

INSTALLATION AND USE INSTRUCTIONS

NARVI ULTRA BIG

ELECTRICAL SAUNA STOVES N18, N21, N24, N27, N30, N33, N36

1. THE FOLLOWING IS REQUIRED FOR INSTALLATION:

1. The sauna stove Narvi-Ultra Big
 - I. 2 wedge anchors to fix the sauna stove to the floor
2. Control centre C-2003
 - I. bulb temperature regulator / overheating protection
 - II. anchor screws for the control centre and bulb temperature regulator / overheating protection
3. Use and installation instructions for the sauna stove and control centre
4. Power unit
 - I. anchor screws

2. BEFORE INSTALLATION

Check the following details:

- The sauna stove is the correct size (kW) for the size of the sauna (cu m).
- Table 1 shows the volumes of the sauna for the different types of saunas.
- If there are non-insulated surfaces in the sauna, for instance brick, tile or glass, 1.5 cu m must be added to the sauna volume for each square meter of wall on the basis of which the stove effect is defined according to Table 1.

The volume values of the sauna according to Table 1 must not be exceeded or lowered.

- The minimum height of the sauna has been defined in Table 1 as well as the minimum distances.
- The stove can also be installed in a wall recess where the protection distances according to Figure 1 must be considered.

ONLY ONE ELECTRICAL STOVE CAN BE INSTALLED IN THE SAUNA

- Dimensions of the sauna stove
 - Width 85 cm
 - Depth 48 cm
 - Height 68 cm
 - Weight of the sauna stove without stones 38 kg
 - Amount of stones in the sauna stove 120 kg

3. INSTALLATION

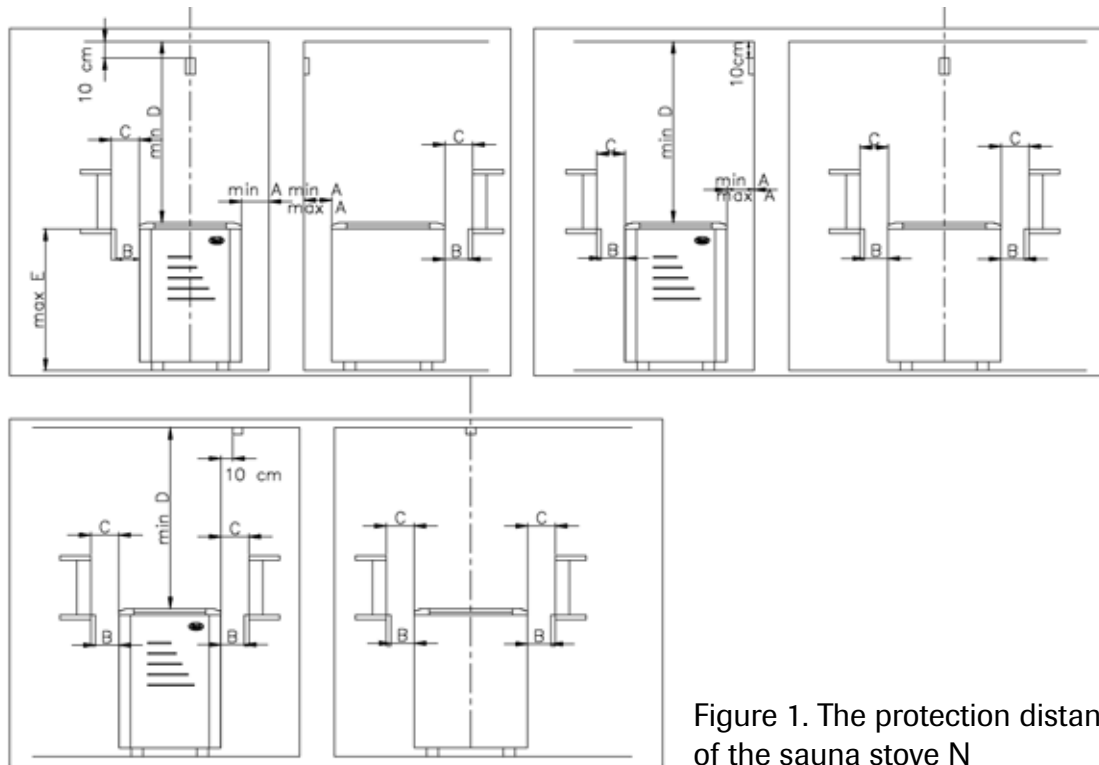


Figure 1. The protection distances of the sauna stove N

3.1 INSTALLATION OF THE SAUNA STOVE

- The sauna stove is fastened by two legs to the floor.
- When installing the sauna stove the protection distances must be considered
- The connection of the sauna stove to the electrical network must be carried out by a qualified electrician in accordance with the valid regulations.
- A rubber cable of type H07RN-F or similar must be used as a connection cable. The cross-sectional surface and the size of the fuse of the cable are shown in Table 1.

Table 1. The installation data of Narvi-Ultra Big

SAUNA STOVE				SAUNA		MINIMUM DISTANCES From the stove					CABLES			FUSES				
Model	Effect kW	Group effect		Volume		Height min cm	Sides A**)	In front B**)	In front C**)	Ceiling D**)	Floor E**)	Power unit mm	Connecting cable mm		Connecting cable for the stove	Front fuse A	Group fuse	
		kW	kW	min m ³	max m ³		min cm	min cm	min cm	cm	cm		cm	Group1			Group2	Group1 A
N 18	18	9	9	18	30	210	16	10	20	140	68	5 x 10	5x2.5	5x2.5	5x2.5	3x35	16	16
N 21	21	9	12	24	36	210	16	10	20	140	68	5 x 10	5x2.5	5x4	5x2.5	3x35	16	25
N 24	24	12	12	27	40	210	16	10	20	140	68	5 x 16	5x4	5x4	5x2.5	3x50	25	25
N 27	27	12	15	30	46	220	20	10	20	150	68	5 x 16	5x4	5x6	5x2.5	3x50	25	25
N 30	30	15	15	40	56	220	20	10	20	150	68	5 x 16	5x6	5x6	5x2.5	3x50	25	25
N 33	33	15	18	46	66	220	20	10	20	150	68	5 x 16	5x6	5x10	5x2.5	3x50	25	25

**) See Figure 1

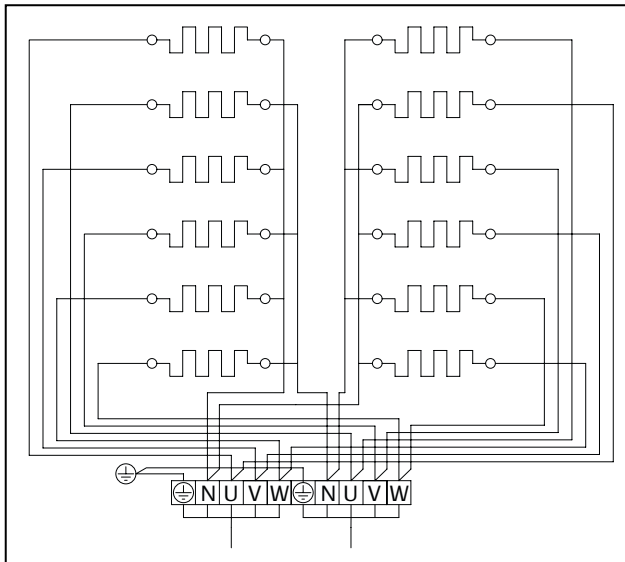


Figure 2. Switch diagram

4. PILING THE STONES:

- When piling the stones make sure that the resistors do not bend and there is sufficient air circulation.
- Do not pile the stones densely. A stone basket which has been filled too densely causes overheating of the resistors (= a shorter lifetime) and slows down warming the sauna. The stones must completely cover the heating resistors.

5. FEATURES REQUIRED OF A STOVE STONE:

- The stove stone must be officially examined so that it does not contain substances which can be hazardous to the health.
- The stove stone must be strong to better resist the changes in heat.
- The stove stone must have a good heat capacity so that the steam does not end too early.
- The stove stone must have a good thermal conductivity so that the stones and the sauna warm up sooner.
- The form of the stove stone must be right so the installation of the stones is easier and the heating air circulates correctly in the sauna stove.
- By using the right stove stones and by changing them often enough, the life of the sauna stove and the resistors will be longer.
- By using the right stove stones and by changing them often enough, energy will be saved.
- It is recommended that the stove stones be changed at intervals of 1-2 years.

6. WE RECOMMEND USING A REAL NATURAL STONE (OLIVINE DIABASE)

- The stones are already clean and selected.
- The olivine diabase has excellent heat capacity and thermal conductivity.
- An officially examined product
- Excellent steam capacity
- There are two types of olivine diabase: a traditional and a rounded stone
- We do not recommend ceramic stones.

7. THE FIRST HEATING:

- Warm up the sauna stove after installation to remove the smells of paints and oil. At the same time, arrange the ventilation of the sauna.

8. CARE OF THE SAUNA STOVE:

- The stove stones should be checked from time to time and the damaged stones replaced with the new ones.
- It is worthwhile leaving the stove switched on for a moment after the sauna.

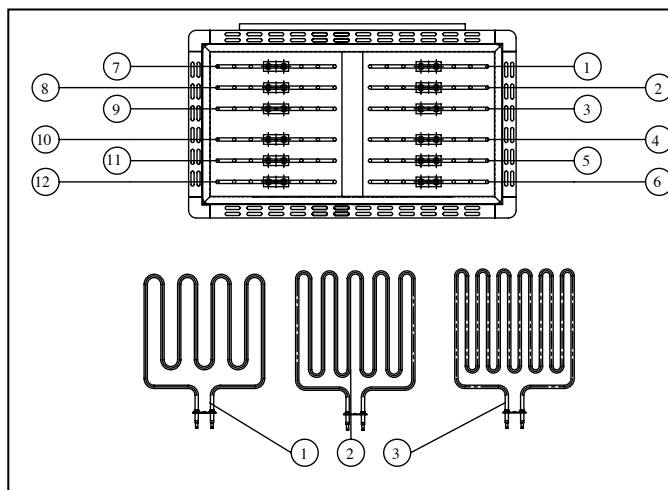
9. VENTILATION OF THE SAUNA:

- The ventilation of the sauna must be arranged as effectively as possible to achieve sufficient oxygen and freshness. The best way is that the fresh air is directed near to the sauna stove (not closer than 50 cm).
- The ventilating air pipe must be equipped with an adjustable valve.
- The size of the bleed valve must be at least twice as big as the ventilating air pipe. The bleed valve can be installed on the wall opposite the sauna stove at least 20 cm higher than the ventilating air pipe.

10. CONSTRUCTION OF THE SAUNA:

- The sauna must be well insulated thermally, especially the ceiling through which the warmth mostly tends to dissipate. Owing to the damp, it is recommended that the thermal insulation of the sauna is protected with material which does not allow damp to penetrate, for instance aluminium foil. The cladding must always be wood.

11. SPARE PARTS:



Stove type	Resistance	Model
N 18	1,2,3,4,5,6	1 1500 W / 230 V
	7, 8,9,10,11,12	1 1500 W / 230 V
N 21	1,3,5,7,9,11	1 1500 W / 230 V
	2,4,6,8,10,12	2 2000 W / 230 V
N 24	1,2,3,4,5,6	2 2000 W / 230 V
	7,8,9,10,11,12	2 2000 W / 230 V
N 27	1,2,3,4,5,6	2 2000 W / 230 V
	7,8,9,11	2 2000 W / 230 V
	8,10,12	2 3000 W / 230 V
N 30	1,3,5,7,9,11	2 2000 W / 230 V
	2,4,6,8,10,12	3 3000 W / 230 V
N 33	1,3,5	2 2000 W / 230 V
	2,4,6	3 3000 W / 230 V
	7,8,9,10,11,12	3 3000 W / 230 V