

Installation Instructions

MARSIC300

Ship Emission Measuring Device

SFU Gas Sampling Unit



Described product

Product name: MARSIC300

Manufacturer

Endress+Hauser SICK GmbH+Co. KG
Bergener Ring 27
01458 Ottendorf-Okrilla
Germany

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Original document

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1 Important Information

1.1 About this document

**NOTICE:**

The retrofitting may only be carried out by trained personnel!
For this purpose, it is important to be familiar with the MARSIC300.

These instructions are Retrofit Instructions and describe the service work required for installation of the Retrofit Kit SFU.

The Retrofit Instructions are only to be used in combination with the valid Operating Instructions and additional documents listed below.

| Part Number | Document |
|-------------|------------------------------------------------------|
| 8029898 | Operating Instructions MARSIC300 |
| 8029819 | Operating Instructions SFU Gas Sampling System |
| 9236781 | MARSIC300 circuit diagram (see system documentation) |

**NOTICE:**

Always read the Operating Instructions before starting any work!
Be sure to observe all safety and warning information!

1.2 Intended use

The Retrofit Kit SFU is provided for:

- Exchanging the hexagon socket screws with the new one-way safety screws
- Exchanging the handle with a new improved handle
- Affixing information signs on the analyzer cabinet and SFU

Extra screws, washers and distance sleeves are also included.

2 Tools and materials

The following tools and materials are required for installation:

- Heat resistant gloves
- Hex Key for M6 screw (wrench width 5 mm; acc. ISO 4762)
- Slotted Screwdriver, dimensions: 1,6 x 10,0 x 200 mm
- Retrofit Kit SFU:
 - 2x one-way safety screw
 - 2x small ring washer
 - 2x large ring washer
 - 2x distance sleeve
 - 3x instruction signs
 - 1x handle

3 Installation



CAUTION:

Please use caution when applying these instructions as they may require advanced product knowledge.

3.1 Preparatory work

- 1 Switch the analyzer to "Stand-by":
 - ▶ Set „Maintenance signal“ to „On“.
 - ▶ Set „System maintenance“ to „Standby“.
- 2 Flush system for 10 minutes.
- 3 Shut down the SFU on the fuse inside the analyzer cabinet (see circuit diagram).
- 4 Let the probe cool down for about 30 minutes.

3.2 Sample filter unit

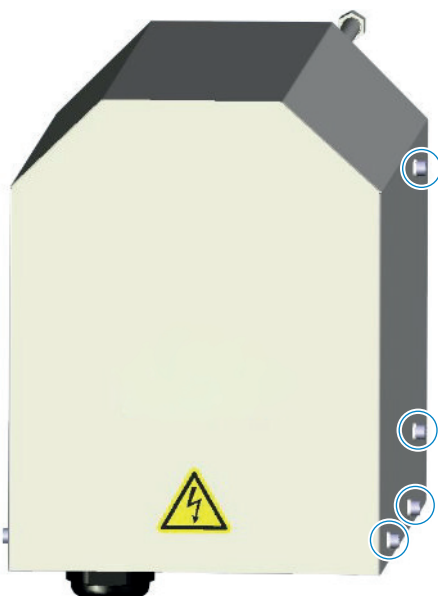


CAUTION:

Beware of hot surface! Use suitable protective gear!

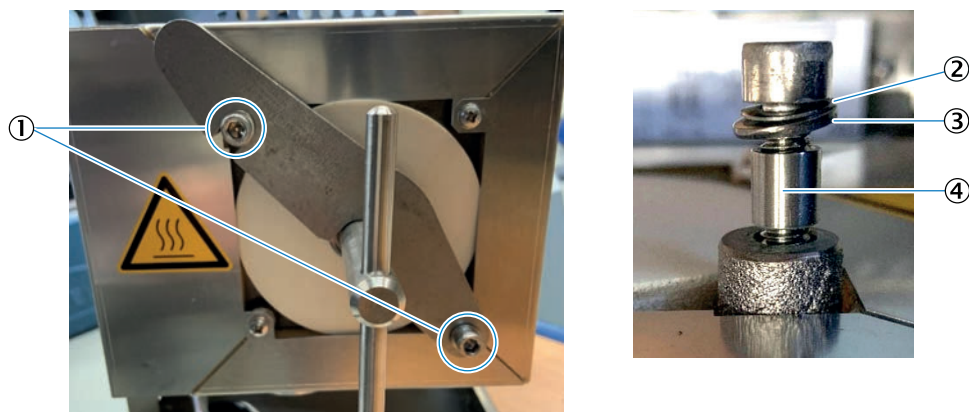
3.2.1 Remove the weatherproof cover

- 1 Remove the screws on the cover with the hex key.



- 2 Remove cover and set aside.

3.2.2 Exchange screws on the bracket

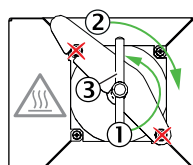


- ① hexagon socket screw
- ② small ring washer
- ③ large ring washer
- ④ distance sleeve

- 1 Unscrew the hexagon socket screw on the **left-hand side** first.
 - Carefully remove the screw including distance sleeve and ring washers.
 - Make note of the correct order.
- 2 Replace the hexagon socket screw with the one-way safety screw. Observe the correct order of the distance sleeve and ring washers.
- 3 Screw the one-way safety screw back into the probe.
- 4 Repeat the procedure with the second screw on the **right-hand side**.
Note: The distance sleeve will **not** come off the bracket.

3.2.3 Exchange the handle

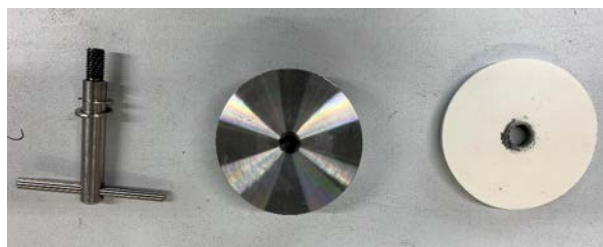
- 1 Remove the filter holder.



NOTICE: Do not remove screws!

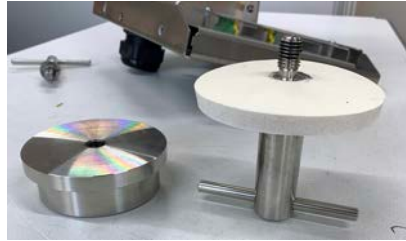
- Turn handle ① counterclockwise.
- Swivel mounting bracket ② to right.
- Pull out filter holder ③ using handle.

- 2 Disassemble the filter holder.
 - Unscrew the handle clockwise.
 - Remove the two parts of the cover.



-
- 3 Reassemble the filter holder using the **new larger** handle.
- ▶ Place the white ring on the handle.
 - ▶ Screw the handle including the white ring counterclockwise into the metal cover.

Step 1



Step 2



Result



NOTICE: O-ring, flat seals and filter must be exchanged!

▶ See SFU Operating Instructions for details.

- 4 Insert the filter holder back into the housing.
5 Turn handle clockwise until it tightens.
6 Swivel mounting bracket to the left to close.

3.3 Mounting of instruction signs



NOTICE: Instruction signs must be mounted as follows:

- Small „Service Information“ sign: analyzer cabinet
- Large „Service Information and Opening instruction“ sign: SFU cover
- Small „Opening instruction“ sign: SFU filter housing

3.3.1 Analyzer cabinet

- 1 Affix the **small** „Service Information“ sign next to the display.



Service Information!

Before performing maintenance,
watch the MARSIC tutorial
videos

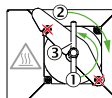
3.3.2 SFU

- 1 Affix the **large** „Service and opening instruction“ sign on the outer side of the cover.



Service Information!

Please watch the video
“MARSIC Tutorial:
Gas Sampling System
Main-tenance”



To open:

- [1] Notice: Do not remove screws!**
1. Turn handle ① counterclockwise.
 2. Swivel bracket ② to right.
 3. Pull out filter ③ using handle.

- 2 Affix the **small** „Opening instruction“ sign on the filter housing below the handle.



3.4 Final work

- 1 Place the cover back on the SFU and fasten with the four screws.
- 2 Power up the SFU by switching on the corresponding fuse in the analyzer cabinet.
- 3 Wait for the probe to heat up.
- 4 Execute a leakage test according to the MARSIC300 operating instructions.
- 5 Switch the analyzer back to "Measuring":
 - ▶ Set „System maintenance“ to „Abort Standby“.
 - ▶ Set „Maintenance signal“ to „Off“.

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