SIEMENS

9282

Desigo™ PX

Extension modules

PXX-L11
PXX-L12

Use together with PXC....D or PXC...-E.D

- **For the integration of room controllers in the Desigo RXC range into the Desigo building automation and control system**
- **For the grouping of rooms**
- **For the implementation of higher-level system functions**
- **Integration of LONWORKS ®-compatible third-party equipment**

Type summary

Type	Number of connectable RXC / LONWORKS devices
PXX-L11	60
PXX-L12	120

Equipment combinations

System controller / automation station				
With system Desigo...	**≥V4**	**≥ V5**	**≥ V5**	**≥ V5**
Type (data sheet CM1N9222)	**PXC00.D, PXC00-E.D**	**PXC50.D, PXC50-E.D**	**PXC100.D, PXC100-E.D**	**PXC200.D, PXC200-E.D**
Number of RXC with PXX-L11	60	10	60 *)	60 *)
Number of RXC with PXX-L12	120	10	120 *)	120 *)

*) A great number of RXC will reduce the performance of the PXC... for the connected TX-I/O data points.

Funktionen

The system controller LONWORKS, PXC00.D or PXC00-E.D with PXX-Lxx, fulfills the following primary tasks:

- Compresses data from the room controllers at the automation level
- Maps Desigo RXC applications to BACnet for operation and monitoring (grouped as HVAC, lighting and blind control functions)
- Execution of higher functions for room automation:
  Room and zone-based groups, and system functions such as changeover and summer/winter compensation etc.
- System functions such as trend, alarming and schedulers

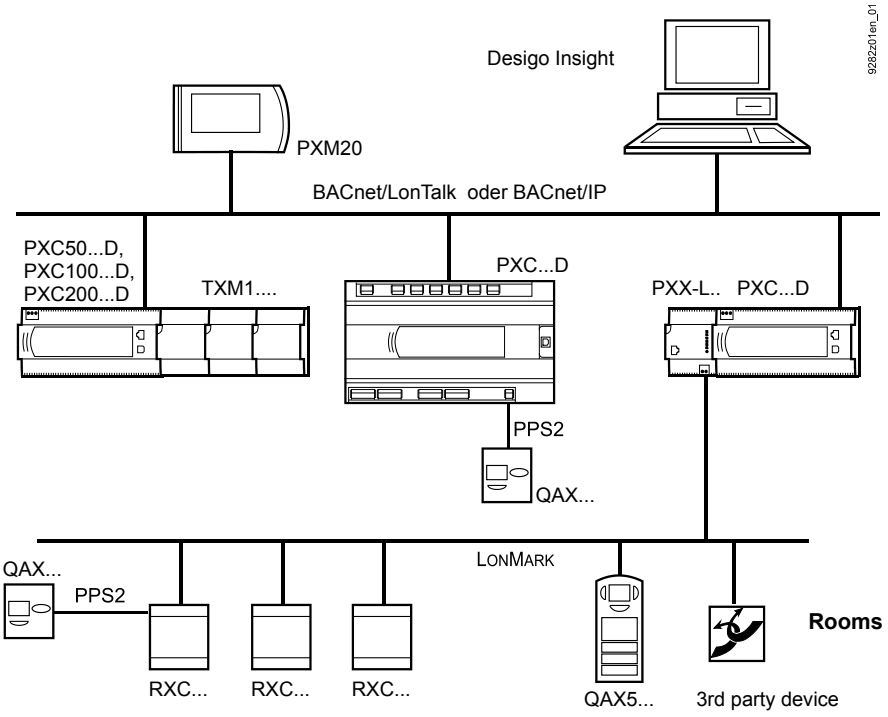
On the system controller LONWORKS, RXC applications are mapped in a way that creates a room view. This enables the rooms to be grouped together, e.g. for shared occupancy programs, or for shared commands for the control of lighting or blinds.

Hardware

Hardware consists of

- a PXC....D / PXC...-E.D system controller.
- and a PXX-L11 or -L12 extension module.

Topology



Note: For an overview on the Desigo RXC product range see document CA110333.

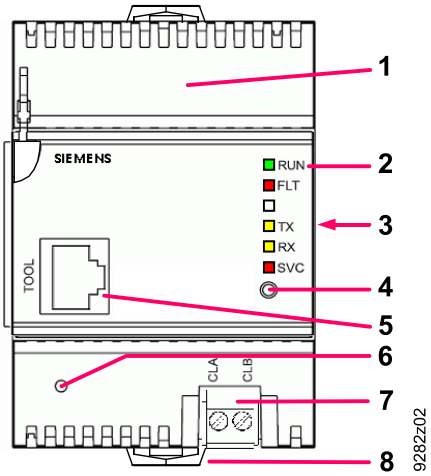
Extended Command Set (ECS)

The PXX-Lxx extension modules support Extended Command Set (ECS) to EIA-709.1-B protocol. If a LONWORKS node is written with an ECS command (e.g. installation by NL220), several legacy commands will be refused by the module from this moment on. A module configured in this manner will only allow restricted communication with older tools that do not support ECS (e.g. the diagnostic tool NLUtil).

Mechanical design

The compact construction enables the extension module to be used in highly confined spaces.

Housing



1 Plastic housing
2 LED display for device and system status
3 Interface to automation station
4 Service button
5 Tool interface
6 FW download button
7 Plug-in terminal block with screw terminals (LONWORKS bus)
8 Slider for mounting on DIN rail

LED display, service button

LED	Color	Activity	Meaning / → Corrective action
RUN	Green	Continuously off	No power supply. → Check power supply.
		Continuously on	Power supply ok; firmware functions ok.
FLT	Red	Continuously off	Everything ok.
		Continuously on	Hardware fault detected during self-test. → PXX-Lxx must be replaced.
		Fast flashing	No valid firmware present. → Reload firmware.
TX	Yellow	Flashing	Sending LonWorks® data packets
RX	Yellow	Flashing	Receiving LonWorks® data packets
SVC	Red	Continuously off	Everything OK. LonWorks® node configured
		Continuously on	Faulty LonWorks® chip or service pin is being pressed.
		Flashing	LonWorks® node not configured → Configure with LNS
◎	Service button		Press with pointed object
○	FW download button		Press with pointed object

Mounting

The extension modules PXX-Lxx can be snapped on to standard mounting rails. To connect, push the extension module from left to the PXC....D / PXC...-E.D system controller until the interfaces establish a connection.

Disposal

The devices are classified as waste electronic equipment in terms of the European Directive 2012/19/EU (WEEE) and should not be disposed of as unsorted municipal waste.
The relevant national legal rules are to be adhered to.
Regarding disposal, use the systems setup for collecting electronic waste.
Observe all local and applicable laws.

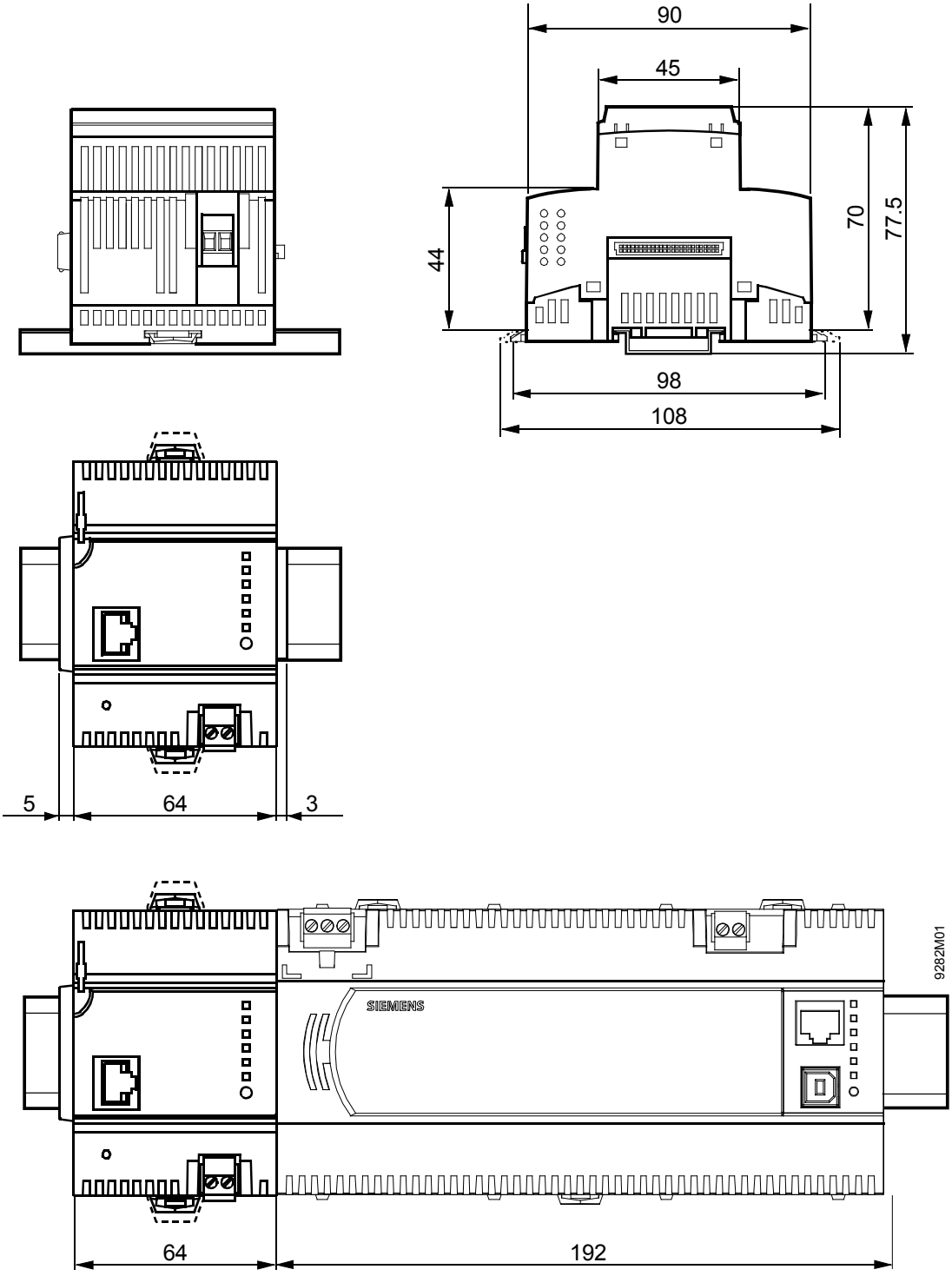
Technical data

General device data	Power supply	DC 24 V ±20% (SELV) or DC 24 V class 2 (US) 50 mA, 1.2 W from system controller PXC....D / PXC...-E.D
Connection LONWORKS® BUS	Interface type	TP/FT-10
	Transceiver	FTT-10A
	Bit rate	78 kbps
	Protocol	LonTalk
	RJ45 connector wiring	
	Connecting cable for LNS tool	Max. 3m
	Wiring	
	Plug-in screw terminal	Stranded or solid conductors 0.25 to 2.5 mm^2 or 2 x 1.5 mm^2
	Cable type	See specifications in the RXC installation manual, CA110334
	Cable length	Max. 450m in free topology Max. 900m in serial topology
	See Installation Guide RXC, CA110334 for more details	
Protection data	Housing protection standard	IP30 (IP30) to EN 60529
	Protection class	III to EN 60730-1
Ambient conditions	Normal operation	Class 3K5 to IEC 721
	Temperature	0 ... 50 °C
	Humidity	< 85 % r.h.
	Transport	Class 2K3 to IEC 721
	Temperature	– 25 ... 65 °C
	Humidity	< 95 % r.h.
Standards, directives and approvals	Product standard EN 60730-1	Automatic electrical controls for household and similar use
	Electromagnetic compatibility (Applications)	For use in residential, commerce, light-industrial and industrial environments
	EU conformity (CE)	CM1T9282xx *)
	UL certification (US)	UL 916, http://ul.com/database
	RCM-conformity (EMC)	CM1T9222en_C1 *)
	EAC conformity	Eurasia conformity
	FCC	47 CFR Part 15 Class B
Environmental compatibility	Product environmental declaration (contains data on RoHS compliance, materials composition, packaging, environmental benefit, disposal)	CM1E9282 *)
Dimensions	See “Dimensions”	
Weight	Without / with packaging	0.129 kg / 0.140 kg

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

Dimensions

Dimensions in mm



PXX-Lx with a PXC....D / PXC...-E.D system controller

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