Product Portfolio

Enertex Bayern GmbH

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Table of Contents

Control / Visualization . . . 1
- Enertex® EibPC² inkl. Option NP . . . 1
- Enertex® EibPC² ohne Option NP . . . 4
- Enertex® ENA² . . . 6

Roomcontroller . . . 9
- Enertex® MeTa² KNX Premium, Alu gebürstet . . . 9
- Enertex® MeTa² KNX Premium, vergoldet . . . 12
- Enertex® MeTa² KNX Premium, schwarz eloxiert . . . 15
- Enertex® MeTa² KNX Premium, weiß (RAL9010) pulverbeschichtet . . . 18
- Enertex® MeTa² KNX Standard, Alu gebürstet . . . 21
- Enertex® MeTa² KNX Standard, gold . . . 24
- Enertex® MeTa² KNX Standard, schwarz eloxiert . . . 27
- Enertex® MeTa² KNX Standard, weiß (RAL9010) pulverbeschichtet . . . 30
- Enertex® MeTa® KNX Premium, Alu gebürstet . . . 33
- Enertex® MeTa® KNX Premium, schwarz eloxiert . . . 36
- Enertex® MeTa® KNX Premium, weiß (RAL9010) pulverbeschichtet . . . 38
- Enertex® MeTa® KNX Premium, vergoldet . . . 41
- Enertex® MeTa® KNX Standard, Alu gebürstet . . . 43
- Enertex® MeTa® KNX Standard, schwarz eloxiert . . . 45
- Enertex® MeTa® KNX Standard, weiß (RAL9010) pulverbeschichtet . . . 47
- Enertex® MeTa® KNX Standard, vergoldet . . . 49
- Enertex® MeTa® KNX Starter, Alu gebürstet . . . 51
- Enertex® MeTa® KNX Starter, schwarz eloxiert . . . 53
- Enertex® MeTa® KNX Starter, weiß (RAL9010) pulverbeschichtet . . . 55
- Enertex® Synohr MultiSense KNX Premium, Alu gebürstet . . . 57
- Enertex® Synohr MultiSense KNX Premium, weiß (RAL 9010) pulverbeschichtet . . . 59
- Enertex® Synohr MultiSense KNX Premium, schwarz eloxiert . . . 61

System Devices / Actuators . . . 63
- Enertex® KNX IP Secure Router . . . 63
- Enertex® KNX IP Secure Interface . . . 65
- Enertex® KNX TP Secure Coupler . . . 67
- Enertex® KNX LED Dimmsequenzer 20A/5x REG . . . 69
- Enertex® KNX LED Dimmsequenzer 20A/5x DK . . . 72
- Enertex® KNX HV Dimmer 2000W/8x . . . 75
- Enertex® KNX PowerSupply 960³ . . . 78
- Enertex® KNX Dual PowerSupply 1280 . . . 80

Measure . . . 82
- Enertex® KNX SmartMeter 85A . . . 82

Enertex® KNX SmartMeter 85A RT . . . 84
Enertex® KNX SmartMeter 630A (RT) . . . 87
Switch . . . 90
Enertex® ProxyTouch KNX . . . 90
Cover Frame . . . 92
Enertex® AluRa – einfach, Alu gebürstet, natur eloxiert . . . 92
Enertex® AluRa – einfach, Alu gebürstet, schwarz eloxiert . . . 93
Enertex® AluRa – einfach, weiß pulverbeschichtet . . . 94
Enertex® AluRa – zweifach, Alu gebürstet, natur eloxiert . . . 95
Enertex® AluRa – zweifach, Alu gebürstet, schwarz eloxiert . . . 96
Enertex® AluRa – dreifach, Alu gebürstet, natur eloxiert . . . 97
Enertex® AluRa – dreifach, Alu gebürstet, schwarz eloxiert . . . 98
Enertex® AluRa – dreifach, weiß pulverbeschichtet . . . 99
Other Devices . . . 100
Enertex® LED PowerSupply 160-12 . . . 100
Enertex® LED PowerSupply 160-24 . . . 102
Enertex® LED PowerSupply 160-48 . . . 104

Control / Visualization

Enertex® EibPC² inkl. Option NP

Order number: 1159-01

Short description

Logic machine and visualization for the KNX Bus, DIN rail mount (4 SU), bus powered, integrated IP-Interface

Figure 1. Enertex® EibPC² inkl. Option NP (1159-01)

Device properties

- Hardware:
  - DIN rail mount, 4 SU
  - ARM processor for industrial applications, 8 GB flash memory
  - OLED display shows device parameters, e.g., IP-Address
  - Integrated KNX TP interface
  - Bus-powered, no additional power supply required
  - Power consumption 1.8 W (typical workload)
  - Ethernet switch with two RJ45 jacks
- KNX features:
  - up to 65.000 objects
  - Scenes, timers, schedules, logic machine, presence simulation, long-term recordingof

telegrams, export telegrams on FTP server
    - KNX IP Interface to program other devices using ETS
- Network features:
    - Responsive web visualization (http, https)
    - Doorbird video doorbell: ring, camera and intercom in visualization
    - Modbus TCP Master, Slave (e.g., for PV inverter, solar batteries)
    - Easy integration of http(s) Web-APIs (REST)
    - MQTT Broker, Client to integrate IoT devices (e.g., Shelly)
    - Control Keba EV charger, PV surplus charging
    - Online weather forecast
    - OpenVPN server, TCP/UDP, e-mail and Telegram notifications
- Enertex® EibStudio:
    - Free configuration tool for Windows, Linux, macOS
    - Visual editor for logic and visualization
    - Debugger, group monitor
    - Code-based programming with more than 1200 ready-to-use Macros for typical tasks like heating and cooling, shading, lighting
- Import projects created with the successful Enertex® EibPC

Device description

Much more than logic and visualization for your KNX smart home: Enertex® EibPC². The Enertex® EibPC² handles all standard tasks such as scenes, timers, time-based control, or freely configurable logic. Furthermore, it serves as an interface for PV inverters, battery storage systems, or smart sockets. With the web visualization, you always keep an overview, whether on your smartphone or PC.

The ARM industrial processor and 8 GB flash memory guarantee reliability and performance for many years of complex tasks. Compact and economical with 4 SU and typical 1.8 watts power consumption. The integrated KNX bus coupler with an additional free tunnel connection for the ETS avoids the need for an extra interface and serves as a power supply for the device. Important information can be read directly on the display in the distribution panel.

With the modern web visualization, you can view the status of your devices at any time and take action if necessary, without needing to install an extra app on each device. Combine configurable elements, e.g., for switching, dimming, or value selection with functions such as timers or weather display. With ready-to-use page templates and ETS sample projects for Enertex products, e.g., KNX SmartMeter or KNX PowerSupply, you can create an appealing device visualization in seconds. The EibPC² supports Doorbird intercoms with video and duplex audio directly in the visualization.

The parameterization software EibStudio allows clear and comfortable programming. With graphical logic modeling and the visualization editor, you quickly achieve the desired result. Errors are avoided without restricting the user. Text-based programming is also possible. The entire

configuration is project-based, simplifying the management of multiple installations. EibStudio is available for free for Windows, Linux, and macOS.

NEW: The redesigned web visualization automatically adapts to your devices – whether smartphone, tablet, PC, or smartwatch. Doorbird intercoms with video and duplex audio directly in the browser.

Make the EibPC² your energy management center. In addition to functions for web APIs and Modbus TCP, the EibPC² now also supports MQTT as a broker and client. For example, it receives the current power consumption data from the Enertex® KNX SmartMeter and controls the electric car charging station or inexpensive Wifi sockets as needed.

Keywords

- MQTT
- Telegram logger
- Timer
- Weather forecast
- Modbus TCP
- Visualisation
- Logic machine
- KNX control
- Load management

Enertex® EibPC² ohne Option NP

Order number: 1159-02

Short description

Logic machine for the KNX Bus, DIN rail mount (4 SU), bus powered, integrated IP-Interface

Figure 2. Enertex® EibPC² ohne Option NP (1159-02)

Device properties

- Hardware:
  - DIN rail mount, 4 SU
  - ARM processor for industrial applications, 8 GB flash memory
  - OLED display shows device parameters, e.g., IP-Address
  - Integrated KNX TP interface
  - Bus-powered, no additional power supply required
  - Power consumption 1.8 W (typical workload)
  - Ethernet switch with two RJ45 jacks
- KNX features:
  - up to 65.000 objects
  - Scenes, timers, schedules, logic machine, presence simulation, long-term recordingof telegrams, export telegrams on FTP server
  - KNX IP Interface to program other devices using ETS
- Enertex® EibStudio:

    - Free configuration tool for Windows, Linux, macOS
    - Visual editor for logic and visualization
    - Debugger, group monitor
    - Code-based programming with more than 1200 ready-to-use Macros for typical tasks like heating and cooling, shading, lighting
- Import projects created with the successful Enertex® EibPC

Device description

Logic for your KNX smart home: Enertex® EibPC². The Enertex® EibPC² handles all standard tasks such as scenes, timers, time-based control, or freely configurable logic.

The ARM industrial processor and 8 GB flash memory guarantee reliability and performance for many years of complex tasks. Compact and economical with 4 SU and typical 1.8 watts power consumption. The integrated KNX bus coupler with an additional free tunnel connection for the ETS avoids the need for an extra interface and serves as a power supply for the device. Important information can be read directly on the display in the distribution panel.

The parameterization software EibStudio allows clear and comfortable programming. With graphical logic modeling, you quickly achieve the desired result. Errors are avoided without restricting the user. Text-based programming is also possible. The entire configuration is project-based, simplifying the management of multiple installations. EibStudio is available for free for Windows, Linux, and macOS.

Keywords

- Telegram logger
- Timer

Enertex® ENA²

Order number: 1170

Short description

Secure remote access, network protection and telegram logger, DIN rail mount (4 SU), bus powered

Figure 3. Enertex® ENA² (1170)

Device properties

- Secure remote access for your local network – Cloud-free End-to-end encrypted connection between mobile device and ENA²
- Forward remote access via Enertex relay server to connect to your local network, works with any internet provider (IPv4, IPv6, DS-Lite), no local router configuration required (optional)
- Guided browser-based configuration on device
- Easy-to-use user management
- Integrated free DynDNS service
- Integrated OpenVPN server
  - Restrict users access
  - Controllable via KNX group telegrams
  - Free client software for common operating systems (Windows, Linux, MacOS, Android, iOS)
  - VPN "on demand": automatically connect to your network (iOS-only)
- „Protected Network“
  - Separate physical ethernet interfaces for your main and protected networks

    - Control forwarding and filtering
    - Firewall and DHCP server
- Recent security standards and well-known and trusted VPN software
- KNX Telegramlogger
    - Records all KNX telegrams in internal database (~ 100.000.000 tel., depends on data type)
    - Import ETS project for data type, topology and device information Easy to query and analyze telegrams on ENA² webserver
    - Show time-value charts, e.g. per hour, per day
    - Identify configuration errors, e.g., read requests without response
- DIN rail mount (4 SU)
- Powered by integrated bus interface
- Power consumption 1.8 W (typical workload)

Device description

The Enertex® ENA² provides secure remote access for your mobile devices or remote management of your installation, and protects your building network against fraudulent access by local network devices. Additionally, the ENA² stores all telegrams in an integrated database. The configuration is optimized for the needs of your SmartHome, without any security tradeoff, ensured by recent security techniques and well-tested VPN software.

The ENA² is no cloud device, but leaves the control to whom it belongs: You. Enertex offers a free relay server (optional). If used, changing the internet router configuration is not required and remote access works independently of your local internet provider's configuration (IPv4, IPv6, DS-Lite). Your end-to-end encrypted data is only forwarded by the server, without any risk for your privacy. User permissions to open remote a connection can be controlled with KNX group telegrams.

Connected vacuum cleaners make the "Protected Network" inevitable to protect your KNX IP devices. The device has two physically separated ethernet interfaces. Your existing LAN on the first interface is typically managed by your internet router, and connects your computers, Smartphones, and IoT devices. On the second interface, the ENA² manages the "Protected Network" for your KNX IP devices. The separation prevents any other device from accessing the building infrastructure without permission. With the easy-to-use browser-based configuration on the device, you manage the filters.

To understand what happened when and why, the ENA² stores all telegrams (~ 100.000.000 telegrams, depending on data type). The database can be exported for the ETS or analyzed directly on the device. Generate time-value-charts or find typical configurations errors with a few "clicks", e.g., read requests without or with multiple responses.

Our ENA² is the only device to provide remote access, a "Protected Network" and a database for KNX telegrams.

Keywords

- Telegram logger

- Remote access
- VPN
- DynDNS
- Firewall
- Remote maintenance

Roomcontroller

Enertex® MeTa² KNX Premium, Alu gebürstet

Order number: 1177-01-al

Available from: Jul 15, 2024

Short description

Four rocker switches, one menu rocker, 80 switching options, room controller functionalities

Figure 4. Enertex® MeTa² KNX Premium, Alu gebürstet (1177-01-al)

Device properties

- KNX room controller for precise temperature control and sensor with mechanical rockers
- Front made of high-quality solid aluminum.
- High-resolution rocker displays with aging-resistant color TFT (IPS) technology and 0.1 mm resolution (480x60 pixels).
- Two-stage room temperature control with individual setpoints for heating and cooling.
- Control of up to four controller extensions
- Control of up to four split units
- Integrated three-stage fan control (fan coil actuator)
- 32 channels for switching, dimming, colored light control, tunable white control, blind control,

value transmitter, scene recall and multimedia control, each with up to three sub-functions

- Built-in temperature and humidity sensor
- Integrated light sensor
- Motion detection by radar-based motion detector with a range of up to 3 m in 3 zones
- Alarm function with six configurable alarms (audible and/or visual)
- Output of three different signal tones in two volumes
- Support for up to eight logic functions
- Message function for recording and displaying up to 32 KNX events such as door contact openers
- Approx. 310 different icons, free choice of colors for texts and icons
- Integrated fonts for Western European and Eastern European languages, as well as Cyrillic, Greek, Hebrew, Arabic
- Separate menu rocker ("MeTa") for switching between up to ten operating pages
- Two external binary inputs, can optionally be used as an input for a remote temperature sensor (e.g. Albrecht Jung item no.: FF NTC)
- Integrated bus coupling unit for power supply via the KNX bus (no additional power supply required)
- Compatible with standard flush-mounted boxes
- Four electronically inscribable, mechanical rocker switches enable up to 80 individual switching functions
- Additional large display in age-resistant color TFT (IPS) technology offers an impressive resolution of 0.1 mm
- Visualization of PV generation, consumption, wallbox and battery storage directly on the display
- Visualization of weather forecasts (external KNX-capable server required, e.g. Enertex® EibPC²)
- Three-line freely parameterizable info display for versatile applications, such as multimedia displays or general messages.
- Large-format display of time, date, temperatures, etc.
- Dimensions: 90 x 161 x 14.6 mm

Device description

The Enertex® MeTa² KNX room controller combines sensor technology with the convenient feel of an easy-to-use rocker control, as well as a comprehensive control center and a temperature control system with modern TFT displays. The up to four electronically inscribable mechanical rockers enable up to 80 operating functions, whereby each rocker can be assigned ten times. The labeling field allows the action to be carried out to be displayed, including feedback messages, information displays, alarms and message functions. The housing made of high-quality solid aluminum houses a high-resolution rocker display with age-resistant color TFT (IPS) technology, whose black background is seamlessly integrated into the panes of the rockers.

The room controller offers precise two-stage room temperature control with individual setpoint specification for heating and cooling. It controls up to four controller extensions and four split units. Other functions include integrated three-stage fan control, temperature and humidity sensors, a light sensor and a radar-based motion detector with a range of around three meters and divided into three zones.

The controller has alarm functions that can trigger acoustic and/or visual signals with six parameterizable alarms. Three different signal tones are available in two volumes. In addition, the room controller supports up to 32 channels, including switching, dimming, colored light control, tunable white control, blinds control and blinds control.

With about 310 different icons, free choice of colors for texts and icons, as well as fonts for different languages (Western European and Eastern European coding, Cyrillic, Greek, Hebrew, Arabic), the room controller offers a high degree of customizability. The separate menu button makes it easy to switch between up to ten freely configurable menu levels. Two external inputs can be used for remote temperature sensors or as binary inputs. The integrated bus coupling unit supplies the device via the KNX bus without an additional power supply.

Keywords

- Room controller
- RTR
- KNX push button
- Display labelling
- Mechanical rockers
- Binary input
- Air humidity sensor
- Temperature sensor
- Light sensor
- Motion detector
- KNX Secure

Enertex® MeTa² KNX Premium, vergoldet

Order number: 1177-01-gl

Available from: Jul 15, 2024

Short description

Four rocker switches, one menu rocker, 80 switching options, room controller functionalities

Figure 5. Enertex® MeTa² KNX Premium, vergoldet (1177-01-gl)

Device properties

- KNX room controller for precise temperature control and sensor with mechanical rockers
- Front made of high-quality solid aluminum.
- High-resolution rocker displays with aging-resistant color TFT (IPS) technology and 0.1 mm resolution (480x60 pixels).
- Two-stage room temperature control with individual setpoints for heating and cooling.
- Control of up to four controller extensions
- Control of up to four split units
- Integrated three-stage fan control (fan coil actuator)
- 32 channels for switching, dimming, colored light control, tunable white control, blind control, value transmitter, scene recall and multimedia control, each with up to three sub-functions
- Built-in temperature and humidity sensor

- Integrated light sensor
- Motion detection by radar-based motion detector with a range of up to 3 m in 3 zones
- Alarm function with six configurable alarms (audible and/or visual)
- Output of three different signal tones in two volumes
- Support for up to eight logic functions
- Message function for recording and displaying up to 32 KNX events such as door contact openers
- Approx. 310 different icons, free choice of colors for texts and icons
- Integrated fonts for Western European and Eastern European languages, as well as Cyrillic, Greek, Hebrew, Arabic
- Separate menu rocker ("MeTa") for switching between up to ten operating pages
- Two external binary inputs, can optionally be used as an input for a remote temperature sensor (e.g. Albrecht Jung item no.: FF NTC)
- Integrated bus coupling unit for power supply via the KNX bus (no additional power supply required)
- Compatible with standard flush-mounted boxes
- Four electronically inscribable, mechanical rocker switches enable up to 80 individual switching functions
- Additional large display in age-resistant color TFT (IPS) technology offers an impressive resolution of 0.1 mm
- Visualization of PV generation, consumption, wallbox and battery storage directly on the display
- Visualization of weather forecasts (external KNX-capable server required, e.g. Enertex® EibPC²)
- Three-line freely parameterizable info display for versatile applications, such as multimedia displays or general messages.
- Large-format display of time, date, temperatures, etc.
- Dimensions: 90 x 161 x 14.6 mm

Device description

The Enertex® MeTa² KNX room controller combines sensor technology with the convenient feel of an easy-to-use rocker control, as well as a comprehensive control center and a temperature control system with modern TFT displays. The up to four electronically inscribable mechanical rockers enable up to 80 operating functions, whereby each rocker can be assigned ten times. The labeling field allows the action to be carried out to be displayed, including feedback messages, information displays, alarms and message functions. The housing made of high-quality solid aluminum houses a high-resolution rocker display with age-resistant color TFT (IPS) technology, whose black background is seamlessly integrated into the panes of the rockers.

The room controller offers precise two-stage room temperature control with individual setpoint specification for heating and cooling. It controls up to four controller extensions and four split units. Other functions include integrated three-stage fan control, temperature and humidity

sensors, a light sensor and a radar-based motion detector with a range of around three meters and divided into three zones.

The controller has alarm functions that can trigger acoustic and/or visual signals with six parameterizable alarms. Three different signal tones are available in two volumes. In addition, the room controller supports up to 32 channels, including switching, dimming, colored light control, tunable white control, blinds control and blinds control.

With about 310 different icons, free choice of colors for texts and icons, as well as fonts for different languages (Western European and Eastern European coding, Cyrillic, Greek, Hebrew, Arabic), the room controller offers a high degree of customizability. The separate menu button makes it easy to switch between up to ten freely configurable menu levels. Two external inputs can be used for remote temperature sensors or as binary inputs. The integrated bus coupling unit supplies the device via the KNX bus without an additional power supply.

Keywords

- Room controller
- RTR
- KNX push button
- Display labelling
- Mechanical rockers
- Binary input
- Air humidity sensor
- Temperature sensor
- Light sensor
- Motion detector
- KNX Secure

Enertex® MeTa² KNX Premium, schwarz eloxiert

Order number: 1177-01-sw

Available from: Jul 15, 2024

Short description

Four rocker switches, one menu rocker, 80 switching options, room controller functionalities

Figure 6. Enertex® MeTa² KNX Premium, schwarz eloxiert (1177-01-sw)

Device properties

- KNX room controller for precise temperature control and sensor with mechanical rockers
- Front made of high-quality solid aluminum.
- High-resolution rocker displays with aging-resistant color TFT (IPS) technology and 0.1 mm resolution (480x60 pixels).
- Two-stage room temperature control with individual setpoints for heating and cooling.
- Control of up to four controller extensions
- Control of up to four split units
- Integrated three-stage fan control (fan coil actuator)
- 32 channels for switching, dimming, colored light control, tunable white control, blind control, value transmitter, scene recall and multimedia control, each with up to three sub-functions
- Built-in temperature and humidity sensor

- Integrated light sensor
- Motion detection by radar-based motion detector with a range of up to 3 m in 3 zones
- Alarm function with six configurable alarms (audible and/or visual)
- Output of three different signal tones in two volumes
- Support for up to eight logic functions
- Message function for recording and displaying up to 32 KNX events such as door contact openers
- Approx. 310 different icons, free choice of colors for texts and icons
- Integrated fonts for Western European and Eastern European languages, as well as Cyrillic, Greek, Hebrew, Arabic
- Separate menu rocker ("MeTa") for switching between up to ten operating pages
- Two external binary inputs, can optionally be used as an input for a remote temperature sensor (e.g. Albrecht Jung item no.: FF NTC)
- Integrated bus coupling unit for power supply via the KNX bus (no additional power supply required)
- Compatible with standard flush-mounted boxes
- Four electronically inscribable, mechanical rocker switches enable up to 80 individual switching functions
- Additional large display in age-resistant color TFT (IPS) technology offers an impressive resolution of 0.1 mm
- Visualization of PV generation, consumption, wallbox and battery storage directly on the display
- Visualization of weather forecasts (external KNX-capable server required, e.g. Enertex® EibPC²)
- Three-line freely parameterizable info display for versatile applications, such as multimedia displays or general messages.
- Large-format display of time, date, temperatures, etc.
- Dimensions: 90 x 161 x 14.6 mm

Device description

The Enertex® MeTa² KNX room controller combines sensor technology with the convenient feel of an easy-to-use rocker control, as well as a comprehensive control center and a temperature control system with modern TFT displays. The up to four electronically inscribable mechanical rockers enable up to 80 operating functions, whereby each rocker can be assigned ten times. The labeling field allows the action to be carried out to be displayed, including feedback messages, information displays, alarms and message functions. The housing made of high-quality solid aluminum houses a high-resolution rocker display with age-resistant color TFT (IPS) technology, whose black background is seamlessly integrated into the panes of the rockers.

The room controller offers precise two-stage room temperature control with individual setpoint specification for heating and cooling. It controls up to four controller extensions and four split units. Other functions include integrated three-stage fan control, temperature and humidity

sensors, a light sensor and a radar-based motion detector with a range of around three meters and divided into three zones.

The controller has alarm functions that can trigger acoustic and/or visual signals with six parameterizable alarms. Three different signal tones are available in two volumes. In addition, the room controller supports up to 32 channels, including switching, dimming, colored light control, tunable white control, blinds control and blinds control.

With about 310 different icons, free choice of colors for texts and icons, as well as fonts for different languages (Western European and Eastern European coding, Cyrillic, Greek, Hebrew, Arabic), the room controller offers a high degree of customizability. The separate menu button makes it easy to switch between up to ten freely configurable menu levels. Two external inputs can be used for remote temperature sensors or as binary inputs. The integrated bus coupling unit supplies the device via the KNX bus without an additional power supply.

Keywords

- Room controller
- RTR
- KNX push button
- Display labelling
- Mechanical rockers
- Binary input
- Air humidity sensor
- Temperature sensor
- Light sensor
- Motion detector
- KNX Secure

Enertex® MeTa² KNX Premium, weiß (RAL9010) pulverbeschichtet

Order number: 1177-01-ws

Available from: Jul 15, 2024

Short description

Four rocker switches, one menu rocker, 80 switching options, room controller functionalities

Figure 7. Enertex® MeTa² KNX Premium, weiß (RAL9010) pulverbeschichtet (1177-01-ws)

Device properties

- KNX room controller for precise temperature control and sensor with mechanical rockers
- Front made of high-quality solid aluminum.
- High-resolution rocker displays with aging-resistant color TFT (IPS) technology and 0.1 mm resolution (480x60 pixels).
- Two-stage room temperature control with individual setpoints for heating and cooling.
- Control of up to four controller extensions
- Control of up to four split units
- Integrated three-stage fan control (fan coil actuator)
- 32 channels for switching, dimming, colored light control, tunable white control, blind control, value transmitter, scene recall and multimedia control, each with up to three sub-functions

- Built-in temperature and humidity sensor
- Integrated light sensor
- Motion detection by radar-based motion detector with a range of up to 3 m in 3 zones
- Alarm function with six configurable alarms (audible and/or visual)
- Output of three different signal tones in two volumes
- Support for up to eight logic functions
- Message function for recording and displaying up to 32 KNX events such as door contact openers
- Approx. 310 different icons, free choice of colors for texts and icons
- Integrated fonts for Western European and Eastern European languages, as well as Cyrillic, Greek, Hebrew, Arabic
- Separate menu rocker ("MeTa") for switching between up to ten operating pages
- Two external binary inputs, can optionally be used as an input for a remote temperature sensor (e.g. Albrecht Jung item no.: FF NTC)
- Integrated bus coupling unit for power supply via the KNX bus (no additional power supply required)
- Compatible with standard flush-mounted boxes
- Four electronically inscribable, mechanical rocker switches enable up to 80 individual switching functions
- Additional large display in age-resistant color TFT (IPS) technology offers an impressive resolution of 0.1 mm
- Visualization of PV generation, consumption, wallbox and battery storage directly on the display
- Visualization of weather forecasts (external KNX-capable server required, e.g. Enertex® EibPC²)
- Three-line freely parameterizable info display for versatile applications, such as multimedia displays or general messages.
- Large-format display of time, date, temperatures, etc.
- Dimensions: 90 x 161 x 14.6 mm

Device description

The Enertex® MeTa² KNX room controller combines sensor technology with the convenient feel of an easy-to-use rocker control, as well as a comprehensive control center and a temperature control system with modern TFT displays. The up to four electronically inscribable mechanical rockers enable up to 80 operating functions, whereby each rocker can be assigned ten times. The labeling field allows the action to be carried out to be displayed, including feedback messages, information displays, alarms and message functions. The housing made of high-quality solid aluminum houses a high-resolution rocker display with age-resistant color TFT (IPS) technology, whose black background is seamlessly integrated into the panes of the rockers.

The room controller offers precise two-stage room temperature control with individual setpoint specification for heating and cooling. It controls up to four controller extensions and four split

units. Other functions include integrated three-stage fan control, temperature and humidity sensors, a light sensor and a radar-based motion detector with a range of around three meters and divided into three zones.

The controller has alarm functions that can trigger acoustic and/or visual signals with six parameterizable alarms. Three different signal tones are available in two volumes. In addition, the room controller supports up to 32 channels, including switching, dimming, colored light control, tunable white control, blinds control and blinds control.

With about 310 different icons, free choice of colors for texts and icons, as well as fonts for different languages (Western European and Eastern European coding, Cyrillic, Greek, Hebrew, Arabic), the room controller offers a high degree of customizability. The separate menu button makes it easy to switch between up to ten freely configurable menu levels. Two external inputs can be used for remote temperature sensors or as binary inputs. The integrated bus coupling unit supplies the device via the KNX bus without an additional power supply.

Keywords

- Room controller
- RTR
- KNX push button
- Display labelling
- Mechanical rockers
- Binary input
- Air humidity sensor
- Temperature sensor
- Light sensor
- Motion detector
- KNX Secure

Enertex® MeTa² KNX Standard, Alu gebürstet

Order number: 1177-02-al

Available from: Jul 15, 2024

Short description

Four rocker switches, one menu rocker, 80 switching options, room controller functionalities

Figure 8. Enertex® MeTa² KNX Standard, Alu gebürstet (1177-02-al)

Device properties

- KNX room controller for precise temperature control and sensor with mechanical rockers
- Front made of high-quality solid aluminum.
- High-resolution rocker displays with aging-resistant color TFT (IPS) technology and 0.1 mm resolution (480x60 pixels).
- Two-stage room temperature control with individual setpoints for heating and cooling.
- Control of up to four controller extensions
- Control of up to four split units
- Integrated three-stage fan control (fan coil actuator)
- 32 channels for switching, dimming, colored light control, tunable white control, blind control, value transmitter, scene recall and multimedia control, each with up to three sub-functions
- Built-in temperature and humidity sensor

- Integrated light sensor
- Motion detection by radar-based motion detector with a range of up to 3 m in 3 zones
- Alarm function with six configurable alarms (audible and/or visual)
- Output of three different signal tones in two volumes
- Support for up to eight logic functions
- Message function for recording and displaying up to 32 KNX events such as door contact openers
- Approx. 310 different icons, free choice of colors for texts and icons
- Integrated fonts for Western European and Eastern European languages, as well as Cyrillic, Greek, Hebrew, Arabic
- Separate menu rocker ("MeTa") for switching between up to ten operating pages
- Two external binary inputs, can optionally be used as an input for a remote temperature sensor (e.g. Albrecht Jung item no.: FF NTC)
- Integrated bus coupling unit for power supply via the KNX bus (no additional power supply required)
- Compatible with standard flush-mounted boxes
- Two electronically inscribable, mechanical rocker switches with max. 40 switching functions
- Dimensions: 90 x 90 x 14.6 mm

Device description

The Enertex® MeTa² KNX room controller combines high TFT displays with pleasantly haptic rocker control. Additionally it is both a comprehensive control center and a temperature control system with high versatility.The up to four electronically inscribable mechanical rockers enable up to 80 operating functions, whereby each rocker can be assigned ten times. The labeling field allows the action to be carried out to be displayed, including feedback messages, information displays, alarms and message functions. The housing made of high-quality solid aluminum houses a high-resolution rocker display with age-resistant color TFT (IPS) technology, whose black background is seamlessly integrated into the panes of the rockers.

The controller has alarm functions that can trigger acoustic and/or visual signals with six parameterizable alarms. Three different signal tones are available in two volumes. In addition, the room controller supports up to 32 channels, including switching, dimming, colored light control, tunable white control, blinds control and blinds control.

With about 310 different icons, free choice of colors for texts and icons, as well as fonts for different languages (Western European and Eastern European coding, Cyrillic, Greek, Hebrew, Arabic), the room controller offers a high degree of customizability. The separate menu button at the lower end of the controller makes it easy to switch between up to ten freely configurable menu levels. Two external inputs can be used for remote temperature sensors or as binary inputs. The integrated bus coupling unit supplies the device via the KNX bus without an additional power supply.

Keywords

- Room controller

- RTR
- KNX push button
- Display labelling
- Mechanical rockers
- Binary input
- Air humidity sensor
- Temperature sensor
- Light sensor
- Motion detector
- KNX Secure

Enertex® MeTa² KNX Standard, gold

Order number: 1177-02-gl

Available from: Jul 15, 2024

Short description

Four rocker switches, one menu rocker, 80 switching options, room controller functionalities

Figure 9. Enertex® MeTa² KNX Standard, gold (1177-02-gl)

Device properties

- KNX room controller for precise temperature control and sensor with mechanical rockers
- Front made of high-quality solid aluminum.
- High-resolution rocker displays with aging-resistant color TFT (IPS) technology and 0.1 mm resolution (480x60 pixels).
- Two-stage room temperature control with individual setpoints for heating and cooling.
- Control of up to four controller extensions
- Control of up to four split units
- Integrated three-stage fan control (fan coil actuator)
- 32 channels for switching, dimming, colored light control, tunable white control, blind control, value transmitter, scene recall and multimedia control, each with up to three sub-functions
- Built-in temperature and humidity sensor

- Integrated light sensor
- Motion detection by radar-based motion detector with a range of up to 3 m in 3 zones
- Alarm function with six configurable alarms (audible and/or visual)
- Output of three different signal tones in two volumes
- Support for up to eight logic functions
- Message function for recording and displaying up to 32 KNX events such as door contact openers
- Approx. 310 different icons, free choice of colors for texts and icons
- Integrated fonts for Western European and Eastern European languages, as well as Cyrillic, Greek, Hebrew, Arabic
- Separate menu rocker ("MeTa") for switching between up to ten operating pages
- Two external binary inputs, can optionally be used as an input for a remote temperature sensor (e.g. Albrecht Jung item no.: FF NTC)
- Integrated bus coupling unit for power supply via the KNX bus (no additional power supply required)
- Compatible with standard flush-mounted boxes
- Two electronically inscribable, mechanical rocker switches with max. 40 switching functions
- Dimensions: 90 x 90 x 14.6 mm

Device description

The Enertex® MeTa² KNX room controller combines high TFT displays with pleasantly haptic rocker control. Additionally it is both a comprehensive control center and a temperature control system with high versatility.The up to four electronically inscribable mechanical rockers enable up to 80 operating functions, whereby each rocker can be assigned ten times. The labeling field allows the action to be carried out to be displayed, including feedback messages, information displays, alarms and message functions. The housing made of high-quality solid aluminum houses a high-resolution rocker display with age-resistant color TFT (IPS) technology, whose black background is seamlessly integrated into the panes of the rockers.

The controller has alarm functions that can trigger acoustic and/or visual signals with six parameterizable alarms. Three different signal tones are available in two volumes. In addition, the room controller supports up to 32 channels, including switching, dimming, colored light control, tunable white control, blinds control and blinds control.

With about 310 different icons, free choice of colors for texts and icons, as well as fonts for different languages (Western European and Eastern European coding, Cyrillic, Greek, Hebrew, Arabic), the room controller offers a high degree of customizability. The separate menu button at the lower end of the controller makes it easy to switch between up to ten freely configurable menu levels. Two external inputs can be used for remote temperature sensors or as binary inputs. The integrated bus coupling unit supplies the device via the KNX bus without an additional power supply.

Keywords

- Room controller

- RTR
- KNX push button
- Display labelling
- Mechanical rockers
- Binary input
- Air humidity sensor
- Temperature sensor
- Light sensor
- Motion detector
- KNX Secure

Enertex® MeTa² KNX Standard, schwarz eloxiert

Order number: 1177-02-sw

Available from: Jul 15, 2024

Short description

Four rocker switches, one menu rocker, 80 switching options, room controller functionalities

Figure 10. Enertex® MeTa² KNX Standard, schwarz eloxiert (1177-02-sw)

Device properties

- KNX room controller for precise temperature control and sensor with mechanical rockers
- Front made of high-quality solid aluminum.
- High-resolution rocker displays with aging-resistant color TFT (IPS) technology and 0.1 mm resolution (480x60 pixels).
- Two-stage room temperature control with individual setpoints for heating and cooling.
- Control of up to four controller extensions
- Control of up to four split units
- Integrated three-stage fan control (fan coil actuator)
- 32 channels for switching, dimming, colored light control, tunable white control, blind control, value transmitter, scene recall and multimedia control, each with up to three sub-functions
- Built-in temperature and humidity sensor

- Integrated light sensor
- Motion detection by radar-based motion detector with a range of up to 3 m in 3 zones
- Alarm function with six configurable alarms (audible and/or visual)
- Output of three different signal tones in two volumes
- Support for up to eight logic functions
- Message function for recording and displaying up to 32 KNX events such as door contact openers
- Approx. 310 different icons, free choice of colors for texts and icons
- Integrated fonts for Western European and Eastern European languages, as well as Cyrillic, Greek, Hebrew, Arabic
- Separate menu rocker ("MeTa") for switching between up to ten operating pages
- Two external binary inputs, can optionally be used as an input for a remote temperature sensor (e.g. Albrecht Jung item no.: FF NTC)
- Integrated bus coupling unit for power supply via the KNX bus (no additional power supply required)
- Compatible with standard flush-mounted boxes
- Two electronically inscribable, mechanical rocker switches with max. 40 switching functions
- Dimensions: 90 x 90 x 14.6 mm

Device description

The Enertex® MeTa² KNX room controller combines high TFT displays with pleasantly haptic rocker control. Additionally it is both a comprehensive control center and a temperature control system with high versatility.The up to four electronically inscribable mechanical rockers enable up to 80 operating functions, whereby each rocker can be assigned ten times. The labeling field allows the action to be carried out to be displayed, including feedback messages, information displays, alarms and message functions. The housing made of high-quality solid aluminum houses a high-resolution rocker display with age-resistant color TFT (IPS) technology, whose black background is seamlessly integrated into the panes of the rockers.

The controller has alarm functions that can trigger acoustic and/or visual signals with six parameterizable alarms. Three different signal tones are available in two volumes. In addition, the room controller supports up to 32 channels, including switching, dimming, colored light control, tunable white control, blinds control and blinds control.

With about 310 different icons, free choice of colors for texts and icons, as well as fonts for different languages (Western European and Eastern European coding, Cyrillic, Greek, Hebrew, Arabic), the room controller offers a high degree of customizability. The separate menu button at the lower end of the controller makes it easy to switch between up to ten freely configurable menu levels. Two external inputs can be used for remote temperature sensors or as binary inputs. The integrated bus coupling unit supplies the device via the KNX bus without an additional power supply.

Keywords

- Room controller

- RTR
- KNX push button
- Display labelling
- Mechanical rockers
- Binary input
- Air humidity sensor
- Temperature sensor
- Light sensor
- Motion detector
- KNX Secure

Enertex® MeTa² KNX Standard, weiß (RAL9010) pulverbeschichtet

Order number: 1177-02-ws

Available from: Jul 15, 2024

Short description

Four rocker switches, one menu rocker, 80 switching options, room controller functionalities

Figure 11. Enertex® MeTa² KNX Standard, weiß (RAL9010) pulverbeschichtet (1177-02-ws)

Device properties

- KNX room controller for precise temperature control and sensor with mechanical rockers
- Front made of high-quality solid aluminum.
- High-resolution rocker displays with aging-resistant color TFT (IPS) technology and 0.1 mm resolution (480x60 pixels).
- Two-stage room temperature control with individual setpoints for heating and cooling.
- Control of up to four controller extensions
- Control of up to four split units
- Integrated three-stage fan control (fan coil actuator)
- 32 channels for switching, dimming, colored light control, tunable white control, blind control, value transmitter, scene recall and multimedia control, each with up to three sub-functions

- Built-in temperature and humidity sensor
- Integrated light sensor
- Motion detection by radar-based motion detector with a range of up to 3 m in 3 zones
- Alarm function with six configurable alarms (audible and/or visual)
- Output of three different signal tones in two volumes
- Support for up to eight logic functions
- Message function for recording and displaying up to 32 KNX events such as door contact openers
- Approx. 310 different icons, free choice of colors for texts and icons
- Integrated fonts for Western European and Eastern European languages, as well as Cyrillic, Greek, Hebrew, Arabic
- Separate menu rocker ("MeTa") for switching between up to ten operating pages
- Two external binary inputs, can optionally be used as an input for a remote temperature sensor (e.g. Albrecht Jung item no.: FF NTC)
- Integrated bus coupling unit for power supply via the KNX bus (no additional power supply required)
- Compatible with standard flush-mounted boxes
- Two electronically inscribable, mechanical rocker switches with max. 40 switching functions
- Dimensions: 90 x 90 x 14.6 mm

Device description

The Enertex® MeTa² KNX room controller combines high TFT displays with pleasantly haptic rocker control. Additionally it is both a comprehensive control center and a temperature control system with high versatility.The up to four electronically inscribable mechanical rockers enable up to 80 operating functions, whereby each rocker can be assigned ten times. The labeling field allows the action to be carried out to be displayed, including feedback messages, information displays, alarms and message functions. The housing made of high-quality solid aluminum houses a high-resolution rocker display with age-resistant color TFT (IPS) technology, whose black background is seamlessly integrated into the panes of the rockers.

The controller has alarm functions that can trigger acoustic and/or visual signals with six parameterizable alarms. Three different signal tones are available in two volumes. In addition, the room controller supports up to 32 channels, including switching, dimming, colored light control, tunable white control, blinds control and blinds control.

With about 310 different icons, free choice of colors for texts and icons, as well as fonts for different languages (Western European and Eastern European coding, Cyrillic, Greek, Hebrew, Arabic), the room controller offers a high degree of customizability. The separate menu button at the lower end of the controller makes it easy to switch between up to ten freely configurable menu levels. Two external inputs can be used for remote temperature sensors or as binary inputs. The integrated bus coupling unit supplies the device via the KNX bus without an additional power supply.

Keywords

- Room controller
- RTR
- KNX push button
- Display labelling
- Mechanical rockers
- Binary input
- Air humidity sensor
- Temperature sensor
- Light sensor
- Motion detector
- KNX Secure

Enertex® MeTa® KNX Premium, Alu gebürstet

Order number: 1157-01-al

Short description

The MeTa® KNX room controller is a push-button sensor with mechanical rockers and electronic labelling fields

Figure 12. Enertex® MeTa® KNX Premium, Alu gebürstet (1157-01-al)

Device properties

- High quality anodized aluminum housing
- Fits into any standard flush-mounted box
- Contains bus coupling unit
- Built-in RGBW light sensor

- Menu switch
- Binary input e.g. for use with conventional switches
- Socket for supplying the device via the KNX bus (no additional power supply necessary)
- Four electronically labeled, mechanical rocker switches with max. 32 switching functions
- Additional large LCD display
- Built-in temperature and humidity sensor
- Room controllers for heating and cooling
- Size: 90 x 161 x 14,6 mm

Device description

The Enertex® MeTa® KNX room controller is available in two hardware versions: With four rocker switches in double height (Premium) or with two rocker switches in single height (Standard and Starter). The mechanical buttons used provide a familiar haptic feedback. The device is supplied by the KNX bus only and requires no external power supply. Each version has a rocker switch at the bottom for switching through die menu levels (up to four levels configurable). Due to the level structure, up to 32 (Premium) or 16 (Standard and Starter) switching commands can be configured. Furthermore, the buttons allow easy parameterization of the room controller directly at the device.

The room controller measures the temperature, humidity (Premium und Standard Version) and color intensity (all variants). Premium and Standard version also offer a highly flexible room controller for heating and cooling. The displays' brightness can be controlled automatically through the built-in RGBW light sensor or parameterized fix. An external binary input allows the coupling of a conventional switch to the KNX bus.

Enertex® MeTa® KNX is available in 3 versions and in 4 color options each:

- Enertex® MeTa® KNX Premium Version
- Enertex® MeTa® KNX Standard Version
- Enertex® MeTa® KNX Starter Version

Color options:

- Brushed aluminium
- Matte black anodized aluminium
- Glossy white powder coated aluminium (RAL9010)
- Brass gold plated:

Keywords

- RTR
- KNX push button
- Display labelling
- Mechanical rockers
- Binary input

- Air humidity sensor
- Temperature sensor
- Light sensor

Enertex® MeTa® KNX Premium, schwarz eloxiert

Order number: 1157-01-sw

Short description

The MeTa® KNX room controller is a push-button sensor with mechanical rockers and electronic labelling fields

Figure 13. Enertex® MeTa® KNX Premium, schwarz eloxiert (1157-01-sw)

Device properties

- High quality anodized aluminum housing
- Fits into any standard flush-mounted box
- Contains bus coupling unit
- Built-in RGBW light sensor
- Menu switch
- Binary input e.g. for use with conventional switches
- Socket for supplying the device via the KNX bus (no additional power supply necessary)
- Four electronically labeled, mechanical rocker switches with max. 32 switching functions
- Additional large LCD display
- Built-in temperature and humidity sensor
- Room controllers for heating and cooling

- Size: 90 x 161 x 14,6 mm

Device description

The Enertex® MeTa® KNX room controller is available in two hardware versions: With four rocker switches in double height (Premium) or with two rocker switches in single height (Standard and Starter). The mechanical buttons used provide a familiar haptic feedback. The device is supplied by the KNX bus only and requires no external power supply. Each version has a rocker switch at the bottom for switching through die menu levels (up to four levels configurable). Due to the level structure, up to 32 (Premium) or 16 (Standard and Starter) switching commands can be configured. Furthermore, the buttons allow easy parameterization of the room controller directly at the device.

The room controller measures the temperature, humidity (Premium und Standard Version) and color intensity (all variants). Premium and Standard version also offer a highly flexible room controller for heating and cooling. The displays' brightness can be controlled automatically through the built-in RGBW light sensor or parameterized fix. An external binary input allows the coupling of a conventional switch to the KNX bus.

Enertex® MeTa® KNX is available in 3 versions and in 4 color options each:

- Enertex® MeTa® KNX Premium Version
- Enertex® MeTa® KNX Standard Version
- Enertex® MeTa® KNX Starter Version

Color options:

- Brushed aluminium
- Matte black anodized aluminium
- Glossy white powder coated aluminium (RAL9010)
- Brass gold plated:

Keywords

- RTR
- KNX push button
- Display labelling
- Mechanical rockers
- Binary input
- Air humidity sensor
- Temperature sensor
- Light sensor

Enertex® MeTa® KNX Premium, weiß (RAL9010) pulverbeschichtet

Order number: 1157-01-ws

Short description

The MeTa® KNX room controller is a push-button sensor with mechanical rockers and electronic labelling fields

Figure 14. Enertex® MeTa® KNX Premium, weiß (RAL9010) pulverbeschichtet (1157-01-ws)

Device properties

- High quality anodized aluminum housing
- Fits into any standard flush-mounted box
- Contains bus coupling unit

- Built-in RGBW light sensor
- Menu switch
- Binary input e.g. for use with conventional switches
- Socket for supplying the device via the KNX bus (no additional power supply necessary)
- Four electronically labeled, mechanical rocker switches with max. 32 switching functions
- Additional large LCD display
- Built-in temperature and humidity sensor
- Room controllers for heating and cooling
- Size: 90 x 161 x 14,6 mm

Device description

The Enertex® MeTa® KNX room controller is available in two hardware versions: With four rocker switches in double height (Premium) or with two rocker switches in single height (Standard and Starter). The mechanical buttons used provide a familiar haptic feedback. The device is supplied by the KNX bus only and requires no external power supply. Each version has a rocker switch at the bottom for switching through die menu levels (up to four levels configurable). Due to the level structure, up to 32 (Premium) or 16 (Standard and Starter) switching commands can be configured. Furthermore, the buttons allow easy parameterization of the room controller directly at the device.

The room controller measures the temperature, humidity (Premium und Standard Version) and color intensity (all variants). Premium and Standard version also offer a highly flexible room controller for heating and cooling. The displays' brightness can be controlled automatically through the built-in RGBW light sensor or parameterized fix. An external binary input allows the coupling of a conventional switch to the KNX bus.

Enertex® MeTa® KNX is available in 3 versions and in 4 color options each:

- Enertex® MeTa® KNX Premium Version
- Enertex® MeTa® KNX Standard Version
- Enertex® MeTa® KNX Starter Version

Color options:

- Brushed aluminium
- Matte black anodized aluminium
- Glossy white powder coated aluminium (RAL9010)
- Brass gold plated:

Keywords

- RTR
- KNX push button
- Display labelling
- Mechanical rockers

- Binary input
- Air humidity sensor
- Temperature sensor
- Light sensor

Enertex® MeTa® KNX Premium, vergoldet

Order number: 1157-01-gl

Short description

The MeTa® KNX room controller is a push-button sensor with mechanical rockers and electronic labelling fields

Figure 15. Enertex® MeTa® KNX Premium, vergoldet (1157-01-gl)

Device properties

- High quality anodized aluminum housing
- Fits into any standard flush-mounted box
- Contains bus coupling unit
- Built-in RGBW light sensor
- Menu switch
- Binary input e.g. for use with conventional switches
- Socket for supplying the device via the KNX bus (no additional power supply necessary)
- Four electronically labeled, mechanical rocker switches with max. 32 switching functions
- Additional large LCD display
- Built-in temperature and humidity sensor
- Room controllers for heating and cooling

- Size: 90 x 161 x 14,6 mm

Device description

The Enertex® MeTa® KNX room controller is available in two hardware versions: With four rocker switches in double height (Premium) or with two rocker switches in single height (Standard and Starter). The mechanical buttons used provide a familiar haptic feedback. The device is supplied by the KNX bus only and requires no external power supply. Each version has a rocker switch at the bottom for switching through die menu levels (up to four levels configurable). Due to the level structure, up to 32 (Premium) or 16 (Standard and Starter) switching commands can be configured. Furthermore, the buttons allow easy parameterization of the room controller directly at the device.

The room controller measures the temperature, humidity (Premium und Standard Version) and color intensity (all variants). Premium and Standard version also offer a highly flexible room controller for heating and cooling. The displays' brightness can be controlled automatically through the built-in RGBW light sensor or parameterized fix. An external binary input allows the coupling of a conventional switch to the KNX bus.

Enertex® MeTa® KNX is available in 3 versions and in 4 color options each:

- Enertex® MeTa® KNX Premium Version
- Enertex® MeTa® KNX Standard Version
- Enertex® MeTa® KNX Starter Version

Color options:

- Brushed aluminium
- Matte black anodized aluminium
- Glossy white powder coated aluminium (RAL9010)
- Brass gold plated:

Keywords

- RTR
- KNX push button
- Display labelling
- Mechanical rockers
- Binary input
- Air humidity sensor
- Temperature sensor
- Light sensor

Enertex® MeTa® KNX Standard, Alu gebürstet

Order number: 1157-02-al

Short description

The MeTa® KNX room controller is a push-button sensor with mechanical rockers and electronic labelling fields

Figure 16. Enertex® MeTa® KNX Standard, Alu gebürstet (1157-02-al)

Device properties

- High quality anodized aluminum housing
- Fits into any standard flush-mounted box
- Contains bus coupling unit
- Built-in RGBW light sensor
- Menu switch
- Binary input e.g. for use with conventional switches
- Socket for supplying the device via the KNX bus (no additional power supply necessary)
- Two electronically labeled, mechanical rocker switches with max. 16 switching functions
- Built-in temperature and humidity sensor
- Room controllers for heating and cooling
- Size: 90 x 90 x 14,6 mm

Device description

The Enertex® MeTa® KNX room controller is available in two hardware versions: With four rocker switches in double height (Premium) or with two rocker switches in single height (Standard and Starter). The mechanical buttons used provide a familiar haptic feedback. The device is supplied by the KNX bus only and requires no external power supply. Each version has a rocker switch at the bottom for switching through die menu levels (up to four levels configurable). Due to the level structure, up to 32 (Premium) or 16 (Standard and Starter) switching commands can be configured. Furthermore, the buttons allow easy parameterization of the room controller directly at the device.

The room controller measures the temperature, humidity (Premium und Standard Version) and color intensity (all variants). Premium and Standard version also offer a highly flexible room controller for heating and cooling. The displays' brightness can be controlled automatically through the built-in RGBW light sensor or parameterized fix. An external binary input allows the coupling of a conventional switch to the KNX bus.

Enertex® MeTa® KNX is available in 3 versions and in 4 color options each:

- Enertex® MeTa® KNX Premium Version
- Enertex® MeTa® KNX Standard Version
- Enertex® MeTa® KNX Starter Version

Color options:

- Brushed aluminium
- Matte black anodized aluminium
- Glossy white powder coated aluminium (RAL9010)
- Brass gold plated:

Keywords

- RTR
- KNX push button
- Display labelling
- Mechanical rockers
- Binary input
- Air humidity sensor
- Temperature sensor
- Light sensor

Enertex® MeTa® KNX Standard, schwarz eloxiert

Order number: 1157-02-sw

Short description

The MeTa® KNX room controller is a push-button sensor with mechanical rockers and electronic labelling fields

Figure 17. Enertex® MeTa® KNX Standard, schwarz eloxiert (1157-02-sw)

Device properties

- High quality anodized aluminum housing
- Fits into any standard flush-mounted box
- Contains bus coupling unit
- Built-in RGBW light sensor
- Menu switch
- Binary input e.g. for use with conventional switches
- Socket for supplying the device via the KNX bus (no additional power supply necessary)
- Two electronically labeled, mechanical rocker switches with max. 16 switching functions
- Built-in temperature and humidity sensor
- Room controllers for heating and cooling
- Size: 90 x 90 x 14,6 mm

Device description

The Enertex® MeTa® KNX room controller is available in two hardware versions: With four rocker switches in double height (Premium) or with two rocker switches in single height (Standard and Starter). The mechanical buttons used provide a familiar haptic feedback. The device is supplied by the KNX bus only and requires no external power supply. Each version has a rocker switch at the bottom for switching through die menu levels (up to four levels configurable). Due to the level structure, up to 32 (Premium) or 16 (Standard and Starter) switching commands can be configured. Furthermore, the buttons allow easy parameterization of the room controller directly at the device.

The room controller measures the temperature, humidity (Premium und Standard Version) and color intensity (all variants). Premium and Standard version also offer a highly flexible room controller for heating and cooling. The displays' brightness can be controlled automatically through the built-in RGBW light sensor or parameterized fix. An external binary input allows the coupling of a conventional switch to the KNX bus.

Enertex® MeTa® KNX is available in 3 versions and in 4 color options each:

- Enertex® MeTa® KNX Premium Version
- Enertex® MeTa® KNX Standard Version
- Enertex® MeTa® KNX Starter Version

Color options:

- Brushed aluminium
- Matte black anodized aluminium
- Glossy white powder coated aluminium (RAL9010)
- Brass gold plated:

Keywords

- RTR
- KNX push button
- Display labelling
- Mechanical rockers
- Binary input
- Air humidity sensor
- Temperature sensor
- Light sensor

Enertex® MeTa® KNX Standard, weiß (RAL9010) pulverbeschichtet

Order number: 1157-02-ws

Short description

The MeTa® KNX room controller is a push-button sensor with mechanical rockers and electronic labelling fields

Figure 18. Enertex® MeTa® KNX Standard, weiß (RAL9010) pulverbeschichtet (1157-02-ws)

Device properties

- High quality anodized aluminum housing
- Fits into any standard flush-mounted box
- Contains bus coupling unit
- Built-in RGBW light sensor
- Menu switch
- Binary input e.g. for use with conventional switches
- Socket for supplying the device via the KNX bus (no additional power supply necessary)
- Two electronically labeled, mechanical rocker switches with max. 16 switching functions
- Built-in temperature and humidity sensor

- Room controllers for heating and cooling
- Size: 90 x 90 x 14,6 mm

Device description

The Enertex® MeTa® KNX room controller is available in two hardware versions: With four rocker switches in double height (Premium) or with two rocker switches in single height (Standard and Starter). The mechanical buttons used provide a familiar haptic feedback. The device is supplied by the KNX bus only and requires no external power supply. Each version has a rocker switch at the bottom for switching through die menu levels (up to four levels configurable). Due to the level structure, up to 32 (Premium) or 16 (Standard and Starter) switching commands can be configured. Furthermore, the buttons allow easy parameterization of the room controller directly at the device.

The room controller measures the temperature, humidity (Premium und Standard Version) and color intensity (all variants). Premium and Standard version also offer a highly flexible room controller for heating and cooling. The displays' brightness can be controlled automatically through the built-in RGBW light sensor or parameterized fix. An external binary input allows the coupling of a conventional switch to the KNX bus.

Enertex® MeTa® KNX is available in 3 versions and in 4 color options each:

- Enertex® MeTa® KNX Premium Version
- Enertex® MeTa® KNX Standard Version
- Enertex® MeTa® KNX Starter Version

Color options:

- Brushed aluminium
- Matte black anodized aluminium
- Glossy white powder coated aluminium (RAL9010)
- Brass gold plated:

Keywords

- RTR
- KNX push button
- Display labelling
- Mechanical rockers
- Binary input
- Air humidity sensor
- Temperature sensor
- Light sensor

Enertex® MeTa® KNX Standard, vergoldet

Order number: 1157-02-gl

Short description

The MeTa® KNX room controller is a push-button sensor with mechanical rockers and electronic labelling fields

Figure 19. Enertex® MeTa® KNX Standard, vergoldet (1157-02-gl)

Device properties

- High quality anodized aluminum housing
- Fits into any standard flush-mounted box
- Contains bus coupling unit
- Built-in RGBW light sensor
- Menu switch
- Binary input e.g. for use with conventional switches
- Socket for supplying the device via the KNX bus (no additional power supply necessary)
- Two electronically labeled, mechanical rocker switches with max. 16 switching functions
- Built-in temperature and humidity sensor
- Room controllers for heating and cooling
- Size: 90 x 90 x 14,6 mm

Device description

The Enertex® MeTa® KNX room controller is available in two hardware versions: With four rocker switches in double height (Premium) or with two rocker switches in single height (Standard and Starter). The mechanical buttons used provide a familiar haptic feedback. The device is supplied by the KNX bus only and requires no external power supply. Each version has a rocker switch at the bottom for switching through die menu levels (up to four levels configurable). Due to the level structure, up to 32 (Premium) or 16 (Standard and Starter) switching commands can be configured. Furthermore, the buttons allow easy parameterization of the room controller directly at the device.

The room controller measures the temperature, humidity (Premium und Standard Version) and color intensity (all variants). Premium and Standard version also offer a highly flexible room controller for heating and cooling. The displays' brightness can be controlled automatically through the built-in RGBW light sensor or parameterized fix. An external binary input allows the coupling of a conventional switch to the KNX bus.

Enertex® MeTa® KNX is available in 3 versions and in 4 color options each:

- Enertex® MeTa® KNX Premium Version
- Enertex® MeTa® KNX Standard Version
- Enertex® MeTa® KNX Starter Version

Color options:

- Brushed aluminium
- Matte black anodized aluminium
- Glossy white powder coated aluminium (RAL9010)
- Brass gold plated:

Keywords

- RTR
- KNX push button
- Display labelling
- Mechanical rockers
- Binary input
- Air humidity sensor
- Temperature sensor
- Light sensor

Enertex® MeTa® KNX Starter, Alu gebürstet

Order number: 1157-03-al

Discontinued

Short description

The MeTa® KNX room controller is a push-button sensor with mechanical rockers and electronic labelling fields

Figure 20. Enertex® MeTa® KNX Starter, Alu gebürstet (1157-03-al)

Device properties

- High quality anodized aluminum housing
- Fits into any standard flush-mounted box
- Contains bus coupling unit
- Built-in RGBW light sensor
- Menu switch
- Binary input e.g. for use with conventional switches
- Socket for supplying the device via the KNX bus (no additional power supply necessary)
- Two electronically labeled, mechanical rocker switches with max. 16 switching functions
- Size: 90 x 90 x 14,6 mm

Device description

The Enertex® MeTa® KNX room controller is available in two hardware versions: With four rocker switches in double height (Premium) or with two rocker switches in single height (Standard and Starter). The mechanical buttons used provide a familiar haptic feedback. The device is supplied by the KNX bus only and requires no external power supply. Each version has a rocker switch at the bottom for switching through die menu levels (up to four levels configurable). Due to the level structure, up to 32 (Premium) or 16 (Standard and Starter) switching commands can be configured. Furthermore, the buttons allow easy parameterization of the room controller directly at the device.

The room controller measures the temperature, humidity (Premium und Standard Version) and color intensity (all variants). Premium and Standard version also offer a highly flexible room controller for heating and cooling. The displays' brightness can be controlled automatically through the built-in RGBW light sensor or parameterized fix. An external binary input allows the coupling of a conventional switch to the KNX bus.

Enertex® MeTa® KNX is available in 3 versions and in 4 color options each:

- Enertex® MeTa® KNX Premium Version
- Enertex® MeTa® KNX Standard Version
- Enertex® MeTa® KNX Starter Version

Color options:

- Brushed aluminium
- Matte black anodized aluminium
- Glossy white powder coated aluminium (RAL9010)
- Brass gold plated

Keywords

- KNX push button
- Display labelling
- Mechanical rockers
- Binary input
- Air humidity sensor
- Temperature sensor
- Light sensor

Enertex® MeTa® KNX Starter, schwarz eloxiert

Order number: 1157-03-sw

Discontinued

Short description

The MeTa® KNX room controller is a push-button sensor with mechanical rockers and electronic labelling fields

Figure 21. Enertex® MeTa® KNX Starter, schwarz eloxiert (1157-03-sw)

Device properties

- High quality anodized aluminum housing
- Fits into any standard flush-mounted box
- Contains bus coupling unit
- Built-in RGBW light sensor
- Menu switch
- Binary input e.g. for use with conventional switches
- Socket for supplying the device via the KNX bus (no additional power supply necessary)
- Two electronically labeled, mechanical rocker switches with max. 16 switching functions
- Size: 90 x 90 x 14,6 mm

Device description

The Enertex® MeTa® KNX room controller is available in two hardware versions: With four rocker switches in double height (Premium) or with two rocker switches in single height (Standard and Starter). The mechanical buttons used provide a familiar haptic feedback. The device is supplied by the KNX bus only and requires no external power supply. Each version has a rocker switch at the bottom for switching through die menu levels (up to four levels configurable). Due to the level structure, up to 32 (Premium) or 16 (Standard and Starter) switching commands can be configured. Furthermore, the buttons allow easy parameterization of the room controller directly at the device.

The room controller measures the temperature, humidity (Premium und Standard Version) and color intensity (all variants). Premium and Standard version also offer a highly flexible room controller for heating and cooling. The displays' brightness can be controlled automatically through the built-in RGBW light sensor or parameterized fix. An external binary input allows the coupling of a conventional switch to the KNX bus.

Enertex® MeTa® KNX is available in 3 versions and in 4 color options each:

- Enertex® MeTa® KNX Premium Version
- Enertex® MeTa® KNX Standard Version
- Enertex® MeTa® KNX Starter Version

Color options:

- Brushed aluminium
- Matte black anodized aluminium
- Glossy white powder coated aluminium (RAL9010)
- Brass gold plated

Keywords

- KNX push button
- Display labelling
- Mechanical rockers
- Binary input
- Air humidity sensor
- Temperature sensor
- Light sensor

Enertex® MeTa® KNX Starter, weiß (RAL9010) pulverbeschichtet

Order number: 1157-03-ws

Discontinued

Short description

The MeTa® KNX room controller is a push-button sensor with mechanical rockers and electronic labelling fields

Figure 22. Enertex® MeTa® KNX Starter, weiß (RAL9010) pulverbeschichtet (1157-03-ws)

Device properties

- High quality anodized aluminum housing
- Fits into any standard flush-mounted box
- Contains bus coupling unit
- Built-in RGBW light sensor
- Menu switch
- Binary input e.g. for use with conventional switches
- Socket for supplying the device via the KNX bus (no additional power supply necessary)
- Two electronically labeled, mechanical rocker switches with max. 16 switching functions

- Size: 90 x 90 x 14,6 mm

Device description

The Enertex® MeTa® KNX room controller is available in two hardware versions: With four rocker switches in double height (Premium) or with two rocker switches in single height (Standard and Starter). The mechanical buttons used provide a familiar haptic feedback. The device is supplied by the KNX bus only and requires no external power supply. Each version has a rocker switch at the bottom for switching through die menu levels (up to four levels configurable). Due to the level structure, up to 32 (Premium) or 16 (Standard and Starter) switching commands can be configured. Furthermore, the buttons allow easy parameterization of the room controller directly at the device.

The room controller measures the temperature, humidity (Premium und Standard Version) and color intensity (all variants). Premium and Standard version also offer a highly flexible room controller for heating and cooling. The displays' brightness can be controlled automatically through the built-in RGBW light sensor or parameterized fix. An external binary input allows the coupling of a conventional switch to the KNX bus.

Enertex® MeTa® KNX is available in 3 versions and in 4 color options each:

- Enertex® MeTa® KNX Premium Version
- Enertex® MeTa® KNX Standard Version
- Enertex® MeTa® KNX Starter Version

Color options:

- Brushed aluminium
- Matte black anodized aluminium
- Glossy white powder coated aluminium (RAL9010)
- Brass gold plated

Keywords

- KNX push button
- Display labelling
- Mechanical rockers
- Binary input
- Air humidity sensor
- Temperature sensor
- Light sensor

Enertex® Synohr MultiSense KNX Premium, Alu gebürstet

Order number: 1144-01-al

Discontinued

Short description

KNX room controller with integrated voice control, up to 40 switching commands

Figure 23. Enertex® Synohr MultiSense KNX Premium, Alu gebürstet (1144-01-al)

Device properties

- High-quality anodized aluminum housing
- Room controller for heating and cooling
- Built-in temperature and humidity sensor
- Built-in RGBW light sensor
- Two touch buttons and one tacile switch
- Displaying KNX text messages and symbols
- Front Panel RGB ring illumination (status)
- RGB ambient lights
- Fits in standard flush-mounted box
- Contains bus coupling unit
- Voice recognition with up to 40 free configurable commands
- Playing arbitrary audio files (WAV) from SD card
- Freely definable colors of the luminous ring

- Monitoring of noise levels e.g. for use as a „baby monitor“
- Display of 28 characters with auto-scrolling on the dot matrix
- Speech wildcard commands One command „DIMMER_PERCENT“ can control in this way the brightness of a KNX TM Dimmers completely
- Master/Slave mode, if multiple SynOhr devices installed in larger rooms (Enertex® EibPC required)

Device description

SynOhr ® MultiSense KNX is the world’s first room controller with built-in voice recognition. The room controller measures the temperature, humidity and color intensity. A dot-matrix can show KNX-compliant 14-byte strings. An integrated speaker outputs audio signals, that are saved on the included microSD card. The vocabulary of the speech recognition contains about 250 words, that do not have to be taught separately and can be parameterized with the ETS. This makes it very easy to parameterize commands as "COMPUTER, LIGHT 30 PERCENT". SynOhr® MultiSense KNX is powered directly from the KNX bus.

Keywords

- Speech recognition
- RTR

Enertex® Synohr MultiSense KNX Premium, weiß (RAL 9010) pulverbeschichtet

Order number: 1144-01-ws

Discontinued

Short description

KNX room controller with integrated voice control, up to 40 switching commands

Figure 24. Enertex® Synohr MultiSense KNX Premium, weiß (RAL 9010) pulverbeschichtet (1144-01-ws)

Device properties

- High-quality anodized aluminum housing
- Room controller for heating and cooling
- Built-in temperature and humidity sensor
- Built-in RGBW light sensor
- Two touch buttons and one tacile switch
- Displaying KNX text messages and symbols
- Front Panel RGB ring illumination (status)
- RGB ambient lights
- Fits in standard flush-mounted box
- Contains bus coupling unit
- Voice recognition with up to 40 free configurable commands
- Playing arbitrary audio files (WAV) from SD card
- Freely definable colors of the luminous ring

- Monitoring of noise levels e.g. for use as a „baby monitor“
- Display of 28 characters with auto-scrolling on the dot matrix
- Speech wildcard commands One command „DIMMER_PERCENT“ can control in this way the brightness of a KNX TM Dimmers completely
- Master/Slave mode, if multiple SynOhr devices installed in larger rooms (Enertex® EibPC required)

Device description

SynOhr ® MultiSense KNX is the world’s first room controller with built-in voice recognition. The room controller measures the temperature, humidity and color intensity. A dot-matrix can show KNX-compliant 14-byte strings. An integrated speaker outputs audio signals, that are saved on the included microSD card. The vocabulary of the speech recognition contains about 250 words, that do not have to be taught separately and can be parameterized with the ETS. This makes it very easy to parameterize commands as "COMPUTER, LIGHT 30 PERCENT". SynOhr® MultiSense KNX is powered directly from the KNX bus.

Keywords

- Speech recognition
- RTR

Enertex® Synohr MultiSense KNX Premium, schwarz eloxiert

Order number: 1144-01-sw

Discontinued

Short description

KNX room controller with integrated voice control, up to 40 switching commands

Figure 25. Enertex® Synohr MultiSense KNX Premium, schwarz eloxiert (1144-01-sw)

Device properties

- High-quality anodized aluminum housing
- Room controller for heating and cooling
- Built-in temperature and humidity sensor
- Built-in RGBW light sensor
- Two touch buttons and one tacile switch
- Displaying KNX text messages and symbols
- Front Panel RGB ring illumination (status)
- RGB ambient lights
- Fits in standard flush-mounted box
- Contains bus coupling unit
- Voice recognition with up to 40 free configurable commands
- Playing arbitrary audio files (WAV) from SD card
- Freely definable colors of the luminous ring

- Monitoring of noise levels e.g. for use as a „baby monitor“
- Display of 28 characters with auto-scrolling on the dot matrix
- Speech wildcard commands One command „DIMMER_PERCENT“ can control in this way the brightness of a KNX TM Dimmers completely
- Master/Slave mode, if multiple SynOhr devices installed in larger rooms (Enertex® EibPC required)

Device description

SynOhr ® MultiSense KNX is the world’s first room controller with built-in voice recognition. The room controller measures the temperature, humidity and color intensity. A dot-matrix can show KNX-compliant 14-byte strings. An integrated speaker outputs audio signals, that are saved on the included microSD card. The vocabulary of the speech recognition contains about 250 words, that do not have to be taught separately and can be parameterized with the ETS. This makes it very easy to parameterize commands as "COMPUTER, LIGHT 30 PERCENT". SynOhr® MultiSense KNX is powered directly from the KNX bus.

Keywords

- Speech recognition
- RTR

System Devices / Actuators

Enertex® KNX IP Secure Router

Order number: 1164

Short description

The KNX IP Secure Router (2 SU) supports eight KNXnet / IP tunnel connections with high performance and can be used as a line or area coupler

Figure 26. Enertex® KNX IP Secure Router (1164)

Device properties

- KNX IP Secure Routing, KNX IP Secure Tunnelling
- Maximum performance:
  - Routing: 49 telegrams per second
  - Tunnelling: 49 telegrams per second
- Up to eight encrypted or unencrypted KNX UDP and TCP tunnel connections
- Integrated OLED display shows important device parameters
- Powered directly from KNX bus
- DIN rail mount (2 SU)
- Repeater, line, area or world coupler

- telegram rate limitation, telegram length with up to 248 Bytes (TP)
- block device programming over TP
- Support of UDP connections with longer reponse time (1..8 s)
- Routing Counter 7: old and new Standard can be alternated by software
- Temporally disabling filtering function for commissioning diagnostics
- Detection of errors of topology
- Up to 64 group address filter
- Buffered real-time clock and SNTP server
- Parameterization and diagnostics functions with telnet interface
- Display the bus voltage in OLED and Telnet
- Time server for the KNX bus with 36 hours power reserve
- Mapper for bidirectional translation from secure to plain group communication

Device description

The Enertex® KNX IP Secure Router (2 SU) is the central component of KNX systems in order to make sure, that IP communication scales up to the maximum possible security. The device authenticates and encrypts KNX and IP telegrams. An potential IP attack, e.g. from outside (Internet) or inside (Intranet) does not see the real contents of KNX-IP telegrams. Telegram rate limitation, max. telegram lengths up to 248 bytes and bus performance up to 49 telegrams per second optimize the use of logics and visualizations. The OLED display simplifies the diagnosis. The topology error detection and the temporary filter deactivation facilitate commissioning diagnostics.

Using an additional application, the time synchronized by NTP can be transmitted as a bus telegram. The time is buffered for up to 36 hours in the event of a power failure, so that the bus time is also immediately available when power is restored. In addition, the application offers the "Mapper". This enables the connection from Unsecure to secure group addresses. This allows new Secure devices to be connected to older devices in modern systems.

Keywords

- KNX Secure
- Repeater
- Line coupler
- Area coupler
- World coupler
- Topology error detection
- Time server
- SNTP server
- Telnet

Enertex® KNX IP Secure Interface

Order number: 1168

Short description

The Enertex® KNX IP Secure Interface (2SU) authenticates and encrypts KNX and IP telegrams.

Figure 27. Enertex® KNX IP Secure Interface (1168)

Device properties

- KNX IP Secure Tunnelling
- Maximum performance: Tunnelling: 49 telegrams per second
- Up to eight encrypted or unencrypted KNX UDP and TCP tunnel connections
- Integrated OLED display shows important device parameters
- Powered directly from KNX bus
- DIN rail mount (2 SU)
- telegram rate limitation, telegram length with up to 248 Bytes (TP)
- Support of UDP connections with longer reponse time (1..8 s)
- Buffered real-time clock and SNTP server
- Parameterization and diagnostics functions with telnet interface
- Display the bus voltage in OLED and Telnet
- Time server for the KNX bus with 36 hours power reserve

- Mapper for bidirectional translation from secure to plain group communication

Device description

The Enertex® KNX IP Secure Interface (2 SU) is the central component of KNX systems for coupling via the IP backbone. It communicates with the currently highest possible security standard. The device authenticates and encrypts KNX and IP telegrams. An potential IP attack, e.g. from outside (Internet) or inside (Intranet) does not see the real contents of KNX-IP telegrams. Telegram rate limitation, max. telegram lengths up to 248 bytes and bus performance up to 49 telegrams per second optimize the use of logics and visualizations. The OLED display simplifies diagnostics during operation and commissioning.

Using an additional application, the time synchronized by NTP can be transmitted as a bus telegram. The time is buffered for up to 36 hours in the event of a power failure, so that the bus time is also immediately available when power is restored. In addition, the application offers the "Mapper". This enables the connection from Unsecure to secure group addresses. This allows new Secure devices to be connected to older devices in modern systems.

Keywords

- KNX Secure
- Topology error detection
- Time server
- SNTP server
- Telnet

Enertex® KNX TP Secure Coupler

Order number: 1171

Short description

KNX TP Secure Coupler, line/ area coupler for TP, DIN rail mount (2 SU), OLED-Display, KNX-Bus powered

Figure 28. Enertex® KNX TP Secure Coupler (1171)

Device properties

- KNX TP Secure Routing
- Maximum routing performance 49 telegrams per second
- Secure commissioning with KNX Data Secure
- Integrated OLED display shows important device parameters
- Powered directly from KNX bus
- DIN rail mount (2 SU)
- Repeater, line, area coupler
- telegram rate limitation
- block device programming over TP from main or subline
- Temporally disabling filtering function for commissioning diagnostics
- Detection of errors of topology

- Up to 64 group address filter
- Display the bus voltage of main and subline at OLED
- Typ. 7.5 mA current consumption sub line, 0.5 mA main line
- area/line coupler
- buffering of up to 1024 telegrams for each of the two lines
- telegram length with up to 248 Bytes (TP)

Device description

The Enertex® KNX TP Secure Coupler (2 TE) enables the coupling of standard and secure TP lines via a TP backbone. Setup is carried out either via standard KNX data communication or secure commissioning via Data Secure. Telegram rate limitation, max. telegram lengths of up to 248 bytes and bus performance of up to 49 telegrams per second optimise the use of modern KNX systems. In addition to important operating parameters such as bus voltage and current consumption, an OLED display also shows routed telegrams with sender and destination addresses.

Topology error detection and temporary filter deactivation facilitate commissioning diagnostics. Flexible group address filters for each of the 32 main groups for main and subline are easily parameterizable.

Keywords

- KNX Secure
- Area coupler
- Line coupler
- Error detection
- Long frames

Enertex® KNX LED Dimmsequenzer 20A/5x REG

Order number: 1174-REG

Short description

The Enertex® KNX LED Dimmsequenzer 20A/5x is a pulse width modulating 5-channel dimmer for 5 - 48 V LED modules

Figure 29. Enertex® KNX LED Dimmsequenzer 20A/5x REG (1174-REG)

Device properties

- Five channels, pulse-witdh modulated, max. 20 A with free load sharing on any channel, 5-48 VDC, 480 W
- Free channel configuration:
  - 5x independent channel (i.c.)
  - 1x RGBCCT
  - 1x RGBW + 1x i.c.
  - 1x RGB + 2x i.c.
  - 1x RGB + 1x Tunable White (TW)
  - 2x TW + 1x i.c.
  - 1x TW + 3x i.c.
- Soft dimming with frequencies from 200 to 1200 Hz
- RGBCCT – RGBW: Extended white balancing or extension of tunable white color temperature space
- Dim2Warm, Timebased dimming and day-time-based white control (Human Centric Lighting /

HCL)

- Suitable for inrush currents up to 100 A
- Protection against over- and undervoltage, overcurrent (selective), overtemperature, reverse polarity
- Protection functions for power supply and lighting
- Helpful commissioning functions via integrated display and push buttons
- Sequencer, scenes, bit-scenes, staircase lighting and lock functions
- Measurement of voltage, power, current, energy and cost meters per channel
- Switch object for switching off a switching actuator
- No external fuses and distribution terminals required, approved for cable lengths up to 50m
- KNX Data Secure capable
- Din rail mounted version (REG) - DIN rail housing with 4 SU

Device description

The Enertex® KNX LED Dimmsequenzer 20A/5x is a pulse width modulating dimmer for 5 - 48 V LED modules. Per channel the dimmer can dim up to 20 A LED current and in total 480 W power maximum. The dimmer is suitable for any LED lighting device that are suitable for DC constant voltage. Since the overcurrent switch-off of the Dimmsequenzer has been designed to be very robust against false triggering at high inrush currents, it is also particularly suitable for lamps that have very high inrush currents. LV halogen lamps can therefore also be operated, as long as they are suitable for PWM dimming. We recommend the Enertex® LED PowerSupply series to supply the lamps. The dimmer operates with intelligent pulse pattern generation, whereby the switch-on pulses are distributed as evenly as possible over the five channels. This extends the life of the power supply and allows a smaller dimensioning of the power supply.

External distribution terminals are not required, as the device provides one plus and one minus terminal for each lighting channel and also for the LED power supply. No additional fuse is required in the DC circuit. The flush mount variant (variant DK) with double furniture marking is suitable for installation in furniture or ceilings, rail mounted variant (variant REG) for installation in the control cabinet. The permissible cable length between the dimmer and the lamp is up to 50m.

With the help of the display and the push buttons the installation of the complete lighting can be tested and put into operation without ETS software. For this purpose, a separate function for 1-button commissioning is provided. This starts a commissioning routine which measures the voltages and currents of all channels under full load. The correct dimensioning of lamps, power supply and cabling including the actual voltage at the lamp is determined via the display. The different dimming curves, PWM frequencies and dimming speeds for the connected lamps can also be tested via the menu on the display. The choice of four predefined dimming curves in conjunction with a dimming frequency between 211 Hz and 1200 Hz means that a suitable configuration for smooth and flicker-free dimming can be found for almost all lamp types.

With the help of numerous integrated protective functions, the device safely switches off the current in the event of an installation error. The protective functions here include reverse polarity protection, overvoltage and undervoltage protection, overtemperature protection and overcurrent protection, which acts selectively. In the event of a short circuit, only the affected channel is shut

down. Once a fault condition is cleared, then the dimmer automatically restarts. Overloads on the lamp or LED power supply are indicated on the bus and optionally switched off. For this purpose, key parameters for continuous load and overload capacity must be parameterized. During operation, the device measures the actual currents and powers in each channel, the DC input voltage, the device temperature and the telegram rate. These values are both shown on the display and made available via communication objects on the bus. To record the power costs for the lighting, the device provides energy and cost counters for each channel by means of communication objects.

The independent channels can be parameterized in the application in any combination of cool white / warm white, as color channels or as individual channels. Current RGBCCT lighting stripes (red, green, blue, cool white, warm white) are also optimally supported. These lamps are perfectly staged with an automatic white balance (RGB-Extended) developed by Enertex or with the extended Tunable White color temperatures, which are generated by automatic admixture of R/G/B (TW-Extended).

The colors can be controlled either via the primary colors red, green and blue (color mode RGB) or via hue, saturation and brightness (color mode HSV). The dimmer supports 8-, as well as 1-bit scenes and also enables the locking of individual channels / channel groups by means of communication objects. Five sequences, i.e. sequences of color or color temperature controls in the range from seconds to hours with smooth color changes, can either be defined by the user or assigned to over 20 predefined color sequences. Different switch-on behaviors for day and night are supported as well as time-controlled dimming of channels / channel groups. The latter enables, among other things, time-of-day-dependent white light control (Human Centric Lighting / HCL) in Tunable White mode. The setpoints can be specified either as absolute times or relative to sunrise or sunset (astro function).

The bus communication can optionally be encrypted by means of KNX Data Secure.

Keywords

- KNX Secure
- Dimming sequencer
- Dimmer
- RGBCCT
- RGBW
- RGB

Enertex® KNX LED Dimmsequenzer 20A/5x DK

Order number: 1174-DK

Short description

The Enertex® KNX LED Dimmsequenzer 20A/5x is a pulse width modulating 5-channel dimmer for 5 - 48 V LED modules

Figure 30. Enertex® KNX LED Dimmsequenzer 20A/5x DK (1174-DK)

Device properties

- Five channels, pulse-witdh modulated, max. 20 A with free load sharing on any channel, 5-48 VDC, 480 W
- Free channel configuration:
  - 5x independent channel (i.c.)
  - 1x RGBCCT
  - 1x RGBW + 1x i.c.
  - 1x RGB + 2x i.c.
  - 1x RGB + 1x Tunable White (TW)
  - 2x TW + 1x i.c.
  - 1x TW + 3x i.c.
- Soft dimming with frequencies from 200 to 1200 Hz
- RGBCCT – RGBW: Extended white balancing or extension of tunable white color temperature space
- Dim2Warm, Timebased dimming and day-time-based white control (Human Centric Lighting / HCL)
- Suitable for inrush currents up to 100 A
- Protection against over- and undervoltage, overcurrent (selective), overtemperature, reverse polarity
- Protection functions for power supply and lighting
- Helpful commissioning functions via integrated display and push buttons
- Sequencer, scenes, bit-scenes, staircase lighting and lock functions

- Measurement of voltage, power, current, energy and cost meters per channel
- Switch object for switching off a switching actuator
- No external fuses and distribution terminals required, approved for cable lengths up to 50m
- KNX Data Secure capable
- Ceiling mount version (DK) – Double furniture marking

Device description

The Enertex® KNX LED Dimmsequenzer 20A/5x is a pulse width modulating dimmer for 5 - 48 V LED modules. Per channel the dimmer can dim up to 20 A LED current and in total 480 W power maximum. The dimmer is suitable for any LED lighting device that are suitable for DC constant voltage. Since the overcurrent switch-off of the Dimmsequenzer has been designed to be very robust against false triggering at high inrush currents, it is also particularly suitable for lamps that have very high inrush currents. LV halogen lamps can therefore also be operated, as long as they are suitable for PWM dimming. We recommend the Enertex® LED PowerSupply series to supply the lamps. The dimmer operates with intelligent pulse pattern generation, whereby the switch-on pulses are distributed as evenly as possible over the five channels. This extends the life of the power supply and allows a smaller dimensioning of the power supply.

External distribution terminals are not required, as the device provides one plus and one minus terminal for each lighting channel and also for the LED power supply. No additional fuse is required in the DC circuit. The flush mount variant (variant DK) with double furniture marking is suitable for installation in furniture or ceilings, rail mounted variant (variant REG) for installation in the control cabinet. The permissible cable length between the dimmer and the lamp is up to 50m.

With the help of the display and the push buttons the installation of the complete lighting can be tested and put into operation without ETS software. For this purpose, a separate function for 1-button commissioning is provided. This starts a commissioning routine which measures the voltages and currents of all channels under full load. The correct dimensioning of lamps, power supply and cabling including the actual voltage at the lamp is determined via the display. The different dimming curves, PWM frequencies and dimming speeds for the connected lamps can also be tested via the menu on the display. The choice of four predefined dimming curves in conjunction with a dimming frequency between 211 Hz and 1200 Hz means that a suitable configuration for smooth and flicker-free dimming can be found for almost all lamp types.

With the help of numerous integrated protective functions, the device safely switches off the current in the event of an installation error. The protective functions here include reverse polarity protection, overvoltage and undervoltage protection, overtemperature protection and overcurrent protection, which acts selectively. In the event of a short circuit, only the affected channel is shut down. Once a fault condition is cleared, then the dimmer automatically restarts. Overloads on the lamp or LED power supply are indicated on the bus and optionally switched off. For this purpose, key parameters for continuous load and overload capacity must be parameterized. During operation, the device measures the actual currents and powers in each channel, the DC input voltage, the device temperature and the telegram rate. These values are both shown on the display and made available via communication objects on the bus. To record the power costs for the lighting, the device provides energy and cost counters for each channel by means of communication objects.

The independent channels can be parameterized in the application in any combination of cool white / warm white, as color channels or as individual channels. Current RGBCCT lighting stripes (red, green, blue, cool white, warm white) are also optimally supported. These lamps are perfectly staged with an automatic white balance (RGB-Extended) developed by Enertex or with the extended Tunable White color temperatures, which are generated by automatic admixture of R/G/B (TW-Extended).

The colors can be controlled either via the primary colors red, green and blue (color mode RGB) or via hue, saturation and brightness (color mode HSV). The dimmer supports 8-, as well as 1-bit scenes and also enables the locking of individual channels / channel groups by means of communication objects. Five sequences, i.e. sequences of color or color temperature controls in the range from seconds to hours with smooth color changes, can either be defined by the user or assigned to over 20 predefined color sequences. Different switch-on behaviors for day and night are supported as well as time-controlled dimming of channels / channel groups. The latter enables, among other things, time-of-day-dependent white light control (Human Centric Lighting / HCL) in Tunable White mode. The setpoints can be specified either as absolute times or relative to sunrise or sunset (astro function).

The bus communication can optionally be encrypted by means of KNX Data Secure.

Keywords

- KNX Secure
- Dimming sequencer
- Dimmer
- Ceiling installation
- RGBCCT
- RGBW
- RGB

Enertex® KNX HV Dimmer 2000W/8x

Order number: 1176-08

Available from: Sep 15, 2024

Short description

8 channel dimming actuator, DIN rail mount (6 SU), 230 VAC, up to 250 W per channel

Figure 31. Enertex® KNX HV Dimmer 2000W/8x (1176-08)

Geräteeigenschaften

- 8 dimming channels, 230 VAC, up to 250 W per channel
- DIN rail mounted device with space-saving 6 SU installation width
- Suitable for LED lamps, HV halogen lamps, and LV halogen lamps with transformer/ECG
- Support for leading edge and trailing edge phase control
- Optimum dimming behavior over the widest possible dimming range, even with problematic LED lamps, thanks to the use of innovative dimming methods: lamp correction method and low-light stabilization method.
- Smooth and harmonious dimming transitions thanks to adaptive lamp correction method (LKV) and additionally selectable dimming curves
- Low-light stabilization method (SSV) ensures stable, flicker-free light at heavily dimmed brightness levels
- Lowest losses per channel: Standby <0.2 W, full load <2 W
- Energy and electricity cost meter per channel with accurate active power measurement in accordance with accuracy class A (2%)
- Helpful commissioning and diagnostic functions via display and buttons on the device
- Automated commissioning with load detection and lamp measurement, as well as final self-diagnosis of the dimming capability of the lamp

- Overload, overvoltage, short-circuit, and temperature protection with alarm message
- Parameterizable lamp protection
- Parallel operation of up to 4 channels with 1000W total power
- Extensive application: Time-controlled dimming, sleep and wake-up light, staircase lighting function with switch-off warning, timers, scenes, bit scenes, blocking function, extensive logic functions

Gerätebeschreibung

The Enertex® KNX HV Dimmer 2000W/8x is a dimming actuator for all dimmable 230 VAC lamps. The DIN rail mounting device offers 8 independent dimming channels with only 6 SU in the distribution box. Each channel has a dimming power of 250 W, and up to 1000 W are possible when operating 4 channels in parallel.

The dimmer uses two innovative technologies to ensure seamless, flicker-free and harmonic dimming over the entire dimming range: Lamp correction method (LKV) and low-light stabilization method (SSV). In addition, selectable dimming curves provide the freedom to set the desired dimming behavior.

The lamp correction method (LKV) detects and corrects the finest irregularities of the lamps to ensure smooth and harmonic dimming transitions. The new low-light stabilization method (SSV) ensures extremely precise and stabilized control of the lamp, perfectly synchronized with the mains frequency. The result is stable, flicker-free light, even at heavily dimmed brightness levels, where the human eye is particularly sensitive to brightness fluctuations.

With the Enertex® KNX HV Dimmer 2000W/8x, the problem of LED Ghosting is also significantly reduced. This occurs due to a small amount of electrical current, that continues to flow through the LED lights even when they are switched off. However, the high-quality driver of the new Enertex dimmer significantly reduces these currents. Lamps are therefore completely dark when switched off.

With the help of the display and the buttons, the dimmer including wiring and lamps can be tested even without a PC and ETS software. Further simplification for the installer is provided by the automated commissioning process at the touch of a button, which automatically determines the optimum dimming parameters for the lamps of a channel. Subsequent fine adjustment of these parameters is also possible via the display.

To record the energy costs for lighting, the device provides energy and cost meters for each channel via communication objects.

Furthermore, the device offers a very comprehensive ETS application, including: Time-controlled dimming, sleep and wake-up light, staircase lighting function with switch-off warning, timers, scenes, bit scenes, blocking function, extensive logic functions.

Bus communication can optionally be encrypted using KNX Data Secure.

Keywords

- 230V Dimmer
- 8 channel dimmer

- 8 channel dimming actuator
- KNX Secure
- Diagnostic function
- Parallel operation
- Leading edge dimmer
- Trailing edge dimmer

Enertex® KNX PowerSupply 960³

Order number: 1152-3

Short description

KNX Power Supply, 960 mA, DIN rail mount (6 SU)

Figure 32. Enertex® KNX PowerSupply 960³ (1152-3)

Device properties

- KNX Power Supply with integrated choke for 960 mA current output
- Two additional unchoked 30 V auxiliary voltage outputs (AUX A and AUX B) each with 320 mA current output
- Both auxiliary voltage outputs are 100% overload capable
- Separate short-circuit and overcurrent limitation for each output
- No influence by short-circuit of one output to the others
- High efficiency of over 90% at nominal load (efficiency before the choke)
- Measurement of voltages, currents, power, telegram bus load, bus voltage failures and internal device temperature on KNX bus via group objects
- Integrated bus coupling unit with (optional) KNX Data Secure communication
- OLED display for clear indication of all important measurement and device data
- Display of current values including time and date
- 16 extensive time switches with 4 switching times and 4 group addresses each, including extensive logic functions, holiday calendar and astro function
- Integrated KNX clock, buffered against power failure (power reserve approx. 36 hours)
- Remote bus reset function (triggering bus reset via a group address) for KNX line
- Separate remote AUX reset function (triggering AUX reset via a group address) for AUX A output

- Bus telegram on exceeding or falling below parameterized limit values
- Energy meter for energy consumption on the KNX bus
- Configurable C14 text messages for bus status

Device description

The Enertex® power supply KNX PowerSupply960³ (6 SU) with integrated choke supplies the KNX bus with a DC voltage of 30 V DC at a current of 960 mA. In addition, the device offers two further unchoked auxiliary voltage outputs (AUX A and AUX B), each with an output current of 320 mA. Both auxiliary voltage outputs have a 100% overload capacity and can be used to supply further devices or, using additional external KNX chokes, to supply further KNX lines. Each of the three outputs has its own current limiter, which protects against short circuit and overload. The limitation is selective, so that if one output or KNX line is short-circuited, the other two outputs can continue to operate normally.

The device also has measuring and diagnostic functions. Measured values and device parameters are shown on the OLED display of the device, e.g. current, voltage and peak current with time stamp for the KNX and both auxiliary voltage outputs. Commissioning, maintenance and analysis of the KNX installation is thus significantly simplified.

Further measurement and diagnostic data is made available via group objects at the bus, including the internal housing temperature, telegram rate, energy meter and the latest bus voltage failure, the latest bus voltage recovery and the latest remote reset with time stamp.

Communication via group addresses is carried out with standard KNX protocol unencrypted or encrypted with KNX Data Secure. With the help of two KNX group addresses, a separate voltage reset can be carried out for both the KNX bus and the auxiliary voltage output AUX A.

In addition, the KNX PowerSupply960³ has an integrated real-time clock with a power reserve of approx. 36 hours and can be parameterised as a KNX clock. A comprehensive time switch application with 64 switching times for max. 64 group addresses, including extensive logic functions, holiday calendar and astro function is integrated. The time switches can directly address KNX group addresses for switching, dimming, blinds, scene, colour RGB, colour HSV and heating controller’s operating mode.

Keywords

- Auxiliary voltage
- Diagnostic function
- KNX Secure

Enertex® KNX Dual PowerSupply 1280

Order number: 1173

Short description

2-in-1 KNX power supply, 1280 mA + 320 mA, din rail (6 SU)

Figure 33. Enertex® KNX Dual PowerSupply 1280 (1173)

Device properties

- 2-in-1 KNX power supply for supplying two KNX lines
- Main line with integrated KNX choke for 1280 mA output current
- Secondary line with integrated KNX choke for 320 mA output current
- Additional third unchoked 30 V auxiliary voltage output for 320 mA output current with 100% overload capability
- Separate short-circuit and overcurrent limitation for each output
- No influence by short-circuit of one output to the others
- High efficiency of over 90% at nominal load (efficiency before the choke)
- Measurement of voltages, currents, power, telegram bus load, bus voltage failures and internal device temperature on KNX bus via group objects
- Integrated bus coupling unit with (optional) KNX Data Secure communication
- OLED display for clear indication of all important measurement and device data
- Display of current values including time and date
- 16 extensive time switches with 4 switching times and 4 group addresses each, including extensive logic functions, holiday calendar and astro function
- Integrated KNX clock, buffered against power failure (power reserve approx. 36 hours)
- Separate remote reset function (triggering bus resets via a group address) for both KNX lines

- Bus telegram on exceeding or falling below parameterized limit values
- Energy meter for energy consumption on the KNX bus
- Configurable C14 text messages for bus status

Device description

The Enertex® KNX DUAL PowerSupply 1280 (6 SU) provides with a single device two separately operating KNX power supplies with 1280 mA and 320 mA and a third 30V auxiliary power supply with 320 mA (100% overload capable). The device allows a compact realization of a powerful inner line in combination with another physically and topologically separated second outer line. The additional unchoked 30 V auxiliary voltage output provides a DC supply for further devices or, using a further external KNX choke, a third KNX line (320 mA).

Each of the three outputs has its own current limiter, which protects against short circuit and overload. The limitation is selective, so that if one output or KNX line is short-circuited, the other two outputs or lines can continue to operate normally.

The device also has measuring and diagnostic functions. Measured values and device parameters are shown on the OLED display of the device, e.g. current, voltage, peak current with time stamp for both KNX and auxiliary voltage outputs. Commissioning, maintenance and analysis of the KNX installation is thus significantly simplified.

Further measurement and diagnostic data is made available via group objects at the bus, including the internal housing temperature, telegram rate, energy meter and the latest bus voltage failure, the latest bus voltage recovery and the latest remote reset with time stamp. Communication via group addresses is carried out with standard KNX protocol unencrypted or encrypted with KNX Data Secure. With the help of two KNX group addresses, a separate bus reset can be carried out for the main line and secondary line.

In addition, the KNX DUAL PowerSupply 1280 has an integrated real-time clock with a power reserve of approx. 36 hours and can be parameterised as a KNX clock. A comprehensive time switch application with 64 switching times for max. 64 group addresses, including extensive logic functions, holiday calendar and astro function is integrated. The time switches can directly address KNX group addresses for switching, dimming, blinds, scene, colour RGB, colour HSV and heating controller’s operating mode.

Keywords

- KNX PowerSupply
- Dual PowerSupply
- Auxiliary voltage
- Diagnostic function
- KNX Secure

Measure

Enertex® KNX SmartMeter 85A

Order number: 1149-85

Short description

The KNX SmartMeter is a bidirectional meter for measuring the active and reactive power or energy, as well for power quality analysis

Figure 34. Enertex® KNX SmartMeter 85A (1149-85)

Device properties

- 3-phase bidirectional counter for measuring active and reactive power
- Energy meter of accuracy class 1 (1% for active and reactive energy)
- Lossless current measurement via included, calibrated external current sensors
- Two current sensor variants available for different measurment ranges: 85 A or 630 A per phase
- Measures: Active and reactive power, active and reactive energy, voltage, current, power factor, unbalanced load, zero system current, THD, harmonics
- Output of all counter readings and measured values at KNX bus via group objects
- Recording of all measured values on microSD card in standard csv format with time stamp
- Special energy meters for supervision of solar collectors (balance, generation and consumption meter)
- Condition monitoring function: Indication of overload overvoltage, power failure, voltage

distortion, current distortion, unbalanced load, zero system current

- Current sensors for a measurement range from 2 mA to 85 A per phase and power between 0.5 W and 58 kW

Device description

The Enertex® KNX SmartMeter (4 SU DIN rail) is a bidirectional meter for measuring the active and reactive power or energy, as well for power quality analysis. The measurement will be done in three-phase system or in three separate single-phase systems with the accuracy of class 1 (1%). In the accuracy class 1 according to EN 62053-11 only accuracy requirements for the measuring range between 2% and 100% of rated current are determined. For smaller currents no requirements are defined, as these can not be accurately detected with conventional current transformers. In contrast, the Enertex KNX SmartMeter uses special high precision current sensors (Rogowski coils), which are calibrated to the device in factory. Thus, very small currents to 0.002% (= 2mA) of rated current are accurately measurable. In addition, the current is measured with very little loss (< 2mW loss). The provided current sensors are suitable for through-hole mounting and may be installed directly at the main supply point of the grid. The SmartMeter is powered exclusively via the bus. Therefore, the device can even be operated if there is no voltage at the voltage inputs or the voltage has been separated.

The measuring range of the active power extends from 0.5W to 19.550W or 58.650W (three-phase). Energy values or measuring values for monitoring the power quality can be recorded for analysis on a SD card.

All measured values (current, voltage, active power, reactive power, active energy, reactive energy, power factor, THD-U, THD-I, power harmonics, unbalanced load, zero current, power frequency) are shown on the KNX bus. All energy and measurement values are further stored as text data with a time stamp on a SD-card for further data analysis.

Besides specialized functions for performance-based load control, optimization of the own energy demand with photovoltaic facilities, calculating the usage or feeding charge with tariff switching the ETS application also provides various monitoring functions. In case of exceed of limits these functions report events as power outages, high voltage spikes, high power distortion, high reactive energy, highly non-uniform loading of the three phases (unbalanced load) or high neutral loading on the bus. To assess the power quality harmonics up to the 50th harmonic of current and voltage are measured. The numerous monitoring features enable fast accurate analysis of network-related failures, malfunctions and damages of electrical equipment.

Keywords

- Bidirectional meter
- Energy meter
- Current transformers
- Current measurement
- Tariff counter

Enertex® KNX SmartMeter 85A RT

Order number: 1149-85-RT

Short description

The KNX Smartmeter is a bidirectional meter for measuring the active and reactive power or energy, as well for power quality analysis

Figure 35. Enertex® KNX SmartMeter 85A RT (1149-85-RT)

Device properties

- 3-phase bidirectional counter for measuring active and reactive power
- Energy meter of accuracy class 1 (1% for active and reactive energy)
- Lossless current measurement via included, calibrated external current sensors
- Two current sensor variants available for different measurment ranges: 85 A or 630 A per phase
- Measures: Active and reactive power, active and reactive energy, voltage, current, power factor, unbalanced load, zero system current, THD, harmonics
- Output of all counter readings and measured values at KNX bus via group objects
- Recording of all measured values on microSD card in standard csv format with time stamp
- Special energy meters for supervision of solar collectors (balance, generation and consumption meter)
- Condition monitoring function: Indication of overload overvoltage, power failure, voltage distortion, current distortion, unbalanced load, zero system current
- Current sensors for a measurement range from 2 mA to 85 A per phase and power between 0.5 W and 58 kW

- Can also be used without KNX bus, as a battery-buffered real-time clock is built in. When operating without KNX bus, all data with time stamp are recorded every minute on the SD card.

Device description

The Enertex® KNX Smartmeter (4 SU DIN rail) is a bidirectional meter for measuring the active and reactive power or energy, as well for power quality analysis. The measurement will be done in three-phase system or in three separate single-phase systems with the accuracy of class 1 (1%). In the accuracy class 1 according to EN 62053-11 only accuracy requirements for the measuring range between 2% and 100% of rated current are determined. For smaller currents no requirements are defined, as these can not be accurately detected with conventional current transformers. In contrast, the Enertex KNX Smartmeter uses special high precision current sensors (Rogowski coils), which are calibrated to the device in factory. Thus, very small currents to 0.002% (= 2 mA) of rated current are accurately measurable. In addition, the current is measured with very little loss (< 2 mW loss). The provided current sensors are suitable for through-hole mounting and may be installed directly at the main supply point of the grid.

The Smartmeter is powered exclusively via the bus. Therefore, the device can even be operated if there is no voltage at the voltage inputs or the voltage has been separated.

The measuring range of the active power extends from 0.5 W to 19.550 W or 58.650 W (three-phase). Energy values or measuring values for monitoring the power quality can be recorded for analysis on a SD card.

All measured values (current, voltage, active power, reactive power, active energy, reactive energy, power factor, THD-U, THD-I, power harmonics, unbalanced load, zero current, power frequency) are shown on the KNX bus. All energy and measurement values are further stored as text data with a time stamp on a SD-card for further data analysis.

Besides specialized functions for performance-based load control, optimization of the own energy demand with photovoltaic facilities, calculating the usage or feeding charge with tariff switching the ETS application also provides various monitoring functions. In case of exceed of limits these functions report events as power outages, high voltage spikes, high power distortion, high reactive energy, highly non-uniform loading of the three phases (unbalanced load) or high neutral loading on the bus. To assess the power quality harmonics up to the 50th harmonic of current and voltage are measured. The numerous monitoring features enable fast accurate analysis of network-related failures, malfunctions and damages of electrical equipment.

The KNX Smartmeter 85 RT can also be operated without KNX bus. Therefore a 24 VDC power supply must be connected to the KNX terminal. In this mode all measurement data without the harmonics are recorded every minute on the SD card. Recording moment for each measurement is then selected due to an internal battery-buffered clock that (UTC/GMT+ 1 hour) is set to the local time of Berlin at the factory and deviates one minute at maximum per year from the time of day. If required the clock can be adjusted using the SD card.

Keywords

- Energy meter
- Current transformers
- Current measurement

- Tariff costs
- Real time clock

Enertex® KNX SmartMeter 630A (RT)

Order number: 1149-630

Short description

The KNX Smartmeter is a bidirectional meter for measuring the active and reactive power or energy, as well for power quality analysis

Figure 36. Enertex® KNX SmartMeter 630A (RT) (1149-630)

Device properties

- 3-phase bidirectional counter for measuring active and reactive power
- Energy meter of accuracy class 1 (1% for active and reactive energy)
- Lossless current measurement via included, calibrated external current sensors
- Two current sensor variants available for different measurment ranges: 85 A or 630 A per phase
- Measures: Active and reactive power, active and reactive energy, voltage, current, power factor, unbalanced load, zero system current, THD, harmonics
- Output of all counter readings and measured values at KNX bus via group objects
- Recording of all measured values on microSD card in standard csv format with time stamp
- Special energy meters for supervision of solar collectors (balance, generation and consumption meter)
- Condition monitoring function: Indication of overload overvoltage, power failure, voltage distortion, current distortion, unbalanced load, zero system current
- Current sensors for a measurement range from 10 mA to 630 A per phase and power between 7.5 W and 293 kW

- Can also be used without KNX bus, as a battery-buffered real-time clock is built in. When operating without KNX bus, all data with time stamp are recorded every minute on the SD card.

Device description

The Enertex® KNX Smartmeter (4 SU DIN rail) is a bidirectional meter for measuring the active and reactive power or energy, as well for power quality analysis. The measurement will be done in three-phase system or in three separate single-phase systems with the accuracy of class 1 (1%). In the accuracy class 1 according to EN 62053-11 only accuracy requirements for the measuring range between 2% and 100% of rated current are determined. For smaller currents no requirements are defined, as these can not be accurately detected with conventional current transformers. In contrast, the Enertex KNX Smartmeter uses special high precision current sensors (Rogowski coils), which are calibrated to the device in factory. Thus, very small currents to 0.002% (= 2 mA) of rated current are accurately measurable. In addition, the current is measured with very little loss (< 2 mW loss). The provided current sensors are suitable for through-hole mounting and may be installed directly at the main supply point of the grid.

The Smartmeter is powered exclusively via the bus. Therefore, the device can even be operated if there is no voltage at the voltage inputs or the voltage has been separated.

The measuring range of the active power extends from 0.5 W to 19.550 W or 58.650 W (three-phase). Energy values or measuring values for monitoring the power quality can be recorded for analysis on a SD card.

All measured values (current, voltage, active power, reactive power, active energy, reactive energy, power factor, THD-U, THD-I, power harmonics, unbalanced load, zero current, power frequency) are shown on the KNX bus.

Besides specialized functions for performance-based load control, optimization of the own energy demand with photovoltaic facilities, calculating the usage or feeding charge with tariff switching the ETS application also provides various monitoring functions. In case of exceed of limits these functions report events as power outages, high voltage spikes, high power distortion, high reactive energy, highly non-uniform loading of the three phases (unbalanced load) or high neutral loading on the bus. To assess the power quality harmonics up to the 50th harmonic of current and voltage are measured. The numerous monitoring features enable fast accurate analysis of network-related failures, malfunctions and damages of electrical equipment.

Alternatively, the KNX Smartmeter 630 can also be operated without KNX bus. Therefore a 24 VDC power supply must be connected to the KNX terminal. In this mode all measurement data without the harmonics are recorded every minute on the SD card. Recording moment for each measurement is then selected due to an internal battery-buffered clock that (UTC/GMT+ 1 hour) is set to the local time of Berlin at the factory and deviates one minute at maximum per year from the time of day. If required the clock can be adjusted using the SD card.

Keywords

- Energy meter
- Current transformers
- Current measurement
- Tariff costs

- Real time clock

Switch

Enertex® ProxyTouch KNX

Order number: 1155

Short description

Capacitive touch sensor (ideal for ceramics, wood, glass) for up to 25 mm material thickness

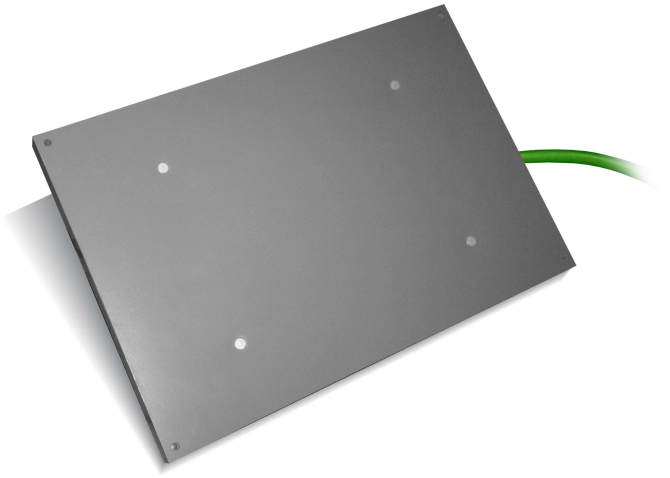

Figure 37. Enertex® ProxyTouch KNX (1155)

Device properties

- Capacitive touch sensor, up to six switching operations, 210x140x11 mm
- Three sensor panels provide one-click, double-click and wiping-gesture operations (with customizable acoustic feedback)
- Sensor panels can be used as one big panel
- Up to six switching operations
- Plastic housing (210x140x11 mm), robust against splashing water
- Cleaning mode (acoustic feedback optional)
- Reset time programmable by switching timer
- KNX bus powered only

Device description

The Enertex® ProxyTouch KNX is a capacitive touch sensor, which can be mounted behind surfaces as ceramics, wood and glass. It has three sensor panels in a plastic housing with a size of 210x140x11 mm and is impermeable to splash-water. If you touch a tile e.g., with the device mounted at it’s back on the specified sensor panel (A, B or C) the device will send a telegram to the bus. The sensors can be addressed together, individually or by wiping gestures. All sensor panels can also be addressed by double-click. Optionally, the device can give an acoustic feedback, which has a different tone pitch according to the triggered sensor panel (A = high, B = medium, C = deep). If the device is in programming mode a red LED is visible and a dialing tone is audible. In the cleaning mode a tone can be activated optionally, which notifies the device’s lock. It’s

recommended to approach to the device fast, because the sensors react to capacitive changes. The maximum thickness of the surface material is 25 mm for ceramics or glass and 20 mm for wood. The ProxyTouch KNX is bus powered only.

Keywords

- KNX push-button sensor
- invisible
- hidden
- Capacitive proximity switch

Cover Frame

Enertex® AluRa – einfach, Alu gebürstet, natur eloxiert

Order number: 1178-01-al

Short description

Single frame, fits with 55 mm inserts: Jung Serie A and AS

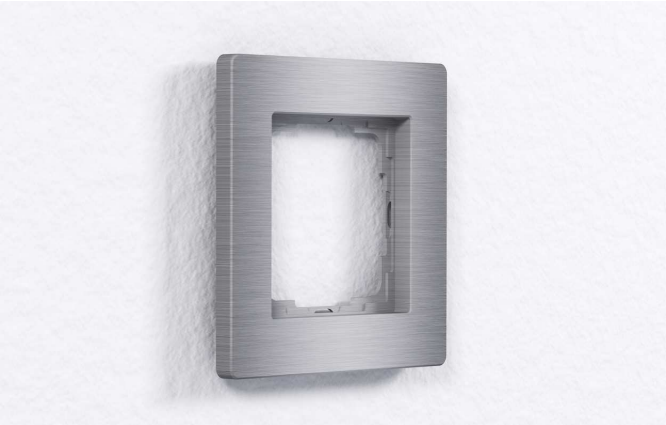

Figure 38. Enertex® AluRa – einfach, Alu gebürstet, natur eloxiert (1178-01-al)

Device properties

- High quality anodized aluminum frame
- Optimized shadow gap, fits with 55 mm inserts from Jung Serie A and AS (incl. USB socket)

Device description

The high-quality aluminium frame Enertex® Alurathe successor to our 1162 series for switches and sockets fits with 55 mm inserts from Jung A and AS 500 (incl. USB socket). The elegant shadow gap is optimized for the Jung A and AS series.

It also fits excellently to both of the Enertex® room controllers Meta® KNX and SynOhr® MultiSense KNX. The Enertex® AluRa is available in three color options:

- Brushed aluminium
- Black anodized aluminium
- White powder-coated (RAL9010)

In addition, each color variant is available as single-, double- or triple frame.

Keywords

- frame 55

Enertex® AluRa – einfach, Alu gebürstet, schwarz eloxiert

Order number: 1178-01-sw

Short description

Single frame, fits with 55 mm inserts: Jung Serie A and AS

Figure 39. Enertex® AluRa – einfach, Alu gebürstet, schwarz eloxiert (1178-01-sw)

Device properties

- High quality anodized aluminum frame
- Optimized shadow gap, fits with 55 mm inserts from Jung Serie A and AS (incl. USB socket)

Device description

The high-quality aluminium frame Enertex® Alurathe successor to our 1162 series for switches and sockets fits with 55 mm inserts from Jung A and AS 500 (incl. USB socket). The elegant shadow gap is optimized for the Jung A and AS series.

It also fits excellently to both of the Enertex® room controllers Meta® KNX and SynOhr® MultiSense KNX. The Enertex® AluRa is available in three color options:

- Brushed aluminium
- Black anodized aluminium
- White powder-coated (RAL9010)

In addition, each color variant is available as single-, double- or triple frame.

Keywords

- frame 55

Enertex® AluRa – einfach, weiß pulverbeschichtet

Order number: 1178-01-ws

Short description

Single frame, fits with 55 mm inserts: Jung Serie A and AS

Figure 40. Enertex® AluRa – einfach, weiß pulverbeschichtet (1178-01-ws)

Device properties

- High quality anodized aluminum frame
- Optimized shadow gap, fits with 55 mm inserts from Jung Serie A and AS (incl. USB socket)

Device description

The high-quality aluminium frame Enertex® Alurathe successor to our 1162 series for switches and sockets fits with 55 mm inserts from Jung A and AS 500 (incl. USB socket). The elegant shadow gap is optimized for the Jung A and AS series.

It also fits excellently to both of the Enertex® room controllers Meta® KNX and SynOhr® MultiSense KNX. The Enertex® AluRa is available in three color options:

- Brushed aluminium
- Black anodized aluminium
- White powder-coated (RAL9010)

In addition, each color variant is available as single-, double- or triple frame.

Keywords

- frame 55

Enertex® AluRa – zweifach, Alu gebürstet, natur eloxiert

Order number: 1178-02-al

Short description

Double frame, fits with 55 mm inserts: Jung Serie A and AS

Figure 41. Enertex® AluRa – zweifach, Alu gebürstet, natur eloxiert (1178-02-al)

Device properties

- High quality anodized aluminum frame
- Optimized shadow gap, fits with 55 mm inserts from Jung Serie A and AS (incl. USB socket)

Device description

The high-quality aluminium frame Enertex® Alurathe successor to our 1162 series for switches and sockets fits with 55 mm inserts from Jung AS 500 (incl. USB socket). The elegant shadow gap is optimized for the Jung A and AS series.

It also fits excellently to both of the Enertex® room controllers Meta® KNX and SynOhr® MultiSense KNX. The Enertex® AluRa is available in three color options:

- Brushed aluminium
- Black anodized aluminium
- White powder-coated (RAL9010)

In addition, each color variant is available as single-, double- or triple frame.

Keywords

- frame 55

Enertex® AluRa – zweifach, Alu gebürstet, schwarz eloxiert

Order number: 1178-02-sw

Short description

Double frame, fits with 55 mm inserts: Jung Serie A and AS

Figure 42. Enertex® AluRa – zweifach, Alu gebürstet, schwarz eloxiert (1178-02-sw)

Device properties

- High quality anodized aluminum frame
- Optimized shadow gap, fits with 55 mm inserts from Jung Serie A and AS (incl. USB socket)

Device description

The high-quality aluminium frame Enertex® Alurathe successor to our 1162 series for switches and sockets fits with 55 mm inserts from Jung AS 500 (incl. USB socket). The elegant shadow gap is optimized for the Jung A and AS series.

It also fits excellently to both of the Enertex® room controllers Meta® KNX and SynOhr® MultiSense KNX. The Enertex® AluRa is available in three color options:

- Brushed aluminium
- Black anodized aluminium
- White powder-coated (RAL9010)

In addition, each color variant is available as single-, double- or triple frame.

Keywords

- frame 55

Enertex® AluRa – dreifach, Alu gebürstet, natur eloxiert

Order number: 1178-03-al

Short description

Triple frame, fits with 55 mm inserts: Jung Serie A and AS

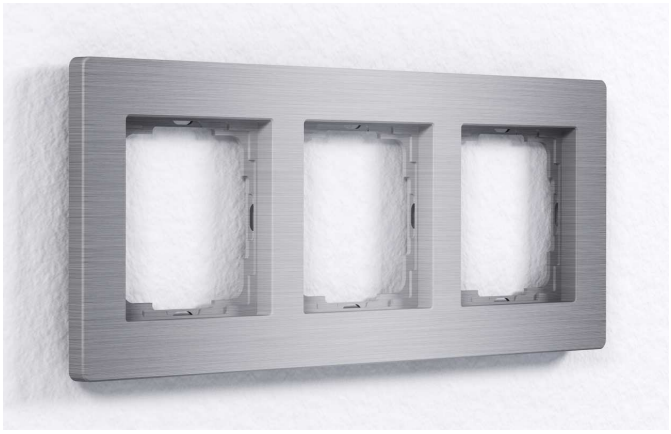

Figure 43. Enertex® AluRa – dreifach, Alu gebürstet, natur eloxiert (1178-03-al)

Device properties

- High quality anodized aluminum frame
- Optimized shadow gap, fits with 55 mm inserts from Jung Serie A and AS (incl. USB socket)

Device description

The high-quality aluminium frame Enertex® Alurathe successor to our 1162 series for switches and sockets fits with 55 mm inserts from Jung A and AS 500 (incl. USB socket). The elegant shadow gap is optimized for the Jung A and AS series.

It also fits excellently to both of the Enertex® room controllers Meta® KNX and SynOhr® MultiSense KNX. The Enertex® AluRa is available in three color options:

- Brushed aluminium
- Black anodized aluminium
- White powder-coated (RAL9010)

In addition, each color variant is available as single-, double- or triple frame.

Keywords

- frame 55

Enertex® AluRa – dreifach, Alu gebürstet, schwarz eloxiert

Order number: 1178-03-sw

Short description

Triple frame, fits with 55 mm inserts: Jung Serie A and AS

Figure 44. Enertex® AluRa – dreifach, Alu gebürstet, schwarz eloxiert (1178-03-sw)

Device properties

- High quality anodized aluminum frame
- Optimized shadow gap, fits with 55 mm inserts from Jung Serie A and AS (incl. USB socket)

Device description

The high-quality aluminium frame Enertex® Alurathe successor to our 1162 series for switches and sockets fits with 55 mm inserts from Jung A and AS 500 (incl. USB socket). The elegant shadow gap is optimized for the Jung A and AS series.

It also fits excellently to both of the Enertex® room controllers Meta® KNX and SynOhr® MultiSense KNX. The Enertex® AluRa is available in three color options:

- Brushed aluminium
- Black anodized aluminium
- White powder-coated (RAL9010)

In addition, each color variant is available as single-, double- or triple frame.

Keywords

- frame 55

Enertex® AluRa – dreifach, weiß pulverbeschichtet

Order number: 1178-03-ws

Short description

Triple frame, fits with 55 mm inserts: Jung Serie A and AS

Figure 45. Enertex® AluRa – dreifach, weiß pulverbeschichtet (1178-03-ws)

Device properties

- High quality anodized aluminum frame
- Optimized shadow gap, fits with 55 mm inserts from Jung Serie A and AS (incl. USB socket)

Device description

The high-quality aluminium frame Enertex® Alurathe successor to our 1162 series for switches and sockets fits with 55 mm inserts from Jung A and AS 500 (incl. USB socket). The elegant shadow gap is optimized for the Jung A and AS series.

It also fits excellently to both of the Enertex® room controllers Meta® KNX and SynOhr® MultiSense KNX. The Enertex® AluRa is available in three color options:

- Brushed aluminium
- Black anodized aluminium
- White powder-coated (RAL9010)

In addition, each color variant is available as single-, double- or triple frame.

Keywords

- frame 55

Other Devices

Enertex® LED PowerSupply 160-12

Order number: 1167-12

Short description

The Enertex® LED PowerSupply 160 is an ultra compact 12 V DIN rail power supply (4 SU) for supplying lamps and LEDs.

Figure 46. Enertex® LED PowerSupply 160-12 (1167-12)

Device properties

- Voltage input: 230 V AC (50 Hz)
- Voltage variants: 12 V, 24 V, 48 V
- Rated output power: 160 W (temperature derating for continuous full load operation)
- Ultra compact design: Only 4 SU wide DIN rail housing
- Very high efficiency of up to 94.5 %
- Low standby consumption of max. 0.3 W
- Parallel operation of up to 3 devices possible (load is automatically distributed equally among each other)
- Protection functions: Short-circuit protection, overload protection and overtemperature protection
- Fulfills all requirements for lamps and LED lamps according to IEC 61347-1 and 61347-2-13
- LEDs: power, normal load, max. load

- Active PFC function
- Voltage output: 12 – 14.25 V DC (adjustable in 0.25 V steps)
- Maximum efficiency: 93 %; efficiency tops “80Plus Silver” certificate in all load conditions
- Standby power consumption: typ. 0.1 W

Device description

The power supply unit Enertex® LED PowerSupply 160-12 for DIN rail mount (4 SU) supplies your LED lamps with a DC voltage of 12 V DC and a rated power of 160 W. The output voltage can be increased in 0.25 V increments up to 14.25 V with a rotary switch to compensate line losses. Three LEDs signal operation and partial or full load operation.

The maximum efficiency is 93 %, with an efficiency of over 90 % achieved in all load operations above 25 %. Thus, the efficiency tops the requirements of the "80Plus Silver" certificate. The standby power consumption is typ. 0.1 W. The power supplies can be installed in parallel for the operation of higher loads. The devices detect the parallel connection and distribute the load symmetrically among each other. The use of high-quality components increases the lifetime of the device and also reduces the typical humming noises, that come along with dimming of LEDs.

The DIN rail device also fulfills all requirements of the lamp standards according to IEC 61347-1 and 61347-2-13. Therefore it is suitable for supplying all dimmable and non-dimmable lamps: LED illuminants, fluorescent lamps, halogen lamps and other conventional lamps. In addition, the device has a integrated short-circuit protection, overload protection and over-temperature protection. All protective functions are self-healing, i.e. when the fault condition is removed, the power supply restarts and provides the output power again.

The Enertex® LED PowerSupply 160 is by means of its unique features the perfect solution for the LED supply in your distribution panel.with paragraphs

Keywords

- 12V power supply unit
- DIN rail
- LED power supply
- 80 PLUS Gold certificate

Enertex® LED PowerSupply 160-24

Order number: 1167-24

Short description

The Enertex® LED PowerSupply 160 is an ultra compact 24 V DIN rail power supply (4 SU) for supplying lamps and LEDs.

Figure 47. Enertex® LED PowerSupply 160-24 (1167-24)

Device properties

- Voltage input: 230 V AC (50 Hz)
- Voltage variants: 12 V, 24 V, 48 V
- Rated output power: 160 W (temperature derating for continuous full load operation)
- Ultra compact design: Only 4 SU wide DIN rail housing
- Very high efficiency of up to 94.5 %
- Low standby consumption of max. 0.3 W
- Parallel operation of up to 3 devices possible (load is automatically distributed equally among each other)
- Protection functions: Short-circuit protection, overload protection and overtemperature protection
- Fulfills all requirements for lamps and LED lamps according to IEC 61347-1 and 61347-2-13
- LEDs: power, normal load, max. load
- Active PFC function
- Voltage output: 24 – 28.5 V DC (adjustable in 0.5 V steps)

- Maximum efficiency: 94.5 %; efficiency tops “80Plus Gold” certificate in all load conditions
- Standby power consumption: typ. 0.1 W

Device description

The power supply unit Enertex® LED PowerSupply 160 for DIN rail mount (4 SU) supplies your LED lamps with a DC voltage of 24 V DC and a rated power of 160 W. The output voltage can be increased in 0.5 V increments up to 28.5 V with a rotary switch to compensate line losses. Three LEDs signal operation and partial or full load operation.

The maximum efficiency is 94.5 %, with an efficiency of over 91 % achieved in all load operations above 25 %. Thus, the efficiency tops the requirements of the "80Plus Gold" certificate. The standby power consumption is typ. 0.1 W. The power supplies can be installed in parallel for the operation of higher loads. The devices detect the parallel connection and distribute the load symmetrically among each other. The use of high-quality components increases the lifetime of the device and also reduces the typical humming noises, that come along with dimming of LEDs.

The DIN rail device also fulfills all requirements of the lamp standards according to IEC 61347-1 and 61347-2-13. Therefore it is suitable for supplying all dimmable and non-dimmable lamps: LED illuminants, halogen lamps, fluorescent lamps and other conventional lamps. In addition, the device has a integrated short-circuit protection, overload protection and over-temperature protection. All protective functions are self-healing, i.e. when the fault condition is removed, the power supply restarts and provides the output power again.

The Enertex® LED PowerSupply 160 is by means of its unique features the perfect solution for the LED supply in your distribution panel.

Keywords

- 24V power supply unit
- DIN rail
- LED power supply
- 80 PLUS Gold certificate

Enertex® LED PowerSupply 160-48

Order number: 1167-48

Short description

The Enertex® LED PowerSupply 160 is an ultra compact 48 V DIN rail power supply (4 SU) for supplying lamps and LEDs.

Figure 48. Enertex® LED PowerSupply 160-48 (1167-48)

Device properties

- Voltage input: 230 V AC (50 Hz)
- Voltage variants: 12 V, 24 V, 48 V
- Rated output power: 160 W (temperature derating for continuous full load operation)
- Ultra compact design: Only 4 SU wide DIN rail housing
- Very high efficiency of up to 94.5 %
- Low standby consumption of max. 0.3 W
- Parallel operation of up to 3 devices possible (load is automatically distributed equally among each other)
- Protection functions: Short-circuit protection, overload protection and overtemperature protection
- Fulfills all requirements for lamps and LED lamps according to IEC 61347-1 and 61347-2-13
- LEDs: power, normal load, max. load
- Active PFC function
- Voltage output: 48 – 57 V DC (adjustable in 1 V steps)

- Maximum efficiency: 94.5 %; efficiency tops “80Plus Gold” certificate in all load conditions
- Standby power consumption: typ. 0.3 W

Device description

The power supply unit Enertex® LED PowerSupply 160-48 for DIN rail mount (4 SU) supplies your LED lamps with a DC voltage of 48 V DC and a rated power of 160 W. The output voltage can be increased in 1 V increments up to 57 V with a rotary switch to compensate line losses. Three LEDs signal operation and partial or full load operation.

The maximum efficiency is 94.5 %, with an efficiency of over 91 % achieved in all load operations above 25 %. Thus, the efficiency tops the requirements of the "80Plus Gold" certificate. The standby power consumption is typ. 0.3 W. The power supplies can be installed in parallel for the operation of higher loads. The devices detect the parallel connection and distribute the load symmetrically among each other. The use of high-quality components increases the lifetime of the device and also reduces the typical humming noises, that come along with dimming of LEDs.

The DIN rail device also fulfills all requirements of the lamp standards according to IEC 61347-1 and 61347-2-13. Therefore it is suitable for supplying all dimmable and non-dimmable lamps: LED illuminants, halogen lamps, fluorescent lamps and other conventional lamps. In addition, the device has a integrated short-circuit protection, overload protection and over-temperature protection. All protective functions are self-healing, i.e. when the fault condition is removed, the power supply restarts and provides the output power again.

The Enertex® LED PowerSupply 160 is by means of its unique features the perfect solution for the LED supply in your distribution panel.

Keywords

- 48V power supply unit
- DIN rail
- LED power supply
- 80 PLUS Gold certificate