



# TSC

## Ice thermal storage



### Key benefits

- Reliability: constant water supply temperature (1 to 2°C)
- Lowest first cost
- Energy saving

### TSC characteristics

- External ice melt
- Direct refrigerant or glycol feed

### Capacity range

300 - 5000 kWh

### Other benefits are:

- Proven BAC technology, part of your building infrastructure
- Minimum maintenance
- Environmentally friendly



Read more about the [TSU benefits](#).

**Interested in customized TSC coils for your cooling project?** Contact your local [BAC representative](#) for more information.

## Downloads

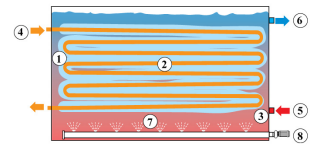
- [TSC coils](#)

# Principle of operation

## Ice thermal storage

### Principle of operation

The TSC coil is for use in an external melt system. This system produces and builds **ice (1)** around a **coil (2)** submerged in **water (3)**. A **refrigerant or cold glycol (4)** circulates through this, while ice accumulates on the outside. The ice is melted by circulating **warm water (5)** from the load over the coil, which **cools the water (6)**. Low pressure **air (7)** from an **air pump (8)** is distributed below the coil for water agitation.



**Want to use the TSC coil in your ice storage system?** Contact your local [BAC representative](#) for more information.



# Construction details

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### Construction details

The coil is constructed of continuous length of **prime surface steel**, hot-dip galvanized after fabrication. Designed for maximum 10 bar (glycol ) or 22 bar (ammonia) operating pressure according to PED.

Coils are delivered with **BAC's Internal Coil Corrosion Protection** , to ensure an optimal internal corrosion protection and guaranteed quality.

**Like to know more about the TSC ice coil construction details?**

Contact your [local BAC representative](#).





# TSC-C - TSC-D

Ice thermal storage

## Engineering data

**REMARK:** Do not use for construction. Refer to factory certified dimensions & weights. This page includes data current at time of publication, which should be reconfirmed at the time of purchase. In the interest of product improvement, specifications, weights and dimensions are subject to change without notice.

### General notes

1. All dimensions are in mm. Weights are in kg.
2. Unit should be continuously supported by a flat level surface.
3.  $H_1$  = installed height. Coil connections are closed and filled with inert gas for shipping and storage. Add 130 mm for shipping height.
4. Refrigerant charge listed is operating charge for pump recirculated bottom feed. For other feed systems, consult your BAC representative.

**Last update:** 01/07/2024

### TSC-C - TSC-D



Model	No° Coils	Data Per Coil						
		Approx. Ship. Weight (kg)	Coil Volume (L)	R717 charge (kg)	H	H1	L	W
TSC-95C	1	1065	297	128	1912	2260	2654	1055
TSC-115C	1	1205	340	147	1912	2260	3258	1055
TSC-120C	1	1315	368	159	1912	2260	2654	1350
TSC-145C	1	1500	453	196	1912	2260	3258	1350
TSC-170C	1	1635	510	220	1912	2260	3861	1350
TSC-200C	1	1950	566	244	1912	2260	4464	1350
TSC-225C	1	2135	651	281	1912	2260	5070	1350
TSC-185C	2	1065	297	128	1912	2260	2654	1055
TSC-230C	2	1205	340	147	1912	2260	3258	1055
TSC-270C	2	1340	410	177	1912	2260	3861	1055
TSC-310C	2	1590	453	196	1912	2260	4464	1055
TSC-350C	2	1725	510	220	1912	2260	5070	1055
TSC-290C	2	1500	453	196	1912	2260	3258	1350
TSC-340C	2	1635	510	220	1912	2260	3861	1350
TSC-400C	2	1950	566	244	1912	2260	4464	1350
TSC-450C	2	2135	651	281	1912	2260	5070	1350
TSC-480C	4	1365	380	164	1912	2260	2721	1350
TSC-590C	4	1545	462	199	1912	2260	3327	1350
TSC-700C	4	1680	519	224	1912	2260	3928	1350
TSC-800C	4	2000	574	248	1912	2260	4534	1350
TSC-910C	4	2180	660	285	1912	2260	5137	1350
TSC-1050 C	6	1680	520	225	1912	2260	4030	1350
TSC-790D	4	2065	687	297	2102	2448	3327	1645
TSC-940D	4	2315	779	336	2102	2448	3931	1645
TSC-1080 D	4	2720	864	373	2102	2448	4534	1645
TSC-1220 D	4	2950	950	410	2102	2448	5140	1645
TSC-1440 D	4	3310	1084	468	2102	2448	6045	1645