

# TEMPERATURE CHAMBER

(-75°C ... +180°C)

TK-105 CKULT

TK-190 CKULT

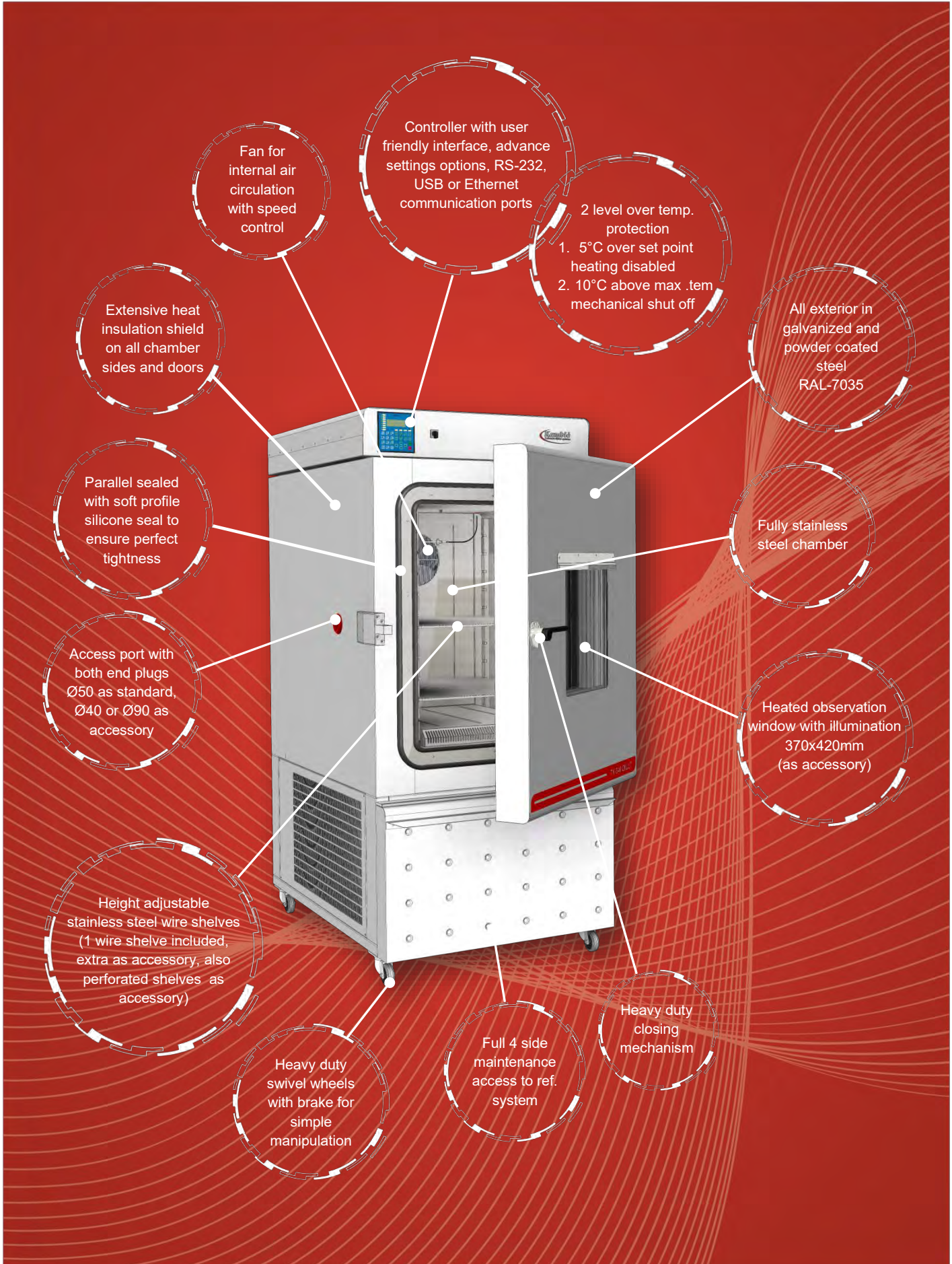
TK-340 CKULT

TK-500 CKULT

TK-1000 CKULT

- Material temperature resistance and product testing
  - Maintaining superior temperature stability
    - Sample conditioning prior to other tests
    - Data loggers and sensors calibration
    - Temperature controlled test polygon
    - 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

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

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

Heated observation window with illumination 370x420mm (as accessory)

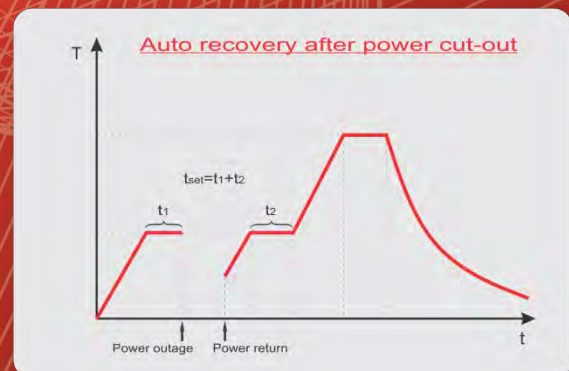
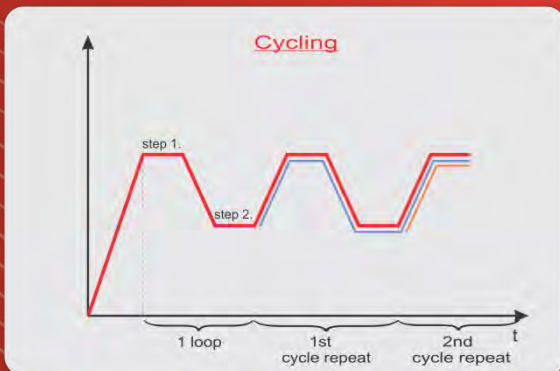
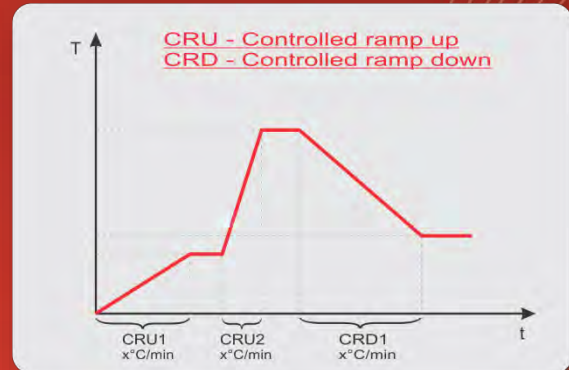
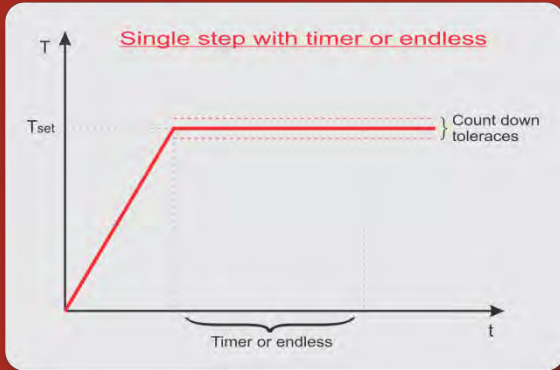
Height adjustable stainless steel wire shelves (1 wire shelf included, extra as accessory, also perforated shelves as accessory)

Heavy duty swivel wheels with brake for simple manipulation


Full 4 side maintenance access to ref. system

Heavy duty closing mechanism

**Controller functions:**





**Technical data:**

	TK-105 CKULT	TK-190 CKULT	TK-340 CKULT
			
External dimensions (WxHxD) in mm	850 x 1715 x 1100	940 x 1832 x 1125	940 x 2052 x 1310
Internal dimensions (WxHxD) in mm	530 x 500 x 460	620 x 514 x 590	620 x 810 x 690
Volume (L)	~ 105	~ 190	~ 340
Temperature range (°C)	-75 ...+180	-75 ...+180	-75 ...+180
Heat up rate (°C/min) EN 60068-3-5	2,6	2,2	2,3
Cool down rate (°C/min) EN 60068-3-5	2,4	4,9	2,9
Temperature display resolution (°C)	0.1	0.1	0.1
Temperature set resolution (°C)	0.1	0.1	0.1
Temperature stability (°C)	±1,0°C @ -75°C ±0,08°C @ 50°C ±0,1°C @ 90°C ±0,1°C @ 180°C	±1,2°C @ -75°C ±0,08°C @ 50°C ±0,08°C @ 90°C ±0,1°C @ 180°C	±1,2°C @ -75°C ±0,08°C @ 50°C ±0,08°C @ 90°C ±0,1°C @ 180°C
Temperature uniformity (°C)	±1,5°C @ -75°C ±0,5°C @ 50°C ±0,5°C @ 90°C ±1,5°C @ 180°C	±1,5°C @ -75°C ±0,5°C @ 50°C ±0,5°C @ 90°C ±1,5°C @ 180°C	±1,5°C @ -75°C ±0,5°C @ 50°C ±0,5°C @ 90°C ±1,5°C @ 180°C
Temperature control	PID	PID	PID
Power supply	3x400V 50/60Hz	3x400V 50/60Hz	3x400V 50/60Hz
Wattage (W)	4500	6500	7500
Interface	RS 232 USB or Ethernet (accessory)	RS 232 USB or Ethernet (accessory)	RS 232 USB or Ethernet (accessory)
Shelve	1 (max 6)	1 (max 8)	1 (max 8)
Shelve capacity (kg)	35	35	35
Max capacity (kg)	60	80	100
Access port (mm)	Ø 50 standard, (Ø 40, Ø 90 as accessory)	Ø 50 standard, (Ø 40, Ø 90 as accessory)	Ø 50 standard, (Ø 40, Ø 90 as accessory)
Noise (dBA) @ 1 m distance	67	67	67
Weight (kg)	405	440	480

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

\*Accessories might affect performance!

**Technical data:**

	<b>TK-500 CKULT</b>	<b>TK-1000 CKULT</b>
		
External dimensions (WxHxD) in mm	1165 x 1985 x 1640	1375 x 2068 x 1900
Internal dimensions (WxHxD) in mm	870 x 800 x 800	1070 x 1000 x 1000
Volume (L)	~ 500	~ 1000
Temperature range (°C)	-75 ... +180	-75 ... +180
Heat up rate (°C/min) EN 60068-3-5	2,3	2,3
Cool down rate (°C/min) EN 60068-3-5	1,2	1,2
Temperature display resolution (°C)	0.1	0.1
Temperature set resolution (°C)	0.1	0.1
Temperature stability (°C)	±1,0°C @ -75°C ±0,1°C @ 50°C ±0,1°C @ 90°C ±0,1°C @ 180°C	±1,0°C @ -75°C ±0,1°C @ 50°C ±0,1°C @ 90°C ±0,1°C @ 180°C
Temperature uniformity (°C)	±1,5°C @ -75°C ±0,5°C @ 50°C ±0,5°C @ 90°C	±1,0°C @ -75°C ±0,5°C @ 50°C ±0,5°C @ 90°C
Temperature control	PID	PID
Power supply	3x400V 50/60Hz	3x400V 50/60Hz
Wattage (W)	10000	10000
Interface	RS 232 (USB or Ethernet as accessory)	RS 232 (USB or Ethernet as accessory)
Shelve	1 (max 6)	1 (max 8)
Shelve capacity (kg)	50	50
Max capacity (kg)	150	200
Access port (mm)	Ø 50 standard, (Ø 40, Ø 90 as accessory)	Ø 50 standard, (Ø 40, Ø 90 as accessory)
Noise (dBA) @ 1 m distance	68	68
Weight (kg)	530	890

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

\*Accessories might affect performance!

**Ordering information and accessories:**

<b>Description</b>	<b>Part no.</b>
Temperature chamber TK-105 CKULT	2511
Temperature chamber TK-190 CKULT	2514
Temperature chamber TK-340 CKULT	2517
Temperature chamber TK-500 CKULT	1747
Temperature chamber TK-1000 CKULT	2520
Shelve wire TK-105 CKULT	951
Shelve wire TK-190 CKULT	953
Shelve wire TK-340 CKULT	956
Shelve wire TK-500 CKULT	958
Shelve wire TK-1000 CKULT	960
Shelve perforated TK-105 CKULT	1726
Shelve perforated TK-190 CKULT	1728
Shelve perforated TK-340 CKULT	957
Shelve perforated TK-500 CKULT	959
Shelve perforated TK-1000 CKULT	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	252
USB interface	1466
Ethernet interface	1716
TK-Tool (Software Monitoring & History)	1663
Password protection	1718
Evaluation report 9 points, 3 temperatures - performed by Kambic	1719
Evaluation report 9 points, 3 temperatures - Accredited	1852

