



MANUFACTURER

KW Apparecchi Scientifici S.r.l.
Via della Resistenza 119 - 53035 Monteriggioni (SI) - Italy

MODEL

K58 HTS IN UP V

Upright Ultra-low Temperature Freezer

TECHNICAL CHARACTERISTICS

| | |
|-----------------------|----------------------------------|
| Storage Volume | 358 lt |
| Boxes (h=2") Capacity | 240 (with full load of 20 racks) |
| Temperature Range | -50°C / -86°C |
| T stability | ± 0,2°C (with set point -80°C) |
| T uniformity | ± 4°C (with set point -80°C) |
| Climate Class | N |
| Power Supply | 220V-230V / 1 / 50-60Hz |
| Power Consumption | 0,6 Kw |
| Noise Level | < 45 dB |


STRUCTURE

| | | | |
|--------------------------------------|-----------------------------------|-----------------------|--|
| Internal Surface | Stainless Steel AISI 304 | Shelves | n°3 in AISI 304 S.S. + base |
| External Surface | White pre-painted steel sheet | Compartments | 4 |
| External Dimensions | 105 W x 84 D x 189 H cm | Inner Doors | 4 |
| Internal Dimensions | 70 W x 46 D x 111 H cm | Handle | Ergonomic design with key lock system |
| Weight | 270 kg | Door Type | One wing, solid type |
| Shipping Size (with wooden crate) | 130 W x 115 D x 215 H cm | Door Sealing | Heated triple silicone gasket |
| | 360 kg | Standard Equipment | 4 pivoting wheels (front wheels w/brake) |
| Int/Ext Edges | Rounded for easy cleaning | | Int/Ext pass-through hole |
| Insulation | 140 mm (PUR 80 mm + V.I.P. 60 mm) | | Pressure compensation valve |

REFRIGERATION SYSTEM

| | | | | |
|--------------------|--|-------|----------|------|
| Cooling System | Fully sealed circuit | | | |
| | n°2 hermetic compressors at variable speed equipped with inverter, arranged in cascade | | | |
| Refrigerant Gas | 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

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|---|--|--|--|
| HTS (High Technology System) |  | | |
| Display | Display Touch-Screen TFT 7" - Microprocessor 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 | CSV (Excel) | | |
| 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) | | |
| | Environmental adaptability (separate management of the condenser fans) | | |
| | Key test (The user can simulate alarm conditions by simply pressing a button) | | |
| Connectivity | Data logger function (Automatic recording of temperatures and alarms data) | | |
| | USB port | Dry contacts for remote alarms | |
| | SD Card port | Bridge RS485 port with ModBus protocol | |
| Alarm List (Audio/Visual) | Min/Max Temperature | Faulty probes | |
| | Power failure alarm | Compressor alarm | |
| | Door open | High T in condensation | |
| | High condenser pressure | Dirty condenser | |
| | Battery 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 bridge |
| 4000VA power voltage stabilizer | Electric lock for door opening through PIN/Transponder |
| Additional shelf in AISI 304 stainless steel | Wi-Fi router |
| Transparent panel for display cover | Ethernet port |