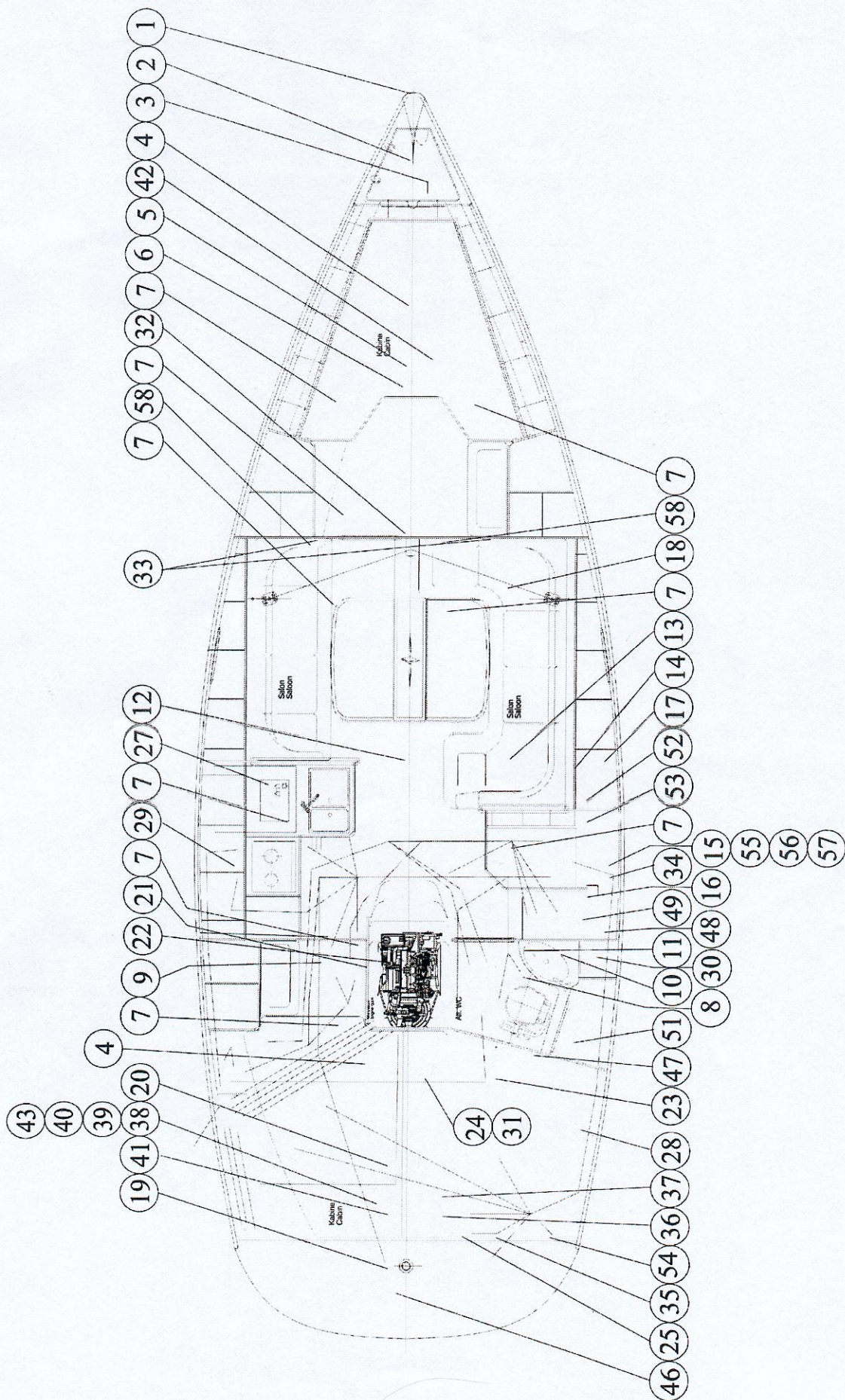
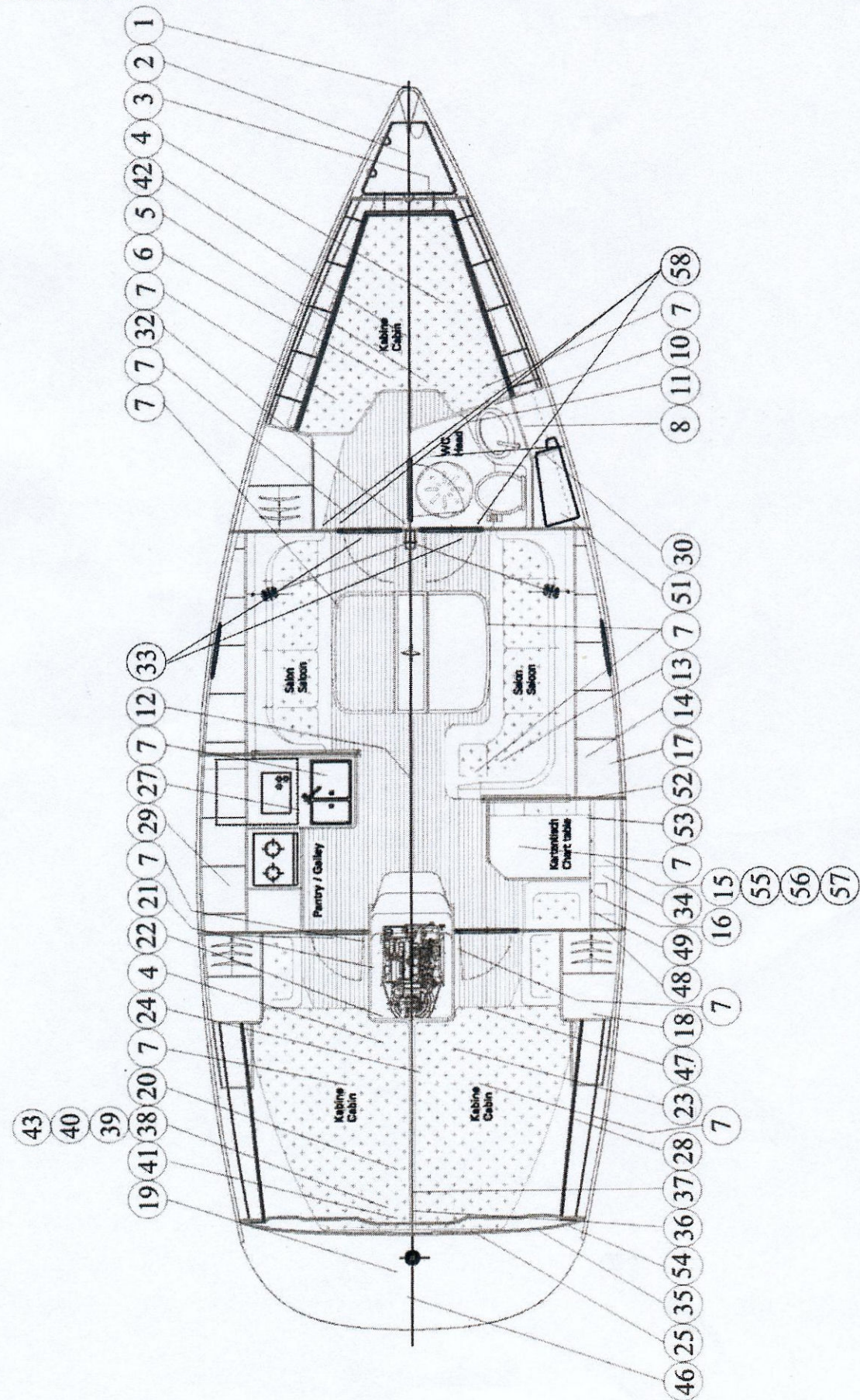


2.5.6 Distribution of electric devices: (2 cabins)



Distribution of electric devices: (3 cabins)

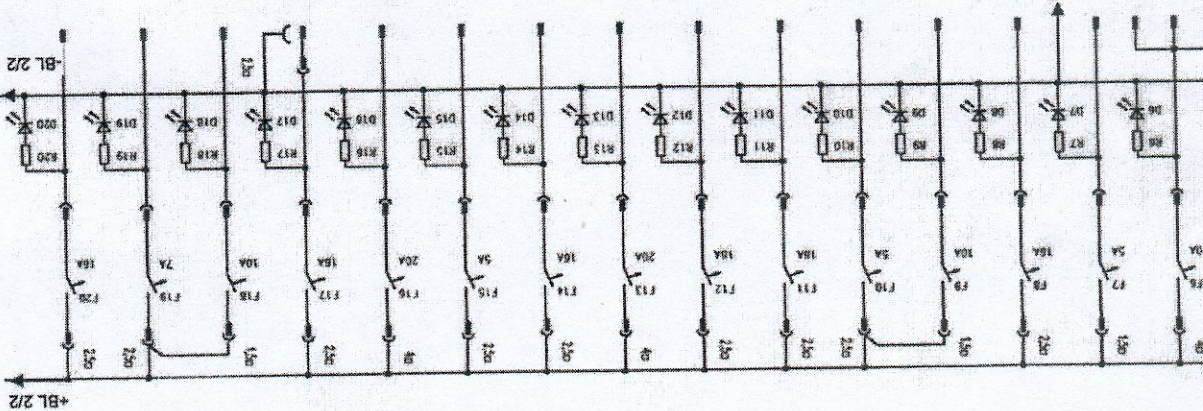


2.5.7 Wiring plan

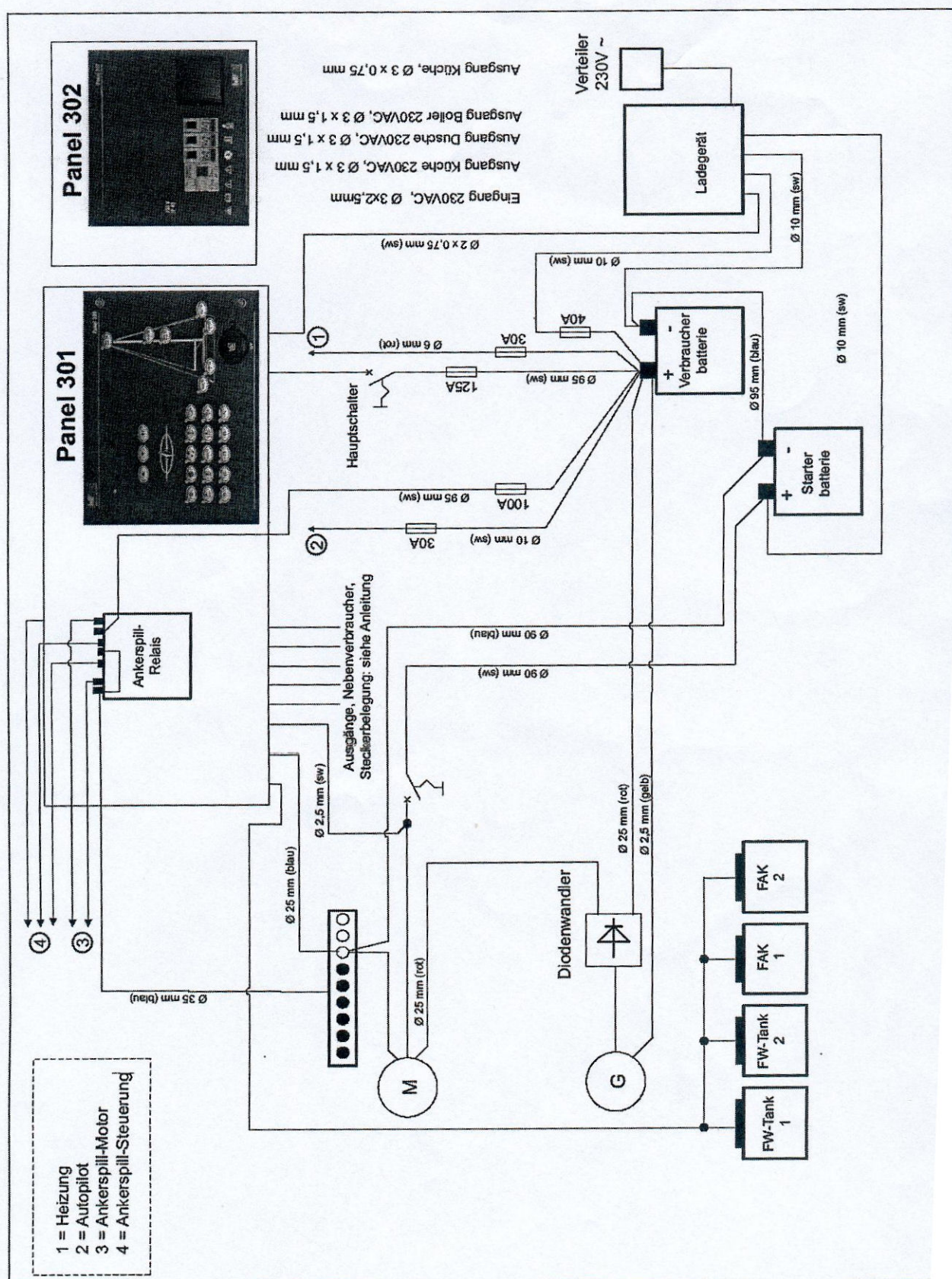
1	Zweifarbennleuchte	Navigation light
2	Elektrische Ankerwinde	Electric windlass
3	Bedienteil Ankerwinde	Windlass switch
4	Frischwassertankgeber	Fresh water gauge
5	Echolot Geber	Echo sounder
6	Sumlog Geber	Log
7	Halogenleuchten	Light
8	Neonleuchten	Neon lamp
9	Wasserpumpe	Water pump
10	Duschpumpe	Shower drain pump
11	Duschschalter	Shower drain switch
12	Elektrische Lenzpumpe	Bilge pump
13	Batterien	Batteries
14	Batterie Ladegerät	Battery charger
15	Elektro Panel	Electric panel
16	Hauptschalter (Motor/Verbraucher)	Main switch (engine/consumer)
17	Kurscomputer Auto - Optional	Auto pilot – option
18	Kompass Auto - Optional	Compass – option
19	Rückholgeber Auto - Optional	Repeater – option
20	Motor Auto - Optional	Auto engine – option
21	Anlasser Motor	Engine start
22	Gleichrichter	Detector
23	Dieseltankgeber	Fuel tank gauge
24	Boiler - Optional	Water heater – option
25	Heckleuchte	Stern light
26		
27	Kühlaggregat	Cooling unit
28	Landanschluss 230 V	Shore socket 230 V
29	Steckdose Küche 230 V	Socket 230 V
30	Steckdose Duschraum 230 V	Socket 230 V
31	Steckdose Boiler	Socket 230 V
32	Kabeldurchführung	Cable penetration
33	Lautsprecher - Optional	Speaker – option
34	Radio - Optional	Radio – option
35	Antennenkabel Radio – Optional	Radio antenna - option
36	Motor Panel	Engine panel
37	Tankuhr	Tank gauge
38	Tridata Bedienteil	Tridata unit
39	Wind Bedienteil	Wind gauge
40	Auto 6001 Bedienteil - Optional	6001 unit – option
41	Kompass	Compass
42	Bugstrahlrudermotor – Optional	Bow thrusters engine - option
43	Steuerung Bugstrahlruder - Optional	Bow thrusters unit – option
44	Genuawinsch Bedienteil - Optional	Genua winsh unit – option
45	Genuawinschen Motor - Optional	Genua winsh motor – option
46	Heizung – Optional	Heater – option
47	Dieselpumpe Heizung - Optional	Heater fuel pump – option
48	Thermostat Heizung – Optional	Heater thermostat – option
49	Fühler Heizung – Optional	Heater gauge – option
50	Generator – Optional	Generator – option
51	Fäkalientankgeber	Waste water tank gauge
52	Sicherung	Fuse
53	Kartenplotter	Map plotter
54	GPS Antenne	GPS antenna
55	Relais Autopilot	Relay
56	Sicherung Ladegerät	Fuse battery charger
57	Ankerspillrelais	Relay anchor winch
58	Lampe	Lamp

Ankerwinde	Anchor winlass
Bilgenpumpe	Bilge pump
FW-Pumpe	Fresh water pump
Duschabsaugpumpe	Self priming shower pump
Fäkalienpumpe	Waste water pump
Heizung	Heating
Kühlschrank	Refrigerator
12V-Steckdose	Plug socket 12V

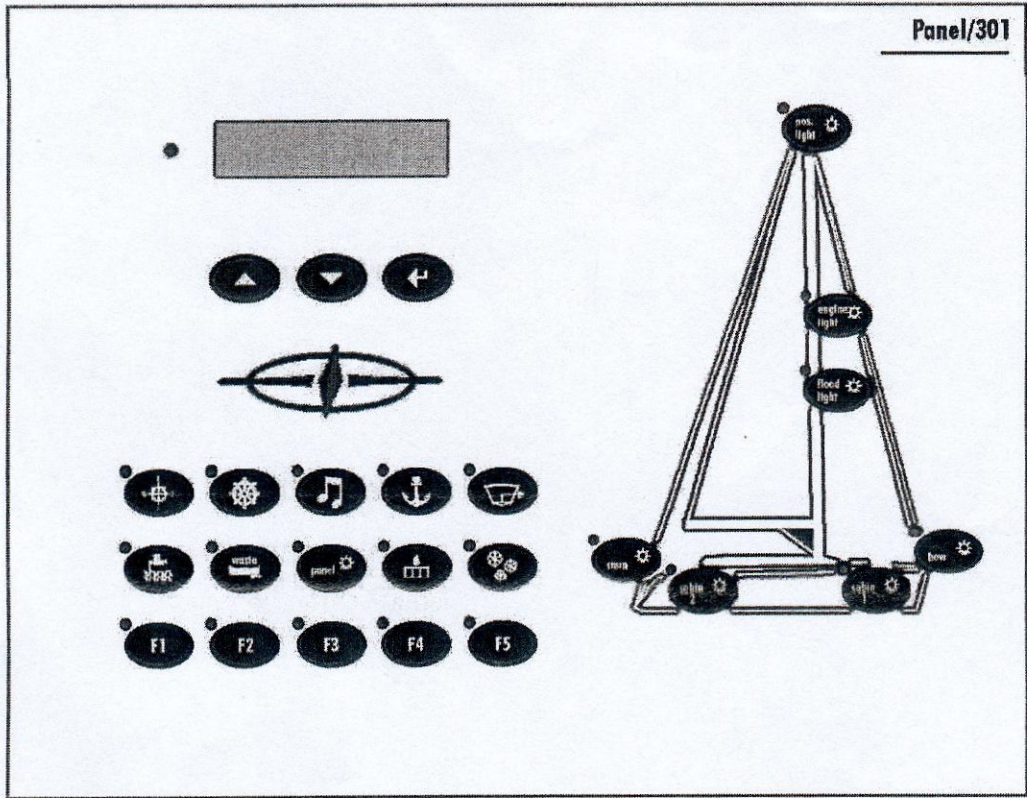
1	Innenbeleuchtung	1
2	Innenbeleuchtung	2
3	Innenbeleuchtung	3
4	Innenbeleuchtung	4
5	Innenbeleuchtung	5
6	Innenbeleuchtung	6
7	Innenbeleuchtung	7
8	Innenbeleuchtung	8
9	Innenbeleuchtung	9
10	Innenbeleuchtung	10
11	Innenbeleuchtung	11
12	Innenbeleuchtung	12
13	Innenbeleuchtung	13
14	Innenbeleuchtung	14
15	Innenbeleuchtung	15
16	Innenbeleuchtung	16
17	Innenbeleuchtung	17
18	Innenbeleuchtung	18
19	Innenbeleuchtung	19
20	Innenbeleuchtung	20



2.5.8 Distribution plans



Operating instruction Bavaria sailing boat Panel 301



The boat schematic has integrated switches in the exact position where the lights are switched.

The „external lights“

stern, bow, steam, mast head

are switched with those buttons (ON \diamond OFF). State of the switches is stored also after complete shut down power supply and remains in case of restart.
In case of malfunctions may be cause by disturbed lamps or disconnected cables the yellow LED which is lighted in function flashes.

The „interior light“

cabin 1, cabin 2, deck flood

are switched with those buttons (ON \diamond OFF). State of the switches is stored also after complete shut down power supply and remains in case of restart.
In case of malfunctions may be cause by disturbed lamps or disconnected cables the yellow LED which is lighted in function flashes.
On bottom left of the panel the push buttons of special boat functions are situated. These buttons switches special boat devices like bilge pump, heater etc. ON \diamond OFF.

State of the switches is indicated by a appropriate LED.

yellow LED on	Device switched on
yellow LED flashes	malfunction
yellow LED off	Device switched off

Compass

switching ON \diamond OFF of compass relais. State of the switches is stored also after complete shut down power supply and remains in case of restart.

Navigation

switching ON \diamond OFF navigation relais. State of the switches is stored also after complete shut down power supply and remains in case of restart.

In case of malfunctions may be cause by disturbed lamps or disconnected cables the yellow LED which is lighted in function flashes and in the display "malfunction" is indicated.

Radio

switching ON \diamond OFF radio relais. State of the switches is stored also after complete shut down power supply and remains in case of restart.

In case of malfunctions may be cause by disturbed lamps or disconnected cables the yellow LED which is lighted in function flashes and in the display "malfunction" is indicated.

Anchor

switching ON \diamond OFF of anchor relais. State of the switches is stored also after complete shut down power supply and remains in case of restart.

Bilge pump

switching ON \diamond OFF bilge pump relais. State of the switches is stored also after complete shut down power supply and remains in case of restart.

In case of malfunctions may be cause by disturbed lamps or disconnected cables the yellow LED which is lighted in function flashes and in the display "malfunction1" is indicated.

Fresh water

switching ON \diamond OFF of fresh water relais. State of the switches is stored also after complete shut down power supply and remains in case of restart.

Waste water

switching ON \diamond OFF of waste water relais. State of the switches is stored also after complete shut down power supply and remains in case of restart.

Panel light

switching ON \diamond OFF of backlight of panel buttons and display. After 1 minute the light goes automatically OFF again in order to save battery capacity. Restart is done by a new push.

Heater

switching ON \diamond OFF of heater relais. State of the switches is stored also after complete shut down power supply and remains in case of restart.

yellow LED on Device switched on

yellow LED flashes malfunction

yellow LED off Device switched off

Cooler

switching ON \diamond OFF of cooler relais. State of the switches is stored also after complete shut down power supply and remains in case of restart.

In case of malfunctions may be cause by disturbed lamps or disconnected cables the yellow LED which is lighted in function flashes.

Additionally to the designed push buttons with fixed functionality 5 spare buttons (F1 – F5)




are available for customized devices which can be connected following the Bavaria flowchart and harness plan.

F1 bis F5

switching ON \diamond OFF of free usable relais. State of the switches is stored also after complete shut down power supply and remains in case of restart.

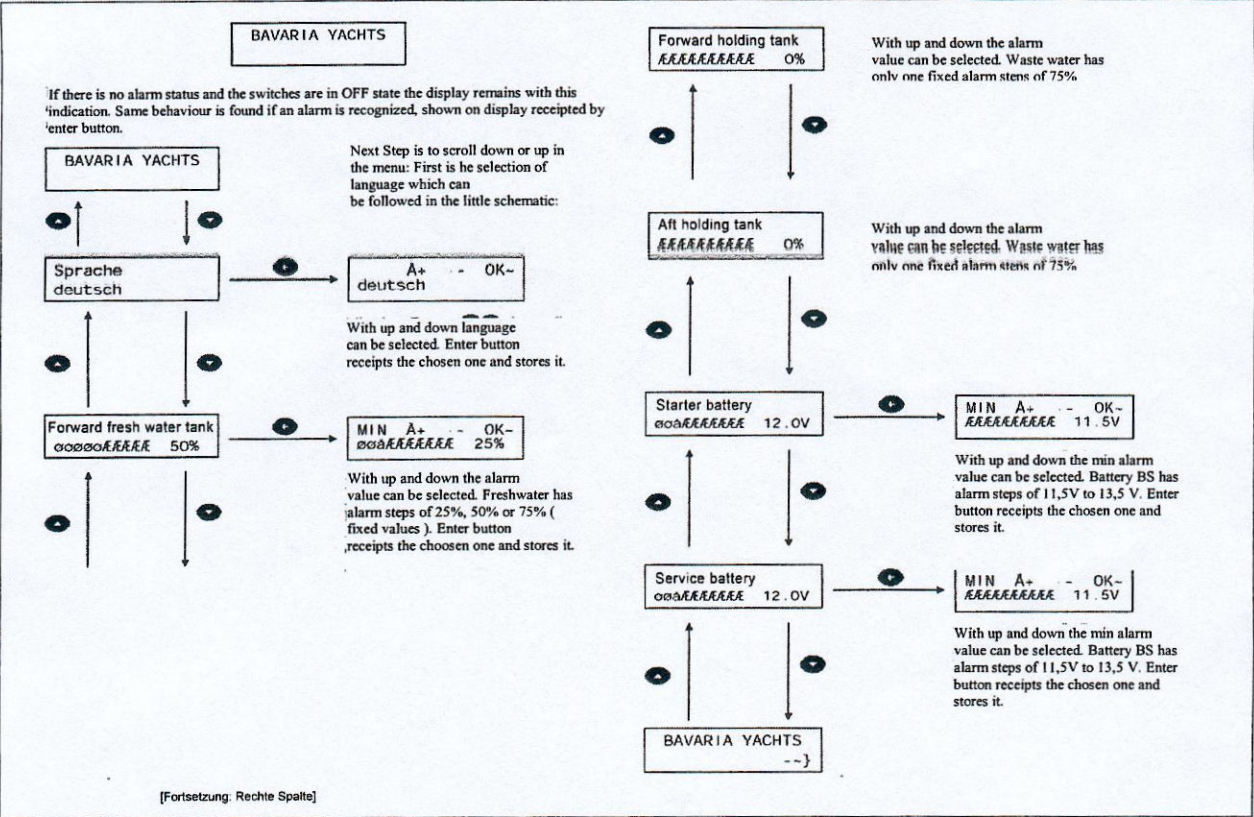
At top of the panel on the left a display is positioned which can be controlled by special scroll buttons below the display.

Using the scroll buttons the indication of preselected informations are displayed.

Scroll buttons   and enter  below display.

As soon as main power is switched on all LEDs are flashing for 1 sec. to show their functionality (self check). After this check normal functionality is given.

After switch on the display shows



If following symbol is displayed  charging of battery is indicated.

A red LED left of display will flash if an alarm is active. On the display the menue is shown which has raised the alarm. Parallel a flashing exclamation mark next to the beacon on the display occurs.

To receipt the alarm the enter button

Has to be pushed for 2 sec.. The text „Alarm“ on the display shows that the alarm has been recognized but not resetted.

Connection plug arrangement Bavaria Sailing Yacht Panel 301**Common:****Power supply:**

+12V +25% / - 25% DC (9,0 V – 15,0 V)

Power supply:

+12V(Batt 2+) over pressed screw-connection, **Setscrew** M8, Würth Power+ 93322

Coverage with 125A

GND over pressed screw-connection, **Tap hole** M6, Würth Power+ 93321

Connection plug arrangement:**Lightcable:**

PowerCon 28-2ML 14pol (presselement Würth), (Mating plug of Tyco Nr. 929504-5)

- 1 12V Battery 1+, starterbattery, Connection only for battery measurement
- 2 >>> Do not attach, internally occupied <<<
- 3 Toplight (1)
- 4 Steaming light (2)
- 5 Nose light (3)
- 6 Sailinglight (4)
- 7 Interior lighting (5)
- 8 Interior lighting (5a)
- 9 Interior lighting (6)
- 10 Interior lighting (6a)
- 11 Heating (15)
- 12 Radio (9)
- 13 Radio (9a)
- 14 Autopilot (8a)

Flat pin K92827-020916 (insertion element Wuerth) counterpart AMP

Navigational instrument (8) 154719

+ 1xKontakt autopilot (8a) 154719 + 1xKontakt

Foredeck cable: PowerCon 28-2ML 4pol (insertion element Wuerth), (push-pull plugs of Tyco NR. 929504-1)

- 1 Toplight (1)
- 2 Steaming light (2)
- 3 Sailinglight (4)
- 4 Freshwater (12)

Flat pin K92827-020916 (insertion element Wuerth) counterpart AMP

bilge pump (11) 154719 + 1 x kontakt

showering exhaust pump (13) 154719 + 1 x kontakt

refrigerator (16a) \ refrigerator (16c)/926716 + 2 x kontakt

windlass (10) 154719 + 1 x kontakt

Stocko, 2-polig (insertion element Wuerth)

- 1 waste water tank 1 3/4
- 2 waste water tank 1 COM / GND

Stocko, 2-polig (insertion element Wuerth)

- 1 Tank 1 4/4, white
- 2 Tank 1 3/4, brown
- 3 Tank 1 2/4, green
- 4 Tank 1 1/4, yellow
- 5 Tank 1 COM / GND

Diesel tank cable: QuadCon of marks 3polig (insertion element Wuerth), (push-pull plugs of Molex 39014031)

- 1 GND
- 2 5V, VCC_extern
- 3 Level, 0 ... 5V, (5V ^100%)

Battery charger cable:

Stocko, 2-polig (insertion element Wuerth)

- 1 GND
- 2 LED entrance

Backcable:

PowerCon 28-2ML 6pol (insertion element Wuerth), (push-pull plugs of Tyco NR. 929504-1)

- 1 rear light (3a)
- 2 compass lighting (7)
- 3 fresh water (12a)
- 4 navigational instruments (8)
- 5 fresh water (12a)
- 6 navigational instruments (8)

Flat pin K92827-020916 (insertion element Wuerth) counterpart AMP

showering exhaust pump (13a) \
showering exhaust pump (13b) / 926716 + 2xKontakt
refrigerator (16a) \
cooling aggregate (16b) / 926716 + 2xKontakt

Stocko, 2pol (insertion element Wuerth)

- 1 waste water tank 2 3/4
- 2 waste water tank 2 COM / GND

Stocko, 5pol (insertion element Wuerth)

- 1 Tank 2 4/4, white
- 2 Tank 2 3/4, brown
- 3 Tank 2 2/4, green
- 4 Tank 2 1/4, yellow
- 5 Tank 2 COM / GND

Reserve:

Flat pin K92827-020916 (insertion element Wuerth) counterpart AMP

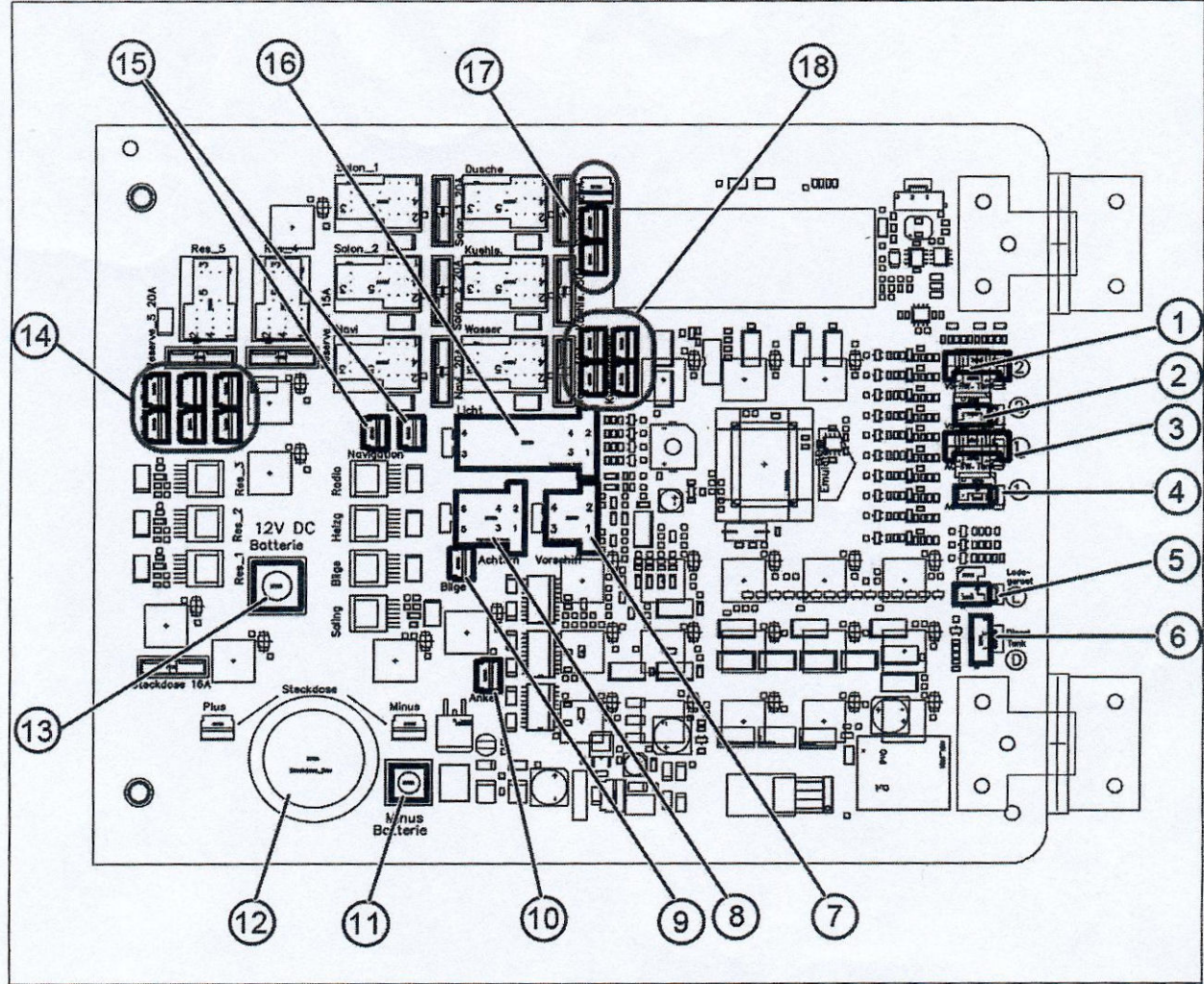
- 2 Reserve 1 (14)
- 1 Reserve 2 (18)
- 3 Reserve 3 (19)
- 4 Reserve 4 (20)
- 5 Reserve 5 (21)
- 6 Reserve 5 (21)

Plug socket:

Flat pin K92827-020916 (insertion element Wuerth)

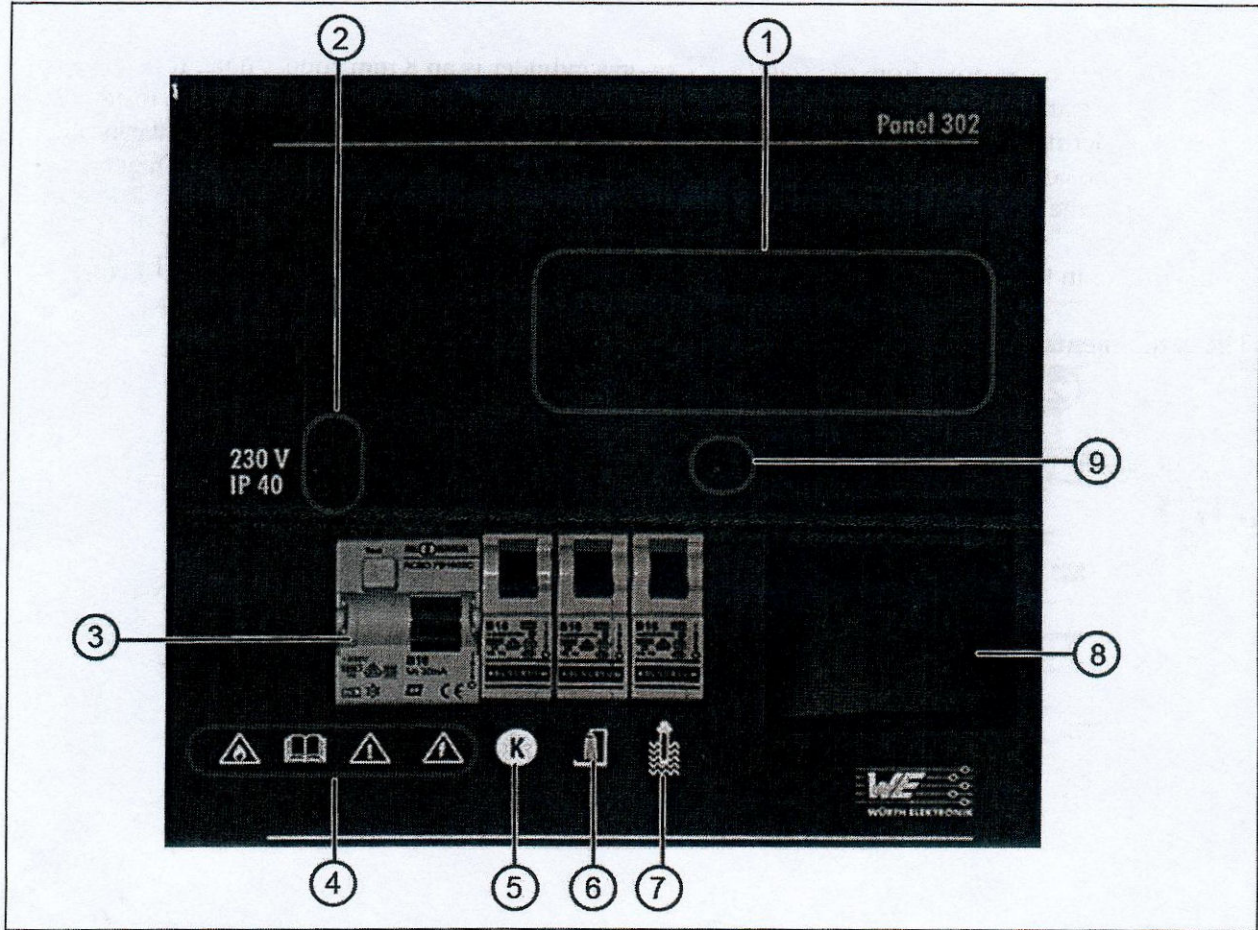
- 1 12V_Batt_2+ with safety device, NOT switched
- 2 GND

Opinion leader plate back



1	Monitoring freshwater tank 2 (VS)
2	Monitoring waste water tank 2
3	Monitoring freshwater tank 1 (AC)
4	Monitoring waste water tank 1
5	Monitoring battery charger
6	Monitoring Diesel tank (not used)
7	Foredeck cable (not used)
8	Aftcable
9	Bilge pump
10	Anchor
11	Battery - negative pole
12	Plug socket 12V with safety device
13	Battery - positive pole 12C DC
14	Reserve for the function keys F1-F5
15	Options (autopilot/navigation)
16	Light cable
17	Showering exhaust pump
18	Refrigerator

2.5.9 AC-distribution



1	Designation of location for radio (optional)
2	LED (green) for earth-leakage circuit breakers
3	Earth-leakage circuit breaker FI
4	Consider warning symbols
5	Automatic circuit breaker kitchen (16A)
6	Automatic circuit breaker shower (16A)
7	Automatic circuit breaker storage water heater (16A)
8	Plug socket 220V
9	LED (red) for storage water heaters on