



CLIMATIC CHAMBERS

(- 75 °C ...+ 180 °C)

Model:

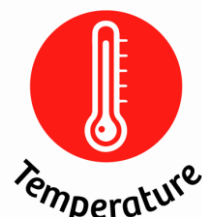
KK-190 CHULT

KK-340 CHULT

KK-500 CHULT

KK-1000 CHULT

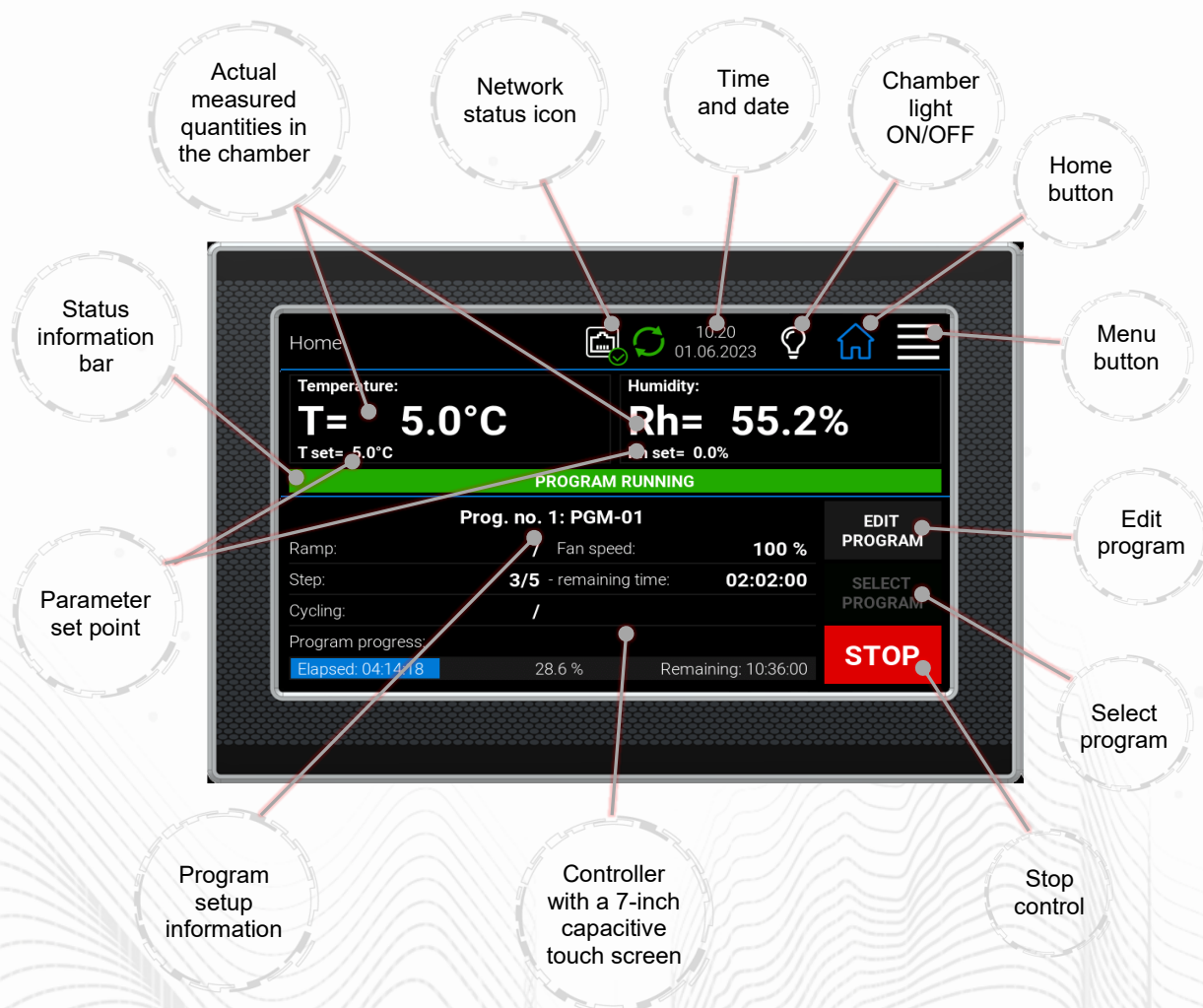
- Temperature & Relative humidity-controlled test polygon
- Material temperature & Rh resistance and product testing
 - Maintaining superior temperature & Rh stability
 - Sample conditioning prior to other tests
 - Data loggers and sensors calibration
 - World class metrology performance
 - Accelerated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



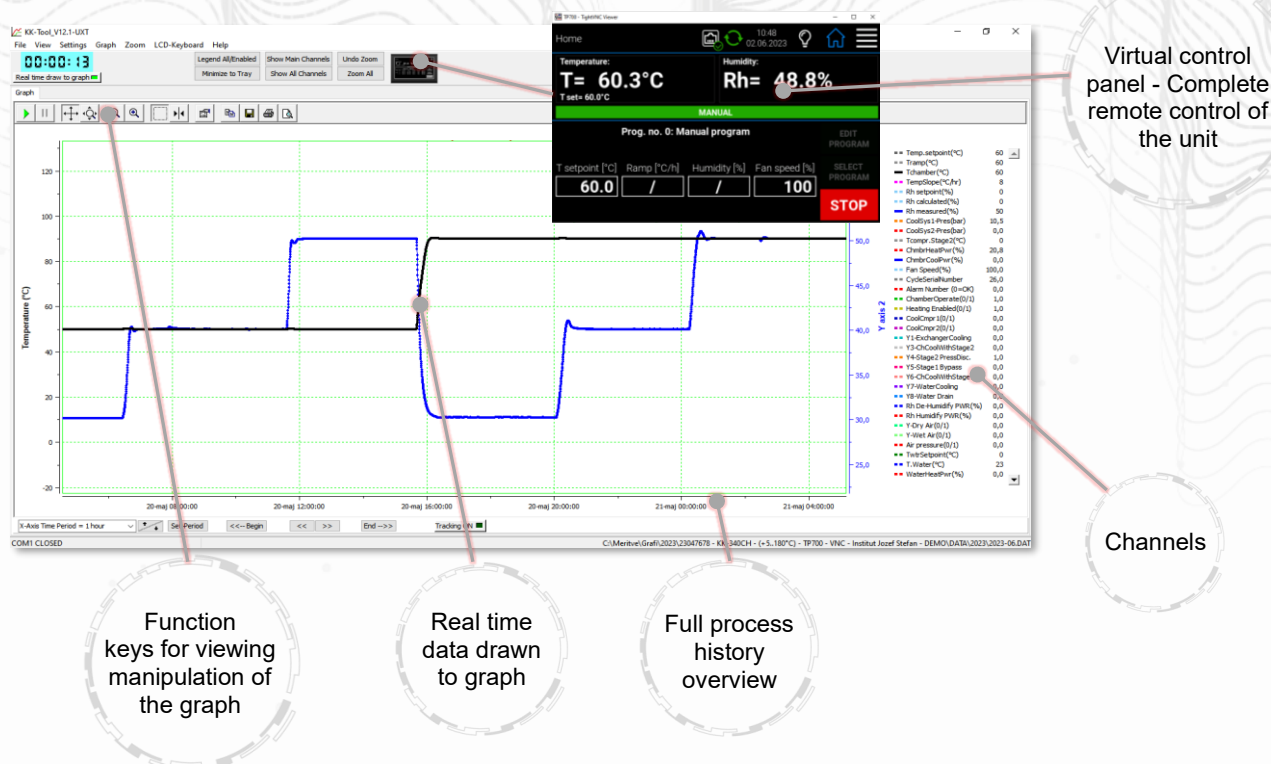
Device description:



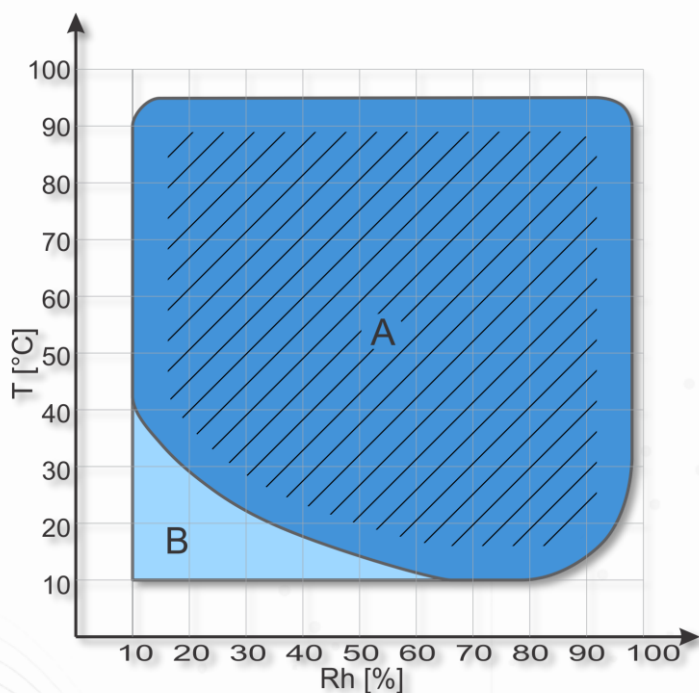
Touch display with advanced controller functions:



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



Rh range:

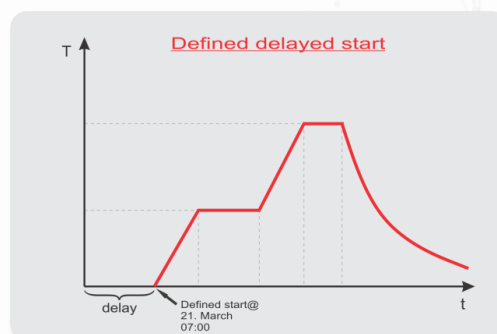
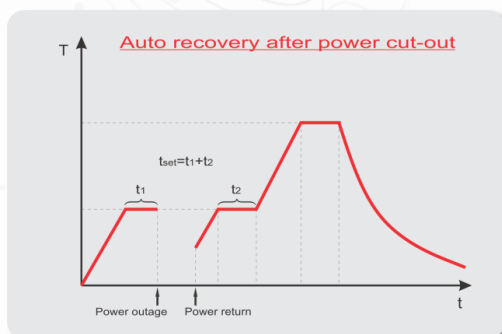
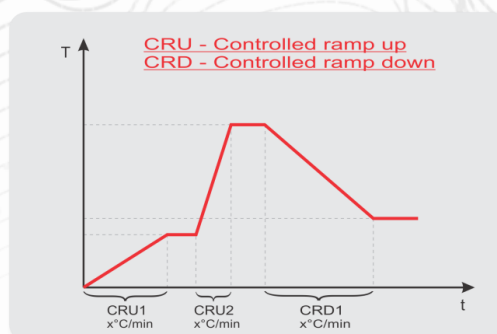
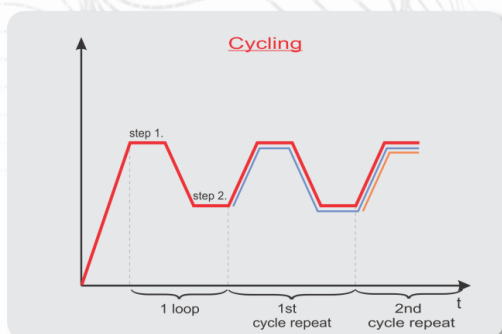
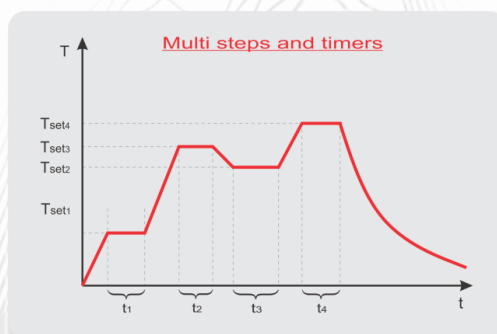
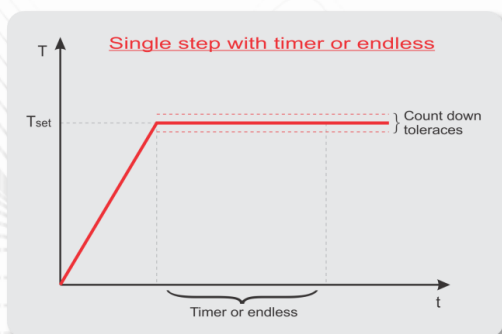


/// - Ideal range

A - Standard range

B - Extended humidity range

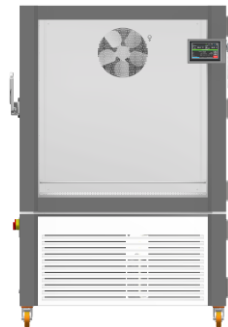
Controller functions:



	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	1,5
Cool down rate [°C/min] (according to EN 60068-3-5)	2,2	1,6
Temperature display res [°C]	0.1	0.1
Temperature set res. [°C]	0.1	0.1
Temperature stability [°C]	± 1,0 °C @ - 75 °C ± 0,1 °C @ 50 °C 50% Rh ± 0,1 °C @ 90 °C 90% Rh ± 0,5 °C @ 180 °C	± 1,0 °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 ± 1,7 °C @ 180 °C	± 1,2 °C @ - 75 °C ± 0,5 °C @ 50 °C 50 % Rh ± 0,5 °C @ 90 °C 90 % Rh ± 1,7 °C @ 180 °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]	6500	7500
Interface	USB and Ethernet	USB and Ethernet
Shelve	1 (max 8)	1 (max 8)
Shelve capacity [kg]	35	35
Max capacity [kg]	80	100
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)	3,3	1,5
Cool down rate [°C/min] (according to EN 60068-3-5)	1,2	1,6
Temperature display res [°C]	0.1	0.1
Temperature set res. [°C]	0.1	0.1
Temperature stability [°C]	± 1,0 °C @ - 75 °C ± 0,1 °C @ 50 °C 50 % Rh ± 0,1 °C @ 90 °C 90 % Rh ± 0,1 °C @ 180 °C	± 1,0 °C @ - 75 °C ± 0,1 °C @ 50 °C 50 % Rh ± 0,1 °C @ 90 °C 90 % Rh ± 0,1 °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	± 1,0 °C @ - 75 °C ± 0,5 °C @ 50 °C 50 % Rh ± 0,5 °C @ 90 °C 90 % Rh
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]	12000	14000
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]	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

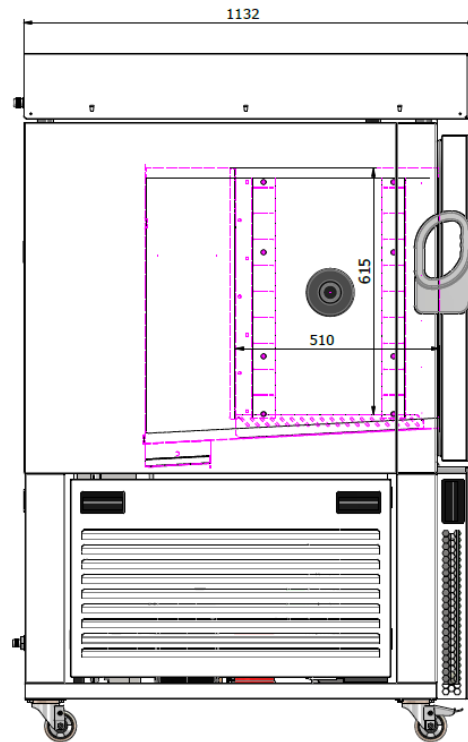
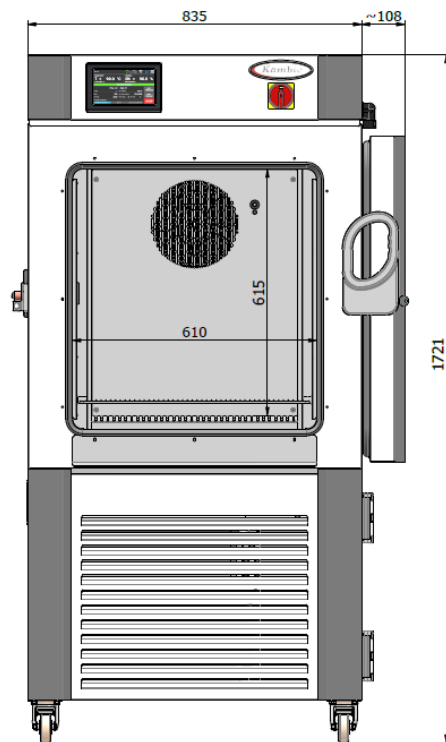
*All performance in controlled environment ($T_{ambient} = 22 \text{ °C} \pm 3 \text{ °C}$)!

*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 Kambic	1719
Evaluation report 9 points, 3 climatic values - Accredited	1777

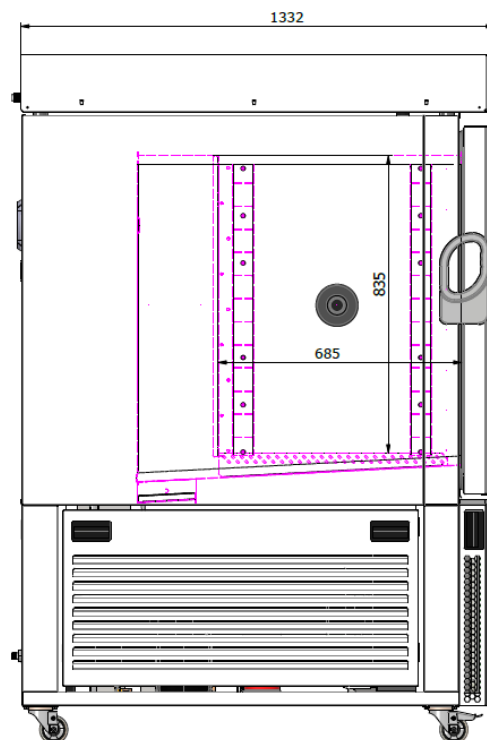
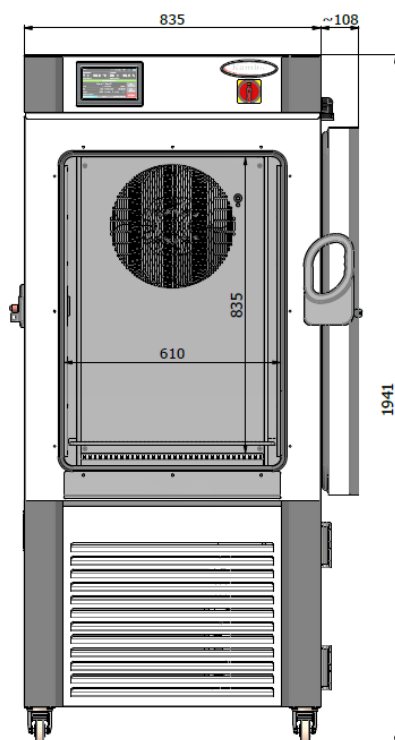
**Accessories might affect performance!*



SHIPPING	
W	1180 mm
H	2050 mm
D	1280 mm
weight	520 kg

* we reserve the right to modifications

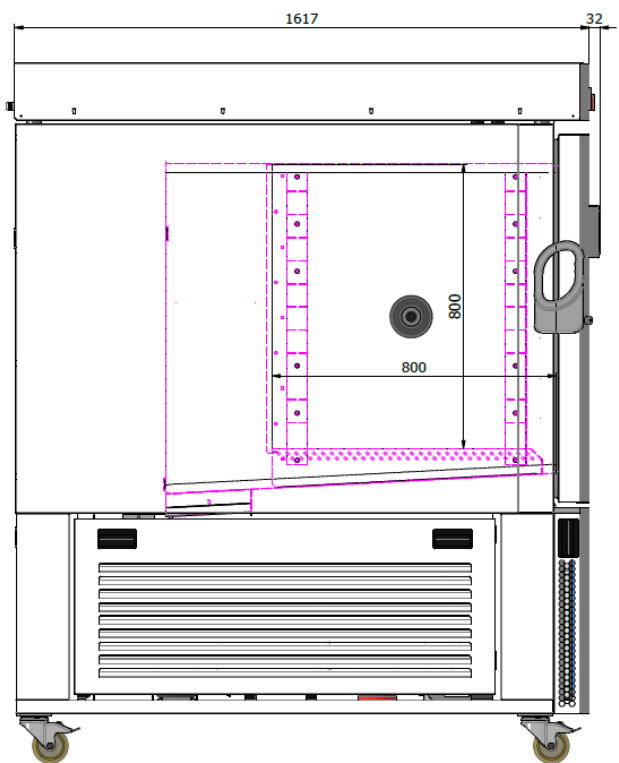
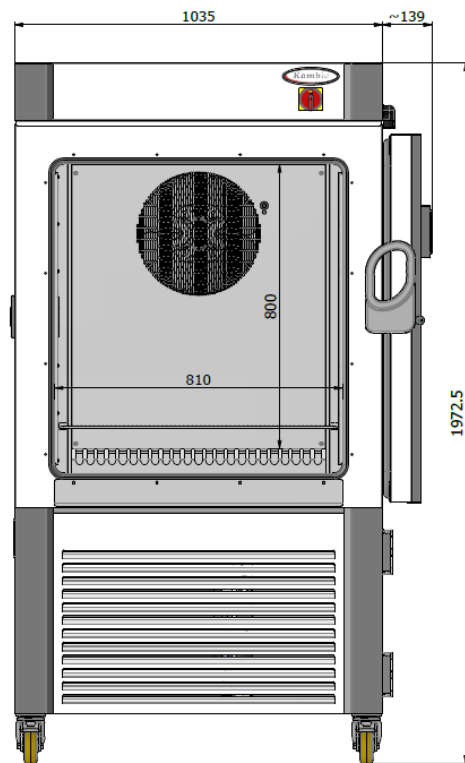
DIMENSIONAL DRAWING	PRODUCT	MODEL
	CLIMATIC CHAMBER	KK-190 CHULT



SHIPPING	
W	1180 mm
H	2050 mm
D	1280 mm
weight	520 kg

* we reserve the right to modifications

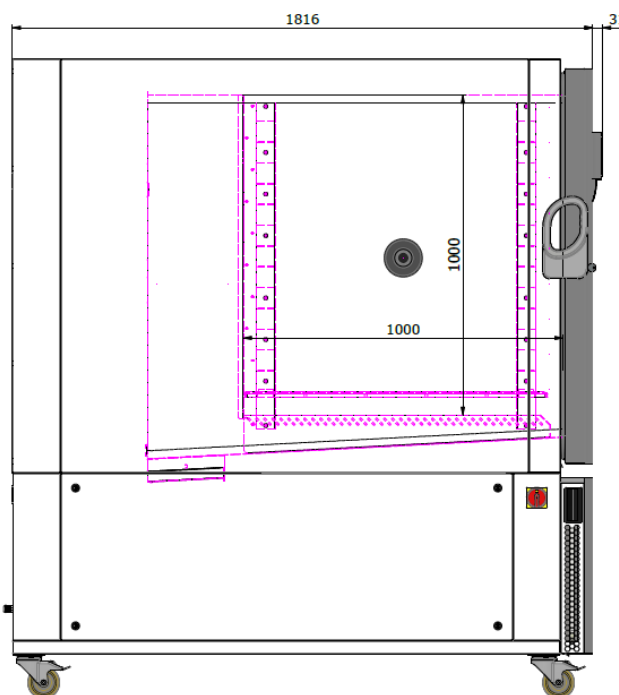
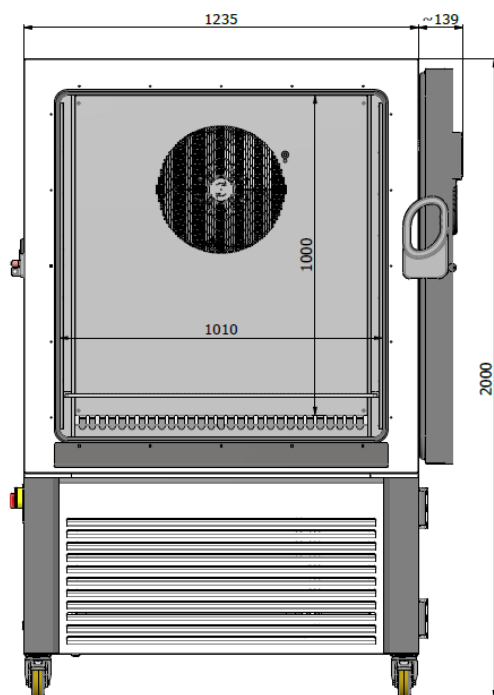
DIMENSIONAL DRAWING	PRODUCT	MODEL
	CLIMATIC CHAMBER	KK-340 CHULT



SHIPPING	
W	
H	
D	
WEIGHT	

* we reserve the right to modifications

DIMENSIONAL DRAWING	PRODUCT	MODEL
	CLIMATIC CHAMBER	KK-500 CHULT V23



SHIPPING	
W	1500 mm
H	2250
D	2050 mm
WEIGHT	

* we reserve the right to modifications

DIMENSIONAL DRAWING	PRODUCT	MODEL
	CLIMATIC CHAMBER	KK-1000 CHULT V23