VIBCODE®

Test instructions

After repairing a VIBCODE sensor, the functionality of the coding unit and vibration sensor must be tested.

1. Preparation
To test the coding unit you will need:
– VIBCODE encoding tool, VIB 8.962
– VIBCODE demo set, VIB 8.670 SET
– Coding ring with coded number: 2662
– Coding ring with coded number: 5529

To test the vibration sensor you will need:
– Vibration calibrator, VC10/ VC13/ VC20 or similar
– Adapter for vibration calibrator, M8/90° - M5, VIB 8.742
– VIBCODE measuring point, VIB 8.680 SET
– Coding ring with coded number: 1234

Required for both tests:
– Sensor cable, straight, VIB 5.437-2.9 or spiral cable, VIB 5.436
– VIBXPERT II instrument
– VIBCODE instructions, VIB 9.834.G
– VIBXPERT II instructions, LIT 53.201.EN
– VIBCODE coding rings, 25 pcs., VIB 8.563 A25

Prepare the coding rings
• Encode the three coding rings using the VIBCODE encoding tool as per the previous diagrams.
• Insert coding rings 2662 and 5529 into the VIBCODE demo set.
• Insert coding ring 1234 into the VIBCODE measurement point.

Prepare the VIBXPERT II
• Switch on VIBXPERT II.
• Enable the Multimode operating mode.
• Select the Acceleration measurement type in the Overall values tab.

• Press the MENU key.
• Select the option Task Manager.
• Select the Task “user”:
• Select Channel A.
• In the Sensor setup select “VIBCODE 2 Hz”.

2662
5529
1234
2. Coding unit
Verify that the numbers of the coding rings in the VIBCODE demo set are correctly identified. Start the previously set multimode vibration measurement and check that the VIBCODE number is displayed correctly on the measurement screen.

This procedure must be carried out for each VIBCODE measurement point at three different plug orientations, each offset by 120°, in order to cover all possible reading errors (Fig. 1).

Start the test
• Select the previously configured measuring task.
• Connect the VIBCODE sensor to the channel set for the measurement task.
• Plug the VIBCODE sensor into the first measurement point (2662) on the VIBCODE demo set (Fig. 2).
• Press the ENTER key to start the measurement. The VIBCODE number will appear in the header of the measurement screen.

• Enter the test result in the test report.
• Press the ESC key.
• Unplug the VIBCODE sensor, rotate it 120°, and plug it back into the same measurement point.
• Repeat the procedure at this and the next plug orientation (240°).
• Repeat the test procedure at the second VIBCODE measuring point (5529).

3. Vibration sensor
• Attach the VIBCODE measuring point 1234 to the vibration calibrator with the VIB 8.742 adapter.
• Position the vibration calibrator upright.
• Plug the VIBCODE sensor into the VIBCODE measuring point (Fig. 3).
• Switch on the vibration calibrator.
• Start the previously configured vibration measurement task. The measured vibration value must be within the predetermined measurement tolerance range (± 10%).

• Enter the measurement results in the test report and note whether the test was successful (Y/N).

• Save the settings.
• Press the ESC key twice to open the measurement tasks selection screen.

- Open the measurement setup and set the values shown below:

- Enter the test result in the test report.
- Press the ESC key.
- Unplug the VIBCODE sensor, rotate it 120°, and plug it back into the same measurement point.
- Repeat the procedure at this and the next plug orientation (240°).
- Repeat the test procedure at the second VIBCODE measuring point (5529).
Fig. 1: VIBCODE in three different plug orientations

Fig. 2: Test setup, coding unit

Fig. 3: Test setup, vibration sensor
Test report “VIBCODE”

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Coding unit

<table>
<thead>
<tr>
<th>Angle</th>
<th>2662 ✓/X</th>
<th>5529 ✓/X</th>
<th>Passed Y/N</th>
</tr>
</thead>
<tbody>
<tr>
<td>0°</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>120°</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>240°</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Vibration sensor

<table>
<thead>
<tr>
<th>Measured value r.m.s.</th>
<th>Target value / Tolerance</th>
<th>Passed Y/N</th>
</tr>
</thead>
<tbody>
<tr>
<td>m/s²</td>
<td>10 m/s² / ± 10%</td>
<td></td>
</tr>
</tbody>
</table>

General

Reviewer _________________________________________________________

Date ____________________________________________________________

VIBCODE serial number __________________________________________

Test passed (Y / N) _____________________________________________

Signature _____________________________________________________

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