



MEDICAL REFRIGERATORS

- LABORATORY AND PHARMACY REFRIGERATOR
- BLOOD BANK REFRIGERATOR
- LABORATORY FREEZER
- DEEP FREEZER**
- PLASMA FREEZER
- COMBINED REFRIGERATOR AND FREEZER
- COMBINED REFRIGERATOR**



Flight No.	Destination	Schedule	Hall	Type
LH 456	London/Heathrow	1810	B	321
LH 895	Hannover	1810	A	320
LH 811	Köln/Bonn	1815	A	320
LH 833	Düsseldorf	1815	A	735
LH 233	Berlin/Tegel	1820	A	321
FU 546	Nizza	1830	D	CRJ
LO 354	Warschau	1830	D	EM4
OS 116	Wien	1835	A	735
SR 557	Zürich	1835	D	320
LH 227	Frankfurt/Main	1840	A	315
OU 437	Zagreb	1840	B	720
LH 595A	Strasbourg	1845	A	DH3
LH 5915	Düsseldorf	1845	A	DH3
LH 5917	Düsseldorf	1845	A	321
LH 521	Hamburg	1845	A	320
LH 3000	Oso	1850	B	723
LH 5184	Helsinki	1850	B	142
DL 7520	Berlin/Tegel	1850	D	733
LH 1061	Nürnberg	1850	A	AT3
LH 1925	Bremen	1850	A	710
LH 5656	Paderb./Lippst.	1850	A	DM3
DL 7166	Köln/Bonn	1855	D	733
DL 7096	Düsseldorf	1855	D	733
LH 4314	Birmingham	1855	B	142
LH 4928	München/Osnabr.	1855	A	733
LH 4542	Manchester	1855	B	142
LH 5178	Leipzig/Halle	1855	A	F50
LH 3672	Zürich	1900	B	F50
LH 4160	Paris/CDG	1900	A	735
LH 5822	Marseille	1900	A	CRJ
LH 4432	Brüssel	1900	A	735
LH 5760	Nizza	1900	A	CRJ
ZK 834	Graz	1900	A	J31
LH 5886	Amsterdam	1900	A	142
IB 3531	Madrid	1905	D	320
LH 3212	Prag	1905	B	F50
LH 5076	Warschau	1905	B	CRJ
LH 4948	London/Heathrow	1910	B	733
LH 3832	Bologna-Napoli	1910	A	733
LH 5384	Wien	1910	A	CRJ
LH 5886	Turin	1910	A	142
LH 5386	Genf	1910	B	144
LH 5884	Firenze	1910	A	142
LH 882	Düsseldorf	1910	A	733
LH 3448	Malpensa	1910	A	735
LH 3448	Göteborg	1915	B	CRJ
LH 5812	Lyon	1915	A	CRJ
LH 895	Hannover	1915	A	735
LH 833	Köln/Bonn	1915	A	320
LH 3046	Stockholm/ARN	1915	B	319
LH 2205	Berlin/Tegel	1915	A	321
LH 4312	Madrid	1920	A	733
LH 3818	Rom	1920	A	733
LH 3456	Istanbul	1920	B	319
LH 4308	Barcelona	1920	A	733
LH 3420	Athen	1920	A	320
LH 857	Hamburg	1925	A	320
LH 879	Düsseldorf	1925	A	733
EN 2688	Triest	1930	A	AT3
SR 2948	Brüssel	1930	D	735
EN 2697	Verona	1935	A	AT3
EN 2697	Venedig	1935	A	AT3
MS 889	Kairo	1935	C	350
FC 607	Erfurt	1935	A	038
SK 664	Kopenhagen	1940	B	M80
EN 2681	Genoa	1945	A	AT3
EN 2677	Pisa	1945	A	AT3
EN 2705	Mallanz/Bergamo	1945	A	AT3
EAE 108	Mönchengladbach	1945	A	AT3
EN 9193	Ancona	1945	A	AT3
LH 244	Berlin/Tegel	1945	A	733
DL 7114	Hamburg	1955	D	733
LH 273	Frankfurt/Main	1955	D	A88
DL 4609	Berlin/Tegel	1955	D	735
KL 1798	Amsterdam	2000	D	F70

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Should it be necessary of useful without undermining any model essential features, technical and stylistic characteristics are subject to be changed without manufacturer's previous notice. Pictures don't necessarily show product in standard version.



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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.



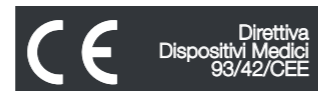
frimed has always been oriented to a constant improvement of the business process in order to satisfy the client, to involve its staff and to have a relationship of mutual satisfaction with suppliers. The commitment undertaken in this direction has enabled the company to achieve an important goal the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

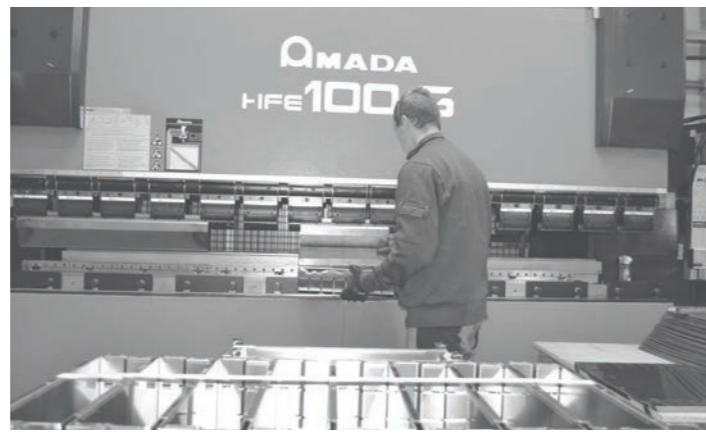


Further Quality Management System ISO 14001: certification confirms **frimed** serious commitment to minimize the environmental impact of procedures, products and services and attests the reliability of the Environmental Management System applied.



In 2010 **frimed** also achieved the certification of Quality Management System according to ISO 13485 (Medical Devices) and, at the same time, the CE certification according to Medical Device Directives 93/42/EEC for the marking of Blood Bank refrigerators (class IIa) for hospital use.





index

PRODUCT	6
LABORATORY AND PHARMACY REFRIGERATOR	14
BLOOD BANK REFRIGERATOR	20
LABORATORY FREEZER -25° -30°C	24
LABORATORY DEEP FREEZER -40°C	28
PLASMA FREEZER -40°C	30
COMBINED REFRIGERATOR AND FREEZER	34
COMBINED REFRIGERATOR	38



ENERGY SAVING AND ENVIRONMENT PROTECTION TECHNOLOGY

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



ENVIRONMENT FRIENDLY REFRIGERANT GAS NATURAL GAS R290

CFC- free R452a gas is used in all compressors of frimed models. In addition we also offer compressors with natural gas R290 on all our 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 granting 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 ecological 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

In Scotch-Brite stainless steel. 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.

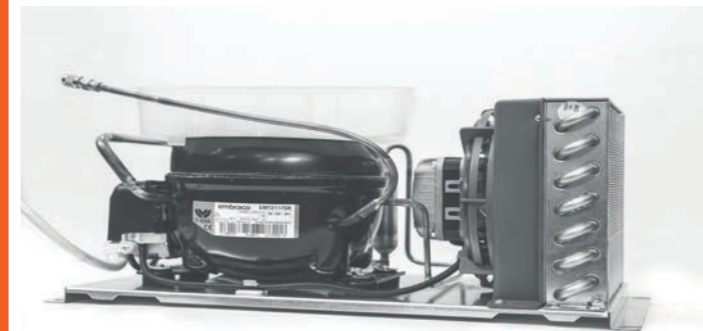
TEMPERATURE CHART RECORDER (STANDARD ON BLOOD BANK REFRIGERATORS)

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

CASTORS WITH FRONTAL BRAKES (OPTIONAL)

TEST HOLE (OPTIONAL)

Ø 25 mm sidewall test hole for custom probe.



CONTROL PANEL

Microprocessor control panel with **colour 4.3" LCD touch screen and keys**.

Setting and visualization with **0.1°C resolution**.

Display showing cabinet temperature, set point, date, hour, equipment model and electronic accessories.

Continuous temperature monitoring.

Real time temperature graph on display (to be activated by user).

Password protected power switch and settings.

Digital **humidity sensor** (optional).

RS232/RS485 ports.

Digital calibration of probes.

In/out 4-20 mA converter module.

Safety thermostat.

Two independent **PT1000** probes, the first one to set and detect temperature, the other one to manage the alarm system and display temperature.

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

Alarms of high and low temperature, open door, condenser efficiency, damaged probes, power failure at electricity recovery, power failure with recording of data and alarms generated by back-up battery (standard only on blood bank refrigerator and plasma freezer), damaged or flat battery.

Memory of latest alarms shown on display.

Back-up Battery to show temperature on display and to manage the alarm system in case of power failure.

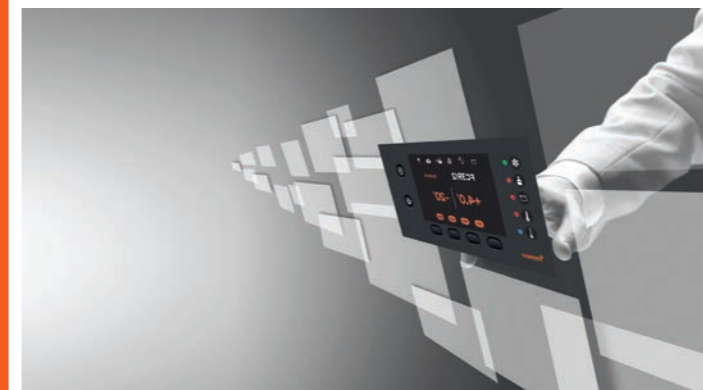
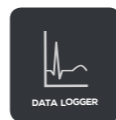
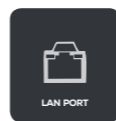
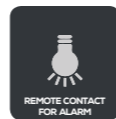
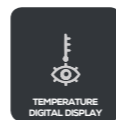
Remote contact (dry, volt-free) to connect the equipment to an external alarm.

GSM module to send SMS alarms messages to mobile phones showing date, time, cabinet temperature and type of alarm. Possibility to send SMS messages from mobile phone to check correct functioning of equipment.

LAN port to connect one or more appliances via Ethernet on PC to monitor working state.

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

Data logger to record temperatures and alarms. Download data on USB pen drive.



SHU AIR PURIFIER

A revolution in air sanitization and purification of your refrigerator.

The technology used by SHU quickly and effectively attacks and destroys micro-organisms which are harmful to humans (mould, bacteria, viruses, odours and volatile organic compounds) by taking advantage of extraordinary biochemical processes.

Shu air purifier is the only one currently on the market using "state-of-the-art" technology. This is the latest and most advanced technology which is used in NASA aerospace stations.

This system is capable already in the first 90 minutes of use, of eliminating more than 95% of viruses, bacteria and mould in the environment.

HOW SHU WORKS

The germicidal UV lamp destroys germs that pass through the UVC light rays.

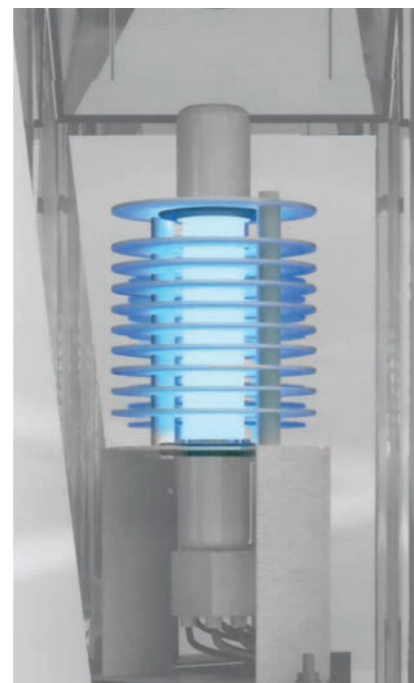
The rays of light from the UV lamp react with the nano Nickel HCT™ catalyst producing catalytic molecules. The catalytic molecules detect and destroy the carbon-based molecules by converting them into harmless carbon dioxide and water.

Unlike other purification systems on the market, SHU is not limited to purifying the air that passes through the catalyst, but also emits a thick layer of molecules into the air (ROS Reactive Oxygen Species) that purifies the air throughout the whole environment.

SHU, VIA AHPCO TECHNOLOGY, produces a layer of hydroxide ions, radicals, radical peroxides, hydro peroxides which through the action of light and air humidity, triggers a reaction of decomposition of organic and inorganic substances: only the oxygen and hydrogen molecules remain in the air. It is an absolutely natural phenomenon similar to what occurs during a storm: the air is purified.

SHU ELIMINATES IN REAL TIME...

- Salmonella enterica
- Staphylococcus aureus
- Resistant strains of Staphylococcus aureus:
Methicillin resistant (MRSA) and CA-MRSA /
PVL-MRSA
- Vancomycin resistant Enterococcus (VRE)
- Listeria monocytogenes
- Escherichia coli (E. coli O157: H7)
- Campylobacter jejuni
- Acinetobacter baumannii
- HIV 1
- Influenza A
- Avian Influenza
- H1N1 (Human and Swine)
- Herpes Simplex Type 1
- Polio Type 2
- Norovirus and Murine Norovirus
- Rhinovirus



shu
SANITARY HABITAT UNIT

REFRIGERATOR

LABORATORY AND PHARMACY

+2°+12°C FROM 100 TO 1400 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 ecological 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 R452a or CFC/HCFC-free natural refrigerant R290 on request.

DEFROSTING

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

CONTROL PANEL AND ALARMS

Microprocessor control panel with colour 4.3" LCD touch screen and keys. Display with 0.1°C resolution. Temperature monitoring detected by two independent PT1000 probes. Real time temperature graph (to be activated by user). Optional humidity sensor. RS232/RS 485 port. Digital calibration of probe. Visual and audible alarms of: high and low temperature (by means of independent probe), open door, condenser efficiency, damaged probes, **power failure at electricity recovery**, **power failure with recording of data and alarms (by means of optional back-up battery)**, damaged or flat battery. Memory of latest alarms visible on display.

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.
- Power failure alarm at electricity recovery.



OPTIONAL ACCESSORIES

- Scotch-Brite stainless steel sliding drawers with telescopic ball-bearing slides. Plexiglas frontal side.
- Kit of dividers for drawer.
- Additional shelf.
- Smooth shelf with borders.
- Castors with frontal brakes.
- Weekly temperature chart recorder.
- Back-up battery.
- GSM module to send SMS alarm messages to mobile phones.
- LAN port to connect the appliance via ethernet on PC.
- Safety thermostat.
- Digital humidity sensor.
- Test hole (Ø 25 mm).
- Kit for DIN 58345 conformity.
- Electric digital key lock.
- 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	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR
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	optional	optional	optional	optional
FUNCTIONS					
Password protected use	✓	✓	✓	✓	✓
Remote alarm	✓	✓	✓	✓	✓
Data logger	✓	✓	✓	✓	✓
Humidity probe	optional	optional	optional	optional	optional
RS232-RS485 serial port	✓	✓	✓	✓	✓
4-20 mA converter module	✓	✓	✓	✓	✓
Safety thermostat	optional	optional	optional	optional	optional
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)	245	245	245	245	245
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	✓	✓	✓	✓	✓
Shelf with border	✓	✓	✓	✓	✓
Castors with frontal brakes	✓	✓	✓	✓	✓
Temp. chart recorder	✓	✓	✓	✓	✓
Back-up battery	✓	✓	✓	✓	✓
GSM module	✓	✓	✓	✓	✓
LAN Port	✓	✓	✓	✓	✓
Port hole	✓	✓	✓	✓	✓
Electric Digital key lock	✓	✓	✓	✓	✓
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	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR
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	optional	optional	optional	optional
FUNCTIONS					
Password protected use	✓	✓	✓	✓	✓
Remote alarm	✓	✓	✓	✓	✓
Data logger	✓	✓	✓	✓	✓
Humidity probe	optional	optional	optional	optional	optional
RS232-RS485 serial port	✓	✓	✓	✓	✓
4-20 mA converter module	✓	✓	✓	✓	✓
Safety thermostat	optional	optional	optional	optional	optional
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)	245	360	360	360	360
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	✓	✓	✓	✓	✓
Shelf with border	✓	✓	✓	✓	✓
Castors with frontal brakes	✓	✓	✓	✓	✓
Temp. chart recorder	✓	✓	✓	✓	✓
Back-up battery	✓	✓	✓	✓	✓
GSM module	✓	✓	✓	✓	✓
LAN Port	✓	✓	✓	✓	✓
Port hole	✓	✓	✓	✓	✓
Electric Digital key lock	✓	✓	✓	✓	✓
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	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR
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	optional	optional
FUNCTIONS			
Password protected use	✓	✓	✓
Remote alarm	✓	✓	✓
Data logger	✓	✓	✓
Humidity probe	optional	optional	optional
RS232-RS485 serial port	✓	✓	✓
4-20 mA converter module	✓	✓	✓
Safety thermostat	optional	optional	optional
ELECTRICAL DATA			
Supply voltage (V/Hz)	230/50-230/60	230/50-230/60	230/50-230/60
Max absorbed current (W)	336	336	336
INTERNAL EQUIPMENT			
Shelves	3	3	4
OPTIONAL ACCESSORIES			
Drawer	max 5	max 5	max 6
Kit of dividers for drawer	✓	✓	✓
Additional shelf	✓	✓	✓
Shelf with border	✓	✓	✓
Castors with frontal brakes	✓	✓	✓
Temp. chart recorder	✓	✓	✓
Back-up battery	✓	✓	✓
GSM module	✓	✓	✓
LAN Port	✓	✓	✓
Port hole	✓	✓	✓
Electric Digital key lock	✓	✓	✓
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	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR
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	optional	optional	optional	optional
FUNCTIONS					
Password protected use	✓	✓	✓	✓	✓
Remote alarm	✓	✓	✓	✓	✓
Data logger	✓	✓	✓	✓	✓
Humidity probe	optional	optional	optional	optional	optional
RS232-RS485 serial port	✓	✓	✓	✓	✓
4-20 mA converter module	✓	✓	✓	✓	✓
Safety thermostat	optional	optional	optional	optional	optional
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)	336	260	260	490	490
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	✓	✓	✓	✓	✓
Shelf with border	✓	✓	✓	✓	✓
Castors with frontal brakes	✓	✓	✓	✓	✓
Temp. chart recorder	✓	✓	✓	✓	✓
Back-up battery	✓	✓	✓	✓	✓
GSM module	✓	✓	✓	✓	✓
LAN Port	✓	✓	✓	✓	✓
Port hole	✓	✓	✓	✓	✓
Electric Digital key lock	✓	✓	✓	✓	✓
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	750x850x2150-156	1500x900x2170-236	1500x900x2170-249

specifications

BLOOD BANK REFRIGERATOR

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

+2°+6°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 ecological 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 +2°C and +6°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 R452a or CFC/HCFC-free natural refrigerant R290 on request.

DEFROSTING

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

CONTROL PANEL AND ALARMS

Microprocessor control panel with colour 4.3" LCD touch screen and keys.

Display with 0.1°C resolution. Temperature monitoring detected by two independent PT1000 probes. Real time temperature graph (to be activated by user). Optional humidity sensor. RS232/RS 485 port. Digital calibration of probe.

Visual and audible alarms of: high and low temperature (by means of independent probe), open door, condenser efficiency, damaged probes, power failure with recording of data and alarms (by means of back-up battery), damaged or flat battery. Memory of latest alarms visible on display

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

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



CERTIFICATION

Certified in accordance with **Medical Device Directive 93/42/EEC** class IIa for storage and preservation of blood.



STANDARD

- Drawers.
- 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.
- Safety thermostat.
- Weekly temperature chart recorder.
- 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.
- Kit for DIN 58371 conformity.

OPTIONAL ACCESSORIES

- Kit of dividers for drawer.
- Castors with frontal brakes.
- GSM module to send SMS alarm messages to mobile phones.
- LAN port to connect the appliance via ethernet on PC.
- Digital humidity sensor.
- Test hole (Ø 25 mm).
- Electric digital key lock.
- Power supply 115V/60Hz.



MODEL	SB10E	FS15E	FS20E	FS25E
TECHNICAL DATA				
Capacity (LT)	100	150	200	250
Blood bags (450 ml/each)	64	96	128	160
Temp. range (°C)	+2 / +6	+2 / +6	+2 / +6	+2 / +6
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)	<45	<45	<45	<49
CONTROL PANEL	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR
VISUAL AND AUDIBLE ALARMS				
High/Low temperature	√	√	√	√
Open door	√	√	√	√
Condenser efficiency	√	√	√	√
Damaged sensor	√	√	√	√
Power failure	√	√	√	√
Full recording memory	√	√	√	√
SMS alarm message	optional	optional	optional	optional
FUNCTIONS				
Password protected use	√	√	√	√
Remote alarm	√	√	√	√
Data logger	√	√	√	√
Humidity probe	optional	optional	optional	optional
RS232-RS485 serial port	√	√	√	√
4-20 mA converter module	√	√	√	√
Safety thermostat	√	√	√	√
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)	245	245	245	360
INTERNAL EQUIPMENT				
Drawers	2	3	4	5
Temp. chart recorder	√	√	√	√
Back-up battery	√	√	√	√
OPTIONAL ACCESSORIES				
Kit of dividers for drawer	√	√	√	√
Castors with frontal brakes	√	√	√	√
GSM module	√	√	√	√
LAN Port	√	√	√	√
Port hole	√	√	√	√
Electric Digital key lock	√	√	√	√
Power supply 115V/60Hz	√	√	√	√
CERTIFICATION	MEDICAL DEVICE 93/42 CLASS IIA	MEDICAL DEVICE 93/42 CLASS IIA	MEDICAL DEVICE 93/42 CLASS IIA	MEDICAL DEVICE 93/42 CLASS IIA
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
TECHNICAL DATA					
Capacity (LT)	300	450	520	700	1400
Blood bags (450 ml/each)	192	275	330	385	770
Temp. range (°C)	+2 / +6	+2 / +6	+2 / +6	2 / +6	2 / +6
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	<49	<50
CONTROL PANEL	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR
VISUAL AND AUDIBLE ALARMS					
High/Low temperature	√	√	√	√	√
Open door	√	√	√	√	√
Condenser efficiency	√	√	√	√	√
Damaged sensor	√	√	√	√	√
Power failure	√	√	√	√	√
Full recording memory	√	√	√	√	√
SMS alarm message	optional	optional	optional	optional	optional
FUNCTIONS					
Password protected use	√	√	√	√	√
Remote alarm	√	√	√	√	√
Data logger	√	√	√	√	√
Humidity probe	optional	optional	optional	optional	optional
RS232-RS485 serial port	√	√	√	√	√
4-20 mA converter module	√	√	√	√	√
Safety thermostat	√	√	√	√	√
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)	360	336	336	260	490
INTERNAL EQUIPMENT					
Drawers	6	5	6	7	14
Temp. chart recorder	√	√	√	√	√
Back-up battery	√	√	√	√	√
OPTIONAL ACCESSORIES					
Kit of dividers for drawer	√	√	√	√	√
Castors with frontal brakes	√	√	√	√	√
GSM module	√	√	√	√	√
LAN Port	√	√	√	√	√
Port hole	√	√	√	√	√
Electric Digital key lock	√	√	√	√	√
Power supply 115V/60Hz	√	√	√	√	√
CERTIFICATION	MEDICAL DEVICE 93/42 CLASS IIA	MEDICAL DEVICE 93/42 CLASS IIA	MEDICAL DEVICE 93/42 CLASS IIA	MEDICAL DEVICE 93/42 CLASS IIA	MEDICAL DEVICE 93/42 CLASS IIA
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° C FROM 100 TO 1400 LT.

SB-CV-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 on SB-AF models and 80 mm insulation on CV models obtained by injection of high density ecological 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.

SHELVES/DRAWERS

SB-CV 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).
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 R452a or CFC/HCFC-free natural refrigerant R290 on request.

DEFROSTING

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

CONTROL PANEL AND ALARMS

Microprocessor control panel with colour 4.3" LCD touch screen and keys. Display with 0.1°C resolution. Temperature monitoring detected by two independent PT1000 probes. Real time temperature graph (to be activated by user). Optional humidity sensor. RS232/RS 485 port. Digital calibration of probe.

Visual and audible alarms of: high and low temperature (by means of independent probe), open door, condenser efficiency, damaged probes, **power failure at electricity recovery**, **power failure with recording of data and alarms (by means of optional back-up battery)**, damaged or flat battery. Memory of latest alarms visible on display.

DATA LOGGER

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



STANDARD

- Shelves or drawers (SB-CV 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.
- Power failure alarm at electricity recovery.

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.
- Smooth shelf with borders.
- Castors with frontal brakes.
- Weekly temperature chart recorder.
- Back-up battery.
- GSM module to send SMS alarm messages to mobile phones.
- LAN port to connect the appliance via ethernet on PC.
- Digital humidity sensor.
- Test hole (Ø 25 mm).
- Electric digital key lock.
- Power supply 115V/60Hz.
- Insulation of 80 mm for AF models.





MODEL	SB10B	SB10BL	CV3	CV4	CV5
TECHNICAL DATA					
Capacity (LT)	100	100	160	220	250
Factory set (°C)	-22	-30	-30	-30	-30
Temp. range (°C)	-10 / -25	-10 / -32	-10 / -32	-10 / -32	-10 / -32
Cooling type	Static evaporator	Static evaporator	Static evaporator	Static evaporator	Static evaporator
Defrost	Manual	Manual	Manual	Manual	Manual
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					
	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR
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	optional	optional	optional	optional
FUNCTIONS					
Password protected use	✓	✓	✓	✓	✓
Remote alarm	✓	✓	✓	✓	✓
Data logger	✓	✓	✓	✓	✓
Humidity probe	optional	optional	optional	optional	optional
RS232-RS485 serial port	✓	✓	✓	✓	✓
4-20 mA converter module	✓	✓	✓	✓	✓
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)	345	345	450	450	450
INTERNAL EQUIPMENT					
Drawers	2	2	3	4	5
Shelves in alternative	2	2	3	4	5
OPTIONAL ACCESSORIES					
Kit of dividers for drawer	✓	✓	✓	✓	✓
Castors with frontal brakes	✓	✓	✓	✓	✓
Temp. chart recorder	✓	✓	✓	✓	✓
Back-up battery	✓	✓	✓	✓	✓
GSM module	✓	✓	✓	✓	✓
LAN Port	✓	✓	✓	✓	✓
Port hole	✓	✓	✓	✓	✓
Electric Digital key lock	✓	✓	✓	✓	✓
Power supply 115V/60Hz	✓	✓	✓	✓	✓
CERTIFICATION					
	CE	CE	CE	CE	CE
DIMENSIONS (WxDxH - MM)/KG					
External Dimensions/weight	600x600x860-66	600x600x860-66	640x620x1400-95	640x620x1600-111	640x620x1800-125
Packing Dimensions/weight (carton box)	700x700x1030-73	700x700x1030-73	700x700x1530-105	700x700x1780-121	700x700x1930-135



MODEL	CV6	AF70B	AF70BL	AF140B	AF140BL
TECHNICAL DATA					
Capacity (LT)	320	700	700	1400	1400
Factory set (°C)	-30	-22	-30	-22	-30
Temp. range (°C)	-10 / -32	-10 / -25	-10 / -32	-10 / -25	-10 / -32
Cooling type	Static evaporator	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling
Defrost	Manual	Automatic	Automatic	Automatic	Automatic
CFC-Free Refrigerant gas	R452a or R290	R452a or R290	RR452a or R290	R452a or R290	R452a or R290
Noise level (db)	<45	<50	<50	<60	<60
CONTROL PANEL					
	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR
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	optional	optional	optional	optional
FUNCTIONS					
Password protected use	✓	✓	✓	✓	✓
Remote alarm	✓	✓	✓	✓	✓
Data logger	✓	✓	✓	✓	✓
Humidity probe	optional	optional	optional	optional	optional
RS232-RS485 serial port	✓	✓	✓	✓	✓
4-20 mA converter module	✓	✓	✓	✓	✓
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)	450	530	887	614	1084
INTERNAL EQUIPMENT					
Drawers	6	optional - max 7	optional - max 7	optional - max 14	optional - max 14
Shelves	6	4	4	8	8
OPTIONAL ACCESSORIES					
Kit of dividers for drawer	✓	✓	✓	✓	✓
Castors with frontal brakes	✓	✓	✓	✓	✓
Temp. chart recorder	✓	✓	✓	✓	✓
Back-up battery	✓	✓	✓	✓	✓
GSM module	✓	✓	✓	✓	✓
LAN Port	✓	✓	✓	✓	✓
Port hole	✓	✓	✓	✓	✓
Electric Digital key lock	✓	✓	✓	✓	✓
Power supply 115V/60Hz	✓	✓	✓	✓	✓
CERTIFICATION					
	CE	CE	CE	CE	CE
DIMENSIONS (WxDxH - MM)/KG					
External Dimensions/weight	640x620x2000-136	700x800x1990-150	700x800x1990-150	1400x800x1990-229	1400x800x1990-229
Packing Dimensions/weight (carton box)	700x700x2130-146	750x850x2150-162	750x850x2150-162	1500x900x2170-249	1500x900x2170-249

specifications

DEEP FREEZER

LABORATORY

-40° C FROM 300 TO 600 LT.

CL MODELS

STRUCTURE

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

INSULATION

100mm insulation obtained by injection of high density ecological 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. Optional electric digital key lock.

SHELVES/DRAWERS

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.

TEMPERATURE RANGE

Between -15°C and -42°C. 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-free refrigerant R452a or CFC/HCFC-free natural refrigerant R290 on request.

DEFROSTING

Manual defrosting cycle.

CONTROL PANEL AND ALARMS

Microprocessor control panel with colour 4.3" LCD touch screen and keys. Display with 0.1°C resolution. Temperature monitoring detected by two independent PT1000 probes. Real time temperature graph (to be activated by user).

Optional humidity sensor. RS232/RS 485 port. Digital calibration of probe.

Visual and audible alarms of: high and low temperature (by means of independent probe), open door, condenser efficiency, damaged probes, **power failure at electricity recovery**, **power failure with recording of data and alarms (by means of optional back-up battery)**, damaged or flat battery. Memory of latest alarms visible on display

DATA LOGGER

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



STANDARD

- Shelves or drawers.
- 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.
- Power failure alarm at electricity recovery.

OPTIONAL ACCESSORIES

- Kit of dividers for drawer.
- Additional shelf.
- Smooth shelf with borders.
- Castors with frontal brakes.
- Weekly temperature chart recorder.
- Back-up battery.
- GSM module to send SMS alarm messages to mobile phones.
- LAN port to connect the appliance via ethernet on PC .
- Digital humidity sensor.
- Test hole (Ø 25 mm).
- Electric digital key lock.
- Power supply 115V/60Hz.



PLASMA FREEZER

-40°C 600 LT.

CL60B/PF MODEL

STRUCTURE

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

INSULATION

100mm insulation obtained by injection of high density ecological 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. Optional electric digital key lock.

DRAWERS

Standard equipped with 6 Scotch-Brite stainless steel drawers with telescopic ball-bearing slides and plexiglas frontal side. Optional kit of Plexiglas dividers for drawer.

TEMPERATURE RANGE

Between -15°C and -42°C. 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-free refrigerant R452a or CFC/HCFC-free natural refrigerant R290 on request.

DEFROSTING

Manual defrosting cycle.

CONTROL PANEL AND ALARMS

Microprocessor control panel with colour 4.3" LCD touch screen and keys. Display with 0.1°C resolution. Temperature monitoring detected by two independent PT1000 probes. Real time temperature graph (to be activated by user). Optional humidity sensor. RS232/RS 485 port. Digital calibration of probe. Visual and audible alarms of: high and low temperature (by means of independent probe), open door, condenser efficiency, damaged probes, power failure with recording of data and alarms (by means of back-up battery), damaged or flat battery. Memory of latest alarms visible on display.

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

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



CERTIFICATION

Certified in accordance with **Medical Device Directive 93/42/EEC** class IIa for storage and preservation of plasma.



STANDARD

- Drawers.
- Four one-way wheels with stabilizing adjustable feet.
- Power cord with Schüko type plug or British type plug.
- Protection fuses.
- RFI filter.
- Password protected power switch and settings.
- Electronic control panel with alarm system.
- Weekly temperature chart recorder.
- 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.
- Kit for DIN 58375 conformity.

OPTIONAL ACCESSORIES

- Kit of dividers for drawer.
- Castors with frontal brakes.
- GSM module to send SMS alarm messages to mobile phones.
- LAN port to connect the appliance via ethernet on PC.
- Digital humidity sensor.
- Test hole (Ø 25 mm).
- Electric digital key lock.
- Power supply 115V/60Hz.



MODEL	CL30B	CL60B	CL60B/2
TECHNICAL DATA			
Capacity (LT)	300	600	300/300
Factory set	-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	R452a or R290	R452a or R290
Noise level (db)	<52	<52	<52
CONTROL PANEL	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR
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	optional	optional
FUNCTIONS			
Password protected use	√	√	√
Remote alarm	√	√	√
Data logger	√	√	√
Humidity probe	optional	optional	optional
RS232-RS485 serial port	√	√	√
4-20 mA converter module	√	√	√
ELECTRICAL DATA			
Supply voltage (V/Hz)	230/50-230/60	230/50-230/60	230/50-230/60
Max absorbed current (W)	520	580	760
INTERNAL EQUIPMENT			
Drawers in alternative	6	6	3/3
Shelves	6	6	3/3
Temp.chart recorder	optional	optional	optional
Back-up battery	optional	optional	optional
OPTIONAL ACCESSORIES			
Kit of dividers for drawer	√	√	√
Castors with frontal brakes	√	√	√
Temp.chart recorder	√	√	√
Back-up battery	√	√	√
GSM module	√	√	√
LAN Port	√	√	√
Port hole	√	√	√
Electric Digital key lock	√	√	√
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	CL60B/PF
TECHNICAL DATA	
Capacity (LT)	600
Factory set	-40
Temp. range (°C)	-15 / -42
Cooling type	Static evaporator
Defrost	Manual
CFC-Free Refrigerant gas	R452a or R290
Noise level (db)	<52
CONTROL PANEL	LCD TOUCH 4.3" MICROPROCESSOR
VISUAL AND AUDIBLE ALARMS	
High/Low temperature	√
Open door	√
Condenser efficiency	√
Damaged sensor	√
Power failure	√
Full recording memory	√
SMS alarm message	optional
FUNCTIONS	
Password protected use	√
Remote alarm	√
Data logger	√
Humidity probe	optional
RS232-RS485 serial port	√
4-20 mA converter module	√
ELECTRICAL DATA	
Supply voltage (V/Hz)	230/50-230/60
Max absorbed current (W)	580
INTERNAL EQUIPMENT	
Drawers in alternative	6
Shelves	6
Temp.chart recorder	√
Back-up battery	√
OPTIONAL ACCESSORIES	
Kit of dividers for drawer	√
Castors with frontal brakes	√
Temp.chart recorder	standard
Back-up battery	standard
GSM module	√
LAN Port	√
Port hole	√
Electric Digital key lock	√
Power supply 115V/60Hz	√
CERTIFICATION	MEDICAL DEVICE CLASS IIA
DIMENSIONS (WxDxH - MM)/KG	
External Dimensions/weight	780x840x1930-204
Packing Dimensions/weight (carton box)	860x900x2080-216

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 ecological 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.

SHELVES/DRAWERS

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 R452a or CFC/HCFC-free natural refrigerant R290 on request.

DEFROSTING

Fully automatic defrosting cycle in refrigerator compartment.

Manual defrost in freezer compartment. Hot gas defrost in freezer compartment of AF140/2 models.

CONTROL PANEL AND ALARMS

Microprocessor control panel with colour 4.3" LCD touch screen and keys.

Display with 0.1°C resolution. Temperature monitoring detected by two independent PT1000 probes. Real time temperature graph (to be activated by user).

Optional humidity sensor. RS232/RS 485 port. Digital calibration of probe.

Visual and audible alarms of: high and low temperature (by means of independent probe), open door, condenser efficiency, damaged probes, **power failure at electricity recovery, power failure with recording of data and alarms (by means of optional back-up battery)**, damaged or flat battery. Memory of latest alarms visible on display.

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.
- Power failure alarm at electricity recovery.

OPTIONAL ACCESSORIES

- Scotch-Brite stainless steel sliding drawers (see table).
- Kit of dividers for drawer.
- Additional shelf.
- Smooth shelf with borders.
- Castors with frontal brakes.
- Weekly temperature chart recorder.
- Back-up battery.
- GSM module to send SMS alarm messages to mobile phones.
- LAN port to connect the appliance via ethernet on PC.
- Safety thermostat on refrigerator compartment.
- Digital humidity sensor.
- Test hole (Ø 25 mm).
- Electric digital key lock.





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	LCD TOUCH 4,3" MICROPROCESSOR	LCD TOUCH 4,3" MICROPROCESSOR
VISUAL AND AUDIBLE ALARMS		
High/Low temperature	✓	✓
Open door	✓	✓
Condenser efficiency	✓	✓
Damaged sensor	✓	✓
Power failure	optional	optional
Full recording memory	✓	✓
SMS alarm message	optional	optional
FUNCTIONS		
Password protected use	✓	✓
Remote alarm	✓	✓
Data logger	✓	✓
Humidity probe	optional	optional
RS232-RS485 serial port	✓	✓
4-20 mA converter module	✓	✓
Safety thermostat	optional	optional
ELECTRICAL DATA		
Supply voltage (V/Hz)	230/50-230/60	230/50-230/60
Max absorbed current (W)	427	427
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	✓	✓
LAN Port	✓	✓
Port hole	✓	✓
Electric Digital key lock	✓	✓
Power supply 115V/60Hz	✓	✓
CERTIFICATION	CE	CE
DIMENSIONS (WxDxH - MM)/KG		
External Dimensions/weight	600x600x1970-127	600x600x1970-131
Packing Dimensions/weight (carton box)	700x700x2200-137	700x700x2200-141

	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	LCD TOUCH 4,3" MICROPROCESSOR	LCD TOUCH 4,3" MICROPROCESSOR	LCD TOUCH 4,3" MICROPROCESSOR	LCD TOUCH 4,3" MICROPROCESSOR
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	optional	optional	optional
FUNCTIONS				
Password protected use	✓	✓	✓	✓
Remote alarm	✓	✓	✓	✓
Data logger	✓	✓	✓	✓
Humidity probe	optional	optional	optional	optional
RS232-RS485 serial port	✓	✓	✓	✓
4-20 mA converter module	✓	✓	✓	✓
Safety thermostat	optional	optional	optional	optional
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)	350/480	350/480	1100	1100
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 freeze	max 7+max7 in freezer
Kit of dividers for drawer	✓	✓	✓	✓
Castors with frontal brakes	✓	✓	✓	✓
Temp. chart recorder	✓	✓	✓	✓
Back-up battery	✓	✓	✓	✓
GSM module	✓	✓	✓	✓
LAN Port	✓	✓	✓	✓
Port hole	✓	✓	✓	✓
Electric Digital key lock	✓	✓	✓	✓
Power supply 115V/60Hz	✓	✓	✓	✓
CERTIFICATION	CE	CE	CE	CE
DIMENSIONS (WxDxH - MM)/KG				
External Dimensions/weight	700x800x2040-180	700x800x2040-183	1400x800x1990-240	1400x800x1990-265
Packing Dimensions/weight (carton box)	750x850x2180-193	750x850x2180-198	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 ecological 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 R452a or CFC/HCFC-free natural refrigerant R290 on request.

DEFROSTING

Fully automatic defrosting cycle in both compartments.

CONTROL PANEL AND ALARMS

Microprocessor control panel with colour 4.3" LCD touch screen and keys. Display with 0.1°C resolution. Temperature monitoring detected by two independent PT1000 probes. Real time temperature graph (to be activated by user).

Optional humidity sensor. RS232/RS 485 port. Digital calibration of probe.

Visual and audible alarms of: high and low temperature (by means of independent probe), open door, condenser efficiency, damaged probes, **power failure at electricity recovery**, **power failure with recording of data and alarms (by means of optional back-up battery)**, damaged or flat battery. Memory of latest alarms visible on display.

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.
- Power failure alarm at electricity recovery.

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.
- Smooth shelf with borders.
- Castors with frontal brakes.
- Weekly temperature chart recorder.
- Back-up battery.
- GSM alarm to send SMS alarm messages to mobile phones.
- LAN port to connect the appliance via ethernet on PC.
- Safety thermostat.
- Digital humidity sensor.
- Test hole (Ø 25 mm).
- Kit for DIN 58345 conformity.
- Electric digital key lock.





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 PANEL				
	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR	LCD TOUCH 4.3" MICROPROCESSOR
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	optional	optional	optional
FUNCTIONS				
Password protected use	✓	✓	✓	✓
Remote alarm	✓	✓	✓	✓
Data logger	✓	✓	✓	✓
Humidity probe	optional	optional	optional	optional
RS232-RS485 serial port	✓	✓	✓	✓
4-20 mA converter module	✓	✓	✓	✓
Safety thermostat	optional	optional	optional	optional
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)	245/245	260/260	360/360	260/260
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
Additional shelf	✓	✓	✓	✓
Castors with frontal brakes	✓	✓	✓	✓
Temp.chart recorder	✓	✓	✓	✓
Back-up battery	✓	✓	✓	✓
GSM module	✓	✓	✓	✓
LAN Port	✓	✓	✓	✓
Port hole	✓	✓	✓	✓
Electric Digital key lock	✓	✓	✓	✓
Power supply 115V/60Hz	✓	✓	✓	✓
CERTIFICATION				
	CE	CE	CE	CE
DIMENSIONS (WxDxH - MM)/KG				
External Dimensions/weight	600x600x1960-125	700x800x2040-183	1200x600x1960-198	1400x800x1990-265
Packing Dimensions/weight (carton box)	700x700x2200-139	750x850x2180-198	1500x900x2170-249	1600x960x2210-394

frimed equipment is used in

- Afghanistan
- Algeria
- Australia
- Austria
- Bahrain
- Bangladesh
- Belgium
- Benin
- Bosnia-Herzegovina
- Cyprus
- Colombia
- Costa Rica
- Croatia
- Czech Republic
- Egypt
- France
- Georgia
- Germany
- Gran Canaria
- Great Britain
- Greece
- Guyana
- Hong Kong
- India
- Indonesia
- Iraq
- Israel
- Italy
- Jordan
- Kenya
- Kuwait
- Latvia
- Lebanon
- Malaysia
- Malta
- Mauritius
- Mexico
- Moldova
- Morocco
- Mozambique
- Oman
- Pakistan
- Peru
- Philippines
- Poland
- Portugal
- Qatar
- Romania
- Saudi Arabia
- Serbia
- Singapore
- Slovenia
- Sri Lanka
- Sudan
- Syria
- Switzerland
- Taiwan
- Thailand
- The Netherlands
- Tunisia
- Uganda
- United Arab Emirates
- Vietnam
- Yemen
- Zambia

