SIL-DECLARATION OF CONFORMITY

Manufacturer: ABB Automation Products GmbH
Address: Schillerstraße 72 - D-32425 Minden
Product name: Positioner TZIDC – TZIDC-200 (4...20 mA) und Shutdown Modul
Valid from: Software-Revision 3.00

Functional Safety according to IEC 61508/61511

We as the manufacturer declare that the a.m. products are suitable for the use in safety related application up to SIL 2.
A proven-in-use assessment according to IEC61511 is to be conducted. The attached safety instructions must be observed.
The assessment of the safety critical and dangerous random error results according to IEC61508:2000 provide in case of an annual function test the following parameters:

SIL (Safety integrity level): 2
HFT (Hardware fault tolerance): 0 (one channel application)

<table>
<thead>
<tr>
<th>Product</th>
<th>SFF</th>
<th>PFDav</th>
<th>$\lambda_{dd} + \lambda_{s}$</th>
<th>$\lambda_{du}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>TZIDC / TZIDC-200 as shutdown module</td>
<td>94%</td>
<td>1.76 * 10^{-4}</td>
<td>718 FIT</td>
<td>40 FIT</td>
</tr>
<tr>
<td>TZIDC / TZIDC-200 with supply current of 0 mA</td>
<td>94%</td>
<td>1.76 * 10^{-4}</td>
<td>651 FIT</td>
<td>40 FIT</td>
</tr>
</tbody>
</table>

2014-03-24

Date

i. V. Tilo Merlin
Head of Research & Development

i. V. Manfred Klüppel
Head of Quality Assurance