

# **Switch Imtech Bridge Guard**

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## References

IMO Res.A.694(17), MSC.128(75), MSC.191(79), IEC 60945 (2002) inc. corr.1 (2008), IEC 61162 Series, IEC 62288 Ed.2.0 (2008), IEC 62616 (2010) , IEC 61696-1 IEC FDIS Ed.2 TC80-690 FDIS VDR, IEC 61924-2 NEN-EN-IEC Ed.1 2012-12

## Introduction

The standard standard switch that is used for the BNWAS depends on which system it is integrating with. In a stand-alone version, a switch might not be necessary. In combination with the Imtech NavVision AM(C)S mostly the Phoenix Contact FL Switch SGNT series is used.

This serie is type-approved under Bureau Veritas certificate number 22935/AO BV

## Abbreviations list

BNWAS	Bridge Navigational Watch Alarm System
LED	Light Emitting Diode

## 1. The Switch

The Phoenix switch is a Switch/repeater that conforms to the IEEE 802.3. it comes in a 5-ports and an 8-ports version. It will need a supply voltage of 24V DC. If power is supplied, it needs to last at least for the given time in MSC 128(75). The power supply usually lies outside the scope of the BNWAS.



Figure 1-1: 5-port and 8-port switch

## 2. Specifications

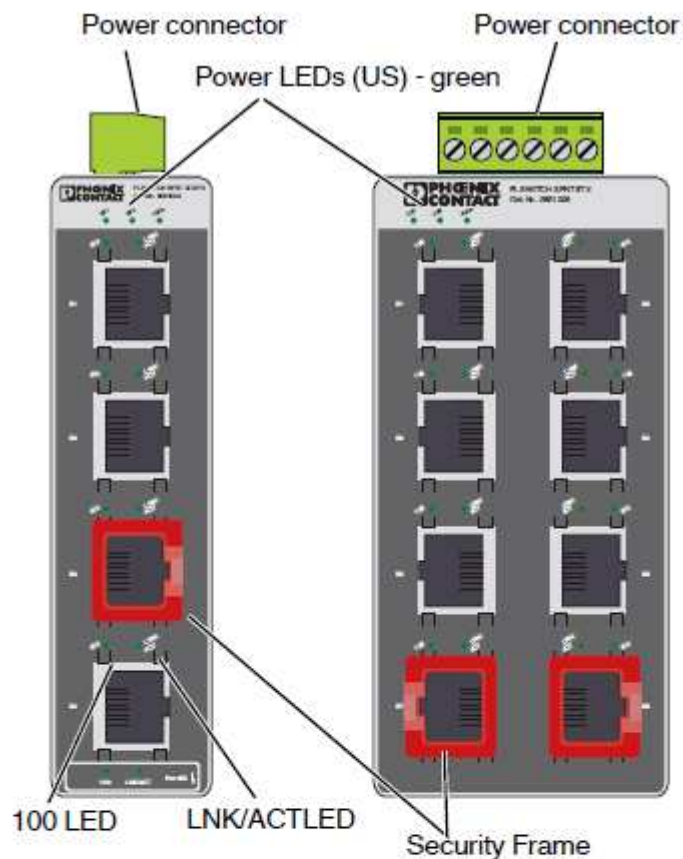


Figure 1 Power Connector, LED Locations and Security Frame

### 5.1 Diagnostic and Status Indicators

Des.	Color	Status	Meaning
US1 and US2	green	ON	Supply voltage (US) in the tolerance range
		OFF	Supply voltage (US) too low
Alarm	red	ON	US1 or US2 is too low or missing
			Port link failure
		OFF	Normal operation

Figure 2-1: Drawing and diagnostics



## General Data

Function	Switch/repeater; conforms to standard IEEE 802.3
Latency of the communication processor	8 µs plus frame time
Housing dimensions (width x height x depth)	
5-port switch, without connectors	30 x 130 x 100 mm
8-port switch, without connectors	50 x 130 x 100 mm
Weight, without connectors	
FL SWITCH SFNT 5TX(-C)	271 g
FL SWITCH SFNT 8TX(-C)	457 g
FL SWITCH SFNT 4TX/FX(-C)	276 g
FL SWITCH SFNT 7TX/FX(-C)	464 g
FL SWITCH SFNT 7TX/FX ST(-C)	465 g
FL SWITCH SFNT 6TX/2FX(-C)	484 g
FL SWITCH SFNT 6TX/2FX ST (-C)	484 g
Operating temperature	-40°C to 75°C
Storage temperature	-40°C to 85°C
Degree of protection	IP20, DIN 40050, IEC 60529
Protection class	Class 3 VDE 0106; IEC 60536
Humidity (operation and storage)	5% to 95%, no condensation
Air pressure (operation)	62 kPa to 108 kPa, 4160 m above sea level
Air pressure (storage)	62 kPa to 108 kPa, 4160 m above sea level
Mounting	NS 35 (EN 60715)
Preferred mounting position	Perpendicular to a standard mounting rail
Connection to protective earth ground	Snapped onto a grounded mounting rail

## Supply Voltage (US)

Connection type	Removable, screw-clamp connector
Wire size (solid/stranded/AWG)	0.2 to 2.5 mm <sup>2</sup> / 0.2 to 2.5 mm <sup>2</sup> / 24 to 12 AWG
Recommended PE wire size	2.5 mm <sup>2</sup>
Nominal power supply	24 V DC
Permissible ripple	3.6 V <sub>pp</sub> within the permissible voltage range
Permissible voltage range	9 V DC to 32 V DC
Test voltage	500 V DC for one minute
Protection against polarity reversal	Present

Figure 2-2: General data