

# IC, RG

## Технические характеристики

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# Ice Production and Storage

## Ice Flake Makers

Produce high purity ice suitable for a wide range of uses in hospitals, laboratories, analysis research stations, blood transportation with specific usage for ice bags, oxygen tents, surgery, cold therapies, blood transfusion, chemical reactions and a host of other applications.

The ice produced is slow melting and sufficiently dry to prevent the flakes sticking together in lumps.

Catalogue No.		<b>IC360-08</b>	<b>IC360-14</b>
Model		AF80AS	AF103AS
Output	kg/day	73	105
Storage capacity	kg	25	30
Condensing unit		Air cooled – both models	
Compressor	W	800	900
Refrigerant		R134a	R404a
Overall H	mm	889	1078
W	mm	535	592
D	mm	626	622
Weight	kg	58	66
Water	litres/hour	2.2	3.3
Water inlet		¾ in gas – both models	
Water outlet		20mm o.d. – both models	

The outer case is stainless steel and there is an insulated plastic lined bin with sliding door on the upper front for the convenient storage and removal of flake ice. Electrical and water connections are at the rear and there are safety controls to protect against water supply failure.

### Ice Flake Makers, Scotsman

As described. With stainless steel casing and insulated plastic lined bin. For 230V 50Hz a.c. only, 3A.

**IC360-08** AF80AS

**IC360-14** AF103AS



IC360-14, IC360-08 is similar

## Ice Cube Maker

A compact, floor standing, self contained unit needing no plumbing in for applications requiring the use of cubed ice, or in areas where water connections are not readily available. Integral 4 litre capacity water reservoir tank can be filled through the ice bin door. Produces up to 10kg of ice in 24 hours. The insulated storage bin has a capacity of 3.5kg or approximately 500 cubes and features a sliding door for convenient storage and removal of ice. Finished in enamel paint with reservoir level sight glass inset into front panel. Overall dimensions 640 x 380 x 380mm H x W x D. Weight 29kg. For 220-240V 50Hz single phase a.c., or 24V d.c. supplies.

**IC360-75** Ice cube maker

## Ice Crusher

### Ice Crusher, Waring

Portable, compact unit, ideal for producing small to medium volumes of chipped ice (to 6mm) from ice cubes. The low speed, high torque motor driving the crusher assembly enables it to produce up to 600g of ice granules per minute. The feed chute opening is 38 x 57mm. The tall stand and adjustable height under the unit allows vessels up to 230mm high to be accommodated for direct filling from the dispensing chute. Rugged stainless steel construction ensures easy cleaning and durability. Dimensions 185 x 250 x 460mm W x D x H. Weight 9.6kg. For 220V 50Hz single phase supplies.

**IC425-10** Ice Crusher

Freezers – see *Refrigeration* section.

Dip coolers, refrigerated circulators – see *Baths* section.

Freeze Dryers – see *Freeze Drying* section.

IC425



IC360-75

# Ice Production and Storage

## Dry Ice Makers

Produce CO<sub>2</sub> Dry Ice direct from a CO<sub>2</sub> syphon cylinder in one to two minutes. Dry Ice can maintain temperatures down to -70°C and can be used whenever localised cooling or freezing is needed:-

In hospitals – for blood, tissue and serum preservation.

In research establishments – to provide reference temperatures.

In schools and laboratories – as a cooling agent, and cold trap for gases.

In factories – for shrink fitting of small metal components and other localised cooling applications.

### Snowpack Pellet Makers

Catalogue No.		IC410-15	IC410-25
Pellet weight	g	30	500
Pellet size	mm	22 x 50 diameter	75 x 100 diameter
No. of pellets*		30	2

\* From a 6.35kg CO<sub>2</sub> syphon cylinder.

### Pellet Makers, Snowpack

As described. Supplied with gloves but without CO<sub>2</sub> syphon cylinder.

**IC410-15** 30g pellet

**IC410-25** 500g pellet

### Cryo-Gloves

Provide protection at low temperatures. Suitable for handling dry ice and materials in freezers. Overall length approximately 350mm. Supplied per pair.

**SA720-10** Small

**SA720-13** Medium

**SA720-16** Large

Liquid nitrogen storage – see *Dewars section*.

Freezers – see *Refrigeration section*.

### Economy Frigmat<sup>®</sup>, Dry Ice Maker

For dry ice production directly from a CO<sub>2</sub> syphon cylinder. Up to 9 x 454g blocks of dry ice 85 x 85 x 110mm W x D x H produced from a 22.7kg liquid CO<sub>2</sub> cylinder. With pressure gauge and relief valve to monitor pressure build-up and ensure safe operation. The block is formed within an HDPE chamber that can be safely handled using a gloved hand. The all-metal frame, with non-slip rubber feet, is rugged and withstands heavy or field use. Supplied with 1.8m long, nickel-plated copper supply tube and fitting for European threaded cylinders. Overall 140 x 370 x 150mm W x D x H. Weight 3.9kg.

**IC430-10** Economy Frigmat<sup>®</sup>

## Dry Ice Storage Container

### Dry Ice Storage Container, Coolit

Designed to provide a rugged, stable container for large term storage of ice and dry ice on the bench. Leakproof, white polystyrene body with 25mm thick, double insulated wall filled with expanded polystyrene foam. Capacity 4 litres. Overall 215 x 285 x 285mm H x W x D. Supplied singly.

**IC465-10** Coolit

**IC465-14** Insulated lid for IC465-10



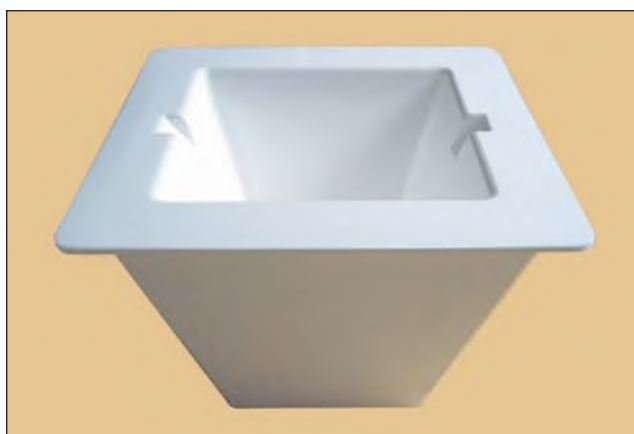
Safety Gloves



IC430-10



IC410-15 in use, IC410-25 is similar



IC465-10

# Ice Production and Storage

## JENCONS Igloo Containers

A pair of simple, lightweight insulated containers for temporary transport and storage of specimens, ice, or solid carbon dioxide.

Capacity	litres	3.5
Dimensions (overall top L x W x overall height)	mm	200 x 200 x 190
Weight	g	114

### Igloo Standard container

One piece vessel manufactured in flame retardant expanded polystyrene with separate plug type lid in the same material. Conveniently stackable due to tapering profile. Supplied singly.

**IC475-10** Igloo Standard

### Igloo Extra Tuff, leakproof container

Generally as the Igloo Standard but with a rigid polystyrene coating which increases the durability of the container thereby extending its usable life. The coating also renders the container leakproof to internal spillages during normal use. A polystyrene liner is provided to aid cleaning and improve hygiene.

**IC475-45** Igloo, Extra Tuff

## Ice Storage Vessels

### Ice Tray

Benchtop insulated tray designed to hold flaked ice, maintaining samples and reagents in optimal conditions. Manufactured in chemically resistant, easy-to-clean white polystyrene. Internal dimensions 60 x 200 x 125mm H x W x D, overall dimensions 80 x 244 x 165mm H x W x D. Supplied singly.

**IC477-35** Mini ice tray

**RA626-25** Accessory insert rack to hold 32 x 1.5ml microtubes

### Ice Buckets with lid, Azlon

Durable, rigid, polyurethane-skimmed foam with excellent insulation properties suitable for use with liquid nitrogen, dry-ice, water-ice and salt solutions (maintains ice for up to 36 hours at room temperature). With integral handles at the rim and flush fitting lid with recessed handle. Overall 185 x 330mm height x maximum width. Capacity 4.5 litres. Supplied singly in colours as indicated.

**IC485-08** IBB001P, black

**IC485-11** IBB002P, blue

**IC485-14** IBB003P, green



IC477 in use



IC475-10,

IC475-45



IC485

# Refrigeration

## Portable Refrigerators

For sample transport or vaccine and pharmaceutical storage in the field.

- ◆ 12V d.c. or 100-240V a.c. operation
- ◆ Temperature range +2°C to +8°C within ambient temperatures up to +32°C
- ◆ Digital temperature display with max./min. function and temperature fluctuation audio visual alarm
- ◆ Forced air circulation ensures minimal temperature fluctuation within the cabinet and rapid recovery if the lid is opened
- ◆ Compliant with RPSGB, NHS, WHO and RCVS requirements
- ◆ Durable, moulded, industrial plastic housing allows easy cleaning and a long working life

Model		SMP41	SMP65
Capacity	litres	41	65
Dimensions, exterior (interior, max*)	H, mm	400 (260)	450 (325)
	W, mm	610 (525)	725 (610)
	D, mm	385 (290)	510 (360)
Weight	kg	18	24

\*Chamber dimensions are maximum. Compartment has ledges and indents.

As described. Supplied with vehicle cigarette lighter connection for mobile use and mains cable lead. For 12V d.c. or 100-240V 50/60Hz a.c. supplies.

**RG140-41** SMP41

**RG140-65** SMP65



**RG140 in use**

## Portable Incubators

### Portable Incubator, Challenger MX25

Versatile, robust, rectangular portable incubator for small scale incubation of samples in the field or where use of a standard incubator is impractical. Temperature range ambient +5°C to +45°C, variation  $\pm 5^\circ\text{C}$  (at 20°C ambient). Capacity 5.2 litres. An overtemperature cut-out engages at +70°C. Solid-state heating and control electronics are sealed in the case and a heat reservoir chassis ensures even heat distribution and rapid heat recovery to set temperature. With moulded co-polymer case, transparent polycarbonate lid and spirit thermometer. With a separate, external, universal power supply for increased safety and operation on 100-240V a.c. supplies. An accessory cigar lighter plug and cable allows alternative 12V d.c. operation in the field. Usable internal dimensions 180 x 150 x 180mm W x D x H, overall 320 x 260 x 270mm W x D x H. Weight 1.9kg.

**IN085-75** Challenger MX25

**IN085-77** Cigar lighter plug cable for IN085-75

Diplides – see HT802 to HT808.

### Portable Incubator, Ranger MX45

Versatile, robust, portable incubator for small-scale incubation of samples in the field, or where use of a standard incubator is impractical. Temperature range ambient +5°C to +45°C with quickset reference points at +30°C and +37°C, variation  $\pm 0.5^\circ\text{C}$  (at 20°C ambient). Capacity 5.5 litres. An overall temperature cut-out engages at +70°C. Solid state heating and control electronics are sealed in the case and a heat reservoir chassis ensures even heat distribution and rapid heat recovery to set temperature. Rugged aluminium housing with moulded copolymer liner, transparent inner lid and spirit thermometer. With external, universal power supply for increased safety and operation on 100-240V supplies and cigar lighter plug and cable which allows alternative 12V d.c. operation in the field. Usable internal dimensions 300 x 140 x 125mm W x D x H, overall 350 x 280 x 200mm W x D x H. Weight 3.6kg.

**IN085-94** Ranger MX45



**IN085-75 in use**



**IN085-94**

# Refrigeration

## Laboratory Refrigerators

Designed for the safe storage of chemicals, volatile liquids and specimens. Maintain internal air temperature between +2°C and +10°C.

- ◆ Automatic defrost
- ◆ Integral door lock and 2 keys
- ◆ Digital controller with LED temperature readout to 0.1°C (-BT- models also incorporate Bluetooth connectivity and smart phone app for data monitoring and temperature control)
- ◆ Refrigerants:
  - R134a (RG200-16, -36 and -85 only)
  - R600a (RG200-47 and -68 only)
- ◆ "Spark-free" interior
- ◆ Adjustable shelf levels
- ◆ Audible and visual high and low temperature alarms
- ◆ Anti-microbial door handle

### Laboratory Refrigerators

As described. With "spark-free" interior, automatic defrost and door lock. The thermostat is adjustable to maintain internal air temperature between +2°C and +10°C. All models are supplied with wire shelves and drawers as indicated. For 230V 50Hz single phase supplies.

	Model	Gross cap. litres	H x W x D mm	Shelves/drawers supplied
<b>RG200-16</b>	LSFSR82	82	660 x 502 x 540	2/1
<b>RG200-36</b>	LSFSR107	107	830 x 495 x 620	2/1
<b>RG200-47</b>	LSFSR158BTUK	158	845 x 558 x 600	3/1
<b>RG200-68</b>	LSFSR288BTUK	288	1570 x 595 x 634	5/1
<b>RG200-85</b>	LR1607C	475	1688 x 695 x 910	5/0

## Laboratory Refrigerators/Freezer

Combined refrigerators/freezers for storage of temperature sensitive samples, volatile liquids, chemicals and poisons.

- ◆ Refrigerator range: +2°C to +10°C
- ◆ Freezer range: -12°C to -20°C
- ◆ "Spark-free" interior
- ◆ Integral door lock and 2 keys
- ◆ Digital controller with LED temperature readout
- ◆ Audible and visual high and low temperature alarms
- ◆ Adjustable shelf levels (refrigerator only)
- ◆ Antimicrobial door handle
- ◆ R600a refrigerant

### Laboratory Refrigerators/Freezer

As described. With "spark-free" interior, door lock and wire shelves and drawers as indicated. For 230V 50Hz single phase supplies.

	Model	Gross cap. Refrigerator litres	Gross cap. Freezer litres	H x W x D mm	Shelves/baskets supplied
<b>RG205-33</b>	LSC138UK	106	13	865 x 595 x 660	3/1

#### Notes:

Due to the large size and weight of these units, the user must ensure that suitable space area, floor loading and access for installation is available prior to ordering. The RG200- and RG205-series are installable by the user and delivery therefore will only be made to the customers unloading area.

R600a refrigerant models cannot be transported by airfreight due to the hazardous nature of this refrigerant. They can therefore only be exported by overland or seafreight.



RG200-36 in use



RG205-33 in use

# Refrigeration

## Laboratory Refrigerators/Freezers



- ◆ "Spark-free" interior, all electrical components located externally (not suitable for open vessels of inflammable liquids)
- ◆ Ranges: +0°C to +10°C - refrigerators, -12°C to -24°C - freezers (-18°C to -25°C - RG214-80) up to +32°C ambient
- ◆ Digital controller with display of actual temperature with high or low temperature, audio and visual alarms, Min./Max. temperature recall since last reset and door open alarm
- ◆ Integral door lock
- ◆ Automatic defrosting (refrigerators only)
- ◆ R134a refrigerant (except RG210-80 and RG214-80 which has R600a)
- ◆ Removable, wire shelves with adjustable height

	Gross cap. litres	H x W x D mm	Weight kg	Shelves supplied
<b>Laboratory Refrigerators</b>				
RG210-28	66	740 x 450 x 510	34	3
RG210-37	150	835 x 600 x 600	45	3
RG210-80	439	1875 x 600 x 700	93	6
<b>Laboratory Freezers</b>				
RG214-13	66	740 x 450 x 510	34	3
RG214-37	124	830 x 600 x 600	45	3
RG214-80	406	1875 x 600 x 700	97	6

As described. With "spark-free" interior and door lock. Supplied with shelves as indicated. RG210-80 and RG214-80 are mounted on castors for additional manoeuvrability. For 230V 50Hz single phase supplies.



RG210-37 in use, RG214 are similar

## Laboratory Refrigerator/Freezers



Combined refrigerator/freezers. Compact, storage solution for samples requiring refrigeration or freezing.

- ◆ "Spark-free" interior, all electrical components located externally
- ◆ Nominal operating temperatures:
  - refrigerator compartment: +4°C
  - freezer compartment: -20°C
- ◆ "Door open" alarm on refrigerator compartment
- ◆ Available with, or without, lockable door latches
- ◆ R600a refrigerant
- ◆ Refrigerator compartment automatic defrosting

### Combination Refrigerator/Freezers

As described. With "spark-free" interior, shelves in the refrigerator and baskets in the freezer compartments as indicated. Weight 68kg. For 230V 50Hz single phase supplies.

	Gross cap, litres		H x W x D mm	Lock	Shelves/baskets supplied
	Refrigerator	Freezer			
RG220-12	271	113	2000 x 595 x 650	x	5/3
RG220-17	271	113	2000 x 595 x 650	✓	5/3

### Note:

Due to the large size and weight of these units the user must ensure that suitable space area, floor loading and access for installation is available prior to ordering. They are installable by the user and delivery therefore will only be made to the customers unloading area.



RG220-17

# Refrigeration

## Laboratory Refrigerators and Freezers

### LIEBHERR

- ◆ Temperature ranges:
  - Refrigerators: +3 to +8°C
  - Freezer: -9 to -26°C
- ◆ Digital temperature control with temperature (over/under) and door-open alarms
- ◆ Alarm log of duration and date of last 3 events
- ◆ Forced air circulation provides excellent temperature stability (except freezer GG5210.740)
- ◆ Volt-free and RS485 interfaces for remote alarms/monitoring (except freezer GG5210.740)
- ◆ R600a refrigerant
- ◆ Self-closing, solid or glass door models available. Glass door models also have LED internal lighting

As described. For 220-240V 50Hz single phase supplies. Note: these models are not spark-free.

- RG222-05** LKUv 1610, +3 to +16°C, solid door
- RG222-08** LKUv 1613, +3 to +16°C, glass door
- RG222-14** LKv 3910, +3 to +16°C, solid door
- RG222-17** LKv 3913, +3 to +16°C, glass door
- RG222-33** GG5210.740, -14 to -28°C, solid door

#### Note:

Due to the large size and weight of these units the user must ensure that suitable space area, floor loading and access for installation is available prior to ordering. They are installable by the user and delivery therefore will only be made to the customers unloading area.

R600a and R290 refrigerant models cannot be transported by airfreight due to the hazardous nature of these refrigerants. They can therefore only be exported by overland or seafreight.

Model	Solid door Glass door	LKUv 1610 LKUv 1613	LKv 3910 LKv 3913	GG5210.740 —
Range	°C	+3 to +16	+3 to +16	-14 to -28
Capacity	litres	141	360	520
External	H, mm	820	1840	1864
	W, mm	600	600	750
	D, mm	615	615	750
Weight, net	kg	43	84	118
Shelves supplied		3	5	—*
Energy consumption in 24 hours	kWh	0.7 (1610)	0.9 (3910)	1.3
	kWh	1.0 (1612)	1.3 (3912)	

\*Fitted with 14 plastic bin drawers



RG222-05, RG222-08 is similar



RG222-14, RG222-17 is similar



# Refrigeration

## Laboratory Refrigerators/Freezers

### LIEBHERR

- ◆ Temperature ranges:
  - Refrigerators: +1 to +15°C (LKexv-series models only)  
+3 to +16°C (LK-/LC-series models only)
  - Freezer: -9 to -30°C (LCexv 4010 model only)
- ◆ Digital temperature display with high/low temperature and door-open alarms (except LKexv models which have temperature display only)
- ◆ Self-closing, solid door with integral door lock
- ◆ Atex certified "spark-free" interior
- ◆ Adjustable shelf levels with glass shelves
- ◆ R600a refrigerant
- ◆ Forced air circulation (LC- refrigerator compartment only)
- ◆ RG224-50 and RG224-70 additionally have a volt-free alarm and RS485 interfaces for monitoring temperature

Model		LKexv2600	LKexv 3600	LKexv 5400
Range	°C	+1 to +15 — all models		
Capacity	litres	240	333	554
External	H, mm	1250	1640	1640
	W, mm	600	600	750
	D, mm	610	610	730
Shelves supplied		4	5	5
Energy consumption in 24 hours	kWh	0.786	0.947	0.947

Model		LKUexv 1610*	LKEXv 3910*	LCexv 4010
Range	Refrigerator	°C	+3 to +16	+3 to +16
	Freezer	°C	—	—
Capacity	Refrigerator	litres	141	360
	Freezer	litres	—	—
External	H, mm	820	1840	2000
	W, mm	600	600	600
	D, mm	615	615	615
Shelves/baskets supplied		3/0	5/0	4/3
Energy consumption in 24 hours	kWh	0.9	0.9	1.8

As described. For 220-240V 50Hz single phase supplies.

**RG224-22** LKexv 2600, +1 to+15°C

**RG224-32** LKexv 3600, +1 to+15°C

**RG224-42** LKexv 5400, +1 to+15°C

**RG224-50** LKUexv 1610, +3 to+16°C

**RG224-70** LKEXv 3910, +3 to+16°C

**RG225-15** LCexv 4010, +3 to+16°C / -9 to -30°C

#### Note:

Due to the large size and weight of these units the user must ensure that suitable space area, floor loading and access for installation is available prior to ordering. They are installable by the user and delivery therefore will only be made to the customers unloading area.

R600a and R290 refrigerant models cannot be transported by airfreight due to the hazardous nature of these refrigerants. They can therefore only be exported by overland or seafreight.

\*With additional secondary safety thermostat to stop unit cooling below +2°C and access port.

**Inset: RG224-50**



**RG224-42**



**RG225-15**

# Refrigeration

## Laboratory Refrigerators and Freezers, Heavy-duty

### LIEBHERR

- ◆ Large capacity: 600 to 1427 litres
- ◆ Stainless steel interior (except LGPv6520 - chromium nickel steel) with plastic coated, adjustable height grid shelves
- ◆ Volt-free and RS485 interfaces for remote alarms/monitoring
- ◆ Self-closing, solid or glass door models available with integral door lock
- ◆ Programmable controller with datalogging function and digital temperature display with over/under temperature and door-open audible and visual alarms
- ◆ Forced air circulation (except LGPv6520)
- ◆ Mounted on castors (two with lock)

Model	LKPv- LGPv-	6520 6520	6523 —	8420 —	1420 1420	1423 —
Range	LKPv LGPv	°C -2 to +16 °C -35 to -10	0 to +16 —	-2 to +16 —	-2 to +16 -26 to -10	0 to +16 —
Capacity		litres 600	600	856	1427	1427
Refrigerant	LKPv LGPv	R290 R290	R290 —	R290 —	R290 R290	R290 —
External		H, mm 2150 W, mm 700 D, mm 830	2150 700 830	2150 790 980	2150 1430 830	2150 1430 830
Shelves supplied		4	5	4	8	8
Doors		1 x solid	1 x glass	1 x solid	2 x solid	2 x glass
Interior LED lighting		no	yes	no	no	yes
Energy consumption in 24 hours						
	LKPv	kWh 1.8	2.7	2.4	2.3	3.9
	LGPv	kWh 4.7	—	—	8.9	—

As described. For 220-240V 50Hz single phase supplies.

- RG228-15** LKPv6520, -2 to +16°C
- RG228-30** LKPv6523, 0 to +16°C
- RG228-40** LKPv8420, -2 to +16°C
- RG228-45** LKPv1420, -2 to +16°C
- RG228-60** LKPv1423, 0 to +16°C

- RG228-77** LGPv6520, -35 to -10°C
- RG228-85** LGPv1420, -26 to -10°C

#### Note:

Due to the large size and weight of these units the user must ensure that suitable space area, floor loading and access for installation is available prior to ordering. They are installable by the user and delivery therefore will only be made to the customers unloading area.

R600a and R290 refrigerant models cannot be transported by airfreight due to the hazardous nature of these refrigerants. They can therefore only be exported by overland or seafreight.



RG228-15



RG228-45

# Refrigeration

## Pharmacy Refrigerators



Specifically designed for the storage of vaccines, insulin, temperature-sensitive samples and pharmaceuticals. Maintain internal air temperature between +2°C and +8°C.

- ◆ Choice of controller:
  - Control (RG230-series) — digital controller monitoring internal air temperature only. Max./min. memory and audio-visual alarm
  - Control Plus (RG232-series) — digital controller monitoring internal air and load (product) temperatures using additional glycol-immersed probe (-BT-models also incorporate Bluetooth connectivity and smart phone app for data monitoring and temperature control). Additionally have a 16mm porthole allowing further auxiliary probes to access the internal chamber
- ◆ Forced air cooling for temperature stability and rapid temperature recovery after door opening
- ◆ Audio-visual alarm signal if internal temperature exceeds operating range.
- ◆ Integral door lock with 2 keys and open door alarm (except 41 and 47 litre models)
- ◆ Automatic defrost
- ◆ Refrigerants:
  - R134a (RG230-models only)                      — R600a (RG232-models only)
- ◆ Adjustable shelf levels
- ◆ Glass door and built-in illumination models available
- ◆ Anti-microbial door handle

As described. With solid or glass door, door lock, adjustable wire shelves, and wire base basket as indicated. For 230V 50Hz single phase supplies.

	<i>Model</i>	<i>Gross cap. litres</i>	<i>H x W x D, mm</i>	<i>Shelves/baskets supplied</i>	<i>Internal light</i>
<b>Solid door models</b>					
<b>RG230-13</b>	PESR41UK	41	705 x 380 x 500	2/0	No
<b>RG230-24</b>	PESR82UK	82	660 x 502 x 540	2/1	No
<b>RG230-27</b>	PESR107UK	107	835 x 505 x 620	2/1	No
<b>RG230-58</b>	PE1607C	444	1688 x 685 x 910	5/0	No
<b>RG232-14</b>	PPSR47BTUK	47	565 x 475x 445	2/0	Yes
<b>RG232-31</b>	PPSR158BTUK	158	850 x 595 x 660	3/1	Yes
<b>RG232-47</b>	PPSR310BTUK	310	1500 x 595 x 660	5/1	Yes
<b>RG232-51</b>	PPSR400BTUK	400	1935 x 595 x 660	6/1	Yes
<b>Glass door models</b>					
<b>RG230-62</b>	PEGR41UK	41	705 x 380 x 500	2/0	No
<b>RG230-66</b>	PEGR82UK	82	660 x 502 x 540	2/1	No
<b>RG230-68</b>	PEGR107UK	107	835 x 505 x 620	2/1	No
<b>RG230-94</b>	PG1607C	444	1688 x 685 x 910	5/0	No
<b>RG232-61</b>	PPGR47BTUK	47	565 x 480 x 505	2/0	Yes
<b>RG232-71</b>	PPGR158BTUK	158	850 x 595 x 660	3/1	Yes
<b>RG232-81</b>	PPGR310BTUK	310	1500 x 595 x 660	5/1	Yes
<b>RG232-87</b>	PPGR400BTUK	400	1935 x 595 x 660	6/1	Yes

**Note:**  
Due to the large size and weight of these units the user must ensure that suitable space area, floor loading and access for installation is available prior to ordering. They are installable by the user and delivery therefore will only be made to the customers unloading area.  
  
R600a refrigerant models cannot be transported by airfreight due to the hazardous nature of this refrigerant. They can therefore only be exported by overland or seafreight.



**RG230-24**



**RG232-70**

# Refrigeration

## Pharmacy Refrigerators



For the storage of medicines and vaccines under controlled conditions in dispensaries, surgeries and in general use. Maintain internal air temperature between +2°C and +8°C.

- ◆ Intellicold™ touchscreen controller ensures accuracy and consistency within the specified temperature range whilst only using the power necessary to do so, giving substantially lower running costs
- ◆ Built-in temperature display with max./min. recordings and continuous readout, high/low temperature alarm with reset, power failure and "door open" alarms
- ◆ Fan assisted air circulation provides enhanced uniformity
- ◆ Conform with UK Dept. of Health "Green Book", Royal Pharmaceutical Society (RPS), General Pharmaceutical Council (GPHC) and National Travel Health Network and Centre (NaTHNaC) guidelines
- ◆ Integral door lock and internal lighting (glass door models have independent external light switch)
- ◆ Remote alarm contacts
- ◆ 13 month temperature data storage with expansion via SD card slot (accessory coded SD card available)
- ◆ R134a, CFC-, HCFC- and ammonia-free refrigerant and environmentally friendly insulation used
- ◆ Moulded plastic interior with enamelled steel exterior

### Pharmacy Refrigerators

As described. With automatic defrost, lockable door, Intellicold™ touchscreen controller, fan air circulation, wire shelves and solid or glass-paned doors as indicated. For 230V 50Hz single phase supplies.

	Gross cap. litres	H x W x D mm	Weight kg	Shelves supplied
<b>Solid door models</b>				
<b>RG270-17</b>	36	540x 450 x 510	30	2
<b>RG270-29</b>	66	735 x 450 x 510	34	3
<b>RG270-37</b>	150	835 x 600 x 600	51	3
<b>RG270-47</b>	340	1500 x 600 x 700	79	6
<b>RG270-52</b>	440	1865 x 600 x 700	93	6
<b>RG270-71</b>	543	1960 x 750 x 755	100	5
<b>Glass door models</b>				
<b>RG270-72</b>	150	835 x 600 x 600	54	3
<b>RG270-89</b>	340	1500 x 600 x 700	91	6
<b>RG270-92</b>	440	1865 x 600 x 700	105	6
<b>RG270-96</b>	543	1960 x 750 x 755	100	5

**RG270-99** Accessory coded SD card for RG270-series only, allows up to 13 months data storage

#### Note:

Due to the large size and weight of these units the user must ensure that suitable space area, floor loading and access for installation is available prior to ordering. They are installable by the user and delivery therefore will only be made to the customers unloading area.



RG270-37 in use



RG270-72 in use

# Refrigeration

## Pharmacy Refrigerators

### LIEBHERR

For vaccine and medicine storage in pharmaceutical dispensaries, surgeries, and other clinical areas. Internal temperature  $+5^{\circ}\text{C} \pm 3\text{K}$ .

- ◆ Audible and visual low/high temperature and door opening alarms
- ◆ Digital display with min./max. memory
- ◆ Safety thermostat to ensure temperature does not fall below  $2^{\circ}\text{C}$
- ◆ Volt-free and RS485 serial interface
- ◆ Power alarm failure indicator
- ◆ Access port for independent temperature probe
- ◆ Seamless plastic inner liner for easy cleaning
- ◆ Lockable solid or glass door models available. Glass door models also have LED internal lighting
- ◆ R600a refrigerant and environmentally friendly insulation used

As described. With solid or glass door, door lock and adjustable close-mesh wire shelves as indicated. For 220-240V 50Hz single phase supplies.

	Model	Gross cap. litres	H x W x D, mm	Shelves supplied	Internal light
<b>Solid door models</b>					
	<b>RG285-10</b> MkUv1610	141	820 x 600 x 615	3	No
	<b>RG285-30</b> Mkv3910	360	1840 x 600 x 615	5	No
<b>Glass door models</b>					
	<b>RG285-60</b> MkUv1613	141	820 x 600 x 615	3	Yes
	<b>RG285-80</b> Mkv3913	360	1840 x 600 x 615	5	Yes

#### Note:

Due to the large size and weight of these units the user must ensure that suitable space area, floor loading and access for installation is available prior to ordering. They are installable by the user and delivery therefore will only be made to the customers unloading area.

R600a refrigerant models cannot be transported by airfreight due to the hazardous nature of this refrigerant. They can therefore only be exported by overland or seafreight.



RG285-10



RG285-80

# Refrigeration

## CryoPorter DP-80, Arctiko

A portable, low-temperature, personal freezer allowing access to samples at the bench.

- ◆ Range -80°C to 0°C with temperature stability:  $\pm 0.2^\circ\text{C}$
- ◆ Digital controller with display, adjustable high/low temperature alarms and easy operation
- ◆ Safety cut-outs for over/undertemperature and excessive supply current
- ◆ Stirling technology cooling system without compressor, for quiet operation with low power usage
- ◆ Operates on 12V d.c. and 100-240V a.c. supplies
- ◆ Utilises accessory aluminium blocks to hold a variety of sample tubes (freezer holds one block)

As described. Overall 230 x 262 x 390mm W x D x H, internal chamber: 135 x 135 x 80mm W x D x H. Weight: 10kg. For 12V d.c. or 100-240V 50/60Hz a.c. supplies. Without insert block.

**RG320-10** DP-80

### Accessory blocks for RG320-10

Aluminium, with drilled apertures to hold tubes as indicated.

**RG322-04** DPB-0296, for 96 x 0.2ml (0.6mm diameter) PCR tubes

**RG322-08** DPB-0548, for 48 x 0.5ml (0.8mm diameter) PCR tubes

**RG322-12** DPB-1548, for 48 x 1.5ml (11mm diameter) microtubes

**RG322-16** DPB-1840, for 40 x 1.8ml (12.8mm diameter) cryostorage vials

**RG322-20** DPB-2040, for 40 x 2.0ml (10.8mm diameter) cryostorage vials

**RG322-24** DPB-0001, empty tray, internal W x D x H: 115.5 x 83 x 30mm

## Benchtop Freezer MUF40, Arctiko

- ◆ Range -80°C to -60°C with temperature stability:  $\pm 1.0^\circ\text{C}$
- ◆ Single compressor cooling system offers low energy consumption and low noise during operation
- ◆ Digital setting, with display, visual and audible high/low temperature alarms, power failure alarm and 48 hour battery back-up of temperature display and alarms in the event of power failure
- ◆ Stainless steel interior
- ◆ Locking door
- ◆ Remote alarm contacts
- ◆ EP88, CFC-free refrigerant

<i>Model</i>		MUF40
<i>Temperature range</i>	$^\circ\text{C}$	-60 to -80
<i>Capacity, litres</i>		35
<i>Shelves supplied</i>		1
<i>Dimensions, W x D x H</i>	<i>Internal:</i>	336 x 356 x 295mm
	<i>External:</i>	495 x 660 x 680mm
<i>Weight</i>	<i>kg</i>	56

As described. Supplied with one removable shelf. For 230V 50/60Hz a.c. supplies.

**RG325-15** MUF40



**RG320 with RG322**



**RG325**

# Refrigeration

## Ultra-low Temperature Chest Freezers

- ◆ Choice of temperature ranges:
  - -10°C to -45°C
  - -60°C to -85°C
- ◆ Unique refrigeration system with single-stage, Danfoss® compressor and patented refrigerant used
- ◆ Recessed control panel with keypad setting and bright, LED temperature display
- ◆ Low loading height
- ◆ R404a refrigerant
- ◆ Built-in overtemperature safety system with audible alarm
- ◆ Quiet operation, <51dB
- ◆ PVC laminated, galvanised steel interior with steel lid and 100mm polyurethane insulation
- ◆ Double seal lid gaskets and sublids
- ◆ Counterbalanced lid with locking handle
- ◆ Defrost water drain hole provided
- ◆ Battery back-up maintains settings and alarms
- ◆ Mounted on heavy-duty, 50mm diameter castors for manoeuvrability
- ◆ Low energy consumption

Cat. No.	Temp. range -10 to -45°C* Temp. range -60 to -85°C*	<b>RG416-07</b> <b>RG416-42</b>	<b>RG416-12</b> <b>RG416-44</b>	<b>RG416-17</b> —
Capacity, maximum	litres	130	299	416
	2ml cryotubes <sup>#</sup>	8400	21600	31500
Dimensions, H x W x D	External, mm	920 x 725 x 730	920 x 1305 x 730	920 x 1705 x 730
	Internal, mm	650 x 320/520 <sup>†</sup> x 450	650 x 900/1100 <sup>†</sup> x 450	650 x 1300/1500 <sup>†</sup> x 450
Weight	kg	56	78	94

\*At ambient temperatures up to +25°C (+30°C - 130 litre models only) and voltage fluctuation <±10%. Only suitable for 50Hz supplies.

<sup>#</sup>Using RG416 racks, 50mm high cryoboxes with 10 x 10 dividers.

<sup>†</sup>There is a raised ledge, 250 x 200mm H x D at the right side of the chamber base to accommodate the compressor housing beneath.

As described. For 220-230V 50Hz single phase supplies. For use in ambients up to +25°C (+30°C - 130 litre models only).

- RG416-07** -10°C to -45°C, 130 litres
- RG416-12** -10°C to -45°C, 299 litres
- RG416-17** -10°C to -45°C, 416 litres
- RG416-42** -60°C to -85°C, 130 litres
- RG416-44** -60°C to -85°C, 299 litres

### Accessory Racks

Stainless steel. For use particularly with cryogenic boxes up to maximum dimensions 135 x 135 x 51mm L x W x H. With handle and retaining bar (to secure boxes during transportation). Dimensions stated are overall W x D x H. Supplied singly and empty.

	Dimensions, mm	Shelves
<b>RG416-90</b>	140 x 140 x 335	6
<b>RG416-95</b>	140 x 140 x 610	11

### Note:

Maximum rack capacities for RG416 chest freezers are as follows\*

130 litres freezer will hold 3 x RG416-90 and 6 x RG416-95

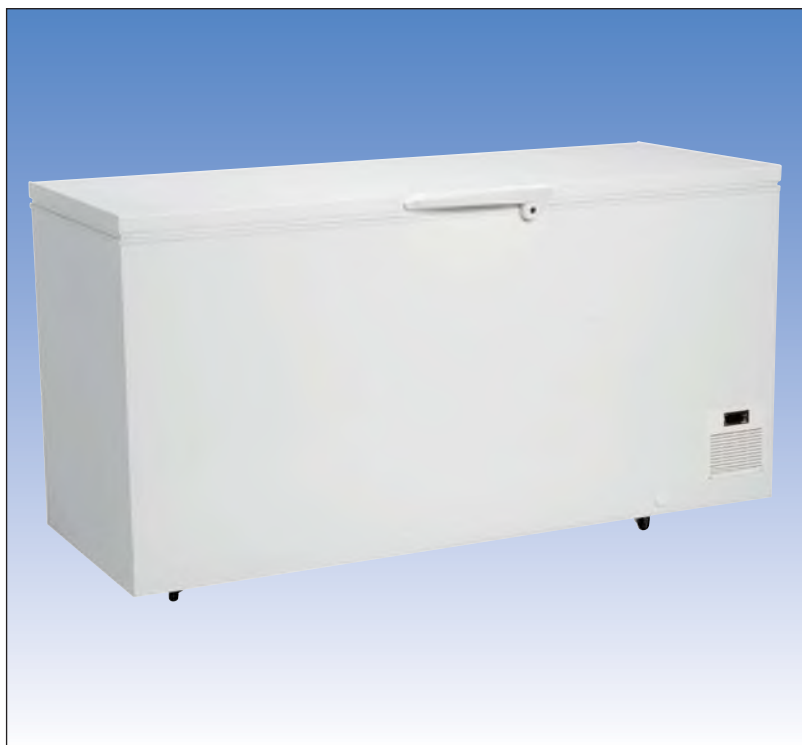
299 litres freezer will hold 3 x RG416-90 and 18 x RG416-95

416 litres freezer will hold 3 x RG416-90 and 27 x RG416-95

\*Other configurations are possible, please advise your requirements.



**RG416-07**



**RG416-17**

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