

BOE – THERM

CoolMaster[®]

1 x 220-240V / 50Hz

Range: K2

Water Cooler with Tank and Pump **Automatic & Manual Filling**



FOR A PERFECT COOLING
IN INDUSTRIAL PROCESS
WATER SYSTEMS

CFK and HCFK-free

The CoolMaster is a complete and plug-in type of DTE product which fully meets all European directives, safety, and quality standards, such as CE, EN 292, EN 1050, EN 60204, EN 378 and PED directive 97/23/EG. All DTE products are developed and constructed in accordance with ISO 9001. Standard documentation supplied with all machines: Pressure test certificate, refrigeration charge/evacuation certificate, leakage testing approval, system check certificate, instruction card and a machine operating and maintenance manual. All certificates issued in conformance with European and local laws governing construction of refrigeration.



The **CoolMaster** consists of components from the standard production range of well-known suppliers. All building elements are fitted in such a way that they are not only easily accessible but also easily exchangeable. Careful selection, calculation and set-up of the components is achieved using computer programmes DTE designed especially for this purpose. In this way DTE houses the maximum cooling capacity in a minimum of space.

In the **CoolMaster** only durable materials are used. DTE leaves nothing to chance and chooses knowingly for a robust housing fitted with rubber legs. These legs are easily removable to enable direct mounting onto customers steelwork.

The insulated stainless steel water tank in the **CoolMaster** is sealed tight to prevent any possible algal growth caused by the incidence of light.

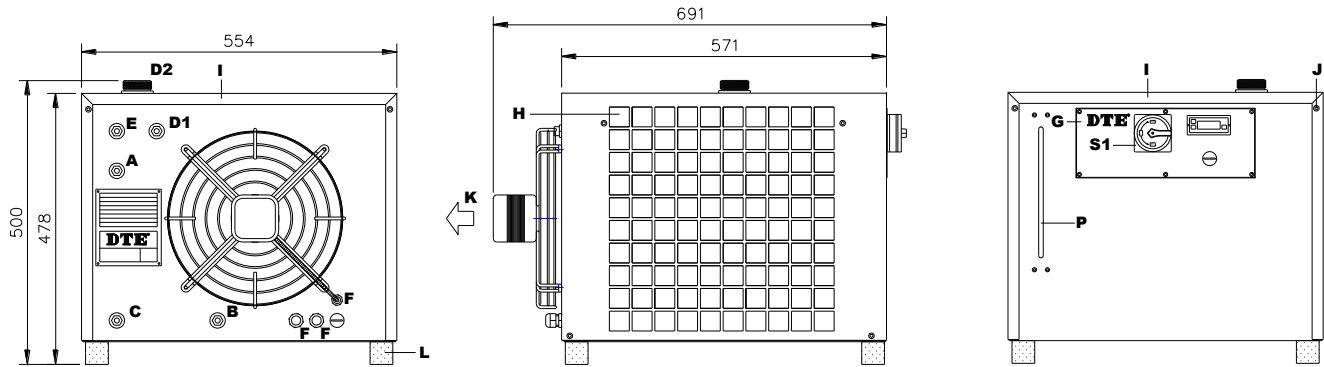
Furthermore, the warm air produced by the condenser does not remain in the **CoolMaster**, but is blown out directly by a powerful axial fan.

These important DTE constructional features guarantee the long life of the **CoolMaster**.

The CoolMaster includes the following components:

- ✓ **Tube-coil heat exchanger** (evaporator) made of **stainless steel**,
- ✓ digital **temperature controller** with adjustable limitation and display for reading out measured values,
- ✓ a pressure limited **thermostatic expansion valve**, (except. K-001.0 en de K-001.7 capillaire injection)
- ✓ an industrial **multi-stage centrifugal pump** with impellers, shaft and other key components made of **stainless steel**,
- ✓ **by-pass** for water pump protection,
- ✓ hermetically sealed and suction gas cooled **compressor**,
- ✓ an air-cooled **condenser** specially designed by DTE, fitted with copper pipes and aluminium fins,
- ✓ an industrial **axial fan** which directly blows the hot condenser air horizontally to outside,
- ✓ a closed **water tank** made of **stainless steel**, which also has been provided with **insulation**, a **float** for automatically refilling, **manual filling device**, and **sight glass**,
- ✓ a **switch box** provided with all necessary **protections**,
- ✓ connection for **external start/stop** (Volts-Free Contact).
- ✓ All **connections** on the back of the machine, no hoses or cables are visible

Dimensions in mm.



- A = Cooling water inlet, 1/2" BSP outside thread
- B = Cooling water outlet, 1/2" BSP outside thread
- C = Drainvalve, 1/2" BSP inside thread
- D₁ = Filling water inlet, 1/2" BSP outside thread
- D₂ = Manual filling device
- E = Overflow water tank, 3/4" BSP outside thread
- F = Bushing coupling electrical cable, PG-13,5
- G = Control panel
- H = Ingoing condenser air
- I = Removable cover
- J = Fixing bolts cover
- K = Outgoing condenser air
- L = Rubber legs
- P = Sight glass

Options

Besides the **CoolMaster** standard programme, DTE also offers customized **CoolMaster's** which are calculated and built according to your specifications. The modular construction of the **CoolMaster** allows fast and simple adaptation to your specifications. DTE has almost all components for extra features available from stock.

Some of these are:

- ✓ full compliance with the country dependent standards and regulations,
- ✓ adaptation to all voltages and frequencies,
- ✓ housing fitted with wheels instead of rubber legs,
- ✓ adaptation to extreme environmental conditions,
- ✓ temperature adjustment and/or readable by remote control,
- ✓ protection against run-dry circulation pump,
- ✓ condenser for external set-up,
- ✓ integration of water-cooled condenser instead of an air cooled condenser,
- ✓ water piping in copper or stainless steel.

TYPE-NUMBER	**Cooling capacity at 15°C	**Cooling capacity at 5°C	Tension / Frequency	*** Circulation cooling water	** Rated power input	** Rated current	* Maximum current	Water-tank volume	Air quantity	Y
	Watt	Watt	V/Hz	l/h	kW	Amp.	Amp.	litres	m³/h	
K-001.0	990	710	1x220-240/50	CH2-20	0,85	4,35	5,05	23	1.180	80
K-001.7	1.720	1.270	1x220-240/50	CH2-20	0,87	4,42	5,17	23	1.180	80
K-003.6	3.550	2.520	1x220-240/50	CH2-30	1,33	6,27	8,47	23	1.180	81
K-004.9	4.850	3.510	1x220-240/50	CH2-30	1,90	9,07	11,47	23	1.180	89

* Maximum permissible load.

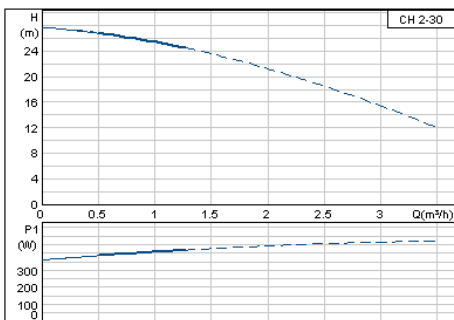
** At an ambient temperature of 27°C.

*** For head pressure water pump, see pump graphic.

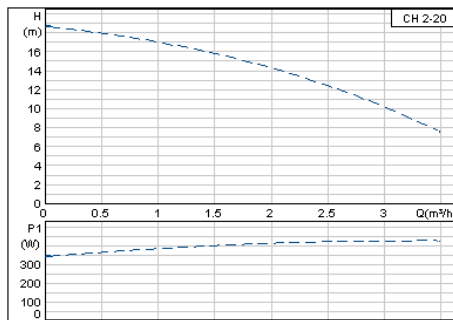
Conversion values: 1 W = 1 J/s = 0,86 kcal/h

Technical specifications under subject to change.

CH2-30



CH2-20



Option

Different tensions

- 1x200V/60Hz
- 3x110V/60Hz
- 3x220V/50Hz
- 3x220V/60Hz
- 220-240 / 380-415V/50Hz
- 3x440V/60Hz
- 3x460V/60Hz
- 3x480V/60Hz
- 1x230V/60Hz