



**MANUFACTURER**

KW Apparecchi Scientifici S.r.l.

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

**MODEL**

K66 HTS IN UP V

Upright Ultra-low Temperature Freezer

**TECHNICAL CHARACTERISTICS**

|                       |                                  |
|-----------------------|----------------------------------|
| Storage Volume        | 806 lt                           |
| Boxes (h=2") Capacity | 600 (with full load of 24 racks) |
| Temperature Range     | -40°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               | 120 W x 110 D x 205 H cm          | Inner Doors        | 4  |
| Internal Dimensions               | 85 W x 73 D x 130 H cm            | Handle             | Ergonomic design with key lock system    |
| Weight                            | 450 kg                            | Door Type          | One wing, solid type                     |
| Shipping Size (with wooden crate) | 135 W x 130 D x 225 H cm          | Door Sealing       | Heated triple silicone gasket            |
|                                   | 550 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**

|                                     |  |  |  |
|-------------------------------------|--|--|--|
| <b>HTS (High Technology System)</b> |  |  |  |
| 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                        | USB port   | Dry contacts for remote alarms         |  |
|                                     | SD Card port   | Bridge RS485 port with ModBus protocol |  |
|                                     | Min/Max Temperature  | Faulty probes                          |  |
| Alarm List (Audio/Visual)           | Power failure alarm  | Compressor alarm                       |  |
|                                     | Door open  | High T in condensation                 |  |
|                                     | High condenser pressure  | Dirty condenser                        |  |
|                                     | Battery Failure  |  |  |

**OPTIONAL ACCESSORIES AVAILABLE ON REQUEST**

|   |  |
|---|--|
| 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  |