

KJELDATHERM BLOCK-DIGESTION UNIT

KJELDATHERM with Lift

Digestion in aluminium heating block with precise temperature control. Tried and tested C. Gerhardt technology specifically designed for Kjeldahl digestion of a wide variety of samples with nitrogen content in the micro and macro range. Ideal for subsequent Kjeldahl distillation with the VAPODEST distillation units.

Available for three tube sizes and for 8, 20 or 40 samples.

- Range of functions**
- Ensures transparency and traceability of the digestion process
 - Methods can be defined and stored
 - Assignment of user rights
 - USB interface for data export
 - Pre-heat function
 - Predefined methods for all established Kjeldahl digestions
 - Automatic lift
 - Automatic control of TURBOSOG and cooling water valve
 - Illuminated digestion chamber



KJELDATHERM with lift

Type	KT-L 8s	KT-L 20s	KT-L 40s	KT-L 8s-BS	KT-L 20s-BS
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TECHNICAL DATA

Heating places	8	20	40	8	20
Size of tubes [mL]	250/300	250/300	100	400	400
Temperature max. [°C]	430	430	430	430	430
Temperature control accuracy [%]	+/- 0.5	+/- 0.5	+/- 0.5	+/- 0.5	+/- 0.5
Programs	99 ¹⁾	99 ¹⁾	99 ¹⁾	99 ¹⁾	99 ¹⁾
Display size [inch"]	3.5	3.5	3.5	3.5	3.5
Power consumption [W]	1160	2360	2360	1160	2360
Dimensions W / D / H [mm]	515 / 483 / 748	515 / 483 / 748	515 / 483 / 748	515 / 483 / 748	515 / 483 / 748
Weight [kg]	approx. 44	approx. 53	approx. 53	approx. 44	approx. 53
Nominal voltage [V]	230 (115)	230 (115)	230 (115)	230 (115)	230 (115)
Frequency [Hz]	50 - 60 ²⁾	50 - 60 ²⁾	50 - 60 ²⁾	50 - 60 ²⁾	50 - 60 ²⁾

DELIVERS

Digestion tubes	8 x	20 x	40 x	8 x	20 x
KJELDATHERM digestion block with two-tier console and operating unit	1 x	1 x	1 x	1 x	1 x
Insert rack for tubes	1 x	1 x	1 x	1 x	1 x
Exhaust manifold with drip tray	1 x	1 x	1 x	1 x	1 x
Water jet pump	1 x	1 x	1 x	1 x	1 x
Isoversinic-tubing	1.5 m	1.5 m	1.5 m	1.5 m	1.5 m

ORDER INFORMATION

Version 230 V	12-0704	12-0729	12-0745	12-0706	12-0731
Version 115 V	12-0705	12-0730	12-0746	12-0707	12-0732

1) Each program is available with 40 different heating steps that have programmable times and heating capacities

2) Version 115 V only 60 Hz

KJELDATHERM without Lift

Digestion in aluminium heating block with precise temperature control.
Identical technology as with model KJELDATHERM with lift,
but the user has to lift and lower the insert rack by hand.

Available for three tube sizes and for 8, 20 or 40 samples.

Range of functions

- Ensures transparency and traceability of the digestion process
- Methods can be defined and stored
- Assignment of user rights
- USB interface for data export
- Pre-heat function
- Predefined methods for all established Kjeldahl digestions



KJELDATHERM without lift

Type	KT 8s	KT 20s	KT 40s	KT 8s-BS	KT 20s-BS
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TECHNICAL DATA

Heating places	8	20	40	8	20
Size of tubes [ml]	250/300	250/300	100	400	400
Temperature max. [°C]	430	430	430	430	430
Temperature control accuracy [%]	+/- 0.5	+/- 0.5	+/- 0.5	+/- 0.5	+/- 0.5
Programs	99 ¹⁾	99 ¹⁾	99 ¹⁾	99 ¹⁾	99 ¹⁾
Display size [inch"]	2.4	2.4	2.4	2.4	2.4
Power consumption [W]	1000	2200	2200	1000	2200
Dimensions W / D / H [mm]	515 / 483 / 728	515 / 483 / 728	515 / 483 / 728	515 / 483 / 728	515 / 483 / 728
Weight [kg]	approx. 31	approx. 40	approx. 40	approx. 31	approx. 40
Nominal voltage [V]	230 (115)	230 (115)	230 (115)	230 (115)	230 (115)
Frequency [Hz]	50 - 60	50 - 60	50 - 60	50 - 60	50 - 60

DELIVERS

Digestion tubes	8 x	20 x	40 x	8 x	20 x
KJELDATHERM digestion block with two-tier console and operating unit	1 x	1 x	1 x	1 x	1 x
Insert rack for tubes	1 x	1 x	1 x	1 x	1 x
Exhaust manifold with drip tray	1 x	1 x	1 x	1 x	1 x
Water jet pump	1 x	1 x	1 x	1 x	1 x
Isoversinic-tubing	1.5 m	1.5 m	1.5 m	1.5 m	1.5 m

ORDER INFORMATION

Version 230 V	12-0700	12-0725	12-0743	12-0702	12-0727
Version 115 V	12-0701	12-0726	12-0744	12-0703	12-0728

1) Each program is available with 40 different heating steps that have programmable times and heating capacities

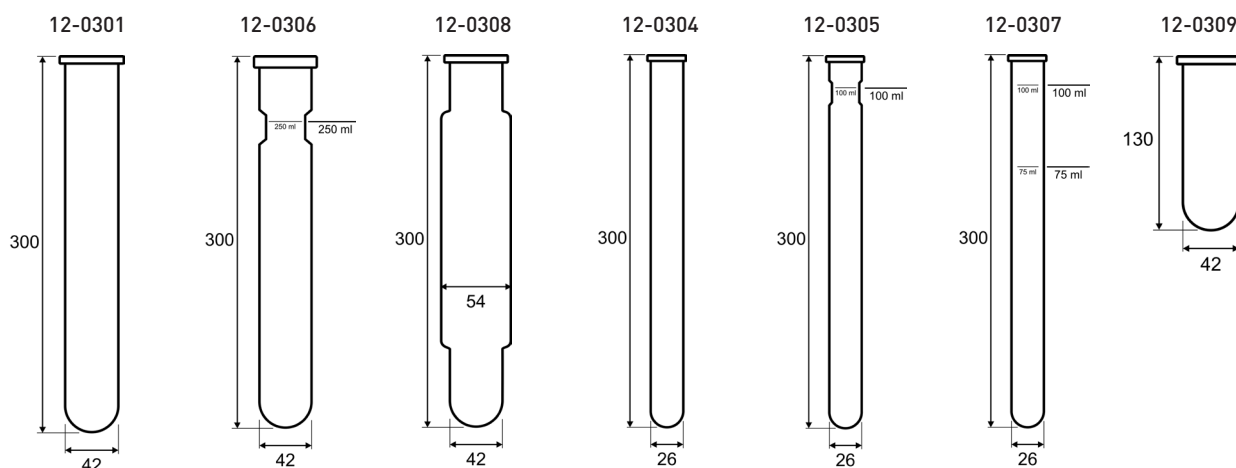
CONSUMABLES AND ACCESSORIES

Make sure to use only original C. Gerhardt spare parts in order to obtain the best possible results. These parts have been tested thoroughly for the operation with KJELDATHERM and TURBOTHERM in the C. Gerhardt application lab.

KJELDAHL-DIGESTION TUBES AND KJELDAHL-FLASKS

All tubes are made of high standard Duran material.

Order No.	Type	Description	for KJELDATHERM Type
12-0301	KTG 250	KJELDATHERM digestion tube, 250/300 ml - 10 pcs	KT/KT-L 8s, KT/KT-L 20s
12-0306	KTG/E 250	KJELDATHERM digestion tube, 250/300 ml, with constriction + calibrated at 250 ml - 1 pc.	KT/KT-L 8s, KT/KT-L 20s
12-0308	BS-400	KJELDATHERM digestion tube, 400 ml, diminished - 4 pcs	KT/KT-L 8s-BS, KT/KT-L 20s-BS
12-0304	KMT	KJELDATHERM digestion tube, micro 100 ml - 10 pcs	KT/KT-L 40s, KT/KT-L 8s
12-0305	KMT/E	KJELDATHERM digestion tube, micro 100 ml with constriction + calibrated at 100 ml - 1 pc.	KT/KT-L 40s
12-0307	KMT	KJELDATHERM tube, micro 100 ml, calibrated at 100 ml + 75 ml - 1 pc.	KT/KT-L 40s
12-0309	KTG-DU	KTG Dummy tube, L 130 mm - 4 pcs	KT/KT-L 8s, KT/KT-L 20s



Catalyst tablets



Order No.	Type	Description
12-0326	Se	KJELCAT-tablets, tin of 1,000 pcs 3.5 g K_2SO_4 + 0.0035 g Se
12-0328	Cu	KJELCAT-tablets, tin of 1,000 pcs 5.0 g K_2SO_4 + 0.5 g $CuSO_4 \times 5H_2O$
12-0329	CuTi	KJELCAT-tablets, tin of 1,000 pcs 5.0 g K_2SO_4 + 0.15 g $CuSO_4 \times 5H_2O$ + 0.15 g TiO_2
12-0336	Cu light	KJELCAT-tablets, tin of 1,000 pcs 5.0 g K_2SO_4 + 0.1 g $CuSO_4 \times 5H_2O$
12-0334	CK	Kjelcat tablets, 3.5g K_2SO_4 + 0.4g $CuSO_4 \times 5H_2O$, 1.000 pcs

Antifoam tablets



Order No.	Type	Description
12-0332	AS	Antifoam extra tablets, tin with 1,000 pcs 0.97 Na_2SO_4 + 0.03 g silicone antifoam

Weighing paper

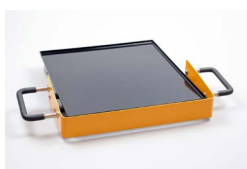


Order No.	Type	Description
12-0353	WP	Weighing paper, poor in N ₂ , pack of 500

KJELDATHERM ECO KIT

Order No.	Type	Description
12-0769	KTP	KJELDATHERM Thermoplate for KT 20s, KT 40s with/without lift. Heat retention plate to keep the temperature of the upheated block.
12-0774	KCF	KJELDATHERM Cooling Fan module for KT-systems with lift. Accelerates cooling of the digested samples and the block. 115-230V 20W
12-0776*	KTP-A	KJELDATHERM Thermoplate with console attachment for KT 20s, KT 40s with/without lift. For storing the Thermoplate on top of the KJELDATHERM unit.
12-0777	KTP-S	KJELDATHERM Thermoplate with base for KT 20s, KT 40s with/without lift For storing the Thermoplate beside the KJELDATHERM unit.
12-0778*	KT-ECO	KJELDATHERM Eco Kit for KT-L 20s, KT-L 40s with lift. Consisting of 12-0774 and 12-0776.

* The total height of the KJELDATHERM digestion units increases by + 100 mm after mounting the sets.



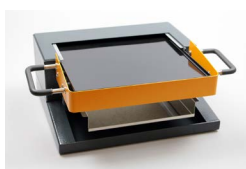
12-0769



12-0774



12-0776



12-0777



12-0778

COOLING WATER VALVE



Order No.	Type	Description
12-0775	WTZs	Cooling water valve WTZs for KT-L 110 - 230 V for the cooling water regulation of TURBOSOG in combination with KT-L digestion units.

Water jet pump WSP



WSP

Order No.	Type	Description
10-0088	WSP	Water jet pump. Condenses and neutralizes aggressive acid fumes. For occasional use with low sample throughput. Suitable for all digestion units TURBOTHERM and KJELDATHERM.

VACUSOG Vacuum Scrubber unit



Order No.	Type	Description
12-0779	VS	VACUSOG gas scrubber for effective extraction of large quantities of inorganic gases. A water connection is not necessary. Suitable for all TURBOTHERM and KJELDATHERM units. - Nominal voltage: 115 - 230 V, 50/60 Hz - Current consumption: 0,4 - 1 A - Weight: approx. 22 kg - Dimensions, closed (W/D/H): 342 / 463 / 490 mm - Dimensions, open (W/D/H): 342 / 463 / 720 mm For more informations see „Product data sheet VACUSOG“

Additional cooling unit for VACUSOG



Order No.	Type	Description
12-0786	ZKV	The ZKV additional cooler was specifically designed for water separation in Kjeldahl digestion in water. The system is installed on the side next to the VACUSOG and connected to the cooling water supply in the laboratory. Complete with water inlet and outlet hose and cooling water regulation: - Cooling water consumption: 0 - 5 l/min - Cooling water pressure: 0 - 6 bar - Nominal voltage: 24 VDC - Dimensions, closed (W/D/H): 160 / 400 / 490 mm - Dimensions, open (W/D/H): 160 / 400 / 720 mm

SCRUBBER UNITS



Order No.	Type	Description
12-0057	TUR/K	TURBOSOG scrubber unit. Condenses and neutralizes aggressive acid fumes, suited for all KJELDATHERM systems: - Nominal voltage: 230 V, 50 Hz - Nominal wattage: 205 W - Weight: 19 kg - Dimensions, closed (W/D/H): 330 / 450 / 420 mm - Dimensions, open (W/D/H): 330 / 450 / 745 mm For more information see „Product data sheet TURBOSOG“

Additional cooling unit



Order No.	Type	Description
12-0361	ZKE	Additional cooling unit for TUR/K. To be attached at the side of the TURBOSOG and connected to the water supply. Separates the water from digestion gas - for a big number of aqueous samples. Dimensions (W/D/H): 155 / 155 / 500 mm

Insert racks for KJELDATHERM-systems KT



Order No.	Type	Description
12-0709	EB8	Insert rack for KT/KT-L 8s - for 8 x 250 ml tubes
12-0712	EB8BS	Insert rack for KT/KT-L 8s-BS - for 8 x 400 ml tubes BS
12-0721	EB20	Insert rack for KT/KT-L 20s - for 20 x 250 ml tubes
12-0724	EB20BS	Insert rack for KT/KT-L 20s-BS - for 20 x 400 ml tubes BS
12-0741	EB40	Insert rack for KT/KT-L 40s - für 40 x 100 ml tubes

Washing attachment for insert rack EB20



Order No.	Type	Description
12-0736		The washing attachment is used to fix the digestion tubes in the EB 20 insert rack, so that all 20 digestion tubes can be placed in a dishwasher for cleaning, complete with the insert rack. This eliminates the need for time-consuming transfer of the tubes from the insert rack into the dishwasher.

Exhaust manifold for KJELDATHERM-systems KT



Order No.	Type	Description
12-0233	AV8	Exhaust manifold, 8-place, for KT/KT-L 8s, KT/KT-L 8s-BS with drip tray
12-0236	AV20	Exhaust manifold, 20-place, for KT/KT-L20s, KT/KT-L 20s-BS with drip tray
12-0237	AV40	Exhaust manifold, 40-place, for KT/KT-L 40s with drip tray

Communication cable



Order No.	Type	Description
1007118	PK45	KT Patchcable RJ45, yellow, 2 m. Connecting cable between controller and digestion block

Tubes



Order No.	Type	Description
1000393	AWS	Cooling water outlet tubing, 22x29 mm, 2 m long
10-0091	ISO	Isoversinic-tubing 12x17mm, black

GL-Screw caps for laboratory bottles



Order No.	Type	Description
1004320		Screw cap GL14, nat. white
1004321		Screw cap GL18, nat. white
1004322		Screw cap GL32, nat. white
1004323		Screw cap GL45, nat. white
1000358		Silicone seal GL 14 with connection, straight
1000356		Silicone seal GL 18
1000357		Silicone seal GL 32
1000355		Silicone seal GL 45

SUPPORT AND SERVICE

In addition to its high quality instruments, C. Gerhardt offers comprehensive services to maintain the functionality and efficiency of your equipment.

Installation / Equipment Qualification

Order No.	Type	Beschreibung
99-0200	ABI-KT	Installation and Instruction KJELDATHERM - Installation and connection of the unit - functional check - operating instructions
		Equipment Qualification (IQ/OQ) KJELDATHERM - Installation of the unit and instruction - Installation Qualification IQ and Operational Qualification OQ , Guidance for Performance Qualification PQ - Training of laboratory personnel with certificate - Individual training certificates, if requested

SERVICING AND MAINTENANCE CONCEPTS

For detailed information on servicing and maintenance concepts, please contact your local authorised C. Gerhardt representative.

WORKSHOPS / SEMINARS / APPLICATIONS TRAINING

For detailed information on trainings and workshops, please contact your local authorised C. Gerhardt representative.

TABLE OF CONFIGURATION

Please arrange the required system

DIGESTION SYSTEM / TYPE

Quantity	Order No.	Type	Description

CONSUMABLES / ACCESSORIES

Quantity	Order No.	Type	Description

SUPPORT AND SERVICE

Quantity	Order No.	Type	Description

Send offer to:

Customer No.	
Company	
Name	
Address	
Tel.	
E-Mail	
Web	