amson Instruments Specification

Tamson Cool Cube - Immersion Cooler

Probe -100 °C / -148 °F



Wheels fitted with brake Low noise Stainless steel probe Flexible hose **Durable materials**

Item	Unit	TCC - IC
P/N 230V/50Hz		00T0300
P/N 230V/60Hz		00T0301
P/N 115V/60Hz		On request
Probe length	[mm]	200
Probe diameter	[mm]	46
Hose length	[mm]	2000
Length	[mm]	920
Width	[mm]	380
Height + display	[mm]	660
Height	[mm]	610
Weight	[kg]	76
Power consumption	[kw]	2.6 max @ start
Power consumption	[kw]	<1.5 working load
Ambient	[°C]	15 26
Materials	Probe, frame, top plate: stainless steel 304 Side panels: zincor with powder coating	
CE	Conforms to CE regulation	

General

This immersion cooler is based on a powerful cooling unit called the Tamson Cool Cube. The immersion cooler offers a flexible solution for a variety of cooling applications.

Construction

The TCC - IC system is easy to use and ideally suited to quickly cool down liquid. A typical application is the combination with the TLV25 which can be used as a very low temperature viscometer bath. The immersion cooler offers an environmentally friendly way of cooling. The refrigerant used is HCFK free. The immersion cooler has a status panel which informs the user about the status of the compressors and overpressure safeties.

The stainless steel cooling probe (200 x 46 mm) is connected to the system via a flexible hose. The relative small footprint offers easy installation under a workbench.

The cooler is mounted on four wheels. Two are fitted with a brake to lock the sytem in place. The casing is constructed from powder coated zincor. The top plate and frame are constructed from of stainless steel.

After the unit is started the probe rapidly cools down. With the cooling down the consumed power also decreases to less than 1.5 kW.

The use of silent fans makes the unit works quietly.

The maintenance of the system is limited by keeping the air inlet free of dust. The inlets can be accessed by easy accessible panels and dust can be removed by the use of a vacuum cleaner. There further is no need for other maintenance.

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Ambient condition

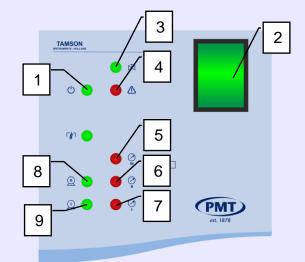
For proper cooling performance within the specifications it is preferred that the ambient temperature is within range 15°C...26°C.

Example of cooling down curve

In combination with a TLV25 a bath temperature of -80°C can be reached within four hours. A high ambient temperature limits the minimum temperature of the bath. With ambient around 20°C a bath minimum temperature of -82°C (± 2°C) can be expected.

A display indicates the functions of the cooling circuit:

- Indicator on / off
- 2 On / off switch
- 3 Pressure valve open
- 4 System error
- 5 High pressure
- 6 Pressostat stage 2
- 7 Pressostat stage 1
- 8 Compressor stage 2 running
- 9 Compressor stage 1 running



TCC - IC and TLV25

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