



Accumulation Tanks

NADO 300/20v6

NADO 500/25v6

NADO 750/35v6

NADO 1000/45v6



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1. Description

Accumulation tanks serve accumulation of excessive heat from its source. The source may be a solid fuel boiler, heat pump, solar collectors, fireplace inserts, etc. Some types of tanks allow combination of connecting even multiple sources.

The NADO type tanks serve accumulation of heat in the heating system and allow heating or preheating of HSW (Hot Service Water) in an inner stainless tank. Incorporation of an accumulation tank in the heating system with a solid fuel boiler allows an ideal run of a boiler at favourable temperature during the boiler operation. The main benefit lies in the period of optimum operation (i.e. with maximum efficiency) when the excessive unconsumed heat accumulates in the tank.

The tanks are manufactured in 300, 500, 750 and 1000-litre volumes. The tanks and tubular exchangers are made of steel, without the inner surface treatment, the outer surface of the tank is provided with a protective paint. Individual versions are additionally equipped with a tubular exchanger and a buried stainless exchanger of 20, 25, 35 and 40 litre volumes, and two funnels G1½“ mm, with the possibility to install an electric heating element of TJ 6/4“ series with an extended cooling compartment. The tanks are equipped with a removable 100 mm thick insulation – polyester foam (Symbio) and a lock.

The NADO type enables direct heating of HSW (Hot Service Water) in a stainless exchanger, or its preheating for another water heater. Connection to a boiler usually allows direct HSW heating in an inner stainless exchanger to the desired temperature whilst, on the contrary, connection to solar collectors or heat pump only preheats HSW and another, e.g. electric, heater has to be used, in order to complete heating of the water to the desired temperature, or final electric reheat has to be fitted in the accumulation tank which is enabled by a TJ 6/4“ series electric heating unit with an extended compartment of up to 6 kW output.

2. Designing the size and connection of ACCU tank to the heating system

An ideal size of the accumulation tank is designed by a design engineer, or a person sufficiently qualified to design heating systems.

Product assembly must be implemented by an authorised person (confirmed in the warranty certificate).

Notice: When putting into operation, water has to be filled first into the inner stainless HSW exchanger and the operating pressure inside it has to be kept, only then heating water can be filled into the outer accumulation tank, otherwise the product may get damaged!

The manufacturer explicitly emphasises the necessity of being particular in testing the tightness of the heating circuit (radiators, piping joints, floor heating, etc.) with the connection of the accumulation tank. No pressure grow above the maximum operating pressure of 0.3 MPa in the accumulation tank heating water compartment may occur, if the heating system is pressurised to higher than the maximum operating pressure, the inner stainless exchanger may get permanently damaged!

No stop fitting can be put between the security fitting of the heating circuit and the accumulation tank!!!

3. General Technical Parameters

	NADO 300/20v6	NADO 500/25v6	NADO 750/35 v6	NADO 1000/45v6
Tank capacity (l)	300	500	750	1000
Weight (kg)	100	145	176	208
Heating surface of the stainless exchanger (m ²)	4,5	6,25	8,5	10
Heating surface of the exchanger (m ²)	1,6	2,2	2,2	3,3
Maximum tank pressure (MPa)	0,3	0,3	0,3	0,3
Maximum pressure of stainless exchanger (MPa)	0,6	0,6	0,6	0,6
Maximum pressure of exchanger (MPa)	1	1	1	1
Maximum temperature of water in the tank and exchanger (°C)	90	90	90	90
Amount of hot water at 40°C at water temperature of 53°C in the tank (l)	210	260	490	750
Amount of hot water at 40°C at water temperature of 80°C in the tank (l)	520	650	1170	1450
Maximum output of el. heating element of TJ 6/4" series (kW)	2x4,5	2x6	2x6	2x6

Recommendation

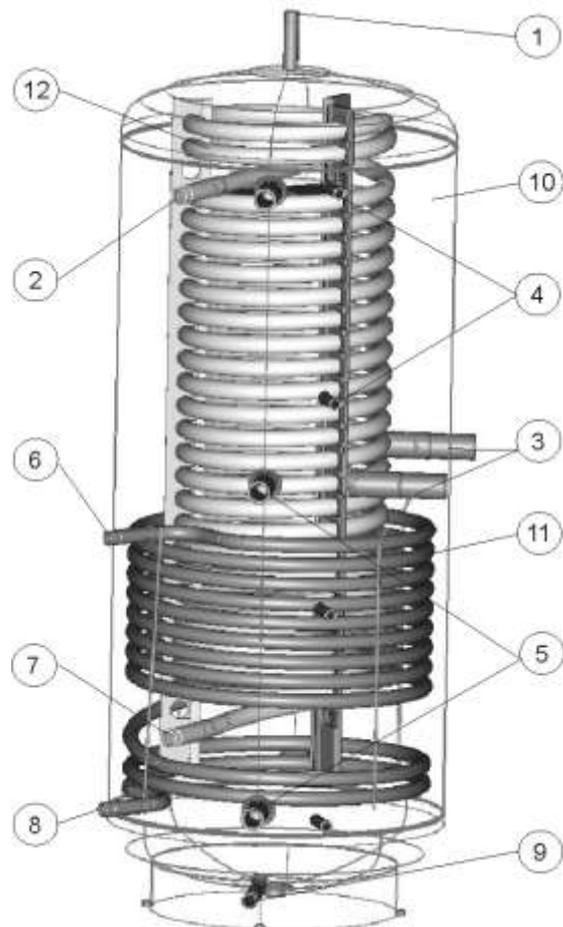
It is recommended to use the product in an indoor environment with air temperatures from +5°C to 45°C and a maximum relative humidity up to 80%.

Connection of the inner tank to HSW must comply with ČSN 060830, a safety valve has to be fitted on the cold water inlet.

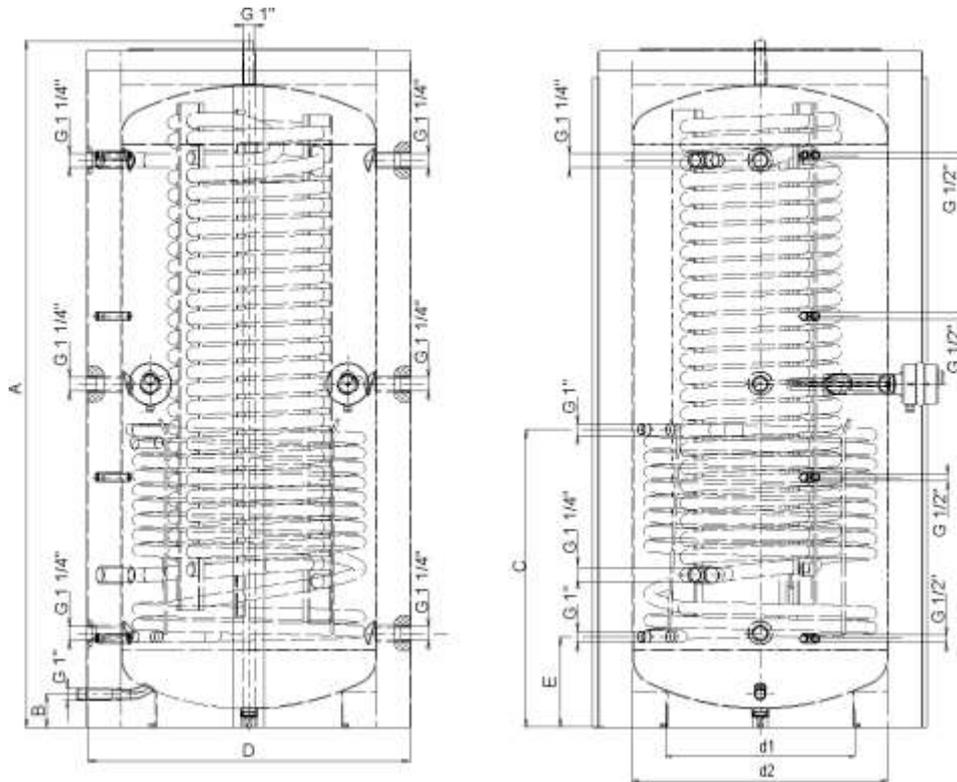
Prior to commissioning, we recommend that you run the heating circuit and any impurities that are trapped in the filter clean, then the system is fully operational.

4. Technical description

- 1 Bleeding (heating water outlet)
- 2 Hot water outlet G 1 1/4"
- 3 Funnel for additional heating element TJ 6/4" with an extended cooling compartment 2x
- 4 Funnel for a thermowell 4x G 1/2"
- 5 Funnel for connecting another heating water source 6x G 1 1/4"
- 6 Inlet into exchanger G 1" (SOLAR)
- 7 Cold water inlet G 1 1/4"
- 8 Outlet from exchanger G 1" (SOLAR)
- 9 Funnel for discharge G 1"
- 10 Steel receptacle
- 11 Exchanger for connecting solar collectors (heat pump)
- 12 Buried stainless exchanger for service water heating by flow



NADO 500/25v6, 750/35 v6, 1000/45 v6



TYPE	NADO 500/25v6	NADO 750/35 v6	NADO 1000/45v6
A	1992	2031	2058
B	90	98	90
C	915	882	1035
D	800	950	1000
d1	440	550	600
d2	600	750	850
E	255	255	282

Thermal insulation: SYMBIO

Polyester sheet of 100 mm thickness. It consists of an upper cover, flange cover and hole caps. Insulation is supplied in a separate packaging.

We recommend that the insulation was fitted at room temperature.

At temperatures significantly below 20°C the insulation shrinks. This disables its easy fitting.

