Synco™ 700

Bus Operator Unit RMZ792

Communicating operator unit for operating up to 150 controllers, room units and central units from the Synco™ 700 range via Konnex bus.
Favorite pages can be freely defined. Powered via Konnex bus or external AC 24 V power supply. Designed for fixed installation or mobile use.

Use

- Central remote operation of several devices of the Synco™ 700 range and of RXB individual room controllers in a Konnex network
- Operation of Synco™ devices from a remote location
- Mobile service unit for setting the parameters of plant

Note

The RMZ792 bus operator unit is not suited for commissioning Synco™ 700 controllers. Commissioning of plant is made with the RMZ790 or RMZ791 operator units or the OCI700.1 service tool.

Functions

Device list

- Device list with a maximum of 150 units
- Automatic device search run
- Automatic or manual sorting of device list
- Naming or renaming of devices
- Deletion of individual devices or of the entire device list

Favorite pages

- Maximum 20 favorite pages for compiling the most important plant values
- Assignment of up to 10 plant values per favorite page
- Naming or renaming pages and plant values
- Sorting favorite pages
- Deletion of favorite pages

Handling faults

- Fault indication by red LED and symbol
- Acknowledgement and resetting of faults
- List for indicating a maximum of 20 pending faults

Operating levels

- 4 operating levels: Info, user, service, and password level
- User, service and password level with individual password protection

Service functions

- User-defined business card for service address / telephone
- Data backup

Bus functions

- Automatic device address search
- Display of fault status messages from other devices on the bus
- Display of system time and date

Supported devices

- RMx7… controllers of the Synco™ 700 range
- RXB2… and RXL2… individual room controllers
- QAW7… room units
- OZW77… central communication units

Languages

- German, English, French, Italian, Dutch, Polish, Czech, Slovakian, Hungarian, Spanish, Danish, Norwegian, Swedish, Finnish, Greek, Russian, Romanian, Slowenian, Serbian, Croatian

Power supply

- Via Konnex bus or external AC 24 V power supply

Type summary

Designation	*Type reference*	*Languages*
Bus operator unit	**RMZ792**	de, en, fr, it, nl, pl, cs, sk, hu, es, da, no, sv, fi, el, ru, ro, sl, sr, hr
Memory card for RMZ792	**RMA792**	de, en, fr, it, nl, pl, cs, sk, hu, es, da, no, sv, fi, el, ru, ro, sl, sr, hr

Ordering and delivery

When ordering, please give name and type reference:
Bus operator unit **RMZ792**.
The RMA792 memory card is included in the scope of delivery.

For updating languages and device descriptions, a **new** RMA792 memory card must be ordered.

Equipment combinations

The following types of devices can be operated with the RMZ792:

Type of device	*Type reference*	*Data Sheet*
Central control units	**RMB795…**	N3121
Heating controllers	**RMH760…**	N3131
Boiler sequence controllers	**RMK770…**	N3132
Switching and monitoring devices	**RMS705…**	N3123
Universal controllers	**RMU710…**	N3144
	RMU720…	N3144
	RMU730…	N3144
XB… room controllers	**RXB21.1/FC-09**	N3872
	RXB21.1/FC-10	N3873
	RXB21.1/FC-11	N3873
	RXB22.1/FC-08	N3872
	RXB22.1/FC-12	N3873
RXL… room controllers	**RXL21.1/FC-10**	N3877
	RXL21.1/FC-11	N3877
	RXL22.1/FC-12	N3877
Room unit for Synco™ 700 controllers	**QAW740**	N1633
Central communication units	**OZW771…**	N3117
	OZW775…	N5663

Product documentation

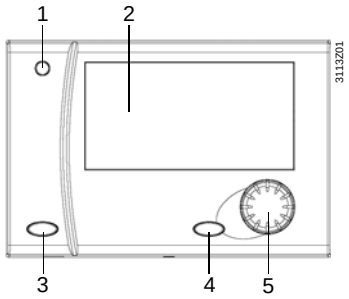
Type of documentation	*Number*
Basic Documentation RMZ792 with a detailed description of all functions	**P3113**
Installation Instructions (mounting and commissioning)	**G3113**
Environmental Declaration	**E3113**
Product range description Synco™ 700	**S3110**
Data Sheet “Konnex Bus KNX“	**N3127**
Basic Documentation "Communication via Konnex bus“	**P3127**
CE Declaration of Conformity	**T3110**

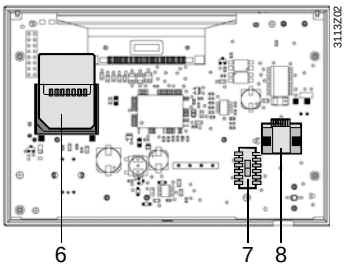
Mechanical design

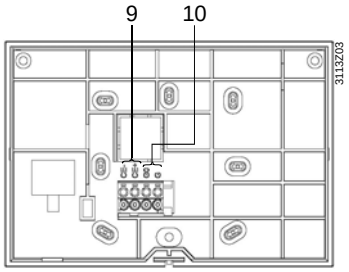
The RMZ792 bus operator unit is designed for flush-panel or wall mounting as well as for mobile use. Cable entry is either through an opening in the mounting plate or a lateral opening in the upper housing section. The connecting cable supplied with the RMZ792 facilitates connection to Synco™ 700 controllers or a Konnex bus connector. Optionally, power supply and bus can be connected via screw terminals on the mounting plate.

For updating languages and device descriptions, the RMZ792 contains a memory card (type reference RMA792, can also be supplied as a separate item).

Operating, display and connecting elements







1 INFO button
2 LCD
3 Fault button (🔔) with integrated red LED to indicate and acknowledge fault status messages:
   LED flashing: Fault status message, ready for acknowledgement
   LED lit: Fault status message pending but not yet reset
   LED off: Normal operation, no fault status message
   Press button: Acknowledgement or resetting of fault
4 ESC button
5 Select-and-push knob (OK knob)
6 RMA792 memory card with languages and device descriptions
7 Slide switch KNX / EXT for selecting power supply (via Konnex bus or external power supply)
8 Socket for Konnex connecting cable RJ45
9 Connection terminals CE+ and CE– for Konnex bus
10 Connection terminals G and G0 for AC 24 V power supply

Engineering notes

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- When powering the unit via Konnex bus, power supply must be sized such that 45 mA are available for the RMZ792
- AC 24 V is required when using an external power source. It must satisfy SELV/PELV (safety extra low-voltage) requirements
- The transformers used must be safety isolating transformers with double insulation to EN 60 742 or EN 61 558-2-6; they must be suited for 100 % duty
- Fuses, switches, wiring and earth wires must be in compliance with local regulations for electrical installations

Mounting and installation notes

- The RMZ792 bus operator unit is designed for:
  – Wall mounting
  – Flush-panel mounting (opening for cable entry required)
  – Mobile use
- The unit must not be fitted in wet or damp spaces; the permissible ambient conditions must be observed
- Prior to mounting the unit, the system must be disconnected from power
- Connection of the RMZ792 to plant being in operation is permitted only when using the connecting cable (RJ45 plug) supplied with the unit

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- When the unit is open or when exchanging the memory card, protective ESD measures must be observed; the electronic components on the printed circuit board must not be touched

Commissioning notes

- The configuration and the parameters of the RMZ792 bus operator unit can be changed on site any time by service staff who have been trained by **SBT HVAC Products** and who have the required access rights
- The RMZ792 is not suited for commissioning the bus users; this must be made on site with the help of the respective operator units or the service tool
- Correct assignment of the device addresses of all bus users is a prerequisite for troublefree operation of the bus operator unit
- The Installation Instructions provide detailed information on the steps to be taken when commissioning the plant

General notes

Maintenance

The RMZ792 bus operator unit is maintenancefree (no battery changes, no fuses). The housing may only be cleaned with a dry cloth.

Repairs

The RMZ792 cannot be repaired on site.

Disposal

The RMZ792 is waste electronic equipment in terms of the European Directive 2002/96/EG (WEEE, Waste of Electrical and Electronic Equipment) and must not be disposed of as part of unsorted municipal waste. Local and currently valid legislation must be observed and the device must be disposed of through appropriate channels.

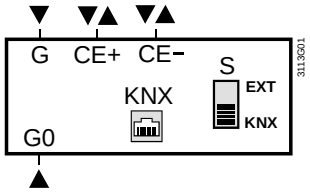
Technical data

Power supply (G, G0)	Operating voltage Safety extra low-voltage (SELV) / protective extra low-voltage (PELV) to External safety isolating transformer (100 % duty, max. 320 VA) to	AC 24 V ±20 % HD 384 EN 60 742 / EN 61 558-2-6
	Frequency	50/60 Hz
	Power consumption	max. 2.5 VA
	Fusing of supply line	max. 10 A
Interface	Konnex bus	
	Type of connection	scew terminals or RJ45 connector
	Type of interface	Konnex TP1, 9.6 kBit/s
	Bus loading number	0.5
	Current draw bus when powered via bus	45 mA
	Current draw bus when powered via external power source (G, G0)	5 mA
	Short-time disruption of power supply to EN 50 090-2-2	100 ms
Memory card (RMA792)	Memory card for RMZ792	RMA792
	Type	DataFlash card, SPI-compatible
	Form factor	MMC (MultiMediaCard)
	Capacity	8 MB
Connecting cable	For connection to Synco™ controllers or Konnex bus connector	
	Type of cable	8-wire, both ends with RJ45 plug
	Length	3 m

Cable lengths	For Konnex bus	
	Type of cable	2-wire without shielding, twisted pairs
	Length	max. 700 m
Electrical connections	Connection terminals	screw terminals
	For solid wires	0.05…2.5 mm^2
	For stranded wires	0.05…1.5 mm^2
	Konnex bus connection (CE+ and CE–)	not interchangeable
Protective data	Degree of protection of housing to IEC 60 529	IP20 (when installed)
	Safety class to EN 60 730	unit suited for use in equipment of safety class II
Environmental conditions	Operation to	IEC 60 721-3-3
	Climatic conditions	class 3K5
	Temperature (housing incl. electronics)	0…50 °C
	Humidity	5…95 % r.h. (non condensing)
	Mechanical conditions	class 3M2
	Transport to	IEC 60 721-3-2
	Climatic conditions	class 2K3
	Temperature	−25…+70 °C
	Humidity	<95 % r.h.
	Mechanical conditions	class 2M2
Classification to EN 60 730	Mode of operation, automatic controls	type 1B
	Degree of contamination, controls' environment	2
	Software class	A
	Rated surge voltage	500 V
Materials and colors	Bus operator unit	polycarbonate, RAL 7035 (light-grey)
	Packaging	corrugated cardboard
Standards	Product safety	
	Automatic electrical controls for household and similar use	EN 60 730-1
	Electromagnetic compatibility	
	For use in industrial and domestic environments	
	Immunity	EN 60730-1
	Emissions	EN 60730-1
	Electrical system technology for homes and buildings (ESHB)	EN 50 090-2-2
	CE conformity to	
	EMC directive	2004/108/EC
	C-Tick conformity to	
	Australian EMC Framework	Radio communication act 1992
	Radio Interference Emmission Standard	AS/NZS 3548
	Environmental compatibility	
	The environmental product declaration CE1E3113 contains data on environmentally compatible product design and assessments (RoHS compliance, materials composition, packaging, environmental benefit, disposal)	ISO 14001 (Environment) ISO 9001 (Quality) SN 36350 (Environmentally compatible products) RL 2002/95/EG (RoHS)
Weight	Net weight (excl. packaging)	0.215 kg
	Connecting cable	0.110 kg

Diagrams

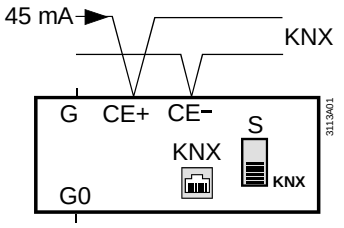
Internal diagram



G, G0 Rated voltage AC 24 V
CE+ Konnex bus data line (positive)
CE– Konnex bus data line (negative)
KNX Connector for Konnex bus (RJ45)
S Slide switch for selecting power supply:
KNX: Power supply via Konnex bus (45 mA)
EXT: External power supply via G, G0 (AC 24 V)

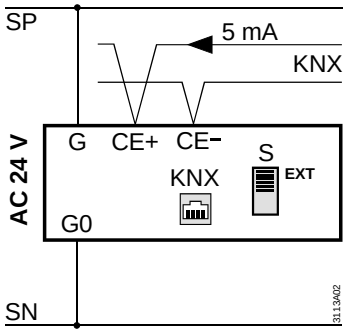
Connection diagrams

Power supply via KNX bus (fixed installation)



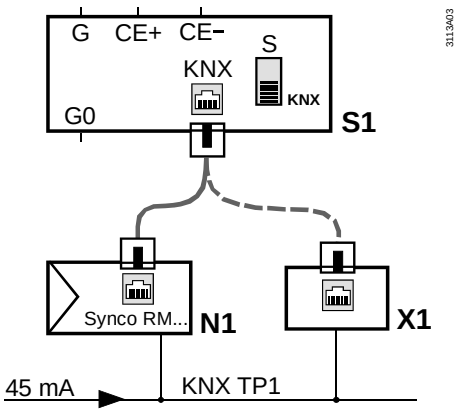
Position of selector S: “KNX“

External power supply AC 24 V



Position of selector S: “EXT“

Power supply via Synco™ controller or bus connector with RJ45 cable supplied with the unit



Position of selector S: “KNX“

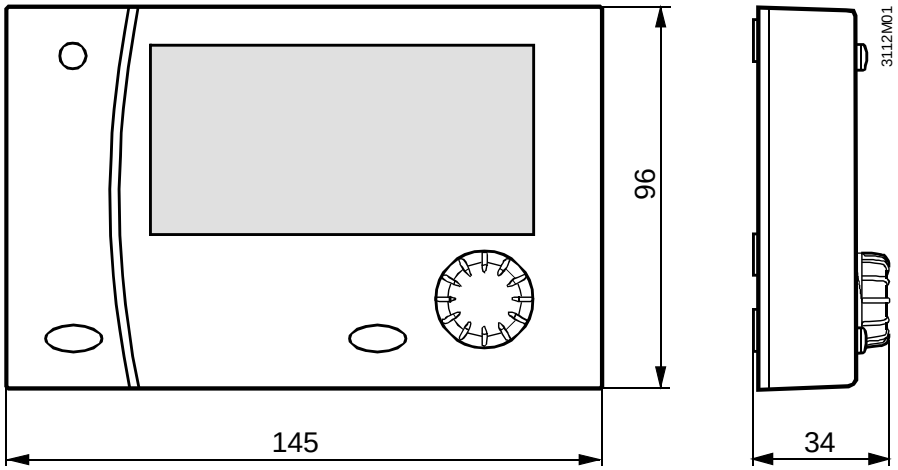
N1 Synco™ controller
S1 Bus operator unit RMZ792
X1 KNX bus connector

Note

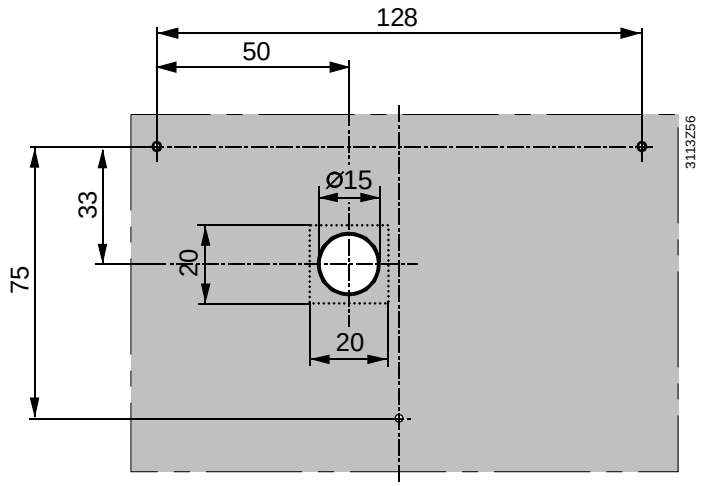
For the required internal configuration of the RMZ792, refer to Basic Documentation P3113.

Dimensions

Bus operator unit



Drilling plan for flush-panel mounting



Dimensions in mm