

IMPORTANT USER INFORMATION

PRIOR TO OPENING INNER DOOR, REMOVE AND DISCARD THE BLACK INSULATED COMPONENTS THAT HAVE BEEN INSERTED INTO INNER DOOR KNOB SLOTS.



Cardinal Health™ Ultra-Low Freezers

Protect your samples with
ultra-low temperature storage



CardinalHealth
Essential to care™

Ultra-low Temperature Freezers

When it comes to protecting samples requiring ultra-low temperatures, you need a reliable and secure solution.

Cardinal Health offers a new line of -86°C upright freezers designed for **ease of use** as well as **dependable** sample protection.

*U.S. Environmental Protection Agency's Significant New Alternatives Policy (SNAP). www.epa.gov/snap/snap-regulations

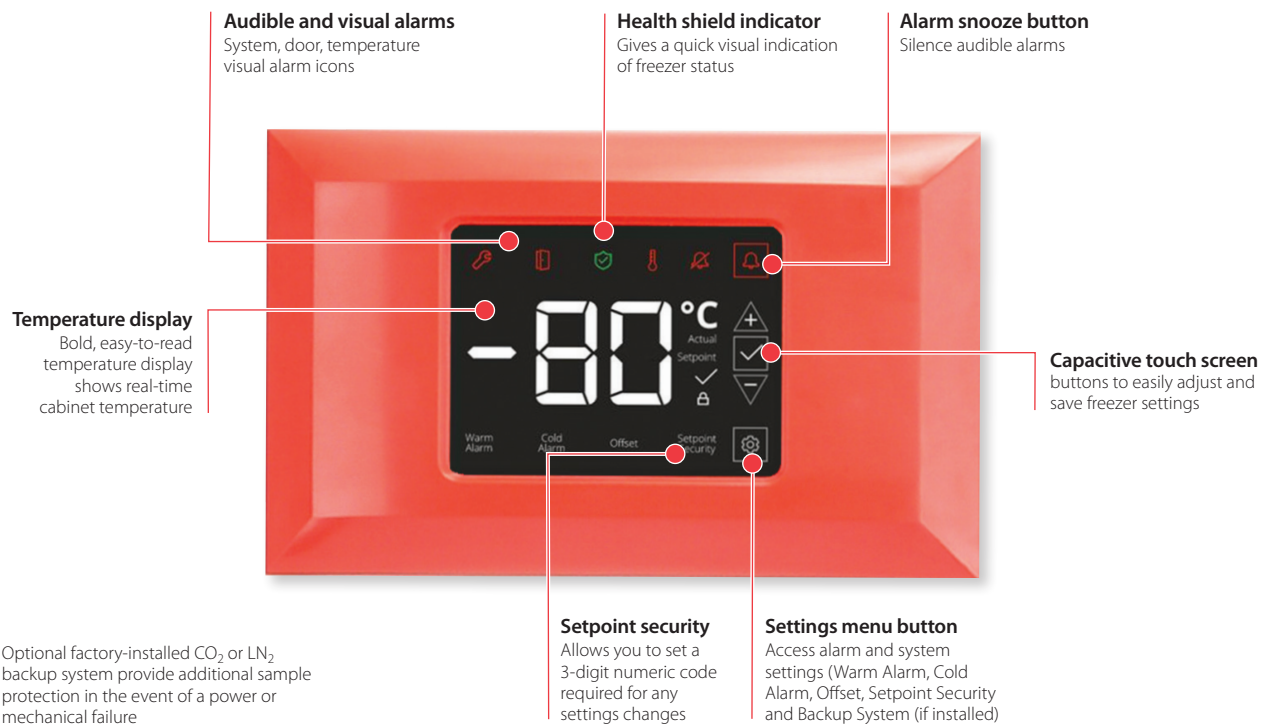
¹ Typical freezer data based on internal testing with freezer setpoint at -80°C and ambient temperature at 20°C . Performance data varies across freezer size and electrical specifications.

² All data based on Thermo Fisher Scientific data unless otherwise noted. Data on file.

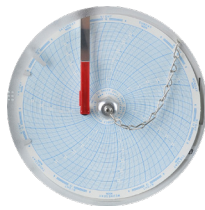
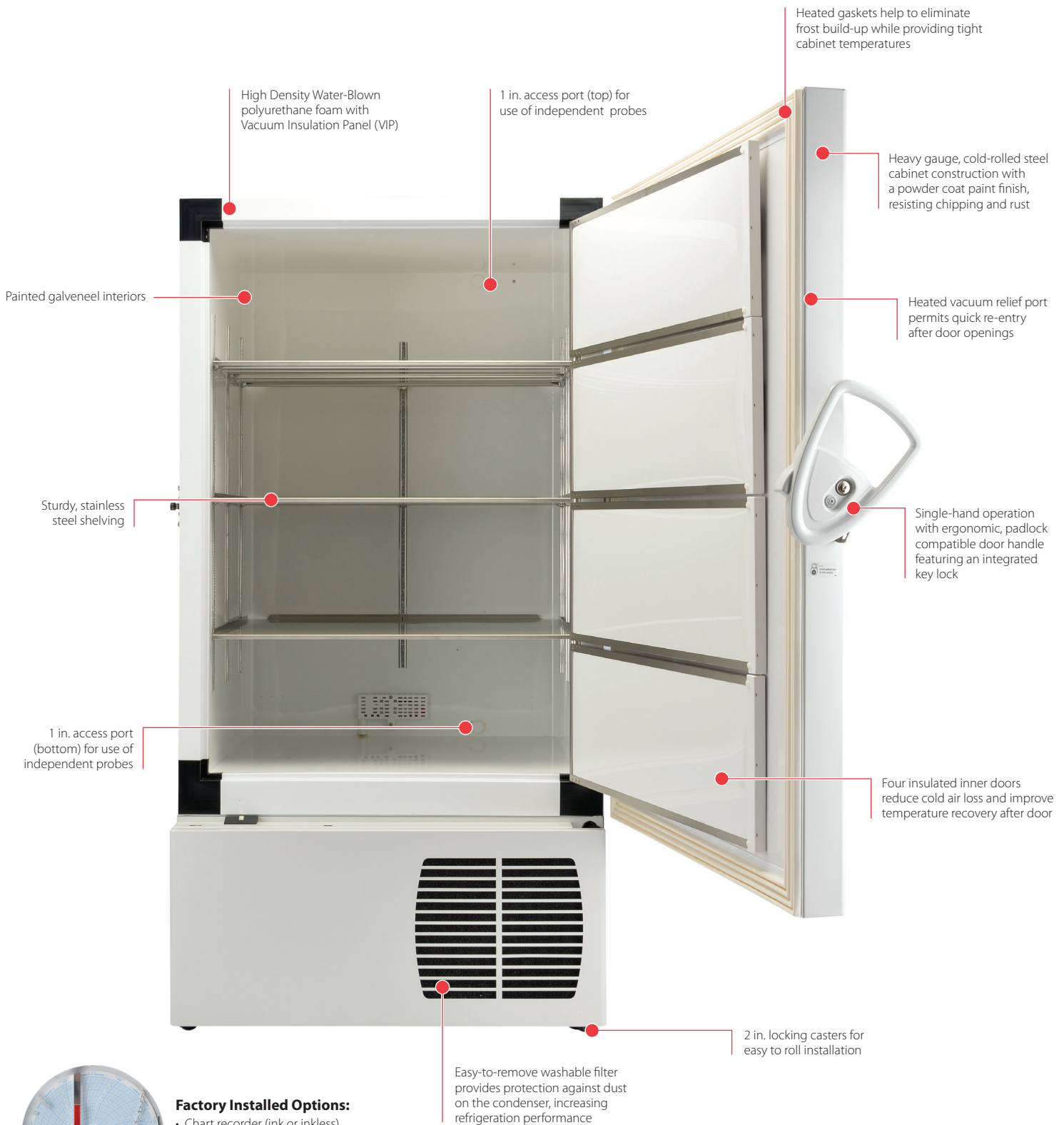
³ FDA Class II Models are listed under product code KSE, regulation number 864.9700. This unit is not intended for use in classified hazardous locations, nor to be used for the storage of flammable inventory. Reference: AABB - Technical Manual 17th Ed., page 273,274. STANDARDS FOR TISSUE BANKING 14th Ed., Section E, E3.300, E3.310, Table E3.331. Note for clarity: The 'Bone' is the Osteoarticular Graft, a weight bearing allograft with intact articular surfaces, consisting of a joint with associated soft tissue and bone. STANDARDS FOR TISSUE BANKING 14th Ed., Section page 8.

- The sustainable, SNAP* compliant choice using natural refrigerants
- Lower energy and HVAC costs
- Choose from four upright models with the capacity to store as little as 300 or up to 600 2-inch cryoboxes
- All freezers feature a hydrocarbon refrigeration system providing sustainable performance with reliability you can count on
- Low peak variation helps ensure sample temperature protection throughout entire cabinet and fast door opening recovery in as little as 11 minutes¹
- Quiet enough to reside directly in the laboratory; at just 50 dBA, the sound is comparable to a home refrigerator²
- Decrease storage footprint up to 25%
- Two options - General purpose versions or FDA Class II Medical Device for Storage of blood, plasma, tissue, skin and bone³
- Two year parts and labor warranty

Eye level information center for simplified operation



Ergonomically designed for sample protection and ease-of-use



Factory Installed Options:

- Chart recorder (ink or inkless)
- CO₂ back-up system
- LN₂ back-up system

Ultra-low Temperature Freezers

Cardinal Health™ –86°C Ultra-Low Temperature Freezers

Features and Benefits:

- Reduced/low peak variation to protect sample temperature¹
- Lower energy consumption and HVAC costs
- Low noise, like your home refrigerator²
- Fast door opening recovery
- Four capacities: 300, 400, 500 and 600, 2-inch box
- Two voltages: 115 V, 60 Hz and 208–230 V, 60 Hz
- Environmentally-friendly, water-blown foam insulation compliant with EPA SNAP
- FDA Class II medical device for storage of blood, plasma, tissue, skin and bone.³

User Interface and Ergonomic Design:

- Plug in and go, no setup required.
- 5.6 in. with bold temperature display and capacitive touch button
- Alarm settings, setpoint security passcode and padlock-compatible doors
- Single-hand door operation, quick maintenance with easy access filter/grill assembly
- Four inner doors to reduce heat impacts on samples during normal use



Upright Freezers Temperature range: –50°C to –86°C

General Purpose Cat. No.	FDA Class II Cat. No.	Cu. Ft. (2 in. Cryobox)	Voltage (Hz)	Amps/Breaker (Plug)	Max. Shelf Weight lbs.	Int. Dimensions D x W x H in.	Ext. Dimensions D x W* x H in.	Ship Wt. lbs.
CAR30086FA	CAR30086LA	14.9 (300)	115 (60)	12.6/20 (NEMA 5-20)	125	28.3 x 17.8 x 51.2	38.5 x 23 x 78	712
CAR30086FD	CAR30086LD	14.9 (300)	208–230 (60)	5.6/15 (NEMA 6-15)	125	28.3 x 17.8 x 51.2	38.5 x 23 x 78	712
CAR40086FA	CAR40086LA	19.4 (400)	115 (60)	13.0/20 (NEMA 5-20)	165	28.3 x 23.1 x 51.2	38.5 x 28.3 x 78	687
CAR40086FD	CAR40086LD	19.4 (400)	208–230 (60)	5.9/15 (NEMA 6-15)	165	28.3 x 23.1 x 51.2	38.5 x 28.3 x 78	687
CAR50086FA	CAR50086LA	24.1 (500)	115 (60)	12.5/20 (NEMA 5-20)	205	28.3 x 28.8 x 51.2	38.5 x 34 x 78**	734
CAR50086FD	CAR50086LD	24.1 (500)	208–230 (60)	5.0/15 (NEMA 6-15)	205	28.3 x 28.8 x 51.2	38.5 x 34 x 78**	734
CAR60086FA	CAR60086LA	28.8 (600)	115 (60)	12.7/20 (NEMA 5-20)	245	28.3 x 34.4 x 51.2	38.5 x 39.6 x 78**	820
CAR60086FD	CAR60086LD	28.8 (600)	208–230 (60)	6.2/15 (NEMA 6-15)	245	28.3 x 34.4 x 51.2	38.5 x 39.6 x 78**	820

* Allowance for handle and hinge, add 4.2 in to cabinet width

** Doorway width clearance is 34.5 in. for CAR50086 and CAR60086

¹ Typical freezer data based on internal testing with freezer setpoint at –80°C and ambient temperature at 20°C. Performance data varies across freezer size and electrical specific cations.

² All data based on internal data unless otherwise noted. Data on file.

³ FDA Class II Models are listed under product code KSE, regulation number 864.9700. This unit is not intended for use in classified hazardous locations, nor to be used for the storage of flammable inventory. Reference: AABB - Technical Manual 17th Ed., page 273,274. STANDARDS FOR TISSUE BANKING 14th Ed., Section E, E3.300, E3.310, Table E3.331. Note for clarity: The 'Bone' is the Osteoarticular Graft, a weight bearing allograft with intact articular surfaces, consisting of a joint with associated soft tissue and bone. STANDARDS FOR TISSUE BANKING 14th Ed., Section page 8.

Chest Freezer Temperature range: –50°C to –86°C

Cat. No.	Cu. Ft. (2 in. Cryobox)	Voltage (Hz)	Amps/Breaker (Plug)	Int. Dimensions D x W x H in.	Ext. Dimensions D x W* x H in.	Ship Wt. lbs.
CARC0386A†	3 (63)	115 (60)	11.5/15 (NEMA 5-15)	18.5 x 18.5 x 16.5	32.3 x 28.7 x 43.8	432

† Note: 3 cu. ft. chest freezer is not SNAP compliant

Ultra-low Freezer Packages

General Purpose Ultra-low freezer with two shelves of sliding drawer racks

Cat. No.	Package Description	Box Capacity	Voltage	Package for Model #
CAR386FARK	Two shelves of sliding drawer racks and 2 inch boxes	300 box capacity	115 V, 60 Hz	CAR30086FA
CAR386FDRK	Two shelves of sliding drawer racks and 2 inch boxes	300 box capacity	208–230 V, 60 Hz	CAR30086FD
CAR486FARK	Two shelves of sliding drawer racks and 2 inch boxes	400 box capacity	115 V, 60 Hz	CAR40086FA
CAR486FDRK	Two shelves of sliding drawer racks and 2 inch boxes	400 box capacity	208–230 V, 60 Hz	CAR40086FD
CAR586FARK	Two shelves of sliding drawer racks and 2 inch boxes	500 box capacity	115 V, 60 Hz	CAR50086FA
CAR586FDRK	Two shelves of sliding drawer racks and 2 inch boxes	500 box capacity	208–230 V, 60 Hz	CAR50086FD
CAR686FARK	Two shelves of sliding drawer racks and 2 inch boxes	600 box capacity	115 V, 60 Hz	CAR60086FA
CAR686FDRK	Two shelves of sliding drawer racks and 2 inch boxes	600 box capacity	208–230 V, 60 Hz	CAR60086FD

General Purpose Ultra-low freezer with factory installed chart recorder and two shelves of sliding drawer racks

Cat. No.	Package Description	Box Capacity	Voltage	Package for Model #
CAR5FARCR	Chart recorder - 2 shelves of sliding drawer racks and 2 inch boxes	500 box capacity	115 V, 60 Hz	CAR50086FA
CAR5FDRCR	Chart recorder - 2 shelves of sliding drawer racks and 2 inch boxes	500 box capacity	208–230 V, 60 Hz	CAR50086FD
CAR6FARCR	Chart recorder - 2 shelves of sliding drawer racks and 2 inch boxes	600 box capacity	115 V, 60 Hz	CAR60086FA
CAR6FDRCR	Chart recorder - 2 shelves of sliding drawer racks and 2 inch boxes	600 box capacity	208–230 V, 60 Hz	CAR60086FD

General Purpose Ultra-low freezer with factory installed CO₂ back-up and two shelves of sliding drawer racks

Cat. No.	Package Description	Box Capacity	Voltage	Package for Model #
CAR4FARCO	CO ₂ backup system - 2 shelves of sliding drawer racks and 2 inch boxes	400 box capacity	115 V, 60 Hz	CAR40086FA
CAR4FDRCO	CO ₂ backup system - 2 shelves of sliding drawer racks and 2 inch boxes	400 box capacity	208–230 V, 60 Hz	CAR40086FD
CAR5FARCO	CO ₂ backup system - 2 shelves of sliding drawer racks and 2 inch boxes	500 box capacity	115 V, 60 Hz	CAR50086FA
CAR5FDRCO	CO ₂ backup system - 2 shelves of sliding drawer racks and 2 inch boxes	500 box capacity	208–230 V, 60 Hz	CAR50086FD
CAR6FARCO	CO ₂ backup system - 2 shelves of sliding drawer racks and 2 inch boxes	600 box capacity	115 V, 60 Hz	CAR60086FA
CAR6FDRCO	CO ₂ backup system - 2 shelves of sliding drawer racks and 2 inch boxes	600 box capacity	208–230 V, 60 Hz	CAR60086FD

General Purpose Ultra-low freezer with factory installed LN₂ back-up and two shelves of sliding drawer racks

Cat. No.	Description	Box Capacity	Voltage	Package for Model #
CAR4FARLN	LN ₂ backup system - 2 shelves of sliding drawer racks and 2 inch boxes	400 box capacity	115 V, 60 Hz	CAR40086FA
CAR4FDRLN	LN ₂ backup system - 2 shelves of sliding drawer racks and 2 inch boxes	400 box capacity	208–230 V, 60 Hz	CAR40086FD
CAR5FARLN	LN ₂ backup system - 2 shelves of sliding drawer racks and 2 inch boxes	500 box capacity	115 V, 60 Hz	CAR50086FA
CAR5FDRLN	LN ₂ backup system - 2 shelves of sliding drawer racks and 2 inch boxes	500 box capacity	208–230 V, 60 Hz	CAR50086FD
CAR6FARLN	LN ₂ backup system - 2 shelves of sliding drawer racks and 2 inch boxes	600 box capacity	115 V, 60 Hz	CAR60086FA
CAR6FDRLN	LN ₂ backup system - 2 shelves of sliding drawer racks and 2 inch boxes	600 box capacity	208–230 V, 60 Hz	CAR60086FD

Ultra-low Freezer Options and Accessories

Options for Ultra-Low Temperature Freezers

Model CAR30086 Cat. No.	Model CAR40086 Cat. No.	Model CAR50086 Cat. No.	Model CAR60086 Cat. No.	Installation	Description
N/A	N/A	CRP4567	CRP4567	Factory Installed	Chart Recorder (Ink) 6 in. (15.2 cm), seven day inkless recorder, –100°C to +38°C, +2°C resolution Models for CAR300 and CAR40 are stand alone
6383-6A* 6383-6D*	6383-6A* 6383-6D*	FCRP5LE	FCRP6LE	Field Installed**	
N/A	N/A	CR4567	CR4567	Factory Installed	Chart Recorder (Inkless) 6 in. (15.2 cm), seven day inkless recorder, –115°C to +50°C, +5°C resolution
N/A	N/A	FCR500LE	FCR600LE	Field Installed**	
N/A	CO4567	CO4567	CO4567	Factory Installed	CO₂ Backup System Maintains temperature down to –67°C with CO ₂ Models for CAR300 are stand alone
FCO300A* FCO300D*	FCO456LEA* FCO456LED*	FCO456LEA* FCO456LED*	FCO456LEA* FCO456LED*	Field Installed**	
N/A	LN4567	LN4567	LN4567	Factory Installed	LN₂ Backup System Maintains temperature down to –80°C with liquid nitrogen Models for CAR300 are stand alone
FLN300A* FLN300D*	FLN456LEA* FLN456LED*	FLN456LEA* FLN456LED*	FLN456LEA* FLN456LED*	Field Installed**	
S125V20ATL	S125V20ATL	S125V20ATL	S125V20ATL	Factory Installed	Twist Lock Plug NEMA L5-20P for 115 V, 60 Hz
TL125V20A	TL125V20A	TL125V20A	TL125V20A	Field Installed**	
S230V15ATL	S230V15ATL	S230V15ATL	S230V15ATL	Factory Installed	Twist Lock Plug NEMA L6-15P for 208–230 V, 60 Hz
TL230V15A	TL230V15A	TL230V15A	TL230V15A	Field Installed**	
S230V20ATL	S230V20ATL	S230V20ATL	S230V20ATL	Factory Installed	Twist Lock Plug NEMA L6-20P for 208–230 V, 60 Hz
TL230V20A	TL230V20A	TL230V20A	TL230V20A	Field Installed**	

*A = 115 V/60 Hz (NEMA 5-20 plug), D = 208-230 V/60 Hz (NEMA 6-15 plug)

**Note: field installed must be installed by a qualified professional

Accessories for Ultra-Low Temperature Freezers

Model CAR30086 Cat. No.	Model CAR40086 Cat. No.	Model CAR50086 Cat. No.	Model CAR60086 Cat. No.	Description
SK300	SK400	SK500	SK600	Shelf Kit - includes one shelf and shelf support clips
CA17020	CA17020	CA17020	CA17020	Chart paper ink (pack of 50)
N/A	N/A	R3894-6	R3894-6	Chart paper inkless (pack of 50)
AF34567LE	AF34567LE	AF34567LE	AF34567LE	Replacement air filter
CA400159	CA400159	CA400159	CA400159	Replacement back-up battery
TFS6903	TFS6903	TFS6903	TFS6903	Alarm Delay Module —eliminates nuisance alarms due to intermittent or transitory conditions. Adjustable delay requires alarm condition to exist for user defined period before signal is released to monitoring system.

Ultra-low Freezer Racks

Racks for Ultra-Low Temperature Freezers

Cat. No.	Description	Dimensions H x W x D in.	Storage	Model CAR30086	Model CAR40086	Model CAR50086	Model CAR60086
Racks for 2 in. boxes							
CA920090	Sliding drawer rack	11.9 x 5.5 x 26.9	Boxes per rack	25	25	25	25
			Racks per shelf	3	4	5	6
			Racks per freezer	12	16	20	24
			Boxes per freezer	300	400	500	600
1950520	Adjustable side access rack	11.6 x 5.4 x 26.75	Boxes per rack	25	25	25	25
			Racks per shelf	3	4	5	6
			Racks per freezer	12	16	20	24
			Boxes per freezer	300	400	500	600
Racks for 3 in. boxes							
CA920091	Sliding drawer rack	11.9 x 5.5 x 26.9	Boxes per rack	15	15	15	15
			Racks per shelf	3	4	5	6
			Racks per freezer	12	16	20	24
			Boxes per freezer	180	240	300	360
Racks for Microplates							
1950592	Side access rack with locking rod for standard or deepwell	11.9 x 5.5 x 25.7	Boxes per rack	147	147	147	147
			Racks per shelf	3	4	5	6
			Racks per freezer	12	16	20	24
			Boxes per freezer	1764	2352	2940	3528
Racks for Chest Freezer							
CA398184	2 in. box rack with locking rod	15.2 x 5.5 x 5.5	Boxes per rack	7			
			Racks per freezer	9			
			Boxes per freezer	63			
CA398185	3 in. box rack	16 x 5.5 x 5.5	Boxes per rack	5			
			Racks per freezer	9			
			Boxes per freezer	45			

Intended Use Statements:

General Purpose Models:

The general purpose –86°C freezers described here are high-performance units for professional use. These products are intended for use as cold storage in research use and as a general purpose laboratory freezer, storing samples or inventory at operating temperatures between –50°C and –80°C. It is not considered a medical device and has therefore not been registered with a medical device regulatory body (e.g., FDA): that is, it has not been evaluated for the storage of samples for diagnostic use or for samples to be re-introduced to the body. This unit is not intended for use in classified hazardous locations, nor to be used for the storage of flammable inventory.

FDA Class II Models:

The –86°C freezers described in this manual are intended for the storage of Frozen Red Blood Cells in 40% glycerol at –65°C for up to 10 years; Frozen Rejuvenated Red Blood Cells at –65°C for up to 10 years; Fresh Frozen Plasma at –65°C for up to 10 years; and Frozen or Cryopreserved Tissue for long term storage: Musculoskeletal Tissue at –40°C or colder, Skin at –40°C or colder and Bone at –40°C or colder.

These products should only be used by authorized and adequately trained personnel. It is considered a medical device and has therefore been listed with medical device regulatory body FDA and is considered a Class II medical device by the FDA. This product is listed under product code KSE, regulation number 864.9700 and is considered 510(K) exempt. This unit is not intended for use in classified hazardous locations, nor to be used for the storage of flammable inventory.

Reference: AABB - Technical Manual 17th Ed., page 273,274. STANDARDS FOR TISSUE BANKING 14th Ed., Section E, E3.300, E3.310, Table E3.331.

Note for clarity: The 'Bone' is the Osteoarticular Graft, a weight bearing allograft with intact articular surfaces, consisting of a joint with associated soft tissue and bone. STANDARDS FOR TISSUE BANKING 14th Ed., Section page 8



We are your lab partner.

Expertise. Choice. Efficiency. Savings.

For more information or to order,

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