

FL SWITCH 2206-2SFX PN - Industrial Ethernet Switch



1044028

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Huomioi, että tässä ilmoitetut tiedot ovat peräisin online-luettelosta. Täydelliset tiedot löydät käyttöohjeesta. Internet-latausten yleiset käyttöehdot ovat voimassa.



Edut

- RSTP
- Ambient temperature -40 °C ... 70 °C
- MRP (client and manager)
- VLANs
- DHCP client, DHCP server (pool-based and port-based), DHCP option 82
- Web-based management, SNMP
- Slim design
- Configuration memory
- Easy and fast startup and commissioning with the FL NETWORK MANAGER software
- PROFINET mode preset

Kaupalliset tiedot

Tuotenumero	1044028
Pakkausyksikkö	1 Kappaletta
Vähimmäistilausmäärä	1 Kappaletta
Tuoteavain	DNN121
Tuotekoodi	DNN121
GTIN	4055626617046
Paino kappaletta kohti (sis. pakkauksen)	415,7 g
Paino kappaletta kohti (ilman pakkausta)	415,7 g
Tullitariffinumero	85176200
Alkuperämaa	DE

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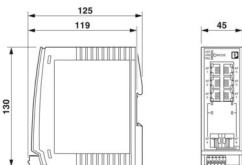


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Tekniset tiedot

Dimensions

Dimensional drawing	
Width	45 mm
Height	130 mm
Depth	119 mm

Notes

General	Support by phone or on-site (fee is charged)
Note on application	
Note on application	Only for industrial use

Material specifications

Housing material	Polycarbonate fiber reinforced
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Mounting

Mounting type	DIN rail mounting
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Interfaces

Ethernet (RJ45)

Connection method	RJ45
Note on the connection method	Auto negotiation and autocrossing
Transmission speed	10/100 Mbps
Transmission physics	Copper
Transmission length	100 m (per segment)
Signal LEDs	Data receive, link status
No. of channels	6 (RJ45 ports)

Ethernet (SFP)

Number of interfaces	2
Connection method	SFP
Transmission speed	100 Mbps (full duplex)
Transmission physics	Depending on the SFP module
Transmission length	up to 40 km (Depending on the fiber/SFP module used)
Signal LEDs	Data receive, link status
No. of channels	2 (SFP ports)

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Output data

Digital:

Output name	Alarm output
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Product properties

Product type	Switch
Product family	Managed Switch 2000
Type	Book type
MTTF	491.44 Years (SN 29500 standard, temperature 25°C, operating cycle 21%)
	212.99 Years (SN 29500 standard, temperature 40°C, operating cycle 34.25%)
	24.97 Years (SN 29500 standard, temperature 70°C, operating cycle 100%)
Special properties	Extended temperature range
	PROFINET mode preset, PROFINET status LEDs
	Development process certified in accordance with IEC 62443-4-1
	Compatible with IEC 62443-4-2
Signal delay	≥ 6.5 µs (Store and Forward mode, 10/100 Mbps, depending on the frame size)
Basic functions	Store-and-forward switch, complies with IEEE 802.3

Insulation characteristics

Protection class	III (VDE 0106)
Degree of pollution	2

Switch functions

Diagnostic functions	RMON History
	LLDP (Link Layer Discovery Protocol)
	SNMP-Traps
	N:1-Portmirroring
	ACD (Address Conflict Detection)
	SysLog
	CRC-Surveillance
Basic functions	Store-and-forward switch, complies with IEEE 802.3
Signal contact control voltage	typ. 24 V DC
PROFINET conformance class	Conformance-Class B
PROFINET device function	PROFINET device
	Fast Startup
Filter functions	Quality of Service (8 priority classes)
	Class of Service
	DiffServ/DSCP
	Port-Priorisierung
	VLAN (up to 32 VLANs)
	IGMP Snooping/Querier (v1/v2)

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IP parameterization	Auto-Query-Port
	Extended Multicast Filtering
	DHCP client
	DHCP Option 82 (Relay Agent)
	DHCP server (pool-based, port-based)
	BootP
MAC address table	DCP (Discovery and Configuration Protocol)
	8k
Management	Web-based management (HTTP/HTTPS)
	Role-based user management (LDAP, RADIUS)
	SNMPv1/v2/v3
	Command Line Interface (Telnet, SSH)
Redundancy	MRP (Media Redundancy Protocol)
	RSTP (Rapid Spanning Tree Protocol)
	FRD (Fast Ring Detection)
	Large Tree Support
	LACP (Link Aggregation Control Protocol)
Status and diagnostic indicators	PROFINET S2 system redundancy
	LEDs: US1, US2 (power supply), Fail (alarm contact), 2 LEDs per Ethernet port (link/activity and speed), PROFINET status LEDs (BF, SF)
Additional functions	Transmission of MMS and GOOSE (IEC 61850-8-1)
	Transmission of Modbus/TCP
Time synchronization	SNTP (Simple Network Time Protocol)

Security functions

Port security	MAC-based, RADIUS (IEEE 802.1X), MAC Authentication Bypass
Basic functions	Store-and-forward switch, complies with IEEE 802.3

Electrical properties

Current consumption	230 mA
Local diagnostics	US1/2 Supply voltage US1, US2 Green LED
	FAIL Div. LED red
	LINK Link status Green LED
	BF Bus errors LED red
	SF Group error LED red
Maximum power dissipation for nominal condition	7.8 W ($U_S = \text{Min}$, $T_{\text{amb}} = \text{Max}$, $DO_1 = \text{Max}$)
Test section	24 V supply / functional ground 500 V DC 1 min
	Ethernet interface/all other potentials 2.25 kV DC 1 min
Transmission medium	Copper
	FO

Supply

Supply voltage (DC)	24 V DC (redundant)
Supply voltage range	12 V DC ... 57 V DC

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Power supply connection	via COMBICON, max. conductor cross-section 1.5 mm ²
Residual ripple	3.6 V _{PP} (within the permitted voltage range)
Max. current consumption	1.4 A (U _S = Min, T _{amb} = Max, DO _I = Max)
Typical current consumption	230 mA (at U _S = 24 V DC and 25 °C ambient temperature)
Current consumption	230 mA

Function

Signal contact control voltage	typ. 24 V DC
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Connection data

Connection method	Push-in spring connection
Note on the connection method	Use only copper connecting cables providing the permitted temperature range (-40 °C ... 75 °C)
Conductor cross-section, rigid	0.25 mm ² ... 1.5 mm ²
Conductor cross-section, flexible	0.25 mm ² ... 1.5 mm ²
Conductor cross-section AWG	24 ... 16
Stripping length	9 mm

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	10 % ... 95 % (non-condensing)
Shock (operation)	30g (EN 60068-2-27)
Vibration (operation)	in acc. with IEC 60068-2-6: 5g, 150 Hz
Air pressure (operation)	79 kPa ... 108 kPa up to 2000 m above mean sea level (Without derating)
Air pressure (storage/transport)	79 kPa ... 108 kPa up to 2000 m above mean sea level (Without derating)

Standards and regulations

Free from substances that could impair the application of coating	Yes
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Approvals

Shipbuilding approval	Tested in accordance with IEC 60945 and IACS E10
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ATEX

Identification	Ⓔ II 3 G Ex ec IIC T4 Gc
Certificate	DEMKO 16 ATEX 1709X

IECEX

Identification	Ex ec IIC T4 Gc
Certificate	IECEX ULD 16.0018 X

UL, USA/Canada

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Identification	cULus
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UL Ex, USA / Canada

Identification	Class I, Division 2, Groups A, B, C, and D, T4 Class I, Zone 2, AEx ec IIC T4 Ex ec IIC T4 Gc X
Certificate	E366272
Note	UL 60079-0 Ed. 6 / UL 60079-7 Ed. 5, CSA 22.2 No. 60079-0 Ed. 3 / CSA C22.2 No. 60079-7 Ed. 2

EAC Ex

Identification	2Ex e IIC T4 Gc X
Certificate	RU C-DE.HB49.B.00118/21

The following continue to apply for EAC Ex:

Identification	Install the device in a suitable, approved housing with at least IP66 protection. The housing/control cabinet must be equipped with a warning sign prohibiting opening in the potentially explosive area. The operation of devices is permitted if all optical ports are connected or sealed with the supplied filler plugs.
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CCC / China-Ex

Identification	Ex ec IIC T4 Gc
Certificate	2022122310115629

Corrosive gas test

Identification	ISA S71.04.2013 G3 Harsh Group A
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UKCA Ex (UKEX)

Identification	Ⓔ II 3 G Ex ec IIC T4 Gc
Certificate	PxCIMA22UKEX2702910X

Shipbuilding data

Temperature	B
Humidity	B
Vibration	A
EMC	B
Enclosure	Required protection according to the Rules shall be provided upon installation on board

EMC data

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Conformance with EMC directives	EN 61000-6-2 EN 61000-4-2 (ESD) Criterion B EN 61000-6-2 EN 61000-4-3 (electromagnetic fields) Criterion A EN 61000-6-2 EN 61000-4-4 (EFT burst) Criterion A EN 61000-6-2 EN 61000-4-5 (surge) Criterion B EN 61000-6-2 EN 61000-4-6 (line noise immunity) Criterion A EN 61000-6-2 EN 61000-6-4 (interference) Class A

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	EN 61000-6-2 EN 61000-6-4 (conducted interference) Class A
Noise immunity	EN 61000-6-2

Noise emission

Standards/regulations	EN 61000-6-3
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System properties

Functionality

Basic functions	Store-and-forward switch, complies with IEEE 802.3
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Signaling

Status display	LEDs: US1, US2 (power supply), Fail (alarm contact), 2 LEDs per Ethernet port (link/activity and speed), PROFINET status LEDs (BF, SF)
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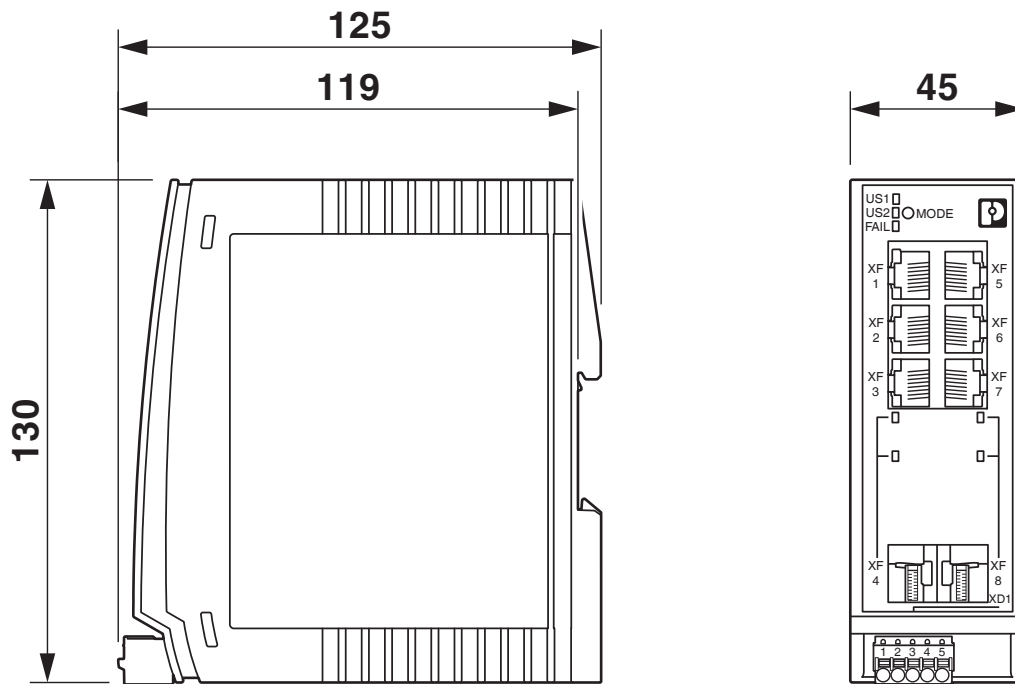


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Piirustukset

Dimensional drawing



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Hyväksynnät

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/fi/tuotteet/1044028>



DNV GL

Hyväksyntätunnus: TAA00000YV



LR

Hyväksyntätunnus: LR22250919TA



NK

Hyväksyntätunnus: TA24215M



BV

Hyväksyntätunnus: 48146_B1 BV



RINA

Hyväksyntätunnus: ELE014724XG001

ABS

Hyväksyntätunnus: 21_2066186_1_PDA



cULus Listed

Hyväksyntätunnus: E238705

PROFINET

Hyväksyntätunnus: Z12624-Z12639



IECEx

Hyväksyntätunnus: IECEx ULD 16.0018X



cUL Listed

Hyväksyntätunnus: E366272



ATEX

Hyväksyntätunnus: DEMKO 16 ATEX 1709X

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CCC

Hyväksyntätunnus: 2022122310115629

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Luokitukset

ECLASS

ECLASS-13.0	19170401
ECLASS-15.0	19170401

ETIM

ETIM 9.0	EC000734
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UNSPSC

UNSPSC 21.0	43222600
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Environmental product compliance

EU RoHS

Täyttää RoHS-direktiivin vaatimukset	Kyllä
poikkeussäännökset siltä osin kuin ne ovat tiedossa	7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	Löydät tuotekohtaisen Kiinan RoHS-ilmoitusluettelon kunkin tuotteen latausalueelta Valmistajan ilmoitus -kohdasta. EFUP-E-merkinnän sisältäville tuotteille ei tarvita Kiinan RoHS-ilmoitusluetteloa, eikä sitä tarvitse siksi laatia.

EU REACH SVHC

Huomautus REACH-kandidaattaineesta (CAS-nro)	Lead(CAS-nro: 7439-92-1)
SCIP	da334d91-f71e-4ea0-8b3d-5762fc5ea1a2

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PHOENIX CONTACT OY
Niittytie 11
FI-01300 Vantaa
+358 (0)9 350 9020
myynti@phoenixcontact.com