
Scientific and Healthcare 2023

Next-level cooling solutions

LIEBHERR

Refrigeration and freezing





Comprehensive solutions for refrigeration and freezing with maximum safety

Reliable refrigeration of temperature-sensitive substances poses enormous challenges for the research and healthcare sectors. To help you overcome every one of them, Liebherr offers high-quality refrigerators and freezers combined with innovative monitoring solutions and a comprehensive range of services.

For example, the network connection of refrigerators and freezers guarantees maximum reassurance and a significant reduction in workload. This is also ensured by our high-quality service – from planning and installation to ongoing support.

And, in terms of sustainability, we can boast more than 65 years of expertise and a passion for professional refrigeration and freezing – with unsurpassed energy efficiency, natural refrigerant and extremely long-lasting appliances.

The quality that characterises Liebherr pays off in many ways. On the following pages you can find out how research and healthcare can benefit from our complete solutions.





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Earthmoving



Material handling



Specialist civil engineering



Mining



Mobile and crawler cranes



Tower Cranes



Concrete technology



Maritime cranes



Aerospace and transportation systems



Gear technology and automation systems



Components



Hotels



Refrigerators and freezers

A tradition of reliability admired the world over.

For more than 70 years Liebherr has offered high-quality products for pioneering industries.

With our customers and partners all over the world, we constantly reach new heights.



One big family

The Liebherr Group was established in 1949 by Hans Liebherr. With a history spanning more than 70 years, the family-run company is characterised by stability and reliability. Liebherr is one of the biggest manufacturers of construction equipment and is also successful in many other industries. The Group has a decentralised organisation with around 50,000 employees worldwide and is divided into independently operating business units.

The Group now encompasses 13 product segments – earthmoving machinery, material handling technology, deep foundation machines, mining, mobile and crawler cranes, tower cranes, concrete technology, maritime cranes, aerospace and transportation systems, gear technology and automation systems, refrigerators and freezers, components and hotels – and comprises more than 140 companies across all continents. The holding company of the Group is Liebherr-International AG in Bulle (Switzerland), all of whose shareholders are members of the Liebherr family.

Cutting edge combined with experience: Appliances

The Appliances division was established at the Ochsenhausen site in 1954 and for many years it has played an important part in the development of the Group. For more than 65 years, Liebherr has been a premium manufacturer of innovative refrigerators and freezers for domestic and commercial use. With an annual production of more than 2.2 million appliances, Liebherr is one of Europe's leading suppliers of cooling and freezing appliances. The five production sites in Ochsenhausen (Germany), Lienz (Austria), Radinovo (Bulgaria), Kluang (Malaysia) and Aurangabad (India) form a manufacturing network for refrigerators and freezers that meets all the most up-to-date standards.

Liebherr is active all over the world. With a dense network of sales subsidiaries and offices in Bulgaria, Germany, the UK, Austria, Canada, Malaysia, Russia, Switzerland, Singapore, South Africa and the USA, the refrigeration and freezing specialists ensure that customers receive expert advice and that service and maintenance work is provided professionally on site.

Quality is in our DNA.

Our work is driven by the high demands of our customers worldwide. For more than 65 years, we have been offering high-quality appliances for private and commercial use that meet these high demands, proving their durability and repaying the investment in them.

Specialists in refrigeration and freezing

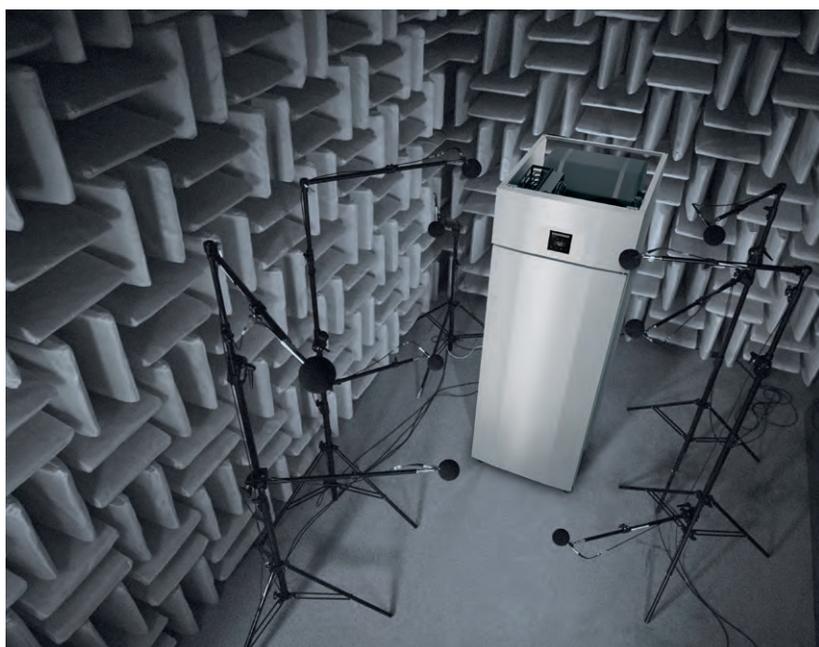
With outstanding quality, pioneering technologies as well as aesthetic yet user-friendly design, Liebherr sets new standards again and again. How do we do it? By specialising in what we do: developing and manufacturing outstanding refrigerators and freezers, especially for professional use. Research, laboratories and medicine are just some of the areas for whose special requirements our appliances are explicitly designed – with a clear mission: to make your demanding day-to-day work easier with maximum precision and safety.





Cleverly built for maximum safety

Sensitive samples, research materials and preparations allow no room for error with refrigeration. Reliability is crucial. And that's exactly what Liebherr stands for. Liebherr professional appliances have been specifically developed for the challenging requirements of the research, laboratory and medical sectors. With clever design details, high-quality materials and innovative technologies, they provide maximum safety and ease of use.



The Liebherr factor:

Professional refrigerators and freezers

- Specially developed for research, laboratories and medicine
- Safe storage of sensitive substances
- Top quality thanks to elaborate testing procedures
- Complete solution in combination with Integrated data recording and services

Tested down to the finest detail – and beyond.

From conception through to development and production to marketing, at Liebherr we do everything we can to offer top-quality, innovative products. We test all the mechanical, electronic and refrigeration components for reliable operation, from the development stage onwards. Before we approve a door hinge, for example, it must undergo at least 100,000 opening cycles. You can count on this: your Liebherr appliance will be the professional partner at your side – 24 hours a day, 365 days a year.

Complete responsibility

Responsible use of our resources is our objective and further continuous improvement throughout the product lifecycle is the long-term aim.

This is why we continually develop more environmentally friendly methods for manufacturing more sustainable products – with the familiar Liebherr quality. As well as high energy efficiency, we put a special focus on durability and ensuring that spare parts are available for at least ten years.



Economic success through environmentally aware product design.

The high product quality and energy efficiency of our appliances help you to be economically competitive:

- Low energy consumption
- The savings potential of every component is fully utilised
- Appliance doors close automatically to minimise loss of cold air

Conscientiously developed

We take every aspect of sustainability into account when designing our products. Our product responsibility begins during the development of the appliances and continues with the careful organisation of our production and supply chains. This means the correct choice of materials with regard to recycling as well as minimising the use of energy during production are important factors. During the use phase our appliances are characterised by very low energy consumption and low operating costs.

Naturally refrigerated

We were the first to convert our complete range of refrigerators to CFC-free refrigerants and blowing agents. We now only use the natural refrigerants R600, R290 and R170. These are specially designed for highly efficient compressors and also result in lower energy consumption and electricity costs.

Responsibly manufactured

We also make sure we use resources responsibly when manufacturing our appliances. Advanced processes are used to recycle the energy released during production for heating buildings. We also purify the water after the manufacturing process to make sure that it is free of pollutants.



Europe-wide certification

All our European production sites are certified according to the international standards for quality management (ISO 9001), environmental management (ISO 14001) and energy management (ISO 50001).

EcoVadis Gold

We handle the issue of Corporate Responsibility holistically and at all stages of the product life cycle. Our efforts have been awarded gold for 2022 by EcoVadis, the world's leading Corporate Social Responsibility ratings agency. We are proud to be among the top 3% of companies assessed by EcoVadis.



The Liebherr factor:

Environmentally conscious development and production:

- Appliances with very low energy consumption
- Natural refrigerant
- Resource-saving manufacturing processes
- European sites are fully certified
- Gold medal from EcoVadis

Choose refrigeration and freezing from the professionals

Whether in the biotechnology, pharmaceutical research, or in healthcare, the highly demanding work relies on refrigeration that meets the highest standards. With specially developed professional appliances, Liebherr offers solutions for the stringent requirements of the medical and scientific sectors – and good arguments for choosing our systems expertise.

Five good reasons for our outstanding performance.



Reliable temperature stability

Liebherr professional appliances are characterised by outstanding temperature stability. Sensitive vaccines, preparations, samples and medicines are cooled to precise, constant temperatures – even when there are extreme climatic conditions.



Standard safety functions

Liebherr stands for maximum protection of valuable products. Numerous safety functions ensure that the quality of temperature-sensitive substances is constantly assured – as is the quality of your work.



Innovative alarm systems

Research and medicine allow no room for inaccuracy – and that includes storage temperatures. Liebherr professional appliances are equipped with various alarm systems that immediately warn of any deviations and help you to realistically assess critical situations.



Sustainability and economy

Our refrigerators and freezers only use natural refrigerants and are characterised by high efficiency as well as very low energy and operating costs. The outstanding TCO (total cost of ownership) is also down to the long service life, easy care and, not least, the fact that the appliances need hardly any maintenance.



Compliance with standards and directives

Liebherr refrigerators and freezers comply with all the various standards, norms and directives on storage quality, hygiene and safety.



Temperature stability

Stable temperature – constant quality

Liebherr appliances offer maximum reliability for storing sensitive substances by ensuring constant temperatures. This not only maintains the correct climate for storage, but also the value of your stored products.

Precise temperature ranges

Temperature fluctuations must be minimal to ensure that the quality of sensitive substances is preserved. Liebherr refrigerators will not deviate from the set temperature by more than ± 3 °C, and Liebherr freezers will not stray by more than ± 5 °C. This optimally protects the quality of their valuable contents.

Stability is in the air.

The circulating-air refrigeration system and the optimal airflow in the interior keep the temperature stable and ensure that the set temperature is quickly restored after the door has been opened. This means frequent opening of the door during day-to-day use has little effect on temperature stability.



The Liebherr factor:

Consistent refrigeration for reliable storage:

- Temperature setting accurate to a tenth of a degree
- Low tolerance for deviations
- Innovative circulating-air refrigeration system
- Optimal airflow and circulation
- Constant monitoring of the precise storage temperature

Safety as standard

When handling highly sensitive substances, safety has top priority. Whether the risk is unauthorised access or loss of quality – Liebherr protects valuable contents with numerous safety functions.



Self closing door with safety hinges

To make loading, unloading and cleaning easier, the appliance door stays open if opened by more than 90°. If the opening angle is less than 90°, it closes automatically for safety.



Passcode protected setting access: individual and secure

The settings menu access can be protected via a 4 digit PIN code to prevent settings and functions being changed unintentionally.

+2 °C SafetyDevice: protection from freezing

If the temperature falls below +2 °C due to a malfunction, the SafetyDevice takes control, stabilising the temperature, activating the alarm and protecting the contents from freezing.

Integrated data logger and alarms system: extra safety

The integrated data logger and alarms system in Liebherr's perfection series keep records of the storage temperature and alerts you immediately in the event of deviations for maximum safety in refrigeration and freezing and optimal protection for your valuable contents.

The Liebherr factor:

Integrated safety functions to protect sensitive substances:

- Self-closing door at an opening angle of less than 90°
- Automatic locking in the event of an alarm
- Mechanical locking systems
- Protection from freezing in the event of malfunctions
- Monitoring, documentation and alarms when required

Checks are good, but alarms are better

Professional refrigerators and freezers together with guarantee maximum storage safety through constant temperature monitoring, immediate alarms for uncontrolled fluctuations and recording of critical situations.



LightAlarm:
know at a glance when action is needed

If there is an uncontrolled temperature rise, if a door has been left open or there are any other problems, the interior light of the appliance starts flashing. In the case of glass-door appliances, this quickly reveals where action is needed. With solid-door appliances, the flashing interior warns you to close the door immediately to preserve the storage quality.



Alarm relay:
don't miss any deviations

In the event of an alarm, the responsible control centre is informed immediately, usually through connections to the building control system. You can define in advance which alarms are to be forwarded, as well as set how long forwarding remains active and whether a reminder should be sent after the alarm is acknowledged. This allows you to react immediately in critical situations.



Alarm history:
quality check made easy

In order to be able to evaluate the quality of the stored substances, a clear history of anomalies that have occurred is necessary. The alarm history logs important data such as the date, duration and maximum temperature of the last ten, and can be accessed and reviewed from anywhere.



5 Years

Integrated data logger:
can be traced back for years

To ensure full traceability, the integrated data logger records the temperature profile, alarm history and service information for up to five years. The stored data can be read directly from the appliance via a USB interface.

Maximum performance at a minimal cost.

Rising costs increase the requirements that professional refrigerators and freezers must meet. Liebherr scores highly here on every level with sustainably economical appliances.

Ultra-efficient: good for people and the environment

Rising electricity prices increase the requirements for efficiency in refrigerators and freezers. From the compressor to the seal, to the lighting and electronics, Liebherr fully utilises the savings potential of each component. The result is impressive – especially in terms of total cost of ownership.

Outstanding service life: satisfaction guaranteed

Liebherr appliances are designed for a long service life. Extremely robustly manufactured, they withstand the demands of daily use. This is quality that pays off – for many years to come.



The Liebherr factor:

Very low energy and total operating costs:

- Energy-efficient
- Extremely long service life

Meeting the highest expectations. And the applicable standards and directives.

Hardly any sector has more stringent requirements for the storage of substances than those of research, laboratories and medicine. Liebherr professional appliances are specially developed to meet these extremely strict requirements for aspects such as hygiene and occupational safety.

DIN 13277 compliance

Laboratory and pharmaceutical refrigerators from Liebherr meet all the necessary property and performance criteria to fully comply with DIN 13277.

IEC 61010-2-011 compliance

Liebherr refrigerators and freezers specially developed for storing temperature-sensitive products are CE safety-compliant. This ensures that all mechanical and electrical requirements for injury-free operation are met – and that you and your team are always kept safe.

ATEX compliance

Liebherr laboratory appliances conform to EN/IEC 60079-0 / EN-IEC 60079-7 and comply with EU Directive 2014/34/EU (“ATEX Directive”). With an interior classified according to <Ex> II 3 G Ex ec IIC T6 (declared as Zone 22), they are suitable for flammable substances in closed containers that could form explosive atmospheres.



Cleanroom compatibility

A label indicates the cleanroom class in which Liebherr refrigerators and freezers may be operated in accordance with DIN EN ISO 14644 or EU GMP. As a result, no additional risk assessment by the customer for cleanroom suitability is necessary. This saves time and money.

Antimicrobial handle

A benefit for users but a bane for germs, the easy-turn handle mechanism makes opening the door effortless. It also contains special antimicrobial substances that remove the need for regular and time-consuming disinfection. This means the appliance is extremely safe even if many people have access to it.



Recommended cleaning products and disinfectants

Liebherr appliances are designed for a long service life. To maintain them, the manual or separate instructions contain recommendations for cleaning products and disinfectants that have been tested by Liebherr for safe use. This way you can be sure that you are not accidentally harming your appliance when you are trying to take care of it.



Easy-to-clean interior

The inner liner is made of polystyrene: a fully recyclable, robust, and odourless plastic. Manufactured seamlessly from one piece, it has no hidden dirt traps and the large, rounded corners can be cleaned quickly and easily. It's the perfect combination of sustainability and hygiene.

The Liebherr factor:

Designed to meet the strictest standards, norms and directives:

- Suitable for storing sensitive substances in accordance with **DIN 13277**
- Safe operation in accordance with **IEC 61010-2-011**
- ATEX compliant for storing explosive and highly flammable substances
- Cleanroom compatible
- Hygienic and easy-to-clean design
- Integrated data logger for reliable documentation as proof of temperature compliance

Endlessly reliable. Take our word for it.

In research, laboratories and medicine, there are ever more jobs to do, and less time to do them in. Liebherr takes some of them off you. Let us lighten your daily workload – with many different services to ensure reliable refrigeration from the professionals.

Delivery right to your door

Liebherr offers you various delivery options. We can deliver your new appliance to the kerbside or take it right in to the place of use and unpack it there. We'll not only take back the packaging for disposal, but also your old appliance if you want.

Installation: it couldn't be quicker

With our installation service, your new appliance is ready in no time to provide you with reliable refrigeration or freezing. Liebherr will not only commission the appliance for you, but also install the digital monitoring solution or other accessories. The availability varies in different countries.

Qualification: let the professionals help

Be on the safe side and save time as well: Liebherr will take care of the time-consuming installation qualification (IQ) and operational qualification (OQ), including the documentation and training. If you want, we can send you the documentation and you can carry out the qualification yourself.

Maintenance: doing it right

Liebherr appliances for research, laboratory and medicine require an impressively low amount of maintenance.

Comprehensive solution for everyday use

Fulfils the highest standards
for data protection

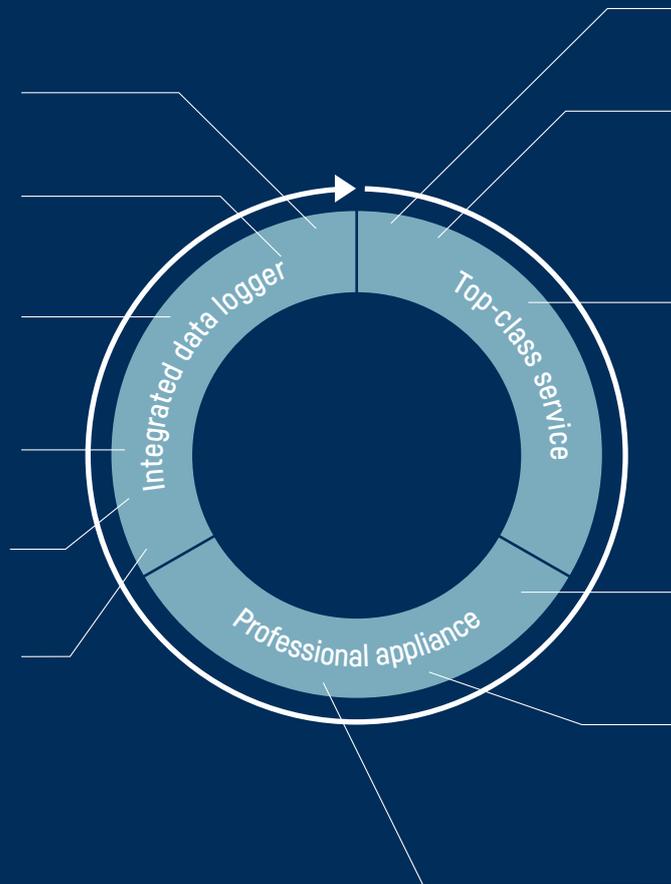
Protect your valuable
substances

Reliable documentation
for proof of temperature
compliance

Prevention of damage
and loss of quality

More time to concentrate
on the essentials

Simple and convenient
monitoring solution



Professional delivery
service from kerbside to
place of installation,
including disposal of
packaging and old appliances

Fast and professional
customer service

Comprehensive expert
support for installation
qualification (IQ) and
operational qualification
(OQ)

Large selection of
professional appliances
for research, medicine and
laboratories

Maximum precision and
reliable temperature
stability

Meets the strict DIN 13277
standard on storage of
temperature-sensitive
substances such as
pharmaceuticals

Two unique series

Whether it's a large research facility or a small laboratory, a doctor's surgery, a nursing home or a pharmacy – our range includes models for every requirement. But however different the appliances are, they all have one thing in common: their first-rate quality.

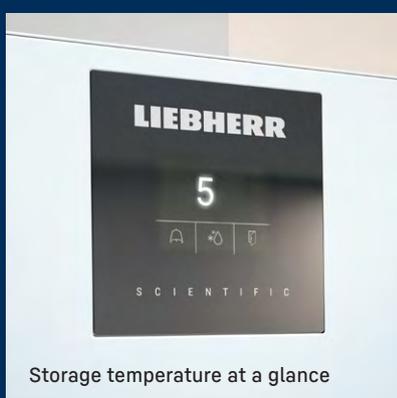
Performance Perfection

Performance series

All the appliances in the Performance series comply with the safety standard IEC 61010-2-011. In addition, some appliances meet other standards such as the ATEX directive.



Optimal temperature stability



Storage temperature at a glance



LED interior light



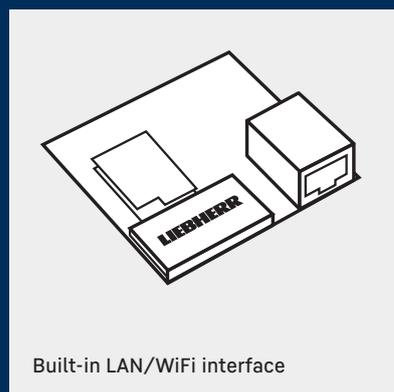
Antimicrobial handle with opening mechanism



LightAlarm

Perfection series

The appliances in the Perfection series not only comply with the IEC 61010-2-011 safety standard but also DIN 13277, which specifies requirements for laboratory and medical applications.



Built-in LAN/WiFi interface





The new generation of appliances for laboratories and research – safety redefined

Constant temperatures are essential when storing sensitive substances. This especially applies to work in laboratories, where even the slightest deviations can jeopardise the quality of research results. This is why Liebherr has developed new refrigerators and freezers specifically for this sector, combining maximum refrigeration performance with optimum temperature stability. Innovative safety features with monitoring and alarm functions offer all-round protection from all kinds of incident and malfunction.

The next generation of appliances also set new standards in terms of energy efficiency and total cost of ownership. On the next few pages we present the latest results of research and development by the refrigeration specialists at Liebherr and show how they can benefit safety in your laboratory.

MediLine**General laboratory use/ATEX**

LKUv/LCv/LCexv/LKUexv/LGUex

Refrigerators +/-3 K deviation from setpoint

Freezers +/-5 K deviation from setpoint

Calibration option

Visual and audible alarms

Alarm relay

Alarm test function

+2 °C SafetyDevice function

Alarm history with real-time clock and 6 events

NTC product sensor
(optional for LCv/LCexv/LGUex)

Min./max. temperature log

Self-closing door at < 90°

Custom alarm settings possible

Mechanical lock

RS485 interface

Modbus RTU communication protocol

LED 7-segment display with buttons

Castors/adjustable feet as accessories,
75 cm-wide appliances with castors as
standardEvaporator cover (stops items freezing to inner
liner), optional

Sensor feedthrough

Refrigerators: glass door models with ceiling
lighting

Freezers: no lighting

Ergonomic slimline handle with opening mech-
anism

Safety according to IEC 60335-2-89

ATEX directive (LKUexv, LCexv, LGUex)

Performance series**General laboratory use/ATEX**

SRFfg/SFFfg

Refrigerators +/-3 K deviation from setpoint

Freezers +/-5 K deviation from setpoint

Freezers with SmartFrost

Calibration option

Visual and audible alarms

Alarm relay

Alarm test function

+2 °C SafetyDevice function

Alarm immediately upon power failure

Min./max. temperature log

Self-closing door at < 90°

Custom alarm settings possible

Mechanical lock

Optional LAN/WiFi

Local API (optional via LAN/WiFi Module)

Monochrome display, touch buttons

Individually adjustable maintenance timer

Castors/adjustable feet as accessories

Evaporator cover (stops items freezing to inner
liner)

Sensor feedthrough

Freezers: no lighting

Antimicrobial handle with opening mechanism

Super-efficient

Safety according to IEC 61010-2-011

ATEX directive (SRFfg/SFFfg)

Perfection series**General laboratory use**

SRFvh/SFFvh

Refrigerators +/-2 K deviation from setpoint

Freezers +/-4 K deviation from setpoint

Freezers with NoFrost

Calibration option

Visual and audible alarms

Alarm relay

Alarm test function

+2 °C SafetyDevice function

Alarm with battery backup (12 h) immediately
upon power failureAlarm history with real-time clock and 10
events

Integrated data logger

PT1000 product sensor
(optional for SFFvh models)

Min./max. temperature log

Self-closing door at < 90°

Custom alarm settings possible

Mechanical lock

Integrated LAN/WiFi

Local API

USB interface for reading
the data logger

2.4" touch & swipe colour display

Individually adjustable maintenance timer

Castors/adjustable feet as accessories,
75 cm-wide appliances with castors as
standardEvaporator cover (stops items freezing to inner
liner), standard for all models

Sensor feedthrough

Refrigerators: Insulated and glass door models
with vertical lighting

Freezers: LED lighting in the front housing

Antimicrobial handle with opening mechanism

Ultra-efficient

Safety according to IEC 61010-2-011

Fulfil DIN 13277

The advantages at a glance

Min./max. temperature log

The min./max. temperature log stores the minimum and maximum interior temperatures and shows on the display whether the storage temperatures were within the tolerance limits.

+2 °C SafetyDevice

If the temperature falls below +2 °C due to a malfunction, the SafetyDevice takes control, stabilising the temperature, activating the alarm and protecting the contents from freezing.

Power failure alarm

If a malfunction occurs, an integrated battery provides a visual and audible alarm and takes over the power supply. As soon as the power is restored, the time of failure and the maximum temperature reached are displayed.

LightAlarm

In the event of an uncontrolled temperature rise or other problems, the interior light of the appliance starts flashing. This visually shows when action is needed.

Feedthrough for external sensors

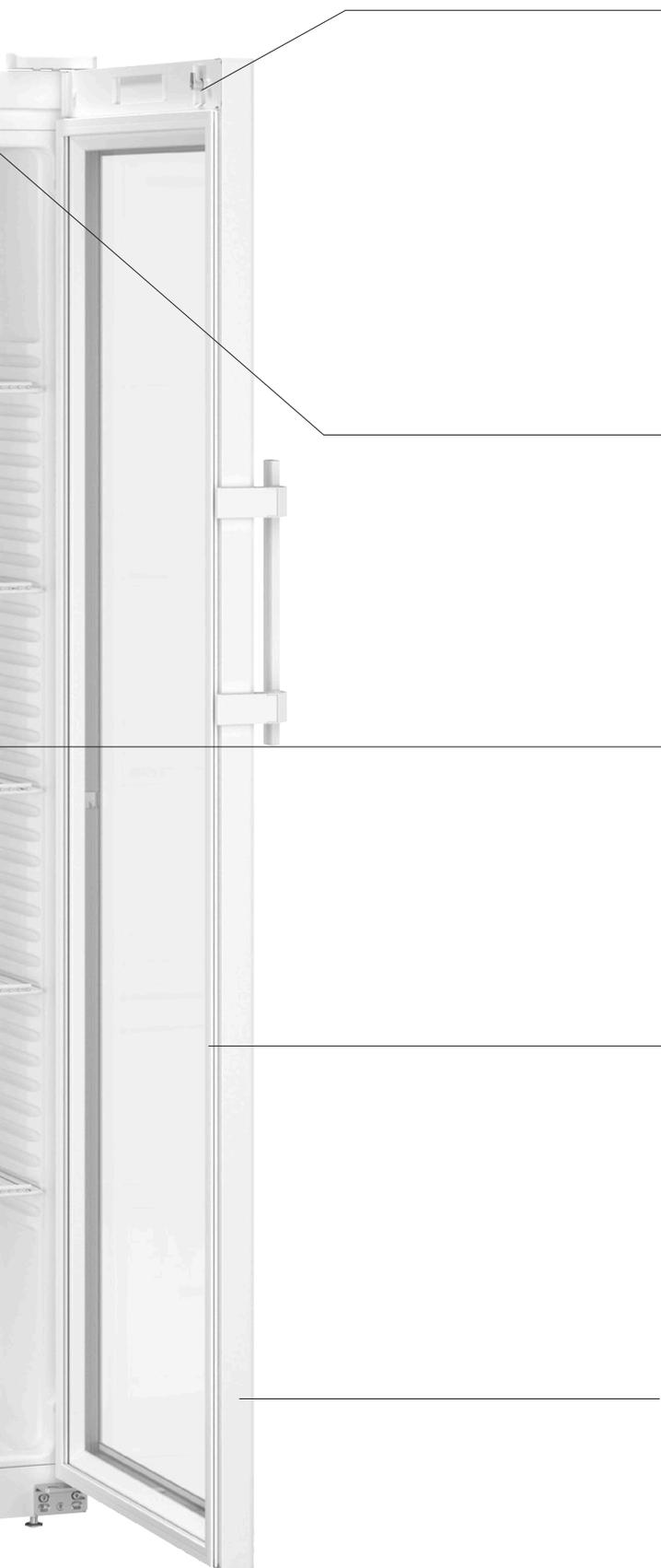
An integrated opening allows a separate sensor to be connected for additional temperature monitoring without having to drill holes or break the door seal.

Integrated data logger

The integrated logger records the temperature profile, alarm history and service information for up to five years. The data can be read out directly from the appliance via the USB interface.



SRFvh 4011 Perfection



Mechanical lock

Liebherr professional appliances are equipped with a mechanical lock and two keys. This ensures that unauthorised persons cannot access your valuable and sensitive stored goods.

Integrated WiFi/LAN interface

The integrated WiFi/LAN interface enables you to easily connect your appliances with Liebherr existing local systems.

Easy-to-clean interior

The inner liner made of fully recyclable, robust and odourless polystyrene is manufactured in one piece without joints. This makes it quick and easy to clean the large, rounded corners.



Replaceable door seal

Save time and money: the insertable Liebherr door seals are easy to change. If a seal is damaged, you can replace it yourself without any tools. Contact Liebherr Customer Service to purchase replacements.



Self-closing door < 90°

To make loading, unloading and cleaning easier, the appliance door stays open if opened by more than 90°. If the opening angle is less than 90°, it closes automatically for safety.



Vertical LED lighting

Vertical LED lighting provides optimal illumination of the interior over the entire height of the appliance. Thanks to the perfect overview on all levels, the required substance is immediately at hand, the door can be quickly closed again, and the interior temperature remains stable. This saves you time looking for things – and above all energy costs.

Quality right down to the smallest detail



Antimicrobial handle with opening mechanism

The smooth-turning handle contains special antimicrobial substances that make it particularly hygienic. Regular and time-consuming disinfection is not necessary.



Grid shelf with pull-out stop

Corrosion-free grid shelves made of coated steel guarantee a secure hold, constant air circulation and good temperature stability. A pull-out stop prevents them from accidentally sliding out.



Ultra Efficient

Ultra-efficient

Rising electricity prices are increasing the demands on the efficiency of refrigerators and freezers. From the compressor to the seal, to the lighting and electronics, Liebherr fully utilises the savings potential of every component. The result is impressive – especially in terms of total operating costs.



±3 °C

±3 °C temperature stability

Temperature fluctuations must be minimal to ensure that the quality of sensitive substances is preserved. Liebherr Laboratory refrigerators have an impressive maximum deviation of just ±3 °C from the set temperature. This not only maintains the storage climate, but also the value of your stored goods.



DIN 13277 compliance

Laboratory and pharmacy refrigerators from Liebherr meet all the necessary equipment and performance criteria to fully comply with DIN 13277. DIN 13277 defines the requirements and test specifications for refrigerators and freezers used in laboratories and for storing medicinal products.



IEC 61010-2-011 standard

Liebherr refrigerators and freezers specially developed for storing temperature-sensitive products are CE safety-compliant. This ensures that all mechanical and electrical requirements for injury-free operation are met – and that you and your team are always safe.

Laboratory refrigerators with plastic inner liner



SRFvh 5511

Perfection

Gross / net capacity	588 / 440 litre
Exterior dimensions in mm (w / d / h)	747 / 769 / 1793
Interior dimensions in mm (w / d / h)	606 / 536 / 1460
Energy consumption in 365 days ¹	360 kWh
Ambient temperature range	+10 °C to +35 °C
Heat output	475 kJ/h
Refrigerant	R 600a
Sound power level	49 dB(A)
Voltage / Connection rating	220 - 240V~ / 2.0 A
Cooling system / Defrost	forced-air / automatic
Temperature range	+3 °C to +16 °C
Gradient ² / max. fluctuation ³	3.3 °C / 2.0 °C
External cabinet finish	steel / white
Door material	glass
Internal liner material	commercial grade moulded polystyrol
Type of control	2.4" touch & swipe colour display
Power failure alarm	immediately upon power failure for at least 12 hrs
Fault: warning signal	visual and audible
Volt-free alarm contact	yes
Interface	WiFi/LAN
Data logger	integrated, USB interface
Interior light	Vertical LED light strip recessed in left wall with separate switch
Adjustable shelves / Shelf material	9 / wire shelves plastic-coated
Usable shelf area in mm (w / d)	606 / 536
Shelf loading / device	60 kg / 300 kg
Castors	castors with brake at the front, fixed castors at the rear
Handle	Antimicrobial handle with opening mechanism
Access ports	1 x Ø 10 mm
DIN 13277	yes
Type of lock / Door hinges	mechanical / right, reversible on site
Gross / net weight	111 / 98 kg
Accessories	
Shelf, plastic-coated	7113310
Base grid	7113314
Glass shelf	9291929
Scanner rail	7435210
Adjustable feet, 90 - 120 mm / 150 - 180 mm	9080022 / 9086924
Additional lock barrels (up to 5)	on request
Side-by-Side set	on request

¹ Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers.



SRFvh 4011

Perfection

Gross / net capacity	420 / 297 litre
Exterior dimensions in mm (w / d / h)	597 / 654 / 1884
Interior dimensions in mm (w / d / h)	460 / 423 / 1660
Energy consumption in 365 days ¹	389 kWh
Ambient temperature range	+10 °C to +35 °C
Heat output	463 kJ/h
Refrigerant	R 600a
Sound power level	49 dB(A)
Voltage / Connection rating	220 - 240V~ / 2.0 A
Cooling system / Defrost	forced-air / automatic
Temperature range	+3 °C to +16 °C
Gradient ² / max. fluctuation ³	3.0 °C / 2.4 °C
External cabinet finish	steel / white
Door material	glass
Internal liner material	commercial grade moulded polystyrol
Type of control	2.4" touch & swipe colour display
Power failure alarm	immediately upon power failure for at least 12 hrs
Fault: warning signal	visual and audible
Volt-free alarm contact	yes
Interface	WiFi/LAN
Data logger	integrated, USB interface
Interior light	Vertical LED light strip recessed in left wall with separate switch
Adjustable shelves / Shelf material	9 / wire shelves plastic-coated
Usable shelf area in mm (w / d)	460 / 423
Shelf loading / device	45 kg / 225 kg
Handle	Antimicrobial handle with opening mechanism
Access ports	1 x Ø 10 mm
DIN 13277	yes
Type of lock / Door hinges	mechanical / right, reversible on site
Gross / net weight	86 / 80 kg
Accessories	
Shelf, plastic-coated	7113308
Base grid	7113312
Glass shelf	9293493
Perforated metal shelf	9029022
Scanner rail	7435208
Adjustable feet, 90 - 120 mm / 150 - 180 mm	9080022 / 9086924
Additional lock barrels (up to 5)	on request
Side-by-Side set	on request

² Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.

³ Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements.

Quality right down to the smallest detail



LED front lighting

The LED front lighting provides optimal illumination of the drawers even in dark environments. Thanks to the perfect overview, the desired substance is immediately at hand, the door can be quickly closed again, and the interior temperature remains stable. For low consumption and lower energy costs.



NoFrost technology

Liebherr professional laboratory appliances no longer need manual defrosting. Any moisture that occurs is bound by the fan-assisted cooling, and when necessary, defrosting phases remove any remaining moisture particles from of the interior – for convenient, safe, and ice-free storage.



Ultra-efficient

Rising electricity prices are increasing the demands on the efficiency of refrigerators and freezers. From the compressor to the seal, to the lighting and electronics, Liebherr fully utilises the savings potential of every component. The result is impressive – especially in terms of total operating costs.



±5 °C

±5 °C temperature stability

Sensitive substances cannot be subjected to large deviations from the set storage temperature. Liebherr freezers guarantee a temperature fluctuation of no more than ±5 °C, so that the valuable goods you store in them are optimally protected and their quality is preserved.



DIN 13277 compliance

Laboratory and pharmacy refrigerators from Liebherr meet all the necessary equipment and performance criteria to fully comply with DIN 13277. DIN 13277 defines the requirements and test specifications for refrigerators and freezers used in laboratories and for storing medicinal products.



IEC 61010-2-011 standard

Liebherr refrigerators and freezers specially developed for storing temperature-sensitive products are CE safety-compliant. This ensures that all mechanical and electrical requirements for injury-free operation are met – and that you and your team are always safe.



SFFvh 5501

Perfection

Gross / net capacity	472 / 257 litre
Exterior dimensions in mm (w / d / h)	747 / 769 / 1793
Interior dimensions in mm (w / d / h)	603 / 510 / 1118
Energy consumption in 365 days ¹	540 kWh
Ambient temperature range	+10°C to +35°C
Refrigerant	R 290
Sound power level	55 dB(A)
Voltage / Connection rating	220 - 240V~ / 2.0 A
Cooling system / Defrost	forced-air / automatic
Temperature range	-9°C to -35°C
Gradient ² / max. fluctuation ³	5.5°C / 4.4°C
External cabinet finish	steel / white
Door material	steel
Internal liner material	commercial grade moulded polystyrol
Type of control	2.4" touch & swipe colour display
Power failure alarm	immediately upon power failure for at least 12 hrs
Fault: warning signal	visual and audible
Volt-free alarm contact	yes
Interface / Data logger	WiFi/LAN / integrated, USB interface
Interior light	LED
Adjustable shelves / Shelf material	4 / wire shelves plastic-coated
Usable shelf area in mm (w / d)	603 / 510
Shelf loading / device	60 kg / 300 kg
Castors	castors with brake at the front, fixed castors at the rear
Drawers / Number of baskets	6 / 2
Handle	Antimicrobial handle with opening mechanism
Type of lock / Door hinges	mechanical / right, reversible on site
Gross / net weight	114 / 104 kg
Accessories	
Shelf, plastic-coated	7112590
Glass shelf / Full-depth drawer	
Short bottom basket / Standard full-depth basket	- / 9141791
Adjustable feet, 90 - 120 mm / 150 - 180 mm	9080022 / 9086924
Additional lock barrels (up to 5)	on request
Side-by-Side set	on request
Product sensor (PT 1000)	6942678

¹ Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers

² Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.

³ Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements.

Laboratory refrigerators with plastic inner liner



LKUv 1613

MediLine

Gross / net capacity	152 / 132 litre
Exterior dimensions in mm (w / d / h)	601 / 618 / 820
Interior dimensions in mm (w / d / h)	440 / 435 / 670
Energy consumption in 365 days ¹	369 kWh
Ambient temperature range	+10 °C to +35 °C
Refrigerant	R 600a
Sound power level	47 dB(A)
Voltage / Connection rating	220 - 240V~ / 1.0 A
Cooling system	forced-air
Defrost	automatic
Temperature range	+3 °C to +16 °C
Gradient ² / max. fluctuation ³	5.1 °C / 4.9 °C
External cabinet finish	steel / white
Door material	glass door
Internal liner material	commercial grade moulded polystyrol
Type of control	LED 7-segment display with buttons
Power failure alarm	when mains power return
Fault: warning signal	visual and audible
Volt-free alarm contact	yes
Interface	RS485
Interior light	LED ceiling light strip with separate switch
Adjustable shelves	3
Shelf material	wire shelves plastic-coated
Usable shelf area in mm (w / d)	440 / 420
Shelf loading	45 kg
Handle	slimline handle with integrated opening mechanism
Type of lock	mechanical
Door hinges	right, reversible on site
Gross / net weight	45 / 43 kg
Accessories	
Shelf, plastic-coated	7113333
Stacking kit, white	9592697
Roller bars	9590521
Evaporator cover, white	9590523
Additional lock barrels (up to 10)	on request



LKUv 1610

MediLine

Gross / net capacity	142 / 133 litre
Exterior dimensions in mm (w / d / h)	601 / 618 / 820
Interior dimensions in mm (w / d / h)	440 / 435 / 670
Energy consumption in 365 days ¹	273 kWh
Ambient temperature range	+10 °C to +35 °C
Refrigerant	R 600a
Sound power level	47 dB(A)
Voltage / Connection rating	220 - 240V~ / 1.0 A
Cooling system	forced-air
Defrost	automatic
Temperature range	+3 °C to +16 °C
Gradient ² / max. fluctuation ³	4.3 °C / 4.6 °C
External cabinet finish	steel / white
Door material	steel
Internal liner material	commercial grade moulded polystyrol
Type of control	LED 7-segment display with buttons
Power failure alarm	when mains power return
Fault: warning signal	visual and audible
Volt-free alarm contact	yes
Interface	RS485
Adjustable shelves	3
Shelf material	wire shelves plastic-coated
Usable shelf area in mm (w / d)	440 / 420
Shelf loading	45 kg
Handle	slimline handle with integrated opening mechanism
Type of lock	mechanical
Door hinges	right, reversible on site
Gross / net weight	40 / 37 kg
Accessories	
Shelf, plastic-coated	7113333
Stacking kit, white	9592697
Roller bars	9590521
Evaporator cover, white	9590523
Additional lock barrels (up to 10)	on request

¹ Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers.

Laboratory fridge-freezer combination with plastic inner liner



LCv 4010

MediLine

Gross / net capacity	fridge compartment	254 / 240 litre
Gross / net capacity	freezer compartment	107 / 105 litre
Exterior dimensions in mm (w / d / h)		601 / 618 / 2003
Interior dimensions in mm (w / d / h)	fridge compartment	440 / 441 / 1105
Interior dimensions in mm (w / d / h)	freezer compartment	433 / 433 / 597
Energy consumption in 365 days ¹		657 kWh
Ambient temperature range		+10°C to +35°C
Refrigerant		R 600a
Sound power level		52 dB(A)
Voltage / Connection rating		220 - 240V~ / 1.5 A
Cooling system	fridge / freezer comp.	forced-air / static
Defrost	fridge / freezer comp.	automatic / manual
Temperature range	fridge / freezer comp.	+3°C to +16°C / -9°C to -30°C
Gradient ²	fridge / freezer comp.	5.2°C / 7.9°C
Max. fluctuation ³	fridge / freezer comp.	5.7°C / 5.5°C
External cabinet finish		steel / white
Door material		steel
Internal liner material		commercial grade moulded polystyrol
Type of control		LED 7-segment display with buttons
Power failure alarm		when mains power return
Fault: warning signal		visual and audible
Volt-free alarm contact		yes
Interface		RS485
Adjustable shelves	fridge compartment	4
Shelf material	fridge / freezer comp.	wire shelves plastic-coated / glass
Usable shelf area in mm (w / d)	fridge compartment	440 / 409
Shelf loading	fridge / freezer comp.	45 kg / 24 kg
Drawers	freezer compartment	3
Handle		slimline handle with integrated opening mechanism
Type of lock		mechanical
Door hinges		right, reversible on site
Gross / net weight		89 / 83 kg
Accessories		
Shelf, plastic-coated, for	fridge compartment	7113333
Evaporator cover, white, for	fridge compartment	9590391
Product temperature sensor		9590407
Roller bars		9592756
Additional lock barrels (up to 10)		on request

² Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.

³ Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements.

The advantages at a glance

+2 °C SafetyDevice

If the temperature falls below +2 °C due to a malfunction, the SafetyDevice takes control, stabilising the temperature, activating the alarm and protecting the contents from freezing.



Power failure info

The power failure info function reports when the appliance was temporarily without power and what the maximum temperature was during this time. This allows you to better assess the potential loss of quality.

Min./max. temperature log

The min./max. temperature log stores the minimum and maximum interior temperatures and shows on the display whether the storage temperatures were within the tolerance limits.

Easy-to-clean interior

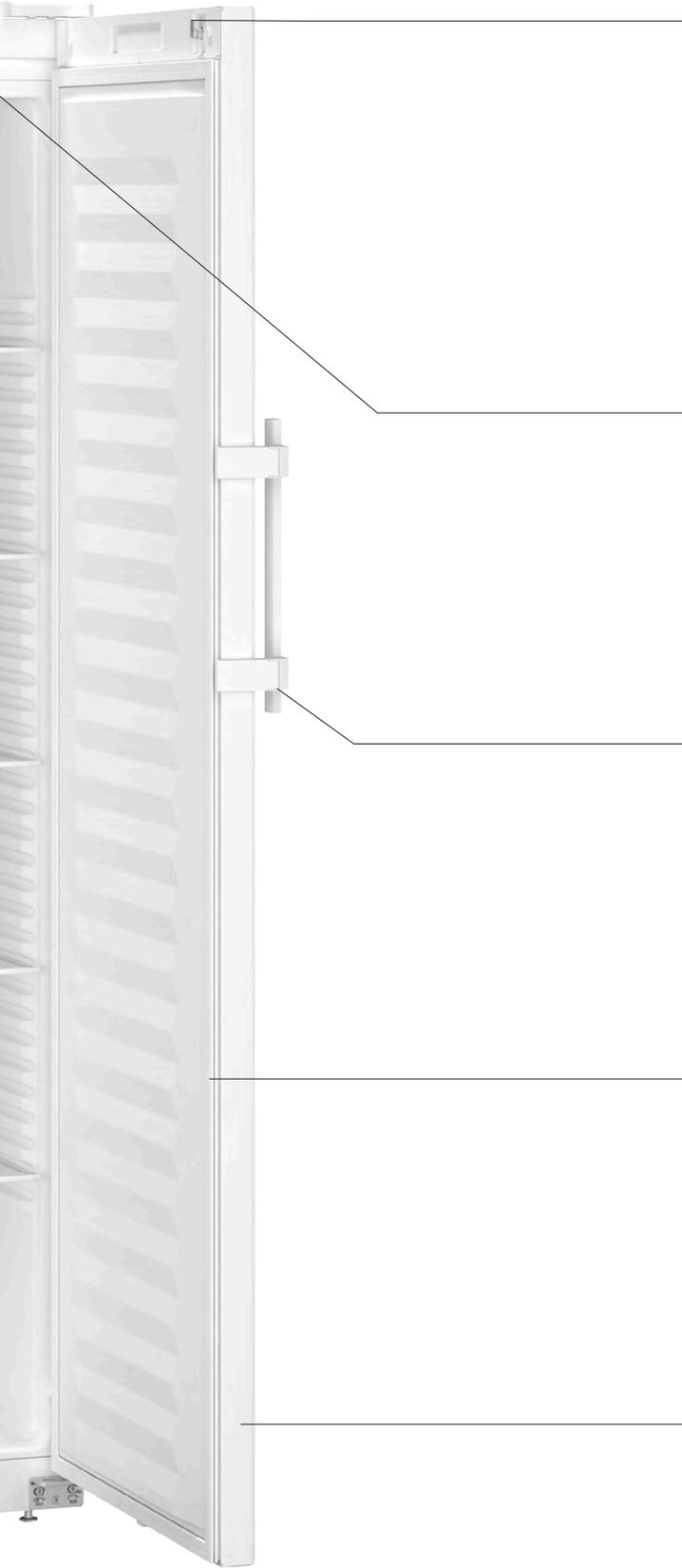
The inner liner made of fully recyclable, robust and odourless polystyrene is manufactured in one piece without joints. This makes it quick and easy to clean the large, rounded corners.

Feedthrough for external sensors

An integrated opening allows a separate sensor to be connected for additional temperature monitoring without having to drill holes or break the door seal.



SRFfg 4001 Performance



Mechanical lock

Liebherr professional appliances are equipped with a mechanical lock and two keys. This ensures that unauthorised persons cannot access your valuable and sensitive stored goods.

Retrofittable WiFi/LAN interface

The retrofittable WiFi/LAN interface enables you to easily connect your appliances with Liebherr existing local systems.

Antimicrobial handle with opening mechanism

The smooth-turning handle contains special antimicrobial substances that make it particularly hygienic. Regular and time-consuming disinfection is not necessary.



Replaceable door seal

Save time and money: the insertable Liebherr door seals are easy to change. If a seal is damaged, you can replace it yourself without any tools. Contact Liebherr Customer Service to purchase replacements.

Self-closing door < 90°

To make loading, unloading and cleaning easier, the appliance door stays open if opened by more than 90°. If the opening angle is less than 90°, it closes automatically for safety.

The image shows the interior of a laboratory refrigerator. On the left, there are several white, slanted glass shelves. The right side of the interior is a light-colored, textured surface with a complex, wavy pattern designed for spark-proofing. Two thin black lines point from the text on the right to the shelves.

Robust glass shelves

For more convenience in the lab, the robust glass shelves of the refrigerators and freezers with spark-proof interior are easy to clean and simple to remove when the door is opened by around 90°.

Quality right down to the smallest detail



Explosion protection: ATEX 95

The ATEX-95 certification confirms that the Liebherr spark-free laboratory refrigerators and freezers are suitable for storing explosive and highly flammable materials as defined by EU Directive 2014/34/EU (ATEX).



Super-efficient

Rising electricity prices are increasing the demands on the efficiency of refrigerators and freezers. From the compressor to the seal, to the lighting and electronics, Liebherr fully utilises the savings potential of every component. The result is impressive – especially in terms of total operating costs.



±3 °C temperature stability

Temperature fluctuations must be minimal to ensure that the quality of sensitive substances is preserved. Liebherr Laboratory refrigerators have an impressive maximum deviation of just ±3 °C from the set temperature. This not only maintains the storage climate, but also the value of your stored goods.



IEC 61010-2-011 standard

Liebherr refrigerators and freezers specially developed for storing temperature-sensitive products are CE safety-compliant. This ensures that all mechanical and electrical requirements for injury-free operation are met – and that you and your team are always safe.

Laboratory refrigerators with spark-free interior



SRFfg 5501

Performance

Gross / net capacity	558 / 441 litre
Exterior dimensions in mm (w / d / h)	747 / 769 / 1684
Interior dimensions in mm (w / d / h)	600 / 537 / 1460
Energy consumption in 365 days ¹	399 kWh
Ambient temperature range	+10 °C to +35 °C
Heat output	408 kJ/h
Refrigerant	R 600a
Sound power level	49 dB(A)
Voltage / Connection rating	220 - 240V~ / 2.0 A
Cooling system / Defrost	forced-air / automatic
Temperature range	+3 °C to +16 °C
Gradient ² / max. fluctuation ³	3.7 °C / 3.0 °C
External cabinet finish	steel / white
Door material	steel
Internal liner material	commercial grade moulded polystyrol
Type of control	monochrome display, touch buttons
Power failure alarm	when mains power return
Fault: warning signal	visual and audible
Volt-free alarm contact	yes
Interface	WiFi/LAN (optional)
Adjustable shelves	5
Shelf material	glass
Usable shelf area in mm (w / d)	600 / 537
Shelf loading / device	40 kg / 300 kg
Handle	Antimicrobial handle with opening mechanism
Access ports	1 x Ø 10 mm
ATEX conformity	yes
Type of lock	mechanical
Door hinges	right, reversible on site
Gross / net weight	92 / 80 kg
Accessories	
Glass shelf	9291929
Perforated metal shelf	
Scanner rail	7435210
Adjustable feet, 90 - 120 mm	9080022
Adjustable feet, 150 - 180 mm	9086924
Additional lock barrels (up to 5)	on request
Side-by-Side set	on request

¹ Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers.



SRFfg 4001

Performance

394 / 298 litre

597 / 654 / 1884

460 / 422 / 1660

421 kWh

+10 °C to +35 °C

454 kJ/h

R 600a

49 dB(A)

220 - 240V~ / 2.0 A

forced-air / automatic

+3 °C to +16 °C

5.1 °C / 3.2 °C

steel / white

steel

commercial grade moulded polystyrol

monochrome display, touch buttons

when mains power return

visual and audible

yes

WiFi/LAN (optional)

5

glass

460 / 422

40 kg / 225 kg

Antimicrobial handle with opening mechanism

1 x Ø 10 mm

yes

mechanical

right, reversible on site

74 / 68 kg

9293493

9029022

7435208

9080022

9086924

on request

on request

² Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.

³ Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements.

Quality right down to the smallest detail

Liebherr offers refrigerators and freezers with a spark-free interior specifically for storing explosive and highly flammable substances in laboratories and in the chemical industry. The inner liners meet the safety requirements of EU Directive 2014/34/EU (ATEX) and have been tested according to the EN 1127-1, IEC 60079-0 and IEC 60079-15 standards by electro-suisse – SEV (Swiss association for electrical and power engineering and information technology), an approved ATEX conformity evaluation organisation.



Easy-to-clean interior

The plastic inner liner is made of polystyrene: a fully recyclable, robust, and odourless plastic. Manufactured seamlessly from one piece, it has no hidden dirt traps, and the large, rounded corners can be cleaned quickly and easily. It's the perfect combination of sustainability and hygiene.



Smart Frost

SmartFrost

Where there's no ice, there's no need to defrost: SmartFrost greatly reduces the frost build-up in the interior and on stored products. Defrosting is required less often – and when it is necessary, it is made much easier by the smooth, easy-to-clean interior walls. The evaporator is embedded in foam insulation, ensuring high energy efficiency and uniform cooling.



Super Efficient

Super-efficient

Rising electricity prices are increasing the demands on the efficiency of refrigerators and freezers. From the compressor to the seal, to the lighting and electronics, Liebherr fully utilises the savings potential of every component. The result is impressive – especially in terms of total operating costs.



±5 °C

±5 °C temperature stability

Sensitive substances cannot be subjected to large deviations from the set storage temperature. Liebherr freezers guarantee a temperature fluctuation of no more than ±5 °C, so that the valuable goods you store in them are optimally protected and their quality is preserved.



IEC 61010-2-011 standard

Liebherr refrigerators and freezers specially developed for storing temperature-sensitive products are CE safety-compliant. This ensures that all mechanical and electrical requirements for injury-free operation are met – and that you and your team are always safe.



Compliance with the ATEX Directive

Liebherr laboratory appliances conform to EN/IEC 60079-0 / EN-IEC 60079-7 and comply with EU Directive 2014/34/EU ("ATEX Directive"). With an interior classified according to <Ex> II 3 G Ex ec IIC T6 (declared as Zone 22), they are suitable for flammable substances in closed containers that could form explosive atmospheres.



SFFfg 5501

Performance

Gross / net capacity	499 / 394 litre
Exterior dimensions in mm (w / d / h)	747 / 769 / 1684
Interior dimensions in mm (w / d / h)	588 / 517 / 1388
Energy consumption in 365 days ¹	516 kWh
Ambient temperature range	+10 °C to +35 °C
Refrigerant	R 290
Sound power level	49 dB(A)
Voltage / Connection rating	220 - 240V~ / 2.0 A
Cooling system	static
Defrost	manual
Temperature range	-9 °C to -30 °C
Gradient ² / max. fluctuation ³	5.4 °C / 3.3 °C
External cabinet finish	steel / white
Door material	steel
Internal liner material	commercial grade moulded polystyrol
Type of control	monochrome display, touch buttons
Power failure alarm	when mains power return
Fault: warning signal	visual and audible
Volt-free alarm contact	yes
Interface	WiFi/LAN (optional)
Adjustable shelves	4
Shelf material	glass
Usable shelf area in mm (w / d)	588 / 517
Shelf loading / device	40 kg / 300 kg
Handle	Antimicrobial handle with opening mechanism
Type of lock	mechanical
Door hinges	right, reversible on site
Gross / net weight	100 / 95 kg
Accessories	
Full-depth drawer	9797881
Adjustable feet, 90 - 120 mm	9080022
Adjustable feet, 150 - 180 mm	9086924
Additional lock barrels (up to 5)	on request
Side-by-Side set	on request



SFFfg 4001

Performance

Gross / net capacity	316 / 242 litre
Exterior dimensions in mm (w / d / h)	597 / 654 / 1884
Interior dimensions in mm (w / d / h)	403 / 402 / 1588
Energy consumption in 365 days ¹	384 kWh
Ambient temperature range	+10 °C to +35 °C
Refrigerant	R 290
Sound power level	49 dB(A)
Voltage / Connection rating	220 - 240V~ / 2.0 A
Cooling system	static
Defrost	manual
Temperature range	-9 °C to -30 °C
Gradient ² / max. fluctuation ³	5.2 °C / 2.4 °C
External cabinet finish	steel / white
Door material	steel
Internal liner material	commercial grade moulded polystyrol
Type of control	monochrome display, touch buttons
Power failure alarm	when mains power return
Fault: warning signal	visual and audible
Volt-free alarm contact	yes
Interface	WiFi/LAN (optional)
Adjustable shelves	5
Shelf material	glass
Usable shelf area in mm (w / d)	403 / 402
Shelf loading / device	40 kg / 270 kg
Handle	Antimicrobial handle with opening mechanism
Type of lock	mechanical
Door hinges	right, reversible on site
Gross / net weight	82 / 76 kg
Accessories	
Full-depth drawer	9797881
Adjustable feet, 90 - 120 mm	9080022
Adjustable feet, 150 - 180 mm	9086924
Additional lock barrels (up to 5)	on request
Side-by-Side set	on request

¹ Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers

² Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.

³ Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements.

Laboratory refrigerators and freezers with spark-free interior



LKUexv 1610

MediLine

Gross / net capacity	141 / 130 litre
Exterior dimensions in mm (w / d / h)	601 / 618 / 820
Interior dimensions in mm (w / d / h)	440 / 435 / 670
Energy consumption in 365 days ¹	315 kWh
Ambient temperature range	+10°C to +35°C
Refrigerant	R 600a
Sound power level	47 dB(A)
Voltage / Connection rating	220 - 240V~ / 1.0 A
Cooling system	forced-air
Defrost	automatic
Temperature range	+3°C to +16°C
Gradient ² / max. fluctuation ³	3.9°C / 4.8°C
External cabinet finish	steel / white
Door material	steel
Internal liner material	commercial grade moulded polystyrol
Type of control	LED 7-segment display with buttons
Power failure alarm	when mains power return
Fault: warning signal	visual and audible
Volt-free alarm contact	yes
Interface	RS485
Adjustable shelves	3
Shelf material	glass
Usable shelf area in mm (w / d)	440 / 420
Shelf loading	40 kg
Drawers	
Number of baskets	
Compartment height in mm	
Handle	slimline handle with integrated opening mechanism
Type of lock	mechanical
Door hinges	right, reversible on site
Gross / net weight	41 / 38 kg
Accessories	
Glass shelf	9293629
Stacking kit, white	9592697
Roller bars	9590521
Additional lock barrels (up to 10)	on request



LGUex 1500

MediLine

Gross / net capacity	139 / 129 litre
Exterior dimensions in mm (w / d / h)	601 / 618 / 820
Interior dimensions in mm (w / d / h)	454 / 450 / 663
Energy consumption in 365 days ¹	294 kWh
Ambient temperature range	+10°C to +35°C
Refrigerant	R 600a
Sound power level	45 dB(A)
Voltage / Connection rating	220 - 240V~ / 1.0 A
Cooling system	static
Defrost	manual
Temperature range	-9°C to -26°C
Gradient ² / max. fluctuation ³	6.6°C / 3.3°C
External cabinet finish	steel / white
Door material	steel
Internal liner material	commercial grade moulded polystyrol
Type of control	LED 7-segment display with buttons
Power failure alarm	when mains power return
Fault: warning signal	visual and audible
Volt-free alarm contact	yes
Interface	RS485
Adjustable shelves	
Shelf material	evaporator plates
Usable shelf area in mm (w / d)	454 / 450
Shelf loading	24 kg
Drawers	3
Number of baskets	1
Compartment height in mm	1 × 149
Handle	slimline handle with integrated opening mechanism
Type of lock	mechanical
Door hinges	right, reversible on site
Gross / net weight	43 / 42 kg
Accessories	
Glass shelf	
Stacking kit, white	9592697
Roller bars	9590521
Additional lock barrels (up to 10)	on request

¹ Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers.

Laboratory fridge-freezer combination with spark-free interior



LCexv 4010

MediLine

Gross / net capacity	fridge compartment	254 / 240 litre
Gross / net capacity	freezer compartment	107 / 105 litre
Exterior dimensions in mm (w / d / h)		601 / 618 / 2003
Interior dimensions in mm (w / d / h)	fridge compartment	440 / 441 / 1105
Interior dimensions in mm (w / d / h)	freezer compartment	433 / 433 / 597
Energy consumption in 365 days ¹		657 kWh
Ambient temperature range		+10°C to +35°C
Refrigerant		R 600a
Sound power level		52 dB(A)
Voltage / Connection rating		220 - 240V~ / 1.5 A
Cooling system	fridge / freezer comp.	forced-air / static
Defrost	fridge / freezer comp.	automatic / manual
Temperature range	fridge / freezer comp.	+3°C to +16°C / -9°C to -30°C
Gradient ²	fridge / freezer comp.	4.0°C / 7.9°C
Max. fluctuation ³	fridge / freezer comp.	3.9°C / 5.5°C
External cabinet finish		steel / white
Door material		steel
Internal liner material		commercial grade moulded polystyrol
Type of control		LED 7-segment display with buttons
Power failure alarm		when mains power return
Fault: warning signal		visual and audible
Volt-free alarm contact		yes
Interface		RS485
Adjustable shelves	fridge compartment	4
Shelf material	fridge / freezer comp.	glass / glass
Usable shelf area in mm (w / d)	fridge compartment	440 / 409
Shelf loading	fridge / freezer comp.	40 kg / 24 kg
Drawers	freezer compartment	3
Handle		slimline handle with integrated opening mechanism
Type of lock		mechanical
Door hinges		right, reversible on site
Gross / net weight		92 / 85 kg
Accessories		
Glass shelf		9293629
Product temperature sensor		9590145
Roller bars		9592756
Additional lock barrels (up to 10)		on request

² Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.

³ Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements.

Accessories

Laboratory refrigerators and freezers with stainless steel inner liner



Side-by-side set

Using the side-by-side set, two appliances can be placed next to each other. The required gap between the appliances is maintained, and they are neatly connected by the cover strip. This ensures tidy installation and avoids any condensation or water between the appliances.



U-shaped trayslides

Additional U-shaped trayslides can be retrofitted as required to provide extra storage options.



Plastic-coated grid shelf

If you need more storage space or want to separate stored products and have a better overview, Liebherr appliances can be equipped with additional grid shelves. Made of metal with a polypropylene coating, they are identical to the ones that come as standard in the appliances and you benefit from the same corrosion-resistant and durable extra shelving.



Product temperature sensor

A product temperature sensor for logging product temperatures is available as a retrofit kit for the laboratory appliances with electronic controller. The logged product temperatures can either be read by the electronic controller or transferred to an external documentation system via the existing RS 485 interface.



Foot-pedal door opener

The optional foot-pedal opener is useful when you don't have a hand free.

Laboratory refrigerators and freezers and laboratory fridge-freezer combination with plastic inner liner



Product temperature sensor

A product temperature sensor for logging product temperatures is available as a retrofit kit for the laboratory appliances with electronic controller. The logged product temperatures can either be read by the electronic controller or transferred to an external documentation system via the existing RS 485 interface.



Special locking

To protect the stored products from unwanted access, special locks are available as accessories for the refrigerators and freezers. This way, different locks can be installed on several appliances so that only the people responsible for a particular appliance have access to it.

Laboratory refrigerators and freezers and laboratory fridge-freezer combination with plastic inner liner



Stacking Kit

The stacking kit can be used to combine two refrigerators or refrigerators and freezers. This way, different temperature zones are available on a small surface area.



Evaporator cover

To better protect temperature-sensitive goods and prevent them from touching the refrigeration system, a protective plate can be retrofitted in the interior. This prevents direct contact with the refrigeration components so that the goods can be safely stored in the intended area.



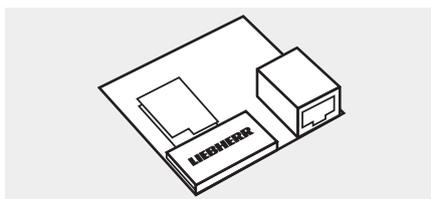
Roller bars and height-adjustable feet

The sturdy castors to facilitate transport and allow cleaning underneath and behind the appliance. Two roller sets including mounting accessories are supplied. The height-adjustable feet create the necessary clearance for easy cleaning under the appliance. With an individually adjustable height of 90 to 120 mm, they perfectly compensate for any unevenness on the floor.



Plastic-coated grid shelf

If you need more storage space or want to separate stored products and have a better overview, Liebherr appliances can be equipped with additional grid shelves. Made of metal with a polypropylene coating, they are identical to the ones that come as standard in the appliances and you benefit from the same corrosion-resistant and durable extra shelving.



WiFi/LAN Module

Appliances can be integrated into a customer's existing monitoring system via a local API. The small electronic unit with integrated LAN/WiFi is ready to use as soon as it is mounted on the back of the appliance.



Long drawer

Always keep a good overview of your stored products with this sturdy plastic drawer. With its ergonomic handle, the drawer is very easy for you to open, day in, day out.



Glass shelf

Additional shelves made of high-quality safety glass not only increase storage space but also make it easier to see the goods. They are ideal for storing smaller containers or materials. In addition, the shatterproof glass shelves are quick and easy to clean.

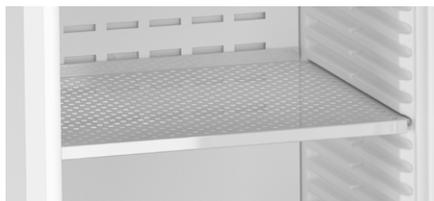


Side-by-side set

Using the side-by-side set, two appliances can be placed next to each other. The required gap between the appliances is maintained, and they are neatly connected by the cover strip. This ensures tidy installation and avoids any condensation or water between the appliances.

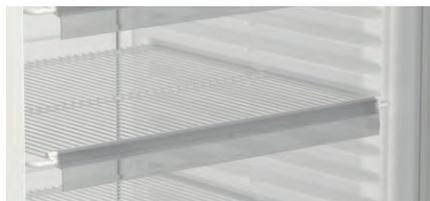
Accessories

Laboratory refrigerators and freezers and laboratory fridge-freezer combination with plastic inner liner



Perforated metal shelf

To ensure that even small items are stored stably in the refrigeration appliances, Liebherr has developed shallow perforated metal shelves especially for this purpose. They are made of coated metal and designed for a maximum load of up to 45 kg. The perforation ensures unhindered air circulation throughout the storage space.



Flexible scanner rail

Scanner rails provide a perfect overview of the materials stored in the refrigerator. Thanks to their flexibility, they can be easily attached to the front of the grid shelves. With correspondingly marked paper cards, they make it easy to sort and find stored products.



Base grid

With the sturdy base grid, you can also make the most of the appliance floor. The grid has an abrasion-resistant coating and protects the inner liner from scratches and other damage.

Laboratory refrigerators and freezers and laboratory fridge-freezer combination with spark-free interior



Product temperature sensor

A product temperature sensor for logging product temperatures is available as a retrofit kit for the laboratory appliances with electronic controller. The logged product temperatures can either be read by the electronic controller or transferred to an external documentation system via the existing RS 485 interface.



Special locking

To protect the stored products from unwanted access, special locks are available as accessories for the refrigerators and freezers. This way, different locks can be installed on several appliances so that only the people responsible for a particular appliance have access to it.



Glass shelf

Additional shelves made of high-quality safety glass not only increase storage space but also make it easier to see the goods. They are ideal for storing smaller containers or materials. In addition, the shatterproof glass shelves are quick and easy to clean.



Stacking Kit

The stacking kit can be used to combine two refrigerators or refrigerators and freezers. This way, different temperature zones are available on a small surface area.



Roller bars

The sturdy castors within the roller bars facilitate transport and allow cleaning underneath and behind the appliance. Two roller sets including mounting accessories are supplied.

Laboratory refrigerators and freezers and laboratory fridge-freezer combination with spark-free interior



Height-adjustable feet

The height-adjustable feet create the necessary clearance for easy cleaning under the appliance. With an individually adjustable height of 90 to 120 mm, they perfectly compensate for any unevenness on the floor.



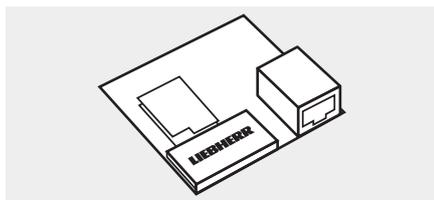
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WiFi/LAN Module

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Long drawer

Always keep a good overview of your stored products with this sturdy plastic drawer. With its ergonomic handle, the drawer is very easy for you to open, day in, day out.



Side-by-side set

Using the side-by-side set, two appliances can be placed next to each other. The required gap between the appliances is maintained, and they are neatly connected by the cover strip. This ensures tidy installation and avoids any condensation or water between the appliances.





Research and laboratory appliances – for maximum precision and safety

Hardly any sector has more stringent requirements for refrigerators and freezers than those of laboratories and research. Liebherr meets them with a specifically developed range and a new generation of appliances.

Sensitive substances are reliably stored at precise temperatures and additionally protected by integrated alarm systems. Maximum efficiency ensures low consumption, while durable materials and components guarantee minimal operating costs. The comprehensive range is user-friendly and easy to connect in a network.

Discover typical Liebherr quality that will pay off for years and lighten your daily workload.

The advantages at a glance

Integrated data memory

The minimum and maximum values can be stored for up to 41 days, and the last three power failures and temperature alarms can be recorded and retrieved.

Emergency battery

If there is a power failure, the electronics are immediately powered by an integrated 12 V battery. This means the integrated memory can carry on logging the interior temperatures without interruption for another 72 hours.



External temperature sensor

The laboratory appliances have a feedthrough (7.0 mm diameter) in the ceiling of the appliance for fitting a temperature sensor in the interior.

Stainless steel workmanship

The smooth interior made of chrome-nickel steel is easy to clean and ensures optimal hygiene.

Space-saving

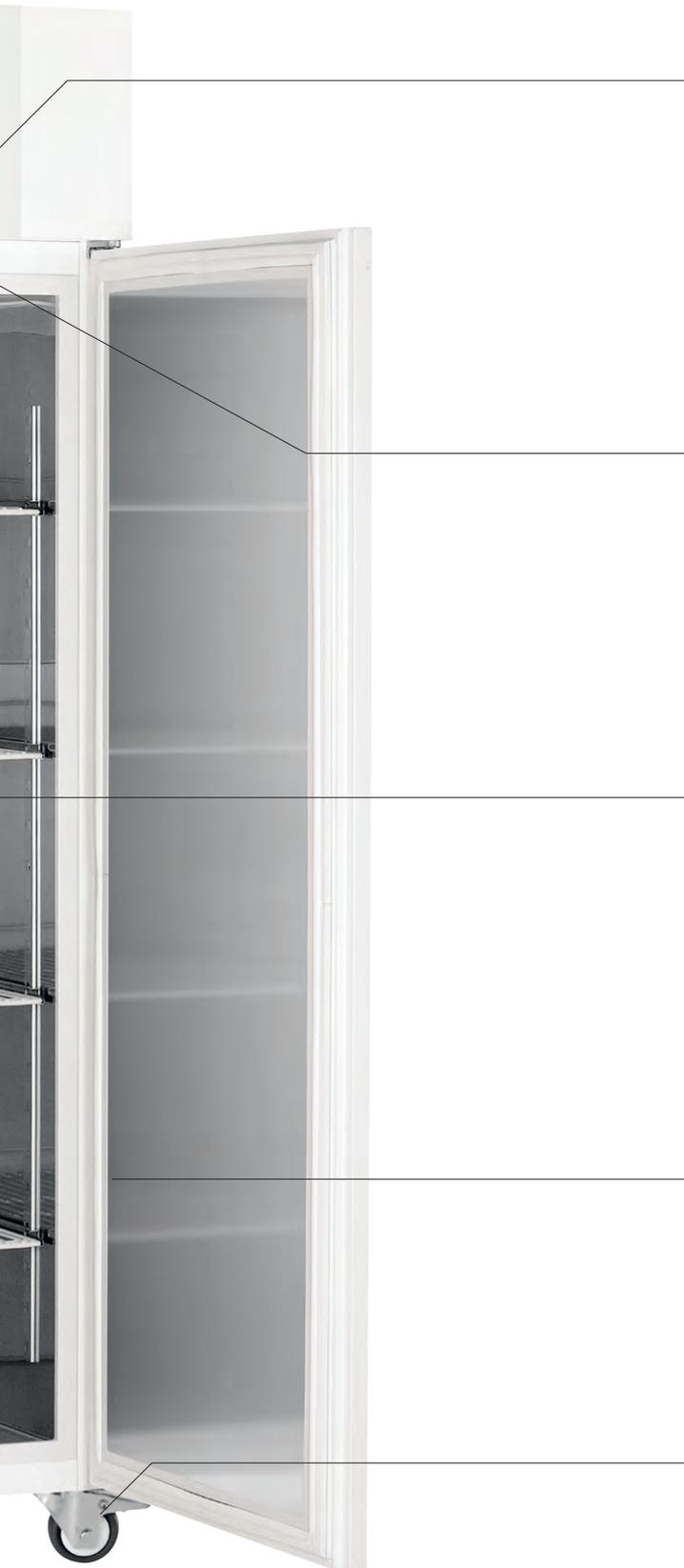
To save space and increase the interior capacity, functional components such as fans and evaporators are located outside the refrigerator compartment.



LKPv 6520 MediLine

Laboratory refrigerators and freezers with stainless steel inner liner

The LKPv 1420, LKPv 1423 and LGPv 1420 models can be taken apart and reassembled for easier transport. This must always be done by a trained technician. Contact Liebherr Sales for more information.



Pressure compensation valve

When the door of a refrigerator or freezer is opened and closed, the exchange of air creates a vacuum that makes it difficult to open the door again immediately afterwards. The pressure compensation valve quickly equalises the vacuum so that the door can be easily opened again.

Integrated alarm systems

If the door is open for longer than one minute, a visual and audible alarm is generated. The temperature and power failure alarm indicates that the temperature is too high or too low, and also warns in the event of power failures.

Dynamic cooling system

The dynamic cooling system with double ventilation combined with optimal airflow ensures maximum temperature stability in the interior.



90° door arrester

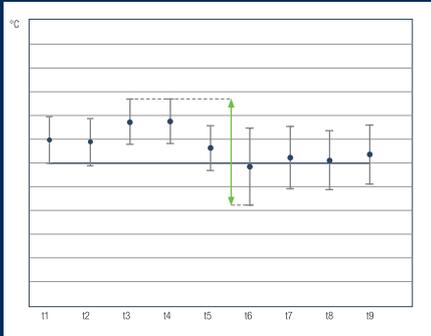
For convenient use, the practical door remains open at 90° and is self-closing at less than 60°.

Castors

The LKPv and LGPv ranges come with castors as standard to allow versatile use according to the available space, as well as easy cleaning, even under the appliances.



Quality right down to the smallest detail



Maximum temperature stability

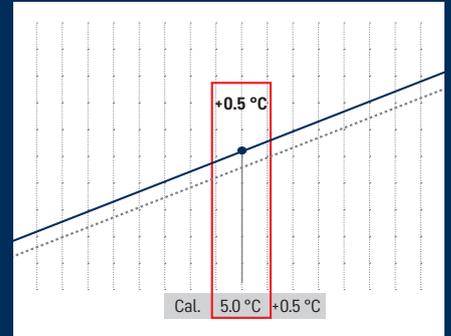
The dynamic cooling system with double ventilation ensures maximum temperature stability in the interior. Very short defrost cycles allow the interior temperature to be kept almost constant during the defrost phases. All the laboratory appliances are designed for temperature stability and consistency according to EN 60068-3.

Advantage of hot gas defrosting
Reduces the time when the temperature is increased

30 min	10 min
Electric defrosting	Hot gas defrosting

Energy-efficient hot gas defrosting

Timed and on-demand hot gas defrosting allows very short defrosting times. To additionally improve temperature stability during defrosting, the internal temperature is slightly lowered shortly beforehand to create a reserve of cold air.



Accurate 1-point calibration

The laboratory appliances with electronic controls have a 1-point calibration function for extremely accurate temperature control. This allows compensation between the set temperature and the actual interior temperature. The correction value can be adjusted in increments of 0.1 K.



Integrated electronics

The intuitive controller with integrated real-time clock allows the temperature to be set to 1/10°C accuracy. The keypad is resistant to dirt and easy to clean – to meet the most stringent hygiene requirements of the laboratory.



Easily accessible refrigeration components

The refrigeration components are easily accessible, located in the upper part of the machinery compartment to significantly increase the capacity of the interior. The front can be easily lifted up to facilitate cleaning or servicing. When opened by more than 45 ° it can be completely detached.



External temperature and alarm documentation

The laboratory appliances are equipped with an RS 485 serial interface – which means that up to 20 appliances can be used with an external documentation and alarm system. The appliances also have a volt-free contact to relay alarms to an external remote warning system.

Laboratory refrigerators with stainless steel inner liner



LKPv 1423

MediLine



LKPv 1420

MediLine

Gross / net capacity	1397 / 980 litre	1366 / 980 litre
Exterior dimensions in mm (w / d / h)	1430 / 830 / 2160	1430 / 830 / 2160
Interior dimensions in mm (w / d / h)	1236 / 650 / 1500	1236 / 650 / 1550
Energy consumption in 365 days ¹	820 kWh	714 kWh
Ambient temperature range	+10°C to +40°C	+10°C to +40°C
Heat output	515 kJ/h	471 kJ/h
Refrigerant	R 290	R 290
Sound power level	58 dB(A)	58 dB(A)
Voltage / Connection rating	220 - 240V~ / 4.0 A	220 - 240V~ / 4.0 A
Cooling system	forced-air	forced-air
Defrost	automatic	automatic
Temperature range	0°C to +16°C	-2°C to +16°C
Gradient ² / max. fluctuation ³	3.8°C / 3.9°C	3.6°C / 2.9°C
External cabinet finish	steel / white	steel / white
Door material	glass door	steel
Internal liner material	304-grade stainless steel	304-grade stainless steel
Type of control	LED 7-segment display with buttons	LED 7-segment display with buttons
Power failure alarm	immediately upon power failure for 72 hrs	immediately upon power failure for 72 hrs
Fault: warning signal	visual and audible	visual and audible
Volt-free alarm contact	yes	yes
Interface	RS485	RS485
Interior light	LED ceiling light strip with separate switch	
Adjustable shelves	8	8
Shelf material	wire shelves plastic-coated	wire shelves plastic-coated
Usable shelf area in mm (w / d)	1236 / 640	1236 / 640
Shelf loading	60 kg	60 kg
Castors	castors with brake at the front, castors at the rear	castors with brake at the front, castors at the rear
Handle	full-length integrated handle	full-length integrated handle
Access ports	1 x Ø 7 mm	1 x Ø 7 mm
Type of lock	mechanical	mechanical
Door hinges	left hand / right hand	left hand / right hand
Gross / net weight	267 / 224 kg	249 / 206 kg
Accessories		
Shelf, plastic-coated	7112393	7112393
U-shaped trayslide, right	9001761	9001761
U-shaped trayslide, left	9001757	9001757
Foot pedal opener	9590639	9590639
Product temperature sensor	9590407	9590407

¹ Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers.

Laboratory refrigerators with stainless steel inner liner



LKPv 6523

MediLine

Gross / net capacity	617 / 430 litre
Exterior dimensions in mm (w / d / h)	700 / 830 / 2160
Interior dimensions in mm (w / d / h)	533 / 650 / 1500
Energy consumption in 365 days ²	571 kWh
Ambient temperature range	+10°C to +40°C
Heat output	345 kJ/h
Refrigerant	R 290
Sound power level	58 dB(A)
Voltage / Connection rating	220 - 240V~ / 4.0 A
Cooling system	forced-air
Defrost	automatic
Temperature range	0°C to +16°C
Gradient ² / max. fluctuation ³	2.0°C / 1.6°C
External cabinet finish	steel / white
Door material	glass door
Internal liner material	304-grade stainless steel
Type of control	LED 7-segment display with buttons
Power failure alarm	immediately upon power failure for 72 hrs
Fault: warning signal	visual and audible
Volt-free alarm contact	yes
Interface	RS485
Interior light	LED ceiling light strip with separate switch
Adjustable shelves	4
Shelf material	wire shelves plastic-coated
Usable shelf area in mm (w / d)	533 / 650
Shelf loading	60 kg
Castors	castors with brake at the front, fixed castors at the rear
Handle	full-length integrated handle
Access ports	1 x Ø 7 mm
Type of lock	mechanical
Door hinges	right, reversible on site
Gross / net weight	164 / 138 kg

Gross / net capacity	617 / 430 litre
Exterior dimensions in mm (w / d / h)	700 / 830 / 2160
Interior dimensions in mm (w / d / h)	533 / 650 / 1500
Energy consumption in 365 days ²	571 kWh
Ambient temperature range	+10°C to +40°C
Heat output	345 kJ/h
Refrigerant	R 290
Sound power level	58 dB(A)
Voltage / Connection rating	220 - 240V~ / 4.0 A
Cooling system	forced-air
Defrost	automatic
Temperature range	0°C to +16°C
Gradient ² / max. fluctuation ³	2.0°C / 1.6°C
External cabinet finish	steel / white
Door material	glass door
Internal liner material	304-grade stainless steel
Type of control	LED 7-segment display with buttons
Power failure alarm	immediately upon power failure for 72 hrs
Fault: warning signal	visual and audible
Volt-free alarm contact	yes
Interface	RS485
Interior light	LED ceiling light strip with separate switch
Adjustable shelves	4
Shelf material	wire shelves plastic-coated
Usable shelf area in mm (w / d)	533 / 650
Shelf loading	60 kg
Castors	castors with brake at the front, fixed castors at the rear
Handle	full-length integrated handle
Access ports	1 x Ø 7 mm
Type of lock	mechanical
Door hinges	right, reversible on site
Gross / net weight	164 / 138 kg
Accessories	
Shelf, plastic-coated	7112393
U-shaped trayslide, right	9001761
U-shaped trayslide, left	9001757
Foot pedal opener	9590659
Product temperature sensor	9590407



LKPv 6520

MediLine

Gross / net capacity	602 / 430 litre
Exterior dimensions in mm (w / d / h)	700 / 830 / 2160
Interior dimensions in mm (w / d / h)	533 / 650 / 1550
Energy consumption in 365 days ²	497 kWh
Ambient temperature range	+10°C to +40°C
Heat output	300 kJ/h
Refrigerant	R 290
Sound power level	58 dB(A)
Voltage / Connection rating	220 - 240V~ / 4.0 A
Cooling system	forced-air
Defrost	automatic
Temperature range	-2°C to +16°C
Gradient ² / max. fluctuation ³	1.8°C / 1.0°C
External cabinet finish	steel / white
Door material	steel
Internal liner material	304-grade stainless steel
Type of control	LED 7-segment display with buttons
Power failure alarm	immediately upon power failure for 72 hrs
Fault: warning signal	visual and audible
Volt-free alarm contact	yes
Interface	RS485
Interior light	
Adjustable shelves	4
Shelf material	wire shelves plastic-coated
Usable shelf area in mm (w / d)	533 / 650
Shelf loading	60 kg
Castors	castors with brake at the front, fixed castors at the rear
Handle	full-length integrated handle
Access ports	1 x Ø 7 mm
Type of lock	mechanical
Door hinges	right, reversible on site
Gross / net weight	154 / 128 kg

Accessories	
Shelf, plastic-coated	7112393
U-shaped trayslide, right	9001761
U-shaped trayslide, left	9001757
Foot pedal opener	9590659
Product temperature sensor	9590407

² Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.
³ Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements.

Laboratory freezers with stainless steel inner liner



LGPv 1420

MediLine

Gross / net capacity	1366 / 980 litre
Exterior dimensions in mm (w / d / h)	1430 / 830 / 2160
Interior dimensions in mm (w / d / h)	1236 / 650 / 1550
Energy consumption in 365 days ¹	2654 kWh
Ambient temperature range	+10 °C to +40 °C
Refrigerant	R 290
Sound power level	60 dB(A)
Voltage / Connection rating	220 - 240V~ / 4.0 A
Cooling system	forced-air
Defrost	automatic
Temperature range	-9 °C to -26 °C
Gradient ² / max. fluctuation ⁴	4.3 °C / 6.7 °C
External cabinet finish	steel / white
Door material	steel
Internal liner material	304-grade stainless steel
Type of control	LED 7-segment display with buttons
Power failure alarm	immediately upon power failure for 72 hrs
Fault: warning signal	visual and audible
Volt-free alarm contact	yes
Interface	RS485
Adjustable shelves	8
Shelf material	wire shelves plastic-coated
Usable shelf area in mm (w / d)	1236 / 640
Shelf loading	60 kg
Castors	castors with brake at the front, castors at the rear
Handle	full-length integrated handle
Type of lock	mechanical
Door hinges	left hand / right hand
Gross / net weight	254 / 209 kg
Accessories	
Shelf, plastic-coated	7112393
U-shaped trayslide, right	9001761
U-shaped trayslide, left	9001757
Foot pedal opener	9590639
Product temperature sensor	9590407

¹ Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers.

² The temperature range is valid at a maximum ambient temperature of +30°C



LGPv 6520

MediLine

Gross / net capacity	602 / 430 litre
Exterior dimensions in mm (w / d / h)	700 / 830 / 2160
Interior dimensions in mm (w / d / h)	533 / 650 / 1550
Energy consumption in 365 days ³	1367 kWh
Ambient temperature range	+10 °C to +40 °C
Refrigerant	R 290
Sound power level	60 dB(A)
Voltage / Connection rating	220 - 240V~ / 4.0 A
Cooling system	forced-air
Defrost	automatic
Temperature range	-9 °C to -35 °C ²
Gradient ³ / max. fluctuation ⁴	2.9 °C / 3.6 °C
External cabinet finish	steel / white
Door material	steel
Internal liner material	304-grade stainless steel
Type of control	LED 7-segment display with buttons
Power failure alarm	immediately upon power failure for 72 hrs
Fault: warning signal	visual and audible
Volt-free alarm contact	yes
Interface	RS485
Adjustable shelves	4
Shelf material	wire shelves plastic-coated
Usable shelf area in mm (w / d)	533 / 650
Shelf loading	60 kg
Castors	castors with brake at the front, fixed castors at the rear
Handle	full-length integrated handle
Type of lock	mechanical
Door hinges	right, reversible on site
Gross / net weight	162 / 136 kg
Accessories	
Shelf, plastic-coated	7112393
U-shaped trayslide, right	9001761
U-shaped trayslide, left	9001757
Foot pedal opener	9590659
Product temperature sensor	9590407

³ Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.

⁴ Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements.



LIEBHERR

LIEBHERR

LIEBHERR



ULT freezers – maximum safety and efficiency at ultra-low temperatures

Liebherr ultra-low temperature freezers set new standards in the temperature range from $-40\text{ }^{\circ}\text{C}$ to $-86\text{ }^{\circ}\text{C}$. Not only do they offer unprecedented quality and reliability for storing highly sensitive substances, but also outstanding energy efficiency and ease of use that you will notice every day. Robust, economical and extremely safe, the series of appliances from the experts in freezing for laboratories and research facilities have an impressive number of functions and features.

For optimal protection of your valuable samples, chemicals and research materials. And for the satisfaction of being able to concentrate fully on your work.

The advantages at a glance

Stainless steel workmanship

The interior, shelves and inner doors are made of rust-proof stainless steel and are therefore easy to clean. This enables optimum hygiene.

Shelves

Three stainless steel shelves in the interior, that can be freely adjusted in 24 mm increments, offer flexibility for space-saving storage, tailored to your requirements. You can add more shelves if required.

Serial interfaces

Interfaces for connecting to documentation and monitoring systems such as a volt-free contact for sending alarms to external remote warning systems.



Data recording

There are two feedthroughs (28 mm) on the top and bottom left for installing separate sensors for external monitoring or data recording systems in the interior.

Unloading ramp

No forklift required: the unloading ramp integrated in the packaging helps you easily position the appliance.



SUFsg 5001 MediLine

Detachable inner door

The detachable inner doors made of rust-proof stainless steel prevent loss of cold air when opening and are also easy to clean.



Door seals

The innovative door seal design, consisting of two all-round seals, makes the door completely airtight when closed. This also helps reduce energy consumption. The seals can be replaced separately and without tools.

Intuitive electronics

The intuitive electronics with integrated real-time clock allow the temperature to be set with an accuracy of one tenth of a degree. The control and display panel is resistant to dirt and easy to clean. Flexible parameter adaptations, such as offset and alarm value settings, allow the appliances to be quickly and easily adapted and qualified for your applications and requirements.



Monitoring system

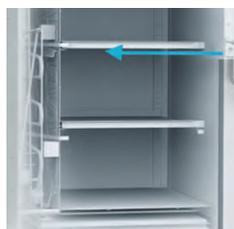
The 3-stage monitoring system, consisting of integrated alarm notifications for temperature, door or mains electrical faults, upgradable features such as CO₂ emergency refrigeration and online monitoring, ensures optimum protection during storage. In the event of a power failure, integrated 12-volt batteries immediately supply the electronics with power. Notifications are provided in critical situations.

Insulation

The combination of CFC-free polyurethane foam and vacuum-insulated panels ensures the best possible insulation to prevent rapid temperature increases.

Pressure compensation valve

When the door is opened and closed, the air exchange creates a vacuum which makes it difficult to open the door again immediately afterwards. The heated pressure compensation valve quickly equalises the vacuum and the door can be easily opened again after just a few seconds.

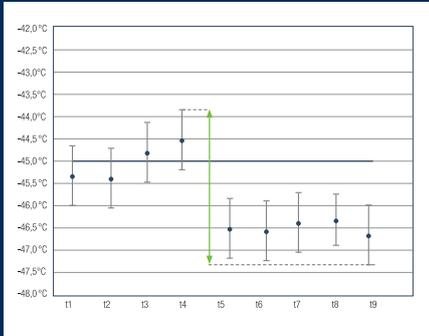


Mechanical lock

The mechanical lock protects the stored products from unwanted access. The door is opened with an ergonomic and unbreakable aluminium lever handle.



Quality right down to the smallest detail



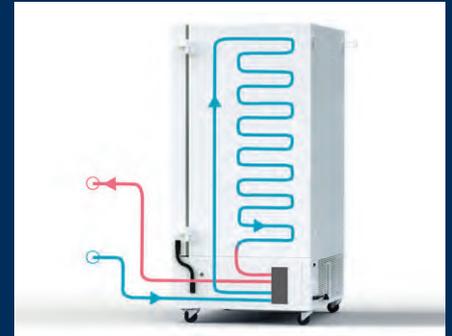
Minimal temperature fluctuations

In order to maintain the quality of the stored samples, it is important to minimise temperature fluctuations. Liebherr ultra-low temperature freezers are characterised by extremely low fluctuations, both within the appliance and over time.



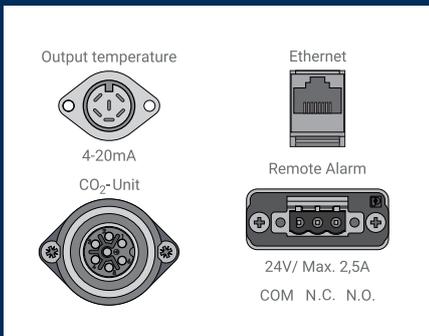
Low energy consumption

Ultra-low temperature freezers are among the appliances with the highest energy consumption in research facilities. Liebherr ultra-low temperature freezers are some of the most economical models on the market worldwide. In combination with highly insulating vacuum panels, the efficient cooling system allows economical operation, optimum energy savings and therefore low operating costs.



Low heat generation

The efficient cascade cooling system with HC refrigerants generates significantly less heat than previous technologies. This saves costs in the thermal design of the room's air conditioning system. If heat dissipation via the room air conditioning is not possible, water cooling is available as an option.



Connection to documentation and monitoring systems

All the appliances have a volt-free alarm output and an Ethernet interface for remote monitoring. This means the appliances can be connected to local BMS system. In addition, the temperature and alarm records can be read via the integrated USB interface. Optionally, a 4-20 mA output allows the temperature value to be integrated into existing data recording systems.



IQ, OQ, training

From installation qualification (IQ) to operational qualification (OQ) to training, we offer you comprehensive expert help with installation and commissioning. We carry out the various checks for you or set specific parameters for you on request. In addition, we train your staff on site in using the equipment and answer your questions. In our document folder you will also find all the important information about the devices.

Ultra-low temperature freezers



SUFsg 7001

MediLine

Gross / net capacity	728 / 700 litre
Exterior dimensions in mm (w / d / h)	1204 / 1082 / 1966
Interior dimensions in mm (w / d / h)	890 / 605 / 1300
Energy consumption in 365 days	2957 kWh
Ambient temperature range	+16 °C to +32 °C
Heat output	1224 kJ/h
Heat output system / Refrigeration system	air cooling / 2-stage cascade system
Refrigerant	R 290 / R 170
Sound power level ¹	47 dB(A)
Voltage / Connection rating	230V~ / 7.0 A
Temperature range	-40 °C to -86 °C
External cabinet finish	steel / white
Door material	steel
Internal liner material	Stainless steel
Type of control	LED 7-segment display with buttons
Volt-free alarm contact	yes
Interface	LAN (Ethernet)
Data logger	integrated, USB interface
Power failure alarm	immediately upon power failure for 72 hrs
Cooling system	static
Pull-down time +22 °C to -80 °C	450 min
Warm-up time -80 °C to -60 °C / to 0 °C	250 min / 2220 min
Number / maximum number of storage shelves	4 / 13
Adjustable shelves	3
Shelf material	stainless steel
Shelf loading / device	50 kg / 200 kg
Number of racks per shelf	6
Max. number of cryoboxes, 50 mm / 75 mm	528 / 336
Castors	castors with brake at the front, fixed castors at the rear
Access ports	2 x Ø 28 mm
Type of lock	mechanical
Door hinges	right hand hinged, not reversible
Gross / net weight	361 / 313 kg
Accessories	
Racks for cryoboxes	see page 34
Cryoboxes, set of 36	7790038
CO ₂ backup system	7790048
Stainless steel storage shelves	7790050
Cover for mains switch incl. key lock	7790051
4 - 20mA analogue output	7790042

Gross / net capacity	728 / 700 litre
Exterior dimensions in mm (w / d / h)	1204 / 1082 / 1966
Interior dimensions in mm (w / d / h)	890 / 605 / 1300
Energy consumption in 365 days	2957 kWh
Ambient temperature range	+16 °C to +32 °C
Heat output	1224 kJ/h
Heat output system / Refrigeration system	water-cooled / 2-stage cascade system
Refrigerant	R 290 / R 170
Sound power level ¹	47 dB(A)
Voltage / Connection rating	230V~ / 7.0 A
Temperature range	-40 °C to -86 °C
External cabinet finish	steel / white
Door material	steel
Internal liner material	Stainless steel
Type of control	LED 7-segment display with buttons
Volt-free alarm contact	yes
Interface	LAN (Ethernet)
Data logger	integrated, USB interface
Power failure alarm	immediately upon power failure for 72 hrs
Cooling system	static
Pull-down time +22 °C to -80 °C	450 min
Warm-up time -80 °C to -60 °C / to 0 °C	250 min / 2220 min
Number / maximum number of storage shelves	4 / 13
Adjustable shelves	3
Shelf material	stainless steel
Shelf loading / device	50 kg / 200 kg
Number of racks per shelf	6
Max. number of cryoboxes, 50 mm / 75 mm	528 / 336
Castors	castors with brake at the front, fixed castors at the rear
Access ports	2 x Ø 28 mm
Type of lock	mechanical
Door hinges	right hand hinged, not reversible
Gross / net weight	361 / 313 kg
Accessories	
Racks for cryoboxes	see page 34
Cryoboxes, set of 36	7790038
CO ₂ backup system	7790048
Stainless steel storage shelves	7790050
Cover for mains switch incl. key lock	7790051
4 - 20mA analogue output	7790042

SUFsg 7001 ver. H72

MediLine

Gross / net capacity	728 / 700 litre
Exterior dimensions in mm (w / d / h)	1204 / 1082 / 1966
Interior dimensions in mm (w / d / h)	890 / 605 / 1300
Energy consumption in 365 days	2957 kWh
Ambient temperature range	+16 °C to +32 °C
Heat output	1224 kJ/h
Heat output system / Refrigeration system	water-cooled / 2-stage cascade system
Refrigerant	R 290 / R 170
Sound power level ¹	47 dB(A)
Voltage / Connection rating	230V~ / 7.0 A
Temperature range	-40 °C to -86 °C
External cabinet finish	steel / white
Door material	steel
Internal liner material	Stainless steel
Type of control	LED 7-segment display with buttons
Volt-free alarm contact	yes
Interface	LAN (Ethernet)
Data logger	integrated, USB interface
Power failure alarm	immediately upon power failure for 72 hrs
Cooling system	static
Pull-down time +22 °C to -80 °C	450 min
Warm-up time -80 °C to -60 °C / to 0 °C	250 min / 2220 min
Number / maximum number of storage shelves	4 / 13
Adjustable shelves	3
Shelf material	stainless steel
Shelf loading / device	50 kg / 200 kg
Number of racks per shelf	6
Max. number of cryoboxes, 50 mm / 75 mm	528 / 336
Castors	castors with brake at the front, fixed castors at the rear
Access ports	2 x Ø 28 mm
Type of lock	mechanical
Door hinges	right hand hinged, not reversible
Gross / net weight	361 / 313 kg
Accessories	
Racks for cryoboxes	see page 34
Cryoboxes, set of 36	7790038
CO ₂ backup system	7790048
Stainless steel storage shelves	7790050
Cover for mains switch incl. key lock	7790051
4 - 20mA analogue output	7790042



SUFsg 5001

MediLine

SUFsg 5001 ver. H72

MediLine

Gross / net capacity	491 / 477 litre	491 / 477 litre
Exterior dimensions in mm (w / d / h)	920 / 1082 / 1966	920 / 1082 / 1966
Interior dimensions in mm (w / d / h)	606 / 605 / 1300	606 / 605 / 1300
Energy consumption in 365 days	2884 kWh	2884 kWh
Ambient temperature range	+16 °C to +32 °C	+16 °C to +32 °C
Heat output	1188 kJ/h	1188 kJ/h
Heat output system / Refrigeration system	air cooling / 2-stage cascade system	water-cooled / 2-stage cascade system
Refrigerant	R 290 / R 170	R 290 / R 170
Sound power level ¹	47 dB(A)	47 dB(A)
Voltage / Connection rating	230V~ / 7.0 A	230V~ / 7.0 A
Temperature range	-40 °C to -86 °C	-40 °C to -86 °C
External cabinet finish	steel / white	steel / white
Door material	steel	steel
Internal liner material	Stainless steel	Stainless steel
Type of control	LED 7-segment display with buttons	LED 7-segment display with buttons
Volt-free alarm contact	yes	yes
Interface	LAN (Ethernet)	LAN (Ethernet)
Data logger	integrated, USB interface	integrated, USB interface
Power failure alarm	immediately upon power failure for 72 hrs	immediately upon power failure for 72 hrs
Cooling system	static	static
Pull-down time +22 °C to -80 °C	360 min	360 min
Warm-up time -80 °C to -60 °C / to 0 °C	230 min / 2160 min	230 min / 2160 min
Number / maximum number of storage shelves	4 / 13	4 / 13
Adjustable shelves	3	3
Shelf material	stainless steel	stainless steel
Shelf loading / device	50 kg / 200 kg	50 kg / 200 kg
Number of racks per shelf	4	4
Max. number of cryoboxes, 50 mm / 75 mm	352 / 224	352 / 224
Castors	castors with brake at the front, fixed castors at the rear	castors with brake at the front, fixed castors at the rear
Access ports	2 x Ø 28 mm	2 x Ø 28 mm
Type of lock	mechanical	mechanical
Door hinges	right hand hinged, not reversible	right hand hinged, not reversible
Gross / net weight	308 / 254 kg	308 / 254 kg
Accessories		
Racks for cryoboxes	see page 34	see page 34
Cryoboxes, set of 36	7790038	7790038
CO ₂ backup system	7790048	7790048
Stainless steel storage shelves	7790049	7790049
Cover for mains switch incl. key lock	7790051	7790051
4 ~ 20mA analogue output	7790042	7790042

¹ Average sound pressure level at 1 m distance

Accessories

Ultra-low temperature freezers

Racks for cryoboxes

Convenient and temperature-resistant storage systems for well-organised sample storage. Available as aluminium or stainless steel side-access racks for 5x4 or 6x4 50 mm boxes and as stainless steel front-access drawer racks for 5x4 or 6x4 50 mm boxes.

Maximum Loading SUFsg 5001: 8x Rack 5x4 + 8x Rack 6x4 = 352 boxes x 81 pcs. 2mL samples.

Maximum Loading SUFsg 7001: 12x Rack 5x4 + 12x Rack 6x4.



Aluminium side-access rack 5x4	7790003
Aluminium side-access rack 6x4	7790014

Stainless steel front-access rack 5x4 + drawers	7790031
Stainless steel front-access rack 6x4 + drawers	7790032



Cryoboxes

The set contains 36 durable and temperature-resistant cryoboxes made from water-repellent cardboard, with fixed 9x9 grid, for safe storage and transport of valuable samples.



CO₂ backup system

The CO₂ backup system ensures that the cooling of the stored samples continues at reduced temperatures for up to 72 hours in the event of a power failure. The CO₂ bottle is not part of the accessory.



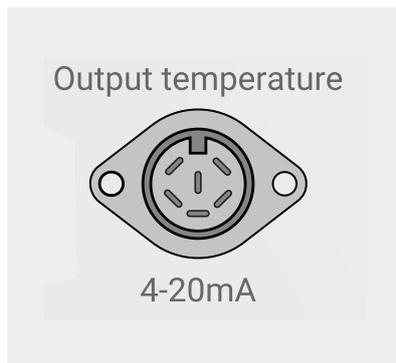
Stainless steel storage shelves

Additional robust stainless steel shelves for flexible and individual partitioning of the interior at 24 mm increments.



**Cover for mains switch
incl. key lock**

Protection against unintended disconnection or manipulation of the mains switch.



4-20mA analogue output

The 4-20mA interface displays the interior temperature as a current value, which for example can be imported into an independent system for recording or checking the internal temperature.



Our catalogue programme

Liebherr commercial appliances can be found at specialist retailers where providing first-class service and expert advice are their top priorities.

You can find an overview of other Liebherr appliances in our catalogues. Available in stores or at home.liebherr.com.



BIM data now available

The cooperation between Liebherr-Hausgeräte and Specifi® gives planners and dealers worldwide access to a digital Liebherr appliances library with BIM models for the food service and and scientific industries. Compatible with AutoCAD® and Revit.

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