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# Scientific and Healthcare 2023

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Next-level cooling solutions

# LIEBHERR

Refrigeration and freezing



# 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.



## 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

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 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.

## Laboratory freezers with spark-free interior



### SFFfg 5501 Performance



### SFFfg 4001 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 <sup>1</sup>	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 <sup>2</sup> / max. fluctuation <sup>3</sup>	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
Connectivity type	SmartModule
Connectivity solution	Retrofittable
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
Castors Ø 80 mm	9086926
Castors Ø 100 mm	9080023
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
SmartModule	6145269

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 <sup>1</sup>	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 <sup>2</sup> / max. fluctuation <sup>3</sup>	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
Connectivity type	SmartModule
Connectivity solution	Retrofittable
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
Castors Ø 80 mm	9086926
Castors Ø 100 mm	9080023
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<sup>1</sup> Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers

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

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

The equipment details shown depend on the model; the description for the respective model applies.



# WolfLabs

**Pricing on any accessories shown can be found by keying the part number into the search box on our website.**

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

**[www.wolflabs.co.uk](http://www.wolflabs.co.uk)**

**Tel : 01759 301142**

**Fax : 01759 301143**

**[sales@wolflabs.co.uk](mailto:sales@wolflabs.co.uk)**

Please contact us if this literature doesn't answer all your questions.