

Functions of a thermo-hygrometer:

Field of operation	Healthy living	Save energy	Maintain levels	Avoid mold
Temperature	x	x	x	x
Humidity	x		x	x
MAX/MIN		x	x	x
Dewpoint				x

30.5005



30.5000.02



30.5002



30.5014.02



30.5013

- Outdoor temperature and humidity through an external sensor probe



The Allrounder

30.5021.01



30.5021.02

30.5021.11

30.5021 Style

- Modern design
- Indication of the comfort level by smiley
- Large scale display of either temperature or humidity
- Time

Nice living accessory



30.5019 Cosy

- Coloured zones of comfort for a healthy living climate

45.2007 Mechanical Thermo-Hygrometer

- Very precise hair synthetic movement
- case with brass ring
- needs no battery



30.5017 ECO Solar

- Solar powered
- 5 years of warranty

The eco-friendly



30.5011 Comfort Control

- Visual and acoustic warning of mold formation
- Detailed user manual with several hints on active heating and airing

95.2008 Klima Control Set

For the control of the indoor climate and the detection of cold bridges by the use of **Comfort Control** and **EasyFlash** infrared thermometer



- Non-contact measurement of the surface temperature
- Response time: 1 sec.

The experts in mold detection



30.5009 MusiControl

- Clef as indicator for ideal storage conditions
- Alarm function
- Detailed user manual

The expert in musical instruments



30.5010 Klima Guard

- Wet bulb temperature
- Acoustic and visual warning
- Ideal for checking room, storage and test bench conditions (according to ISO9001)

The expert in storage



30.5015

- Permanent indication of daily highest and lowest values with automatic reset
- Additional max.-min. memory with manual reset

The control freak with double memory



30.3039.IT KlimaLogg Pro

- Acoustic and visual warning with alarm event function
- Data logger with up to 50.000 measured values
- Re-callable via display or PC (wireless USB transceiver)
- Up to 8 radio controlled transmitter Included software (via internet download)

The professional logger



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Perfect climate at home

Healthier living by the control of temperature and humidity



Quality by the weatherpro TFA Dostmann



Feel well at home

A human spends at least two thirds of his lifetime indoors. How he feels there, is very dependent on the quality of the interior air.

The control of interior temperature and humidity by purposeful heating and air creates a comfortable and healthy indoor climate and this also saves on heating costs.

Indoor temperature

The temperature level is a very individual thing and also a matter of dressing and activity. Apart from the pure indoor temperature, the surface temperature of the environment - like windows, walls, ceilings, floors as the air circulation play a role.

With cold walls and draughty windows the temperature of the air has to be much higher in order to reach a comfortable indoor climate. A good damping, even at lower temperatures, does not only protect against direct warmth losses but furthermore ensures additional well-being feelings as the walls' surfaces are warmer.

Humidity

Showering, cooking, laundry drying: By these activities a human always sets water vapor free. About 6 to 12 liters are set free per day with a 3-person household. If there is not sufficient air interchange – a problem of many new and well insulated houses – the air will become too wet. Excessive heating on winter months leads vice versa to dry air several times.

Healthy living



- An indoor temperature of 18 – 22 ° C and a relative humidity of 40 – 60 % are felt as pleasant by most people.
- Those values furthermore minimize health dangers.
- Control the values of your living and bedroom regularly.
- Adjust the indoor climate by active heating and airing.

15 °C
40-60 %

16-18 °C
50-70 %

18 °C
50-70 %

Avoid mold



- Humidity over 60 % of relative humidity favors the growth of mold fungi.
- Observe your dew point with a suitable thermo-hygrometer. The temperatures of the wall's surface should not get under 15 ° C.
- Check the temperatures at critical places such as thermal bridges by infrared measurement.



Save energy



- Through the control of the indoor temperature you are able to save up to 6 % of heating costs with 1 ° C of temperature reduction.
- Check the setting of the heating elements by the nightly stored minimum and maximum values. No higher temperature reduction but 5 ° C on night-time!
- Depending upon use the correct temperature varies from room to room (see below).

20 °C
40-60 %

20 °C
40-60 %

23 °C
50-70 %

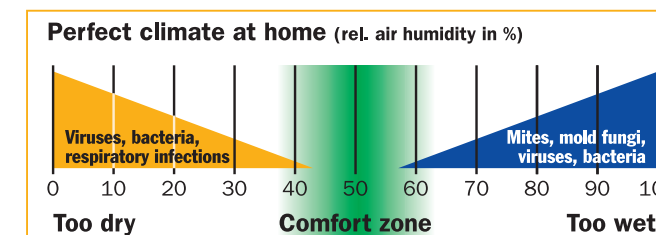
Maintain levels



- Keep an eye on the maximum and minimum values and avoid unsteady temperature and humidity conditions.
- Optimal conditions of indoor climate for wood and leather are: circa 20 ° C and 45 – 65% rH*, textiles and paper: 40 – 50 % rH, musical instruments: 50 – 55 % rH.
- Optimal conditions in a cellar storeroom are 4 – 12°C and 70 – 80% rH (wine: 13°C, 70% rH).

Why the indoor climate is important for health

Mold fungi and mites spread faster with high humidity. In addition, a too dry spatial air can impair our well-being. Skin and respiratory organs are affected negatively and infections, allergies and asthma are more likely. Studies assessed that a relative humidity of 40 to 60 % reduces the number of pathogens and minimizes the risk of respiratory deceases.



What a guitar has to do with humidity

Not only humans but also pets, plants and sensitive objects need the correct climatic conditions. Hygroscopic materials such as wood, paper, leather and textiles react sensitively on a volatile humidity. At high levels of humidity they absorb humidity and may deform or get mold. If the surrounding air is too dry humidity becomes extracted from the item. So the item, for example a musical instrument, a wooden floor, a frame, furniture or a book may form cracks or become brittle.

How mold can appear in your living space

Cold air can absorb less humidity than warm air. If air is cooled down continuously and the absolute humidity remains stable, the relative humidity will rise up to 100 %. If the air continuous to cool beyond that, the excess water vapor will be separated as droplets. This temperature value is called dew-point. A dew point temperature of 15 ° C means that the humidity in the air condensates at places colder than 15°C. From this process - particularly in the winter at badly damped places like old windows, corners of a building or roller-type shutter boxes - the ideal fertile soil for spores and mold fungi develops.

Active heating and airing

In order to achieve the correct temperature and air humidity, you should consider some simple hints:

- Never turn off the heating completely during absence. Holding a certain average temperature saves more money.
- Open the window temporarily (intermittent airing). Continuous airing wastes energy and can even advance the mold formation.
- Air your apartment crosswise. Open opposite windows.
- Also air your apartment on cold and wet weather. Does the cold indoor air warm up, it can absorb more humidity. After some few minutes you should notice the humidity decreasing.
- The lower the temperature the more you have to air your rooms.
- Air your room more often if you have highly insulated glass windows.
- Bathrooms and kitchens have to be aired immediately after usage.

Correct time to air your apartment

- Open each window in every room in the morning.
- Before noon or at noon air each room in which persons stayed.
- Air all rooms again in the evening.

Correct period of airing

The optimal period of airing depends on the season. As recommendation on airing periods with completely opened windows:

December until February:	5 minutes
March until November:	10 minutes
April, May:	15 minutes
June until August:	25 minutes
September, October:	15 minutes



30.3045 IT Bel-Air

- Checking room ambient conditions and outdoor conditions at the same time
- Ventilation tip, if opening or closing the window will improve the indoor climate
- Colored comfort zone

The perfect climate guide

