**VISONIK®**

**Communication**

**Cards COM2**

for Process Unit PRV2...

Cards with terminal block for process unit PRV2... to communicate as a VISONIK Building Process Station (BPS) starting from version 12.

Two COM1 types with the following connections:

- **PVC2.1F** to connect FLN-devices such as Terminal Equipment Controllers (TEC and AEROGYR ventilation controllers (RWI) to the Floor Level Network)
- **PVC2.2M** to connect Monogyr controllers and switching units to the Monogyr bus

**Use**

COM2 communication cards are used to:

- integrate individual room control systems into the VISONIK BPS
- integrate individual room control systems via VISONIK BPS and Building Level Network into a master control system.

**Functions**

COM2 communication cards in the VISONIK BPS facilitate data exchange with the connected individual room controllers via the respective bus (Floor Level Network or Monogyr bus).

**Type summary**

- Communication card for Floor Level Network
  - Terminal block **PVX1.2PM**
  - **PVC2.1F**
- Communication card for Monogyr bus
  - Terminal block **PVX1.2PM**
  - **PVC2.2M**

**Equipment combination**

- Process unit, system neutral **PRV2...** Data sheet 8411
- Program card **PVA3...** Data sheet 8317
Technical design
Depending on the type, COM2 communication cards provide the following functional units:
– interface adapter to the Floor Level Network
  or
– interface adapter to the Monogyr bus

The EEPROM serves to store canned data and configuration data.
Interface specifications: see section “Technical data”.

Mechanical design
Plug-in circuit boards, with FASTON tabs to the terminal block on the connection side. The associated terminal block is mechanically encoded allowing to connect the block only in the correct location (II) on the process unit.

View of the PVC2.1F card

View of the PVC2.2M card

1 Plug contacts to the terminal connection block on the process unit
2 Internal plug connection to the process unit
Observe the following during engineering:

- Use the cards only for applications as described in the brief description on the title page (bold print) and in the section “Use”.
- The specifications in section “Technical data” apply to all connections.
- Wire the cards in accordance with the section “Internal diagrams”.
- The section “Technical data” in data sheet 8301 (VISONIK Building Process Station, overview) applies to the bus connections in an overall system.

The communication cards come with a set of instructions illustrating how and where the cards must be installed.

Do not touch any electrical contacts or components on the open unit. Electrostatic discharges may destroy sensitive components!

When mounting the cards, apply appropriate protective measures as, for example, using an earthed ESD-antistatic mat with wrist connection.

In order to commission and test communications, a program card must be plugged into the VISONIK BPS.

Conformity:
In accordance with the directives set forth by the European Union
Electromagnetic compatibility 89/336/EEC
Emissions EN 50 081-1
Immunity EN 50 082-2

Weight with terminal block, no packaging materials 0.25 kg

Ambient conditions and other general data of process unit PRV2 equally apply to the cards. Refer to “Technical data” in data sheet 8411.

Physical Layer fully compatible with Profibus
Transmission speed 19200 bps (fixed)
Transmission level to RS485
to terminal block II, PVX1.2PM
Round cable connection screened
Round cable 2-pin, polarity dependent
length of a bus segment max. 1200 m incl. spur lines
length of all spur lines max. 500 m
length of one spur line max. 250 m
Multiple bus length max. 3 repeaters in series
Total length between 2 FLN-devices max. 4800m (4 bus segments)
Network topology see data sheet 8026

Transmission speed 1024 bps (fixed)
Round cable connection to terminal block II, PVX1.2PM
Round cable 2-pin unscreened
line length with 1.5 mm² max. 1500 m
line length with 1.0 mm² max. 1000 m
Topology: line, star, tree configurations see data sheet 8277
Internal diagrams

FLN-bus card

Monogyr-bus card

Terminal block II

PVX1.2PM connections

Floor Level Network (FLN-bus)

Monogyr-bus (M-bus)

Connectors

Terminal | Signal
---|---
UR | Remote supply line for bus amplifier (repeater)
UG | Signal ground
UP | Data line positive
UN | Data line negative
↓ | Connection for cable screening

Terminal | Signal
---|---
W | Bus signal
M9 | Bus neutral

X1 | Internal plug connection to process unit