PRODUCT BULLETIN SB 8010-2000

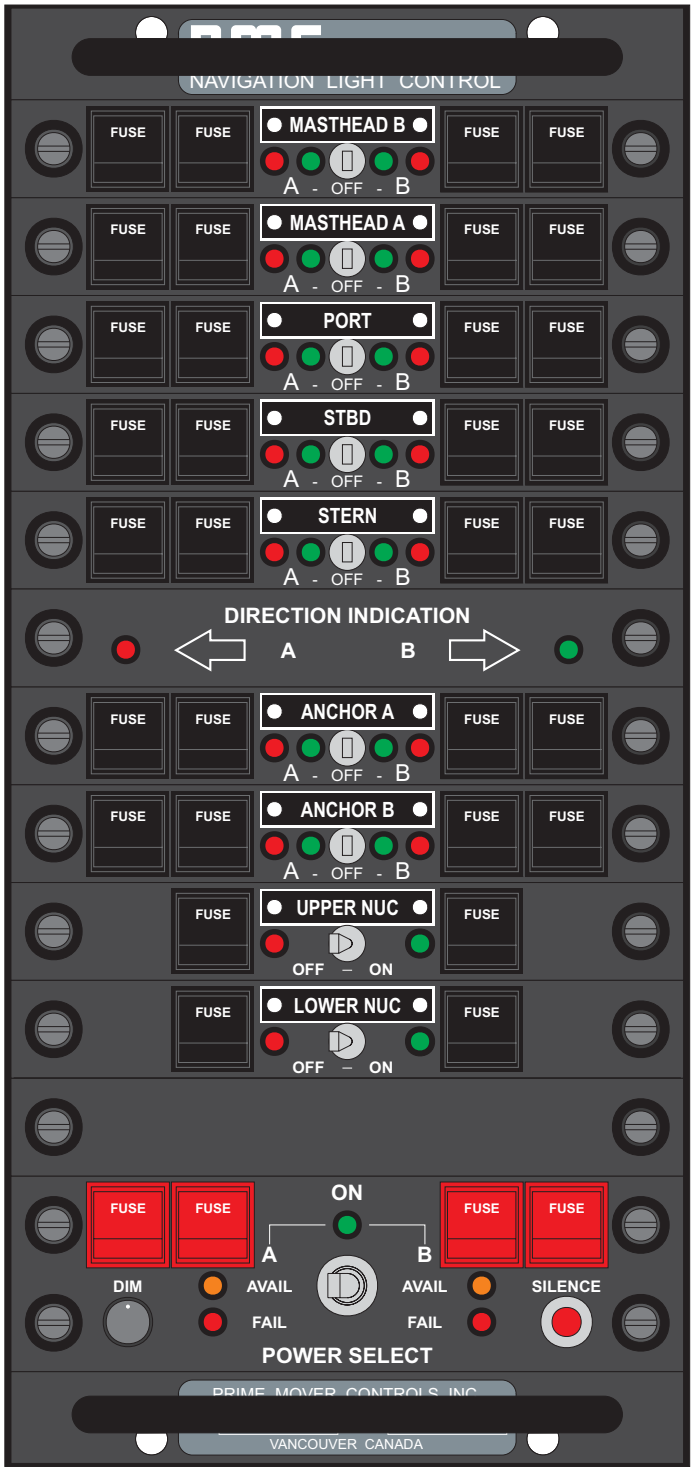
NAVIGATION LIGHT CONTROL PANEL

Type 8010

The PMC Type 8010 Navigation Light control panel is a compact, modular, solid-state control, alarm and monitoring unit. The panel has a black anodized front and is designed for flush mounting in the wheelhouse.

FEATURES

- 24 Hour supervision of remote navigation lights and wiring - with light on or off
- All indicator lamps are long life LEDs with common linear dimmer control
- Power on displayed by green lamp
- Fault signaled by red lamp and internal horn
- Horn silence button included on front
- Protected against external short circuits
- Wide input current sensing range
- Dual input power sources - AC or DC - fully monitored and alarmed
- Solid state modular design with optically isolated sensors
- All electronics are on plug-in modules secured by captive knurled screws
- Large rear terminals for direct wiring
- Compact rugged construction, withstands shock and vibration
- Available in three flush mounted enclosures for 7, 11 or 15 lamp modules
- Optional horn relay contacts available
- Optional coupling of adjacent power switches
- Marine approvals



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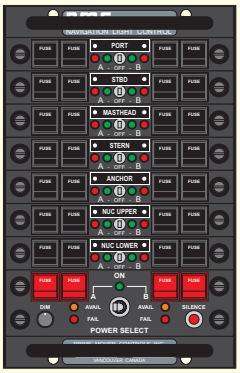
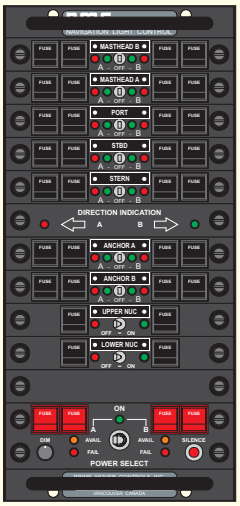
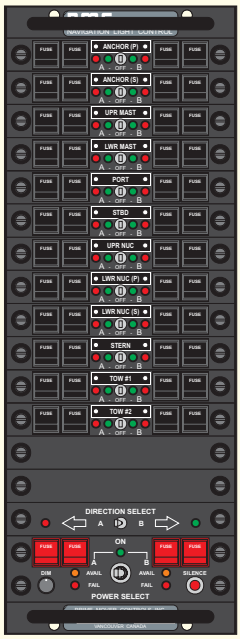
STANDARD ENCLOSURES



11" Size
7 Lamp Modules
1 Power Select Module



15" Size
11 Lamp Modules
1 Power Select Module



19" Size
15 Lamp Modules
1 Power Select Module

Type 8010 Navigation Light Control Panel

The Type 8010 Navigation Light Control Panel is a compact, modular, solid state unit designed to monitor the status of remote navigation running lights. It provides a visual and audible alarm when any remote light fails. Monitoring is continuous whether lights are turned on or off.

Three flush mounted enclosure sizes are available (11", 15" and 19") each having the capability of accepting up to 7, 11 and 15 lamp modules respectively. All positions in an enclosure are powered and active whether used or not. Unused positions are provided with blank front cover plates.

The 1" (25.4 mm) high lamp control modules are available for monitoring one dual or one single running light. Other options include a twin single module which monitors two single lights separately with one common off-on switch, and a lamp switch module designed to switch power directly to external loads.

An optional coupling bar capable of connecting 2, 3 or 4 adjacent power switches can be provided between modules (except type TS) with identical switch arrangements.

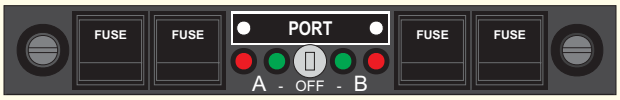
All modules include a power off-on switch, fuses, a green power on LED and a red fault LED. When power is switched to the navigation light the green LED turns on. Failure due to remote open circuit, burnout of remote light, external wiring fault or blown fuse, whether the light is turned on or not, causes the red LED and horn to operate. The green LED, if on, goes off. The horn may be silenced with the front mounted silence button. Silencing the horn for one fault does not prevent a new fault from re-activating the horn. On dual units, manual transfer to the back-up light does not clear the red fault display. When the problem is corrected, return to normal is automatic. Navigation lights with a wide range of wattage can be monitored, without circuit modification.

Each control panel operates from two external AC and/or DC input power sources having the same nominal voltage. Power control is provided by the 2" (50.8 mm) high power select module which includes an A-off-B power select switch, supply fuses and LED status indicators for power on, power available and power failed. Also included are a silence pushbutton and a linear dimmer control for all LEDs. Failure of either input power source actuates a visual and audible alarm which may be silenced and is reset automatically when power is restored.

The Type 8010-2000 Navigation Light Control Panel is available with optional driver outputs for remote fixed mimic displays.

NAVIGATION LIGHT CONTROL PANEL

DUAL LAMP CONTROL MODULE
TYPE DS



For controlling and monitoring dual navigation lights. Switch selects primary or back-up light manually.

TWIN SINGLE LAMP CONTROL MODULE
TYPE TS

For controlling and monitoring two single independent navigation lights simultaneously. A single switch controls both lights.

SINGLE LAMP CONTROL MODULE
TYPE SS

For controlling and monitoring one single navigation light. Single switch controls one light.

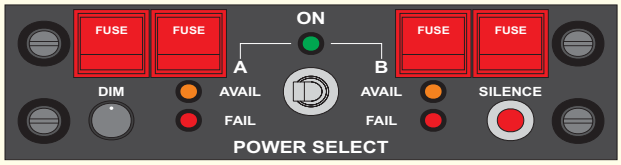
LAMP SWITCH CONTROL MODULE
TYPE LS

For controlling external loads (up to 2.5 Amps) from an independent supply. Input power and fuse failure is monitored and alarmed.

INDEPENDENT SWITCH CONTROL MODULE
TYPE IS

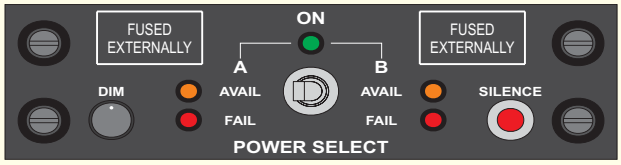
For controlling external loads (up to 2.5 Amps) from an independent supply. Lamp circuit is monitored and alarmed.

POWER SELECT MODULE
TYPE PSM

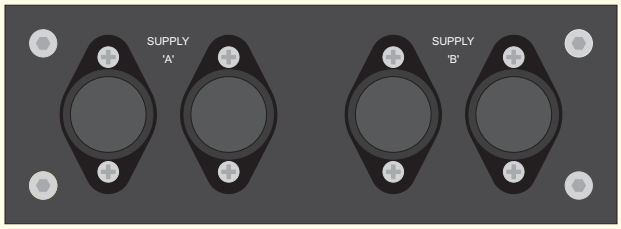


For controlling and monitoring two independent power sources for all lamp control loads. Failure of one supply is visually and audibly alarmed; transfer to alternate supply is manual. Module includes horn, silence and dimmer functions for system.

EXTERNALLY FUSED POWER SELECT MODULE



EXTERNAL FUSE CONSOLE PLATE



For use when the total current of all navigation lights exceeds 10 Amps.

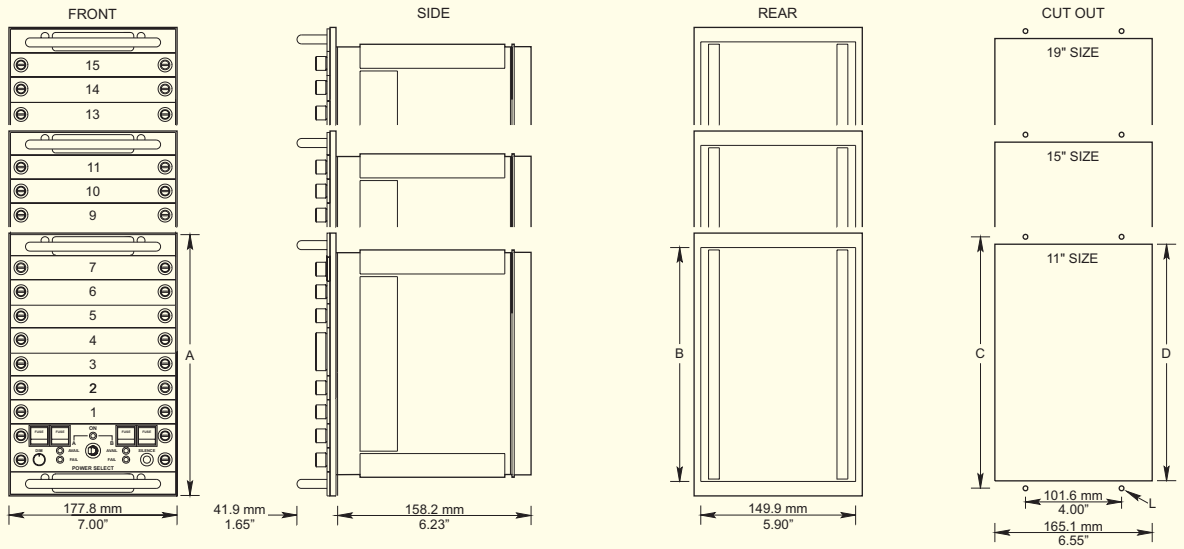
DIRECTION SELECT/INDICATION MODULE

For selection and indication of direction for double ended vesssels.

BLANK FRONT COVER PLATE
TYPE BL

For covering unused positions.

DIMENSIONS FOR TYPE 8010 NAVIGATION LIGHT CONTROL PANEL



ENCLOSURE DIMENSIONS (INCHES)			
A	11	15	19
B	9.60	13.60	17.60
C	10.37	14.37	18.37
D	9.75	13.75	17.75
E	4 HOLES DRILL 0.220 OR TAP 10-24 UNC		
F	MOUNTING HARDWARE KIT P/N 8800-9045		

Mounting hardware kit "F", included with each panel, consists of 4 socket cap machine screws, nuts and washers

ENCLOSURE DIMENSIONS (mm)			
A	279.4	381.0	482.6
B	243.8	345.4	447.0
C	263.4	365.0	466.6
D	247.7	349.3	450.9
E	4 HOLES DRILL 5.50 OR TAP M5 X 0.8		
F	MOUNTING HARDWARE KIT P/N 8800-9046		

SCALE 1 : 8

SPECIFICATIONS:

Electrical:

- Supply Voltage: 12, 24, 32, 120 or 240 Volts AC 50-60 Hz or 12, 24, 32 or 120 Volts DC (Primary and secondary power source must have same nominal voltage)
- Navigation lamp rating: From 30 Watts @ 12 Volts to 200 Watts @ 240 Volts
- Enclosure rating: Total current of all navigation lights powered continuously should not exceed 10 Amps per enclosure (15 Amps with external fuses)
- Wire size: 8 AWG power wiring, 12 AWG navigation light wiring, 16 AWG control wiring (up to two wires per terminal)

Environmental:

- Operating temperature -20 to +70 °C
- Storage temperature -40 to +85 °C
- Vibration: Frequency range 2-100 Hz Velocity peak to peak 2 mm below 13.2 Hz Acceleration amplitude 0.7 g above 13.2 Hz

Physical:

- Dimensions: 279.4 mm, 381.0 mm or 482.6 mm H × 177.8 mm W × 158.2 mm D (11", 15" or 19" H × 7" W × 6.23" D)
- Weight: 5.9 kg (13 lbs) 19" Enclosure
- 4.8 kg (10.5 lbs) 15" Enclosure
- 3.6 kg (8 lbs) 11" Enclosure

ORDERING DATA:

1. Select number of modules of each type:
   Type DS _____
   Type TS _____
   Type SS _____
   Type LS _____
   Type IS _____
   Type PSM _____
2. Select enclosure size:
   ❑ 11" size - 7 lamp modules
   ❑ 15" size - 11 lamp modules
   ❑ 19" size - 15 lamp modules
   Each enclosure includes:
   - 1 power select module - type PSM
   - Blank cover plates as required
3. Specify:
   - Primary power _____ volts ___ AC or DC
   - Secondary power ____ volts ___ AC or DC
   - List of navigation lights
   - Enclosure position for each navigation light
   - Bulb wattage for each navigation light
4. Options:
   - List of navigation lights in common task group
   - Relay contacts for remote alarm
   - Mimic output drive capability

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