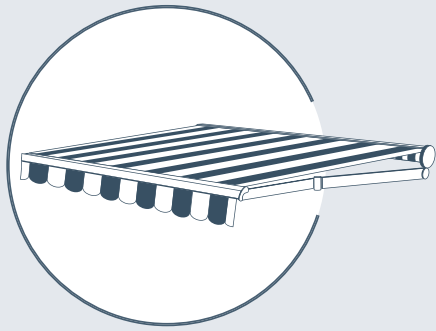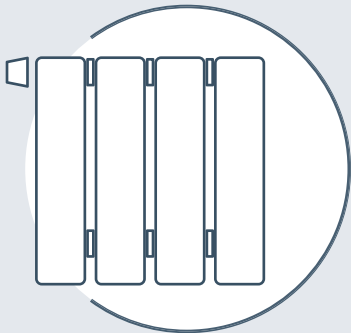# BUILDING AUTOMATION

For KNX, RS485 and Modbus Bus Systems
and for Conventional Applications
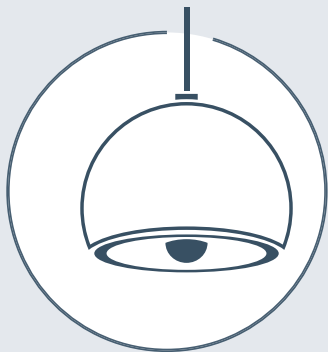
elsner®
e l e k t r o n i k

25 %

Automatic solar protection:
Potential energy savings 25%* and more

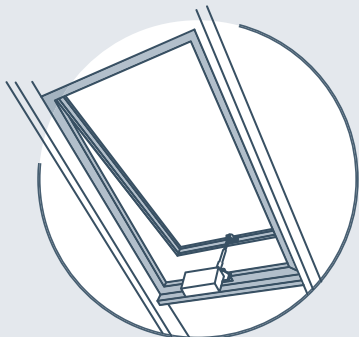## 28 %

Individual room temperature control:
Potential energy savings 28%* and more

45 %

Automatic lighting:
Potential energy savings 45%* and more

19 %

Automatic ventilation system:
Potential energy savings 19%* and more

*Average values from experimental and theoretical investigations of potential energy savings by using building automation. Source: Biberach Technical College, Instrumentation and Control Systems Faculty, Prof. Martin Becker, PhD., Dipl.-Ing. (TC) Peter Knoll | Issue: October 2010

GAIN COMFORT AND SECURITY, SAVE ENERGY

Building automation creates ideal room climate, protects equipment and the building structure, ensures systems work safely – and saves energy and costs.

In public and commercial buildings, which are used by many people, automatic room climate control is already an everyday occurrence. Ventilation, heating and shading matched to requirements ensure ideal conditions 24 hours a day. Coordinating individual systems allows energy efficiency, which is not to be achieved by manual control. Hovewer, the users can intervene within a predetermined framework and, for example, determine their personal comfort temperature or the desired light brightness.

Building systems offer the same benefits for residential property. A **Smart Home** is a house with intelligently connected technologies. Here, comfort, security and efficiency aspects are likewise closely interlinked. Building automation is also financially rewarding as it reduces energy consumption. Investments are almost completely amortised after a timeframe of only a few years. This period is considerably longer for other energy saving measures around the home.

Building automation can be applied to different systems, e.g. safety systems, media systems, domestic appliances or energy management. However, it is the **room climate** that is fundamental for well-being in the building. Here, compact control solutions can already achieve great effects: Intelligent shading will keep the building cool in summer and solar heat is used in the cold season as a free heating source. The slat angle of blinds can be aligned according to the position of the sun. This helps to avoid direct solar irradiation while simultaneously enabling natural daylight illumination of the room to the largest possible extent. Controlled ventilation improves air quality in the room and prevents overheating or condensation forming, particularly in airtight insulated building shells. Networking with heating and cooling systems avoids energy losses.

Lighting control according to brightness, presence and time is not only a simplification but holds real savings potential, especially in large offices and production sites. Security and alarm functions protect buildings and systems and simplify monitoring of apartments, houses or entire complexes.

Everyone profits from perfectly controlled building systems: Users, owners and managers of real estate ... and the environment.

KNX

CONTROL SYSTEMS FOR BUILDINGS, CONSERVATORIES AND PATIO ROOFS

WEATHER SENSORS

ACCESSORIES

CONSERVATORY VENTILATION

VENTILATION UNITS

Air Supply Unit

Ventilation Units for air extraction and recirculation

CONVENTIONAL BUILDING TECHNOLOGY

SENSORS WITH SWITCHING OUTPUT

MOTOR CONTROL UNITS

RECEIVER

RELAYS

POWER SUPPLY UNITS

MODBUS

MODBUS-SENSORS

RS485

RS485-SENSORS

ACCESSORIES

SENSORS FOR CONNECTION TO INPUTS

FOR MOUNTING OF WEATHER STATIONS

SYMBOLS AND THEIR MEANING

Temperature

Sun

Wind

Rain

GPS

Sun position

Humidity

CO_2

Gas

Pressure

Presence

BUILDING AUTOMATION WITH KNX

As the international ISO / IEC 14543-3 standard, KNX is today's worldwide leading open standard for home and building system technology. Solar protection, heating, alarm system, ventilation, lighting or support electronic devices are only examples for the multitude of areas in a building that can be monitored and controlled using KNX. Ideal energy management is possible by networking.

Because all sensors (e.g. brightness sensors) and actuators (e.g. for lights or blinds) are networked via the databus, the system is very amenable to conversion and expansion. How sensors and actuators react with each other (e.g. what inside temperature and what brightness are relevant for an awning) is configured by software and can be changed at any time. Extensions and additions are easy to implement.

The enormous breadth of applications offers unique benefits, not only for the user and home owner, but earlier for planning and installation. The common standard offers almost unlimited networking opportunities; all KNX-certified products are mutually compatible.

Detailed information about KNX, both for investors and for planners and architects is for instance available on www.knx.org.

ROOM CONTROLLERS, OPERATING CONSOLES

Control centres and room controllers form the interface between building technology and user. Contact sensitive screens and intuitively comprehensible menu guidance help to set the integrated controller functions and operate the house systems "with a fingertip". Basic function assignments are set in advance by the integrator in the ETS.

NEW

Cala with black glass / body

Cala with white glass / body

Software version 2.0

N° 70611 Cala KNX T, black
N° 70612 Cala KNX TH, black
N° 70613 Cala KNX AQS / TH, black

N° 70616 Cala KNX T, white
N° 70617 Cala KNX TH, white
N° 70618 Cala KNX AQS / TH, white

CO₂

Figures with frame (not included in delivery)

Room Controller Cala® KNX

- Touch user interface for operation of light, shading, windows, heating, air conditioning and scenes (adjustable)
- User interfaces for up to 3 lamps (switching or dimming with display of the current value)
- Setting page for RGB colour and colour temperature
- User interfaces for up to 3 drives with display of the current movement/slat position
- User interface for temperature setting
- User interface for up to 4 scenes
- Display of measured values; page for bus values
- Threshold values can be set via parameter or object
- Summer compensation for cooling (energy saving function) adjusts the target room temperature to the outdoor temperature
- 8 multifunctional modules change input data by calculations, survey of a condition or transition of the data point type
- 4 actuating variable comparators
- 8 AND and 8 OR logic gates (4 inputs each)
- 4 inputs (binary inputs or for temperature sensor T-NTC, N° 30516, p. 70)
- For wall mounting in a socket
- Awailable in two colors: glass/body black or white
- Dimensions of housing approx. 55 x 55 (W x H, mm), completion with standard 55 mm frame (not included)

- Operating voltage: bus voltage

Cala KNX T
- Temperature sensor with calculation of a mixed value
- PI controller for heating / cooling

Cala KNX TH
- Temperature sensor and humidity sensor with calculation of mixed values, of the dewpoint and monitoring of the comfort field (DIN 1946)
- PI controller for heating / cooling (temperature)
- PI controller for ventilation (CO_2, dehumidification/humidification)

Cala KNX AQS / TH
- CO_2 sensor
- Temperature sensor and humidity sensor with calculation of mixed values, of the dewpoint and monitoring of the comfort field (DIN 1946)
- PI controller for heating / cooling (temperature)
- PI controller for ventilation (CO_2, dehumidification/humidification)

GERMAN DESIGN AWARD SPECIAL 2017

ICONIC AWARDS 2016 product winner

Awards for Cala KNX

Touchpanel ⊞⊓ouch One® Style for Room Automation

- Free configurable display and operation elements
- Graphic weather data display
- Internal automatic functions for shading (sun protection / screen), control of room conditions (heating, cooling, ventilation) and illumination
- Bus functions for time and scene control
- Integrated indoor sensor (temperature, humidity)
- 4 binary inputs (e.g. for push buttons)
- KNX plug connector for data transfer
- Glass front white / grey with 5.7" colour touch display

- Flush or cavity wall mounting (housing for surface mounting available separately)
- Dimensions approx. 181 x 131 (W x H, mm), mounting depth approx. 8 mm, concealed box approx. 172 x 122 x 81 (W x H x D, mm)
- Operating voltage: 12...28 V AC (12...40 V DC)

Optional Accessory
- Remote Controls Remo (p. 44)

Nº 70197
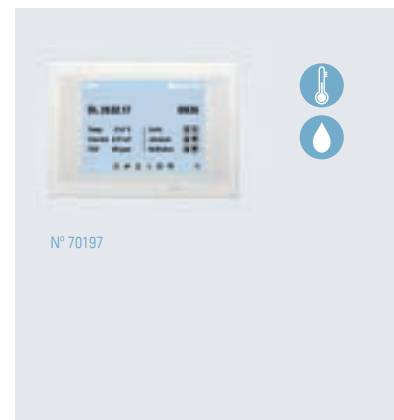
Touchpanel ⊞⊓ouch One® for Room Automation

- Free configurable display and operation elements
- Graphic weather data display
- Internal automatic functions for shading (sun protection / screen), control of room conditions (heating, cooling, ventilation) and illumination
- Bus functions for time and scene control
- Integrated temperature / humidity sensor
- 4 binary inputs (e.g. for push buttons)
- KNX plug connector for data transfer

- Colour touch display 5.7 inches
- Housing plastic white / grey or alu / graphite (partly painted)
- Housing for surface mounting, feeding of cables by a socket
- Approx. 164 x 121 x 29 (W x H x D, mm)
- Operating voltage: 12...28 V AC (12...40 V DC))

Optional Accessory
- Remote Controls Remo (p. 44)

Nº 70195
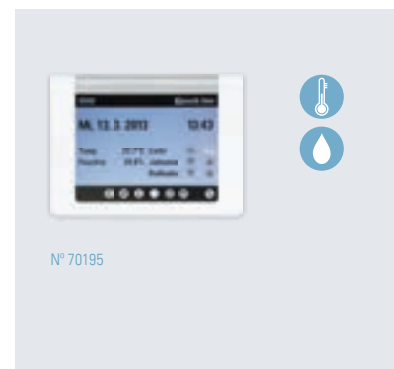
Control System KNX WS1000 Style

- Graphic weather data display
- Internal automatic functions for shading (awning, blind, roller shutter)
- Internal automatic functions for ventilation (windows, fans)
- Internal light control
- Time switch
- KNX plug connector for data transfer
- 32 radio channels for Elsner RF (e.g. relays, dimmers, motor control units, sensors, remote control)
- Supply of weather data via KNX or by direct connection of a weather station (see accessories)
- Display of pictures / slideshow (by SD card)
- Colour touch display 8.4 inches

- Glass front in white / grey
- For wall or cavity wall mounting
- Approx. 270 x 185 (W x H, mm), mounting depth approx. 9 mm, concealed box approx. 254 x 171 x 85 (W x H x D, mm)
- Operating voltage: 230 V AC

Optional Accessory
- Weather station P04i-GPS (p. 50)
- Radio Relays RF Relay and Motor Control Units (p. 47)
- Radio Ventilation WL-Z, WL400, WL800 (p. 54)
- Radio Temperature Sensor WGT and Thermo / Hygrometer WGTH-UP (p. 49)
- Remote Controls Remo (p. 44)

Nº 70193
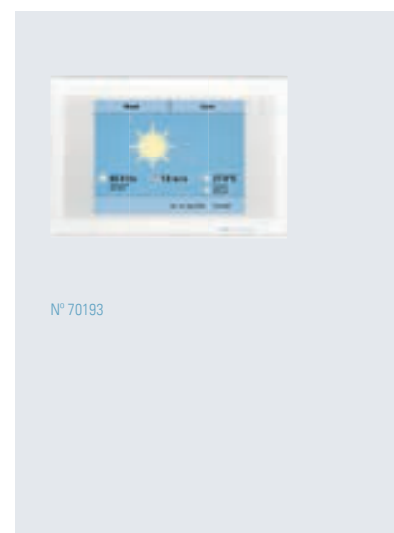
KNX Interface for WS1000 Color / Style

- Use of Control System data in the KNX system (e.g. weather data)
- Automatic functions of the WS1000 can control drives in the KNX system and request sensor data from the bus

- Interface and KNX connector are plugged onto the board of the control system
- Board approx. 53 x 7 x 30 (W x H x D, mm)
- For WS1000 Color and WS1000 Style as of version 1.45, already integrated in model KNX WS1000 Style

Nº 70190

German Design Award
NOMINEE 2014

iF product design award 2014

interior innovation award 2014
Selection

reddot award 2014 winner

PLUS X AWARD
ausgezeichnet als:
BESTES PRODUKT
2016/2017

PLUS X AWARD
2016 ausgezeichnet für:
High Quality
Design
Bedienkomfort
Funktionalität

Awards
System
Corlo

SYSTEM CORLO

Real glass surfaces make the touch displays, push buttons and power outlets of system Corlo a highlight of high class interiors. All devices of the system are installed in a standard socket. Apart from the available frame colours, custom colours for an individual interior design are possible – please ask for further information! Your colour concept can be further customised with the Corlo Touch's variable ambient lighting.

Chrome glossy black,
in 1-gang frame,
ambient lighting
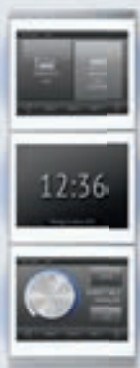
Chrome matt, white
in 3-gang frame

Corlo Touch KNX
N° 70258   white / chrome glossy
N° 70259   black / chrome glossy
N° 70260   white / chrome matt
N° 70261   black / chrome matt
N° 70336   white / white matt
N° 70337   black / black matt

Corlo Touch KNX WL
N° 70252   white / chrome glossy
N° 70253   black / chrome glossy
N° 70254   white / chrome matt
N° 70255   black / chrome matt
N° 70334   white / white matt
N° 70335   black / black matt

Figures with frame (not included in delivery)

Corlo Touch KNX Room Controller, Touch Switch and Display for KNX

- The display can be used as a touch switch, for automatic settings and as an info screen
- Brilliant 3.5" screen with touch sensitive glass surface
- 10 display pages can be configured individually, with areas for operation and display (e.g. switch, rocker, rotary control and value display)
- Includes large set of icons. You can load your own icons from Micro-SD Card
- Ambient lighting with individually variable colours (RGB)
- Proximity sensor allows switching on approach and fast activation of the display from standby mode
- Brightness sensor for automatic adaption of the display lighting
- Internal automatic functions for ventilation, shading (solar / visual protection), room climate control (heating, cooling) and light
- Internal scene control, timer and wake-up function
- KNX connection for data transfer

- 4 AND and 4 OR logic gates (each with 4 inputs, output in each case 1 bit / 2×8 bits)
- 4 inputs (as binary inputs or for temperature sensor), connection line available separately
- Micro SD card slot as storage for image data.
- Glass white or black, edge matt / glossy chromed (custom colours on request), white / black matt coated
- Mounting with Frame Corlo in socket
- Approx. 80 × 71 × 49 (W × H × D, mm), mounting depth approx. 12.5 mm
- Operating voltage: 24 V DC ±10%
- **Corlo Touch KNX WL model:** WLAN-interface allows e.g. smartphone control, display of web pages, visualizations and IP camera images

Optional Accessory
- T-NTC temperature sensor (p. 70)

CORLO APP
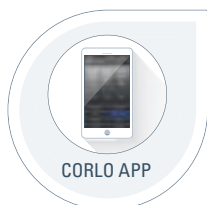
The Corlo Mobile App for Corlo Touch KNX WL allows you to make all of the settings via smartphone or tablet PC. The app can be downloaded for Apple iOS or Android.

Corlo Touch KNX Room Controller, Touch Switch and Display for KNX 5in

- The display can be used as a touch switch, for automatic settings and as an info screen
- The brilliant 5" screen with touch sensitive glass surface
- 10 display pages can be configured individually, with areas for operation and display (e.g. switch, rocker, rotary control and value display)
- Includes large set of icons. You can load your own icons from Micro-SD Card
- Ambient lighting with individually variable colours (RGB)
- Proximity sensor allows switching on approach and fast activation of the display from standby mode
- Brightness sensor for automatic adaption of the display lighting
- Internal automatic functions for ventilation, shading (solar / visual protection), room climate control (heating, cooling) and light

- Internal scene control, timer and wake-up function
- KNX connection for data transfer
- 4 AND and 4 OR logic gates (each with 4 inputs, output in each case 1 bit / 2×8 bits)
- 4 inputs (as binary inputs or for temperature sensor), connection lines available separately
- Micro SD card slot, as storage for image data.
- Glass black, frame glossy black
- Mounting on socket
- Approx. $133 \times 97 \times 35$ (W × H × D, mm), mounting depth approx. 20 mm
- Operating voltage: 24 V DC ±10%
- **Corlo Touch KNX 5in WL model:** WLAN-interface allows e.g. smartphone control, display of web pages, visualizations and IP camera images

Optional Accessory

T-NTC temperature sensor (p. 70)

NEW

Corlo Touch KNX 5in
Nº 70481 black / black

Corlo Touch KNX 5in WL
Nº 70475 black / black

reddot award 2017 winner

Corlo Push Buttons M-T

- Glass white or black, edge matt / glossy chromed or white / black matt coated
- Available as single push button Corlo M1-T and as double push button Corlo M2-T
- Integrated temperature sensor T-NTC
- Mounting with Frame Corlo in socket
- Approx. $80 \times 71 \times 12.5$ (W × H × D, mm)

- Solar wireless push buttons (p. 45)

Corlo Push Buttons M1-T

Nº 70282	White / chrome glossy	Nº 70285	Black / chrome matt
Nº 70283	Black / chrome glossy	Nº 70338	White / white matt
Nº 70284	White / chrome matt	Nº 70339	Black / black matt

Corlo Push Buttons M2-T

Nº 70286	White / chrome glossy	Nº 70289	Black / chrome matt
Nº 70287	Black / chrome glossy	Nº 70340	White / white matt
Nº 70288	White / chrome matt	Nº 70341	Black / black matt

Figures with frame (not included in delivery)

Corlo Power Outlet

- White or black glass, matt / glossy chromed edge or white / black matt coated
- Integrated increased contact protection
- Mounting with Frame Corlo Plan in socket

- Approx. $80 \times 71 \times 12.5$ (W × H × D, mm)

Corlo Power Outlet

Nº 70318	White / chrome glossy	Nº 70331	Black / chrome matt
Nº 70319	Black / chrome glossy	Nº 70332	White / white matt
Nº 70330	White / chrome matt	Nº 70333	Black / black matt

Figures with frame (not included in delivery)

Corlo Cover for LAN Connection Box

- For a dual-port network connection box
- Glas white or black, matt / glossy chromed edge or white / black matt coated
- Mounting with Frame Corlo and suitable network connection unit in a socket

- Approx. $80 \times 71 \times 12.5$ (W × H × D, mm)

Corlo Cover for LAN Box

Nº 70421	White / chrome glossy	Nº 70424	Black / chrome matt
Nº 70422	Black / chrome glossy	Nº 70425	White / white matt
Nº 70423	White / chrome matt	Nº 70426	Black / black matt

Frame Corlo

- 1-gang approx. 80 x 81, 2-gang approx. 80 x 153, 3-gang approx. 80 x 224 (W x H, mm), mounting depth approx. 12.5 mm
- Chrome-diecast, glass white or black, edge matt / glossy chromed or white / black matt coated (custom colours on request)
- Frame Corlo for Corlo Touch KNX (WL), Corlo Power Outlet and Corlo Push Button M-T

Frame Corlo chrome glossy

Nº 70264	1-gang
Nº 70265	2-gang
Nº 70266	3-gang

Frame Corlo chrome matt

Nº 70267	1-gang
Nº 70268	2-gang
Nº 70269	3-gang

Frame Corlo white matt

Nº 70346	1-gang
Nº 70347	2-gang
Nº 70348	3-gang

Frame Corlo black matt

Nº 70410	1-gang
Nº 70411	2-gang
Nº 70412	3-gang

Frame Corlo chrome matt

German Design Award
WINNER 2015

Focus Open 2014
Special Mention

Awards for Suntracer KNX sl
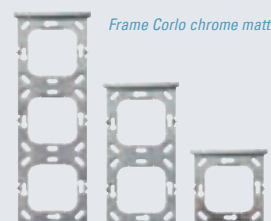
KNX WEATHER SENSORS

The weather stations and sensors provide the current meteorological data for KNX networks. The compact devices use the latest, innovative sensor technology: The electronic **wind sensors** work noiselessly and reliably, even during hail, snow and subzero temperatures. Turbulent air and anabatic winds in the vicinity of the weather station are recorded, too.

The **brightness sensors** used in the devices not only recognize sunlight, but also twilight. For this, filters simulate the sensitivity spectrum of the human eye.

The measuring surfaces of the **precipitation sensors** are heated, so that humidity dries immediately. On the one hand, this prevents false reports caused by fog or dew. On the other hand, the sensor recognizes quickly when it has stopped to rain or snow.

The **GPS receivers** in the devices deliver the local time for calender and week time switch worldwide. At the same time, the data is a basis for a shading control, determined by the position of the sun.

Weather Stations suntracer® KNX sl

N° 70154 Suntracer KNX sl
N° 70155 Suntracer KNX sl light
N° 70156 Suntracer KNX sl basic

- Temperature sensor (-30…+50°C)
- Brightness sensor (0…150 000 lx)
- Wind speed sensor
- Heated precipitation sensor
- Threshold values can be set by parameter or object
- 8 AND and 8 OR logic gates (4 inputs each)
- 8 multifunctional modules change input data by calculations, survey of a condition or transition of the data point type
- Frost protection for shading elements
- Housing for surface mounting, IP 44, white / translucent
- Approx. 62 x 71 x 145 (W x H x D, mm)
- Operating voltage: 12-40 V DC (12-28 V AC)

Suntracer KNX sl
- Air pressure sensor 300-1100 hPa
- GPS receiver: output of local time and position coordinates, calculation of the position of the sun, e.g. for tracking of shading elements and photovoltaic modules

- Calendar time switch (4 annual terms with 2 daily periods), week time switch (24 periods)
- Shading control for 8 fronts with tracking of the slats and shadow edge and with frost protection
- Summer compensation for cooling (energy saving function) adjusts the room target temperature to the outdoor temperature

Suntracer KNX sl light
- GPS receiver: output of local time and position coordinates
- Calculation of the position of the sun
- Shading control for 5 fronts without tracking of the slats and shadow edge
- Calendar time switch (4 annual terms with 2 daily periods), week time switch (24 periods)
- Summer compensation for cooling (energy saving function) adjusts the room target temperature to the outdoor temperature

Suntracer KNX sl basic:
- Without GPS receiver and time functions
- No automatic shading control

Wind Sensor KNX W sl

- Wind speed sensor
- 3 threshold values can be set via parameter or object
- 8 modules for calculation, conditions, transition
- 8 AND and 8 OR logic gates (4 inputs each)

- Housing for surface mounting, IP 44, white/translucent
- Approx. 62 x 71 x 145 (W x H x D, mm)
- Operating voltage: 12-40 V DC (12-28 V AC)

N° 70158 KNX W sl

Rain/Wind Sensor KNX RW sl

- Wind speed sensor
- Heated precipitation sensor
- 4 bus switching outputs, 3 adjustable threshold values
- 8 modules for calculation, conditions, transition

- 8 AND and 8 OR logic gates (4 inputs each)
- Housing for surface mounting, IP 44, white/translucent
- Approx. 62 x 71 x 145 (W x H x D, mm)
- Operating voltage: 12-40 V DC (12-28 V AC)

N° 70162 KNX RW sl

Brightness/Wind Sensor KNX LW sl

- Brightness sensor (0…150 000 lx)
- Wind speed sensor
- 9 threshold values can be set via parameter or object
- 8 modules for calculation, conditions, transition
- 8 AND and 8 OR logic gates (4 inputs each)

- Housing for surface mounting, IP 44, white/translucent
- Approx. 62 x 71 x 145 (W x H x D, mm)
- Operating voltage: 12-40 V DC (12-28 V AC)

N° 70164 KNX LW sl

Weather Stations suntracer® KNX

- Temperature sensor (-30…+50°C)
- 1 brightness sensor (0…150 000 lx)
- Wind speed sensor
- Precipitation sensor with 1.2 watt heating
- Calendar time switch (3 annual terms with 2 daily periods), week time switch (4 daily periods)
- Threshold values can be set via parameter or object
- 8 AND and 8 OR logic gates (4 inputs each)
- Housing for surface mounting, IP 44, white/translucent
- Approx. 96 x 77 x 118 (W x H x D, mm)

Suntracer KNX-GPS:
- GPS receiver
- Calculation of the position of the sun e.g. for tracking of shading elements and photovoltaic modules

- Shading control for 6 fronts with tracking of the slats and shadow edge
- Operating voltage: 12-40 V DC (12-28 V AC)

Suntracer KNX-GPS light:
- GPS receiver
- Calculation of the position of the sun
- Shading control for 5 fronts without tracking of the slats and shadow edge
- Operating voltage: available for 230 V AC or for 12-40 V DC (12-28 V AC)

Suntracer KNX basic:
- No GPS receiver, no time function
- No automatic shading control
- Operating voltage: available for 230 V AC or for 12-40 V DC (12-28 V AC)

N° 3093 Suntracer KNX-GPS

N° 3094 Suntracer KNX-GPS light
12-40 V DC (12-28 V AC)

N° 3090 Suntracer KNX-GPS light
230 V AC

N° 3096 Suntracer KNX basic
12-40 V DC (12-28 V AC)

N° 3095 Suntracer KNX basic
230 V AC

Wind Sensor KNX W

- Wind speed sensor
- 3 threshold values can be set via parameter or object
- 8 AND and 8 OR logic gates (4 inputs each)
- Housing for surface mounting, IP 44, white/translucent

- Approx. 96 x 77 x 118 (W x H x D, mm)
- Operating voltage: available for 230 V AC or for 12…40 V DC/12…28 V AC

N° 70122
(230 V AC)

N° 70123
(12…40 V DC)

Rain / Wind Sensor KNX RW

N° 70126
(230 V AC)

N° 70127
(12...40 V DC)

- Wind speed sensor
- Precipitation sensor with 1.2 watt heating
- 4 bus switching outputs, 3 adjustable threshold values
- 8 AND and 8 OR logic gates (4 inputs each)

- Housing for surface mounting, IP 44, white/translucent
- Approx. 96 x 77 x 118 (W x H x D, mm)
- Operating voltage: available for 230 V AC 12...40 V DC / 12...28 V AC

Brightness / Wind Sensor KNX LW

N° 70128
(230 V AC)

N° 70129
(12...40 V DC)

- 1 brightness sensor (0...150 000 lx)
- Wind speed sensor
- 9 threshold values can be set via parameter or object
- 8 AND and 8 OR logic gates (4 inputs each)

- Housing for surface mounting, IP 44, white/translucent
- Approx. 96 x 77 x 118 (W x H x D, mm)
- Operating voltage: available for 230 V AC or for 12...40 V DC / 12...28 V AC

Brightness Sensor KNX L

N° 70119

- 1 brightness sensor (0...150 000 lx)
- 3 threshold values for day, 3 threshold values for twilight / night
- 8 AND and 8 OR logic gates (4 inputs each)

- Housing for surface mounting, IP 44, white/translucent
- Approx. 96 x 77 x 118 (W x H x D, mm)
- Operating voltage: bus voltage

Global Irradiance Sensor KNX PY

N° 70157

- Global irradiance sensor (Pyranometer)
- Output of radiation intensity in watts per squaremeter (0...2500 W/m2) or kilowatt hours per squaremeter (0...2196 kWh/m2)
- 4 threshold values can be set via parameter or object

- 2 AND and 2 OR logic gates (4 inputs each)
- Housing for surface mounting, IP 44, white/translucent
- Approx. 96 x 77 x 118 (W x H x D, mm)
- Operating voltage: bus voltage

GPS Receiver Vari KNX GPS

GPS

N° 70387

- Output of current time and position coordinates, calculation of the solar position
- Calendar time switch (4 annual terms with 2 daily periods), week time switch (24 periods)

- For outdoor use
- Housing for surface mounting, IP 44
- Approx. 65 x 80 x 30 (W x H x D, mm)
- Operating voltage: bus voltage

German Design Award WINNER 2015

iF DESIGN AWARD 2015

Focus Open 2014 Silver

GERMAN DESIGN AWARD SPECIAL 2016

Awards for Vari KNX

KNX OUTDOOR SENSORS

The outdoor sensors are suitable for outdoor use because of their sturdy housing and protection category. But they can also be used indoors, like in production facilities. The automatic functions and controllers of the devices are configured by means of the ETS. The different types of sensors offer various additional innovative functions.

Multifunctional modules change input data by calculations, survey of a condition or transition of the data point type. The output of **logic gates** can be set to 1 bit or 2 x 8 bit, according to your needs.

Brightness Sensor Vari KNX 3L

- 3 brightness sensors (maximum or mixed value)
- 20 threshold values can be set via parameter / object
- 8 modules for calculation, conditions, transition
- 8 AND and 8 OR logic gates (4 inputs each)

- For indoor and outdoor application
- Housing for surface mounting, IP 44
- Approx. 65 x 80 x 30 (W x H x D, mm)
- Operating voltage: bus voltage

Nº 70382 Vari KNX 3L

Temperature Sensor Vari KNX T

- Temperature sensor with calculation of a mixed value
- PI controller for heating / cooling
- Summer compensation
- 4 threshold values can be set via parameter or object
- 8 modules for calculation, conditions, transition

- 8 AND and 8 OR logic gates (4 inputs each)
- For indoor and outdoor application
- Housing for surface mounting, IP 44
- Approx. 65 x 80 x 30 (W x H x D, mm)
- Operating voltage: bus voltage

Nº 70385 Vari KNX T

Combined Sensor Vari KNX TH

- Temperature sensor and humidity sensor with calculation of mixed values, of the dewpoint and monitoring of the comfort field (DIN 1946)
- PI controller for heating / cooling (temperature)
- Summer compensation
- PI controller for ventilation (dehum./humidification)
- 8 threshold values can be set via parameter or object

- 8 modules for calculation, conditions, transition
- 4 actuating variable comparators
- 8 AND and 8 OR logic gates (4 inputs each)
- For indoor and outdoor application
- Housing for surface mounting, IP 44
- Approx. 65 x 80 x 30 (W x H x D, mm)
- Operating voltage: bus voltage

Nº 70386 Vari KNX TH
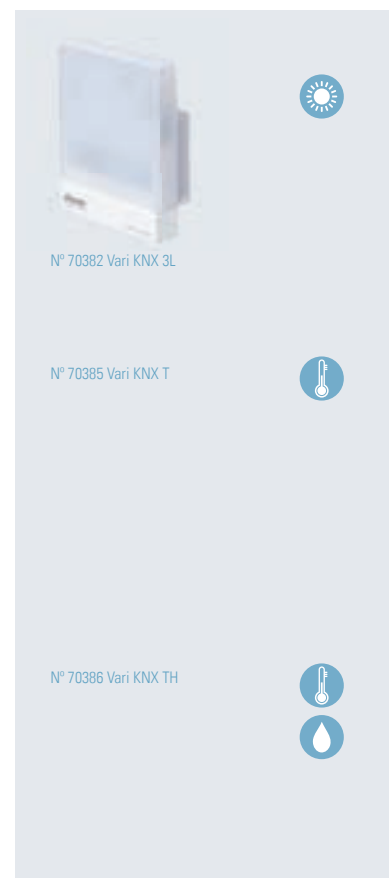
Combined Sensor Vari KNX TH-D

N° 70388 Vari KNX TH-D

- Temperature sensor and humidity sensor with calculation of mixed values, of the dewpoint and monitoring of the comfort field (DIN 1946)
- Air pressure sensor
- PI controller for heating / cooling (temperature)
- Summer compensation
- PI controller for ventilation (dehum. / humidification)
- 12 threshold values can be set via parameter / object

- 8 modules for calculation, conditions, transition
- 4 actuating variable comparators
- 8 AND and 8 OR logic gates (4 inputs each)
- For indoor and outdoor application
- Housing for surface mounting, IP 44
- Approx. 65 x 80 x 30 (W x H x D, mm)
- Operating voltage: bus voltage

Combined Sensor Vari KNX 3L-T

N° 70383 Vari KNX 3L-T

- 3 brightness sensors (maximum or mixed value)
- Temperature sensor with calculation of a mixed value
- PI controller for heating / cooling (temperature)
- Summer compensation
- 24 threshold values can be set via parameter / object

- 8 modules for calculation, conditions, transition
- 8 AND and 8 OR logic gates (4 inputs each)
- For indoor and outdoor application
- Housing for surface mounting, IP 44
- Approx. 65 x 80 x 30 (W x H x D, mm)
- Operating voltage: bus voltage

Combined Sensor Vari KNX 3L-TH

N° 70384 Vari KNX 3L-TH

- 3 brightness sensors (maximum or mixed value)
- Temperature sensor and humidity sensor with calculation of mixed values, of the dewpoint and monitoring of the comfort field (DIN 1946)
- PI controller for heating / cooling (temperature)
- Summer compensation
- PI controller for ventilation (dehum. / humidification)
- 28 threshold values can be set via parameter / object

- 8 modules for calculation, conditions, transition
- 4 actuating variable comparators
- 8 AND and 8 OR logic gates (4 inputs each)
- For indoor and outdoor application
- Housing for surface mounting, IP 44
- Approx. 65 x 80 x 30 (W x H x D, mm)
- Operating voltage: bus voltage

Combined Sensor Vari KNX 3L-TH-D

N° 70389 Vari KNX 3L-TH-D

- 3 brightness sensors (maximum or mixed value)
- Temperature sensor and humidity sensor with calculation of mixed values, of the dewpoint and monitoring of the comfort field (DIN 1946)
- Air pressure sensor
- PI controller for heating / cooling (temperature)
- Summer compensation
- PI controller for ventilation (dehum. / humidification)

- 8 modules for calculation, conditions, transition
- 4 actuating variable comparators
- 32 threshold values can be set via parameter / object
- 8 AND and 8 OR logic gates (4 inputs each)
- For indoor and outdoor application
- Housing for surface mounting, IP 44
- Approx. 65 x 80 x 30 (W x H x D, mm)
- Operating voltage: bus voltage

Combined Sensor Vari KNX 3L-TH-D GPS

N° 70390 Vari KNX 3L-TH-D GPS

- 3 brightness sensors (maximum or mixed value)
- Temperature sensor and humidity sensor with calculation of mixed values, of the dewpoint and monitoring of the comfort field (DIN 1946)
- Air pressure sensor
- GPS receiver: output of current time and position coordinates, calculation of the solar position
- Calendar time switch (4 annual terms with 2 daily periods), week time switch (24 periods)
- PI controller for heating / cooling (temperature)

- Summer compensation
- PI controller for ventilation (dehum. / humidification)
- 8 modules for calculation, conditions, transition
- 4 actuating variable comparators
- 32 threshold values can be set via parameter / object
- 8 AND and 8 OR logic gates (4 inputs each)
- For outdoor use
- Housing for surface mounting, IP 44
- Approx. 65 x 80 x 30 (W x H x D, mm)
- Operating voltage: bus voltage

Temperature Sensor KNX T-AP

- Temperature Sensor (-30…+80°C)
- For indoor and outdoor application
- Calculation of mixed values
- PI controller for heating / cooling

- 4 threshold values can be set via parameter or object
- 4 AND and 4 OR logic gates (4 inputs each)
- Housing for surface mounting, IP 65, grey
- Approx. 65 x 93 x 38 (W x H x D, mm)

N° 70121

Temperature / Humidity Sensor KNX TH65-AP

- Temperature sensor (-25...+80°C)
- Humidity sensor (0% RH … 100% RH)
- For indoor and outdoor application
- Calculation of mixed values
- Monitoring of the comfort field (DIN 1946)
- PI controller for heating / cooling (temperature)

- PI controller for ventilation (dehum. / humidification)
- 7 threshold values can be set via parameter or object
- 4 AND and 4 OR logic gates (4 inputs each)
- Housing for surface mounting, IP 65, grey
- Approx. 65 x 93 x 38 (W x H x D, mm)
- Operating voltage: bus voltage

N° 70184

Ground Sensors with KNX I4-ERD Evaluation Unit

- For monitoring ground temperature and moisture content
- Evaluation unit for up to 4 ground sensors
- 2 threshold values for moisture and temperature per sensor

KNX I4-ERD Evaluation Unit
- 6 units series installation housing, white, approx. 107 x 88 x 60 (W x H x D, mm)

- Operating voltage: 230 V AC

TH-ERD Ground Sensor
- For KNX I4-ERD
- Temperature measurement (-55...125°C)
- Moisture measurement (possible measurement in a temperature range of -10...70°C)
- Approx. 32 x 220 x 10 (W x H x D, mm), cable length approx. 10 m, may be extended to 100 m

N° 70312

N° 70310
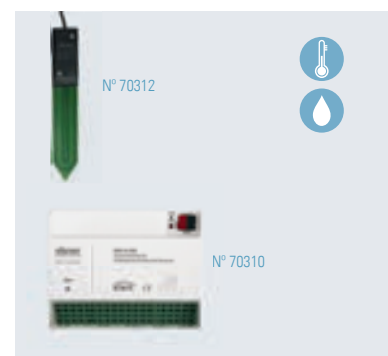
Tank Sensor KNX SO250

- For recording the liquid level in tanks or for distance measurement
- Ultrasound probe (measurement range 12 to 250 cm)
- Setting via ETS (e.g. tank geometry, level)
- 5 threshold values can be set via parameter or object (data output via KNX bus terminal)
- Ultrasound measuring probe, black, Ø approx. 60 mm, height approx. 45 mm, 1½" thread
- Suitable for water and heating oil
- 10 m lead

KNX SO250
- Evaluation unit with display (e.g. for displaying level / distance) and keypad
- 2 additional output relays (setting via keypad)
- Evaluation unit for series installation, 7 units, white, approx. 123 x 89 x 61 (W x H x D, mm)
- Operating voltage: 230 V AC

KNX SO250 basic
- Evaluation unit for series installation, 3U, white, approx. 53 x 88 x 60 (W x H x D, mm)
- Operating voltage: bus voltage

N° 70151 KNX SO250

N° 70153 KNX SO250 basic

Ultrasound probe

KNX INDOOR SENSORS

The indoor sensors monitor the ambient climate. The sensors can process **mixed values** (e.g. room average). For this purpose values of other sensors are received via the bus and mixed with the own measured values (percentage can be adjusted). The thermohygrometers additionally calculate the **dew point** and recognize, whether the measured values conform to the comfort field (DIN 1946).

All devices have integrated PI controllers for one- or two-stage control and are configured by means of the ETS. In temperature sensors the **summer compensation** for cooling can adjust the room target temperature to the outdoor temperature via a characteristic curve. Thereby, the energy consumption of the air-conditioning system can be reduced.

N° 70392 Sewi KNX T

Temperature Sensor Sewi® KNX T

- Temperature sensor with calculation of a mixed value
- PI controller for heating / cooling (temperature)
- Summer compensation
- Threshold values can be set via parameter or object
- 8 modules for calculation, conditions, transition
- 4 actuating variable comparators
- 8 AND and 8 OR logic gates (4 inputs each)
- For indoor application
- Housing for surface mounting, IP 30
- Diameter approx. 105 mm, height 32 mm
- Operating voltage: bus voltage

N° 70393 Sewi KNX TH

Temperature / Humidity Sensor Sewi KNX TH

- Temperature sensor and humidity sensor with calculation of mixed values, of the dewpoint and monitoring of the comfort field (DIN 1946)
- PI controller for heating / cooling (temperature)
- Summer compensation
- PI controller for ventilation (dehum. / humidification)
- Switching outputs with limit values
- 8 modules for calculation, conditions, transition
- 4 actuating variable comparators
- 8 AND and 8 OR logic gates (4 inputs each)
- For indoor application
- Housing for surface mounting, IP 30
- Diameter approx. 105 mm, height 32 mm
- Operating voltage: bus voltage

N° 70394 Sewi KNX AQS

Air Quality Sensor Sewi KNX AQS

- CO_2 sensor
- PI controller for ventilation
- Threshold values can be set via parameter or object
- 8 modules for calculation, conditions, transition
- 4 actuating variable comparators
- 8 AND and 8 OR logic gates (4 inputs each)
- For indoor application
- Housing for surface mounting, IP 30
- Diameter approx. 105 mm, height 32 mm
- Operating voltage: bus voltage

Brightness Sensor Sewi® KNX L

- Brightness sensor
- Threshold values can be set via parameter or object
- 8 modules for calculation, conditions, transition
- 8 AND and 8 OR logic gates (4 inputs each)

- For indoor application
- Housing for surface mounting, IP 30
- Diameter approx. 105 mm, height 32 mm
- Operating voltage: bus voltage

Nº 70395 Sewi KNX L

Room Climate Sensor Sewi® KNX AQS/TH-D

Nº 70397 Sewi KNX AQS/TH-D

- Temperature sensor and humidity sensor with calculation of mixed values, of the dewpoint and monitoring of the comfort field (DIN 1946)
- CO_2 sensor
- Air pressure sensor
- PI controller for heating/cooling (temperature)
- Summer compensation
- PI controller for ventilation (CO_2, dehumidification/ humidification)

- Threshold values can be set via parameter or object
- 8 modules for calculation, conditions, transition
- 4 actuating variable comparators
- 8 AND and 8 OR logic gates (4 inputs each)
- For indoor application
- Housing for surface mounting, IP 30
- Diameter approx. 105 mm, height 32 mm
- Operating voltage: bus voltage

Presence/Brightness Sensor Sewi® KNX L-Pr

- Brightness sensor
- Presence detector (angle of detection 100° × 82°, range 5 m)
- Threshold values can be set via parameter or object
- 8 modules for calculation, conditions, transition

- 8 AND and 8 OR logic gates (4 inputs each)
- For indoor application
- Housing for surface mounting, IP 30
- Diameter approx. 105 mm, height 32 mm
- Operating voltage: bus voltage

Nº 70396 Sewi KNX L-Pr

Presence/Room Climate Sensor Sewi® KNX TH L-Pr

Nº 70398 Sewi KNX TH L-Pr

- Brightness sensor
- Presence detector (angle of detection 100° × 82°, range 5 m)
- Temperature sensor and humidity sensor with calculation of mixed values, of the dewpoint and monitoring of the comfort field (DIN 1946)
- PI controller for heating/cooling (temperature)
- Summer compensation
- PI controller for ventilation (CO_2, dehumidification/ humidification)

- Threshold values can be set via parameter or object
- 8 modules for calculation, conditions, transition
- 4 actuating variable comparators
- 8 AND and 8 OR logic gates (4 inputs each)
- For indoor application
- Housing for surface mounting, IP 30
- Diameter approx. 105 mm, height 32 mm
- Operating voltage: bus voltage

Presence/Room Climate Sensor Sewi® KNX AQS/TH-D L-Pr

Nº 70399 Sewi KNX AQS/TH-D L-Pr

- Brightness sensor
- Presence detector (angle of detection 100° × 82°, range 5 m)
- Temperature sensor and humidity sensor with calculation of mixed values, of the dewpoint and monitoring of the comfort field (DIN 1946)
- CO_2 sensor
- Air pressure sensor
- PI controller for heating/cooling (temperature)
- Summer compensation

- PI controller for ventilation (CO_2, dehumidification/ humidification)
- Threshold values can be set via parameter or object
- 8 modules for calculation, conditions, transition
- 4 actuating variable comparators
- 8 AND and 8 OR logic gates (4 inputs each)
- For indoor application
- Housing for surface mounting, IP 30
- Diameter approx. 105 mm, height 32 mm
- Operating voltage: bus voltage

GERMAN DESIGN AWARD SPECIAL 2016

iF DESIGN AWARD 2016

Focus Open 2015 Special Mention

Awards Sewi KNX

NEW

N° 70400 Mini-Sewi KNX T

Temperature Sensor Mini-Sewi® KNX T

- Temperature sensor with calculation of mixed values
- PI controller for heating / cooling (temperature)
- Threshold values can be set via parameter or object
- 2 actuating variable comparators
- 4 AND and 4 OR logic gates (4 inputs each)

- For indoor application
- Housing for surface mounting, IP 20
- Diameter approx. 51 mm, height 19 mm
- Operating voltage: bus voltage

NEW

N° 70401 Mini-Sewi KNX TH

Room Climate Sensor Mini-Sewi® KNX TH

- Temperature sensor and humidity sensor with calculation of mixed values, of the dewpoint and monitoring of the comfort field (DIN 1946)
- PI controller for heating / cooling (temperature)
- PI controller for ventilation (dehumidification/humidification)
- Threshold values can be set via parameter or object

- 2 actuating variable comparators
- 4 AND and 4 OR logic gates (4 inputs each)
- For indoor application
- Housing for surface mounting, IP 20
- Diameter approx. 51 mm, height 19 mm
- Operating voltage: bus voltage

NEW

N° 70402 Mini-Sewi KNX TH-Pr

Presence / Room Climate Sensor Mini-Sewi® KNX TH-Pr

- Presence detector (angle of detection 100° × 82°, range 5 m)
- Temperature sensor and humidity sensor with calculation of mixed values, of the dewpoint and monitoring of the comfort field (DIN 1946)
- PI controller for heating / cooling (temperature)
- PI controller for ventilation (dehumidification/humidification)

- Threshold values can be set via parameter or object
- 2 actuating variable comparators
- 4 AND and 4 OR logic gates (4 inputs each)
- For indoor application
- Housing for surface mounting, IP 20
- Diameter approx. 51 mm, height 19 mm
- Operating voltage: bus voltage

NEW

N° 70660 Intra-Sewi KNX T, white
N° 70665 Intra-Sewi KNX T, black

Room Climate Sensor Intra-Sewi® KNX T

- Temperature sensor with calculation of mixed values
- PI controller for heating / cooling (temperature)
- Threshold values can be set via parameter or object
- 2 actuating variable comparators
- 4 AND and 4 OR logic gates (4 inputs each)
- For indoor application
- Available in 2 colours: Signal white (RAL 9003), Deep black (RAL 9005)

- Installation in cavity wall/ceiling or socket
- Diameter approx. 80 mm, mounting depth approx. 5 mm
- Operating voltage: bus voltage

NEW

N° 70661 Intra-Sewi KNX TH, white
N° 70666 Intra-Sewi KNX TH, black

Room Climate Sensor Intra-Sewi® KNX TH

- Temperature sensor and humidity sensor with calculation of mixed values, of the dewpoint and monitoring of the comfort field (DIN 1946)
- PI controller for heating / cooling (temperature)
- PI controller for ventilation (dehumidification/humidification)
- Threshold values can be set via parameter or object
- 2 actuating variable comparators

- 4 AND and 4 OR logic gates (4 inputs each)
- For indoor application
- Available in 2 colours: Signal white (RAL 9003), Deep black (RAL 9005)
- Installation in cavity wall/ceiling or socket
- Diameter approx. 80 mm, mounting depth approx. 5 mm
- Operating voltage: bus voltage

Presence / Room Climate Sensor Intra-Sewi® KNX TH-Pr

- Presence detector (angle of detection 100° × 82°, range 5 m)
- Temperature sensor and humidity sensor with calculation of mixed values, of the dewpoint and monitoring of the comfort field (DIN 1946)
- PI controller for heating / cooling (temperature)
- PI controller for ventilation (dehumidification/humidification)
- Threshold values can be set via parameter or object

- 2 actuating variable comparators
- 4 AND and 4 OR logic gates (4 inputs each)
- For indoor application
- Available in 2 colours: Signal white (RAL 9003), Deep black (RAL 9005)
- Installation in cavity wall/ceiling or socket
- Diameter approx. 80 mm, mounting depth approx. 5 mm
- Operating voltage: bus voltage

N° 70662 Intra-Sewi KNX TH-Pr, white
N° 70667 Intra-Sewi KNX TH-Pr, black

Presence Sensor Intra-Sewi® KNX Pr

- Presence detector (angle of detection 100° × 82°, range 5 m)
- 4 AND and 4 OR logic gates (4 inputs each)
- For indoor application
- Available in 2 colours: Signal white (RAL 9003), Deep black (RAL 9005)
- Installation in cavity wall/ceiling or socket

- Diameter approx. 80 mm, mounting depth approx. 5 mm
- Operating voltage: bus voltage

N° 70663 Intra-Sewi KNX Pr, white
N° 70668 Intra-Sewi KNX Pr, black

KNX B8-TH Interface

- 8 binary inputs
- 1 sensor input for temperature sensor T-NTC-ST
- 1 sensor input for temperature sensor T-UP basic or temperature / humidity sensor TH-UP basic
- Approx. 38 x 49 x 18 (W x H x D, mm)

T-NTC-ST
- Sensor for indoor and outdoor applications
- Measurement range -35°C...+100°C
- Length of sensor sleeve approx. 32 mm, Ø ca. 6 mm
- Cable length ca. 300 cm

T-UP basic
- Temperature indoor sensor
- For wall mounting in a socket (55 mm switch series)

TH-UP basic
- Temperature / humidity indoor sensor
- For wall mounting in a socket (55 mm switch series)

N° 70249 KNX B8-TH

N° 30513 T-NTC-ST

N° 30520 T-UP basic
N° 30525 TH-UP basic
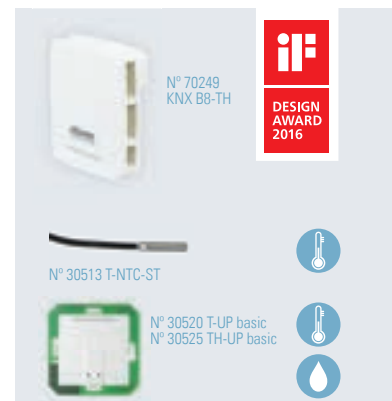
Temperature sensors KNX T-UN

- Temperature sensor
- Extremely small sensor tip for use as a contact or feed probe for in- and outdoor applications, separate evaluation unit
- Calculation of mixed values
- PI controller for heating / cooling
- 4 AND and 4 OR logic gates (4 inputs each)
- Dimensions evaluation unit approx. 38 x 47 x 24 (W x H x D, mm). Cable length approx. 300 cm
- Operating voltage: bus voltage

KNX T-UN 130
- Set of evaluation unit and sensor T-130
- 4 threshold values can be set via parameter or object

- Measurement range -30°C to +130°C
- Measuring sensor protection class: IP 68
- Length of sensor shell approx. 20 mm, Ø approx. 6 mm

KNX T-UN 100
- Set of evaluation unit and sensor T-100
- 4 threshold values can be set via parameter or object
- Measurement range -35°C to +100°C
- Measuring sensor protection class: IP 43
- Length of sensor shell approx. 32 mm, Ø approx. 6 mm

N° 70220 Probe KNX T-UN 130

N° 70221 Probe KNX T-UN 100

Evaluation unit KNX T-UN 100 / 130

N° 70222
Evaluation unit
KNX T6-UN-B4

N° 30518 T-130

N° 30517 T-100

N° 30516 T-NTC

Evaluation unit KNX T6-UN-B4

- Evaluation unit for up to 10 temperature sensors
- 6 temperature inputs for sensors T-100 or T-130 (sensors to be ordered seperately)
- 4 analog/digital inputs (also for sensors T-NTC)
- Overall 6 threshold values and 6 temperature controllers

T-130

- Measurement range -30°C to +130°C
- Measuring sensor protection class: IP 68
- Length of sensor shell approx. 20 mm, Ø approx. 6 mm

T-100

- Measurement range -35°C to +100°C
- Measuring sensor protection class: IP 43
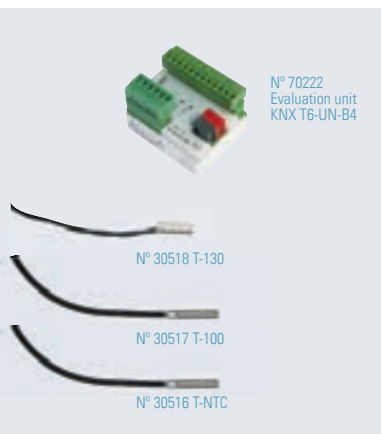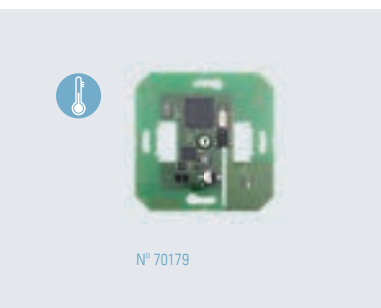- Length of sensor shell approx. 32 mm, Ø approx. 6 mm

T-NTC

- For indoor and outdoor applications
- Measurement range -35°C to +100°C
- E.g. for Corlo Touch Display
- Length of sensor sleeve approx. 32 mm, Ø approx. 6 mm, cable length approx. 300 cm

N° 70179

Temperature sensor KNX T-Objekt-UP

- Temperature sensor (-20…+70°C)
- Calculation of mixed values
- PI controller for heating/cooling
- 3 threshold values can be set via parameter or object
- 4 AND and 4 OR logic gates (4 inputs each)
- For indoor use, wall mounting in a socket

- Completion with frame/cover of the switching series used in the building (not included in scope of delivery)
- Dimensions mounting plate/sensor board approx. 70 x 70 (B x H, mm)
- Operating voltage: bus voltage

N° 70350
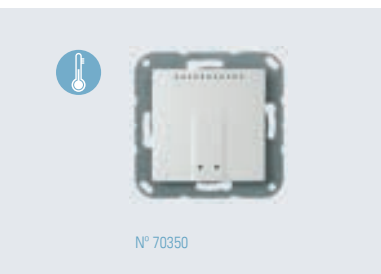
Temperature sensor KNX T-UP basic

- Temperature sensor (-25…+80°C)
- Calculation of mixed values
- PI controller for heating/cooling
- 3 threshold values can be set via parameter or object
- 8 AND and 8 OR logic gates (4 inputs each)
- For indoor use, wall mounting in a socket

- Housing plastic white (glossy)
- Completion with frame of the switching series used in the building (not included in scope of delivery)
- Dimensions of housing approx. 55 x 55 (W x H, mm), mounting depth 15 mm
- Operating voltage: bus voltage

N° 70358

Temperature sensor KNX T-B-UP

- Temperature sensor (0…+50°C)
- Display for measured values, bus data (e.g. date, time), mode, bargraph for target value change
- Push buttons for use as bus buttons or for changing the target temperature and mode
- Calculation of mixed values
- PI controller for heating/cooling
- 3 threshold values can be set via parameter or object
- 8 AND and 8 OR logic gates (4 inputs each)

- Housing plastic white (glossy)
- For indoor use, wall mounting in a socket
- Housing plastic white (glossy)
- Completion with frame of the switching series used in the building (not included in scope of delivery)
- Dimensions of housing approx. 55 x 55 (W x H, mm), mounting depth 15 mm
- Operating voltage: bus voltage

NEW

Temperature sensor KNX T-UP gl

- Temperature sensor with calculation of mixed value
- PI controller for heating/cooling (temperature)
- Threshold values can be set via parameter or object
- 8 modules for calculation, conditions, transition
- 4 actuating variable comparators
- 8 AND and 8 OR logic gates (4 inputs each)
- For indoor use, wall mounting in a socket

- Glass and housing white or black
- Completion with frame of the switching series used in the building (not included in scope of delivery)
- Dimensions of housing approx. 55 x 55 (W x H, mm), mounting depth 8 mm
- Operating voltage: bus voltage

N° 70630 KNX T-UP gl, white
N° 70631 KNX T-UP gl, black

Figures with frames (not included in delivery)

Temperature sensor KNX T-UP Touch

- Temperature sensor with calculation of mixed value
- Display for measured values, bus data (e.g. date, time), mode, bargraph for target value change
- Touch buttons for use as bus buttons or for changing the target temperature and mode
- PI controller for heating / cooling (temperature)
- Threshold values can be set via parameter or object
- 8 modules for calculation, conditions, transition
- 4 actuating variable comparators

- 8 AND and 8 OR logic gates (4 inputs each)
- For indoor use, wall mounting in a socket
- Glass and housing white or black
- Completion with frame of the switching series used in the building (not included in scope of delivery)
- Dimensions of housing approx. 55 x 55 (W x H, mm), mounting depth 8 mm
- Operating voltage: bus voltage

NEW

Nº 70627 KNX T-UP Touch, white
Nº 70628 KNX T-UP Touch, black

Figures with frames (not included in delivery)

Temperature and humidity sensor KNX TH-UP gl

- Temperature sensor and humidity sensor with calculation of mixed values, dew point calculation and monitoring of the comfort field (DIN 1946)
- PI controller for heating / cooling (temperature)
- PI controller for ventilation (CO_2, dehumidification/ humidification)
- Threshold values can be set via parameter or object
- 8 modules for calculation, conditions, transition
- 4 actuating variable comparators

- 8 AND and 8 OR logic gates (4 inputs each)
- For indoor use, wall mounting in a socket
- Glass and housing white or black
- Completion with frame of the switching series used in the building (not included in scope of delivery)
- Dimensions of housing approx. 55 x 55 (W x H, mm), mounting depth 8 mm
- Operating voltage: bus voltage

NEW

Nº 70621 KNX TH-UP gl, white
Nº 70622 KNX TH-UP gl, black

Figures with frames (not included in delivery)

Temperature and humidity sensor KNX TH-UP Touch

- Temperature sensor and humidity sensor with calculation of mixed values, dew point calculation and monitoring of the comfort field (DIN 1946)
- Display for measured values, bus data (e.g. date, time), mode, bargraph for target value change
- Touch buttons for use as bus buttons or for changing the target temperature and mode
- PI controller for heating / cooling (temperature)
- PI controller for ventilation (dehumidification/ humidification)
- Threshold values can be set via parameter or object
- 8 modules for calculation, conditions, transition

- 4 actuating variable comparators
- 8 AND and 8 OR logic gates (4 inputs each)
- For indoor use, wall mounting in a socket
- Glass and housing white or black
- Completion with frame of the switching series used in the building (not included in scope of delivery)
- Dimensions of housing approx. 55 x 55 (W x H, mm), mounting depth 8 mm
- Operating voltage: bus voltage

NEW

Nº 70615 KNX TH-UP Touch, white
Nº 70616 KNX TH-UP Touch, black

Figures with frames (not included in delivery)

Ambient Climate Sensor KNX AQS / TH-UP gl   Replacement for KNX AQS/TH-UP basic

- Temperature sensor and humidity sensor with calculation of mixed values, dew point calculation and monitoring of the comfort field (DIN 1946)
- CO_2 sensor
- PI controller for heating / cooling (temperature)
- PI controller for ventilation (CO_2, dehumidification/ humidification)
- Threshold values can be set via parameter or object
- 8 modules for calculation, conditions, transition
- 4 actuating variable comparator

- 8 AND and 8 OR logic gates (4 inputs each)
- For indoor use, wall mounting in a socket
- Glass and housing white or black
- Completion with frame of the switching series used in the building (not included in scope of delivery)
- Dimensions of housing approx. 55 x 55 (W x H, mm), mounting depth 8 mm
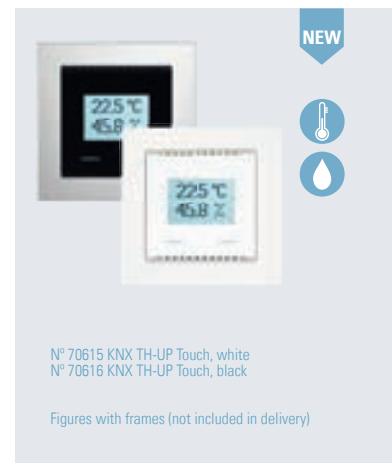- Operating voltage: bus voltage

NEW

CO₂

Nº 70624 KNX AQS / TH-UP gl, white
Nº 70625 KNX AQS / TH-UP gl, black

Figures with frame (not included in delivery)

GERMAN
DESIGN
AWARD
WINNER
2018

Award for KNX TH-UP gl , KNX TH-UP Touch
KNX AQS / TH-UP gl and KNX AQS / TH-UP Touch

NEW

CO₂

N° 70618 KNX AQS / TH-UP Touch, white
N° 70619 KNX AQS / TH-B-UP Touch, black

Figures with frame (not included in delivery)

Ambient Climate Sensor KNX AQS / TH-UP Touch   Replacement for KNX AQS/TH-B-UP

- Temperature sensor and humidity sensor with calculation of mixed values, dew point calculation and monitoring of the comfort field (DIN 1946)
- CO_2 sensor
- Display for measured values, bus data (e.g. date, time), mode, bargraph for target value change
- Touch buttons for use as bus buttons or for changing the target temperature and mode
- PI controller for heating / cooling (temperature)
- PI controller for ventilation (CO_2, dehumidification / humidification)
- Threshold values can be set via parameter or object

- 8 modules for calculation, conditions, transition
- 4 actuating variable comparator
- 8 AND and 8 OR logic gates (4 inputs each)
- For indoor use, wall mounting in a socket
- Glass and housing white or black
- Completion with frame of the switching series used in the building (not included in scope of delivery)
- Dimensions of housing approx. 55 x 55 (W x H, mm), mounting depth 8 mm
- Operating voltage: bus voltage

VOC

N° 70244

Mixed Gas Sensor KNX VOC-UP basic

- Mixed gas sensor detects volatile organic compounds (0…2000 ppm)
- Calculation of mixed values
- PI controller for ventilation
- 2 actuating variable comparators
- 4 threshold values can be set via parameter or object
- 8 AND and 8 OR logic gates (4 inputs each)

- For indoor use, wall mounting in a socket
- Completion with frame of the switching series used in the building (not included in scope of delivery)
- Dimensions of housing approx. 55 x 55 (W x H, mm), mounting depth 15 mm
- Auxiliary voltage: 12...24 V DC

N° 70406 Salva KNX TH
N° 70405 Salva KNX basic

N° 70409 Salva
(Exchange/without KNX)

Smoke Detector Salva® KNX

- Smoke detector
- KNX connection
- Local alarm signal and forwarding of the signal to KNX; local acknowledgement of the alarm
- High operational safety through auto. self-test
- Reporting of polluted smoke chamber
- 8 modules for calculation, conditions, transition
- 8 AND and 8 OR logic gates (4 inputs each)
- For indoor application. Surface mounting, IP 40
- Diameter approx. 113 mm, hight 58 mm
- Power supply via battery (9 V); warning in case of low battery charge. Average service life approx. 10 years (typical) under normal conditions as per EN14604.
- Replacement device (without KNX) available separately, e.g. in case of a dirty smoke chamber

Salva KNX TH
- Smoke detector for smoke and heat alarm
- Temperature sensor and humidity sensor with calculation of mixed values, of the dewpoint and monitoring of the comfort field (DIN 1946)
- Threshold values can be set via parameter or object
- PI controller for heating / cooling (temperature)
- PI controller for ventilation (dehum. / humidification)

Salva KNX basic
- Smoke detector for smoke alarm

Salva
- Smoke detector without KNX unit
- As replacement unit for 70405 / 70406 or for installation without KNX

N° 70314

Leackage Sensor Leak KNX

- For water / pipe break detection
- Set consists of evaluation unit and probe

Probe
- Detection of water
- Diameter: approx. 77 mm, cable length approx. 140 cm (plus cable grip and plugs)
- BNC plug for connection to the evaluation unit

Evaluation unit
- Acoustic alarm signal during a water alarm
- Alarm signal to bus, text message is possible
- Surface mounted, protection category IP 20, grey
- Approx. 80 x 82 x 51 (W x H x D, mm)
- Operating voltage: 230 V AC

SIMPLE INTEGRATION OF ELSNER PRODUCTS

Suntracer KNX sl
Weather Station

- Date/Time
- Request Date/Time
- Precipitation
- Outdoor temperature
- Light intensity outside
- Direction of the sun (azimuth)
- Elevation of the sun
- Wind speed
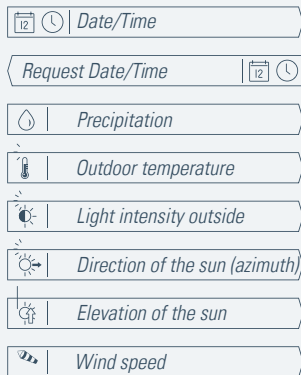
Corlo Touch KNX
Touch Display

- Blind long-term
- Blind short-term
- Blind safety
- Blind position height
- Blind position slat
- Feedback position height
- Feedback position slat
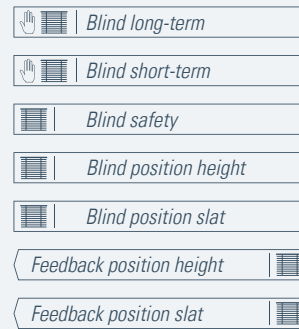
KNX S1R-UP 230V
Actuator

The example shows the installation of a shading automation with weather station Suntracer KNX sl, display Corlo Touch KNX and actuator KNX S1R-UP. The KNX applications of Elsner Elektronik products are coordinated, so that the integration can be completed with minimal effort.

KNX ACTUATORS

The actuators control drives or heating and cooling systems in the KNX system. For the shading and window actuators the automatic can be set externally or internally. The internal automatic offers numerous options for blocking, locking (e.g. master– slave) and priority settings (e.g. manual – automatic). Movement positions and scenes may be stored and recalled via the bus. The slats of blinds can be tracked according to the position of the sun.

The actuators for heating and cooling control have got an integrated room temperature control and can also control systems via pulse width modulation.

For drives or consumer loads

N° 70511
KNX S1R-UP

N° 70512
KNX S1R-BA2-UP
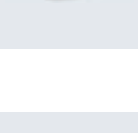
N° 70513
KNX S1R-BA4-UP

Multifunctional actuators KNX S1R-UP

- For one drive (1x up/down) or two switched devices (2x on/off),
- Potential-free relay output that switches low-wearing near the zero crossing of electric tension, max. 230 V AC, fused with T4.0 A
- Motor run time variable by ETS parameters or active current metering
- Automatic functions for shading, window
- 16 channel scene control

- Analogue/digital inputs (e.g. for temperature sensor T-NTC or button Corlo M-T):
  KNX S1R-BA4-UP with 4 inputs,
  KNX S1R-BA2-UP with 2 inputs,
  KNX S1R-UP without inputs
- Flush mounting in a socket
- Approx. 50 x 50 x 54 (W x H x D, mm)
- Operating voltage: bus voltage

N° 70514

Multifunctional actuator KNX S1-BA4

- Potential-free relay output for 1 drive (1x up/down) or two switchable devices (2x on/off)
- Motor run time variable by ETS parameters or active current metering
- Automatic functions for shading, window
- 16 channel scene control

Replacement for KNX S1R-B4 PF

- 4 temperature threshold values
- 4 analogue/digital inputs e.g. for temperature sensors T-NTC or Corlo M-T
- For installation on DIN rail, 3 units, white, approx. 53 x 88 x 60 (W x H x D, mm)
- Operating voltage: bus voltage

Actuators for Shadings / Windows KNX S

- Potential-free drive outputs (1x up / down) up to 230 V AC and 30 V DC
- Automatic functions for shading / window
- For installation on DIN rail
- With push button and LEDs

KNX S2
- 2 drive outputs
- Operating voltage: bus voltage

KNX S4
- 4 drive outputs
- Operating voltage: 230 V AC

Nº 70541 KNX S2
Nº 70540 KNX S4
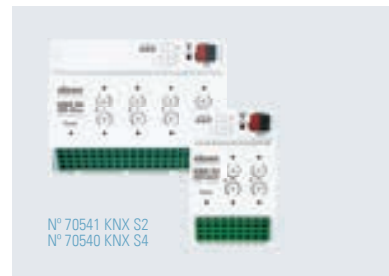
Multifunctional Actuators KNX S1E-UP

- Non-wearing electronic output for one drive (1x up / down) or two switched devices (2x on / off), max. 230 V AC, loadable to a maximum of 400 Watt
- Motor run time variable by ETS parameters or active current metering
- Automatic functions for shading and window
- 16 channel scene control

- Analogue / digital inputs (e.g. for temperature sensor T-NTC or button Corlo M-T):
  KNX S1E-BA4-UP with 4 inputs,
  KNX S1E-BA2-UP with 2 inputs,
  KNX S1E-UP without inputs
- Flush mounting in a socket
- Approx. 50 x 50 x 54 (W x H x D, mm)
- Operating voltage: bus voltage

Nº 70517
KNX S1E-UP 230 V

Nº 70518
KNX S1E-BA2-UP 230 V

Nº 70519
KNX S1E-BA4-UP230 V

For 230 V AC drives

Actuators for Shadings / Windows KNX S-UP 230 V AC

- For a 230 V AC drive, output is fused with T6,3 A
- Automatic functions for shading and window
- 8 channel scene control
- Binary inputs (direct operation / bus key):
  KNX S-B4T-UP with 4 binary inputs and 1 temperature sensor input

KNX S-B2-UP with 2 binary inputs,
KNX S-UP without inputs
- Flush mounting in a socket
- Approx. 50 x 51 x 41 (W x H x D, mm)
- Operating voltage: 230 V AC

Nº 70131 KNX S-B4T-UP 230 V AC
Nº 70133 KNX S-B2-UP 230 V AC
Nº 70135 KNX S-UP 230 V AC

Multifunctional Actuators KNX S4-B10, KNX S2-B6, KNX S1-B2

- Outputs 230 V AC, each for one drive (1x up / down) or two switchable devices (2x on / off)
- Motor run time variable by ETS parameters or active current metering
- Automatic functions for shading, window, light
- 16 channel scene control
- For installation on DIN rail, with push button pairs and control LEDs
- Operating voltage: 230 V AC

KNX S4-B10 230 V
- 4 multifunctional outputs 230 V AC

- 10 binary inputs (direct operation / bus key)
- 6 units, approx. 107 x 88 x 60 (W x H x D, mm)

KNX S2-B6 230 V
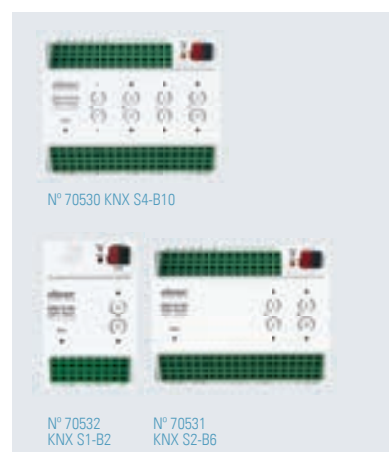- 2 multifunctional outputs 230 V AC
- 6 binary inputs (direct operation / bus key)
- 6 units, approx. 107 x 88 x 60 (W x H x D, mm)

KNX S1-B2 230 V
- 1 multifunctional output 230 V AC
- 2 binary inputs (direct operation / bus key)
- 3 units, approx. 53 x 88 x 60 (W x H x D, mm)

Nº 70530 KNX S4-B10

Nº 70532
KNX S1-B2

Nº 70531
KNX S2-B6

For 24 V DC drives

Actuator for Shadings / Windows KNX S1R-BA4-UP 24 V

N° 70516

- For a 12 V DC or 24 V DC motor, output with polarity change
- Low-wearing relays that switch in zero crossing of electric tension
- Motor run time variable by ETS parameters or active current metering
- Automatic functions for shading and window
- 16 channel scene control

- 4 analogue / digital inputs e.g. for temperature sensors T-NTC or Corlo M-T
- Flush mounting in a socket
- Approx. 50 x 50 x 54 (W x H x D, mm)
- Operating voltage: bus voltage
- An external power supply unit is necessary for the outputs

Actuator for Shadings / Windows KNX S1E-BA4-UP PS

N° 70515

- Non-wearing electronic output with polarity change for a 24 V DC motor
- Integrated power supply unit (230 V AC at 24 V DC; 0,5 A)
- Motor run time variable by ETS parameters or active current metering
- Automatic functions for shading and window

- 16 channel scene control
- 4 analogue / digital inputs e.g. for temperature sensors T-NTC or Corlo M-T
- Flush mounting in a socket
- Approx. 50 x 50 x 54 (W x H x D, mm)
- Operating voltage: 230 V AC

Actuators for Shadings / Windows KNX S-UP (24 V DC)

N° 70130 KNX S-B4T-UP 24 V DC
N° 70132 KNX S-B2-UP 24 V DC
N° 70134 KNX S-UP 24 V DC

- For a 24 V DC motor, output with polarity change
- Automatic functions for shading, window
- 8 channel scene control
- Binary inputs (direct operation / bus key): **KNX S-B4T-UP** with 4 binary inputs and 1 temperature sensor input

- **KNX S-B2-UP** with 2 binary inputs, **KNX S-UP** without inputs
- Flush mounting in a socket
- Approx. 50 x 51 x 41 (W x H x D, mm)
- Operating voltage: 24 V DC

Actuator for Shadings / Windows KNX S4-B12 24 V

N° 70533

- 4 outputs (up / down) for 12 V DC- or 24 V DC motors (24 V DC for internal or external auxiliary voltage, 12 V DC with external auxiliary voltage)
- Motor run time variable by ETS parameters or active current metering
- Automatic functions for shading, window
- 16 channel scene control

- 12 binary inputs (direct operation / bus key)
- 4 key pairs and control LEDs
- For installation on DIN rail, 6 units, approx. 107 x 88 x 60 (W x H x D, mm)
- Operating voltage: 24 V DC
- An external power supply unit is necessary for the outputs

KNX Actuators – For Doors/Gates

Control Module for Door Drives KNX A3-B2

- 3 outputs for control of a door (defined open/close/stop, impulse or deadman mode)
- 2 binary inputs (for status query or as a bus push button)

- Approx. 38 x 47 x 29 (W x H x D, mm)
- Operating voltage: bus voltage

N° 70391

KNX Actuators – For Heating/Cooling

Heating actuators KNX K4 and KNX K8

- Outputs for heating/cooling control (on/off or pulse width modulation) 230 V AC, 8 W per output
- Starting current max. 1.1 A per channel
- Internal temperature control (PI controller, one- or two-stage)
- For installation on DIN rail, with push button pairs and LEDs

KNX K4
- 4 outputs
- Operating voltage: bus voltage
- 3 units, approx. 53 x 88 x 60 (W x H x D, mm)

KNX K8
- 8 outputs
- Auxiliary voltage: 230 V AC
- 6 units, approx. 107 x 88 x 60 (W x H x D, mm)

N° 70321
KNX K8

N° 70320 KNX K4

KNX SYSTEM DEVICES

System devices form the basis and interfaces of the KNX systems. For example, the **IP-KNX Interface** integrates IP cameras into KNX. **Power supply units** deliver a 29 V bus voltage necessary for the bus operation. In addition, all Elsner KNX voltage supply units have a 24 V DC output for the supply of the bus participants. The devices are also available with the USB port for system programming and with integrated router. The router allows the use of Ethernet as a fast backbone for KNX data and can be used as a line coupler and for remote access (IP/LAN).

IP Interface for cameras

N° 70199

IP KNX Interface

- Interface for data transfer between IP and KNX
- For Mobotix IP cameras or models with similar communication setup
- 8 cameras with 8 input and 8 output objects each
- Transfer of camera events to KNX bus
- Control of the camera via KNX bus

- KNX bus connector and IP port (POE)
- Configuration via ETS 5 and camera software
- Installation on DIN rail 3 units, white, approx. 53 x 88 x 60 (W x H x D, mm)

Power Supply Units

N° 70140

Power Supply Unit KNX PS640

- 1 output for KNX bus voltage, output current of max. 640 mA, short-circuit proof (throttled)
- 1 output for 24 V DC, output current of maximum 150 mA (not throttled)
- Display of short circuit, overvoltage, overload, excessive temperature, current consumption

- Reset of the connected bus participants
- Installation on DIN rail (7 units), white, approx. 123 x 89 x 61 (W x H x D, mm)
- Operating voltage: 230 V AC

KNX System Devices IP Interfaces ## Power Supply Unit KNX PS640+

- 1 output for KNX bus voltage, output current of max. 640 mA, short-circuit proof (throttled)
- 1 output for 24 V DC, output current of maximum 150 mA (not throttled)
- Display of short circuit, overvoltage, overload, excessive temperature, current consumption
- Reset of the connected bus participants

- Bus connector for data transfer to line/ main line/area
- Bus functions: transfer of malfunction messages and operating data, time/period reset, storage of malfunction messages
- Installation on DIN rail (7 units), white, approx. 123 x 89 x 61 (W x H x D, mm)
- Operating voltage: 230 V AC

N° 70141

Power Supply Unit KNX PS640 USB

- 1 output for KNX bus voltage, output current of max. 640 mA, short-circuit proof (throttled)
- 1 output for 24 V DC, output current of max. 150 mA (not throttled)
- Display of short circuit, overvoltage, overload, excessive temperature, current consumption

- Reset of the connected bus participants
- USB connection for programming (ETS)
- Installation on DIN rail (7 units), white,
- approx. 123 x 89 x 61 (W x H x D, mm)
- Operating voltage: 230 V AC

N° 70143

Power Supply Unit KNX PS640+USB

- 1 output for KNX bus voltage, output current of max. 640 mA, short-circuit proof (throttled)
- 1 output for 24 V DC, output current of max. 150 mA (not throttled)
- Display of short circuit, overvoltage, overload, excessive temperature, current consumption
- Reset of the connected bus participants
- USB connection for programming (ETS)

- Bus connector for data transfer to line/ main line/area
- Bus functions: transfer of malfunction messages and operating data, time/period reset, storage of malfunction messages
- Installation on DIN rail (7 units), white, approx. 123 x 89 x 61 (W x H x D, mm)
- Operating voltage: 230 V AC

N° 70144

Router with Power Supply Unit KNX PS640-IP

- 1 output for KNX bus voltage, output current of max. 640 mA, short-circuit proof (throttled)
- 1 output for 24 V DC, output current of max. 150 mA (not throttled)
- Display of short circuit, overvoltage, overload, excessive temperature, current consumption
- Reset of the connected bus devices
- Ethernet connection by RJ45 connector

- Routing
- Application as KNX line coupler
- Tunneling (bus access via IP, remote maintenance via LAN)
- Installation on DIN rail (7 units), white, approx. 123 x 89 x 61 (W x H x D, mm)
- Operating voltage: 230 V AC

N° 70142

Router with Power Supply Unit KNX PS640+IP

- 1 output for KNX bus voltage, output current of max. 640 mA, short-circuit proof (throttled)
- 1 output for 24 V DC, output current of max. 150 mA (not throttled)
- Display of short circuit, overvoltage, overload, excessive temperature, current consumption
- Reset of the connected bus devices
- Bus connector for data transfer to line/ main line/area

- Bus functions: transfer of malfunction messages and operating data, time/period reset, storage of malfunction messages
- Ethernet connection by RJ45 connector
- Routing (Ethernet as fast backbone for KNX data)
- Application as KNX line coupler
- Tunneling (bus access via IP, remote maintenance via LAN)
- Installation on DIN rail (7 units), white, approx. 123 x 89 x 61 (W x H x D, mm)
- Operating voltage: 230 V AC

N° 70145

KNX RF

Retrofitting, extension or refurbishment of listed historic buildings – all of this is way more easy with KNX radio technology. The KNX installation via a twisted pair line is perfectly complemented with the radio standard. Radio actuators and a radio remote control for example are integrated into the system via a media coupler and thus become fully-fledged bus participants.

All KNX RF components of Elsner Elektronik use the standard KNX RF S. The ETS as of version 5 is necessary for setting up a KNX system with radio.

Media Coupler KNX RF LC-TP

N° 70701

- Connects wireless KNX devices (KNX RF) with wired devices (KNX TP)
- Bidirectional communication
- The display screens show addressing, KNX traffic (bus load for RF and TP), incoming and outgoing messages (for RF and TP, with source and target addresses)
- For indoor use, wall mounting in a socket

- Housing plastic white glossy
- Completion with frame of the switching series used in the building (not included in scope of delivery)
- Dimensions of housing approx. 55 x 55 (W x H, mm), mounting depth approx. 15 mm
- Operation voltage: bus voltage

Radio Motor Control Units KNX RF-MSG-ST and KNX RF-MSG-DST

- Motor control devices for KNX RF (Standard KNX RF S)
- Motor run time variable by ETS parameters or active current metering
- Position feedback and storage, scenes
- Retransmitter function (forwarding of all received KNX RF telegrams)
- Connector housing with STAK3 coupling and STAS3 plug
- Operation voltage: 230 V AC

KNX RF-MSG-ST
- For 1 drive (230 V AC / 4 A maximum)
- Approx. 149 x 36 x 25 (W x H x D, mm)

KNX RF-MSG-DST
- For 1 drive (230 V AC / 4 A maximum)
- Power output for supplying additional motor control units (loop-through function)
- Approx. 135 x 73 x 29 (W x H x D, mm)

KNX RF-MSG2-DST
- For 2 drives (230 V AC), separate control
- Approx. 135 x 73 x 29 (W x H x D, mm)

N° 70711 KNX RF-MSG-ST

N° 70712 KNX RF-MSG-DST

N° 70713 KNX RF-MSG2-DST
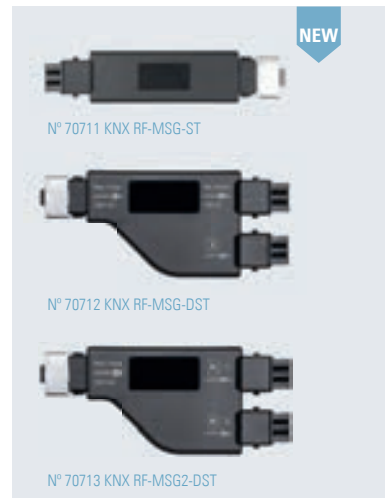
Remote Control Remo® KNX RF

- Hand-held transmitter with touch control panel for KNX RF (Standard KNX RF S)
- 32 channels
- Housing plastic black
- Dimensions approx. 64 x 122 x 11 (W x H x D, mm)
- Power supply: Lithium battery, chargeable via USB 2.0 Micro-B charger

N° 70746

reddot award 2017
winner
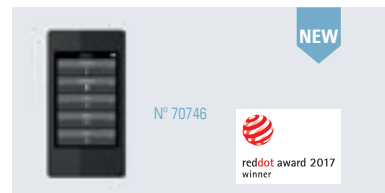
KNX RF USB Stick

- PC interface for addressing, programming and diagnostics of KNX RF devices (USB 2.0)
- For PCs with Windows based operating system
- Housing plastic black
- Dimensions approx. 21 x 59 x 7,5 (W x H x D, mm)

N° 70704

CONTROL SYSTEMS FOR BUILDINGS, CONSERVATORIES, PATIO ROOFS

Building control systems by Elsner Elektronik are complete packages with control unit, sensor systems and power electronics. This is why the devices are simple to install and set up, as well as convenient in operation. The central automatic control for example, takes over ideal shading and ventilation or facilitates manual movements of drives, such as awnings and rooflights.

Some control systems can be expanded by using wireless interfaces. The system is complemented as required with special wireless-based motor control devices, relays, key interfaces, etc. This is what makes the systems flexible to respond to any change in the use of the buildings or the demands of its occupants. Wireless communication is also particularly suitable for renovation and redevelopment. With all Elsner radio products the control data remains completely in the hands of the user. Individual settings and sensor values are stored locally in the hardware of the devices. No user data will be saved at external data storages or send to web servers.

BUILDING CONTROL SYSTEMS WS1 AND WS1000

WS1000 and WS1 are control and operating units for building systems in residential and smaller office properties as well as in conservatories. The automatic control ensures ideal room climate and offers **security and comfort functions**. In addition, the building's **energy budget** is optimized by the perfect interplay of the building technology systems.

The central element of the control is the touch sensitive colour display. The connected devices are operated and settings are changed here. The interface guides the user easily through the setting steps. As soon as operations cease, the screen shows the current weather data, the sun's course or rain- and snowfall. To save energy, the display can darken automatically or switch off completely under low ambient light conditions. Drives and devices are connected directly to the controls. Wireless channels are also available for communication. This allows additional drives and devices to be controlled via wireless modules.

Colour white/grey:
N° 60180   WS1 Style-0
N° 60181   WS1 Style-1
N° 60182   WS1 Style-2
N° 60183   WS1 Style-3
N° 60184   WS1 Style-4
N° 60194   WS1 Style-4 PF

Colour white/grey:
N° 60185   WS1 Style-0
N° 60186   WS1 Style-1
N° 60187   WS1 Style-2
N° 60188   WS1 Style-3
N° 60189   WS1 Style-4

Building Control System WS1® Style

Scope of delivery:
- central unit with integrated indoor sensor, weather station P04i-GPS (p. 50)

Central Unit WS1 Style:
- 1, 2, 3, 4 or no drive outputs, 230 V AC or potential-free (version PF).
- 2 multifunctional outputs
- 2 multifunctional inputs
- Connection for 4 external push buttons
- 32 wireless channels for Elsner RF
- Colour touch display 5.7 inches

- Display of pictures/slideshow (via SD card)
- Settings can be saved on SD card
- Integrated temperature/air humidity sensor
- White/grey glass front or dark grey/black
- For wall or cavity wall mounting (housing for surface mounting available separately)
- Approx. 181 x 131 (W x H mm), mounting depth approx. 8 mm, concealed box approx. 172 x 122 x 81 (W x H x D, mm)
- Operating voltage: 230 V AC

CONTROL SYSTEMS
WS1 & WS1000

Weather Station

Control Unit

Indoor Sensor
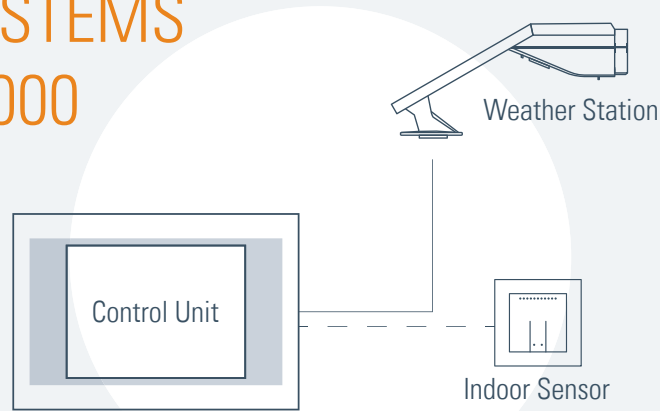
RADIO
32 radio channels for Elsner RF

- Actuators for switching, dimming and for drives
- Ventilation units WL400, WL800, WL-Z
- Sensors
- Remote control, radio push buttons Corlo P RF or conventional buttons via push button interface

CENTRAL UNIT
with wired connectivity

- Drive outputs for shading, windows, sliding doors
- Multifunctional outputs for heating, cooling, ventilation, alarm systems, light, dimmer, roof gutter heating
- Multifunctional inputs for motion detector, smoke detector, closed contact, signal of a heating/ cooling, of a camera or for reset
- Connection for external pugh buttons, e.g. Corlo Push Buttons M-T

KNX
via Interface

- WS1000 Color and WS1000 Style can be integrated into KNX building bus systems
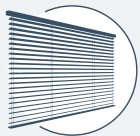
BLIND CONTROL
The sun protection control of blinds considers the position of the sun and tracks the slats accordingly. As a result, natural daylight enters the room while direct sunlight is shielded. The blind does not shade until the desired room temperature is reached. At night or at set times the blind is closed as a visual protection. Wind alarm protects the slats from damage.
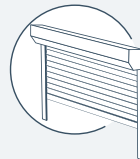
SHUTTER CONTROL
Shutters are closed at a certain time at night as visual protection and darkening. Additionally, shutters can be used as sunscreen. If the control detects that it is too bright, it waits until the sun has heated the room to the desired temperature. That way heating energy is saved in winter. Then the shutters are closed on the sun side.
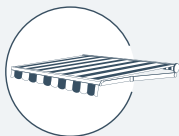
AWNING CONTROL
Awnings protect from sunlight by being controlled according to brightness, sun direction and sun height. To use the warmth of the sun in the cold season, awnings only extend when the desired room temperature is reached. Sensitive cloth is automatically protected from damage by wind or rain.
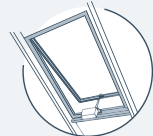
WINDOW CONTROL
Automatic window ventilation regulates room tempera-ture and air humidity. For example, the windows are opened at night for cooling in summer. A rain alarm function protects furniture and equipment against moisture damage. Motion alarm also closes the windows.
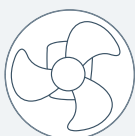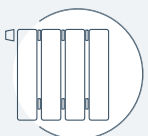
TEMPERATURE CONTROL
Heating, ventilation and air conditio-ning units are controlled so that the desired indoor climate is kept constant.

LIGHT CONTROL
Light can not only be switched or dimmed comfortably via the control, it can also switch automatically depending on time and brightness.

SECURITY
Safety in the building is enhanced by connecting smoke alarms and motion detectors. Control displays can show video camera images, e.g. for monitoring the entrance area.

Building Control System WS1000® Style

Colour white / grey:
N° 60201   WS1000 Style-4
N° 60202   WS1000 Style-6
N° 60203   WS1000 Style-8
N° 60204   WS1000 Style-10
N° 60214   WS1000 Style-10 PF

Colour dark grey / black
N° 60206   WS1000 Style-4
N° 60207   WS1000 Style-6
N° 60208   WS1000 Style-8
N° 60209   WS1000 Style-10

Scope of delivery

Central unit, indoor sensor
WGTH-UP (p. 49), weather station P04i-GPS (p. 50)

Central Unit WS1000 Style

- 4, 6, 8 oder 10 drive outputs, 230 V AC or potential-free (version PF)
- 4 multifunctional outputs
- 4 multifunctional inputs
- Connection for 10 external push buttons
- 32 wireless channels for Elsner RF

- Integration in KNX bus system via optional interface
- Colour touch display 8.4 inches
- Display of pictures / slideshow (via SD card)
- Settings can be saved on SD card
- White / grey glass front (white indoor sensor) or dark grey / black (alu indoor sensor)
- For wall or cavity wall mounting
- Approx. 270 x 185 (W x H, mm), mounting depth approx. 9 mm, concealed box approx. 254 x 171 x 85 (W x H x D, mm)
- Operating voltage: 230 V AC

Building Control System WS1® Color
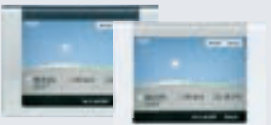
Colour white / grey:
N° 60145   WS 1 Color-0
N° 60135   WS 1 Color-1
N° 60136   WS 1 Color-2
N° 60137   WS 1 Color-3
N° 60138   WS 1 Color-4

Colour alu / graphit:
N° 60146   WS 1 Color-0
N° 60139   WS 1 Color-1
N° 60140   WS 1 Color-2
N° 60141   WS 1 Color-3
N° 60142   WS 1 Color-4

Scope of delivery

Central unit with integrated indoor sensor, weather station P04i-GPS (p. 50)

Central Unit WS1 Color

- 1, 2, 3, 4 or no drive ouputs 230 V AC
- 2 multifunctional outputs
- 2 multifunctional inputs
- Connection for 4 external push buttons
- 32 wireless channels for Elsner RF

- Integrated indoor sensor for temperature, and air humidity
- Colour touch display 5.7 inches
- Housing plastic white / grey or alu / graphite (partly painted)
- For wall or cavity wall mounting (housing for surface mounting available separately)
- Approx. 164 x 121 x 29, concealed box approx. 152 x 92 x 62 (W x H x D, mm)
- Operating voltage: 230 V AC

Building Control System WS1000® Color

Colour white / grey:
N° 60121   WS1000 Color-4
N° 60122   WS1000 Color-6
N° 60123   WS1000 Color-8
N° 60124   WS1000 Color-10

Colour alu / graphit:
N° 60125   WS1000 Color-4
N° 60126   WS1000 Color-6
N° 60127   WS1000 Color-8
N° 60128   WS1000 Color-10

Scope of delivery

Central unit, indoor sensor WGTH-UP (p. 49), weather station P04i-GPS (p. 50)

Central Unit WS1000 Color

- 4, 6, 8 or 10 drive outputs 230 V AC
- 4 multifunctional outputs
- 4 multifunctional inputs
- Connection for 10 external push buttons
- 32 wireless channels for Elsner RF
- Integration in KNX bus system via optional interface

- Colour touch display 8.4 inches
- Display of pictures / slideshow (via SD card)
- Settings can be saved on SD card
- Housing plastic, partly painted
- Colours: white / grey (indoor sensor white) or alu / graphite (indoor sensor alu)
- For wall or cavity wall mounting
- Approx. 250 x 182 x 43, concealed box approx. 235 x 169 x 62 (W x H x D, mm)
- Operating voltage: 230 V AC

Award
Solexa II

SOLEXA II RADIO CONTROL SYSTEM

The wireless control Solexa II is used for shading, window ventilation, brightness and heating control. Because of the modular structure different projects starting with the control of a single awning on the terrace up to room climate control in a building can be realized.
The basis of the system is **the set of touch display and weather station**, which allows **automatic control** according to time, indoor temperature, outdoor temperature, brightness, wind speed and precipitation. Date, time and position coordinates are received via GPS and the position of the sun is calculated to control awnings, blinds and shutters. A **connection for a drive** is already included in the **weather station**. Drives, lights (switchable, dimmable) and heaters are integrated into the control system via various **radio actuators**.
For **manual operation** further Solexa II displays, remote controls Remo, push buttons Corlo P RF or an Elsner RF push button interface, can be used. Elsner radio sensors allow for recording of additional indoor temperature values for control.
The SOL interface allows the use of the **Solexa II Mobile App**. Thus, technical equipment can be controlled via your own smartphone.

Radio Control Solexa II

Modular structure for maximum flexibility: (see page 40)
- Display and weather station as basic set
- Extension with Elsner radio actuators, sensors and operating devices

Simple, time saving installation via radio communication. Ideal solution for retrofitting, for listed historic buildings and so on.

Functions:
- Automatic shading depending on brightness, indoor temperature, position of the sun; time control

- Timer for shutter
- Automatic window ventilation depending on indoor and outdoor temperature; time control
- Rain / wind and frost protection (can be switched off)
- Storage of a movement position for automatic mode, for blinds also slat angle
- Automatic light control depending on brightness and time
- Automatic heating depending on temperature and time

Nº 10150 Solexa II Set, white / alu
Nº 10144 Solexa II Display separately

Display Solexa II

- For use with Weather Station Solexa II
- Touch display
- Integrated room temperature sensor

- Housing for surface mounting, approx. 107 x 112 x 14 (W x H x D, mm)
- Integrated battery, charging via USB cable (5 V, e.g. charging set Nº 10155)

Weather station Solexa II

Wi-Fi Interface SOL N° 10154

Weather Station Solexa II

- For use with Display Solexa II (up to 4 displays)
- Collection of temperature, precipitation, wind speed, light (1 sun sensor); GPS reception
- Connection for 230 V motor (integrated radio motor control unit)
- For up to 16 radio actuators (all Elsner RF actuators, see page 47)
- Up to 32 Elsner RF operating devices / sensors

- Wi-Fi integration (for app usage) via optional interface SOL
- Approx. 96 x 77 x 118 (W x H x D, mm), IP 44, white / translucent, combined fixture for wall / pole
- Operating voltage 230 V AC
- Radio frequency 868.2 MHz, Elsner RF

Wi-Fi Interface SOL for Solexa II Mobile App

- Communication Interface for Solexa II weather station for wireless networks
- Allows control and display of measured values via smartphone app

- Solexa II Mobile App is available in Google Play Store (for Android 4.0.3 and up) and in App Store (for Apple iOS 8.0 and up)

OVERVIEW SOLEXA II WITH WEATHER STATION

Wi-Fi Interface SOL
for Solexa II Mobile App

up to 32 operating devices and sensors:
Remote Controls Remo
Push Buttons Corlo P RF
Button Interface RF-B2-UP
Combined Sensor WGTH-UP
Temperature Sensor WGT
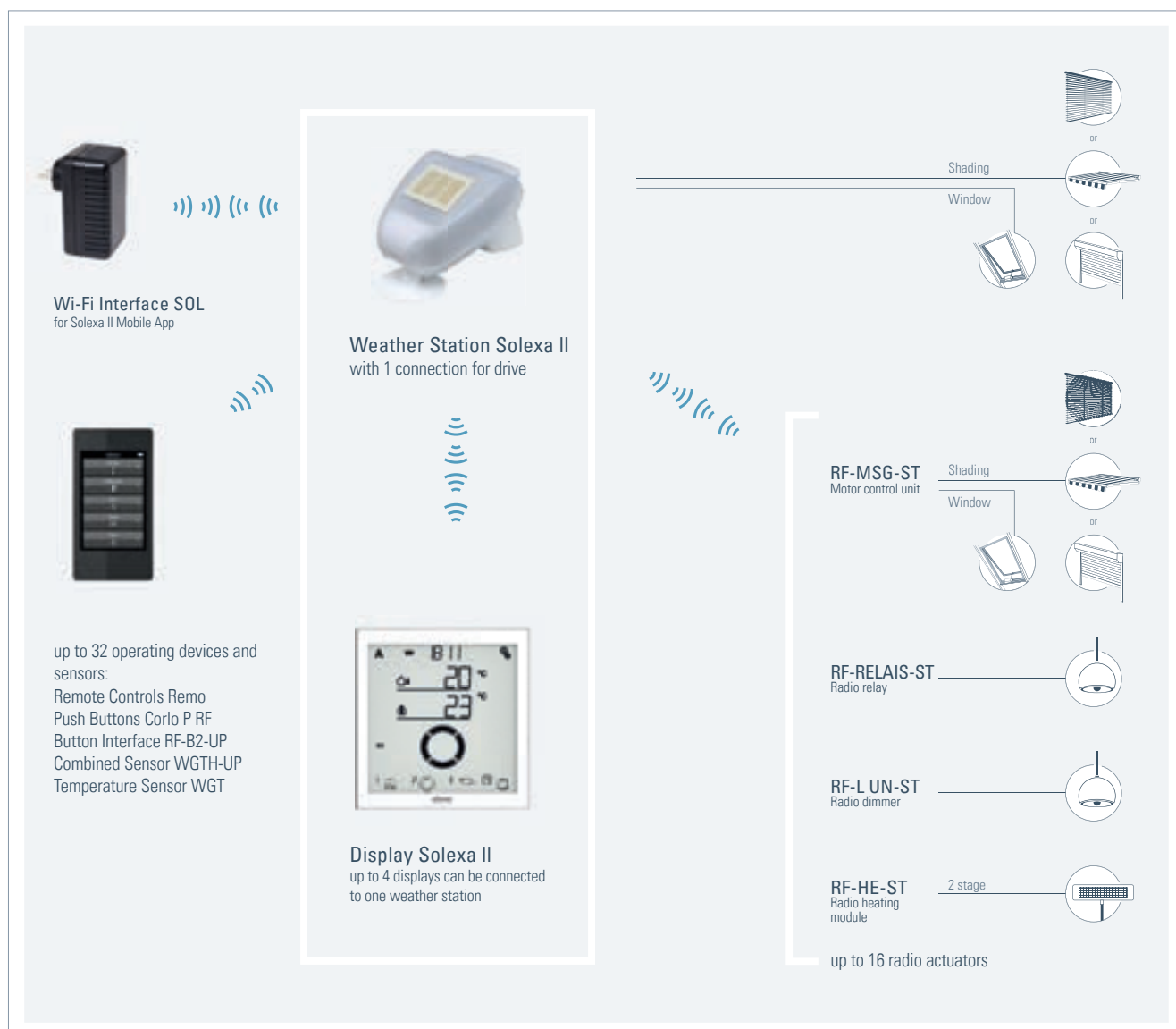
Weather Station Solexa II
with 1 connection for drive

Display Solexa II
up to 4 displays can be connected
to one weather station

Shading

Window

or

or

RF-MSG-ST
Motor control unit

Shading

Window

or

or

RF-RELAIS-ST
Radio relay

RF-L UN-ST
Radio dimmer

RF-HE-ST
Radio heating
module

2 stage

up to 16 radio actuators

CONTROLS SOLEXA AND AREXA

Shading Control Solexa and Window Control Arexa consist of control unit and weather station. The drive mechanism of the sun screen/window is connected directly to the weather station. Several drives can be controlled simultaneously as a group at one single control by using an additional group control relay (e.g. for a number of roof windows at one Arexa).

The control unit has a display which shows the current weather information, mode and alarm messages. An indoor temperature sensor is integrated, too. The drives are operated manually and the automatic functions are set with the keys.

Control unit and weather station communicate wirelessly so that the control unit can be placed freely in the room. As there is no cabling required inside the building, the control systems are an ideal option for retrofitting.

Shading Control Solexa® 230 V

- For a window. Connection of 230 V motor at weather station, multiple drives with group control relay
- Complete system: control unit (with indoor temperature sensor) and weather station
- Automatic ventilation functions depending on indoor and outdoor temperature
- Rain and wind protection (may be switched off)
- Storage of an opening position for automatic mode

Control Unit
- Housing plastic white
- For wall mounting
- Approx. 103 x 98 x 28 (W x H x D, mm)
- Operating voltage: 2 x 1.5 V (batteries AA) or 1.2 V (storage batteries AA)

Weather Station
- Temperature, precipitation, wind speed and brightness (1 solar sensor) recording
- Combined fixture for wall/pole mounting
- Housing for surface mounting, IP 44, white/translucent
- Approx. 96 x 77 x 118 (W x H x D, mm)
- Operating voltage: 230 V AC, 50 Hz

Accessories (not included)
- Remote Controls Remo (p. 44)
- Group control relays, motor control devices (p. 59, 61)
- Mounting arms for weather station (p. 70)
- Mains lines set (p. 51)

N° 10110
(white)

N° 10130
(aluminium)

N° 10131
(pearl dark grey)

Weather Station

Operation unit

Weather Station

N° 10115

Window Control Arexa® 230 V

- For a window. Connection of 230 V motor at weather station, multiple drives with group control relay
- Complete system: control unit (with indoor temperature sensor) and weather station
- Automatic ventilation functions depending on indoor and outdoor temperature
- Rain and wind protection (may be switched off)
- Storage of an opening position for automatic mode

Control Unit
- Housing plastic white
- For wall mounting
- Approx. 103 x 98 x 28 (W x H x D, mm)
- Operating voltage: 2 x 1.5 V (batteries AA) or 1.2 V (storage batteries AA)

Weather Station
- Temperature, precipitation, wind speed and brightness (1 solar sensor) recording
- Combined fixture for wall/pole mounting
- Housing for surface mounting, IP 44, white/translucent
- Approx. 96 x 77 x 118 (W x H x D, mm)
- Operating voltage: 230 V AC, 50 Hz

Accessories (not included)
- Remote Controls Remo (p. 44)
- Group control relays, motor control devices (p. 59, 61)
- Mounting arms for weather station (p. 70)
- Connecting cable set (see below)

N° 10113

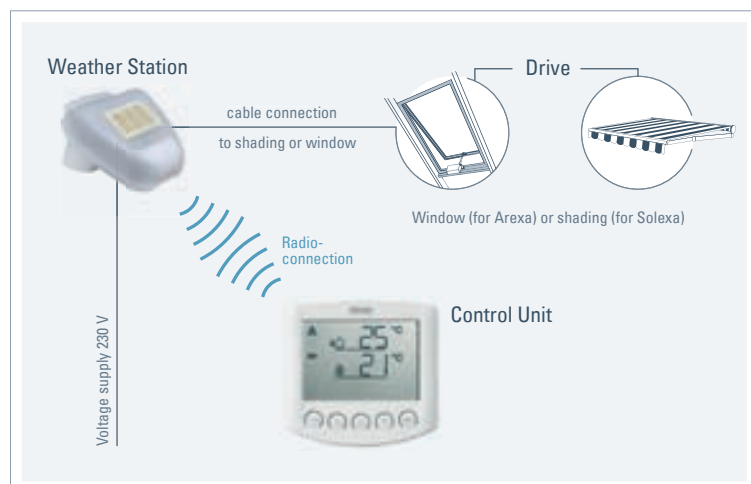## Connection cable set for Solexa or Arexa 230 V

- Simplified control connections via a mains socket
- Mains lead, length approx. 6 m

- Motor connection cable with STAK3 coupling, length approx. 6 m

Connection diagram Solexa / Arexa

Weather Station

cable connection to shading or window

Drive

Window (for Arexa) or shading (for Solexa)

Radio-connection

Control Unit

Voltage supply 230 V

VENTILATION CONTROLS, WEATHER DATA EVALUATION

Indoor Sensor with Ventilation Control AQS / TH PF

- Sensor and control technology combined in a compact housing for all frames with an inner dimension of 55 mm
- Temperature sensor (0...+50°C)
  Humidity sensor (0% RH…95% RH)
  CO2 sensor (0…2000 ppm)
- For 1 window or ventilation unit (outputs potential free, 50 V AC / DC, 100 mA)
- Automatic function for ventilation (1- or 2-step control)
- Display showing measurements and setting menus
- Push buttons for manual operation (open / close) and for automatic settings
- Adjustable automatic reset time after manual operation (5...120 min.)

- 2 inputs for central commands allow the interruption of the automatic by external switch signals (e.g. push buttons, rain alarm from rain sensors R24 V or RW-PF, timer, motion detector). The central command has priority over local operation and automatic if realized with permanent voltage
- For indoor use, for wall mounting in a socket
- Housing plastic white (glossy)
- Completion with frame of the switching series used in the building (not included in scope of delivery)
- Dimensions of housing approx. 55 x 55 (W x H, mm), mounting depth 15 mm
- Operating voltage: 24 V DC

N° 40115

Wireless Ventilation Module RF-WL 0-10 V

- Wireless control for ventilation units WL400, WL800 and WL-Z (see page 54)
- A signal at the motion detector input starts ventilation (extraction with 40%) Additional ventilation levels can be triggered via 2 inputs (60% or 80% ventilation performance)

- Voltage input 0-10 V DC (1-10 V equal to ventilation performance proportional 10-100%)
- 24 V DC voltage output (maximum 200 mA)
- Flush mounting in a socket
- Approx. 50 x 50 x 54 (W x H x D, mm)
- Operating voltage: 230 V AC

N° 60539

Evaluation Unit PS8A

- System for recording, processing and forwarding of weather data (e.g. for ventilation and shading)
- Automation in buildings ventilation and shading in with PLC, computer or relay controllers
- Comprehensive system comprising central unit, weather station and interior sensor

PS8A evaluation unit
- Integrated keypad and display
- 8 adjustable relay outputs
- Threshold values for sun from the east, south and west, for indoor and outdoor temperature and for wind speed
- Rain alarm, twilight detection, week timer
- Alarm message in case of incorrect data
- All parameters can be linked by AND or OR
- Installation on DIN rail (6 units), grey, approx. 105 x 90 x 60 (W x H x D, mm)
- Operating voltage: 230 V AC, 50 Hz

Weather Station P03/3-GPS
- Temperature sensor
- 3 brightness sensors (east, south, west)
- Wind speed sensor
- Precipitation sensor with 1.2 watt heating
- GPS receiver
- Combi mount for wall or pole mounting; mounting arms available as an option
- Housing for surface mounting, IP 44, white / translucent
- Approx. 96 x 77 x 118 (W x H x D, mm)
- Operating voltage: 24 V DC

Inside temperature sensor T-KTY82
- Length of sensor shell approx. 45 mm, Ø approx. 6 mm, cable length approx. 187 mm

N° 701 Evaluation Unit PS8A with weather station P03 / 3 and temperature sensor T-KTY82

RADIO REMOTE CONTROLS, RADIO PUSH BUTTONS

The technology in a Smart Home and on the terrace can be comfortably operated with a radio remote control or push buttons.
The hand-held transmitter is a small mobile control center for all devices, e.g. starting with light, up to a heating or awning.
Push buttons on important points in the house are nevertheless recommended for example beside the terrace door for blinds control.
Thanks to radio these buttons are easy to install subsequently.
The radio operating devices presented here work with the wireless protocol Elsner RF and are completion of building controls, as well as for direct operation of ventilation units, drives and consumers on RF actuators (see the info box "Suitable Devices").

Nº 60522

Remote Control Remo® pro

- Radio hand-held transmitter with 32 channels (number depends on the device that is controlled)
- Coloured touch display, Buttons can be named individually
- Functions: up / down / stop, on / off, dimming (depending on the device to control)
- For control of the drives and devices installed at building control systems

- For direct manual control of ventilation units, dimmers, relays and motor control units
- Radio frequency 868.2 MHz, Elsner RF
- Housing plastic / glass, black / glossing
- Approx. 64 x 122 x 14 (W x H x D, mm)
- Integrated battery, charging via Micro-USB cable (5 V, e.g. charging set Nº 10155)

Nº 60511 (white)
Nº 60512 (aluminium)

Remote Control Remo® 8

- Radio hand-held transmitter with 8 channels
- Functions: up / down / stop, on / off, dimming (depending on the device to control)
- For control of the drives and devices installed at building control systems
- For direct manual control of ventilation units, dimmers, relays and motor control units

- With magnetic wall-mounting
- Radio frequency 868.2 MHz, Elsner RF
- Housing plastic white / grey or alu / graphite (partly painted)
- Hand-held transmitter approx. 41 x 140 x 21, mounting approx. 54 x 150 x 11 (W x H x D, mm)
- Power supply: 3 V battery type CR2032

RF-B2-UP Radio Push Button Interface

- Radio Interface for 2 normal double switches
- For operating drives and equipment on WS1, WS1000, Solexa II, Solexa and Arexa controls
- For direct operation of fans, relays and motor control devices

- Power supply: 3 V battery type CR2032
- Approx. 38 x 47 x 29 (W x H x D, mm)
- Connection lead 300 mm, can be extended up to 10 m
- For controls as of version 1.597
- Radio frequency 868.2 MHz, Elsner RF

N° 60540

Corlo Push Buttons P RF

- Glass white or black, edge matt/glossy chromed or white/black coated
- Available as single push button Corlo P1 RF (on/off, dimming) and as double push button Corlo P2 RF (2× on/off, drive 1× up/down, dimming)
- Wireless Push Button for drives/devices on controls WS1, WS1000, Solexa II
- For direct operation of ventilation units, relays, motor control units
- Energy supply through integrated solar panels. Additional emergency power supply through 3 V batterie (Typ CR2032)
- Mounting with Frame Corlo in socket or Frame Corlo Plan without socket (see page 11)

- Approx. 80 × 71 × 12,5 (W × H × D, mm)
- For more push buttons and sockets for System Corlo please see page 11
- Radio frequency 868.2 MHz, Elsner RF

Corlo Push Buttons M1-T		Corlo Push Buttons M2-T	
White/chrome glossy	N° 70282	White/chrome glossy	N° 70286
Black/chrome glossy	N° 70283	Black/chrome glossy	N° 70287
White/chrome matt	N° 70284	White/chrome matt	N° 70288
Black/chrome matt	N° 70285	Black/chrome matt	N° 70289
White/white matt	N° 70338	White/white matt	N° 70340
Black/black matt	N° 70339	Black/black matt	N° 70341

Corlo Push Buttons P1 RF		Corlo Push Buttons P2 RF	
White/chrome glossy	N° 70290	White/chrome glossy	N° 70294
Black/chrome glossy	N° 70291	Black/chrome glossy	N° 70295
White/chrome matt	N° 70292	White/chrome matt	N° 70296
Black/chrome matt	N° 70293	Black/chrome matt	N° 70297
White/white matt	N° 70342	White/white matt	N° 70344
Black/black matt	N° 70343	Black/black matt	N° 70345

Figures with frames (not included in delivery)
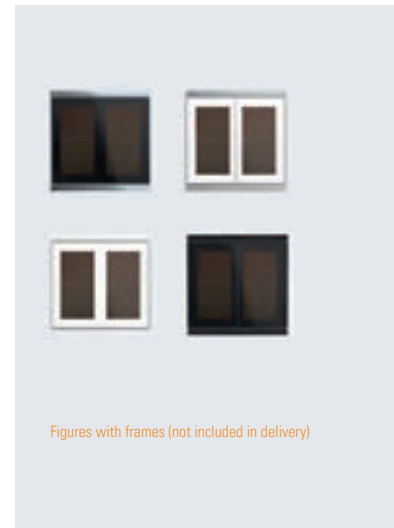
Frame Corlo Plan

- Frame for System Corlo (radio push buttons P RF, cover for LAN socket)
- 1-gang approx. 80 x 81, 2-gang approx. 80 x 153, 3-gang approx. 80 x 224 (W x H, mm), mounting depth approx. 12.5 mm
- Diecast, glass white or black, edge matt/glossy chromed or white/black matt coated (custom colours on request)

Frame Corlo Plane chrome glossy		Frame Corlo Plane white matt	
1-gang	N° 70300	1-gang	N° 70413
2-gang	N° 70301	2-gang	N° 70414
3-gang	N° 70302	3-gang	N° 70415

Frame Corlo Plane chrome matt		Frame Corlo Plane black matt	
1-gang	N° 70303	1-gang	N° 70416
2-gang	N° 70304	2-gang	N° 70417
3-gang	N° 70305	3-gang	N° 70418

Frame Corlo see page 11

Frame Corlo Plan chrome matt
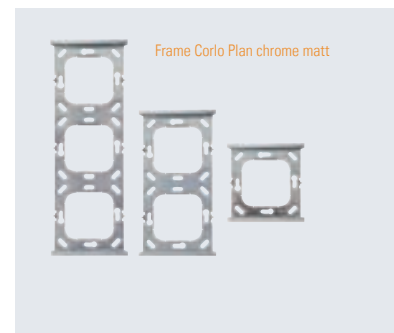
Remote Controls, Radio Push Button Interface and Push Buttons are suitable for the following devices:

Radio modules
RF-Relais *as of version 2.0*
RF-MSG and RF-Dimmer
RF-HE-ST

Control systems
(KNX) WS1000 Style/WS1 Style
WS1000 Color / WS1 Color
as of version 1.1
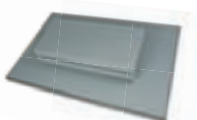
Ventilation units
Air Supply Unit WL-Z
Ventilation Unit WL400/WL800
as of version 4.0

Shading Control Solexa
as of version 3.6
Window Control Arexa
as of version 3.7
Radio Control Solexa II
Touch One Style / Touch One

RADIO CONTROL UNITS, F-CON

Radio actuators allow an easy connection of motors and consumers with the control units WS1, WS1000 (Color/Style) and Solexa II. In addition, together with a remote control, the radio actuators provide a comfortable manual control of the technology in the house and on the terrace.

F-CON CONNECTION SYSTEM   All F-Con compatible installation products are marked with ⃞F-Con

The F-Con radio motor control units allow for an extra fast installation: Due to STAK3/STAS3 connectors, these modules are simply plugged together and taught. Additional advantages:
- Usable producer independent with all 230 V motors with standard four-wire connection (up/down), no radio motors necessary
- ① Motor control unit RF-MSG-DST with 230 V loop-through function available for a simple cable routing   > p. 48

Accessories and extensions:
- ② Pre-made connection lines and mains lines   > p. 51
- ③ Group control relay GS2-DST for parallel operation of two drives without an integrated isolating relay   > p. 61
- ④ Radio remote controls and push buttons for direct manual control (operating devices with Elsner RF Radio protokoll)   > p. 44
- Automatic control is possible with the control units WS1, WS1000, Solexa II (control with Elsner RF Radio protokoll)   > p. 36
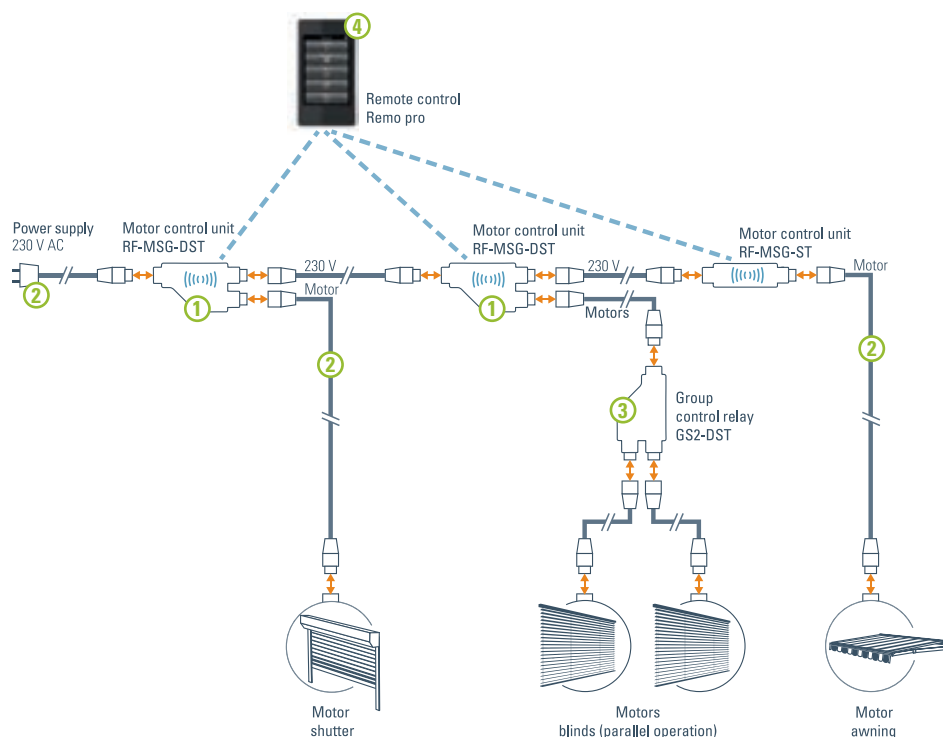
RF-Relays

- For 1 consumer
- Direct manual control with remote controls or push buttons (p. 44)
- Automatic control via WS1, WS1000 (Color / Style), Solexa II
- Operation voltage: 230 V AC
- Radio frequency 868.2 MHz, Elsner RF

RF-Relay-UP
- Potential-free NO-contact

- Maximum 2 A / 230 V
- Built-in device for mounting in concealed box
- Approx. 38 x 47 x 29 (W x H x D, mm)
- For WS1000 as of version 1.03

RF-Relay-N
- Earth-protected plug dose CEE 7 / 4 for 1 consumer maximum 10 A / 230 V
- Approx. 54 x 86 x 80 (W x H x D, mm)
- For WS1 / 1000 as of version 1.20

N° 60534
RF-Relais-UP

N° 60530
RF-Relais-N

RF-Relay-ST F-Con

- Also suitable for heaters with 1 heating level, max. 16 A / 230 V
- Direct manual control with remote controls or push buttons (p. 44)
- Automatic control via WS1, WS1000 (Color / Style), Solexa II

- For WS1 / 1000 version 1.20 and higher
- Housing with STAS3 plug / STAK3 coupling
- Approx. 149 x 36 x 25 (W x H x D, mm)
- Operation voltage: 230 V AC
- Radio frequency 868.2 MHz, Elsner RF

N° 60536

Radio Heating Module RF-HE-ST F-Con

- For radiant heater with 2 heating levels (4 wire connection) 50%, 100%; maximum 8 A per level
- Direct manual control with remote controls or push buttons (p. 44)
- Automatic control via WS1, WS1000 (Color / Style), Solexa II

- For controls as of version 1.818
- Housing with STAS3 plug / STAK3 coupling
- Approx. 149 x 36 x 25 (W x H x D, mm)
- Operation voltage: 230 V AC
- Radio frequency 868.2 MHz, Elsner RF

N° 60546

RF-L PWM-ST Wireless dimmer for LED lighting strips F-Con

- For a group of up to 4 lamps of 24 V LED lighting strips
- Direct manual control with remote controls or push buttons (p. 44)
- Automatic control via WS1, WS1000 (Color/Style), Solexa II
- For controls as of version 1.8
- Operation voltage: 230 V AC
- Radio frequency 868.2 MHz, Elsner RF

RF-L PWM-ST Dimmer with connection box (60548)
- Dimmer with connection box for up to 4 LED lighting strips
- Dimmer: Housing with STAS3 plug and STAK3 coupling, approx. 149 x 36 x 25 (W x H x D, mm)
- Connection box: Housing for surface mounting IP 55, approx. 109 x 39 x 44 (W x H x D, mm), cable length approx. 47 cm plus plug

Power Supply for Dimmer RF-L PWM-ST (60528)
- 24 V DC power supply, maximum 5 A
- STAS3 plug and STAK3 coupling
- Housing for surface mounting IP 67, approx. 194 x 37 x 64 (W x H x D, mm), cable length approx. 14 cm plus plug on both ends

Dimmer Set with connection box and power supply (60549)
- RF-L PWM-ST dimmer with connection box for a group of up to 4 lamps of 24 V LED lighting strips, maximum 5 A
- Dimmer and connection box as N° 60548
- Power supply as N° 60528

NEW

N° 60548 Dimmer RF-L PWM with connection box

N° 60528 Power Supply 24 V DC for RF-L PWM-ST

N° 60549 Set Dimmer RF-L PWM-ST
with connection box and power supply

Radio Dimmer RF-L LED-ST for LED lighting strips F-Con

N° 60545 RF-L LED-ST

- For 1 dimmable LED lighting strip (or group of lamps) in conjunction with dimmable power supply units
- Universal dimmer with automatic load detection (trailing edge, leading edge), load 20-300 W
- Direct manual control with remote controls or push buttons (p. 44)

- Automatic control via WS1, WS1000 (Color/Style), Solexa II
- For WS1/1000 as of version 1.818
- Housing with STAS3 plug and STAK3 coupling
- Approx. 149 x 36 x 25 (W x H x D, mm)
- Operation voltage: 230 V AC
- Radio frequency 868.2 MHz, Elsner RF

Radio Dimmer RF-L UN-ST for halogen/energy-saving lamps F-Con

N° 60544 RF-L UN-ST

- For high/low voltage halogen lamps (or group of lamps) in conjunction with dimmable power supply units or for 1 dimmable energy saving lamp (or group of lamps)
- Universal dimmer with automatic load detection (trailing edge, leading edge), load 20-300 W
- Direct manual control with remote controls or push buttons (p. 44)

- Automatic control via WS1, WS1000 (Color/Style), Solexa II
- For WS1/1000 as of version 1.818
- Housing with STAS3 plug and STAK3 coupling
- Approx. 149 x 36 x 25 (W x H x D, mm)
- Operation voltage: 230 V AC
- Radio frequency 868.2 MHz, Elsner RF

Radio Dimmer RF-L-UP 1-10 V for EVG and low voltage technology

N° 60547 RF-L-UP 1-10 V

- For 1 lamp (or group of lamps) mit electronic ballast (EVG), LED-converter or power supply unit for low coltage technology
- 230 V switching output (6 A)
- 1-10 V control unit (dimming 1-100%)
- Direct manual control with remote controls or push buttons (p. 44)

- Automatic control via WS1, WS1000 (Color/Style), Solexa II
- For WS1/1000 as of version 1.818
- Flush mounting in a socket
- Approx. 50 x 50 x 54 (W x H x D, mm)
- Operation voltage: 230 V AC
- Radio frequency 868.2 MHz, Elsner RF

Radio Motor Control Unit RF-MSG for flush-mounted installation

N° 60532 RF-MSG

N° 60533 RF-MSG-PF

- For 1 drive (230 V AC/4 A max.)
- Direct manual control with remote controls or push buttons (p. 44)
- Automatic control via WS1, WS1000 (Color/Style, as of version 1.597), Solexa II
- Integrated device for installation in junction box, with up/down clamps
- Approx. 38 x 47 x 29 (W x H x D, mm)

- Operating voltage: 230 V AC, 50 Hz
- Radio frequency 868.2 MHz, Elsner RF

RF-MSG
- 230 V drive output

RF-MSG-PF
- Potential free drive output

Radio Motor Control Unit RF-MSG-ST and RF-MSG-DST F-Con

NEU

N° 60535 RF-MSG-ST

N° 60541 RF-MSG-DST

N° 60542 RF-MSG2-DST

- Direct manual control with Remote Controls or Push Buttons (p. 44)
- Automatic control via WS1, WS1000 (Color/Style, from the version 1.597), Solexa II
- Housing with STAS3 plug/STAK3 coupling
- Operating voltage: 230 V AC, 50 Hz
- Radio frequency 868.2 MHz, Elsner RF

RF-MSG-ST
- For 1 drive (230 V AC/4 A maximum)
- Approx. 149 x 36 x 25 (W x H x D, mm)

RF-MSG-DST
- For 1 drive (230 V AC/4 A maximum)
- Power output for supplying additional motor control units (loop-through function)
- Approx. 135 x 73 x 29 (W x H x D, mm)

RF-MSG2-DST
- For 2 drives (230 V AC), separate control
- Approx. 135 x 73 x 29 (W x H x D, mm)

Radio Ventilation Module RF-VM

- For an air supply / exhaust device or a fresh air / heating combination (products of other manufacturers)
- 8 speed level
- Direct manual control with remote controls Remo or via interface RF-B2-UP (p. 44)
- Automatic control via WS1, WS1000 (Color / Style, as of version 1.597), Solexa II

- Operating voltage: 230 VAC, 50 Hz
- For flush mounting
- Cover approx. 220 x 140 (W x H, mm), mounting depth approx. 3 mm. concealed box approx. 200 x 120 x 64 (W x H x D, mm)
- For controls as of version 1.597
- Radio frequency 868.2 MHz, Elsner RF

N° 60537

RF-Router (Wireless Router)

- Increases the range of the wireless signal for 16 wireless subscribers
- Operating voltage: 230 V AC
- For WS1 and WS1000 Color / Style as of version 1.708

RF-Router-UP
- Built-in device, approx. 38 x 47 x 29 (W x H x D, mm)

RF-Router-N
- Adapter plug for plug / power outlet CEE 7/4

N° 60531 RF-Router-UP

N° 60529 RF-Router-N

Additional Antenna

- For WS1 und WS1000 Color / Style
- Improves reception / transmission intensity

- Connection at the display board
- Total length of antenna with cable approx. 565 mm

N° 60131

RADIO SENSORS

The radio sensors have been specially developed for the communication with WS1, WS1000 (models Color, Style, KNX) and Solexa II controls. They collect indoor data precisely at the required location and thus enable the realization of different climatic zones in the house or conservatory.

Temperature sensor WGT

- Temperature sensor (-30…+130°C) with separate evaluation unit
- Extremely small sensor tip for use as a contact or feed probe
- Protection category of the measuring sensor: IP 68

- Sensor: Length approx. 20 mm, Ø approx. 6 mm, cable approx. 300 cm. Evaluation unit approx. 38 x 47 x 24 (W x H x D, mm)
- Operating voltage: 7…30 V DC
- For controls as of version 1.51
- Radio frequency 868.2 MHz, Elsner RF

N° 20552
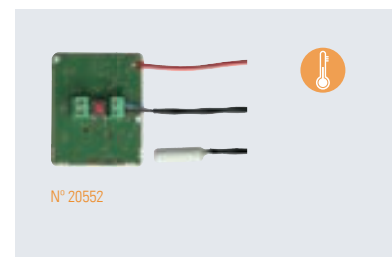
Indoor Sensors WGTH-UP and WG AQS / TH-UP

- Wireless communication with central unit
- Housing plastic white (glossy) or alu (painted, matt)
- For wall mounting in a socket, incl. frame (housing compatible with all 55 mm production frames)
- Operating voltage: 7…30 V DC
- Radio frequency 868.2 MHz, Elsner RF

WGTH-UP
- WS1000 includes in delivery
- Measurement of temperature and air humidity

WG AQS / TH-UP
- Measurement of CO_2 content, temperature and air humidity

WGTH-UP
N° 20550 (white)
N° 20551 (Alu)

WG AQS / TH-UP
N° 20553 (white)
N° 20554 (Alu)
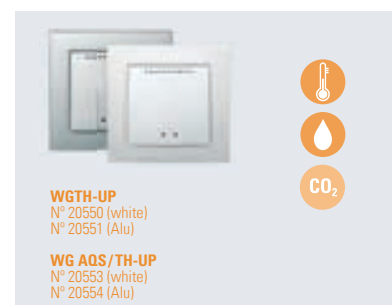
WEATHER SENSORS

The weather sensors have been developed specially for the Elsner building controls. A weather station P04i-GPS is already included in the delivery of WS1 and WS1000 controls (models Color, Style). In case of the KNX WS1000 Style, the user can decide whether to use the P04i-GPS or to get the weather data transmitted from KNX.

A weather station can be used for several controls via the distributor. Further wind sensors can be connected in addition to the weather station via the data collector. The separate wind measurement on facades with special wind loads can help to avoid wind damage at shadings.

N° 30136

P04i-GPS Weather Station

- For WS1/WS1000 Color/Style and KNX WS1000 Style
- Temperature, precipitation, wind speed and brightness recording
- Sun position calculation by the control system
- GPS receiver (time, position)

- Combi mount for wall/pole mounting
- Housing for surface mounting, IP 44, white/translucent
- Approx. 62 x 71 x 145 (W x H x D, mm)
- Operating voltage: 24 V DC

N° 30137

P04i-W Wind Sensor

- Wind Sensor for WS1 and WS1000 Color/Style in conjunction with P04i Data Collector
- Housing for surface mounting, IP 44, white/translucent

- Approx. 62 x 71 x 145 (W x H x D, mm)
- Operating voltage: 24 V DC

P04i Distributor

- Weather data distributor with 1 data input (for P04i-GPS) and 4 data outputs (for WS1 and WS1000)
- Modular device 6 width units, white, approx. 107 x 88 x 60 (W x H x D, mm)
- Operating voltage: 230 V AC

N° 30131

P04i Data Collector

- Weather data collector with 5 data inputs (1 for P04i-GPS, 4 for P04i-W) and 1 data output (for WS1 and WS1000)
- Modular device 6 width units, white, approx. 107 x 88 x 60 (W x H x D, mm)
- Operating voltage: 230 V AC

N° 30132

ACCESSORIES

Adapter Plugs for Display of WS1000 Color / Style

- For Control Systems WS1000 Color or (KNX) WS1000 Style
- Allow for the separate mounting of display and power electronics (for Style model: mounting of the display with concealed box)
- Connection with 8-wire / 12-wire cable (12-wire when using the KNX interface), e.g. J-Y(St) 6x2x0.8, maximum length 10 m

N° 60130
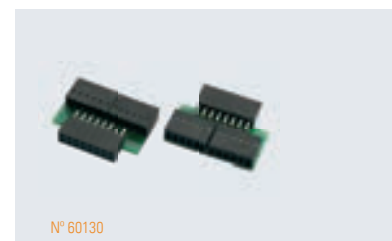
Charging Set

- Micro-USB charger
- For Solexa II Display and Remo pro / KNX

N° 10155

Connection lines F-Con

- Connection lines for radio modules with STAK3 / STAS3 connectors and motors
- STAS3 on STAK3, with STASI securing clip
- Available in lengths: 1 m; 2,5 m; 5 m

NEW

1 / 2,5 / 5 m
N° 60565 (1 m)
N° 60566 (2,5 m)
N° 60567 (5 m)
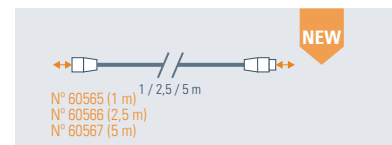
Mains line F-Con

- Allows the start-up of radio models with STAK3 / STAS3 connectors without intervention to the electrical installation
- Fixed connection to the household power circuit can be carried out afterwards by a professional electrician
- Grounding-type plug with STAK3 output and STASI securing clip
- Length 5 m

NEW

5 m
N° 60563
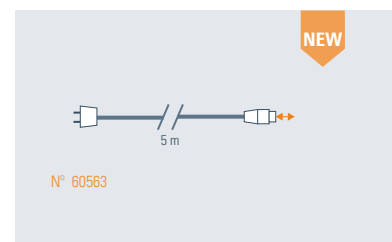
CONSERVATORY VENTILATION

In addition to shading, correct and adequate ventilation is imperative, so that a conservatory or a building with glass facade does not become a greenhouse. At its simplest, ventilation takes place via windows and roof vents. But this "natural ventilation" is not always possible. Particularly if the building height is low, the air circulation is insufficient. Open windows also encourage intruders. In these cases, motorised fans provide a pleasant climate. Mounted in the roof area, air is extracted (exhaust) or recirculated (recirculating air). Vents in the floor let fresh air flow in again.

Ventilation in summer
Good ventilation is important in summer in order to bring fresh, cool air into the room. An air feed in the floor area provides cooling. Windows or air supply units are installed in the skirting. Because air in the glass building warms up and rises, heat can easily accumulate in the ridge area. This can escape through the open rooflight or is exhausted in a controlled manner by ventilation units.

Ventilation in winter
In winter, the automatic control is predominantly in charge of using the sun's energy to heat the glass building. It will only extend the awning or blind once the desired indoor temperature is reached. When temperatures are low outside, windows and vents remain closed to avoid energy losses caused by a cold air supply. Ventilation units with a recirculation function can also be used for heat recovery. The warm air which collects in the roof area is distributed throughout the conservatory by the recirculation.

Ventilation and humidity
The air humidity in living rooms is a crucial factor in whether the climate is perceived as comfortable. Correct ventilation brings the air into motion and routes moisture to the outside. An obvious accompaniment to high humidity in a room is condensation on the window panes. This is particularly common if there are large temperature differences between inside and outside. Air movement helps to disperse this, as it occurs through ventilation, heating or recirculation. Elsner Elektronik ventilation units can counter condensation forming even before it has settled as moisture. A special calculation process in Elsner controls starts the recirculation function even before the window panes are affected.

Ventilation in summer: Open vents in the skirting admit fresh, cool air. Heated air is exhausted in the ridge area.

Ventilation in winter: Vents remain closed and the heating is on. In recirculation mode, the ventilation units distribute the warm air from the ridge area.

The air vent closes the air supply unit (left). Only if the vent is open fresh air can flow in (right).
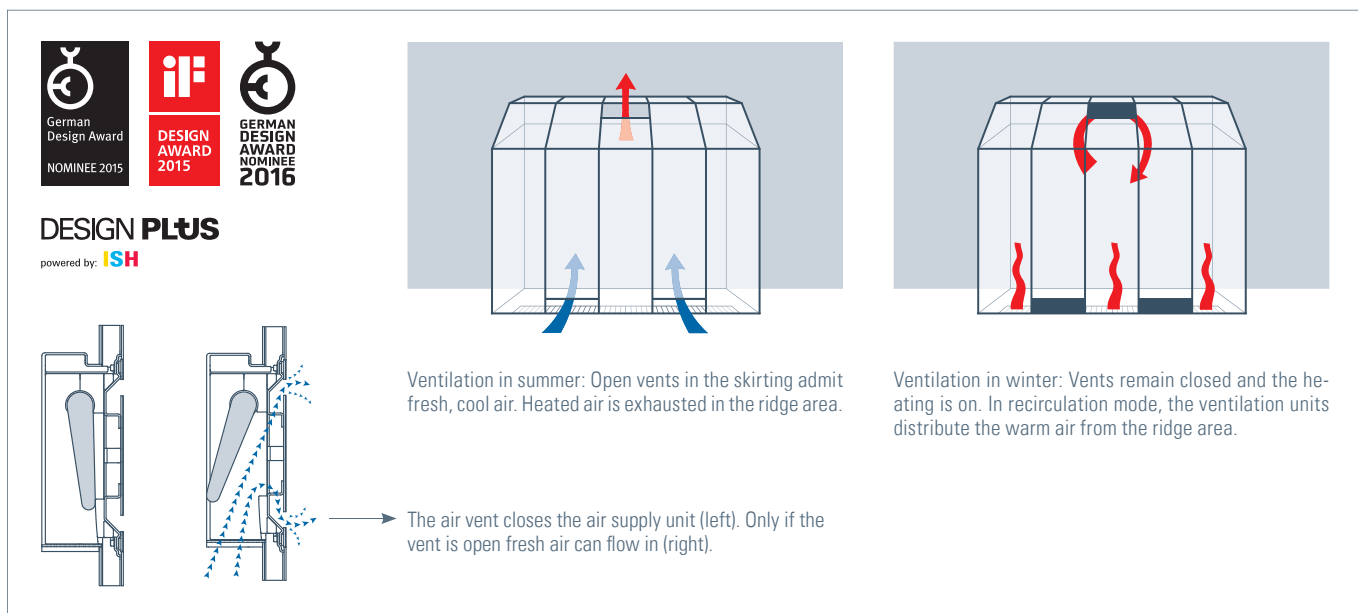
AIR SUPPLY UNIT

The WL-Z air supply unit is installed in the skirting and provides fresh air. As soon as air escapes through a roof light or is exhausted through an extraction device, cool air from outside flows in independently through the opened vent without any help of a fan. Because of the diffusor of WL-Z the air is distributed evenly and without draught in the room. If the appropriate protective grid has been installed, insects and pollen remain outside (optional).

The **fresh air supply** is regulated by the automatic controls according to the inside temperature and the air humidity. The models WS1 and WS1000 (Color, Style) are applicable here. If the values are higher than desired, the air supply is opened. The outside temperature is also recorded at the WL-Z air supply unit to optimize ventilation in summer and in winter. If summer mode is activated, the vent closes as soon as the temperature of the air flowing in is higher than the room temperature. Winter mode keeps the vent closed on cold days to prevent the energy loss. The WL-Z is flush on the inside and can be therefore used in the immediate vicinity of sliding doors. Due to the thermal decoupling of the exterior and interior part an excellent insulation value of 0.9 W/m² K is achieved. The device is powder-coated on both sides. The installation panel is extremely resistant to pressure; it is mounted like a glass pane. Because the WL-Z is processed free from any silicone, it can be installed together with self-cleaning panes. The WL-Z ventilation device is controlled via radio. During installation, merely the mains supply is connected. As soon as the wireless connection has been set, the WL-Z works directly together with the WS1 and WS1000 (Color, Style) controls. The air supply unit can also be operated directly with the wireless remote controls or push buttons (Elsner RF).

Inside view

Exterior view

Air Supply Unit WL-Z

- Air feed on a reflow basis, volume of air dependent on pressure difference
- Manual control with remote control or radio push buttons (p. 44); automatic control via WS1, WS1000 (Color/Style, p. 38)
- Air flow cross-section approx. 19.200 mm² (192 cm²)
- Power input max. 5 W
- Integrated temperature sensor for summer and winter mode
- U-value approx. 0,9 W/m²K
- Panel compression strength approx. 350 kPa
- Radio frequency 868.2 MHz, Elsner RF
- Standard colours: similar to RAL 9016 traffic white, RAL 9006 aluminium white, RAL 9007 aluminium grey
- Custom colours available as per RAL (extra charges) (extra charges apply), coating with custom colour powder possible

- Fan approx. 641 x 207 (W x D, mm), installation height approx. outside 60 mm, inside flush-mounted
- Standard panel approx. 1050 x 30 x 270 mm (W x H x D), panel thickness 24-60 mm, can be trimmed on 3 sides
- Pre-cut of panel and custom panel dimensions available, extra charges apply
- Operating voltage: 230 V, 50 Hz

Optional accessories
- Pollen protection fleece (N° 60550)
- Insect screen (N° 60553)

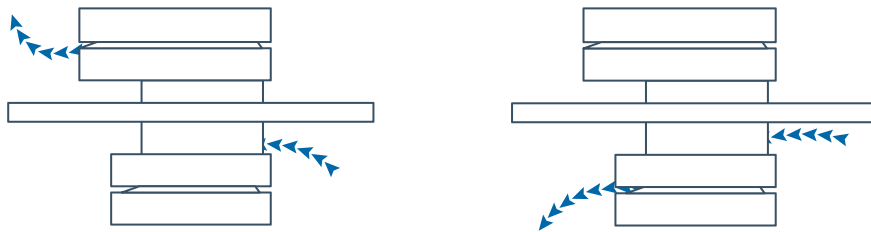*Standard panel WL-Z*
N° 60502   WL-Z, RAL 9016
N° 60503   WL-Z, RAL 9006
N° 60504   WL-Z, RAL 9007
N° 60505   WL-Z, custom, 1-colour
N° 60506   WL-Z, custom, 2-colour
(N° 60513-N° 60517   WL-Z pre-cut)

Ventilation unit function in exhaust mode (link) and in recirculation mode (right)

VENTILATION UNITS FOR AIR EXTRACTION AND RECIRCULATION

Motorised ventilation equipment ensures a comfortable climate in the conservatory if airing through windows is inadequate due to the building's layout, or is unwanted due to security risks. The ventilation units extract (exhaust) or recirculate (recirculation) air. The fans are particularly quiet when running.

The ventilation units communicate via radio with the WS1 and WS1000 (Color, Style) controls. Alternatively, the equipment can be switched directly with the wireless remote control or radio buttons. The ventilation unit can be automatically activated with a motion sensor via the RF-WL module. Recirculation mode is used for better heat recovery in your room and thus saves heat energy. Well timed air recirculation can also reduce condensation effectively. The controls WS1 and WS1000 detect critical temperature and dew point conditions using a special calculation method. This starts recirculation mode even before moisture settles. Due to their low installation height, the fans fit under an exterior sun screen, such as an awning. Owing to their completely silicone-free processing, the installation alongside self-cleaning panes is possible.

When the fan is shut off, the closure flap is closed with high contact pressure. Together with the self-limiting flap motor, this guarantees a tight closure of the ventilation aperture.

Ventilation Units WL

- Exhaust and recirculation modes (heat recovery, condensation reduction)
- Manual control with remote controls or radio push buttons (p. 44); automatic control via WS1, WS1000 (Color / Style, p. 36), module RF-WL 0-10 V (p. 43)
- Integrated temperature sensor (for recirculation)
- Panel compression strength approx. 350 kPa
- U-value approx. 0.9 W/m2K
- Available for roof sloping from 0° to 90°
- Radio frequency 868.2 MHz, Elsner RF
- Standard colours: similar to RAL 9016 traffic white, RAL 9006 aluminium white, RAL 9007 aluminium grey
- Custom colours available as per RAL (extra charges apply), coating with custom colour powder possible
- Standard panel approx. 1050 x 30 x 750 (W x H x D), can be trimmed on 3 sides
- Pre-cut of panel, custom panel dimensions and hights available, extra charges apply

- Fan dimensions: Depth approx. outside 304 mm, inside 254 mm. Installation hight approx. outside 150 mm, inside 165mm (when panel is 30 mm high, other hights result in a corresponding change of inner installation hight)
- Operating voltage: 230 V, 50 Hz

Ventilation Unit WL400
- Air volume extraction max. approx. 277 m3/h (net)
- Infinite variation, power consumption approx. 4 W (minimum speed) up to 62 W
- Fan width: approx. 379 mm

Ventilation Unit WL800
- Air volume extraction max. approx. 555 m3/h (net)
- Infinite variation, power consumption approx. 8 W (minimum speed) up to 124 W
- Fan width: approx. 651 mm

Standard panel WL
N° 60461	WL800, RAL 9016	N° 60481	WL400, RAL 9016
N° 60462	WL800, RAL 9006	N° 60482	WL400, RAL 9006
N° 60463	WL800, RAL 9007	N° 60483	WL400, RAL 9007
N° 60465	WL800, custom, 1-colour	N° 60485	WL400, custom, 1-colour
N° 60466	WL800, custom, 2-colour	N° 60486	WL400, custom, 2-colour
(N° 60471-N° 60476	WL800 pre-cut)	(N° 60491-N° 60496	WL400 pre-cut)

Exterior view WL800, grey RAL 9007, fine structure

Inside view WL800 white RAL 9016, silk gloss

Inside view WL400, white RAL 9016, silk gloss

CONVENTIONAL BUILDING TECHNOLOGY

SENSORS WITH SWITCHING OUTPUTS

The sensors with relay outputs can be used in many building automation systems. A pipe breakage detector indicates a leakage with a load acoustic alarm signal, without any other devices needed.

Rain Sensor R 24 V

N° 30158

- Precipitation sensor with 1.2 watt heating
- 24 V DC output for rain alarm
- Hold time 10-300 seconds, potentiometervariable
- Approx. 96 x 77 x 118 (W x H x D, mm)

- Housing for surface mounting, IP 44, white / translucent
- Operating voltage: 24 V DC

Rain / Wind Sensor RW-PF

N° 30159

- Wind speed sensor
- Precipitation sensor with 1.2 watt heating
- Potential-free changeover contacts for wind and rain alarm
- Setting of the wind threshold value via DIP switches inside the device

- LEDs show wind / rain alarm
- Approx. 96 x 77 x 118 (W x H x D, mm)
- Housing for surface mounting, IP 44, white / translucent
- Operating voltage: 12...40 V DC (12...28 V AC)

Leak Leakage Sensor

N° 30165

- For water / pipe break detection
- Set consists of evaluation unit and probe

Probe
- Detection of water
- Diameter: approx. 77 mm, line length: approx. 140 mm (plus cable grip and plugs)
- BNC plug for connection to the evaluation unit

Evaluation unit
- Acoustic alarm signal during water alarm and follow-up time
- Output for alarm reporting (potential-free changeover contact)
- Housing for surface mounting, protection category IP 20, grey
- Approx. 80 x 82 x 51 (W × H × D, mm)
- Operating voltage: 230 V AC

MOTOR CONTROL UNITS

Motor control units take over numerous tasks in the field of building automation: They transmit commands of control systems to motors and allow the formation of goups. Devices with inputs for push buttons simplify local manual operation.

Intelligent Motor Control Unit IMSG 230

- For 1 drive, 230 V AC / 4 A, up / down clamps
- For central and manual control of shading or window
- Central input 230 V AC
- Local manual operation with unlocked buttons (230 V AC)
- Storing of a movement position
- Integrated automated time system for buttons: inching function (for exact positioning) and longer keypress (automatic movement to the end position)
- Integrated device for installation in junction box
- Approx. 38 x 47 x 29 (W x H x D, mm)
- Operating voltage: 230 V AC, 50 Hz

N° 70446

Motor Control Units IMSG-UC

- With keypad (manual operation) and status LEDs
- Central and extension inputs with variable voltage (6…80 V DC, 6…240 V AC)
- Setting the central control to "Deadman" or "Autohold"
- Local manual operation with unlocked buttons (setting to Standard or Comfort mode) Storing one movement position per drive
- Connect through clamps
- Potential-free relays
- Auxiliary voltage: 230 V AC

IMSG-UC-2H
- For 2 drives (230 V)
- Connection for 2 up / down push buttons
- Modular device 3 width units, white, approx. 53 x 88 x 60 (W x H x D, mm)

IMSG-UC-4H
- For 4 drives (230 V)
- Connection for 4 up / down push buttons
- Modular device 6 width units, white, approx. 107 x 88 x 60 (W x H x D, mm)

N° 70455 IMSG-UC-2H

N° 70456 IMSG-UC-4H

Motor Control Unit MSG1-UP

N° 70451

- For 1 drive (230 V AC / 4 A, up / down)
- For central and manual control of shading or window
- Low wear zero voltage switch
- Direction change pause 1 second
- Central input 8...28 V, deadman or autohold modes

- Manual input for non-locked keys (8...28V), integrated automatic key timer (step mode / autohold)
- Integrated device for installation in junction box
- Approx. 38 x 47 x 29 (W x H x D, mm)
- Operating voltage: 230 V AC, 50 Hz

Motor Control Unit MSG1-UP 24V PS

N° 70452

- For a 24 V DC motor
- Integrated power supply unit (230 V AC to 24 V DC, 0.5 A)
- Output with polarity change
- Non-wearing, noiseless electronical output
- For central and manual control of shading or window

- Central inputs up / stop and down / stop
- Manual inputs up / stop and down / stop
- Flush mounting in a socket
- Approx. 50 x 50 x 54 (W x H x D, mm)
- Operating voltage: 230 V AC

CONVERTER

GPS-DCF Converter UTC ±

N° 30150

- Receives the international time signal UTC via GPS and converts the information to a DCF77 protocol (DCF output +24 V / - / out)
- Connection to a DCF77 signal input (as an alternative to a DCF77 antenna)
- Setting of the UTC offset via DIP switches inside the device

- The setting MEZ (central european time) comprises the automatic summer / winter time switchover
- Housing for surface mounting, IP 54, grey
- Approx. 80 x 80 x 55 (W x H x D, mm)
- Auxiliary voltage: 12-24 V DC

RELAY MODULES

Group control relays allow several actuators to be connected to one output. The actuators without an integrated isolating relay can also be operated on such an output. A control command (parallel operation) is followed by this actuators group.
Coupling relays direct the commands to other control units and provide the necessary potential isolation at the same time.

Group Control Relays WGGS-4 and WG-N-GS 4

- Isolating relay for operation of drives without integrated group control relay in a group
- 4 × drive 230 V AC (up/down/N/PE)
- Control input (up/down): 230 V AC, 50 Hz
- Operating voltage: 230 V AC, 50 Hz
- Housing for surface mounting, IP 54, grey
- Approx. 160 x 80 x 57 (W x H x D, mm)

WGGS-4
- 4 outputs (up/down clamps), load of one output max. 500 W

WG-N-GS-4
- With individual mains line
- 4 drives (up/down/N/PE), total load max. 1.5 kW, load of one output max. 600 W

N° 202, 203

Group Control Relays WGGS-2

- Isolating relays for operation of drives without integrated group control relay in a group
- Max. 500 W per output
- Control input (up/down): 230 V AC, 50 Hz
- Operating voltage: 230 V AC, 50 Hz
- Cascadable

WGGS-2
- 2 outputs 230 V AC (up/down clamps)
- Built-in type for assembly in junction box
- Approx. 38 x 47 x 29 (W x H x D, mm)

WGGS-2-AP
- 2 outputs 230 V AC (up/down clamps)
- Housing for surface mounting, IP 55, grey
- Approx. 89 x 53 x 89 (B x H x , without fastening)

WGGS-2-APK
- Control input with STAS3 plug
- 2 outputs 230 V AC (STAK3 connector)
- Housing for surface mounting, IP 55, grey
- Approx. 89 x 53 x 89 (B x H x T, without fastening)

N° 2032 WGGS-2

N° 2035 WGGS-2-AP

N° 2036 WGGS-2-APK

Group Control Relays GS2-DST F-Con

- Isolating relay for operation of drives without integrated group control relay in a group
- Cascadable
- Control input with STAS3 plug, 230 V AC, up/down
- 2 outputs 230 V AC (STAK3 connector), totally 4 A maximum

- Operating voltage: 230 V AC, 50 Hz
- Housing with STAS3 plug and STAK3 connectors
- Approx. 135 x 73 x 29 (B x H x T, mm)

NEW

N° 60560 GS2-DST

Group Control Relays WGGS-2/4-H

Nº 2037
WGGS-2-H

Nº 2034
WGGS-4-H

- Isolating relays for operation of drives without integrated group control relay in a group
- Cascadable
- Max. 500 W per output
- Control input (up/down): 230 V AC, 50 Hz
- Operating voltage: 230 V AC, 50 Hz
- Modular devices

WGGS-2-H
- 2 outputs 230 V AC (up/down clamps)
- Approx. 38 x 47 x 29 (W x H x D, mm),3 width units

WGGS-4-H
- 4 outputs 230 V AC (up/down clamps)
- Approx. 88 x 90 x 50 (W x H x D, mm), 5 width units

AC/DC-Relay RACDC-H for coupling/potential isolation

Nº 2016

- For coupling/potential isolation of various control systems
- For 24 V motors (with polarity change), max. 4 A
- Control input (up/down): 230 V AC, 50 Hz

- Operating voltage: 24 V DC
- Additional 24 V DC voltage output
- Modular device 3 width units, approx. 53 x 90 x 50 (W x H x D, mm)

Potential-free relays WG-PF and RP-H for coupling/potential isolation

Nº 2017
RP-H 230 V

Nº 2019
WG-PF

Nº 2021
RP-H 24 V

Nº 2022
RP-H PW

- For coupling/potential isolation of various control systems
- Power disconnection has to be carried out by the control device

WG-PF
- Output with one NO-contact for up and one for down, potential-free, max. 230 V AC, 8 A
- Control input 230 V AC, up/down/N/PE, 50 Hz
- Mounting in socket
- Approx. 38 x 47 x 29 (W x H x D, mm)
- Operating voltage: 230 V AC, 50 Hz

RP-H 230 V
- Output with a change-over contact for up and for down, maximum 230 V AC, 8 A
- Control input 230 V AC, up/down/N/PE, 50 Hz

- Modular device 3 width units, approx. 53 x 90 x 50 (W x H x D, mm)
- Operating voltage: 230 V AC, 50 Hz

RP-H 24 V
- Output with a change-over contact for up and for down, potential-free, maximum 230 V AC, each 1 A
- Control input 24 V DC, up/down/Com
- Modular device 3 width units, approx. 53 x 90 x 50 (W x H x D, mm)

RP-H PW
- Output up/down/N/PE, potential-free, maximum 230 V AC, 1 A
- Control input 24 V DC with polarity change
- Modular device 3 width units, approx. 53 x 90 x 50 (W x H x D, mm)

POWER SUPPLY UNITS

Power supply units provide the supply voltage for devices that are operated with low voltage.

24 V DC Power Supply Units PS180, PS400, PS1000 and PS5000

- For devices with 24 V AC supply voltage
- Input voltage: 230 V AC, 50 Hz
- Output voltage: 24 V DC
- Modular device

PS180
- Output maximum 180 mA / 4,5 W
- Approx. 53 x 90 x 50 (W x H x D, mm), 3 width units

PS400
- Output max. 400 mA / 10 W

- Approx. 53 x 90 x 50 (W x H x D, mm), 3 width units

PS1000
- Output maximum 1000 mA / 24 W
- Approx. 53 x 90 x 50 (W x H x D, mm), 3 width units

PS5000
- Input voltage 230 V AC or 275-350 V DC
- Output adjustable 24-28 V DC, maximum 5 A / 120 W
- Approx. 108 x 95 x 69 (W x H x D, mm), 6 width units

N° 20200 PS180
N° 20201 PS400
N° 20202 PS1000

N° 20203 PS5000

Power Supply Unit WGDC-2S

- 2 outputs, a total of maximum 2 A
- Can be jumpered to 12 V DC, 24 V DC or "Soft Start"
- "Soft Start" function for control of the slat angle of blinds. Switchover from 12 V to 24 V after approx. 1s
- Integrated changeover relay stops the drive faster

- Control input „up / down": 230 V AC, 50 Hz, short-circuit proof, stabilised
- Housing for surface mounting, IP 54, grey
- Approx. 160 x 80 x 57 (W x H x D, mm)
- Operating voltage: 230 V AC, 50 Hz

N° 2014

MODBUS

The data collected by the sensors is output as Modbus RTU protocol. The tank sensor additionally has an output relay, a current and a voltage interface.

MODBUS SENSORS

Indoor Sensors Sewi Modbus

- Modbus data output
- For indoor use
- Housing for surface mounting, IP 30
- Diameter approx. 105 mm, height 32 mm
- Operating voltage: 12...24 V DC

Sewi AQS/TH Modbus
- Room climate sensor (temperature, humidity, CO_2)
- Calculation of dew point temperature

Sewi TH Modbus
- Temperature / humidity sensor
- Calculation of dew point temperature

Nº 30174 Sewi AQS/TH Modbus
Nº 30175 Sewi TH Modbus

Weather Stations P03/3-Modbus

- Modbus data output (Modbus RTU)
- Temperature sensor (-40…+70°C)
- 3 brightness sensors (east, south, west, 0…99 000 lx)
- Electronic wind speed sensor
- Precipitation sensor with 1.2 watt heating
- Housing for surface mounting, IP 44, white / translucent
- Approx. 96 x 77 x 118 (W x H x D, mm)

- Operating voltage: 12...40 V DC (12...28 V AC)

P03/3-Modbus
- No time signal

P03/3-Modbus-GPS
- GPS receiver for international time signal UTC and position
- Calculation of the position of the sun (azimuth / elevation)

Nº 30146 P03/3-Modbus
Nº 30147 P03/3-Modbus-GPS
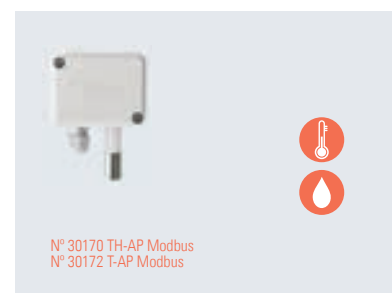
Outdoor Sensors for Modbus

- Modbus data output
- For indoor and outdoor use
- Housing for surface mounting IP 65, grey
- Approx. 65 x 93 x 38 (W x H x D, mm)
- Operating voltage: 12...24 V DC

TH-AP Modbus
- Temperature sensor (-40…+80°C)
- Hunidity sensor (0% RH…100% RH)
- Calculation of dew point temperature

T-AP Modbus
- Temperature sensor (-40…+80°C)

Nº 30170 TH-AP Modbus
Nº 30172 T-AP Modbus

Tank Sensor SO250-UI Modbus

- Measurement of the fill level of tanks with calculation of the content or of distances (12…250 cm)
- Modbus interface for data output
- 2 additional output relays
- Voltage interface 0…10 V
- Current interface 0…20 mA
- Evaluation unit with display and keypad to show the fill level / distance and to set tank geometry and measurement cycle
- Modular device 7 width units, white, approx. 123 x 89 x 61 (W x H x D, mm)
- Ultrasonic measuring sensor, black, Ø approx. 60 mm, height approx. 45 mm, thread 1½ inches

- Suitable for water and heating oil
- 10 m connection cable
- Operating voltage: 230 V AC

Nº 70152
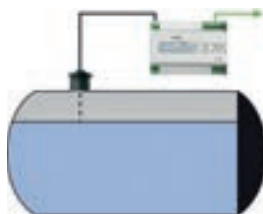
RS485

The weather stations provide the current meteorological data as RS485 protocol. The compact devices use the latest, innovative sensor technology: The electronic **wind sensor** works noiselessly and reliably, even during hail, snow and sub-zero temperatures. Even turbulent air and anabatic winds in the vicinity of the weather station are recorded. The brightness sensors used in the devices not only recognize sunlight, but also twilight. For this, filters simulate the sensitivyty spectrum of the human eye.

The measuring surface of the **precipitation sensor** is heated, so that humidity dries immediately. On the one hand, this prevents false reports caused by fog or dew. On the other hand, the sensor recognizes quickly when it has stopped to rain or snow. The **GPS receiver** provides the international time signal (UTC) and the position.

RS485 SENSORS

Weather Stations P03/3-RS485-GPS, P03/3-RS485-CET, P03/3-RS485 basic

- RS485 data output
- Temperature sensor (-40…+80°C)
- Wind speed sensor
- 3 brightness sensors
  (east, south, west, 0…99 000 lx)
- Precipitation sensor with 1.2 watt heating
- Housing for surface mounting, IP 44,
  white / translucent
- Approx. 96 x 77 x 118 (W x H x D, mm)

P03/3-RS485-GPS

- GPS receiver
- Calculation of the position of the sun
  (azimuth / elevation)
- Output of UTC
- Operating voltage: 24 V DC

P03/3-RS485-CET

- GPS receiver
- Calculation of the position of the sun
  (azimuth / elevation)
- Output of the central european time CET, automatic
  summer / winter time switchover according to the
  specifications for central europe
- Operating voltage: 24 V DC

P03/3-RS485 basic

- No time function
- Operating voltage: 12…40 V DC (12…28 V AC)

N° 30145 P03/3-RS485-GPS
N° 30151 P03/3-RS485-CET

N° 30140 P03/3-RS485 basic

Weather Stations P04/3-RS485-GPS, P04/3-RS485-CET, P04/3-RS485 basic

- RS485 data output
- Temperature sensor (-40…+70°C)
- 3 brightness sensors
  (east, south, west, 0…99 000 lx)
- Wind speed sensor
- Heated precipitation sensor
- Housing for surface mounting, IP 44, white /
  translucent
- Approx. 62 x 71 x 145 (W x H x D, mm)

P04/3-RS485-GPS

- GPS receiver
- Calculation of the position of the sun
  (azimuth / elevation) Output of UTC
- Operating voltage: 24 V DC

P04/3-RS485-CET

- GPS receiver
- Output of the central european time CET, automatic
  summer / winter time switchover according to the
  specifications for central europe
- Operating voltage: 24 V DC

P04/3-RS485 basic

- No time function
- Operating voltage: 12…40 V DC (12…28 V AC)

N° 30152 P04/3-RS485-GPS
N° 30153 P04/3-RS485-CET
N° 30154 P04/3-RS485 basic

ACCESSORIES

TEMPERATURE SENSORS

Nr. 305 T-KTY82

Nr. 30516 T-NTC

Temperature sensors T-KTY82 and T-NTC

T-KTY82
- For indoor and outdoor applications
- Application example: actuators KNX S-B4T-UP
- Length of sensor sleeve approx. 45 mm,
  Ø approx. 6 mm, cable length approx. 187 mm

T-NTC
- For indoor and outdoor applications
- Measurement range -35°C...+100°C
- T-NTC e.g. for Corlo Touch
- T-NTC-ST with plug for KNX B8-TH
- Length of sensor sleeve approx. 32 mm,
  Ø approx. 6 mm, cable length approx. 300 cm

FOR MOUNTING OF WEATHER STATIONS

Hinge Arm large
N° 30109 (white)
N° 30111 (alu blank)

Mounting Arm Fix
N° 30127 (white)
N° 30128 (alu blank)

Pole Mount Fix P
N° 30129 (white)

For Mounting of Weather Stations

- For flexible mounting of Elsner Elektronik weather stations and sensors

Mounting Arms Flex with ball joints:
- For P03/Solexa/Suntracer, P04/Suntracer sl and Vari models
- For wall mounting
- RAL 9003 powder-coated
- High quality, fixable ball joints
- Flex S: 1 ball joint, total length approx. 64 mm
- Flex S+: 2 ball joints, total length approx. 116 mm
- Flex L: 1 ball joint, total length approx. 215 mm

Mounting Arm L:
- For P03/Solexa/Suntracer, P04/Suntracer sl and Vari models
- For wall mounting
- RAL 9003 powder-coated
- Total length approx. 163 mm (no joints)

Mounting Arm Fix:
- For P03/Solexa/Suntracer, P04/Suntracer sl and Vari models
- Available powder-coated RAL 9003 or aluminium blank
- Total length approx. 425 mm

Pole Mount Fix P:
- For P03/Solexa and P04 models
- Powder-coated RAL 9003
- Approx. 55 x 58 x 30 (W x H x D, mm)

Hinge Arm large:
- For P03/Solexa/Suntracer models
- For wall, pole or beam mounting
- Available powder-coated RAL 9016 traffic white or aluminium blank
- 1 hinge, total length approx. 420 mm

Mounting Arm Flex S
N° 30119

Mounting Arm Flex S+
N° 30120

Mounting Arm L
N° 30112

Mounting Arm Flex L
N° 30115

Mounting Arm Flex L+
N° 30116

ELSNER ELEKTRONIK

Building automation technology "Made in Ostelsheim"
Elsner Elektronik has been standing for intelligent solutions in the sector of automatic control systems and building automation since 1990. All products of Elsner are developed and manufactured at the company headquarters in Ostelsheim. Highly qualified staff and advanced technology guarantee for a continuously high quality standard. Elsner Elektronik offers complete systems for the control of the ambient climate in buildings as well as individual components for different data interfaces (KNX, RS485, Modbus). Central operating devices, weather and indoor sensors, actuators or system devices – All products combine flexible technical solutions, comfortable operation and a forward-looking design.

Test laboratory for KNX application software
Elsner Elektronik is licensed as a KNX test laboratory and carries out the interworking and functional tests stipulated by the KNX Association. Regular audits to DIN EN ISO/IEC 17025 ensure compliance with the KNX standard. The test laboratory ensures that equipment from a range of manufacturers is successfully prepared for KNX certification. Elsner Elektronik supplies individual service packages for this purpose. Cost-effective entry-level offers include the manufacturer's co-operation, while the comprehensive package also includes registration with the KNX Association. Individual training courses introduce participants to the generation of EITT test sequences.

Qualitätsmanagement

ISO 9001

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