



# ULTRA LOW TEMP. FREEZER (VERTICAL) -86°C

AN ISO 9001 : 2015 CERTIFIED CO. & CE MARK PRODUCT

Model No : SRL / ULVF-04-VI



## Construction :

Fabricated on angular structure, with inner as stainless steel 304L grade & outer of G.I. duly non-resistant epoxy powder coated .

**Insulation :** Polyurethane foam, 5" -5.1", 127-130 mm thick/VIP {Vacuum insulation panel} / For space saving and higher efficiency.

**Exterior :** 19 swg, 1.2mm thick GI

**Interior :** Top quality polished 304L stainless steel, 19 swg.

**Heated Air Vent :** To Prevent vacuum & ice information.

**Air Filter :** front mounted, to be easily accessed by 1/4 turn screws.

**Access Port :** One pass-through ports, 1" dia (25mm).

**Pressure equalization port.**

**Casters & Feet :** Heavy-duty lockable casters with adjustable leveling feet.

## Compartment & Shelving :

2-6 Compartments with shelves at adjustable heights or individual compartments with door for each compartment.

**Cabinet & Door Seals :** Outer door to be fitted with low temperature seals. Alarm for temp. deviation failure, open door, clean filter.

## Application :

Equipment specially designed & suitable for Electronic Industry, Space Programs Research, Research Labs, Defence Labs, Blood Banks, Biological Specimens, Serum, Vaccines, Research Laboratories Medical Specimens, Clinical Samples, Industrial research etc, for testing under extreme low temp. conditions.

## Temperature Range :

-50°C to -86°C

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## Refrigeration system :

**Cascade Refrigeration** : Hermetically-sealed two -stage cascade system with capacity to cope in high-ambient condition.

**Compressor** : Low-noise 55-60db, heavy duty & commercially-available, make Danfoss, Embraco, Tecumseh.

**Refrigerants** : CFC free 404A & 508B

Circulation with one fan for reduced power consumption and noise.

**Compressor Lubricants** : Biodegradable & commercially available high-performance, synthetic polyolester oil.

## Accessories :

Ln2 Backup with regulators, cylinders operated directly from PLC/PID automatically when the temp. rises above the set point of 5°C

Racks, Cryo gloves, Cryo boxes

Cryo boxes to be hold 2ml vials.

Voltage stabilizer of 5 KVA.

UPS backup with batteries.

## Temp. Control :

**Control** : PLC with HMI & PID action Microprocessor- controlled temperature and alarms with non-volatile memory.

**Display** : Large, bright, Digital Touchscreen LCD, user interface.

**Calibrate** : Set control probe parameters.

**Operating Voltage** : 230V, 50/60Hz, 12.0FLA.

**Electrical Safety Compliance** : IEC 61010

## Safety Features :

2 minute compressor "on" delay timer to safeguard the compressor. Compressor overload relay protector, HPCO / LPCO For compressor, safety Temp. Controller. MCB for mains.

## Certification :

ISO 9001-2015 CO.  
CE Mark product.  
D & B Certified.

## Data Logger :

7 Days chart recorder or Data logging with RS-232/485 inter phase, inbuilt system monitoring and reporting technology SMART diagnostic software with audio-visual alarm for temperature deviation power fail more than 5°C and system fail & low battery, filter check, door check, part replacement notification. Remote alarm port to & auto dialer. Battery backup for alarm during power failure, password access for temp. set point alteration.

## Special Attention :

Can be kept at an maximum temp. of 32°C ± 2°C & suitable rating Servo Controlled Voltage Stabilizer is recommended in case of voltage fluctuations.

## TECHNICAL SPECIFICATIONS VERTICAL

Model SRL-ULVF-04-VI	Internal Dimension (W X D X H)(cms)	Capacity Ltrs
ULVF-A	45 x 45 x 50	100
ULVF-B	50 x 50 x 60	150
ULVF-C	50 x 50 x 80	200
ULVF-D	60 x 60 x 80	288
ULVF-E	60 x 60 x 100	360
ULVF-F	60 x 60 x 110	396
ULVF-G	65 x 70 x 110	500
ULVF-H	70 x 70 x 110	540
ULVF-I	70 x 70 x 120	588

Due to continuous development & improvements in design, we reserve the right to change the specification without notice.