# FL SWITCH SFN 5TX-24VAC - Industrial Ethernet Switch 

## 2891021

https://www.phoenixcontact.com/us/products/2891021

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Ethernet switch, 5 TP RJ45 ports, automatic detection of data transmission speed of 10 or 100
 Mbps (RJ45), autocrossing function

## Your advantages

- DC and AC power supplies
- RJ45 ports support a transmission speed of $10 / 100 \mathrm{Mbps}$
- Fiber-optic ports support 100 Mbps
- QoS-prioritized (Quality of Service) messages
- Local diagnostic indicators with LEDs
- The switch also offers cable locking and port blocking
- Auto negotiation and autocrossing detection simplifies installation and setup


## Commercial data

| Item number | 2891021 |
| :--- | :--- |
| Packing unit | 1 pc |
| Sales key | DN19 |
| Product key | DNN113 |
| Catalog page | 4046356457156 |
| GTIN | 448.5 g |
| Weight per piece (including packing) | 277 g |
| Weight per piece (excluding packing) | 85176200 |
| Customs tariff number | TW |
| Country of origin |  |

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## Technical data

| Dimensions |  |
| :--- | :--- |
| Width | 30 mm |
| Height | 120 mm |
| Depth | 70 mm |

Material specifications
Housing material Aluminum

Mounting
Mounting type DIN rail mounting

Interfaces

| Ethernet (RJ45) | RJ45 |
| :--- | :--- |
| Connection method | Auto negotiation and autocrossing |
| Note on the connection method | $10 / 100$ Mbps |
| Transmission speed | Ethernet in RJ45 twisted pair |
| Transmission physics | 5 (RJ45 ports) |
| No. of channels |  |

Product properties

| Type | Block design |
| :---: | :---: |
| Product type | Switch |
| Product family | Unmanaged Switch SFN |
| MTTF | 199.7 Years (MIL-HDBK-217F standard, temperature $25^{\circ} \mathrm{C}$, operating cycle 100\%) |
| Insulation characteristics |  |
| Protection class | III (IEC 61140, EN 61140, VDE 0140-1) |
| Switch functions |  |
| Basic functions | Unmanaged switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode |
| Status and diagnostic indicators | LEDs: $U_{S}$, link and activity per port |
| Additional functions | Autonegotiation |
| Security functions |  |
| Basic functions | Unmanaged switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode |

Electrical properties
Local diagnostics
Maximum power dissipation for nominal condition

[^0]
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| Test section | 500 V DC 1 min. |
| :--- | :--- |
| Transmission medium | Copper |


| Supply |  |
| :--- | :--- |
| Supply voltage (AC/DC) | $24 \mathrm{~V} \mathrm{AC/DC}$ |
| Supply voltage range | $20 \mathrm{~V} \mathrm{AC} \ldots 28 \mathrm{~V} \mathrm{AC}$ |
|  | $12 \mathrm{~V} \mathrm{DC} \ldots 32 \mathrm{~V} \mathrm{DC}$ |
| Power supply connection | Via COMBICON, max. conductor cross section $2.5 \mathrm{~mm}^{2}$ |
| Residual ripple | $3.6 \mathrm{~V}_{\mathrm{PP}}$ (within the permitted voltage range) |
| Typical current consumption | 114 mA (at $\left.\mathrm{U}_{\mathrm{S}}=24 \mathrm{~V} \mathrm{AC}\right)$ |

## Connection data

| Conductor cross section, rigid | $0.2 \mathrm{~mm}^{2} \ldots 2.5 \mathrm{~mm}^{2}$ |
| :--- | :--- |
| Conductor cross section, flexible | $0.2 \mathrm{~mm}^{2} \ldots 2.5 \mathrm{~mm}^{2}$ |
| Conductor cross section AWG | $30 \ldots 12$ |
| Stripping length | 7 mm |

## Environmental and real-life conditions

Ambient conditions
Degree of protection
Ambient temperature (operation)
Ambient temperature (storage/transport)
Permissible humidity (operation)
Permissible humidity (storage/transport)
Vibration (operation)
Air pressure (operation)
Air pressure (storage/transport)
Resistance to gases that may endanger the functions, in acc. with DIN 40046-36, DIN 40046-37

## IP20

$0^{\circ} \mathrm{C} \ldots 60^{\circ} \mathrm{C}$
$-20^{\circ} \mathrm{C} . .70^{\circ} \mathrm{C}$
5 \% ... 95 \% (non-condensing)
5 \% ... 95 \% (non-condensing)
in acc. with IEC 60068-2-6: $5 \mathrm{~g}, 150 \mathrm{~Hz}$
$86 \mathrm{kPa} . . .108 \mathrm{kPa}$ (up to 1500 m above sea level)
$66 \mathrm{kPa} . . .108 \mathrm{kPa}$ (up to 3500 m above sea level)
Sulfur dioxide $\left(\mathrm{SO}_{2}\right) 10 \pm 0.3 \mathrm{~cm}^{3} / \mathrm{m}^{3}$, hydrogen sulfide $\left(\mathrm{H}_{2} \mathrm{~S}\right) 1$ $\pm 0.3 \mathrm{~cm}^{3} / \mathrm{m}^{3}$, at $25^{\circ} \mathrm{C}$ and $75 \%$ humidity and exposure of four days

Standards and regulations
Free from substances that could impair the application of coating
In acc. with VW specification

## Approvals

Conformity/Approvals
UL, USA / Canada Class I, Div. 2, Groups A, B, C, D

## EMC data

Conformance with EMC directives
IEC 61000-6-2 IEC 61000-4-2 (ESD) Criterion B
IEC 61000-4-3 (immunity to radiated interference) Criterion $A$
IEC 61000-4-4 (burst) Criterion B
IEC 61000-4-5 (surge) Criterion B
IEC 61000-4-6 (immunity to conducted interference) Criterion A
IEC 61000-4-8 (immunity to magnetic fields) Criterion A

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|  | EN 55022 (emitted interference) Criterion A |
| :--- | :--- |
| Noise immunity | EN 61000-6-2:2005 |
| Electromagnetic compatibility | Conformance with EMC Directive 2004/108/EC |
| Noise emission | EN 61000-6-4 |
| System properties |  |
| Functionality | Unmanaged switch / auto negotiation, complies with IEEE 802.3, <br> store and forward switching mode |
| Basic functions |  |

Signaling
Status display LEDs: $U_{S}$, link and activity per port

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## Approvals

:Q: To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2891021

## EII EAC

Approval ID: RU*-DE.*.B.00741/19
(1) UL Listed

Approval ID: FILE E 140324

## -(a) cUL Listed

Approval ID: FILE E 140324

## -(1) cUL Listed

Approval ID: FILE E 199827
(1) UL Listed

Approval ID: FILE E 199827

## cULus Listed

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## Classifications

| ECLASS |  |
| :--- | :--- |
| ECLASS-11.0 | 19170402 |
| ETIM |  |
| ETIM 9.0 |  |
| EC000734 |  |
| UNSPSC |  |
| UNSPSC 21.0 | 43222600 |

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Environmental product compliance

| REACh SVHC | Lead 7439-92-1 |
| :--- | :--- |
| China RoHS | Environmentally Friendly Use Period $=10 ;$ <br>  |
| For information on hazardous substances, refer to the <br> manufacturer's declaration available under "Downloads" |  |

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## Accessories

MSTB 2,5/ 4-ST - PCB connector
1754481
https://www.phoenixcontact.com/us/products/1754481


PCB connector, nominal cross section: $2.5 \mathrm{~mm}^{2}$, color: green, nominal current: 12 A , rated voltage (III/2): 320 V , contact surface: Tin, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: MSTB 2,5/..-ST, pitch: 5 mm , connection method: Screw connection with tension sleeve, screw head form: $L$ Slotted, conductor/PCB connection direction: $0^{\circ}$, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

DT-LAN-CAT.6+ - Surge protection device
2881007
https://www.phoenixcontact.com/us/products/2881007


Surge protection in accordance with Class $\mathrm{E}_{\mathrm{A}}\left(\mathrm{CAT6}_{\mathrm{A}}\right)$, for Gigabit Ethernet (up to 10 Gbps$)$, token ring, FDDI/CDDI, ISDN, and DS1. Suitable for Power over Ethernet (PoE++ / 4PPoE) "Mode A" and "Mode B". RJ45 attachment plug with separate grounding cable and ground connection snap-on foot for NS 35 DIN rails.

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FL CAT5 PATCH 0,5 - Patch cable
2832263
https://www.phoenixcontact.com/us/products/2832263

## Patch cable, CAT5, assembled, 0.5 m



FL CAT5 PATCH 1,0 - Patch cable
2832276
https://www.phoenixcontact.com/us/products/2832276

Patch cable, CAT5, assembled, 1 m


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FL CAT5 PATCH 2,0 - Patch cable
2832289
https://www.phoenixcontact.com/us/products/2832289

## Patch cable, CAT5, assembled, 2 m



NBC-R4AC-R4AC-IE8A/.../.. - Patch cable
1411854
https://www.phoenixcontact.com/us/products/1411854

Patch cable, degree of protection: IP20, number of positions: 8, 10 Gbps ,
 CAT6 ${ }_{A}$, cable outlet: straight, Ethernet

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https://www.phoenixcontact.com/us/products/2891021

NBC-R4AC/10G-R4AC/10G-94F/2,0 - Patch cable
1408360
https://www.phoenixcontact.com/us/products/1408360

Patch cable, CAT6 $_{\text {A }}$, 4-pair, shielded, connection not crossed (line), assembled
 at both ends with RJ45/IP20 connectors, outer sheath material: PUR, length: 2.0 m


Patch cable, CAT6 $_{\text {A }}, 4$-pair, shielded, connection not crossed (line), assembled at both ends with RJ45/IP20 connectors, outer sheath material: PUR, length: 3.0 m

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## FL SEC PAC 4TX - Port Guard Security Element

2832865
https://www.phoenixcontact.com/us/products/2832865

Layer1 security elements for 4 RJ45 network connections for use with patch boxes and panels


FL DIN RA - DIN rail adapter
2891053
https://www.phoenixcontact.com/us/products/2891053

The FL DIN RA is installed in a standard, 19-inch rack (EIA-310-D, IEC 60297-3100) to allow DIN rail mounted equipment to be rack mounted.



E/NS 35 N - End bracket
0800886
https://www.phoenixcontact.com/us/products/0800886


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[^0]:    US Supply voltage Green LED
    LNK/ACT Link status/data transmission Green LED
    100 Data transmission speed Yellow LED
    2.74 W

