

BLUE
line



-86°C

Ultra-Low Temperature Freezers – K Line
A new standard for ULT storage



**APPARECCHI
SCIENTIFICI**

Technologies for life sciences



the Company

KW is one of the most dynamic and innovative companies, leader in the design and production of controlled temperature devices down to -150°C , which stands out for its high reliability, wide range and customization capabilities. The company has a strong experience in the scientific equipment segment, also with "medical devices" certification, and a large network of sales and after-sales service centers. Thanks to the continuous investments in organization and technologies, KW has achieved a significant improvement in positioning as a leader in the sector.



Industry 4.0

The company adopts the principles of interconnection of resources to offer the highest quality of processes and products. The devices are equipped with monitoring and connection systems that allow remote support and maintenance. The "KW total assistance" service (thanks to our worldwide service network, where present) allows to delegate the management of the machines to ensure maximum safety of storage.

mission

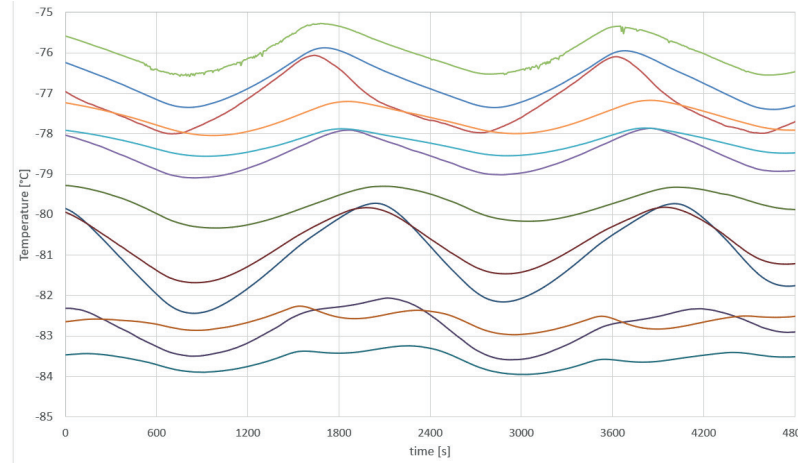
The Company aims at a continuous improvement of products and process performances to offer the best technological solutions to the medical field, technical-scientific research and industry sectors.



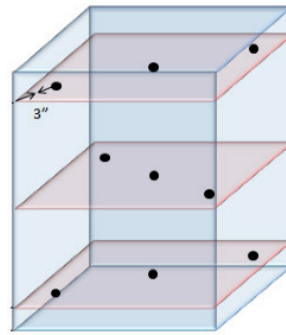
-86°C

The K Line represents the state-of-the-art of ULT freezers down to -90°C with innovative technical solutions and great variability of configurations. Thanks to the deep work of R&D department and the experience gained in more than 68 years of activity, a complete line of ULT freezers is available with maximum grade of performances and reliability with the lower energy consumption and a complete connectivity through the cloud.

The refrigerating system is equipped with a cascade circuit, composed of *eco-friendly fluids*, that is very reliable and guarantees a high cooling performance. It comes with 2 silent hermetic compressors having high cooling capacity, equipped with magneto thermal protections and maximum condensation pressure thermostat. All these features assure total reliability and lack of 1st stage failures. The condensation surfaces are wide to face severe environmental and working conditions and to reduce energy consumptions. The expansion of the refrigerants is obtained through capillary tubes. The evaporating surfaces are composed of a serpentine copper tube thermally connected to the entire external surface of the inner case. The perfect insulation of the cabinet, granted by PUR Foam and V.I.P. panels (depending on the model) grants the best thermal conditions for the stored samples, either in case of frequent openings and large samples loads. The combination of above-mentioned technical solutions guarantees high refrigerant capacity, fast cooling (low pull down and recovery time), and high uniformity of inner temperature.

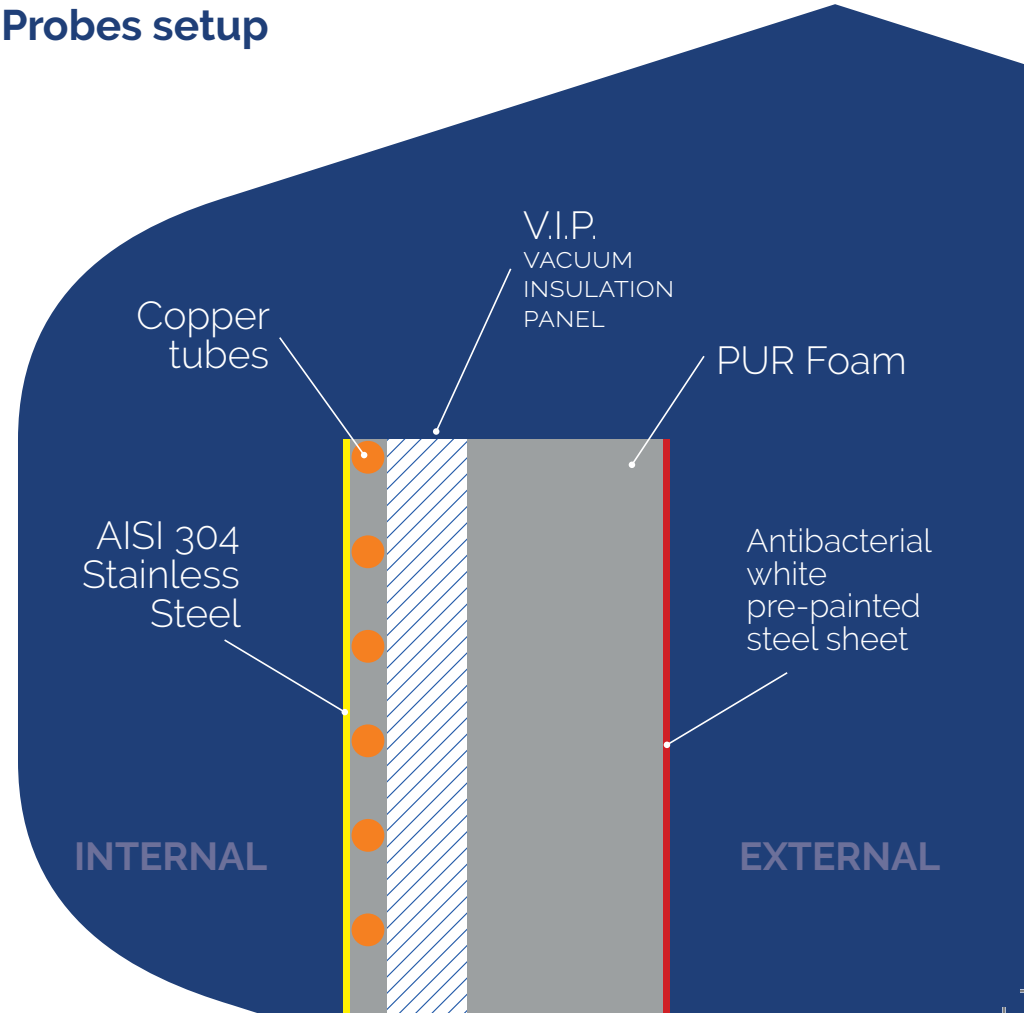


Inner temperature distribution




Probes setup

Freezer lateral section



main features

- Temperature stability in air within $\pm 3^{\circ}\text{C}$ with set point of -80°C in the standard version; $\pm 0,2^{\circ}\text{C}$ in the U.P. version
- Temperature uniformity in air of $\pm 5^{\circ}\text{C}$ in the U.P. versions
- Perfect thermal insulation granted by PUR foam and V.I.P.
- Use of natural refrigerants with low GWP (Global Warming Potential) and absence of HFC in polyurethane foams, reducing carbon footprint
- Internal chamber in AISI 304 stainless steel for maximum hygiene
- Energy saving thanks to innovative system management, granting one of the lowest power consumptions of the category, also with **Energy Star certification** 
- Industry 4.0 compliant with network capabilities
- Possibility of custom-made solutions following specific needs
- Most stringent company and products international certifications
- Extremely fast startup time
- Rapid recovery of the T after prolonged openings or entry of significant thermal loads, also with booster function
- Long time of heating in case of power black-out ($t > 5\text{h}$ until -50°C)
- Backup battery for powering the controller and recording the temperature even in the event of a power failure
- All models with HPL controller can be available certified as Medical Devices Class IIa

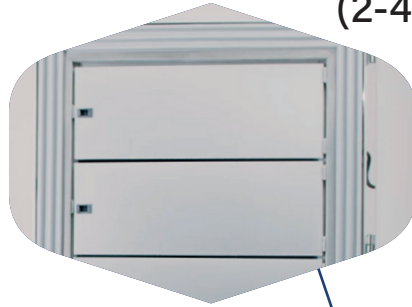
KW's commitment to contain the carbon footprint is guaranteed by:

- Use of natural refrigerants with very low GWP (Global Warming Potential) and absence of HFC in polyurethane foams
- Maintenance procedure performed according to the F-Gas directives
- High COP (refrigeration efficiency parameter) of the systems used

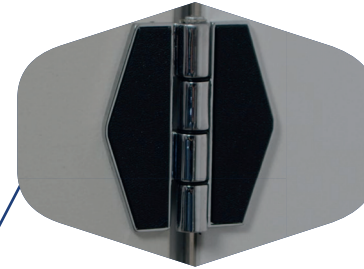


main features

Inner doors
(2-4-5)



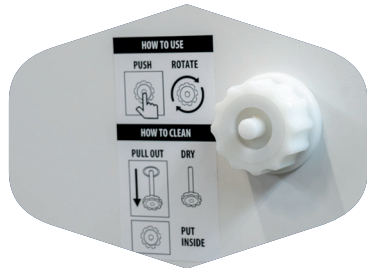
Door hinges



Remote alarm control
and LAN port



Ergonomic
handle

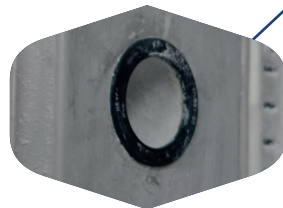


Pressure compensation valve



Rounded edges

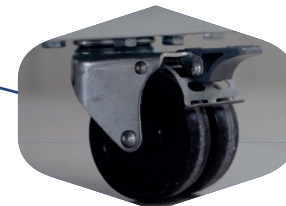
Internal/External
pass-through hole



Triple gaskets



Adjustable shelves



Pivoting wheels

versions

Wide range of models
to meet the different needs.

Vertical



MODEL	CAPACITY	INTERNAL DIM.	EXTERNAL DIM.	SHELVES COMP.	INNER DOORS	BOXES
K57	122	500x450x540	890x825x1330	1/2	1	72
K56	261	501x470x1108	890x855x1870	3/4	4	144
K58	358	702x460x1110	1050x840x1890	3/4	4	240
K60	506	702x650x1110	1050x1030x1890	3/4	4	320
K62	606	802x590x1280	1160x970x2050	3/4	4	400
K64	708	802x690x1280	1160x1070x2050	3/4	4	500
K66	809	852x730x1300	1200x1110x2050	3/4	4	600

Chest Type



MODEL	CAPACITY	INTERNAL DIM.	EXTERNAL DIM.	COMP.	INNER DOORS	BOXES
K52	110	550x400x500	900x840x1270	1	1	56
K52E	174	642x492x550	900x840x1270	1	1	64
K54	230	1150x400x500	1500x870x1270	2	2	128
K54E	334	1240x490x550	1500x870x1270	2	2	192
K55	476	1220x520x750	1935x910x1110	2	2	288
K55E	705	1860x480x790	2550x874x1120	2	2	468
K5578	801	1780x600x750	2488x982x1100	2	2	576

Under The-Counter



MODEL	CAPACITY	INTERNAL DIM.	EXTERNAL DIM.	SHELVES COMP.	INNER DOORS	BOXES
KUB75	86	428x343x588	990x635x780	1/2	1	48

special
versions



Ultra Slim

A special version of ULT freezers to save external sizes keeping the internal capacity. Thanks to V.I.P. insulation, same performances of standard solutions are granted.



MODEL	CAPACITY	INTERNAL DIM.	EXTERNAL DIM.	SHELVES COMP.	INNER DOORS	BOXES
K58US	349	490x570x1248	765x935x1925	3/4	2	240
K60US	501	588x656x1300	885x1032x1999	3/4	2	320
K62US	577	600x770x1248	875x1110x1925	3/4	2	400
K66US	870	730x890x1340	1005x1226x2015	3/4	2	600

Double Door

The most suitable solution in case of frequent openings, granting reduced temperature increase due to separated doors.



MODEL	CAPACITY	INTERNAL DIM.	EXTERNAL DIM.	SHELVES COMP.	INNER DOORS	BOXES
K58 2D	358	702x460x1300	1060x840x2025	3/4	4	240
K60 2D	506	702x650x1300	1060x1030x2025	3/4	4	320
K62 2D	606	802x590x1280	1150x965x2025	3/4	4	320
K64 2D	708	802x690x1280	1150x1065x2025	3/4	4	400
K66 2D	809	852x730x1300	1200x1110x2050	3/4	4	480

Biological Bank

Banca Biologica®

is an exclusive trademark
of KW since 1990

Twin group

Two independent cascade systems that guarantee maximum safety of conservation in the event of a malfunction of one of the two systems.

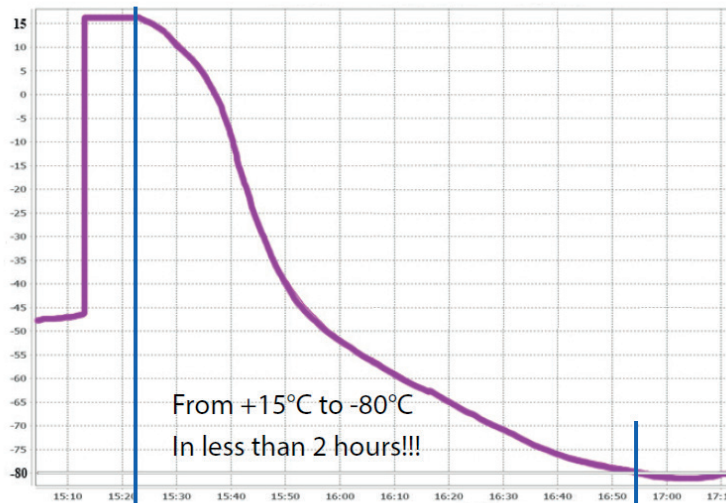
Booster mode

Temporary activation of both systems following openings or an increase in the thermal load.

**From +15°C to -80°C
in less than 2 hours.**

Maintenance activities with no device downtime (when possible).

The -80°C ULT freezers can also be available in the Biological Bank version for an extremely safe storage.



Pull down with Booster mode

Vertical

Double door
available
upon request.

MODEL	CAPACITY	INTERNAL DIM.	EXTERNAL DIM.	SHELVES COMP.	INNER DOORS	BOXES
K56S	266	501x470x1108	1185x855x1870	3/4	4	144
K58S	358	702x460x1110	1050x920x1890	3/4	4	240
K60S	506	702x650x1110	1050x1110x1890	3/4	4	320
K62S	606	802x590x1280	1160x1050x2050	3/4	4	400
K64S	708	802x690x1280	1160x1150x2050	3/4	4	500
K66S	809	852x730x1300	1200x1190x2050	3/4	4	600

Chest Type

MODEL	CAPACITY	INTERNAL DIM.	EXTERNAL DIM.	COMP.	INNER DOORS	BOXES
K52S	110	550x400x500	900x840x1270	1	1	56
K52ES	174	642x492x550	900x840x1270	1	1	64
K54S	230	1150x400x500	1500x870x1270	2	2	128
K54ES	334	1240x490x550	1500x870x1270	2	2	192
K55S	476	1220x520x750	1395x910x1110	2	2	288
K55ES	705	1860x480x790	2990x874x1120	2	2	468
K5578S	801	1780x600x750	2948x982x1100	2	2	576

Biological Bank version is available with HPL controller only.

ultra performance version

V - Variable speed

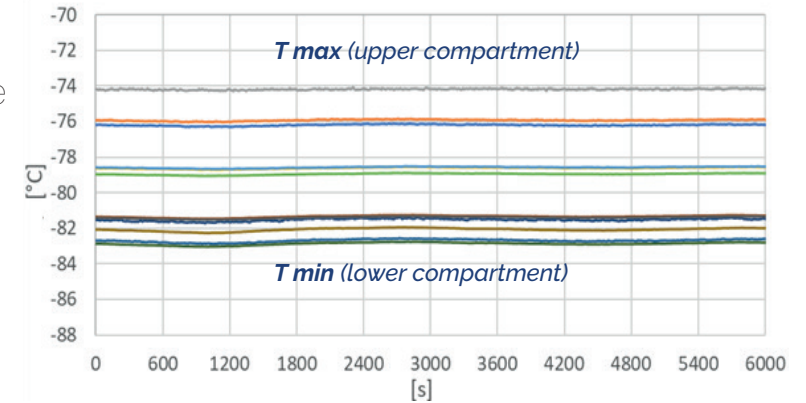


STANDARD MODE
with max power consumption of 9kWh/24h

UP MODE
with exceptional thermal performance

The UP version of ULT freezers grants the maximum temperature stability with reduced energy consumption. The compressors with inverters grant a lower noise level, and, thanks to the continuous operation, guarantee a perfect temperature stability.

Inner temperature distribution



main features



- Variable speed compressors
- Temperature stability within $\pm 0.2^{\circ}\text{C}$ with set point of -80°C
- Temperature uniformity of $\pm 5^{\circ}\text{C}$
- Perfect thermal insulation granted by a combination of PUR foam and V.I.P.
- Energy saving thanks to innovative system management, granting one of the lowest power consumptions of the category. Energy Star certification for K64 version
- Available both in 115V and 230V, 50/60Hz standard
- Use of recycled and/or recyclable and therefore eco-compatible materials

Vertical

MODEL	CAPACITY	INTERNAL DIM.	EXTERNAL DIM.	SHELVES COMP.	INNER DOORS	BOXES
K58	358	702x460x1110	1050x840x1890	3/4	4	240
K60	506	702x650x1110	1050x1030x1890	3/4	4	320
K62	606	802x590x1280	1160x970x2050	3/4	4	400
K64	708	802x690x1280	1160x1070x2050	3/4	4	500
K66	809	852x730x1300	1200x1110x2050	3/4	4	600

-90°C version



Thanks to the use of innovative refrigerants, this version of ULT freezers allows the user to work with a set point of -90°C, granting better performances in terms of temperature uniformity and power consumption. The maximum inner temperature of the cabinet is lower than standard models, increasing the safety of stored samples.

main features

- Set point at -90°C
- Perfect insulation with PUR foam and V.I.P.
- Highest inner temperature between -78°C and -82°C
- Less samples temperature increase during operations
- Reduced power consumption

Vertical

MODEL	CAPACITY	INTERNAL DIM.	EXTERNAL DIM.	SHELVES COMP.	INNER DOORS	BOXES
K9058	358	702x460x1110	1050x840x1890	3/4	4	240
K9060	506	702x650x1110	1050x1030x1890	3/4	4	320
K9062	606	802x590x1280	1160x970x2050	3/4	4	400
K9064	708	802x690x1280	1160x1070x2050	3/4	4	500
K9066	809	852x730x1300	1200x1110x2050	3/4	4	600

-90°C version is available with HPL controller only.

custom version

KW develops special customized solutions to embed the freezers on classified chambers walls. The environment where the samples are stored at -86°C is contamination free. Additionally, these solutions grant the minimum impact in the lab and eliminate thermal and acoustic pollution in the environment.

They are ideal for cell factories, transplant laboratories and all facilities where avoiding the contamination of samples is a key factor (classified rooms).



main features

- The front part of the freezer is fully sealed along the entire perimeter and is equipped with an appropriate frame that is placed between the equipment and the sterile chamber
- The motor condensing system is entirely positioned outside the sterile chamber
- All external walls and doors can be in AISI 304 or AISI 316 stainless steel



controllers

A wide range of controllers with different characteristics and functionalities to control the device.



HTS

- 7" TFT touch screen display
- Data Logger capabilities for temperature and alarms
- Internet connectivity
- Wi-Fi capabilities
- Cloud management
- USB port



optionals

- LAN connection
- Electric lock for door opening with PIN/badge
- Wi-Fi router
- GSM module



HPL

- 7" or 9" TFT touch screen display
- Data Logger capabilities for temperature and alarms
- Internet connectivity
- Cloud management
- USB port
- LAN port
- SD slot



optionals

- Electric lock for door opening with PIN/badge/fingerprint
- Wi-Fi router
- GSM module

controllers



PL ADVANCED

- Data Logger capabilities for temperature and alarms
- Internet connectivity
- Wi-Fi capabilities
- Cloud management
- Dedicated App for monitoring
- Weekly email with temperature graphs
- Alarms with mobile notifications

optionals

- LAN connection
- Electric lock for door opening with PIN



Dedicated APP for PL ADVANCED controller

Thanks to the integration capabilities of our controllers, APP (for iOS and Android) and Cloud management is possible to control and assist remotely the complete network of systems. Safety is granted by email/notification alerts in case of any fault of problem.

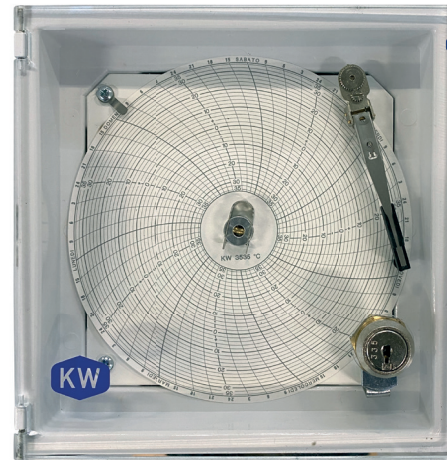


Cloud management of ULT equipped with HTS or PL ADVANCED controllers

accessories

A dedicated line of accessories to complete the performances of the products.

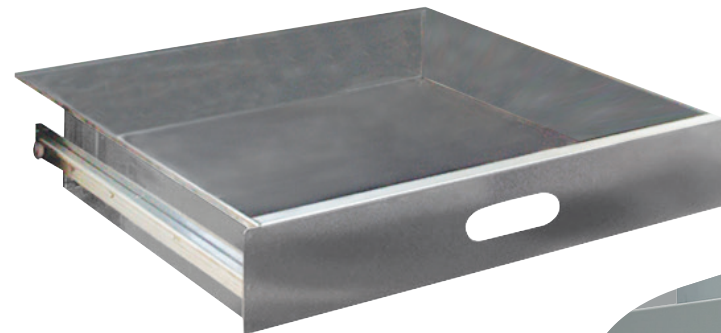
- 230V $\pm 15\%$ stabilizer to adjust the optimal power supply for the compressors
- Weekly cycle chart disk recorder with internal backup battery
- Additional internal shelves (for vertical freezers)
- Additional counter doors
- Water condensation solution
- CO₂/LN₂ backup system with 24VAC/50Hz power supply in case of mechanical failure of the system
- CO₂/LN₂ backup system with 12VAC/50Hz power supply in case of mechanical or electrical failure of the system
- Additional RT Pt 100 probe for external data logger
- Containers and drawers (with possible custom design) in AISI 304 stainless steel
- Drawers dividers
- Different types of AISI 304 stainless steel racks (special racks available upon request).



Weekly cycle chart disk recorder



Customized drawers



Drawers



Frontal extraction rack



Lateral extraction rack



Column rack

CO₂/LN₂ backup system





technical specifications

**-86°C**

Vertical, single door

		K56	K57	K58	K60	K62	K64	K66
TECHNICAL CHARACTERISTICS								
CAPACITY		261lt	122lt	358lt	506lt	606lt	708lt	809lt
TEMPERATURE RANGE		-40°C/-86°C	-40°C/-86°C	-40°C/-86°C	-40°C/-86°C	-40°C/-86°C	-40°C/-86°C	-40°C/-86°C
REFRIGERANTS	1° STAGE	R1270	R1270	R1270	R1270	R1270	R1270	R1270
	2° STAGE	R170	R170	R170	R170	R170	R170	R170
POWER SUPPLY		230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz
ELECTRICAL POWER		0,6kW	0,6kW	0,7kW	0,7kW	0,7kW	0,8kW	0,8kW
CERTIFICATIONS		CE	CE	CE	CE	CE	CE	CE
NOISE LEVEL (SOUND PRESSURE LEVEL, 1M)		< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)
STRUCTURE								
INTERNAL SURFACE	AISI 304 Stainless Steel	X	X	X	X	X	X	X
	AISI 316 Stainless Steel	Optional	Optional	Optional	Optional	Optional	Optional	Optional
EXTERNAL SURFACE	Antibacterial White Pre-painted Steel Sheet	X	X	X	X	X	X	X
	AISI 304 Stainless Steel	Optional	Optional	Optional	Optional	Optional	Optional	Optional
EXTERNAL SIZES LXPXH MM		890 x 855 x 1870	890 x 825 x 1330	1050 x 840 x 1890	1050 x 1030 x 1890	1160 x 970 x 2050	1160 x 1070 x 2050	1200 x 1110 x 2050
INTERNAL SIZES LXPXH MM		501 x 470 x 1108	500 x 450 x 540	702 x 460 x 1110	702 x 650 x 1110	802 x 590 x 1280	802 x 690 x 1280	852 x 730 x 1300
WEIGHT		240Kg	180Kg	270Kg	300Kg	310Kg	340Kg	450Kg
INSULATION	HIGH DENSITY PUR FOAM [18MW/MK]	140mm	150mm	140mm	140mm	140mm	140mm	110mm
	V.I.P. [7MW/MK]	-	-	-	-	-	-	30mm
ULTRA PERFORMANCE VERSION: + 60MM V.I.P.		-	-	-	Optional	Optional	Optional	Optional
DOORS	DOORS	1	1	1	1	1	1	1
	COMPARTMENTS	4	2	4	4	4	4	4
FRONTAL EXTRACTION RACKS	TOTAL RACKS NUMBER (H = 50MM)	12	6	20	20	20	20	24
	BOXES PER RACK	12	12	12	16	20	25	25
	TOTAL BOXES NUMBER	144	72	240	320	400	500	600
CONTROLLERS	HPL	X	X	X	X	X	X	X
	PL ADV	X	X	X	X	X	X	X
	HTS	X	X	X	X	X	X	X

-86°C

Vertical, double door



		K58 2D	K60 2D	K62 2D	K64 2D	K66 2D
TECHNICAL CHARACTERISTICS						
CAPACITY		358lt	506lt	606lt	708lt	809lt
TEMPERATURE RANGE		-40°C/-86°C	-40°C/-86°C	-40°C/-86°C	-40°C/-86°C	-40°C/-86°C
REFRIGERANTS	1° STAGE	R1270	R1270	R1270	R1270	R1270
	2° STAGE	R170	R170	R170	R170	R170
POWER SUPPLY		230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz
ELECTRICAL POWER		0,7kW	0,7kW	0,7kW	0,8kW	0,8kW
CERTIFICATIONS		CE	CE	CE	CE	CE
NOISE LEVEL (SOUND PRESSURE LEVEL, 1M)		< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)
STRUCTURE						
INTERNAL SURFACE	AISI 304 Stainless Steel	X	X	X	X	X
	AISI 316 Stainless Steel	Optional	Optional	Optional	Optional	Optional
EXTERNAL SURFACE	Antibacterial White Pre-painted Steel Sheet	X	X	X	X	X
	AISI 304 Stainless Steel	Optional	Optional	Optional	Optional	Optional
EXTERNAL SIZES LXPXH MM		1060 x 840 x 2025	1060 x 1030 x 2025	1150 x 965 x 2025	1150 x 1065 x 2025	1200 x 1110 x 2050
INTERNAL SIZES LXPXH MM		702 x 460 x 1300	702 x 650 x 1300	802 x 590 x 1280	802 x 690 x 1280	852 x 730 x 1300
WEIGHT		290Kg	320Kg	330Kg	350Kg	450Kg
INSULATION	HIGH DENSITY PUR FOAM [18MW/MK]	140mm	140mm	140mm	140mm	110mm
	V.I.P. [7MW/MK]	-	-	-	-	30mm
ULTRA PERFORMANCE VERSION: + 60MM V.I.P.		-	-	-	-	-
DOORS	DOORS	2	2	2	2	2
	COMPARTMENTS	4	4	4	4	4
FRONTAL EXTRACTION RACKS	TOTAL RACKS NUMBER (H = 50MM)	20	20	20	20	24
	BOXES PER RACK	12	16	16	20	20
	TOTAL BOXES NUMBER	240	320	320	400	480
CONTROLLERS	HPL	X	X	X	X	X
	PL ADV	X	X	X	X	X
	HTS	X	X	X	X	X



-86°C

Vertical, Ultra Slim

		K58US	K60US	K62US	K66US
TECHNICAL CHARACTERISTICS					
CAPACITY		349lt	501lt	577lt	870lt
TEMPERATURE RANGE		-40°C/-86°C	-40°C/-86°C	-40°C/-86°C	-40°C/-86°C
REFRIGERANTS	1° STAGE	R1270	R1270	R1270	R1270
	2° STAGE	R170	R170	R170	R170
POWER SUPPLY		230V/50Hz	230V/50Hz	230V / 50Hz	230V/50Hz
ELECTRICAL POWER		0,7kW	0,7kW	0,7kW	0,8kW
CERTIFICATIONS		CE	CE	CE	CE
NOISE LEVEL (SOUND PRESSURE LEVEL, 1M)		< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)
STRUCTURE					
INTERNAL SURFACE	AISI 304 Stainless Steel	X	X	X	X
	AISI 316 Stainless Steel	Optional	Optional	Optional	Optional
EXTERNAL SURFACE	Antibacterial White Pre-painted Steel Sheet	X	X	X	X
	AISI 304 Stainless Steel	Optional	Optional	Optional	Optional
EXTERNAL SIZES LXPXH MM		765 x 935 x 1925	885 x 1032 x 1999	875 x 1110 x 1925	1005 x 1226 x 2015
INTERNAL SIZES LXPXH MM		490 x 570 x 1248	588 x 656 x 1300	600 x 770 x 1248	730 x 890x 1340
WEIGHT		270Kg	300Kg	310Kg	450Kg
INSULATION	HIGH DENSITY PUR FOAM [18MW/MK]	30mm	30mm	30mm	30mm
	V.I.P. [7MW/MK]	60mm	60mm	60mm	60mm
ULTRA PERFORMANCE VERSION: + 60MM V.I.P.		-	-	-	-
DOORS	DOORS	1	1	1	1
	COMPARTMENTS	4	4	4	4
FRONTAL EXTRACTION RACKS	TOTAL RACKS NUMBER (H = 50MM)	12	16	16	20
	BOXES PER RACK	20	20	25	30
	TOTAL BOXES NUMBER	240	320	400	600
CONTROLLERS	HPL	X	X	X	X
	PL ADV	X	X	X	X
	HTS	X	X	X	X

-86°C

Under the counter



KUB75

TECHNICAL CHARACTERISTICS		
CAPACITY		86lt
TEMPERATURE RANGE		-40°C/-86°C
REFRIGERANTS	1° STAGE	R1270
	2° STAGE	R170
POWER SUPPLY		230V/50Hz
ELECTRICAL POWER		0,5kW
CERTIFICATIONS		CE
NOISE LEVEL (SOUND PRESSURE LEVEL, 1M)		< 52dB(A)
STRUCTURE		
INTERNAL SURFACE	AISI 304 Stainless Steel	X
	AISI 316 Stainless Steel	Optional
EXTERNAL SURFACE	Antibacterial White Pre-painted Steel Sheet	X
	AISI 304 Stainless Steel	Optional
EXTERNAL SIZES LXPXH MM		990 x 635 x 780
INTERNAL SIZES LXPXH MM		428 x 343 x 588
WEIGHT		100Kg
INSULATION	HIGH DENSITY PUR FOAM [18MW/MK]	120mm
	V.I.P. [7MW/MK]	30mm
ULTRA PERFORMANCE VERSION: + 60MM V.I.P.		-
DOORS	DOORS	1
	COMPARTMENTS	2
FRONTAL EXTRACTION RACKS	TOTAL RACKS NUMBER (H = 50MM)	6
	BOXES PER RACK	8
	TOTAL BOXES NUMBER	48
CONTROLLERS	HPL	X
	PL ADV	X
	HTS	X



-86°C

Vertical, single door, Biological Bank

		K56S	K57S	K58S	K60S	K62S	K64S	K66S
TECHNICAL CHARACTERISTICS								
CAPACITY		266lt	122lt	358lt	506lt	606lt	708lt	809lt
TEMPERATURE RANGE		-40°C/-86°C	-40°C/-86°C	-40°C/-86°C	-40°C/-86°C	-40°C/-86°C	-40°C/-86°C	-40°C/-86°C
REFRIGERANTS	1° STAGE	R1270	R1270	R1270	R1270	R1270	R1270	R1270
	2° STAGE	R170	R170	R170	R170	R170	R170	R170
POWER SUPPLY		230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz
ELECTRICAL POWER		0,6kW (Booster Mode 1,2kW)	0,6kW (Booster Mode 1,2kW)	0,7kW (Booster Mode 1,4kW)	0,7kW (Booster Mode 1,4kW)	0,7kW (Booster Mode 1,4kW)	0,8kW (Booster Mode 1,6kW)	0,8kW (Booster Mode 1,6kW)
CERTIFICATIONS		CE	CE	CE	CE	CE	CE	CE
NOISE LEVEL (SOUND PRESSURE LEVEL, 1M)		< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)
STRUCTURE								
INTERNAL SURFACE	AISI 304 Stainless Steel	X	X	X	X	X	X	X
	AISI 316 Stainless Steel	Optional	Optional	Optional	Optional	Optional	Optional	Optional
EXTERNAL SURFACE	Antibacterial White Pre-painted Steel Sheet	X	X	X	X	X	X	X
	AISI 304 Stainless Steel	Optional	Optional	Optional	Optional	Optional	Optional	Optional
EXTERNAL SIZES LXPXH MM		1185 x 855 x 1870	890 x 905 x 1350	1050 x 920 x 1890	1050 x 1110 x 1890	1160 x 1050 x 2050	1160 x 1150 x 2050	1200 x 1190 x 2050
INTERNAL SIZES LXPXH MM		501 x 470 x 1108	500 x 450 x 540	702 x 460 x 1110	702 x 650 x 1110	802 x 590 x 1280	802 x 690 x 1280	852 x 730 x 1300
WEIGHT		240Kg	180Kg	270Kg	300Kg	310Kg	340Kg	450Kg
INSULATION	HIGH DENSITY PUR FOAM [18MW/MK]	140mm	140mm	140mm	140mm	140mm	140mm	140mm
	V.I.P. [7MW/MK]	-	-	-	-	-	-	-
ULTRA PERFORMANCE VERSION: + 60MM V.I.P.		-	-	-	-	-	-	-
DOORS	DOORS	1	1	1	1	1	1	1
	COMPARTMENTS	4	4	4	4	4	4	4
FRONTAL EXTRACTION RACKS	TOTAL RACKS NUMBER (H = 50MM)	12	6	20	20	20	20	24
	BOXES PER RACK	12	12	12	16	20	25	25
	TOTAL BOXES NUMBER	144	72	240	320	400	500	600
CONTROLLERS	HPL	X	X	X	X	X	X	X
	PL ADV	-	-	-	-	-	-	-
	HTS	-	-	-	-	-	-	-

-86°C

Vertical, double door, Biological Bank



		K58S 2D	K60S 2D	K62S 2D	K64S 2D	K66S 2D
TECHNICAL CHARACTERISTICS						
CAPACITY		358lt	506lt	606lt	708lt	809lt
TEMPERATURE RANGE		-40°C/-86°C	-40°C/-86°C	-40°C/-86°C	-40°C/-86°C	-40°C/-86°C
REFRIGERANTS	1° STAGE	R1270	R1270	R1270	R1270	R1270
	2° STAGE	R170	R170	R170	R170	R170
POWER SUPPLY		230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz
ELECTRICAL POWER		0,7kW (Booster Mode 1,4kW)	0,7kW (Booster Mode 1,4kW)	0,7kW (Booster Mode 1,4kW)	0,8kW (Booster Mode 1,6kW)"	0,8kW (Booster Mode 1,6kW)
CERTIFICATIONS		CE	CE	CE	CE	CE
NOISE LEVEL (SOUND PRESSURE LEVEL, 1M)		< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)
STRUCTURE						
INTERNAL SURFACE	AISI 304 Stainless Steel	X	X	X	X	X
	AISI 316 Stainless Steel	Optional	Optional	Optional	Optional	Optional
EXTERNAL SURFACE	Antibacterial White Pre-painted Steel Sheet	X	X	X	X	X
	AISI 304 Stainless Steel	Optional	Optional	Optional	Optional	Optional
EXTERNAL SIZES LXPXH MM		1060 x 920 x 2025	1060 x 1110 x 2025	1150 x 1045 x 2025	1150 x 1145 x 2025	1200 x 1190 x 2050
INTERNAL SIZES LXPXH MM		702 x 460 x 1300	702 x 650 x 1300	802 x 590 x 1280	802 x 690 x 1280	852 x 730 x 1300
WEIGHT		290Kg	320Kg	330Kg	350Kg	460Kg
INSULATION	HIGH DENSITY PUR FOAM [18MW/MK]	140mm	140mm	140mm	140mm	140mm
	V.I.P. [7MW/MK]	-	-	-	-	-
ULTRA PERFORMANCE VERSION: + 60MM V.I.P.		-	-	-	-	-
DOORS	DOORS	2	2	2	2	2
	COMPARTMENTS	4	4	4	4	4
FRONTAL EXTRACTION RACKS	TOTAL RACKS NUMBER (H = 50MM)	20	20	20	20	24
	BOXES PER RACK	12	16	16	20	20
	TOTAL BOXES NUMBER	240	320	320	400	480
CONTROLLERS	HPL	X	X	X	X	X
	PL ADV	-	-	-	-	-
	HTS	-	-	-	-	-

-86°C

Chest Type

		K52	K52E	K54	K54E	K55	K55E	K5578
TECHNICAL CHARACTERISTICS								
CAPACITY		110lt	174lt	230lt	334lt	476lt	705lt	801lt
TEMPERATURE RANGE		-40°C/-86°C	-40°C/-86°C	-40°C/-86°C	-40°C/-86°C	-40°C/-86°C	-40°C/-86°C	-40°C/-86°C
REFRIGERANTS	1° STAGE	R1270	R1270	R1270	R1270	R1270	R1270	R1270
	2° STAGE	R170	R170	R170	R170	R170	R170	R170
POWER SUPPLY		230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz
ELECTRICAL POWER		0,6kW	0,6kW	0,6kW	0,6kW	0,7kW	0,7kW	0,7kW
CERTIFICATIONS		CE	CE	CE	CE	CE	CE	CE
NOISE LEVEL (SOUND PRESSURE LEVEL, 1M)		< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)
STRUCTURE								
INTERNAL SURFACE	AISI 304 Stainless Steel	X	X	X	X	X	X	X
	AISI 316 Stainless Steel	Optional	Optional	Optional	Optional	Optional	Optional	Optional
EXTERNAL SURFACE	Antibacterial White Pre-painted Steel Sheet	X	X	X	X	X	X	X
	AISI 304 Stainless Steel	Optional	Optional	Optional	Optional	Optional	Optional	Optional
EXTERNAL SIZES LXPXH MM		900 x 840 x 1270	900 x 840 x 1270	1500 x 870 x 1270	1500 x 870 x 1270	1935 x 910 x 1110	2550 x 874 x 1120	2488 x 982 x 1100
INTERNAL SIZES LXPXH MM		550 x 400 x 500	642 x 492 x 550	1150 x 400 x 500	1240 x 490 x 550	1220 x 520 x 750	1860 x 480 x 790	1780 x 600 x 750
WEIGHT		130Kg	140Kg	270Kg	280Kg	320Kg	400Kg	440Kg
INSULATION	HIGH DENSITY PUR FOAM [18MW/MK]	175mm	140mm	175mm	140mm	140mm	140mm	140mm
	V.I.P. [7MW/MK]	-	-	-	-	-	-	-
ULTRA PERFORMANCE VERSION: + 60MM V.I.P.		-	-	-	-	-	-	-
DOORS	DOORS	1	1	1	1	1	1	1
	COMPARTMENTS	1	1	2	2	2	2	2
FRONTAL EXTRACTION RACKS	TOTAL RACKS NUMBER (H = 50MM)	7	8	16	24	24	39	48
	BOXES PER RACK	8	8	8	8	12	12	12
	TOTAL BOXES NUMBER	56	64	128	192	288	468	576
CONTROLLERS	HPL	X	X	X	X	X	X	X
	PL ADV	X	X	X	X	X	X	X
	HTS	X	X	X	X	X	X	X

-86°C

Chest Type, Biological Bank



		K52S	K52ES	K54S	K54ES	K55S	K55ES	K5578S
TECHNICAL CHARACTERISTICS								
CAPACITY		110lt	174lt	230lt	334lt	476lt	705lt	801lt
TEMPERATURE RANGE		-40°C/-86°C	-40°C/-86°C	-40°C/-86°C	-40°C/-86°C	-40°C/-86°C	-40°C/-86°C	-40°C/-86°C
REFRIGERANTS	1° STAGE	R1270	R1270	R1270	R1270	R1270	R1270	R1270
	2° STAGE	R170	R170	R170	R170	R170	R170	R170
POWER SUPPLY		230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz
ELECTRICAL POWER		0,6kW (Booster Mode 1,2kW)	0,6kW (Booster Mode 1,2kW)	0,6kW (Booster Mode 1,2kW)	0,6kW (Booster Mode 1,2kW)	0,7kW (Booster Mode 1,4kW)	0,7kW (Booster Mode 1,4kW)	0,7kW (Booster Mode 1,4kW)
CERTIFICATIONS		CE	CE	CE	CE	CE	CE	CE
NOISE LEVEL (SOUND PRESSURE LEVEL, 1M)		< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)
STRUCTURE								
INTERNAL SURFACE	AISI 304 Stainless Steel	X	X	X	X	X	X	X
	AISI 316 Stainless Steel	Optional	Optional	Optional	Optional	Optional	Optional	Optional
EXTERNAL SURFACE	Antibacterial White Pre-painted Steel Sheet	X	X	X	X	X	X	X
	AISI 304 Stainless Steel	Optional	Optional	Optional	Optional	Optional	Optional	Optional
EXTERNAL SIZES LXPXH MM		900 x 840 x 1270	900 x 840 x 1270	1500 x 870 x 1270	1500 x 870 x 1270	1395 x 910 x 1110	2990 x 874 x 1120	2948 x 982 x 1100
INTERNAL SIZES LXPXH MM		550 x 400 x 500	642 x 492 x 550	1150 x 400 x 500	1240 x 490 x 550	1220 x 520 x 750	1860 x 480 x 790	1780 x 600 x 750
WEIGHT		130Kg	140Kg	270Kg	280Kg	320Kg	400Kg	440Kg
INSULATION	HIGH DENSITY PUR FOAM [18MW/MK]	175mm	140mm	175mm	140mm	140mm	140mm	140mm
	V.I.P. [7MW/MK]	-	-	-	-	-	-	-
ULTRA PERFORMANCE VERSION: + 60MM V.I.P.		-	-	-	-	-	-	-
DOORS	DOORS	1	1	1	1	1	1	1
	COMPARTMENTS	1	1	2	2	2	2	2
FRONTAL EXTRACTION RACKS	TOTAL RACKS NUMBER (H = 50MM)	7	8	16	24	24	39	48
	BOXES PER RACK	8	8	8	8	12	12	12
	TOTAL BOXES NUMBER	56	64	128	192	288	468	576
CONTROLLERS	HPL	X	X	X	X	X	X	X
	PL ADV	-	-	-	-	-	-	-
	HTS	-	-	-	-	-	-	-

-86°C

Vertical, Ultra Performance, Variable speed



		K58 UP V	K60 UP V	K62 UP V	K64 UP V	K66 UP V
TECHNICAL CHARACTERISTICS						
CAPACITY		358lt	506lt	606lt	708lt	809lt
TEMPERATURE RANGE		-50°C/-80°C	-50°C/-80°C	-50°C/-80°C	-50°C/-80°C	-50°C/-80°C
REFRIGERANTS	1° STAGE	R1270	R1270	R1270	R1270	R1270
	2° STAGE	R170	R170	R170	R170	R170
POWER SUPPLY		230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz
ELECTRICAL POWER		0,6kW	0,6kW	0,6kW	0,6kW	0,6kW
CERTIFICATIONS		CE	CE	CE	CE - ENERGY STAR	CE
NOISE LEVEL (SOUND PRESSURE LEVEL, 1M)		< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)
STRUCTURE						
INTERNAL SURFACE	AISI 304 Stainless Steel	X	X	X	X	X
	AISI 316 Stainless Steel	Optional	Optional	Optional	Optional	Optional
EXTERNAL SURFACE	Antibacterial White Pre-painted Steel Sheet	X	X	X	X	X
	AISI 304 Stainless Steel	Optional	Optional	Optional	Optional	Optional
EXTERNAL SIZES LXPXH MM		1050 x 840 x 1890	1050 x 1030 x 1890	1160 x 970 x 2050	1160 x 1070 x 2050	1200 x 1110 x 2050
INTERNAL SIZES LXPXH MM		702 x 460 x 1110	702 x 650 x 1110	802 x 590 x 1280	802 x 690 x 1280	852 x 730 x 1300
WEIGHT		270Kg	300Kg	310Kg	340Kg	450Kg
INSULATION	HIGH DENSITY PUR FOAM [18MW/MK]	80mm	80mm	80mm	80mm	80mm
	V.I.P. [7MW/MK]	-	-	-	-	-
ULTRA PERFORMANCE VERSION: + 60MM V.I.P.		X	X	X	X	X
DOORS	DOORS	1	1	1	1	1
	COMPARTMENTS	4	4	4	4	4
FRONTAL EXTRACTION RACKS	TOTAL RACKS NUMBER (H = 50MM)	20	20	20	20	24
	BOXES PER RACK	12	16	20	25	25
	TOTAL BOXES NUMBER	240	320	400	500	600
CONTROLLERS	HPL	-	-	-	-	-
	PL ADV	-	-	-	-	-
	HTS	X	X	X	X	X

-86°C

Vertical, -90°C



		K9058	K9060	K9062	K9064	K9066
TECHNICAL CHARACTERISTICS						
CAPACITY		358lt	506lt	606lt	708lt	809lt
TEMPERATURE RANGE		-50°C/-90°C	-50°C/-90°C	-50°C/-90°C	-50°C/-90°C	-50°C/-90°C
REFRIGERANTS	1° STAGE	R1270	R1270	R1270	R1270	R1270
	2° STAGE	R1150	R1150	R1150	R1150	R1150
POWER SUPPLY		230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz
ELECTRICAL POWER		0,8kW	0,8kW	0,8kW	0,9kW	0,9kW
CERTIFICATIONS		CE	CE	CE	CE	CE
NOISE LEVEL (SOUND PRESSURE LEVEL, 1M)		< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)	< 52dB(A)
STRUCTURE						
INTERNAL SURFACE	AISI 304 Stainless Steel	X	X	X	X	X
	AISI 316 Stainless Steel	Optional	Optional	Optional	Optional	Optional
EXTERNAL SURFACE	Antibacterial White Pre-painted Steel Sheet	X	X	X	X	X
	AISI 304 Stainless Steel	Optional	Optional	Optional	Optional	Optional
EXTERNAL SIZES LXPXH MM		1050 x 840 x 1890	1050 x 1030 x 1890	1160 x 970 x 2050	1160 x 1070 x 2050	1200 x 1110 x 2050
INTERNAL SIZES LXPXH MM		702 x 460 x 1110	702 x 650 x 1110	802 x 590 x 1280	802 x 690 x 1280	852 x 730 x 1300
WEIGHT		270Kg	300Kg	310Kg	340Kg	450Kg
INSULATION	HIGH DENSITY PUR FOAM [18MW/MK]	140mm	140mm	140mm	140mm	140mm
	V.I.P. [7MW/MK]	-	-	-	-	-
ULTRA PERFORMANCE VERSION: + 60MM V.I.P.		X	X	X	X	X
DOORS	DOORS	1	1	1	1	1
	COMPARTMENTS	4	4	4	4	4
FRONTAL EXTRACTION RACKS	TOTAL RACKS NUMBER (H = 50MM)	20	20	20	20	24
	BOXES PER RACK	12	16	20	25	25
	TOTAL BOXES NUMBER	240	320	400	500	600
CONTROLLERS	HPL	X	X	X	X	X
	PL ADV	-	-	-	-	-
	HTS	-	-	-	-	-

**-86°C**

Frontal extraction racks

The following tables show the maximum number of racks for each freezer model.
The indicated racks are for standard 133x133x50mm boxes. For different types of boxes,
contact your local area manager.

ULT	P/N	Model	Compartments	Racks/ Comp.	Total Racks	Boxes/ Rack	Total Boxes
K57	8001032A	DRA K57 12/5	2	3	6	12	72
K56	8001032A	DRA K56 12/5	4	3	12	12	144
K58	8001032A	DRA K58 12/5	4	5	20	12	240
K60	8001002A	DRA K60 16/5	4	5	20	16	320
K62	8001007A	DRA K62 20/5	4	5	20	20	400
K64	8001001A	DRA K64 25/5	4	5	20	25	500
K66	8001029A	DRA K66 25/5	4	6	24	25	600
KUB75	8001033A	DRA KUB75 8/5	2	3	6	8	48
K58US	8001007A	DRA K62 20/5	4	3	12	20	240
K60US	8001044A	DRA K60US 20/5	4	4	16	20	320
K62US	8001001A	DRA K64 25/5	4	4	16	25	400
K66US	8001029A	DRA K66 25/5	4	5	20	25	500
K58 2D	8001032A	DRA K58 12/5	4	5	20	12	240
K60 2D	8001002A	DRA K60 16/5	4	5	20	16	320
K62 2D	8001002A	DRA K60 16/5	4	5	20	16	320
K64 2D	8001008A	DRA K64-2D 20/5	4	5	20	20	400
K66 2D	8001030A	DRA K66-2D 20/5	4	6	24	20	480
K56S	8001032A	DRA K56 12/5	4	3	12	12	144
K58S	8001032A	DRA K58 12/5	4	5	20	12	240
K60S	8001002A	DRA K60 16/5	4	5	20	16	320
K62S	8001007A	DRA K62 20/5	4	5	20	20	400
K64S	8001001A	DRA K64 25/5	4	5	20	25	500
K66S	8001029A	DRA K66 25/5	4	6	24	25	600
K58S 2D	8001032A	DRA K58 12/5	4	5	20	12	240
K60S 2D	8001002A	DRA K60 16/5	4	5	20	16	320
K62S 2D	8001002A	DRA K60 16/5	4	5	20	16	320
K64S 2D	8001008A	DRA K64-2D 20/5	4	5	20	20	400
K66S 2D	8001030A	DRA K66-2D 20/5	4	6	24	20	480

-86°C

Lateral extraction racks



ULT	P/N	Model	Compartments	Racks/ Comp.	Total Racks	Boxes/ Rack	Total Boxes
K57	8001012A	RK K57 12/5	2	3	6	12	72
K56	8001012A	RK K56 12/5	4	3	12	12	144
K58	8001012A	RK K58 12/5	4	5	20	12	240
K60	8001015A	RK K60 16/5	4	5	20	16	320
K62	8001004A	RK K62 20/5	4	5	20	20	400
K64	8001020A	RK K64 25/5	4	5	20	25	500
K66	8001020A	RK K64 25/5	4	6	24	25	600
K58US	8001012A	RK K58 12/5	4	3	12	12	144
K60US	8001004A	RK K62 20/5	4	4	16	20	320
K62US	8001022A	RK K64-2D 20/5	4	4	16	20	320
K66US	8001022A	RK K64-2D 20/5	4	5	20	20	400
K58 2D	8001012A	RK K58 12/5	4	5	20	12	240
K60 2D	8001015A	RK K60 16/5	4	5	20	16	320
K62 2D	8001015A	RK K60 16/5	4	5	20	16	320
K64 2D	8001022A	RK K64-2D 20/5	4	5	20	20	400
K66 2D	8001022A	RK K64-2D 20/5	4	6	24	20	480
K56S	8001012A	RK K56 12/5	4	3	12	12	144
K58S	8001012A	RK K58 12/5	4	5	20	12	240
K60S	8001015A	RK K60 16/5	4	5	20	16	320
K62S	8001004A	RK K62 20/5	4	5	20	20	400
K64S	8001020A	RK K64 25/5	4	5	20	25	500
K66S	8001020A	RK K64 25/5	4	5	20	25	500
K58S 2D	8001012A	RK K58 12/5	4	5	20	12	240
K60S 2D	8001015A	RK K60 16/5	4	5	20	16	320
K62S 2D	8001015A	RK K60 16/5	4	5	20	16	320
K64S 2D	8001022A	RK K64-2D 20/5	4	5	20	20	400
K66S 2D	8001022A	RK K64-2D 20/5	4	6	24	20	480



-86°C

Column racks

ULT	P/N	Model	Racks	Boxes/ Rack	Total Boxes
K52	8001005A	K52 8/5	7	8	56
K52E	8001005A	K52 8/5	8	8	64
K54	8001005A	K54 8/5	16	8	128
K54E	8001005A	K54 8/5	24	8	192
K55	8001026A	K55 12/5	24	12	288
K55E	8001026A	K55 12/5	39	12	468
K5578	8001026A	K5578 12/5	48	12	576
K52S	8001005A	K52 8/5	7	8	56
K52ES	8001005A	K52 8/5	8	8	64
K54S	8001005A	K54 8/5	16	8	128
K54ES	8001005A	K54 8/5	24	8	192
K55S	8001026A	K55 12/5	24	12	288
K55ES	8001026A	K55 12/5	39	12	468
K5578S	8001026A	K5578 12/5	48	12	576



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