



# Control and Indication

All control and alarm functions can be integrated in the switchboard panel for an easy and quick reading.

Bilge pump level alarm, overheating engine indicator, oil level alarm or the charging process of the battery charger are, among others, indicators you can integrate to have a centralised system.

**3SEN (120x65x60)**



- Three LED indicators for indication
- Please, specify 12V DC or 24V DC and indicators' colour (red or green)

**3SEN (120x65x60)**



- Three Neon indicators, orange colour, for AC indication (230V AC)

**3ALV (120x65x60)**



- Battery alarm for 12V DC or 24V DC batteries. Generates an alarm in case of under or over voltage
- Optional relay for 4ZUM buzzer
- Switch to disconnect the alarm

**4ZUM (60x65x60)**



- Buzzer for acoustic alarm. 12/24V DC (9... 30V)

**3SE8 (120x65x60)**



- Module with 8 LED indicators of 4,4mm diameter. Green colour. 12/24V DC

# ELECTRICAL SWITCHBOARDS

## Lights

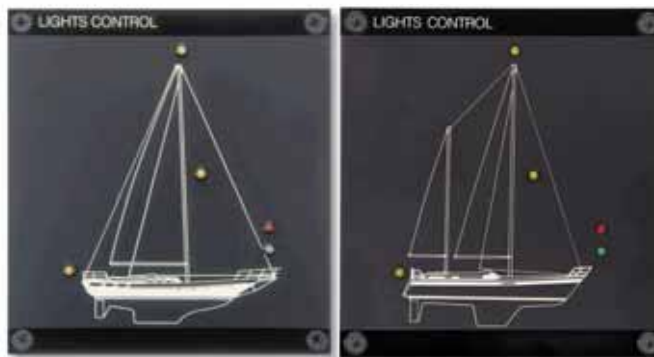
### control

Security in sea lies in being always visible, especially during the night. Thus, it is very important to be sure that navigation and/or anchor lights really work when they are switched on. EnerNaval, well aware of this problem, has designed an electronic system which detects if navigation light is switched on or there is any problem. In this case, an indicator light and an acoustic alarm will warn you.

#### 2CL1F / 2CL2F (120x130x70)

- Sailing boat (sloop) with an electronic PCB which warns you in case some navigation light is faulty
  - 5 luminous LED indicators
  - Alarm relay for each of the 5 circuits included

Possibility to have a customised drawing for your boat



- Sailing boat (ketch) with an electronic PCB which warns you in case some navigation light is faulty
  - 5 luminous LED indicators
  - Alarm relay for each of the 5 circuits included

Possibility to have a customised drawing for your boat

#### 1CLBF (240x130x70)



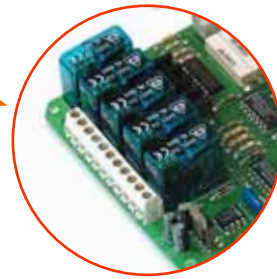
- Module with a motorboat drawing. Navigation lights for 5 position lights included. A second PCB to check the proper running of the bilge pumps is optional
- Possibility to have a customised drawing of your boat with 5 LED indicators for the navigation lights and 3 for the bilge pump control  
Ref. 1CLBF-BP: customised panel without navigation lights circuit

#### 1CLPF (240x130x70)



- Module with a fishing boat drawing with 2 navigation light circuits to control up to 10 position light circuits according to the current laws  
Ref. 1CLP: module with the drawing and LED indicators but WITHOUT navigation light circuits

CLNR



5 relays to connect an acoustic alarm

An electronic PCB mounted on the rear part of the panel allows to detect if any navigation light is faulty through a luminous alarm.

12V\*

\* For a 24V DC power supply, a DC/DC Orion converter (24/12, 5A) is required



# ELECTRICAL SWITCHBOARDS

## Bilge pump

### control

The quicker we notice there is water in the bilge, the more safety is our boat.

Due to our great experience in selecting bilge level sensors, we suggest you to use 2 kind of different sensors in the main bilges of the boat or bilges where there is notable water admission.

These two kinds of sensors (float sensor or capacitive sensor) reduce the faulty running due to a manufacturing fault or strange elements in the bilge (oils, soap, objects, etc.)

#### FLOAT SENSOR



**UPS-01/12:** With alarm ,15A contact,  
12V DC power supply

**UPS-01/24:** With alarm ,15A contact,  
24V DC power supply

**UPS-02/12:** Without alarm,12V DC power supply

**UPS-02/24:** Without alarm,24V DC power supply

#### CAPACITATIVE SENSOR



**ASEIN01:** 12V DC power supply, contact capacity 10A

**ASEIN02:** 12V DC power supply, contact capacity 15A

**ASEIN03:** 24V DC power supply, contact capacity 15A

#### 3CAA (120x65x60)



- Bilge pump control module
- 3 positions switch/push-button switch: automatic, stop, manual
- Luminous alarm
- Please, specify 12V DC or 24V DC

#### 4COA (60x60x60)



- Bilge pump control panel with switch for automatic or manual run. Run indicator