

# Type Approval Certificate



This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the GL Type Approval System.

Certificate No. **86 569 - 10 HH**

Company **PHOENIX CONTACT GmbH & Co. KG**  
**Flachsmarktstraße 8**  
**32825 Blomberg, GERMANY**

Product Description **Unmanaged Ethernet Switches**

Type **FL Switches SFNT 4TX/FX, 5TX, 7TX/FX, 7TX/FX ST, 8TX**

Environmental Category **C/EMC1**

Technical Data /  
Range of Application  
**Interfaces**  
**FL Switch SFNT 4 TX/FX:**  
**Interface: Ethernet (RJ45) / Fiber optic interface**  
**No. of ports: 4 RJ45 ports**  
**Type of connection: RJ45 socket, auto negotiation and auto crossing / SC-DUPLEX**  
**Transmission physics: Ethernet in RJ45 twisted pair / Multimode glass fiber**  
**Transmission speed: 10/100 Mbit/s (RJ45) / 100 Mbit/s (SC-D, full duplex)**  
**Firmware: V. 1.10**

**FL Switch SFNT 5 TX:**  
**Interface: Ethernet (RJ45)**  
**No. of ports: 5 RJ45 ports**  
**Type of connection: RJ45 socket, auto negotiation and auto crossing**  
**Transmission physics: Ethernet in RJ45 twisted pair**  
**Transmission speed: 10/100 Mbit/s (RJ45)**  
**Firmware: V. 1.10**

Test Standard **Guidelines for the Performance of Type Approvals Chapter 2, Edition 2003**

Documents **Test report :E091569E1 2nd; E091569E2 2nd; U091569E1; U091569E2; Firmware test, dated 2008.11.20; Function test Ver. B1, dated 2009.01.05 + Vers. A3, dated 2009.03.30; GL-Software Questionnaire according. class 3, dated 2010.01.28; Documents and drawings according to submitted file.**

Remarks **None**

Valid until **2015-01-31**

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File No. **I.B.08**

Hamburg, 2010-02-01

Type Approval Symbol



**Germanischer Lloyd**

  
Jürgen Wittburg

  
Heinz Scheffler

This certificate is issued on the basis of "Guidelines for the Performance of Type Approvals Part 1, Procedure".

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**FL Switch SFNT 7 TX/FX:**

Interface: Ethernet (RJ45) / Fiber optic interface

No. of ports: 7 RJ45 ports

Type of connection: RJ45 socket, auto negotiation and auto crossing / SC-DUPLEX

Transmission physics: Ethernet in RJ45 twisted pair / Multimode glass fiber

Transmission speed: 10/100 Mbit/s (RJ45) / 100 Mbit/s (SC-D, full duplex)

Firmware: V. 1.10

**FL Switch SFNT 7 TX/FX ST:**

Interface: Ethernet (RJ45) / Fiber optic interface

No. of ports: 7 RJ45 ports

Type of connection: ST format

Transmission physics: Ethernet in RJ45 twisted pair / Multimode glass fiber

Transmission speed: 100 Mbit/s (ST, full duplex)

Firmware: V. 1.10

**FL Switch SFNT 8 TX:**

Interface: Ethernet (RJ45)

No. of ports: 8 RJ45 ports

Type of connection: RJ45 socket, auto negotiation and auto crossing

Transmission physics: Ethernet in RJ45 twisted pair

Transmission speed: 10/100 Mbit/s (RJ45)

Firmware: V. 1.10

**Function**

Basic functionality: Unmanaged switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode

Status and diagnostics LEDs : Supply voltage, link and activity per port

Alarm NC Contact: Supply voltage or if a port fails, 24 V DC/100mA

**Network extension parameters**

Cascading depth: Network, line and star structure: any

Maximum conductor length (twisted pair): 100 m

Supply voltage: 24 V DC

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