

Climatic Chambers

(+5 °C ...+ 180 °C)

KK-68 CH

KK-190 CH

KK-340 CH

KK-500 CH

KK-1000 CH

- Temperature & 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



Temperature

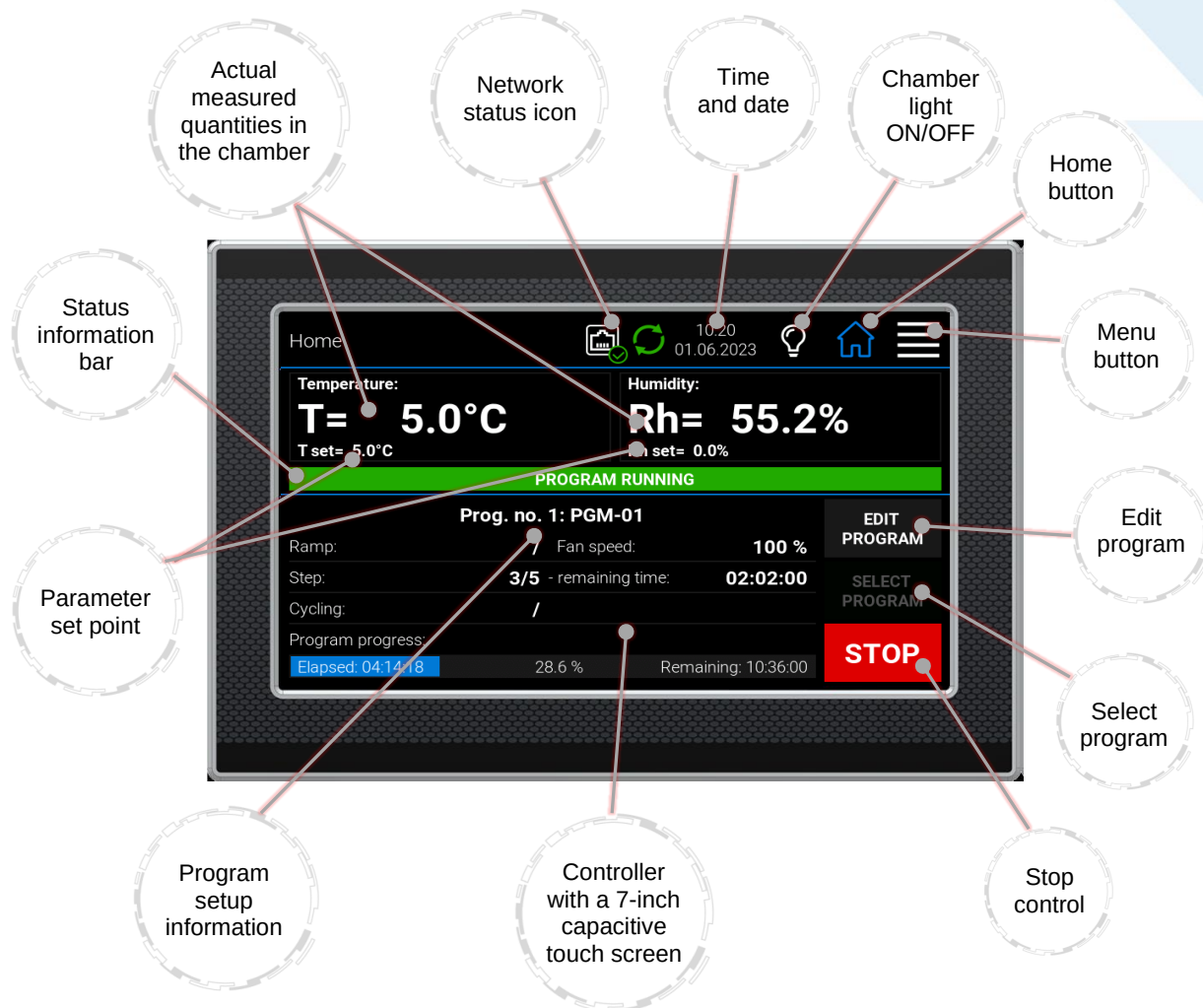


**Relative
Humidity**

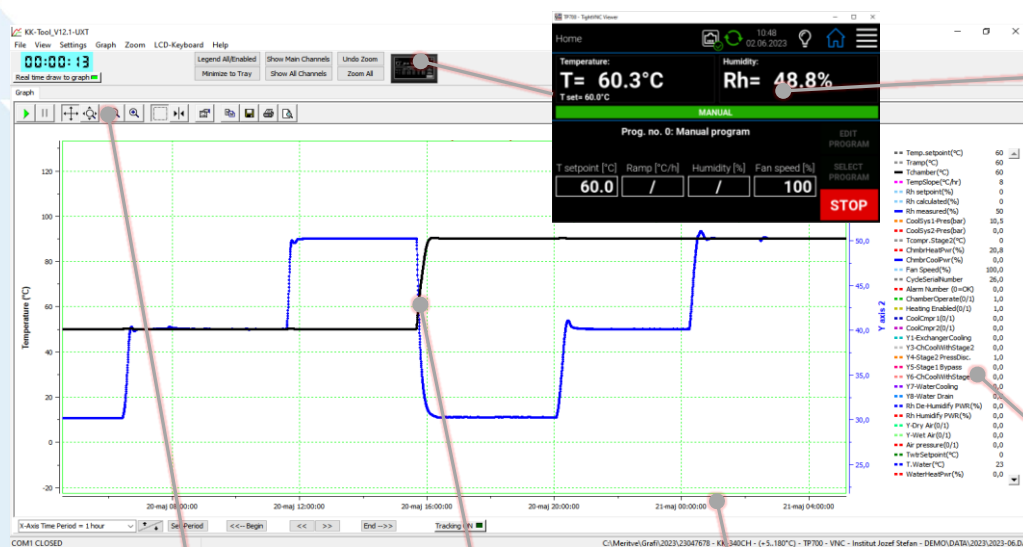
Device description:



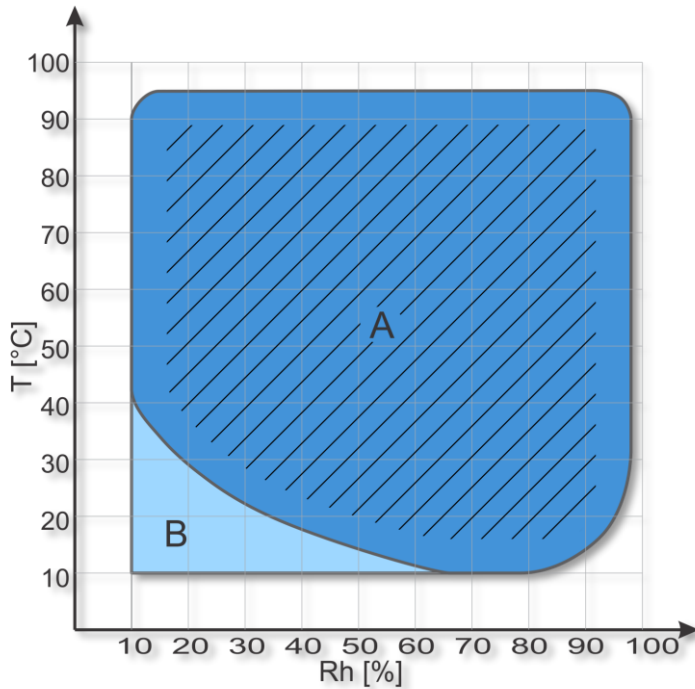
Touch display with advanced controller functions:



KK-Tool software for PC (free – included with every unit):



Rh range:

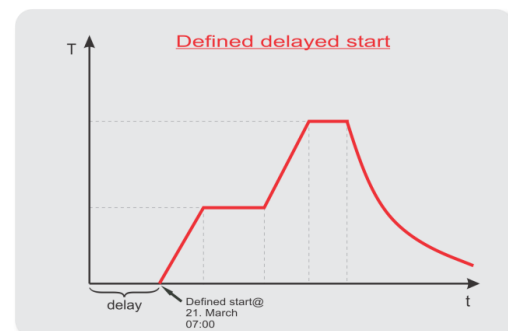
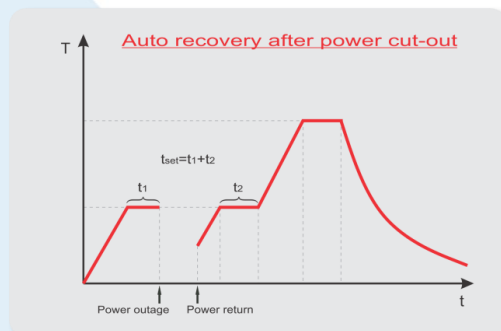
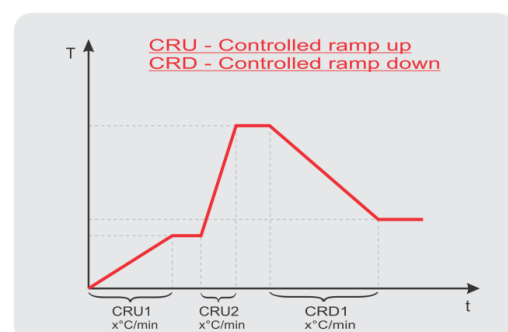
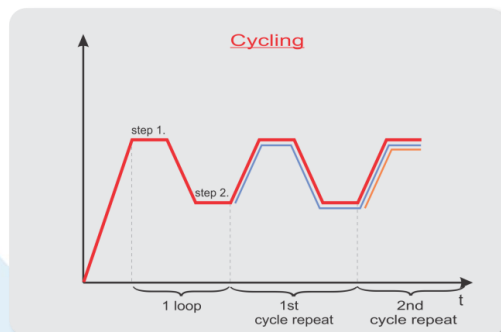
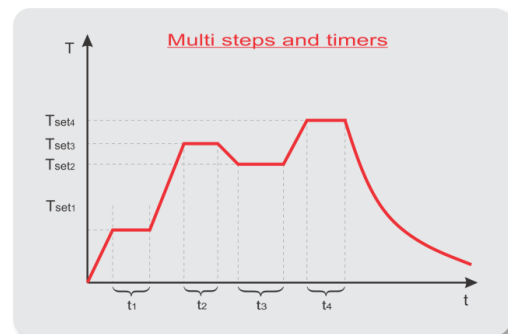
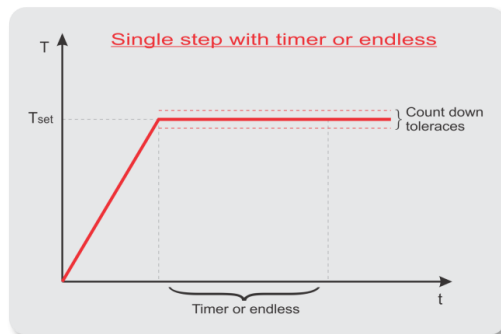


/// - Ideal range

A - Standard range

B - Extended humidity range

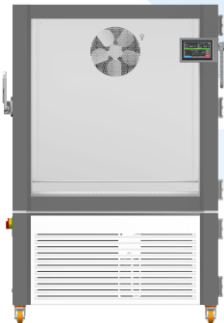
Controller functions:



	KK-68 CH	KK-190 CH	KK-340 CH
			
External dimensions (WxHxD) [mm]	650 x 1223 x 796	835 x 1661 x 951	835 x 1881 x 1126
Internal dimensions (WxHxD) [mm]	410 x 475 x 350	600 x 615 x 510	600 x 835 x 685
Volume [L]	~ 68	~ 190	~ 340
Temperature range [°C]	+ 5 ...+ 180	+ 5 ...+ 180	+ 5 ...+ 180
Heat up rate [°C/min] (according to EN 60068-3-5)	4.0	2.0	1.5
Cool down rate [°C/min] (according to EN 60068-3-5)	3.0	3.0	3.0
Temperature display res [°C]	0.1	0.1	0.1
Temperature set res. [°C]	0.1	0.1	0.1
Temperature stability [°C]	± 0.3°C @ 5°C ± 0.05°C @ 50°C 50 % Rh ± 0.05°C @ 90°C 90 % Rh ± 0.1°C @ 180°C	± 0.3°C @ 5°C ± 0.05°C @ 50°C 50 % Rh ± 0.05°C @ 90°C 90 % Rh ± 0.15°C @ 180°C	± 0.3°C @ 5°C ± 0.05°C @ 50°C 50%Rh ± 0.05°C @ 90 °C 90%Rh ± 0.15°C @ 180°C
Temperature uniformity [°C]	± 1.0°C @ 5°C ± 0.3°C @ 50°C 50 % Rh ± 0.3°C @ 90°C 90 % Rh ± 2.5°C @ 180°C	± 1.0°C @ 5°C ± 0.3°C @ 50°C 50 % Rh ± 0.3°C @ 90°C 90 % Rh ± 1.5°C @ 180°C	± 1.0°C @ 5°C ± 0.3°C @ 50°C 50 % Rh ± 0.3°C @ 90°C 90 % Rh ± 1°C @ 180°C
Heat compensation [W]	~ 1500 @ + 20 °C	~ 3000 @ + 20 °C	~ 3000 @ + 20 °C
Rh range [%]	10...98	10...98	10...98
Rh display resolution [%]	0.1	0.1	0.1
Rh set resolution [%]	1	1	1
Rh stability [%]	± 0.3 % @ 50 °C 50 % Rh ± 0.3 % @ 90 °C 90 % Rh	± 0.3 % @ 50 °C 50 % Rh ± 0.3 % @ 90 °C 90 % Rh	± 0.3 % @ 50 °C 50 % Rh ± 0.3 % @ 90 °C 90 % Rh
Temperature control	PID (PT-100)	PID (PT-100)	PID (PT-100)
Relative humidity control	Dew point RH control via Rh capacitive sensor/ dry air purge for extended range	Dew point RH control via Rh capacitive sensor/ dry air purge for extended range	Dew point RH control via Rh capacitive sensor/ dry air purge for extended range
Power supply	230V 50/60 Hz	230V 50/60 Hz	230V 50/60 Hz
Wattage [W]	3500	3600	3600
Interface	USB and Ethernet	USB and Ethernet	USB and Ethernet
Shelve	1 (max 6)	1 (max 8)	1 (max 8)
Shelve capacity [kg]	25	35	35
Max capacity [kg]	40	80	100
Water reservoir capacity [L]	8.2	19.6	19.6
Water consumption [L/24h] (operating at +90 °C / 90 %Rh)	~1.0	~1.5	~1.5
Observation window	As standard	As standard	As standard
Access port [mm]	Ø 50 (left side)	Ø 50 (left side)	Ø 50 (left side)
Noise [dBA] @ 1 m distance	58	60	60
Weight [kg]	195	278	324

*All performance in controlled environment ($T_{ambient} = 22\text{ °C} \pm 3\text{ °C}$)!

*Accessories might affect performance!

	KK-500 CH	KK-1000 CH
		
External dimensions (WxHxD) [mm]	1035 x 1880 x 1381	1235 x 1928 x 1579
Internal dimensions (WxHxD) [mm]	800 x 835 x 800	1000 x 1035 x 1000
Volume [L]	~ 500	~ 1000
Temperature range [°C]	+ 5 ... + 180	+ 5 ... + 180
Heat up rate [°C/min] (according to EN 60068-3-5)	3.0	3.0
Cool down rate [°C/min] (according to EN 60068-3-5)	2.0	2.0
Temperature display res [°C]	0.1	0.1
Temperature set res. [°C]	0.1	0.1
Temperature stability [°C]	± 0.3°C @ 5°C ± 0.05°C @ 50°C 50% Rh ± 0.05°C @ 90°C 90 % Rh ± 0.2°C @ 180°C	± 0.3°C @ 5°C ± 0.05°C @ 50°C 50 % Rh ± 0.05°C @ 90°C 90 % Rh ± 0.2°C @ 180°C
Temperature uniformity [°C]	± 1.0°C @ 5°C ± 0.3°C @ 50°C 50 % Rh ± 0.3°C @ 90°C 90 % Rh ± 1.5°C @ 180°C	± 1.0°C @ 5°C ± 0.3°C @ 50°C 50 % Rh ± 0.3°C @ 90°C 90 % Rh ± 1.5°C @ 180°C
Heat compensation [W]	~ 3000 @ + 20 °C	~ 5000 @ + 20 °C
Rh range [%]	10...98	10...98
Rh display resolution [%]	0.1	0.1
Rh set resolution [%]	1	1
Rh 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
Temperature control	PID (PT-100)	PID (PT-100)
Relative humidity control	Dew point RH control via Rh capacitive sensor/ dry air purge for extended range	Dew point RH control via Rh capacitive sensor/ dry air purge for extended range
Power supply	3x400V 50/60Hz	3x400V 50/60Hz
Wattage [W]	9000	12000
Interface	USB and Ethernet	USB and Ethernet
Shelve	1 (max 8)	1 (max 8)
Shelve capacity [kg]	50	50
Max capacity [kg]	150	200
Water reservoir capacity [L]	29.3	39.3
Water consumption [L/24h] (operating at +90 °C / 90 %Rh)	~1.5	~2.0
Observation window	As standard	As standard
Access port [mm]	Ø 50 (left side)	Ø 50 (left side)
Noise [dBA] @ 1 m distance	62	62
Weight [kg]	435	604

*All performance in controlled environment ($T_{ambient} = 22\text{ °C} \pm 3\text{ °C}$)!

*Accessories might affect performance!

Ordering information and accessories:

Description	Part no.
Climatic chamber KK-68 CH	789
Climatic chamber KK-190 CH	910
Climatic chamber KK-340 CH	921
Climatic chamber KK-500 CH	907
Climatic chamber KK-1000 CH	909
Shelve wire KK-68 CH	792
Shelve wire KK-190 CH	953
Shelve wire KK-340 CH	956
Shelve wire KK-500 CH	958
Shelve wire KK-1000 CH	960
Shelve perforated KK-68 CH	793
Shelve perforated KK-190 CH	954
Shelve perforated KK-340 CH	957
Shelve perforated KK-500 CH	959
Shelve perforated KK-1000 CH	961
Access Port w. Plug Ø 50 mm right (specify position)	899
Access Port w. Plug Ø 90 mm right (specify position)	900
Automatic water feeding	1744
Extended Rh range via dry air purge	1758
Trolley for KK-68 CH	794
Evaluation report 9 points, 3 climatic values - performed by Kambic	1719
Evaluation report 9 points, 3 climatic values - Accredited	1777

**Accessories might affect performance!*

