

# KJELDATHERM® BLOCK DIGESTION UNIT



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 with various fittings.

**Scope of delivery** KJELDATHERM® digestion block

Digestion tubes

Insert rack

Exhaust manifold

Instruction manual

## KJELDATHERM® automatic (with lift)

Type	KBL12S	KBL40S	KBL8S	KBL20S	KBL8S-BS	KBL20S-BS
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### TECHNICAL DATA

Heating places	12	40	8	20	8	20
Size of tubes [ml]	100	100 <sup>1)</sup>	250-300	250-300	400	400
Temperature max. [°C]	430	430	430	430	430	430
Programs <sup>2)</sup>	9	9	9	9	9	9
Nominal wattage [W]	1160	2360	1160	2360	1160	2360
Dimensions W / D / H [mm]	460/415/740	460/530/740	460/415/740	460/530/740	460/415/740	460/530/740
Weight [kg]	29	39	29	39	29	39
Nominal voltage [V]	230 / 115	230 / 115	230 / 115	230 / 115	230 / 115	230 / 115
Frequency [Hz]	50 - 60 <sup>3)</sup>	50 - 60 <sup>3)</sup>	50 - 60 <sup>3)</sup>	50 - 60 <sup>3)</sup>	50 - 60 <sup>3)</sup>	50 - 60 <sup>3)</sup>

### DELIVERS

Digestion tubes	12 x	40 x	8 x	20 x	8 x	20 x
KJELDATHERM®-Block	1 x	1 x	1 x	1 x	1 x	1 x
Insert rack for tubes	1 x	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	1 x
Water jet pump	1 x	1 x	1 x	1 x	1 x	1 x
Resistance thermometer Pt100	1 x	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	1,5 m
Console with lift	1 x	1 x	1 x	1 x	1 x	1 x
Temperature time controller TZ	1 x	1 x	1 x	1 x	1 x	1 x

### ORDER INFORMATION

Version 230 V	12-0069	12-0080	12-0059	12-0071	12-0065	12-0076
Version 115 V	12-0437	12-0224	12-0212	12-0221	12-0218	12-0443

1) on request also available with 75 ml tubes instead of 100 ml tubes

2) each program is available with 9 different heating steps that have programmable times and heating capacities

3) Version 115 V only 60 Hz



KJELDATHERM® manual

Type	KB12S	KB40S	KB8S	KB20S	KB8S-BS	KB20S-BS
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**TECHNICAL DATA**

Heating places	12	40	8	20	8	20
Size of tubes [ml]	100	100 <sup>1)</sup>	250-300	250-300	400	400
Temperature max. [°C]	430	430	430	430	430	430
Programs	1	1	1	1	1	1
Nominal wattage [W]	1000	2200	1000	2200	1000	2200
Dimensions W / D / H [mm]	415/415/650	415/530/650	415/415/650	415/530/650	415/415/650	415/530/650
Weight [kg]	16	27	16	26	16	26
Nominal voltage [VAC]	230 / 115	230 / 115	230 / 115	230 / 115	230 / 115	230 / 115
Frequency [Hz]	50 - 60	50 - 60	50 - 60	50 - 60	50 - 60	50 - 60

**DELIVERS**

Digestion tubes	12 x	40 x	8 x	20 x	8 x	20 x
KJELDATHERM®-Block	1 x	1 x	1 x	1 x	1 x	1 x
Insert rack for tubes	1 x	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	1 x
Water jet pump	1 x	1 x	1 x	1 x	1 x	1 x
Resistance thermometer Pt100	1 x	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	1,5 m
Console	1 x	1 x	1 x	1 x	1 x	1 x
Temperature controller TR	1 x	1 x	1 x	1 x	1 x	1 x

**ORDER INFORMATION**

Version 230 V	12-0068	12-0079	12-0058	12-0070	12-0064	12-0075
Version 230 V with TZ-control unit (instead of TR-controller)	12-0426	12-0422	12-0421	12-0420	12-0423	12-0428
Version 115 V with TZ-control unit (instead of TR-controller)	12-0436	12-0446	12-0438	12-0442	12-0439	12-0441

1) on request also available with 75 ml tubes instead of 100 ml tubes

2) Version 115 V not available with TR-controller

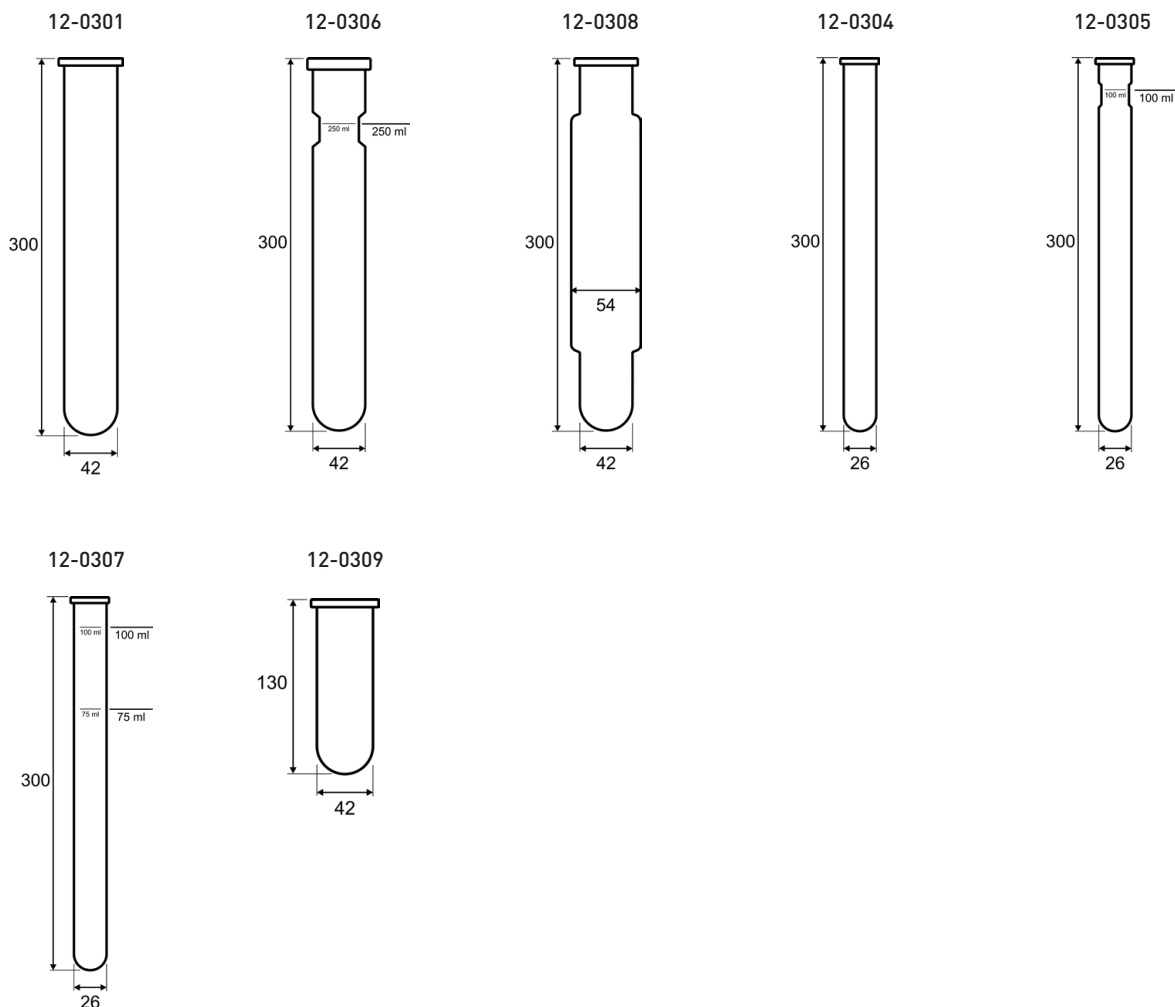
## CONSUMABLES AND ACCESSORIES

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, 300 ml - 10 pcs	KB(L)8S, KB(L)20S
12-0306	KTG/E 250	KJELDATHERM® digestion tube, macro 300 ml, with constriction + calibrated at 250 ml	KB(L)8S, KB(L)20S
12-0308	BS-400	KJELDATHERM® digestion tube, 400 ml, diminished 4 pcs	KB(L)8S-BS, KB(L)20S-BS
12-0304	KMT	KJELDATHERM® digestion tube, micro 100 ml - 10 pcs	KB(L)40S, KB(L)8S
12-0305	KMT/E	KJELDATHERM® digestion tube, micro 100 ml with constriction + calibrated at 100 ml	KB(L)40S, KB(L)12S
12-0307	KMT	KJELDATHERM® tube, micro 100 ml, calibrated at 100 ml + 75 ml	KB(L)40S, KB(L)12S
12-0309	KTG-DU	KTG Dummy tube, L 130 mm - 4 pcs	KB(L)8S, KB(L)20S



## TZ - CONTROL UNIT



Order No.	Type	Description
12-0011	TZ	Programmable temperature time controller for all KJELDATHERM® systems: - 9 programs with 9 program steps - accuracy < 0,5 % in the upper temperature range - Nominal voltage: 230 VAC, 50 - 60 Hz - Dimensions: W 85 / D 240 / H 255 mm - Temperature range: RT - 430 °C
12-0378	TZ	Programmable temperature time controller Identical to 12-0011, but as version 115 VAC, 60 Hz

## TR - TEMPERATURE CONTROLLER



Order No.	Type	Description
12-0010	TR	Electronic temperature controller for manual KJELDATHERM® systems: - accuracy < 1,0 % in the upper temperature range - Nominal voltage: 230 VAC, 50 - 60 Hz - Dimensions: W 85 / D 150 / H 155 mm - Temperature range: RT - 430 °C
12-0377	TR	Electronic temperature controller Identical to 12-0010, but as version 115 VAC, 60 Hz

## 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 $CuSO_4 \times 5H_2O$

## 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 <sub>2</sub> , pack of 500

**Insert racks for KJELDATHERM®-systems KB**



Order No.	Type	Description
12-0240	EB 8	Insert rack for KB(L)8S - for 8 x 250 ml tubes
12-0255	EB 8 BS	Insert rack for KB(L)8S-BS - for 8 x 400 ml tubes BS
12-0242	EB 12	Insert rack for KB(L)12S - for 12 x 100 ml tubes
12-0244	EB 20	Insert rack for KB(L)20S - for 20 x 250 ml tubes
12-0245	EB 20	Insert rack made of stainless steel for KB(L)20S for 20 x 250 ml tubes
12-0256	EB 20 BS	Insert rack for KB(L)20S-BS - for 20 x 400 ml tubes BS
12-0261	EB 40	Insert rack for KB(L)40S - for 40 x 100 ml tubes

**Exhaust manifold for KJELDATHERM®-systems KB**



Order No.	Type	Description
12-0233	AV8	Exhaust manifold, 8-place, for KB(L)8S, KB(L)8S-BS with drip tray
12-0235	AV12	Exhaust manifold, 12-place, for KB(L)12S, with drip tray
12-0236	AV20	Exhaust manifold, 20-place, for KB(L)20S, KB(L)20S-BS with drip tray
12-0237	AV40	Exhaust manifold, 40-place, KB(L)40S, with drip tray

**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, 50-60 Hz - Nominal wattage: 205 W - Weight: 19 kg - Dimensions: W 330 / D 450 / H 420 mm For more informations see „Product data sheet TURBOSOG“
12-0088	WSP	Water jet pump. Condenses and neutralizes aggressive acid fumes, suitable for all digestion units KJELDATHERM®.

Laboratory bottles for TURBOSOG



Order No.	Type	Description
12-0358	EFL	Spare bottle, 2000 ml for Turbosog complete with screw cap GL45 + silicone seal GL45

Glass pipes for TURBOSOG



Order No.	Type	Description
12-0359	KOA	Downpipe for condensate bottle, short
12-0360	WAA	Downpipe for washing bottle, long

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

## 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	

