

https://www.phoenixcontact.com/in/products/2891065

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Ethernet switch with eight RJ45 ports, meets IEC 61850-3 and IEEE 1613 standards. Automatic detection of data transmission speed of 10/100 Mbps (RJ45) with autocrossing function.

## Your advantages

- Wide operating temperature range of -40 °C ... 75 °C
- · QoS-prioritized (Quality of Service) messages
- Network structure according to IEC 61850
- IEEE 1613
- · Alarm contact for power supply and link status diagnostics
- · Local diagnostic indicators with LEDs
- Intended for use in power substations
- · Auto negotiation and autocrossing detection simplifies installation and setup

### **Commercial Data**

Item number	2891065
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to Order (non-returnable)
Sales Key	DNN
Product Key	DNN115
Catalog Page	Page 301 (C-6-2019)
GTIN	4046356764339
Weight per Piece (including packing)	875 g
Weight per Piece (excluding packing)	660 g
Customs tariff number	85176200
Country of origin	TW

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## **Technical Data**

#### Dimensions

	Width	54.4 mm
	Height	146.4 mm
	Depth	125 mm
Material specifications		
	Housing material	Aluminum

DIN rail mounting

#### Mounting

Mounting type

#### Interfaces

Ethernet	(RJ45)
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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
No. of channels	8 (RJ45 ports)
Data flow control/protocols	IEC 61850-3, IEEE 1613

### **Product properties**

design naged Switch 1000 'ears (MIL-HDBK-217F standard, temperature 25°C, ing cycle 100%) E 0106, IEC 60536) naged switch / autonegotiation, complies with IEEE 802. and forward switching mode, includes QoS and alarm ct. Meets IEC 61850-3 and IEEE 1613 standards
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$U_{S1},U_{S2}$ (redundant voltage supply), link and activity pe
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	store and forward switching mode, includes QoS and alarm contact. Meets IEC 61850-3 and IEEE 1613 standards
ectrical properties	
Local diagnostics	US1, US2 Supply voltage Green LED
	LNK/ACT Link status/data transmission Green LED
	100 Data transmission speed Green LED
	Alarm Power failure at US1 or US2/Link failure
Maximum power dissipation for nominal condition	10.56 W
Transmission medium	Copper
Supply	
Supply voltage (DC)	24 V DC (redundant)
	48 V DC
Supply voltage range	12 V DC 57 V DC
Inrush current	9.84 A (0.2 ms)
Residual ripple	3.6 $V_{PP}$ (within the permitted voltage range)
Typical current consumption	440 mA (at U <sub>S</sub> = 24 V DC)
Function	
Signal contact control voltage	24 V DC
Signal contact control current	100 mA
Connection data	100 mA
Connection data Connection technology Connection name	100 mA
Connection data Connection technology Connection name Power supply	100 mA Power supply
Connection data Connection technology Connection name Power supply Connection method	100 mA Power supply COMBICON plug-in screw terminal block
Connection data Connection technology Connection name Power supply Connection method Conductor cross section, rigid	100 mA         Power supply         COMBICON plug-in screw terminal block         0.2 mm² 2.5 mm²
Connection data Connection technology Connection name Power supply Connection method Conductor cross section, rigid Conductor cross section, flexible	100 mA         Power supply         COMBICON plug-in screw terminal block         0.2 mm² 2.5 mm²         0.2 mm² 2.5 mm²
Connection data Connection technology Connection name Power supply Connection method Conductor cross section, rigid Conductor cross section, flexible Conductor cross section AWG	100 mA         Power supply         COMBICON plug-in screw terminal block         0.2 mm² 2.5 mm²         0.2 mm² 2.5 mm²         24 14
Connection data Connection technology Connection name Power supply Connection method Conductor cross section, rigid Conductor cross section, flexible Conductor cross section AWG Stripping length	100 mA         Power supply         COMBICON plug-in screw terminal block         0.2 mm² 2.5 mm²         0.2 mm² 2.5 mm²         24 14
Connection data Connection technology Connection name Power supply Connection method Conductor cross section, rigid Conductor cross section, flexible Conductor cross section AWG Stripping length Environmental and real-life conditions	100 mA         Power supply         COMBICON plug-in screw terminal block         0.2 mm² 2.5 mm²         0.2 mm² 2.5 mm²         24 14
Connection data Connection technology Connection name Power supply Connection method Conductor cross section, rigid Conductor cross section, flexible Conductor cross section AWG Stripping length Environmental and real-life conditions Ambient conditions	100 mA         Power supply         COMBICON plug-in screw terminal block         0.2 mm² 2.5 mm²         0.2 mm² 2.5 mm²         24 14         7 mm
Connection data Connection technology Connection name Power supply Connection method Conductor cross section, rigid Conductor cross section, flexible Conductor cross section AWG Stripping length Environmental and real-life conditions Ambient conditions Degree of protection	100 mA         100 mA         Power supply         COMBICON plug-in screw terminal block         0.2 mm <sup>2</sup> 2.5 mm <sup>2</sup> 0.2 mm <sup>2</sup> 2.5 mm <sup>2</sup> 0.2 mm <sup>2</sup> 2.5 mm <sup>2</sup> 24 14         7 mm         IP20
Connection data Connection technology Connection name Power supply Connection method Conductor cross section, rigid Conductor cross section, flexible Conductor cross section AWG Stripping length Environmental and real-life conditions Ambient conditions Degree of protection Ambient temperature (operation)	100 mA         100 mA         Power supply         COMBICON plug-in screw terminal block         0.2 mm <sup>2</sup> 2.5 mm <sup>2</sup> 0.2 mm <sup>2</sup> 2.5 mm <sup>2</sup> 24 14         7 mm         IP20         -40 °C 75 °C
Connection data Connection technology Connection name Power supply Connection method Conductor cross section, rigid Conductor cross section, flexible Conductor cross section AWG Stripping length Environmental and real-life conditions Ambient conditions Degree of protection Ambient temperature (operation) Ambient temperature (storage/transport)	100 mA         Power supply         COMBICON plug-in screw terminal block         0.2 mm² 2.5 mm²         0.2 mm² 2.5 mm²         0.2 mm² 2.5 mm²         24 14         7 mm         IP20         -40 °C 75 °C         -45 °C 85 °C
Connection data Connection technology Connection name Power supply Connection method Conductor cross section, rigid Conductor cross section, flexible Conductor cross section AWG Stripping length Content and real-life conditions Ambient conditions Degree of protection Ambient temperature (operation) Ambient temperature (storage/transport) Permissible humidity (operation)	100 mA         Power supply         COMBICON plug-in screw terminal block         0.2 mm² 2.5 mm²         0.2 mm² 2.5 mm²         0.2 mm² 2.5 mm²         24 14         7 mm         IP20         -40 °C 75 °C         -45 °C 85 °C         5 % 95 % (non-condensing)
Connection data Connection technology Connection name Power supply Connection method Conductor cross section, rigid Conductor cross section, flexible Conductor cross section AWG Stripping length Environmental and real-life conditions Ambient conditions Degree of protection Ambient temperature (operation) Ambient temperature (storage/transport) Permissible humidity (operation) Air pressure (operation)	100 mA         Power supply         COMBICON plug-in screw terminal block         0.2 mm² 2.5 mm²         0.2 mm² 2.5 mm²         0.2 mm² 2.5 mm²         24 14         7 mm         IP20         -40 °C 75 °C         -45 °C 85 °C         5 % 95 % (non-condensing)



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### 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 A
	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
	IEC 61000-4-9 (immunity to pulsed magnetic field) Criterion B
	EN 55022 (emitted interference) Criterion B
Noise immunity	IEC 61850-3, IEEE 1613, EN 61000-6-2: 2005
Noise emission	EN 61000-6-4

### System properties

#### Functionality

	Basic functions	Unmanaged switch / autonegotiation, complies with IEEE 802.3, store and forward switching mode, includes QoS and alarm contact. Meets IEC 61850-3 and IEEE 1613 standards
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	Status display	LEDs: $\mathbf{U}_{S1},\mathbf{U}_{S2}$ (redundant voltage supply), link and activity per port

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# Classifications

### ECLASS

	ECLASS-11.0	19170402
ETIM		
	ETIM 8.0	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;
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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### Accessories

MSTB 2,5/ 2-ST - PCB connector

1754449 https://www.phoenixcontact.com/in/products/1754449



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Socket, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, 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

### MSTB 2,5/ 5-ST - PCB connector

1754504 https://www.phoenixcontact.com/in/products/1754504



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Socket, number of potentials: 5, number of rows: 1, number of positions: 5, number of connections: 5, 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

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

2881007

https://www.phoenixcontact.com/in/products/2881007



Surge protection in accordance with Class  $E_A$  (CAT6<sub>A</sub>), 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.

### FL CAT5 PATCH 0,5 - Patch cable

2832263 https://www.phoenixcontact.com/in/products/2832263



Patch cable, CAT5, assembled, 0.5 m

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### FL CAT5 PATCH 1,0 - Patch cable

2832276

https://www.phoenixcontact.com/in/products/2832276

Patch cable, CAT5, assembled, 1 m



## FL CAT5 PATCH 2,0 - Patch cable

2832289 https://www.phoenixcontact.com/in/products/2832289



Patch cable, CAT5, assembled, 2 m

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

#### 1411854

https://www.phoenixcontact.com/in/products/1411854



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

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

1408360

https://www.phoenixcontact.com/in/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

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

#### 1408365

https://www.phoenixcontact.com/in/products/1408365



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

#### E/NS 35 N - End clamp

0800886 https://www.phoenixcontact.com/in/products/0800886



End clamp, width: 9.5 mm, color: gray

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### FL RJ45 PROTECT CAP - Dust protection

2832991

https://www.phoenixcontact.com/in/products/2832991

Dust protection caps for RJ45 socket



FL SEC PAC 4TX - Port Guard Security Element

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

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



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