

## **HARTMANN Minibars -** Energy Efficient, Silent and Comfortable

Offer your guests more comfort with a minibar! You can offer your guests snacks and chilled beverages at any time of the day or night without them having to leave the room. The new generation minibars are energy efficient, silent and vibration free.



#### **Modern Cooling Systems**

We generally distinguish between three different types of cooling technology: compressor cooling, absorption cooling and thermoelectric cooling according to the Peltier principle. HARTMANN minibars are available with absorption cooling and with Peltier cooling.

Models with compression cooling are, however, only available on request since this technology is comparatively louder in operation and susceptible to more maintenance work.

# HARTMANN Minibars with Absorption Cooling

The absorption minibars are cooled with a mixture of gas and water that liquefies in a condenser. An evaporator turns it back into gas. The cooling takes place at this part of the cycle. HARTMANN minibars defrost automatically.

# HARTMANN Minibars with Peltier Cooling

Peltier technology requires electric current for the cooling process. The direct conversion of electric power to energy for cooling allows Peltier minibars to optimally utilize the use of energy. There is no need for a cooling unit so that the minibar offers more interior space for chilled goods. Thanks to fuzzy logic control, the Peltier minibars can be regulated automatically so that icing does not occur.



### **Highlights at a Glance:**

- Very low power consumption
- Totally noise and vibration free operation
- No moving parts
- No maintenance required
- Environmental friendly
- More space inside the Peltier minibars
- No defrosting due to Fuzzy-logic temperature control
- Multiple fields of applications: various models and sizes for use in hotels of all kind of categories but also in hospitals and clinics, student accommodations, meeting rooms and offices.



GMARK certificate



















## **Minibar** Model HTM A 28 / A 30 / A 40 / A 50 / A 60

Minibar with modern absorption cooling system - noiseless and vibration-free\*. Flexible configuration with adjustable shelves and bottle compartments in solid doors.

\*HTM A 60-01 will have a fan for internal air circulation

28, 30, 40, 50, 60 litres - class

## **Absorption Cooling**

## **Configuration / Functionalities**

- Heat absorption technology and automatic defroster
- Adjustable thermostat
- Cooling Temperature: 3 - 8  $^{\rm o}$  C for solid door , 10 - 15  $^{\rm o}$  C for glass door
- Height-adjustable and removable plastic shelves
- Adjustable drinks holder in the door, model HTM A 50 and A 60 with 1.5l bottle holder
- LED interior light with door contact
- DIN right-hinged door, changeable to DIN left
- Flat door
- With sliding hinge to mount the minibar door to the door of a built-in cabinet
- · Colours: corpus in black; interior in white
- 100% CFC free



Minibar HTM A60-01 FD

## **Optional Features**

- Glass door for optimal display
- Sliding hinge for built-in models
- Door lock
- Reversible door
- · Metal feet for fixing





Temperature regulator



Interior light



Height-adjustable shelves



Adjustable door drinks holder

Product tested acc. to EN ISO 15502 standard

Balcony type shelves in the door for additional capacity

Series	Ex. dimensions h x w x d in mm	Weight in kg (net)	Volume in litres (gross)	Performance in watt	Voltage volts	Energy consumption kWh/p.a.	No. of shelves
HT ME A 28-05 FD	440 × 400 × 390	12	28	53	AC 220 - 240 / 50 - 60Hz	274	1
HT ME A 30-05 FD	510 x 380 x 430	13	30	60	AC 220 - 240 / 50 - 60Hz	292	1
HT ME A 40-05 FD	545 x 435 x 455	15	38	60	AC 220 - 240 / 50 - 60Hz	310	2
HT ME A 50-05 FD	560 x 455 x 480	18	50	60	AC 220 - 240 / 50 - 60Hz	274	2
HT ME A 60-01 FD	605 x 460 x 480	20	60	90	AC 220 - 240 / 50 - 60Hz	402	2



## Minibar Model HTM T30/ HTM T40/ HTM T65

30, 40 and 65-litres volume minibars with Peltier cooling system. The minibar is also available with glass door for especially attractive presentation of snacks and drinks.

30, 40, 65 litres - class

## **Peltier Cooling**

## **Configuration / Functionalities**

- Non-wearing Peltier thermoelectrics
- Fuzzy logic control system for low energy consumption
- No moving parts 100% silent and vibration free\*
- Ammonia-free and therefore environmentally friendly
- $\bullet$  Temperature can be lowered max. 23 °C below that of the outside temperature
- Maximum cooling temperature: 6 °C, to save energy
- Transparent, height-adjustable and removable plastic shelve
- Soft LED interior light with door contact
- Colour: black

\*HTM T 65- 01 will have a fan for internal air circulation









Door drinks holder



LED interior light

## **Optional Features**

- With sliding hinge to mount the minibar door to the door of a built-in cabinet
- Lock
- DIN right-hinged door with changeable door hinge for conversion to a DIN left- hinged door





Minibar HTM 1 40 - 01 GD

Model	Ex. dimensions h x w x d in mm	Weight in kg (net)	Volume in litres (gross)	Performance in watt	Voltage volts	Energy consumption kWh / p.a.	No. of shelves
HTM T 30-02 FD	480 x 380 x 445	10	30	65	AC 220-240	99	1
HTM T 40-01 FD	545 x 405 x 445	14	40	70	AC 220-240	165	2
HTM T 40-01 GD (with glass door)	545 x 405 x 445	11	40	70	AC 220-240	256	2
HTM T 65-01 FD	635 x 474 x 450	15	65	83	AC 220-240	144	2
HTM T 65-01 GD (with glass door)	635 x 474 x 450	17	65	83	AC 220-240	203	2

<sup>\*</sup> Average energy consumption per 24 hours at an ambient temperature of 25 °C and a cooling temperature of 6 °C according to EN 153: 2006 Note: Please see minibar installation instructions on page - 35

## **Drawer Type Minibars**

## Minibar Model HTM DT45-01 FD

The Drawer Type Minibar is a new concept with a pull out drawer so drinks and snacks inside are well visible and accessible from above. The 45 ltr. Minibar comprises one big part for bottles and cans and an automatic slide-out for mini bottes and snacks. It is illuminated by LED light and can be organized with adjustable dividers.

The drawer type minibar is available in black decorative panel with handle or prepared for built-in in furniture with customizable wooden panel.

45 litres - class

**Peltier Cooling** 

## **Configuration / Functionalities**

- Drawer design
- Non-wearing thermoelectric (Peltier) system
- Low energy consumption
- CFC free; environmental friendly
- Adjustable dividers and bottle-fingers for secure storage
- Automatic slide-out tray for mini bottles and snacks
- LED interior light with drawer contact
- Colours: corpus in black; interior in white
- Adjustable drinks divider to optimize the space
- Storage volume 45 ltrs.

- Power supply 220/230V
- Performance in watts 65W
- Dimensions: H 420 x W 495 x D455 in mm
- Standard: decorative panel with handle

## **Optional Features**

- Panel without handle for furniture integration
- Snack tray



Sleek design handle

Drinks holder

Snack Tray (optional)

Model	Ex. dimensions h x w x d in mm	Weight in kg (net)	Volume in litres (gross)	Performance in watt	Voltage volts	Energy consumption kWh / p.a.	No. of divider
HTM DT45 - 01 FD	420 x 495 x 455	11.5	45	65	AC 220-240	125	3

<sup>\*</sup> Average energy consumption per 24 hours at an ambient temperature of 25 °C and a cooling temperature of 6 °C according to EN 153: 2006 Note: Please see minibar installation instructions on page - 35



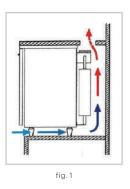
# HARTMANN Minibars Cooling Air Intake and Discharge

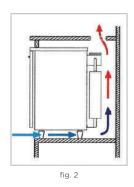
When installing a minibar, it is important to allow ample space for fresh air intake and exhaust air discharge, so that the minibar can deliver its full cooling capacity while consuming as little energy as possible at the same time.

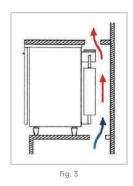
The inside of the minibar is cooled by expelling heat via the back of the unit, so the air surrounding the minibar must be able to circulate freely. For this reason, it is important to allow a ventilation cross-section of 200 cm<sup>2</sup> for air intake and discharge when installing the minibar. The distance between the back of

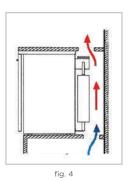
the minibar and the piece of furniture it is installed in should be at least 6 cm. As a general rule: the more space a minibar has to expel exhaust air, the more efficiently it will operate and the more energy-efficient it will be.

The air intake for the minibar is located at the bottom, with fresh air entering either at the front or at the back as shown in the schematic drawings:





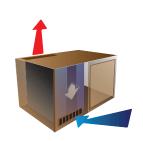




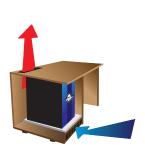
Warm (exhaust) air must be discharged at the top of the minibar in all cases (chimney effect), as shown in the installation example:

Minibars should not be set up close to radiators or other heat sources, or placed in direct sunlight, as this can lead to higher energy consumption.

We will be happy to assist you with any questions you may have about installation of your minibar!







Inlet Air (cold) Exhaust Air (warm)

#### **Power Consumption Per Minibar Per Year**

HTM T30 -02 FD
Peltier Cooling Minibar

Comparable absorber minibar, consumption of 274 kWh p. a.

Annual energy savings of approx. 60 %!