# **OWNERS MANUAL MODEL** 1712-30-04 1712-45-04 1712-60-04 1712-80-04 1712-90-04 1418-2-1517-1 1418-2-1517-3 **SAUNA HEATERS** • INSTALLATION OPERATION 7013547

314 SKSM 58 K

We wish you many hours of relaxation and pleasure in your sauna. Please read the instructions beneath very carefully in order to find out how the sauna works.

ATTENTION: The installation of the sauna heater and other electrical power supply connection should be carried out by a qualified electrician in accordance with the national electrical code and local regulation.

### INSTALLING THE SAUNA HEATER

Before installing the heater, please check the following:

- that the following parts have been delivered: heater, control box with temperature sensor device.
- that the voltage of the heater and control box is correct and that the control box is suitable for the heater
- that the kW of the heater corresponds with the size (m ) of the sauna room. See table 1
- that the minimum construction spaces in fig. 1 are strictly followed

### FAILURE TO FOLLOW THE ABOVE INSTRUCTIONS MAY RESULT IN FIRE HAZARD.

The minimum and maximum m³ depend on the insulation and the surrounding temperature. If the sauna has tile or concrete walls without wooden covering, approx. 1,2m³ for every m² of tile or concrete must be added to the volume, in order to get the most suitable heater.

## MOUNTING THE SAUNA HEATER (See fig 1)

Drill the four screw holes using a 3,5 mm drill bit. The screw head should be approx. 3 mm from the wall surface. Make sure that the screws are fastened through the sauna room soft wood lining into a backing board to hold the heater

Hang the heater on the screws. Tighten the lower screws in order to lock the heater in position.

Re-chech your distances from the heater to combustible materials to make sure the stipulated minimum distances are followed.

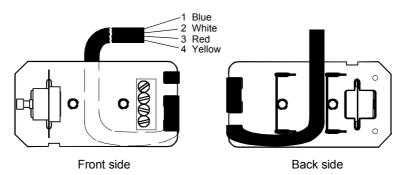
### **CONTROL PANEL**

The control panel is splash proof and may be mounted in the damp area adjacent to the cabin.

# SENSOR CONNECTION AND CHECKING

- 1. The housing for the temperature sensor device, should be attached to the wall as shown in fig. 1. A hole must be drilled through the wall for the cable, wich should be passed through to the control device.
- 2. The cable should be carefully attached to the wall to prevent the silicon insulation from being torn.
- 3. CAREFUL

Connect the sensor cable to the control device as follows:



4. After the completed electrical installation, switch on the equipment. The temperature should be set around the middle of the scale.

When installing the temperature sensor device, the distances stipulated in fig. 1 must be strictly followed

FAILURE TO FOLLOW THE INSTRUCTIONS MAY RESULT IN FIRE HAZARD.

### **ELECTRICAL HOOK-UP**

The wiring diagrams (figs. 2 and 3) are to be found in the heater and control box.

The sauna heater MUST NOT be used before firm connection to the electrical system has been established. The connecting cable must be at least rubber cable. Table 1.

### SAUNA STONES

Should be washed before use. Fill the stone compartment from bottom to top with the large stones at the bottom The heating elements should be covered by the small stones, however, never force the stones between the elements

### **VENTILATION**

Since a sauna bath should be as pleasant and relaxing as possible, proper ventilation is essential.

The air circulation in a family sauna should be recycled six times per hour during a sauna bath. The fresh air inlet vent should be below the sauna heater and have a diameter of 60 mm.

The outlet should be as far from the inlet as possible and placed diagonally across the sauna from the inlet hole. The outlet should be twice as big as the inlet and approx. 600 mm above the floor.

### CONTROLLING THE TEMPERATURE WITH CONTROL BOX

The desired temperature for the sauna is chosen on the thermostat. The heater is switched on by turning the timer. The signal light on the control box lights up to inform that the heater is "ON".

After bathing the heater is turned off by turnin the timer to 0-setting. The signal light goes out to inform that the heater is "OFF".

Should you forget to switch off the heater, it will automatically switch off.

The thermostat can be programmed to turn off at a desired temperature and needs to be turned off only when the temperature in the sauna is altered.

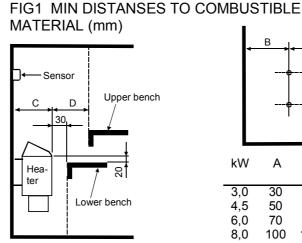
### LIMIT CONTROL

If the temperature in the sauna should rise too high (for example due to a thermostat fault) the limit switch in the sensor will turn off the power. When the fault has been rectified the switch may be reset.

### TIMER

The timer is the main on/off switch for the controlpanel. To switch on, turn knob clockwise: The Scale provides first a 1-4hr working band, then a 1-8hr preset band which delays the switch on time. The pilot light shows when the heater is on.

# Sensor A 205 205 Will 120 Will 12



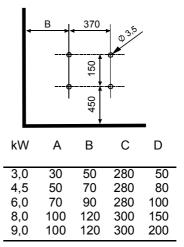
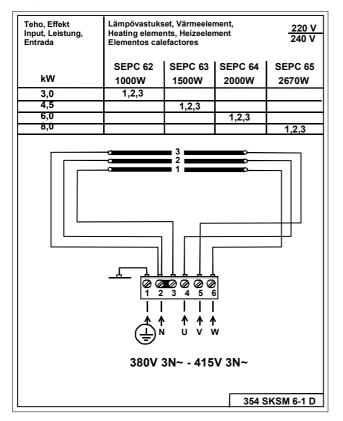


Table 1

	Input	Sauna room			Minimum	Minimum	Inimum Suplu connection		Control	
1		1		spacing	spacing	Cable size		panel		
1		volyme			of heater	to	required			
1		min i max		height	from	ceiling		ı		1
1				min	adjacent	_				
1					surfaces					
1					Α	F	3-ph	1-ph		
1						see fig 1	-	-		
1	kW	$m^3$	$m^3$	mm	mm	mm	mm <sup>2</sup>	mm <sup>2</sup>	OT2PS-3	OT2PS-1
ſ	3,0	2	4	1900	30	1200	5 x 1,5		X	
L								3 x 2,5		X
1	4,5	3	6	1900	50	1200	5 x 1,5		X	
ļ								3 x 4		X
1	6,0	5	9	1900	70	1250	5 x 1,5		X	
1								3 x 10		X
	8,0	8	13	1900	100	1250	5 x 2,5		X	
								3 x 10		X
	9,0	9	14	1900	100	1250	5 x 2,5		Х	

Fig 2a Fig 2b



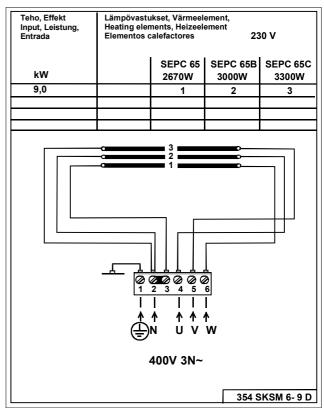
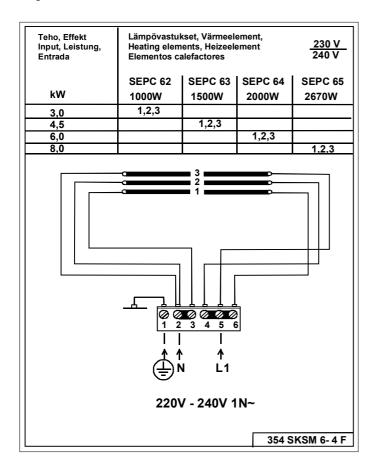
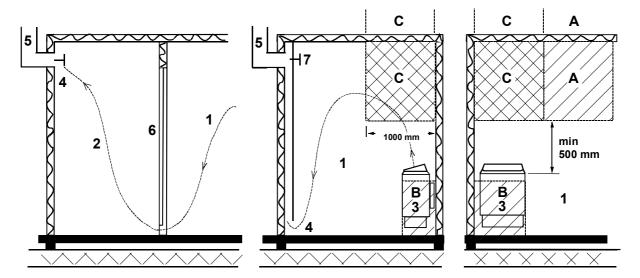


Fig 2c



# Recommended sauna room ventilation



- 1. Sauna room
- 3. Electric sauna heater
- 2. Washroom
- 4. Exhaust valve

- 5. Exhaust flue or channel
- 6. Door to the sauna room
- 7. A ventilation valve can be installed here to be kept closed while the sauna is heated and during bathing.

Inlet vent can be positioned in the A zone. Make sure the incoming fresh air will not interfere with (i.e. cool down) the sauna heater's thermostat near the ceiling.

The B zone serves as the incoming air zone, if the sauna room isn't fitted with forced ventilation. In this case, the exhaust valve is installed min 1m higher than the inlet valve.

DO NOT ISTALL INLET VALVE WITHIN ZONE C, IF THE SAUNA HEATER'S CONTROL THERMOSTAT IS LOCATED AT THE SAME ZONE.

Fig 3.

