# SIEMENS



Synco™

### **KNX**<sup>·</sup>

### Bus operator unit



Communicating operator unit to operate up to 150 devices in a KNX network. Freely-definable Favorites pages. Supply from KNX bus or external AC 24 V. Fixed installation (panel) or mobile use (hand-held device).

Use	
	Central operation of Synco 700 devices and central communication units as well as RX room controllers and RD room thermostats via KNX bus.
Note	The RMZ792 does <b>not</b> allow for commissioning the devices in the KNX network. The commissioning must occur locally on the device in the KNX network using the RMZ790 or RMZ791 operator units or centrally using the OCI700.1 service tool.
Functions	
Device list	<ul> <li>Device list with max. 150 devices.</li> <li>Automatic device search.</li> <li>Automatic or manual sorting of the device list.</li> <li>Naming or renaming devices.</li> <li>Deleting individual devices or the entire device list.</li> </ul>

Favorites pages	<ul> <li>Up to 20 definable Favorites pages featuring key plant values.</li> <li>Up to 10 plant values per Favorites page.</li> <li>Naming or renaming pages and plant values.</li> <li>Sorting Favorites pages.</li> <li>Deleting Favorites pages.</li> </ul>
Fault handling	<ul><li>Fault indication via red LED and symbol.</li><li>Fault acknowledgement and reset.</li><li>List to display max. 20 current faults.</li></ul>
Operating levels	<ul> <li>4 operating levels: Info, User, Service, Password.</li> <li>User, Service, and Password level with individual password protection.</li> </ul>
Service functions	<ul><li>Customized business card for Service address/phone.</li><li>Data backup.</li></ul>
Bus functions	<ul><li>Automatic device address search.</li><li>Indication of fault status messages from other devices on the bus.</li><li>Display of system time and date.</li></ul>
Supported devices	<ul> <li>RM control units (Synco 700 range).</li> <li>RXB2 and RXL2 room controllers.</li> <li>RDG, RDF, RDU341 room thermostats.</li> <li>QAW740 room unit.</li> <li>OZW771, OZW775 central communication units.</li> </ul>
Languages	<ul> <li>German, English, French, Italian, Dutch, Polish, Czech, Slovakian, Hungarian, Spanish, Portuguese, Danish, Norwegian, Swedish, Finnish, Greek, Russian, Romanian, Slovenian, Serbian, Croatian, Bulgarian, Turkish.</li> </ul>
Supply	From KNX bus or external AC 24 V.

#### Type summary

Designation	Туре	Languages
Bus operator unit		de, en, fr, it, nl, pl, cs, sk, hu, es, pt, da, no, sv, fi, el, ru, ro, sl, sr, hr, bg, tr

#### Ordering and delivery

When ordering, specify both name and product number.

- **RMZ792** bus operator unit.
- A connection cable and installation instructions are supplied wit the device.

 Important note
 The RMZ792 Series C bus operator unit does not have an exchangeable memory card.

 To operate future, new devices (with new device descriptions), order the exchange device S/RMZ792.

	Devices	Туре	Data sheet no.
Synco 700	Universal controller	RMU7x0, RMU7x0B	N3144, N3150
	Heating controller	RMH760, RMH760B	N3131, N3133
	Boiler sequence controller	RMK770	N3132
	Central control unit	RMB795, RMB795B	N3121, N3122
	Switching and monitoring unit	RMS705, RMS705B	N3123, N3124
	Room unit	QAW740	N1633
	Central communication units	OZW771, OZW775	N3117, N5663
RXB, RXL			N2072
KAD, KAL	Room controller	RXB21.1, RXB22.1	N3873
	Room controller	RXL21.1, RXL22.1	N3877
	Room controller	RXB24.1	N3874
	Room controller	RXL24.1	N3878
	Room controller	RXB39.1	N3875
	Room controller	RXL39.1	N3876
RDG, RDF, RDU	Room thermostat for fan coils	RDG100KN	N3191
-, , -	Room thermostat for fan coils	RDG160KN	N3191
	Room thermostat for VAV	RDG400KN	N3192
	Room thermostat for fan coils	RDF301	N3171
	Room thermostat for fan coils	RDF301.50H	N3171
	Room thermostat for fan coils	RDF600KN	N3171
	Room thermostat for fan coils	RDF800KN, RDF800KN/NF	N3174
	Room thermostat for fan coils and lighting	RDF301.50	N3171
	Room thermostat for VAV	RDU341	N3172

#### The RMZ792 Series C bus operator unit allows for operating the following devices:

#### **Product documentation**

Documentation type	Doc. no.
Basic documentation RMZ792, detailed description of the functions	P3113
Installation instructions (mounting and commissioning)	G3113
Environmental declaration	E3113
Synco product range	S3110
"KNX bus" data sheet	N3127
Basic documentation: Communication via KNX bus	P3127
CE declaration of conformity	T3110

The RMZ792 bus operator unit comprises a base plat and housing part with electronics, display, and operating elements.

The bus operator unit is well suited for front or wall mounting as well as mobile use as a hand-held device.

Cables are introduced via an opening in the base plate or an opening on the side of the upper part of the housing.

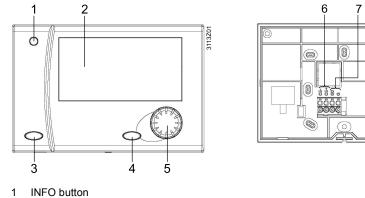
The supplied connection cable is to connect to a control unit or to a KNX bus plug (RJ45).

Supply occurs via KNX bus or externally with AC 24 V operating voltage at connection terminals G, G0 on the base plate.

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0

**Operating**, display and connecting elements



2 LCD panel

3

2

3

- Fault button ( $\Omega$ ) with integrated, red LED to display and acknowledge fault indication signals: LED flashes: Fault status message, ready to acknowledge LED lit: Fault status message pending, but not yet unlocked LED off: No fault status message available.
- Press button: Acknowledge or reset fault.
- 4 ESC button
  - Press-and-turn OK button
- 5 Connecting terminals CE+, CE- for KNX bus 6
- 7 Connecting terminals G, G0 for external supply AC 24 V

KNX 1 2

- Slider = KNX for supply from KNX bus (power 45 mA) 1
  - Slider = EXT for external supply AC 24 V to G, G0 (power 5 mA)
  - RJ45 connection plug for connection cable to control unit or KNX bus plug

#### **Engineering notes**

Slider KNX / EXT



- Power 45 mA must be included when calculating power for the bus operator unit supplied via KNX bus.
- AC 24 V voltage is required to power the bus operator unit externally. It must meet requirements for SELV/PELV (safety extra low-voltage).
- The transformers used must be safety isolating transformers featuring double insulation as per EN 60742 or EN 61558-2-6, designed for 100% duty.
- Fuses, switches, wiring and earthing must comply with relevant national safety • regulations for electrical installations.

- The RMZ792 bus operator unit is designed for:
  - Front mounting (15 mm dia. drill hole required for cable entry).
  - Wall mounting.
  - Mobile use as hand-held device.
- Mounting in wet or damp spaces not allowed. Observer all permissible environmental conditions.
- Disconnect the system from the power prior to mounting and installing the device.
- Connecting the bus operator unit to an operating plant is allowed only when the supplied cable (RJ45 plug) is used.
- Comply with all ESD safety measures, i.e. do not touch electronic components on the circuit board.

#### **Commissioning notes**

- Only staff trained by Siemens with associated permissions (access rights) may commission (configure) the RMZ792 operator unit. See also P3113 basic documentation.
- The RMZ792 bus operator unit does not allow for commissioning (configuring) the devices in the KNX network. Commissioning must occur locally on the device (bus device) in the KNX network using the RMZ790 or RMZ791 operator units or centrally using the OCI700.1 service tool.
- See the installation instructions for initially starting and commissioning the bus operator unit.
- Troublefree operation of the bus operator unit requires a correct device address for all bus devices.

#### **General notes**

Maintenance

The RMZ792 does not require maintenance (no change of battery, no fuses). Clean the housing only with a dry towel.

The RMZ792 bus operator unit cannot be repaired on site.

Repair

Disposal

The devices are considered electronics devices for disposal in term of European Directive 2012/19/EU and may not be disposed of as domestic waste.

- Dispose of the device via the channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.



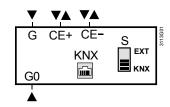
Power supply (G, G0)	Operating voltage Safety extra-low voltage (SELV) / protective	AC 24 V ±20 %
	extra-low voltage (PELV) as per	HD 384
	requirements for external safety isolating transformer (100% ED, max. 320 VA) as per	EN 60742 / EN 61558-2-6
	Short interruptions to power supply as per	EN 61000-4-11, 100 ms
	Frequency	50/60 Hz
	Power consumption	Max. 2.5 VA
	Supply line fusing	Max. 10 A
		<b>0</b>
Connection	Connection type	Screw terminals
ower supply (G, G0)	For wire	$0.052.5 \text{ mm}^2$
	For strand	0.051.5 mm <sup>2</sup>
	Power consumption for external supply (G, G0	) 5 mA
NX bus connection	Connection types	Screw terminals or
		RJ45 plug for connection cable
	Connection type	Screw terminals
	For wire	0.052.5 mm <sup>2</sup>
	For strand	0.051.5 mm <sup>2</sup>
	Cable type	2-core stranded,
		Without screening
	Connections CE+, CE–	Not exchangeable
NX interface	Interface type	KNX TP1, 9.6 kbps
	Bus load number	0.5
	Power consumption at KNX bus supply	45 mA
connection cable	For connection to	Synco control unit
	or to	KNX bus plug
supplied with RMZ792)	Design	8-core, RJ45 plug both sides
	Length	3 m
	Degree of protection of bouging to IEC 60520	IP 20 (when mounted)
egrees of protection	Degree of protection of housing to IEC 60529	IP 20 (when mounted)
egrees of protection	Degree of protection of housing to IEC 60529 Safety class	IP 20 (when mounted) III to EN 60730-1
	· · · ·	
Environmental	Safety class	III to EN 60730-1
Environmental	Safety class Operation as per	III to EN 60730-1 IEC 60721-3-3
Invironmental	Safety class Operation as per Climatic conditions	III to EN 60730-1 IEC 60721-3-3 Class 3K5
invironmental	Safety class Operation as per Climatic conditions Temperature (housing and electronics)	III to EN 60730-1 IEC 60721-3-3 Class 3K5 050 °C
invironmental	Safety class Operation as per Climatic conditions Temperature (housing and electronics) Humidity	III to EN 60730-1 IEC 60721-3-3 Class 3K5 050 °C 595% r. h. (non-condensing)
invironmental	Safety class Operation as per Climatic conditions Temperature (housing and electronics) Humidity Mechanical conditions	III to EN 60730-1 IEC 60721-3-3 Class 3K5 050 °C 595% r. h. (non-condensing) Class 3M2
invironmental	Safety class Operation as per Climatic conditions Temperature (housing and electronics) Humidity Mechanical conditions Transport as per	III to EN 60730-1 IEC 60721-3-3 Class 3K5 050 °C 595% r. h. (non-condensing) Class 3M2 IEC 60721-3-2
invironmental	Safety class Operation as per Climatic conditions Temperature (housing and electronics) Humidity Mechanical conditions Transport as per Climatic conditions	III to EN 60730-1 IEC 60721-3-3 Class 3K5 050 °C 595% r. h. (non-condensing) Class 3M2 IEC 60721-3-2 Class 2K3
invironmental	Safety class Operation as per Climatic conditions Temperature (housing and electronics) Humidity Mechanical conditions Transport as per Climatic conditions Temperature	III to EN 60730-1 IEC 60721-3-3 Class 3K5 050 °C 595% r. h. (non-condensing) Class 3M2 IEC 60721-3-2 Class 2K3 -25+70 °C
invironmental onditions	Safety class Operation as per Climatic conditions Temperature (housing and electronics) Humidity Mechanical conditions Transport as per Climatic conditions Temperature Humidity	III to EN 60730-1         IEC 60721-3-3         Class 3K5         050 °C         595% r. h. (non-condensing)         Class 3M2         IEC 60721-3-2         Class 2K3         -25+70 °C         <95 % r.h.
Environmental conditions	Safety class Operation as per Climatic conditions Temperature (housing and electronics) Humidity Mechanical conditions Transport as per Climatic conditions Temperature Humidity Mechanical conditions Degree of contamination, control environment	III to EN 60730-1 IEC 60721-3-3 Class 3K5 050 °C 595% r. h. (non-condensing) Class 3M2 IEC 60721-3-2 Class 2K3 -25+70 °C <95 % r.h. Class 2M2 2
Environmental conditions	Safety class Operation as per Climatic conditions Temperature (housing and electronics) Humidity Mechanical conditions Transport as per Climatic conditions Temperature Humidity Mechanical conditions	III to EN 60730-1 IEC 60721-3-3 Class 3K5 050 °C 595% r. h. (non-condensing) Class 3M2 IEC 60721-3-2 Class 2K3 -25+70 °C <95 % r.h. Class 2M2
Degrees of protection Environmental conditions Classifications as per EN 60730 Materials and colors	Safety class Operation as per Climatic conditions Temperature (housing and electronics) Humidity Mechanical conditions Transport as per Climatic conditions Temperature Humidity Mechanical conditions Degree of contamination, control environment Software class	III to EN 60730-1         IEC 60721-3-3         Class 3K5         050 °C         595% r. h. (non-condensing)         Class 3M2         IEC 60721-3-2         Class 2K3         -25+70 °C         <95 % r.h.

Standards and guidelines	Product standard	EN 60730-1 Automatic electrical controls for household and similar use
	Product family standard	EN 50491-3
		General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS)
	Electromagnetic compatibility	For residential, commercial and
		industrial environment
	EU Conformity (CE)	CE1T3110xx <sup>*)</sup>
	RCM Conformity	CE1T3110en_C1 *)
	Environmental compatibility The product environmental declaration CE1E3113 <sup>*)</sup> contains data on environmentally compatible product design and assessments (RoHS compliance, materials composition, packaging, environmental benefit, disposal).	
Weight	Excl. packaging	0.215 kg
	Connection cable	0.110 kg

\*) The documents can be downloaded from http://siemens.com/bt/download.

#### **Connection diagrams**

**Connection diagram** 



G, G0 Operating voltage AC 24 V

CE+ KNX bus data line (positive)

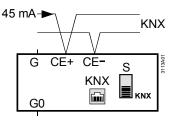
KNX bus data line (negative) CE-KNX RJ45 connection plug for KNX bus

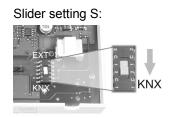
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Slider to select power supply KNX / EXT KNX: Supply from KNX bus (power consumption 45 mA)

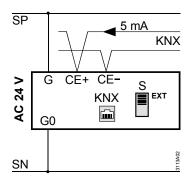
EXT: External supply AC 24 V via terminals G, G0, power consumption 5 mA

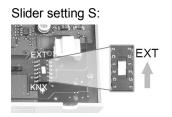
Supply from KNX bus (fixed installation)



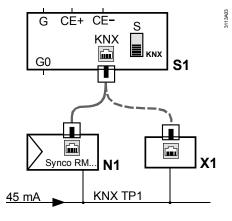


Supply external AC 24 V (terminals G, G0)





#### Supply from Synco device or bus plug via supplied cable



Slider setting S: KNX

N1 Synco RM.. control unit S1 RMZ792 bus operator unit

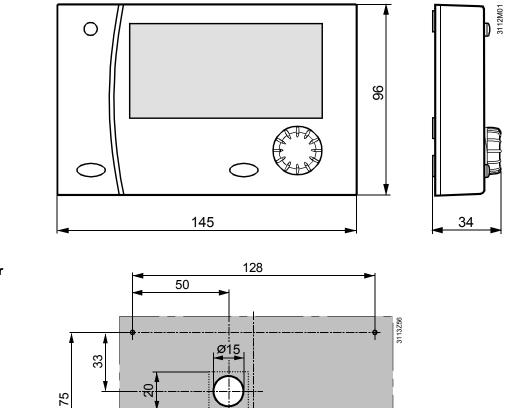
X1 KNX bus plug

Note

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See basic documentation P3113 to configure RMZ792 bus operator unit.

#### Bus operator unit



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## Drilling diagram for front mounting

Dimensions in mm

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Subject to change 9/9