9263p01

DESIGO™ PX

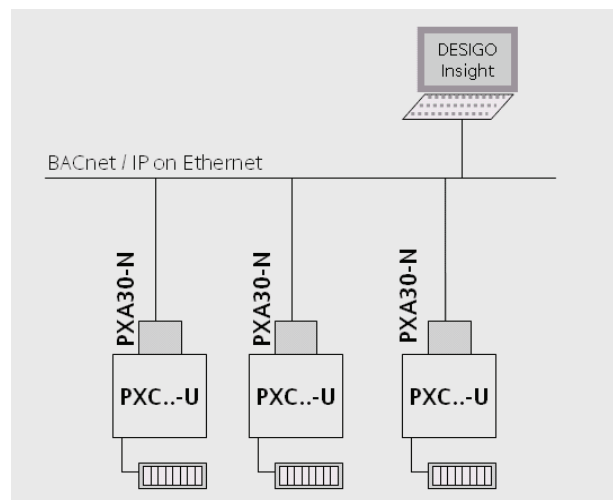# Extension module for BACnet over Ethernet / IP   PXA30-N

Plugs into the modular automation stations, type PXC..-U

- **For operation of the PXC…-U automation stations in the DESIGO building automation and control system, using BACnet over Ethernet / IP**

Functions

With a PXA30-N extension module connected, the PXC…-U automation station operates as a native BACnet / IP device (the LON function is inactive).
As an option, full BBMD (BACnet Broadcast Management Device) functions can be activated in the automation station.

Topology

Types

PXA30-N Extension module

Compatibility

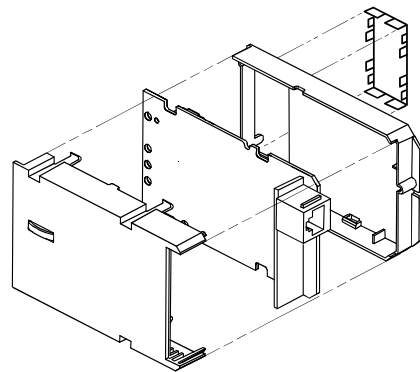The module is fitted into a PXC…-U automation station.

Ordering

When ordering, please specify the quantity, product name and type code.

Example:
20 Extension modules PXA30-N
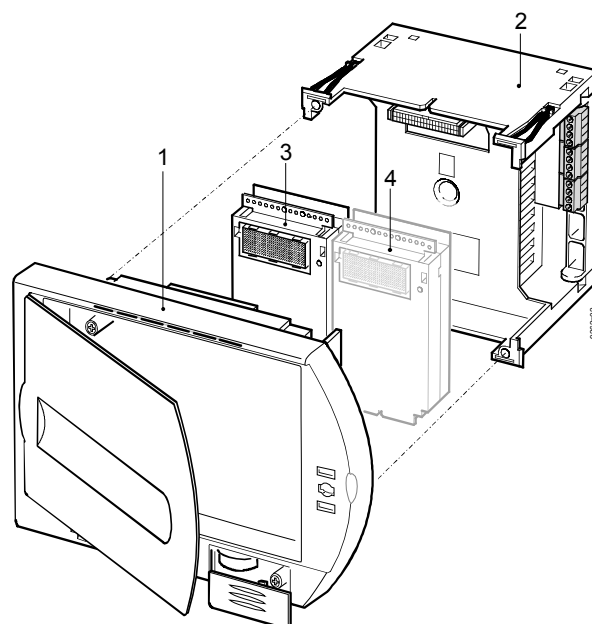
Design

- Two-part snap-together housing (plastic)
- Cover for contact protection
- PCB with electronic components
- RJ45 socket
- RS232 socket (D-Sub 9)

Mounting

The extension module is plugged into a PXC...-U modular automation station.
It is important to follow the instructions supplied with the device, in particular:

- Avoid touching the connector pins (ESD precautions)
- Push the module firmly into position (1.5 mm) and check that it is securely in place so that the fine contact pins interlock properly.

1 Plug-in unit

2 Device base

3 Extension module PXA30-N *(Left slot only!)*

4 Other extension modules

Engineering notes

The automation station can be operated with static or dynamic (DHCP) addressing. (DCHP = Dynamic Host Configuration Protocol.) A fixed address must be used for automation stations for which the BBMD functions have been enabled. The use of static address settings is generally recommended (for troubleshooting and diagnostic purposes).

It should also be noted that BACnet communicates over IP via a static UDP port number. The UDP port number is determined during commissioning. This port must be unblocked in routers and firewalls.

Installation notes

It is essential to adhere to the instructions described in the mounting and installation guide (CA110396). For example, the Ethernet connection to the next switch must not exceed 100 m.

Commissioning

The automation station is commissioned and configured with DTS (DESIGO TOOLSET) / XWP (XWORLS plus) by use of IP datagrams.

DTS / XWORKS must be connected to the same IP segment as the automation station.

Operating notes

The automation station supports ICMP (Internet Control Message Protocol).
This allows you to ping the IP nodes of all PCs for diagnostic purposes.
SNMP (Simple Network Management Protocol) is not supported, however.

If the Ethernet/IP network is used by other systems (e.g. data processing), the associated loads must be taken into account. The bus load associated with a data processing system is typically many times higher than the bus load associated with the BACnet devices.

Disposal

The device includes electrical and electronic components and must not be disposed of as domestic waste.
Current local legislation must be observed.
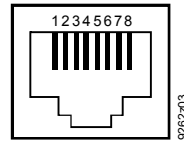
Technical data

Ethernet connection	Interface type	100BaseTX, IEEE 802.3 compatible
	Bit rate	10 / 100 Mbit/s, auto-sensing
	Protocol	BACnet over UDP/IP
	Connection	RJ45 socket, screened
	Wiring	
	Cable type	Standard CAT5 UTP[1] or STP[2]
	Cable length	Max. 100m

Housing protection standard	Protection standard to EN 60529		IP 30	
Protection class	Insulation protection class		III	
Environmental conditions	IEC 721	Operation: Class 3K5	Transport: Class 2K3	
	Temperature	0 ... 50 °C	– 25 ... 65 °C	
	Humidity	< 85 % rh	< 95 % rh	
Standards	Product safety			
	Automatic electronic controls for household and similar use		EN 60730-1	
	Special requirements for energy controllers		EN 60730-2-11	
	EMC Directive			
	Immunity		EN 61000-6-2 (Industry)	
	Emissions		EN 61000-6-3 (Residential)	
	Meets the requirements for **CE** marking:			
	EMC Directive		2004/108/EG	
	UL-Approbation		UL 916: PAZX, PAZX7	
Dimensions	*See "Dimensions"*			
Weight	With / without packaging		75 g / 95 g	

[1] UTP Unshielded Twisted Pair [2] STP Shielded Twisted Pair

Pins

Ethernet

RJ45 socket screened, standard connection in accordance with AT&T256

1.	Tx+	5.	Unoccupied
2.	Tx–	6.	Rx–
3.	Rx+	7.	Unoccupied
4.	Unoccupied	8.	Unoccupied

Dimensions

Dimensions in mm

Subject to Change

Siemens
Building Technologies

PXA30-N – Extension module for BACnet over Ethernet / IP

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