

Interface converters - FL COMSERVER BASIC 232/422/485 - 2313478

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Second generation FL COMSERVER BASIC..., serial device server for converting a serial RS-232/422/485 interface to Ethernet, only supports TCP and UDP applications, incl. Com Port Redirector software and user documentation (PDF)

Product Features

- Reasonably-priced version
- Software for virtual COM ports supplied as standard
- TCP and UDP support
- Configuration via web-based management
- All connections can be plugged in using a COMBICON screw terminal block



Key Commercial Data

| | |
|--------------------------------------|----------|
| Packing unit | 1 pc |
| Weight per Piece (excluding packing) | 200.0 g |
| Custom tariff number | 85176200 |
| Country of origin | Germany |

Technical data

Note

| | |
|-------------------------|---|
| Utilization restriction | EMC: class A product, see manufacturer's declaration in the download area |
|-------------------------|---|

Dimensions

| | |
|--------|---------|
| Width | 22.5 mm |
| Height | 99 mm |
| Depth | 116 mm |

Ambient conditions

| | |
|---------------------------------|------------------|
| Ambient temperature (operation) | -25 °C ... 60 °C |
|---------------------------------|------------------|

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Ambient conditions

| | |
|--|--|
| | -20 °C ... 60 °C (With UL approval) |
| Ambient temperature (storage/transport) | -25 °C ... 70 °C |
| Permissible humidity (operation) | 10 % ... 95 % (non-condensing) |
| Permissible humidity (storage/transport) | 5 % ... 95 % (non-condensing) |
| Altitude | 5000 m (For restrictions see manufacturer's declaration) |
| Degree of protection | IP20 |
| Noise immunity | EN 61000-6-2:2005 |

General

| | |
|--|---|
| Electrical isolation | DIN EN 50178 (VCC // Ethernet // Serial) |
| Test voltage data interface/data interface | 1.5 kV _{rms} (50 Hz, 1 min.) |
| Test voltage data interface/power supply | 1.5 kV _{rms} |
| | 1.5 kV _{rms} (50 Hz, 1 min.) |
| Standards/regulations | EN 50121-4 |
| Electromagnetic compatibility | Conformance with EMC Directive 2004/108/EC (valid until 19.04.2016) / 2014/30/EU (valid from 20.04.2016) |
| Noise emission | EN 61000-6-4 |
| Net weight | 180.3 g |
| Housing material | PA 6.6-FR |
| Color | green |
| 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)) |
| MTTF | 2001 Years (SN 29500 standard, temperature 25°C, operating cycle 21 % (5 days a week, 8 hours a day)) |
| | 870 Years (SN 29500 standard, temperature 40 °C, operating cycle 34.25 % (5 days a week, 12 hours a day)) |
| | 355 Years (SN 29500 standard, temperature 40°C, operating cycle 100 % (7 days a week, 24 hours a day)) |
| Conformance | CE-compliant |
| ATEX | # II 3 G Ex nA IIC T4 Gc X (Please follow the special installation instructions in the documentation!) |
| UL, USA | Class I, Zone 2, AEx nA IIC T5 |
| UL, USA / Canada | 508 listed |
| | Class I, Div. 2, Groups A, B, C, D |
| UL, Canada | Class I, zone 2, Ex nA IIC T5 Gc X |

Power supply

| | |
|------------------------|--|
| Nominal supply voltage | 24 V AC/DC ±20 % (via pluggable COMBICON screw terminal block) |
|------------------------|--|

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Power supply

| | |
|-----------------------------|---|
| | 24 V DC $\pm 5\%$ (as an alternative or redundant, via backplane bus contact and system current supply) |
| Supply voltage range | 19.2 V AC/DC ... 28.8 V AC/DC (via pluggable COMBICON screw terminal block) |
| | 22.8 V DC ... 25.2 V DC (as an alternative or redundant, via backplane bus contact and system current supply) |
| Typical current consumption | 100 mA (24 V DC) |

Serial interface

| | |
|-----------------------------|--|
| Interface 1 | Ethernet interface, 10/100BASE-T(X) in acc. with IEEE 802.3u |
| Interface | Ethernet |
| Connection method | RJ45 socket, shielded |
| Transmission length | ≤ 100 m (shielded twisted pair) |
| Protocols supported | TCP/IP, UDP |
| Auxiliary protocols | ARP, DHCP, BOOTP, SNMP, RIP, RARP, HTTP, TFTP |
| Serial transmission speed | 10/100 Mbps, auto negotiation |
| Interface 2 | V.24 (RS-232) interface in acc. with ITU-T V.28, EIA/TIA-232, DIN 66259-1 |
| Interface | RS-232 |
| Connection method | D-SUB-9 plug |
| File format/coding | UART/NRZ: 7/8 Bit Data, 1/2 Bit Stopp, None/Even/Odd Parity |
| Transmission length | 15 m |
| Pin assignment | DTE/DCE switchover via web-based management |
| Data flow control/protocols | Software handshake, Xon/Xoff or hardware handshake RTS/CTS |
| 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 |
| Interface 3 | RS-422 interface in acc. with ITU-T V.11, EIA/TIA-422, DIN 66348-1 |
| Interface | RS-422 |
| Connection method | Plug-in/screw connection via COMBICON |
| File format/coding | Serial asynchronous UART/NRZ, 7/8 data, 1/2 stop, 1 parity, 10/11-bit character length |
| Transmission length | ≤ 1200 m |
| Termination resistor | 390 Ω (configurable) |
| | 180 Ω |
| | 390 Ω |
| Data flow control/protocols | Automatic control |
| 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 |
| Interface 4 | RS-485 interface, in acc. with EIA/TIA-485, DIN 66259-4/RS-485 2-wire |
| Interface | RS-485 |
| Connection method | Plug-in/screw connection via COMBICON |

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Technical data

Serial interface

| | |
|-----------------------------|--|
| File format/coding | UART/NRZ: 7/8 Bit Data, 1/2 Bit Stopp, None/Even/Odd Parity |
| Termination resistor | 390 Ω (configurable) |
| | 180 Ω |
| | 390 Ω |
| Data flow control/protocols | Automatic control |
| 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 |

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) |

Standards and Regulations

| | |
|---|--|
| Electromagnetic compatibility | Conformance with EMC Directive 2004/108/EC (valid until 19.04.2016) / 2014/30/EU (valid from 20.04.2016) |
| Type of test | Free fall in acc. with IEC 60068-2-32 |
| Test result | 1 m |
| Type of test | Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6 |
| Test result | 5g, 10-150 Hz, 2.5 h, in XYZ direction |
| Type of test | Shock in acc. with EN 60068-2-27/IEC 60068-2-27 |
| Test result | 15g, 11 ms period, half-sine shock pulse |
| Type of test | Shock in acc. with EN 60068-2-27/IEC 60068-2-27 |
| Test result | 30g, 11 ms period, half-sine shock pulse |
| Noise emission | EN 61000-6-4 |
| Noise immunity | EN 61000-6-2:2005 |
| Free from substances that could impair the application of coating | according to P-VW 3.10.7 57 65 0 VW-AUDI-Seat central standard |
| Standards/regulations | EN 50121-4 |
| Conformance | CE-compliant |
| ATEX | # II 3 G Ex nA IIC T4 Gc X |
| UL, USA | Class I, Zone 2, AEx nA IIC T5 |
| UL, USA / Canada | 508 listed |
| | Class I, Div. 2, Groups A, B, C, D |
| UL, Canada | Class I, zone 2, Ex nA IIC T5 Gc X |

Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 27250504 |
|------------|----------|

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Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.1 | 27250504 |
| eCl@ss 5.0 | 27250504 |
| eCl@ss 5.1 | 27250504 |
| eCl@ss 6.0 | 27250504 |
| eCl@ss 7.0 | 27250504 |
| eCl@ss 8.0 | 19179290 |

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC000310 |
| ETIM 3.0 | EC000310 |
| ETIM 4.0 | EC000310 |
| ETIM 5.0 | EC000310 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211506 |
| UNSPSC 7.0901 | 39121008 |
| UNSPSC 11 | 39121008 |
| UNSPSC 12.01 | 39121008 |
| UNSPSC 13.2 | 39121008 |

Approvals

Approvals

Approvals

UL Listed / cUL Listed / EAC / EAC / KC / cULus Listed

Ex Approvals

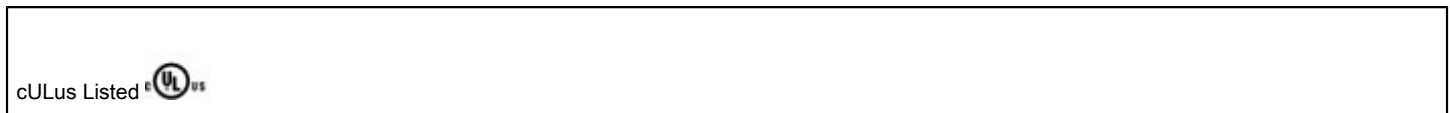
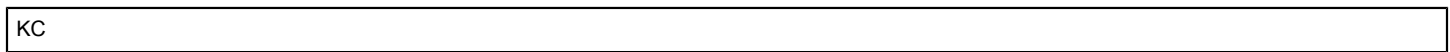
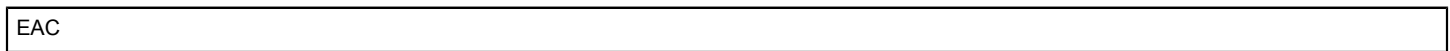
ATEX / ATEX / UL Listed / cUL Listed / cULus Listed

Approvals submitted

Approval details

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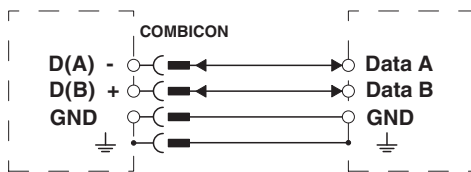
Approvals



Drawings

Connection diagram

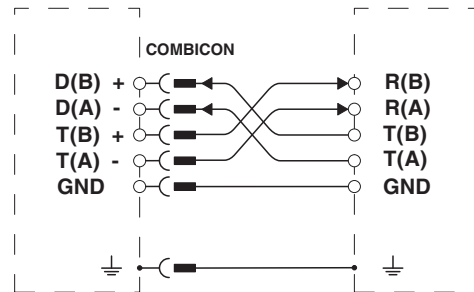
FL COMSERVER RS-485



RS-485 connection

Connection diagram

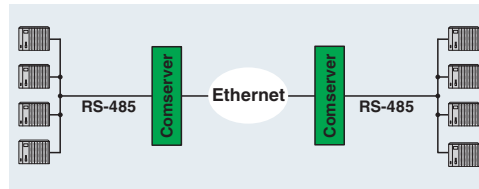
FL COMSERVER RS-422



RS-422 connection

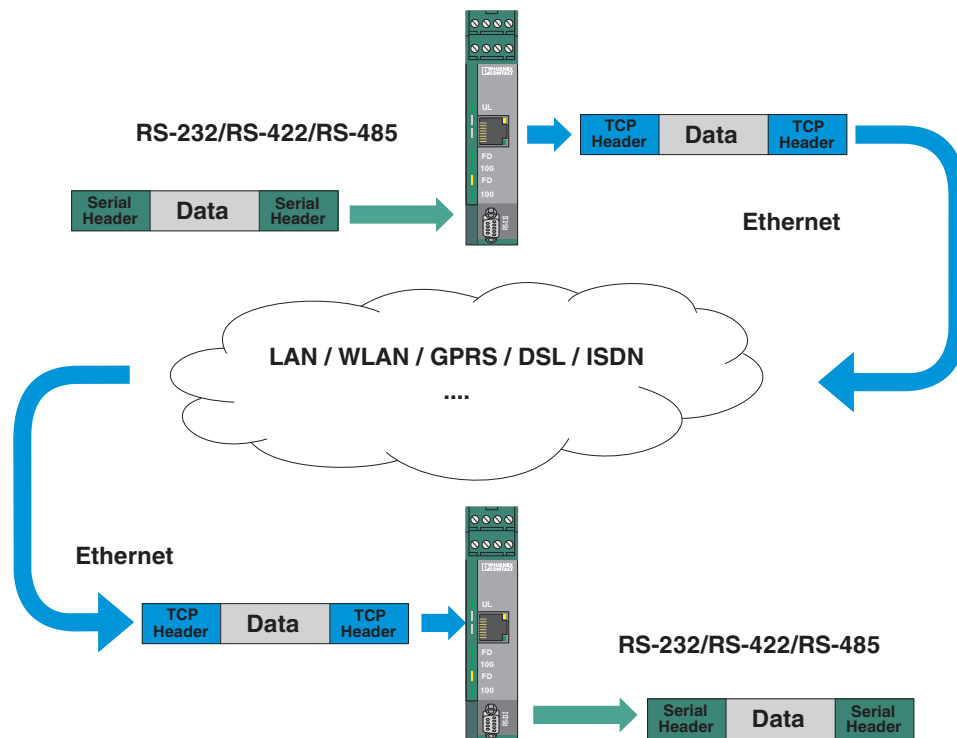
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Application drawing



Increasing the range with FL COMSERVER

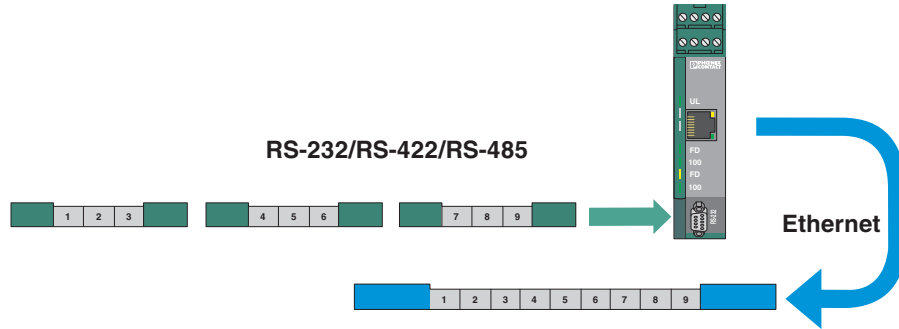
Application drawing



Serial data transmission via Ethernet

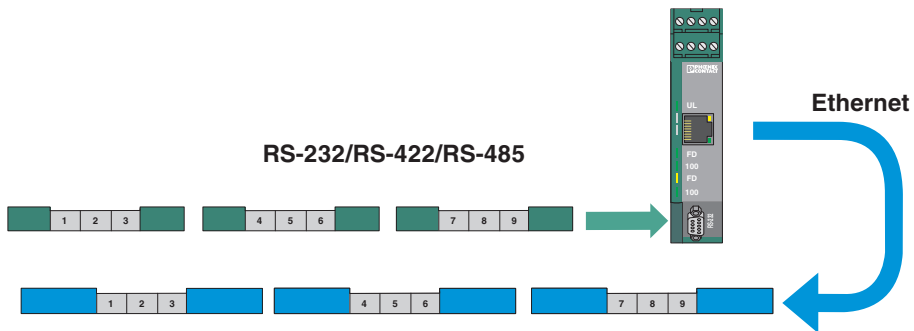
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Application drawing



Large value: "Idle Force Timeout Characters"

Application drawing



Small value: "Idle Force Timeout Characters"