



MEDICAL REFRIGERATORS

LABORATORY AND PHARMACY
REFRIGERATOR

BLOOD BANK
REFRIGERATOR

LABORATORY FREEZER

DEEP FREEZER

PLASMA FREEZER

COMBINED
REFRIGERATOR

AND FREEZER

COMBINED REFRIGERATOR





as established in 1997,
as result of twenty year experience of its owners
in medical refrigeration field.

Constant research and development, along with
professional and serious attitude have enabled **frimed**
to design and manufacture highly reliable refrigerators
and freezers to be used in hospital, laboratory,
industrial biomedical and pharmaceutical fields as well
as scientific field in general.

In few years our appliances have become well known
and are now appreciated and chosen in many countries
all over the world.





frimed has always been oriented to a constant improvement of the business process in order to satisfy the client, to involve its staff and to have a relationship of mutual satisfaction with suppliers. The commitment undertaken in this direction has enabled the company to achieve an important goal the certification of Quality Management System **ISO 9001** which is a guarantee of reliability and professional attitude.

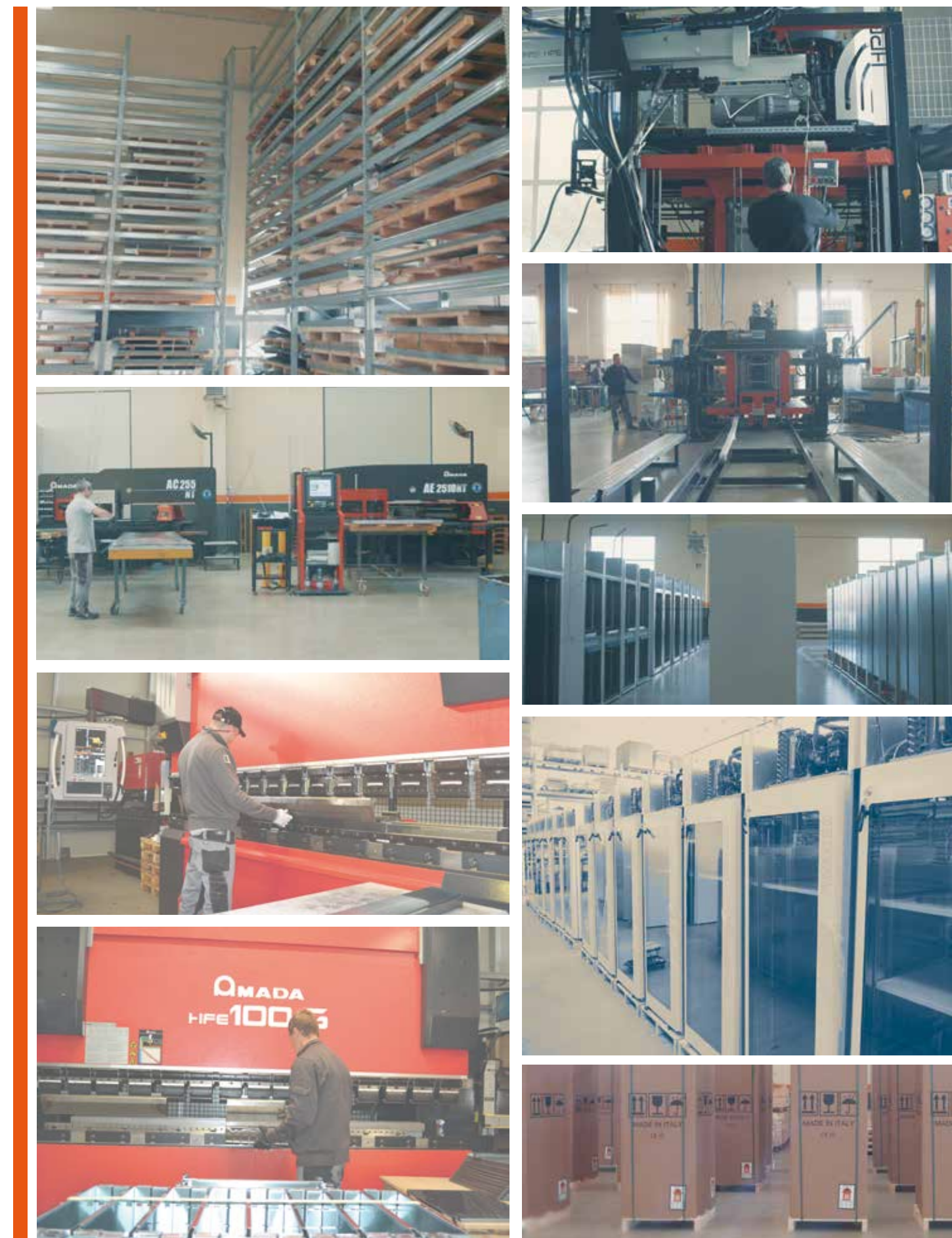
Further Quality Management System **ISO 14001** certification confirms **frimed** serious commitment to minimize the environmental impact of procedures, products and services and attests the reliability of the Environmental Management System applied.

In 2010 **frimed** also achieved the certification of Quality Management System according to **ISO 13485** (Medical Devices) for design, production and warranty service of blood bank refrigerators and plasma freezers.

In 2011 **frimed** achieved the CE certification according to Medical Device Directives 93/42/EEC for the marking of Blood Bank refrigerators (class IIa) for hospital use.

In 2023 **frimed** achieved the certification for Medical Devices according to **(EU) Regulation 2017/745 (MDR)**, which replaces the existing medical device directives (93/42/EEC).

The MDR (Medical Device Regulation) introduced important changes to manufacturing and marketing regulations of Medical Devices, increasing the level of safety and performance of the same and redefining the tasks and responsibilities of the economic operators involved in the entire supply chain.





FRIMED FOR THE ENVIRONMENT

We make our contribution to a sustainable future thanks to the photovoltaic system installed by ONERGY on our factory: today we can meet our energy needs while reducing our carbon footprint.



In order to reduce the environmental impact we have also adopted a package made of about 98% recyclable material for all our appliances.



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ENERGY SAVING

LED LIGHTING

All our cabinets with positive temperature are internally equipped with LED lights. LED lighting is the solution for reducing energy use, because it allows saving energy up to 70% compared with fluorescent lamps. LED lights have high performance, bright colour and provide beneficial environmental impact with longer life and therefore less landfill waste.

LOW EMISSIVITY GLASS

This technology applied to all models with glass door significantly improves performance of insulation allowing energy saving.

CFC-FREE THERMO INSULATION

Insulation of all cabinets is done by means of CFC-free polyurethane foam. Insulation thickness of 60mm for all refrigerator models and 80,100 mm for freezer models grants highly insulating performance.

REFRIGERANT GAS

Low consumption and high performance compressors. R290 natural gas available on all models.

ENERGY SAVING DEFROST CYCLE

In all ventilated refrigerators, defrosting cycles are performed only when necessary.

HOT GAS DEFROSTING

For ventilated freezer AF70B and AF140B with a very short cycle with no need of electric resistance.

HIGH PERFORMANCE MOTOR FAN

It grants energy saving thanks to new technology. Besides, **frimed** mainboard makes condenser fan work only when necessary.



TECHNICAL HIGHLIGHTS

STRUCTURE

External structure in hot-dip galvanised steel, anti-corrosion treated and PVC film coated. Stainless steel internal structure.

INSULATION

Insulation of 60mm, 80mm, 100mm obtained by injection of high density polyurethane CFC-free foam for excellent product preservation and best energy saving.

DOOR

Self-closing door with removable magnetic gasket on four sides for perfect closing. Right hand opening or left hand on request.

LOCK WITH KEY

To use the appliance under supervision. Optional electric digital key lock.

LED LIGHTING

LED light with automatic switch at door opening. Manual switch on control panel.

SHELVES

Scotch-Brite stainless steel shelves, adjustable in height.

DRAWERS (STANDARD ON BLOOD BANK REFRIGERATORS)

Sliding drawers in Scotch-Brite stainless steel. Plexiglas frontal side. Optional plexiglas dividers.

REFRIGERATION SYSTEM

Completely sealed, silent and highly efficient hermetic compressor and ventilated air condenser. Internal ventilated or static evaporator. CFC-free refrigerant.

DEFROSTING

Fully automatic defrosting cycle with auto-evaporation of condensed water, or manual defrosting cycle.

DATA LOGGER

Electronic data logger with download of data on USB pen drive.

TEMPERATURE CHART RECORDER (OPTIONAL)

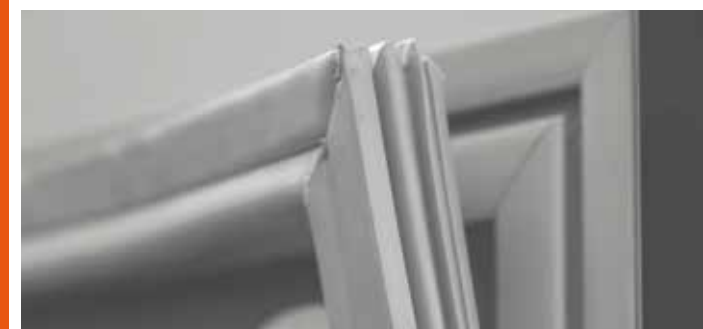
Weekly temperature recording system working with 1,5V battery. It is equipped with 52 disks and an ink pen.

CASTORS WITH FRONTAL BRAKES (OPTIONAL)

Additional 10 cm to be considered on total height of appliance.

TEST HOLE (OPTIONAL)

∅ 25 mm sidewall test hole for custom probe.



CONTROL PANELS

LGK-2 Digital



Microprocessor control panel with easy-to-read **digital display** showing inside menu, temperature, set point, date and hour, model of appliance.

Equipment settings and switching off only by means of **password**.

Continuous **temperature monitoring** with set point and alarms shown on display.

Visual and acoustic alarms through buzzer sound, general alarm warning light, specific alarm warning light and icon on display.

Alarms included: high and low temperature (adjustable threshold), open door, condenser efficiency, damaged probes, power failure, run-down battery.

Back up battery (optional) to show temperature on display and generate alarms in case of power failure.

Remote contact to connect the appliance to an external alarm.

GSM module (optional) to send SMS alarm messages showing date, time, cabinet temperature and type of alarm. Possibility to send SMS message to check correct functioning of cabinet.

LAN port (optional) to connect one or more appliances via ethernet on PC for monitoring correct functioning.

USB port to download temperature data and alarms or to reset the appliance.

Data logger to record temperatures of last 30 days. Download data on USB pen drive.

Memory for last 20 alarms shown on display.



TP-1 Full Touch



Microprocessor control system equipped with:

- Display (Capacitive) **Touch Screen** True Color 4,3" or 7" (optional)
- **USB port** to downloading temperature data and alarms; software updates
- **LAN network connection** (wireless)
- **WiFi** 802.11n/g
- **RS485 serial port** between display and control board

The devices of this series are equipped with special functions for the optimization of defrosts and with functions that can be used to obtain energy saving of the unit. There are 3 inputs for NTC temperature probes (evaporator, condenser, temperature internal chamber), and an input for PT100 probe dedicated to monitoring the internal temperature.

The system architecture is one I / O control card (controller card) and one interface card (4.3" TFT display card with capacitive touch screen).

The communication between the two boards takes place through an RS485 serial; the Controller board powers the Display board in low voltage (12V).

WIFI MODULE

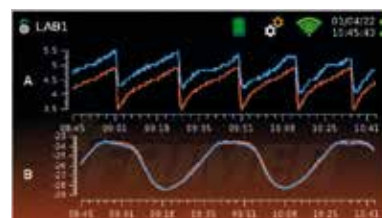
The wifi module is already included in the standard interface card (display) for possible connection to the cloud [optional with license]

PASSWORD

The system is password protected at different levels:

- operator [normal user]
- control [control user]
- service [service user]
- factory [factory user]

Passwords (except the factory one, not accessible) can be customized to avoid improper use of the system. Videographic display of temperature trends, historical alarms that can be consulted directly on the display.



TP-1 Full Touch

ALARMS

The controller has an internal buzzer for acoustic signaling of alarms, a dry contact relay for remote alarm connection.

Acoustic-visual signaling (with red triangle alarm symbol) of the alarms, even in the power failure if equipped with a back up battery (optional), easy to understand thanks to a detailed list with the meaning of the alarm generated, including :

- High - low temperature
- Dirty condenser
- No power supply - power failure (if with battery as option)
- Open door
- Sensor failure
- Low battery charge (option)
- Communication alarm



Password protected switching on and off controller to avoid deactivation of the fridge by unauthorized personnel

DATA LOGGER

Electronic recording system of temperature and alarm data, with large memory, downloadable on USB key. Sampling interval of 30sec or greater.

CLOUD system (as option)

Connecting and remotely controlling the instrument will no longer be a problem. The electronic system has an integrated WIFI connection module. Once online, thanks to the specifically developed Cloud platform (optional, to be quoted), it is possible to remotely intervene on the unit. Available connection with VNC/Websocket technology that replicates the instrument interface on a PC giving full access to the instrument. The CLOUD system also simplifies the identification of any error directly remotely so as to allow the service to reduce or even cancel the intervention time and troubleshooting. The system allows archiving and downloading of historical temperature and alarm data. It is possible to receive by e-mail a pdf attachment containing the data download, both in graphic and numerical form. The dispatch can be daily, weekly or cadenced according to the operator's choice.

CONNECTINFRI - CLOUD SYSTEM

AVAILABLE ON TP-1 FULL TOUCH CONTROL PANEL

To correctly store medicines, vaccines, blood and general biological material, a "simple" refrigerator is not enough.

Today, more than ever, the optimal storage of biological material, medicines, and so on, has not only an economic but also a social value. **ConnectInFri**, is a specifically created cloud to connect and control your refrigerator or freezer remotely, with access via your mobile phone, tablet or computer. With secure password-protected access to the **ConnectInFri** platform, you can remotely view and access your refrigerator's control panel where you can view the parameters and change them if necessary.

ConnectInFri features:

1. VNC (Virtual Network Computing) remote control:

this is the software application to access/control your refrigerator, thus allowing you to control the unit and use it as if you were standing right in front of it.

This aspect, which is unique in this field of application (Medical Refrigeration), has several extremely significant advantages in terms of efficiency, stored product control and cost savings, namely:

a- Possibility for the Service (or whoever is in charge of technical assistance) to control the machine without the end user having to intervene in any way to analyse the situation and reach a diagnosis of the possible problem without physically intervening on site.

b- Possibility to interact with the end user (e.g., co-worker/employee) without being physically present, in the event of functional or purely instructional problems.

2. Data Backup

A backup of the unit's data has been implemented in the web clouding infrastructure. Naturally, it will always be possible to download such data directly from the unit itself, via the USB port on the display (circular queue of about 12 months), but it will also be possible to download and save such data within the portal itself (for 10 years).

3. Automatic report sending

You can choose to automatically send an e-mail with the weekly pdf report of the unit's **temperature/alarm data**, to an e-mail address set by the user

Through using **ConnectInFri**, the person in charge of the laboratory, technical department, etc., will be able to:

- View the operating progress of their equipment
- Remotely change the temperature
- Manage alarms
- Manage scheduled maintenance by means of programmable memos
- Analyse energy consumption
- Store data records in folders and print them out by selecting the desired period

ConnectInFri security

Communications are made through secure authentication.

All information (values, alarms, generator data) is stored in a secure, non-public database.

Passwords are irreversibly encrypted so that no one but the user can know the credentials.

The cloud guarantees the use of the most up-to-date security standards and is 100% compliant with the GDPR (General Data Protection Regulation).



REFRIGERATOR

LABORATORY AND PHARMACY

+2°+12°C FROM 100 TO 1570 LT.

SB-FS-PN-AF MODELS

STRUCTURE

External structure in hot-dip galvanised steel, anti-corrosion treated and PVC film coated. Stainless steel internal structure.

INSULATION

60 mm of insulation obtained by injection of high density polyurethane CFC-free foam for excellent product preservation and energy saving.

DOOR

Self-closing solid or glass door (double insulating - low emissivity glass) with folding magnetic gasket (easy to replace) on four sides for perfect closing. Right hand opening or left hand on request. Lock with key.

SHELVES

Scotch-Brite stainless steel shelves, removable and adjustable in height.

LIGHT

LED light (energy saving up to 70%, ecological) with automatic switch at door opening. Manual switch on control panel.

TEMPERATURE RANGE

Between +2°C and +12°C. Factory preset to +4°C. Digital adjustable with an increment of 0.1°C

REFRIGERATION SYSTEM

Completely sealed, silent and highly efficient hermetic compressor and ventilated air condenser (suitable also for tropical countries). Forced-air cooling system conceived to achieve maximum temperature uniformity and stability inside the refrigerator even in case of frequent door openings. Evaporator fan shuts off during door opening. CFC-free refrigerant gas R452a or CFC/HCFC-free natural refrigerant gas R290.

DEFROSTING

Fully automatic defrosting cycle and auto-evaporation of condensed water.

CONTROL PANELS AVAILABLE:

LGK-2 digital control panel (page 10)

TP-1 full touch control panel (page 12)

DATA LOGGER

Electronic recording system of temperatures and alarms. Download of data on USB pen drive.



STANDARD

- Shelves.
- Four one-way wheels with stabilizing adjustable feet.
- Power cord with Schuko type plug or British type plug.
- Protection fuses (on power switch and electronic mainboard).
- RFI filter.
- Password protected power switch and settings.
- Electronic control panel with alarm system.
- Remote contact (dry, volt-free) for alarm.
- Data Logger with USB port to download data.
- Memory of latest alarms visible on screen.



OPTIONAL ACCESSORIES

- Scotch-Brite stainless steel sliding drawers with telescopic ball-bearing slides. Plexiglas frontal side.
- Kit of dividers for drawer.
- Additional shelf.
- Castors with frontal brakes (+ 10 cm on total height).
- Weekly temperature chart recorder.
- Back-up battery.
- GSM module to send SMS alarm messages to mobile phones (LGK-2).
- LAN port to connect the appliance via ethernet on PC.
- Cloud system (TP-1 full touch).
- Safety thermostat (DIN 13277 conformity)
- Test hole (Ø 25 mm) for external user sensor.
- Electric digital key lock (TP-1 full touch).
- Power supply 115V/60Hz.
- Insulation of 80 mm. for AF models.



MODEL	SB10	SB10V	FS15	FS15V	FS20
TECHNICAL DATA					
Capacity (LT)	100	100	150	150	200
Temp. range (°C)	+2 / +12	+2 / +12	+2 / +12	+2 / +12	+2 / +12
Cooling type	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling
Defrost	Automatic	Automatic	Automatic	Automatic	Automatic
CFC-Free Refrigerant gas	R452a or R290	R452a or R290	R452a or R290	R452a or R290	R452a or R290
Noise level (db)	<45	<45	<45	<45	<45
CONTROL PANEL	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1
VISUAL AND AUDIBLE ALARMS					
High/Low temperature	√	√	√	√	√
Open door	√	√	√	√	√
Condenser efficiency	√	√	√	√	√
Damaged sensor	√	√	√	√	√
Power failure	optional	optional	optional	optional	optional
Full recording memory	√	√	√	√	√
SMS alarm message	optional LGK-2	optional LGK-2	optional LGK-2	optional LGK-2	optional LGK-2
FUNCTIONS					
Password protected use	√	√	√	√	√
Remote alarm	√	√	√	√	√
Data logger	√	√	√	√	√
Wi-Fi	TP-1	TP-1	TP-1	TP-1	TP-1
ELECTRICAL DATA					
Supply voltage (V/Hz)	230/50-230/60	230/50-230/60	230/50-230/60	230/50-230/60	230/50-230/60
Max absorbed current (W)	165	165	150	150	155
INTERNAL EQUIPMENT					
Shelves	2	2	2	2	3
OPTIONAL ACCESSORIES					
Drawer	max 2	max 2	max 3	max 3	max 4
Kit of dividers for drawer	√	√	√	√	√
Additional shelf	√	√	√	√	√
Cloud system	TP-1	TP-1	TP-1	TP-1	TP-1
Castors with frontal brakes	√	√	√	√	√
Temp. chart recorder	√	√	√	√	√
Back-up battery	√	√	√	√	√
GSM module	LGK-2	LGK-2	LGK-2	LGK-2	LGK-2
LAN Port	LGK-2	LGK-2	LGK-2	LGK-2	LGK-2
Port hole	√	√	√	√	√
Electric Digital key lock	TP-1	TP-1	TP-1	TP-1	TP-1
Safety thermostat	optional	optional	optional	optional	optional
Power supply 115V/60Hz	√	√	√	√	√
CERTIFICATION	CE	CE	CE	CE	CE
DIMENSIONS (WxDxH - MM)/KG					
External Dimensions/weight	600x600x860-57	600x600x860-60	600x600x1360-73	600x600x1360-78	600x600x1560-82
Packing Dimensions/weight (carton box)	700x700x1030-63	700x700x1030-66	700x700x1570-80	700x700x1570-85	700x700x1770-89



MODEL	FS20V	FS25	FS25V	FS30	FS30V
TECHNICAL DATA					
Capacity (LT)	200	250	250	300	300
Temp. range (°C)	+2 / +12	+2 / +12	+2 / +12	+2 / +12	+2 / +12
Cooling type	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling
Defrost	Automatic	Automatic	Automatic	Automatic	Automatic
CFC-Free Refrigerant gas	R452a or R290	R452a or R290	R452a or R290	R452a or R290	R452a or R290
Noise level (db)	<45	<49	<49	<49	<49
CONTROL PANEL	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1
VISUAL AND AUDIBLE ALARMS					
High/Low temperature	√	√	√	√	√
Open door	√	√	√	√	√
Condenser efficiency	√	√	√	√	√
Damaged sensor	√	√	√	√	√
Power failure	optional	optional	optional	optional	optional
Full recording memory	√	√	√	√	√
SMS alarm message	optional LGK-2	optional LGK-2	optional LGK-2	optional LGK-2	optional LGK-2
FUNCTIONS					
Password protected use	√	√	√	√	√
Remote alarm	√	√	√	√	√
Data logger	√	√	√	√	√
Wi-Fi	TP-1	TP-1	TP-1	TP-1	TP-1
ELECTRICAL DATA					
Supply voltage (V/Hz)	230/50-230/60	230/50-230/60	230/50-230/60	230/50-230/60	230/50-230/60
Max absorbed current (W)	155	165	165	178	178
INTERNAL EQUIPMENT					
Shelves	3	4	4	5	5
OPTIONAL ACCESSORIES					
Drawer	max 4	max 5	max 5	max 6	max 6
Kit of dividers for drawer	√	√	√	√	√
Additional shelf	√	√	√	√	√
Cloud system	TP-1	TP-1	TP-1	TP-1	TP-1
Castors with frontal brakes	√	√	√	√	√
Temp. chart recorder	√	√	√	√	√
Back-up battery	√	√	√	√	√
GSM module	LGK-2	LGK-2	LGK-2	LGK-2	LGK-2
LAN Port	LGK-2	LGK-2	LGK-2	LGK-2	LGK-2
Port hole	√	√	√	√	√
Electric Digital key lock	TP-1	TP-1	TP-1	TP-1	TP-1
Safety thermostat	optional	optional	optional	optional	optional
Power supply 115V/60Hz	√	√	√	√	√
CERTIFICATION	CE	CE	CE	CE	CE
DIMENSIONS (WxDxH - MM)/KG					
External Dimensions/weight	600x600x1560-86	600x600x1760-88	600x600x1760-93	600x600x1960-97	600x600x1960-102
Packing Dimensions/weight (carton box)	700x700x1770-93	700x700x1890-98	700x700x1890-103	700x700x2170-107	700x700x2170-112

specifications



MODEL	PN45	PN45V	PN52
TECHNICAL DATA			
Capacity (LT)	450	450	520
Temp. range (°C)	+2 / +12	+2 / +12	+2 / +12
Cooling type	Forced air cooling	Forced air cooling	Forced air cooling
Defrost	Automatic	Automatic	Automatic
CFC-Free Refrigerant gas	R452a or R290	R452a or R290	R452a or R290
Noise level (db)	<49	<49	<49
CONTROL PANEL	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1
VISUAL AND AUDIBLE ALARMS			
High/Low temperature	√	√	√
Open door	√	√	√
Condenser efficiency	√	√	√
Damaged sensor	√	√	√
Power failure	optional	optional	optional
Full recording memory	√	√	√
SMS alarm message	optional LGK-2	optional LGK-2	optional LGK-2
FUNCTIONS			
Password protected use	√	√	√
Remote alarm	√	√	√
Data logger	√	√	√
Wi-Fi	TP-1	TP-1	TP-1
ELECTRICAL DATA			
Supply voltage (V/Hz)	230/50-230/60	230/50-230/60	230/50-230/60
Max absorbed current (W)	271	271	274
INTERNAL EQUIPMENT			
Shelves	3	3	4
OPTIONAL ACCESSORIES			
Drawer	max 5	max 5	max 6
Kit of dividers for drawer	√	√	√
Additional shelf	√	√	√
Cloud system	TP-1	TP-1	TP-1
Castors with frontal brakes	√	√	√
Temp.chart recorder	√	√	√
Back-up battery	√	√	√
GSM module	LGK-2	LGK-2	LGK-2
LAN Port	LGK-2	LGK-2	LGK-2
Port hole	√	√	√
Electric Digital key lock	TP-1	TP-1	TP-1
Safety thermostat	optional	optional	optional
Power supply 115V/60Hz	√	√	√
CERTIFICATION	CE	CE	CE
DIMENSIONS (WxDXH - MM)/KG			
External Dimensions/weight	700x800x1840-120	700x800x1840-124	700x800x2040-134
Packing Dimensions/weight (carton box)	750x850x1980-134	750x850x1980-137	750x850x2180-149



MODEL	PN52V	AF70	AF70V	AF140	AF140V
TECHNICAL DATA					
Capacity (LT)	520	700	700	1400	1400
Temp. range (°C)	+2 / +12	+2 / +12	+2 / +12	+2 / +12	+2 / +12
Cooling type	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling
Defrost	Automatic	Automatic	Automatic	Automatic	Automatic
CFC-Free Refrigerant gas	R452a or R290	R452a or R290	R452a or R290	R452a or R290	R452a or R290
Noise level (db)	<49	<49	<49	<50	<50
CONTROL PANEL	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1
VISUAL AND AUDIBLE ALARMS					
High/Low temperature	√	√	√	√	√
Open door	√	√	√	√	√
Condenser efficiency	√	√	√	√	√
Damaged sensor	√	√	√	√	√
Power failure	optional	optional	optional	optional	optional
Full recording memory	√	√	√	√	√
SMS alarm message	optional LGK-2	optional LGK-2	optional LGK-2	optional LGK-2	optional LGK-2
FUNCTIONS					
Password protected use	√	√	√	√	√
Remote alarm	√	√	√	√	√
Data logger	√	√	√	√	√
Wi-Fi	TP-1	TP-1	TP-1	TP-1	TP-1
ELECTRICAL DATA					
Supply voltage (V/Hz)	230/50-230/60	230/50-230/60	230/50-230/60	230/50-230/60	230/50-230/60
Max absorbed current (W)	274	140	140	240	240
INTERNAL EQUIPMENT					
Shelves	4	4	4	8	8
OPTIONAL ACCESSORIES					
Drawer	max 6	max 7	max 7	max 14	max 14
Kit of dividers for drawer	√	√	√	√	√
Additional shelf	√	√	√	√	√
Cloud system	TP-1	TP-1	TP-1	TP-1	TP-1
Castors with frontal brakes	√	√	√	√	√
Temp.chart recorder	√	√	√	√	√
Back-up battery	√	√	√	√	√
GSM module	LGK-2	LGK-2	LGK-2	LGK-2	LGK-2
LAN Port	LGK-2	LGK-2	LGK-2	LGK-2	LGK-2
Port hole	√	√	√	√	√
Electric Digital key lock	TP-1	TP-1	TP-1	TP-1	TP-1
Safety thermostat	optional	optional	optional	optional	optional
Power supply 115V/60Hz	√	√	√	√	√
CERTIFICATION	CE	CE	CE	CE	CE
DIMENSIONS (WxDXH - MM)/KG					
External Dimensions/weight	700x800x2040-138	700x800x1990-137	700x800x1990-142	1400x800x1990-216	1400x800x1990-226
Packing Dimensions/weight (carton box)	750x850x2180-153	750x850x2180-141	750x850x2180-156	1500x900x2170-236	1500x900x2170-249

specifications



MODEL	AF70N	AF70NV
TECHNICAL DATA		
Capacity (LT)	710	710
Temp. range (°C)	+2 / +12	+2 / +12
Cooling type	Forced air cooling	Forced air cooling
Defrost	Automatic	Automatic
CFC-Free Refrigerant gas	R452a or R290	R452a or R290
Noise level (db)	<49	<49
CONTROL PANEL		
	LGK-2 TP-1	LGK-2 TP-1
VISUAL AND AUDIBLE ALARMS		
High/Low temperature	✓	✓
Open door	✓	✓
Condenser efficiency	✓	✓
Damaged sensor	✓	✓
Power failure	optional	optional
Full recording memory	✓	✓
SMS alarm message	optional LGK-2	optional LGK-2
FUNCTIONS		
Password protected use	✓	✓
Remote alarm	✓	✓
Data logger	✓	✓
Wi-Fi	TP-1	TP-1
ELECTRICAL DATA		
Supply voltage (V/Hz)	230/50-230/60	230/50-230/60
Max absorbed current (W)	140	140
INTERNAL EQUIPMENT		
Shelves	4	4
OPTIONAL ACCESSORIES		
Drawer	max 7	max 7
Kit of dividers for drawer	✓	✓
Additional shelf	✓	✓
Cloud system	TP-1	TP-1
Castors with frontal brakes	✓	✓
Temp.chart recorder	✓	✓
Back-up battery	✓	✓
GSM module	LGK-2	LGK-2
LAN Port	LGK-2	LGK-2
Port hole	✓	✓
Electric Digital key lock	TP-1	TP-1
Safety thermostat	✓	✓
Power supply 115V/60Hz	✓	✓
CERTIFICATION		
	CE	CE
DIMENSIONS (WxDxH - MM)/KG		
External Dimensions/weight	700x940x1990-150	700x940x1990-155
Packing Dimensions/weight (carton box)	750x1000x2180-158	750x1000x2180-163

new



MODEL	AF140N	AF140NV
TECHNICAL DATA		
Capacity (LT)	1570	1570
Temp. range (°C)	+2 / +12	+2 / +12
Cooling type	Forced air cooling	Forced air cooling
Defrost	Automatic	Automatic
CFC-Free Refrigerant gas	R452a or R290	R452a or R290
Noise level (db)	<50	<50
CONTROL PANEL		
	LGK-2 TP-1	LGK-2 TP-1
VISUAL AND AUDIBLE ALARMS		
High/Low temperature	✓	✓
Open door	✓	✓
Condenser efficiency	✓	✓
Damaged sensor	✓	✓
Power failure	optional	optional
Full recording memory	✓	✓
SMS alarm message	optional LGK-2	optional LGK-2
FUNCTIONS		
Password protected use	✓	✓
Remote alarm	✓	✓
Data logger	✓	✓
Wi-Fi	TP-1	TP-1
ELECTRICAL DATA		
Supply voltage (V/Hz)	230/50-230/60	230/50-230/60
Max absorbed current (W)	240	240
INTERNAL EQUIPMENT		
Shelves	8	8
OPTIONAL ACCESSORIES		
Drawer	max 14	max 14
Kit of dividers for drawer	✓	✓
Additional shelf	✓	✓
Cloud system	TP-1	TP-1
Castors with frontal brakes	✓	✓
Temp.chart recorder	✓	✓
Back-up battery	✓	✓
GSM module	LGK-2	LGK-2
LAN Port	LGK-2	LGK-2
Port hole	✓	✓
Electric Digital key lock	TP-1	TP-1
Safety thermostat	✓	✓
Power supply 115V/60Hz	✓	✓
CERTIFICATION		
	CE	CE
DIMENSIONS (WxDxH - MM)/KG		
External Dimensions/weight	1400x940x1990-230	1400x940x1990-260
Packing Dimensions/weight (carton box)	1500x1000x2170-250	1500x1000x2170-280

new



BLOOD BANK REFRIGERATOR

FROM 64 TO 770 BLOOD BAGS (450 ml/each)

+3° +5°C FROM 100 TO 1400 LT.

SB-FS-PN-AF MODELS

STRUCTURE

External structure in hot-dip galvanized steel, anti-corrosion treated and PVC film coated. Scotch-Brite stainless steel internal structure.

INSULATION

60mm insulation obtained by injection of high density polyurethane CFC-free foam for excellent product preservation and energy saving.

DOOR

Self-closing glass door (double insulating – low emissivity glass) with folding magnetic gasket (easy to replace) on four sides for perfect closing. Right hand opening or left hand on request. Lock with key.

DRAWERS

Scotch-Brite stainless steel drawers with telescopic ball-bearing slides and plexiglas frontal side. Optional plexiglas internal dividers.

LIGHT

LED light (energy saving up to 70%, ecological) with automatic switch at door opening. Manual switch on control panel.

TEMPERATURE RANGE

Between +3°C and +5°C. Factory preset to +4°C. Digital adjustable with an increment of 0.1°C

REFRIGERATION SYSTEM

Completely sealed, silent and highly efficient hermetic compressor and ventilated air condenser (suitable also for tropical countries). Forced-air cooling system conceived to achieve maximum temperature uniformity and stability inside the refrigerator even in case of frequent door openings. Evaporator fan shuts off during door opening. CFC/HCFC-free natural refrigerant gas R290.

DEFROSTING

Fully automatic defrosting cycle and auto-evaporation of condensed water.

CONTROL PANELS AVAILABLE:

LGK-2 digital control panel (page 10)

4.3" TP-1 full touch control panel (page 12)

DATA LOGGER

Electronic recording system of temperatures and alarms. Download data on USB pen drive.

BACK-UP BATTERY

Self-powered back-up battery supplying electric power to control panel in order to generate alarms in case of power failure.

TEMPERATURE CHART RECORDER (OPTIONAL ACCESSORY)

Weekly temperature recording system working with 1,5V battery. It is equipped with 52 paper disks and an ink pen.



Medical Device certified according to (EU) Regulation 2017/745 (MDR).

STANDARD

- Drawers.
- Four one-way wheels with stabilizing adjustable feet.
- Lock with key.
- Power cord with Schuko type plug or British type plug.
- Protection fuses (on power switch and electronic mainboard).
- RFI filter.
- Password protected power switch and settings.
- Electronic control panel with alarm system.
- Back-up battery.
- Remote contact (dry, volt-free) for alarm.
- Data Logger with USB port to download data.
- Memory of latest alarms visible on screen.

OPTIONAL ACCESSORIES

- Weekly temperature chart recorder.
- Kit of dividers for drawer.
- Castors with frontal brakes (+ 10 cm on total height).
- Test hole (Ø 25 mm) for external user sensor.





MODEL	SB10E	FS15E	FS20E	FS25E
LGK-2 CONTROL PANEL	SB10EL225PVS	FS15EL225PVS	FS20EL225PVS	FS25EL225PVS
TP-1 CONTROL PANEL	SB10EA425PVS	FS15EA425PVS	FS20EA425PVS	FS25EA425PVS
TECHNICAL DATA				
Capacity (LT)	100	150	200	250
Blood bags (450 ml/each)	64	96	128	160
Temp. range (°C)	+3 / +5	+3 / +5	+3 / +5	+3 / +5
Cooling type	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling
Defrost	Automatic	Automatic	Automatic	Automatic
CFC-Free Refrigerant gas	R290	R290	R290	R290
Noise level (db)	<45	<45	<45	<49
CONTROL PANEL	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1
VISUAL AND AUDIBLE ALARMS				
High/Low temperature	√	√	√	√
Open door	√	√	√	√
Condenser efficiency	√	√	√	√
Damaged sensor	√	√	√	√
Power failure	√	√	√	√
Full recording memory	√	√	√	√
FUNCTIONS				
Password protected use	√	√	√	√
Remote alarm	√	√	√	√
Data logger	√	√	√	√
Back-up battery	√	√	√	√
ELECTRICAL DATA				
Supply voltage (V/Hz)	230/50	230/50	230/50	230/50
Max absorbed current (W)	165	150	155	165
INTERNAL EQUIPMENT				
Drawers	2	3	4	5
OPTIONAL ACCESSORIES				
Kit of dividers for drawer	√	√	√	√
Castors with frontal brakes	√	√	√	√
Temp. chart recorder	√	√	√	√
Port hole	√	√	√	√
CERTIFICATION	EU MDR 2017/745	EU MDR 2017/745	EU MDR 2017/745	EU MDR 2017/745
DIMENSIONS (WXDXH - MM)/KG				
External Dimensions/weight	600x600x860-68	600x600x1360-89	600x600x1560-107	600x600x1760-125
Packing Dimensions/weight (carton box)	700x700x1030-75	700x700x1570-97	700x700x1770-119	700x700x1890-142



MODEL	FS30E	PN45E	PN52E	AF70E	AF140E
FS30EL225PVS	PN45EL225PVS	PN52EL225PVS	AF70EL225PVS	AF140EL225PVS	
FS30EA425PVS	PN45EA425PVS	PN52EA425PVS	AF70EA425PVS	AF140EA425PVS	
TECHNICAL DATA					
Capacity (LT)	300	450	520	700	1400
Blood bags (450 ml/each)	192	275	330	385	770
Temp. range (°C)	+3 / +5	+3 / +5	+3 / +5	+3 / +5	+3 / +5
Cooling type	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling
Defrost	Automatic	Automatic	Automatic	Automatic	Automatic
CFC-Free Refrigerant gas	R290	R290	R290	R290	R290
Noise level (db)	<49	<49	<49	<49	<50
CONTROL PANEL	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1
VISUAL AND AUDIBLE ALARMS					
High/Low temperature	√	√	√	√	√
Open door	√	√	√	√	√
Condenser efficiency	√	√	√	√	√
Damaged sensor	√	√	√	√	√
Power failure	√	√	√	√	√
Full recording memory	√	√	√	√	√
FUNCTIONS					
Password protected use	√	√	√	√	√
Remote alarm	√	√	√	√	√
Data logger	√	√	√	√	√
Back-up battery	√	√	√	√	√
ELECTRICAL DATA					
Supply voltage (V/Hz)	230/50	230/50	230/50	230/50	230/50
Max absorbed current (W)	178	271	274	140	240
INTERNAL EQUIPMENT					
Drawers	6	5	6	7	14
OPTIONAL ACCESSORIES					
Kit of dividers for drawer	√	√	√	√	√
Castors with frontal brakes	√	√	√	√	√
Temp. chart recorder	√	√	√	√	√
Port hole	√	√	√	√	√
CERTIFICATION	EU MDR 2017/745	EU MDR 2017/745	EU MDR 2017/745	EU MDR 2017/745	EU MDR 2017/745
DIMENSIONS (WXDXH - MM)/KG					
External Dimensions/weight	600x600x1960-130	700x800x1840-142	700x800x2040-152	700x800x1990-175	1400x800x1990-295
Packing Dimensions/weight (carton box)	700x700x2130-151	750x850x1980-163	750x850x2180-182	750x850x2150-205	1500x900x2170-340

specifications

FREEZER

LABORATORY

-25°-30°-40°C FROM 100 TO 1570 LT.

SB-CV-AF-CL MODELS

STRUCTURE

External structure in hot-dip galvanized steel, anti-corrosion treated and PVC film coated. Scotch-Brite stainless steel internal structure.

INSULATION

Insulation of 60mm (SB-AF models), 80 mm (CV models) and 100mm (CL models) obtained by injection of high density polyurethane CFC-free foam for excellent product preservation and energy saving.

DOOR

Self-closing solid door with folding magnetic gasket (easy to replace) on four sides for perfect closing. Right hand opening or left hand on request. Lock with key (SB-CV-AF models).

SHELVES/DRAWERS

SB-CV and CL models standard equipped with either Scotch-Brite stainless steel shelves, removable and adjustable in height or Scotch-Brite stainless steel drawers with telescopic ball-bearing slides and plexiglas frontal side. AF models standard equipped with Scotch-Brite stainless steel shelves, removable and adjustable in height.

TEMPERATURE RANGE

Between -10°C and -25°C. Factory preset to -22°C (SB-AF models).
Between -10°C and -32°C. Factory preset to -30°C (CV and BL models of AF-SB).
Between -15°C and -42°C. Factory preset to -40°C (CL models).
Digital adjustable temperature with an increment of 0.1°C.

REFRIGERATION SYSTEM

Completely sealed, silent and highly efficient hermetic compressor and ventilated air condenser. Static evaporator for SB-CV models. Forced-air cooling system for AF models conceived to achieve maximum temperature uniformity and stability inside the refrigerator even in case of frequent door openings. Evaporator fan shuts off during door opening. CFC-free refrigerant gas R452a or CFC/HCFC-free natural refrigerant gas R290.

DEFROSTING

Manual defrost on SB-CV models. Fully automatic defrosting cycle and auto-evaporation of condensed water on AF models

CONTROL PANELS AVAILABLE:

LGK-2 digital control panel (page 10)
TP-1 full touch control panel (page 12)

DATA LOGGER

Electronic recording system of temperatures and alarms. Download of data on USB pen drive.



STANDARD

- Shelves or drawers (SB-CV-CL models). Shelves on AF models.
- Four one-way wheels with stabilizing adjustable feet.
- Power cord with Schuko type plug or British type plug.
- Protection fuses (on power switch and electronic mainboard).
- RFI filter.
- Password protected power switch and settings.
- Electronic control panel with alarm system.
- Remote contact (dry, volt-free) for alarm.
- Data Logger with USB port.
- Memory of latest alarms visible on screen.

OPTIONAL ACCESSORIES

- Scotch-Brite stainless steel sliding drawers with telescopic ball-bearing slides and plexiglas frontal side (AF models).
- Kit of dividers for drawer.
- Additional shelf.
- Castors with frontal brakes (+ 10 cm on total height).
- Weekly temperature chart recorder.
- Back-up battery.
- GSM module to send SMS alarm messages to mobile phones (LGK-2).
- LAN port to connect the appliance via ethernet on PC.
- Cloud system (TP-1 full touch).
- Test hole (Ø 25 mm) for external user sensor.
- Electric digital key lock (TP-1 full touch).
- Power supply 115V/60Hz.
- Insulation of 80 mm for AF models.





MODEL	SB10B	SB10BL	CV3
TECHNICAL DATA			
Capacity (LT)	100	100	160
Factory set (°C)	-22	-30	-30
Temp. range (°C)	-10 / -25	-10 / -32	-10 / -32
Cooling type	Static evaporator	Static evaporator	Static evaporator
Defrost	Manual	Manual	Manual
CFC-Free Refrigerant gas	R452a or R290	R452a or R290	R452a or R290
Noise level (db)	<45	<45	<45
CONTROL PANEL			
	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1
VISUAL AND AUDIBLE ALARMS			
High/Low temperature	√	√	√
Open door	√	√	√
Condenser efficiency	√	√	√
Damaged sensor	√	√	√
Power failure	optional	optional	optional
Full recording memory	√	√	√
SMS alarm message	optional LGK-2	optional LGK-2	optional LGK-2
FUNCTIONS			
Password protected use	√	√	√
Remote alarm	√	√	√
Data logger	√	√	√
WI-FI	TP-1	TP-1	TP-1
ELECTRICAL DATA			
Supply voltage (V/Hz)	230/50-230/60	230/50-230/60	230/50-230/60
Max absorbed current (W)	185	320	320
INTERNAL EQUIPMENT			
Drawers	2	2	3
Shelves <small>alternatively</small>	2	2	3
OPTIONAL ACCESSORIES			
Kit of dividers for drawer	√	√	√
Castors with frontal brakes	√	√	√
Temp. chart recorder	√	√	√
Back-up battery	√	√	√
GSM module	LGK-2	LGK-2	LGK-2
LAN Port	LGK-2	LGK-2	LGK-2
Cloud system	TP-1	TP-1	TP-1
Port hole	√	√	√
Electric Digital key lock	TP-1	TP-1	TP-1
Power supply 115V/60Hz	√	√	√
CERTIFICATION			
	CE	CE	CE
DIMENSIONS (WxDxH - MM)/KG			
External Dimensions/weight	600x600x860-66	600x600x860-66	640x620x1400-95
Packing Dimensions/weight (carton box)	700x700x1030-73	700x700x1030-73	700x700x1530-105

MODEL	CV4	CV5	CV6
TECHNICAL DATA			
Capacity (LT)	220	250	320
Factory set (°C)	-30	-30	-30
Temp. range (°C)	-10 / -32	-10 / -32	-10 / -32
Cooling type	Static evaporator	Static evaporator	Static evaporator
Defrost	Manual	Manual	Manual
CFC-Free Refrigerant gas	R452a or R290	R452a or R290	R452a or R290
Noise level (db)	<45	<45	<45
CONTROL PANEL			
	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1
VISUAL AND AUDIBLE ALARMS			
High/Low temperature	√	√	√
Open door	√	√	√
Condenser efficiency	√	√	√
Damaged sensor	√	√	√
Power failure	optional	optional	optional
Full recording memory	√	√	√
SMS alarm message	optional LGK-2	optional LGK-2	optional LGK-2
FUNCTIONS			
Password protected use	√	√	√
Remote alarm	√	√	√
Data logger	√	√	√
WI-FI	TP-1	TP-1	TP-1
ELECTRICAL DATA			
Supply voltage (V/Hz)	230/50-230/60	230/50-230/60	230/50-230/60
Max absorbed current (W)	351	384	416
INTERNAL EQUIPMENT			
Drawers	4	5	6
Shelves	4	5	6
OPTIONAL ACCESSORIES			
Kit of dividers for drawer	√	√	√
Castors with frontal brakes	√	√	√
Temp. chart recorder	√	√	√
Back-up battery	√	√	√
GSM module	LGK-2	LGK-2	LGK-2
LAN Port	LGK-2	LGK-2	LGK-2
Cloud system	TP-1	TP-1	TP-1
Port hole	√	√	√
Electric Digital key lock	TP-1	TP-1	TP-1
Power supply 115V/60Hz	√	√	√
CERTIFICATION			
	CE	CE	CE
DIMENSIONS (WxDxH - MM)/KG			
External Dimensions/weight	640x620x1600-111	640x620x1800-125	640x620x2000-136
Packing Dimensions/weight (carton box)	700x700x1780-121	700x700x1930-135	700x700x2130-146

specifications



MODEL	AF70B	AF70BL	AF140B	AF140BL
TECHNICAL DATA				
Capacity (LT)	700	700	1400	1400
Factory set (°C)	-22	-30	-22	-30
Temp. range (°C)	-10 / -25	-10 / -32	-10 / -25	-10 / -32
Cooling type	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling
Defrost	Automatic	Automatic	Automatic	Automatic
CFC-Free Refrigerant gas	R452a or R290	RR452a or R290	R452a or R290	R452a or R290
Noise level (db)	<50	<50	<60	<60
CONTROL PANEL				
	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1
VISUAL AND AUDIBLE ALARMS				
High/Low temperature	√	√	√	√
Open door	√	√	√	√
Condenser efficiency	√	√	√	√
Damaged sensor	√	√	√	√
Power failure	optional	optional	optional	optional
Full recording memory	√	√	√	√
SMS alarm message	optional LGK-2	optional LGK-2	optional LGK-2	optional LGK-2
FUNCTIONS				
Password protected use	√	√	√	√
Remote alarm	√	√	√	√
Data logger	√	√	√	√
Wi-Fi	TP-1	TP-1	TP-1	TP-1
ELECTRICAL DATA				
Supply voltage (V/Hz)	230/50-230/60	230/50-230/60	230/50-230/60	230/50-230/60
Max absorbed current (W)	420	560	730	1084
INTERNAL EQUIPMENT				
Drawers <small>alternatively</small>	optional - max 7	optional - max 7	optional - max 14	optional - max 14
Shelves	4	4	8	8
OPTIONAL ACCESSORIES				
Kit of dividers for drawer	√	√	√	√
Castors with frontal brakes	√	√	√	√
Temp. chart recorder	√	√	√	√
Back-up battery	√	√	√	√
GSM module	LGK-2	LGK-2	LGK-2	LGK-2
LAN Port	LGK-2	LGK-2	LGK-2	LGK-2
Cloud system	TP-1	TP-1	TP-1	TP-1
Port hole	√	√	√	√
Electric Digital key lock	TP-1	TP-1	TP-1	TP-1
Power supply 115V/60Hz	√	√	√	√
CERTIFICATION				
	CE	CE	CE	CE
DIMENSIONS (WxDxH - MM)/KG				
External Dimensions/weight	700x800x1990-150	700x800x1990-150	1400x800x1990-229	1400x800x1990-229
Packing Dimensions/weight (carton box)	750x850x2150-162	750x850x2150-162	1500x900x2170-249	1500x900x2170-249



MODEL	CL30B	CL60B	CL60B/2
TECHNICAL DATA			
Capacity (LT)	300	600	300/300
Factory set (°C)	-40	-40	-40 / -40
Temp. range (°C)	-15 / -42	-15 / -42	-15 / -42
Cooling type	Static evaporator	Static evaporator	Static evaporator
Defrost	Manual	Manual	Manual
CFC-Free Refrigerant gas	R452a or R290	RR452a or R290	R452a or R290
Noise level (db)	<52	<52	<52
CONTROL PANEL			
	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1
VISUAL AND AUDIBLE ALARMS			
High/Low temperature	√	√	√
Open door	√	√	√
Condenser efficiency	√	√	√
Damaged sensor	√	√	√
Power failure	optional	optional	optional
Full recording memory	√	√	√
SMS alarm message	optional LGK-2	optional LGK-2	optional LGK-2
FUNCTIONS			
Password protected use	√	√	√
Remote alarm	√	√	√
Data logger	√	√	√
Wi-Fi	TP-1	TP-1	TP-1
ELECTRICAL DATA			
Supply voltage (V/Hz)	230/50-230/60	230/50-230/60	230/50-230/60
Max absorbed current (W)	416	425	760
INTERNAL EQUIPMENT			
Drawers <small>alternatively</small>	6	6	3 / 3
Shelves	6	6	3 / 3
OPTIONAL ACCESSORIES			
Kit of dividers for drawer	√	√	√
Castors with frontal brakes	√	√	√
Temp. chart recorder	√	√	√
Back-up battery	√	√	√
GSM module	LGK-2	LGK-2	LGK-2
LAN Port	LGK-2	LGK-2	LGK-2
Cloud system	TP-1	TP-1	TP-1
Port hole	√	√	√
Electric Digital key lock	TP-1	TP-1	TP-1
Power supply 115V/60Hz	√	√	√
CERTIFICATION			
	CE	CE	CE
DIMENSIONS (WxDxH - MM)/KG			
External Dimensions/weight	680x660x2040-145	780x840x1930-204	780x840x1930-224
Packing Dimensions/weight (carton box)	700x700x2130-160	860x900x2080-216	860x900x2080-240



MODEL	AF70NB	AF140NB
TECHNICAL DATA		
Capacity (LT)	710	1570
Factory set (°C)	-22	-22
Temp. range (°C)	-10 / -25	-10 / -25
Cooling type	Forced air cooling	Forced air cooling
Defrost	Automatic	Automatic
CFC-Free Refrigerant gas	R452a or R290	R452a or R290
Noise level (db)	<50	<60
CONTROL PANEL		
	LGK-2 TP-1	LGK-2 TP-1
VISUAL AND AUDIBLE ALARMS		
High/Low temperature	√	√
Open door	√	√
Condenser efficiency	√	√
Damaged sensor	√	√
Power failure	optional	optional
Full recording memory	√	√
SMS alarm message	optional LGK-2	optional LGK-2
FUNCTIONS		
Password protected use	√	√
Remote alarm	√	√
Data logger	√	√
Wi-Fi	TP-1	TP-1
ELECTRICAL DATA		
Supply voltage (V/Hz)	230/50	230/50
Max absorbed current (W)	420	730
INTERNAL EQUIPMENT		
Drawers <small>alternatively</small>	optional max 7	optional max 14
Shelves	4	8
OPTIONAL ACCESSORIES		
Kit of dividers for drawer	√	√
Castors with frontal brakes	√	√
Temp. chart recorder	√	√
Back-up battery	√	√
GSM module	LGK-2	LGK-2
LAN Port	LGK-2	LGK-2
Cloud system	TP-1	TP-1
Port hole	√	√
Electric Digital key lock	TP-1	TP-1
Power supply 115V/60Hz	√	√
CERTIFICATION		
	CE	CE
DIMENSIONS (WxDxH - MM)/KG		
External Dimensions/weight	700x940x1990-158	1400x940x1990-255
Packing Dimensions/weight (carton box)	750x1000x2180-175	1500x1000x2170-275

new

PLASMA FREEZER

-30°-40°C FROM 160 TO 700 LT.

CV/PF-CL/PF MODELS

STRUCTURE

External structure in hot-dip galvanized steel, anti-corrosion treated and PVC film coated. Scotch-Brite stainless steel internal structure.

INSULATION

Insulation of 80mm (CV/PF models) and 100mm (CL/PF models) obtained by injection of high density polyurethane CFC-free foam for excellent product preservation and energy saving.

DOOR

Self-closing solid door with two folding magnetic gaskets (easy to replace) on four sides for perfect closing. Right hand opening or left hand on request. Lock with key (CV/PF models). Optional electric digital key lock.

DRAWERS

Standard equipped with Scotch-Brite stainless steel drawers with telescopic ball-bearing slides and plexiglas frontal side. Optional kit of Plexiglas dividers for drawer.

TEMPERATURE RANGE

Between -25°C and -32°C (CV/PF models). Factory preset to -30°C.
Between -30°C and -42°C. (CL/PF models). Factory preset to -40°C.
Digital adjustable temperature with an increment of 0.1°C.

REFRIGERATION SYSTEM

Completely sealed, silent and highly efficient hermetic compressor and ventilated air condenser. Static evaporator.
CFC/HCFC-free natural refrigerant gas R290.

DEFROSTING

Manual defrosting cycle.

CONTROL PANELS AVAILABLE:

LGK-2 digital control panel (page 10)

4.3" TP-1 full touch control panel (page 12)

DATA LOGGER

Electronic recording system of temperatures and alarms of last 30 days.
Download of data on USB pen drive.

BACK-UP BATTERY

Self-powered back-up battery supplying electric power to control panel in order to generate alarms in case of power failure.

TEMPERATURE CHART RECORDER (OPTIONAL ACCESSORY)

Weekly temperature recording system working with 1,5V battery. It is equipped with 52 paper disks and an ink pen.



Medical Device certified according to **(EU) Regulation 2017/745 (MDR)**.

STANDARD

- Drawers.
- Four one-way wheels with stabilizing adjustable feet.
- Lock with key (CV/PF models).
- Power cord with Schüko type plug or British type plug.
- Protection fuses.
(on power switch and electronic mainboard)
- RFI filter.
- Password protected power switch and settings.
- Electronic control panel with alarm system.
- Back-up battery.
- Remote contact (dry, volt-free) for alarm.
- Data Logger with USB port to download data.
- Memory of latest alarms visible on screen.

OPTIONAL ACCESSORIES

- Weekly temperature chart recorder.
- Kit of dividers for drawer.
- Castors with frontal brakes
(+ 10 cm on total height).
- Test hole (Ø 25 mm) for external user sensor.





MODEL	CV3/PF	CV4/PF	CV5/PF	CV6/PF
LGK-2 CONTROL PANEL	CV3PFL225PCS	CV4PFL225PCS	CV5PFL225PCS	CV6PFL225PCS
TP-1 CONTROL PANEL	CV3PFA425PCS	CV4PFA425PCS	CV5PFA425PCS	CV6PFA425PCS
TECHNICAL DATA				
Capacity (LT)	160	220	250	320
Bags (450 ml/each)	96	128	160	192
Temp. range (°C)	-25 / -32	-25 / -32	-25 / -32	-25 / -32
Cooling type	Static evaporator	Static evaporator	Static evaporator	Static evaporator
Defrost	Manual	Manual	Manual	Manual
CFC-Free Refrigerant gas	R290	R290	R290	R290
Noise level (db)	<45	<45	<45	<45
CONTROL PANEL	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1
VISUAL AND AUDIBLE ALARMS				
High/Low temperature	√	√	√	√
Open door	√	√	√	√
Condenser efficiency	√	√	√	√
Damaged sensor	√	√	√	√
Power failure	√	√	√	√
Full recording memory	√	√	√	√
FUNCTIONS				
Password protected use	√	√	√	√
Remote alarm	√	√	√	√
Data logger	√	√	√	√
Back-up battery	√	√	√	√
ELECTRICAL DATA				
Supply voltage (V/Hz)	230/50	230/50	230/50	230/50
Max absorbed current (W)	320	351	384	416
INTERNAL EQUIPMENT				
Drawers	3	4	5	6
OPTIONAL ACCESSORIES				
Kit of dividers for drawer	√	√	√	√
Castors with frontal brakes	√	√	√	√
Temp. chart recorder	√	√	√	√
Port hole	√	√	√	√
CERTIFICATION	EU MDR 2017/745	EU MDR 2017/745	EU MDR 2017/745	EU MDR 2017/745
DIMENSIONS (WxDxH - MM)/KG				
External Dimensions/weight	640x620x1400-95	640x620x1600-111	640x620x1800-125	640x620x2000-136
Packing Dimensions/weight (carton box)	700x700x1530-105	700x700x1780-121	700x700x1930-135	700x700x2130-146



MODEL	CL60B/PF	CL70B/PF
LGK-2 CONTROL PANEL	CL60BPFL225PCS	CL70BPFL225PCS
TP-1 CONTROL PANEL	CL60BPFA425PCS	CL70BPFA425PCS
TECHNICAL DATA		
Capacity (LT)	600	714
Bags (450 ml/each)	330	330
Temp. range (°C)	-30 / -42	-30 / -42
Cooling type	Static evaporator	Static evaporator
Defrost	Manual	Manual
CFC-Free Refrigerant gas	R290	R290
Noise level (db)	<52	<52
CONTROL PANEL	LGK-2 TP-1	LGK-2 TP-1
VISUAL AND AUDIBLE ALARMS		
High/Low temperature	√	√
Open door	√	√
Condenser efficiency	√	√
Damaged sensor	√	√
Power failure	√	√
Full recording memory	√	√
FUNCTIONS		
Password protected use	√	√
Remote alarm	√	√
Data logger	√	√
Back-up battery	√	√
ELECTRICAL DATA		
Supply voltage (V/Hz)	230/50	230/50
Max absorbed current (W)	425	425
INTERNAL EQUIPMENT		
Drawers	6	6
OPTIONAL ACCESSORIES		
Kit of dividers for drawer	√	√
Castors with frontal brakes	√	√
Temp. chart recorder	√	√
Port hole	√	√
CERTIFICATION	EU MDR 2017/745	EU MDR 2017/745
DIMENSIONS (WxDxH - MM)/KG		
External Dimensions/weight	780x840x1930-204	880x900x2030-204
Packing Dimensions/weight (carton box)	860x900x2080-216	910x920x2100-216

specifications

COMBINED REFRIGERATOR AND FREEZER

LABORATORY AND PHARMACY

+2°+12°/-10°-30°C FROM 200/100 TO 700/700 LT.

FC/2-AF/2 MODELS

STRUCTURE

External structure in hot-dip galvanized steel, anti-corrosion treated and PVC film coated. Scotch-Brite stainless steel internal structure.

INSULATION

60mm insulation obtained by injection of high density polyurethane CFC-free foam for excellent product preservation and energy saving.

DOOR

Self-closing solid or glass door (double insulating – low emissivity glass) for refrigerator compartment and self-closing solid door for freezer compartment. Folding magnetic gasket (easy to replace) on four sides for perfect closing. Right hand opening or left hand on request. Lock with key.

INTERNAL FITTINGS

Scotch-Brite stainless steel shelves, removable and adjustable in height in refrigerator compartment. Scotch-Brite stainless steel drawers with telescopic ball-bearing slides and plexiglas frontal side in freezer compartment (shelves on AF/2 models).

LIGHT

LED light (energy saving up to 70%, ecological) with automatic switch at door opening in refrigerator compartment. Manual switch on control panel.

TEMPERATURE RANGE

Refrigerator compartment: between +2°C and +12°C. Factory preset to +4°C.
Freezer compartment: between -10°C and -30°C. (-25°C on AF140/2 models)
Factory preset to -25°C (-22°C on AF140/2 models).
Digital adjustable temperatures with an increment of 0.1°C.

DUAL REFRIGERATION SYSTEM

Two separate completely sealed, silent and highly efficient hermetic compressors and ventilated air condensers (suitable also for tropical countries). Forced-air cooling system in refrigerator compartment conceived to achieve maximum temperature uniformity and stability inside the refrigerator even in case of frequent door openings. Evaporator fan shuts off during door openings. Static evaporator in freezer compartment. Ventilated evaporator for both compartments of model AF140/2. CFC-free refrigerant gas R452a or CFC/HCFC-free natural refrigerant gas R290.

DEFROSTING

Fully automatic defrosting cycle in refrigerator compartment.
Manual defrost in freezer compartment. Hot gas defrost in freezer compartment of AF140/2 models.

CONTROL PANELS AVAILABLE:

LGK-2 digital control panel (page 10)
TP-1 full touch control panel (page 12)

DATA LOGGER

Electronic recording system of temperatures and alarms in refrigerator and freezer compartments. Download data on USB pen drive.



STANDARD

- Shelves in refrigerator compartment.
- Drawers in freezer compartment (shelves on AF/2 models).
- Four one-way wheels with stabilizing adjustable feet.
- Two power cords with Schuko type plug or British type plug.
- Protection fuses.
- (on power switch and electronic mainboard)
- RFI filter.
- Password protected power switch and settings.
- Electronic control panel with alarm system.
- Remote contacts (dry, volt-free) for alarm
- Two data loggers with USB port to download data.
- Memory of latest alarms visible on screen.

OPTIONAL ACCESSORIES

- Scotch-Brite stainless steel sliding drawers (see table).
- Kit of dividers for drawer.
- Additional shelf.
- Castors with frontal brakes (+ 10 cm on total height).
- Weekly temperature chart recorder.
- Back-up battery.
- GSM module to send SMS alarm messages to mobile phones (LGK-2).
- LAN port to connect the appliance via ethernet on PC.
- Cloud system (TP-1 full touch).
- Safety thermostat on refrigerator compartment.
- Test hole (Ø 25 mm) for external user sensor.
- Electric digital key lock (TP-1 full touch).
- Power supply 115V/60Hz



MODEL	FC39/2	FC39V/2
TECHNICAL DATA		
Capacity Refrigerator (LT)	200	200
Capacity Freezer (LT)	100	100
Factory set (°C)	+4 / -25	+4 / -25
Temp. range (°C)	+2 / +12 -10 / -30	+2 / +12 -10 / -30
Cooling type Refrigerator	Forced air cooling	Forced air cooling
Cooling type Freezer	Static evaporator	Static evaporator
Defrost	Refrigerator Automatic Freezer Manual	Refrigerator Automatic Freezer Manual
CFC-Free Refrigerant gas	R452a or R290	R452a or R290
Noise level (db)	<50	<50
CONTROL PANEL		
	LGK-2 TP-1	LGK-2 TP-1
VISUAL AND AUDIBLE ALARMS		
High/Low temperature	√	√
Open door	√	√
Condenser efficiency	√	√
Damaged sensor	√	√
Power failure	optional	optional
Full recording memory	√	√
SMS alarm message	optional LGK-2	optional LGK-2
FUNCTIONS		
Password protected use	√	√
Remote alarm	√	√
Data logger	√	√
Wi-Fi	TP-1	TP-1
ELECTRICAL DATA		
Supply voltage (V/Hz)	230/50-230/60	230/50-230/60
Max absorbed current (W)	155+175	155+175
INTERNAL EQUIPMENT		
Refrigerator compartment	3 shelves	3 shelves
Freezers compartment	2 drawers	2 drawers
OPTIONAL ACCESSORIES		
Drawer in refrig. compartment	max 3	max 3
Kit of dividers for drawer	√	√
Castors with frontal brakes	√	√
Temp. chart recorder	√	√
Back-up battery	√	√
GSM module	LGK-2	LGK-2
LAN Port	LGK-2	LGK-2
Cloud system	TP-1	TP-1
Port hole	√	√
Electric Digital key lock	TP-1	TP-1
Safety thermostat	√	√
Power supply 115V/60Hz	√	√
CERTIFICATION		
	CE	CE
DIMENSIONS (WxDxH - MM)/KG		
External Dimensions/weight	600x700x1970-127	600x700x1970-131
Packing Dimensions/weight (carton box)	720x720x2200-137	720x720x2200-141

	AF70/2	AF70V/2	AF140/2	AF140V/2
TECHNICAL DATA				
Capacity Refrigerator (LT)	350	350	700	700
Capacity Freezer (LT)	350	350	700	700
Factory set (°C)	+4 / -25	+4 / -25	+4 / -22	+4 / -22
Temp. range (°C)	+2 / +12 -10 / -30	+2 / +12 -10 / -30	+2 / +12 -10 / -25	+2 / +12 -10 / -25
Cooling type Refrigerator	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling
Cooling type Freezer	Static evaporator	Static evaporator	Forced air cooling	Forced air cooling
Defrost	Refrigerator Automatic Freezer Manual	Refrigerator Automatic Freezer Manual	Refrigerator Automatic Freezer Automatic	Refrigerator Automatic Freezer Automatic
CFC-Free Refrigerant gas	R452a or R290	R452a or R290	R452a or R290	R452a or R290
Noise level (db)	<50	<50	<52	<52
CONTROL PANEL				
	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1
VISUAL AND AUDIBLE ALARMS				
High/Low temperature	√	√	√	√
Open door	√	√	√	√
Condenser efficiency	√	√	√	√
Damaged sensor	√	√	√	√
Power failure	optional	optional	optional	optional
Full recording memory	√	√	√	√
SMS alarm message	optional LGK-2	optional LGK-2	optional LGK-2	optional LGK-2
FUNCTIONS				
Password protected use	√	√	√	√
Remote alarm	√	√	√	√
Data logger	√	√	√	√
Wi-Fi	TP-1	TP-1	TP-1	TP-1
ELECTRICAL DATA				
Supply voltage (V/Hz)	230/50-230/60	230/50-230/60	230/50-230/60	230/50-230/60
Max absorbed current (W)	270+320	270+320	140+420	140+420
INTERNAL EQUIPMENT				
Refrigerator compartment	2 shelves	2 shelves	4 shelves	4 shelves
Freezers compartment	3 drawers	3 drawers	4 shelves	4 shelves
OPTIONAL ACCESSORIES				
Drawer in refrig. compartment	max 3	max 3	max 7+max7 in freezer	max 7+max7 in freezer
Kit of dividers for drawer	√	√	√	√
Castors with frontal brakes	√	√	√	√
Temp. chart recorder	√	√	√	√
Back-up battery	√	√	√	√
GSM module	LGK-2	LGK-2	LGK-2	LGK-2
LAN Port	LGK-2	LGK-2	LGK-2	LGK-2
Cloud system	TP-1	TP-1	TP-1	TP-1
Port hole	√	√	√	√
Electric Digital key lock	TP-1	TP-1	TP-1	TP-1
Safety thermostat	√	√	√	√
Power supply 115V/60Hz	√	√	√	√
CERTIFICATION				
	CE	CE	CE	CE
DIMENSIONS (WxDxH - MM)/KG				
External Dimensions/weight	700x870x2000-180	700x870x2000-183	1400x800x1990-240	1400x800x1990-265
Packing Dimensions/weight (carton box)	760x890x2180-193	760x890x2180-198	1500x900x2170-258	1500x900x2170-280

specifications

COMBINED REFRIGERATOR

PHARMACY

+2°/+15°/+2°/+15°C FROM 150/150 TO 700/700 LT.

FP/2 MODELS

STRUCTURE

External structure in hot-dip galvanized steel, anti-corrosion treated and PVC film coated. Scotch-Brite stainless steel internal structure.

INSULATION

60mm insulation obtained by injection of high density polyurethane CFC-free foam for excellent product preservation and energy saving.

DOOR

Two self-closing glass doors (double insulating – low emissivity glass) for both refrigerator compartments. Folding magnetic gasket (easy to replace) on four sides for perfect closing. Right hand opening or left hand on request. Lock with key.

SHELVES

Scotch-Brite stainless steel shelves, removable and adjustable in height in both compartments.

LIGHT

LED light (energy saving up to 70%, ecological) with automatic switch at door opening in both compartments. Manual switch on control panel.

TEMPERATURE RANGE

Upper compartment: between +2°C and +15°C. Factory preset to +4°C.
Lower compartment: between +2°C and +15°C. Factory preset to +4°C.
Digital adjustable temperatures with an increment of 0.1°C.

DUAL REFRIGERATION SYSTEM

Two separate completely sealed, silent and highly efficient hermetic compressors and ventilated air condensers (suitable also for tropical countries). Forced-air cooling system in both compartments conceived to achieve maximum temperature uniformity and stability inside the refrigerator even in case of frequent door openings. Evaporator fan shuts off during door openings. CFC-free refrigerant gas R452a or CFC/HCFC-free natural refrigerant gas R290.

DEFROSTING

Fully automatic defrosting cycle in both compartments.

CONTROL PANELS AVAILABLE:

LGK-2 digital control panel (page 10)
TP-1 full touch control panel (page 12)

DATA LOGGER

Electronic recording system of temperatures and alarms in both compartments. Download data on USB pen drive.



STANDARD

- Shelves.
- Four one-way wheels with stabilizing adjustable feet.
- Two power cords with Schuko type plug or British type plug.
- Protection fuses.
(on power switch and electronic mainboard)
- RFI filter.
- Password protected power switch and settings.
- Two microprocessors to monitor temperatures.
- Remote contacts (dry, volt-free) for alarm.
- Two data loggers with USB port to download data.
- Memory of latest alarms visible on screen.

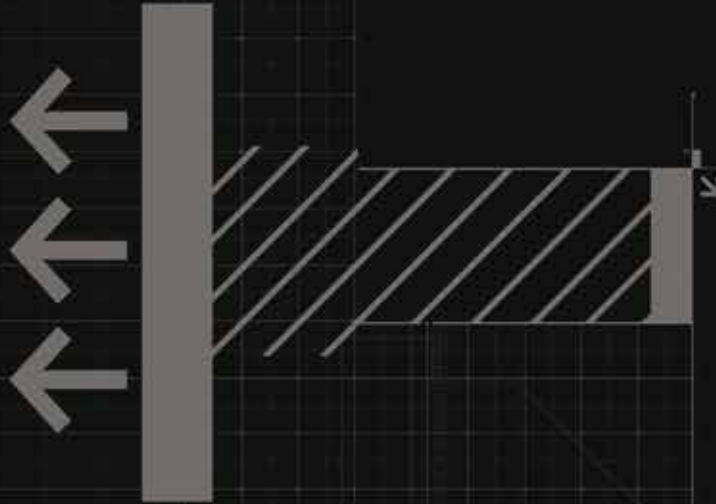
OPTIONAL ACCESSORIES

- Scotch-Brite stainless steel sliding drawers (see table).
- Kit of dividers for drawer.
- Scotch-Brite stainless steel pharmacy drawers (h 7 cm).
- Additional shelf.
- Castors with frontal brakes (+ 10 cm on total height).
- Weekly temperature chart recorder.
- Back-up battery.
- GSM module to send SMS alarm messages to mobile phones (LGK-2).
- LAN port to connect the appliance via ethernet on PC.
- Cloud system (TP-1 full touch).
- Safety thermostat (DIN 13277 conformity).
- Test hole (Ø 25 mm) for external user sensor.
- Electric digital key lock (TP-1 full touch).
- Power supply 115V/60Hz





MODEL	FP30V/2	FP70V/2	FP60V/2	FP140V/2
TECHNICAL DATA				
Capacity (LT) Upper comp.	150	350	300	700
Capacity (LT) Lower comp.	150	350	300	700
Factory set	+4 / +4	+4 / +4	+4 / +4	+4 / +4
Temp. range (°C)	+2 / +15 +2 / +15	+2 / +15 +2 / +15	+2 / +15 +2 / +15	+2 / +15 +2 / +15
Cooling type	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling
Defrost	Automatic	Automatic	Automatic	Automatic
CFC-Free Refrigerant gas	R452a or R290	R452a or R290	R452a or R290	R452a or R290
Noise level (db)	<50	<50	<52	<52
CONTROL PANE				
	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1	LGK-2 TP-1
VISUAL AND AUDIBLE ALARMS				
High/Low temperature	√	√	√	√
Open door	√	√	√	√
Condenser efficiency	√	√	√	√
Damaged sensor	√	√	√	√
Power failure	optional	optional	optional	optional
Full recording memory	√	√	√	√
SMS alarm message	optional LGK-2	optional LGK-2	optional LGK-2	optional LGK-2
FUNCTIONS				
Password protected use	√	√	√	√
Remote alarm	√	√	√	√
Data logger	√	√	√	√
Wi-Fi	TP-1	TP-1	TP-1	TP-1
ELECTRICAL DATA				
Supply voltage (V/Hz)	230/50-230/60	230/50-230/60	230/50-230/60	230/50-230/60
Max absorbed current (W)	150+150	270+270	178+178	140+140
INTERNAL EQUIPMENT				
Upper compartment	3 shelves	3 shelves	4 shelves	4 shelves
Lower compartment	3 shelves	3 shelves	4 shelves	4 shelves
OPTIONAL ACCESSORIES				
Drawer	max 3/3	max 3/3	max 6/6	max 7/7
Kit of dividers for drawer	√	√	√	√
Pharma drawer (h 7 cm)	max 5/5	max 5/5	max 10/10	max 12/12
Cloud system	TP-1	TP-1	TP-1	TP-1
Castors with frontal brakes	√	√	√	√
Temp. chart recorder	√	√	√	√
Back-up battery	√	√	√	√
GSM module	LGK-2	LGK-2	LGK-2	LGK-2
LAN Port	LGK-2	LGK-2	LGK-2	LGK-2
Port hole	√	√	√	√
Electric Digital key lock	TP-1	TP-1	TP-1	TP-1
Safety thermostat	√	√	√	√
Power supply 115V/60Hz	√	√	√	√
CERTIFICATION				
	CE	CE	CE	CE
DIMENSIONS (WxDxH - MM)/KG				
External Dimensions/weight	600x700x2030-125	700x870x2000-183	1200x600x1980-198	1400x800x1990-265
Packing Dimensions/weight (carton box)	720x720x2200-139	760x890x2180-198	1500x900x2170-249	1500x900x2170-280



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Part No	Description	Quantity	Unit
141-100	FRIMED		
141-101	FRIMED		
141-102	FRIMED		
141-103	FRIMED		
141-104	FRIMED		
141-105	FRIMED		
141-106	FRIMED		
141-107	FRIMED		
141-108	FRIMED		
141-109	FRIMED		
141-110	FRIMED		
141-111	FRIMED		
141-112	FRIMED		
141-113	FRIMED		
141-114	FRIMED		
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141-199	FRIMED		
141-200	FRIMED		