



CLIMATIC CHAMBERS

(- 75 °C ...+ 180 °C)

Model:

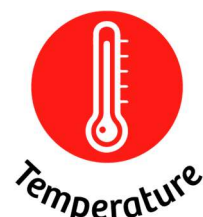
KK-190 CHULT

KK-340 CHULT

KK-500 CHULT

KK-1000 CHULT

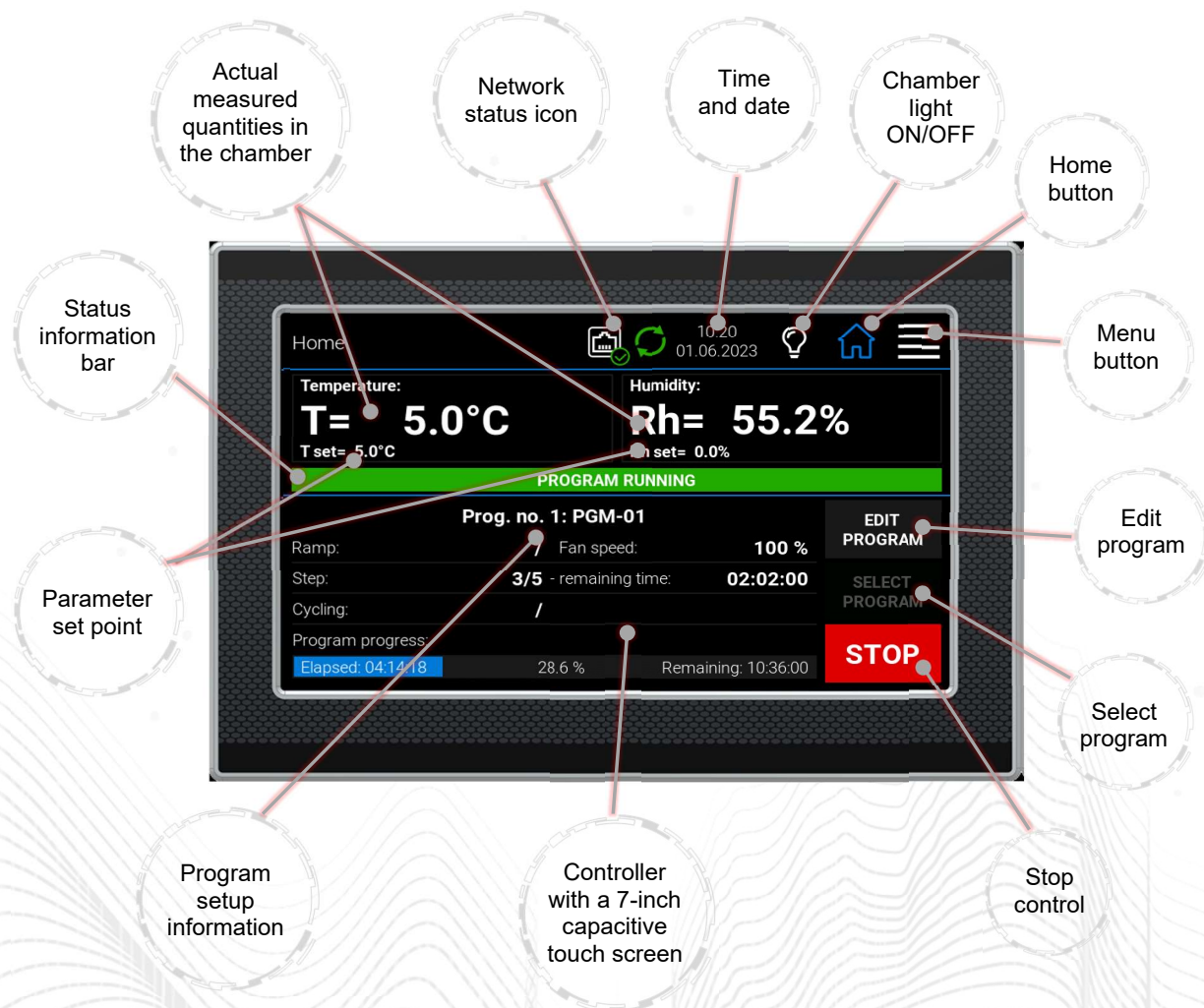
- Temperature & Relative humidity-controlled test polygon
- Material temperature & Rh resistance and product testing
 - Maintaining superior temperature & Rh stability
 - Sample conditioning prior to other tests
 - Data loggers and sensors calibration
 - World class metrology performance
 - Accelerated ageing
 - Stress tests



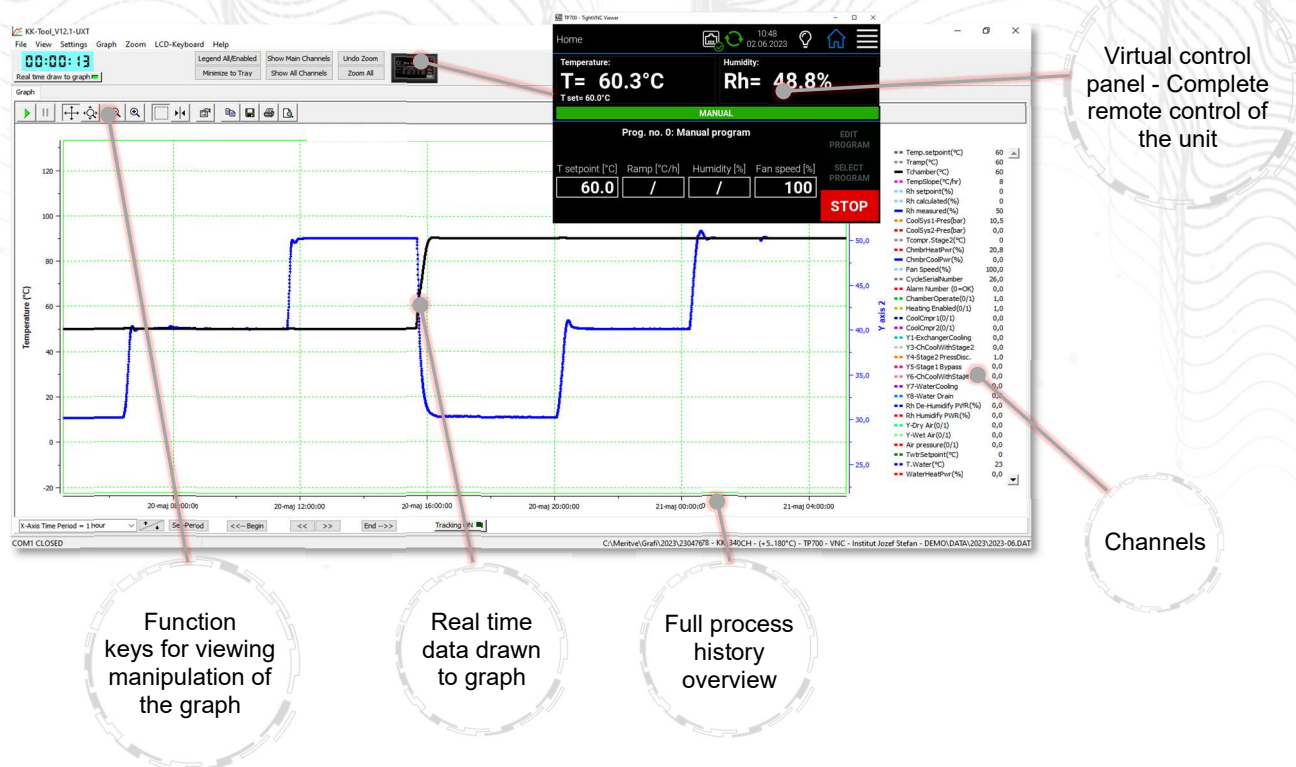
Device description:



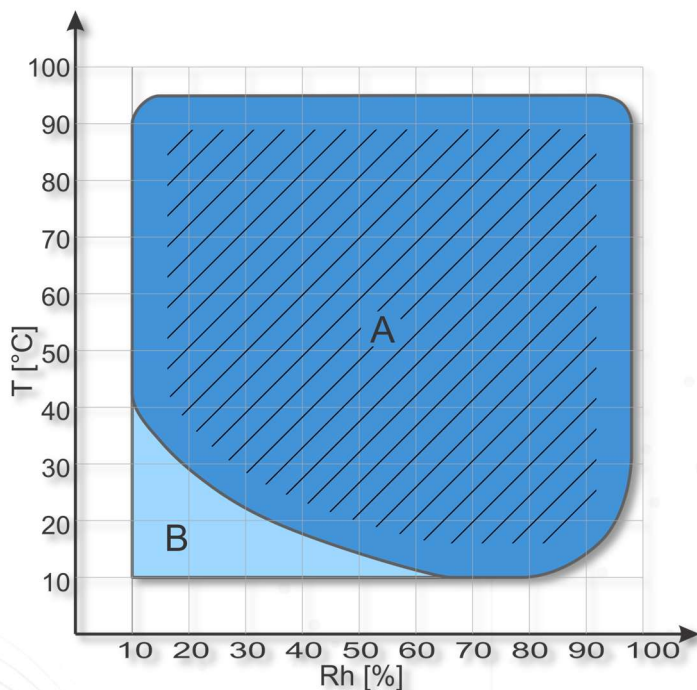
Touch display with advanced controller functions:



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



Rh range:

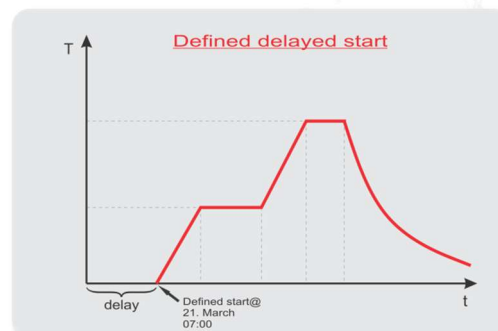
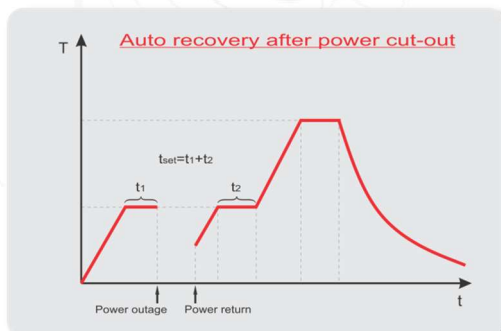
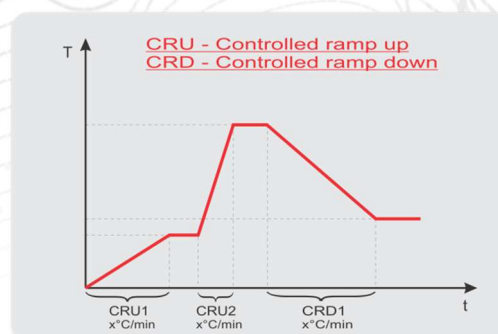
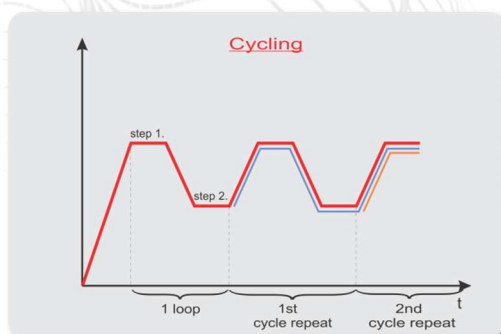
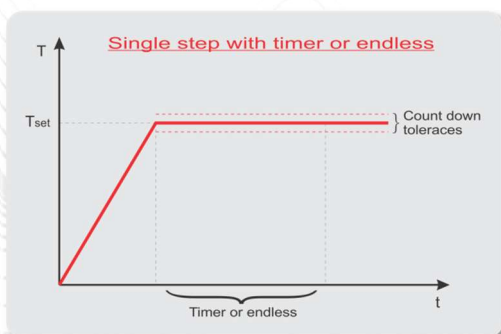


/// - Ideal range

A - Standard range

B - Extended humidity range

Controller functions:



	KK-190 CHULT	KK-340 CHULT
		
External dimensions (WxHxD) [mm]	835 x 1721 x 1126	875 x 1985 x 1326
Internal dimensions (WxHxD) [mm]	610 x 615 x 510	600 x 835 x 685
Volume [L]	~ 190	~ 340
Temperature range [°C]	- 75 ...+ 180	- 75 ...+ 180
Heat up rate [°C/min] (according to EN 60068-3-5)	2.2	1.6
Cool down rate [°C/min] (according to EN 60068-3-5)	2.4	2.7
Temperature display res [°C]	0.1	0.1
Temperature set res. [°C]	0.1	0.1
Temperature stability [°C]	± 0.5 °C @ - 75 °C ± 0.1 °C @ 50 °C 50% Rh ± 0.1 °C @ 90 °C 90% Rh ± 0.2 °C @ 180 °C	± 0.5 °C @ - 75 °C ± 0.08 °C @ 50 °C 50 % Rh ± 0.08 °C @ 90 °C 90 % Rh ± 0.2 °C @ 180 °C
Temperature uniformity [°C]	± 1.2 °C @ - 75 °C ± 0.5 °C @ 50 °C 50 % Rh ± 0.5 °C @ 90 °C 90 % Rh ± 2.0 °C @ 180 °C	± 1.0 °C @ - 75 °C ± 0.5 °C @ 50 °C 50 % Rh ± 0.5 °C @ 90 °C 90 % Rh ± 1.5 °C @ 180 °C
Heat compensation [W]	~ 300 @ - 60 °C ~ 1000 @ - 20 °C	~ 500 @ - 60 °C ~ 1200 @ - 20 °C
Rh range [%]	10...98	10...98
Rh display resolution [%]	0.1	0.1
Rh set resolution [%]	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
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]	6300	9800
Interface	USB and Ethernet	USB and Ethernet
Shelve	1 (max 8)	1 (max 8)
Shelve capacity [kg]	35	35
Max capacity [kg]	80	80
Water reservoir capacity [L]	19.6	19.6
Water consumption [L/24h] (operating at +90 °C / 90 %Rh)	~1.5	~1.5
Observation window	As standard	As standard
Access port [mm]	Ø 50 (left side)	Ø 50 (left side)
Noise [dBA] @ 1 m distance	67	67
Weight [kg]	440	480

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

*Accessories might affect performance!

	KK-500 CHULT	KK-1000 CHULT
		
External dimensions (WxHxD) [mm]	1165 x 1985 x 1640	1235 x 2000 x 1816
Internal dimensions (WxHxD) [mm]	810 x 800 x 800	1010 x 1000 x 1000
Volume [L]	~ 500	~ 1000
Temperature range [°C]	- 75 ...+ 180	- 75 ...+ 180
Heat up rate [°C/min] (according to EN 60068-3-5)	3.6	3.5
Cool down rate [°C/min] (according to EN 60068-3-5)	2.2	2.1
Temperature display res [°C]	0.1	0.1
Temperature set res. [°C]	0.1	0.1
Temperature stability [°C]	± 0.8 °C @ - 75 °C ± 0.1 °C @ 50 °C 50 % Rh ± 0.1 °C @ 90 °C 90 % Rh ± 0.2 °C @ 180 °C	± 0.8 °C @ - 75 °C ± 0.1 °C @ 50 °C 50 % Rh ± 0.1 °C @ 90 °C 90 % Rh ± 0.2 °C @ 180 °C
Temperature uniformity [°C]	± 1.0 °C @ - 75 °C ± 0.5 °C @ 50 °C 50 % Rh ± 0.5 °C @ 90 °C 90 % Rh ± 1.5 °C @ 180 °C	± 1.0 °C @ - 75 °C ± 0.5 °C @ 50 °C 50 % Rh ± 0.5 °C @ 90 °C 90 % Rh ± 1.5 °C @ 180 °C
Heat compensation [W]	~ 1000 @ - 60 °C ~ 2500 @ - 20 °C	~ 1350 @ - 60 °C ~ 3000 @ - 20 °C
Rh range [%]	10...98	10...98
Rh display resolution [%]	0.1	0.1
Rh set resolution [%]	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
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]	16300	18000
Interface	USB and Ethernet	USB and Ethernet
Shelve	1 (max 8)	1 (max 8)
Shelve capacity [kg]	35	35
Max capacity [kg]	80	80
Water reservoir capacity [L]	35	45
Water consumption [L/24h] (operating at +90 °C / 90 %Rh)	~2.0	~2.0
Observation window	As standard	As standard
Access port [mm]	Ø 50 (left side)	Ø 50 (left side)
Noise [dBA] @ 1 m distance	68	68
Weight [kg]	630	890

**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-190 CHULT	1071
Climatic chamber KK-340 CHULT	1091
Climatic chamber KK-500 CHULT	1100
Climatic chamber KK-1000 CHULT	3013
Shelve wire KK-190 CHULT	953
Shelve wire KK-340 CHULT	956
Shelve wire KK-500 CHULT	958
Shelve wire KK-1000 CHULT	960
Shelve perforated KK-190 CHULT	954
Shelve perforated KK-340 CHULT	957
Shelve perforated KK-500 CHULT	959
Shelve perforated KK-1000 CHULT	961
Access Port w. Plug Ø 50 mm right (<i>*specify position</i>)	899
Access Port w. Plug Ø 100 mm right (<i>*specify position</i>)	900
Automatic water feeding	1744
Extended Rh range via dry air purge	1758
Evaluation report 9 points, 3 climatic values - performed by Kambič	1719
Evaluation report 9 points, 3 climatic values - Accredited	1777

**Accessories might affect performance!*

