

Ultra Low Temperature Freezers

-40° C and -86° C



ilShin[®] Europe

iShin[®] *Ultra Low Freezer Series*

iShin Ultra Low Temperature Freezers are available in two temperature ranges: -40°C and -86°C.

The standard internal cabinet material is epoxy coated steel. As an option stainless steel interior is available. In our freezer ranges both upright and chest type freezers are available. Internal volumes vary from 191 litre up to 730 litre.

The iShin product design philosophy is based on three principles: Customers needs, Quality and Innovation and always with the customer in mind. With these ideals we pursue our goal to maintain satisfied customers.



**The lowest
noise level in the
world**

Safety and Reliability



Your samples stored in a freezer are the most important issue. Therefore iShin only uses the most reliable components available in the world. The Bristol compressors, which have proven their outstanding durability during the past 30 years, are used in a unique cascade cooling system with very low gas system pressures.

Thanks to the unique WhisperFreeze[®] technology iShin Ultra Low Freezers offer extremely low noise level.

The CFC free refrigeration system is safe for both user and environment.

The Perfect Fit System[®] with 3 separate gaskets, prevents ice formation around the door. The sophisticated eye level control panel on upright models provides all the warnings and information necessary to protect your samples.

This makes the iShin system the most user friendly freezer ever built and creates the safest environment for your samples.

Performance Features

- Hermetically sealed cooling system;
- Cold air loss is minimized by insulated inner doors;
- Efficient evaporator with maximum contact with walls for fast cooling;
- 130 mm high pressure foamed polyurethane insulation;
- Standard epoxy coated steel interior, stainless steel interior optional;
- Heavy-duty casters with unique built in adjustable stand;
- Chamber with rounded corners for easy cleaning;
- 3 built-in access ports are standard;
- Upright models with very user friendly control panel on eye level;
- Easy to clean condenser filter;
- WhisperFreeze[®] compressors and quiet running fans create a very low noise level (+/- 50 dBA);
- Perfect Fit System[®] ensures low ice and tight door closing;
- Reliable hot gas heated door seals prevents ice build up;
- Adjustable shelves are standard;
- Dry contacts for remote alarm and RS232 for remote monitoring are standard.



Standard Specifications Chest Freezers Single Stage Refrigeration System: -20°C down to -45°C



DF4514 (shown with optional recorder)

Model no:	DF4507	DF4510	DF4514	DF4517	DF4520
Capacity	191 l	295 l	392 l	492 l	593 l
Ext Dimensions WxDxH mm	1280x790x1030	1590x790x1030	1880x790x1030	2180x790x1030	2480x790x1030
Int Dimensions WxDxH mm	570x500x670	870x500x670	1170x500x670	1470x500x670	1770x500x670
Insulation	130 mm Non CFC, foamed in place polyurethane				
Electrical	110 V / 60 Hz or 230 V / 50 Hz				200/230V,50/60 Hz
Certification	CE, EM certified				
Weight	185 kg	205 kg	230 kg	255 kg	285 kg
Noise level	In normal operation and ambient conditions of 20 °C all models +/- 50 dBa				
Refrigeration	1 x 1/2 HP	1 x 1/2 HP	1 x 1/2 HP	1 x 1/2 HP	1 x 1 HP
Aver.Power cons.*	200 Watts	220 Watts	250 Watts	300 Watts	350 Watts
2 " Cryo boxes***	12 boxes / rack	12 boxes / rack	12 boxes / rack	12 boxes / rack	12 boxes / rack
3 " Cryo boxes***	8 boxes / rack	8 boxes / rack	8 boxes / rack	8 boxes / rack	8 boxes / rack
Racks / Freezer***	12 racks total	18 racks total	24 racks total	30 racks total	36 racks total



DF3517

Standard Specifications Upright Freezers Single Stage Refrigeration System: -20°C down to -40°C

Model no:	DF3510	DF3514	DF3517	DF3520	DF3524
Capacity	276 l	369 l	484 l	605 l	730 l
Inner Doors	3 inner doors	3 shelves, 4 inner doors create 4 compartments			
Ext Dimensions WxDxH mm	920x900x1740	920x900x1979	920x1050x1979**	1070x1050x1979**	1070x1180x1979
Int Dimensions WxDxH mm	600x480x960	600x480x1280	600x630x1280	750x630x1280	750x760x1280
Insulation	130 mm Non CFC, foamed in place polyurethane				
Electrical	110 V / 60 Hz or 230 V / 50 Hz			200 / 230 V, 50 / 60 Hz	
Certification	CE, EM certified				
Weight	265 kg	305 kg	350 kg	380 kg	420 kg
Noise level	In normal operation and ambient conditions of 20 °C all models +/- 50 dBa				
Refrigeration	1 x 1/2 HP	1 x 1/2 HP	1 x 1/2 HP	1 x 1 HP	1 x 1 HP
Av.Power cons.*	250 Watts	300 Watts	350 Watts	400 Watts	450 Watts
2 " Cryo boxes***	15 boxes / rack	15 boxes / rack	20 boxes / rack	20 boxes / rack	25 boxes / rack
3 " Cryo boxes***	9 boxes / rack	9 boxes / rack	12 boxes / rack	12 boxes / rack	15 boxes / rack
Racks / Freezer***	12 racks total	16 racks total	16 racks total	20 racks total	20 racks total

All models have the option for a stainless steel interior. Please add 'S' behind the model number to order stainless steel interior. (for example DF8517S)

Standard Specifications Chest Freezers Cascade Refrigeration System: -40°C down to -86°C



DF9010 (shown with optional recorder)

Model no:	DF9007	DF9010	DF9014	DF9017	DF9020
Capacity	191 l	295 l	392 l	492 l	593 l
Ext Dimensions WxDxH mm	1280x790x1030	1590x790x1030	1880x790x1030	2180x790x1030	2480x790x1030
Int Dimensions WxDxH mm	570x500x670	870x500x670	1170x500x670	1470x500x670	1770x500x670
Insulation	130 mm Non CFC, foamed in place polyurethane				
Electrical	110 V / 60 Hz or 230 V / 50 Hz				200/230V,50/60 Hz
Certification	CE, EM certified				
Weight	211 kg	236 kg	261 kg	286 kg	311 kg
Noise level	In normal operation and ambient conditions of 20 °C all models +/- 50 dBa				
Refrigeration	2 x 1/2 HP	2 x 1/2 HP	2 x 1/2 HP	2 x 1/2 HP	2 x 1 HP
Aver.Power cons.*	400 Watts	450 Watts	500 Watts	550 Watts	700 Watts
2 " Cryo boxes***	12 boxes / rack	12 boxes / rack	12 boxes / rack	12 boxes / rack	12 boxes / rack
3 " Cryo boxes***	8 boxes / rack	8 boxes / rack	8 boxes / rack	8 boxes / rack	8 boxes / rack
Racks / Freezer***	12 racks total	18 racks total	24 racks total	30 racks total	36 racks total



DF8517

Standard Specifications Up-Right Freezers Cascade Refrigeration System: -40°C down to -86°C

Model no:	DF8510	DF8514	DF8517	DF8520	DF8524
Capacity	276 l	369 l	484 l	605 l	730 l
Inner Doors	3 inner doors	3 shelves, 4 inner doors create 4 compartments			
Ext Dimensions WxDxH mm	920x900x1740	920x900x1979	920x1050x1979**	1070x1050x1979**	1070x1180x1979
Int Dimensions WxDxH mm	600x480x960	600x480x1280	600x630x1280	750x630x1280	750x760x1280
Insulation	130 mm Non CFC, foamed in place polyurethane				
Electrical	110 V / 60 Hz or 230 V / 50 Hz			200 / 230 V, 50 / 60 Hz	
Certification	CE, EM certified				
Weight	294 kg	334 kg	380 kg	410 kg	450 kg
Noise level	In normal operation and ambient conditions of 20 °C all models +/- 50 dBa				
Refrigeration	2 x 1/2 HP	2 x 1/2 HP	2 x 1/2 HP	2 x 1 HP	2 x 1 HP
Aver.Power cons.*	475 Watts	500 Watts	550 Watts	750 Watts	800 Watts
2 " Cryo boxes***	15 boxes / rack	15 boxes / rack	20 boxes / rack	20 boxes / rack	25 boxes / rack
3 " Cryo boxes***	9 boxes / rack	9 boxes / rack	12 boxes / rack	12 boxes / rack	15 boxes / rack
Racks / Freezer***	12 racks total	16 racks total	16 racks total	20 racks total	20 racks total

* Freezers set to -40/-80°C, ambient 20°C, test run over 24 hrs, 50 percent product load

** DF8517 and DF8520 pass through a < 90 cm wide doorway with door open, front panels clicked off, and rolling the freezer from side to side.

*** storage boxes and racks are optional



Smart Microprocessor Control

- Multi-position key switch: on, off and set
- Battery alarm
- Condenser temperature alarm
- Power failure alarm
- High and Low temperature alarm
- Bright, easy to read, digital display
- Temperature setpoints
- Volt free dry contacts for remote alarm



Microprocessor control on eye level



Convenient voltage checking

After-Sales and Service: priority number 1

The ilShin products are backed up by a world wide team of well-trained engineers. Our after sales department holds stock of economical spare parts which are easy to replace because of the user friendly detachable cable housing.

For further detailed questions, such as pull down temperature graphs, heat output, or other ilShin products please contact your local ilShin dealer.



Options and Accessories



7 day Chart recorder



CO₂ back up system



Aluminium storage racks



Shark® Cryo Gloves

Rack Model:	Boxes size	Total Boxes	For Freezer Model
CR0062	2"	12	All Chest Freezers
CR0063	3"	8	
UR0066	2"	15	Upright Model DF3510, DF8510 DF3514, DF8514
UR0067	3"	9	
UR0068	2"	20	Upright Model DF3517, DF8517, DF3520, DF8520
UR0069	3"	12	
UR0070	2"	25	Upright Model DF3524, DF8524
UR0071	3"	15	

Box Model no:	Description
PP0060	Fiberboard storage box 2"
PP0061	Fiberboard storage box 3"

Divider Model no:	Storage box Divider:
PP1049	7x7, 16mm, 49 cell
PP1064	8x8, 14mm, 64 cell
PP1081	9x9, 13mm, 81 cell
PP1100	10x10, 12mm, 100 cell

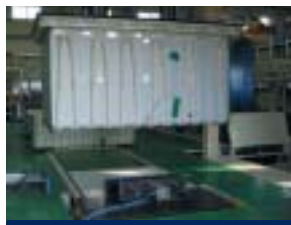
Model no:	Description
CH0067	Temperture recorder. 7 day circular chart recorder
CP0067	Chart recorder paper (52 pieces)
IP0067	Red pens for Chart recorder (6 pieces)
LC0070	CO ₂ backup system
LC0071	LN ₂ backup system
IQQQ100	IQ/OQ protocol package
IFS100	RS232 monitoring software
PR100	Heated pressure equalisation valve (factory fitted or retro-fit-kit)
1004b	Optional large door handle with integrated lock (factory fitted or retro-fit-kit)
CG100	Shark® ULT short-term protection Gloves

Quality Manufacturing

High quality products achieved by superior manufacturing technology



Advanced design



Internal chamber preparation



Installation of Internal chamber into exterior cabinet



Preparation before foaming process



High pressure polyurethane foaming process



Door installation



Compressor housing attachment



Packing the finished product

Innovative Design

Inventive technical design results in a durable ULT system



Dual layered air insulated inner doors prevent cold loss inside chamber



Start relays and capacitors minimize electrical load and reduce power consumption



Extra large tropical condenser makes the system work without high pressures



Automatic voltage compensation protects electrical components

Testing / Quality Control

Rigorous testing and quality control results in the most reliable freezers ever built



Every single product manufactured by iShin is fully tested before leaving the factory. These tests include: temperature of each internal compartment, an insulation test, pressure of the refrigeration system, high/low pressure tests and overloading/overheating with different voltages and cycles.

User Friendly Design

The system is designed with the customer always in mind



Filters are detachable and easily accessible through a condenser door. This makes cleaning the air filter a quick and easy job.



A safety condenser cover protects the customer when cleaning the filter



A door-length-handle allows easy opening by taller and shorter users.

Your local iShin dealer: