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PRODUCT INFORMATION

Weather station DOL-58

New weather station to determine the weather conditions on site.
The weather station allows the consideration of the local weather conditions for the ventilation control.

BUSINESS UNIT	RELEASED	NUMBER OF PUBLICATION	NO. OF PAGES INCL. COVER
☒ Egg ☒ Poultry ☒ Pig	☐ Regionally ☒ Internationally	01-0044 (per region) PUBLISHED ON 13.12.2016 (date)	7

REGION OF APPLICATION

☒ Asia ☒ China ☒ Europe ☒ India ☒ Latin America ☒ MEA ☒ North America ☒ Russia

Further limitations/exceptions of countries:

LANGUAGES

☒ English ☐ Chinese ☐ French ☒ German ☐ Russian ☐ Spanish ☐ Others

RELEASED BY

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NAME 3

NAME 4

SIGNATORY RULES

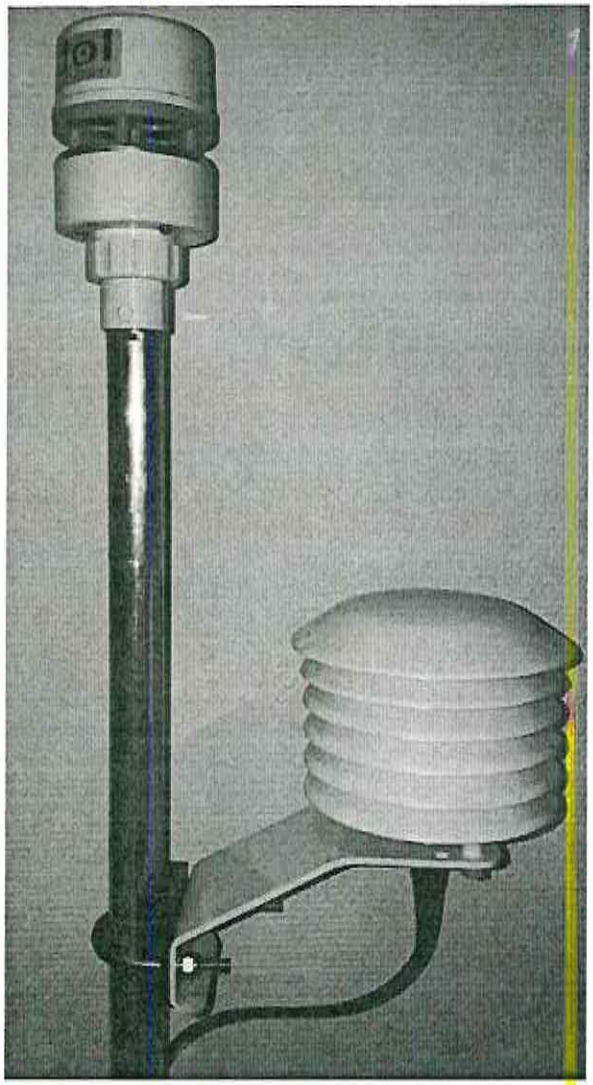
Regional product (only for one region)
Name 1: Chief Engineer of BU (global)
Name 2: Employee Customer Engineering (region)

International product (only more than one region)
Name 1: Product Manager (global)
Name 2: Employee Engineering (global or regional)

Products Central Technologies
Name 1: Product Manager CT or 1-3 Product Manager(s) BU (global)*
Name 2: Product Owner CT

*only if there is no Product Manger CT in charge

In order to ventilate a house optimally by means of natural ventilation, it is important to know the local weather exactly. For this purpose we now offer the weather station DOL-58. With the weather station, the house computer (e.g. Viper Touch - from version 4.2.1) can react to the weather conditions.



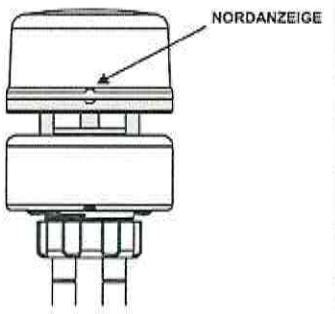


Figure 1: Weather station DOL-58

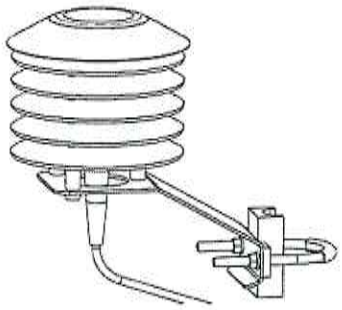
Weather station DOL-58, wind direction, velocity, air pressure 0-10V (60-44-0232)
11 - 30 VDC supply voltage
-25°C – 55°C temperature
800 – 1100 hPa (0.8 – 1.1 bar) air pressure
0-40 m/s wind velocity
0-360° wind direction

For the weather station DOL-58, a suitable mounting set is available to fasten the sensor to the wall.

Code no.	Description
83-15-2936	**Bracket cpl for weather station DOL-58**
99-10-3780	Hexagon wood screw 8 x 80 DIN 571 galv.
99-98-3784	Dowel universal UX 10 x 60 without collar
37-80-2011	Washer A 8.4 x 25 x 2.0 DIN 9021 galv.
99-10-1040	Hexagon nut M 8 galv. DIN 934-8
99-10-1317	Hexagon head screw M 8 x 80 galv. DIN 933 8.8
99-20-1176	Hexagon nut M 8 stainless steel DIN 934
99-50-3069	U-bolt stainless steel 8x25/W34/H48
83-14-9743	Tube 26.9 x 2.30-1300 galv. with thread for weather station DOL-58
83-14-9712	Angle bracket for weather station DOL-58

Figure 2: Bracket for weather station

In order to measure the humidity and temperature of the outside air, the DOL-114 sensor can be fastened to the above mentioned mounting set with a radiation protection:



Code no.	Description
60-44-0245	Weather protection for climate sensor outside
60-44-0252	Sensor for humidity of air DOL-114 without plug

Figure 3: Weather protection

For a complete weather station the order must be entered as follows:

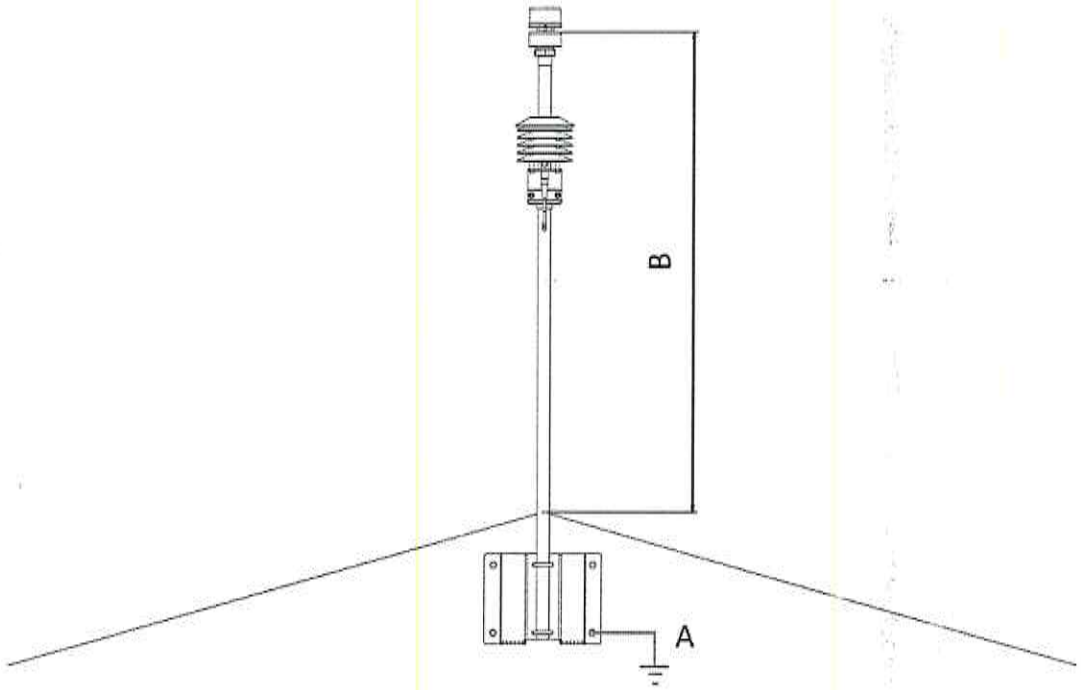
Quantity	Code no.	Description
1	60-44-0232	Weather station DOL-58 wind direction, speed, air pressure 0-10V
1	60-44-0252	Sensor for humidity of air DOL-114 without plug
1	60-44-0245	Weather protection for climate sensor outside
1	83-15-2936	Bracket cpl for weather station DOL-58

Assembly:

For the assembly consider the following:

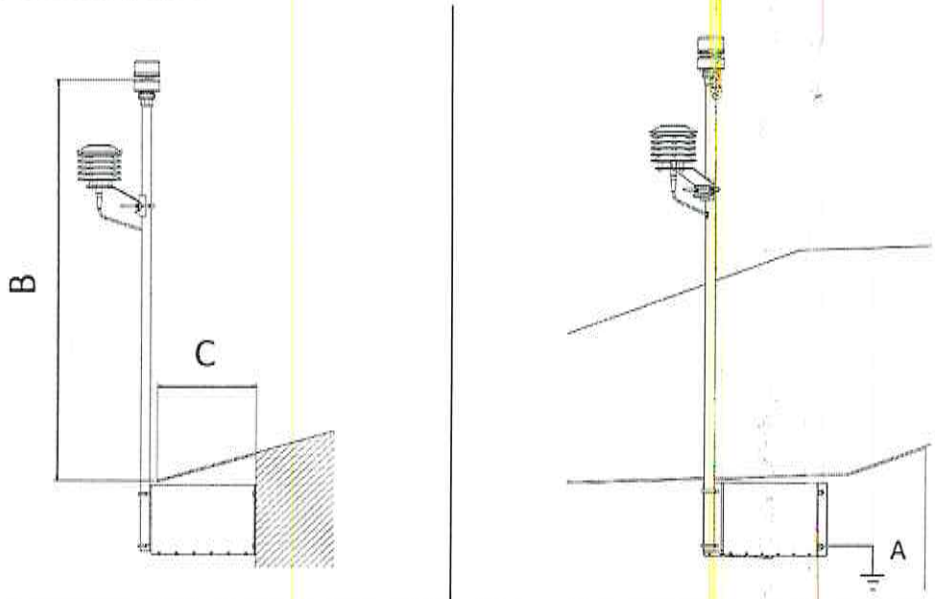
- The pole / tube must be installed 100 % vertically.
- The north indicator (see figure 1) must be aligned to the north.
- Ensure a sufficient earthing (shown in red)

Assembly recommendation



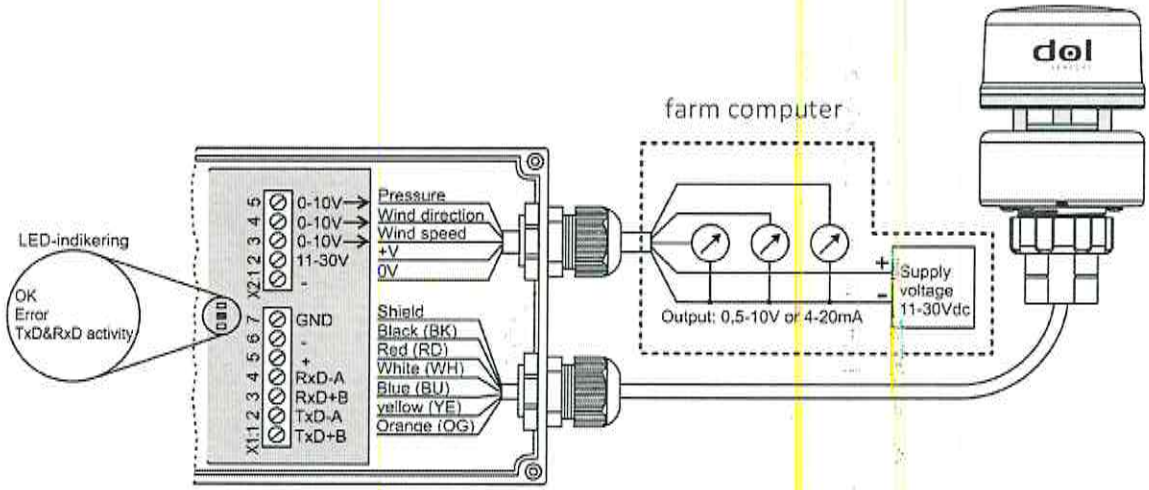
A	Ensure sufficient earthing (Ø 4 mm²)
B	as high as possible

Alternative assembly option:



A	Ensure sufficient earthing (Ø 4 mm²)
B	As high as possible, preventing roof and support from touching each other
C	Eave height 280 mm max.

Electrical connection



Technical data

Dimensioning				Output value [V]		Output value [A]	
Wind velocity	Measuring range	0 – 40	m/s	0.5 – 10	VDC	4 – 20	mA
	Resolution	0.05	m/s	11.88	mVDC	20.00	µA
	Precision [0 – 5 m/s]	0.5+10 %	m/s	11.88+10 %	mVDC	200 + 10%	µA
	Precision [5 – 40 m/s]	1.0 or 5 %	m/s	23.75 or 5%	mVDC	400 or 5%	µA
Wind direction	Measuring range	0 – 360	°	0.5 – 10	VDC	4 – 20	mA
	Resolution	0.1	°	2.63	mVDC	4.44	µA
	Precision [2 – 5 m/s]	5.0	°	131.66	mVDC	222.22	µA
	Precision [>5 m/s]	2.0	°	52.67	mVDC	88.89	µA
Air pressure	Measuring range	800 – 1100	hPa	0.5 – 10	VDC	4 – 20	mA
	Resolution	0.1	hPa	3.17	mVDC	5.33	µA
	Precision	± 1.00	hPa	± 31.67	mVDC	± 53.33	µA

Max. cable length	100 m @ 0.75 mm² AWG 18 200 m @ 1.50 mm² AWG 15

Check your knowledge ...

	1. What is the purpose of the marking at the weather station?
A	To see where is the top and the bottom side
B	To align the sensor to the north and thus determine the wind direction
C	To align the sensor

1. B