

OPERATION AND INSTALLATION MANUAL

Akumulation Tanks

NADO 800/35v9

NADO 1000/35v9



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READ CAREFULLY THE BELOW INSTRUCTIONS PRIOR TO THE INSTALLATION THE HEATER!

Dear Customer,

Works Cooperative of Dražice – Machine Plant, Ltd., would like to thank you for your decision to use a product of our brand.

The manufacturer reserves the right for engineering modification of the product. The product is designed for permanent contact with drinkable water.



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.

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 800 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 equipped with a tubular exchanger and a buried stainless exchanger of 35 litre volume, and two funnels G1½" with the possibility to install an electric heating element of TJ 6/4" series. The tanks are equipped with a removable 100 mm thick insulation – polyester foam - and a Symbio 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 the 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 complete heating the water to the desired temperature, or final electric heating has to be fitted in the accumulation tank which is enabled by the electric heating unit of TJ 6/4" series.

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 might get damaged!

3 TECHNICAL PARAMETERS

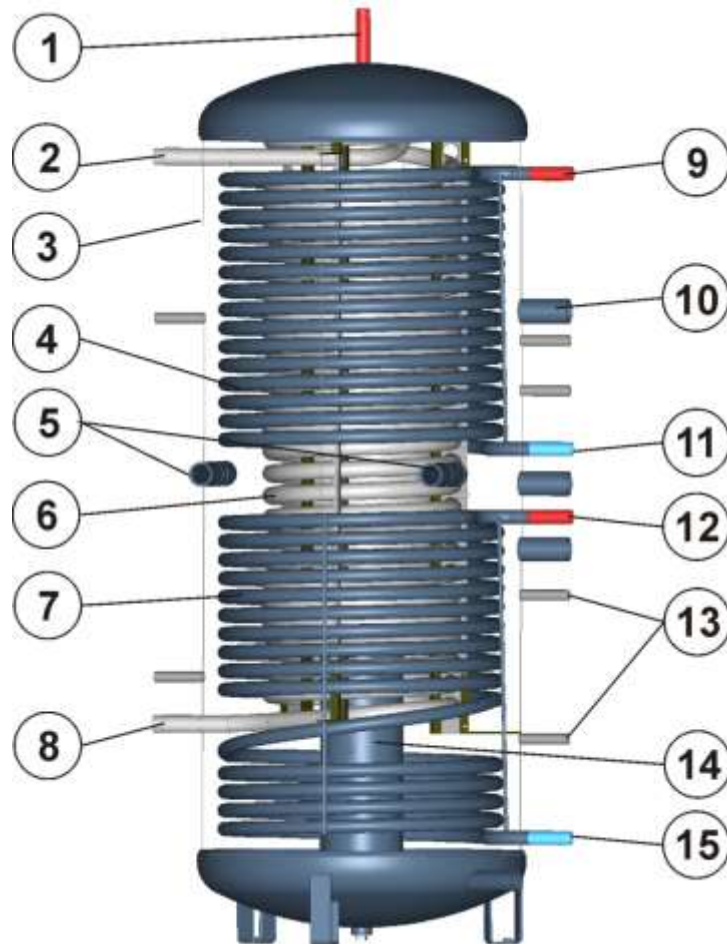
	NADO 800/35v9	NADO 1000/35v9
Tank capacity [l]	820	956
Capacity of stainless exchanger [l]	35	35
Capacity of bottom exchanger [l]	25	25
Capacity of upper exchanger [l]	18	25
Weight [kg]	206	251
Heating surface of stainless exchanger [m ²]	8.5	8.5
Heating surface of bottom exchanger [m ²]	3.3	3.3
Heating surface of upper exchanger [m ²]	2.2	3.3
Maximum tank pressure [MPa]	0.3	0.3
Maximum pressure of stainless exchanger [MPa]	0.6	0.6
Maximum pressure of bottom and upper exchanger [MPa]	1	1
Maximum temperature of water in the tank and exchanger [°C]	90	90
Amount of 40°C hot water at 53°C water temperature in the tank [l]	490	539
Amount of 40°C hot water at 80°C water temperature in the tank [l]	1170	1287
Maximum output of el. heating element of TJ 6/4" series (kW)	2x6	2x6



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

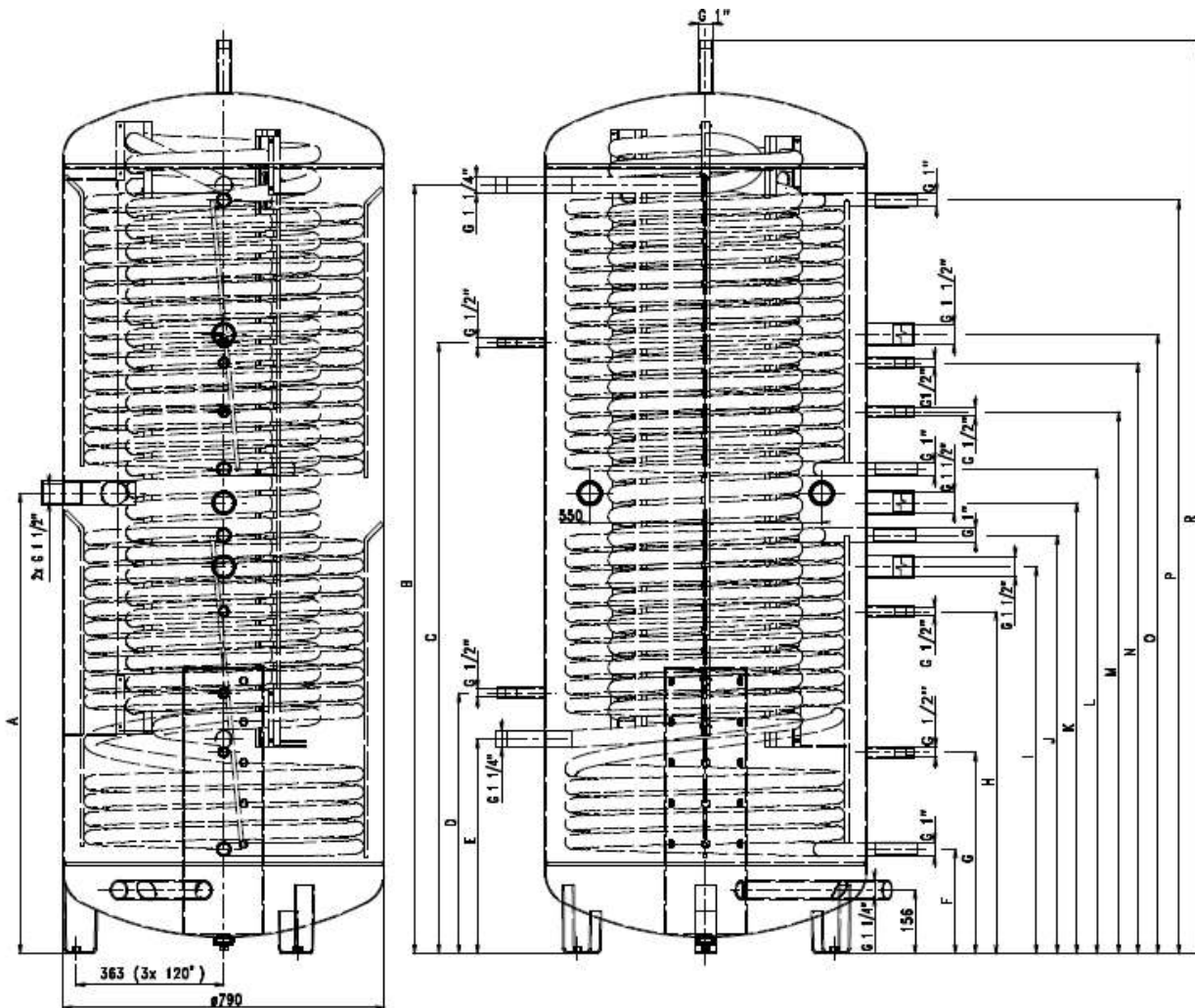
Connection of the inner tank to HSW must comply with \u268 CSN 060830, a safety valve has to be fitted on the cold water inlet.

4 TECHNICAL DESCRIPTION



1. Bleeding (heating water outlet) - G1"
2. Hot service water outlet - G 1 ¼"
3. Steel receptacle
4. Exchanger for connecting an additional heating source
5. Funnel for additional heating element TJ 6/4" – G 1 ½" (2 units)
6. Buried stainless exchanger for service water heating by flow
7. Exchanger for connecting solar collectors (heat pump)
8. Cold water inlet - G 1 ¼"
9. Inlet into exchanger - G 1"
10. Funnel for connecting an additional heating water source - G 1 ½" (3 units)
11. Outlet from exchanger - G 1"
12. Entry to (solar) exchanger – G1"
13. Funnel for a thermowell - G ½" (6 units)
14. Stratification pipe
15. Outlet from exchanger (solar) - G 1"

NADO 800/35v9, NADO 1000/35v9



	NADO 800/35v9	NADO 1000/35v9
A	1017	1130
B	1943	1887
C	1290	1500
D	570	640
E	256	527
F	287	257
G	465	495
H	-	840
I	877	950
J	947	1027
K	1017	1107
L	1113	1190
M	1190	1330
N	1290	1450
O	1390	1520
P	1550	1850
R	1943	2243

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