



Product Data Base **ARC\_TFK.VD2**

Application description **2100\_xx\_HVAC\_T.pdf**




ETS-Application:

- Measured values of temperature
- PI or two-position controller for temperature with steady or PWM output
- Various operating methods for temperature control: relative RTC, absolute RTC, standard
- Maximum limit alarm with presetting limit via KNX Bus
- Minimum / Maximum temperature with reset input
- Adjustable frost protection alarm
- Adjustment of all standards and limits
- Actual value adjustment for temperature



SK01-T	Article	Article description	Article no.	Product gr.
<b>SK01 without Temperature Probe</b>				
EIB/KNX, on-wall, outdoor / damp room, IP65		Document: 2101_xx_SK01-T.pdf		
	SK01-T	KNX Sensor / Controller Temperature  Operating temperature: -25 .. +80 °C  Plastic housing: 72 x 64 x 40 mm For indoor / outdoor and damp room, IP65  Without temperature sensor (PT1000)	30101000	1
<b>SK01 with Surface Contacting Probe</b>				
EIB/KNX, on-wall, outdoor / damp room, IP65		Document: 2102_xx_SK01-T-OFTF.pdf		
	SK01-T-OFTF	KNX Sensor / Controller Temperature Surface-Contacting sensor, square, for flat surfaces. The aluminium casing of the PT1000 temperature sensor is attached to the surface with glue.  Operating temperature: -25 .. +80°C Measured temperature range: -30 .. +105°C Dimensions sensor: 8 x 8 x 40 mm Connecting cable: PVC 1,5 m  Plastic housing: 72 x 64 x 40 mm	30101001	1



SK01-T	Article	Article description	Article no.	Product gr.
SK01 with Sleeve Probe				
EIB/KNX, on-wall, outdoor / damp room, IP65		Document: 2103_xx_SK01-T-HTF.pdf		
<p>KNX Sensor / Controller Temperature</p> <p>With sleeve sensor ( PT1000 ) for temperature detection in liquid and gaseous media using an immersion sleeve.</p> <p>Sensor: V4A stainless steel, sleeve sensor, round , rolled stamped ( protected from humidity ) 50 mm, Ø 6 mm.</p> <p>Plastic housing: 72 x 64 x 40 mm</p> <p>For indoor / outdoor and damp room, IP65</p> <p>with Teflon cable <b>IP68</b></p>				
	SK01-T-HTF PVC 1,5 m	Operating temperature: -25 .. +80 °C Measured temperature range: -35 .. +105 °C Connecting cable: PVC 1,5 m IP65	30101002	1
	SK01-T-HTF Silicone 1,5 m	Operating temperature: -25 .. +80 °C Measured temperature range: -50 .. +180 °C Connecting cable: Silicone 1,5 m IP65	30101003	1
	SK01-T-HTF Teflon 1,5 m	Operating temperature: -25 .. +80 °C Measured temperature range: -50 .. +250 °C Connecting cable: Teflon 1,5 m <b>IP68</b>	30101055	1
SK01 with Contacting / Tube Contacting Probe				
EIB/KNX, on-wall, outdoor / damp room, IP65		Document: 2104_xx_SK01-T-ALTF1.pdf		
<p>KNX Sensor / Controller Temperature</p> <p>with axial sensor tube for temperature detection of liquid and gaseous media on pipes and tubes.</p> <p>Installation on pipe with endless straps and metal tightener ( included ).</p> <p>Strap dimensions: Ø 13-92 mm ( 1/4 - 3" ), 300 mm</p> <p>( included in delivery )</p> <p>Plastic housing: 72 x 64 x 40 mm</p> <p>For indoor / outdoor and damp room, IP65</p>				
	SK01-T-ALTF1 PVC 1,5 m	Operating temperature: -25 .. +80 °C Measured temperature range: -35 .. +105 °C Connecting cable: PVC 1,5 m IP65	30101004	1
	SK01-T-ALTF1 Silicone 1,5 m	Operating temperature: -25 .. +80 °C Measured temperature range: -50 .. +180 °C Connecting cable: Silicone 1,5 m IP65	30101005	1






SK01-T	Article	Article description	Article no.	Product gr.
SK01 with Tube Contacting Probe				
EIB/KNX, on-wall, outdoor / damp room, IP65		Document: 2105_xx_SK01-T-ALTF2.pdf		
	SK01-T-ALTF2	<p>KNX Sensor / Controller Temperature with contacting sensor ( PT1000 ) on the rear side of the terminal box, used for temperature detection of liquids and gaseous media in pipes and tubes. Installation on tubes with endless strap and metal tightener ( included ). Strap dimensions: Ø 13-92 mm ( 1/4 - 3" ), 300 mm</p> <p>Operating temperature: -25 .. +80 °C Measured temperature range: -35 .. +110 °C</p> <p>Plastic housing: 72 x 64 x 40 mm</p>	30101006	1
SK01 with External Sensor				
EIB/KNX, on-wall, outdoor / damp room, IP65		Document: 2106_xx_SK01-T-ATF2.pdf		
	SK01-T-ATF2	<p>KNX Sensor / Controller Temperature The PT1000 sensor is enclosed in a V4A stainless steel sheath tube (30mm, Ø 6mm).</p> <p>Operating temperature: -25 .. +80 °C Measured temperature range: -50 .. +90 °C</p> <p>Plastic housing: 72 x 64 x 40 mm</p>	30101007	1
SK01 with Screw-in / Immersion Probe-Cable Connection				
EIB/KNX, on-wall, outdoor / damp room, IP65		Document: 2107_xx_SK01-T-ESTF.pdf		
<p>KNX Sensor / Controller Temperature</p> <p>The PT1000 sensor is in a brass sheath tube ( Ø8mm max. pressure 40 bar ) made of V4A steel with cable connection.</p> <p>Used for temperature detection in liquid or gaseous media, in heating plants, circulation and climate technology.</p> <p>Plastic housing: 72 x 64 x 40 mm</p> <p>For indoor / outdoor and damp room, IP65</p>				
	SK01-T-ESTF 50 mm PVC 1,5 m	<p>Operating temperature: -25 .. +80 °C Measured temperature range: -35 .. +105 °C Probe: G1/2", 50 mm</p>	30101008	1
	SK01-T-ESTF 100 mm PVC 1,5 m	<p>Operating temperature: -25 .. +80 °C Measured temperature range: -35 .. +105 °C Probe: G1/2", 100 mm</p>	30101009	1
	SK01-T-ESTF 50 mm Silicone 1,5 m	<p>Operating temperature: -25 .. +80 °C Measured temperature range: -50 .. +180 °C Probe: G1/2", 50 mm</p>	30101010	1
	SK01-T-ESTF 100 mm Silicone 1,5 m	<p>Operating temperature: -25 .. +80 °C Measured temperature range: -50 .. +180 °C Probe: G1/2", 100 mm</p>	30101011	1






SK01-T	Article	Article description		Article no.	Product gr.
SK01 with Screw-in / Immersion Probe, Brass Immersion Sleeve					
EIB/KNX, on-wall, outdoor / damp room, IP65		Document: 2108_xx_SK01-T-ETF1.pdf			
<p>KNX Sensor / Controller Temperature</p> <p>The PT1000 sensor is in a brass sheath tube ( G1/2", Ø 6mm ), which is inside a brass immersion sleeve ( Ø 8mm, max. pressure 10 bar).</p> <p>Used for temperature detection in liquid or gaseous media, in heating plants, circulation and climate technology.</p> <p>Plastic housing: 72 x 64 x 40 mm</p> <p>For indoor / outdoor and damp room, IP65</p>					
	SK01-T-ETF1 50mm brass	Operating temperature: Measured temperature range:	-25 .. +80 °C -30 .. +150 °C	30101013	1
	SK01-T-ETF1 100mm brass	Operating temperature: Measured temperature range:	-25 .. +80 °C -30 .. +150 °C	30101014	1
	SK01-T-ETF1 150mm brass	Operating temperature: Measured temperature range:	-25 .. +80 °C -30 .. +150 °C	30101015	1
	SK01-T-ETF1 200mm brass	Operating temperature: Measured temperature range:	-25 .. +80 °C -30 .. +150 °C	30101016	1
	SK01-T-ETF1 250mm brass	Operating temperature: Measured temperature range:	-25 .. +80 °C -30 .. +150 °C	30101017	1
	SK01-T-ETF1 300mm brass	Operating temperature: Measured temperature range:	-25 .. +80 °C -30 .. +150 °C	30101018	1
	SK01-T-ETF1 400mm brass	Operating temperature: Measured temperature range:	-25 .. +80 °C -30 .. +150 °C	30101019	1
SK01 with Screw-in Immersion Probe, Immersion Sleeve V4A					
EIB/KNX, on-wall, outdoor / damp room, IP65		Document: 2109_xx_SK01-T-ETF2.pdf			
<p>KNX Sensor / Controller Temperature</p> <p>The PT1000 sensor is in a V4A steel sheath tube ( G1/2", Ø 6mm ), which is inside a V4A immersion sleeve ( Ø 8mm, max. pressure 40 bar).</p> <p>Used for temperature detection in liquid or gaseous media, in heating plants, circulation and climate technology.</p> <p>Plastic housing: 72 x 64 x 40 mm</p> <p>For indoor / outdoor and damp room, IP65</p>					
	SK01-T-ETF2 50mm V4A	Operating temperature: Measured temperature range:	-25 .. +80 °C -30 .. +150 °C	30101020	1
	SK01-T-ETF2 100mm V4A	Operating temperature: Measured temperature range:	-25 .. +80 °C -30 .. +150 °C	30101021	1
	SK01-T-ETF2 150mm V4A	Operating temperature: Measured temperature range:	-25 .. +80 °C -30 .. +150 °C	30101022	1
	SK01-T-ETF2 200mm V4A	Operating temperature: Measured temperature range:	-25 .. +80 °C -30 .. +150 °C	30101023	1
	SK01-T-ETF2 250mm V4A	Operating temperature: Measured temperature range:	-25 .. +80 °C -30 .. +150 °C	30101024	1
	SK01-T-ETF2 300mm V4A	Operating temperature: Measured temperature range:	-25 .. +80 °C -30 .. +150 °C	30101025	1
	SK01-T-ETF2 400mm V4A	Operating temperature: Measured temperature range:	-25 .. +80 °C -30 .. +150 °C	30101026	1


SK01-T	Article	Article description	Article no.	Product gr.
SK01 with Screw-in Immersion Probe, Immersion Sleeve with Extended Shaft V4A				
EIB/KNX, on-wall, outdoor / damp room, IP65		Document: 2110_xx_SK01-T-ETF3.pdf		
<p>KNX Sensor / Controller Temperature</p> <p>The PT1000 sensor is in a V4A steel sheath tube ( G1/2“, Ø 6mm ), which is inside a V4A stainless steel immersion sleeve (max. pressure 40 bar).</p> <p>Installed using pipes and cases with the immersion sleeve ( included ).</p> <p>Plastic housing: 72 x 64 x 40 mm</p> <p>For indoor / outdoor and damp room, IP65</p>				
	SK01-T-ETF3 50mm V4A	Operating temperature: -25 .. +80 °C Measured temperature range: -30 .. +150 °C	30101027	1
	SK01-T-ETF3 100mm V4A	Operating temperature: -25 .. +80 °C Measured temperature range: -30 .. +150 °C	30101028	1
	SK01-T-ETF3 150mm V4A	Operating temperature: -25 .. +80 °C Measured temperature range: -30 .. +150 °C	30101029	1
	SK01-T-ETF3 200mm V4A	Operating temperature: -25 .. +80 °C Measured temperature range: -30 .. +150 °C	30101030	1
	SK01-T-ETF3 250mm V4A	Operating temperature: -25 .. +80 °C Measured temperature range: -30 .. +150 °C	30101031	1
	SK01-T-ETF3 300mm V4A	Operating temperature: -25 .. +80 °C Measured temperature range: -30 .. +150 °C	30101032	1
	SK01-T-ETF3 400mm V4A	Operating temperature: -25 .. +80 °C Measured temperature range: -30 .. +150 °C	30101033	1
SK01 with Screw-in/Immersion Probe with Ext. Shaft with Neck Tube for Quick Responsivity				
EIB/KNX, on-wall, outdoor / damp room, IP65		Document: 2111_xx_SK01-T-ETF7.pdf		
<p>KNX Sensor / Controller Temperature</p> <p>Temperature Probe ( PT1000 ) with neck tube and plain tapered sheath tube, very quick response time, especially suitable for very swift temperature and control processes such as hot water systems.</p> <p>Pipe length: 25 mm</p> <p>Pipe measurements: Ø 6mm, plain tapered Ø 4mm</p> <p>Protective material: stainless steel</p> <p>Plastic housing: 72 x 64 x 40 mm</p> <p>For indoor / outdoor and damp room, IP65</p>				
	SK01-T-ETF7 100 mm	Operating temperature: -25 .. +80 °C Measured temperature range: -35 .. +150 °C Probe: G1/2", 100 mm	30101034	1
	SK01-T-ETF7 150 mm	Operating temperature: -25 .. +80 °C Measured temperature range: -30 .. +150 °C Probe: G1/2", 150 mm	30101035	1
	SK01-T-ETF7 250 mm	Operating temperature: -25 .. +80 °C Measured temperature range: -30 .. +150 °C Probe: G1/2", 250 mm	30101036	1

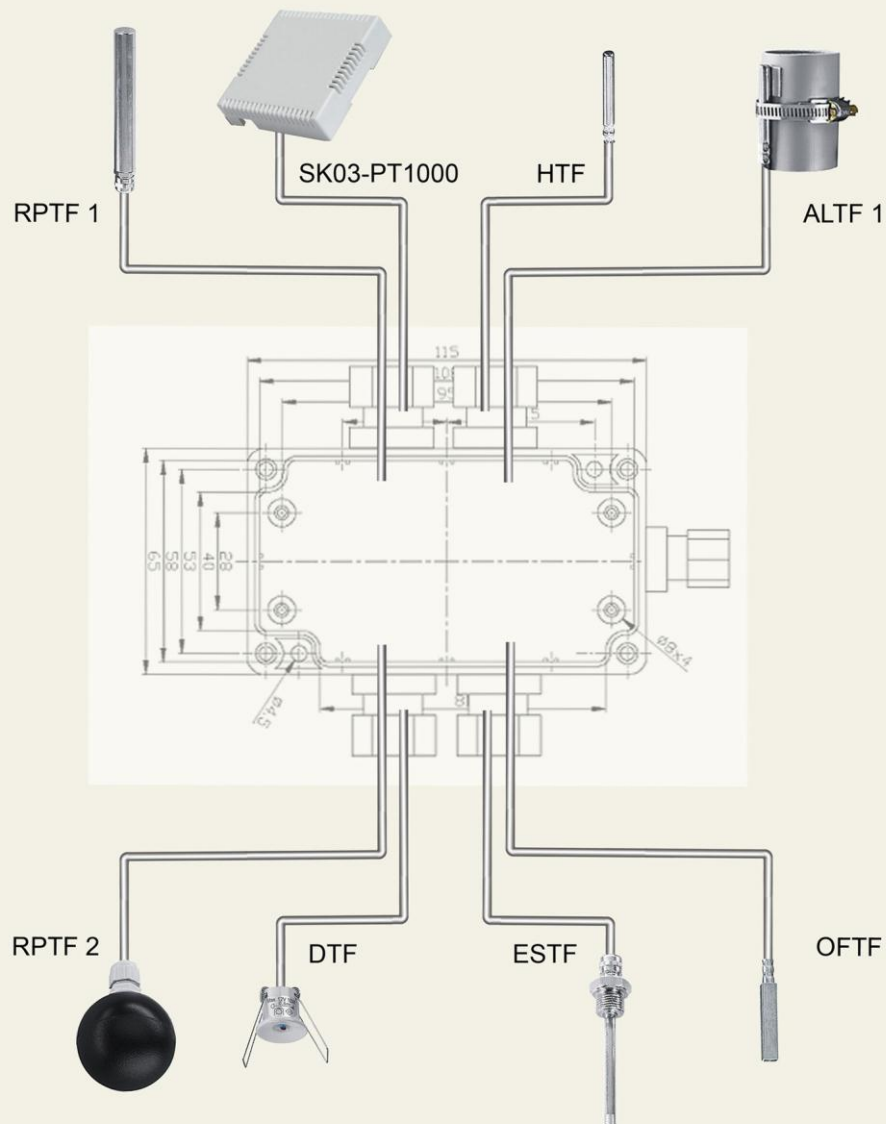
SK01-T	Article	Article description	Article no.	Product gr.
SK01 with Duct/Air Duct Probe incl. Mounting Flange V4A				
EIB/KNX, on-wall, outdoor / damp room, IP65		Document: 2112_xx_SK01-T-KTF1.pdf		
<p>KNX Sensor / Controller Temperature</p> <p>The PT1000 sensor is in a V4A stainless steel sheath tube ( Ø 6mm ). Used in air ducts and heating and climate technology. The boxes are mounted onto air ducts with a plastic sleeve and 2 screws.</p> <p>Plastic housing: 72 x 64 x 40 mm</p> <p>For indoor / outdoor and damp room, IP65</p>				
	SK01-T-KTF1 50 mm V4A	Measured temperature range: -30 .. +150 °C Probe: 50 mm	30101037	1
	SK01-T-KTF1 100 mm V4A	Measured temperature range: -30 .. +150 °C Probe: 100 mm	30101038	1
	SK01-T-KTF1 150 mm V4A	Measured temperature range: -30 .. +150 °C Probe: 150 mm	30101039	1
	SK01-T-KTF1 200 mm V4A	Measured temperature range: -30 .. +150 °C Probe: 200 mm	30101040	1
	SK01-T-KTF1 250 mm V4A	Measured temperature range: -30 .. +150 °C Probe: 250 mm	30101041	1
	SK01-T-KTF1 300 mm V4A	Measured temperature range: -30 .. +150 °C Probe: 300 mm	30101042	1
	SK01-T-KTF1 400 mm V4A	Measured temperature range: -30 .. +150 °C Probe: 400 mm	30101043	1

SK01-T	Article	Article description	Article no.	Product gr.
<b>SK01 with Pendulum Room Probe</b>				
EIB/KNX, on-wall, outdoor / damp room, IP65		Document: 2113_xx_SK01-T-RPTF1.pdf		
	SK01-T-RPTF1	<p>KNX Sensor / Controller Temperature</p> <p>Temperature sensor PT1000 is in sheath tube. Installation in rooms with a high ceiling with a suspended sensor.</p> <p>Operating temperature: -25 .. +80 °C Measured temperature range: -30 .. +75 °C Probe: 100 mm, M12 / 1,5 mm Connecting cable: PVC 1,5 m</p> <p>Plastic housing: 72 x 64 x 40 mm For indoor / outdoor and damp room, IP65</p>	30101050	1
<b>SK01 with Pendulum Room Probe ( globe thermometer )</b>				
EIB/KNX, on-wall, outdoor / damp room, IP65		Document: 2114_xx_SK01-T-RPTF2.pdf		
	SK01-T-RPTF2	<p>KNX Sensor / Controller Temperature</p> <p>Temperature sensor PT1000 is in a black plastic sphere d = 50mm. Dark radiation probe detects radiation and radiation heat. Installation in rooms with high ceilings with suspended sensor.</p> <p>Operating temperature: -25 .. +80 °C Measured temperature range: -30 .. +80 °C Connecting cable: PVC 1,5 m</p> <p>Plastic housing: 72 x 64 x 40 mm For indoor / outdoor and damp room, IP65</p>	30101051	1

SK02-T	Article	Article description	Article no.	Product gr.
<b>SK02</b>		Temperature probe integrated in box		
EIB/KNX, on-wall, indoor, IP20		Document: 2115_xx_SK02-T.pdf		
	SK02-T	<p>KNX Sensor / Controller Temperature inside box.</p> <p>Use: detecting and controlling room temperature in homes, hotels, offices, exhibition areas and schools.</p> <p>Operating temperature: -25 .. +55 °C Measured temperature range: -25 .. +55 °C</p> <p>Plastic housing: 71 x 71 x 25 mm For in-wall mounting in dry interiors IP20</p>	30102201	1

SK03-T	Article	Article description	Article no.	Product gr.
SK03		Temperature probe integrated in box		
EIB/KNX, in-wall, indoor, IP20		Document: 2116_xx_SK03-T.pdf		
<p>KNX Sensor / Controller Temperature inside box.</p> <p>Use: detecting and controlling room temperature in homes, hotels, offices, exhibition areas and schools.</p> <p>Mounted using 2 spring clips in cable ring ( included ) for a 68 mm in-wall pattress. Compatible with switching systems ( e.g. Gira, Merten in standard 55mm ).</p> <p>For in-wall mounting in dry interiors IP20</p>				
	SK03-T	<p>Plastic housing: white</p> <p>Operating temperature: -25 .. +55 °C Measured temperature range: -25 .. +55 °C</p> <p>Frame: 55 mm</p> <p>For in-wall mounting in dry interiors IP20</p>	30103201	1
	SK03-T	<p>Plastic housing: anthrazit</p> <p>Operating temperature: -25 .. +55 °C Measured temperature range: -25 .. +55 °C</p> <p>Frame: 55 mm</p> <p>For in-wall mounting in dry interiors IP20</p>	30103202	1

SK08-T8	Article	Article description	Article no.	Product gr.
SK08-T8		Multiple-PT1000		
EIB/KNX, on-wall, outdoor / damp room, IP65				
	SK08-T8	<p>KNX Controller 8 Channel Temperature for measuring and controlling up to 8 temperatures</p> <p>Plastic housing: 115 x 65 x 50 mm For indoor / outdoor and damp room, IP65</p> <p>Without temperature sensors</p> <p>More Information see rubric E: Physical and chemical measurement instrumentation S8</p>	30801000	1



**KNX-Sensors Temperature / Humidity / Climate**
**Sensor: Sensirion SHT11/**
**TFK**


Sensors with integrated KNX bus coupler for measuring and regulating temperature and humidity.  
 No auxiliary voltage necessary.

Product Data Base **ARC\_TFK.VD2**



Application description **2200\_HVAC\_TFK\_xx.pdf**


ETS-Application:


- Measured values of temperature and relative humidity ( Sensirion-Sensor )
- PI or two-position controller for temperature with steady or PWM output
- Two-position controller for relative humidity
- Various operating methods for temperature control: relative RTC, absolute RTC, standard
- Maximum limit alarm with presetting via KNX Bus: humidity, temperature
- Minimum / Maximum temperature saved
- Adjustable frost protection alarm
- Dew point alarm and dew point control
- Adjustment of all standards and limits
- Text displayed when entering/leaving the comfort field
- Values calculated: absolute humidity, dew point temperature, enthalpy
- Actual value adjustment for temperature and relative humidity



SK01-TFK	Article	Article description	Article no.	Product gr.
<b>SK01 with External Probe</b>				
EIB/KNX, on-wall, outdoor / damp room, IP65		Document: 2201_xx_SK01-TFK-AFF.pdf		
	SK01-TFK -AFF	KNX Sensor / Controller Temperature / Humidity / Climate  The probe is protected from dust by a poroplast protective coating. Application: building automation, refrigeration, airconditioning and ventilation systems, clean rooms, greenhouses, etc.	30301053	1
		Probe length: 45 mm Operating temperature range : -20 .. +80 °C Measured humidity range: 10 .. 90% r.H.  Plastic housing: 72 x 64 x 40 mm For indoor / outdoor and damp room, IP65		





SK01-TFK	Article	Article description	Article no.	Product gr.
SK01 with Pendulum room probe				
EIB/KNX, on-wall, outdoor / damp room, IP65		Document: 2202_xx_SK01-TFK-RPFF-MMF.pdf		
KNX Sensor / Controller Temperature / Humidity / Climate  Application: building automation, refrigeration, airconditioning and clean room technology, greenhouses, halls with high ceilings. Installation in rooms with high ceilings with the sensor suspended from the ceiling.  For indoor / outdoor and damp room, IP65				
	SK01-TFK -RPFF	<p>The probe is protected from dust by a poroplast protective coating and is used as a pendulum room sensor.</p> <p>Probe: 100 mm Connecting cable: 2 m</p> <p>Operating temperature range: -20 .. +80 °C Measured humidity range: 10 .. 100% r.H.</p> <p>Plastic housing: 72 x 64 x 40 mm For indoor / outdoor and damp room, IP65</p>	30301054	1
	SK01-TFK -RPFF -MMF	<p>The probe is protected from condensation and dust by a hydrogas metal membrane filter and is used as a pendulum room sensor.</p> <p>Probe: 100 mm Connecting cable: 2 m</p> <p>Operating temperature: -20 .. +80 °C Measured temperature range: -20 .. +80 °C Measured humidity range: 10 .. 100% r.H.</p> <p>Plastic housing: 72 x 64 x 40 mm For indoor / outdoor and damp room, IP65</p>	30301056	1

SK01-TFK	Article	Article description	Article no.	Product gr.
<b>SK01 with Duct Probe</b>				
EIB/KNX, on-wall, outdoor / damp room, IP65		Document: 2203_xx_SK01-TFK-KFF.pdf		
	SK01-TFK-KFF	<p>KNX Sensor / Controller Temperature / Humidity / Climate</p> <p>The probe is protected from dust by a poroplast protective coating. Application: detection of temperature in air ducts, local regulation in heating systems for constant KNX valves or electrothermal valves, local air regulation.</p> <p>Installation: The boxes are fixed to the air duct with a plastic sleeve and two screws.</p> <p>Operating temperature: -20 .. +80 °C Measured temperature range: -20 .. +80 °C Measured humidity range: 10 .. 90% r.H.</p> <p>Plastic housing: 72 x 64 x 40 mm For indoor / outdoor and damp room, IP65</p>	30301057	1

SK02-TFK	Article	Article description	Article no.	Product gr.
<b>SK02</b>		Temperature Probe Integrated in Box		
EIB/KNX, on-wall, indoor, IP20		Document: 2204_xx_SK02-TFK.pdf		
	SK02-TFK	KNX Sensor / Controller Temperature / Humidity / Climate  Use: detecting and controlling room temperature in homes, hotels, offices, exhibition areas and schools.  Operating temperature: -25 .. +55 °C Measured temperature range: -25 .. +55 °C Humidity range: 10 .. 90% r.H.  Plastic housing: 71 x 71 x 25 mm For in-wall mounting in dry interiors IP20	30302201	1

SK03-TFK	Article	Article description	Article no.	Product gr.
SK03		Temperature probe integrated in box		
EIB/KNX, in-wall, indoor, IP20		Document: 2205_xx_SK03-TFK.pdf		
<div>KNX Sensor / Controller</div> <div>Temperature / Humidity / Climate</div> <div>Detecting and controlling room climate in homes, hotels, offices, exhibition areas and schools.</div> <div>Compatible with switching systems ( e.g. Gira, Merten in standard 55mm ).</div> <div>Mounted with two spring clips with cable ring ( included ) for a 68mm in-wall pattress.</div> <div>For in-wall mounting in dry interiors IP20</div>				
	SK03-TFK	<div>Plastic housing: white</div> <div>Operating temperature: -25 .. +55 °C</div> <div>Measured temperature range: -25 .. +55 °C</div> <div>Humidity range: 10 .. 90% r.H.</div> <div>Frame: 55 mm</div> <div>For in-wall mounting in dry interiors IP20</div>	30303201	1
	SK03-TFK	<div>Plastic housing: anthrazit</div> <div>Operating temperature: -25 .. +55 °C</div> <div>Measured temperature range: -25 .. +55 °C</div> <div>Humidity range: 10 .. 90% r.H.</div> <div>Frame: 55 mm</div> <div>For in-wall mounting in dry interiors IP20</div>	30303202	1

Ax-TFK	Article	Article description	Article no.	Product gr.
Ax-TFK		Temperature Probe Integrated in Box		
EIB/KNX, in-wall, indoor, IP20		Document: 2206_xx_Ax-TFK.pdf		
<div>KNX Sensor / Controller</div> <div>Temperature / Humidity / Climate</div> <div>Detecting and controlling room climate in homes, hotels, offices, exhibition areas and schools.</div> <div>Magnetic fixture with metal frame ( included ) for 60/68mm in-wall pattress mounting.</div> <div>For in-wall mounting in dry interiors IP20</div>				
	AE-TFK	<div>Metal housing</div> <div>82 x 82 x 8 mm with bevel</div> <div>Aluminium sandblasted</div> <div>anodized</div> <div>Operating temperature: -25 .. +55 °C</div> <div>Measured temperature range: -25 .. +55 °C</div> <div>Operating humidity range: 10 .. 90% r.H.</div>	30304200	1
	AW-TFK	<div>Metal housing</div> <div>82 x 82 x 8 mm with bevel</div> <div>Aluminium sandblasted</div> <div>white powder-coated</div> <div>Operating temperature: -25 .. +55 °C</div> <div>Measured temperature range: -25 .. +55 °C</div> <div>Operating humidity range: 10 .. 90% r.H.</div>	30304201	1

**KNX-Sensorik Temperature / Temperature / Humidity / Climate**
**Sensor: Sensirion SHT11/71 / PT1000**
**TTFK**




Sensors with integrated KNX Bus Coupler for measuring and regulating temperature, humidity and climate.  
 An additional PT1000 probe can be connected.  
 No auxiliary voltage necessary.





Product Data Base: **ARC\_TFK.VD2**





Application description **2300\_HVAC\_TTFK\_xx.pdf**

ETS-Application:

- Measured values of temperature and relative humidity (Sensirion-Sensor)
- PI or two-position controller for temperature with steady or PWM output
- Two-position controller for relative humidity
- Various operating methods for temperature control: relative RTC, absolute RTC, standard
- Maximum limit alarm with presetting via KNX Bus: humidity, temperature
- Minimum / Maximum temperature saved
- Adjustable frost protection alarm
- Dew point alarm and dew point control
- Adjustment of all standards and limits
- Values calculated: absolute humidity, dew point temperature, enthalpy
- Actual value adjustment for temperature and relative humidity
- Measured value of the second temperature (additional sensor PT1000) with two-position controller

SK01-TTFK	Article	Article description	Article no.	Product gr.
<b>SK01 with External Probe</b>				
EIB/KNX, on-wall, outdoor / damp room, IP65		Document: 2301_xx_SK01-TTFK-AFF.pdf		
	SK01-TTFK -AFF	<p>KNX Sensor / Controller            Temperature / Temperature / Humidity / Climate            /Dewpoint control</p> <p>The temperature/humidity probe is protected from dust by a poroplast protective coating.</p> <p>Application: building automation, refrigeration, airconditioning and ventilation technology, greenhouses etc.</p> <p>Probe: 45 mm, Ø = 14 mm</p> <p>Operating temperature: -25 .. +55 °C            Measured temperature range: -20 .. +80 °C            Humidity range: 10 .. 90% r.H.</p> <p>Plastic housing: 72 x 64 x 40 mm            For indoor / outdoor and damp room, IP65</p> <p>An additional PT1000 Sensor not included in delivery.</p>	30401053	1
		<p>An additional PT1000 Sensor for surface mounting, screwing in or contacting with customized cable-length can be ordered.</p> <p>( see rubric Z, components / replacement parts )</p>		

SK01-TTFK	Article	Article description	Article no.	Product gr.
SK01 with Pendulum room probe				
EIB/KNX, on-wall, outdoor / damp room, IP65		Document: 2302_xx_SK01-TTFK-RPFF-MMF.pdf		
KNX Sensor / Controller Temperature / Temperature / Humidity / Climate / Dewpoint control  Application: building automation, refrigeration, airconditioning and ventilation technology, greenhouses, in halls with high ceilings, etc.  For indoor / outdoor and damp room, IP65				
	SK01-TTFK -RPFF	<p>The temperature/humidity probe is protected from dust by a poroplast protective coating.</p> <p>Probe: 100 mm Connecting cable: 2 m</p> <p>Operating temperature: -25 .. +55 °C Measured temperature range: -20 .. +80 °C Humidity range: 10 .. 90% r.H.</p> <p>Plastic housing: 72 x 64 x 40 mm For indoor / outdoor and damp room, IP65</p> <p>An additional PT1000 Sensor not included in delivery.</p>	30401054	1
	SK01-TTFK -RPFF -MMF	<p>The probe is protected from condensation and dust by a hydrogas metal membrane filter and is used as a pendulum room sensor.</p> <p>Probe: 100 mm Connecting cable: 2 m</p> <p>Operating temperature: -25 .. +55 °C Measured temperature range: -20 .. +80 °C Humidity range: 10 .. 100% r.H.</p> <p>Plastic housing: 72 x 64 x 40 mm For indoor / outdoor and damp room, IP65</p> <p>An additional PT1000 Sensor not included in delivery.</p>	30401056	1
		<p>An additional PT1000 Sensor for surface mounting, screwing in or contacting with customized cable-length can be ordered.</p> <p>( see rubric Z, components / replacement parts )</p>		

SK03-TTFK	Article	Article description	Article no.	Product gr.
SK03		Temperature probe integrated in box		
EIB/KNX, in-wall, indoor, IP20		Document: 2304_xx_SK03-TTFK.pdf		
<div>KNX Sensor / Controller</div> <div>Temperature / Temperature / Humidity / Climate /Dewpoint control</div> <div>Use: detecting and controlling room temperature in homes, hotels, offices, exhibition areas and schools.</div> <div>Mounted using 2 spring clips in cable ring ( included ) for a 68 mm in-wall pattress.</div> <div>Compatible with switching systems ( e.g. Gira, Merten in standard 55mm ).</div> <div>For in-wall mounting in dry interiors IP20</div>				
	SK03-TTFK	<div>Plastic housing:   white</div> <div>Operating temperature:               -25 .. +55 °C</div> <div>Measured temperature range:       -25 .. +55 °C</div> <div>Humidity range:                       10 .. 90% r.H.</div> <div>Frame:  55 mm</div> <div>An additional PT1000 Sensor not included in delivery.</div>	30403201	1
	SK03-TTFK	<div>Plastic housing:   anthrazit</div> <div>Operating temperature:               -25 .. +55 °C</div> <div>Measured temperature range:       -25 .. +55 °C</div> <div>Humidity range:                       10 .. 90% r.H.</div> <div>Frame:  55 mm</div> <div>An additional PT1000 Sensor not included in delivery.</div>	30403202	1
		<div>An additional PT1000 Sensor for surface mounting, screwing in or contacting with customized cable-length can be ordered.</div> <div>( see rubric Z, components / replacement parts )</div>		



## KNX-Sensors Physical and Chemical Measurement Instrumentation


## S8

The product series S8 consists of sensors and controllers for several physical and chemical measurands for indoor and outdoor applications.




Product Data Base **ARC\_S8.VD2**


Functions:


- Up to 8 Measured values with each
- Two position controller with switch and pulse 1-bit output  
or
- PI controller with continuous 8-bit or pulse-width modulated 1-bit output
- Adjustable periodic display of control variable : no periodic display /10-250 seconds
- Adjustable release and lock with all controllers
- Threshold alarms for upper and lower thresholds
- Auxiliary adjusting of set value or threshold via the bus
- Calibration of the sensors ( offset cancellation )


T8	Article	Article description	Article no.	Product gr.
<b>SK08-T8</b>		Multiple PT1000		
EIB/KNX, Indoor / Outdoor, IP65		Document: 3100_xx_SK08-T8.pdf		
<p>KNX Controller 8 Channel Temperature for measurement and control of up to 8 temperatures. The temperatures are measured with the external PT1000 temperature probes. Different kind of probes can be mixed in one installation.</p> <p>For indoor / outdoor / damp room application, IP65</p> <p>Use case: Monitoring and control of temperatures in heating-/cooling- or informational applications. The temperature sensors ( PT1000 ) are not included in delivery.</p> <p>The additional PT1000 Sensors for surface mounting, screwing in or contacting with customized cable-length can be ordered. ( see rubric Z, components / replacement parts )</p>				
	SK08-T8	<p>KNX Controller 8 Channel Temperature for measuring and controlling up to 8 temperatures</p> <p>Plastic housing: 115 x 65 x 50 mm For indoor / outdoor and damp room, IP65</p> <p>Operating temperature: -20 .. +80 °C Measured temperature range: -30 .. +180 °C Without temperature sensor</p> <p>For applicable sensors see rubric Z, components / replacement parts</p>	30801000	1






WAQ	Article	Article description	Article no.	Product gr.
<b>SK08-WAQ</b>		Water quality — pH-ORP		
EIB/KNX, Indoor / Outdoor, IP65		Document: 3200_xx_SK08-WAQ.pdf		
<p>KNX Sensor / Controller Galvanic isolated instrumentation amplifier and bus couple unit for measurement and control of the water quality indicators, pH and ORP.</p> <p>For monitoring and control of the water quality in aquariums, swimming pools, ponds and service water systems.</p> <p>For indoor / outdoor and damp room applications, IP65</p>				
	SK08-WAQ	<p>KNX Sensor / controller for Water quality</p> <p>Plastic housing: 115 x 65 x 50 mm</p> <p>without Measuring Electrode Units</p>	30802000	1
<b>SK08-WAQ-MES</b>		Water quality — pH-ORP		
EIB/KNX, Indoor / Outdoor, IP65		Document: 3200_xx_SK08-WAQ.pdf		
	SK08-WAQ-MES	<p>KNX Sensor / controller for Water quality</p> <p>Plastic housing: 115 x 65 x 50 mm</p> <p>with Measuring Electrode Units included</p> <p>Operating temperature: 0 .. +50 °C</p>	30802001	10


CO2-TF	Article	Article description	Article no.	Product gr.
X-S8-CO2-TF		CO2 / temperature / humidity / climate		
EIB/KNX, Indoor, IP20		Document: 3300_xx_X-S8-CO2-TF.pdf		
<p>KNX Sensor / controller for monitoring and control of CO2-concentration and room climate values as temperature, humidity and dewpoint temperature.</p> <p>Use case: Monitoring and control of CO2-concentration and air quality in offices, conference rooms, hotels, schools, workspaces etc. Monitoring and control of the climate in indoor applications.</p> <p>Auxiliary power necessary: 9 .. 30 VDC 250 mW</p>				
	AE -S8-CO2-TF	<p>Metal housing 82 x 82 x 8 mm with bevel Aluminium sandblasted, anodized</p> <p>Operating temperature: -25 .. +55 °C Operating humidity range: 10 .. 90% r.H. CO2 measuring range: 0 .. 5000 ppm</p> <p>Magnetic fixture with metal frame ( included ) for 60/68mm in-wall pattress mounting IP20</p>	30803040	10
	AW -S8-CO2-TF	<p>Metal housing 82 x 82 x 8 mm with bevel Aluminium sandblasted White powder coated</p> <p>Operating temperature: -25 .. +55 °C Operating humidity range: 10 .. 90% r.H. CO2 measuring range: 0 .. 5000 ppm</p> <p>Magnetic fixture with metal frame ( included ) for 60/68mm in-wall pattress mounting IP20</p>	30803041	10
	SK04 -S8-CO2-TF	<p>Plastic housing 121 x 70 x 24 mm</p> <p>Operating temperature: -10 .. +55 °C Operating humidity range: 10 .. 90% r.H. CO2 measuring range: 0 .. 5000 ppm</p> <p>On-wall mounting in dry indoor applications IP20</p>	30803050	10

GLBS	Article	Article description	Article no.	Product gr.
<b>SK08-GLBS- MES</b>		Global radiation		
EIB/KNX, Indoor / Outdoor, IP65		Document: 3400_xx_SK08-GLBS.pdf		
	SK08-GLBS -MES	<p>KNX - Global radiation sensor, silicon pyranometer and Busmodul included  Range: 0 .. 1800 W/m2  Accuracy: 5%  Spectral range: 400 .. 1100 nm  Temperature range: -40 .. +65°C  Drift: typical 2%/A  With bubble level for exact leveling</p> <p>UV-resistant plastic housing ( Sensor only )  115 x 65 x 50 mm</p> <p>Connection cable length: 1 m</p>	30804001	10

BFT	Article	Article description	Article no.	Product gr.
<b>SK08-BFT-WMT</b>		Soil moisture / temperature		
EIB/KNX, Indoor / Outdoor, IP65		Document: 3500_xx_SK08-BFT.pdf		
	SK08-BFT -WMT  inkl. Watermark® Bodenfeuchte Sensor	<p>KNX-Sensor / controller for monitoring and control of soil moisture and soil temperature. (PT1000) with Watermark®-WM ( maintenance free ) soil moisture sensor.  The integrated controller allows automatic irrigation dependent on the real demands of water.  Plastic housing: 115 x 65 x 50 mm</p> <p>Connection cable Watermark®-WM: 5 m</p> <p>Other lengths available  ( see rubric Z, components / replacement parts )</p>	30805001	10

BFTLFT	Article	Article description	Article no.	Product gr.
<b>SK08-BFTLFT-AFF-WMT</b>		Soil moisture / temperature + air temp/hum.		
EIB/KNX, Indoor / Outdoor, IP65		Document: 3600_xx_SK08-BFTLFT.pdf		
	SK08-BFTLFT -AFF-WMT  inkl. Watermark® Bodenfeuchte Sensor	<p>KNX-Sensor / controller for monitoring and control of soil moisture and soil temperature. (PT1000) with Watermark®-WM ( maintenance free ) soil moisture sensor.  additionally also air temperature and humidity. ( Sensirion SHT11/71 ).  The integrated controller allows automatic irrigation dependent on the real demands of water.</p> <p>Plastic housing: 115 x 65 x 50 mm</p> <p>Connection cable Watermark®-WM: 5 m</p> <p>Other lengths available  ( see rubric Z, components / replacement parts )</p>	30805021	10

F	Article	Article description	Article no.	Product gr.
<b>X-S8-F</b>		Ultrasonic fill level measurement system		
EIB/KNX, Indoor / Outdoor, IP65		Document: 3700_xx_X-S8-F.pdf		
		<p>Ultrasonic sensor / controller for monitoring and control of fill levels in cisterns, reservoirs , pools or tanks with KNX coupling unit.</p> <p>The ultrasonic level sensor system LevelJET from ProJET evaluates the levels in reservoirs of many construction types. Minimal and maximal levels can be set on site. The bus coupling unit enables to use the values in the KNX-Bus.</p> <p>Use case: Monitoring and control of liquid levels in cisterns and tanks.</p> <p>Additional supply of 9 .. 12 VDC 35 mA necessary . Wall power supply included in delivery</p> <p>Two housings are available as shown below</p>		
		<b>SK01-S8-F-ST</b>  SK01 plastic housing 72 x 64 x 40 mm IP65  Mounted with 2 screws onto the wall.  Measuring range: <b>0,15 .. 2,5 m</b>	30807001	10
		<b>REG-S8-F-ST</b>  DIN Rail mounted housing 2 units width ( 35 mm ) IP20  Measuring range: <b>0,15 .. 2,5 m</b>	30807002	10
		<b>SK01-S8-F-HR-6</b>  SK01 plastic housing 72 x 64 x 40 mm IP65  Mounted with 2 screws onto the wall.  Measuring range: <b>0,75 .. 6 m</b>	30807011	10
		<b>REG-S8-F-HR-6</b>  DIN Rail mounted housing 2 units width ( 35 mm ) IP20  Measuring range: <b>0,75 .. 6 m</b>	30807012	10

AN2	Article	Article description	Article no.	Product gr.
<b>SK01-S8-AN2</b>		Analog modul 2-fold		
EIB/KNX, Indoor / Outdoor, IP65		Document: 3800_xx_SK01-S8-AN2.pdf		
	SK01-S8-AN2	KNX Dataconverter / controller for monitoring and control of two analog voltages. Input range 0 to 12V.  Plastic housing: 72 x 64 x 40 mm For indoor / outdoor and damp room, IP65	30806200	1

## KNX Funktion module / Gateways

The KNX-FM Modul is a logic module which is used in KNX Systems. It is characterized by its free programming capabilities. Programming is done in the forth language and is executed by an internal interpreter. The 50 MHz Arm processor allows fast 32-bit integer operations and 64-bit floating point calculations. The self-compiling command interpreter produces fast and compact code. Sample applications are the preprogrammed KNX-GW-DMX and the KNX-GW-RS232-RS485 Gateways.

Additional use cases are Admission control systems, Data logging, trans-media gateways etc.

Additionally, the module KNX-FM contains programmable control and display elements.

Programming and parametrization is done via USB by the ArcSuite program which can be downloaded.

The preprogrammed solutions KNX-GW-DMX and KNX-GW-RS232-RS485 have dedicated configuration software available.




Free download at [www.arcus-eds.com](http://www.arcus-eds.com).

## KNX Funktion modul / Gateways



## Technical data

Outline:	107 x 75 x 31 mm
Mounting options:	REG ( 6TE )
Protection class:	IP20
Operating Temperature:	-5°C .. +45 °C
KNX-load:	20 .. 32VDC 150 mW
Power supply:	9 .. 30VDC 100 mA
Programming:	Software ArcSuite via USB
Data rates:	RS232 250.0 kBaud max.
	RS485 115.2 kBaud max.

KNX Funktion module	Article	Article description	Article no.	Product gr.
<b>KNX-FM</b>	<b>KNX-GW-DMX</b>	<b>KNX-GW-RS232-RS485</b>		
KNX-FM		Document: 4100_xx_KNX-FM.pdf		
	KNX-FM	<p>The KNX-FM is a free programmable logic module with an KNX-Interface. It is housed in a 107mm wide DIN Rail mounted housing.</p> <p>Programming is done by the Program ArcSuite.</p> <p>Free download at <a href="http://www.arcus-eds.com">www.arcus-eds.com</a></p>	40020186	1
KNX-GW-DMX		Document: 4200_xx_KNX-GW-DMX.pdf		
	KNX-GW-DMX	<p>The KNX-GW-DMX is a gateway between the KNX-Bus and the DMX512-Bus used by a wide range of devices for lighting applications.</p> <p>Parametrization is done by the dedicated program DMX-Configurator.</p> <p>Free download at <a href="http://www.arcus-eds.com">www.arcus-eds.com</a></p>	40120186	1
KNX-GW-RS232-RS485		Document: 4300_xx_KNX-GW-RS232-RS485.pdf		
	KNX-GW-RS232-RS485	<p>The KNX-GW-RS232-RS485 is a gateway between the KNX-Bus and the serial lines RS232 and RS485. It can be used to easily connect devices with serial data of both directions like multimedia equipment or alarm systems to the KNX-Bus.</p> <p>Parametrization is done by the dedicated Program RS232-Configurator.</p> <p>Free download at <a href="http://www.arcus-eds.com">www.arcus-eds.com</a></p>	40220186	1



## KNX Smart Metering

**Impuls counter IMPZ**

This impuls counting modules with battery backed up memory and KNX coupling unit are designed for universal monitoring of consumption values in the KNX bus. The impuls counting module is available in an outdoor/damp room compliant IP65 plastic housing or as DIN Rail mounted device. The internal lithium back up battery enables the functionality without KNX bus connection for over 5 years

Meters with potential free impuls outputs (S0, relay, reed-switch ) can be connected to the KNX-Bus independent of their medium. This measurement concept allows retrofitting smart metering into old installations.

The KNX-IMPZ2 contains two independent counters which can be used for different meters or even different media. Furthermore the two inputs can act as one meter with two tariffs, switching between the tariffs is done by the second input or via KNX.

Suitable Meters for the IMPZ are e.g. the meters of NZR, which are approved by the PTB.

**In home water meters WZ-M**

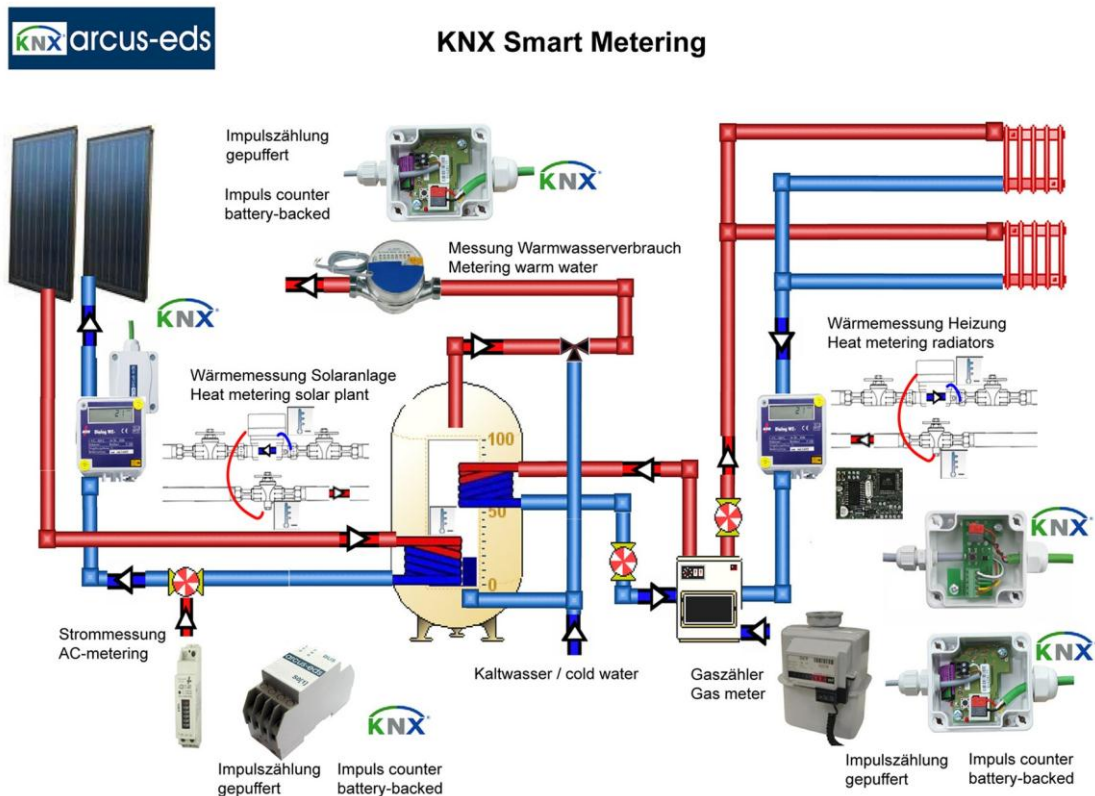
The in home water meter is a package of the calibrated water meter „WZ-M“ from NZR and the impuls counting unit SK01-IMPZ1 from Arcus-EDS GmbH. The meter is approved by the PTB.

The internal lithium back up battery enables the functionality without KNX bus connection for over 5 years

**Heat quantity meter WMZ**

The heat quantity meter is a calibrated heat quantity meter „WZ-HY“ from NZR equipped with an internal KNX bus coupling unit from Arcus-EDS GmbH, it is approved by the PTB.

The electronic counting unit is equipped with a lithium battery which assures 5 years lifetime ( and 1 year surplus ). The bus coupling unit is mounted inside the sealed housing and nonreactive connected with the external terminal box.



**KNX-IMPZ1****Impuls counting module KNX-IMPZ1**



Use case: Integration of consumption meters with impuls outputs into the KNX bus.

The counting unit is designed to be used with a S0-Interface ( according EN 43864 ) but can also be used with other impuls outputs with a potential free contact.

**KNX readable data:**

Serial number  
Accumulated consumption  
Current flow rate/consumption rate  
Current time  
Current date  
Last reference date

Last reference value Next  
reference date Consumption  
value Consumption Reset  
Consumption last reset date  
Consumption last reset time

KNX-IMPZ1	Article	Article description	Article no.	Product gr.
EIB/KNX		Document: 5100_xx_IMPZ1.pdf		
	SK01-IMPZ1	<p>1 Channel S0 counter module with KNX interface</p> <p>SK01 plastic housing 72 x 64 x 40 mm IP65</p> <p>Mounted with 2 screws onto the wall.</p>	60201101	1
	REG-IMPZ1	<p>1 Channel S0 counter module with KNX interface</p> <p>DIN Rail mounted housing 2 units width ( 35 mm ) IP20</p>	60201102	1

**KNX-IMPZ2****Impuls counting module KNX-IMPZ2**

Use case: Integration of consumption meters with impuls outputs into the KNX bus.



The counting unit is designed to be used with a S0-Interface ( according EN 43864 ) but can also be used with other impuls outputs with a potential free contact.

The two counting values can be two different meters or one meter with 2 tariffs. Switching the tariffs is done through the second input or over KNX.

**KNX readable data:**

Serial number  
Accumulated consumption  
Current flow rate/consumption rate  
Current time  
Current date  
Last reference date

Last reference value Next  
reference date Consumption  
value Consumption Reset  
Consumption last reset date  
Consumption last reset time

KNX-IMPZ2	Article	Article description	Article no.	Product gr.
EIB/KNX		Document: 5200_xx_IMPZ2.pdf		
	SK01-IMPZ2	2 Channel S0 counter module with KNX interface  SK01 plastic housing 72 x 64 x 40 mm IP65  Mounted with 2 screws onto the wall.	60201201	1
	REG-IMPZ2	2 Channel S0 counter module with KNX interface  DIN Rail mounted housing 2 units width ( 35 mm ) IP20	60201202	1

## KNX-IMPZ-WZ-M

## In home water meters Modularis WZ-M

EIB/KNX

Document: 5300\_xx\_WZ-M.pdf

**KNX readable data:**

Serial number  
 Accumulated volume in l or m<sup>3</sup>  
 Current flow rate in l or m<sup>3</sup>/unit of time  
 Current time  
 Current date  
 Last reference date  
 Last reference value  
 Next reference date  
 Consumption value  
 Consumption Reset  
 Consumption last reset date  
 Consumption last reset time

Connection box: SK01 plastic housing  
 72 x 64 x 40 mm  
 IP65

Mounted with 2 screws onto the wall.

WZ-M Technical data		Remarks	Article no.	Product gr.
<b>Nominal Flow Rate</b> 1,5 m <sup>3</sup> /h <b>Nominal Diameter</b> 15 mm <b>Maximum Flow Rate</b> 3 m <sup>3</sup> /h <b>Installation Length</b> 80 mm		WZK-M cold 30°C	60201-75124015	10
		WZW-M hot 90°C	60201-75124515	10
<b>Nominal Flow Rate</b> 1,5 m <sup>3</sup> /h <b>Nominal Diameter</b> 15 mm <b>Maximum Flow Rate</b> 3 m <sup>3</sup> /h <b>Installation Length</b> 110 mm		WZK-M cold 30°C	60201-75124115	10
		WZW-M hot 90°C	60201-75124615	10
<b>Nominal Flow Rate</b> 2,5 m <sup>3</sup> /h <b>Nominal Diameter</b> 20 mm <b>Maximum Flow Rate</b> 5 m <sup>3</sup> /h <b>Installation Length</b> 130 mm		WZK-M cold 30°C	60201-75124025	10
		WZW-M hot 90°C	60201-75124525	10



Other water meters, technical data and companion dimensions are available at NZR. [www.nzr.de](http://www.nzr.de).

The NZR-article no. equals the second part of our article no.

Prices on request.



All meters of the series WZ-M are equipped with an internal Impuls module, they are PTB approved and calibrated.

## KNX-WMZ-WZ-HY

## Heat quantity meter WZ-HY

EIB/KNX

Document: 5400\_xx\_WMZ.pdf



## KNX readable data

Energy value  
Volume  
Supply and return temperature  
Temperature difference  
Actual flow rate  
Heating power  
Last reference value  
Serial number

## Temperature range:

0 .. 120 °C

Connection box:  
SK01 plastic housing  
72 x 64 x 40 mm  
IP65

Mounted with 2 screws onto the wall.

WZ-HY Technical data		Temperature probe	Article no.	Product gr.
<b>Nominal Flow Rate</b> Nominal Diameter Maximum Flow Rate <b>Installation Length</b>	<b>0,6 m³/h</b> 15 mm <b>1,2 m³/h</b> <b>110 mm</b>	dry probe	60101-85373106	10
		wet probe	60101-85473106	10
<b>Nominal Flow Rate</b> Nominal Diameter Maximum Flow Rate <b>Installation Length</b>	<b>1,5 m³/h</b> 15 mm <b>3 m³/h</b> <b>110 mm</b>	dry probe	60101-85373115	10
		wet probe	60101-85473115	10
<b>Nominal Flow Rate</b> Nominal Diameter Maximum Flow Rate <b>Installation Length</b>	<b>2,5 m³/h</b> 20 mm <b>5 m³/h</b> <b>130 mm</b>	dry probe	60101-85373125	10
		wet probe	60101-85473125	10



Other heat meters, technical data and companion dimensions as well as informations about mounting kits and adapters are available at NZR. [www.nzr.de](http://www.nzr.de).



The NZR-article no. equals the second part of our article no.

Prices on request.



All meters of the series WZ-HY are equipped with an internal KNX coupling unit, they are PTB approved, sealed and calibrated.

## Components for the T sensor family and the TTFK auxiliary inputs

Article	Article description	Article no.	Product gr.
<b>In-wall mounted probes PT1000</b>			
	SK03-PT1000 white  Temperature probe PT1000 With screw-in clamps Mounted on in-wall pattress ( 60/68 mm ) Compatible to switching systems ( e.g. Gira, Merten ) in standard 55mm.  Indoor use only IP20	90104401	2
	SK03-PT1000 anthrazit  Temperature probe PT1000 With screw-in clamps Mounted on in-wallin-wall pattress ( 60/68 mm ) Compatible to switching systems ( e.g. Gira, Merten ) in standard 55mm.  Indoor use only IP20	90104402	2
<b>Feed/surface mounted probe PT1000 IP54</b>			
	OFTF PT1000 PVC  Feed Temperature/Surface Probe  Operating range: -30 .. +105 °C Cable: 1,5 m PVC	90100001	2
<b>Sleeve probe PT1000</b>			
	HTF PT1000 PVC  Operating range: -35 .. +105 °C Cable: 1,5 m PVC IP65	90100002	2
	HTF PT1000 Silicone  Operating range: -35 .. +180 °C Cable: 1,5 m Silicone IP65	90100003	2
	HTF PT1000 Teflon IP68  Operating range: -50 .. +250 °C Cable: 1,5 m Teflon IP68	90100055	2

## Components for the T sensor family and the TTFK auxiliary inputs



Article	Article description	Article no.	Product gr.
<b>Pipe Feed Probe PT1000 IP65</b>			
	ALTF1 PT1000 PVC	Feed Temperature/ Pipe Feed Probe Operating range: -35 .. +105 °C Cable: 1,5 m PVC	90100004 2
	ALTF1 PT1000 Silicone	Feed Temperature/ Pipe Feed Probe Operating range: -35 .. +105 °C Cable: 1,5 m Silicone	90100005 2
	ALTF2 PT1000	Feed Temperature/ Pipe Feed Probe in plastic housing with contacting sensor (PT1000) on the rear side of the terminal box  Operating range: -30 .. +110 °C	90100006 2
<b>Outdoor / damp room temperature probe PT1000 IP65</b>			
	ATF2 PT1000	Outdoor / damp room temperature probe in plastic housing (PT1000)  Operating range: -50 .. +90 °C	90100007 2
<b>Screw-In Temperature Probe PT1000 IP65</b>			
	ESTF PT1000-50 PVC	G1/2" 50 mm V4A Operating range: -35 .. +105 °C Cable: 1,5 m PVC	90100008 2
	ESTF PT1000-100 PVC	G1/2" 100 mm V4A Operating range: -35 .. +105 °C Cable: 1,5 m PVC	90100009 2
	ESTF PT1000-50 Silicone	G1/2" 50 mm V4A Operating range: -35 .. +180 °C Cable: 1,5 m Silicone	90100010 2
	ESTF PT1000-100 Silicone	G1/2" 100 mm V4A Operating range: -35 .. +180 °C Cable: 1,5 m Silicone	90100011 2



## Components for the T sensor family and the TTFK auxiliary inputs

Article	Article description	Article no.	Product gr.
<b>Ceiling mounted temperature probe PT1000</b>			
	DTF PT1000	Ceiling mounted temperature probe  Operating range: -20 .. +90 °C Cable: 135 mm PVC	90100012  2
<b>Pendulum room probe for temperature PT1000 IP65</b>			
	RPTF1 PT1000	Pendulum room probe for temperature PT1000. Probe dimension: 100mm, M12/1,5mm  Operating range: -30 .. +75 °C Cable: 1,5 m PVC	90100050  2
<b>Pendulum room probe for temperature PT1000 IP65</b>			
	RPTF2 PT1000	Pendulum room probe for temperature PT1000. in black plastic sphere ( Ø 50 mm ) for the acquisition of the temperature caused by radiant heat.  Operating range: -30 .. +80 °C Cable: 1,5 m PVC	90100051  2
<b>Cable</b>			
<b>The necessary probe cable lengths are manufactured on demand</b>			
	AN-PVC- -T2x025	PVC LiYY 2 x 0,25 mm² Product sold by meter	90200220  2
	AN-Silicone -T2x025	Silicone SiHF 2 x 0,25 mm² Product sold by meter	90200221  2
	AN-Teflon -T2x100	Teflon Li-6Y6Y-OZ 2 x 1 mm² Product sold by meter	90200223  2



### Components for the TFK / TTFK sensor family

Article	Article description	Article no.	Product gr.
<b>Pendulum room probe for temperature and humidity IP65</b>			
 <p>A coiled cable with a black connector at one end and a long, thin metal probe with a white filter at the other end.</p>	<p>RPFF ( Sensirion )</p> <p>Pendulum room temperature/humidity probe with plastic sinter filter Storage Temperature: -25...+80 °C Operating Temperature: -20...+55 °C Operating Humidity: 10 .. 90% r.H. Cable material: PVC Probe length: 100mm Length: 2m</p>	90100054	2
<b>Pendulum room probe for temperature and humidity ( condensation proof ) IP65</b>			
 <p>A coiled cable with a black connector at one end and a long, thin metal probe with a metal membrane filter at the other end.</p>	<p>RPFF-MMF ( Sensirion )</p> <p>Pendulum room humidity/temperature probe with metal membrane filter (condensation proof) Storage Temperature: -25...+80 °C Operating Temperature: -20...+55 °C Operating Humidity: 10 .. 100% r.H. Cable material: PVC Probe length: 100mm Length: 2m</p>	90100056	2

## Components for the KNX measuring system S8

Article	Article description		Article no.	Product gr.
Water quality probe pH, ORP for WAQ				
	WAQ Probe set single-rod measuring cells	Standard probes for PH and ORP to use with SK08-WAQ	91110020	9
Global radiation probe for GLBS				
	GLBS -DAV6450	Global radiation sensor element for the SK08-GLBS	91110021	9
	Mountkit-GLBS	Mounting kit for GLBS Sensor	91110022	9
Soil moisture probe Watermark® WMT				
	WMT	Watermark®-soil moisture probe with temperature sensor element with underground cable ( length 5 m )	91100000	2
		Underground cable for WMT ( each additional meter )	90200500	2

## Components for Touch\_IT C3

Article	Article description	Article no.	Product gr.
<b>Temperature sensor</b>			
	1 Wire DTF  Ceiling-Mounted Temperature Probe  Cable lenth: 2,5 m Accuracy: $\pm 0,5\text{ }^{\circ}\text{C}$ Temperature range: -55 .. +125 $^{\circ}\text{C}$	90100013	2
	1 Wire HTF  Sleeve Temperature Probe  Cable lenth: Silicone 3 m Accuracy: $\pm 0,5\text{ }^{\circ}\text{C}$ Temperature range: -55 .. +125 $^{\circ}\text{C}$	90100014	2