

ISOLATING SWITCHING AMPLIFIERS POWER SUPPLIES

RECHNER
SENSORS



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Edition 2017

With publication of this catalogue all former printed catalogues about RECHNER isolating switching amplifiers and power supplies are invalid.

All specifications are subject to change without notice. (2017)

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ISOLATING SWITCHING AMPLIFIER SERIES N-132...



The *Series N-132...* isolating switching amplifiers (Ex Barrier) transmit switching operations from an intrinsically safe control circuit to a non-intrinsically safe active current circuit. The control units are designed according to NAMUR-DIN 19234 or EN 60947-5-6 intrinsically safe and according to IEC 60079 [Ex ia] II C. The conformity is certified in Germany by DEKRA EXAM GmbH.

Power pack, switching amplifier, electronic evaluation unit and output relay are all integrated in the 17.6 mm sized housing. The units are EMC-approved according to IEC 61000-4-2 to 5. Quick mounting is possible on profile according to NS35/15 or NS35/7,5. LED displays are integrated in the front plate for stand-by (green), state of output (yellow) and wire-break / shortcircuit of the sensor cable (red).

The isolating switching amplifiers can be actuated by NAMUR sensors, e.g. our series *IAS-30...and KAS-40...* or by mechanical contacts.

ISOLATING SWITCHING AMPLIFIERS SERIES N-132...

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Isolating Switching Amplifier

N-132/1-01 120...230 V AC

- To connect **one NAMUR-Sensor** or potential-free mechanical contact, which is mounted in the zones 0, 1, 2 (Gas) or 20, 21, 22 (dust)
- Compact design - only 17.6 mm width
- Removable screw terminals
- Indication sensor wire-break or shortcircuit via LED display

Certificate:

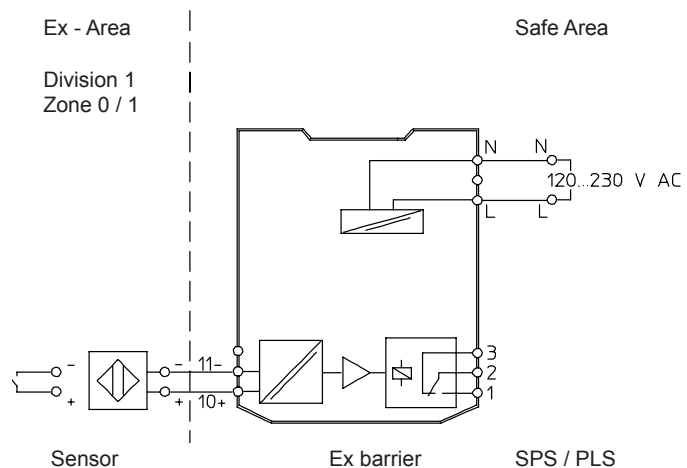
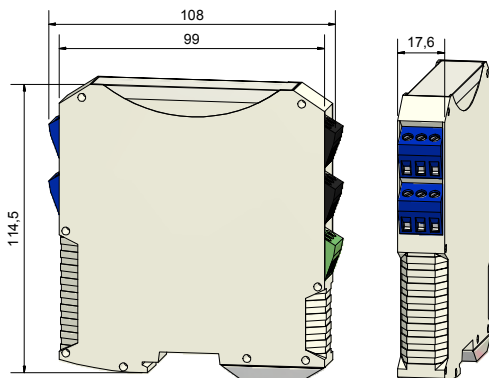


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|-----------------------|--------------------|
| DMT 09 ATEX E 087X | IECEX BVS 10.0088X |
| II (1) G [Ex ia] IIC | [Ex ia] IIC |
| II (1) D [Ex ia] IIIC | [Ex ia] IIIC |



Technical data

| | |
|--------------------------------------|--|
| Operating voltage (U_B) | 120...230 V AC |
| Output function | 1 x change-over contact potential-free |
| Contact rating each relay AC max. | 250 V AC / 4 A |
| Contact rating each relay DC max. | 250 V DC / 2 A |
| Type | N-132/1-01 |
| Art.-No. | N 00012 |
| No-load current (I_o) | Typ. 12 mA |
| No-load voltage max. (U_o) | 9.6 V DC |
| Short-circuit current max. (I_k) | 10 mA |
| Outer inductance max. (L_o) | [Ex ia] IIC 350 mH / IIB 1000 mH |
| Outer capacitance max. (C_o) | [Ex ia] IIC 3.6 μ F / IIB 26 μ F |
| Actuating signal | NAMUR EN 60547-5-6 |
| Permitted ambient temperature | -20...+70 °C |
| Display | Red / yellow and green |
| Degree of protection IC 60529 | Housing: IP 30 Terminals: IP 20 |
| Norm | EN 60947-5-6 |
| Connection | Screw terminals |



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Isolating Switching Amplifier

N-132/1-10 24 V DC

- To connect **one NAMUR-Sensor** or potential-free mechanical contact, which is mounted in the zones 0, 1, 2 (Gas) or 20, 21, 22 (dust)
- Compact design - only 17.6 mm width
- Removable screw terminals
- Indication sensor wire-break or shortcircuit via relay contact

Certificate:



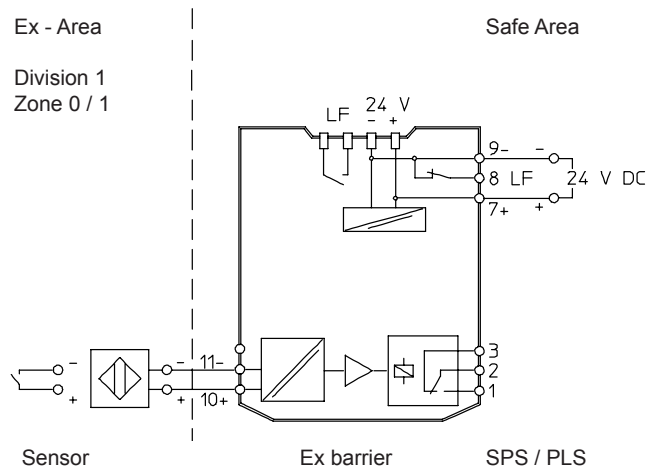
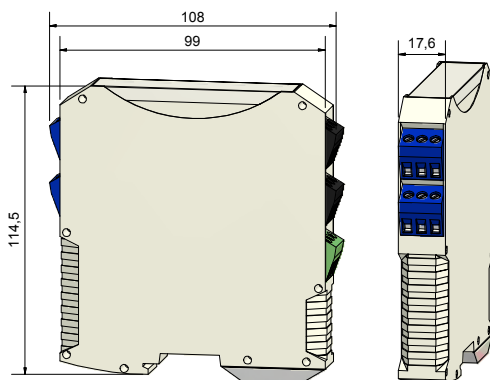
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| DMT 09 ATEX E 087X | IECEX BVS 10.0088X |
| [Ex] II (1) G [Ex ia] IIC | [Ex ia] IIC |
| [Ex] II (1) D [Ex ia] IIIC | [Ex ia] IIIC |



Technical data

| | |
|--------------------------------------|--|
| Operating voltage (U_B) | 18...31.2 V DC |
| Output function | 1 x change-over contact potential-free |
| Contact rating each relay AC max. | 250 V AC / 4 A |
| Contact rating each relay DC max. | 250 V DC / 2 A |
| Type | N-132/1-10 |
| Art.-No. | N 00014 |
| No-load current (I_o) | Typ. 33 mA |
| No-load voltage max. (U_o) | 9.6 V DC |
| Short-circuit current max. (I_K) | 10 mA |
| Outer inductance max. (L_o) | [Ex ia] IIC 350 mH / IIB 1000 mH |
| Outer capacitance max. (C_o) | [Ex ia] IIC 3.6 μ F / IIB 26 μ F |
| Actuating signal | NAMUR EN 60547-5-6 |
| Permitted ambient temperature | -20...+70 °C |
| Display | Red / yellow and green |
| Degree of protection IC 60529 | Housing: IP 30 Terminals: IP 20 |
| Norm | EN 60947-5-6 |
| Connection | Screw terminals |

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Isolating Switching Amplifier

N-132/1(2)-01 120...230 V AC

- To connect **one NAMUR-Sensor** or potential-free mechanical contact, which is mounted in the zones 0, 1, 2 (Gas) or 20, 21, 22 (dust)
- With 2 relay outputs.
- Compact design - only 17.6 mm width
- Removable screw terminals
- Indication sensor wire-break or shortcircuit via LED display

Certificate:

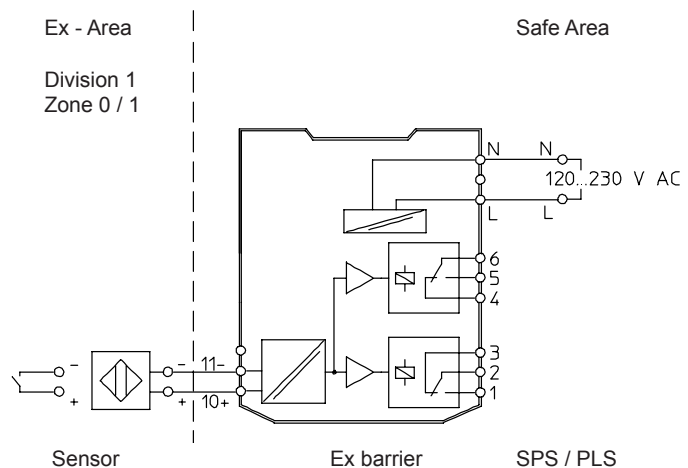
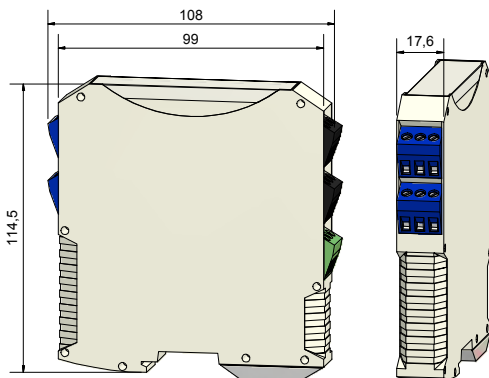


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| DMT 09 ATEX E 087X | IECEX BVS 10.0088X |
| II (1) G [Ex ia] IIC | [Ex ia] IIC |
| II (1) D [Ex ia] IIIC | [Ex ia] IIIC |



Technical data

| | |
|--------------------------------------|--|
| Operating voltage (U_B) | 120...230 V AC |
| Output function | 2 x change-over contact potential-free |
| Contact rating each relay AC max. | 250 V AC / 4 A |
| Contact rating each relay DC max. | 250 V DC / 2 A |
| Type | N-132/1(2)-01 |
| Art.-No. | N 00021 |
| No-load current (I_o) | Typ. 12 mA |
| No-load voltage max. (U_o) | 9.6 V DC |
| Short-circuit current max. (I_k) | 10 mA |
| Outer inductance max. (L_o) | [Ex ia] IIC 350 mH / IIB 1000 mH |
| Outer capacitance max. (C_o) | [Ex ia] IIC 3.6 μ F / IIB 26 μ F |
| Actuating signal | NAMUR EN 60547-5-6 |
| Permitted ambient temperature | -20...+70 °C |
| Display | Red / yellow and green |
| Degree of protection IC 60529 | Housing: IP 30 Terminals: IP 20 |
| Norm | EN 60947-5-6 |
| Connection | Screw terminals |



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Isolating Switching Amplifier

N-132/2-01 120...230 V AC

- To connect **two NAMUR-Sensors** or potential-free mechanical contacts, which are mounted in the zones 0, 1, 2 (Gas) or 20, 21, 22 (dust)
- Compact design - only 17.6 mm width
- Removable screw terminals
- Indication sensor wire-break or shortcircuit via LED display

Certificate:



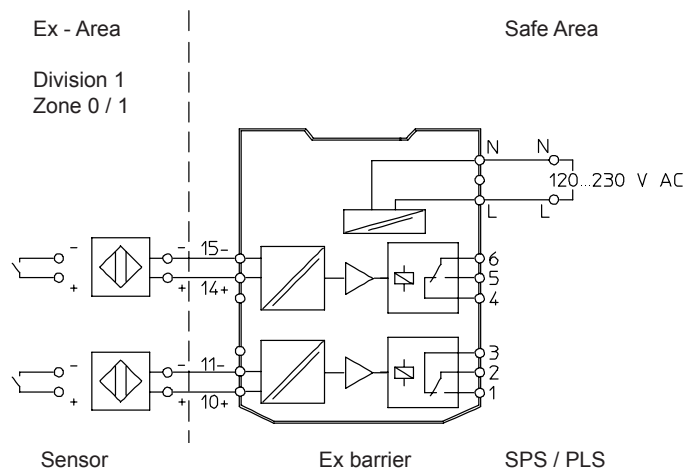
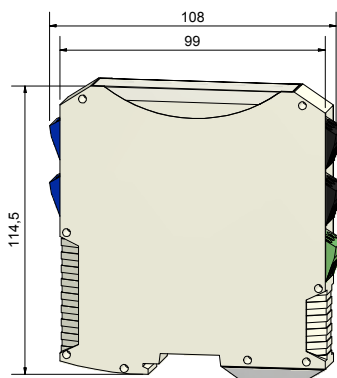
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| DMT 09 ATEX E 087X | IECEX BVS 10.0088X |
| [Ex] II (1) G [Ex ia] IIC | [Ex ia] IIC |
| [Ex] II (1) D [Ex ia] IIIC | [Ex ia] IIIC |



Technical data

| | |
|--------------------------------------|--|
| Operating voltage (U_B) | 120...230 V AC |
| Output function | 2 x change-over contact potential-free |
| Contact rating each relay AC max. | 250 V AC / 4 A |
| Contact rating each relay DC max. | 250 V DC / 2 A |
| Type | N-132/2-01 |
| Art.-No. | N 00015 |
| No-load current (I_o) | Typ. 18 mA |
| No-load voltage max. (U_o) | 9.6 V DC |
| Short-circuit current max. (I_k) | 20 mA |
| Outer inductance max. (L_o) | [Ex ia] IIC 90 mH / IIB 340 mH |
| Outer capacitance max. (C_o) | [Ex ia] IIC 3.6 μ F / IIB 26 μ F |
| Actuating signal | NAMUR EN 60547-5-6 |
| Permitted ambient temperature | -20...+70 °C |
| Display | Red / yellow and green |
| Degree of protection IC 60529 | Housing: IP 30 Terminals: IP 20 |
| Norm | EN 60947-5-6 |
| Connection | Screw terminals |

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Isolating Switching Amplifier

N-132/2-10 24 V DC

- To connect **two NAMUR-Sensors** or potential-free mechanical contacts which are mounted in the zones 0, 1, 2 (Gas) or 20, 21, 22 (dust)
- Compact design - only 17.6 mm width
- Removable screw terminals
- Indication sensor wire-break or shortcircuit via relay contact

Certificate:

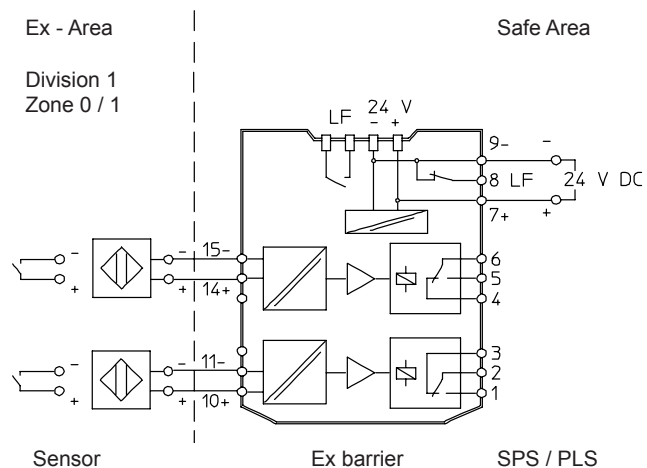
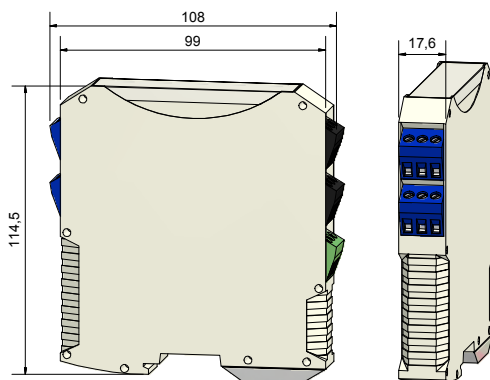


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|-----------------------|--------------------|
| DMT 09 ATEX E 087X | IECEX BVS 10.0088X |
| II (1) G [Ex ia] IIC | [Ex ia] IIC |
| II (1) D [Ex ia] IIIC | [Ex ia] IIIC |



Technical data

| | |
|--------------------------------------|--|
| Operating voltage (U_B) | 18...31.2 V DC |
| Output function | 2 x change-over contact potential-free |
| Contact rating each relay AC max. | 250 V AC / 4 A |
| Contact rating each relay DC max. | 250 V DC / 2 A |
| Type | N-132/2-10 |
| Art.-No. | N 00017 |
| No-load current (I_o) | Typ. 55 mA |
| No-load voltage max. (U_o) | 9.6 V DC |
| Short-circuit current max. (I_k) | 20 mA |
| Outer inductance max. (L_o) | [Ex ia] IIC 90 mH / IIB 340 mH |
| Outer capacitance max. (C_o) | [Ex ia] IIC 3.6 μ F / IIB 26 μ F |
| Actuating signal | NAMUR EN 60547-5-6 |
| Permitted ambient temperature | -20...+70 °C |
| Display | Red / yellow and green |
| Degree of protection IC 60529 | Housing: IP 30 Terminals: IP 20 |
| Norm | EN 60947-5-6 |
| Connection | Screw terminals |



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Isolating Switching Amplifier

N-132/1-E-10 24 V DC

- To connect **one NAMUR-Sensor** or potential-free mechanical contact, which is mounted in the zones 0, 1, 2 (Gas) or 20, 21, 22 (dust)
- Amplifier for use in areas with the risk of gas explosion, zone 2
- Compact design - only 17.6 mm width
- Removable screw terminals
- Indication sensor wire-break or shortcircuit via relay contact

Certificate:



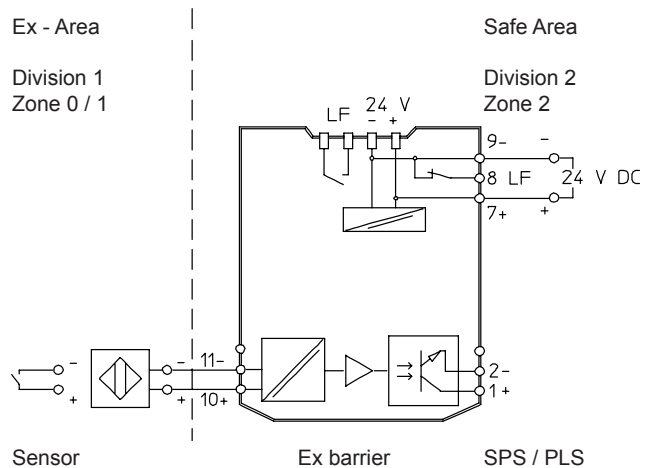
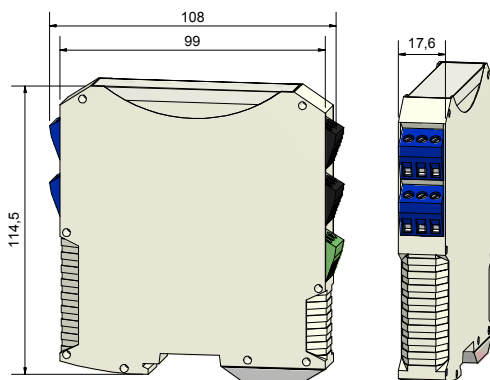
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| DMT 09 ATEX E 087X | IECEx BVS 10.0088X |
| Ex II (1) G [Ex ia] IIC | Ex nAc nCc [ia] IIC T4 |
| Ex II (1) D [Ex ia] IIC | [Ex ia] IIC |



Technical data

| | |
|---|--|
| Operating voltage (U_B) | 18...31.2 V DC |
| Output function | 1 x transistor output / open collector |
| Contact rating each DC output max. | 35 V DC / 50 mA |
| Type | N-132/1-E-10 |
| Art.-No. | N 00022 |
| No-load current (I_o) | Typ. 26 mA |
| No-load voltage max. (U_o) | 9.6 V DC |
| Short-circuit current max. (I_{sc}) | 10 mA |
| Outer inductance max. (L_o) | [Ex ia] IIC 350 mH / IIB 1000 mH |
| Outer capacitance max. (C_o) | [Ex ia] IIC 3.6 μ F / IIB 26 μ F |
| Actuating signal | NAMUR EN 60547-5-6 |
| Permitted ambient temperature | -20...+70 °C |
| Display | Red / yellow and green |
| Degree of protection IC 60529 | Housing: IP 30 Terminals: IP 20 |
| Norm | EN 60947-5-6 |
| Connection | Screw terminals |

All specifications are subject to change without notice. (2017)



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Isolating Switching Amplifier

N-132/2-E-10 24 V DC

- To connect **two NAMUR-Sensors** or potential-free mechanical contacts which are mounted in the zones 0, 1, 2 (Gas) or 20, 21, 22 (dust).
- Amplifier for use in areas with the risk of gas explosion, zone 2
- Compact design - only 17.6 mm width
- Removable screw terminals
- Indication sensor wire-break or short-circuit via relay contact

Certificate:

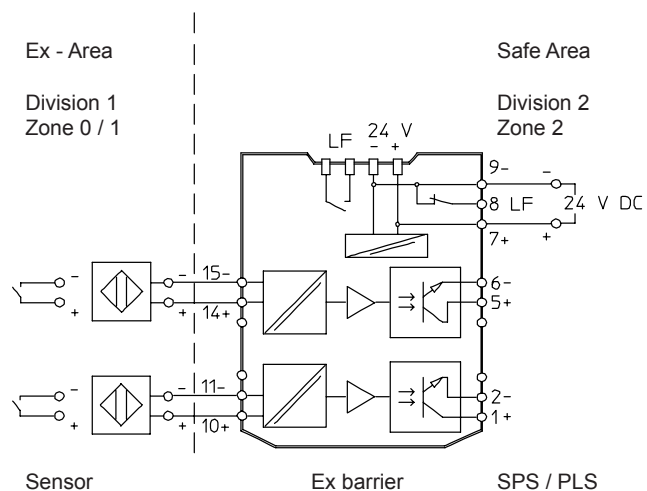
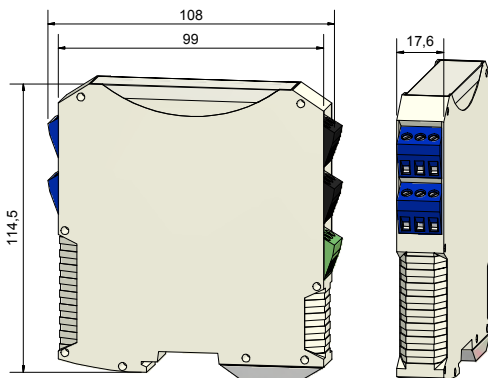


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| DMT 09 ATEX E 087X | IECEX BVS 10.0088X |
| II (1) G [Ex ia] IIC | Ex nAc nCc [ia] IIC T4 |
| II (1) D [Ex ia] IIIC | [Ex ia] IIIC |



Technical data

| | |
|--------------------------------------|--|
| Operating voltage (U_b) | 18...31.2 V DC |
| Output function | 2 x transistor output / open collector |
| Contact rating each DC output max. | 35 V DC / 50 mA |
| Type | N-132/2-E-10 |
| Art.-No. | N 00018 |
| No-load current (I_o) | Typ. 36 mA |
| No-load voltage max. (U_o) | 9.6 V DC |
| Short-circuit current max. (I_k) | 20 mA |
| Outer inductance max. (L_o) | [Ex ia] IIC 90 mH / IIB 340 mH |
| Outer capacitance max. (C_o) | [Ex ia] IIC 3.6 μ F / IIB 26 μ F |
| Actuating signal | NAMUR EN 60547-5-6 |
| Permitted ambient temperature | -20...+70 °C |
| Display | Red / yellow and green |
| Degree of protection IC 60529 | Housing: IP 30 Terminals: IP 20 |
| Norm | EN 60947-5-6 |
| Connection | Screw terminals |



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Transmitter Power Supply

N-132/1/4-20-IL - Analogue Output 4...20 mA

- For connection of 1 ATEX certified 2-wire analogue sensor e. g. our KAS-40...IL with 4...20 mA output signal
- Transmitter for use in areas with the risk of gas explosion, zone 2
- Galvanic isolation between input, output and power supply
- Compact design - only 17.6 mm width
- Removable screw terminals
- Indication sensor wire-break or shortcircuit via relay contact

Certificate:



DMT 09 ATEX E 129X

IECEX BVS 10.0087X



Ex II 3 (1) G Ex nA nC [ia] IIC T4

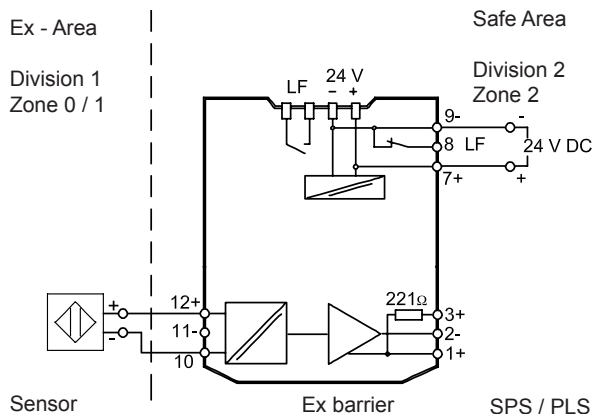
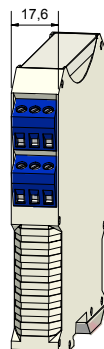
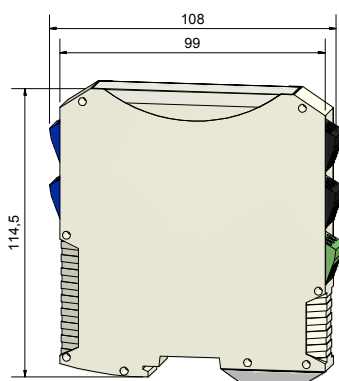
Ex nA nC [ia Ga] IIC T4 Gc

Ex II (1) D [Ex iaD]

[Ex ia Da] IIIC

Technical data

| Type | | N-132/1/4-20-IL |
|--------------------------------|---|----------------------------------|
| Art. No. | | N 00020 |
| Safety Data (CENELEC) | Max. voltage U_0 | 27 V |
| | Max. current I_0 | 88 mA |
| | Max. power P_0 | 576 mW |
| | Internal capacitance C_i and inductance L_i | Negligible |
| | Max. connectable capacitance C_0 IIC / IIB | 90 nF / 705 nF |
| | Max. connectable inductance L_0 IIC / IIB | 2.3 mH / 14 mH |
| Power supply | Insulation voltage U_m | 253 V |
| | Nominal voltage U_N | 24 V DC |
| | Voltage range | 18...31.2 V DC |
| | Nominal current (with U_N and I_{Amax}) | 70 mA |
| Ex i Input | Power consumption (with U_N and I_{Amax}) | 1.7 W |
| | Transmitter supply voltage | 16 V |
| Output | Input signal | 0/4...20 mA |
| | Resistance range (load) | 600 Ω |
| Ambient conditions | Output range | 0/4...20 mA |
| | Ambient temperature | -20...+70 °C |
| | Storage temperature | -40...+80 °C |
| LED-Display | Relative humidity (no condensation) | < 95 % |
| | | Red / yellow and green |
| Degree of protection IEC 60529 | | Housing: IP30 Terminals: IP20 |
| Norm | | EN 60947-5-6 |
| Connection | | Screw terminals |



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Transmitter Power Supply

N-132/2/4-20-IL - Analogue Output 4...20 mA

- For connection of 2 ATEX certified 2-wire analogue sensors e. g. our KAS-40...IL with 4...20 mA output signal
- Transmitter for use in areas with the risk of gas explosion, zone 2
- Galvanic isolation between input, output and power supply
- Compact design - only 17.6 mm width
- Removable screw terminals
- Indication sensor wire-break or shortcircuit via relay contact

Certificate:

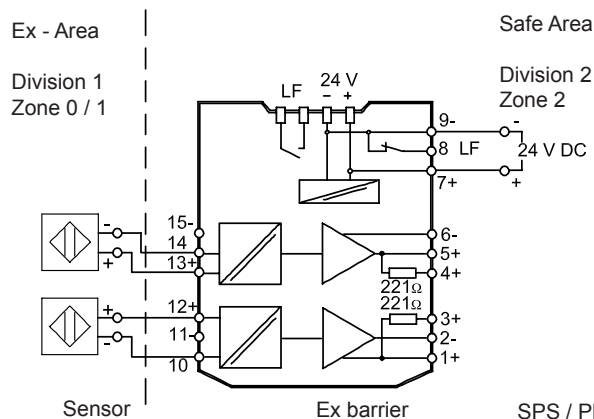
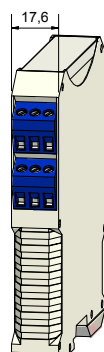
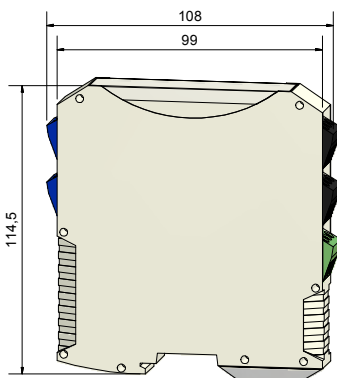


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| DMT 09 ATEX E 129X | IECEX BVS 10.0087X |
| II 3 (1) G Ex nA nC [ia] IIC T4 | Ex nA nC [ia Ga] IIC T4 Gc |
| II (1) D [Ex iaD] | [Ex ia Da] IIC |



Technical data

| Type | | N-132/2/4-20-IL |
|--------------------------------|---|----------------------------------|
| Art. No. | | N 00023 |
| Safety Data (GENELEC) | Max. voltage U_0 | 27 V |
| | Max. current I_0 | 88 mA |
| | Max. power P_0 | 576 mW |
| | Internal capacitance C_i and inductance L_i | Negligible |
| | Max. connectable capacitance C_0 IIC / IIB | 90 nF / 705 nF |
| | Max. connectable inductance L_0 IIC / IIB | 2.3 mH / 14 mH |
| Power supply | Insulation voltage U_m | 253 V |
| | Nominal voltage U_N | 24 V DC |
| | Voltage range | 18...31.2 V DC |
| | Nominal current (with U_N and I_{Amax}) | 125 mA |
| Ex i Input | Power consumption (with U_N and I_{Amax}) | 3 W |
| | Transmitter supply voltage | 16 V |
| Output | Input signal | 0/4...20 mA |
| | Resistance range (load) | 600 Ω |
| Ambient conditions | Output range | 0/4...20 mA |
| | Ambient temperature | -20...+70 °C |
| | Storage temperature | -40...+80 °C |
| LED-Display | Relative humidity (no condensation) | < 95 % |
| Degree of protection IEC 60529 | LED-Display | Red / yellow and green |
| Norm | Degree of protection IEC 60529 | Housing: IP30 Terminals: IP20 |
| Connection | Norm | EN 60947-5-6 |
| | Connection | Screw terminals |



SPS / PLS

Made in Germany

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All specifications are subject to change without notice. (2017)

POWER SUPPLIES - SERIES EG-...-130...

The EG...-130-... series control units contain a DC-side short-circuit protected power pack, voltage stabiliser and output relay. The 22 mm small housing is designed for quick mounting on DIN 46 277 profiles (housing size 70 mm for EG III-...). LED displays are integrated in the front panel for stand-by and state of output. When a sensor is connected to the unit, it automatically recognises whether the sensor is PNP or NPN output.

These control units can be actuated by all 2, 3 and 4-wire sensors with PNP, NPN, NO, NC or antivalent function, i. e. our series IAS-10..., IAS-20..., IAS-60..., KAS-70..., KAS-80..., KAS-90..., IS-120... and SW-600.

The model EG III-130 can also be connected to one of our KXA-.../ KFA-... or KFX-... sensor systems. Details of the parameters to be considered when connecting these systems, are available on request.

POWER SUPPLIES SERIES EG...-130...

Pages:

POWER SUPPLIES SERIES EG...-130...

18 - 22

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Power Supply EG I-130 Series 130 - Relay Output

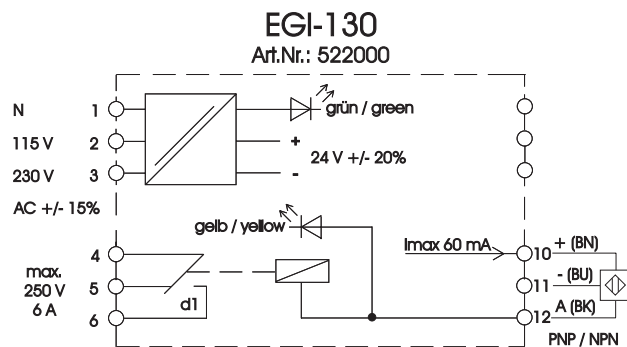
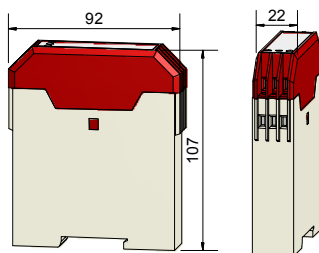
- To connect one 2, 3 or 4-wire sensor with NPN or PNP transistor output (not from our series SW-600). When connecting an antivolt sensor (4-wire) the NO or NC output can be connected.
- With one output relay (1 x change over)

Certificate:



Technical data

| | |
|---|--|
| Operating voltage (U_B) | 115 / 230 V AC \pm 15 % 40...60 Hz |
| No-load current (I_o) | Typ. 20 mA |
| Output function | 1 x potential-free change-over contact |
| Contact rating each relay max. | 250 V AC / 6A |
| Type | EGI-130 |
| Art.-No. | 522 000 |
| Actuating voltage (U_S) | 24 V DC \pm 20 % |
| Actuating current max. (I_S) | 60 mA |
| Residual ripple acc. to DIN 41 755 max. | 2 % |
| Actuating signal | PNP or NPN |
| Permitted ambient temperature | -25...+80 °C |
| Display | LED green and yellow |
| Degree of protection IEC 60529 | Housing: IP 30 Connections: IP 20 |
| Norm | EN 60 947-5-2 |
| Connection | Screw terminals |



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Power Supply EG II-130 Series 130 - Relay Output

- To connect two 2, 3 or 4-wire sensors with NPN or PNP transistor output (not from our series SW-600). When connecting one antivalent sensor (4-wire) both outputs, NO and NC, can be connected. When connecting two antivalent sensors only one output of each can be connected.
- With two output relays (1 x changeover and 1 x normally open)

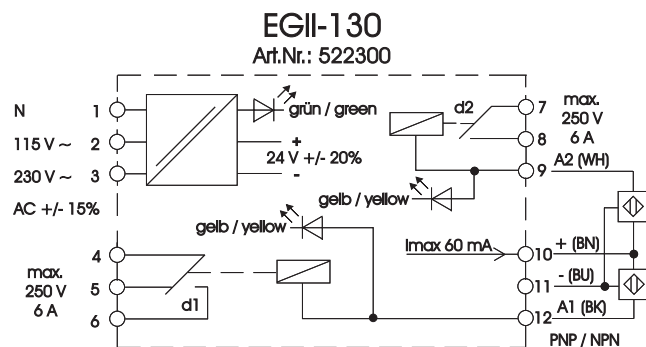
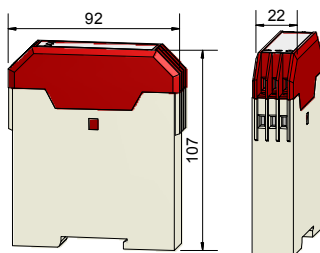
Certificate:



Technical data

| | |
|---|---|
| Operating voltage (U_B) | 115 / 230 V AC \pm 15 % 40...60 Hz |
| No-load current (I_o) | Typ. 40 mA |
| Output function | 1 x potential-free change-over contact / 1 x potential-free NO |
| Contact rating each relay max. | 250 V AC / 6 A |
| Type | EGII-130 |
| Art.-No. | 522 300 |
| Actuating voltage (U_S) | 24 V DC \pm 20 % |
| Actuating current max. (I_S) | 60 mA |
| Residual ripple acc. to DIN 41 755 max. | 2 % |
| Actuating signal | PNP or NPN |
| Permitted ambient temperature | -25...+80 °C |
| Display | LED green and yellow |
| Degree of protection IEC 60529 | Housing: IP 30 Connections: IP 20 |
| Norm | EN 60 947-5-2 |
| Connection | Screw terminals |

All specifications are subject to change without notice. (2017)



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Power Supply EG I-130-TD Series 130 - Relay Output With Time Delay

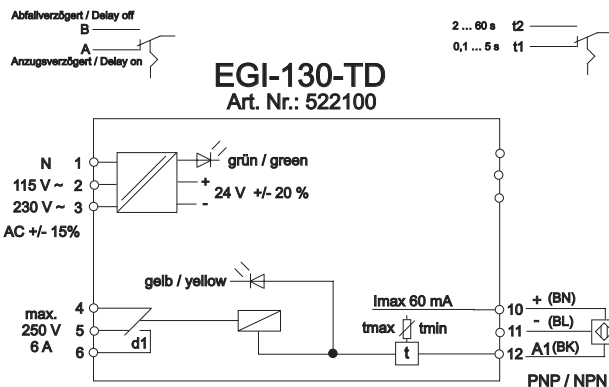
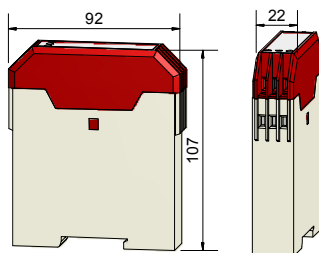
- To connect one 2, 3 or 4-wire sensor with NPN or PNP transistor output. When connecting an antivalent sensor (4-wire) the NO or NC output can be connected.
- With one output relay (1 x changeover)
- This control unit provides an energising or de-energising delay, which is programmable by a switch:
A = energising delay, B = de-energising delay.

Certificate:



Technical data

| | |
|---|--|
| Operating voltage (U_B) | 115 / 230 V AC \pm 15 % 40...60 Hz |
| No-load current (I_o) | Typ. 20 mA |
| Output function | 1 x potential-free change-over contact |
| Contact rating each relay max. | 250 V AC / 6 A |
| Type | EGI-130-TD |
| Art.-No. | 522 100 |
| Actuating voltage (U_S) | 24 V DC \pm 20 % |
| Actuating current max. (I_S) | 60 mA |
| Residual ripple acc. to DIN 41 755 max. | 2 % |
| Actuating signal | PNP or NPN |
| Permitted ambient temperature | -25...+80 °C |
| Display | LED green and yellow |
| Version adjustable for time | Energising and de-energising delay $t_1 = 0,1...5$ s / $t_2 = 2...60$ s |
| Degree of protection IEC 60529 | Housing: IP 30 Connections: IP 20 |
| Norm | EN 60 947-5-2 |
| Connection | Screw terminals |



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Power Supply EG I-130-MM Series 130 - Relay Output- MIN / MAX-Control

- To connect two 2 or 3-wire sensors in NO-function with NPN or PNP transistor output. When connecting antivalent sensors the NO-output can be connected.
- Integrated MIN / MAX-Control
- With one output relay (1 x changeover)

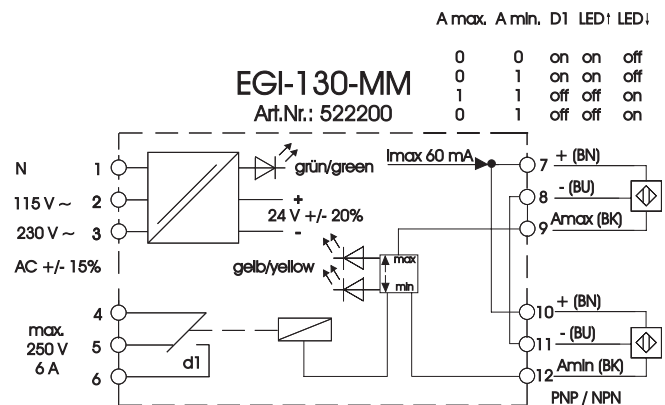
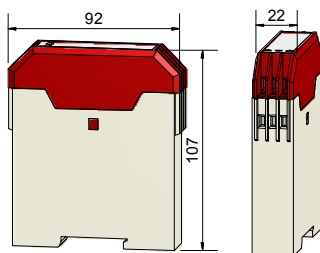
Certificate:



Technical data

| | |
|---|--|
| Operating voltage (U_b) | 115 / 230 V AC \pm 15 % 40...60 Hz |
| No-load current (I_o) | Typ. 20 mA |
| Output function | 1 x potential-free change-over contact |
| Contact rating each relay max. | 250 V AC / 6 A |
| Type | EGI-130-MM |
| Art.-No. | 522 200 |
| Actuating voltage (U_s) | 24 V DC \pm 20 % |
| Actuating current max. (I_s) | 60 mA |
| Residual ripple acc. to DIN 41 755 max. | 2 % |
| Actuating signal | PNP or NPN |
| Permitted ambient temperature | -25...+80 °C |
| Display | LED green and yellow |
| Version | Min. / max.-Control |
| Degree of protection IEC 60529 | Housing: IP 30 Connections: IP 20 |
| Norm | EN 60 947-5-2 |
| Connection | Screw terminals |

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Power Supply EG III - 130 Series 130 - Relay Output

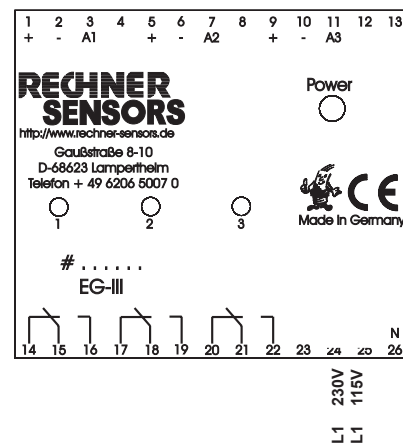
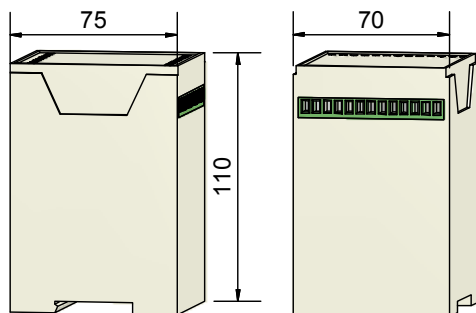
- To connect three 2, 3 or 4-wire sensors with NPN or PNP transistor output. When connecting an anti-valent sensor (4-wire) the NO or NC output can be connected
- With three output relays

Certificate:



Technical data

| | |
|---|---|
| Operating voltage (U_B) | 115 / 230 V AC \pm 15 % 40 ... 60 Hz |
| No-load current (I_0) | Typ. 40 mA |
| Output function | 3 x potential-free change-over contact |
| Contact rating each relay max. | 250 V AC / 6 A |
| Type | EGIII-130 |
| Art.-No. | NA 0002 |
| Actuating current max. (I_S) | 100 mA |
| Residual ripple acc. to DIN 41 755 max. | 2 % |
| Actuating signal | PNP or NPN |
| Permitted ambient temperature | -25...+70 °C |
| Display | LED green and yellow |
| Degree of protection IEC 60529 | Housing: IP 30 Connections: IP 20 |
| Norm | EN 60 947-5-2 |
| Connection | Screw terminals |



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Accessories

Pages:

| | |
|--------------------------|---------|
| Pac-Bus single-element | 22 - 23 |
| Terminal set for pac-Bus | 22 - 23 |

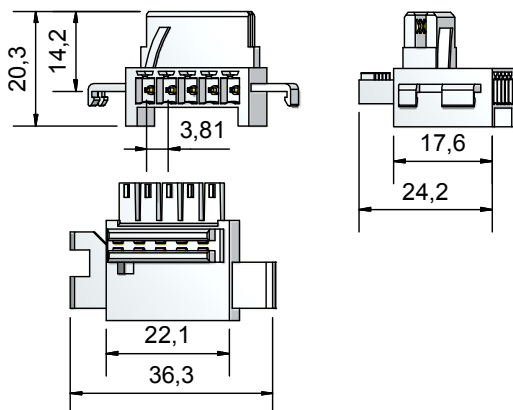
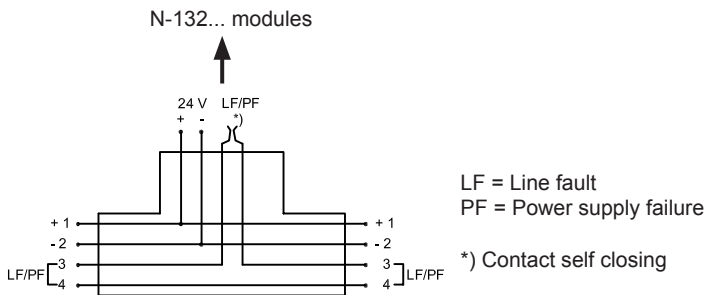


pac-Bus System

| | ZONES | | | | | |
|-----------------|-------|---|---|----|----|----|
| | 0 | 1 | 2 | 20 | 21 | 22 |
| Ex i Interfaces | | | | | | |
| Installation in | | | X | | | X |

pac-Bus System

- Simple and time saving wiring for power supply and common error messaging for groups of N-132/... series. Installation without tools on DIN rails NS35/15 or NS35/7,5.
- pac-Bus single element, raster distance 17,6 mm and terminal set for pac-Bus 5 - pole (set begin + end) with bridge for error message chain
- Supply for approx. 40 modules per segment
- Usable for high and low profile DIN rails (NS35/15 and NS35/7,5)
- Just snap on DIN rail without tools
- Elements can be appended at any time
- Potential free error messaging contact for common error signal
- Gold plated contacts for highest contact safety
- Low cost supply via terminals
- Supply module with integrated replaceable fuses and redundant supply available
- Installation possible in Zone 2 and Div. 2



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pac-Bus single element, raster distance 17,6 mm 5-pole, (set begin and end) with bridge for error message chain



| | | | |
|-----------------------|--|----------|-------|
| Packaging unit | | 3 pieces | 1 set |
|-----------------------|--|----------|-------|

Technical data

| Type | | pac-Bus | Terminal set for pac-Bus |
|-----------------------------------|---|---|---|
| Art. No. | | 190 760 | 190 761 |
| Certificates | BVS 03 E 213 E | | |
| Explosion protection | Ⓔ II 3G EEx nA II T4 | | |
| Installation | In Zone 2, Div. 2 and in the safe area | | |
| Power supply connection | Number of contacts | 2 | 2 |
| | Nominal voltage (U _N) | 24 V DC | 24 V DC |
| | Max. voltage | 31,2 V | 31,2 V |
| | Max. current | 4 A | 4 A |
| | Max. through resistance | < 5 mΩ | < 5 mΩ |
| Common error messaging connection | Number of contacts | 1 + 1 (self closing) | 1 + 1 (self closing) |
| | Nominal voltage (U _N) | 24 V DC | 24 V DC |
| | Max. voltage | 31,2 V | 31,2 V |
| | Max. current | 100 mA | 100 mA |
| | Max. through resistance | < 5 mΩ | < 5 mΩ |
| Ambient conditions | Ambient temperature | -25...+70 °C | -25...+70 °C |
| | | (Follow specification of Ex i isolators) | |
| | Storage temperature | -40...+80 °C | -40...+80 °C |
| | Relative humidity (no condensation) | ≤ 95 % | ≤ 95 % |
| | Vibration (DIN EN 60068-2-6) Frequency / amplitude / speed | 2 - 200 - 2 Hz / 10 mm / 4 g | 2 - 200 - 2 Hz / 10 mm / 4 g |
| | Shock (DIN EN 60068-2-7) Acceleration / pulse time | 25 g / 6 ms | 25 g / 6 ms |
| | Free fall (DIN EN 60068-2-32) Level / number | 1 m / 50 | 1 m / 50 |
| Mechanical data | Connections | Screw terminals, 5-pole, maximum 1,5 mm ² or N-132 24 V DC | Screw terminals, 5-pole, maximum 1,5 mm ² or N-132 24 V DC |
| | Weight | Approx. 4 g | Approx. 4 g |
| | Mounting type | On DIN-rail according to EN 50022 | On DIN-rail according to EN 50022 |
| | Mounting position | Horizontal or vertical | Horizontal or vertical |
| | Protection class | IP 20 | IP 20 |
| | Housing material | PA 6.6 | PA 6.6 |
| | Fire protecting class (UL 94) | V0 | V0 |
| | Contact | Copper alloy; 0,5 µm gold-plated over 2 µm nickel | Copper alloy; 0,5 µm gold-plated over 2 µm nickel |
| | Withdrawed force | > 15 N (typical > 40 N) | > 15 N (typical > 40 N) |
| | Plug cycles | < 50 | < 50 |
| Norm | | EN 60 947-5-2 | EN 60 947-5-2 |

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TYPE SELECTION IN ARTICLE NUMBER ORDER

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| 190761 | Terminal set for pac-Bus | 24, 25 |
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| 522200 | EGI-130-MM | 21 |
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| N-132/1(2)-01 | N00021 | 8 |
| N-132/1/4-20-IL | N00020 | 13 |
| N-132/1-E-10 | N00022 | 11 |
| N-132/2-01 | N00015 | 9 |
| N-132/2-10 | N00017 | 10 |
| N-132/2/4-20-IL | N00023 | 14 |
| N-132/2-E-10 | N00018 | 12 |
| pac-Bus | 190760 | 24, 25 |
| Terminal set for pac-Bus | 190761 | 24, 25 |

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