

# TRANSMICOR T231 SERIES

RELATIVE HUMIDITY TRANSMITTER FOR WALL MOUNTING



## Main characteristics

- Measuring range: 0 ... 100 %rh, -30...+70 °C
- Accuracy:  $\pm 2$  %rh,  $\pm 0,2$  °C
- Output signal: 4 ... 20mA (2 wire), Pt100  $\Omega$  1/3 DIN
- Supply voltage: 9...33VDC
- Protection degree: IP65
- Interchangeable sensor module S6000
- Linearised and temperature compensated humidity measurement
- Capacitive thin film humidity sensor
- Sensor response time: < 10 seconds
- CE conformity

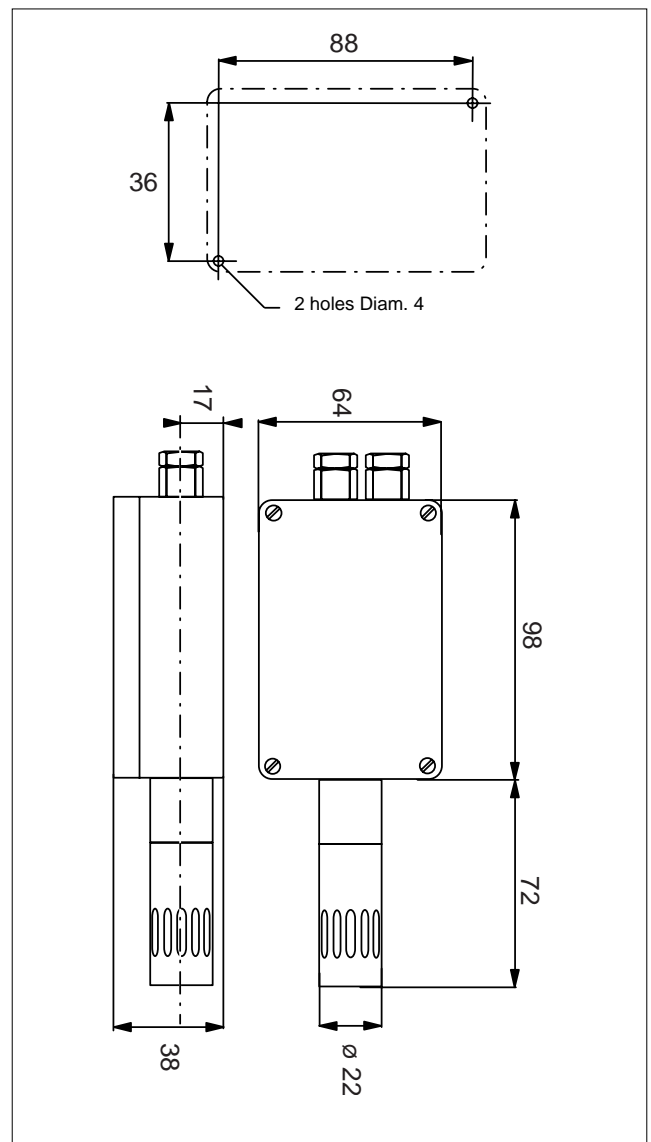
The T231 series relative humidity probe is equipped with the calibrated and fully interchangeable sensor module HUMICOR S6000, presenting an innovative element in humidity measurement.

Maintenance cost are therefore drastically reduced and machine downtime is minimised.

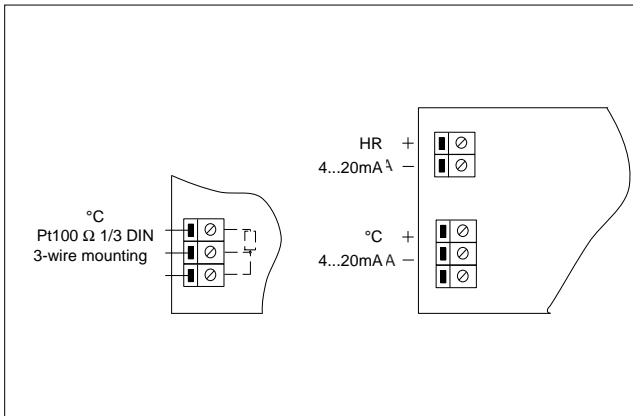
## TECHNICAL DATA

	Humidity	Temperature
<b>Connections</b>	2 wire	2 wire
<b>Accuracy @ 23 °C</b>	Hysteresis non-linearity included $\pm 2$ %rh (5...95 %rh) $\pm 2,5$ %rh (< 5 %rh, > 95 %rh)	Pt100 $\Omega$ 1/3 DIN direct: $\pm 0,2$ °C Current output: $\pm 0,3$ °C
<b>Measuring range</b>	0 ... 100 %rh	-30...+70 °C
<b>Sensor response time</b>	(90% of scale for a step change from 11% to 75 %rh)	/
<b>Output signal</b>	< 10 sec 4...20mA	4...20mA Pt100 $\Omega$ direct 1/3 DIN (3 wire)
<b>Temperature range</b>	/	-30...+70°C, 0...100 °C
<b>Power supply: E</b>	9...33 VDC	
<b>Impedance: R</b>	$R < ((E - 9) / 0,02) \Omega$	
<b>Consumption</b>	20mA max.	
<b>Operating range</b>		
Probe	0 ... 100 %rh	-30 ... +85 °C
Housing	0 ... 100 %rh	-30 ... +70 °C
Storage	0 ... 100 %rh	-40 ... +70 °C
<b>Housing</b>		
Dimension	98*64*38	
Material	ABS	
Weight	150 g	
<b>Probe</b>		
Dimension	$\varnothing 22$ mm, L = 72mm	
Material	DELTRIN	
<b>Protection grade</b>	IP65	
<b>Electrical connections</b>	Screw terminal, tightening capacity 1,5 mm <sup>2</sup> max.	

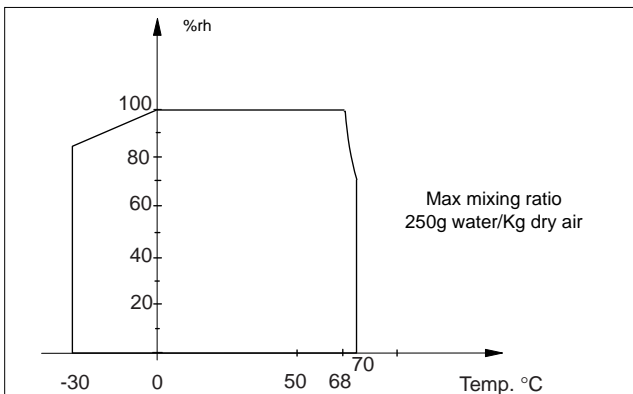
## DIMENSIONS



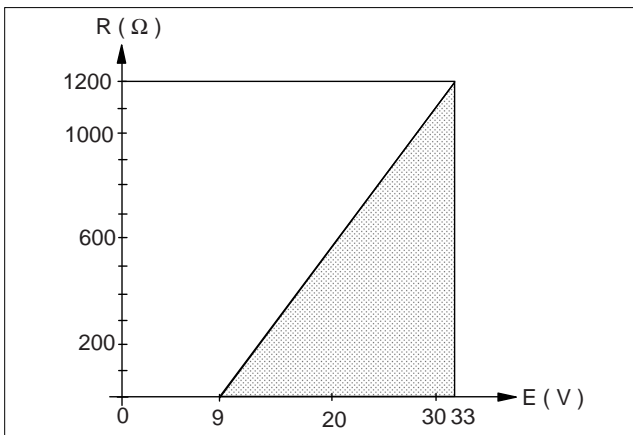
## ELECTRICAL CONNECTIONS



## MEASURING RANGE



## DIAGRAM OF MAXIMUM CHARGE



## ACCESSORIES

### Control kit HKC:

You can check your hygrometer with the control kit HKC which is based on the principle of non-saturated salt solutions..

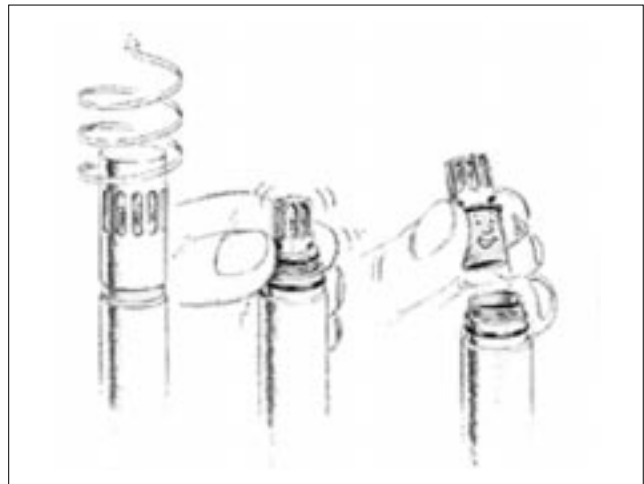
Refer to technical data sheet 85521

### Interchangeable sensor module S6000:

S6000 with Pt100  $\Omega$  output: Ref. 6A03130

S6000 without Pt100  $\Omega$  output: Ref. 6A08840

## REMOVING THE S6000



## ORDERING CODE

T2		3	1			
<b>Output signal</b>						
2 fils, 4 ... 20mA		3				
<b>Models</b>						
Wall mounting		1				
<b>Temperature range</b>						
No temperature		0				
Pt100 direct (Standard)		1				
Range 0 ... 100 °C		2				
Range -30 ... + 70 °C		3				
<b>Power supply (Model 2 wire)</b>						
9...33 VDC		0XX				
<b>Protection cap / filter</b>						
Slotted cap DELRIN, white		A				
Slotted cap DELRIN, black (Standard)		B				
Slotted cap DELRIN, white with polyethylene filter		C				
Slotted cap DELRIN, black with polyethylene filter		D				
Slotted cap PVDF, white		E				
Slotted cap PVDF, white, with teflon filter		F				
Wire mesh filter, stainless steel		G				
Sinter filter, stainless steel (*)		H				
Sinter filter, stainless steel, teflon coated (*)		I				

(\*) A knurled nut, ref. 1A04640, is necessary to fix these filter types

**Example: T231.30XXA**  
Relative humidity transmitter T230, wall mounting version with output signal humidity 4/20mA, temperature 4/20mA (-30...+70 °C), power supply 9...33 VDC, slotted cap in white DELRIN.

GEFRAN spa reserves the right to make any kind of design or functional modification at any moment without prior notice



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