

SB 55-103**Insulation Measurement Procedure for CEH E Motors**

2018-04-25

Rev. C

1 Scope and Target Group

⚠ WARNING

- ✓ Always refer to the user manual for additional information and safety warnings.
- ✓ Only perform this task if you are qualified to carry out the steps described below.
- ✓ Always make sure that the tasks described in this bulletin are intended for the equipment you are working on.
- ✓ If you are unsure about the workflow, steps or qualification, contact your TTS aftersales service contact.

Your aftersales service contact:

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2 Task

Measurement of the e motor insulation and the windings of the e motor of a CEH winch.

3 Preparation



WARNING

Danger of electric shock!

Make sure that the e motor is not connected to the power supply and that the power supply cannot be restored to the e motor during your work!

For the measurements, you will need the following tools:

- Screwdrivers
- Multimeter
- Insulation tester

NOTICE

Please fill in the table on page 6 of this document with the required information, such as:

- E-motor type
- E motor serial number
- Multimeter type
- Insulation tester type
- All measured values

4 Procedure

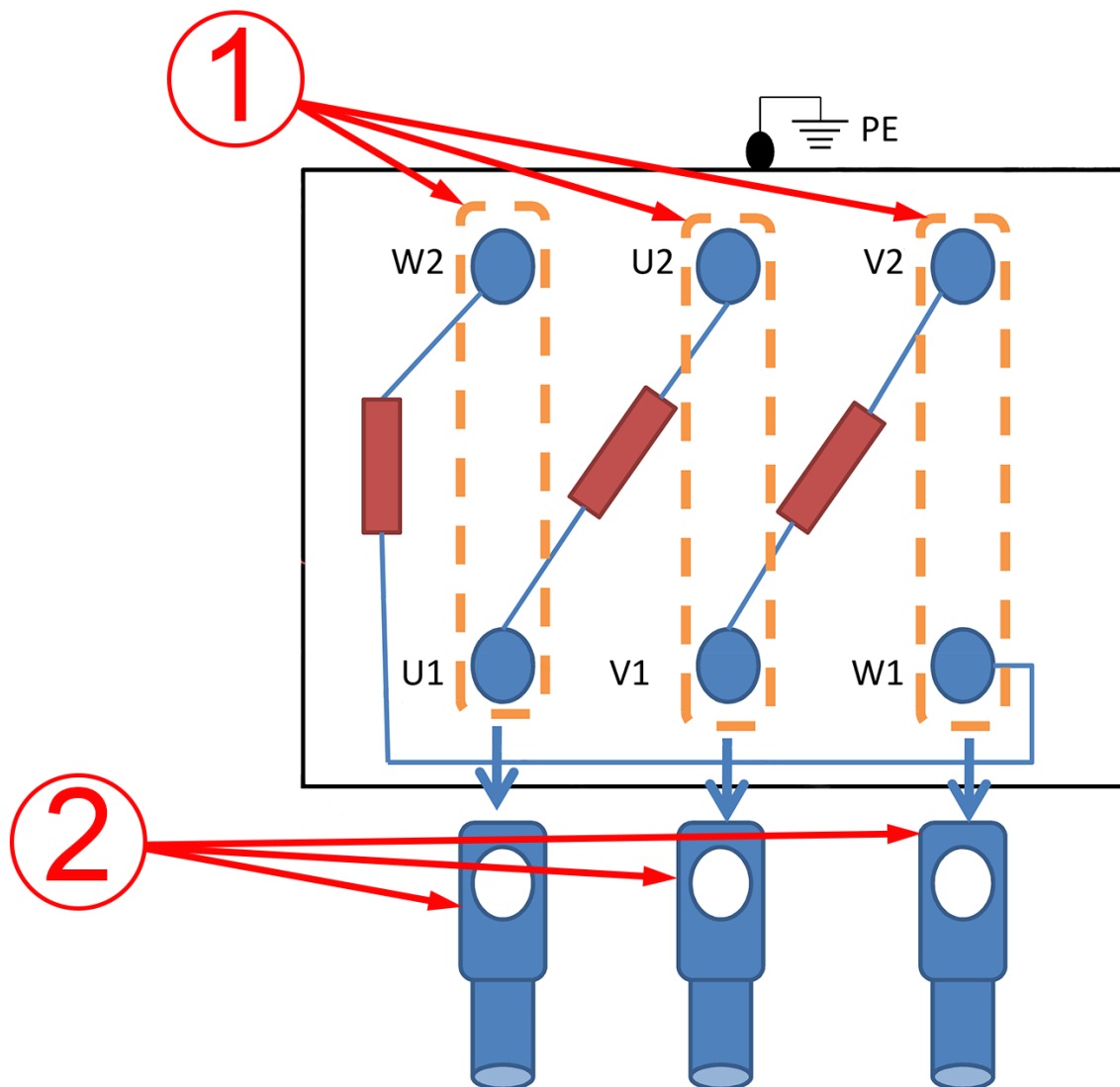


Figure 1: Remove connections

1. Remove all connectors for the Delta mode (see detail 1 in figure 1).
2. Screw off all cables that are connected to U1, V1, W1, U2, V2 and W2 (see detail 2 in figure 1.)

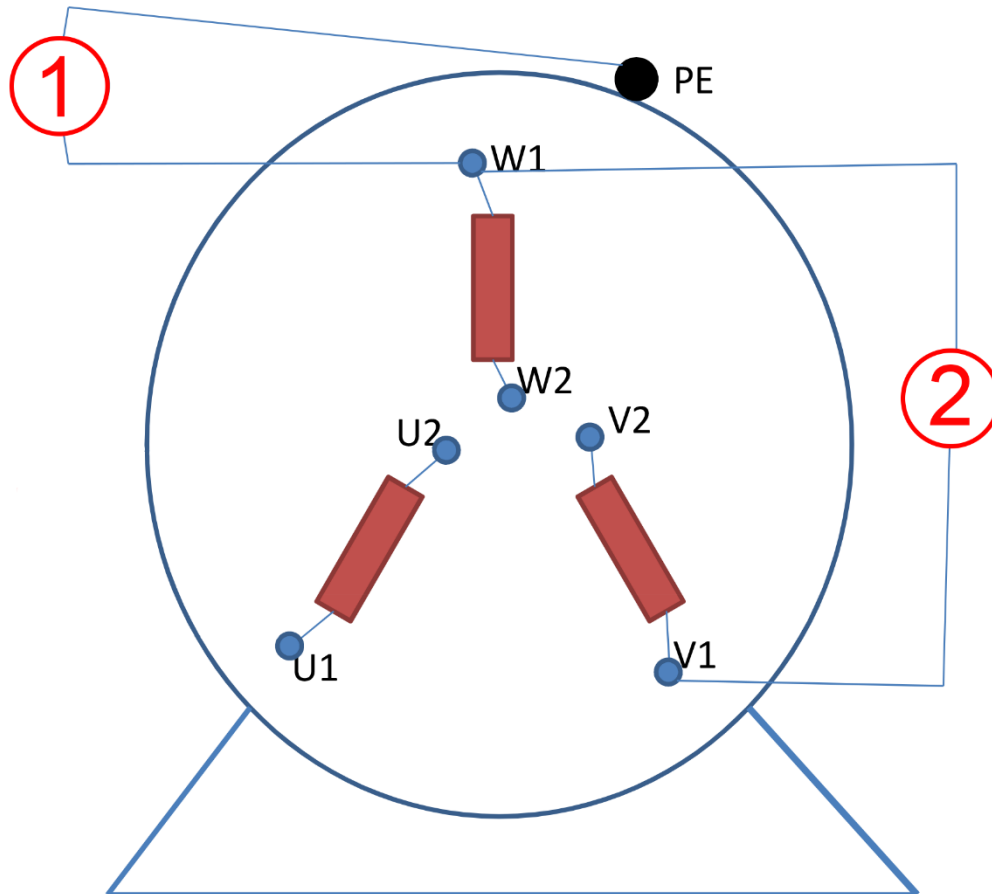


Figure 2: Measurement points

3. Test 1:
Using the Insulation tester, measure the insulation between the following points (refer to detail 1 in figure 2):

W1 → PE

U1 → PE

V1 → PE

Note down your results in the table on the last page.

4. Test 2:
Using the Insulation tester, measure the insulation between the following points (refer to detail 2 in figure 2):

W1 → V1

V1 → U1

U1 → W1

Note down your results in the table on the last page.

5 Tables

5.1 General Data

Date	Vessel Name	IMO	Technician

5.2 E Motor

Supplier	Type	Serial number	Year

5.3 Measurement Results

Test	Test points	Resistance (Ω)
1	U1 → PE	
	V1 → PE	
	W1 → PE	
2	W1 → V1	
	V1 → U1	
	U1 → W1	

5.4 Test Equipment

Test Equipment	Producer	Type	Year
Insulation tester			