Screen navigation guide for 20/25 trip unit

Instructions apply to:

UL489 : PD-NF
IEC : PD-NF, IZMX16

UL489 : PD-RF
IEC : PD-RF, IZMX40

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Instructions apply to:

UL489 : PD-NF
IEC : PD-NF, IZMX16

UL489 : PD-RF
IEC : PD-RF, IZMX40
Appendix A – Flow Charts

A.1 Main Menu
A.1.1 Note on Ground Fault

Trip Unit without Ground Fault

No Ground Current Graph Display

Trip Unit with Ground Fault

Current(A)

√ ZSI

L2/B 0

L1/A 0

L3/C 0

N 0

G 0

√ ZSI

L2/B 0

L1/A 0

L3/C 0

N 0

G 0

A.1.2 Main Menu Difference Between PXR 20 and PXR 25

PXR 25

PXR 20
## A.1.3 QR Code Display Table

<table>
<thead>
<tr>
<th>Region</th>
<th>Breaker Frame</th>
<th>Product Website</th>
<th>Support Phone Number or Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMER</td>
<td>Magnum</td>
<td><a href="http://www.eaton.com/magnum">www.eaton.com/magnum</a></td>
<td>1-800-809-2772</td>
</tr>
<tr>
<td></td>
<td>NF/RF ICCB</td>
<td><a href="http://www.eaton.com/powerdefense">www.eaton.com/powerdefense</a></td>
<td>1-800-809-2772</td>
</tr>
<tr>
<td>SE Asia</td>
<td>Magnum</td>
<td><a href="http://www.eaton.com/izmwi-ea">www.eaton.com/izmwi-ea</a></td>
<td>65 6825 1741</td>
</tr>
<tr>
<td></td>
<td>NF/RF ICCB</td>
<td><a href="http://www.eaton.com/izmx-ea">www.eaton.com/izmx-ea</a></td>
<td>65 6825 1741</td>
</tr>
<tr>
<td>China</td>
<td>Magnum</td>
<td><a href="http://www.eaton.com.cn/izm9799">www.eaton.com.cn/izm9799</a></td>
<td>1-800-988-1203</td>
</tr>
<tr>
<td></td>
<td>NF/RF ICCB</td>
<td><a href="http://www.eaton.com.cn/izmx">www.eaton.com.cn/izmx</a></td>
<td>1-800-988-1203</td>
</tr>
</tbody>
</table>
A.2 Test and Password Protect

From "Test" Screen on Next Page...

For Password Reset see Section A.9.1...

To "Test" Screen on Next Page...

Password is right? 
Yes
No

Submit

In= 200

In= 200

In= 200

In= 200

In= 200

In= 200

In= 200

In= 200

In= 200

In= 200

In= 200

In= 200

In= 200

In= 200

In= 200

In= 200

In= 200

In= 200

In= 200

In= 200

In= 200

In= 200

In= 200

In= 200
Screen navigation guide for 20/25 trip unit

From "Password Protect" on Previous Page...

To Main Menu on Previous Page...

Note: If the Trip time is 0, LCD will display 0 sec. If the Trip time is not 0, it can display trip time.

In= 200

Opening is not allowed!

√ ZSI

Remote Test

Local

Test Menu

Trip Time

Current

0                   A

0                A

√ ZSI

Remote Test

Main Menu

Test Menu
Screen navigation guide for 20/25 trip unit

Continued from Previous Page...

Go to Password Protect. Edit and Reset Display.

Note: If user adjusts the rotary switch, LCD screen will jump to this screen. Waiting for 10 seconds or pressing the up/down/enter button can clear the screen and bring the user back to the Main Menu.
A.3.1 Communication Settings

From Setting - Communication...
A.3.1 (Continued) Communication Settings

A.3.2 Difference in Settings with and without Modbus
A.3.3 Setting Menu Sequence

If the trip unit has the Ground Fault function:

The Setting Menu:
- Language
- Communication
- Long Delay Curve
- Ground Fault
- Neutral
- Power Feed
- ZSI
- Maintenance Mode
- Edit Password
- Set Time
- Switch Config.

If the trip unit has no Ground Fault function:

The Setting Menu:
- Language
- Communication
- Long Delay Curve
- Neutral
- Power Feed
- ZSI
- Maintenance Mode
- Edit Password
- Set Time
- Switch Config.

If the trip unit has no ARMs function:

The Setting Menu:
- Language
- Communication
- Long Delay Curve
- Ground Fault
- Neutral
- Power Feed
- ZSI
- Edit Password
- Set Time
- Switch Config.

If the trip unit has no ARMs and no GF function:

The Setting Menu:
- Language
- Communication
- Long Delay Curve
- Neutral
- Power Feed
- ZSI
- Edit Password
- Set Time
- Switch Config.
A.4 Internal Modbus

Screen navigation guide for 20/25 trip unit
A.4.1 External Modbus

A.5 INCOM
A.6 Ethernet
A.7 Profibus
A.8 Diagnostics
Continued from Previous Page...

Diagnostics

Overload

Operation

Last Operation

Diagnostics

Temperature

Continued on Next Page...
Continued from Previous Page...

- Diagnostics
  - Run Time
  - Reset
  - Days: 0
  - Hours: 0
  - Minutes: 0
  - Inv: 200

- Diagnostics
  - Next Menu
  - Run End
  - In: 200
A.9 Edit Password

From Password Reset in Section A.9.1...

Continued in "Password Edit" on Next Page...

To Password Reset to Default Sub-Function in Section A.9.1...

Continued in "Password Edit" on Next Page...

From Password Reset in Section A.9.1...
A.10 Reset

Screen navigation guide for 20/25 trip unit
A.10.1 Reset Difference Between PXR 20 and PXR 25

\[\text{Reset Energy} \quad \uparrow \quad \text{Main Menu} \quad \downarrow \quad \text{Energy} \quad \text{In= 200} \quad \text{V 25 \, \text{EN}}\]

\[\text{Reset Diag.} \quad \uparrow \quad \text{Main Menu} \quad \downarrow \quad \text{Diag.} \quad \text{In= 200} \quad \text{V 25 \, \text{EN}}\]

\[\text{Reset Max/Min} \quad \uparrow \quad \text{Main Menu} \quad \downarrow \quad \text{Max/Min} \quad \text{In= 200} \quad \text{V 25 \, \text{EN}}\]
A.11 Trip Alarm

Trip or Alarm Happened Any Time

Trip Happened?

Trip: Alarm
YES
NO

Minor Alarm?

Alarm
YES
NO

Trip or Alarm Happened Any Time
Note: There is support for displaying 200 event summaries, 10 trip events, 10 alarm events, and 10 time change events at max.

Summary #1 is the latest event, and summary #200 is the oldest. This is the same for trips, alarms, and time changes.

If there are only 100 summary events stored in the FRAM, the LCD screen will only display 100 summaries. This is the same for trips, alarms, and time changes.
A.12.3 Trip Event Cause Definition Table.

<table>
<thead>
<tr>
<th>Cause Definition</th>
<th>English Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>Instantaneous</td>
<td>Instantaneous</td>
</tr>
<tr>
<td>AUX-Power Under Power</td>
<td>Low AUX-Power</td>
</tr>
<tr>
<td>Operations Counts</td>
<td>Breaker Health</td>
</tr>
<tr>
<td>Long Delay</td>
<td>Long Delay</td>
</tr>
<tr>
<td>Short Delay</td>
<td>Shoft Delay</td>
</tr>
<tr>
<td>Phase Currents Near Pickup, Highload Alarm</td>
<td>High Load</td>
</tr>
<tr>
<td>Fixed Hardware Inst.</td>
<td>Hardware Inst.</td>
</tr>
<tr>
<td>Setpoints Error</td>
<td>Setpoints Error</td>
</tr>
<tr>
<td>Over Temperature</td>
<td>Over Temp</td>
</tr>
<tr>
<td>Long Delay Neutral Over Current</td>
<td>Neu. Long Delay</td>
</tr>
<tr>
<td>Ground Fault</td>
<td>Ground Fault</td>
</tr>
<tr>
<td>Non-Volatile Memory Error</td>
<td>NV Memory</td>
</tr>
<tr>
<td>Breaker Mechanism Fault</td>
<td>Mechanism</td>
</tr>
<tr>
<td>Watchdog Fault</td>
<td>Watchdog</td>
</tr>
<tr>
<td>Making Current Release</td>
<td>MCR</td>
</tr>
<tr>
<td>Coil Supervision</td>
<td>TA Open</td>
</tr>
<tr>
<td>Diagnostic Warning #1 (A/D Calibration)</td>
<td>Diag. Warning</td>
</tr>
<tr>
<td>MM Mode</td>
<td>ARMs</td>
</tr>
<tr>
<td>Normal</td>
<td>Normal</td>
</tr>
<tr>
<td>Control via Communications</td>
<td>Control Via Comm</td>
</tr>
<tr>
<td>Calibration</td>
<td>Calibration Error</td>
</tr>
<tr>
<td>Real Time Clock</td>
<td>RTC</td>
</tr>
<tr>
<td>Local Test from LCD</td>
<td>Open from LCD</td>
</tr>
</tbody>
</table>
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