

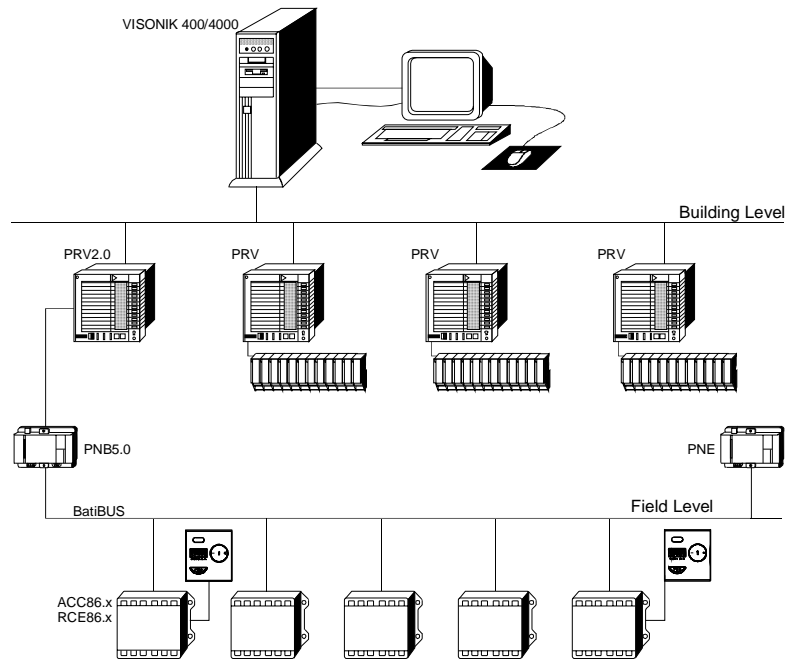


BatiBUS Node

PNB 5.0

FOR ACC86.X / RCE86.X- VISONIK CONNECTION

System overview



The PNB is an interface between the BatiBUS and the PRV2.0.

- PNB 5.0 : only for RCE86.xx/509 and ACC86.x units.
Software version must be 14 or higher.
(These units are named ACC86 in the following text)
- PNB 2.0 : for older versions

System capacity

- A max. of 60 ACC86 controllers per BatiBUS can be addressed and controlled by one PRV2.0.
- The Controller address range is 0 to 200, of which the PRV2.0 can address the range from 1 to 200.
- In the PRV2, there can be up to 24 groups of controllers with max. 16 controllers per group.
- Additionally, up to 30 master / slave configurations with max. 10 controllers are possible

Functions

- Mapping the ACC86 values
A range of ACC86 values are mapped to PRV2.0 points and can be used in the PRV2.0 and the VISONIK. As a result, the PRV2.0 contains a complete, accurate process image of all the ACC86 controllers.
 - Temperature
 - Operating mode (Comfort / Eco / Standby)
 - setpoint Comfort heating
 - setpoint Comfort cooling
 - setpoint Eco heating
 - setpoint Eco cooling
 - Window contact
 - Changeover
 - VCF¹⁾
- Commands
Different values such as operating mode, setpoints etc. for groups of controllers can be remotely changed from the PRV2.0.
 - Operating mode (Comfort / Eco / Standby)
 - setpoint Comfort heating
 - setpoint Comfort cooling
 - setpoint Eco heating
 - setpoint Eco cooling
 - Changeover
 - Range for local setpoint changes
- Operation
Four Popcards allow simplified local operation of all ACC86 connected to the BatiBUS. The same operations can also be configured on the VISONIK Insight
- Master / slave
Master / slave operation applies to rooms where more than one ACC86 is installed. Master / slave functionality is used to synchronise these controllers. Any change in the master of the following parameters will be transmitted to its slaves.
 - Operating mode (Comfort / Eco / Standby)
 - setpoint Comfort heating
 - setpoint Comfort cooling
 - Changeover
 - VCF 1)

If at least one window of a Master / slave configuration is open, all controllers will change to the operating mode Standby. If all windows are closed, the controllers will go back to the group value.
- Energy handling (optional)

Each ACC86 transmits the electrical energy consumed and offers possibilities of influencing energy consumption.

Display	Consumed Energy per controller and per group Electrical output limit Authorisation of electric air heater battery
Command	Electrical output limit Authorisation of electric air heater battery

- Supervision of the communication
The PNB supervises the communication between the PNB and the different ACC86, and reports its status to the PRV2.0.
 - Interface to other applications
In addition to applications already available, there is a clearly-defined interface for adding additional applications.
- 1) Master / slave information to make certain several controllers to not provide simultaneous heating and cooling for the same room.

Access to ACC86 parameters

The PRV2.0 has access to the following ACC86 parameters:

<i>BATIGYR value</i>	<i>Event-driven</i>	<i>request for parameter</i>	<i>change of parameter</i>
Temperature	every 5 min.	Yes	No
Operating mode	Yes	Yes	Yes
Setpoint comfort heating	Yes	Yes	Yes
Setpoint comfort cooling	Yes	Yes	Yes
Setpoint eco heating	No	Yes	Yes
Setpoint eco cooling	No	Yes	Yes
Window contact	Yes	Yes	No
Local range	Yes	Yes	No
Fan step	No	Yes	Yes
Valve position cold water	No	Yes	No
Valve pos. warm water	No	Yes	No
VCF	Yes	Yes	Yes
Consumed energy	No	Yes	No
Limitation el. output	No	Yes	Yes
Position el. output	No	Yes	No
Authorisation el. heating	No	Yes	Yes
Alarm / Stop Input	Yes	Yes	No

The following information is also available:

Firmware Version of the Controller (e.g. 18)
Hardware Version of the Controller (2/4-pipe;...)

Technical data

Operating voltage	24 V AC/DC ±15 %
Frequency	AC 50..60 Hz
Power consumption	max. 0.6 VA
Ambient temperature	
Operation	0..40 °C
Storage and transport	-20..70 °C
Weight	180 g

PNB protection	PTC resistor 200mA
Cable between PRV and PNB	max. 1.5 m
Regulator load (C)	1mA C=2
Capacitance (DS)	DS=3.3

Configuration work needed

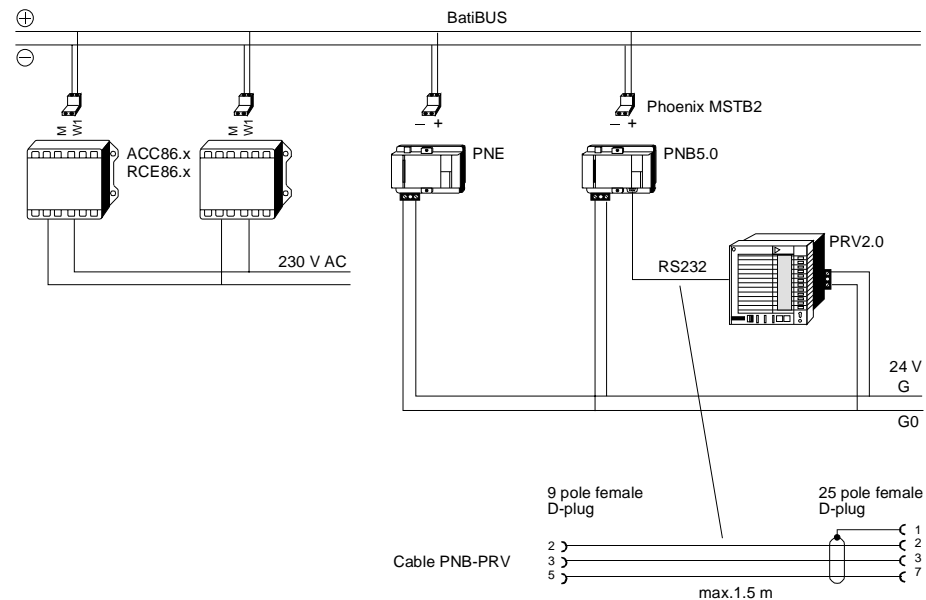
A COLBAS Task in the PRV2.0 is used for the project specific information:

- Which ACC86 controllers are connected
- Definition of the groups
- Definition of master / slave

Accessories

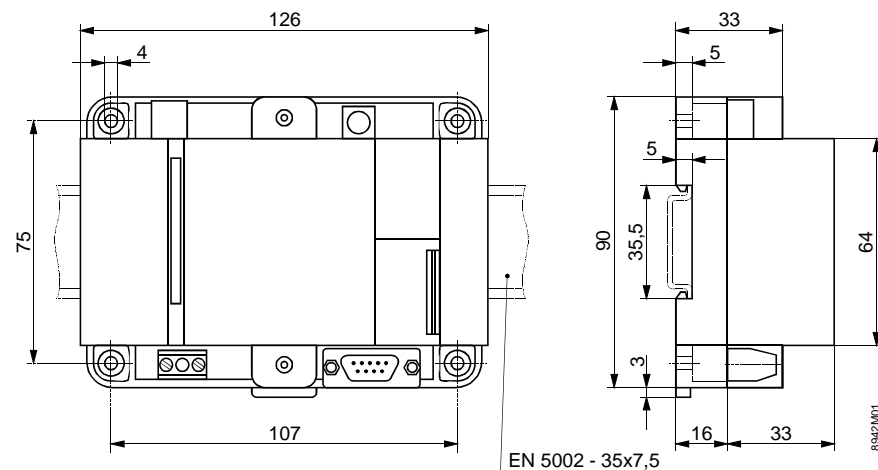
Name	Type reference	Data sheet
Power supply for BatiBUS	PNE	8943

Connection diagram



The connection to BatiBUS is done by a Phoenix MST B2, which is part of the delivery.

Dimensions



Dimensions in mm