TURBOTHERM RAPID DIGESTION UNIT



Optional with temperature measurement

Digestion unit with infrared technology and modern control. The quick alternative to the KJELDATHERM® digestion block. 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. Also for use as a multifunctional, programmable hotplate for inorganic acid digestion.
Using the optionally available „Temperature Kit", the temperature performance can be documented during the entire digestion process.

Scope of delivery Complete system, incl.:
Digestion tubes, Insert rack,
Exhaust manifold, Instruction manual

optional
TTs Temperature Kit,
Process control with documentation of the temperature performance (installation can only be carried out at the factory).

TURBOTHERM TTs

Type	TTs100	TTs625	TTs125	TTs440	TTs480
TECHNICAL DATA					
Heating places	12	6	12	4	4
Size of tubes [ml]	100	250 - 300	250 - 300	400	800
Temperature max. [°C]	-	-	-	-	-
Programs	99[1)]	99[1)]	99[1)]	99[1)]	99[1)]
Nominal wattage max. [W]	2000	2000	2000	2000	2000
Dimensions W / D / H [mm]	636 / 430 / 740	636 / 430 / 740	636 / 430 / 740	636 / 430 / 740	636 / 430 / 740
Weight [kg]	ca. 29	ca. 29	ca. 29	ca. 29	ca. 29
Nominal voltage [V]	230 / 115[2)]	230 / 115[2)]	230 / 115[2)]	230 / 115[2)]	230 / 115[2)]
Frequency [Hz]	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60
DELIVERS					
Digestion tubes	12 x	6 x	12 x	4 x	4 x
TURBOTHERM basic system	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 amnifold with drip tray	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
Console	1 x	1 x	1 x	1 x	1 x
ORDER INFORMATION					
Version 230 V	12-0602	12-0604	12-0606	12-0608	12-0610
Version 115 V	12-0603	12-0605	12-0607	12-0609	12-0611
CONFIGURATION (optional)					
TURBOTHERM TTs Temperature Kit	12-0618[3)]	12-0618[3)]	12-0618[3)]	12-0618[3)]	12-0618[3)]

1) each program is available with 40 different heating steps that have programmable times and heating capacities
2) Version 115 V is equipped with an additional power connection cable for connecting the VACUSOG/TURBOSOG extraction unit.
3) When ordering, please add the temperature kit to the order number of the TURBOTHERM. Installation is carried out at the factory.

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CONSUMABLES AND ACCESSORIES

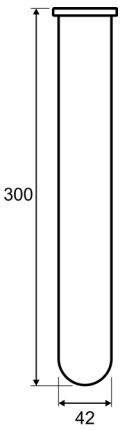
Make sure to use only original C. Gerhardt spare parts in order to obtain the best possible results. These parts have been tested thoroughly for the operation with KJELDATHERM and TURBOTHERM in the C. Gerhardt application lab.

KJELDAHL-DIGESTION TUBES AND KJELDAHL-FLASKS

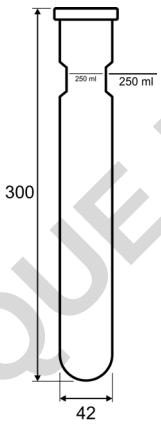
All tubes are made of high standard Duran® material.

Order No.	Type	Description	for type
12-0301	KTG 250	Kjeldatherm digestion tube, 300 ml - 10 pcs	TTs625, TTs125
12-0306	KTG/E 250	Kjeldatherm digestion tube, macro 300 ml, with constriction + calibrated at 250 ml	TTs625, TTs125
12-0310	KDD400	Jumbo digestion tube 400 ml - 4 pcs	TTs440
12-0311	KDD800	Jumbo digestion tube 800 ml - 4 pcs	TTs480
12-0304	KMT	Kjeldatherm digestion tube, micro 100 ml - 10 pcs	TTs100
12-0305	KMT/E	Kjeldatherm digestion tube, micro 100 ml with constriction + calibrated at 100 ml	TTs100
12-0307	KMT	Kjeldatherm digestion tube, micro, 100 ml, calibrated at 100 ml + 75 ml	TTs100

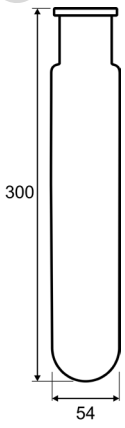
12-0301



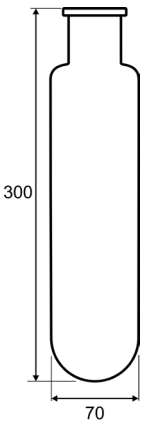
12-0306



12-0310



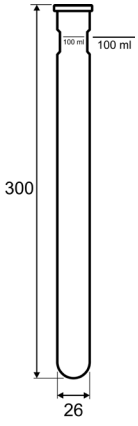
12-0311



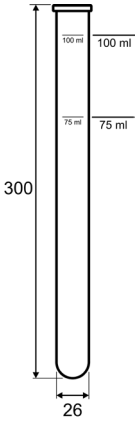
12-0304



12-0305



12-0307



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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 $CuSO_4$ x $5H_2O$
12-0329	CuTi	KJELCAT-tablets, tin of 1,000 pcs 5.0 g K_2SO_4 + 0.15 g $CuSO_4$ x $5H_2O$ + 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 $CuSO_4$ x $5H_2O$

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_2, pack of 500

Insert rack for TURBOTHERM



Order No.	Type	Description
12-0277	EG12-100	Insert rack for 12 x 100 ml tubes, for TTs100
12-0269	EG625	Insert rack for 6 x 250/300 ml tubes, for TTs625
12-0273	EG125	Insert rack for 12 x 250/300 ml tubes, for TTs125
12-0271	EG440	Insert rack for 4 x 400 ml tubes, for TTs440
12-0272	EG480	Insert rack for 4 x 800 ml tubes, for TTs480

Exhaust manifold for TURBOTHERM-systems



Order No.	Type	Description
12-0281	AV12-100	Exhaust manifold for 12 x 100 ml tubes, for TT100
12-0278	AV6	Exhaust manifold for 6 x 250/300 ml tubes, for TT625
12-0279	AV4	Exhaust manifold for 4 x 400 / 4 x 800 ml tubes, for TTs440 and TTs480
12-0280	AV125	Exhaust manifold for 12 x 250/300 ml tubes, for TTs125

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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 (WxDxH): 342 x 463 x 490 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 sep-aration 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 (WxDxH): 160 x 400 x 490 mm - Dimensions, open (WxDxH): 160 x 400 x 720 mm

TURBOSOG Scrubber unit



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

Additional cooling unit for TURBOSOG



Order No.	Type	Description
12-0361	ZKE	Additional cooling unit for TURBOSOG For efficient separation of condensate in water digestions.

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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®.

Drip tray



Order No.	Type	Description
1007314	TWS	Drip tray for TURBOTHERM TTs

Tubes



Order No.	Type	Description
10-0091	ISO	Isoversinic-tubing, black, 1,5 m Connecting tube from TURBOSOG/VACUSOG to exhaust manifold of digestion unit.

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

Spare parts for exhaust manifold AV



Order No.	Type	Description	suitable for Exhaust manifold
1001668	AK12-100	Suction head glass, 12-place, 100 ml	AV12-100
1001666	AK12	Suction head glass, 12-place, 250 ml	AV125
1001667	AK6	Suction head glass, 6-place	AV6
1001665	AK4	Suction head glass, 4-place	AV4

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Mains cable



Order No.	Type	Description
10-0057		Mains cable 230 V, 1,5 m
1002243		Mains cable 115 V, 2 m

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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

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Send offer to:

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

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Presented by: