

# Climatic Chambers



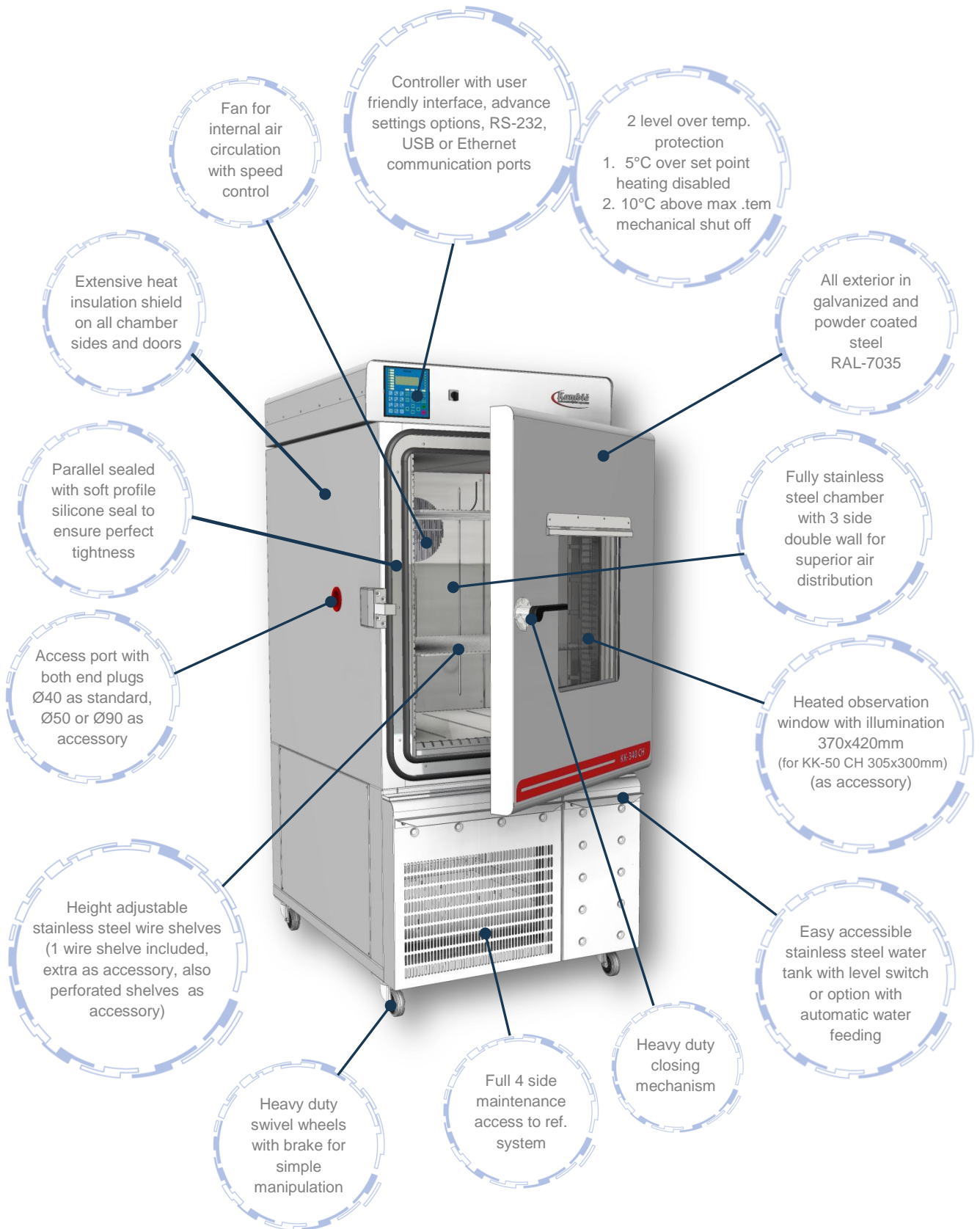
**Withnell Sensors**  
Data Loggers, Thermocouples & Calibration



## Standard Temp +5°C to +180°C

- ✓ Volumes from 50L to 1000L
- ✓ Custom, walk in sizes available
- ✓ Innovative air circulation system
- ✓ Impressive stability & uniformity

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[sales@withnellsensors.co.uk](mailto:sales@withnellsensors.co.uk)



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

Extensive heat insulation shield on all chamber sides and doors

All exterior in galvanized and powder coated steel RAL-7035

Parallel sealed with soft profile silicone seal to ensure perfect tightness

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

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

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

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

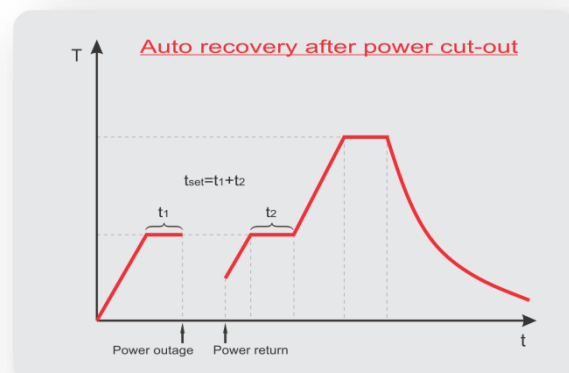
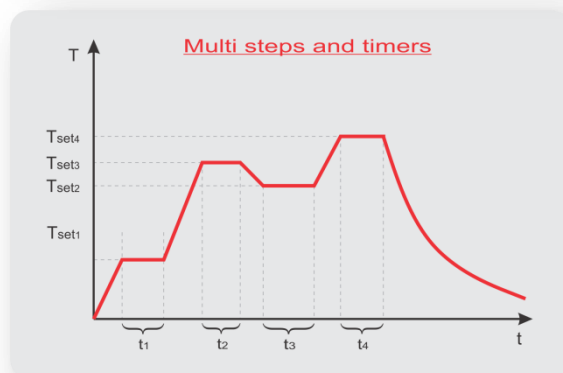
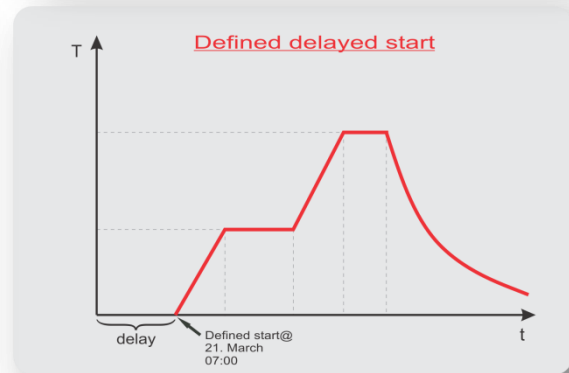
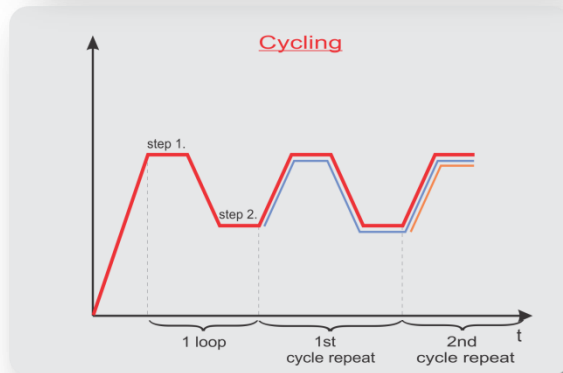
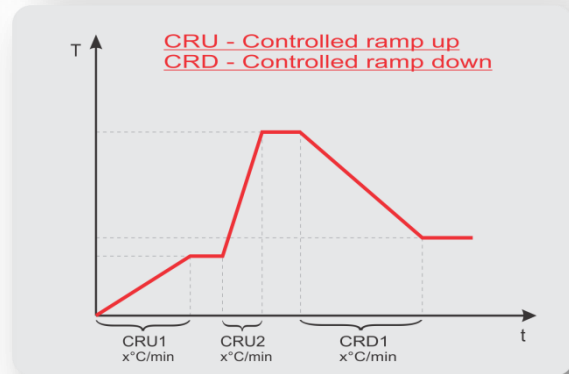
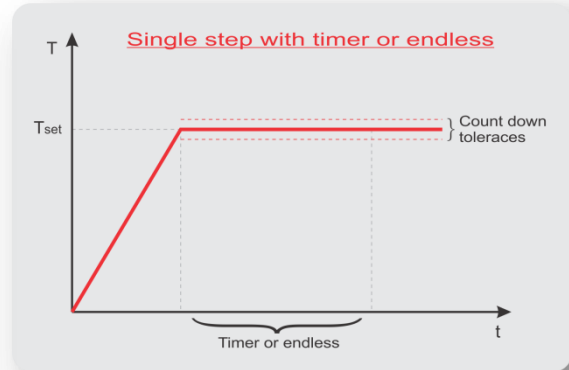
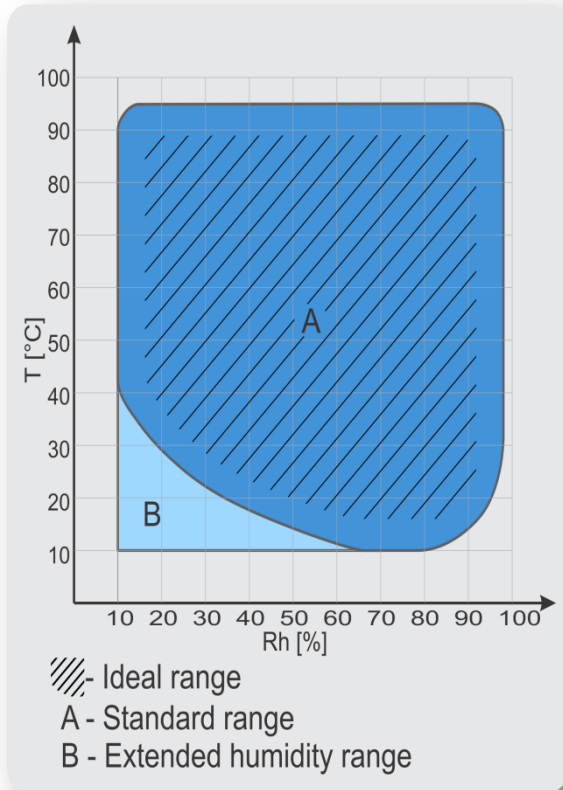
Easy accessible stainless steel water tank with level switch or option with automatic water feeding


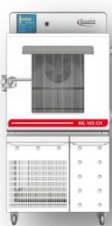

Heavy duty swivel wheels with brake for simple manipulation

Full 4 side maintenance access to ref. system




Heavy duty closing mechanism

**Controller functions:**



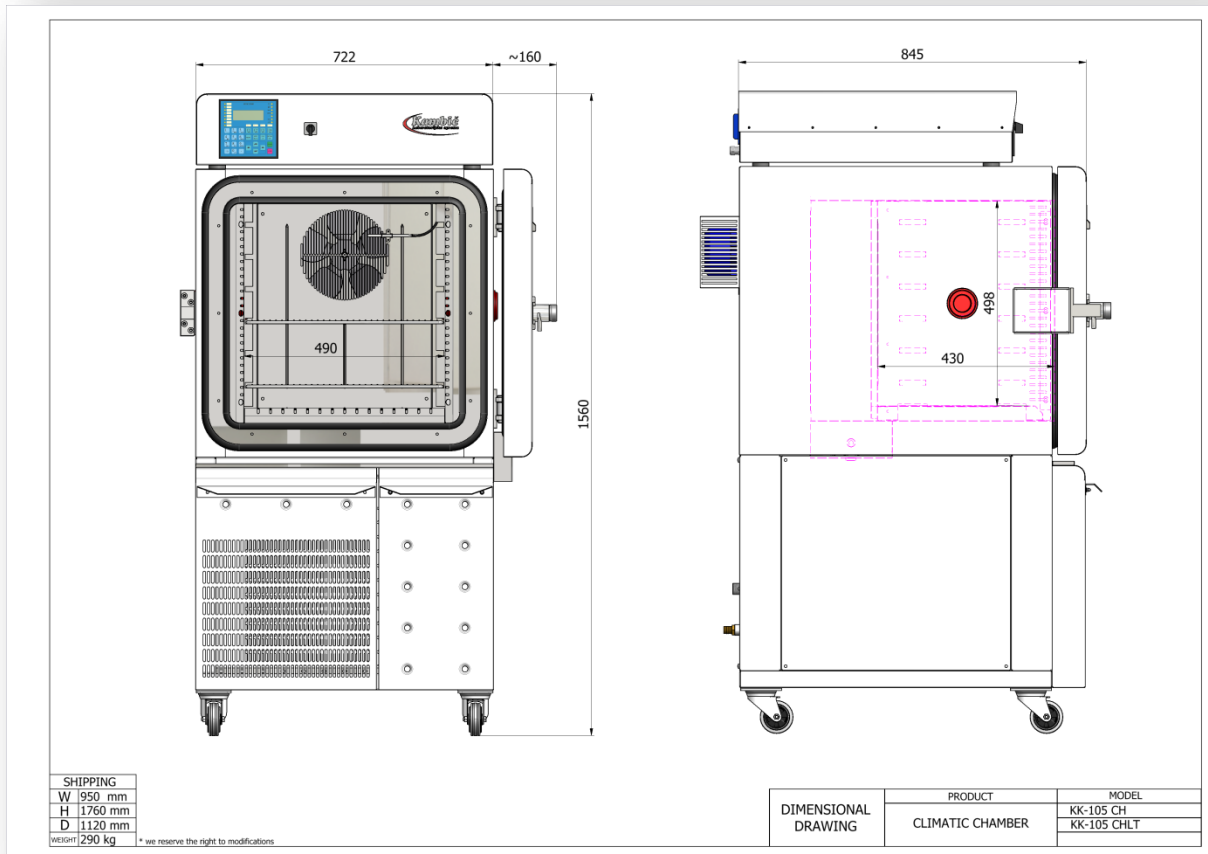
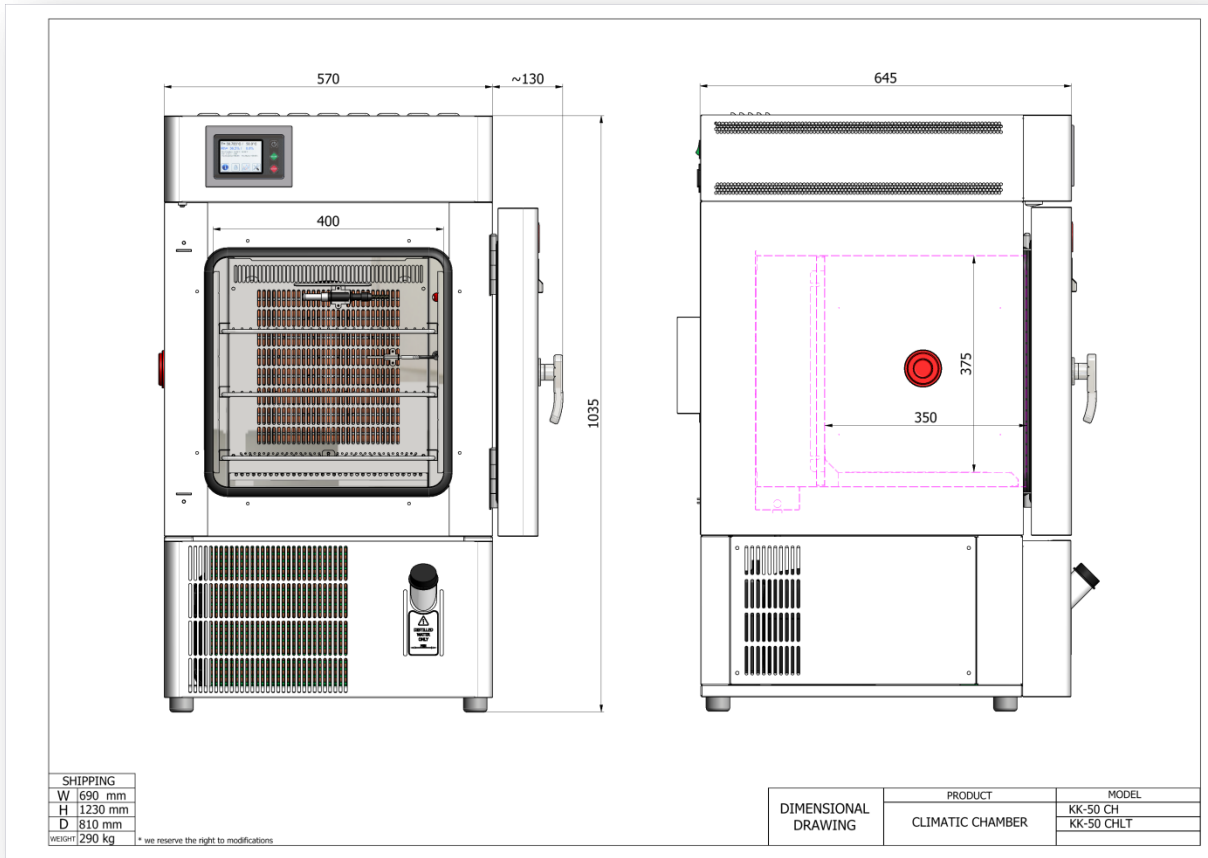
	<b>KK-50 CH</b>	<b>KK-105 CH</b>	<b>KK-190 CH</b>
			
External dimensions (WxHxD) in mm	570 x 1035 x 645	725 x 1560 x 845	834 x 1675 x 930
Internal dimensions (WxHxD) in mm	400 x 375 x 350	490 x 498 x 430	600 x 610 x 510
Volume (L)	~ 50	~ 105	~ 190
Temperature range (°C)	+5 ...+180	+5 ...+180	+5 ...+180
Heat up rate (°C/min) EN 60068-3-5	7,0	3,0	2,7
Cool down rate (°C/min) EN 60068-3-5	2,1	6,4	2,7
Temperature display resolution (°C)	0.1	0.1	0.1
Temperature set resolution (°C)	0.1	0.1	0.1
Temperature stability (°C)	±0,05°C @ 50°C 50% Rh ±0,05°C @ 90°C 90% Rh ±0,1°C @ 180°C	±0,08°C @ 50°C 50% Rh ±0,1°C @ 90°C 90% Rh ±0,1°C @ 180°C	±0,08°C @ 50°C 50% Rh ±0,1°C @ 90°C 90% Rh ±0,1°C @ 180°C
Temperature uniformity (°C)	±0,4°C @ 50°C 50% Rh ±0,4°C @ 90°C 90% Rh ±1,5°C @ 180°C	±0,3°C @ 50°C 50% Rh ±0,3°C @ 90°C 90% Rh ±1,5°C @ 180°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	58
Weight (kg)	125	238	278

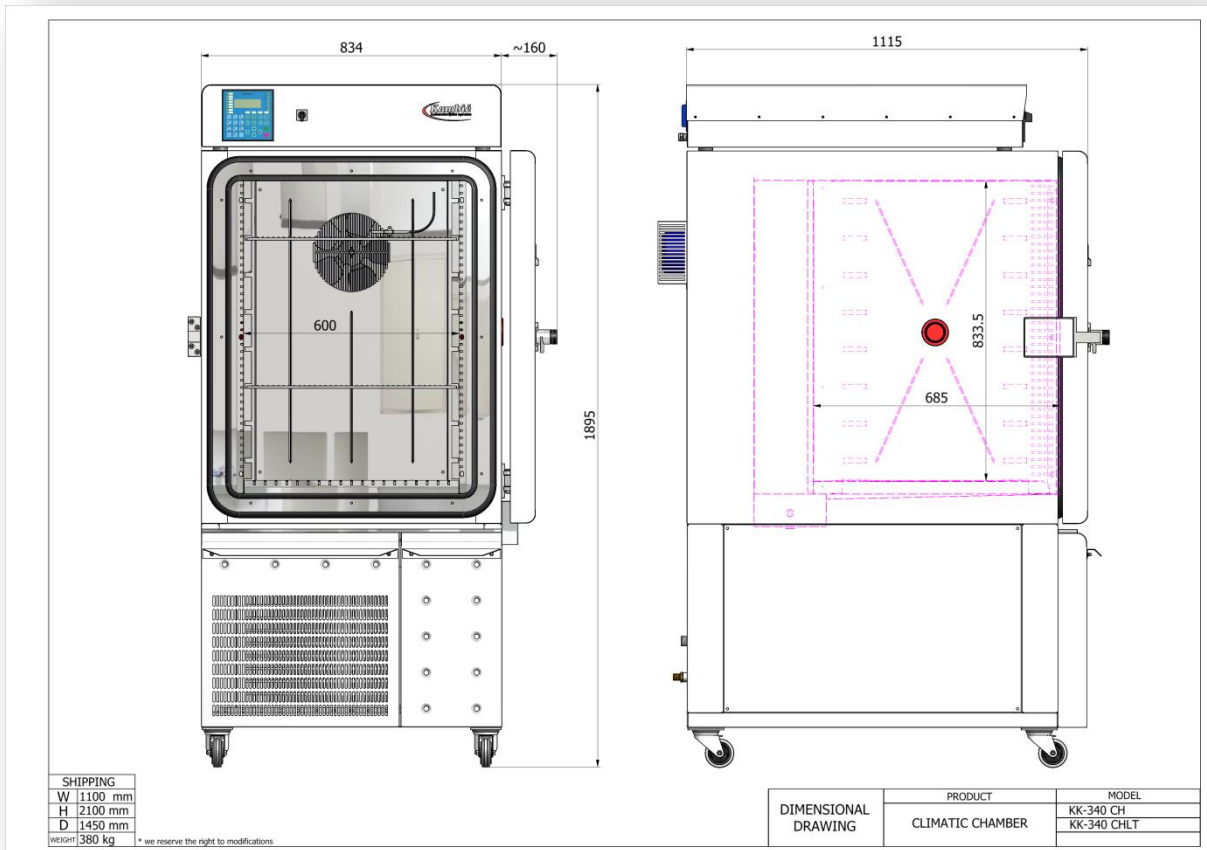
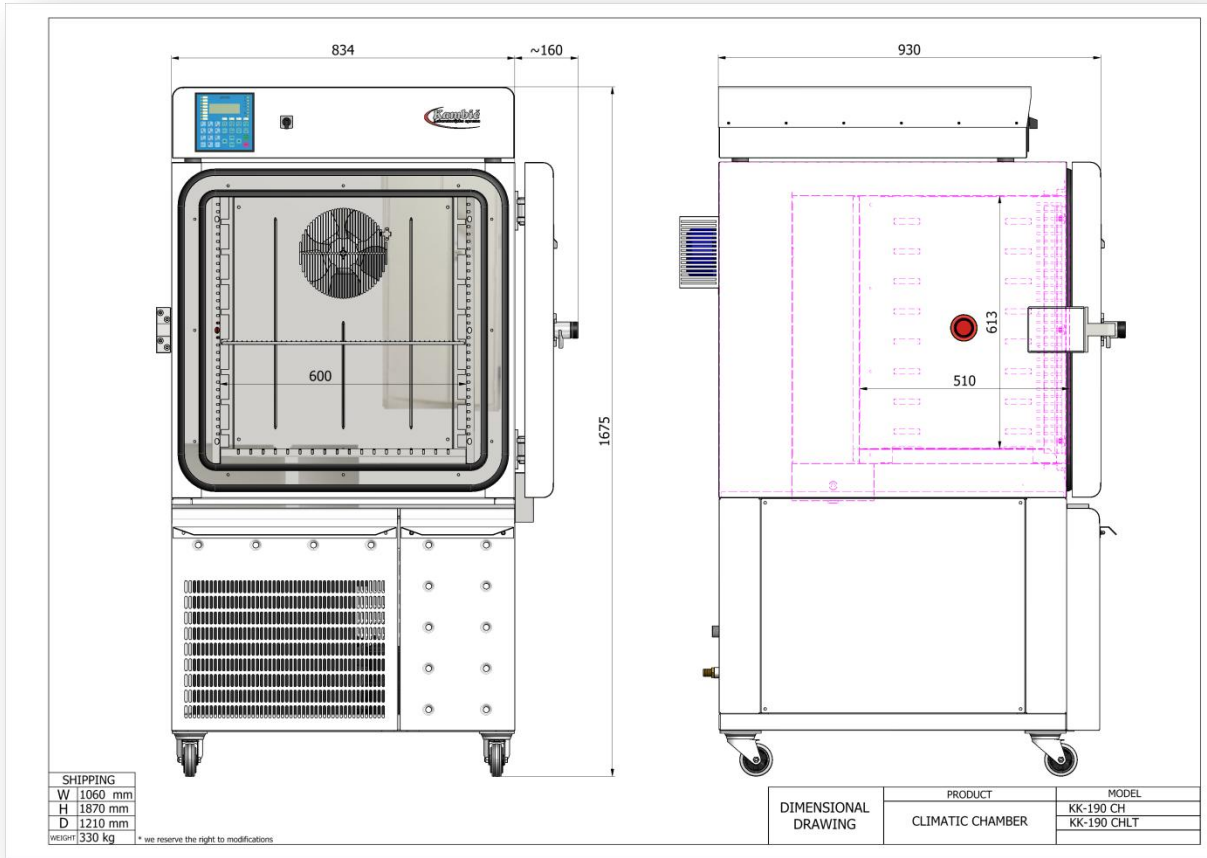


	<b>KK-340 CH</b>	<b>KK-500 CH</b>	<b>KK-1000 CH</b>
			
External dimensions (WxHxD) in mm	835 x 1895 x 1115	1035 x 1810 x 1270	1235 x 1930 x 1495
Internal dimensions (WxHxD) in mm	600 x 830 x 685	800 x 800 x 800	1000 x 1000 x 1000
Volume (L)	~ 340	~ 500	~ 1000
Temperature range (°C)	+5 ...+180	+5 ...+180	+5 ...+180
Heat up rate (°C/min) EN 60068-3-5	1,4	3,5	3,8
Cool down rate (°C/min) EN 60068-3-5	1,8	1,8	1,6
Temperature display resolution (°C)	0.1	0.1	0.1
Temperature set resolution (°C)	0.1	0.1	0.1
Temperature stability (°C)	±0,08°C @ 50°C 50% Rh ±0,1°C @ 90°C 90% Rh ±0,1°C @ 180°C	±0,06°C @ 50°C 50% Rh ±0,1°C @ 90°C 90% Rh ±0,1°C @ 180°C	±0,05°C @ 50°C 50% Rh ±0,1°C @ 90°C 90% Rh ±0,1°C @ 180°C
Temperature uniformity (°C)	±0,34°C @ 50°C 50% Rh ±0,41°C @ 90°C 90% Rh ±1,5°C @ 180°C	±0,3°C @ 50°C 50% Rh ±0,4°C @ 90°C 90% Rh ±1,0°C @ 180°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 50/60 Hz	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	58	62	65
Weight (kg)	324	435	604

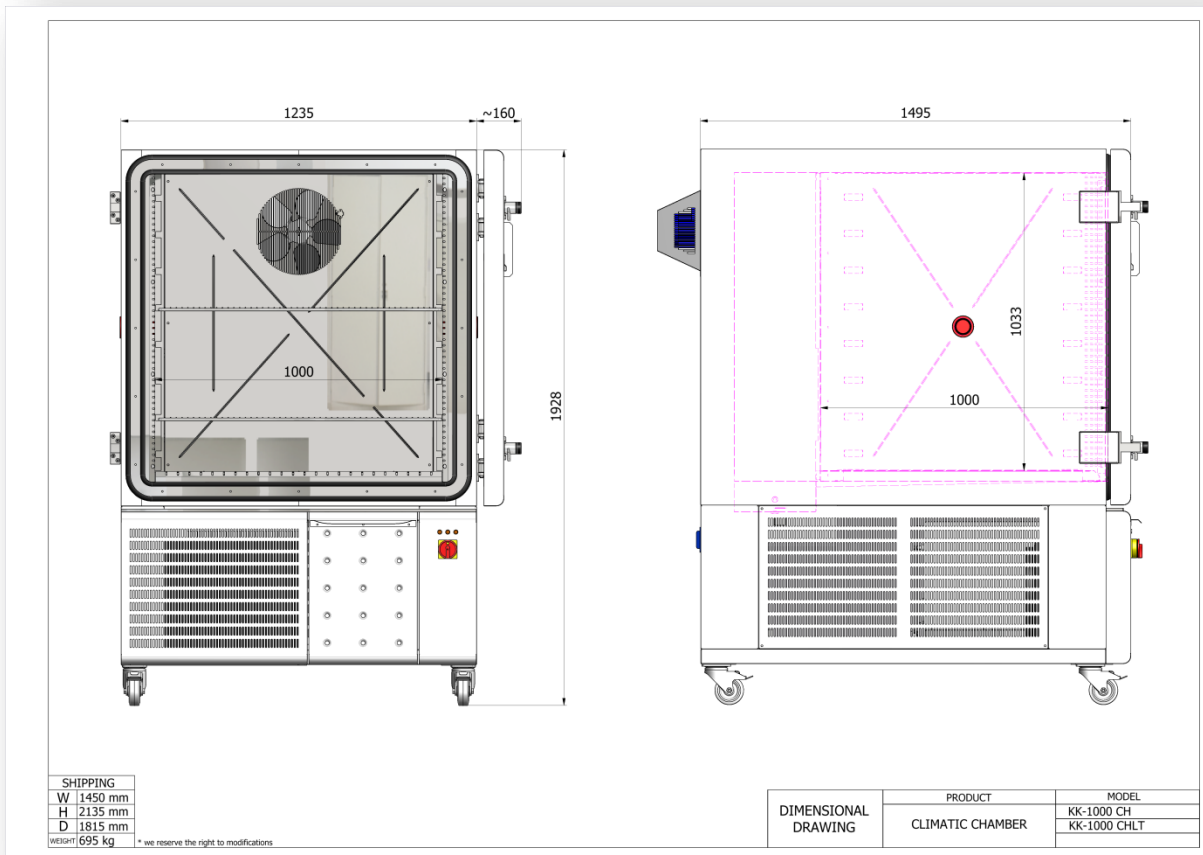
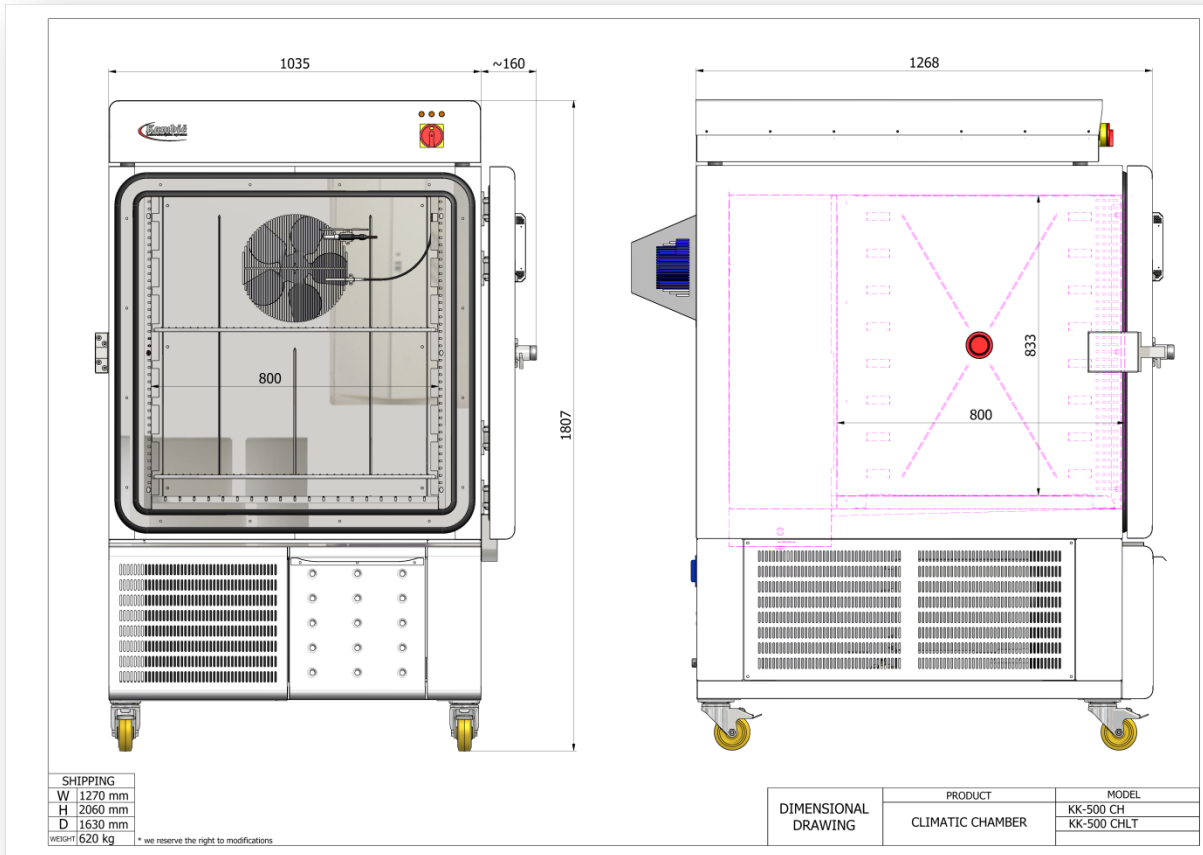
**Ordering information and accessories:**

<b>Description</b>	<b>Part no.</b>
Climatic chamber KK-50 CH	2571
Climatic chamber KK-105 CH	905
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-50 CH	1766
Shelve wire KK-105 CH	951
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-50 CH	1765
Shelve perforated KK-105 CH	952
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 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 CH, KK-190 CH, KK-340 CH, KK-500 CH, KK-1000 CH)	252
Observation window with illumination 305x300mm (KK-50 CH)	2637
Automatic water feeding	1744
Extended Rh range via dry air purge	1758
Trolley for KK-50 CH	2207
USB interface	1466
Ethernet interface	1716
RedEye KK Tool (Software Monitoring & History)	1663
Password protection	1718
Evaluation report	1719









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