INSTALLATION INSTRUCTIONS
& CONDITIONS FOR SAFE USE

II 2 GD Ex eb IIC

TERMINAL TYPE: ZB SERIES NSCH

DEMKO 03ATEX136208 U
IECEx ULD 13.0005U
Notified Body No. 0539

Standards: EN 60079-0:2009 EN 60079-7:2007
IEC 60079-0:2007 IEC 60079-7:2007

General Information:
Busbar assembly type SH… or WEW…, with clamping yokes type ZB…, NSCH for the connection of copper conductors in enclosures in type of explosion protection increased safety “e”. The following assembly elements are covered in this certification: rail mounting clamps type SH1, SH2, SH2S, SH3, WEW35/1 or WEW 35/2 and clamping yokes type ZB…; NSCH (as listed below), to be used with protective conductor mounting rails.

Rating Data:
Operating temperature range -60°C … +180°C (for ZB, NSCH without insulating material)
Operating temperature range -60°C … +100°C (for ZB with PA66 insulating material)
Operating temperature range -60°C … +80°C (for SH1 and SH3 with PA66 insulating material)
Operating temperature range -60°C … +130°C (for SH2 with KRG insulating material)
Operating temperature range -60°C … +100°C (for WEW with Wemid insulating material)

<table>
<thead>
<tr>
<th>Type</th>
<th>Rated conductor cross section in mm² (AWG)</th>
<th>Conductor cross section rigid in mm² (AWG)</th>
<th>Conductor cross section flexible in mm² (AWG)</th>
<th>Maximum current in A</th>
<th>Tightening torque in Nm</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZB4, ZB4K, ZB4G, ZB4/6, ZB4/6K</td>
<td>4 (12)</td>
<td>Min. 0.5 (20) Max. 6.0 (10)</td>
<td>Min. 0.5 (20) Max. 4.0 (12)</td>
<td>28*</td>
<td>0.5</td>
</tr>
<tr>
<td>ZBE6, ZBE6K</td>
<td>6 (10)</td>
<td>Min. 1.0 (20) Max. 10 (8)</td>
<td>Min. 1.5 (20) Max. 10 (8)</td>
<td>36*</td>
<td>1.2</td>
</tr>
<tr>
<td>ZB10</td>
<td>10 (8)</td>
<td>Min. 1.5 (16) Max. 10 (8)</td>
<td>Min. 1.5 (16) Max. 10 (8)</td>
<td>50*</td>
<td>1.2</td>
</tr>
<tr>
<td>ZB16, ZB16/6K, ZB16/6K, ZB16/6, ZB16K, ZB16/6</td>
<td>16 (6)</td>
<td>Solid: Min. 2.5 (14) Max. 16 (6)</td>
<td>Min. 2.5 (14) Max. 16 (6) Stranded: Min. 16 (6) Max. 25 (4)</td>
<td>66*</td>
<td>1.2</td>
</tr>
<tr>
<td>ZB35, ZB35K</td>
<td>35 (2)</td>
<td>–</td>
<td>Min. 16 (64) Max. 35 (0) Stranded: Min. 16 (6) Max. 50 (4)</td>
<td>109*</td>
<td>2.5</td>
</tr>
<tr>
<td>NSCH</td>
<td>2,5 (14)</td>
<td>2,5 (14)</td>
<td>2,5 (14)</td>
<td>24 per clamping unit; 72 NSCH</td>
<td>2</td>
</tr>
</tbody>
</table>

* Note: If smaller cross sections than the rated cross section are used, the belonging lower current has to be laid down in the IECEx/EC-Type Examination Certificate of the complete apparatus.

Mounting instructions:
The Busbar assembly type SH… or WEW…, with clamping yokes type ZB…, NSCH are suitable for application in enclosures in atmospheres with flammable gases and combustible dust. For use in flammable gases these enclosures must satisfy the requirements according to IEC/EN60079-0 and IEC/EN60079-7. For use in combustible dust these enclosures must satisfy the requirements according to IEC/EN60079-0 and IEC/EN60079-31.

In combination with other terminal block series and sizes and if other accessories are used, the applicable creepage and clearance distances shall be met. Regarding the use of accessories the instructions of the manufacturer must be followed.

Schedule of Limitations:
The Earthing and Neutral Busbar assembly described above is considered to form one component, with Ex marking applied to the busbar holders type SH and WEW.. If used independently, the above mentioned parts are not covered by this certificate.

The maximum temperature rise was determined as 14,2K (for busbar system type ZB).
The maximum temperature rise was determined as 23,9K (for busbar system type NSCH).