Seltis

Specialist In Medical Lab Freezers

Seltis

-85.0

-86°C FREEZER

CE ISO9001 CERTIFIED ® Trademark

-86°c ULT Deep Freezer

The Ultra Low temperature freezer is used for rapid freezing and long term storage. The equipment is also applied to the laboratory materials for researches such as DNA, RNA, biological cells, organic tissues, blood samples, antibodies etc.

PRODUCT FEATURES

STRUCTURE

- Anti-corrosion 304 grade Stainless Steel Interior with epoxy powder Coated cold rolled 1.2mm thick steel exterior.
- Stainless Steel Compartments with adjustable SS Shelves and polystyrene insulated washable and removable SS inner doors.
- Use of Polyurethane Foam with Vacuum Insulation panel.
- Triple Sealed Silicon gasket to minimize Cold air loss and assure stable temperature.
- System takes less than 4 hrs to achieve -86°c temperature with empty freezer at ambient temperature of +27°c.
- Washable and removable Front panel Condenser air flter.
- Heavy duty Swivel locking Castors and two front adjustable leveling feet.
- System provides power management and ifluctuation correction through Voltage regulator / booster.
- Ergonomic door design with door Key lock and pad lock system with optinal RFID for additional sample security.
- Easy to open integrated outer door latch and handle allows one handed opening and closing.
- Rim Heating on the door panel to avoid frosting.
- Warm up time of empty freezer from -86°c to -40°c is 4-6hrs at ambient temperature of +27°c.
- Warm up time of sample loaded freezer from -86°c to 0°c is more than 45hrs at ambient temperature of +27°c.
- Air Cooled Condenser and aero dynamic axial fan motor.
- Auto vacuum release port for easy door opening.
- Manual defrost system.
- System provides all door opening and closing duration status record.
- Inbuilt White Board for writing notes and information.
- Temperature recovery in less than 15 minutes after door opening for one minute.

CONTROL & SAFETY SYSTEM

- Microprocessor Eye Level LED touch screen control shows temperature graph & various operating parameters like cabinet temperature, set temperature, voltage & ambient temperature on the control panel with on board data recording and USB port for data transfer upto 10-15 years
- All error/faults displays on control board through self diagnostic system including filter and battery change.
- Battery back for temperature display and alarm for more than 72 hrs incase of power failure.
- Audio & Visual alarm incase of power failure, high and low temperature, filter clean, hot condenser, door ajar, Low battery, Sensor error, System failure, abnormal voltage etc.
- Programmable high & Low temperazure alarm with on/o ff switch and lockable on/o ffalarm.
- Six PIN Password protections for sample security, power, temperature and alarm settings.
- Automatic restart and restoration of alarm and set points to user programmed level after power interruption.

REFRIGERATION SYSTEM

- High performance and energy saving mode using two stage CFC, HFC & HCFC Free environment friendly cascade refrigeration system with hermetically sealed dual compressors.
- High & Low Cut facility for Compressors.
- Large thermal box insulated brazed plate heat exchanger ensuring optimal heat removal and system stability when operating in extreme conditions.
- Down feed Cold wall evaporator design provides superior refrigerant flow and maximizes cooling power and ensures maximum cold transfer into the freezer and heat removal from the chamber.
- Evaporator design enhances refrigerant flow increasing the overall efficiency, temperature uniformity and recovery performance.
- Time delay and temperature delay mode of operation for second stage compressors

Seltis

Upright Type -86°c Single Door Ultra Low Temperature Deep Freezer

Basic	Model	ST-86V350	ST-86V411	ST-86 V525	ST-86V585	ST-86V651	ST-86V725	ST-86V840	ST-86 V925
	Cabinet Type	Upright							
	Compartment	4/5							
Technical Parameter	Shelves	3/4							
	Cooling Type	Direct Cooling							
	Ground Clearance (mm)	100/128							
	Temperature Performance	-86°c							
	Refrigerant	R290 / R170							
	Power Consumption(kWh/day)	8.5kwh ~ 11.5kwh							
	Noise Level(db)	45							
Temperature	Ambient Temperature (C)	10°c~45°c							
	Temperature Range (C)	-40°c~ -86°C							
Controller	Compressor	1hp x 2							
	Temperature Uniformity	±3°c							
	Temperature Controller	Microprocessor 7" LED Touch Screen with 1°c increment							
	Sensor Type	PT100/PT1000							
Electronic parameter	Voltage / Frequency	220V/50Hz							
	Heat Output(W)	320	320	330	330	360	370	380	390
	Electricity (A)	7	7	7	7	7	7	7	7
	Capacity (L)	350	411	525	585	651	725	840	925
Size	Net/Gross Weight(Kg)	250/275	270/295	290/315	310/325	325/350	345/370	390/405	410/425
	Outer Size (W*D*H)mm	870x980x1945	891x992x1945	891x1055x1994	891x1155x1994	910x1215x1994	1248x975x1994	1179x1135x1994	1220x698x1994
	Inner Size (W*D*H)mm	505x610x1140	606x575x1180	606x665x1310	606x738x1310	660x755x1310	963x558x1350	894x718x1310	965x696x1378
Alarm & System	High / Low Temperature	√							
	Power Off	√							
	Abnormal Voltage	√							
	Sensor Malfuntion	√							
	Filter Check	√							
	Temp. Controller Malfunction	√							
	Battery Backup Malfunction	√							
	Ambient Temperature	√							
	Door Ajar	√							
	Test Hole/Diameter	2/25mm							
	Foot	√							
	USB Port	√							
	Remote Alarm Contact	√							
	RS232/485 Port (4-20ma Output) Dry Contacts	√							
	Castor	√							
	Certification	ISO 9001, CE Certified							

(Design and Dimensions are subject to change without notice for further improvement)

Accessory

Upright rack

Sliding rack

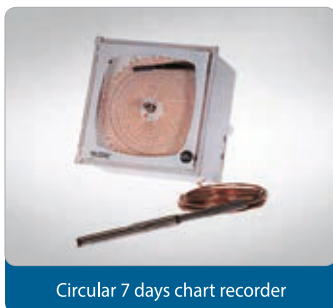Chest rack

Poly Carbonate Box (2")

Co2 / Ln2 Backup System

U-System
(remote alarm, wireless control system)

Frost remover

Cryogenic gloves(Cryo gloves)

Circular 7 days chart recorder

SMS Alert System

Mfr
SELECT REFRIGERATION
E-283, Patel Garden, Dwarka Mor, New Delhi - 110059 INDIA
Ph : 91-11-65642376, 9717569994, 9717569992 Fax : 91-11-43852133
E-mail : info@selectrefrigeration.in
Website : www.selectrefrigeration.in
www.seltis.in

Seltis

Specialist In Medical Lab Freezers

-86°C FREEZER

-86°c ULT Deep Freezer

Seltis

The Ultra Low temperature freezer is used for rapid freezing and long term storage. The equipment is also applied to the laboratory materials for researches such as DNA, RNA, biological cells, organic tissues, blood samples, antibodies etc.

PRODUCT FEATURES

STRUCTURE

- Anti-corrosion 304 grade Stainless Steel Interior with epoxy powder Coated cold rolled 1.2mm thick steel exterior.
- Stainless Steel Compartments with adjustable SS Shelves and polystyrene insulated washable and removable SS inner doors.
- Use of Polyurethane Foam with Vacuum Insulation panel.
- Triple Sealed Silicon gasket to minimize Cold air loss and assure stable temperature.
- System takes less than 4 hrs to achieve -86°c temperature with empty freezer at ambient temperature of +27°c.
- Washable and removable Front panel Condenser air flter.
- Heavy duty Swivel locking Castors and two front adjustable leveling feet.
- System provides power management and ifluctuation correction through Voltage regulator / booster.
- Ergonomic door design with door Key lock and pad lock system with optinal RFID for additional sample security.
- Easy to open integrated outer door latch and handle allows one handed opening and closing.
- Rim Heating on the door panel to avoid frosting.
- Warm up time of empty freezer from -86°c to -40°c is 4-6hrs at ambient temperature of +27°c.
- Warm up time of sample loaded freezer from -86°c to 0°c is more than 45hrs at ambient temperature of +27°c.
- Air Cooled Condenser and aero dynamic axial fan motor.
- Auto vacuum release port for easy door opening.
- Manual defrost system.
- System provides all door opening and closing duration status record.
- Inbuilt White Board for writing notes and information.
- Temperature recovery in less than 15 minutes after door opening for one minute.

CONTROL & SAFETY SYSTEM

- Microprocessor Eye Level LED touch screen control shows temperature graph & various operating parameters like cabinet temperature, set temperature, voltage & ambient temperature on the control panel with on board data recording and USB port for data transfer upto 10-15 years
- All error/faults displays on control board through self diagnostic system including filter and battery change.
- Battery back for temperature display and alarm for more than 72 hrs incase of power failure.
- Audio & Visual alarm incase of power failure, high and low temperature, filter clean, hot condenser, door ajar, Low battery, Sensor error, System failure, abnormal voltage etc.
- Programmable high & Low temperature alarm with on/o ff switch and lockable on/o ffalarm.
- Six PIN Password protections for sample security, power, temperature and alarm settings.
- Automatic restart and restoration of alarm and set points to user programmed level after power interruption.

REFRIGERATION SYSTEM

- High performance and energy saving mode using CFC, HFC & HCFC Free environment friendly refrigeration system with hermetically sealed dual compressors. In case one compressor fails another compressor maintains -75°c for indefinite period.
- High & Low Cut facility for Compressors.
- Large thermal box insulated brazed plate heat exchanger ensuring optimal heat removal and system stability when operating in extreme conditions.
- Down feed Cold wall evaporator design provides superior refrigerant flow and maximizes cooling power and ensures maximum cold transfer into the freezer and heat removal from the chamber.
- Evaporator design enhances refrigerant flow increasing the overall efficiency, temperature uniformity and recovery performance.
- Time delay and temperature delay mode of operation for second stage compressors

-86°c ULT Deep Freezer

Seltis

Upright Type -86°c Dual Cooling Ultra Low Temperature Deep Freezer

Basic	Model	ST-86V350D	ST-86V411D	ST-86 V525D	ST-86V585D	ST-86V651D	ST-86V725D	ST-86V840D	ST-86 V925D
	Cabinet Type	Upright							
	Compartment	4/5							
Technical Parameter	Shelves	3/4							
	Cooling Type	Direct Cooling							
	Ground Clearance (mm)	100/128							
	Temperature Performance	-86°c							
	Refrigerant	R290 / R170							
	Power Consumption(kWh/day)	8.5kwh ~ 11.5kwh							
	Noise Level(db)	45							
Temperature	Ambient Temperature (C)	10°c~45°c							
	Temperature Range (C)	-40°c~ -86°C							
Controller	Compressor	1hp x 2							
	Temperature Uniformity	±3°c							
	Temperature Controller	Microprocessor 7" LED Touch Screen with 1°c increment							
	Sensor Type	PT100/PT1000							
Electronic parameter	Voltage / Frequency	220V/50Hz							
	Heat Output(W)	320	320	330	330	360	370	380	390
	Electricity (A)	7	7	7	7	7	7	7	7
	Capacity (L)	350	411	525	585	651	725	840	925
Size	Net/Gross Weight(Kg)	250/275	270/295	290/315	310/325	325/350	345/370	390/405	410/425
	Outer Size (W*D*H)mm	870x980x1945	891x992x1945	891x1055x1994	891x1155x1994	910x1215x1994	1248x975x1994	1179x1135x1994	1220x698x1994
	Inner Size (W*D*H)mm	505x610x1140	606x575x1180	606x665x1310	606x738x1310	660x755x1310	963x558x1350	894x718x1310	965x696x1378
Alarm & System	High / Low Temperature	√							
	Power Off	√							
	Abnormal Voltage	√							
	Sensor Malfuntion	√							
	Filter Check	√							
	Temp. Controller Malfunction	√							
	Battery Backup Malfunction	√							
	Ambient Temperature	√							
	Door Ajar	√							
	Test Hole/Diameter	2/25mm							
	Foot	√							
	USB Port	√							
	Remote Alarm Contact	√							
	RS232/485 Port (4-20ma Output) Dry Contacts	√							
	Castor	√							
	Certification	ISO 9001, CE Certified							

(Design and Dimensions are subject to change without notice for further improvement)

Accessory

Upright rack

Sliding rack

Chest rack

Poly Carbonate Box (2")

Co2 / Ln2 Backup System
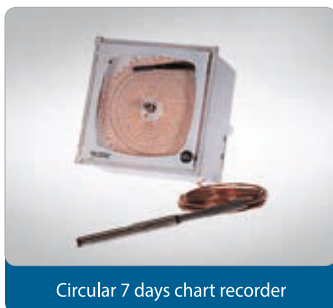

U-System
(remote alarm, wireless control system)

Frost remover

Cryogenic gloves(Cryo gloves)

Circular 7 days chart recorder

SMS Alert System