

Technical Data Sheet

ULT Freezer -86°C



MANUFACTURER

KW Apparecchi Scientifici S.r.l.

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

MODEL

K60 PL ADV IN

Upright Ultra-low Temperature Freezer

- h 8			
TECHNICAL CHARACTERISTICS			
Storage Volume	506 lt		
Boxes (h=2") Capacity	320 (with full load of 20 racks)		
Temperature Range	-40°C / -86°C		
Climate Class	N		
Power Supply	220V-230V / 1 / 50-60Hz		
Power Consumption	0,7 Kw		
Noise Level	< 52 dB		

STRUCTURE						
Internal Surface Stainless Steel AISI 304 External Surface White pre-painted steel sheet		Shelves	n°3 in AISI 304 S.S. + base			
		Compartments	4			
External Dimensions 105 W x 103 D x 189 H cm		Inner Doors	4			
Internal Dimensions 70 W x 65 D x 111 H cm Weight 300 kg		Handle	Ergonomic design with key lock system			
		Door Type	One wing, solid type			
Shipping Size (with wooden crate)	130 W x 130 D x 220 H cm	Door Sealing	Heated triple silicone gasket			
	400 kg		4 pivoting wheels (front wheels w/brake)			
Int/Ext Edges	Rounded for easy cleaning	Standard Equipment	Int/Ext pass-through hole			
Insulation	140 mm (High density PUR foam)		Pressure compensation valve			

REFRIGERATION SYSTEM					
Cooling System	Fully sealed circuit with n.2 hermetic compressors arranged in cascade				
Refrigerant Gases (HC)	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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PL ADV	-308;			
	White and blue 7-segments display - 5 keys capacitive keyboard			
Display	Simultaneous display of the monitor probe and the set point			
	n.2 thermal probes RTD Pt 100 class A (n.1 for thermoregulation - n.1 for T alarm)			
T Regulation Accuracy	± 0.1°C			
Access Control	Access to controller functions via safety password			
Maintenance	Supervision and remote assistance via Cloud			
Maintenance	On-site supervision via dedicated APP ConneX (iOS and Android) and web pages			
	In the event of a faulty probe, the probe keeps the T on the average of historical cycles			
Consist Franchisms	Data logger function (3Mb flash memory)			
Special Functions	Buzzer with autosilence and reset function			
	Test circuit and battery recharge			
	Internal Wi-Fi module	Wireless programming of parameters		
Connectivity	Alert messaging by email	Receipt of the weekly graphic report by email		
	Dry contacts for remote alarm signals	Data download via the ConneX APP (no USB needed)		
	Power failure with back-up battery	System overpressure		
	High/Low temperature	Door open		
Alarm List (Audio/Visual)	Faulty probes	No communication between motherboards		
(Addio) visual)	High condenser temperature	Compressor timing failure		
	Pressure switch intervention failure	Pressure transducer intervention failure		

	OPTIONAL ACCESSORIES AVAILABLE ON REQUEST		
	24V CO2 backup system for mechanical failure	Additional shelf in AISI 304 stainless steel	
Γ	24V LN2 backup system for mechanical failure	Additional RTD Pt 100 probe	
Γ	12V CO2 backup system for mechanical/electric failure	Additional RTD Pt 100 probe with 4-20mA converter	
Γ	12V LN2 backup system for mechanical/electric failure	Weekly cycle chart disk recorder (n°52 spare disks included)	
Γ	Water condensing device with automatic barostatic valve	Strip-chart electronic recorder	
Γ	4000VA power voltage stabilizer	Electric lock for door opening through PIN	
Г	Transparent panel for display cover	Ethernet expansion module	