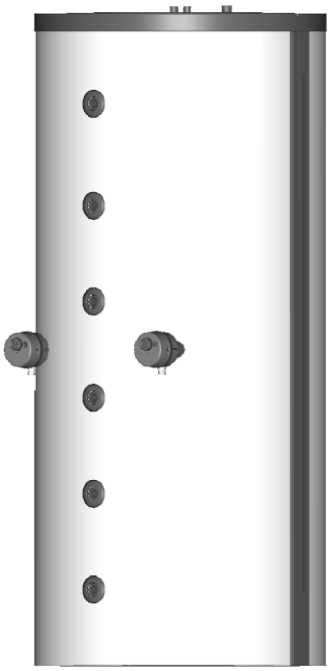
Operation and Installation Manual

DRAŽICE
MEMBER OF THE NIBE GROUP

Accumulation Tanks

NADO 500/200v7
NADO 750/200v7
NADO 1000/200v7



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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 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 and tubular exchangers are made of steel, without the inner surface treatment, the outer surface of the tank is provided with a protective paint. The tanks are manufactured in 500, 750 and 1000-litre volumes. The 500-litre version is additionally equipped with a tubular exchanger of 2.5m^2 surface and the 750 and 1000 litre version with a tubular exchanger of 3.3 m^2 surface and two funnels G1½“ mm, with the possibility to install an electric heating element of TJ 6/4“ series with an extended cooling compartment, up to 6 kW.

The NADO type enables direct heating of HSW (Hot Service Water) in an inner enamelled tank, or preheating of water for another water heater. Connection to a boiler usually allows direct HSW heating in an inner tank 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 reheat 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).

Important: When putting into operation, water has to be filled first into the inner tank for HSW 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 in the accumulation tank heating water compartment may occur above the maximum operating pressure of 0.3 MPa, if the heating system is pressurised to higher than the maximum operating pressure, the inner enamelled tank may get permanently damaged!

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

3. General dimensions

	NADO 500/200 v7	NADO 750/200 v7	NADO 1000/200v7
Tank capacity (l)	500	750	1000
Inner tank capacity (l)	200	200	200
Tank weight (kg)	166	214	228
Tank diameter	600	790	790
Diameter of tank with insulation	800	990	990
Heating surface of the exchanger (m^2)	2,5	3,3	3,3
Maximum tank pressure (MPa)	0,3	0,3	0,3
Maximum pressure of the inner accumulator (MPa)	0,6	0,6	0,6
Maximum pressure of exchanger (MPa)	1	1	1
Maximum temperature of water in the tank and exchanger (°C)	90	90	90
Maximum output of el. heating element of TJ 6/4" series (kW)	-	2x6	2x6

Recommendation

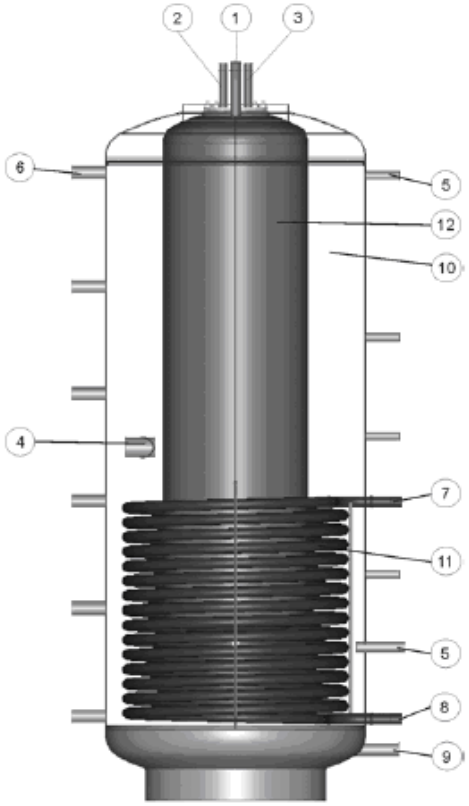
It is recommended to use the product in an indoor environment with air temperatures from +5°C to 45°C and a maximum relative humidity up to 80%.

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

We recommend checking and cleaning the inner tank from scale and eventual replacement of the anode rod after two years of operation. The anode life is theoretically calculated for two years of operation; however, it changes with water hardness and chemical composition in the place of use.

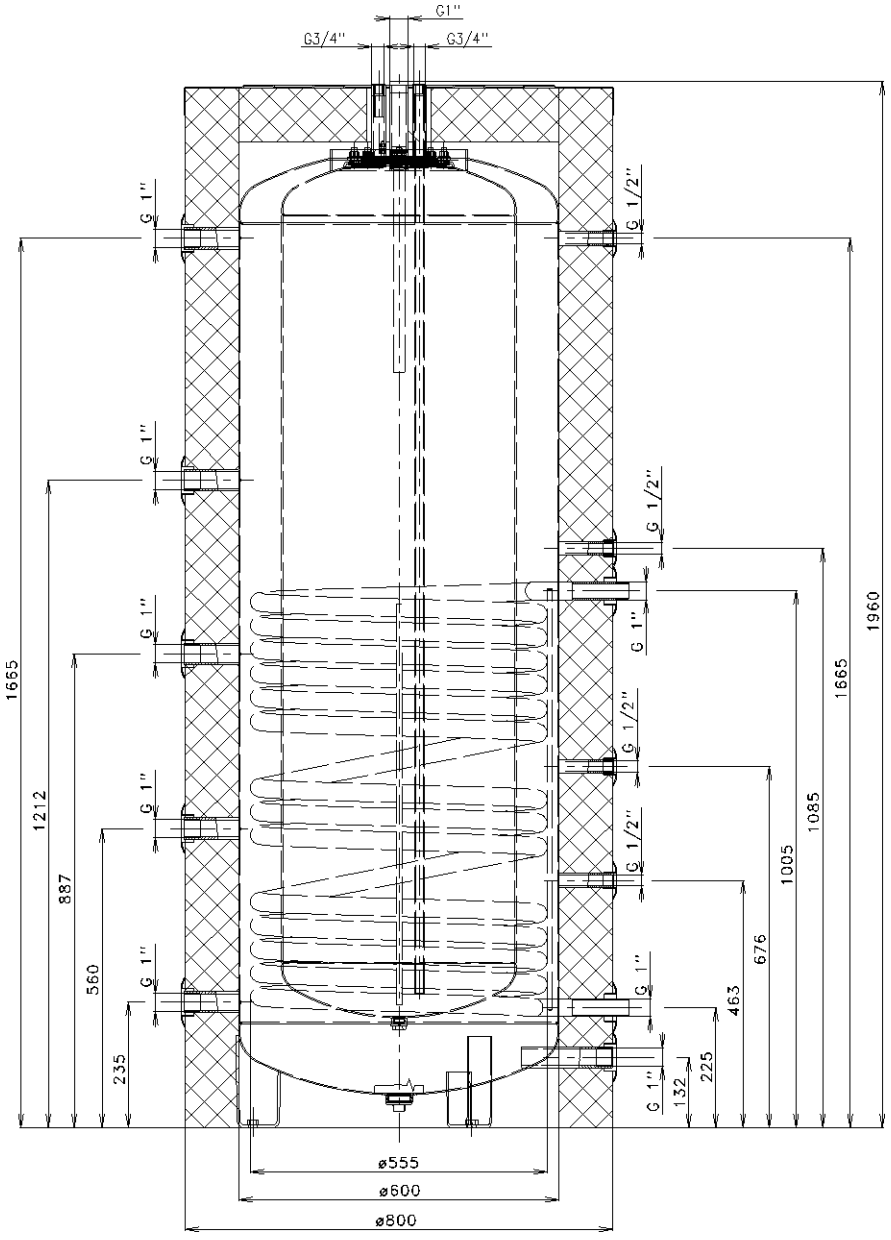
1. Technical description

1 Heating water outlet G1"
2 Hot water outlet G3/4"
3 Cold water inlet G3/4"
4 Funnel for additional heating element TJ 6/4“ with an extended cooling compartment 2x
5 Thermowell funnel 6x G 1/2" - for 750 l and 1000 l only
6 Funnel for connecting another heating water source 6x G 1"
7 Inlet into exchanger G 1“ (SOLAR)
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 Inner enamelled accumulator for service water heating

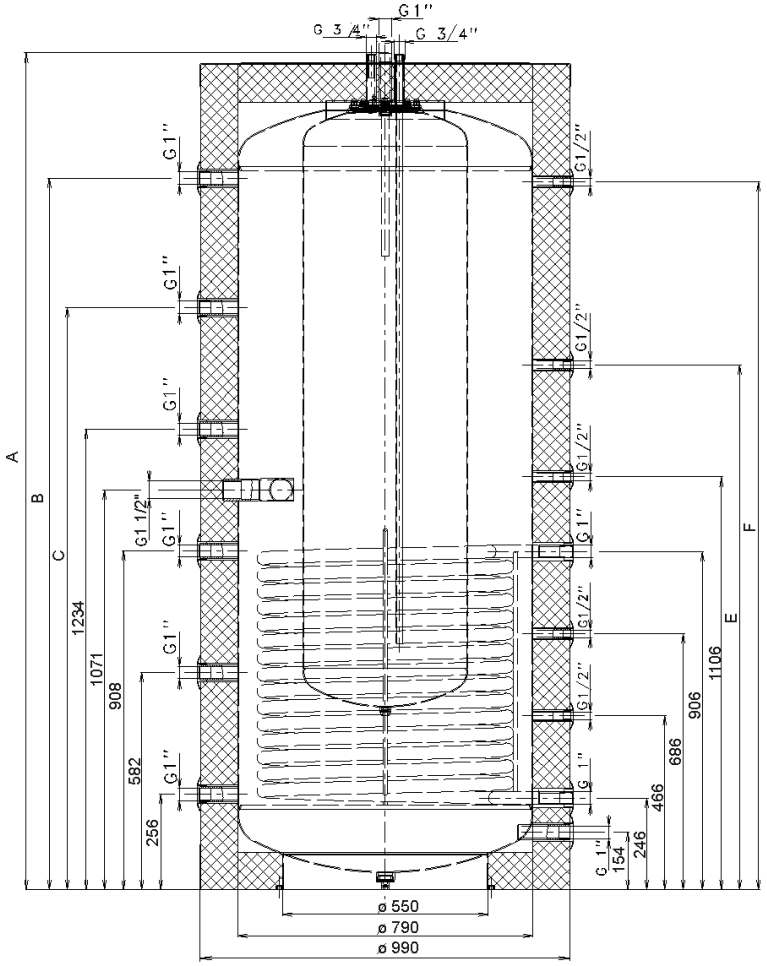


NADO 500 / 200v7

Funnels 6/4“ are fitted only with NADO750,1000/200v7, for the electric heating element of TJ6/4“ series with an extended cooling compartment!!!



NADO 750 / 200v7, NADO 1000 / 200v7

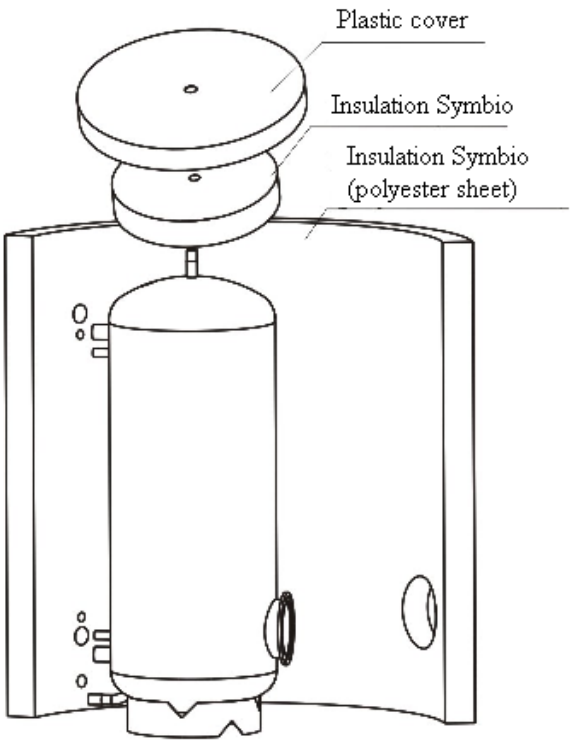


TYPE	**NADO 750/200 v7**	**NADO 1000/200v7**
A	1940	2240
B	1606	1906
C	-	1560
E	-	1406
F	1606	1896

Thermal insulation

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.



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