# Table of contents

<table>
<thead>
<tr>
<th>Part of product</th>
<th>Sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designation for 6U, 1/2x19&quot; casing with 1 TRM slot</td>
<td>2</td>
</tr>
<tr>
<td>Designation for 3U, 1/1x19&quot; casing with 1 TRM slot</td>
<td>3</td>
</tr>
<tr>
<td>Communication module (COM)</td>
<td>4</td>
</tr>
<tr>
<td>Power supply module 48–125 VDC (PSM)</td>
<td>5</td>
</tr>
<tr>
<td>Power supply module 110–250 VDC, 100–240 VAC (PSM)</td>
<td>6</td>
</tr>
<tr>
<td>Transformer module (TRM)</td>
<td>7</td>
</tr>
<tr>
<td>Binary input/output module (BIO)</td>
<td>8</td>
</tr>
<tr>
<td>Binary input/output module (BIO)</td>
<td>9</td>
</tr>
</tbody>
</table>
Designation for 6U, 1/2x19" casing with 1 TRM

<table>
<thead>
<tr>
<th>Module</th>
<th>Slot</th>
<th>Terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDM</td>
<td>pCOM</td>
<td>X0, X1, X9, X304</td>
</tr>
<tr>
<td>PSM</td>
<td>pPSM</td>
<td>X307, X309, X410</td>
</tr>
<tr>
<td>TRM</td>
<td>p2</td>
<td>X101, X102</td>
</tr>
<tr>
<td>BIO</td>
<td>p3</td>
<td>X321, X324</td>
</tr>
<tr>
<td>BIO</td>
<td>p4</td>
<td>X326, X329</td>
</tr>
<tr>
<td>BIO</td>
<td>p5</td>
<td>X331, X334</td>
</tr>
<tr>
<td>BIO</td>
<td>p6</td>
<td>X336, X339</td>
</tr>
</tbody>
</table>

p = Position
Rear view slot

1/1x19"

pPSM - p2 - pCOM

- p6 - p5 - p4 - p3

p = Position

Rear view terminal

Designation for 3U, 1/1x19" casing with 1 TRM

<table>
<thead>
<tr>
<th>Module</th>
<th>Slot</th>
<th>Terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM</td>
<td>pCOM</td>
<td>X0, X1, X8, X9, X304</td>
</tr>
<tr>
<td>TRM</td>
<td>p2</td>
<td>X101, X102</td>
</tr>
<tr>
<td>PSM</td>
<td>pPSM</td>
<td>X317, X319, X420</td>
</tr>
<tr>
<td>BIO</td>
<td>p3</td>
<td>X321, X324</td>
</tr>
<tr>
<td>BIO</td>
<td>p4</td>
<td>X326, X329</td>
</tr>
<tr>
<td>BIO</td>
<td>p5</td>
<td>X331, X334</td>
</tr>
<tr>
<td>BIO</td>
<td>p6</td>
<td>X336, X339</td>
</tr>
</tbody>
</table>

Based on

Prepared 2011-08-23
Agnete Ryh

Approved 2011-11-30
Patrick Nyback

Title
Connection Diagram
RQR50 (1Ph/TCB/298) B11A

ANSI symbols

Doc.no.
1MRK006502-SC

ABB AB
Communication module (COM)

Ethernet, RJ45 connection only for LHMI and PC-tools

Ethernet, LC optical

RS485_GNDC    1
RS485_RX      2
RS485_TERM    3
RS485_TX      4
RS485_SIG_GND 5
RS485_GND     6

IIRG-B        7
IIRG-B_GNDC   8
IIRG-B        9
IIRG-B_GNDC   10

Optical serial port, ST connector

Observe polarity sequence
Power supply module 48–125 VDC (PSM)

Configuration plant adopted

T1  BRKL_TR_A
T2  BRKL_TR_B
T3  BRKL_TR_C
T4  AUTO_SC_OK
T5  MAN_SC_OK
T6  GENERAL_ALARM
S1  SPARE
S2  SPARE
S3  GENERAL_TRIP

Auxiliary supply EL
Protective earth
Normal
Foil

Observe polarity sequence

Rock casing =XA =XB =XC
6U, 1/2x19" X307 X410 X309
3U, 1/1x19" X317 X420 X319
Transformer module (TRM)

Compression or ringlug terminals

- Indicates polarity mark. Note that internal polarity can be adjusted by setting of analog input CT neutral direction and or on SMI pre-processing function blocks.
Binary input/output module (BIO)

Observe polarity sequence

Configuration plant adapted

C1  TRIP_Phi
C2  TRIP_Phi
C3  PHI_JI
S1  JPH_JI
S2  JPH_JI
S3  JPH_JI
S4  SPARE
S5  BAT_SUPRV_AL
S6  BREAKOUT
B01  BKR_VT_OK
B02  SYNC1_VT_OK
B03  SYSN2_VT_OK
B04  189.52a
B05  189.52a
B06  289.52a
B07  289.52a
B08  289.52a
B09  289.52a

Doc.no. 1MRK006502-SC

ABB AB
Binary input/output module (B10)

Observe polarity sequence.