

FL COMSERVER UNI 232/422/485-T - Interface converters



2904817

<https://www.phoenixcontact.com/us/products/2904817>

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FL COMSERVER UNI...-T, version with extended temperature range (-40°C to +70°C). For converting a serial RS-232/RS-422/RS-485 interface to Ethernet, supports TCP, UDP, Modbus gateway, and PPP applications, including COM port redirector software.

Your advantages

- Extended temperature range of -40 °C ... +70 °C
- Modbus gateway between Modbus/RTU / ASCII and Modbus/TCP
- All connections can be plugged in using a COMBICON screw terminal block
- Configuration via web-based management
- Software for virtual COM ports supplied as standard

Commercial data

Item number	2904817
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	DNC321
GTIN	4046356891486
Weight per piece (including packing)	291.2 g
Weight per piece (excluding packing)	188.888 g
Country of origin	DE

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Technical data

Notes

Utilization restriction

CCCex note	Use in potentially explosive areas is not permitted in China.
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Product properties

Product type	Interface converter
MTTF	1973 Years (SN 29500 standard, temperature 25°C, operating cycle 21%)
	854 Years (SN 29500 standard, temperature 40°C, operating cycle 34.25%)
	348 Years (SN 29500 standard, temperature 40°C, operating cycle 100%)
MTBF	666 Years (Telcordia standard, 25°C temperature, 21% operating cycle (5 days a week, 8 hours a day))
	179 Years (Telcordia standard, 40°C temperature, 34.25% operating cycle (5 days a week, 12 hours a day))

Functions

Management	Web-based management
	SNMP v1/v2
Supported browsers	Netscape Communicator versions 4.5 and up or Internet Explorer versions 5.5 and up

System properties

System requirements

Supported browsers	Netscape Communicator versions 4.5 and up or Internet Explorer versions 5.5 and up
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Electrical properties

Electrical isolation	VCC // Ethernet // Serial
Maximum power dissipation for nominal condition	2.1 W
Test voltage data interface/data interface	1.5 kV _{rms} (50 Hz, 1 min.)
Test voltage data interface/power supply	1.5 kV _{rms} (50 Hz, 1 min.)
	1.5 kV _{rms}

Supply

Supply voltage range	12 V AC/DC ... 30 V AC/DC (observe derating)
Typical current consumption	100 mA (24 V DC)

Function

Management	Web-based management, SNMP, emergency exit with Telnet and serial
Status and diagnostic indicators	LEDs: UL (logic voltage), TD + RD (data activity serial), FD (full duplex), 100 (100 Mbps mode), Link (Ethernet), Activity (Ethernet), ERR (error)

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Connection data

Supply

Tightening torque	0.56 Nm ... 0.79 Nm
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Interfaces

Signal	Ethernet
	Modbus
Web server	yes

Data: Ethernet interface, 10/100Base-T(X) in accordance with IEEE 802.3

Serial transmission speed	10/100 Mbps, auto negotiation
Connection method	RJ45 jack, shielded
No. of channels	1
Transmission length	≤ 100 m (shielded twisted pair)
Protocols supported	TCP/IP, UDP, Modbus (TCP, RTU/ASCII), PPP
Auxiliary protocols	ARP, DHCP, BOOTP, SNMP, RIP, RARP, HTTP, TFTP, ICMP
Data flow control/protocols	Modbus/TCP

Data: V.24 (RS-232) interface in acc. with ITU-T V.28, EIA/TIA-232, DIN 66259-1

Serial transmission speed	0.3; 0.6; 1.2; 2.4; 4.8; 7.2; 9.6; 19.2; 38.4; 57.6; 115.2; 187.5; 230.4 kbps
Connection method	D-SUB 9 plug
Pin assignment	DTE/DCE switchover via web-based management
Transmission length	15 m
File format/coding	UART/NRZ: 7/8 Bit Data, 1/2 Bit Stopp, None/Even/Odd Parity
Data flow control/protocols	Software handshake, Xon/Xoff, or hardware handshake RTS/CTS // 3964 R compatible, Modbus RTU/ASCII

Data: RS-422 interface in acc. with ITU-T V.11, EIA/TIA-422, DIN 66348-1

Serial transmission speed	0.3; 0.6; 1.2; 2.4; 4.8; 7.2; 9.6; 19.2; 38.4; 57.6; 115.2; 187.5; 230.4; 500; 1000 kbps
Connection method	Plug-in/screw connection via COMBICON
Transmission length	≤ 1200 m
Termination resistor	390 Ω (configurable) 180 Ω 390 Ω
File format/coding	UART/NRZ: 7/8 Bit Data, 1/2 Bit Stopp, None/Even/Odd Parity
Data flow control/protocols	Automatic control

Data: RS-485 interface, in acc. with EIA/TIA-485, DIN 66259-4/RS-485 2-wire

Serial transmission speed	0.3; 0.6; 1.2; 2.4; 4.8; 7.2; 9.6; 19.2; 38.4; 57.6; 115.2; 187.5; 230.4; 500; 1000 kbps
Connection method	Plug-in/screw connection via COMBICON
Termination resistor	390 Ω 180 Ω 390 Ω (configurable)

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File format/coding	UART/NRZ: 7/8 Bit Data, 1/2 Bit Stopp, None/Even/Odd Parity
Data flow control/protocols	Automatic control

Dimensions

Width	45 mm
Height	99 mm
Depth	116 mm

Material specifications

Color (Housing)	green (RAL 6021)
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Mechanical tests

Free fall in accordance with IEC 60068-2-32	Free fall: 1 m
Vibration resistance in accordance with EN 60068-2-6/IEC 60068-2-6	Vibration (operation): 5g, 10...150 Hz, 2.5 h, in XYZ direction
Shock in accordance with EN 60068-2-27/IEC 60068-2-27	Shock (operation): 15g, 11 ms period, half-sine shock pulse
	Shock (storage/transport): 30g, 11 ms period, half-sine shock pulse

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 70 °C (free-standing, 40mm space on all sides)
	-40 °C ... 60 °C (Mounted in rows with zero spacing)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Altitude	≤ 5000 m (For restrictions, see the manufacturer's declaration for altitude operation)
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)

Approvals

CE

Certificate	CE-compliant
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ATEX

Identification	Ⓔ II 3G Ex nA IIC T4 Gc X
Note	Please follow the special installation instructions in the documentation!

Corrosive gas test

Identification	ISA-S71.04-1985 G3 Harsh Group A
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EMC data

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Noise immunity	EN 61000-6-2:2005

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Noise emission

Standards/regulations	EN 61000-6-4
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Standards and regulations

Free from substances that could impair the application of coating	in accordance with VW-AUDI-Seat central standard P-VW 3.10.7 57 65 0
Standards/regulations	EN 50121-4

Mounting

Mounting type	DIN rail mounting
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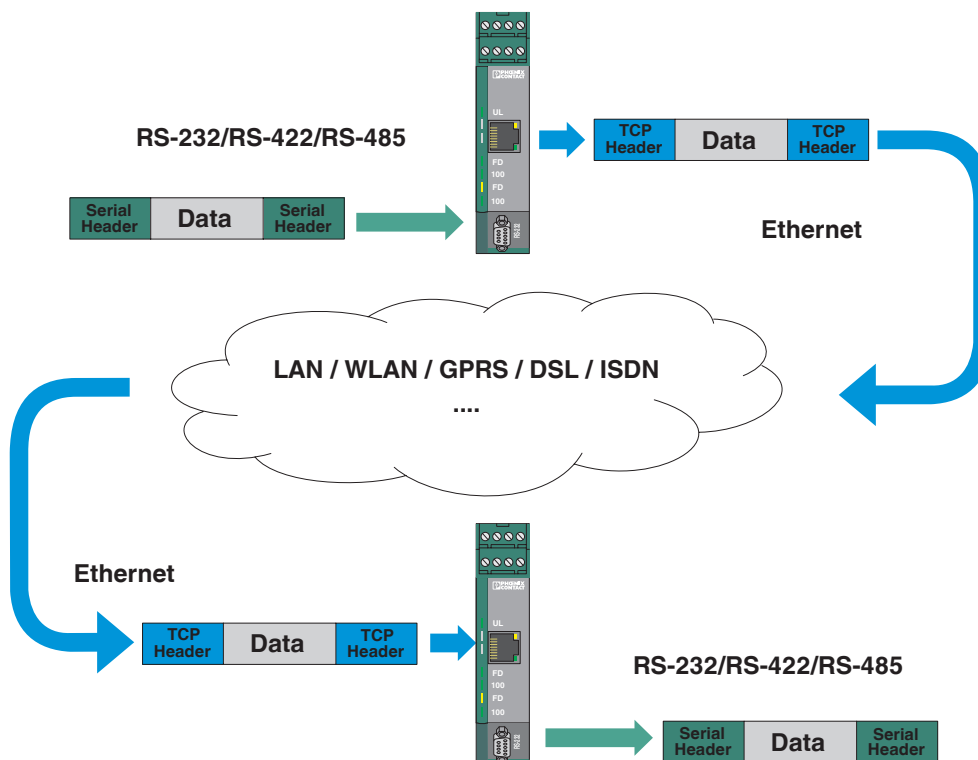
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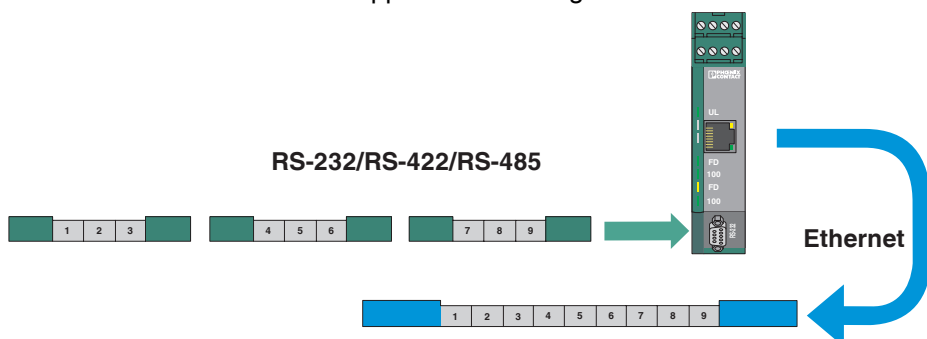
Drawings

Application drawing



Serial data transmission via Ethernet

Application drawing



Large value: "Idle Force Timeout Characters"

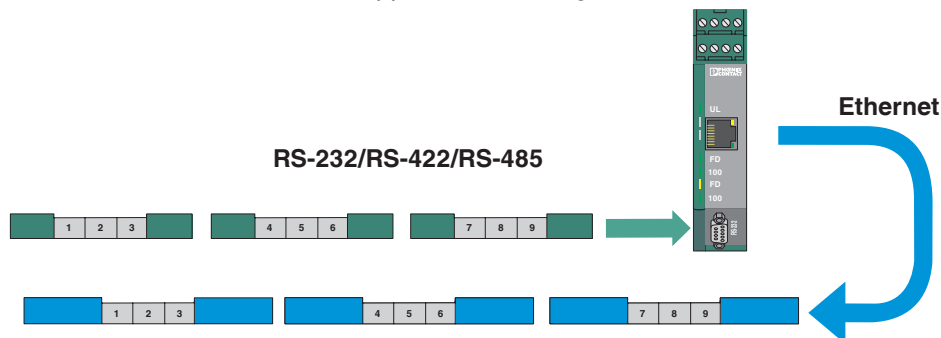
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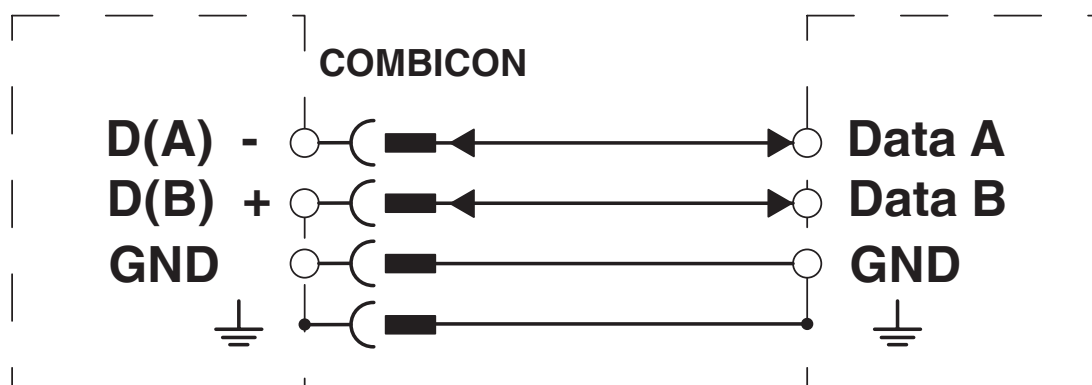
Application drawing



Small value: "Idle Force Timeout Characters"

Connection diagram

FL COMSERVER RS-485

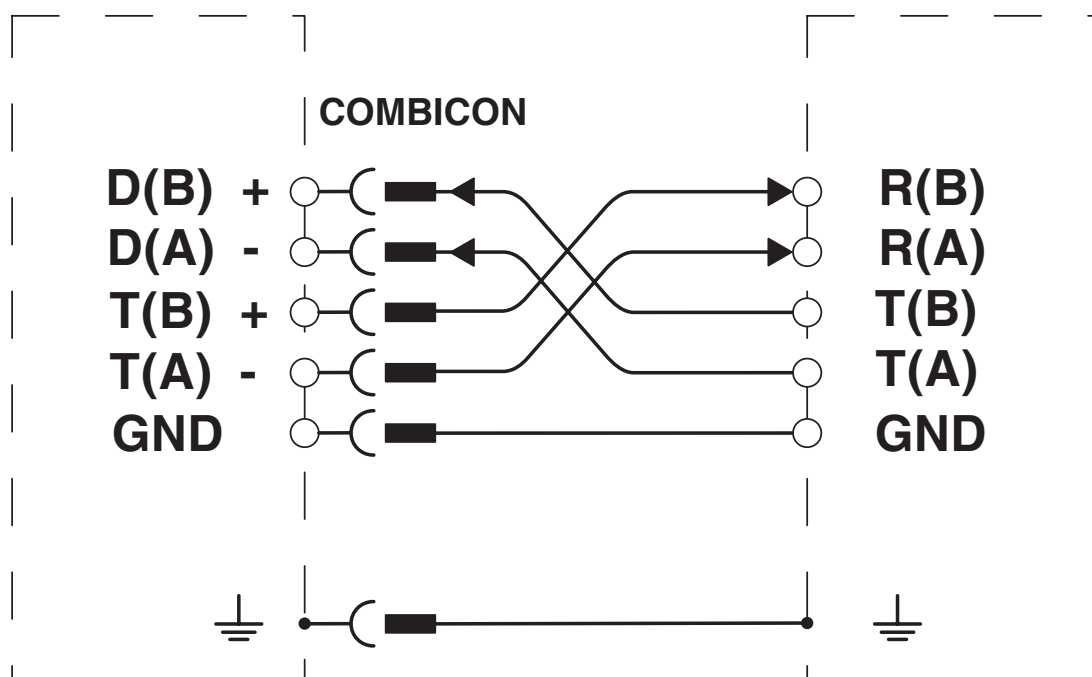


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Connection diagram

FL COMSERVER RS-422



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Classifications

UNSPSC

UNSPSC 21.0	43222604
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Environmental product compliance

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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