



# DEEP FREEZER (VERTICAL)

MODEL NO. - ACM- DW-HL 368





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## FEATURES

- Compact design, Energy Efficient with large storage capacity – Upright Vertical Model
- Outer casing is Stainless Steel SS 304
- Inner Chamber And Shelves are of Stainless Steel SS 304
- Robust construction and elegant looks with Three Compartments
- Microprocessor based programmable temperature Controller cum Indicator
- Higher Capacity System for fast pulls down.
- NANOGEL Panel & Tollesbury Technology system to reduce temperature recovery time after door opening
- High density, environment friendly, polyurethane foam for better insulation.
- High-pressure injection machine used for efficient insulation.
- R-134 a refrigerant, chlorine free, environment friendly. CFC-FREE, HCFC-FREE non flammable refrigerants
- Carrier/Kirloskar/Tecumseh compressor.
- Battery Back up for Two Hours
- Audible and visible alarms for temperature, power failure, system failure, battery low





- Built in voltage stabilizer with time delay relay
- Heavy duty lockable castors and lockable outer doors and lids
- Security lock for unauthorized tampering
- Energy saver compressor-low energy consumption.
- Freezers have heated air vent and front panel air filter
- Longer thaw out time to take care of prolonged periods of failure.
- 4 PIN security lock for unauthorized tampering
- 60mm thick insulation
- Temperature range (ambient to  $-25^{\circ}\text{C}$ )
- Volume: 100 liters
- Quality management Certifications Applicable : ISO 9001:2008, ISO: 13485, ISO:14001, WHO-GMP Compliance Certificate
- Product Certification Standard ; CE (CE For Machinery directive (98/37/EC), CE (Medical devices (93/42/EEC)
- Supplied complete with voltage stabilizer with step up and step down function
- To work on 220-230 Volts, single phase AC supply

## DETAILED PRODUCT SPECIFICATIONS

**Material of Construction:** Castor wheel mounted cabinet is double walled with inner chamber & storage shelves of Stainless steel sheet of grade SS 304 and outer wall of MS sheet epoxy powder coated with ultra thin vacuum insulation.

**Temperature Range:**  $-25^{\circ}\text{C}$  with accuracy of  $\pm 0.5^{\circ}\text{C}$  (CFC Free)



**Temperature Control:** The temperature inside the Deep Freezer is controlled by intelligent programmable temperature controller and indicator. This controller is based on the microcontroller nano watt technology and its ergonomic design suits for any specific requirement of the freezer like Datalogger facility, Thermal and DOT Matrix interface, direct data load facility in computer office automation software like MS-Word and Excel and many other features listed in the specification bellow.

**Cooling Mode:** This LED indicates the cooling system on condition and it light up when the set temperature is lower than the ambient temperature.

**Temperature Alarm:** This LED indicated the extreme Ambient condition and the temperature failure condition.

**Audio Alarm :** This Alarm indicates the visual alarm and indiactes any failure and Temperature overshoot conditions.

**Door Open :** Visual indication with door open conditions.

**A.C Power failure :** This visual indicator light up when the mains power fail and the system working in the battery mode.

**Low battery indicator :** This LED indicates the battery backup status, This LED indicates when the battery charge capacity available at 25% of the total charge.

**UP :** Count up key.

**SET :** This is a set button to set any parameter on the screen, by pressing of this key a cursor blink on the corresponding parameter, So you can select any desired parameter and use UP and Down key to set specific value/setting.

**Down :** Down count key.

**ESC :** This key is used to exit from any menu, you are working right now.



**Print/Data download :** This key is used to transfer the stored data into the printer or Data download facility in the computer MS Excel/Word and Hyperterminal software.

**Display Unit :** This unit is a user interactive interface system for easy operation and it displays the parameter like DATE, TIME, Ambient Temperature, Compressor ON Delay Time, Read and Set Temperature.

**Temperature Display :** This seven segment display indicates the read temperature value inside the chamber

## SYSTEM SETTINGS

**DATE and TIME :** From normal operational mode, press SET key ones,

**Insulation :** The gap of 100 mm between the outer and the inner wall is filled with ultra thin vacuum insulation.

**Air circulation:** Triple walled back of unit is fitted with two air circulation fans for maintaining temperature uniformly throughout the chamber

**Doors:** The double walled door is made of stainless steel grade SS 304. Lock and Key arrangement is provided in the double walled outer door.

**Illumination:** Unit is fitted with door operated illumination lamp inside the chamber.

40 watt/120 volt replacement light bulb fits inside the illumination cavity of the chamber.

**Refrigeration Unit:** Refrigeration unit is formed by ISI marked compressor/cooling kit. Of Kioloskar Copeland or Tecumseh.

**Front Panel:** The front panel is provided with separate indicator lamps for main heating and incoming voltage. Digital Temperature controller cum Indicator and voltmeter.

**Shelves:** The unit is supplied with three shelves of stainless steel sheet.

**Voltage:** To work on 220/230V A.C. supply.

**Capacity:** 100 / 218 / 328 / 388 / 538 / 828 Liters



## SYSTEM SETTINGS

<b>Temperature Control</b>	-	-
Temperature variation (time)	± °C	0.5
Temperature deviation (spatial)	± °C	0.5
Readability/ Set ability	°C	0.5
Temperature range ***	°C	-25°C
Sensor thermocouple	-	Type K
Controller	-	PID optional
Display	-	LCD
Adjustable alarm limits (visual and acoustic)	-	Incorporated
<b>Safety thermostats</b>	-	-
Temperature variation (time)	± °C	3
Sensor thermocouple	-	Type K
Automatic setting	-	Yes
Adjustable limits	-	Yes
<b>Light control</b>	-	-
Readability/Setability	%	7% (optional feature)
Light intensity in the middle	Lux	As Desired (optional feature)
Light intensity in both sides	Lux	As Desired (optional feature)



<b>Accessories</b>	-	-
Automatic de-icing system	-	optional
Timer (1-999 minutes or hours)	-	optional
Real Time Program	-	optional
Printer Report Program	-	optional
Serial Data Port	RS232	optional
Inspection window in door	-	optional
<b>Shelves</b>	-	-
Standard/ max	kg	3 (adjustable)
Max load per shelf	kg	30
Permitted total load	-	90 kg
<b>Accessories</b>	-	-
Printer Report Program	-	optional
2 x 24 characters LCD Display	-	optional
Access Port 30 mm	-	optional
Inspection window in door with cover	-	optional
Castors, lockable	-	Yes
<b>Power consumption</b>	-	-
Nominal power	W	1300
Nominal voltage	V	230, 1~
Frequency	Hz	50/60



An ISO 9001 : 2208 | ISO 14001 : 2008 | ISO 13485  
WHO: GMP Products | GLP Compliant Products

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