

Laboratory Refrigerator, with air circulation

Internally spark resistant

TC 1003-ex



External Dimension: **B = 600 mm**
 D = 610 mm
 H = 1640 mm

Inside Dimension: **B = 470 mm**
 D = 440 mm
 H = 1452 mm

Capacity: **333 l**

Temperature range: **1°C to 15°C**

Housing

galvanized sheet steel with white coating. Isolated door supplied as standard with right hand hinge (reversible). Grease resistant magnetic seal.

Interior space

of high quality plastic. Cleaning friendly by rounded corners, slippery surface in the interior, meets highest hygiene requirements

Isolation

Polyurethane, free of CFCS

Air circulating cooling

for fast, uniform temperature control, the temperature gradient was reduced to a minimum.

Interior fittings

5 pcs. glass shelves, height adjustable, dimension: 470x425 mm, max. load 40 kg per shelf

Control system located above door.

High quality temperature controller, with capillary sensor, (located outside)

Set value analogue adjustable

Digital Temperature display, outside

Working range from 1°C to 15°

Refrigerating unit

Refrigerating unit fully hermetically sealed, forced ventilation, fitted on vibration - absorbing mounts (ambient temperature max. 32°C), low noise (43 dBa/1m), energy saving compressor with high quality vaporisation system. Refrigerant: environment friendly R600a

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Defrost

Automatic defrost, with manual dew water collector inside

Electrical dates

Power supply 230 V/50 Hz / single-phase
Power input 150 W
Energy consumption 0,95 KW (24 Std.)
Power cable 1,5 m with schuko plug

Packing details (palletized)

Dimensions: approx. 70x70x180 cm
Net weight: approx. 59 kg
Gross weight: approx. 64 kg
Country of Origin: European Community
Customs clearance code: 8418 5090

Technical indication:

This refrigerator is classified as “**internally spark resistant**” and have no electrical components in the interior, reducing the risk of fire or explosion. (The class of explosion protection provided by this equipment meets Federal German safety regulations for laboratory equipment DGUV Information 213-850. The appropriate regulations must be observed in other countries).

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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 has to 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 has to 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 cabinet

1 Temperature on 3 different measuring points (measured with calibrated PT 100 sensor) evenly located on the shelves. Inspection time 6 hours, open door after that of 30 seconds. The inside temperature of the cabinet must have been stabilized itself within 1 hour on the set point temperature.

The measurements are carried out in the empty state.

The temperature measures are carried out in our company, represented graphically and provided to you.

The values may not dropping below or above the tolerances given by us.

(Additional measuring points 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.

The values may not dropping below or above the tolerances given by us.