

CLIMATIC CHAMBER

(-40°C ... +180°C)

KK-50 CHLT

KK-105 CHLT

KK-190 CHLT

KK-340 CHLT

KK-500 CHLT

KK-1000 CHLT

Temperature and relative humidity controlled test polygon

Material temperature & Rh resistance and product testing

Maintaining superior temperature & Rh stability

Sample conditioning prior to other tests

Data loggers and sensors calibration

World class metrology performance

Accelerated ageing

Stress tests

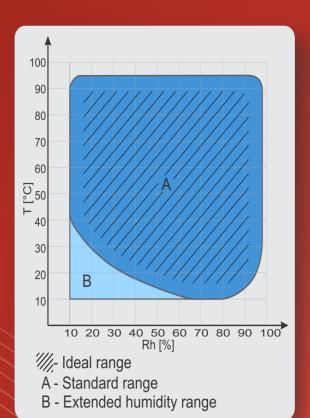


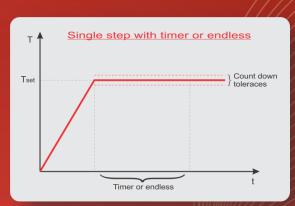


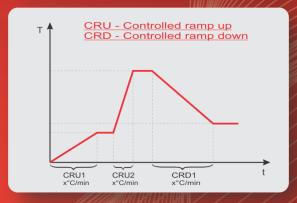




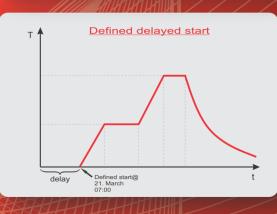
Controller functions:

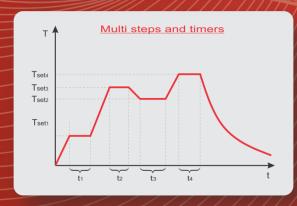


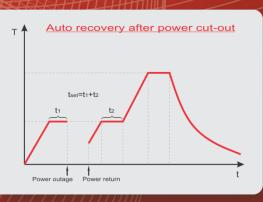














	KK-50 CHLT	KK-105 CHLT	KK-190 CHLT
External dimensions (WxHxD) in mm	570 x 1035 x 645	725 x 1560 x 845	834 x 1675 x 930
Internal dimensions (WxHxD) in mm	400 x 375 x 350	490 x 498 x 430	600 x 610 x 510
Volume (L)	~ 50	~ 105	190
Temperature range (°C)	-40+180	-40+180	-40/+180
Heat up rate (°C/min) EN 60068-3-5	5,3	3,0	1,7
Cool down rate (°C/min) EN 60068-3-5	2,1	1,7	3,2
Temperature display resolution (°C)	0.1	0.1	0.1
Temperature set resolution (°C)	0.1	0.1	0.1
Temperature stability (°C)	±0,2°C @ -40°C ±0,05°C @ 50°C 50% Rh ±0,05°C @ 90°C 90% Rh ±0,1°C @ 180°C	±0,4°C @ -40°C ±0,08°C @ 50°C 50% Rh ±0,1°C @ 90°C 90% Rh ±0,1°C @ 180°C	±0,5°C @ -40°C ±0,08°C @ 50°C 50% Rh ±0,1°C @ 90°C 90% Rh ±0,1°C @ 180°C
Temperature uniformity (°C)	±2,2°C @ -40°C ±0,4°C @ 50°C 50% Rh ±0,4°C @ 90°C 90% Rh ±1,5°C @ 180°C	±1,5°C @ -40°C ±0,3°C @ 50°C 50% Rh ±0,3°C @ 90°C 90% Rh ±1,5°C @ 180°C	±1,5°C @ -40°C ±0,6°C @ 50°C 50% Rh ±0,4°C @ 90°C 90% Rh ±1,5°C @ 180°C
Relative humidity range (%)	1098	1098	1098
Relative humidity display resolution (%)	0.1	0.1	0.1
Relative humidity set resolution (%)			
Relative humidity stability (%)	±0,5% @ 50°C 50% Rh ±0,5% @ 90°C 90% Rh	±0,5% @ 50°C 50% Rh ±0,5% @ 90°C 90% Rh	±0,5% @ 50°C 50% Rh ±0,5% @ 90°C 90% Rh
Temperature control	PID	PID	PID
Relative humidity control	Dew point humidity control / dry air purge for extended	Dew point humidity control / dry air purge for extended	Dew point humidity control / dry air purge for extended
Power supply	230V 50/60Hz	230V 50/60Hz	230V 50/60Hz
Wattage (W)	230 (30/00112)	3200	3600
	/// RS/232 ///	RS 232	RS 232
Interface	(USB or Ethernet as accessory)	(USB or Ethernet as accessory)	(USB or Ethernet as accessory)
Shelve	1 (max 6)	1 (max 6)	1 (max 8)
Shelve capacity (kg)	/////25/////	35/////	35
Max capacity (kg)	(/////30/////	/////60///////	80
Access port (mm)	Ø 40 standard, (Ø 50, Ø 90 as accessory)	Ø 40 standard, (Ø 50, Ø 90 as accessory)	Ø 40 standard, (Ø 50, Ø 90 as accessory)
Noise (dBA) @ 1 m distance	58///	////58/////	60
Weight (kg)	////125////	/////238//////	278



	KK-340 CHLT	KK-500 CHLT	KK-1000 CHLT
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	0 0 0 0 0 0		
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External dimensions	005 4005 4445	4005 4040 4070	4005 //4000 //405
(WxHxD) in mm	835 x 1895 x 1115	1035 x 1810 x 1270	1235 x 1930 x 1495
Internal dimensions	600 x 830 x 685	800 x 800 x 800	1000 x 1000 x 1000
(WxHxD) in mm			
Volume (L)	~ 340	~ 500	///////////////////////////////////////
Temperature range (°C)	-40+180	-40+180	-40/+180
Heat up rate (°C/min) EN 60068-3-5	2,4	3,0	3,0
Cool down rate (°C/min)	2,1	1,2	1,8
EN 60068-3-5	2,1	1,2	
Temperature display resolution (°C)	0.1	0.1	0.1
Temperature set resolution (°C)	0.1	0.1	0.1
	±0,5°C @ -40°C ±0,08°C @ 50°C 50% Rh	±0,5°C @ -40°C ±0,06°C @ 50°C 50% Rh	±0,5°C @ -40°C ±0,05°C @ 50°C 50% Rh
Temperature stability (°C)	±0,1°C @ 90°C 90% Rh ±0,1°C @ 180°C	±0,1°C @ 90°C 90% Rh ±0,1°C @ 180°C	±0,1°C @ 90°C 90% Rh ±0,1°C @ 180°C
	±1,5°C @ -40°C	±0,5°C @ -40°C	±0,5°C @ -40°C
Temperature uniformity (°C)	±0,34°C @ 50°C 50% Rh ±0,41°C @ 90°C 90% Rh	±0,3°C @ 50°C 50% Rh ±0,4°C @ 90°C 90% Rh	±0,4°C @ 50°C 50% Rh ±0,5°C @ 90°C 90% Rh
	±1,5°C @ 180°C	±1,0°C @ 180°C	±1,0°C @ 180°C
Relative humidity range (%)	1098	1098	1098
Relative humidity display resolution (%)	0.1	//////// 0:10/10/10	0.1
Relative humidity set resolution			
(%)	<i>Mana</i> nan	90111111111	1///
Relative humidity stability (%)	±0,5% @ 50°C 50% Rh	±0,5% @ 50°C 50% Rh	±0,5% @ 50°C 50% Rh
	±0,6% @ 90°C 90% Rh	±0,5% @ 90°C 90% Rh	±0,5% @ 90°C 90% Rh
Temperature control	PID Dew point humidity	PID Dew point humidity	PID Dew point humidity
Relative humidity control	control / dry air	control / dry air	control / dry air
	purge for extended	purge for extended	purge for extended
Power supply	230V 50/60Hz	3x400V 50/60Hz	3x400V 50/60Hz
Wattage (W)	/////3600	9000	12000
Interface	RS 232 (USB or Ethernet	RS 232 (USB or Ethernet	RS 232 (USB or Ethernet
interface	as accessory)	as accessory)	as accessory)
Shelve	///1/(max 6)	/ / 1 (max 6)	1 (max 8)
Shelve capacity (kg)	///// 35/////	/////50	50
Max capacity (kg)	/////100/////	/////150///////	200
A 2 2 2 2 2 2 1 1 2 2 2 2	Ø 40 standard,	Ø 40 standard,	Ø 40 standard,
Access port (mm)	(Ø 50, Ø 90 as accessory)	(Ø 50, Ø 90 as accessory)	(Ø 50, Ø 90 as accessory)
Noise (dBA) @ 1 m distance	60	62/////	65
Weight (kg)	324////	////435/////	604



Ordering information and accessories:

Description	Part no.
Climatic chamber KK-50 CHLT	2572///////
Climatic chamber KK-105 CHLT	937///////
Climatic chamber KK-190 CHLT	912////////
Climatic chamber KK-340 CHLT	935///////
Climatic chamber KK-500 CHLT	988/////////
Climatic chamber KK-1000 CHLT	936//////
Shelve wire KK-50 CHLT	1766//////
Shelve wire KK-105 CHLT	951
Shelve wire KK-190 CHLT	953
Shelve wire KK-340 CHLT	956
Shelve wire KK-500 CHLT	958
Shelve wire KK-1000 CHLT	960
Shelve perforated KK-50 CHLT	1765
Shelve perforated KK-105 CHLT	952
Shelve perforated KK-190 CHLT	954
Shelve perforated KK-340 CHLT	957
Shelve perforated KK-500 CHLT	959
Shelve perforated KK-1000 CHLT	961
Access Port w. Plug Ø 40 mm right	2629
Access Port w. Plug Ø 50 mm right	608
Access Port w. Plug Ø 90 mm right	1731
Observation window with illumination 370x420mm (KK-105 CHLT, KK-190 CHLT, KK-340 CHLT, KK-500 CHLT, KK-1000 CHLT)	252
Observation window with illumination 305x300mm (кк-50 СНСТ)	2637
Automatic water feeding	1744
Extended Rh range via dry air purge	1758
Trolley for KK-50 CHLT	2207
USB interface	1466
Ethernet interface	//11/////////////////////////////////
RedEye KK Tool (Software Monitoring & History)	1663
Password protection	7/
Evaluation report	1719



