

86°C Ultra Low Temperature (ULT) Freezers *-86°C Ultra Low Temperature (ULT) Freezers*



These Ultra Low Temperature (ULT) freezers series are developed and manufactured in co-operation with KW, Italy and are ideal for storage of biological, pharmaceutical, plasma and other temperature sensitive material in laboratories and blood banks.

The refrigeration system is fully sealed. It uses a cascade circuit with 2 silent, hermetically sealed compressors with a high refrigeration capacity to obtain maximum cooling reliability and performance.

Every internal shelf has Evaporation tray to guarantee high refrigeration capacity, very fast cooling (reduced pull down and recovery times) and elevated uniformity of the internal temperature.

Performance

- Silent - noise at a distance of 3 meters does not exceed 55 dB(A)
- Large-surface condensers with tubeless execution: Unique solution that minimizes thermal resistance
- Faster recovery of set Temperature after opening the door
- Triple-step seal in silicone rubber gasket for prevention against air loss
- Gasket heating by means of the refrigerant pipes - the safest solution against ice formation

Leading Technology

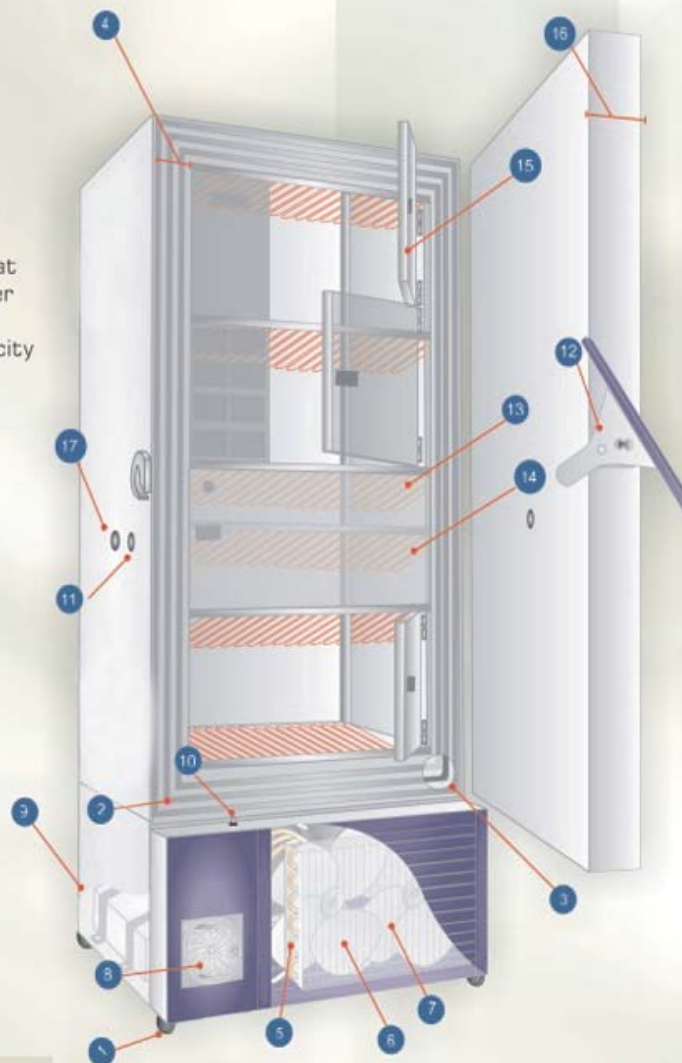
- 2 PT 100 sensors; failure of one of the sensors automatically transfers the regulation to the other, including an alarm event
- Intelligent controller continues to run a timed thermo stabilization with compressor on/off times collected in case of both sensor failure
- Sensor placed in the condenser senses insufficient heat exchange situations with warnings in case of condenser obstruction (chocking)
- Data logger for temperature with ample storage capacity

User Friendly

- Backlit alphanumeric 2 lines LCD display
- Compensation valve permitting access to the internal compartment within a few seconds after the previous closing.
- Pivoting wheels for maximum freezer maneuverability.

Safety

- Password Protected security for on/off, temperature set point
- Disaster recovery - the freezer continues working with average on/off times recorded before the failure
- Audio Visual alarms with data logging facility - Gives details of type of alarm with date and time of occurrence
- High/Low internal temperature alarm, Power failure alarm, Door open alarm, Sensor failure alarm, Condenser obstruction alarm



- 1 Kit with pivoting and fixed wheels - facilitate moving the freezer
- 2 Triple silicone gasket - for maximum safety against heat loss and minimum power consumption
- 3 Hot gas pipe - heats the triple gasket and prevents the formation of frost / ice
- 4 Insulation - Polyurethane foam with an average thickness of 140 mm. , for maximum thermal protection and minimum power consumption
- 5 Two-stage, CFC- and HCFC-free refrigeration system – Environmental friendly
- 6 Tubeless two-circuit condenser with a unique design - very high thermal efficiency
- 7 Auto-speed, low-noise axial fans - adjustable to the condensation Temperature
- 8 7 days Circular Chart Temperature recorder – for recording of internal temperature (optional)
- 9 Port for remote alarm signals - to make physical connections to external devices
- 10 Micro door switch - for open door alarms
- 11 Pressure Compensation valve - permits access to the internal compartment within a few seconds after the previous closing
- 12 Highly ergonomic closing handle - facilitates easy opening and closing of door
- 13 Evaporation tray below each compartment - for the faster cooling and the better uniformity of internal Temperature
- 14 Internal chamber in AISI 304 (standard) with rounded edges for easy cleaning and maximum hygiene
- 15 Independent Internal counter doors with 20 mm polyurethane foam - better internal Temperature stability, to minimize the opening surface
- 16 External door insulated using polyurethane foam (> 110 mm.) - for maximum thermal protection and minimum power consumption
- 17 Internal-external access holes for cabling



Intelligent Controller with Built in Data logger

- The controller periodically records and stores the temperature. The data can be received and transferred to a PC by means of the USB port provided or through Data Pocket transceiver and the serial receiver. The Cold Master supervision software allows downloading and printing (in graph or table format) of the temperature data. The controller enters the records into two temperature channels. The memory capacity allows making an entry every 20 minutes for approximately 4 months.

- **Data Pocket Kit includes:** IR transceiver, IR receiver for PC, Cold Master management software

Technical Data

	K 58 PL	K 60 PL	K 64 PL
Internal Volume (Liters)	354	505	706
Number of trays	4	4	4
Internal Dimensions W x D x H (mm)	700 x 460 x 1110	700 x 650 x 1110	800 x 690 x 1280
External Dimensions W x D x H (mm)	960 x 800 x 1880	970 x 960 x 1840	1060 x 1000 x 1990
Operating Temperature range	-45° to -86°C		
Insulation (CFC free polyurethane foam)	140 mm to 180 mm for Body & 110 mm for Door		
Temperature control	Microprocessor		
Display	2 lines, 16 characters, Alphanumeric LCD display		
Power Failure Alarm	Audio Visual Alarm		
Door Open Alarm	Audio Alarm in case door open for over one minute		
Internal Body Material	Stainless Steel - 304 grade		
External Body Material	Powder coated CRCA Steel		
Noise Level	Less Than 55 db(A)		
Recommended Voltage Stabilizer	VS-06		
Electrical	220-240 volts, 50Hz, Single Phase		

V. S. International Pvt. Ltd.

A-204, Neelam Centre, Hind Cycle Road, Worli, Mumbai - 400 030., INDIA.
 Contact : +91 22 4333 3900 / 2498 8777 Fax: +91 22 6660 8779