

Operation manual

DS 50

Universal Display for panel mounting



connectible to dew point sensors
FA 415, FA 416, FA 410 und FA 300

Important information

The operating instructions must be read in full and carefully observed before starting up the device.

The manufacturer cannot be held liable for any damage which occurs as a result of non-observance or non-compliance with this manual.

Should the device be tampered with in any manner other than a procedure which is described and specified in the manual, the warranty is cancelled and the manufacturer is exempt from liability.

The device is destined exclusively for the described application.

CS Messtechnik offers no guarantee for the suitability for any other purpose and is not liable for errors which may have slipped into this operating manual. They are also not liable for consequential damage resulting from the delivery, capability or use of this device.

Area of application

Panel meter DS 50 can be used as an on-line display to show the current measurement values of dew point sensors FA 300 and flow sensor VA 300 from CS. DS 50 receives the display information from the sensor, the sensor need to be programmed accordingly (please specify the measurement value you want to display on the order). Typical applications are:

- > Dew point display in dryer
- > On-line volume dew point display mounted in a panel
- > Various applications where an economically priced display is required

The panel meter requires a power supply of 10 ... 30 VDC.

Safety instructions

Must be read before starting up the device!

Warning:

- Observe the measuring ranges of the connected sensor.
- Don't exceed the stated supply voltage.
- Observe permissible storage, transport and operating temperatures.
- Improper handling or use of force when opening the device cancels all warranty claims.
- Avoid condensation or water drops as it can cause malfunction.

Commissioning

DS 50 is a on-line display which can be used in connection with CS dew point sensors. As the physical unit to be displayed can vary please specify on the order which unit you would like to have displayed, so that the right label can be placed in front of DS 50 and the sensors can be programmed accordingly. We offer a selection of following units:

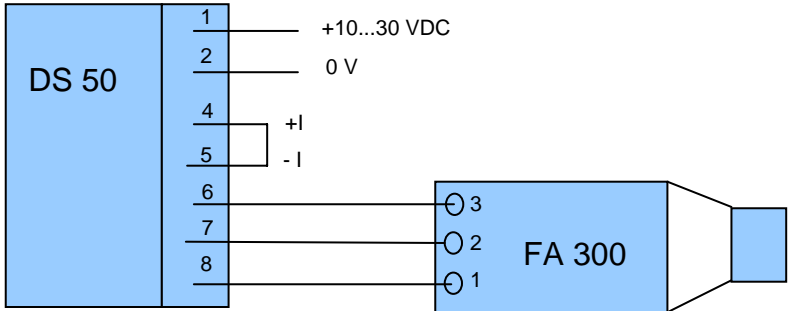
°C_{td}, g/m³, g/kg, ppm.

Order information

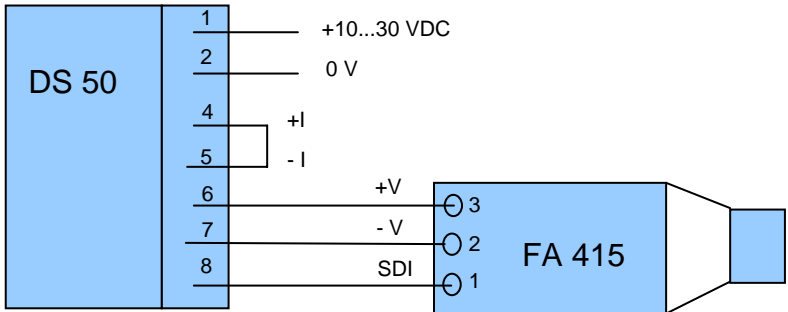
<i>Description</i>	<i>P/N</i>
DS 50 panel meter	0500 0001
FA 415 dew point sensor	0699 0415
FA 416 dew point sensor	0699 0416
FA 410 dew point sensor -80°...20°C _{td}	0699 0410
FA 410 dew point sensor -20°...50°C _{td}	0699 0412
24 VDC mains supply (GS version)	0440 0010
24 VDC mains supply (UL version)	0440 0011

Installation instructions

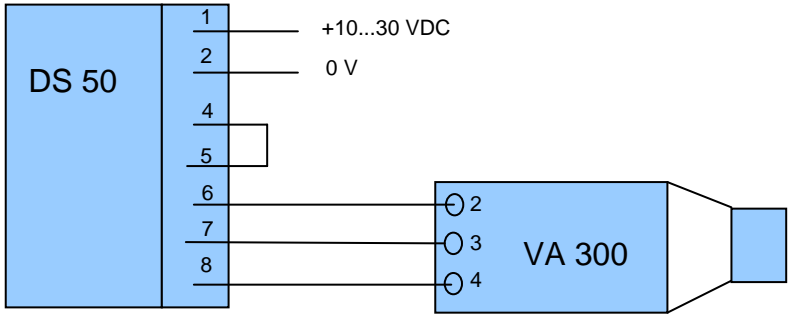
Connection of dew point sensor FA 300:



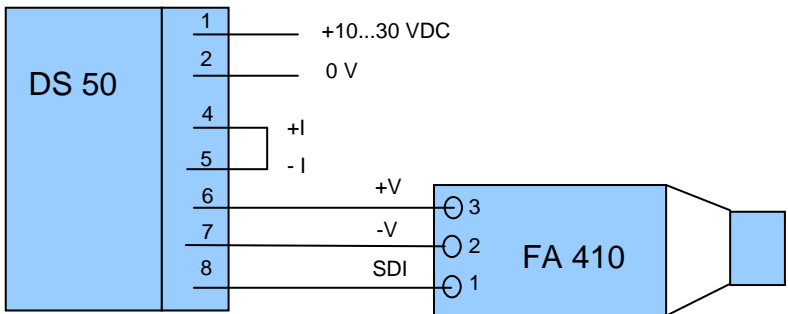
Connection of dew point sensor FA 415:



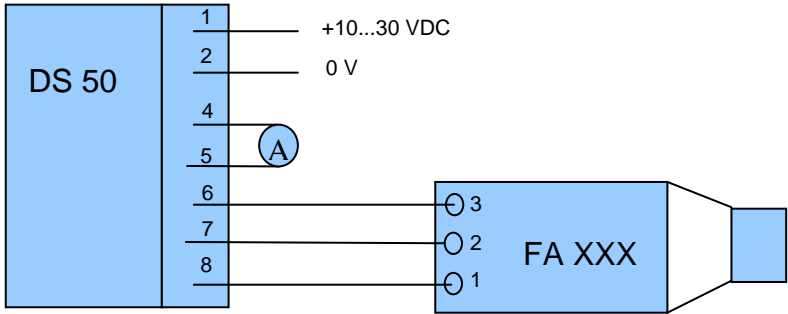
Connection of dew point sensor FA 416:



Connection of dew point sensor FA 410:



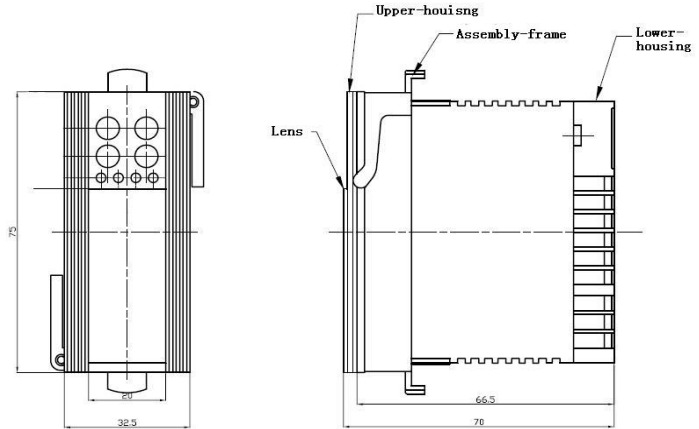
Connection of loop current meter:



Attention:

Please ensure that the supplied power (24 VDC) is isolated from the rest of the system, otherwise the current loop measurement may not work.

Mechanical dimensions:



Technical data

- Power supply: 10-30 VDC, 80 mA (with out sensor)
- Dimensions: 75 x 32 x 70 mm (w x h x l)
- Display: LED 7-Segment, 10 mm height, 4 digits, red colour
- Alarm indication: 1 x Yellow LED 3mm, pre alarm
1 x Red LED 3 mm, main alarm
(Alarms have to be programmed in the sensor)
- Connectors: Wire range: AWG 26 ... AWG 14
- Max. wire length: 50 m to sensor
- Operating temperature: 0 ... 60°C
- Storage temperature: -40 ... 70°C

EC Declaration of Conformity

for

DIRECTIVE 2002/96/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27. January 2003 on waste electrical and electronic equipment (WEEE)

and

DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27. January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

of the down mentioned instrument from CS Instruments GmbH:

Panel meter DS 50

CS Instruments GmbH as the manufacturer herewith declares that the above instruments and accessories belongs to the category 9 (WEEE 2002/96/EC).

Therefore the above instruments do not fall upward aforementioned directive RoHS 2002/95/EC and are not affected by the material restriction. In accordance with directive WEEE 2002/96/EC the measuring instruments specified above are taken back from CS Instruments GmbH to the disposal.

CS Instruments GmbH
Harrislee, 21.May 2006

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Christian Schuldt, Managing Director

This declaration does not guarantee any product characteristics.
Please do also adhere to the safety instructions stated in the enclosed documentation.

notes

Contact

- **Advice**
- **Sales**
- **Customer-service**
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