

Fact sheet

# ThermoClean®

Domestic water heating system for hospitals, sports centers, hotels as well as dwelling-houses



## Application

ThermoClean® is a compact and effective system solution for legionella free domestic water heating. ThermoClean® is suitable for hospitals, sports centers, hotels and dwelling houses, where effectively prevent the development and growth of legionella is needed. The system is available in two different types with separate reaction (-DL) or combination (-Combi) storage tank which contains the charging and recooling unit. These units are equipped with brazed (-DL/-Combi) plate heat exchangers.

## Domestic hot water (DHW)

The ThermoClean® system uses the thermal disinfection method, whereby the reaction temperature inside the installation is kept at a constant temperature of 70 °C. It is dimensioned in such a way that the water is warranted to remain in the reaction area of the device for at least 5 minutes. The system is equipped with electronic controls for controlling of the charging temperature and the temperature in buffer storage tank.

## Domestic hot water circulation

The ThermoClean® system is supplied with connection for DHW circulation including balancing valve and a non-return valve as a standard as well as circulation pump as an option.

## Options

The ThermoClean®-DL systems can be combined with additional buffer storage tanks to provide the required capacity for peak consumption. The system can be also equipped with the over-tapping protection to prevent system cool-down during over tapping.

## Construction

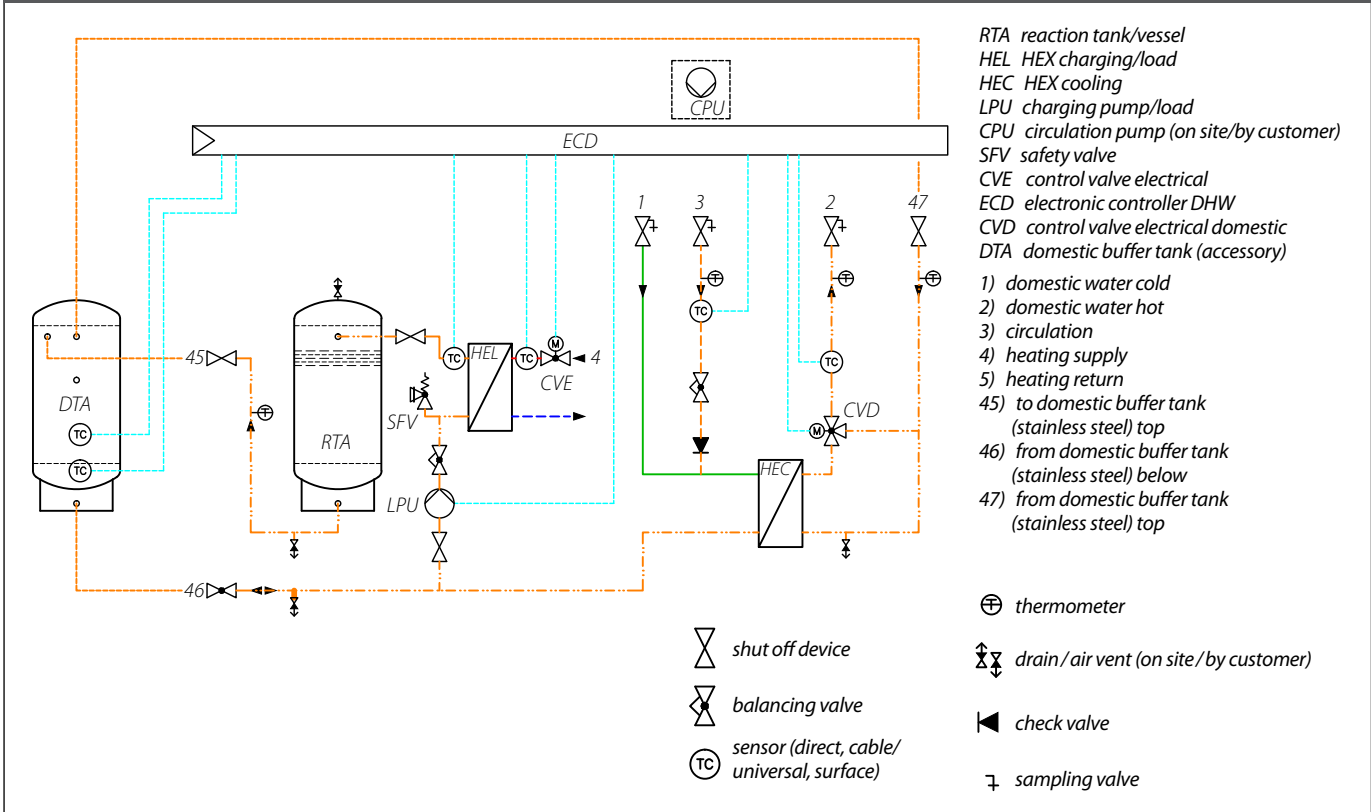
The combination and reaction storage tank, plate heat exchangers and piping are made of stainless steel. All pipe connections are made by welding. The charging and re-cooling unit is mounted on a separated common frame construction. After setup the unit should be connected with reaction (combination) storage tank.

## FEATURES AND BENEFITS

- Domestic water heating system
- Electronic control of DHW temperature
- Max. capacity: 46-546/30-101 kW<sup>1</sup>
- Reaction storage tank capacity: 200-1300/350-1000 l<sup>1</sup>
- Reliable prevention of legionella bacteria
- Continuous thermal disinfection of DHW circulation
- Low operating cost
- Compact design and easy installation

<sup>1</sup>) ThermoClean®-DL/-Combi

CIRCUIT DIAGRAM – EXAMPLE



**Technical parameters:**

Type -DL/-Combi  
 Nominal pressure: PN 16 (25)<sup>2</sup>  
 DH supply temp: T<sub>max</sub> = 100 (150)2 °C

**Options:**

- Additional buffer storage tank

2) Available on request

DHW: CAPACITY EXAMPLES

Type	Performance index NL <sup>3</sup>	Connected load [kW]	Max. power for peak consumption [kW]	Circ. flow (max) [l/h]	Resistance			Dimensions			Weight [kg]	Connections				
					Heating water [kPa]	DHW (max) [kPa]	Circ. (max) [kPa]	H [mm]	W [mm]	D [mm]		1, 2	3	4, 5	45-47	
-DL	200	— <sup>4</sup>	84 .. 46	140	1070 .. 1800	24	54	19	1730	1950	700	210	1 1/2"	1 1/4"	25/20	1 1/2"
	500	— <sup>4</sup>	210 .. 114	350	2670 .. 4500	22	58	20	2090	2060	800	260	2 3/8"	1 3/4"	50/40	2 3/8"
	1000	— <sup>4</sup>	420 .. 228	700	5330 .. 9000	29	65	27	2525	2570	1000	460	2 1/2"	2"	50/40	2 1/2"
-Combi	350	15 .. 9	55 .. 30	91	690 .. 1170	20	56	18	1825	1530	750	185	1 1/2"	1 1/4"	20	—
	500	28 .. 13	71 .. 39	119	910 .. 1530	21	56	19	1865	1630	850	210	1 1/2"	1 1/4"	25/20	—
	1000	52 .. 29	101 .. 55	168	1280 .. 2160	24	49	14	2145	1900	1050	325	1 3/4"	1 1/2"	32/20	—

3) Performance index NL acc. to DIN 4708

4) Dependent on the additional storage tank(s)

**Danfoss A/S**

Heating Segment • heating.danfoss.com • +45 7488 2222 • E-Mail: heating@danfoss.com

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