

# **CTC AT**

# Coil tanks and buffer tanks of 300 to 1000 litres.

CTC AT is a series of buffer tanks designed for almost all types of energy sources. They are available in several models and sizes, and can also be combined to fit most heating systems and properties. All tanks are well insulated with polyurethane/mineral wool for the lowest possible energy loss.

#### CTC AT 1

Coil tanks for efficient DHW heating. They are available in three sizes – 300, 500 and 750 litres – and in no less than five different models. CTC's tanks accumulate the radiator water instead of the domestic hot water, so that the heat pump operates as favorably as possible, and you always have fresh domestic hot water. The domestic hot water is heated via finned coils which are efficiently heated by the radiator water inside the tank.

CTC AT 300/25 has a volume of 300 litres and contains a hot water coil measuring 25 metres. CTC AT 500/25–50 has a volume of 500 litres and contains 1 to 2 coils measuring 25 metres. CTC AT 750/50–75 has a volume of 750 litres and contains 2 to 3 coils measuring 25 metres each.

CTC AT 300 is able to cover the hot water needs of an average-sized house. CTC AT 500 is able to cover the hot water needs of up to 10 apartments

and CTC AT 750 up to 15 apartments. They can also be cascade-connected in situations where the hot water need is greater.

#### CTC AT 2

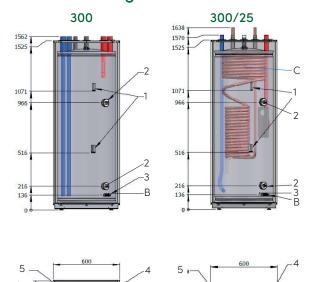
Volume tanks for hot water storage. The hot water storage tanks are available in four sizes (300, 500, 750 and 1000 litres) and can be interconnected to achieve the desired storage volume.

A hot water storage tank is necessary for wood boilers in order to store energy, since wood boilers often produce more energy than can be consumed at any given time. The size of the tank depends on the size of the property and the type of wood boiler installed. In most cases, a modern wood boiler requires a storage volume of at least 1500 litres.

CTC AT 500 and 750 are also available in 6 bar versions for systems requiring higher pressure.



# Dimensions diagram



### **CONNECTIONS:**

- 1. Temperature sensor thermowell  $\varnothing$  7
- 2. Immersion heater outlet DN50
- 3. Draining DN15
- 4. Supply from heat source DN32
- 5. Return to heat source DN32
- 6. DHW

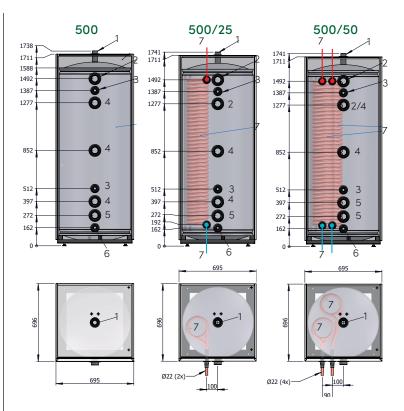
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- 7. Expansion DN25
- 8. Ø 22 Cw/DHW/conn. bivalent mixing valve
- 9. Return pipe radiator DN32
- 10. Riser pipe radiator DN32
- 11. Additional connection DN20

#### **EQUIPMENT**

- B. Drain cock
- C. Hot water coil Ø 22



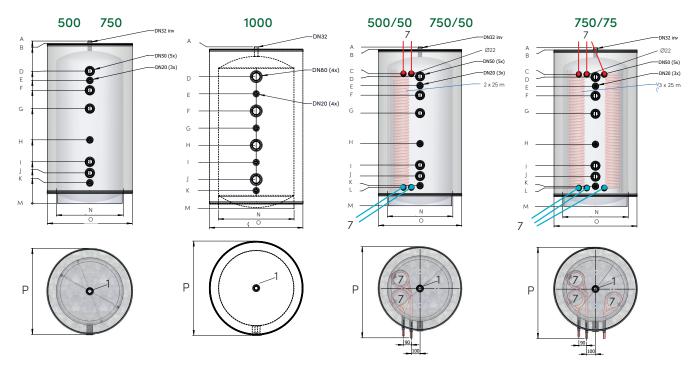
#### **CONNECTIONS:**

- 1. Expansion/Bleeding DN32
- 2. Supply from heat source DN50
- 3. Thermometer DN20
- 4. Immersion heater outlet DN50
- 5. Return to heat source DN50
- 6. Draining DN20
- 7. DHW-coil Ø 22

Technical data	300 3 bar	300/25	500 3 bar	500/25	500/50		
CTC no.		589913001	589912001	588353301	588350301	588349301	
Weight	kg	90	117	118	143	168	
Dimensions (width x depth x height)	mm	637x600x	1562/1638	696x695x1740			
Required ceiling height	mm	1645	1695	1870			
Max. operating pressure (PS) – Heating system	bar	3		3			
Water volume (V) – Heating system	litres	293	287.5	478	472.5	467	
Max. operating temperature (TS)	°C	100		100			
Hot water coil quantity/length	qty/m	-	1/ 25	-	1/ 25	2/ 25	
Max. operating pressure – DHW system	bar	-	10	-	10	10	
Water volume – DHW system	litres	-	5.5	-	5.5	11	
DHW performance V <sub>40</sub> - at 10 l/m / 20 l/m	litres	-	280/208	-	513/284	518/370	
Energy efficiency class (A <sup>+</sup> to F)		(	C	С			
Insulation			р	olyurethane (PU	yurethane (PUR)		
Standing loss (S) (EN12897)		84	84	101	101	101	

Energy labels and data sheets can be downloaded from www.ctc-heating.com/ecodesign.





	500 - 6 bar	750 - 3 bar	750 - 6 bar	1000 - 3 bar	500/50 - 6 bar	750/50 - 3 bar	750/50 - 6 bar	750/75 - 3 bar	750/75 - 6 bar
А	1772	1810	1817	1888	1772	1810	1817	1810	1817
В	1748	1784	1791	-	1748	1784	1791	1784	1791
С	-	-	-	-	1495	1515	1511	1515	1511
D	1465	1515	1481	1540	1465	1515	1481	1515	1481
E	1360	1410	1376	1340	1360	1410	1376	1410	1376
F	1250	1300	1266	1140	1250	1300	1266	1300	1266
G	905	1015	1061	940	905	1015	1061	1015	1061
Н	565	665	711	740	565	665	711	665	711
- 1	450	420	466	540	450	420	466	420	466
J	325	295	341	340	325	295	341	295	341
K	215	185	231	210	215	185	231	185	231
L	-	-	-	-	195	215	211	215	211
M	0	0	0	0	0	0	0	0	0
N	Ø650	Ø780	Ø750	Ø890	Ø650	Ø780	Ø750	Ø780	Ø750
0	Ø840	Ø960	Ø950	Ø1090	Ø840	Ø960	Ø950	Ø960	Ø950
Р	859	980	964	1101	939	1065	1044	1065	1044

DN32: Expansion/Bleeding (A)
 Ø22: DHW-coil (C/L)

 $5\,x$  DN50: Supply/Return/Immersion heater outlet (D/F/G/I/J)  $3\,x$  DN20: Draining/Thermometer (E/H/K)

Technical data	500	500/50	750	750/50	750/75	1000	
recilifical data	6 bar	6 bar	3 / 6 bar	3 / 6 bar	3 / 6 bar	3 bar	
CTC no.		589903001	589900001	588352301/ 589904001	588348301/ 589901001	588347301/ 589902001	590642301
Weight	kg	118	168	118/139	168/190	193/215	175
Dimensions (Ø x height)	mm	Ø840x1780		Ø960x1820 / Ø950x1820			Ø1090x1910
Required ceiling height	mm	1890		2005 / 2040			2040
Max. operating pressure (PS) – Heating system	bar	6		3/6			3
Water volume (V) – Heating system	litres	503	492	721/689	710/678	704.5/672.5	971
Max. operating temperature (TS)	°C	100		100			100
Hot water coil quantity/length	qty/m	-	2/ 25	-	2/ 25	3/ 25	-
Max. operating pressure – DHW system	bar	-	10	-	- 10		-
Water volume – DHW system		-	11	-	11	16.5	-
DHW performance V <sub>40</sub> - at 10 l/m / 20 l/m	litres	-	518/370	-	480/410	520/450	-
Energy efficiency class (A <sup>+</sup> to F)		C		-			-
Insulation		Mineral wool					
Standing loss (S) (EN12897)	W	104	104	127/127	127/127	127/127	138



# Hot water storage tanks – overview and accessories

# 300

#### Hot Water Storage Tank 1: 300/20

Insulated, 300 litre coil tank with 25 m hot water coil. Outlet for immersion heater 2". Outer housing: sheet metal. Insulation: PUR

#### Hot Water Storage Tank 2: 300

Insulated, 300 litre volume tank. Outlet for immersion heater 2". Outer housing: sheet metal. Insulation: PUR

#### Hot Water Storage Tank 1: 500/25 - 3 bar

Insulated, 500 litre coil tank with 25 m hot water coil.

Outlet for immersion heater 2". Outer housing: sheet metal. Insulation: PUR

#### Hot Water Storage Tank 1: 500/50 - 3 bar

Insulated, 500 litre coil tank with 2x25 m hot water coils.

Outlet for immersion heater 2". Outer housing: sheet metal. Insulation: PUR

#### Hot Water Storage Tank 2: 500 - 3 bar

Insulated, 500 litre volume tank.

Outlet for immersion heater 2". Outer housing: sheet metal. Insulation: PUR

# 500 - 3 bar



# 500 - 6 bar



#### Hot Water Storage Tank 1: 500/50 - 6 bar

Insulated, 500 litre coil tank with 2x25 m hot water coils. Outlet for immersion heater 2". Outer housing: impact-resistant plastic sheet. Insulation: glass wool.

#### Hot Water Storage Tank 2: 500 - 6 bar

Insulated, 500 litre volume tank. Outlet for immersion heater 2". Outer housing: impact-resistant plastic sheet. Insulation: glass wool.

#### Hot Water Storage Tank 1: 750/50, 3 bar/6 bar

Insulated, 750 litre coil tank with 2x25 m hot water coils. Outlet for immersion heater 2". Outer housing: impact-resistant plastic sheet. Insulation: glass wool.

# Hot Water Storage Tank 1: 750/75, 3 bar/6 bar

Insulated, 500 litre coil tank with 3x25 m hot water coils. Outlet for immersion heater 2". Outer housing: impact-resistant plastic sheet. Insulation: glass wool.

#### Hot Water Storage Tank 2: 750, 3 bar/6 bar

Insulated, 750 litre volume tank. Outlet for immersion heater 2".

Outer housing: impact-resistant plastic sheet. Insulation: glass wool.

# Hot Water Storage Tank 2: 1000, 3 bar

Insulated, 1000 litre volume tank. Outlet for immersion heater 3". Outer housing: impact-resistant plastic sheet. Insulation: glass wool.

# 750-1000



#### **Accessories** CTC no.: For 300. Control box with separate overheating protection. DN50/G2" 400/230V CTC Immersion Heater 3 kW K7E 588810301 CTC Immersion Heater 6 kW K7E 588809301 For 300. Control box with separate overheating protection. DN50/G2" 400/230V CTC Immersion Heater 9 kW K7E For 300. Control box with separate overheating protection. DN50/G2" 400V 588808301 CTC Immersion Heater 3 kW K11E For 500-750. Control box with integrated overheating protection.DN50/G2" 400/230V 588807301 588806301 CTC Immersion Heater 6 kW K11F For 500-750. Control box with integrated overheating protection. DN50/G2" 400/230V CTC Immersion Heater 9 kW K11E For 500-750. Control box with integrated overheating protection. DN50/G2" 400V 588805301 CTC Thermowell 160, bushing 3/4" For 500-1000. Thermowell with 3/4" bushing for connecting of sensors 588330301 CTC Drainage Valve, 3/4" For 500–1000. Drainage valve 1/2" with bushing 3/4"588343301 CTC Thermometer 0-120 °C For 500-1000. Thermometer with thermowell and 3/4" bushing 588328301