

## Interface converter - PSM-ME-RS232/RS232-P - 2744461

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Interface converter, for the isolation of RS-232 (V.24) interfaces, 4 channels, rail-mountable

### Why buy this product

- ✓ Mounting on standard EN DIN rails
- ✓ In the case of variable cable lengths, the RS-232 connection on the field side can be established conveniently using plug-in screw terminal blocks
- ✓ High-quality 3-way isolation up to 2 kV (VCC // RS-232 // RS-232)
- ✓ Integrated surge protection with transient discharge to the DIN rail
- ✓ Maximum transmission speed of 115.2 kbps
- ✓ Transmission of TxD/RxD data channels and RTS/CTS control lines
- ✓ 24 V DC or AC power supply suitable for the control cabinet
- ✓ Active data transmission indicated by separate data indicators for the transmit and receive channels
- ✓ Shipbuilding approval according to DNV



### Key Commercial Data

|                                      |                                                                                                         |
|--------------------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit                         | 1 STK                                                                                                   |
| GTIN                                 | <br>4 017918 188795 |
| GTIN                                 | 4017918188795                                                                                           |
| Weight per Piece (excluding packing) | 181.200 g                                                                                               |
| Custom tariff number                 | 85176200                                                                                                |
| Country of origin                    | Germany                                                                                                 |

### Technical data

#### Note

# Interface converter - PSM-ME-RS232/RS232-P - 2744461

## Technical data

### Note

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

### Dimensions

|         |             |
|---------|-------------|
| Caption | Slim design |
| Width   | 22.5 mm     |
| Height  | 99 mm       |
| Depth   | 118.6 mm    |

### Ambient conditions

|                                         |                                                          |
|-----------------------------------------|----------------------------------------------------------|
| Ambient temperature (operation)         | 0 °C ... 55 °C                                           |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C                                         |
| Permissible humidity (operation)        | 10 % ... 95 % (non-condensing)                           |
| Altitude                                | 5000 m (For restrictions see manufacturer's declaration) |
| Degree of protection                    | IP20                                                     |
| Noise immunity                          | EN 61000-6-2:2005                                        |

### General

|                                          |                                                                                                          |
|------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Transmission channels                    | 4 (2/2), RxD, TxD, RTS, CTS; full duplex                                                                 |
| Bit delay                                | < 3 µs                                                                                                   |
| Bit distortion                           | < 5 %                                                                                                    |
| Electrical isolation                     | VCC // V.24 (RS-232) (A) // V.24 (RS-232) (B)                                                            |
| Test voltage data interfaces             | 2 kV AC                                                                                                  |
| Test voltage data interface/power supply | 2 kV AC                                                                                                  |
|                                          | 2 kV <sub>rms</sub> (50 Hz, 1 min.)                                                                      |
| Electromagnetic compatibility            | Conformance with EMC Directive 2014/30/EU                                                                |
| Noise emission                           | EN 61000-6-3                                                                                             |
| Net weight                               | 123,18 g                                                                                                 |
| Housing material                         | PA                                                                                                       |
| Color                                    | green                                                                                                    |
| MTBF                                     | 2263 Years (Telcordia standard, 25°C temperature, 21% operating cycle (5 days a week, 8 hours a day))    |
|                                          | 438 Years (Telcordia standard, 40°C temperature, 34.25% operating cycle (5 days a week, 12 hours a day)) |
| Conformance                              | CE-compliant                                                                                             |
| UL, USA/Canada                           | 508 recognized                                                                                           |
|                                          | Class I, Div. 2, Groups A, B, C, D                                                                       |
|                                          | Class I, Zone 2, AEx nA IIC T4                                                                           |
|                                          | Class I, Zone 2, Ex nA IIC T4 Gc X                                                                       |

## Interface converter - PSM-ME-RS232/RS232-P - 2744461

### Technical data

#### Power supply

|                             |                                   |
|-----------------------------|-----------------------------------|
| Nominal supply voltage      | 24 V AC/DC $\pm 20\%$             |
| Supply voltage range        | 19.2 V AC/DC ... 28.8 V AC/DC     |
| Typical current consumption | 40 mA (24 V DC)                   |
| Protective circuit          | Surge protection Suppressor diode |

#### Serial interface

|                                       |                                                                           |
|---------------------------------------|---------------------------------------------------------------------------|
| Interface 1                           | V.24 (RS-232) interface in acc. with ITU-T V.28, EIA/TIA-232, DIN 66259-1 |
| Connection method                     | D-SUB 9 plug                                                              |
| Transmission length                   | 15 m (shielded twisted pair)                                              |
| Conductor cross section flexible min. | 0.2 mm <sup>2</sup>                                                       |
| Conductor cross section flexible max. | 2.5 mm <sup>2</sup>                                                       |
| Conductor cross section AWG min.      | 24                                                                        |
| Conductor cross section AWG max.      | 13                                                                        |
| Pin assignment                        | DTE/DCE switchover via switch                                             |
| Protocols supported                   | transparent protocol                                                      |
| Serial transmission speed             | 115.2 kbps                                                                |
| Interface 2                           | V.24 (RS-232) interface in acc. with ITU-T V.28, EIA/TIA-232, DIN 66259-1 |
| Connection method                     | Pluggable screw connection                                                |
| Transmission length                   | 15 m (shielded twisted pair)                                              |
| Conductor cross section flexible min. | 0.2 mm <sup>2</sup>                                                       |
| Conductor cross section AWG min.      | 24                                                                        |
| Conductor cross section AWG max.      | 13                                                                        |

#### Standards and Regulations

|                                  |                                           |
|----------------------------------|-------------------------------------------|
| Electromagnetic compatibility    | Conformance with EMC Directive 2014/30/EU |
| Noise emission                   | EN 61000-6-3                              |
| Noise immunity                   | EN 61000-6-2:2005                         |
| Connection in acc. with standard | CUL                                       |
| Standards/regulations            | EN 61000-4-2                              |
| Contact discharge                | $\pm 6$ kV (Test Level 3)                 |
| Standards/regulations            | EN 61000-4-3                              |
| Frequency range                  | Test Level 3                              |
| Standards/regulations            | EN 61000-4-4                              |
| Comments                         | Criterion B                               |
| Standards/regulations            | EN 61000-4-5                              |
| Signal                           | $\pm 2$ kV (12 $\Omega$ )                 |
| Standards/regulations            | EN 55011                                  |
|                                  | EN 61000-4-6                              |



# Interface converter - PSM-ME-RS232/RS232-P - 2744461

## Technical data

### Standards and Regulations

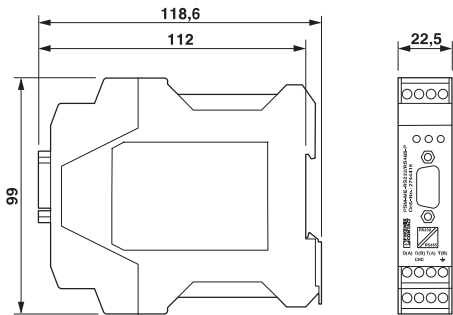
|                       |                                    |
|-----------------------|------------------------------------|
| Conformance           | CE-compliant                       |
| UL, USA/Canada        | 508 recognized                     |
|                       | Class I, Div. 2, Groups A, B, C, D |
|                       | Class I, Zone 2, AEx nA IIC T4     |
|                       | Class I, Zone 2, Ex nA IIC T4 Gc X |
| Noxious gas test      | ISA-S71.04-1985 G3 Harsh Group A   |
| Shipbuilding approval | DNV                                |

### Environmental Product Compliance

|            |                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------|
| REACH SVHC | Lead 7439-92-1                                                                                      |
| China RoHS | Environmentally Friendly Use Period = 50                                                            |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

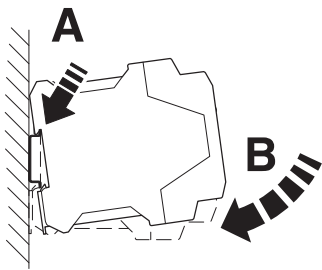
## Drawings

Dimensional drawing



Slim design

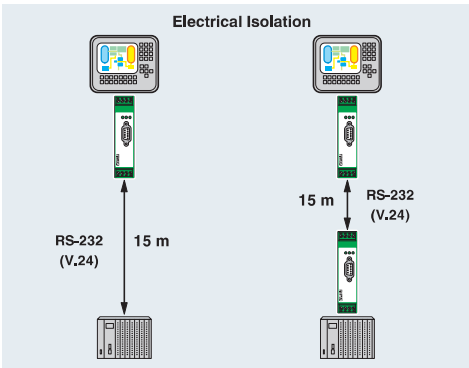
Schematic diagram



Mounting

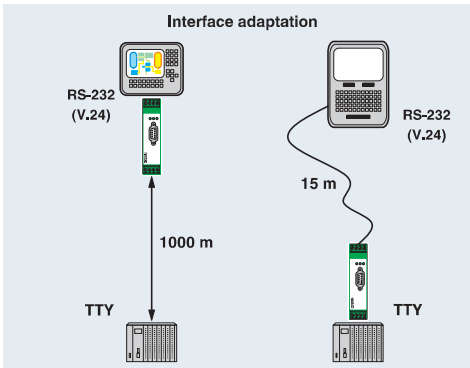
Interface converter - PSM-ME-RS232/RS232-P - 2744461

Application drawing



Electrical isolation

Application drawing



Interface adaptation

Classifications

eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27250312 |
| eCl@ss 4.1 | 27250312 |
| eCl@ss 5.0 | 27242208 |
| eCl@ss 5.1 | 27242700 |
| eCl@ss 6.0 | 27242200 |
| eCl@ss 7.0 | 27242208 |
| eCl@ss 8.0 | 27242208 |
| eCl@ss 9.0 | 27242208 |

ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC000310 |
| ETIM 3.0 | EC000310 |
| ETIM 4.0 | EC000310 |
| ETIM 5.0 | EC000310 |
| ETIM 6.0 | EC001423 |

UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30211506 |
| UNSPSC 7.0901 | 39121008 |
| UNSPSC 11     | 39121008 |
| UNSPSC 12.01  | 39121008 |
| UNSPSC 13.2   | 39122114 |

# Interface converter - PSM-ME-RS232/RS232-P - 2744461

## Approvals

### Approvals

Approvals

UL Recognized / cUL Recognized / EAC / DNV GL / cULus Recognized

Ex Approvals

UL Recognized / cUL Recognized / UL Listed / cUL Listed / cULus Recognized / cULus Listed

### Approval details

|                  |                                                                                     |                                                                                                                                                       |               |
|------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| UL Recognized    |    | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 238705 |
| cUL Recognized   |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 238705 |
| EAC              |  |                                                                                                                                                       | EAC-Zulassung |
| DNV GL           |                                                                                     | <a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a>                                                                             | TAA00001KR    |
| cULus Recognized |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> |               |

## Accessories

### Accessories

#### Adapter cable

Data cable - PSM-KA 9 SUB 25/BB/2METER - 2761059



RS-232 cable, 9-pos. D-SUB socket 25-pos on D-SUB socket

## Interface converter - PSM-ME-RS232/RS232-P - 2744461

### Accessories

---

Data cable - PSM-KA9SUB9/BB/2METER - 2799474



RS-232 cable, 9-pos. D-SUB socket on 9-pos. D-SUB socket, 9-wire, 1:1

### Mounting material

---

Components of electronic housing - ME-SAS - 2853899



Shield connection clip for printed circuit terminal block

### Screwdriver tools

---

Screwdriver - SZF 1-0,6X3,5 - 1204517



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip