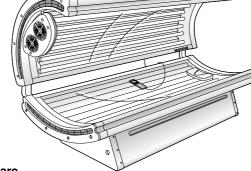
**HB 578/A** 

Service Service Service







SUNSTUDIO COMBI

Domestic Appliances and Personal Care

# Service Manual

SAP coding HB 578

#### **GENERAL**

The full-body tanner Sunstudio Combi HB 578/A is equipped with a 30 minute timer.

After the pre-set tanning time, the appliance automatically switches off.

The facial tanner (3 x PL 36W) can be switched on/off by means of switch SK 1.

It has seven fans - two in the canopy and three in the couch - for adequate cooling of the equipment during operation and 2 fans for body cooling.

The voltage supply will only be switched on via the relay (Re) after the timer has been set.

The starting current is limited by NTC resistors (NTC 1-9) and phase-correction takes place by means of the capacitors (C 1-9).

When choosing a place for the appliance, make sure there is enough free space around the appliance to guarantee proper cooling.

# TECHNICAL DATA

Operating voltage Power consumption Ballast canopy

Ballast couch

Starter type couch

Lamp type canopy

Starter type canopy

Lamp type couch

Timer Safety class

Test mark

Length of mains cord

Irradiation field Dimesions : 230V, 50Hz

: approx. 3050W : 12 x 100W : 3 x 40W

12 x 100W 12 x S12 3 x S10 12 x S12

12 x Cleo Performance 100W

3 x PL 36W

: 12 x Cleo Performance 100W

: 30 min.

: double insulation

: CE : approx. 3m

approx. 200 x 85 cm approx. 208 x 101 x 91 cm

 $(L \times W \times H)$ 

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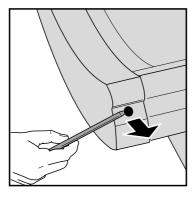


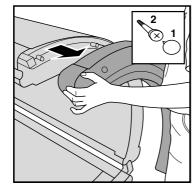
#### DISASSEMBLY

# Canopy

Use an appropriate knife to carefully remove the two decorative caps that cover the plastic rivets (7) from the end covers of the lamp housing (35 + 40) and then lever the rivets out of the lamp housing with the knife.

Use an appropriate screwdriver to carefully remove the 5 screw covers (34) and to loosen the screws (36).





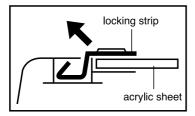
Now the end covers can be removed from the lamp housing.

Unscrew the body cooling fan on the left side of the canopy and take it out.

Remove the screws.

Pull the ornamental/retaining strips (3) of the

acrylic sheet (45) up and snap them out.



Lift the acrylic sheet from the appliance together with a second person.

The TLs (42 + 53) are now accessible. To remove the cover of the lamp housing (38), first remove the decorative caps of the four plastic rivets (37) with a suitable knife.

# Be careful: prevent scratches on the cover!

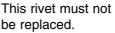
Then pull the cover of the lamp housing out of the grooves of the housing parts (39 + 43). Lift the cover off the housing parts together with a second person and place it on a soft surface behind the appliance in such a way that the connecting cable (44) is not subjected to a too high mechanical load.

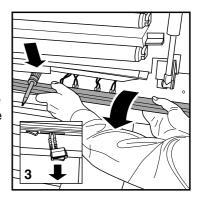
Now all the other parts of the lamp housing of the canopy are accessible and can be disassembled. To disassemble the two upper fans (23), first remove the two ballasts and then lift the fans with the fan holders out of the housing so that the fixing screws can be loosened.

Mark the position of the filter holders before disassembly to make sure that they can be assembled in exactly the same position when reassembling the lamp housing, which is necessary to ensure that the rivets of the cover of the lamp housing (28) can be reinserted without a problem.

To disassemble switches SK 1-3 (52, 54), the housing part (43) must be pushed inwards and downwards and kept apart with a suitable object. The housing part (43) is highly flexible.

Appliances from the first series have another rivet in their housing part (43) that must be removed before the housing can be pushed down.





To disassemble the gas pressure springs (50), fold the canopy up and have a second person lock it in this position.

Push housing part (43) inwards and downwards and keep it apart with a suitable object. Remove the spring retainer cover (51) with a suitable screwdriver and then loosen the retaining nut.

The gas pressure spring can now be removed from the appliance.

Always use a new spring retainer cover (51) when reassembling the appliance!

To disassemble the body cooling fans (61), take the two housing halves (60 + 63) apart after loosening four screws.

The fans that have already been unscrewed can now be disassembled further.

# Couch

Use an appropriate knife to carefully remove the two decorative caps that cover the plastic rivets (7) from the end covers of the lamp housing (6 + 13). Then lever the rivets out of the lamp housing with the knife.

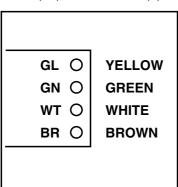
Use an appropriate screwdriver to carefully remove the 4 screw covers (34) and to loosen the screws (36).

Now the end covers can be removed from the lamp housing (6 + 13).

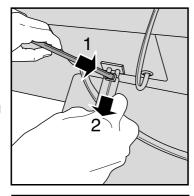
Pull the ornamental/retaining strips (3) of the acrylic sheet (9) up and snap them out.

Lift the acrylic sheet off the couch to gain access to the TLs (2), the starters (19) and the PCB (5).

To replace the remote control (30), unsolder connecting cable (29) from the remote control PCB.

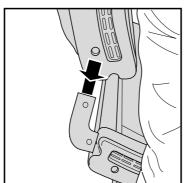


To disassemble the cover (15) of the lamp housing, pull the connecting cable (44) of the canopy out of the socket in the couch.

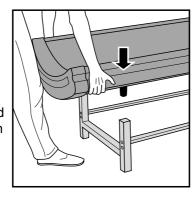


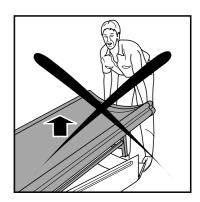
Lift the canopy off the couch together with a second person. Place the canopy on a soft surface.





Then lift the couch off its frame together with a second person and place the couch on a soft surface with the lamps pointing downwards.





Loosen the screws located in the cover of the lamp housing next to the studs (69).

Pull the cover out of the grooves of the housing part (14) and lift it together with a second person off the rest of the housing and put it on a soft surface.

Now all the other parts of the lamp housing of the couch are accessible and can be disassembled.

# **ASSEMBLY**

### Canopy

When assembling the acrylic sheet (45), make sure the ornamental/retaining strips (3) have been snapped in properly.

Always use a new spring retainer (51) when reassembling the gas pressure springs (50)!

When assembling the housing part (43), make sure the housing part has been properly snapped in behind the metal strip.

#### Couch

When assembling the acrylic sheet (9), make sure the ornamental/retaining strips (3) have been snapped in properly.

When assembling the cover of the lamp housing (15), please make sure that the small housing cover (10) permitting entry of the mains cable, remote control cable and other connectors laps properly over the cover of the housing.

#### SERVICE TIPS

- If a fuse blows when you switch on the appliance, this is usually caused by a fuse that acts too quickly.
  - In such a case, use of a slow 16A safety fuse is recommended on account of the high starting current.
- The fuse may also be activated as a result of a defective NTC resistor, a defective capacitor, a defective ballast or an overloaded circuit.

- If one or more TL's have broken down, you can track down the failure cause by exchanging parts (ballasts, starters, lamps).
   If these parts are OK, the wiring must be checked, especially the connections to the lamp holders.
- An unusually early blackening of the end of the TL's points to a wiring fault or a defective starter.
- The plug-in connections of the wires can be detached by means of a paper clip.
- When the couch cannot be switched on, the relay on the PCB may be defective.
   Other possible causes are a defective inlet or a defective connecting cable.

- Always use protecting goggles when looking in the direction of burning lamps.
- The acrylic sheets can be cleaned with a moist cloth and some washing-up liquid.
   Avoid the use of alcohol, alcohol-based cleaners, petrol, acetone or abrasives!
   These substances can cause irreparable damage to the sheets.
- Used-up or broken lamps are chemical waste and must be disposed of in the appropriate manner.

#### **IRRADIANCE**

The measuring data indicated below were established with help of an UVX 36 meter and may only be checked with this equipment, since the values measured are relative values.

The measurements must be taken after approx. 5 minutes in the centre of the irradiation field and at the distance indicated.

The following aspects must be checked or the following preliminary measurements must be taken:

- Mains voltage: 230V  $\sim$
- Room temperature approx.: 22-28°C
- Check the fans for failure-free operation as optimal irradiation is only guaranteed at the correct operating temperatures.
- Clean the reflectors, the lamps and the acrylic sheets.

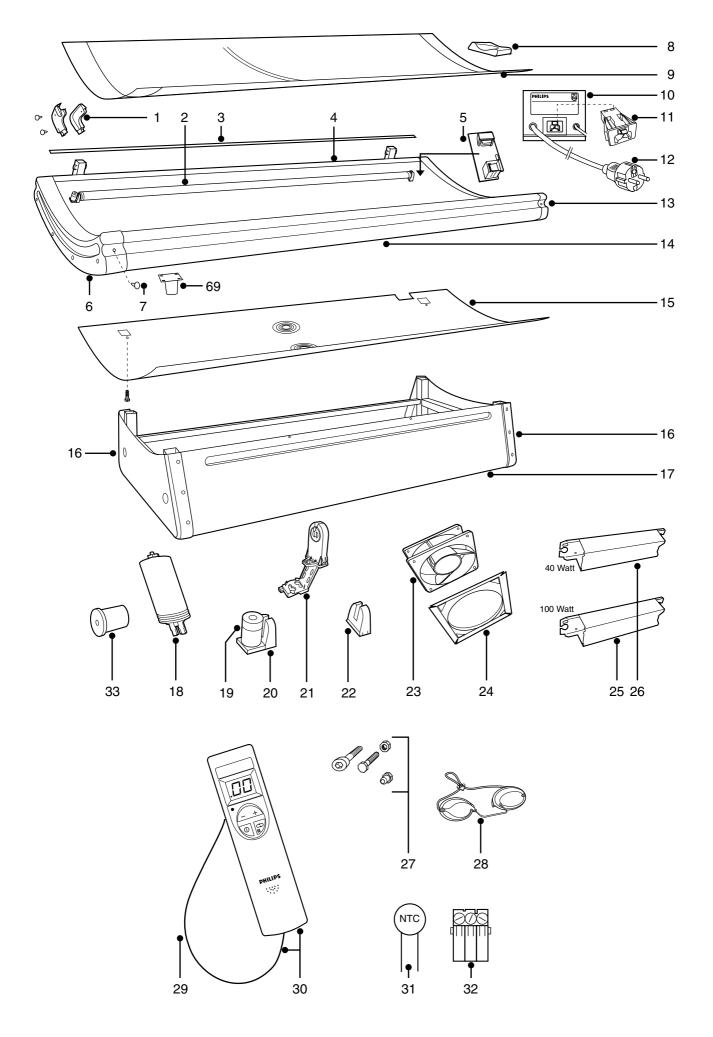
With regard to the minimum irradiation indicated below, you should bear in mind that this is not an absolute value at which the lamps must be replaced.

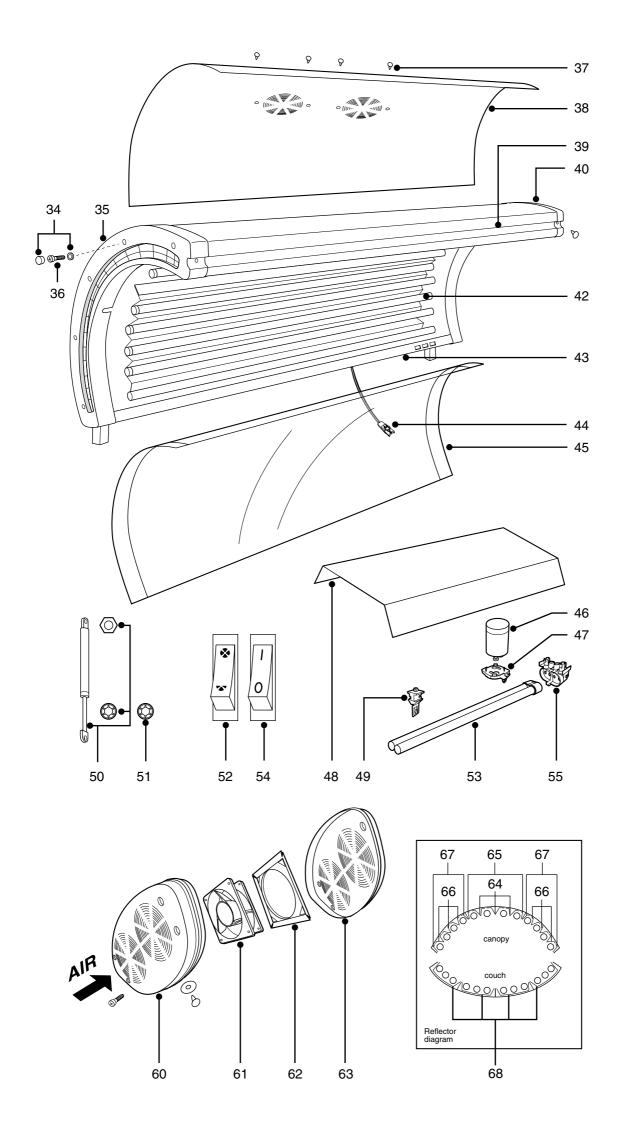
Depending on the skin type, the tanning session may also be extended so that the lamps can be used a little longer.

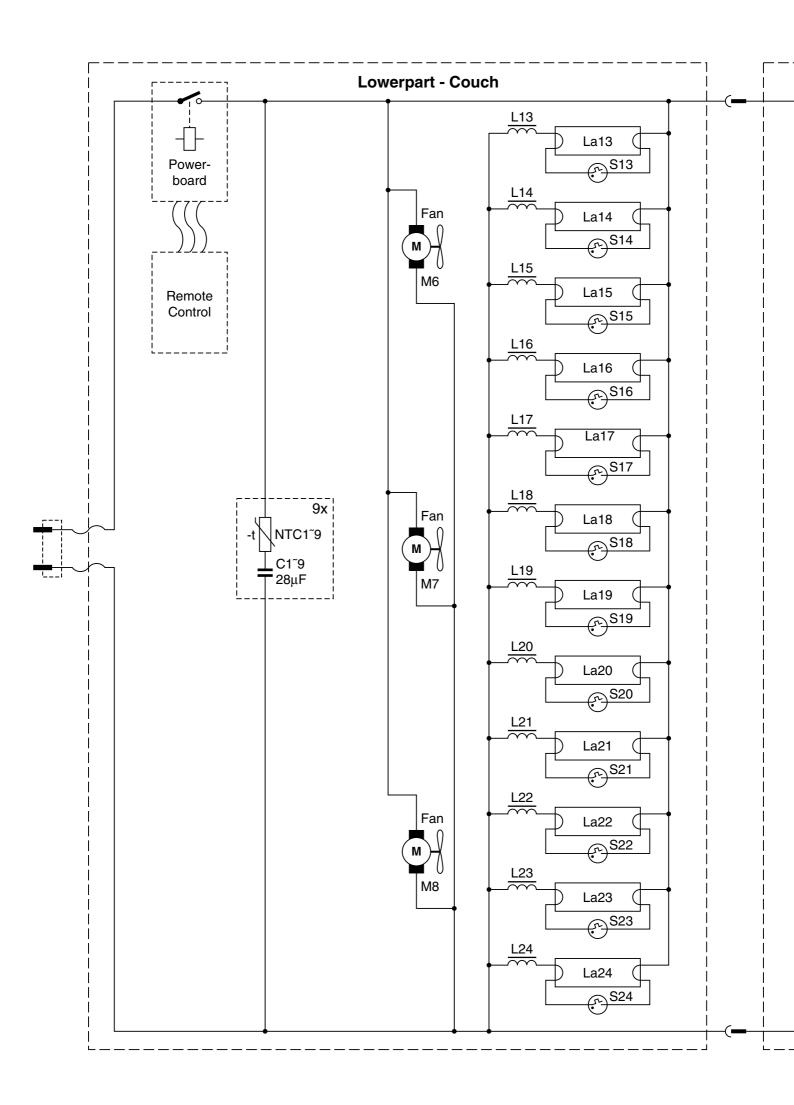
UVX 36 meter	distance in cm	output in mW/cm <sup>2</sup> NEW (approx)	output in mW/cm2 MIN (approx)
Couch	0 cm from acrylic sheet couch	8.7	5.5
Canopy	20 cm from acrylic sheet	rom acrylic sheet 8.7	
Canopy beneath the facial tanner	20 cm from acrylic sheet	8.7	5.5

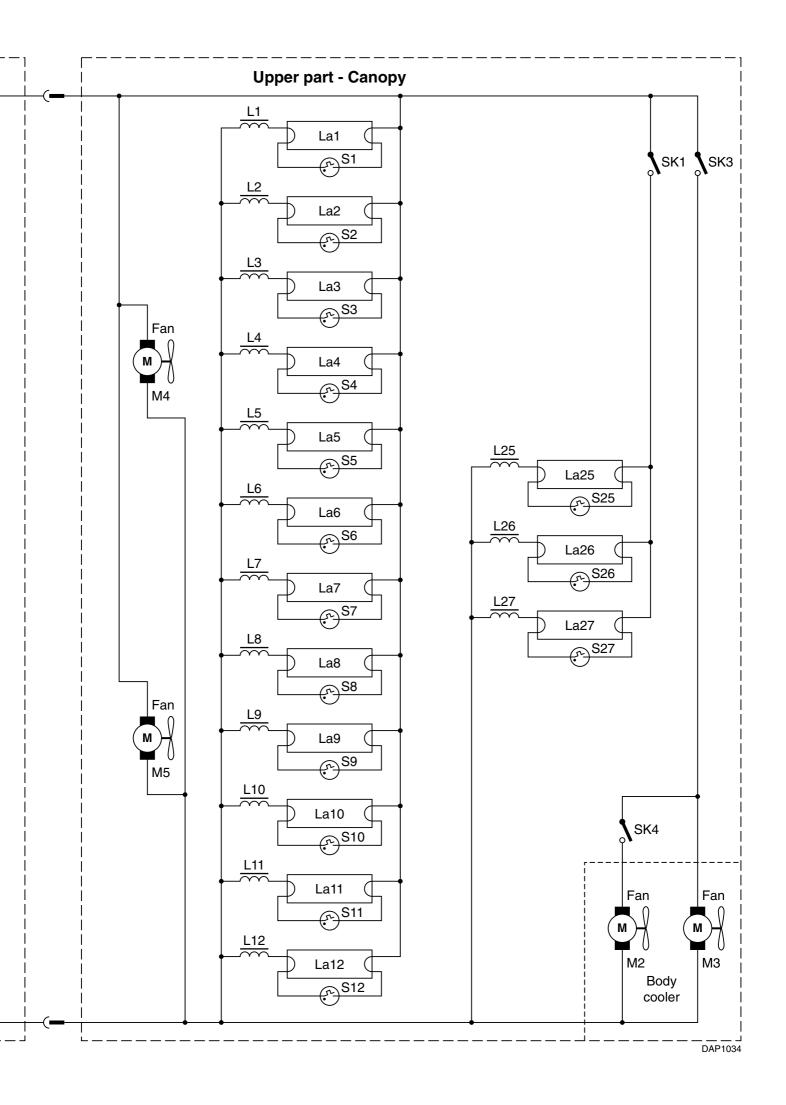
1	9965 000 01958	housing + cover hinge TL Cleo Performance 100W locking strip side cover back <b>couch</b> power module	35	9965 000 01954	end cover canopy L	
2	4822 134 30014		36	4822 502 14539	s.t. screw 4.8x19	
3	9965 000 01944		37	4822 532 12791	push rivet 6x7.5	
4	9965 000 01945		38	9965 000 03628	cover canopy	
5	4822 218 11844		39	9965 000 01942	side cover front couch/canopy	
6	9965 000 01955	end cover <b>couch</b> L/R	40	9965 000 01953	end cover canopy R side cover back canopy connecting cable acrilyc sheet canopy	
7	9965 000 02712	push rivet 6x9.5	42	= 2		
8	9965 000 01956	pillow	43	9965 000 03638		
9	9965 000 01950	acrylic sheet <b>couch</b>	44	4822 320 11909		
10	4822 442 01239	cover inlet	45	9965 000 03663		
11 12 13 14 15	4822 265 10944 4822 321 11313 = 6 = 39 9965 000 01951	2-p socket female plug flex EU white 16A/2C cover <b>couch</b>	46 47 48 49 50	9260 001 90155 9965 000 03664 9965 000 03665 9965 000 03666 9965 000 01936	starter S10 starterholder PL PL reflector lamp clamp PL gasspring 5648MW	
16	9965 000 02730	stand side panel	51	9965 000 02909	cap spring fix 10 mm	
17	9965 000 02731	stand front panel	52	9965 000 01947	switch body blower	
18	4822 124 40701	capacitor 28uF/250V	53	9279 034 00903	TL Cleo 36W/PL	
19	4822 219 80258	starter <b>S12</b>	54	9965 000 01946	switch on/off	
20	4822 255 10374	lamp/starter holder <b>couch</b>	55	9965 000 03667	lampholder PL	
21	9965 000 01933	lamp/starter holder canopy	60	9965 000 01957	housing + cover reflector middle <b>canopy</b> L=1342	
22	4822 255 10375	lamp holder couch	61	= 23		
22	9965 000 01934	lamp holder canopy	62	= 24		
23	4822 361 10966	fan 230V	63	= 60		
24	9965 000 01935	rubber sealing (fan)	64	9965 000 03668		
25	4822 146 10791	ballast 100W	65	9965 000 03669	reflector side reflector middle reflector side reflector side reflector connecting tube reflector side reflector connecting tube canopy L=1342 canopy L=1722 canopy couch	
26	9965 000 03637	ballast 40W	66	9965 000 01938		
27	9965 000 01959	mounting set	67	9965 000 01939		
28	4822 690 80147	HB072 prot. goggles	68	9965 000 01937		
29	4222 062 94310	r.c. cable	69	9965 000 03043		
30 31 32 33 34	4222 062 94290 4822 116 30297 4822 265 30284 9965 000 03044 9965 000 02739	remote controle with cable NTC resistor connecting block for NTC screw plug set of 5 caps and rings				

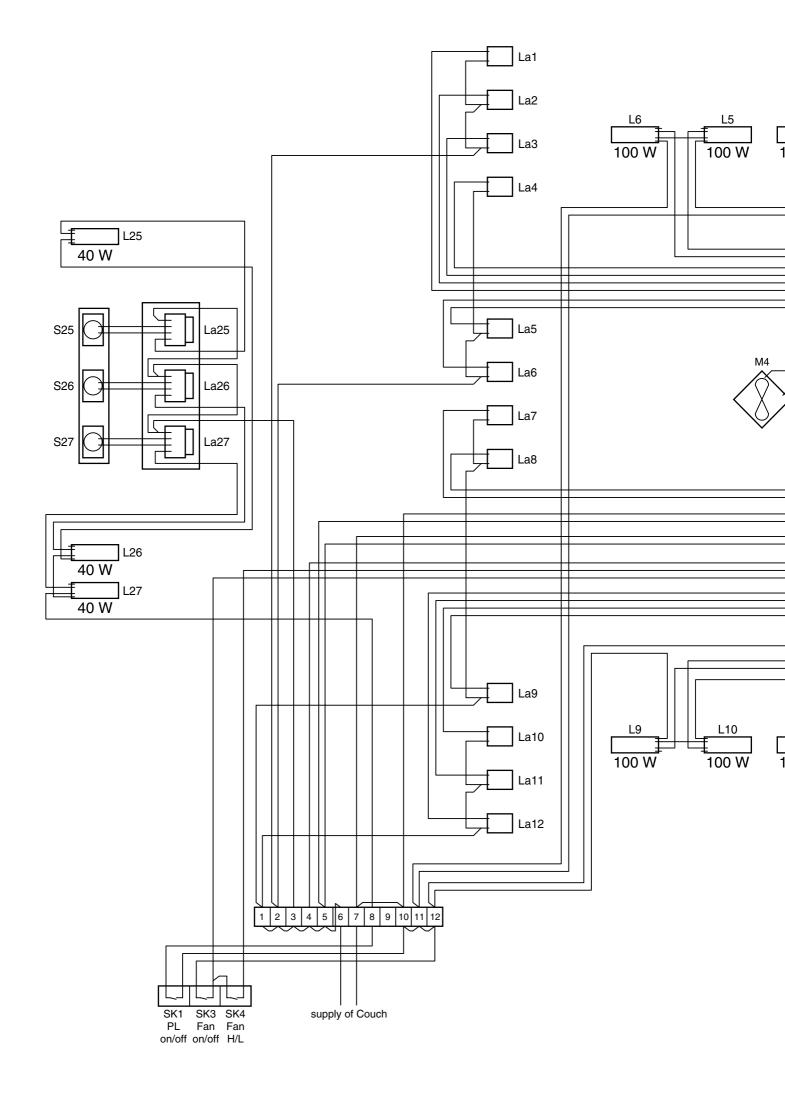
# HB 578/A

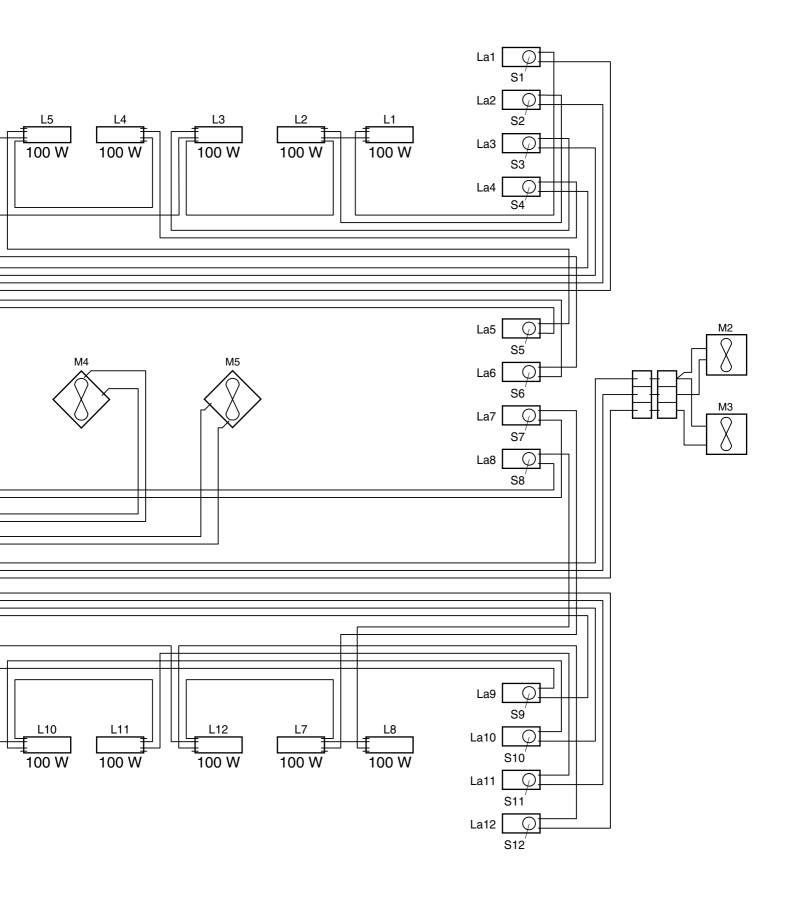












HB 578 Canopy

