

circuit diagram

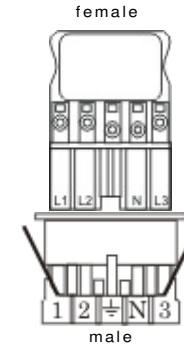
KBL Tower pure Energy

			Datum	05.05.06	KBL- Solarien		MS Tower T230W/T200	MS Tower_IND_220V_usa	= Änderungen vorbehalten	
			Bearb.	R.Schmidt						+
			Gepr.							page 1
Zust.	Änderung	Datum	Name	Norm	Urspr.	Ers.f.	Ers.d.	MS Tower_IND_02/1105	von 9Bl.	

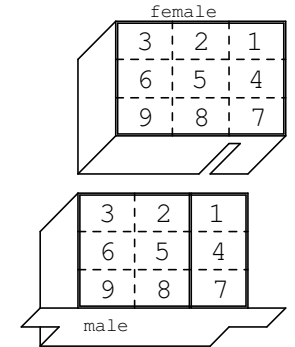
connectors

- X0 control unit / main terminal block
- X1 connector door
- X1C four-wire-clamp / door
- X2 connector side frame left
- X2C four-wire-clamp / side frame left
- X3 connector back side frame
- X3C four-wire-clamp / back side frame
- X4 connector side frame right
- X4C four-wire-clamp / side frame right
- X5 connector body fan
- X6 connector door lighting
- X7 connector interior lighting
- X9 connection option / central exhaust fan
- X9D connection option / central exhaust fan
- X10 connector external timer / external music
- X11 connection Aqua Cool
- X11C four-wire-clamp / Aqua cool
- X12 connector thermal switch
- X13 liquid level sensor

- E1 main control board / start, power supply
- E2 main control board / body fan
- E3 main control board / relais output
- E4 main control board / remote start
- E5 main control board / error message
- E6 n.c.
- E7 n.c.
- E9 music amplifier / power supply
- E10 relais board fresh / power supply
- E11 relay board fresh / relais output
- E12 relay board fresh / relais output
- E16 LED transformer / power supply
- E17 LED transformer / output
- E18 n.c.



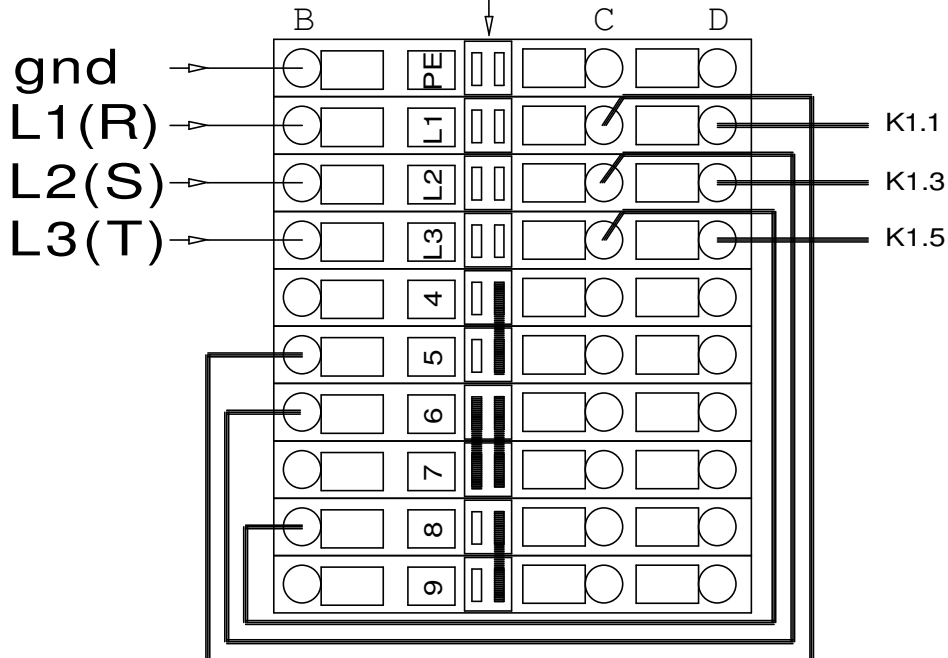
Adels



HSU

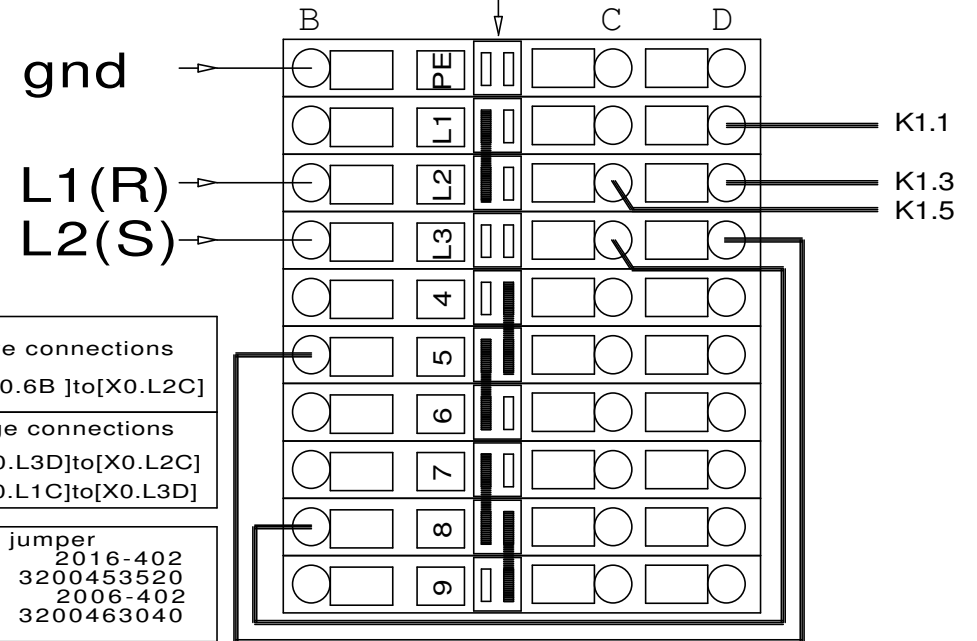
connection of the main power supply 3 x 220V / 3 ~ / 60Hz (AWG 10)

Attention : set jumper settings



connection of the main power supply 2 x 220V / ~ / 60Hz (AWG 4)

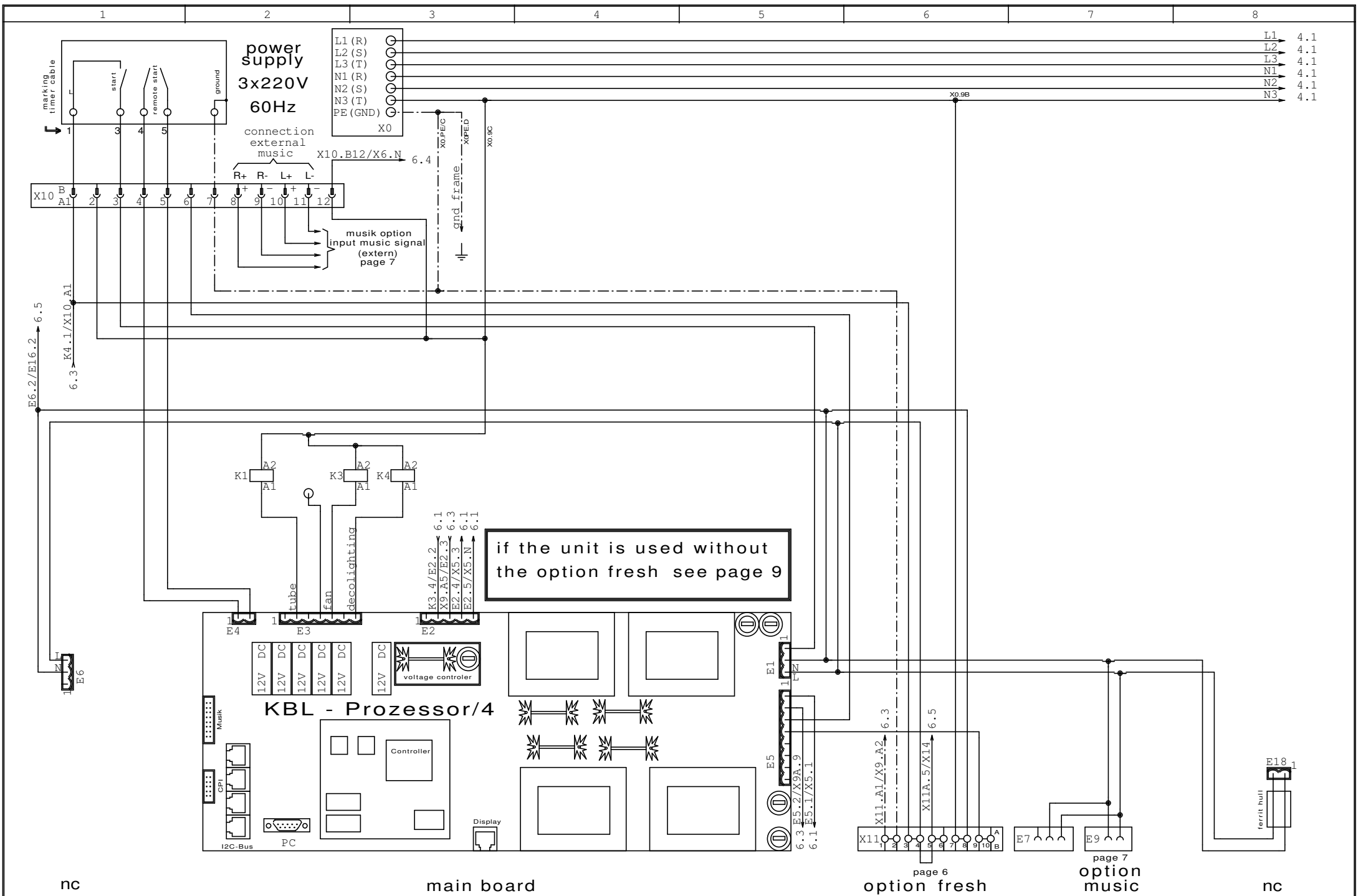
Attention : set jumper settings



remove connections
from[X0.6B]to[X0.L2C]

change connections
from[X0.L3D]to[X0.L2C]
from[X0.L1C]to[X0.L3D]

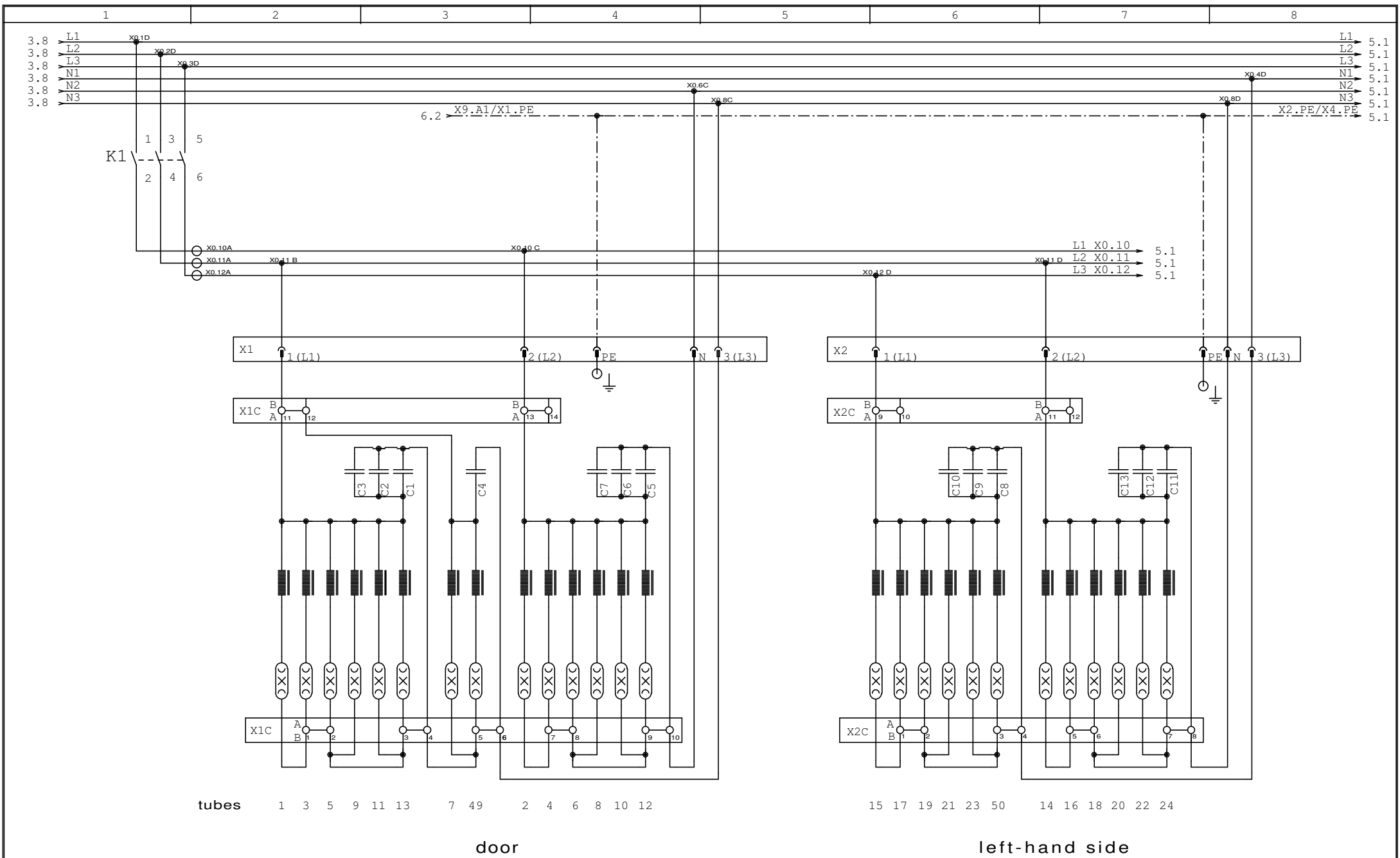
jumper
Wago 2016-402
KBL 3200453520
Wago 2006-402
KBL 3200463040



- L1 4.1
- L2 4.1
- L3 4.1
- N1 4.1
- N2 4.1
- N3 4.1

if the unit is used without the option fresh see page 9

nc		main board		option fresh		option music		nc	
Datum	05.05.06	KBL- Solarien		MS Tower T230W/T200		MS Tower_IND_220V_usa		= Änderungen vorbehalten	
Bearb.	R.Schmidt							+ page 3	
Gepr.								von 9Bl.	
Zust.	Änderung	Datum	Name	Norm	Urspr.	Ers.f.	Ers.d.	MS Tower_IND_02/1105	



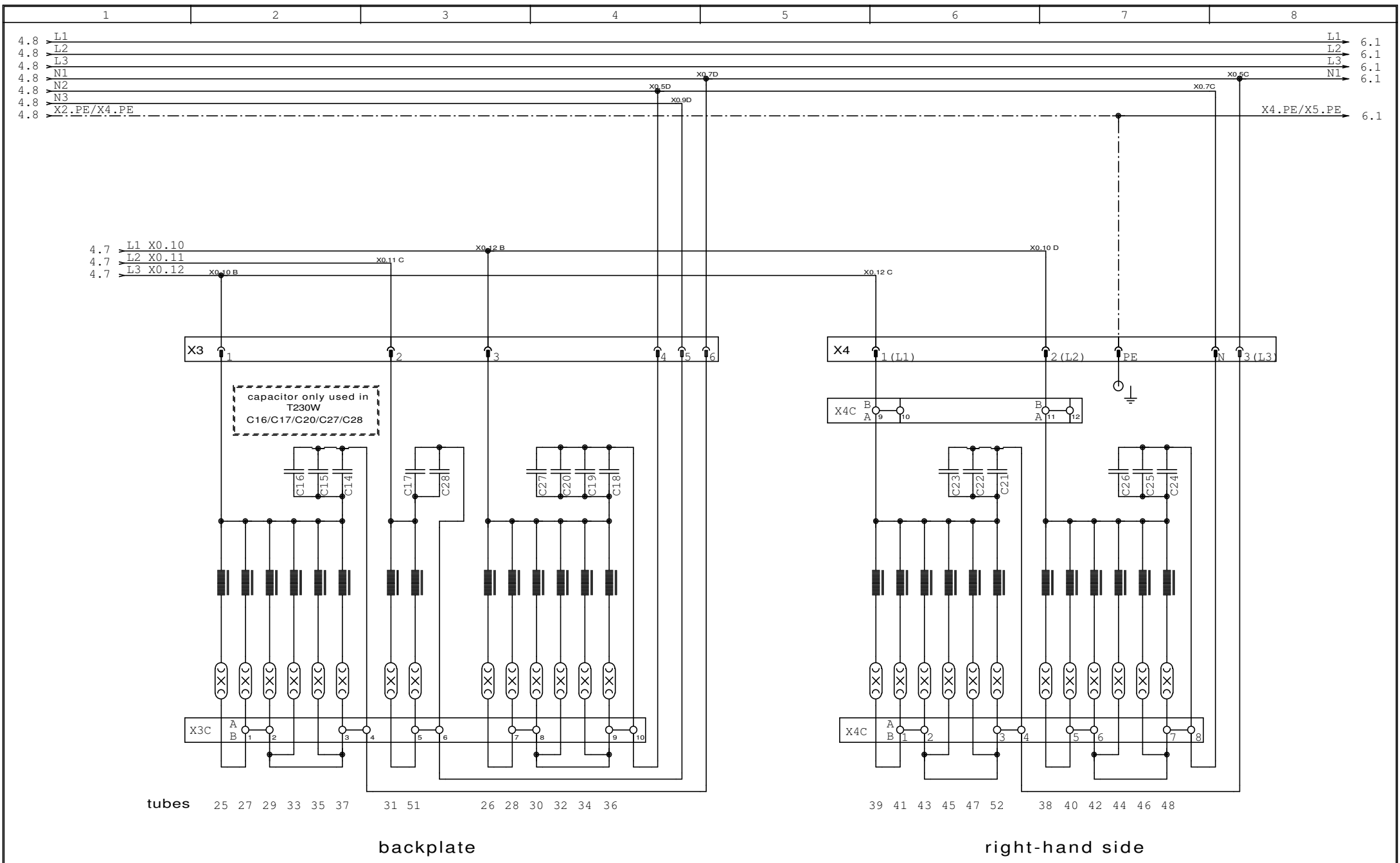
tubes 1 3 5 9 11 13 7 49 2 4 6 8 10 12

door

15 17 19 21 23 50 14 16 18 20 22 24

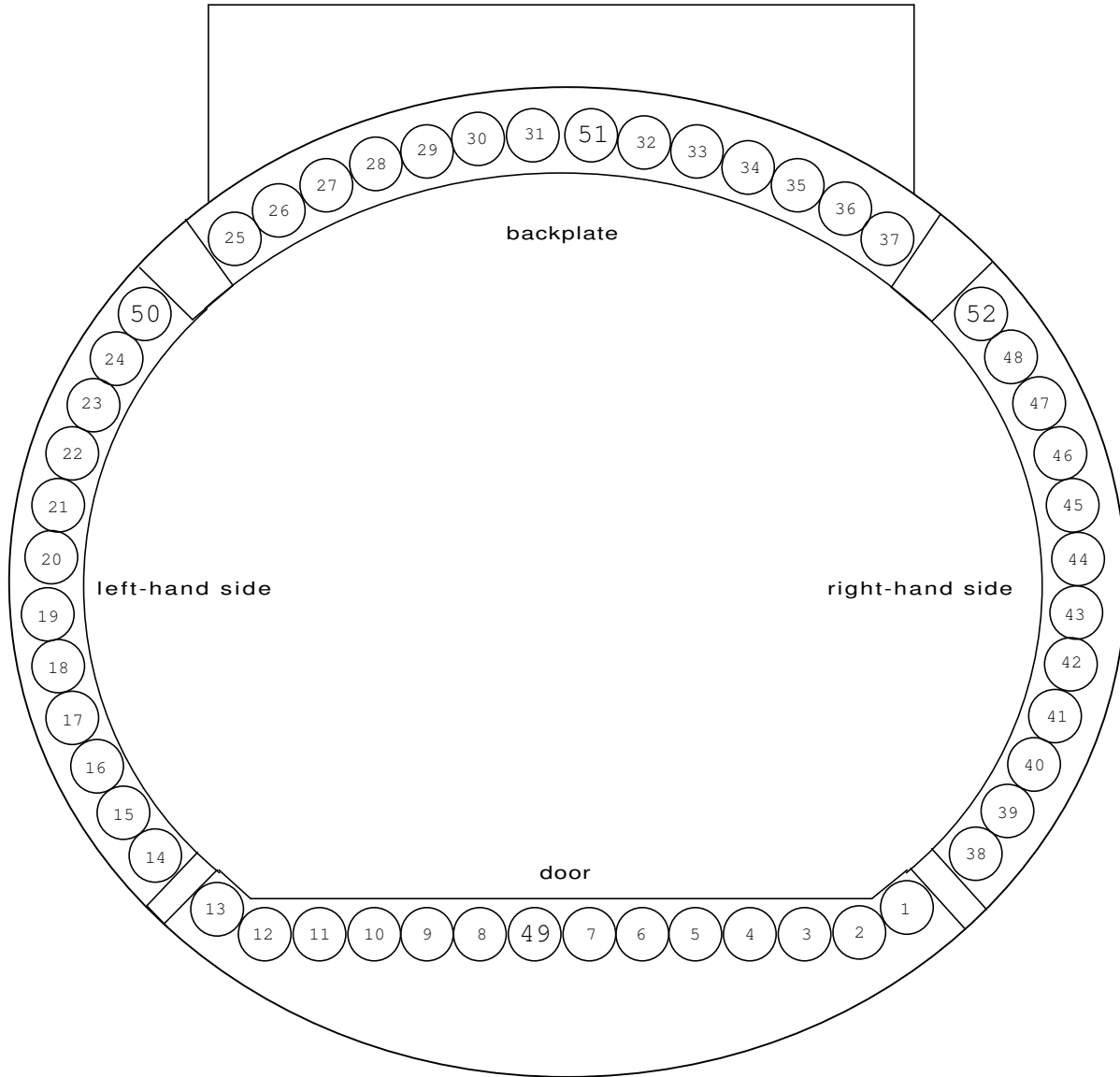
left-hand side

				Datum	05.05.06	 KBI <small>ENGINEERING COMPANY</small>	MS Tower_IND_220V_usa	= Änderungen vorbehalten		
				Bearb.	R.Schmidt		MS Tower T230W/T200	+		
				Gepr.					page 4	
Zust.	Änderung	Datum	Name	Norm		Urspr.	Ers.f.	Ers.d.	MS Tower_IND_02/1105	von 9Bl.



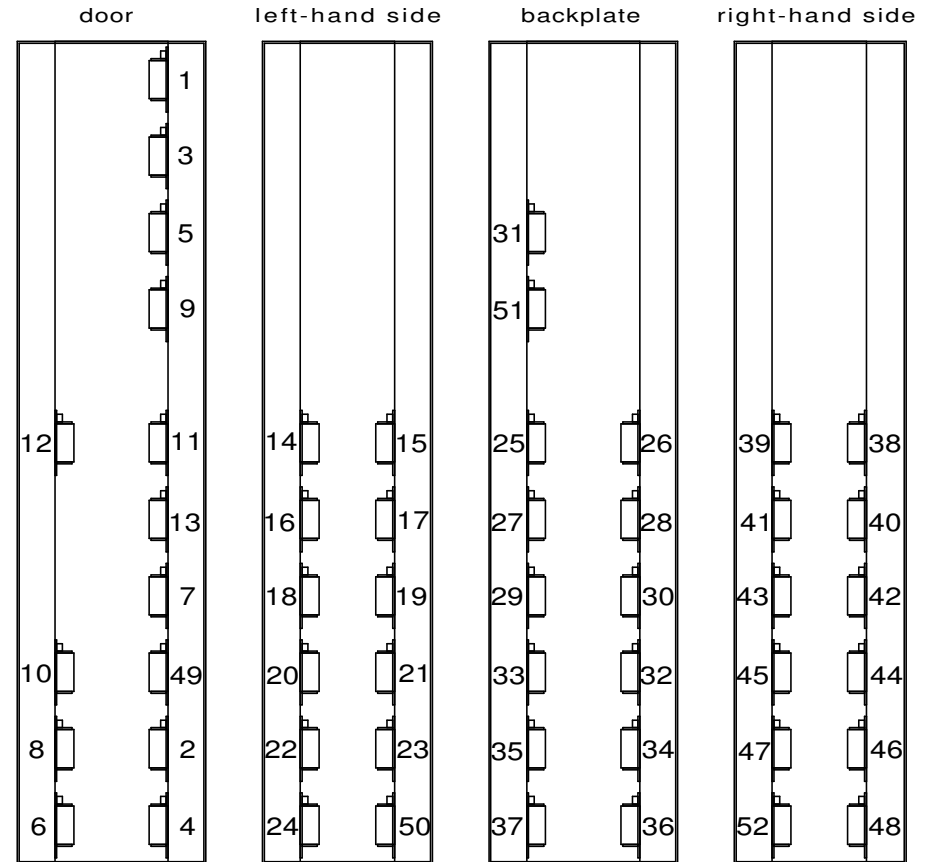
tube position

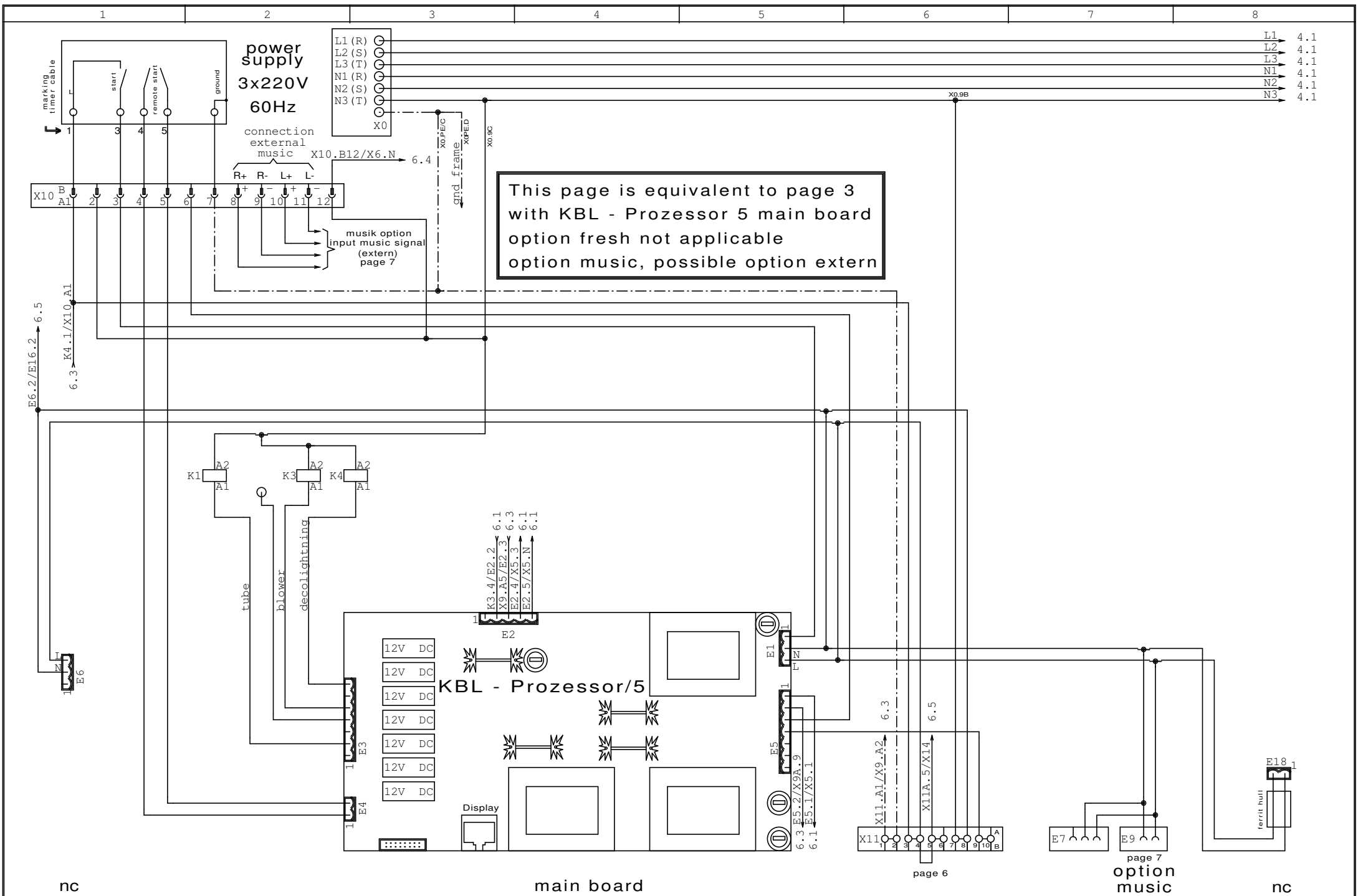
top view



ballast position

interior view





This page is equivalent to page 3
 with KBL - Prozessor 5 main board
 option fresh not applicable
 option music, possible option extern

															Datum	05.05.06		KBL- Solarien				MS Tower T230W/T200			MS Tower_IND_220V_usa			= Änderungen vorbehalten	
															Bearb.	R.Schmidt												+	
															Gepr.														
Zust.	Änderung	Datum	Name	Norm	Urspr.	Ers.f.	Ers.d.				MS Tower_IND_02/1105			page 9															
													von 9Bl.																