

## OWNERS MANUAL

### MODEL

CUP 30 D

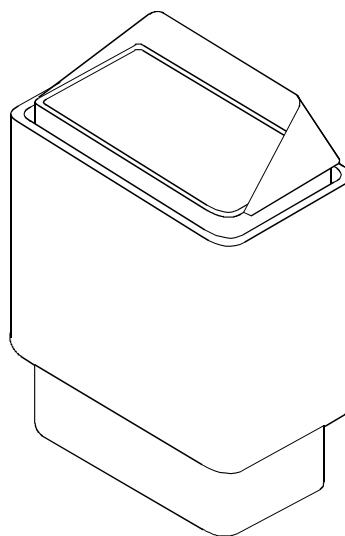
CUP 45 D 380V 3~

CUP 60 D 400V 3~

CUP 80 D 440V 3~

CUP 90 D

SYLA 5 PLM



## SAUNA HEATERS

- INSTALLATION
- OPERATION

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, OLET-5
- 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<sup>3</sup>) 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 m<sup>3</sup> depend on the insulation and the surrounding temperature. If the sauna has tile or concrete walls without wooden covering, approx. 1,2m<sup>3</sup> for every m<sup>2</sup> 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-check your distances from the heater to combustible materials to make sure the stipulated minimum distances are followed.

#### MOUNTING OF THE CONTROL BOX

The control box must be installed in a dry place outside the sauna room. The sensor unit should be fastened to the wall in the sauna according to fig 1. please follow the measurements mentioned in fig 1. otherwise it may cause a burn.

#### CONNECTION

The electrical installation of the sauna heater and the control panel must be made by a qualified electrician according to the requirements. The principal connection will be made in accordance with fig. 1. The required wiring diagrams are inside the control panel. The heater can be connected by using a rubber wire HO7BB -F5G, table 1. the connection box must be a splash water proof construction and its height from the floor must not be higher than 500mm. If the connection- and installationwires come inside the sauna or inside the walls of the sauna higher than 1000mm from the floor they must loaded take at least 170°C (for instance HO7SS-K4G: thermostat SYTA 3.

All electrical appliances that are installed higher than 1000mm from the sauna floor must be accepted for use in 125°C surrounding temperatures (marking T 125).

#### 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.

## THE REGULATION OF THE TEMPERATURE AND TIME

Turn the knob of the thermostat to the desired temperature and switch on the heater by turning the timer knob to the desired position. The signal lamp on the control box indicates that the heater is on. After bathing switch off the heater by turning the timer knob to 0. If you forget to switch off the current, the timer will automatically take care of this. You need not turn the thermostat knob every time if you keep the sauna temperature constant. There is a variable temperature setting.

## LIMIT CONTROL

Inside the thermostat there is a thermal fuse that switches off the whole current if the temperature for some reason rises too high in the sauna. After reaching a normal temperature in the sauna the thermal fuse have to be changed. Before that you have to find the reason for the temperature increase

FIG1 MIN DISTANCES TO COMBUSTIBLE MATERIAL (mm)

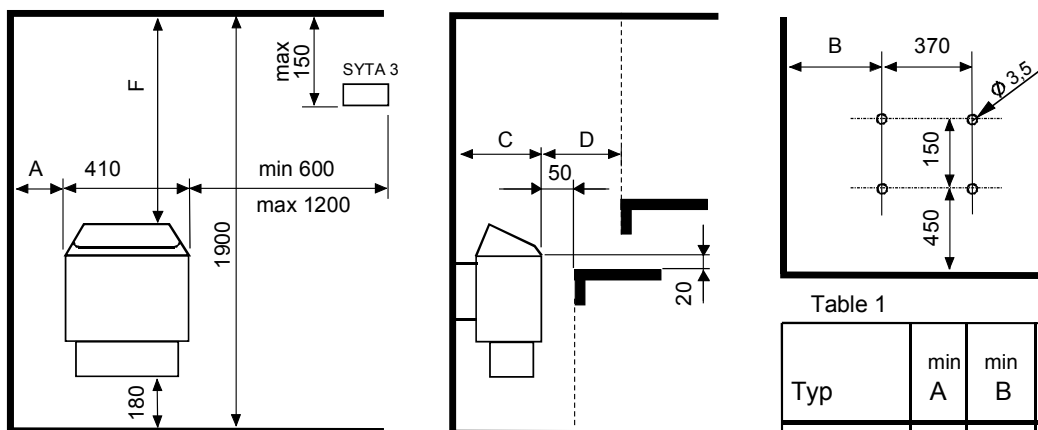


Table 1

Typ	min A	min B	min C	min D	min F
CUP 30	50	80	280	100	1200
CUP 45	80	100	280	100	1200
CUP 60	100	120	280	150	1250
CUP 80	130	150	300	200	1250
CUP 90	130	150	300	200	1250

TABLE 1.

HEATER		SAUNA			MINIMUM DISTANCES			CABLES TO			FUSES	CONTROL PANEL	
Type	Effect	Volume Min.	Volume Max.	Height Min	From heater to			Control panel	Thermo-stat	Heater	Main fuse	380V/440V	
				Hmin mm	side-wall A min mm	ceiling min mm	quard rail and upper bench D min mm	HO7V-R mm <sup>2</sup>	HO7SS-K4G 250V~ mm <sup>2</sup>	HO7BB-F5G mm <sup>2</sup>	A	SYLA5PLM	SYLA 5PLM
CUP 30	3,0	2	4	1900	50	1200	80	5 x 1,5	4 x 1,5	5 x 1,5	10	X	X
CUP 45	4,5	3	6	1900	80	1200	100	5 x 1,5	4 x 1,5	5 x 1,5	10	X	X
CUP 60	6,0	5	8	1900	100	1250	150	5 x 1,5	4 x 1,5	5 x 1,5	10	X	X
CUP 80	8,0	7	10	1900	130	1250	200	5 x 2,5	4 x 1,5	5 x 2,5	16	X	X
CUP 90	9,0	8	12	1900	130	1250	200	5 x 2,5	4 x 1,5	5 x 2,5	16	X	X

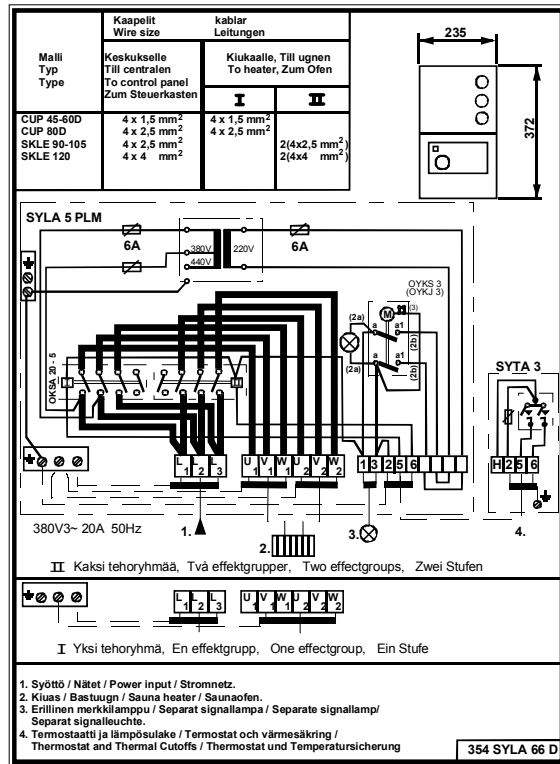
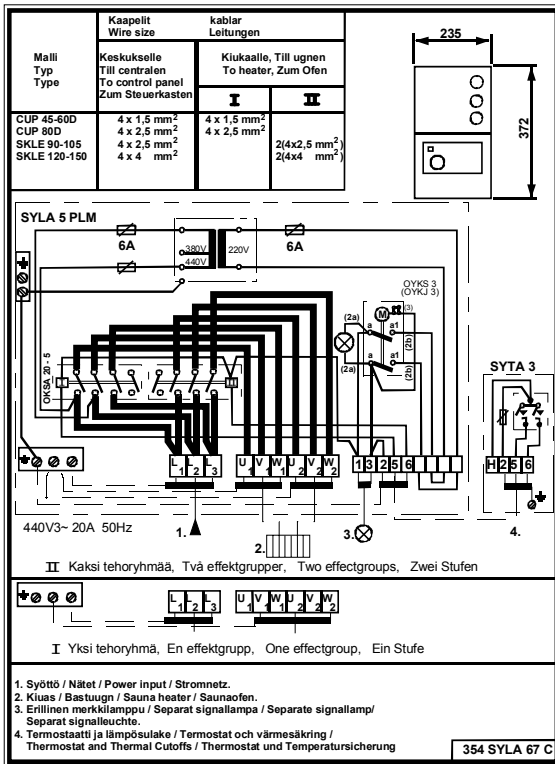
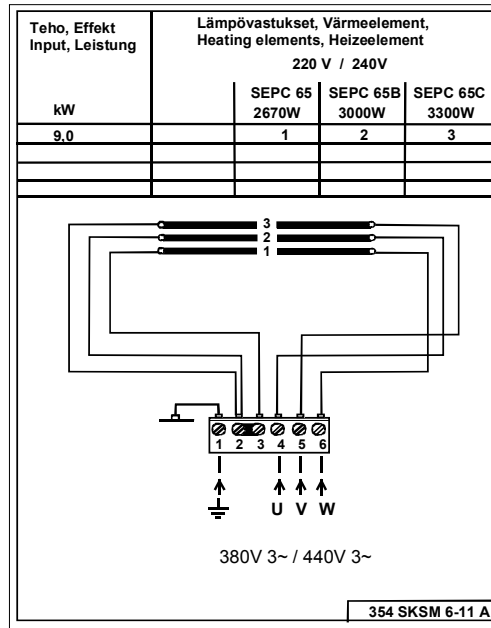
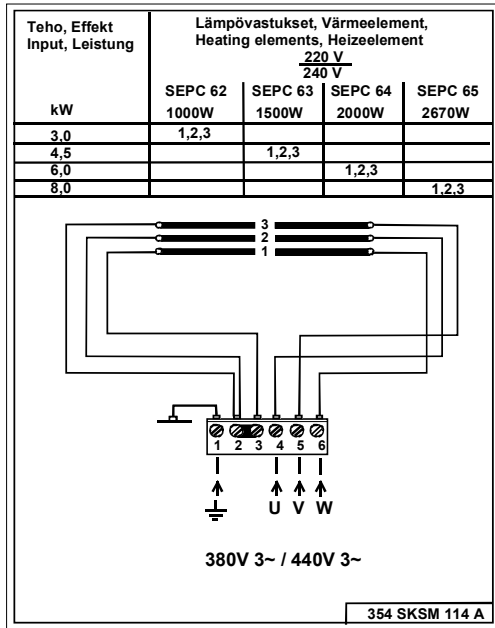


Fig. 4 Ventilation

