

Industrial Ethernet Switch - FL SWITCH SFNB 5TX



2891001

<https://www.phoenixcontact.com/pc/products/2891001>

Please be informed that the data shown in this PDF document is generated from our Online Catalog. Please find the complete data in the user documentation. Our General Terms of Use for Downloads are valid.

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

Your advantages

- RJ45 ports support a transmission speed of 10/100 Mbps
- Local diagnostic indicators with LEDs
- Auto negotiation and autocrossing detection simplifies installation and setup

Commercial Data

| | |
|--------------------------------------|---------------------|
| Item number | 2891001 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Product Key | DNN113 |
| Catalog Page | Page 288 (C-6-2019) |
| GTIN | 4046356457163 |
| Weight per Piece (including packing) | 273.566 g |
| Weight per Piece (excluding packing) | 263 g |
| Customs tariff number | 85176200 |
| Country of origin | TW |

Technical Data

Dimensions

| | |
|--------|--------|
| Width | 28 mm |
| Height | 110 mm |
| Depth | 70 mm |

Material specifications

| | |
|------------------|----------|
| Housing material | Aluminum |
|------------------|----------|

Mounting

| | |
|---------------|-------------------|
| Mounting type | DIN rail mounting |
|---------------|-------------------|

Interfaces

Ethernet (RJ45)

| | |
|-------------------------------|-----------------------------------|
| Connection method | RJ45 |
| Note on the connection method | Auto negotiation and autocrossing |
| Transmission speed | 10/100 Mbps |
| Transmission physics | Ethernet in RJ45 twisted pair |
| Transmission length | 100 m (per segment) |
| Signal LEDs | Data receive, link status |
| No. of channels | 5 (RJ45 ports) |

Product properties

| | |
|--------------|--|
| Type | Block design |
| Product type | Switch |
| MTTF | 173.5 Years (MIL-HDBK-217F standard, temperature 25°C, operating cycle 100%) |

Switch functions

| | |
|----------------------------------|---|
| Basic functions | Unmanaged switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode |
| MAC address table | 1k |
| 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 | US Supply voltage Green LED |
| | LNK/ACT Link status/data transmission Green LED |
| | 100 Data transmission speed Yellow LED |
| Maximum power dissipation for nominal condition | 4.44 W |

| | |
|---------------------|--------|
| Transmission medium | Copper |
|---------------------|--------|

Supply

| | |
|-----------------------------|--|
| Supply voltage (DC) | 24 V DC |
| Supply voltage range | 12 V DC ... 48 V DC |
| Power supply connection | Via COMBICON, max. conductor cross section 2.5 mm ² |
| Residual ripple | 3.6 V _{PP} (within the permitted voltage range) |
| Max. current consumption | 345 mA (at 12 V DC) |
| Typical current consumption | 185 mA (at U _S = 24 V DC) |

Connection data

| | |
|-----------------------------------|---|
| Connection method | Screw connection |
| Conductor cross section, rigid | 0.2 mm ² ... 2.5 mm ² |
| Conductor cross section, flexible | 0.2 mm ² ... 2.5 mm ² |
| Conductor cross section AWG | 30 ... 12 |
| Stripping length | 7 mm |

Environmental and real-life conditions

Ambient conditions

| | |
|--|---|
| Degree of protection | IP20 |
| Ambient temperature (operation) | -10 °C ... 60 °C |
| Ambient temperature (storage/transport) | -20 °C ... 85 °C |
| Permissible humidity (operation) | 5 % ... 95 % (non-condensing) |
| Permissible humidity (storage/transport) | 5 % ... 95 % (non-condensing) |
| Air pressure (operation) | 86 kPa ... 108 kPa (up to 1500 m above sea level) |
| Air pressure (storage/transport) | 66 kPa ... 108 kPa (up to 3500 m above sea level) |

Approval data

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 |
| | EN 55022 (emitted interference) Criterion A |
| Electromagnetic compatibility | Conformance with EMC Directive 2004/108/EC |
| Noise emission | EN 61000-6-4 |
| Noise immunity | EN 61000-6-2 |

LED signaling

Industrial Ethernet Switch - FL SWITCH SFNB 5TX



2891001

<https://www.phoenixcontact.com/pc/products/2891001>

Status display

LEDs: U_S, link and activity per port


Industrial Ethernet Switch - FL SWITCH SFNB 5TX





2891001


<https://www.phoenixcontact.com/pc/products/2891001>

Approvals

| | | | | |
|---|---|-----------------------|-------------------|-----------------------------|
|  | IECEE CB Scheme Approval ID: DK-88783-M1-UL | | | |
| | Nominal Voltage U_N | Nominal Current I_N | Cross Section AWG | Cross Section mm^2 |
| | | | - | - |


| | |
|---|--|
|  | EAC Approval ID: RU*-DE.*.B.00741/19 |
|---|--|


| | |
|---|--|
|  | UL Listed Approval ID: FILE E 140324 |
|---|--|


| | |
|--|---|
|  | cUL Listed Approval ID: FILE E 140324 |
|--|---|

| | |
|---|--|
|  | KC Approval ID: KCC-REI-PCK-FL289100 |
|---|--|

| | |
|---|---|
|  | cUL Listed Approval ID: FILE E 238705 |
|---|---|

| | |
|---|--|
|  | UL Listed Approval ID: FILE E 238705 |
|---|--|

| | |
|---|---|
|  | cUL Listed Approval ID: FILE E 199827 |
|---|---|

| | |
|---|--|
|  | UL Listed Approval ID: FILE E 199827 |
|---|--|

| |
|---------------------|
| cULus Listed |
|---------------------|

Industrial Ethernet Switch - FL SWITCH SFNB 5TX



2891001

<https://www.phoenixcontact.com/pc/products/2891001>

Classifications

ECLASS

| | |
|---------------|----------|
| ECLASS-9.0 | 19170106 |
| ECLASS-10.0.1 | 19170402 |
| ECLASS-11.0 | 19170402 |

ETIM

| | |
|----------|----------|
| ETIM 8.0 | EC000734 |
|----------|----------|

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 43222600 |
|-------------|----------|

Industrial Ethernet Switch - FL SWITCH SFNB 5TX



2891001

<https://www.phoenixcontact.com/pc/products/2891001>

Environmental Product Compliance

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

2891001

<https://www.phoenixcontact.com/pc/products/2891001>

Accessories

PCB connector

PCB connector - MSTB 2,5/ 3-ST - 1754465

<https://www.phoenixcontact.com/pc/products/1754465>

PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, 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 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

Surge protection device

Surge protection device - DT-LAN-CAT.6+ - 2881007

<https://www.phoenixcontact.com/pc/products/2881007>

Surge protection in accordance with Class E_A (CAT6_A), 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.

Industrial Ethernet Switch - FL SWITCH SFNB 5TX



2891001

<https://www.phoenixcontact.com/pc/products/2891001>

Patch cable

Patch cable - FL CAT5 PATCH 0,5 - 2832263

<https://www.phoenixcontact.com/pc/products/2832263>

Patch cable, CAT5, assembled, 0.5 m

Patch cable

Patch cable - FL CAT5 PATCH 1,0 - 2832276

<https://www.phoenixcontact.com/pc/products/2832276>

Patch cable, CAT5, assembled, 1 m

Patch cable

Patch cable - FL CAT5 PATCH 2,0 - 2832289

<https://www.phoenixcontact.com/pc/products/2832289>

Patch cable, CAT5, assembled, 2 m

Patch cable

Patch cable - NBC-R4AC-R4AC-IE8A/.../... - 1411854

<https://www.phoenixcontact.com/pc/products/1411854>

Patch cable, degree of protection:
IP20, number of positions: 8, 10
Gbps, CAT6_A, cable outlet: straight,
Ethernet

2891001

<https://www.phoenixcontact.com/pc/products/2891001>

Patch cable

Patch cable - NBC-R4AC/10G-R4AC/10G-94F/2,0 - 1408360

<https://www.phoenixcontact.com/pc/products/1408360>

Patch cable, CAT6_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

Patch cable - NBC-R4AC/10G-R4AC/10G-94F/3,0 - 1408365

<https://www.phoenixcontact.com/pc/products/1408365>

Patch cable, CAT6_A, 4-pair, shielded, connection not crossed (line), assembled at both ends with RJ45/IP20 connectors, outer sheath material: PUR, length: 3.0 m

DIN rail adapter

DIN rail adapter - FL DIN RA - 2891053

<https://www.phoenixcontact.com/pc/products/2891053>

The FL DIN RA is installed in a standard, 19-inch rack (EIA-310-D, IEC 60297-3-100) to allow DIN rail mounted equipment to be rack mounted.

Industrial Ethernet Switch - FL SWITCH SFNB 5TX



2891001

<https://www.phoenixcontact.com/pc/products/2891001>

Dust protection

Dust protection - FL RJ45 PROTECT CAP - 2832991

<https://www.phoenixcontact.com/pc/products/2832991>

Dust protection caps for RJ45 socket

End clamp

End clamp - E/NS 35 N - 0800886

<https://www.phoenixcontact.com/pc/products/0800886>

End clamp, width: 9.5 mm, color: gray

Port Guard Security Element

Port Guard Security Element - FL SEC PAC 4TX - 2832865

<https://www.phoenixcontact.com/pc/products/2832865>

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

Phoenix Contact 2023 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG

Flachmarktstraße 8

D-32825 Blomberg

+49 (0) 5235-3 00

info@phoenixcontact.com