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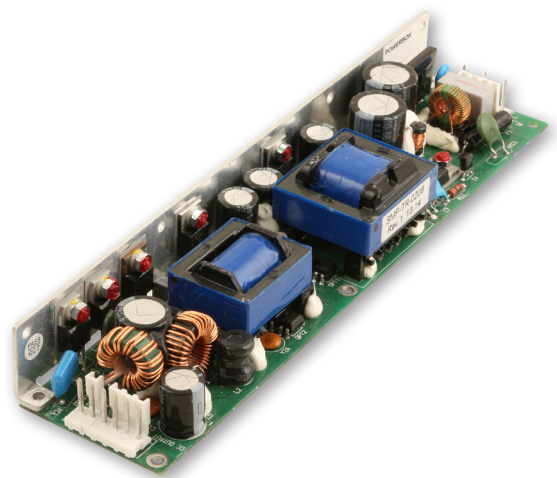
POWERBOX
OFMA60AD12



Flexible power solutions for marine commander bridge

The requirements imposed on products responsible for shipping and offshore installations are greater than the average ones for industrial and office environments. They require power designers to follow strict design rules, employ technologies and the selection of components that comply with international standards.

Generally two zones are recognized on a ship, namely the "bridge and the open deck zone", and the "general power zone" which basically covers all other areas of the ship. The open deck areas and bridge place extra demands on electromagnetic emission and immunity (EMC) since sensitive equipment is positioned here such as communication, radar and navigational devices. The EMC requirements regarding emissions are required to be below the known EN55022 Level B and measurement begins at 10 kHz instead of the usual 150 kHz.



The limits regarding mechanical and climatic requirements are also more demanding than for the average industrial application. Vibration levels up to 4g are common, as well as large temperature fluctuations ranging from -25 to + 70 degrees C, and high relative humidity where condensation cannot be excluded.

In the case of powering critical equipments such as those used for navigation and safety, power supplies are connected to two power networks, a 90 to 264VAC one which is the common voltage distributed from the power generators to the overall vessel, and to a 24VDC supply used for the battery backup system in case of failure of the main voltage.

In normal circumstances power supplies are fed from the AC supply, but in the event of this being lost for whatever reason, they need to be powered by the DC bus and changeover is to be effected without interruption. This is a particular feature designed by Powerbox in the OFMA60AD12, thus guaranteeing full performance in both conditions.

Designed for commander bridge applications where noise levels must be kept to a minimum, the OFMA60AD12 mechanical design has been optimized for natural conduction cooling. All dissipative components are fixed to a single metal plate that can be attached to a heat sink or a cold wall.

The OFMA60AD12 complies with maritime navigation and radio equipment systems (General requirement / Method of testing and required test results) IEC 60945, as well as other related standards for ICT and radio equipment such as EN55024, EN55022, EN61000-6-3 and EN61000-6-1.

Features

- Design optimized for convection cooling
- Dual input voltage AC and DC
- Automatic switching of input supply in the case of main power failure
- Meets marine safety and environmental standards

Input

- 90 to 264VAC
- 17.5 to 36VDC

Output

- 12VDC, 5A, 60W

Environmental

- -20°C to +70°C

About Powerbox

Founded in 1974, with headquarters in Sweden and operations in 15 countries across four continents, Powerbox serves customers all around the globe. The company focuses on four major markets - industrial, medical, transportation/railway and defense - for which it designs and markets premium quality power conversion systems for demanding applications. Powerbox's mission is to use its expertise to increase customers' competitiveness by meeting all of their power needs. Every aspect of the company's business is focused on that goal, from the design of advanced components that go into products, through to high levels of customer service. Powerbox is recognized for technical innovations that reduce energy consumption and its ability to manage full product lifecycles while minimizing environmental impact. Powerbox is a Cosel Group Company.

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