

SB 66-102**Replacement of VMB3 Load Measuring Card by WATTS/SUTTS Card**

2018-05-03

Rev. B

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:

TTS Marine GmbH
An der Reeperbahn 6
D-28217 Bremen
Germany

Telephone: +49(421) 520 08-0
Telefax : +49(421) 52008-749
E-Mail: service@ttsgroup.com

2 Target

This document shows how to replace a VMB3 load measuring card by the new WATTS/SUTTS load measuring card.

NOTICE

The old VMB3 card can be replaced by the WATTS/SUTTS card without difficulties. The new card exactly fits into the housing of the old VMB3 card.

NOTICE

The WATTS/SUTTS card will be delivered with all required settings already performed by TTS. Therefore the new card can be used instantly without further adjustments.

3 Preparation

The retrofit package contains:

- WATTS amplifier card (pre-adjusted by TTS)
- SUTTS module
- Washer (1x)
- Nut (1x)
- Rubber buffer (1x)
- Connecting lead (2x; red / white)

You need the following tools:

- Screwdriver
- Wrench

Hazard of Electric Shock!



Switch off all power supply in the switch cabinet before starting work!

Make sure that no-one switches on the power supply while you are replacing the card!

4 Removal of VMB3 Card

- Before removing VMB3-card, disconnect all cables from the terminal strips. Refer to figures 1 and 2.
 - a. Disconnect the power supply.
 - b. Disconnect the analogue output signals VMB3
 - c. Disconnect load pin.

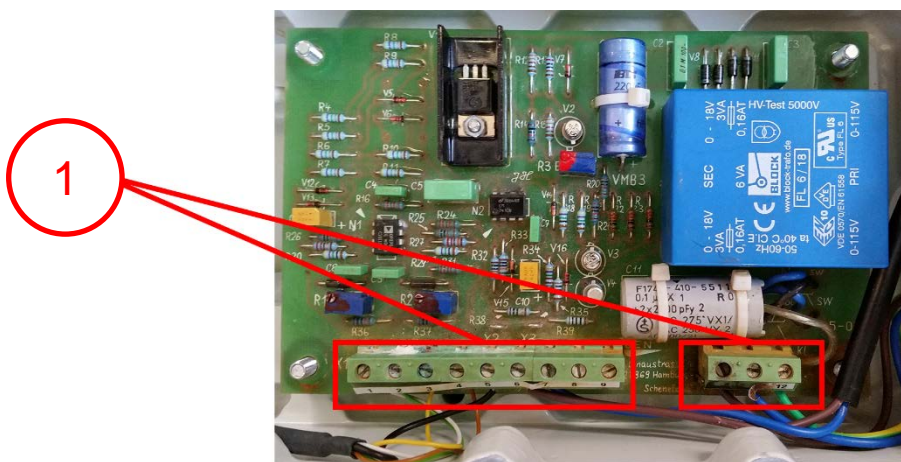


Figure 1

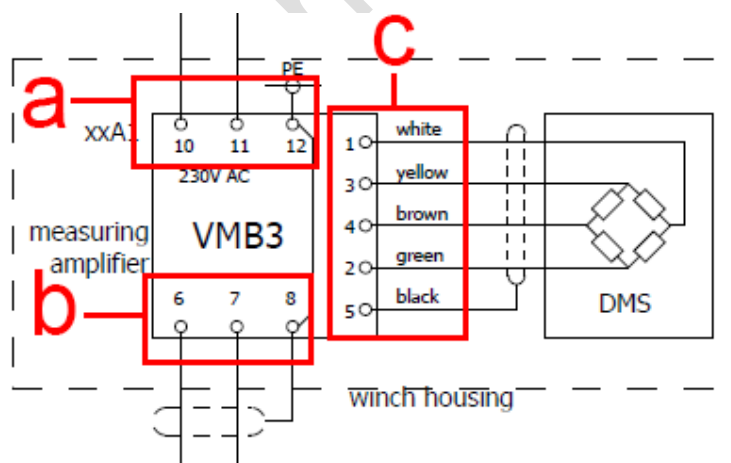


Figure 2

- Loosen the 4 mounting nuts (refer to figure 3, detail 2).
- Remove the nuts and the washers.
- Gently pull out the VMB3 card.

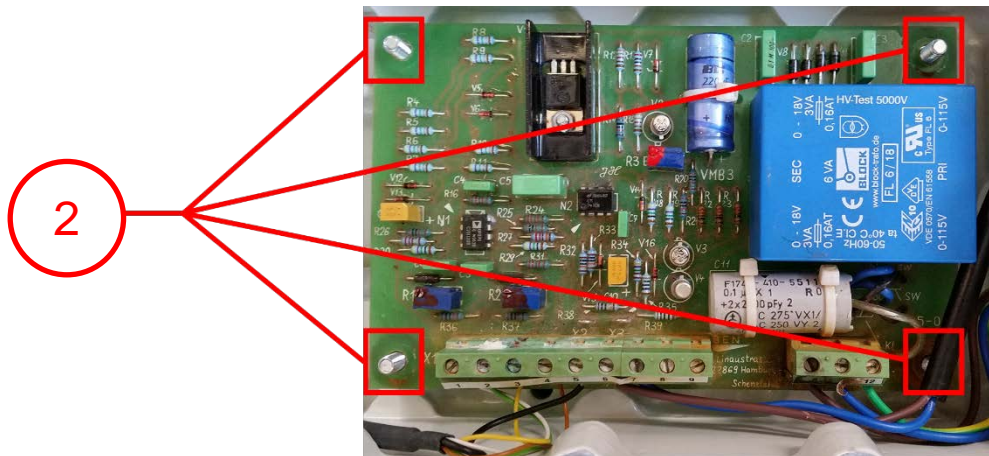


Figure 3

NOTICE

Do not throw away the nuts and washers, as you will need them for mounting the new card.

- Remove the standstill heater in the housing.

NOTICE

As the WATTS/SUTTS card has a built-in standstill heater, the old heater is no longer required.

5 Mounting the WATTS/SUTTS

Hazard of Damage!

**WARNING**

The WATTS/SUTTS card requires a power supply of 24VDC. Connecting the card to 230V will destroy the card!

- Carefully place the WATTS card on the bolts in the housing
- Screw the rubber buffer into the threaded hole (see detail 3 in figure 4)

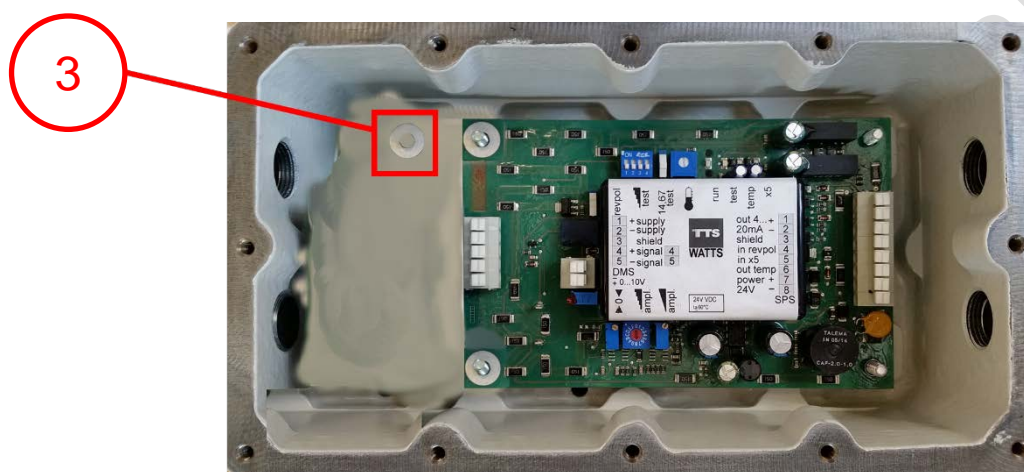


Figure 4

- Fasten the WATTS card with two washers and nuts (see detail 4 in figure 5). Leave the other 2 bolts unscrewed.

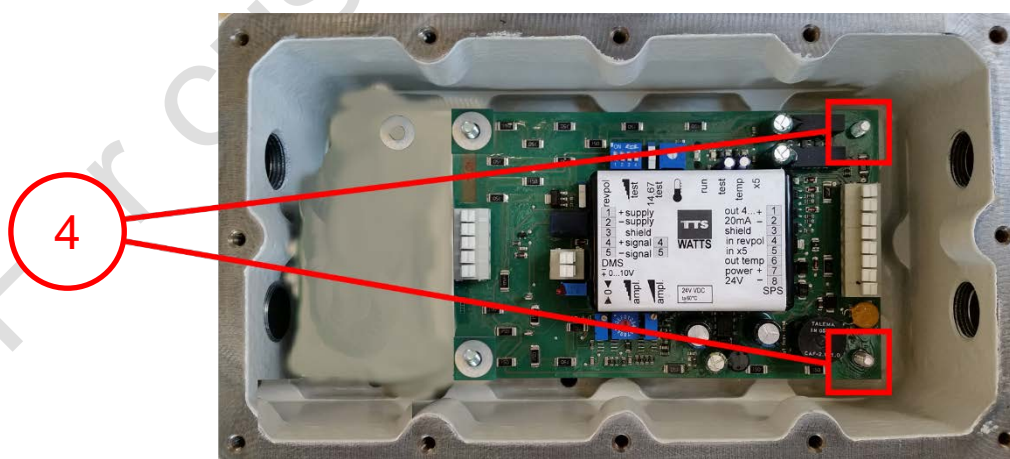


Figure 5

- Now mount the SUTTS card on top of the WATTS card.

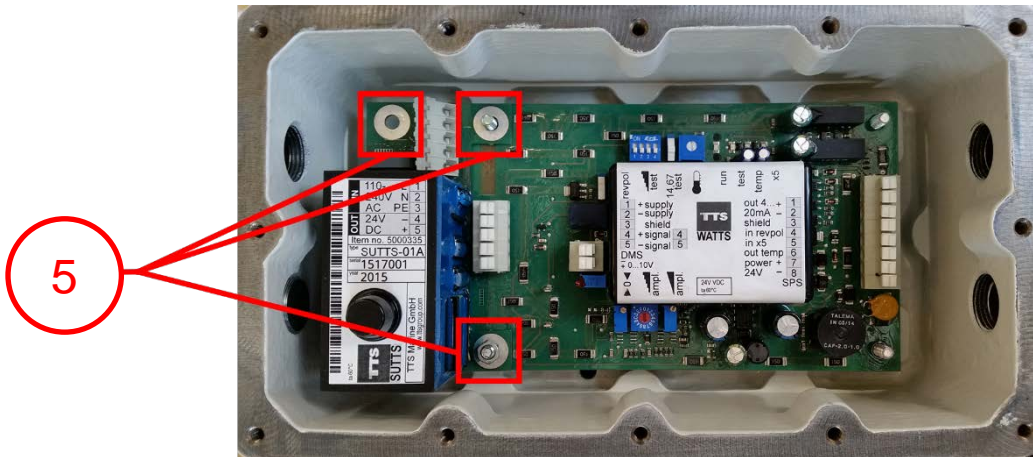


Figure 6

- Now fasten the SUTTS module with the remaining washers and nuts (see detail 5 in figure 6).

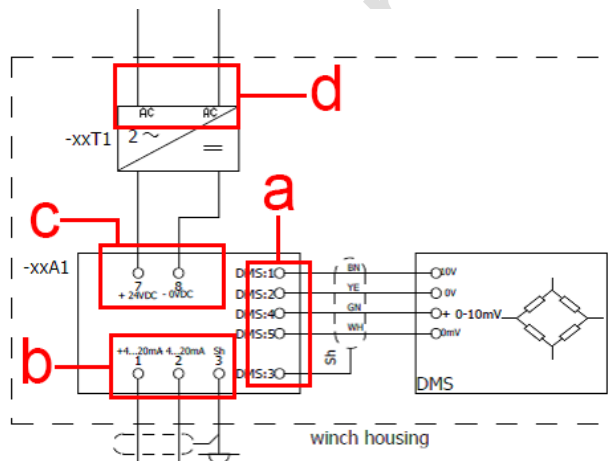


Figure 7

- Connect all cables to the WATTS/SUTTS card, including the 2 new cables. Refer to figure 7. Connect the cables as follows:
 - d. Connect load pin (a).
 - e. Connect the analogue output signals WATTS (b).
 - f. Connect connecting leads between SUTTS and WATTS (24VDC) (c).
 - g. Connect power supply to SUTTS (d).