


MANUFACTURER

KW Apparecchi Scientifici S.r.l.

Via della Resistenza 119 - 53035 Monteriggioni (SI) - Italy

MODEL

K52 HPL IN

Chest Type Ultra-low Temperature Freezer

TECHNICAL CHARACTERISTICS

| | |
|-----------------------|--------------------------------|
| Storage Volume | 110 lt |
| Boxes (h=2") Capacity | 56 (with full load of 7 racks) |
| Temperature Range | -40°C / -86°C |
| Climate Class | N |
| Power Supply | 220V-230V / 1 / 50-60Hz |
| Power Consumption | 0,6 kW |
| Noise Level | < 52 dB |


STRUCTURE

| | | | |
|-----------------------------------|-------------------------------|--------------------|--|
| Internal Surface | Stainless Steel AISI 304 | Door Lock | Closing hook with key lock |
| External Surface | White pre-painted steel sheet | Insulation | 175 mm (High density PUR foam) |
| External Dimensions | 90 W x 84 D x 127 H cm | Inner Doors | 1 |
| Internal Dimensions | 55 W x 40 D x 50 H cm | Door Type | One wing, solid type |
| Weight | 130 kg | Door Sealing | Heated triple silicone gasket |
| Shipping Size (with wooden crate) | 130 W x 110 D x 210 H cm | Standard Equipment | 4 pivoting wheels (front wheels w/brake) |
| | 230 kg | | Int/Ext pass-through hole |
| Int/Ext Edges | Rounded for easy cleaning | | Pressure compensation valve |

REFRIGERATION SYSTEM

| | | | |
|--------------------|--|-------|----------|
| Cooling System | Fully sealed circuit with n.2 hermetic compressors arranged in cascade | | |
| Refrigerant Gases | 1° Stage | R1270 | 2° Stage |
| | | | R170 |
| Evaporating System | Copper tube coil thermally connected to the outer peripheral surface of the inner case | | |
| Condensing System | Air-type high-surface condenser, for forced air circulation | | |
| Defrost | Manual | | |

DIGITAL CONTROL SYSTEM

| | | |
|------------------------------------|---|--|
| HPL (High Performance Line) |  | |
| Display | Display touch-screen TFT 7" - Microprocessor ARM9 technology (n°2 independent motherboards) | |
| T Regulation Accuracy | ± 0.1°C | |
| Thermal Probes | n.2 thermal probes RTD Pt100 class A (n.1 for thermoregulation - n.1 for T alarm) | |
| Available Languages | Italian / English / French / Spanish / German | |
| Data Recording Format | SQLite (Tracer® software included for data reading) | |
| Access Control | Access to controller functions via safety password | |
| Maintenance | Possibility to connect remotely via IP address | |
| Special Functions | Real-time temperature graph on display | |
| | Disaster recovery (the freezer continues to run even in the event of a CPU failure) | |
| | Safety control (the freezer continues to operate even if the control probe breaks) | |
| | Data logger function (Automatic recording of temperatures and alarms) | |
| | Key test (the user can simulate alarm conditions with a simple key pressure) | |
| Connectivity | USB port | Ethernet port |
| | SD Card port | Dry contacts for remote alarms |
| | High/Low temperature | Faulty probes |
| Alarms List (Audio/Visual) | Power failure alarm with back-up battery | Compressor timing failure |
| | Door open | High temperature condenser |
| | High condenser pressure | Dirty condenser |
| | Battery failure | Communication failure with motherboards |
| | Pressure switch intervention failure | Pressure transducer intervention failure |

OPTIONAL ACCESSORIES AVAILABLE ON REQUEST

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|---|---|
| 24V CO2 backup system for mechanical failure | Additional RTD Pt 100 probe |
| 24V LN2 backup system for mechanical failure | Additional RTD Pt 100 probe with 4-20mA converter |
| 12V CO2 backup system for mechanical/electric failure | Weekly cycle chart disk recorder (n°52 spare disks included) |
| 12V LN2 backup system for mechanical/electric failure | Strip-chart electronic recorder |
| Water condensing device with automatic barostatic valve | GSM Module and SIM Card port activation |
| 4000VA power voltage stabilizer | Electric lock for door opening through PIN/Transponder/Finger print |
| Additional shelf in AISI 304 stainless steel | Wi-Fi router |
| Transparent panel for display cover | |