

[1] **TYPE EXAMINATION CERTIFICATE**



[2] **Equipment or Protective System intended for use in Potentially Explosive Atmospheres
Directive 2014/34/EU**

[3] Type Examination Certificate Number: **DEMKO 16 ATEX 1617X Rev. 0**

[4] Product: **FL SWITCH SFNT Series**

[5] Manufacturer: **PHOENIX CONTACT GmbH & Co. KG**

[6] Address: **Flachsmarktstrasse 8, 32825, Blomberg, Germany**

[7] This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] UL International Demko A/S certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment or Protective system intended for use in potentially explosive atmospheres given in Annex II to Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

The examination and test results are recorded in confidential report no. **4787115893**

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012+A11:2013 EN 60079-15:2010

except in respect of those requirements listed at item 18 of the Schedule.

[10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

[11] This Type examination certificate relates only to the design of the specified product, and not to specific items of product subsequently manufactured.

[12] The marking of the product shall include the following:

II 3 G Ex nA nC IIC T4 Gc

Certification Manager
Jan-Erik Storgaard

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2016-10-31

Certification Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
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Schedule

TYPE EXAMINATION CERTIFICATE No.

DEMKO 16 ATEX 1617X Rev. 0

Description of Product:

The FL SWITCH SFNT Series is a range of Factory Line switches that can be used for quick and cost-effective Ethernet network expansion to the field level. These unmanaged switches allow operation across a wider temperature range than most switches, allowing networks to expand into process industry environments, such as oil/gas, chemical, water/wastewater, wind energy, security, monitoring and some marine segments. Due to the narrow housing design, the switches are suitable for use in control cabinets and junction boxes.

The FL SWITCH SFNT Series supports the auto negotiation function on the RJ45 ports and offer transmission speeds of 10/100 Mbps for TX models and 10/100/1000 Mbps for GT models. Mixed operation for the connection of segments with different data transmission speeds is also supported. The RJ45 ports offer an auto crossing function, which means it is not necessary to make a distinction between 1:1 and crossover cables. Models with the "-C" designation have a conformal coating on the PWB, but are otherwise identical to the models without this designation.

| FL | SWITCH | SF | N | T | 5TX ST | -C |
|----|--------|-----|----|---|--------|-----|
| I | II | III | IV | V | VI | VII |

| Part | Description |
|------|--|
| I | Factory Line: FL – The brand name of the family of Phoenix Contact Ethernet Infrastructure Products |
| II | Ethernet Switch: SWITCH – Ethernet Switch |
| III | Standard Function: SF – Unmanaged Switch |
| IV | Housing: N – Narrow Housing |
| V | Operating Temperature: T – Wide Operating Temperature (-40°C to 75°C) |
| VI | Number of RJ45 or Fiber Optic Ports: __TX – Number of RJ45 Ports. May be 4-8, or 14-16. __FX - Number of Multimode fiber ports. May be blank or 2.. __FX ST – Number of Fiber ports that use multimode fiber with ST connectors. May be blank or 2. |
| VII | Conformal Coating: -C – Conformal Coating |

The optical radiation output of the product with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 2014/34/EU is not covered in this certificate.

Temperature range:

The ambient temperature range is -40 °C to +75 °C.

Schedule

TYPE EXAMINATION CERTIFICATE No.

DEMKO 16 ATEX 1617X Rev. 0

Electrical data

| Model | Voltage / Current | T-Code |
|-----------------------------|-------------------|--------|
| FL SWITCH SFNT 4TX/FX | 24 V dc / 180 mA | T4 |
| FL SWITCH SFNT 4TX/FX-C | 24 V dc / 180 mA | T4 |
| FL SWITCH SFNT 5TX | 24 V dc / 120 mA | T4 |
| FL SWITCH SFNT 5TX-C | 24 V dc / 120 mA | T4 |
| FL SWITCH SFNT 6TX/2FX | 24 V dc / 250 mA | T4 |
| *FL SWITCH SFNT 6TX/2FX-C | 24 V dc / 250 mA | T4 |
| FL SWITCH SFNT 6TX/2FX ST | 24 V dc / 250 mA | T4 |
| FL SWITCH SFNT 6TX/2FX ST-C | 24 V dc / 250mA | T4 |
| FL SWITCH SFNT 7TX/FX | 24 V dc / 175 mA | T4 |
| FL SWITCH SFNT 7TX/FX-C | 24 V dc / 175 mA | T4 |
| FL SWITCH SFNT 7TX/FX ST | 24 V dc / 175 mA | T4 |
| FL SWITCH SFNT 7TX/FX ST-C | 24 V dc / 175 mA | T4 |
| FL SWITCH SFNT 8TX | 24 V dc / 153 mA | T4 |
| FL SWITCH SFNT 8TX-C | 24 V dc / 153 mA | T4 |
| FL SWITCH SFNT 14TX/2FX | 24 V dc / 350 mA | T4 |
| FL SWITCH SFNT 15TX/FX | 24 V dc / 315 mA | T4 |
| FL SWITCH SFNT 16TX | 24 V dc / 275 mA | T4 |

Routine tests:

None.

Descriptive Documents

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this Type Examination Certificate.

Special Conditions of Use:

- The equipment shall be installed in an enclosure that provides a degree of protection not less than IP54 in accordance with EN 60079-15.
- The enclosure must require the use of a tool or key to open.
- The equipment shall only be used in an area of not more than pollution degree 2, as defined in EN 60664-1.
- Transient protection shall be provided that is set at a level not exceeding 140% of the peak rated voltage at the supply terminals to the equipment.

Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

Additional information



The trademark

will be used as the company identifier on the marking label.