

# 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





Fan for internal air circulation with speed control

Controller with user friendly interface, advance settings options, RS-232, USB or Ethernet communication ports

2 level over temp. protection  
 1. 5°C over set point heating disabled  
 2. 10°C above max .tem mechanical shut off

All exterior in galvanized and powder coated steel RAL-7035

Extensive heat insulation shield on all chamber sides and doors

Fully stainless steel chamber with 3 side double wall for superior air distribution

Parallel sealed with soft profile silicone seal to ensure perfect tightness

Heated observation window with illumination 370x420mm (for KK-50 CHLT 305x300mm) (as accessory)

Access port with both end plugs Ø40 as standard, Ø50 or Ø90 as accessory

Easy accessible stainless steel water tank with level switch or option with automatic water feeding

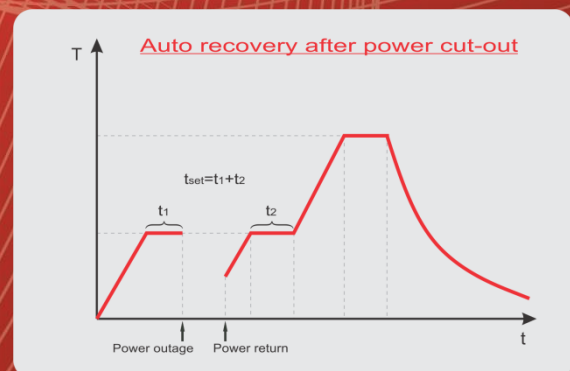
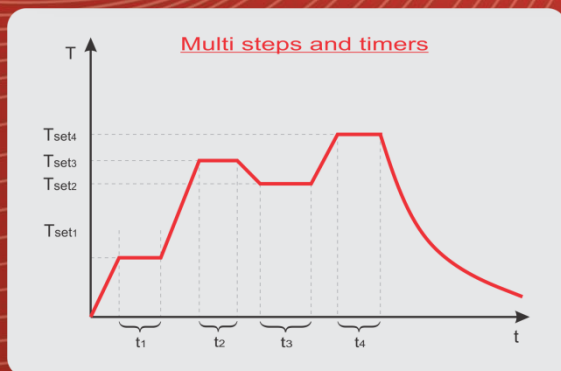
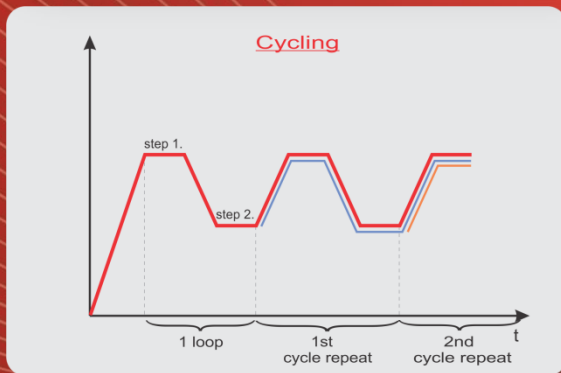
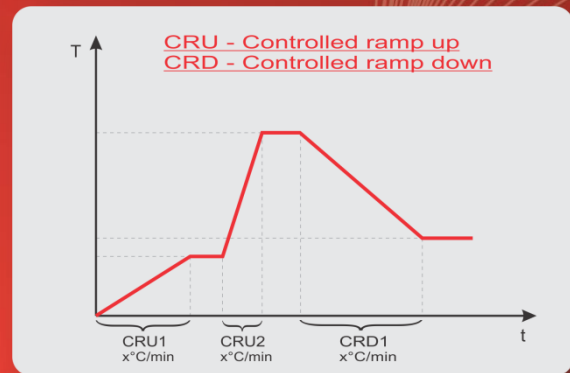
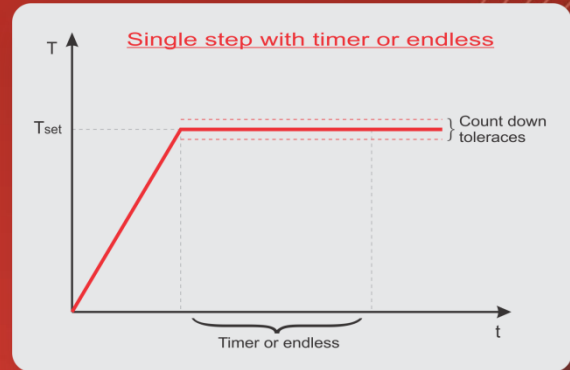
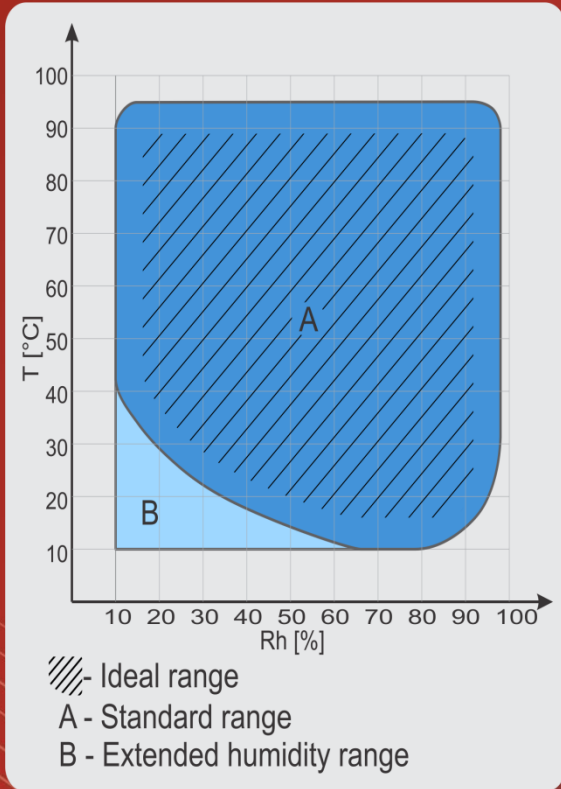
Height adjustable stainless steel wire shelves (1 wire shelf included, extra as accessory, also perforated shelves as accessory)




Heavy duty swivel wheels with brake for simple manipulation




Full 4 side maintenance access to ref. system

Heavy duty closing mechanism

## Controller functions:

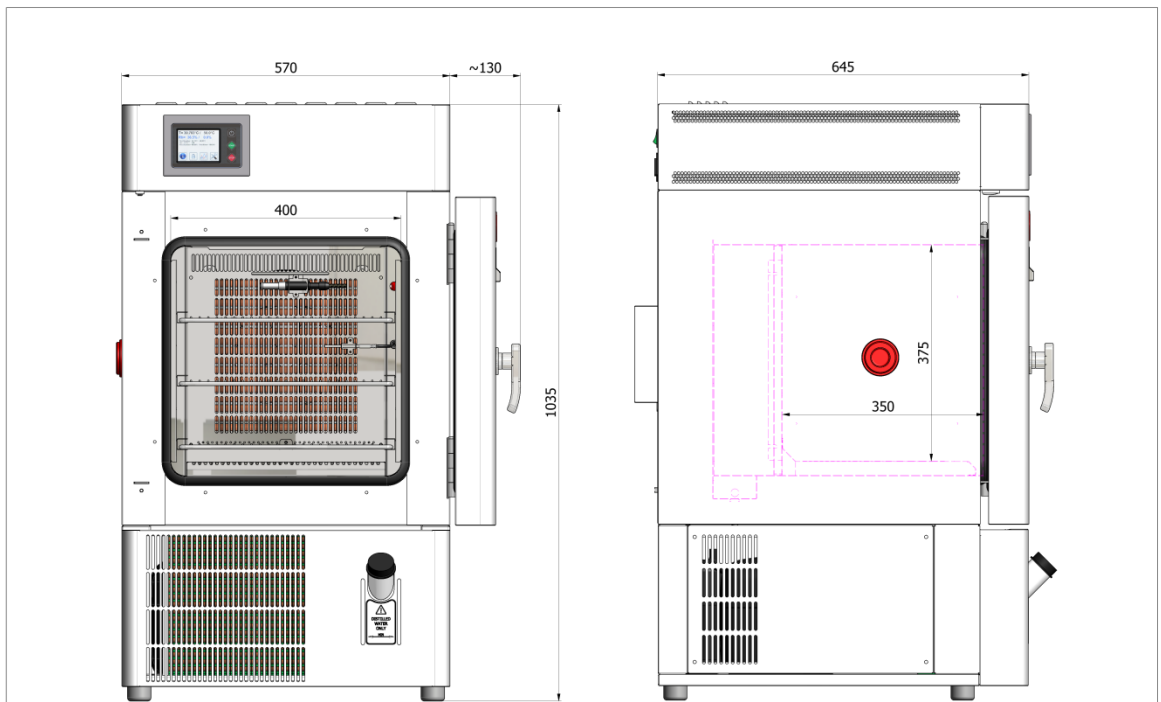


	<b>KK-50 CHLT</b>	<b>KK-105 CHLT</b>	<b>KK-190 CHLT</b>
			
External dimensions (WxHxD) in mm	570 x 1035 x 645	725 x 1560 x 845	834 x 1675 x 930
Internal dimensions (WxHxD) in mm	400 x 375 x 350	490 x 498 x 430	600 x 610 x 510
Volume (L)	~ 50	~ 105	~ 190
Temperature range (°C)	-40 ... +180	-40 ... +180	-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 (%)	10...98	10...98	10...98
Relative humidity display resolution (%)	0.1	0.1	0.1
Relative humidity set resolution (%)	1	1	1
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)	2300	3200	3600
Interface	RS 232 (USB or Ethernet as accessory)	RS 232 (USB or Ethernet as accessory)	RS 232 (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

	<b>KK-340 CHLT</b>	<b>KK-500 CHLT</b>	<b>KK-1000 CHLT</b>
			
External dimensions (WxHxD) in mm	835 x 1895 x 1115	1035 x 1810 x 1270	1235 x 1930 x 1495
Internal dimensions (WxHxD) in mm	600 x 830 x 685	800 x 800 x 800	1000 x 1000 x 1000
Volume (L)	~ 340	~ 500	~ 1000
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) EN 60068-3-5	2,1	1,2	1,8
Temperature display resolution (°C)	0.1	0.1	0.1
Temperature set resolution (°C)	0.1	0.1	0.1
Temperature stability (°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	±0,5°C @ -40°C ±0,06°C @ 50°C 50% Rh ±0,1°C @ 90°C 90% Rh ±0,1°C @ 180°C	±0,5°C @ -40°C ±0,05°C @ 50°C 50% Rh ±0,1°C @ 90°C 90% Rh ±0,1°C @ 180°C
Temperature uniformity (°C)	±1,5°C @ -40°C ±0,34°C @ 50°C 50% Rh ±0,41°C @ 90°C 90% Rh ±1,5°C @ 180°C	±0,5°C @ -40°C ±0,3°C @ 50°C 50% Rh ±0,4°C @ 90°C 90% Rh ±1,0°C @ 180°C	±0,5°C @ -40°C ±0,4°C @ 50°C 50% Rh ±0,5°C @ 90°C 90% Rh ±1,0°C @ 180°C
Relative humidity range (%)	10...98	10...98	10...98
Relative humidity display resolution (%)	0.1	0.1	0.1
Relative humidity set resolution (%)	1	1	1
Relative humidity stability (%)	±0,5% @ 50°C 50% Rh ±0,6% @ 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	3x400V 50/60Hz	3x400V 50/60Hz
Wattage (W)	3600	9000	12000
Interface	RS 232 (USB or Ethernet as accessory)	RS 232 (USB or Ethernet as accessory)	RS 232 (USB or Ethernet as accessory)
Shelve	1 (max 6)	1 (max 6)	1 (max 8)
Shelve capacity (kg)	35	50	50
Max capacity (kg)	100	150	200
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	60	62	65
Weight (kg)	324	435	604

### Ordering information and accessories:

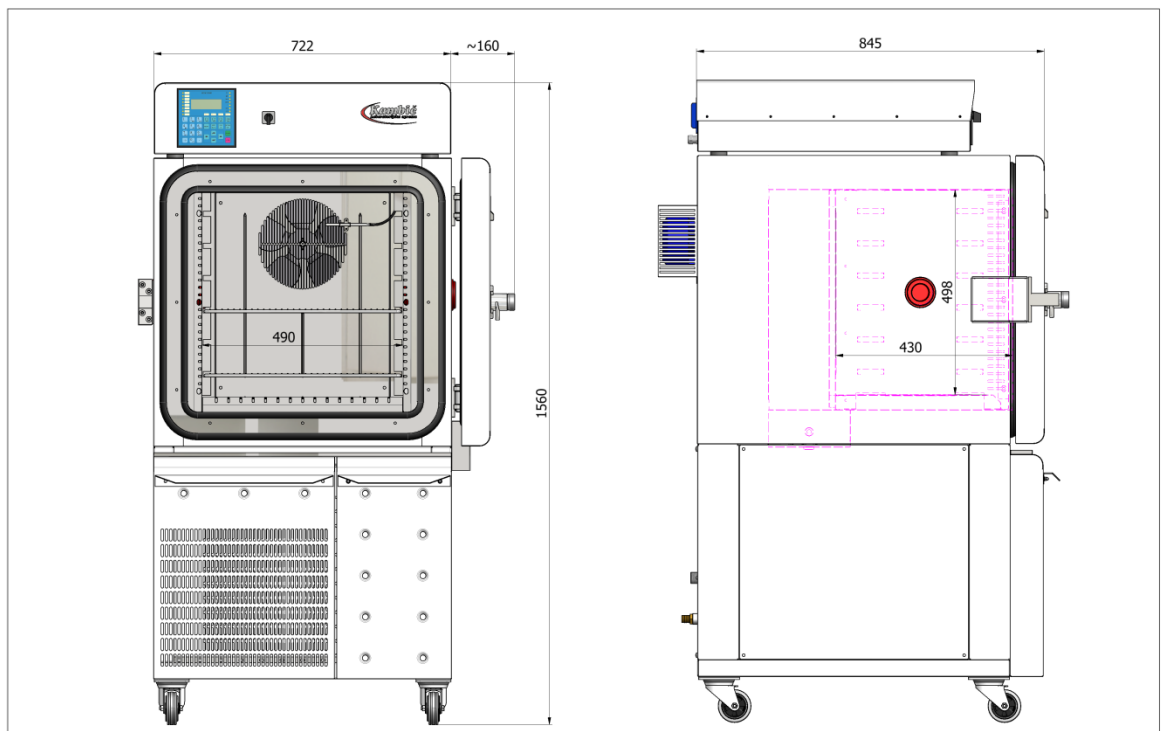
Description	Part no.
Climatic chamber KK-50 CHLT	2572
Climatic chamber KK-105 CHLT	937
Climatic chamber KK-190 CHLT	912
Climatic chamber KK-340 CHLT	935
Climatic chamber KK-500 CHLT	988
Climatic chamber KK-1000 CHLT	936
Shelve wire KK-50 CHLT	1766
Shelve wire KK-105 CHLT	951
Shelve wire KK-190 CHLT	953
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 (KK-50 CHLT)	2637
Automatic water feeding	1744
Extended Rh range via dry air purge	1758
Trolley for KK-50 CHLT	2207
USB interface	1466
Ethernet interface	1716
RedEye KK Tool (Software Monitoring & History)	1663
Password protection	1718
Evaluation report	1719



SHIPPING	
W	690 mm
H	1230 mm
D	810 mm
WEIGHT	160 kg

\* we reserve the right to modifications

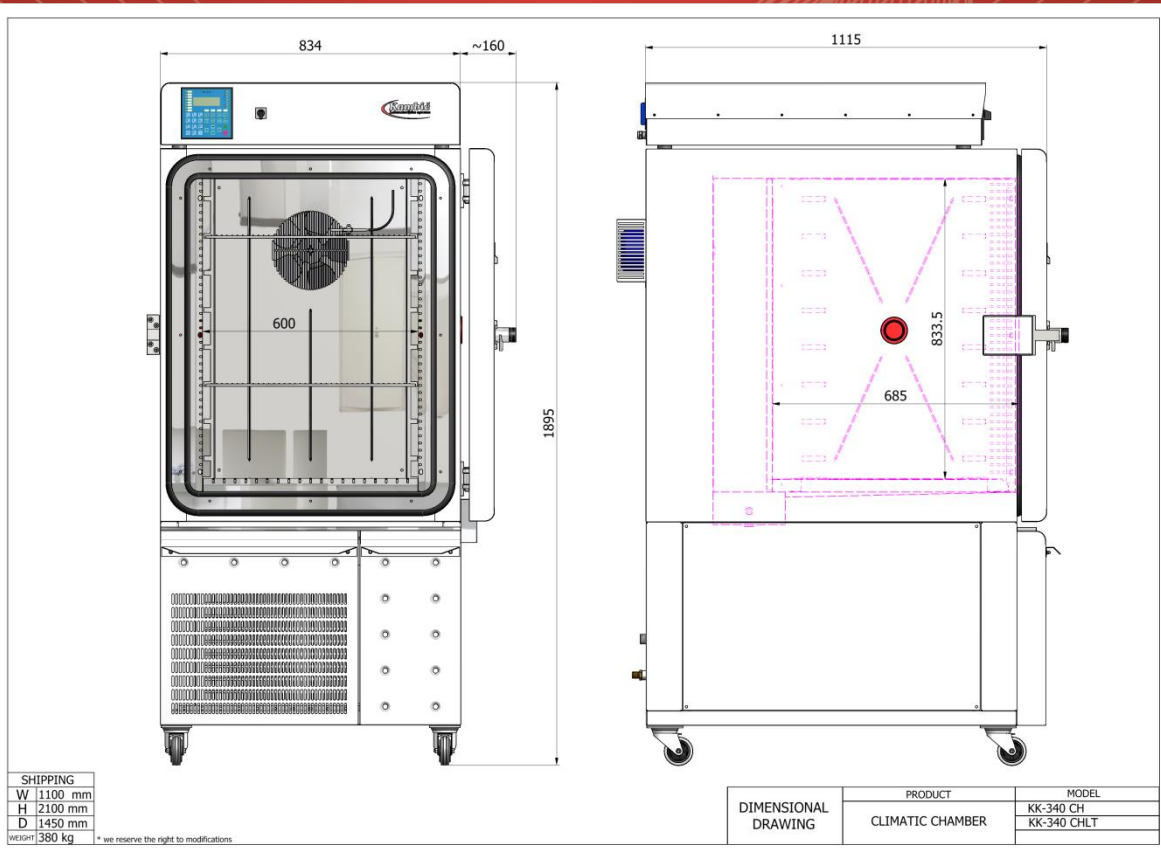
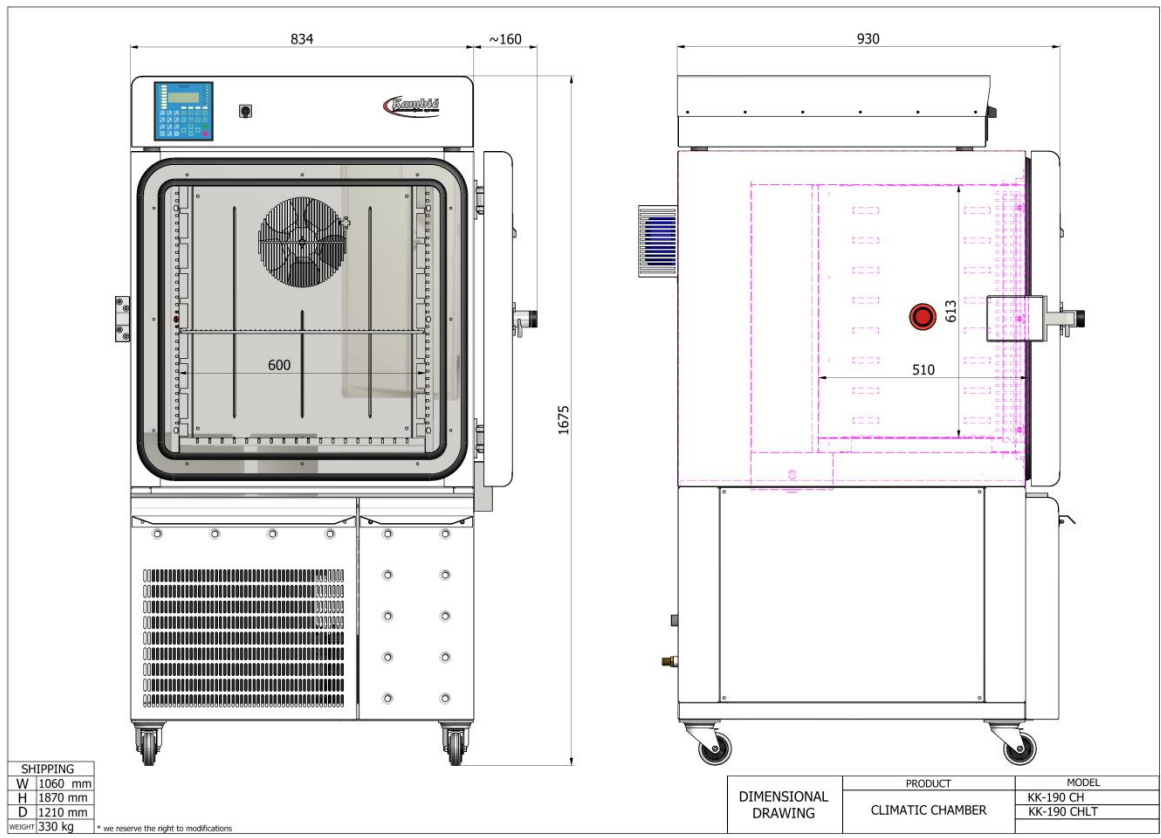
DIMENSIONAL DRAWING	PRODUCT	MODEL
	CLIMATIC CHAMBER	KK-50 CH
		KK-50 CHLT



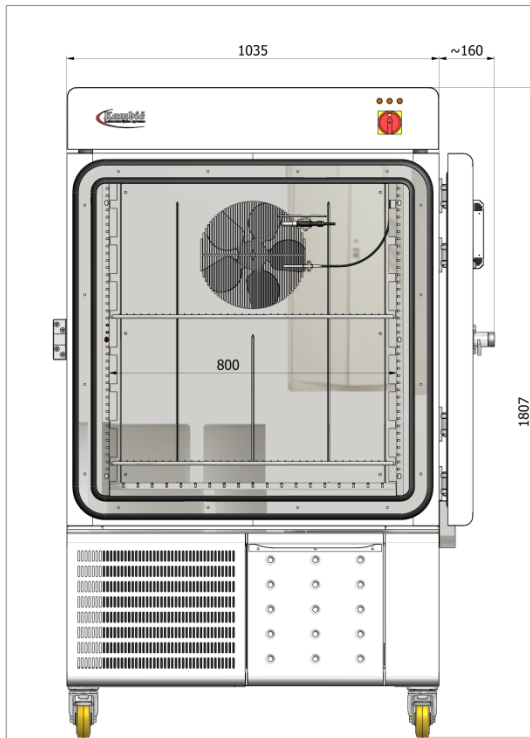
SHIPPING	
W	950 mm
H	1760 mm
D	1120 mm
WEIGHT	290 kg

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DIMENSIONAL DRAWING	PRODUCT	MODEL
	CLIMATIC CHAMBER	KK-105 CH
		KK-105 CHLT

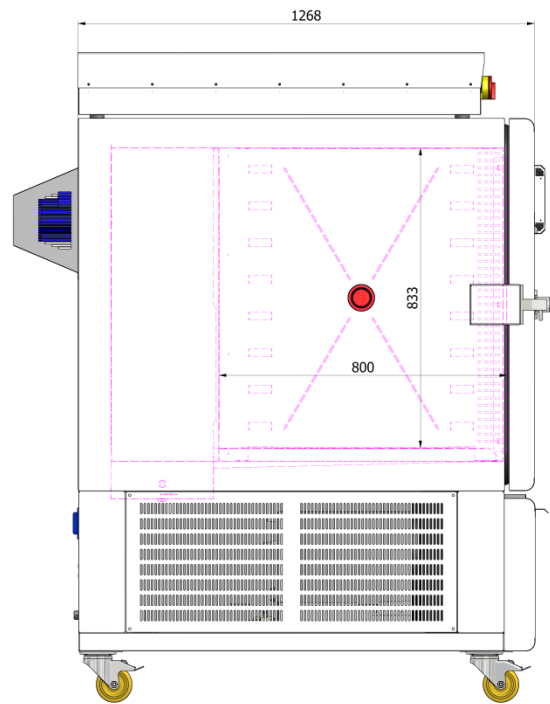




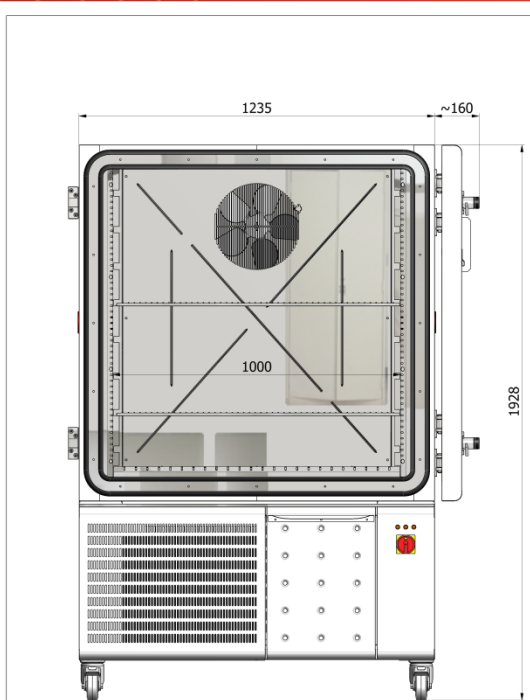


SHIPPING	
W	1270 mm
H	2060 mm
D	1630 mm
WEIGHT	620 kg

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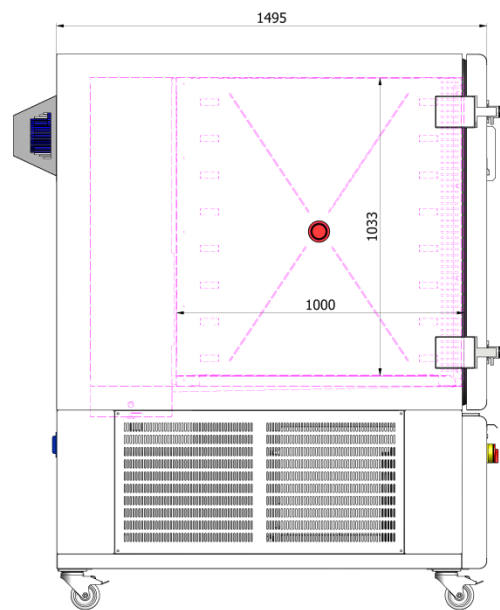


DIMENSIONAL DRAWING	PRODUCT	MODEL
	CLIMATIC CHAMBER	KK-500 CH KK-500 CHLT



SHIPPING	
W	1450 mm
H	2135 mm
D	1815 mm
WEIGHT	695 kg

\* we reserve the right to modifications



DIMENSIONAL DRAWING	PRODUCT	MODEL
	CLIMATIC CHAMBER	KK-1000 CH KK-1000 CHLT