UPS Imtech Bridge Guard

IBG-UPS 214-7-0-1

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Introduction

If the standard power supply doesn't suffice for the mandatory settings as demanded in the MSC 128(75), it is possible to place a UPS as an optional backup for the power supply. This UPS will be powered by the ships batteries and only take over as the batteries of the ship are drained.

Abbreviations list

BNWAS	Bridge Navigational Watch Alarm System
UPS	Uninterruptible power supply

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1. Phoenix UPS

For the BNWAS we use the Phoenix Contact Quint UPS/24VDC/24VDC. This UPS is known for his high reliability. The UPS will be powered by the ships power supply which will run through the UPS. As soon as the power supply ceases the UPS will select the attached UPS battery to feed the BNWAS.

Figure 1-1: Phoenix Contact Quint UPS/24VDC/24VDC

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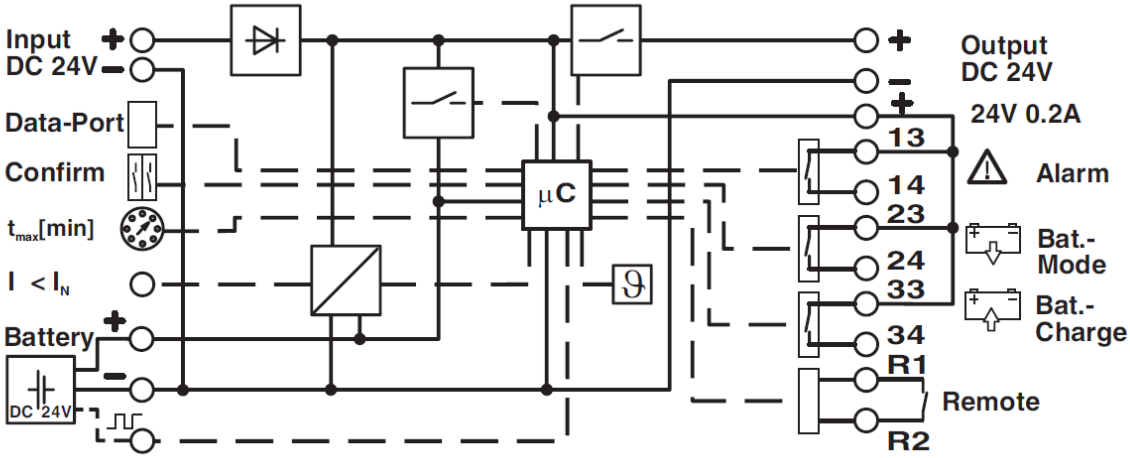

Figure 1-2: Schematic

Input data	
Nominal input voltage	24 V DC
DC input voltage range	18 V DC ... 30 V DC
Buffer period	2 h ()
Current consumption mains mode Max. No load Charging process	 9.4 A 60 mA 1.9 A
Fixed connect threshold	≤ 22 V DC
Output data	
Nominal output voltage	24 V DC
Output voltage range	18 V DC ... 30 V DC
Nominal output current	5 A
Derating	60 °C ... 70 °C (2.5%/K)
Output current limit	(In mains mode according to connected upstream current limiting device) > 7.5 A (Battery operation)
Power dissipation (mains mode) Idle Nominal Load BOOST	 1.4 W 2.1 W 2.4 W
Power dissipation (battery operation) Idle Nominal Load BOOST	 1.3 W 3.3 W 4.1 W
Output power	120 W
Efficiency	> 98.7 %
Connection in parallel	Yes, up to 2 modules with redundancy module
Connection in series	No

Figure 1-3: Specification

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