



THERMAL COMFORT

Thermal Manikin System: **AURETTA KOMFORT**

Maximum feel-good climate can be measured

Our innovative **THERMAL COMFORT** method is trailblazing for the future development of custom-fit HVAC solutions.

Instead of cost-intensive special designs we rely on our state-of-the-art simulation method to exactly calculate the feel-good climate in the operator's cab – thanks to a special measuring manikin - **AURETTA KOMFORT** with hundreds of sensors.

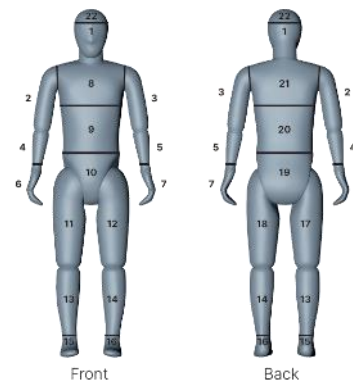
THERMAL MANIKIN SYSTEM

State-of-the-art manikin system used for assessment of the thermal comfort of a human in all realistic environments

Overview:

- **Natural body-shape, based on official population statistics**
- **23 body zones with independent measurement of skin temperature and heat flux**
- **Unique wire system that eliminates control delay and ensures a 100% stable set point**
- **Maximum 'skin'-like sensitivity with heating wire and sensing only 0,2 mm under the paint**
- **Heating range: As a human, 15 to 45 degrees C**
- **Operated through an intuitive PC SW with a graphical user interface and 4 control modes**
- **Is certified in accordance with DIN EN ISO 7730 & DIN EN ISO 14505:2**

Typical split of 23 body zones (can be re-configured depending on needs):



Physical specifications:

- **Size 175 cm / Weight 22 kg**
- **Robust light shell in glass-fiber**
- **Polyoxymethylene joints in neck, shoulders, elbows, hips and knees**
- **The manikin can be separated in the waist without use of tools for easy transport**

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DEVELOPMENT PROCESS

A vision becomes reality:

- **Aim:**
Creating a feel-good climate with minimum energy consumption
- **Method:**
Virtual simulation systems for each individual development step
- **Result:**
HVAC-solutions that are perfect for the individual application



Your benefit:

- Deriving suitable control strategies to improve **THERMAL COMFORT:**
 - Adjustment of air distribution within the cabin to increase comfort
 - Optimization of cabin air conditioning



