PX20 Soft Remote-Diagnostic [Modem]
PX20-E-Soft Remote-Diagnostic [Modem]
User's Guide
# Contents

1. Application ........................................................................................................... 4
2. Prerequisites ........................................................................................................ 4
3. Operation .............................................................................................................. 5
  3.1 Connection settings ....................................................................................... 5
  3.1.1 Simple mode .............................................................................................. 5
  3.1.2 Advanced mode .......................................................................................... 5
  3.2 Escape (press for a few seconds) .................................................................... 6
  3.3 PXM20 / PXM20-E emulation ......................................................................... 7
  3.4 Wiring test ...................................................................................................... 7
  3.5 Exceptions ....................................................................................................... 7
1 Application

The PXM20 / PXM20-E Soft Remote-Diagnostic [Modem] allows for remote diagnosis of DESIGO plants via modem connection. The XWP plant engineering data are not required, only a licensed XWP installation.

The following cases can be resolved using the PXM20 / PXM20-E Soft Remote-Diagnostic:

- Check and correct parameter settings.
- Diagnose and correct operating errors.
- Set passwords.
- Introduce immediate measures for serious problems to ensure that a failed plant can again be operated until the faults are resolved on site.

2 Prerequisites

To use the PXM20 / PXM20-E Soft Remote-Diagnostic, the following conditions must be satisfied:

1. PC with installed XWP.
2. Dongle and license for XWP installation.
3. Modem available and installed. Laptop-internal modems as well as ISDN connections are supported.
3 Operation

3.1 Connection settings

When starting the PXM20 / PXM20-E Soft Remote-Diagnostic tool, a dialog box for the connection settings opens. This dialog box can be opened in Simple or Advanced (enter special connection settings) mode. Per default, the dialog box opens in Simple mode, and the user can change the mode via the associated button.

3.1.1 Simple mode

Enter the desired phone number in the Phone number field and open a connection to the plant via Connect.

![Illustration 3-1: Parameter settings in Simple mode](image1)

Click Advanced to set further parameter (see next section).

3.1.2 Advanced mode

The following settings can be entered in the BACnet over PTP settings dialog box:

![Illustration 3-2: Parameter settings in Advanced mode](image2)
### Modem

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serial Port</td>
<td>Select the serial port to which the modem is connected. COM1 to COM3 are supported.</td>
</tr>
<tr>
<td>Modem Init String</td>
<td>Initialize the modem by sending different configuration commands by means of the modem init string (e.g. AT&amp;F to reset the modem to factory settings). See the modem manufacturer manual for specific settings.</td>
</tr>
<tr>
<td>Modem Dial String</td>
<td>Initialization to select. ATDT for tone or ATDP for pulse dial. See the modem manufacturer manual for specific settings.</td>
</tr>
</tbody>
</table>

### BACnet

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTP Password</td>
<td>Enter the automation station password defined in XWP via the automation station properties (PTP = point-to-point, modem communications type).</td>
</tr>
<tr>
<td>Network Number</td>
<td>Enter the BACnet network number for the PC where the PXM20 / PXM20-E Soft Remote-Diagnostic tool is used. The network number is freely selectable, but must differ from the BACnet network number of the automation station for the PXM20 / PXM20-E Soft Remote-Diagnostic tool, and it must be unique within the internetwork. The default value (1001) is selected so that it does not need to be changed for most applications.</td>
</tr>
</tbody>
</table>

Click **Connect** to connect to the plant.

### 3.2 Escape (press for a few seconds)

In the PXM20 / PXM20-E Soft Remote-Diagnostic tool, select **File** and then **Escape (press for a few seconds)**. This command on PXM20 / PXM20-E device is created via a special button combination that cannot be replicated by mouse on the PXM20 / PXM20-E Soft Remote-Diagnostic tool.

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escape (press for a few seconds)</td>
<td>Press the ESC button for more than 2 seconds to close all open popup windows at the same time.</td>
</tr>
</tbody>
</table>
### 3.3 PXM20 / PXM20-E emulation

The PXM20 / PXM20-E Soft Remote-Diagnostic tool comprises a software emulation of the PXM20 / PXM20-E. Operating the software emulation is analogous to the PXM20 / PXM20-E. For detailed instructions, refer to CM110754.

Illustration 3-3: Operating the PXM20 / PXM20-E emulation

### 3.4 Wiring test

The "Wiring test" function on the PXM20 / PXM20-E is not available via the PXM20 / PXM20-E Soft Remote-Diagnostic tool.

### 3.5 Exceptions

Users of the PXM20 / PXM20-E Soft Remote-Diagnostic tool do not have any modem connection status information.

If the connection is interrupted, menu navigation shows that some values are not refreshed; these values are marked by a question mark. This, or a clicking sound of the modem indicates that the connection has been disconnected. In addition, the **PXM20 information: Qualified Error Text** popup shows that the program is attempting to query a BACnet object while there is no connection.

The type of software access to the COM port ensures that the connection is disconnected properly upon program exit or crash. As a result, a background modem connection resulting in high communications costs will never occur.