

# **Marine Panel**

## **Switch & Breaker with Mounting Panel**



**Package Contain:**

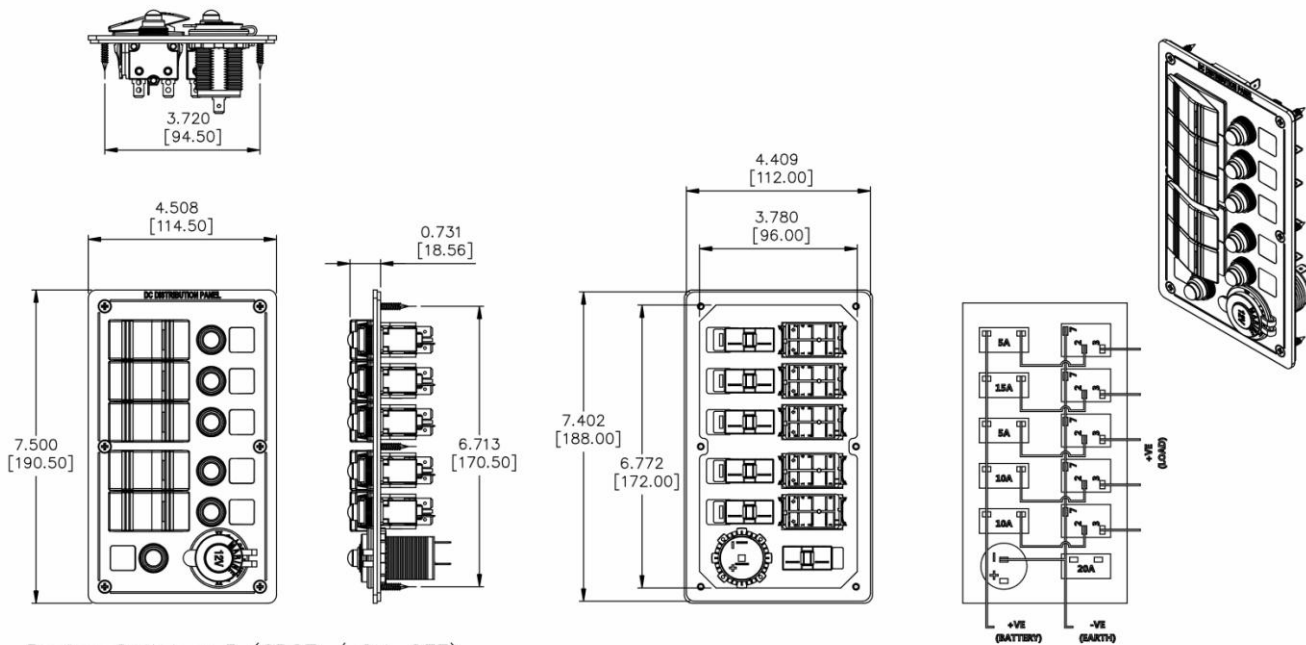
5 x Rocker Switch  
3 x 5A Breaker  
2 x 10A Breaker  
1 x 15A Breaker  
1 x Power Socket  
1 x Rubber Pad  
6 x Stainless Steel Screw  
40 x Indicator

**Specification:**

|                            |                            |                                                                                                                                                      |
|----------------------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SWITCH TYPE:               |                            | 3001748316                                                                                                                                           |
| POLES/THROWS:              |                            | SPST                                                                                                                                                 |
| SWITCH FUNCTIONS:          |                            | ON-OFF                                                                                                                                               |
| ELECTRICAL CHARACTERISTICS | VOLTAGE:                   | 12VDC                                                                                                                                                |
|                            | TOTAL LOAD CURRENT:        | 50A                                                                                                                                                  |
|                            | ELECTRICAL LIFE:           | 10,000 make-and-break cycles at full load                                                                                                            |
|                            | CONTACT RESISTANCE:        | 20m-ohms max. initial @ 2-4VDC, 100mA                                                                                                                |
|                            | INSULATION RESISTANCE:     | Apply 500VDC for 1min±5sec. After which measurement to be made b/w terminals shall result 100M-ohms min.                                             |
|                            | DIELECTRICAL STRENGTH:     | 1,500VAC (50Hz-60Hz) RMS @ sea level shall result no damage to parts arcing or flashover                                                             |
| RELIABILITY PERFORMANCE    | OPERATING TEMPERATURE:     | -30Celsius degree to +85Celsius degree                                                                                                               |
|                            | MECHANICAL LIFE:           | Without load, 10,000cycles min.                                                                                                                      |
|                            | SOLDERING HEAT RESISTANCE: | Max soldering temperature @ 260Celsius degree, immersion time 5+/-1sec, frequency of soldering process @ 2 times max.                                |
|                            | COLD TEST:                 | Stored at temperature -30(+/-3)Celsius degree for 48 hours, shall result no changes to switch's electrical performance                               |
|                            | HOT TEST:                  | Stored at temperature +85(+/-3)Celsius degree for 48 hours, shall result no changes to switch's electrical performance                               |
|                            | HUMIDITY TEST:             | Stored at temperature 40(+/-3)Celsius degree with relative humidity 90%~95% for 48 hours, shall result no changes to switch's electrical performance |

|  |                         |                                                                                                                                                                                                                                                                                                                 |
|--|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <b>SALT SPRAY TEST:</b> | Stored at temperature @ 35(+/-3)Celsius degree, and salt solution concentration of 5% with full air temperature @ 47(+/-3) Celsius degree and air pressure 1.0kg for 48 hours. The switch shall result no corrosion as well as no apparent changes to its functional performance. Per ASTM-B117 & JIS-Z371 STD. |
|--|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SOLDERING &amp; CLEANING RECOMMENDATION</b> | <b>HAND SOLDERING:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                          | Max. temperature @ 350 Celsius degree (662F)with continuous soldering time @ 3sec. max.                                                                                                                                                       |
|                                                | <b>CLEANING PROCESS:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                        | Noted, the switch is "not totally sealed" so it is important not to immerse/spray or clean unsealed areas of the switch during flux removal. Improper cleaning could cause switch deficiencies such as intermittence or open contact failures |
| <b>PACKAGE</b>                                 | <b>INTERNAL PACKAGING:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                      | Tray                                                                                                                                                                                                                                          |
|                                                | <b>RoHS IDENTIFICATIONS:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                    | Package is attached with a label marking "RoHS"                                                                                                                                                                                               |
| <b>PRODUCT HANDLING &amp; STORING</b>          | <p>The switch is suitable for power rated applications, rating recommendation is per aforementioned above (Contact rating section)</p> <p>Problem relates to terminal oxidization can be prevented by storing product in an environment that is dry and cool with the relative humidity less than 90%. Noted, prior to mounting products onto circuit board as well as for unused units, it is recommended to keep them in the bag and with the bag sealed.</p> |                                                                                                                                                                                                                                               |



Rocker Switch x 5 (SPST / ON-OFF)  
 5A Breakers x 3  
 10A Breakers x 2  
 15A Breakers x 1  
 Power Socket x 1  
 Rubber Pad x 1  
 Stainless Steel Screw x 6  
 Symbol x 40 option  
 Size of Panel: 114.5x190.5mm  
 Size of Screw Hole: 94.5x170.5mm  
 Size of Hole: 86x163mm