



FA 415 / FA 416 from -20 to 50 °C_{td}

The dew point sensors FA 415/416 for the typical use in refrigeration dryers



FA 415 dew point sensor

The ideal dew point sensor for the monitoring of refrigeration dryers with analogue output 4...20 mA

Special features

- Analogue output 4...20 mA
- Precise, long-term stability
- Quick response time
- Measuring range -20...50 °C_{td}



FA 416 condensate switch

For reliable alarm signal in case of condensation with alarm relay and LED

Special features

- Dew point distance freely adjustable
- Alarm in case of condensation
- LED alarm signal
- Quick response time

Technical data FA 415/416

Measuring range:	-20...50 °C _{td} resp. 0...100% RH
Accuracy:	± 1 °C at 0...20 °C _{td} ± 2 °C restlicher Bereich
Pressure range:	-1...16 bar
Power supply:	24 VDC (10...30 VDC)
Protection class:	IP 65
EMC:	according to DIN EN 61326
Operating temp.:	-20...70 °C
Connection:	M12, 5-pole
PC connection:	SDI interface
Screw-in thread:	G1/2"
Dimensions:	Ø 30 mm, length 130 mm
Output FA 415:	4...20 mA = -20...50 °C _{td}
Burden for analogue output:	< 500 Ohm
Output FA 416:	Relay NO max. 60 VDC, 0,5 A, ex factory 12 °C _{td} resp. in case of condensation, dew point distance freely adjustable

BDescription	Order no.
FA 415 dew point sensor	0699 0415
FA 416 condensate switch	0699 0416
Connection cables:	
Connection cable, length: 5m	0553 0104
Connection cable, length: 10m	0553 0105
Additional accessories:	
Standard measuring chamber up to 16 bar	0699 3390
CS Service Software for FA/VA 400 sensors including PC connection set, USB adapter and interface adapter to the sensor as well as CS Soft Professional software for data recording, see page 11	0554 2005
Mains unit in wall housin 100-240 V, 10 VA, 50-60 Hz/24 VDC, 0.35 A	0554 0108
Mains unit on DIN rail 100-240 VAC / 24 VDC, 0.35 A	0699 3340
External display, see pages 24	
Calibration:	
Precision calibration at 0 °C and 10 °C _{td} including ISO certificate	3200 0003
Control and calibration set 11.3 % RH	0554 0002
Control and calibration set 33 % RH	0554 0004
Control and calibration set 75.3 % RH	0554 0005

Recommendation:



Mounting with standard meas. chamber for compressed air up to 16 bar

Advantage: Easy installation via fast coupling.

Dew point set DS 52 for refrigeration dryers

Dew point set DS 52

consisting of:

- Digital process meter DS 52



The measuring range of $-20...50\text{ }^{\circ}\text{Ctd}$ makes the dew point set DS 52 with alarm the ideal dew point monitor with analogue output $4...20\text{ mA}$.

The dew point sensor FA 415 is extremely long-term stable and can be installed and removed quickly and easily under pressure by means of the screwable measuring chamber including quick coupling. The dew point set is supplied ready for plug-in, i. e. everything is completely wired. The alarm values can be freely adjusted.

Special features

- System ready for plug-in
Everything completely wired
- No time-consuming studying of the instruction manual
- 2 alarm contacts (230 VAC, 3 A)
pre- and main-alarm freely adjustable
- $4...20\text{ mA}$ analogue output
- Option alarm unit:
Buzzer and continuous red light

Technical data display DS 52

Dimensions:	118 x 92 x 93 mm
Display:	LED red, 7 segments, height: 13 mm, 5 digits, 2 LED for alarm relay
Keypad:	4 keys
Input:	dew point sensor FA 415
Power supply:	230 VAC, 50/60 Hz; Option: 24 VDC or 110 VAC 50/60 Hz
Alarm outputs:	2 x relay output, changeover contact, 250 VAC, max. 3 A
Operating temperature:	$-10...+60\text{ }^{\circ}\text{C}$ (storage temp. $-20\text{ }^{\circ}\text{C}...+80\text{ }^{\circ}\text{C}$)
Alarm thresholds:	freely adjustable
Hysteresis:	$2\text{ }^{\circ}\text{Ctd}$
Analogue output:	$4...20\text{ mA} = -20...50\text{ }^{\circ}\text{Ctd}$

Technical data dew point sensor FA 415

Measuring range:	$-20...50\text{ }^{\circ}\text{Ctd}$
Accuracy:	$\pm 1\text{ }^{\circ}\text{C}$ at $0...20\text{ }^{\circ}\text{Ctd}$ $\pm 2\text{ }^{\circ}\text{C}$ remaining range
Pressure range:	$-1...16\text{ bar}$
Protection class:	IP 65
EMV:	according to DIN EN 61326
Operating temp.:	$-20...70\text{ }^{\circ}\text{C}$
Connection:	M12, 5 pole
PC connection:	SDI interface
Burden analogue output:	$< 500\text{ Ohm}$
Screw-in thread:	G 1/2" without meas.chamber

Description	Order no.
Dew point set DS 52 for refrigeration dryers, consisting of:	0600 0425
DS 52 LED digital process meter in wall housing	0500 0007
FA 415 dew point sensor ($-20...50\text{ }^{\circ}\text{Ctd}$)	0699 0415
Standard measuring chamber up to 16 bar	0699 3390
Connection cable for VA/FA Series, 5 m with M12 plug	0553 0104
Options:	
Power supply 24 VDC (instead of 230 VAC)	Z500 0001
Power uspply 110 VAC (instead of 230 VAC)	Z500 0002
Alarm unit mounted at wall housing	Z500 0003
Alarm unit for external mounting with 5 m lead	Z500 0004
Additional accessory:	
Precision calibration at $0\text{ }^{\circ}\text{C}$ and $10\text{ }^{\circ}\text{C}$ including ISO certificate	3200 0003