Building automation







OUR RANGE OF PRODUCTS











ABOUT US





FAMILY FIRM WITH AN INVENTIVE SPIRIT

Woertz has been working as a competent electrical installation technology partner for more than 80 years now. Our many decades of experience are your guarantee for the best possible results. We have the correct screw terminal, flat cable, or plinth duct for your requirements. As a Swiss family firm, we are committed to Swiss values, which are evident in the quality of our products and services as well as the innovation and inventive-ness we exhibit in the areas of research and development. Our products are 100% «made in Switzerland».

PRODUCTS

Woertz is the leading provider of comprehensive installation systems and components for electrical installation technology in buildings and infrastructures. These networks form the unseen lifelines of the technical configuration of buildings.

A wide variety of technologies are firmly anchored at Woertz. This fact allows us to address different customer requirements with a wide range of systems and services that meet these demands.

WOERTZ -

YOUR PARTNER FOR COMPREHENSIVE SOLUTIONS

As a reliable partner, Woertz provides its customers with impeccable quality. The development of pioneering innovations lies at the centre of our accomplishments.

This is evident across our entire company history since 1972 - the year of our first flat cable patent - and extends to the publishing of more than 20 patents.

THE FUTURE

New products have been developed in the area of building automation and security, including complete solutions in the area of tunnel construction.

Innovative development and many years' experience with flat cable technology form the basis for the design of a new safe flat cable. Our objective is to fulfill the strictest European guidelines ensuring a system guarantee of 100%.

SYSTEM AREAS

Our range can be seen in five different brochures:

- flat cable systems
- building automation
- safety systems
- cable laying systems
- components for electrical installation technology



CONTENTS



Introduction

Building automation

Imagine a world in which your building knows:

• if you are in or out - and provides air conditioning for the room accordingly,

• when you do not have enough light - and decides whether resetting the slats on your blinds is enough or whether the lighting needs to be adjusted,

 how warm it is - and before the sun shines into the room heating it up unnecessarily, sets the slats of your blinds to allow the room to be lit, but not heated by the sun,

 when you leave in the evening - turns off any lighting that was still on, also deactivating any electric circuits that are not needed overnight, e.g. monitors, computers, printers, etc.

THAT is building automation.

The business of Woertz is the field of building automation and electrical installation technology.

The degree of automation in both residential and functional buildings has been constantly increasing for years. This is due in part to the increasing requirements of tenants for comfort, security, and energy efficiency. Energy efficiency is more of an issue than ever before in view of ever increasing energy prices. Tenants want to reduce their energy costs without having to sacrifice comfort at the same time.

We have dedicated ourselves to implementing building automation systems in a way that saves energy and materials by focusing on decentralised cabling.

We build our actuators into "Raptor" casings, which are deployed using a locking device on a flat cable.

The work involved in cabling is made considerably easier and, thanks to the unique connection type (a lever mechanism), the contacts for the devices can be made in seconds.



stop. Fold back the lever. It must be checked whether the lever is properly engaged.



Connect the receiver. Write the physical address on the housing.



Briefly defined, building automation is the automatic control and regulation of various building functions such as heating, ventilation, and air conditioning (HVAC), lighting and shading. Building automation supports building management and results in the effective use of all existing resources when operating building services technical equipment. A building automation system can, for example, close windows, regulate heating, or retract the outside shutters when there are strong winds. Coupled with access control or via motion sensors, the utilisation of rooms can be individually controlled in an energy-saving manner.

What may sound a little abstract here is in practice made up of the constituents hardware, software, and commissioning, or services in general. Building automation is based on the cooperation and interlinking of individual components (sensors, controllers, actuators).



Installation comparison



Installation with Woertz flat cable

Comfort, reliability, flexibility and optimum cost-effectiveness are the central requirements of builders and investors. Installation systems must guarantee high operational reliability of the controlled functions and efficient adaptation to changing user requirements after installation. System solutions from Woertz ensure that the desired comfort functions such as lighting, security, room temperature, weather protection and others can be implemented.

The quality of cabling systems is thus defined by the investment and maintenance costs for possible repairs and changes or expansions as well as the operational reliability of the functions connected to it. Misconceptions in the holistic view of the system can lead to increased material and installation costs as well as unexpected additional time and effort for planning and installation. On the other hand, false economies can lead to considerable reliability risks as well as to high costs for troubleshooting and network expansion.

Summary

The requirements on a professional installation system can be summarised as follows:

- 1) efficient planning and quick, error-free installation
- 2) low-loss, operationally reliable connections
- 3) long service life with an option for subsequent changes / expansions
- 4) compatibility with upstream and downstream systems as well as new technologies
- 5) optimum cost-effectiveness in connection with the complete installation and service life

The following considerations concern cabling systems and product features for functional buildings, industrial building uses and infrastructure buildings. The same principles apply to all types of buildings and infrastructure facilities.

Building automation can be described as the cooperation of monitoring, control, regulation, and optimisation equipment in buildings, and is an important element of technical facility management. Automated systems have already previously been employed for various units, but experience revealed that various separate systems resulted in considerable additional time and effort in installation (cabling), due to particular customised sensor wiring (for example). These days, therefore, there is a migration towards combining the different units (lighting, shading, heating, and so on) in a bus system.



Building automation options

- Switch on and off or dim lights on demand, or dependent on the time of day, time of year, or on movement
- Control heating, ventilation, and air conditioning equipment instantly and on a needs basis
- Control shading equipment on a needs basis depending on sunlight, solar altitude, wind, or time
- Increase security by monitoring of window and door contacts as well as motion detectors
- Implement access control systems
- Record and display all control processes in the building centrally (visualisation)
- Switch on and off or dim lighting using radio or infrared remote control
- Remote monitoring and remote control via the telephone network or the internet (remote action)
- Recording of consumption data from meters for heating, water, gas, and electricity
- · Load control based on the recording of consumption data when lights are activated sequentially
- Control of media equipment and multi-room systems in training, seminar and media rooms



Regulation

In the case of control, the functions are linked to a triggering event. The processes run without feedback or controls. Via a user interface (such as a tactile sensor), the sensor activates a telegram, which operates an actuator via the medium of the bus system (cable network or radio). On the basis of the information in the telegram, the actuator then controls a relay contact, which switches on or off the power supply to a light, for example.



Regulated system

With regulation, in comparison to control, a preset ultimate value (desired value) is continuously monitored. Via the cable connection or via radio, the regulator receives feedback about the output value (actual value). If there is a deviation, the regulator intervenes in the process to correct this value. The intervention in the process is determined by the type of the signals and can regulate the room temperature, position of blinds, or brightness of the lighting, for example.







In line with increased security requirements, it is possible to monitor window contacts and door closing mechanisms or attach a fire or water alarm without much technical effort. The corresponding break contacts are connected to the sensors or binary inputs, and they can be visualised and analysed according to their addressing.

In principle, a building automation system consists of sensors, actuators, control elements, and system devices such as data interfaces.

Sensors can record meteorological data or indoor air quality, for example. Actuators are control elements, and can be used for motor-driven blinds and windows or for lights, for example.

The components for setting up a building automation system are as follows:

- direct digital control (DDC) building automation control units
- field devices, such as sensors and actuators
- room automation system
- cabling and bus systems
- servers and gateways
- master control system (software on a central computer for visualisation of the systems)

The objective of building automation is to implement functional sequences in units (lighting, shading, heating, ventilation, air conditioning, etc.) in a manner that is comprehensive and autonomous (and therefore automatic) according to predefined settings and parameters or to simplify their operation and monitoring. All sensors, actuators, control elements, consumers, and other technical units in the building are interconnected with each other via a bus line. Sequences can be combined in scenarios. A distinguishing feature is the decentralised arrangement of the control units (sensors and actuators). These components are stand-alone, working independently within the system, and are not controlled via a central unit

The most prevalent bus system in building automation today is the EIB/KNX:

The European Installation bus (**EIB**), today known as **KNX**, is now recognised worldwide and is the only standardised bus system in accordance with European and international standards. EIB/KNX governs and describes how sensors and actuators are connected with each other when they are installed in a house or a building. It also specifies how sensors and actuators communicate with each other via telegrams.

EIB/KNX controls the lighting, the blinds or shading equipment, the heating, and the locking and alarm systems, for example. EIB/KNX also allows remote monitoring and control of a building. Currently, EIB is installed primarily in new residential and functional buildings, but it can also subsequently be incorporated when old buildings are modernised. Designed in 2002, KNX is the successor to and amalgamation of the three bus systems EIB, BatiBus, and EHS. KNX is compatible with the preceding standards and, due to the large number of manufacturers, includes most devices for vendor-independent functions and applications.

The topology of the EIB/KNX incorporates lines and zones, which are connected with each other via couplers and control the communication within the system. This can prevent excessive telegram traffic resulting in a bus overload, and thus ensure operational reliability.

With a high level of expansion, it would be possible to include at least 14400 devices (sensors and actuators).





DALI (Digital Addressable Lighting Interface) is a control protocol for controlling digital devices that operate lighting in buildings, used for lights with electronic transformers, electronic ballasts, or electronic power dimmers, for example. Devices with a DALI interface can be controlled separately from one other using DALI short addresses. By means of a bidirectional data exchange, a DALI controller or a DALI gateway can query the status of lamps or operating devices for a light. DALI can be operated as a standalone system with a maximum of 64 operating devices or as a subsystem via DALI gateways in modern building automation systems.

LON (Local Operating Network) is a preferred field bus system for use in building automation. This bus system originated in the USA and was developed around 1990. It enables neutral information exchange between equipment and devices from different manufacturers, independently of the applications.

SMI (Standard Motor Interface) is a field bus system for controlling electronic drives (stepper motors) for blinds, roller blinds, windows and ventilation flaps. It can be operated alone but is usually integrated into higher-level bus systems such as KNX. In addition to simpler cabling, the feedback capability particularly is a considerable advantage for conventional drives.

The advantages of such building system technology with building automation are as follows:

- reduced energy consumption due to intelligent regulation, for example, using window contacts that switch off heating elements, shading equipment that prevents rooms from heating up, or daylight-dependent lighting systems.
- increased comfort due to intelligent control, for example, a predefined lighting scenario can be reproduced at the touch of a button, without having to individually switch on or off or dim multiple lights; or alternatively defined actions can be triggered using logical links to switching statuses.
- protection against break-ins and theft by simulating presence in the building.
- security for the tenants thanks to alarms in the event of critical situations such as water leakage, fire, etc.
- monitoring by an external security service using automatic alarm forwarding.



Woertz has been consistently advancing and developing decentralised building automation

Although the bus system was developed decentrally, today it is almost only sensors that are connected decentrally. All of the actuators are on sub-distribution boards and their outputs are brought into the building via numerous lines. This results in higher materials expense for installation cables and longer installation times. Aside greater fire loads being carried into the building in this way, it also represents a great additional restriction in flexibility for retrofits or changes. Even solutions with so-called "office actuators" are not particularly successful, as here too many functions are centralised (decentralised small distribution boards) without, for example, the effects of cable reduction and expandability.



Based on the flat cable system, which has been used, tried and tested over many years, the range of components for building automation has steadily increased. EIB/KNX actuators and sensor elements with integrated electronics have been especially developed for the Woertz combi flat cable system (power and bus line in one cable). They are used in the decentralised arrangement of bus devices via the flat cable, and therefore offer maximum flexibility.



Instead of having large storey distribution boards with actuators, not only the sensors (such as pushbuttons or motion detectors) are connected to the flat cable in a decentralised manner - the actuators are now also installed decentrally. This means that equipment rooms and distribution cabinets become smaller. The flat cable system with its bus components is installed in recesses, false ceilings, raised floors or plinth ducts. Power is routed directly to the actuators and from there, over short connection lines, pre-assembled and pluggable if possible, it is routed to the consumers. The sensors are connected with the bus line as required, and in this case the units that they belong to and the quantity of sensors does not matter. The result is an enormous reduction in the quantity of cable as well as the cost of installation and work involved.



Benefits

Energy efficiency

Only in the case of transparent buildings can energy consumption be determined in detail and reduced. With the building automation system from Woertz, the system can at any time be expanded with additional sensors, actuators and regulators.

Security

No breaks are required in the flat cable at any point during installation or expansion. There is less cable overall, and the decentralised installation of sensors and actuators means fewer potential risks.

Benefits for builders/investors

Flexible installations allow easy optimisation with regard to utilisation, energy consumption, well-being, and security. Decentralised flat cable installation not only means lower installation costs - lifecycle costs are also reduced.

Benefits for planners

Even if you have not yet decided which bus system to integrate or whether to install a bus system at all, the Woertz flat cable system gives you flexibility up to the last minute. We would be happy to advise you on the best ways to use a decentralised installation.

Benefits for electrical contractors

The Raptor line of contacts gives you the fastest possible method of installation. The EIB/KNX actuator or sensor is mounted with just one click. With implementation times becoming ever shorter, this provides you with the definitive competitive advantage.

Benefits for system integrators

When installing a flat cable system, the low error rate, clear arrangement, simplicity of implementation, and preconfiguration of the bus components allows the system to be commissioned in the shortest possible time.

SMI cabling concept with Woertz® flat cable systems



Woertz[®] flat cable and building automation













Properties of materials and standards

										Catal	Jgue J	ection
Cross-sectional view	Art. No.	Description	Туре		Н				.		••	
				Flame propagation IEC 60332-1-2	Halogen-free IEC 60754-1/2	Smoke density	Flame spread EN 603323	Circuit integrity IEC 60331	System circuit integrity DIN 4102	IP20-System	IP68-System	FE180-System
		Dat	ta cabl	е								
_	49949	Woertz data 2x1.5 mm²	PVC 1)	\checkmark						t-27		
·•••	49948		Halogenfree 2)	\checkmark	✓	✓				P.24		
0000	49651	Woertz multibus 4x1.5xmm ²	Halogenfree 2)	\checkmark	~	✓	~			P.28-33		
	Inst	tallation ca	ble wit	h d	ata	cal	ole					
	49945 1)	Woertz combi 5G2.5+2x1.5 mm²	PVC	\checkmark						-57		
	49946 2)		Halogenfree	\checkmark	~	\checkmark	\checkmark			P.50		
	49946 2)	Woertz DALI 5G2.5+2x1.5 mm ²	Halogenfree	\checkmark	~	\checkmark	✓			P.58-63		
	49864 FRNC 2)	Woertz combi IP 5G2.5+2x1.5 mm ²	Halogenfree	\checkmark	~	✓	\checkmark				P.92-95	
1) Insulation of the I 2) Insulation of the I 3) Insulation of the I	eads PVC co eads haloge eads haloge Star	nat EN 50363-3, n-free coat HD 604-5H, n-free coat VDE 0266, ndards related to fu	Outside Outside Outside rther Woertz	e PVC c e halog e halog flat c	able sy	50363 coat IEC coat VD /stems	4 6050 E 0266 S: see	2-1 leaflet	"Cabl	ing	syste	ems"



Woertz cables are made of high-quality, flame-resistant material, are flame retardant and self-extinguishing.

Flame retardant Standards: IEC 60332-1-2 und EN 60332-1-2



Woertz cables are halogen-free and reduce to a minimal possible damage to health or property.

Halogen-free and no corrosive gases Standards: IEC 60 754-1/2 und EN 50 267-2-1/2



Woertz cable under the influence of fire, developes minimal smoke emission. Thus, escape and emergency routes are not affected.

Smoke density Standards: IEC 61 034-2 und EN 61 034-2





Woertz cables have a low fire acceleration. The spread of fire from the ignition point, is therefore severely restricted.

Flame spread Standards: IEC 60 332-3-24 und EN 60 332-3-24



Woertz cables with insulation endurance FE180, guarantee, the functioning of a cable, in case of a fire over a period of 180 minutes.

Circuit integrity FE180 Standards: IEC 60331-21



Woertz cables, including fastening systems garatee the functioning of the entire electric cable system over a defined period of time.

System circuit integrity E90 Standards: DIN 4102-12



Pre-wiring means cost-saving Service to our customers.

On request the connectors may be provided in advance with round outgoing cables.

Boxes for pumps, valves or mixing valves for HVAC installations for instance may be prewired with outgoing round cables in our workshops. On the building site the prewiredboxes have only to be positioned on the flat cable. The electrical contact will be established within a few seconds by means of an electric screw-driver.















Neutral current

In a single-phase network, the same current always has to flow in the neutral conductor, as in the phase conductor.



In electrical networks with three phases, voltages with a periodic sinusoidal form are generated in the phase conductors, but the sequences are shifted time-wise by a third of a period. In this case, as a result of these processes that are running periodically, when the voltages are combined together (neutral point), the result at each point in time is "O".

For a symmetrical load (each phase the same as the load) the currents are cancelled out, and no current subsequently flows in the neutral conductor either. If the individual phases have different loads (different resistances, due to heavier inductive or capacitive loading of different phasings), the currents no longer balance out, a resulting current remains, and this runs in the neutral conductor back to the power source.

Due to the basic principles of physics and as can be seen from the vector diagram if one or two phases fail and only the remaining one is loaded, this then results in the most extreme asymmetry.



Even in this case, however, it is easy to see (and mathematically deducible) that the maximum neutral current cannot exceed the phase current. (=> basic principle of dimensioning – conductor crosssection for neutral conductor is the same as for phase conductor).

Periodic but non-sinusoidal load

For modern electrical devices, especially in office equipment (computers, printers, etc.), electronically regulated power supplies are often used.





Due to their mode of operation, these devices create non-sinusoidal loads in the electric circuits. The individual phases are therefore not only different in the sizes and phasings of the current, the shape of the flowing current is no longer sinusoidal either.

Result The individual phase currents can no longer cancel each other out, and a neutral current flows.

In order to be able to calculate the conditions, we have to go back to basic mathematical principles.

The following is applicable as mathematically proven: Each periodic oscillation can be composed as a result of sinusoidal oscillations with different frequencies and amplitudes (Fourier).

If the half periods are symmetrical mirror images (+ and – parts are equal), only an odd plural number of fundamental oscillations occur:

$$\begin{split} Y(t) &= A1 sin(\omega t) + A3 sin3 \omega t + A5 sin(5 \omega t) + A7 sin(7 \omega t) ... \\ Fundamental wave & Harmonics \end{split}$$





If the fundamental waves have a 1/3 phase shift, they cancel each other out. However, the third harmonics (period length 1/3 of the fundamental waves), despite the phase shift of the fundamental wave, have the same phase as the other third harmonics.

Result The fundamental waves have an effect of mutual attenuation on each other, but the 3rd harmonics fall into the same phasing and are added together.

woertz (2)



waves and possible conditions that may exist in practice, without calculations and measurements, you can jump to the wrong conclusion that the neutral conductor may be overloaded.

Regardless of the fundamental

In practice, you have to analyse actual conditions using basic mathematical principles. If there is a rise in temperature, the effective total current is always a definitive factor. In the pole conductors, this comprises the fundamental wave and the sum of the odd harmonics.

 $I_{eff} = I_{eff} 50Hz + I_{eff} 150 Hz + I_{eff} 250 Hz + I_{eff} 350 Hz + ...$

In the neutral conductors, the only flowing elements that strengthen are the 3rd and 9th harmonics. The fundamental wave and the other harmonics have an effect of mutual attenuation on each other.



 $I_{eff} N = 3x I_{eff} 150 Hz + 3x I_{eff} 450 Hz + \dots$

Numerous tests have proven that even under extreme conditions, the effective value of the total neutral current cannot reach the value of a phase current.

(see "Neutralleiterströme / Elektrotechnik" chapter 9 section 2 by Arnold / Lovack).

Note

Neutral currents are produced regardless of the cable type used (round or flat cable). Even under selected adverse conditions, the neutral currents (especially the sum of the harmonics) can in practice not exceed the loading of the pole conductor. As a result of the greater capacity of flat cables due to the larger surface area for the same conductor cross-sections, flat cables can withstand operational loading with very little increase in temperature.

www.woertz.ch

Dr. Tamas Onodi



RAPTOR Quickly installed actuators

To perform intelligent connections just in one click

Quick mounting procedure of Raptor actuators



Place the flat cable in the baseplate (installation temperature min. $+10^{\circ}$ C) - the different ridges prevent from incorrect mounting. Open completely the lever, incline the Raptor housing as shown on the picture and engage it in the baseplate till it reaches the pivotal point.



Press slightly the Raptor housing so that the lever touches the stop. Fold back the lever.



It must be checked whether the lever is properly engaged. Connect the receiver. Write the physical address on the housing.

Actuators can't be mounted when live!



The overcurrent protection devices will be chosen in relation to the length of installed cables so that their response time conform to specifications in case of malfunction.

Please consider the maximal load for phases and bus.

Possibility of pre-wiring: the installation becomes more rational!

On request the connectors may be provided in advance with round outgoing cables.

And the Raptor actuators may be mounted in advance on the flat cable in the workshop. Important time saving will be performed - to your advantage!

RAPTOR to flat cable No. 49945 and 49946

Switch actuator, d	louble	Technical data
No. 49590G/L1 49590G/L2 49590G/L3	Eldas No. 405 441 107 405 441 207 405 441 307	L×W×H mm141×74×55 Width including fastenersWith contactsphase+N+PE+2×bus (KNX)Pluggable outputsgesis (female), 2×3 PolesOutput voltage VAC230 as mains voltageRated current per output A16 at 230VAC, ohmic loadPeak current at make A80 (20 ms)Service temperature °C-5 to +45 Installation temperature °CDegree of protectionIP20Packing unit pce.1
Shutter actuator.	single	Technical data
No. 49591G/L1 49591G/L2 49591G/L3	Eldas No. 405 431 107 405 431 207 405 431 307	L×W×H mm 141×74×55 width including fasteners With contacts Phase+N+PE+2×bus (KNX) Pluggable outputs gesis (female), 4 poles Output voltage VAC 230 as mains voltage Rated current/Output current A 8 ohmic load Service temperature °C -5 to +45 Installation temperature °C > +10 Degree of protection IP20 Packing unit pce. 1
Dimmer actuator,	double	Technical data
No. 49593G/L1 49593G/L2 49593G/L3	Eldas No. 405 441 117 405 441 217 405 441 317	L×W×H mm141×74×55Width including fastenersWith contactsphase+N+PE+2×bus (KNX)Pluggable outputsgesis (female), 2×3 polesOutput voltage VAC230as mains voltageRated current per output A16Output control voltage dimmer2x1-10VDC(2 poles)Service temperature °C-5 to +45Installation temperature °C> +10Degree of protectionIP20Packing unit pce.1



RAPTOR to flat cable N	lo. 49945 and 49946
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Binary input, vierfach	Technical data	
No. Eldas No. 49592/L1 405 991 107	L×W×H mm133×74×55Width contacts2×Bus (KNX)Pluggable outputsWAGO (male), 8 PoleInput voltage range4×24VAC - 230VACContacts(24VDC)Service temperature °C-5 to +45Installation temperature °C> +10Degree of protectionIP20Packing unit pce.1	
Power supply 640 mA	Technical data	
No. Eldas No. 49594 405 890 007	L×W×H mm 135×74×55 Width including fasteners With contacts 2×bus (KNX) Output voltage auf KNX-bus 30VDC ± 2V (limited) output current max, 640mA, short-circuit proof	
	Service temperature °C -5 to +45 Installation temperature °C > +10 Degree of protection IP20 Packing unit pce. 1	
USB Interface		
No. Eldas No. 49595 405 830 007	L×W×H mm 114×/4×55 Width including fasteners With contacts 2×bus (KNX) Service temperature °C -5 to +45 Installation temperature °C > +10	
	Packing unit pce. 1	

RAPTOR to flat cable No. 49945 and 49946

RF Concentrator	/Media coupler	Technical data		
No.	Eldas No.	L×W×H mm	114×74×55	
49596	405 750 007		Width inkl. fasteners	
		Number of channels	32×bus (KNX)	
		power supply	30 VDC via KNX-bus	
100		Radio frequency	868.3 MHz	
		Service temperature °C	-5 to +45	
		Installation temperature °C	>+10	
		Degree of protection	IP20	
a la		Packing unit pce.	1	

Accessories to RAPTOR range

Programmer console	Technical data	
No. 49599/V1	Packing unit pce. 1	
Push-button	Technical data	
No. on request		KNX push-buttons are available in different designs
Connector to Shutter actuator	Technical data	
No. Eldas No. 49744M 405 991 207	Packing unit pce. 10	4-pole, with screw connection, black, with code 1 type GST 18i4S S1 ZR1 for 1 cable up to 4x2.5mm2 Height: 15 mm also available on request as pre-wired connec- tor in different lengths
Connector to binary input	Technical data	
No. Eldas No. 49782 405 991 307	Packing unit pce. 1	8-pole, with spring connection, orange Cross-section of connected cable 0.08-1.5mm2 Connected load max. 250V/10A

Weather controller

Senses weather data and controlls the components of building automation.



This weather controller is also a weather station and a sunblind controller for 8 sectors/building faces. The weather controller can only be programmed via the ETS4 software.

Measured data:

The weather controller has 33 integrated programs and senses with its integrated sensors the following values

- Wind (over Ultrasound)
- Wind direction
- 5 x Brightness (North, East, South, West, Sky)
- 5 x solar radiation (North, East, South, West, Sky)
- Temperature
- Precipitation

All measured values are available over KNX bus.

Automatic-Functions:

Comfort programs

- 4 x shading
- 1 x temperature
- 1 x heat
- 1 x illumination
- 1 x twilight
- 2 x time
- 16 x inputs

Further functions

- limit values alterable via KNX
- Solar tracking
- Report for service interval
- Faultreport for sensors
- Positioning possible per program
- 8 sectors/building faces

Safety programs

- 2 x wind
- 2 x precepitation
- 2 x frost
- 1 x global radiation



Weather controller

Weather controller	Connection Data		
No. 49576	Voltage Dissipation Loss Supply Cord Protection Class Bus connection Bus current		21-28 VDC 2.5W (without heating) max 1,3A 2x2x0.25mm ² IP X4 KNX max. 25mA
	Sensors		
	Temperature Illumination Global Radiation Wind speed Wind direction Rain fall		-40°C to +90°C O to 100KLux O to 1200 W/m ² O to 35m/s O to 360° yes/no
CALINED.	Ambient Temperature		
I	Mounting Place Ambient Temperature Storage Temperature		outside mounting -30°C to +60°C -30°C to +75°C
	Conorol		
	General Dimensions WxHxD Weight Maintenance Licensing		157x198x132 mm approx. 900g at least twice a year CE
Accessories			
Power supply	Technical data		
No. 49578	PEG Input Output	4.5 TE 85V-265VAC/50-60 Hz 24VCD/1500mA	
Boom extension	Technical data		
No.	Length	approx 30 cm	
48577			

Building automation

Fancoil controller



For a convenient room climate with maximal power efficiency.



Where are these Fancoil controllers used?

- in offices
- in conference rooms
- in hotels
- in hospitals/clinics
- in laboratories
- in apartments





The fancoil controller can directly be connected to a temperature sensor. The recorded values are supplied to the controllers as actual values. It is possible to implement further external sensors via the integrated KNX interface in order to set the individual comfort zone.

The modification of the temperature setpoint values and the use of the push-button for presence sensing helps for example to save energy, when you leave the room.

It is also possible to control the fan speeds. Window contact sensors influence the performance of the fancoils when the windows are opened. In the standard design, the outputs of the fancoil controllers act on 3-step motor valve drives and alter the flow of energy for heating and cooling.



for heating and cooling - cooling only - with digital outputs

Heating/cooling	Technical data	
with integrated power supply	L×W×H mm 105×107×58	Inputs:
No. Eldas No. 49550 405 410 107	Rated cross-selection mm²2.5Supply voltage VAC, Hz230, 50/60Supply voltage VAC, Hz230, 50/60	<i>Room temperature sensor:</i> semiconductor sensor with PWM-Output (Pulse width modulation)
	Max. Power consumption vA9Measuring range witz temp. sensor °C-40 to 70Switched outputs for fans3	Setpoint temperature sensor: potentiometer, 4,7kOhm, linear or via KNX
1	Switched outputs for valves2×2Type of valve drive3-step actuator or thermal valve	Binary input: 2x potential free 10-30VAC/DC
	drive for 24 VAC	Outputs: Heating/Cooling valve outputs: Output voltage 24VAC (max. 5VA)
temperature sensor 4-poles		<i>Fan output:</i> Relay output, potential free, voltage 250VAC (max. 6A)
49570		Auxiliary voltage output : 24 VAC (max. 5mA)
()		<i>Max. cable lengths for valve output:</i> 30 m
	Packing unit pce. 1	only the temperature controller specified by Woertz may be used
Heating/cooling	Technical data	
without power supply	L×W×H mm 70×107×58	Inputs:
No. Eldas No. 49551 405 410 207	Rated cross-selection mm²2.5Supply voltage VAC, Hz24, 50/60max. Power consumption VA6-18	Room temperature sensor: semiconductor sensor with PWM-Output (Pulse width modu- lation)
the first and	Measuring range with temp. sensor °C -40 to 70 Switched outputs for fans 3	Setpoint temperature adjustment: via KNX
1 Partie	Switched outputs for valves2×2Type of valve drive3-step-actuator or thermal	Binary input: 1× 24VAC
1. Constant	valve drive for 24 VAC	Outputs:
Carl Carl		Heating/Cooling valve outputs: Output voltage 24VAC (max. 75VA)
temperature sensor 3-poles No.		<i>Fan output:</i> Relay output, potential free, voltage 230VAC (max. 6A)
49570/1		<i>Max. cable lengths for valve output:</i> 30 m
\bigcirc	Packing unit pce. 1	only the temperature controller specified by Woertz may be used
Cooling	Technical data	
without power supply No. Eldas No. 49552 405 410 307	LxWxH mm70x107x58Rated cross-selection mm²2.5Supply voltage VAC, Hz24, 50/60max. Power consumption VA2	Inputs: <i>Room-temperature sensor:</i> semiconductor sensor with PWM-Output (Pulse width modu- lation)
	Measuring range with temp. sensor °C -40 to 70 Switched outputs for fans 3	Setpoint temperature adjustment: via KNX
	Switched outputs for valves 1×2 Type of valve drive 3-step-actuator or thermal	Binary input: 1× 24VAC
1 Contraction	valve drive for 24-230 VAC	Outputs: Cooling valve output: potential free, rated
1.1.1		voltage 24VAC-230VAC (max. 0.75A)
		<i>Fan output</i> : Relay output, potential free, voltage 230VAC (max. 6A)
		<i>Max. cable lengths for valve output:</i> 30 m
	Packing unit pce. 1	only the temperature controller specified by Woertz may be used



for heating and cooling - cooling only - with analogical outputs

Heating/cooling	Technical data	
with integrated power supply No. 49550AN	L×W×H mm 105×107×58 Rated cross-selection mm ² 2.5 Supply voltage VAC, Hz 230, 50/60 max. Power consumption VA 9 Measuring range with temp. sensor °C -40 to 70 Switched outputs for fans 3 Switched outputs for valves 2×2 Type of valve drive 2×2 Type of valve drive DC actuator valve drive for 24 VAC + 1 control signal 0-10 V	Inputs: Room temperature sensor: semiconductor sensor with PWM-Output (Pulse width modulation) Setpoint temperature adjustment: potentiometer, 4,7kOhm, linear or via KNX Binary input: 2x 24VAC Outputs: Heating/ Cooling valve outputs: Output voltage 0-10VDC Fan output: relay output, potential free, voltage 250VAC (max. 6A) Auxiliary voltage output: 24 VAC (max. 5mA) Max. cable lengths for valve output: 30 m only the temperature controller specified by
	Packing unit pce. 1	woertz may be used
Cooling	Technical data	
with integrated power supply No. 49555AN	L×W×H mm 105×107×58 Rated cross-selection mm² 2.5 Supply voltage VAC, Hz 230, 50/60 max. Power consumption VA 9 Measuring range with temp. sensor °C -40 to 70 Switched outputs for fans 3 Switched outputs for valves 1×2 Type of valve drive DC actuator valve drive for 24 VAC + 1 control signal 0-10 V Packing unit pce. 1	Inputs:Room temperature sensor: semiconductorsensor with PWM-Output(Pulse width modulation)Setpoint temperature adjustment:potentiometer, 4,7kOhm, linear or via KNXBinary input: 2× 24VACOutputs:Cooling valve outputs:Output voltage 0-10VDCFan output: relay output, potential free,voltage 250VAC (max. 6A)Auxiliary voltage output: 24 VAC (max. 5mA)Max. cable lengths for valve output:30 monly the temperature controller specified byWoertz may be used
Heating/cooling	Technical data	
without power supply No. 49551AN	L×W×H mm 70×107×58 Rated cross-selection mm ² 2.5 Supply voltage VAC, Hz 24, 50/60 max. Power consumption VA 9 Measuring range with temp. sensor °C -40 to 70 Switched outputs for fans 3 Switched outputs for valves 2×2 Type of valve drive DC actuator valve drive for 24 VAC + 1 control signal 0-10 V	Inputs: Room-temperature sensor: semiconductor sensor with PWM-Output (Pulse width modulation) Setpoint temperature adjustment: potentiometer, 4,7kOhm, linear or via KNX Binary input: 1× potential free 10-30VAC/DC Outputs: Heating/ Cooling valve outputs: Output voltage 0-10VDC Fan output: relay output, potential free, voltage 250VAC (max. 6A) Auxiliary voltage output: 24 VAC (max. 5mA) Max. cable lengths for valve output: 30 m
	Packing unit pce. 1	Woertz may be used



Power current and data lines combined in one cable.

Attention: Not combinable with Woertz Combi.



Where are these flat cables used?

- in office buildings
- in hospitals, clinics and residential facilities
- in industrial buildings
- in hotels

Flat cable enables installations to be completed easily with further connections.

woertz

Flat cable Woertz combi 5G2.5 mm² + 2×1.5 mm²

	PVC		Halogen-free	
	No.	Eldas No.	No.	Eldas No.
	49945 49945RT 49945SW 49945WS	113 388 083	49946 49946RT 49946SW 49946SS	113 388 007
asylawing	■ 49945/SM*	113 388 084	L∎] 49946/SM*	113 388 004
	* on request	other colours of	on request	

Technical data			
Dimension Weight	mm g/m	32×6	32×6 340
Fire load	kWh/m	1 18	1 79
No. of leads cross-section	mm ²	5×2.5 + 2×1.5	5×2.5 + 2×1.5
Power current			
Copper conductors		verzinnt feindrähtig	tinned highly flexible
Aderisolation		PVC	vulcanized and flame retardant Polyethylene Compound
Colour of the leads		grey,black, brown, blue, green/yellow	grey,black, brown, blue, green/yellow
Cross-section	mm²	2.5	2.5
			fiame retardant Polyolefin
Test voltage	KV / HZ	4750	4/50
	KV O/km	0.0/1	0.0/1
Max Sonvice temporature	12/KIII °C	0.21 15 to 170	0.21 15 to 190
Min Installation temperature	ں ەر	-15 10 +70	-15 10 +50
Copper weight	kg/km	120	120
Busteil			
Copper conductors		tinned	tinned
Insulation of the leads		PVC	Polyethylene
Colour of the leads		neutral	neutral
Shield		double shield of aluminium	double shield of aluminium
Cross-section	mm ²	1.5	1.5
Coat insulation		PVC	flammwidiger Polyolefin
Test voltage	kV / Hz	4 / 50	4 / 50
Rated voltage	V	50	50
Max. rated current	А	3	3
DC-resistance	Ω/km	13.7	13.7
Capacitance	pF/m	70	70
Attenuation at 1Hz	dB/m	1.2/100	1.2/100
Charact. impedance at1 MHz	nom Ω	nom. 75	nom. 75
Copper weight	kg/km	29	29

Connecting box with screw-type connection to flat cable No. 49945 and 49946

Connecting bo	x 5-poles with bus	Technical data			
No. 49700	Eldas No. 150 775 137	L×W×H mm Weight g Fire load kWh Cross-section mm ² Connecting capacity Ø	76×41×39 86 0.47 5×2.5+ 2×1.5 3.75 + 3.2	for supply or branching bus	for power current and
Res A	ALL	Rated voltage Power current V Max. rated current Power current A Rated voltage bus part V Max. rated current max. bus part A Degree of protection	690 16 50 3 IP20	Plastic parts Metal parts Packing unit pce.	halogen-free corrosion-resistant 50
Connecting bo	ox 5-poles	Technical data			
No. 49701	Eldas No. 150 775 037	L×W×H mm Weight g Fire load kWh	58×41×39 55 0.33	for supply or branching bus	for power current and
Ve		Cross-section mm ² Connecting capacity Ø Rated voltage Power current V Max. rated current Power current A Packing unit pce. Degree of protection	5×2.5 3.75 690 16 50 IP20	Plastic parts Metal parts tightening torque Nm screwdriver No.	halogen-free corrosion-resistant 0.7 1
Connecting bo	ox for bus	Technical data		1	
No. 49702	Eldas No. 150 732 037	L×W×H mm Weight g Fire load kWh	21×41×39 23 0.14	for supply or branching bus	for power current and
Ver.		Cross-section mm ² Connecting capacity Ø Rated voltage bus part V Max. rated current max. bus part A Packing unit pce. Degree of protection	2×1.5 3.2 50 3 50 IP20	Plastic parts Metal parts tightening torque Nm	halogen-free corrosion-resistant 1.0
				screwdriver No.	3

Connecting box, flat execution to flat cable No. 49945 and 49946

Connecting bo	X	Technical data			
No. 49703	Eldas No. 150 701 007	L×W×H mm Weight g Fire load kWh Spring clamp terminals per pole Connecting capacity Ø Rated voltage V Max. rated current max. A Cross-section mm ² Plastic parts Metal parts Packing unit pce. Degree of protection	96×60×23 71.1 0.38 2 6-13 mm 690 16 (2×) 5×2.5 halogen-free corrosion-resistant 50	for supply or branching, insulation stripped flat execution 3P+N+PE for flexible round cable of PVC with end sleeves for strands or cables up to 5×2.5 mm ² tightening torque Nm screwdriver No.	on has not to be to 5×1.5 mm² two rigid round 0.7 1



Branching box 3	-poles	Technical data			
No.	Eldas No.	L×W×H mm	34.5×57.5×25.7	Lateral connection	
49713/L1	150 700 137	Weight g	40		
49713/L2	150 700 237	Fire load kWh	0.18		
49713/13	150 700 117	socket	type GST18i3	Plastic parts	halogen-free
457 10/20	100 / 00 11/	Societ	code 1	Metal parts	corrosion-resistant
10.00		Rated voltage V	250		
1211-			200	tightening torque Nm	0.7
	-	Max. rated current max. A	16	screwdriver No.	1
Contraction of the second	-4	Packing unit pce.	50		
		Degree of protection	IP20	Pre-wired connectors see	page 70
Branching box 3	-poles	lechnical data		1	
No.	Eldas No.	L×W×H mm	48×40×34	Longitudinal connection	
49413/C	150 700 127	Weight g	55		
1		Fire load kWh	0.32	Phase selection	
della		socket	type GST18i3	Plastic parts	halogen-free
			code 1	Metal parts	corrosion-resistant
		Rated voltage V	250		
		Max. rated current max. A	16	tightening torque Nm	0.7
1000		Packing unit nce	25	screwdriver No.	1
		Degree of protection	IP20		
			11 20	Pre-wired connectors see	page 70
Branching box 5	-poles	Technical data			
No.	Eldas No		54×57 5×25 7	with cockat	
NU. 40715	LIUAS NO.	Woight g	J4XJ7.JXZJ.7		
49/15	100 /00 33/		CO		
		Fire load kWh	0.27	Diactia parte	halagan fraa
4		socket	type GST18i5	Matal parts	
A 10 1			code 1	Metal parts	corrosion-resistant
in in		Rated voltage V	250/400	tightoning torque Nm	0.7
	100	Max. rated current max. A	16		0.7
		Packing unit pce.	50	screwuriver no.	1
		Degree of protection	IP20	Pre-wired connectors see	nage 70
					1 // //= \ . / \ /
					pu80 / 0
Branching box 2	-poles for KNX	Technical data			page / c
Branching box 2 No.	-poles for KNX Eldas No.	Technical data L×W×H mm	27×57.5×25.7	with socket	P620 / 0
Branching box 2 No. 49710	-poles for KNX Eldas No. 150 701 187	Technical data L×W×H mm Weight g	27×57.5×25.7 18	with socket Lateral connection	, , , , , , , , , , , , , , , , , , ,
Branching box 2 No. 49710	-poles for KNX Eldas No. 150 701 187	Technical data L×W×H mm Weight g Fire load kWh	27×57.5×25.7 18 0.12	with socket Lateral connection	, , , , , , , , , , , , , , , , , , ,
Branching box 2 No. 49710	-poles for KNX Eldas No. 150 701 187	Technical data L×W×H mm Weight g Fire load kWh socket	27×57.5×25.7 18 0.12 type BST14i2	with socket Lateral connection Plastic parts	halogen-free
Branching box 2 No. 49710	-poles for KNX Eldas No. 150 701 187	Technical data L×W×H mm Weight g Fire load kWh socket	27×57.5×25.7 18 0.12 type BST14i2 Code KNX	with socket Lateral connection Plastic parts Metal parts	halogen-free corrosion-resistant
Branching box 2 No. 49710	-poles for KNX Eldas No. 150 701 187	Technical data L×W×H mm Weight g Fire load kWh socket Rated voltage V	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50	with socket Lateral connection Plastic parts Metal parts	halogen-free corrosion-resistant
Branching box 2 No. 49710	-poles for KNX Eldas No. 150 701 187	Technical data L×W×H mm Weight g Fire load kWh socket Rated voltage V Max. rated current max. A	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3	with socket Lateral connection Plastic parts Metal parts tightening torque Nm	halogen-free corrosion-resistant 1.0
Branching box 2 No. 49710	-poles for KNX Eldas No. 150 701 187	Technical data L×W×H mm Weight g Fire load kWh socket Rated voltage V Max. rated current max. A Packing unit poe	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No.	halogen-free corrosion-resistant 1.0 3
Branching box 2 No. 49710	-poles for KNX Eldas No. 150 701 187	Technical data L×W×H mm Weight g Fire load kWh socket Rated voltage V Max. rated current max. A Packing unit pce. Degree of protection	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50 1P20	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No.	halogen-free corrosion-resistant 1.0 3
Branching box 2 No. 49710	-poles for KNX Eldas No. 150 701 187	Technical data L×W×H mm Weight g Fire load kWh socket Rated voltage V Max. rated current max. A Packing unit pce. Degree of protection	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50 IP20	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i>	halogen-free corrosion-resistant 1.0 3 <i>page 68</i>
Branching box 2 No. 49710	-poles for KNX Eldas No. 150 701 187	Technical data L×W×H mm Weight g Fire load kWh socket Rated voltage V Max. rated current max. A Packing unit pce. Degree of protection	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50 IP20	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i>	halogen-free corrosion-resistant 1.0 3 <i>page 68</i>
Branching box 2 No. 49710 Branching box 2 No	-poles for KNX Eldas No. 150 701 187	Technical data L×W×H mm Weight g Fire load kWh socket Rated voltage V Max. rated current max. A Packing unit pce. Degree of protection Technical data L×W×H mm	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50 IP20	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i>	halogen-free corrosion-resistant 1.0 3 <i>page 68</i>
Branching box 2 No. 49710 Branching box 2 No. 49711	-poles for KNX Eldas No. 150 701 187	Technical data L×W×H mm Weight g Fire load kWh socket Rated voltage V Max. rated current max. A Packing unit pce. Degree of protection Technical data L×W×H mm Weight g	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50 IP20	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> with socket Lateral connection	halogen-free corrosion-resistant 1.0 3 <i>page 68</i>
Branching box 2 No. 49710 Branching box 2 No. 49711	-poles for KNX Eldas No. 150 701 187	Technical data L×W×H mm Weight g Fire load kWh socket Rated voltage V Max. rated current max. A Packing unit pce. Degree of protection Technical data L×W×H mm Weight g Fire load kWh	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50 IP20 27×57.5×25.7 18 0.12	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> with socket Lateral connection	halogen-free corrosion-resistant 1.0 3 <i>page 68</i>
Branching box 2 No. 49710 Branching box 2 No. 49711	 -poles for KNX Eldas No. 150 701 187 -poles for bus Eldas No. 150 702 237 	Technical data L×W×H mm Weight g Fire load kWh socket Rated voltage V Max. rated current max. A Packing unit pce. Degree of protection Technical data L×W×H mm Weight g Fire load kWh socket	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50 IP20 27×57.5×25.7 18 0.12 type BST14i3	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> with socket Lateral connection Plastic parts	halogen-free corrosion-resistant 1.0 3 <i>page 68</i> halogen-free
Branching box 2 No. 49710 Branching box 2 No. 49711	 Poles for KNX Eldas No. 150 701 187 Poles for bus Eldas No. 150 702 237 	Technical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protectionTechnical dataL×W×H mmWeight gFire load kWhsocket	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50 IP20 27×57.5×25.7 18 0.12 type BST14i3 code 3	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> with socket Lateral connection Plastic parts Metal parts	halogen-free corrosion-resistant 1.0 3 <i>page 68</i> halogen-free corrosion-resistant
Branching box 2 No. 49710 Branching box 2 No. 49711	 -poles for KNX Eldas No. 150 701 187 -poles for bus Eldas No. 150 702 237 	Technical data L×W×H mm Weight g Fire load kWh socket Rated voltage V Max. rated current max. A Packing unit pce. Degree of protection Technical data L×W×H mm Weight g Fire load kWh socket	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50 IP20 27×57.5×25.7 18 0.12 type BST14i3 code 3 50	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> with socket Lateral connection Plastic parts Metal parts	halogen-free corrosion-resistant 1.0 3 page 68 halogen-free corrosion-resistant
Branching box 2 No. 49710 Branching box 2 No. 49711	 -poles for KNX Eldas No. 150 701 187 -poles for bus Eldas No. 150 702 237 	Technical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protectionTechnical dataL×W×H mmWeight gFire load kWhsocket	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50 IP20 27×57.5×25.7 18 0.12 type BST14i3 code 3 50 27×57.5×25.7	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> with socket Lateral connection Plastic parts Metal parts tightening torque Nm	halogen-free corrosion-resistant 1.0 3 <i>page 68</i> halogen-free corrosion-resistant 1.0
Branching box 2 No. 49710 Branching box 2 No. 49711	-poles for KNX Eldas No. 150 701 187 -poles for bus Eldas No. 150 702 237	Technical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protectionTechnical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. A	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50 IP20 27×57.5×25.7 18 0.12 type BST14i3 code 3 50 3 50 18 0.12 18 0.12 1920	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No.	halogen-free corrosion-resistant 1.0 3 page 68 halogen-free corrosion-resistant 1.0 3
Branching box 2 No. 49710 Branching box 2 No. 49711	 -poles for KNX Eldas No. 150 701 187 -poles for bus Eldas No. 150 702 237 	Technical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protectionTechnical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protection	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50 IP20 27×57.5×25.7 18 0.12 type BST14i3 code 3 50 3 50 1920	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No.	halogen-free corrosion-resistant 1.0 3 page 68 halogen-free corrosion-resistant 1.0 3
Branching box 2 No. 49710 Branching box 2 No. 49711	 -poles for KNX Eldas No. 150 701 187 -poles for bus Eldas No. 150 702 237 	Technical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protectionTechnical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protection	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50 IP20 27×57.5×25.7 18 0.12 type BST14i3 code 3 50 3 50 122 125 125 125 125 125 125 125	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i>	halogen-free corrosion-resistant 1.0 3 page 68 halogen-free corrosion-resistant 1.0 3 page 69
Branching box 2 No. 49710 Branching box 2 No. 49711 Vo. 49711 Branching box 2 No.	-poles for KNX Eldas No. 150 701 187 -poles for bus Eldas No. 150 702 237	Technical dataL×W×H mmWeight g Fire load kWh socketRated voltage V Max. rated current max. A Packing unit pce. Degree of protectionTechnical dataL×W×H mm Weight g Fire load kWh socketRated voltage V Max. rated current max. A Packing unit pce. Degree of protectionTechnical dataL×W×H mm Weight g Fire load kWh socketRated voltage V Max. rated current max. A Packing unit pce. Degree of protection	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50 IP20 27×57.5×25.7 18 0.12 type BST14i3 code 3 50 3 50 1P20	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i>	halogen-free corrosion-resistant 1.0 3 page 68 halogen-free corrosion-resistant 1.0 3 page 69
Branching box 2 No. 49710 Branching box 2 No. 49711 49711 Branching box 2 No.	 -poles for KNX Eldas No. 150 701 187 -poles for bus Eldas No. 150 702 237 -poles for bus 	Technical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protectionTechnical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protection	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50 IP20 27×57.5×25.7 18 0.12 type BST14i3 code 3 50 3 50 1P20	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i>	halogen-free corrosion-resistant 1.0 3 page 68 halogen-free corrosion-resistant 1.0 3 page 69
Branching box 2 No. 49710 Branching box 2 No. 49711 Branching box 2 No. 49717	 -poles for KNX Eldas No. 150 701 187 -poles for bus Eldas No. 150 702 237 -poles for bus 	Technical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protectionTechnical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protection	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50 IP20 27×57.5×25.7 18 0.12 type BST14i3 code 3 50 3 50 1P20 27×57.5×25.7 18	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> Lateral connection	halogen-free corrosion-resistant 1.0 3 page 68 halogen-free corrosion-resistant 1.0 3 page 69
Branching box 2 No. 49710 Branching box 2 No. 49711 Branching box 2 No. 49717	 -poles for KNX Eldas No. 150 701 187 -poles for bus Eldas No. 150 702 237 -poles for bus 	Technical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protectionTechnical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protection	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50 IP20 27×57.5×25.7 18 0.12 type BST14i3 code 3 50 3 50 IP20 27×57.5×25.7 18 0.12 1920	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> Lateral connection Plastic parts	halogen-free corrosion-resistant 1.0 3 page 68 halogen-free corrosion-resistant 1.0 3 page 69 halogen-free
Branching box 2 No. 49710 Branching box 2 No. 49711 Branching box 2 No. 49711 Branching box 2 No.	 -poles for KNX Eldas No. 150 701 187 -poles for bus Eldas No. 150 702 237 -poles for bus 	Technical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protectionTechnical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protection	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50 IP20 27×57.5×25.7 18 0.12 type BST14i3 code 3 50 3 50 IP20 27×57.5×25.7 18 0.12 27×57.5×25.7 18 0.12	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts	halogen-free corrosion-resistant 1.0 3 page 68 halogen-free corrosion-resistant 1.0 3 page 69 halogen-free
Branching box 2 No. 49710 Branching box 2 No. 49711 Branching box 2 No. 49711 Branching box 2 No.	 -poles for KNX Eldas No. 150 701 187 -poles for bus Eldas No. 150 702 237 -poles for bus 	Technical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protectionTechnical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protectionTechnical dataL×W×H mmWeight gFire load kWhsocketTechnical dataL×W×H mmWeight gFire load kWhsocket	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50 IP20 27×57.5×25.7 18 0.12 type BST14i3 code 3 50 3 50 IP20 27×57.5×25.7 18 0.12 type BST14i3 code 3 50 IP20	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts	halogen-free corrosion-resistant 1.0 3 page 68 halogen-free corrosion-resistant 1.0 3 page 69 halogen-free corrosion-resistant
Branching box 2 No. 49710 Branching box 2 No. 49711 With a state of the state of th	 -poles for KNX Eldas No. 150 701 187 -poles for bus Eldas No. 150 702 237 -poles for bus 	Technical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protectionTechnical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protectionTechnical dataL×W×H mmWeight gFire load kWhsocketL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protection	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50 IP20 27×57.5×25.7 18 0.12 type BST14i3 code 3 50 3 50 IP20 27×57.5×25.7 18 0.12 type BST14i3 code 3 50 IP20	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts tightening torque Nm	halogen-free corrosion-resistant 1.0 3 page 68 halogen-free corrosion-resistant 1.0 3 page 69 halogen-free corrosion-resistant
Branching box 2 No. 49710 Branching box 2 No. 49711 Branching box 2 No. 49711 Branching box 2 No. 49717	 -poles for KNX Eldas No. 150 701 187 -poles for bus -poles for bus 	Technical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protectionTechnical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protectionTechnical dataL×W×H mmWeight gFire load kWhsocketL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protection	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50 IP20 27×57.5×25.7 18 0.12 type BST14i3 code 3 50 3 50 IP20 27×57.5×25.7 18 0.12 type BST14i3 code 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 50 1P20 50 50 1P20 50 50 1P20 50 50 50 50 1P20 50 50 50 1P20 50 50 50 50 50 50 50 50 50 5	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No.	halogen-free corrosion-resistant 1.0 3 page 68 halogen-free corrosion-resistant 1.0 3 page 69 halogen-free corrosion-resistant 1.0 3
Branching box 2 No. 49710 Branching box 2 No. 49711 With a state of the state of th	 -poles for KNX Eldas No. 150 701 187 -poles for bus Eldas No. 150 702 237 -poles for bus 	Technical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protectionTechnical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protectionTechnical dataL×W×H mmWeight gFire load kWhsocketL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.L×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50 IP20 27×57.5×25.7 18 0.12 type BST14i3 code 3 50 3 50 IP20 27×57.5×25.7 18 0.12 type BST14i3 code 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 50 3 50 IP20 3 50 3 50 IP20 3 50 3 50 IP20 3 50 50 50 3 50 3 50 50 50 50 50 50 50 50 50 50	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No.	halogen-free corrosion-resistant 1.0 3 page 68 halogen-free corrosion-resistant 1.0 3 page 69 halogen-free corrosion-resistant 1.0 3
Branching box 2 No. 49710 Branching box 2 No. 49711 With the second seco	 -poles for KNX Eldas No. 150 701 187 -poles for bus -poles for bus 	Technical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protectionTechnical dataL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protectionTechnical dataL×W×H mmWeight gFire load kWhsocketL×W×H mmWeight gFire load kWhsocketRated voltage VMax. rated current max. APacking unit pce.Degree of protection	27×57.5×25.7 18 0.12 type BST14i2 Code KNX 50 3 50 IP20 27×57.5×25.7 18 0.12 type BST14i3 code 3 50 3 50 IP20 27×57.5×25.7 18 0.12 type BST14i3 code 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 3 50 IP20 50 3 50 IP20 50 1 1 1 1 1 1 1 1 1 1 1 1 1	with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> with socket Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No. <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts tightening torque Nm screwdriver No.	halogen-free corrosion-resistant 1.0 3 page 68 halogen-free corrosion-resistant 1.0 3 page 69 halogen-free corrosion-resistant 1.0 3

Connecting box with socket to flat cable No. $49945 \ \text{and} \ 49946$

Connecting box with socket to flat cable No. 49945 and 49946

Branching box 2-	poles for KNX	Technical data			
No.	Eldas No.	L×W×H mm	44×39.5×28	Longitudinal connection	
49720/C	150 707 137	Weight g	19		
		Fire load kWh	0.12	Plastic parts	halogen-free
	A	socket	type BST14i2	Metal parts	corrosion-resistant
W Les			Code KNX	tislatan ing tanan n Nua	1.0
de la		Rated voltage V	50	lightening torque Nm	1.0
	61	Max. rated current max. A	3	Screwullver NO.	5
		Packing unit pce.	50	Pre-wired connectors see	page 68
		Degree of protection	IP20		
Branching box 2	polos for bus	Technical data			
			14,20 EV29	Longitudinal connection	
NO.	EIUAS INO.	LXWXH mm	44×39.5×28	Longitudinal connection	
49721/0	150 /07 257	Fire load kWb	0.12	Plastic parts	halogen-free
-		socket	tvne RST14i3	Metal parts	corrosion-resistant
	1		code 3		
1. Ko		Rated voltage V	50	tightening torque Nm	1.0
		Max. rated current max. A	3	screwdriver No.	3
0		Packing unit pce.	50		
		Degree of protection	IP20	Pre-wired connectors see	page 68
Branching box 2-	poles for bus	Technical data			
No.	Eldas No.	L×W×H mm	44×39.5×28	Longitudinal connection	
49727/C	150 707 337	Weight g	19		
		Fire load kWh	0.12	Plastic parts	halogen-free
		socket	code Woertz	Metal parts	corrosion-resistant
1 305		Rated voltage V	50	tightoning torque Nm	1.0
10 100-		Max. rated current max. A	3	screwdriver No	1.0
all		Packing unit pce.	50	Screwanier rie.	5
		Degree of protection	IP20	Pre-wired connectors see	page 68
Branching box 2-	and 3-poles	Technical data			
Branching box 2- No.	and 3-poles	Technical data	59.5×57.5×25.7	Lateral connection	
Branching box 2- No. 49723/L1	and 3-poles Eldas No. 150 701 137	Technical data L×W×H mm Weight g	59.5×57.5×25.7 57.5	Lateral connection Plastic parts	halogen-free
Branching box 2- No. 49723/L1 49723/L2	and 3-poles Eldas No. 150 701 137 150 701 237	Technical data L×W×H mm Weight g Fire load kWh	59.5×57.5×25.7 57.5 0.29	Lateral connection Plastic parts Metal parts	halogen-free corrosion-resistant
Branching box 2- No. 49723/L1 49723/L2 49723/L3	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX	Lateral connection Plastic parts Metal parts Packing unit pce.	halogen-free corrosion-resistant 50
Branching box 2- No. 49723/L1 49723/L2 49723/L3	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow	halogen-free corrosion-resistant 50 ver current) 0.7
Branching box 2- No. 49723/L1 49723/L2 49723/L3	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu	halogen-free corrosion-resistant 50 ver current) 0.7 ırrent) 1
Branching box 2- No. 49723/L1 49723/L2 49723/L3	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cu	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50 irrent A 16	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus	halogen-free corrosion-resistant 50 ver current) 0.7 irrent) 1 5 part) 1.0
Branching box 2- No. 49723/L1 49723/L2 49723/L3	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cur Max. rated current max. bus A	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50 irrent A 16 3	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part)	halogen-free corrosion-resistant 50 ver current) 0.7 urrent) 1 s part) 1.0 3
Branching box 2- No. 49723/L1 49723/L2 49723/L3	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cu Max. rated current max. bus A Degree of protection	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50 irrent A 16 3 IP20	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i>	halogen-free corrosion-resistant 50 wer current) 0.7 urrent) 1 s part) 1.0 3 pages 68
Branching box 2- No. 49723/L1 49723/L2 49723/L3	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cu Max. rated current max. bus A Degree of protection	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50 irrent A 16 3 IP20	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i>	halogen-free corrosion-resistant 50 ver current) 0.7 urrent) 1 5 part) 1.0 3 pages 68
Branching box 2- No. 49723/L1 49723/L2 49723/L3	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cu Max. rated current max. bus A Degree of protection Technical data	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50 irrent A 16 3 IP20	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i>	halogen-free corrosion-resistant 50 ver current) 0.7 urrent) 1 s part) 1.0 3 pages 68
Branching box 2- No. 49723/L1 49723/L2 49723/L3 Branching box 2- No. 49724/L1	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117 and 3-poles Eldas No.	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cu Max. rated current max. bus A Degree of protection Technical data L×W×H mm Woight g	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50 irrent A 16 3 IP20	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i>	halogen-free corrosion-resistant 50 ver current) 0.7 urrent) 1 s part) 1.0 3 pages 68
Branching box 2- No. 49723/L1 49723/L2 49723/L3 Branching box 2- No. 49724/L1 49724/L1	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117 and 3-poles Eldas No. 150 703 037 150 703 137	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cur Max. rated current max. bus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50 irrent A 16 3 IP20	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts	halogen-free corrosion-resistant 50 ver current) 0.7 urrent) 1 s part) 1.0 3 pages 68 halogen-free
Branching box 2- No. 49723/L1 49723/L2 49723/L3 Branching box 2- No. 49724/L1 49724/L2 49724/L3	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117 and 3-poles Eldas No. 150 703 037 150 703 137	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power curvent V Max. rated current max. Power curvent Max. rated current max. bus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 +	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50 irrent A 16 3 IP20 59.5×57.5×25.7 57.5 0.29 BST14i3 code 3	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> , Lateral connection Plastic parts Metal parts Packing unit pce	halogen-free corrosion-resistant 50 wer current) 0.7 urrent) 1 s part) 1.0 3 pages 68 halogen-free corrosion-resistant
Branching box 2- No. 49723/L1 49723/L2 49723/L3 Branching box 2- No. 49724/L1 49724/L2 49724/L3	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117 Antice the second sec	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cur Max. rated current max. bus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + Rated voltage Power current V	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50 irrent A 16 3 IP20 59.5×57.5×25.7 57.5 0.29 - BST14i3 code 3 250	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> , Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow	halogen-free corrosion-resistant 50 wer current) 0.7 urrent) 1 s part) 1.0 3 pages 68 halogen-free corrosion-resistant 50 wer current) 0.7
Branching box 2- No. 49723/L1 49723/L2 49723/L3 Branching box 2- No. 49724/L1 49724/L2 49724/L3	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117 and 3-poles Eldas No. 150 703 037 150 703 137 150 703 017	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cur Max. rated current max. bus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + Rated voltage Power current V	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50 irrent A 16 3 IP20 59.5×57.5×25.7 57.5 0.29 • BST14i3 code 3 250 50	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu	halogen-free corrosion-resistant 50 wer current) 0.7 mrent) 1 s part) 1.0 3 pages 68 halogen-free corrosion-resistant 50 wer current) 0.7 mrent) 1
Branching box 2- No. 49723/L1 49723/L2 49723/L3 Branching box 2- No. 49724/L1 49724/L2 49724/L3	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117 and 3-poles Eldas No. 150 703 037 150 703 137 150 703 017	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cur Max. rated current max. bus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + Rated voltage Power current V Rated voltage bus V Max. rated current max. Power current V	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50 Irrent A 16 3 IP20 59.5×57.5×25.7 57.5 0.29 • BST14i3 code 3 250 50 Irrent A 16	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus	halogen-free corrosion-resistant 50 ver current) 0.7 irrent) 1 5 part) 1.0 3 pages 68 halogen-free corrosion-resistant 50 ver current) 0.7 irrent) 1 5 part) 1.0
Branching box 2- No. 49723/L1 49723/L2 49723/L3 Same the second	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117 and 3-poles Eldas No. 150 703 037 150 703 137 150 703 017	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power curd Max. rated current max. bus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + Rated voltage Power current V Rated voltage bus V Max. rated current max. Power current V Rated voltage bus V Max. rated current max. Power current V Max. rated current max. Power current V Max. rated current max. Days A	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50 irrent A 16 3 IP20 59.5×57.5×25.7 57.5 0.29 S59.5×57.5×25.7 57.5 0.29 S50.5×57.5×25.7 57.5 0.29 S50.5×57.5×25.7 57.5 0.29 S50.5×57.5×25.7 57.5 0.29 S50.5×57.5×25.7 57.5 0.29 S50.5×57.5×25.7 57.5 0.29 S50.5×57.5×25.7 57.5 0.29 S50.5×57.5×25.7 57.5 0.29 S50.5×57.5×25.7 57.5 0.29 S50.5×57.5×25.7 57.5 0.29 S50.5×57.5×25.7 57.5 0.29 S50.5×57.5×25.7 57.5 0.29 S50.5×57.5×25.7 57.5 0.29 S50.5×57.5×25.7 57.5 0.29 S50.5×57.5×25.7 57.5 0.29 S50.5×57.5×25.7 57.5 0.29 S50.5×57.5×25.7 57.5 0.29 S50.5×57.5×25.7 57.5	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part)	halogen-free corrosion-resistant 50 ver current) 0.7 irrent) 1 s part) 1.0 3 pages 68 halogen-free corrosion-resistant 50 ver current) 0.7 irrent) 1 s part) 1.0 3
Branching box 2- No. 49723/L1 49723/L2 49723/L3 Second Second Se	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117 and 3-poles Eldas No. 150 703 037 150 703 137 150 703 017	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cur Max. rated current max. bus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cur Max. rated current max. Power cur Max. rated current max. Dower cur Max. rated current max. Dower cur Max. rated current max. bus A Degree of protection	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50 irrent A 16 3 IP20 59.5×57.5×25.7 57.5 0.29 BST14i3 code 3 250 irrent A 16 3 1P20	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i>	halogen-free corrosion-resistant 50 ver current) 0.7 irrent) 1 s part) 1.0 3 pages 68 halogen-free corrosion-resistant 50 ver current) 0.7 irrent) 1 s part) 1.0 3 pages 68
Branching box 2- No. 49723/L1 49723/L2 49723/L3 Sanching box 2- No. 49724/L1 49724/L2 49724/L3	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117 and 3-poles Eldas No. 150 703 037 150 703 137 150 703 017	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cur Max. rated current max. bus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cur Max. rated current max. Power cur Max. rated current max. Dower cur Max. rated current max. bus A Degree of protection	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50 Irrent A 16 3 IP20 59.5×57.5×25.7 57.5 0.29 BST14i3 code 3 250 50 Irrent A 16 3 IP20	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i>	halogen-free corrosion-resistant 50 ver current) 0.7 urrent) 1 5 part) 1.0 3 pages 68 halogen-free corrosion-resistant 50 ver current) 0.7 urrent) 1 5 part) 1.0 3 pages 68
Branching box 2- No. 49723/L1 49723/L2 49723/L3 Branching box 2- No. 49724/L1 49724/L2 49724/L3 Branching box 2-	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117 and 3-poles Eldas No. 150 703 037 150 703 017 150 703 017	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cur Max. rated current max. bus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cur Max. rated current max. Power cur Max. rated current max. Dower cur Max. rated current max. Dower cur Max. rated current max. Dower cur Max. rated current max. bus A Degree of protection Technical data	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50 irrent A 16 3 IP20 59.5×57.5×25.7 57.5 0.29 • BST14i3 code 3 250 50 irrent A 16 3 IP20	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> , Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> ,	halogen-free corrosion-resistant 50 wer current) 0.7 urrent) 1 5 part) 1.0 3 pages 68 halogen-free corrosion-resistant 50 wer current) 0.7 urrent) 1 5 part) 1.0 3 pages 68
Branching box 2- No. 49723/L1 49723/L2 49723/L3 Branching box 2- No. 49724/L1 49724/L2 49724/L3 Branching box 2- No.	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117 Band 3-poles Eldas No. 150 703 037 150 703 017 150 703 017 Band 5-poles Eldas No.	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power curded Max. rated current max. bus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + Rated voltage Power current V Rated voltage Dower current V Rated voltage bus V Max. rated current max. Power curded way. rated current max. Power curded way. rated current max. bus A Degree of protection Technical data L×W×H mm	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50 irrent A 16 3 IP20 59.5×57.5×25.7 57.5 0.29 BST14i3 code 3 250 50 irrent A 16 3 IP20 1020 50 50 50 50 50 50 50 50 50 5	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i>	halogen-free corrosion-resistant 50 wer current) 0.7 irrrent) 1 5 part) 1.0 3 pages 68 halogen-free corrosion-resistant 50 wer current) 0.7 irrrent) 1 5 part) 1.0 3 pages 68
Branching box 2- No. 49723/L1 49723/L2 49723/L3 Stanching box 2- No. 49724/L1 49724/L2 49724/L3 Stanching box 2- No. 49724/L3 Stanching box 2- No. 49724/L3	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117 Eldas No. 150 703 037 150 703 017 150 703 017 So 703 017	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power curded Max. rated current max. bus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + Rated voltage Power current V Rated voltage Power current V Rated voltage bus V Max. rated current max. Power curded ways. rated current max. Power curded ways. rated current max. bus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh Socket Max. rated current max. bus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh Socket Verse of bulk	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50 irrent A 16 3 IP20 59.5×57.5×25.7 57.5 0.29 BST14i3 code 3 250 50 irrent A 16 3 IP20 FOR 100 50 50 50 50 50 50 50 50 50	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> Lateral connection Plastic parts	halogen-free corrosion-resistant 50 ver current) 0.7 irrent) 1 5 part) 1.0 3 pages 68 halogen-free corrosion-resistant 50 ver current) 0.7 irrent) 1 5 part) 1.0 3 pages 68 halogen-free
Branching box 2- No. 49723/L1 49723/L2 49723/L3 Branching box 2- No. 49724/L1 49724/L2 49724/L3 Branching box 2- No. 49724/L3	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117 and 3-poles Eldas No. 150 703 037 150 703 017 and 5-poles Eldas No. 150 703 017	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power curd Max. rated current max. bus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + Rated voltage Power current V Rated voltage Power current V Rated voltage bus V Max. rated current max. Power curd Max. rated current max. Power curd Max. rated current max. Power curd Max. rated current max. Dus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50 irrent A 16 3 IP20 59.5×57.5×25.7 57.5 0.29 BST14i3 code 3 250 50 irrent A 16 3 IP20 For the second seco	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts Packing parts Decline parts	halogen-free corrosion-resistant 50 ver current) 0.7 irrent) 1 5 part) 1.0 3 pages 68 halogen-free corrosion-resistant 50 ver current) 0.7 irrent) 1 5 part) 1.0 3 pages 68 halogen-free corrosion-resistant
Branching box 2- No. 49723/L1 49723/L2 49723/L3 Branching box 2- No. 49724/L1 49724/L2 49724/L3 Branching box 2- No. 49724/L3	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117 and 3-poles Eldas No. 150 703 037 150 703 017 and 5-poles Eldas No. 150 705 137	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power curded Max. rated current max. bus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + Rated voltage Power current V Rated voltage Dower current V Rated voltage bus V Max. rated current max. Power curded Max. rated current max. Power curded Max. rated current max. Power curded Max. rated current max. bus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh socket type GST18i5 + B Dated weltage Summer curded	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50 irrent A 16 3 IP20 59.5×57.5×25.7 57.5 0.29 BST14i3 code 3 250 50 irrent A 16 3 IP20 For the second seco	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow	halogen-free corrosion-resistant 50 ver current) 0.7 urrent) 1 s part) 1.0 3 pages 68 halogen-free corrosion-resistant 50 ver current) 0.7 urrent) 1 s part) 1.0 3 pages 68 halogen-free corrosion-resistant 50
Branching box 2- No. 49723/L1 49723/L2 49723/L3 Branching box 2- No. 49724/L1 49724/L2 49724/L3 Branching box 2- No. 49725	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117 and 3-poles Eldas No. 150 703 037 150 703 017 and 5-poles Eldas No. 150 705 137	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cur Max. rated current max. bus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + Rated voltage Power current V Rated voltage Dower current V Rated voltage bus V Max. rated current max. Power cur Max. rated current max. Power cur Max. rated current max. Dow A Degree of protection Technical data L×W×H mm Weight g Fire load kWh socket type GST18i5 + B Rated voltage Power current V Bated voltage Power current V Bated voltage Power current V	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50 irrent A 16 3 IP20 59.5×57.5×25.7 57.5 0.29 59.5×57.5×25.7 50 irrent A 16 3 1P20 50 50 50 50 50 50 50 50 50 5	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (bus part) <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow parawdriver No. (Power cu	halogen-free corrosion-resistant 50 ver current) 0.7 irrent) 1 s part) 1.0 3 pages 68 halogen-free corrosion-resistant 50 ver current) 0.7 irrent) 1 s part) 1.0 3 pages 68 halogen-free corrosion-resistant 50 ver current) 0.7 irrent) 1 s part) 1.0 3 pages 68
Branching box 2-No. 49723/L1 49723/L2 49723/L3 Stanching box 2-No. 49724/L1 49724/L2 49724/L3 Stanching box 2-No. 49724/L3 Stanching box 2-No. 49724/L3 Stanching box 2-No. 49725	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117 and 3-poles Eldas No. 150 703 037 150 703 017 and 5-poles Eldas No. 150 705 137	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cur Max. rated current max. bus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cut Max. rated current max. Power cut Max. rated current max. bus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh socket type GST18i5 + Rated voltage Power current V	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50 irrent A 16 3 IP20 59.5×57.5×25.7 57.5 0.29 BST14i3 code 3 250 irrent A 16 3 IP20 FOR ST14i3 code 3 250 0.29 50 50 50 50 50 50 50 50 50 50	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (Pow screwdriver No. (Power cu	halogen-free corrosion-resistant 50 ver current) 0.7 urrent) 1 5 part) 1.0 3 pages 68 halogen-free corrosion-resistant 50 ver current) 0.7 urrent) 1 5 part) 1.0 3 pages 68 halogen-free corrosion-resistant 50 ver current) 0.7 urrent) 1.0 3 pages 68
Branching box 2-No. 49723/L1 49723/L2 49723/L3 Stanching box 2-No. 49724/L1 49724/L2 49724/L3 Stanching box 2-No. 49724/L3 Stanching box 2-No. 49725	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117 and 3-poles Eldas No. 150 703 037 150 703 017 and 5-poles Eldas No. 150 705 137	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cur Max. rated current max. bus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cur Max. rated current max. Power cur Max. rated current max. bus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh socket type GST18i5 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cur Max. rated current max. bus A Degree bus V Max. rated current	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50 irrent A 16 3 IP20 59.5×57.5×25.7 57.5 0.29 BST14i3 code 3 250 irrent A 16 3 IP20 79×57.5×25.7 82 0.40 ST14i2 Code KNX 250/400 50 irrent A 16	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (Power cu	halogen-free corrosion-resistant 50 ver current) 0.7 urrent) 1 s part) 1.0 3 pages 68 halogen-free corrosion-resistant 50 ver current) 0.7 urrent) 1 s part) 1.0 3 pages 68
Branching box 2- No. 49723/L1 49723/L2 49723/L3 Stanching box 2- No. 49724/L1 49724/L2 49724/L3 Stanching box 2- No. 49724/L3 Stanching box 2- No. 49724/L3	and 3-poles Eldas No. 150 701 137 150 701 237 150 701 117 and 3-poles Eldas No. 150 703 037 150 703 017 and 5-poles Eldas No. 150 705 137	Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + B Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cu Max. rated current max. bus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh socket type GST18i3 + Rated voltage Power current V Rated voltage bus V Max. rated current max. Power cu Max. rated current max. Power cu Max. rated current max. bus A Degree of protection Technical data L×W×H mm Weight g Fire load kWh socket type GST18i5 + B Rated voltage Power current V Rated voltage bus V Max. rat	59.5×57.5×25.7 57.5 0.29 ST14i2 Code KNX 250 50 irrent A 16 3 IP20 59.5×57.5×25.7 57.5 0.29 BST14i3 code 3 250 50 irrent A 16 3 IP20 79×57.5×25.7 82 0.40 ST14i2 Code KNX 250/400 50 irrent A 16 3 IP20	Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i> Lateral connection Plastic parts Metal parts Packing unit pce. tightening torque Nm (Pow screwdriver No. (bus part) <i>Pre-wired connectors see</i> tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (Pow screwdriver No. (Power cu tightening torque Nm (bus screwdriver No. (bus part) <i>Pre-wired connectors see</i>	halogen-free corrosion-resistant 50 wer current) 0.7 irrent) 1 5 part) 1.0 3 pages 68 halogen-free corrosion-resistant 50 wer current) 0.7 irrent) 1 5 part) 1.0 3 pages 68 halogen-free corrosion-resistant 50 wer current) 0.7 irrent) 1 5 part) 1.0 3 pages 68


Branching box and Connecting box to flat cable No. 49945 and 49946

Branching box 2-	and 5-poles	Technical data	
No.	Eldas No.	L×W×H mm 79×57.5×25.7	Lateral connection
49726	150 705 237	Weight g 82	Plastic parts halogen-free
		Fire load kWh 0.40	Metal parts corrosion-resistant
A		socket type GST18i5 + BST14i3 code 3	Packing unit pce. 50
de la		Rated voltage Power current V 250/400	tightening torque Nm (Power current) 0.7
Bi		Rated voltage bus V 50	screwdriver No. (Power current)
		Max. rated current max. Power current A 16	tightening torque Nm (bus part) 1.0
		Max. rated current max. bus A 3	Screwdriver No. (bus part) 3
		Degree of protection IP20	Pre-wired connectors see page 68
Connecting box S	Box	Technical data	
No	Eldas No		for lighting installations with 1/0 switch
/9705/11	150 711 307	Weight g Q/	Tor lighting installations with 1/0 switch
49705/12	150 711 327	Fire load kWh 0.20	Plastic parts halogen-free
49705/L3	150 711 347	Colour of box 1/ 2/ 3 l'grev/d'grev/black	Metal parts corrosion-resistant
	100 / 11 0 1/	socket switches type GST18i3 Code 4 (brown)	Packing unit pce. 50
1 + Brown		socket lamps type GST18i3 code 1	tightening torque Nm 0.7
Las Company		Rated voltage V 250	screwdriver No. 1
		Max. rated current max. A 16	
		Degree of protection IP20	Pre-wired connectors see pages 68
Connecting box S	Box	Technical data	
No.	Eldas No.	L×W×H mm 74×67×37	für Lampenschaltungen with Schrittrelais für
49706/L1	150 712 307	Weight g 110	Taster
49706/L2	150 712 327	Fire load kWh0.20	Plastic parts halogen-free
49706/L3	150 712 347	Colour of box L1/L2/L3 l'grey/d'grey/black	Metal parts corrosion-resistant
		socket switches type GST18i3 Code 4 (brown)	Packing unit pce. 50
14/100		socket lamps type GST18i3 code 1	tightening torque Nm 0.7
1 W		Rated voltage V 250	screwdriver No. 1
		Max. rated current max. A 16	Pre-wired connectors see pages 68
		Degree of protection IP20	The whea connectors see pages bo
Connecting box S	Box	Technical data	
Connecting box S	Box Eldas No.	Technical data L×W×H mm 74×88×37	for lighting installations with changeover
Connecting box S No. 49707/L1	Box Eldas No. 150 713 307	Technical dataL×W×H mm74×88×37Weight g120	for lighting installations with changeover
Connecting box S No. 49707/L1 49707/L2	Box Eldas No. 150 713 307 150 713 327	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20	for lighting installations with changeover Plastic parts halogen-free
Connecting box S No. 49707/L1 49707/L2 49707/L3	Box Eldas No. 150 713 307 150 713 327 150 713 347	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3l'grey/d'grey/black	for lighting installations with changeover Plastic parts halogen-free Metal parts corrosion-resistant
Connecting box S No. 49707/L1 49707/L2 49707/L3	Box Eldas No. 150 713 307 150 713 327 150 713 347	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3I'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)	for lighting installations with changeover Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50
Connecting box S No. 49707/L1 49707/L2 49707/L3	Box Eldas No. 150 713 307 150 713 327 150 713 347	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3l'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1	for lighting installations with changeover Plastic parts halogen-free Plastic parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7
Connecting box S No. 49707/L1 49707/L2 49707/L3	Box Eldas No. 150 713 307 150 713 327 150 713 347	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3l'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250	for lighting installations with changeover Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1
Connecting box S No. 49707/L1 49707/L2 49707/L3	Box Eldas No. 150 713 307 150 713 327 150 713 347	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3I'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16	for lighting installations with changeover Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Page united expression area pages 60
Connecting box S No. 49707/L1 49707/L2 49707/L3	Box Eldas No. 150 713 307 150 713 327 150 713 347	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3I'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20	for lighting installations with changeover Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68
Connecting box S No. 49707/L1 49707/L2 49707/L3	Box Eldas No. 150 713 307 150 713 327 150 713 347	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3I'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20	for lighting installations with changeoverPlastic partshalogen-freeMetal partscorrosion-resistantPacking unit pce.50tightening torque Nm0.7screwdriver No.1Pre-wired connectors see pages 68
Connecting box S No. 49707/L1 49707/L2 49707/L3 Connecting box S	Box Eldas No. 150 713 307 150 713 327 150 713 347 Box	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3I'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20Technical data	for lighting installations with changeover Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68
Connecting box S No. 49707/L1 49707/L2 49707/L3 Connecting box S No. 49708/L1	Box Eldas No. 150 713 307 150 713 327 150 713 347 Box Eldas No. 150 714 307	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3I'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20Technical dataL×W×H mm74×88×37Weight g120	for lighting installations with changeover Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68 for lighting installations with series connection Plastic parts halogen-free
Connecting box S No. 49707/L1 49707/L2 49707/L3 Connecting box S No. 49708/L1 49708/L1 49708/L1	Box Eldas No. 150 713 307 150 713 327 150 713 347 50 713 347 Box Eldas No. 150 714 307 150 714 327	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3I'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20	for lighting installations with changeover Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68 for lighting installations with series connection Plastic parts halogen-free Metal parts corrosion-resistant
Connecting box S No. 49707/L1 49707/L2 49707/L3 Connecting box S No. 49708/L1 49708/L2 49708/L3	Box Eldas No. 150 713 307 150 713 327 150 713 347 50 713 347 Box Eldas No. 150 714 307 150 714 327 150 714 347	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3I'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3h'grev/d'grev/schwarz	for lighting installations with changeover Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68 for lighting installations with series connection Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce 50
Connecting box S No. 49707/L1 49707/L2 49707/L3 Connecting box S No. 49708/L1 49708/L2 49708/L3	Box Eldas No. 150 713 307 150 713 327 150 713 347 Eldas No. 150 714 307 150 714 327 150 714 347	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3I'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3h'grey/d'grey/schwarzsocket switchestype GST18i3 Code 4 (brown)	for lighting installations with changeover Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68 for lighting installations with series connection Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7
Connecting box S No. 49707/L1 49707/L2 49707/L3 Connecting box S No. 49708/L1 49708/L2 49708/L3	Box Eldas No. 150 713 307 150 713 327 150 713 347 Eldas No. 150 714 307 150 714 327 150 714 347	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3I'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3h'grey/d'grey/schwarzsocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1	for lighting installations with changeover Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68 for lighting installations with series connection Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1
Connecting box S No. 49707/L1 49707/L2 49707/L3 Connecting box S No. 49708/L1 49708/L1 49708/L2 49708/L3	Box Eldas No. 150 713 307 150 713 347 150 713 347 Box Eldas No. 150 714 307 150 714 327 150 714 347	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3I'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3h'grey/d'grey/schwarzsocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250	for lighting installations with changeover Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68 for lighting installations with series connection Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1
Connecting box S No. 49707/L1 49707/L2 49707/L3 Connecting box S No. 49708/L1 49708/L2 49708/L3	Box Eldas No. 150 713 307 150 713 327 150 713 347 Eldas No. 150 714 307 150 714 327 150 714 347	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3I'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3h'grey/d'grey/schwarzsocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16	for lighting installations with changeover Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68 for lighting installations with series connection Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1
Connecting box S No. 49707/L1 49707/L2 49707/L3 Connecting box S No. 49708/L1 49708/L1 49708/L3	Box Eldas No. 150 713 307 150 713 327 150 713 347 Box Eldas No. 150 714 307 150 714 327 150 714 347	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3I'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3h'grey/d'grey/schwarzsocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20	For lighting installations with changeover Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68 for lighting installations with series connection Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68
Connecting box S No. 49707/L1 49707/L2 49707/L3 Connecting box S No. 49708/L1 49708/L2 49708/L3	Box Eldas No. 150 713 307 150 713 327 150 713 347 Box Eldas No. 150 714 307 150 714 327 150 714 347	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3I'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3h'grey/d'grey/schwarzsocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20	for lighting installations with changeover for lighting installations with changeover Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68 for lighting installations with series connection Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68
Connecting box S No. 49707/L1 49707/L2 49707/L3 Connecting box S No. 49708/L1 49708/L2 49708/L3	Box Eldas No. 150 713 307 150 713 327 150 713 347 Box Eldas No. 150 714 307 150 714 327 150 714 347	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3I'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3h'grey/d'grey/schwarzsocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20	for lighting installations with changeover Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68 for lighting installations with series connection Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68
Connecting box S No. 49707/L1 49707/L2 49707/L3 Connecting box S No. 49708/L1 49708/L2 49708/L3	Box Eldas No. 150 713 307 150 713 327 150 713 347 Box Eldas No. 150 714 307 150 714 327 150 714 347	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3I'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3h'grey/d'grey/schwarzsocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20	for lighting installations with changeover Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68 for lighting installations with series connection Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68 Pre-wired connectors see pages 68
Connecting box S No. 49707/L1 49707/L2 49707/L3 Connecting box S No. 49708/L1 49708/L2 49708/L3	Box Eldas No. 150 713 307 150 713 327 150 713 347 Box Eldas No. 150 714 307 150 714 327 150 714 347	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3I'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3h'grey/d'grey/schwarzsocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20	for lighting installations with changeover Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68 for lighting installations with series connection Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68
Connecting box S No. 49707/L1 49707/L2 49707/L3 Connecting box S No. 49708/L1 49708/L2 49708/L3	Box Eldas No. 150 713 307 150 713 327 150 713 347 Box Eldas No. 150 714 307 150 714 327 150 714 347	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3I'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3h'grey/d'grey/schwarzsocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20	for lighting installations with changeover Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68 for lighting installations with series connection Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68
Connecting box S No. 49707/L1 49707/L2 49707/L3 Connecting box S No. 49708/L1 49708/L2 49708/L3	Box Eldas No. 150 713 327 150 713 327 150 713 347 Box Eldas No. 150 714 307 150 714 327 150 714 347	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3I'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3h'grey/d'grey/schwarzsocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20	for lighting installations with changeover Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68 for lighting installations with series connection Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68
Connecting box S No. 49707/L1 49707/L2 49707/L3 Connecting box S No. 49708/L1 49708/L2 49708/L3	Box Eldas No. 150 713 307 150 713 347 150 713 347 Eldas No. 150 714 307 150 714 327 150 714 347	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3I'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3h'grey/d'grey/schwarzsocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20	for lighting installations with changeover Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68 for lighting installations with series connection Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68
Connecting box S No. 49707/L1 49707/L2 49707/L3 Connecting box S No. 49708/L1 49708/L2 49708/L3	Box Eldas No. 150 713 307 150 713 347 150 713 347 Eldas No. 150 714 307 150 714 327 150 714 347	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3I'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3h'grey/d'grey/schwarzsocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20	for lighting installations with changeover Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68 for lighting installations with series connection Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68
Connecting box S No. 49707/L1 49707/L2 49707/L3 Connecting box S No. 49708/L1 49708/L2 49708/L3	Box Eldas No. 150 713 307 150 713 327 150 713 347 Box Eldas No. 150 714 307 150 714 327 150 714 347	Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3I'grey/d'grey/blacksocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20Technical dataL×W×H mm74×88×37Weight g120Fire load kWh0.20Colour of box L1/L2/L3h'grey/d'grey/schwarzsocket switchestype GST18i3 Code 4 (brown)socket lampstype GST18i3 code 1Rated voltage V250Max. rated current max. A16Degree of protectionIP20	for lighting installations with changeover Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68 for lighting installations with series connection Plastic parts halogen-free Metal parts corrosion-resistant Packing unit pce. 50 tightening torque Nm 0.7 screwdriver No. 1 Pre-wired connectors see pages 68

Accessories				
Cable end piece		Technical data		
No. 48510/07	Eldas No. 120 900 607	L×W×H mm Weight g Fire load kWh Packing unit pce.	40×44×16 16.8 n.a. 4	polycarbonate, halogen-free; silicone gel Note: Cut neatly both ends of the cable before mount- ing the end pieces. No need to strip the cable. Cable end piece may only be mounted once.
Clamp for screw fi	xing	Technical data		
No. 49731	Eldas No. 120 008 107	L×W×H mm Weight g Fire load kWh Packing unit pce.	52×10×10 2 0.02 100	For fastening cables polyamide 6.6, halogen-free
Cable fastening cl	amp	Technical data		
No. 49733 49733A	Eldas No. 150 900 117 150 900 107	L×W×H mm Weight g Fire load kWh Packing unit pce.	40×15×15 3.7 0.03 100	49733 for screwing on 49733A for sticking on polyamide 6.6, halogen-free
Shears		Technical data		
No. 49930	Eldas No. 983 045 007	Weight g Packing unit pce.	223 1	For cutting neatly and easily every type of flat cables with sliding anvil, Teflon coated blades
Insulating tape		Technical data		
No. 49960	Eldas No. 171 013 004	L×W×H mm Weight g Dielectric strength max. kV/mm Temperature max. °C Packing unit pce.	102×100×2.3 33 23 +70 10	To reinsulate correctly the holes due to poin- ted screws or cutting teeth when removing or displacing connections. Weatherproof, self-fusing
Baseplate with fix	ing brackets	Technical data		
No. 49738P	Eldas No. 150 901 027	Packing unit pce.	10	to connecting boxes for lighting installations enables boxes to be fastened on a surface



Mounting procedure of junction box No. 49700 / 49701



Place the junction box on the flat cable - the different ridges prevent the box from incorrect mounting.



Push on the baseplate (violet). In case of incorrect mounting the bottom part of the box cannot be fitted with normal force.



High current part and bus parts

Introduce the round cable into the flat cable box. Tighten the strain relief clamp to maintain the round cable.



Turn in the pointed screws as far as they will go.



Clip the hood.

The mounting procedure may also occur in a changed order: 3, 1, 2, 4, 5.



To release the hood, insert a screwdriver in the slit provided for the purpose and lift slightly.

Possibility of pre-wiring:

Service to our customers.

On request, the connectors may be provided in advance with round outgoing cables.

The connecting boxes which are dedicated to be placed at regular intervals in office buildings may be mounted in advance in our workshops. It is also possible to prewire all the sockets which are mounted in under-window ducts or floor ducts. On the building site, the connection to the flat cable will be done in a matter of seconds! Important time savings will be performed - to your advantage!







Basic standards and concepts

A high protection degree requires the highest demands on the installation material.

The IP rating is used to specify the environmental protection - electrical enclosure - of electrical equipment (electrical devices, lighting or installations).

The degrees of protection are most commonly expressed as "IP" followed by two characteristic numerals. The letters IP stands for Ingress Protection.

The first numeral indicates the degree of protection against accidental contacts and penetration of solid foreign bodies.

The second numeral indicates the degree of protection against harmful effects of water.

When the degree of protection corresponding to one of the numerals is not stated (be it unnecessary or unknown) it is, replaced by an X.

First charac- teristic numeral	Protection degree	Symbols	Second charac- teristic numeral	Protection degree	Symbols
0	non-protected		0	non-protected	
1	Protection against solid bodies exceeding 50mm dia. No protection against deliberate access.		1	Protection against verti- cally falling drops	
2	Protection against solid for- eign bodies $\emptyset > 12.5$ mm. Protection against contact of fingers.		2	Protection against dripping water when tilted up to 15° in relation to its normal po- sition	
3	Protection against solid for- eign bodies $\emptyset > 12.5$ mm. Protection against contact of tools.		3	Protection againt water fal- ling at an angle up to 60° in relation to the vertical position	
4	Protection against solid for- eign bodies $\emptyset > 1$ mm. Pro- tection against accidental contact with wires.		4	Protection against splash- ing water	
5	Protection against dust pe- netration, total protection against any contact	*	5	Protection against water jets from any direction	
6	Total protection against dust penetration, total pro- tection against any contact		6	Protection against heavy seas or inundations	
			7	Protection against the ef- fects of immersion under defined conditions of pres- sure and time.	
			8	Protection against prolon- ged submersion	

woertz



Woertz Dali 5G2.5 mm² + 2×1.5 mm²

Power current and data lines combined in one cable.

Attention: Not with Woertz Combi combinable.



- in office buildings
- in hospitals, clinics and residential facilities
- in industrial buildings
- in hotels/restaurants

Flat cable enables installations to be completed easily with further connections.



Flat cable Woertz Dali 5G2.5 mm² + 2×1.5 mm²

		PVC		Halogen-free	
		Artikel-Nummer	Eldas No.		Eldas No.
3L+N+PE+2Bus		49945/OS shield	113 488 018	49946/OS shield	113 488 118
Technical Data					
Dimension Weight Fire load No. of leads x cross-sectio	mm g/m kWh/m mm²	32×6 350 1.18 5×2.5 + 2×1.5		32×6 340 1.79 5×2.5 + 2×1.5	
High current part					
Copper conductors Insulation of the leads Colour of the leads Cross-section Coat insulation Test voltage Rated voltage DC-resistance max. Service temperature min. Installation temperature Cu weight	mm² kV / Hz kV Ω/km °C °C kg/km	tinned, highly flexible PVC grey, black, brown, blue, yellow/ 2.5 PVC 4 / 50 0.6/1 8.21 -15 to +70 +5 120	green	tinned, highly flexible vulcanized and flame retard polyethylene grey, black, brown, blue, ye 2.5 flame retardant Polyolefin 4 / 50 0.6/1 8.21 -15 to +90 +5 120	dant Ilow/green
Bus part					
Copper conductors Insulation of the leads Colour of the leads Cross-section Coat insulation Test voltage Rated voltage Max. rated currend DC-resistence Capacitance Attenuation at 1Hz Charact. impedance at 1 MHz Cu weight	mm² kV / Hz V A Ω/km pF/m dB/m nom Ω kg/km	tinned Polyethyle natur 1.5 PVC 4 / 50 50 3 13.7 70 1.2 nom. 75 29		tinned Polyethyle natur 1.5 flame retardant Polyolefin 4 / 50 50 3 13.7 70 1.2 nom. 75 29	

Junction box 5-pole with bus **Technical Data** Eldas-No. Supply and branching for power current part L×W×H mm 76×41×39 No. 49700D 150 780 137 86 and bus part. Weight g Fire load kWh 0.47 Plastic parts: halogen-free Cross-section mm² 5×2.5+ 2×1.5 Metal parts: corrison-resistent 3.75 + 3.2 Connecting capacity Ø Rated voltage power current V 690 Packing unit pce. 50 Max. rated current power current A 16 230 Rated voltage bus part V IP20 Degree of protection Attention: Not combinable with Woertz Combi. **Technical Data** Junction box 5-pole 58×41×39 No. Eldas-No. L×W×H mm Supply and branching for power current part 49701 150 775 037 Weight g 55 Plastic parts: halogen-free 0.33 Fire load kWh Metal parts: corrison-resistent 5×2.5 Cross-section mm² 3.75 Connecting capacity Ø 690 Rated voltage power current V tightening torque Nm 0.7 16 Max. rated current power current A 50 cross recess no. 1 Packing unit pce. Degree of protection IP20 Junction box for bus **Technical Data** Eldas-No. L×W×H mm 21×41×39 Supply and branching for bus part No. 49702D 150 780 037 Weight g 23 Fire load kWh 0.14 Plastic parts: halogen-free Metal parts: Cross-section mm² 2×1.5 corrison-resistent Connecting capacity Ø 3.2 Rated voltage power current V 50 Rated voltage bus part A 3 50 Packing unit pce. 1.0 tightening torque Nm IP20 Degree of protection cross recess no. 3

Junction box with screw-type connection to flat cable No. 49945 and 49946

Connecting box, flat execution to flat cable No. 49945 and 49946

Connecting bo	x	Technical data			
Connecting bo No. 49703	Eldas No. 150 701 007	Technical data L×W×H mm Weight g Fire load kWh Spring clamp terminals per pole Connecting capacity Ø Rated voltage V Max. rated current max. A Cross-section mm ² Plastic parts Metal parts Packing unit pce.	96×60×23 71.1 0.38 2 6-13 mm 690 16 (2×) 5×2.5 halogen-free corrosion-resistant 50	for supply or branching, insulat stripped flat execution 3P+N+PE for flexible round cable of PV0 with end sleeves for strands of cables up to 5×2.5 mm ²	ion has not to be C to 5×1.5 mm ² r two rigid round 0.7
		Degree of protection	JU IP20	screwdriver No.	0.7

Branching box 3-pole **Technical Data** L×W×H mm Eldas-Nr. 34.5×57.5×25.7 Lateral connection No. 49713/L1 150 700 137 Weight g 40 49713/L2 150 700 237 Fire load kWh 0.18 Plastic parts: halogen-free 49713/L3 150 700 117 Socket Typ GST18i3 Code 1 Metal parts: corrison-resistent Rated voltage V 250 Max. rated current A 16 tightening torque Nm 0.7 Packing unit pce. 50 cross recess no. 1 IP20 Degree of protection Pre-wired connectors see page 68 Branching box 3-pole **Technical Data** Eldas-No. L×W×H mm 48×40×34 Longitudinal connection No. 49413/C 150 700 127 Weight g 55 Fire load kWh 0.32 Phase selection Typ GST18i3 Socket Plastic parts: halogen-free Code 1 Metal parts: corrison-resistent Rated voltage V 250 07 Max. rated current A 16 tightening torque Nm Packing unit pce. 25 cross recess no 1 IP20 Degree of protection Pre-wired connectors see page 68 **Technical Data** Branching box 5-pole No. Eldas-No. L×W×H mm 54×57.5×25.7 with socket 49715D/L1 150 783 037 Weight g 65 49715D/L2 150 783 137 Fire load kWh 0.27 Lateral connection 49715D/L3 150 783 017 Socket Typ GST18i5 Plastic parts: Code 2 halogen-free Rated voltage V 250/400 Metal parts: corrison-resistent Max. rated current A 16 0.7 Packing unit pce. 50 tightening torque Nm Degree of protection IP20 cross recess no. 1 Attention: Not combinable with Woertz Combi. Pre-wired connectors see page 68 Branching box 2-pole for bus **Technical Data** 27×57.5×25.7 No. L×W×H mm Lateral connection 49712 Weight g 18 halogen-free Fire load kWh 0.12 Plastic parts: corrison-resistent Socket Code Woertz Metal parts: Rated voltage V 50 Max. rated current A 3 tightening torque Nm 0.7 Packing unit pce. 50 cross recess no. 3 Degree of protection IP20 Pre-wired connectors see page 68 Branching box 2-poles for bus **Technical Data** No. Eldas-No. L×W×H mm 44×39.5×28 Longitudinal connection 49727/C 150 707 337 Weight g 19 Fire load kWh 0.12 Plastic parts: halogen-free code Woertz corrison-resistent socket Metal parts: 50 Rated voltage V Max. rated current max. A 3 0.7 tightening torque Nm 50 Packing unit pce. cross recess no. 1 IP20 Degree of protection Pre-wired connectors see page 68

Branching box with socket to flat cable No 49945 / OS and 49946 / OS

Woertz Dali 5G2.5 mm² + 2×1.5 mm²

Accessories				
Cable end piece		Technical Data		
No. 48510/07	Eldas-Nr. 120 900 607	L×W×H mm Weight g Fire load kWh Packing unit pce. Degree of protection	40×44×16 16.8 n.a. 4 IP68	polycarbonate, halogen-free; silicone gel Note: Cut neatly both ends of the cable before moun- ting the end pieces. No need to strip the cable. Cable end piece may only be mounted once.
Cable fastening cl	amp	Technical Data		
No. 49731	Eldas-Nr. 120 008 107	L×W×H mm Weight g Fire load kWh Packing unit pce.	52×10×10 2 0.02 100	polyamide 6.6, halogen-free
Clamp for screwin	g on	Tecchnial Data		
No. 49733 49733A	Eldas-Nr. 150 900 117 150 900 107	L×W×H mm Weight g Fire load kWh Packing unit pce.	40×15×15 3.7 0.03 100	49733 for screwing on 49733A for sticking on polyamide 6.6, halogen-free
Shears		Technical Data		
No. 49930	Eldas-Nr. 983 045 007	Weight g Packing unit pce.	223 1	For cutting neatly and easily every type of flat cables (max. width 32mm). With sliding anvil. Teflon coated blades.
Insulating tape		Technical Data		
No. 49960	Eldas-Nr. 171 013 004	L×W×H mm Weight g Dielectric strength max. kV/mm Temperature max. °C acking unit pce.	102×100×2.3 33 23 +70 10	To reinsulate correctly the holes due to poin- ted screws or cutting teeth when removing or displacing connections. Weatherproof, self-fusing
Slide with straight	t plates	Technical Data		
No. 49738	Eldas-Nr. 150 901 017	Packing unit pce.	10	Suitable for connecting boxes for lighting instal- lations To fix the boxes on a surface.



Connectors

Connector and mains socket 5-pole		Technical data	
No. 49745M/BL		with screw-type connection, with Code type GST 18i5 S S1 Z	2 mm ²
Socket 49745F/BL		Height mm Fire load kWh Packing unit pce.	17 0.18 10
Pre-wired connectors - Connector and	socket free end	Technical data	
Connector - free end 5G1.5 mm ² No. 49345/1M/BL 49345/2M/BL 49345/3M/BL Socket - free end 5G1.5 mm ²		with free end 5-pole type GST 18i5 locking possibility with flexible round cable PVC, black Lead ends compressed	17
49345/1F/BL 49345/2F/BL 49345/3F/BL 1)*		Length m 1, Packing unit pce.	2, 3 etc. 1
Extensions - Connector and socket 5-p	ole	Technical data	
<u>Connector - Socket 5G1.5 mm</u> ² No. 49345/1MF/BL 49345/2MF/BL 49345/3MF/BL	different lenghts and colours on request	Type GST 18i5 verriegelbar with flexible round cable PVC, black Lead ends compressed Height mm Length m 1, 5	17 2, 3 usw.
1)*		Packing unit pce.	1
Pre-wired connectoren PVC - Connecto	r and Socket free end	Technical data	
Connector - free end 5G1.5 mm ² No. 49745/1M/BL 49745/2M/BL 49745/3M/BL		with free end 5-pole type GST 18i5 locking possibility with flexible round cable HF, black Lead ends compressed	
Socket - free end 5G1.5 mm ² 49745/1F/BL 49745/2F/BL 49745/3F/BL 1)*		Height mm Length m 1, 3 Packing unit pce.	17 2, 3 usw. 1
Extensions - Connector and socket 5-n	ole	Technical data	
Connector - Socket 5G1.5 mm ² No. 49745/1MF/BL 49745/2MF/BL 49745/3MF/BL	different lenghts and colours on request	Type GST 18i5 verriegelbar with flexible round cable HF, black Lead ends compressed	17
1)*		Length m 1, : Packing unit pce.	17 2, 3 usw. 1
1)"			

^{1)*} Different lengths and diameters on request.

Woertz combi IP 5G2.5 mm² + 2×1.5 mm²

For the first time bus technology finds application under more stringent requirements. Power current conductors and bus conductors are moulded here in a single cable sheath.



Where is this flat cable system used?

- Three-phase loads may be supplied through this system. The same cable may also carry bus data.
- The flat cable ecobus combi with shielded bus cable finds broad application in the KNX technology for instance; power bus systems like DALI may be fed through the ecobus combi flat cable with unshielded bus cable.
- Flexibility and robustness make the system ideal for building constructions, public works and open cast works in both construction and excavation phases.
- For the first time bus technology finds application under more stringent requirements. The high protection degree enables for instance DALI light control to be used in street tunnels.
- In industrial washing plants, car wash sites or cleaning installations for tunnels or underground parking where powerful jets of water are used.
- IP66/68 allows not only the use in wet but also in dusty environment. The system therefore suits workshop, joineries or industrial plants.
- No need to seal the connecting boxes or to sever the cable, new potential sources of errors are thus avoided.

Flat cable enables installations to be completed easily with further connections anywhere, anytime.



Woertz combi IP 5G2.5 mm² + 2×1.5 mm² - without shield

Flat cable combi IP 5G2.5 mm² + 2×1.5 mm²

	PVC		Halogen-free	
	No.	Eldas No.	No.	Eldas No.
			49864/FRNC	
3L+N+PE+2 Bus without shield		other colours	on request	

other colours on request

Technical data 33×6 Dimension mm Weight 340 g/m 1.9 Fire load kWh/m No. of leads cross-section mm² $5 \times 2.5 + 2 \times 1.5$ Starkstromteil Copper conductors CU tinned, class 5 Insulation of the leads vulcanized and flame retardant Polyethylene Aderfarben grey, black, brown, blue, green/yellow Cross-section mm² 2.5 Coat insulation flame retardant Polyolefin Test voltage kV / Hz 4/50 Rated voltage kV 0.6/1 DC-resistance Ω/km 8.21 °C -15 to +90 Max. Service temperature °C Min. Installation temperature +5 120 Copper weight kg/km Bus part Copper conductors CU tinned, class 5 Insulation of the leads vulcanized and flame retardant Polyethylene Colour of the leads neutral Cross-section 1.5 mm² 4/50 Test voltage kV / Hz Rated voltage V 230 Max. rated current А 3 DC-resistance Ω/km 13.3 Coat insulation flame retardant Polyolefin Capacitance pF/m 70 Attenuation bei 1Hz dB/100m 1.2/100 Charact. impedance bei 1 MHz nom Ω nom. 75 °C -15 °C to +90 °C Max. Service temperature °C +5 °C Min. Installation temperature Copper weight kg/km 29

Box for feeding and branching for IP68 applications

Box for feeding a	nd branching	Technical data			
No. 48445/L/68 with fastening: No. 48445/L/68/S	Eldas No. 150 703 707 Eldas No. 150 703 717	Weight g L×W×H mm, ohne Kabelverschr. L×W×H mm, with fastening Fire load kWh Fire behaviour Connecting capacity mm Plastic parts Metal parts Degree of protection	210 155×50×55 155×75×55 0.74 UL 94-V0 3.0×3.5 halogen-free corrosion-resistant IP68	No. of leads cross-section mm ² Test current power current part A Rated voltage Power current V/Hz Thread of cable gland tightening torque Nm screwdriver No.	5×2.5 16 400/50 M20×1.5 0.7 1
No. 48447/2D/L/68 with fastening No.	Eldas No. 150 703 607 Eldas No. 150 703 617	Weight g L×W×H mm, without cable glanc L×W×H mm, with fastening Fire load kWh Fire behaviour Connecting capacity mm Plastic parts Metal parts Degree of protection	210 155×50×55 0.74 UL 94-V0 3.0×3.5 halogen-free corrosion-resistant IP68	No. of leads cross-section mm ² 5x Cross-section with bushing mm ² Prüfstrom Power current A Rated voltage Power current V/Hz Rated voltage bus V/Hz Max. rated current bus part A Thread of cable gland M20×1.5 tightening torque Nm screwdriver No.	2.5+ 2×1.5 4 + 1.5 16 400/50 230/50 3 & M16×1.5 0.7 1

ACCESSONES				
Cable end piece		Technical data		
No. 48510/07	Eldas No. 120 900 607	L×W×H mm Weight g Fire load kWh Packing unit pce.	40×44×16 16.8 n.a. 4	polycarbonate, halogen-free; silicone gel Note: Cut neatly both ends of the cable before mount- ing the end pieces. No need to strip the cable. Cable end piece may only be mounted once.
Camp for screw fi	xing	Technical data		
No.	Fldas No		52×10×10	polyamide 6.6. halogen-free
49731	120 008 107	Weight g Fire load kWh Packing unit pce.	2 0.02 100	polyannee e.e, haiogen nee
Shears		Technical data		
No. 49930	Eldas No. 983 045 007	Weight g Packing unit pce.	223 1	for cutting neatly and easily every type of flat cables with sliding anvil, Teflon coated blades
Insulating tape		Technical data		
No. 49960	Eldas No. 171 013 004	L×W×H mm Weight g Dielectric strength max. kV/mm Temperature max. °C Packing unit pce.	102×100×2.3 33 23 +70 10	to reinsulate correctly the holes due to poin- ted screws or cutting teeth when removing or displacing connections. Weatherproof, self-fusing
Cable glands		Technical data		
No. 48560/01/M16 48560/03/M16 48560/05/M16 48560/03/M20 48560/05/M20	Eldas No. 121 682 507 121 682 517 121 682 527 121 682 607 121 682 617	Diameter of cables M16×1.5 mm Diameter of cables M20×1.5 mm	4.5-6.0 6.0-8.0 8.0-10.5 8.0-11.0 11.0-15.0	polyamide, grey Supplied with O-ring made from NBR halogen-free
		Packing unit pce.	5	

Woertz data 2×1.5 mm²



An exceptional bus flat cable which allows to perform various functions in the field of building automation.



Where are these flat cables used?

- In the field of building automation, to connect intelligent devices such as actuators or sensors via bus.
- Specific use with KNX, DALI, LON etc.



Woertz data 2×1.5 mm²

bus flat cable 2×1.5 mm ²					
		PVC		halogen-free	
		No.	Eldas No.	No.	Eldas No.
		49949	113 397 300	49948	113 397 307
The same of the same		49949/SM*	113 397 309		
APRIL S DEPARTMENT					
		*	athan aalauna i	 	
		on request	other colours o	on request	
Technical data					
Dimension	mm	11×6		11×6	
Weight	g/m	90		86	
Fire load	kWh/m	0.48 0.41 F		0.44	
No. of leads cross-section	111111-	2X1.5		2X1.5	
Bus part	I			I	
Copper conductors		tinned		tinned	
Insulation of the leads		Polyethylene		Polyethylene	
Colour of the leads		neutral		neutral	
Shield		double shield of aluminium		double shield of aluminiun	n
Coat insulation		PVC		flame retardant Polyolefin	
Cross-section	mm ²	1.5		1.5	
Test voltage	kV / Hz	4 / 50		4 / 50	
Rated voltage	V	50		50	
Max. rated current	А	3		3	
DC-resistance	Ω/km	13.7		13.7	
Max. Service temperature	°C	-15 to 70		-15 to 70	
Min. Installation temperature	°C	+5		+5	
Capacitance	pF/m	70		70	
Attenuation at 1Hz	dB/100m	nom. 1.2/100		nom. 1.2/100	
Charact. impedance at 1MHz	Ω	nom. 75		nom. 75	
Copper weight	kg/km	29		29	

For KNX with socket 2-poles	Technical data		bus part	
No. Eldas No. 49720 150 706 137	L×W×H mm Weight g Fire load kWh socket Plastic parts Metal parts Packing unit pce.	47×18×23.5 12 0.08 type BST14i2 Code KNX halogen-free corrosion-resistant 50	Cross-section mm ² Rated voltage V Max. rated current A tightening torque Nm screwdriver No.	1.5 50 3 1.0 3
	Degree of protection	IF 20	Pre-wired connectors see page 76	
For bus with socket 3-poles	Technical data		bus part	
No. Eldas No. 49721 150 706 237	L×W×H mm Weight g Fire load kWh socket Plastic parts Metal parts Packing unit pce. Degree of protection	47×18×23.5 12 0.08 type BST14i3 code 3 halogen-free corrosion-resistant 50 IP20	Cross-section mm ² Rated voltage V Max. rated current A tightening torque Nm screwdriver No. <i>Pre-wired connectors see page 77</i>	1.5 50 3 1.0 3
For bus with socket 3-poles	Technical data		bus part	
No. 49727	L×W×H mm Weight g Fire load kWh socket Plastic parts Metal parts Packing unit pce. Degree of protection	47×18×23.5 12 0.08 code Woertz halogen-free corrosion-resistant 50 IP20	Cross-section mm ² Rated voltage V Max. rated current A tightening torque Nm screwdriver No. <i>Pre-wired connectors see page 76</i>	1.5 50 3 1.0 3

Connecting box to flat cable No. 49948 and No. 49949

Connecting box to flat cable No. 49948 and No. 49949

with micro termi	nal	Technical data		bus part	
No. 49722	Eldas No. 150 706 337	L×W×H mm Weight g Fire load kWh Plastic parts Metal parts Packing unit pce. Degree of protection	37×18×23.5 12 0.08 halogen-free corrosion-resistant 50 IP20	Cross-section mm ² Rated voltage V Max. rated current A tightening torque Nm screwdriver No.	1.5 50 3 1.0 3
7					

Woertz data 2×1.5 mm²

Accessories				
Cable end piece		Technical data		
No. E 49732 150	Eldas No. 901 117	L×W×H mm Weight g Fire load kWh Packing unit pce. Degree of protection	20×14×9 1.5 0.02 200 IP68	of polycarbonate, halogen-free; silicone gel Note: Cut neatly both ends of the cable before mount- ing the end pieces. No need to strip the cable. Cable end piece may only be mounted once.
Clamp for screw fixing		Technical data		
No. E 49693 120	Eldas No. 008 607	L×W×H mm Weight g Fire load kWh Packing unit pce.	31×10×8.5 1.2 0.01 100	of polyamide 6.6, halogen-free, grey
Shears		Technical data		
No. E 49930 983	Eldas No. 045 007	Packing unit pce.	1	For cutting neatly and easily every type of flat cables With sliding anvil. Teflon coated blades
Insulating tape		Technical data		
No. E 49960 171	Eldas No. 013 004	L×W×H mm Dielectric strength max. kV/mm Temperature max. °C Packing unit pce.	102×100×2.3 23 +70 10	To reinsulate correctly the holes due to poin- ted screws or cutting teeth when removing or displacing connections. Weatherproof, self-fusing

Gateway multibus



Interface for the direct connection of two different worlds.

The device consists of a plastic housing with 6 modules, fitted with a plug-type connection (output). It has been conceived for DIN35 rail mounting.

The whole range of Belimo MFT/MFT2 actuators, operated by MP-bus, can be individually connected to this interface coupler and be integrated to the KNX network. The KNX interface is able to support up to 8 MP actuators - e.g. flap drives, valve drives, regulation ball valve drives or flow rate controllers - intended for building automation. During commissioning the KNX Gateway is configurated with ETS. The requested drive channel is selected and parametrised for the needed drive type. Status indicators and push-buttons for programming the address- and test-functions are located on the front side of the device. There is also a plug intended for the Belimo hand-held parameter assignment device.

Actual and setpoint values, status of the drive and also the values of passive or active sensors connected to the drive are transmitted via KNX.

Gateway multibus KNX	Technical data		
No. Eldas No. 49667 405 990 207	L×W×H mm Protection class III Rated voltage Power consumption VA Power consumption W Packing unit pce.	105×90×58 (safety low voltage) 24VAC, 50/60Hz/24VDC 2 1 1	 Wiring performed by means of push-/screw terminals. actuators can be controlled digitally through the UK24EIB over an MP-bus system and provide a feedback signal of their actual operating position Connections: KNX push-screw termin, 2-poles Speisung push-screw termin, 3-poles MFT2-Antr. push-screw termin, 4-poles (all terminals for 2xconductor 1.5mm²) MFT-H plug socket, 3-poles (Connections MFT-H or PC via ZIP-RS232) Configuration software - adjustable with ETS2 or higher: actuator type determination of the sensors connected to the MFT2 actuators Actuators supported: all Belimo-MFT / MFT2 actuators, NMV-D2M, FLS, Halomo actuators Number of actuators: max. 8 pce. Communication with actuators: Belimo-MP-bus, Master-Slave-System, 1200 Baud Max. conductor length MP: depends on the number of MFT2 actuators connected, type of actuator, type of power supply and cross-section of conductors

Type UK24EIB

Gateway to flat cable Woertz combi 5G2.5mm²+2×1.5mm² and Woertz multibus 4×1.5mm²

Example of application: Appliances with volumetric flow controllers (Master/Slave- or parallel operation)



Appliances with volumetric flow controllers with active room temperature sensor (0°C ... 50°C /0 ...10VDC). Window contact and KNX room control unit optional.



Woertz multibus 4×1.5 mm²

Without the cable insulation having to be stripped!



Where are these flat cables used?

- for low voltage installations (rugged version for high mechanical strains).
- as a complement to the flat cable system ecobus combi.
- for heating, ventilating and air-conditioning processes (HVAC).
- for basic controls in buildings.
- specially adapted to MP bus products of the company Belimo.
- For SMI BT applications



Woertz multibus 4×1.5 mm²

Flat cable 4×1.5 mm² Halogen-free No. Eldas No. 49651 113 277 509 other colours on request **Technical data** Dimension mm 16×4.6 Weight 125 g/m 0.73 Fire load kWh/m No. of leads cross-section 4×1.5 mm² Power current tinned, highly flexible Copper conductors Insulation of the leads Polyethylene Colour of the leads black, red, white, brown Cross-section mm² 1.5 Coat insulation flame retardant Polyolefin Test voltage kV / Hz 4/50 Rated voltage kV 300 DC-resistance Ω/km 13 °C -15 to 70 Max. Service temperature °C Min. Installation temperature +5 58 kg/km Copper weight

Examples of application: Belimo - Multitherm





Mounting procedure of branching box No. 49670 / 49671



Position the base part of the box and screw it on to its support if required.



Position the asymmetric multibus flat cable in the right position.



Cut the outgoing round cable to the desired length and strip coating. Introduce the leads in the provided partitions (the conductors don't have to be stripped of insulation).



Fold back the cover - Lock.



Tighten up the screws of the cover.



Snap together the upper part and the base.



Fold down the upper part.



Tighten up the fastening screws.

Note:

if necessary, the connecting boxes may be marked by means of self-adhesive labels.

The mounting procedure may also occur in a changed order: 1, 2, 6, 7, 8, 3, 4, 5.

Possibility of pre-wiring: the installation becomes more rational!

On request the boxes may be provided in advance with round outgoing cables.

Boxes for pumps, valves or mixing valves for HVAC installations for instance may be prewired with outgoing round cables in our workshops (fig. 3-5). On the building site the prewired boxes have only to be positioned on the flat cable. The electrical contact will be established within a few seconds by means of an electric screw-driver.



Building automation



Connecting box		Technical data			
No. 49670 49670/1 prewired 1 49670/2 prewired 2	Eldas No. 150 701 317	L×B×H mm Weight g Fire load kWh Rated voltage V Max. rated current A Plastic parts Metal parts Packing unit pce. Degree of protection	76×32×27 55.5 0.4 48 3.5 halogen-free corrosion-resistant 25 IP20	For 2 round cables 4×0.75 mm ² flex with with 1 connector and 3 contacts for supp and branching. specially adapted to MP bus devices from the company Belimo. tightening torque Nm screwdriver No.	i oly 0.7 1
for bus with socke	at 3-noles	Technical data			
No. 49671	Eldas No. 150 701 347	L×B×H mm Weight g Fire load kWh Rated voltage V Max. rated current A Plastic parts Metal parts Packing unit pce. Degree of protection	76×32×27 55.5 0.4 48 3.5 halogen-free corrosion-resistant 25 IP20	For 2 round cables 4x0.75mm2 flex with 4 contacts for supply and branching tightening torque Nm screwdriver No.	0.7
Connecting box		Technical data			
No. 9052	Eldas No. 150 706 037	Weight g Plastic parts Metal parts	46.3 halogen-free corrosion-resistant	for the supply with rigid strands or strands a cross section different from 0.75mm2	with

Connecting boxes with 3 or 4 contacts to flat cable No. 49651

Accessories

Power supply and	l coupler	Technical data		
No. 49658	Eldas No. 960 905 107	Power supply 230V/24VDC consisting 1 power supplyNetzgerät, 1 Dose No. 49670, 1 Dose No. 49701	of	
Cable end piece		Technical datan		
No. 48510/06	Eldas No. 120 900 507	L×B×H mm Weight g Packing unit pce	40×36×16 10.6 4	polycarbonate, halogen-free; silicone gel Note:
and the second sec		Degree of protection	IP68	Cut neatly both ends of the cable before mount- ing the end pieces. No need to strip the cable. Cable end piece may only be mounted once.



Accessories			
Flexible round cable	Technical data		
No. Eldas N 49665 113 271 04	 Diameter mm Fire load kWh/m Temperature range Packing unit m 	6.8 mm 0.02 -30°C to +90°C 500	
No Eldas N	o Weight g	0.5	To seal unused cable outlets 1 stopper deli-
49675 120 660 00	Packing unit pce.	25	vered with connecting boxes No. 49670 and 49671.
Clamp for screw fixing	Technical data		
No. Eldas N 49661 120 008 40	o. L×B×H mm Weight g Fire load kWh Packing unit pce.	31×10×7 6.0 0.01 100	polyamide 6.6, halogen-free
Befestigungsbride	Technical data		
No. Eldas N 49664 120 008 50	o. L×B×H mm Weight g Fire load kWh Packing unit pce.	70×10×10 2.0 0.02 50	polyamide 6.6, halogen-free
Shears	Technical data		
No. Eldas N 49930 983 045 00	o. Weight g)7 Packing unit pce.	223 1	For cutting neatly and easily every type of flat cables with sliding anvil, Teflon coated blades
Insulating tape	Technical data		
No. Eldas N 49632 150 901 14	 Dimension mm×m Weight g Dielectric strength max. kV/mm Temperature max. °C Packing unit m 	50×1 50.1 18 +70 1	To reinsulate correctly the holes due to poin- ted screws or cutting teeth when removing or displacing connections. Weatherproof, self-fusing

Woertz 3G2.5 mm² and Woertz 3G4 mm²

The efficiency of this system is related to its great flexibility and extension facility, anywhere, anytime.



Where are these flat cables used??

- in offices where the number of computers is liable to be increased and the furniture to be displaced.
- in workshops and laboratories equipped with small-sized machines and devices. The flat cables are then laid into floor-, ceiling- or wall ducts
- in shops and show windows where the connecting points may often change
- for the installation of prefabricated houses
- in hanging ceilings for the supply of lamps.

Flat cable enables installations to be completed easily with further connections.

Woertz 3G2.5 mm²

Flachkabel 3G2.5 mm ²					
		PVC		halogenfrei	
		Artikel-Nummer	Eldas-Nummer	Artikel-Nummer	Eldas-Nummer
		■ 49685 ■ 49685/SM*	113 297 807	 49686 49686RT SC49686RT ↓49686/SM* 	113 307 807
L+N+PE		* on request	other colours	on request	
Technical data					
Dimensions Weight Fire load No. of leads cross-section	mm g/m kWh/m mm ²	16.5×6 185 0.583 3×2.5		16.5×6 185 1.02 3×2.5	
Power current	·			, 	
Copper conductors Insulation of the leads Colour of the leads Cross-section Coat insulation	mm²	tinned, highly flexible PVC brown, green/yellow, blue 2.5 PVC oil resistant		tinned, highly flexible vulcanized, flame reta brown, green/yellow, t 2.5 flame retardant Polyol	rdant Polyethylene blue efin
Test voltage	kV / Hz	4 / 50		4 / 50	
Rated voltage	kV	0.6/1		0.6/1	
DC-resistance	Ω/km	8.21		8.21	
Max. Service temperature	°C	-15 to +90		-15 to +90	
Min. Installation temperature	°C	+5		+5	
Copper weight	kg/km	72		72	

Woertz 3G4 mm²

PVC		Halogen-free	
No.	Eldas No.	No.	Eldas No.
		49646	
		other colours on request	t .
1 1 1 2		16.5×6 224 0.95 3×4	
		tinned, highly flexible vulcanized, flame retarda brown, green/yellow, blue	ant Polyethylene e
2		3×4	
		flame retardant Polyolefi	n
Z		4 / 50	
/		0.6/1	
1 15 to 100		5.09	
-10 10 +90		-13 (0 +90	
1		116	
	PVC No. 1 1 1 1 1 1 2 2 2 2 2 4 4 5 1 5 15 10 +90 +5 n	PVC Eldas No. No. Eldas No. 1	PVC Halogen-free No. Eldas No. No. 49646 other colours on request other colours on request 1 16.5×6 224 0.95 3×4 0.95 3×4 stinned, highly flexible vuccanized, flame retardat 2 -15 to +90 -15 to +90 +5 -116 5.09 -15 to +90 +5

Building automation



Example of application: SCHAKO EasyBus



More information under http://www.easybus-system.ch



Connecting box	Technical data			
No. No. Eldas 49687 150 701 407	L×B×H mm Fire load kWh Connecting capacity Ø in mm Rated voltage V Max. rated current A Weight g Packing unit pce. Degree of protection	55×33×33 0.24 3.75 250 16 45 10 IP20	for supply and branching no need to strip the insulation Plastic parts: halogen-free Metal parts: corrosion-resistant tightening torque Nm screwdriver No.	0.7 1
Branching box	Technical data		'	
No. Eldas 49695 49695/1 prewired 1m round cable 49695/2 prewired 2m round cable	L×B×H mm Fire load kWh Connecting capacity Ø in mm Rated voltage V Max. rated current A Weight g Packing unit pce. Degree of protection	90×30×34 0.36 3.75 250 16 85 10 IP20	for branching no need to strip the insulation Plastic parts: halogen-free Metal parts: corrosion-resistant tightening torque Nm screwdriver No. <i>further lengths on request</i>	י 0.7 1
Pre-wired connector	Technical data			
No. 49696F	L×B×H mm Weight g Packing unit pce.	260×30×34 200 1	Pre-wired connector No. 49695 with 10 cm round cable 3G1.5 mm ² and Kupplung 3-poles, type GST 18i3 F B2 Z <i>Pre-wired connectors see page 68</i>	
49696/1F prewired 1m round cable 49696/2F prewired 2m round cable			further lengths on request	

Connecting box and connector to flat cable No. 49685 and 49686

10003301103				
End piece		Technical data		
No. 48510/03	No. Eldas 120 900 307	L×B×H mm Weight g Fire load kWh Packing unit pce. Degree of protection	40×25×15 9.5 n.a. 8	of polycarbonate, halogen-free; silicone gel Note: Cut neatly both ends of the cable before mount ing the end pieces. No need to strip the cable. Cable end piece may only be mounted once.
Clamp for screw	/ fixing	Technical data		
No. 49693	No. Eldas 120 008 607	L×B×H mm Weight g Fire load kWh Packing unit pce.	31×10×8.5 0.95 0.01 100	of polyamide 6.6, halogen-free
Shears		Technical data		
No. 49930	No. Eldas 983 045 007	Weight g Packing unit pce.	223 1	For cutting neatly and easily every type of flat cables With sliding anvil. Teflon coated blades.
Insulating tape		Technical data		
No. 49960	No. Eldas 171 013 004	Dimension mm Weight g Dielectric strength max. kV/mm Temperature max. °C Packing unit pce.	102×100×2.3 33 23 +70 10	To reinsulate correctly the holes due to poin- ted screws or cutting teeth when removing or displacing connections. Weatherproof, self-fusing

Building automation

Connectors

Connector and socke	t KNX 2-poles	Technical data
No. Connector 49740M type BST 14i2 F S1 Z socket	Eldas No. 157 800 288	with spring connection, with Code KNX. to single-wire and highly flexible leads 0.25-0.75 mm ² with strain relief and locking to leads ø 5-7mm.
49740F type BST 14i2 F B1 Z	150 901 127	Height mm14.4Fire load kWh0.04Packing unit pce.50
Snap-in KNX 2-poles		Technical data
No. 49420M type BST 14i2	(see picture)	with spring connection, with Code KNX. to single-wire and highly flexible leads 0.25-0.75 mm ² , with locking
49420F type BST 14i2		Dimensions L×B×H mm23.5×19.5×29.5Mounting opening mm17.8×17.8Sheet thickness mm0.5-2.5Fire load kWh0.04Packing unit pce.25
Pre-wired connectors		Technical data
No. 49740/1M 49740/2M 49740/3M	Eldas No. 157 881 288 157 882 288 157 883 288	Connector with one free cable end 2-poles type BST 14i2 KF-S, Code KNX with flexible round cable 2×0.5 mm ² , green
49740/1F 49740/2F 49740/3F 49740/ further lenge	hts on request	stripping length of sheath mm20stripping length of insulation mm8Height mm14.4Length m1, 2, 3 uws.Packing unit pce.1
Connector and socke	t bus 2-poles	Technical data
No. Connector 49747M socket		with spring connection, with code Woertz (incompatible with code KNX) to single-wire and highly flexible leads 0.25-0.75mm ² with strain relief and locking to leads ø 5-7mm.
49747F		Height mm14.4Fire load kWh0.04Packing unit pce.50
Snap-in bus 2-poles		Technical data
No. 49421M 49421F	(see picture)	with spring connection, with code Woertz(incompatible with code KNX)to single-wire and highly flexible leads0.25-0.75 mm², with lockingDimensions L×B×H mm23.5×19.5×29.5
		Mounting opening mm17.8×17.8Sheet thickness mm0.5-2.5Fire load kWh0.04Packing unit pce.25



Connectors

Pre-wired connectors hald	ogen_free	Technical data
No. 49347/1M 49347/2M 49347/2M 49347/1F 49347/1F 49347/2F 49347/3F 49347/ further lenghts or	n request	Connector with one free cable end 2-poles(shield not connected) code Woertzwith flexible round cable 2x0.5 mm², grey HFstripping length of sheath mm20stripping length of insulation mm8Height mm14.4Length m1, 2, 3 uws.Packing unit pce.1
Connector and socket bus	s 2-poles	Technical data
No. Stecker 49741M Typ BST 14i3 F S1 Z Buchse 49741F Typ BST 14i3 F B1 Z	Eldas No. 157 804 218	Connector with freiem Ende 2-poles(shield not connected)type BST 14i3 F S1 Z, code 3with flexible round cable 2×0.5 mm², greystripping length of sheath mm20stripping length of insulation mm8Height mm14.4Length m1, 2, 3 uws.Packing unit pce.1
Pre-wired connectors halo	ogen-free	Technical data
ArtNr. 49341/1M 49341/2M 49341/3M 49341/1F 49341/2F 49341/3F 49341/ andere Längen av	uf Anfrage	Connector with freiem Ende 2-poles(shield not connected)type BST 14i3 F S1 Z, code 3with flexible round cable 2×0.5 mm², grey HFstripping length of sheath mm20stripping length of insulation mm8Height mm14.4Length m1, 2, 3 uws.Packing unit pce.1
Power connector 3-poles		Technical data
ArtNr. 49743/M/BR	Eldas-Ivr. 157 800 328	with screw-type connection, black/brown, with Code 4 (brown) type GST 18i3 S S1 Z to single-wire and highly flexible leads 1.5-2.5 mm ² with strain relief to leads ø 8-11 mm. Height mm 25 Fire load kWh 0.18 Packing unit pce. 10

Connecors





^{1)*} Different lengths and diameters on request.

Connectors

Power connector and soc	:ket 3-poles	Technical data	
No. 49743M Socket	Eldas No. 157 800 318	with screw-type connection, with code 1 type GST 18i3 S S1 Z for one connection cable up to 3×2.5 mm ²	
49743F		Height mm 13	
		Fire load kWh 0.11	
		Packing unit pce. 10	
Pre-wired connectors Ha	logenfrei - Connector and socket free cable end	Technical data	
Connector - free cable end 3 ArtNr. 49343/1M 49343/2M 49343/2M 49343/3M Socket - free cable end 3G1 49343/1F 49343/2F 49343/2F	<u>3G1.5 mm²</u>	with free cable end 3-polestype GST 18i3 locking possibilitywith flexible round cable HF,blackHeight mm13Length m1, 2, 3 etc.Packing unit pce.1	
49343/3F 1)*			
Pre-wired connectors PV	/C - Connector and socket free cable end	Technical data	
Connector - free cable 3G1.	<u>5 mm²</u>	with free cable end 3-poles	
ArtNr.		type GST 18i3 locking possibility	
49743/1M 49743/2M		With flexible round cable PVC, black	
49743/2M 49743/3M		Length m 1.2.3 etc	
Socket - free cable end 3G1	5 mm ²	1, 2, 0 000	
49743/1F		Packing unit pce. 1	
49743/2F			
49743/3F			
1)*			
Pre-wired connectors hal	ogen-free - Connector and socket 3-poles	Technical data	
Connector - socket 3G1.5 m No. 49343/1MF	<u>1m</u> ²	type GST 18i3 locking possibility with flexible round cable HF,black	
49343/2MF		Height mm 13	
49343/3MF		Length m 1, 2, 3, etc.	
1)*		Packing unit pce 1	
1)			
Dre wined compositors D	IC Connector and cocket 2 notes	Tashnisaha Angahan	
Connectors PV		tree CCT 19/2 looking persibility	
No	<u>IIII</u> -	with flexible round cable PVC black	
49743/1MF			
49743/2MF	· · · · · · · · · · · · · · · · ·		
49743/3MF			
4) 4		Height mm 13	
1)*		Length m 1, 2, 3, etc.	
		Packing unit pce 1	

Connectors

Connector and socket Netz 5-poles		Technical data	
No. Eldas 49745M 157 800	No. 518	with screw-type connection, with co type GST 18i5 S S1 Z for one connection cable up to 5×2.	de 1 .5 mm²
Buchse 49745F	THE PARTY	Height mm Fire load kWh Packing unit pce.	17 0.18 10
Pre-wired connectors halogen-fre	Technical data		
Connector - free cable end 5G1.5 m No. 49345/1M 49345/2M 49345/2M 49345/3M Socket - free cable end 5G1.5 mm ² 49345/1F 49345/2F 49345/3F 1)*	<u>n</u> ²	with free cable end 5-poles type GST 18i5 locking possibility with flexible round cable HF, black Lead ends compressed Höhe mm Längen m Verpackungseinheit Stk.	17 1, 2, 3 uws. 1
Pre-wired connectors PVC - Conn	ector and socket free cable end	Technical data	
Connector - free cable end 5G1.5 mm No. 49745/1M 49745/2M 49745/3M Socket - free cable end 5G1.5 mm ² 49745/1F 49745/2F 49745/3F 11*		with free cable end 5-poles type GST 18i5 locking possibility with flexible round cable PVC,black Height mm Length m Packing unit pce.	17 1, 2, 3 etc. 1
Extensions halogen-free - Connec <u>Connector - Socket 5G1.5 mm</u> ² No. 49345/1MF 49345/2MF 49345/3MF 1)*	tor and socket 5-poles	Technical data type GST 18i5 locking possibility with flexible round cable HF,black Height mm Length m Packing unit pce.	17 1, 2, 3 etc. 1
Extensions PVC - Connector and	Technical data		
Connector - Socket 5G1.5 mm ² ArtNr. 49745/1MF 49745/2MF 49745/3MF 1)*		type GST 18i5 locking possibility with flexible round cable PVC,black Height mm Length m Packing unit pce.	17 1, 2, 3 etc 1

1)* Different lengths and diameters on request.


Accessories

Torque screwdriver 0.6–2.0 Nm No. 49825

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Application:

For controlled tightening of screws in areas containing live parts up to 1,000 V AC, to be used only in combination with a slim-Torque VDE bit holder for 6mm slimBits.

Technical data

Grip:

Torque is infinitely variable with torque setter adjusting tool (included in the delivery). Ergonomic multi-component grip, protective insulation 1,000 V AC, tested for safety by the German TÜV (Technical Inspection Association). Grip size adjusted optimally to torque area. A click signals that the preset torque value has been reached.

Standards:

Manufactured in accordance with IEC 60900:2004. EN ISO 6789, BS EN 26789, ASME B107.14M.

Precision: ±6%, traceable back to national standards.

Holder:

slimTorque VDE bit holder (included in the delivery) for 6mm slimBits.



General terms and conditions

1. Prices for Swiss market

Prices are understood as EXW in CHF excluding VAT (sales tax). The prices in effect at the date of receipt of order apply; surcharges taking account increases of costs of metals are reserved.

2. Packaging and delivery costs

All articles – depending on their weight and bulk – will be shipped by mail, parcel post, truck, airmail or ship, in each case under the liability of the recipient. Additional costs for express deliveries or unusual packaging are at the expense of the recipient. Pallets, boxes, containers, cable drums shall be invoiced at cost price. We will not take back special crates, disposable pallets and boxes. We will not replace breakages, damage and losses during transport free of charge. The transport company should be immediately notified of any damage.

3. Performance

Productions of special drawings, as well as changes to drawings that depart from the performance offered shall be invoiced according to time outlay incurred. This likewise applies for additional project planning effort. Additional work (such as adaptations, special parts, sections, cutouts, notches etc.) that is not detailed in the tender shall be invoiced separately, according to time outlay. The additional work incurred for retrospective individual orders or special versions or reworking shall be invoiced. The tools required for customized orders shall be invoiced according to previously stated prices. Such tools shall remain our property. If we are not awarded the order, we reserve the right to submit invoices for specially-manufactured patterns as well as our work in developing the project. We reserve the right to deviations due to raw materials and production within the permitted tolerances, and these do not place us under obligation to accept returned goods.

4. Invoicing and payment conditions for Swiss market

Orders with a value under CHF 50.00 shall be invoiced with a minimum charge of CHF 50.00 (excl. surcharges). Orders with a value under CHF 100.00 shall be invoiced net at list price. Invoices are payable within 10 days from the invoice data with 2% discount or within 30 days net. A processing fee will be levied in the event of arrears. Deliveries to recipients who are unknown to us and have previously not fulfilled their payment obligations shall be against cash on delivery or advance payment. We reserve the right to share our payment experiences with an information pool.

5. Execution of orders

The cancellation or suspension of orders by the ordering party requires our express agreement, and must occur within 7 days of notification. In particular with the delivery of custom-made articles we reserve an under- or over-delivery of up to 10%. If orders are cancelled any additional costs thereby incurred will be invoiced. Goods ordered on a standby basis must be accepted within the defined period.

6. Delivery date

The specified delivery dates shall be observed wherever possible. We are released from the obligation to respect the delivery date by: Operational disruptions, material deficiencies, official regulations, labour disputes, call up of reservists and other cases of force majeure. Claims due to late delivery will be rejected. The delivery period starts on the date on which we are in possession of all required technical, design and commercial specifications from the ordering party relating to design modifications etc.

7. Warranty

For material or design faults on the articles delivered, we extend a warranty such that we will replace products that we recognize as being faulty at no extra charge in the 12 months after the installation of the respective products, however no later than 18 months thereafter. These must be forwarded to us with an enclosed delivery note. This warranty shall lapse if improper work is carried out on the product. If circumstances do not allow the corrective work to be carried out at our workshops, the warranty is limited to the free of charge replacement of the device. We do not accept expenditure or time outlays that have been caused outside our company.

8. System guarantee

The Woertz guarantee only applies to original products finished in our workshops such as flat cables, boxes and round cables with connectors.

9. Liability

Any claims by the ordering party other than those expressly named in these conditions of delivery, regardless of the legal basis on which they are made, especially all claims for compensation for damages, abatement and cancellation of the contract or withdrawal from the contract, are excluded. We only accept liability in the context of mandatory statutory provisions.

10. Reservation of proprietary rights

All delivered goods remain our property until all demands in respect of these goods have been fulfilled. We reserve the right to enter the reservation of ownership in the official registers in accordance with respective national laws. The costs for such entries shall be borne by the purchaser.

11. Return deliveries

Each return delivery requires our previous agreement and should occur within 12 months after delivery. A delivery note shall be enclosed with the return delivery. In the case of returns of standard equipment that are not due to incorrect delivery on our part, there will only be a reimbursement if the value of goods exceeds CHF 100.00, and we shall charge at least 25% of the value of goods for our own outlays. Returns can only be accepted in the original packaging and with a delivery note. Return of custom-made products of any kind is excluded.

12. Claims

Claims regarding to the number of items, weight, faults, etc. can only be taken into account if they are made within 7 days of receipt of the goods.

13. Export

Prices are understood as EXW in CHF or in EUR excl. VAT (sales tax). This will be separately charged in accordance with the respectively applicable statutory rate. For exports, the minimum invoice value is EUR 300.00/CHF 500.- or USD 500.-. Deliveries are against advance payment or by mutual agreement. The export of products and parts thereof may be subject to export licensing requirements due to their nature or foreseen use.

14. Proprietary rights

Our goods are largely protected by patents in Switzerland and in other countries. Transgressions of these proprietary rights will be prosecuted.

15. Place of fulfilment and legal venue

The place of fulfilment is Muttenz and the legal venue in all events is Arlesheim, Switzerland.



General points



SYSTEM GUARANTEE

The Woertz system guarantee applies exclusively to original Woertz products and Woertz system solutions, that is, Woertz® contact boxes, Woertz[®] flat cables, or other products that have been checked and approved by Woertz for these contacts.



OUR STRENGTHS

Technical advice appropriate to the application. High availability of standard products. Custom designs for special applications. Fast, flexible, and professional.

Woertz:

More than 80 years' experience in the field of electrical installation technology.



Business hours Monday-Friday 07:00-12:00 13:15-17:15 (except for public holidays) Tel.: +41 61 466 33 44

Fax: +41 61 461 37 53

Collections:

07:00-16:00 You can collect any preordered products at the customer counter one hour later.



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Subsidiary

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