

# **Sun Shades for Cabinets and Shelters**

### 1 Application

Strong solar radiation causes heat build-up inside housings that far exceeds the maximum air temperature in the shade. INTERTEC sun shades have been designed to protect the cabinet or shelter from direct radiation.

This simple and inexpensive solution can be installed on the roof, on the walls and also on the doors.

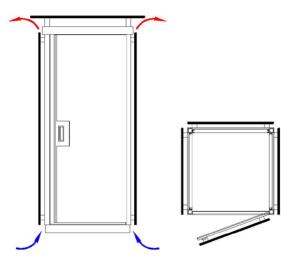
#### 2 Advantages

- Reduces the surface temperature and hence the temperature in the cabinet.
- Decreases temperature fluctuations in the cabinet, thereby ensuring a higher degree of operating safety and longer service life of the instruments installed inside.
- This method may avoid the need for air conditioning or reduce the required cooling power, it is therefore an environmental solution.
- Subsequent installation is also possible.
- Light-weight construction

#### 3 Description

INTERTEC uses GRP for the manufacture of sun shades, either as sandwich or flat sheet material – a material that is known for its excellent temperature insulation properties. For more details, please refer to our data sheet <u>KD018</u>. Sun shades in steel, for example, would be heated up on the inside and thereby transfer the heat to the cabinet by radiation

The gap between sun shade and cabinet allows air flow due to natural convection, creating a chimney effect that prevents heat build-up.





Sun shades perfectly complement thermal management measures such as **active**, **passive** or **hybrid cooling systems**.



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### **Further Solutions**

If, in addition to equipping the cabinet with good insulation and sun protection, further measures for temperature reduction or maintenance need to be taken, INTERTEC offers the following solutions:

- Passive cooling system, see data sheet E053, <u>DD830</u>
- Cold water cooling see data sheet <u>HD530</u>
- Active cooling system consisting of ventilator, air inlet filter and thermostat
- ATEX-approved compact air conditioning unit, see data sheet <u>CD111</u>
- Further options like outdoor-cooling machine upon request





## Additional Shades

- Sun Shades SD22 ... see data sheet <u>KD183</u>
- Sun Shades DIASHADE see data sheets <u>KD285</u> and <u>KD287</u>
- Switch Protection Canopy SD17 see data sheet KD831
- Technical Data for Sun Shades see data sheet <u>KD018</u>

Example: Sun protection with integrated passive cooling

