BOE-THERM

YOUR PARTNER IN TEMPERATURE CONTROL

COOLMASTER K-SERIES

Compact ECO-Friendly Industrial Cooling

- Robust stainless steel housing with removable rubber floor supports (K2 series)
- Closed, insulated stainless steel water tank to prevent algae growth
- Efficient stainless steel spiral heat exchanger and microchannel Al/Cu condenser for high performance and low energy use
- Industrial multi-stage stainless steel pump with built-in bypass
- Axial fan for direct discharge of warm condenser air
- Digital temperature controller with display and adjustable limits
- All connections located on one side for easy installation

K1 AND K2 CHILLER– ECO-FRIENDLY INDUSTRIAL COOLING

Efficient. Sustainable. No Water Spillage.

In industries where precision, hygiene, and reliability are critical:

- Food, bakery and sweets Industry: Hygienic cooling for packaging, processing, and sealing.
- Vacuum & Sealing Packaging: Stable cooling for high-speed, precision equipment.
- Electrical Cabinet Cooling: Protect sensitive electronics from overheating.
- Welding Industry: Reliable cooling for torches and power sources.
- General Process Cooling: Efficient thermal management across various industrial processes.

WHY CHOOSE BOE-THERM'S K1 AND K2 CHILLERS?

NO WATER CONSUMPTION OR DISPOSAL

Our systems operate without the need for fresh water or wastewater discharge. This reduces operational costs and eliminates environmental and regulatory concerns. With no open water circuits, issues like scaling, corrosion, and biological growth are avoided — resulting in longer equipment life, fewer breakdowns, and minimal maintenance.

CONSISTENT PERFORMANCE

CoolMasters maintain stable temperatures regardless of ambient conditions. This ensures optimal performance for sensitive equipment and processes — from vacuum packaging lines to welding stations.

HYGIENIC AND SAFE

Especially in food production, hygiene is essential. Boe-Therm CoolMasters support clean environments with a fully enclosed stainless steel housing and optional air filtration to prevent airborne contamination and bacterial exposure.

COMPACT AND FLEXIBLE DESIGN

Designed to integrate seamlessly into your production setup — whether it's a packaging line, control cabinet, or industrial welding station.

GUARANTEED RELIABILITY

Designed and manufactured under the ISO 9001 quality system and compliant with all relevant European standards and directives:

- EN6078-1 to EN6078-4
- EN-IEC 60204-1
- Machinery Directive 2006/42/EC
- Pressure Equipment Directive (PED) 2014/68/EU
- F-Gas Regulation EU 2024/673

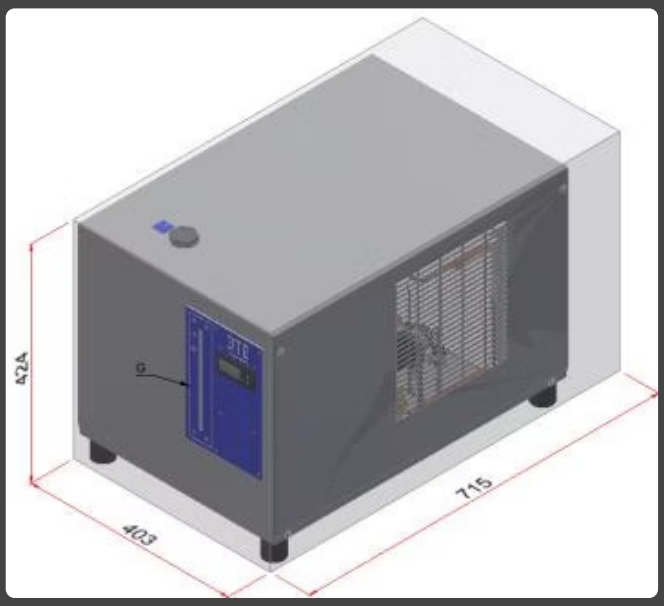
Optional builds available for UL/CSA or ATEX standards as well custom options available

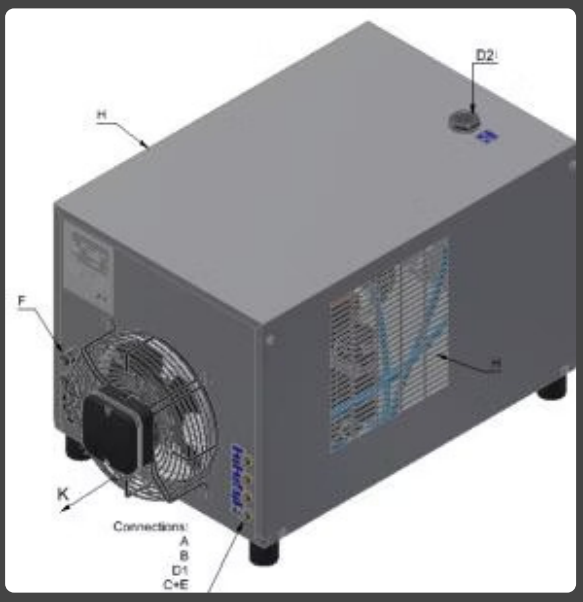
TECHNICAL SPECIFICATIONS

		K-002.2	K-003.7	K-005.0
Refrigerant		**R290**	**R290**	**R290**
GWP (IPCC, AR4)		**3**	**3**	**3**
Refrigerant charge	**kg**	**0,148**	**0,27**	**0,27**
CO2 Footprint	Ton CO2	**0,00**	**0,00**	**0,00**
Nominal cooling capacity (1)	kW	**2,16**	**3,67**	**5,00**
Total power consumption (1 incl. standard pump)	kW	**1,10**	**1,16**	**1,54**
EEER (1) (8)	-	**1,9**	**3,2**	**3,3**
Cooling capacity (2)	kW	**1,66**	**2,90**	**3,87**
Total power consumption (2 incl. standard pump)	kW	**1,23**	**1,25**	**1,87**
EEER (2) (8)	-	**1,4**	**2,3**	**2,1**
SEPR (3) (8)	-	Indoor use only	Indoor use only	Indoor use only
Circulation cooling water (@2.5 bar)	l/h	**720**	**1100**	**1100**
Water tank volume	liters	**12**	**23**	**23**
Air displacement by condenser fan	m^3/h	**700**	**1000 (7)**	**1000 (7)**
Max. current unit (incl. standard pump)	A	**6,9**	**8,6**	**9,9**
Voltage/Frequency		1N 220-240V 50Hz	1N 220-240V 50Hz	1N 220-240V 50Hz
Sound power level (4)	dB(A)	**58**	**64**	**64**
Sound pressure level 10m (4)	dB(A)	**51**	**54**	**55**
Size (L x W x H)	mm	**403 xx 715 × 424**	**554 × 670 × 488**	**554 × 670 × 488**
Main water connections	BSP	1/4"	1/2"	1/2"
Weight (empty) (5)	kg	**37**	**50**	**50**
Weight (operational) (5)	kg	**49**	**73**	**73**
Minimum room volume (6)	m^3	n/a	**35,6**	**35,6**

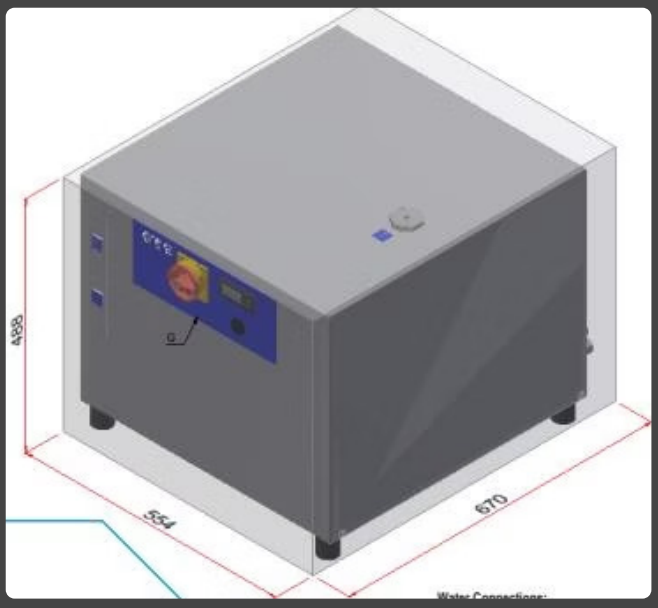
(1) Water temperature at the inlet/outlet of the evaporator 20/15°C, outside air temperature 27°C;
(2) Water temperature at the inlet/outlet of the evaporator 12/7°C, outside air temperature 35°C;
(3) Data entered according to the European Regulation (EU) 2016/2281 for high-temperature process refrigeration systems;
(4) Sound power level in dB(A) free field conditions;
(5) Weight based on standard configuration: empty = including oil, refrigerant and without water. Weight operational = including water;
(6) Minimum room volume is the volume required for safe placement, calculated based on Table C.2 of Annex C of NEN-EN-378-1:2016 (+/-)2020. Any other location or access category on request;
(7) Airflow at standby with secondary set frequency (part load) for safety precaution;
(8) General: EER and SEPR are calculated without water pump.

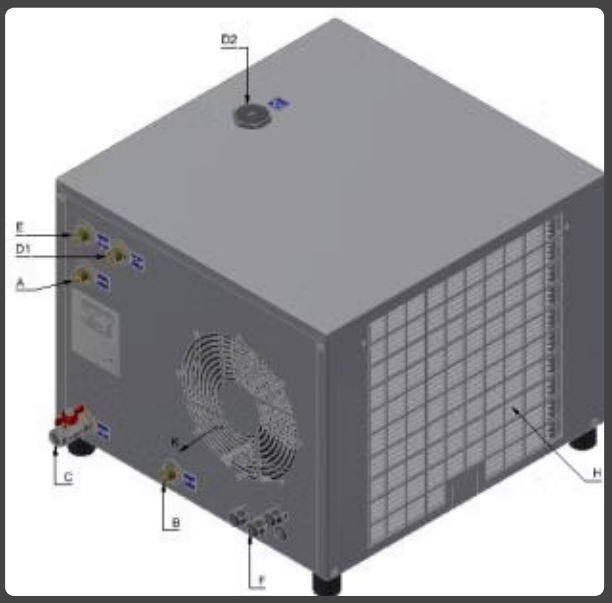
K-002.2





K-003.7 + K-005.0





Water Connections:

- A= Cooling water inlet
- B= Cooling water outlet
- C= Drain
- E= Overflow
- D1= Auto-Filling
- D2= Manual Filling
- D2= Electrical
- F= Electrical
- H= Incoming condenser air
- K= Outgoing condenser air
- G= Control

	K-002.2	K-003.7 + k-005.0
A	1/4"	1/2" outside thread
B	1/4"	1/2" outside thread
C	1/4"	1/2" outside thread
D	cap	cap
E	M16(2x)+ M20 (3x)	C14

BOE-THERM: A LEGACY OF INDUSTRIAL INNOVATION

Boe-Therm A/S stands as a testament to Danish engineering excellence, with a rich history rooted in the design and manufacturing of high-quality temperature control solutions. For decades, Boe-Therm has been a trusted partner for industries worldwide, consistently delivering reliable, durable and energy-efficient units that meet the rigorous demands of modern manufacturing.

> "Since our founding in 1961, Boe-Therm has accumulated over sixty years of invaluable experience, deeply shaping our understanding of diverse industrial needs. This legacy enables our customer-centric approach, allowing us to deliver flexible, tailored solutions that precisely optimize production, enhance product quality, and reduce operational costs for our clients across various sectors."
>
> - Thomas Hass Thomsen, CEO, Boe-Therm A/S

Based in Assens, Denmark, Boe-Therm's expertise is reflected in every product, from meticulous design to robust construction, ensuring that each unit serves as a dependable cornerstone in your industrial operations.

CONTACT INFORMATION AND SUPPORT

For further inquiries, technical support, or to discuss how our TCUs can optimize your specific industrial processes, please reach out to Boe-Therm directly. Their team of experts is ready to provide comprehensive assistance and tailored solutions.

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Visit the official Boe-Therm website for detailed product brochures, technical documentation, and the latest updates on their innovative temperature control solutions.