

# tritec Climatic Cabinet

# KB 7140 F-LL



<b>Outside dimension:</b>	<b>W = 1600 mm</b> <b>D = 840 mm</b> <b>H = 2070 mm</b>
<b>Inside dimension:</b>	<b>W = 1300 mm</b> <b>D = 650 mm</b> <b>H = 1400 mm</b>
<b>Capacity:</b>	<b>1400 litres</b>
<b>Temperature range:</b>	<b>10°C to 45°C</b>
<b>Humidity range:</b>	<b>from ambient to 85%</b>

### Housing

Made of stainless steel (Backplane, as well as top and bottom side of the cabinet of galvanised sheet steel). Set of 4 wheels, 2 with brakes.

### Interior space

Made of chrome nickel steel. Cleaning friendly by rounded corners, slippery surface in the interior, meets highest hygiene requirements.

### Insulation

high density foamed-in-place polyurethane, CFC-free

### Circulation air cooling

for rapid and uniform temperature control, reducing temperature gradients to a minimum

### Door

Solid two-door, right- and left-hand hinge. Grease resistant magnetic seal. Additionally equipped with two inner glass doors.

**Optional:** with door lock

### Interior fittings

- 8 pcs. Grating-type shelves (dim.: 530x590 mm, max. 24 shelves possible)

### Control system

located above door.



(Ill. Similar)

Temperature without humidity  
Working range 2°C up to 20°C  
Temperature accuracy: +/- 2°C

Temperature with humidity  
Working range 10°C up to 45°C  
Ambient humidity up to 85%  
Temperature accuracy: +/- 2°C  
Humidity accuracy: +/- 5%

### tritec®

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## With the following control units:

- Digital thermostat with microprocessor enables PID auto-tuning controller for temperature and light.
- Digital thermostat with microprocessor enabling PID Auto-tuning control for humidity
- Over-temperature safety thermostat, with pilot light
- Under safety temperature limiter, with pilot light
- Switch to choose between direct or programmed temperature
- Switch for selecting between direct or programmed lighting
- Humidity switch
- Humidity alarm (low water)
- 24 h timer for temperature and lighting
- 3 pcs. switch for setting the LUX intensity for lighting (min / ave / max)
- Main switch
- Indicator lights
- Fuses

## Hot steam humidity device

Complete with 20 lt. tank to be filled with dist. water (not regular tap water)

Water quality: dist. water, pure water quality 20µS/cm, degree of purity: 5 µmm.

## Illumination device

Exhaustive illumination of the inner room by 2 x 6 units vertical arranged LED lamps (cool white - approx. 750 x 1250 lux - other lamps on request). Positioned on the left and right-side walls, separated from the interior by a transparent pane. With fans to cool down the lamps. Adjustable in three steps (min / average / maximum) by 2 switches on the front. With timer function.

## Refrigerating unit

fully hermetically sealed, forced ventilation, fitted on vibration - absorbing mounts (ambient temperature max. 30°C), low noise, energy saving compressor with high quality vaporisation system.

Refrigerant: environmentally friendly

## Electrical data

Voltage: 230 V / 50 Hz **Optional:** 60 Hz  
Power consumption: 4000 W  
Fuse: 24 A  
Power cable: 1,5 m for termination / with Shuko plug

## Packing details (palletized)

Dimension: approx. 177x100x221 cm  
Net weight: 270 kg  
Gross weight: 300 kg

**Country of Origin: European Union**

Customs clearance code: 8415 8200

**OPTIONAL**

**Ramp programme temperature & light**

Programmable automatic operating cycles (4 programmes with 16 ramps) for temperature and light

**Humidity ramp programme**

Programmable automatic operating cycles (16 ramps) for humidity



**Cable port with cover**

Approx. 35 mm Ø.

e.g., to create access for operator measurement lines, etc.

**Electronic CO<sub>2</sub> control unit (infrared measurement)**

Operating range from 1 - 10% (20%), control accuracy +/- 0.5%

Actual value permanently displayed digitally, setpoint adjustable via push-button and digitally readable

## Qualifications



### DQ (Design Qualification)

*Definition:* Documented proof that the quality-related, GMP-related requirements has been adequately addressed in the design of equipment, including buildings, premises, and auxiliary equipment

The user-requirement profiles (specifications) are documented and confirmed by us. On request, a specification can be created by us.

### IQ (Installation Qualification)

*Definition:* Documented proof that critical equipment and systems have been delivered and installed in accordance with the set requirements and government regulations.

The IQ documentation is worked out by us especially for the delivered machine and is made available to you. The IQ documentation must be carried out by the customer itself.

### OQ (Operational Qualification)

*Definition:* Documented proof that critical equipment and systems in accordance with the set requirements in the whole operating range are working as intended in accordance with predetermined limits.

The OQ documentation is worked out by us especially for the delivered machine and is made available to you. The OQ documentation must be carried out by the customer itself.

### CQ (Calibration Qualification)

*Definition:* Documented proof that critical measuring equipment in the intended range in accordance with predetermined tolerances operate reliably under current operating conditions

#### Checking the temperature in the unloaded climatic cabinet (after reaching steady state)

**1 temperature on 2 measuring levels with 4 measuring points each and one measuring point in the centre of the unit.** (Measurement with calibrated PT 1000 sensors).

**The humidity is measured simultaneously with a measuring point (in the centre of the unit).**

Test time 4 hours, then open door for 30 seconds.

During this time, the stated tolerances must not be exceeded.

The temperature measurements are carried out on our premises. The measurement evaluation, including graphical representation, is provided in written form. (Other measuring methods possible on request)

### PQ (Performance-Qualification)

*Definition:* Documented proof that critical equipment and systems in accordance with the set requirements in the whole workspace under current working conditions (with product) provide the requested services

The calibration described above is carried out under real conditions on site. Optionally, the measurement can be carried out in a loaded or unloaded state. The measurement evaluation, including graphical representation, is carried out in written form. During this time, the stated tolerances must not be exceeded.

(Other measuring methods possible on request)