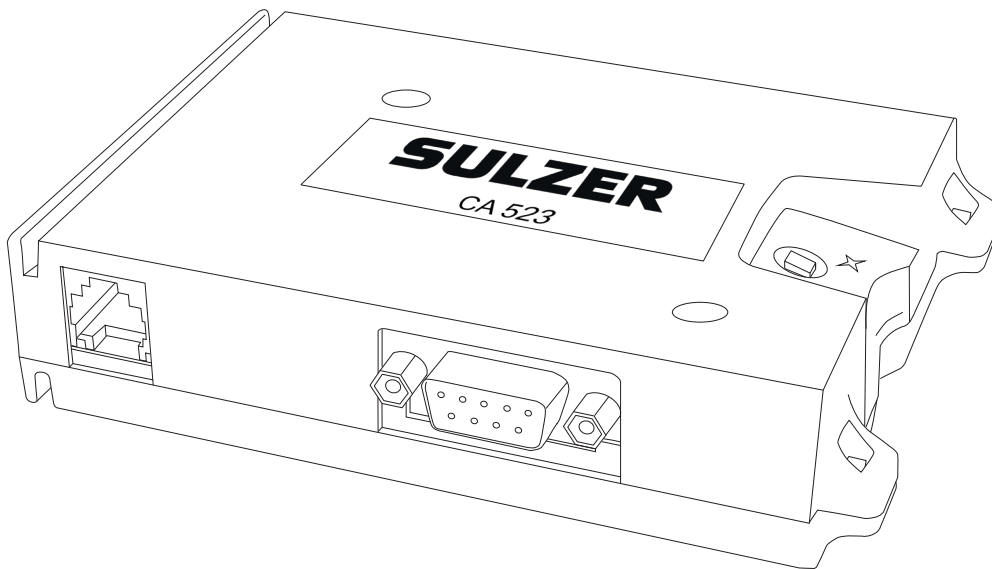

GSM-3G modem type ABS CA 523



Copyright © 2019 Sulzer. All rights reserved.

This manual, as well as the software described in it, is furnished under license and may be used or copied only in accordance with the terms of such license. The content of this manual is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by Sulzer. Sulzer assumes no responsibility or liability for any errors or inaccuracies that may appear in this book.

Except as permitted by such license, no part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, recording, or otherwise, without the prior written permission of Sulzer.

Sulzer reserves the right to alter specifications due to technical developments.



1.6 Power supply

NOTE: Normally the modem is supplied from same source as the control unit.

1.7 Mounting of DIN-rail holder

The DIN-rail holder is fastened with two screws enclosed in the kit to fit an universal 35 mm DIN-rail according to DIN EN 60715. There are two alternatives of mounting the holder depending on if the modem shall be mounted horizontally or vertically.

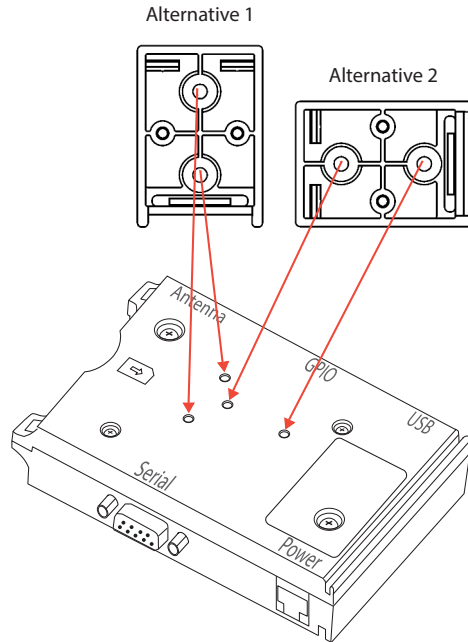


Figure 1-1 Mounting the holder for DIN-rail

1.8 Antenna

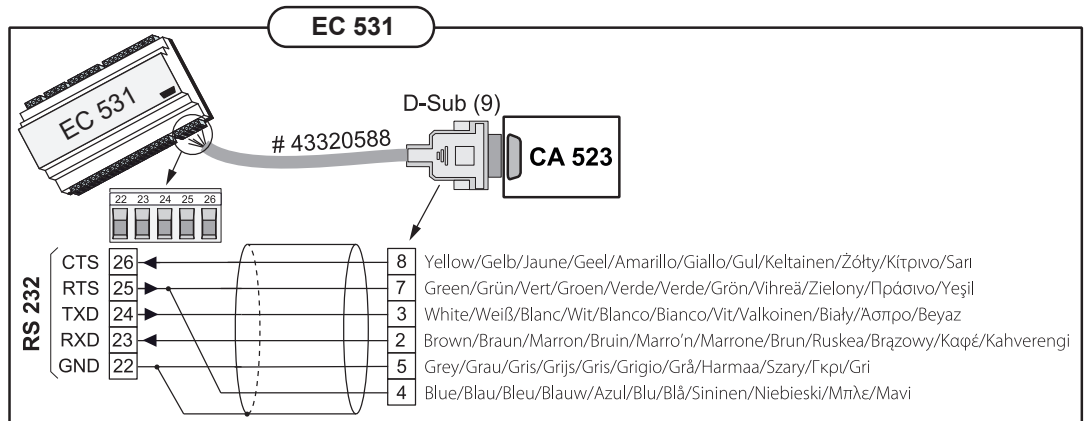
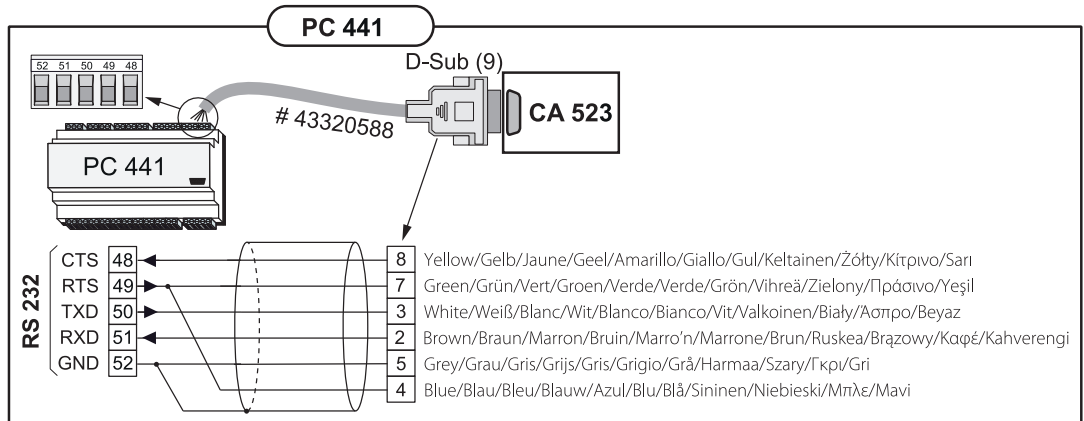
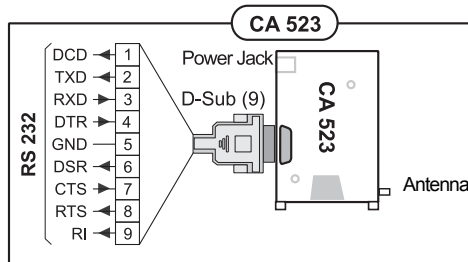
The enclosed antenna is a *Dipole type T* and is to be mounted on a nonmetallic surface. For metal cabinet; use the “Smartdisc”-antenna. The Dipole-T and the Smartdisc antenna cable must not be extended.

In the section of **4.1 Accessory List** are additional antennas which can be ordered from Sulzer if the receiving signal is not sufficient.

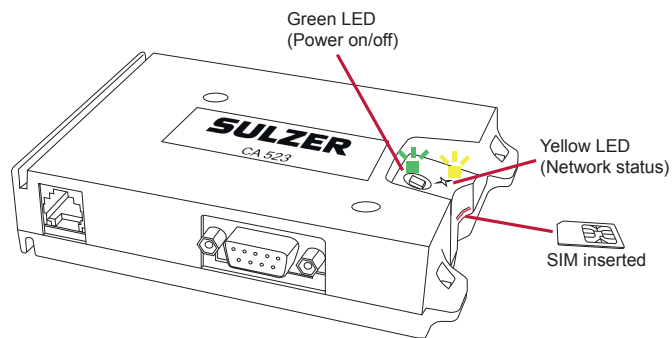
2 RS-232 communication and cable configurations

Use the communication cable (section 1.2 on page 3) to connect the substation. Follow the table below to ensure communication. The default parameters for the modem are; **115200** baud, **No** parity, **8** data bits, **1** stop bit.

| CA 523 D-Sub 9 (F) | D-Sub 9 (M) Cable color | Connections in controllers | | | | |
|-----------------------|----------------------------|----------------------------|--------|--------|--------|-----|
| | | Signal | EC 531 | PC 441 | PC 242 | PCx |
| 1 | Pink | | | | | |
| 2 | Brown | RXD | 23 | 51 | 23 | 47 |
| 3 | White | TXD | 24 | 50 | 24 | 48 |
| 4 | Blue | RTS | 25 | 49 | 25 | 49 |
| 5 | Gray | GND | 22 | 52 | 22 | 46 |
| 6 | - | | | | | |
| 7 | Green | RTS | 25 | 49 | 25 | 49 |
| 8 | Yellow | CTS | 26 | 48 | 26 | 50 |
| 9 | - | | | | | |



3 Installing the SIM card



The SIM - with the circuit side facing towards the Sulzer logo - is inserted by gently pushing it into the SIM card holder until it snaps hold. It is now protected from accidental removal. The SIM can be removed from the card holder by using a flat object such as a screwdriver to carefully press the inserted SIM until it snaps out again.

3.1 Status LEDs

- A green LED; Power ON
- A yellow LED blinking every 2nd second; Network search
- A yellow LED flashes every 4th second; Connected to 2G/3G network

3.2 About SIM cards


AquaWeb

Sulzer provides the AquaWeb SIM-cards. To connect your station to Aquaweb, follow the instructions enclosed with the SIM.

SIM card from other providers

Only telematics enabled SIM card is working. Consult your SIM provider of which functions has to be enabling on the subscription of SIM card.

4 Technical data

| | |
|-------------------------------|--|
| Five band 3G UMTS (WCDMA/FDD) | 800, 850, 900, 1900 and 2100 MHz |
| Quad band GSM | 850, 900, 1800 and 1900 |
| Ambient operating temperature | -30 to +65 °C (-22 to +149 °F) |
| Automatic thermal shutdown | Min: <-40 °C, Max: >+90°C (± 3°C) (Min. <-40 °F, Max: >194 °F) |
| Degree of protection | IP 20, NEMA: Type 1 |
| Housing material | PPO and PC |
| Mounting | With socket; DIN Rail 35 mm |
| Humidity | 0-90% RH non-condensing |
| Dimensions | H x W x D: 26 x 115 x 86 mm (1.0 x 4.5 x 3.5 inch) |
| Power supply | +10 – 30 VDC |
| Power consumption | < 5 W |
| Altitude | Max 2000 MASL or 6562 ft. AMSL |
| Compliance |  R&TTE, GCF, FCC, PTCRB, IC, UL |

Attention If the unit is used in a manner not described in this document the protection provided by the equipment may be impaired.

4.1 Accessory list

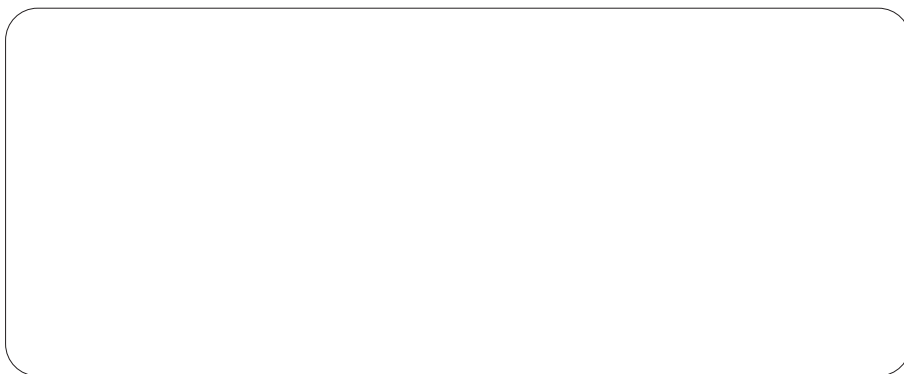
| Part number | Description | Note |
|-------------|----------------------------------|-----------------------------------|
| 43320588 | Modem cable with DB9M + open end | This part is included in 28007006 |

| Antenna Accessories | | |
|---------------------|--|--|
| Part number | Description | Note |
| 28007007 | Low profile Smartdisc (SMA-M) +1 dB, 2.5 m | Extension of the cable is not recommended |
| 28007008 | Align antenna kit +6.0 – +9.0 dBi | Included in kit: Antenna 10 m cable 2 m cable Wall and mast mounting equipment |
| 28007010 | Adapter FME-M to SMA-M | Only when CA 523 is connected to an old antenna |

4.2 Cleaning

How to clean the unit

Powers off the unit and only outside/front shall be cleaned by using a dry, soft cloth. A good choice would be the microfiber type of cloth and gently wipe the CA 523 unit on front in order not to scratch the overlay. If the dry cloth did not completely remove the dirt, do not press harder in an attempt to scrub it off. If necessary, moisten the cloth by adding a small amount of water with thin solution of mild detergent and try again. Never use detergent with polish or solvent which can have an impact of the plastic surface.



SULZER

Sulzer Pump Solutions Ireland Ltd., Clonard Road, Wexford, Ireland
Tel. +353 53 91 63 200, www.sulzer.com