

WIEGAND® Air-Conditioned Medication Cabinet

Proper Storage of Medications

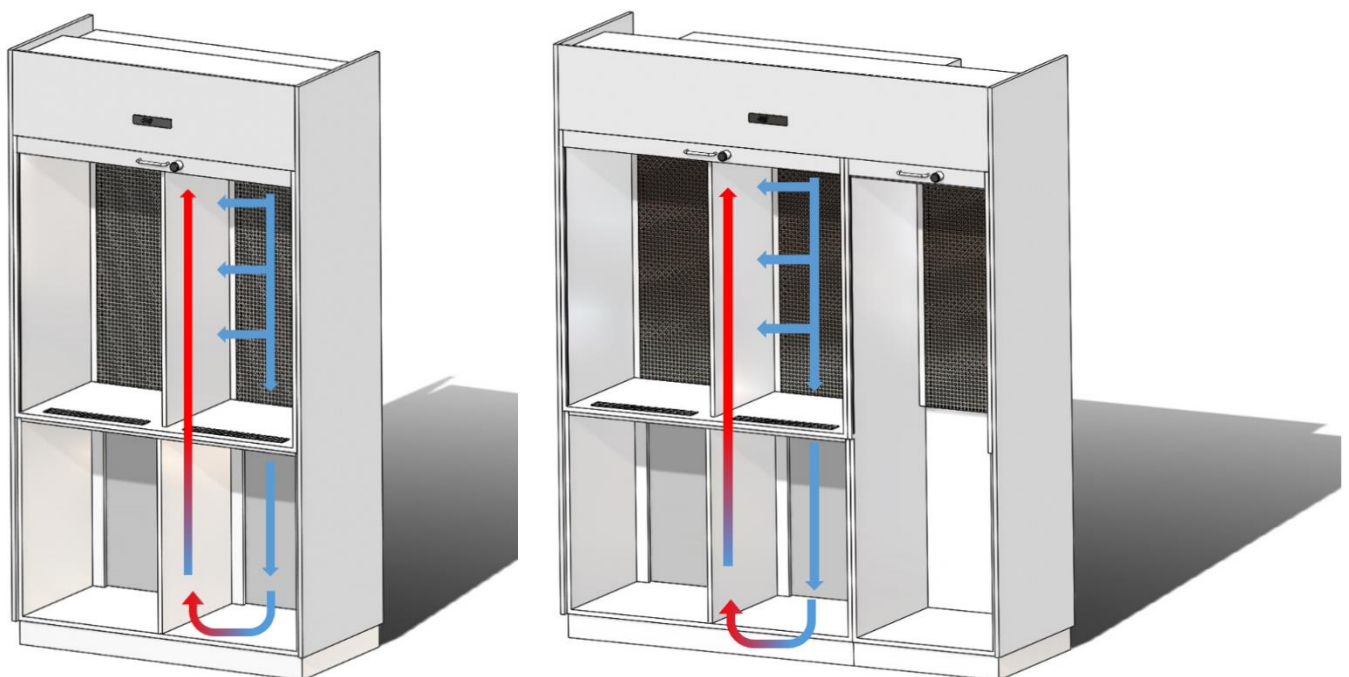
If medications are not stored correctly, their active ingredients may change, posing a risk to patients. Most medications should be kept dry and stored at a maximum room temperature of 25°C. This can be achieved by air-conditioning the entire room, which can be planned and implemented in new buildings. However, in existing buildings, this may not always be feasible or may require extensive structural modifications.

The Air-Conditioned Medication Cabinet

To address this issue, Wiegand AG has developed the air-conditioned medication cabinet in collaboration with Koch Kälte AG, a specialist in cooling systems for hospitals and laboratories. The cabinet is based on the practical Wiegand double cabinet, which can be expanded with a third cabinet element. This combination of two or three cabinets includes a cooling unit and a specially designed air circulation system to maintain the required temperature inside the cabinet. When the doors and roller shutter are closed, the interior is cooled to the target temperature and kept constant.

Advantages of the Wiegand Air-Conditioned Medication Cabinet

- Medication storage at a preset temperature
- Electronic temperature monitoring with display
- Acoustic and visual alarm in case of temperature deviation or prolonged open doors
- Potential-free contact for integration into the building management system
- Space-saving solution – cooling unit integrated at the top of the cabinet combination
- Wiegand cabinet system: straight and angled pull-outs or carrier walls
- Cabinet width designed for ISO modules (60 cm)
- Sturdy roller shutter in the upper half of the double cabinet
- Optional lockable drawer for controlled substances
- LED interior lighting with minimal heat emission



Functional Example of the Two- and Three-Cabinet Combination. Installations may differ from the graphical representation. When requesting a quote, you will receive customized drawings tailored to your project.

Functionality of the Wiegand Air-Conditioned Medication Cabinet

The professional and powerful cooling unit cools the cabinet's interior to the preset target temperature and keeps it constant when the doors and roller shutter are closed. The air inside the cabinet is circulated through the cooling unit. The specially developed airflow system ensures that the temperature limit is not exceeded. To load medications or prepare them, the roller shutter and/or doors must be opened. During this time, the cooling unit automatically shuts off until all cabinets are closed again. While open, cooling is interrupted, and the cabinet's interior, including the medications, gradually adjusts to the ambient temperature. If a door or roller shutter remains open for too long, or if the target temperature is exceeded while the cabinets are closed, an optical and acoustic alarm is triggered. Once all cabinets are closed, the cooling unit automatically resumes operation with a time delay.

Guidelines for Use

To minimize unwanted temperature increases, the following guidelines should be observed:

- Keep the roller shutter and doors open for as short a time as possible
- Open as few doors as possible at the same time
- In case of an alarm, close the roller shutter and doors until the target temperature is restored

Technical Specifications

Connection: 220 – 240 V, 50 Hz

Power consumption: 485 W (only during active cooling, intermittent operation)

Refrigerant: R290 (no ozone-depleting effect)

Preset target temperature: 23°C

Alarm delay for open door/roller shutter: recommended 15 minutes

Display and control panel integrated into the front cover

Sensor for measuring actual temperature

Potential-free contact for integration into alarm systems



Control panel of the cooling unit (sample image)