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RECHNER SENSORS

CATALOGUE

ISOLATING SWITCHING AMPLIFIERS

POWER SUPPLIES

Registration No.: 1327-01

Testing laboratory accredited according to
DIN EN ISO / IEC 17025 Reg.-No. DAT-P-048/95-00

For all transactions, the newest version of the „General Conditions of Sale and Delivery for Products and Services of the Electrical Industry ZVEI“ shall apply, along with the supplementary conditions „extended reservation of proprietary rights“, together with the supplements listed on our order confirmations and/or invoices.
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Edition September 2011
With publication of this catalogue all former printed catalogues about RECHNER isolating switching amplifiers and power supplies are invalid.

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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..., KAS-40...* and *RCS-...* or by mechanical contacts.

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ISOLATING SWITCHING AMPLIFIERS SERIES N-132...

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Isolating Switching Amplifier

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

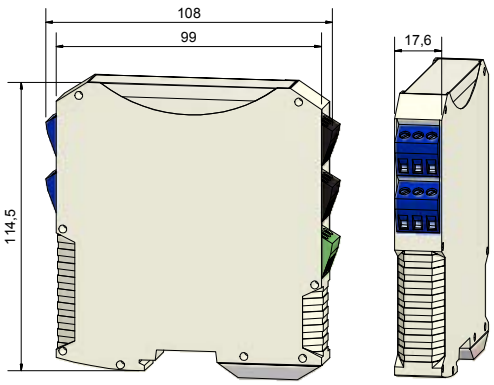
- To connect **one NAMUR-Sensor** or potential-free mechanical contact, which is mounted in the zones 0, 1, 2 (Gas) or 20, 21, 22 (dust)
- Compact design - only 17.6 mm width
- Removable screw terminals
- Indication sensor wire-break or shortcircuit via LED display

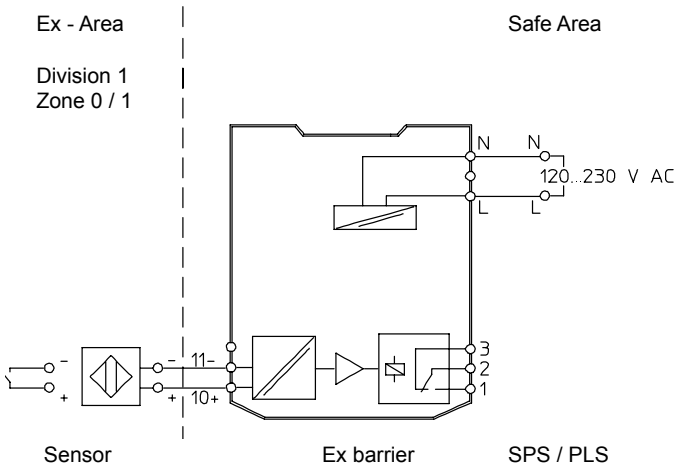
Certificate:

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	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 µF / IIB 26 µF
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

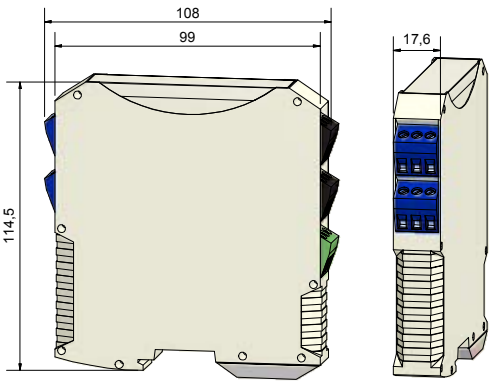
- To connect **one NAMUR-Sensor** or potential-free mechanical contact, which is mounted in the zones 0, 1, 2 (Gas) or 20, 21, 22 (dust)
- Compact design - only 17.6 mm width
- Removable screw terminals
- Indication sensor wire-break or shortcircuit via relay contact

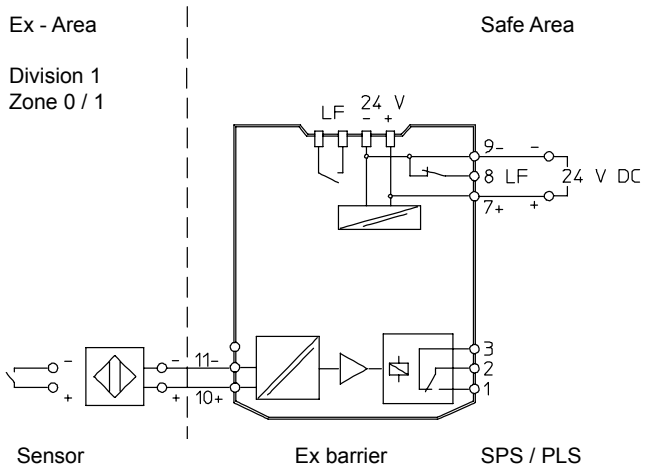
Certificate:

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 µF / IIB 26 µF
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

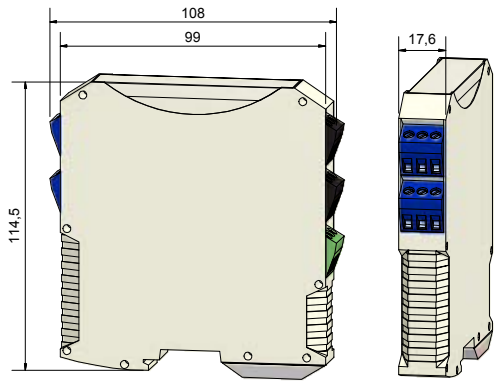
- To connect **one NAMUR-Sensor** or potential-free mechanical contact, which is mounted in the zones 0, 1, 2 (Gas) or 20, 21, 22 (dust)
- With 2 relay outputs.
- Compact design - only 17.6 mm width
- Removable screw terminals
- Indication sensor wire-break or shortcircuit via LED display

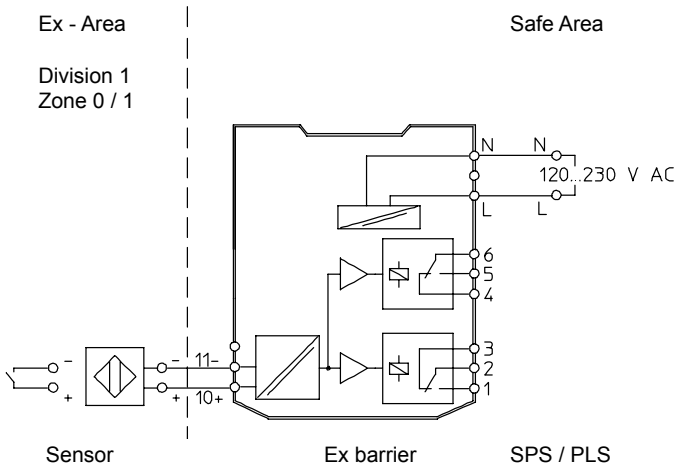
Certificate:

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-132/1(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 µF / IIB 26 µF
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

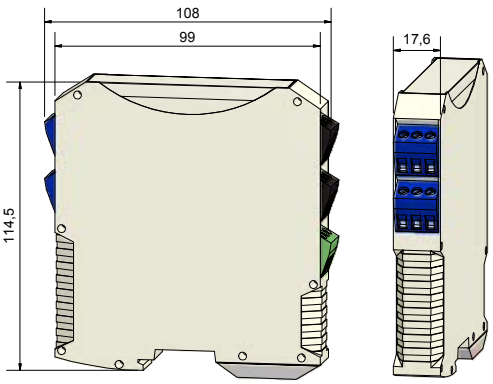
- To connect **two NAMUR-Sensors** or potential-free mechanical contacts, which are mounted in the zones 0, 1, 2 (Gas) or 20, 21, 22 (dust)
- Compact design - only 17.6 mm width
- Removable screw terminals
- Indication sensor wire-break or shortcircuit via LED display

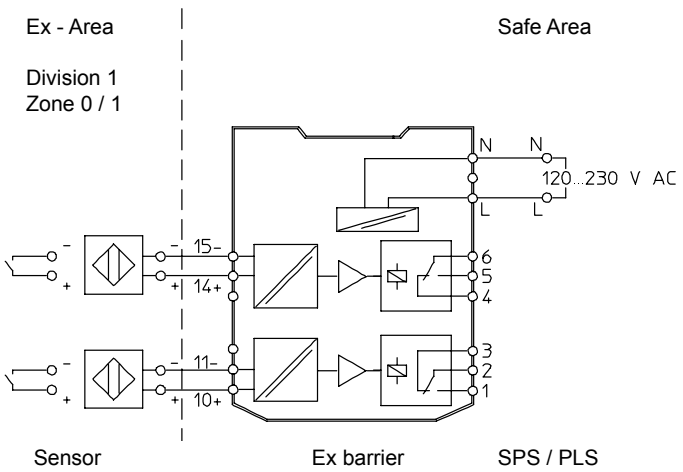
Certificate:

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 µF / IIB 26 µF
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

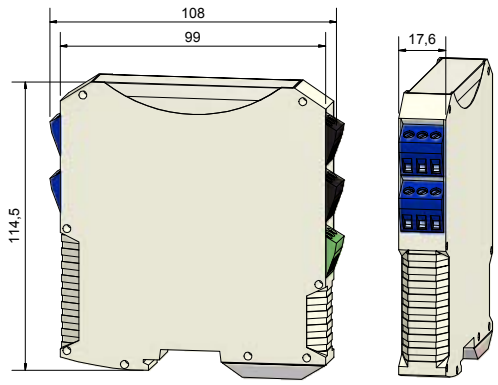
- To connect **two NAMUR-Sensors** or potential-free mechanical contacts which are mounted in the zones 0, 1, 2 (Gas) or 20, 21, 22 (dust)
- Compact design - only 17.6 mm width
- Removable screw terminals
- Indication sensor wire-break or shortcircuit via relay contact

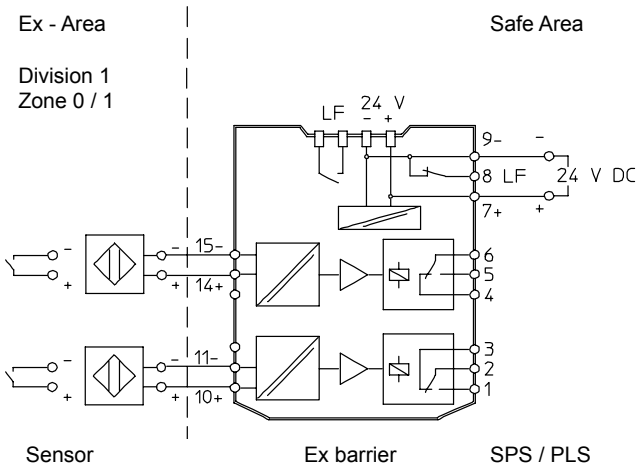
Certificate:

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	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 µF / IIB 26 µF
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

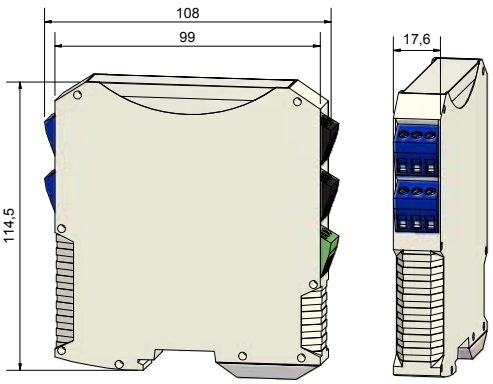
- To connect **one NAMUR-Sensor** or potential-free mechanical contact, which is mounted in the zones 0, 1, 2 (Gas) or 20, 21, 22 (dust)
- Amplifier for use in areas with the risk of gas explosion, zone 2
- Compact design - only 17.6 mm width
- Removable screw terminals
- Indication sensor wire-break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

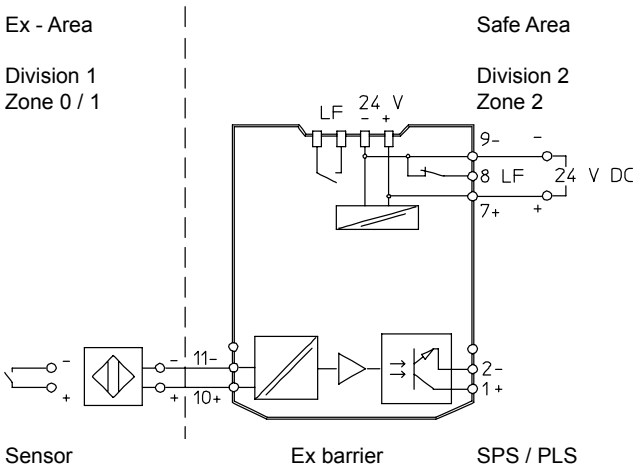
Certificate:

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] IIIC	[Ex ia] IIIC

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_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 µF / IIB 26 µF
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-E-10 24 V DC

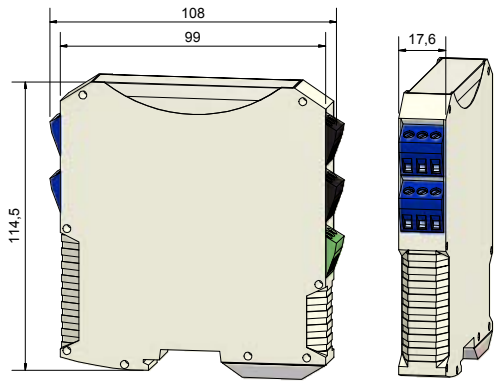
- To connect **two NAMUR-Sensors** or potential-free mechanical contacts which are mounted in the zones 0, 1, 2 (Gas) or 20, 21, 22 (dust).
- Amplifier for use in areas with the risk of gas explosion, zone 2
- Compact design - only 17.6 mm width
- Removable screw terminals
- Indication sensor wire-break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

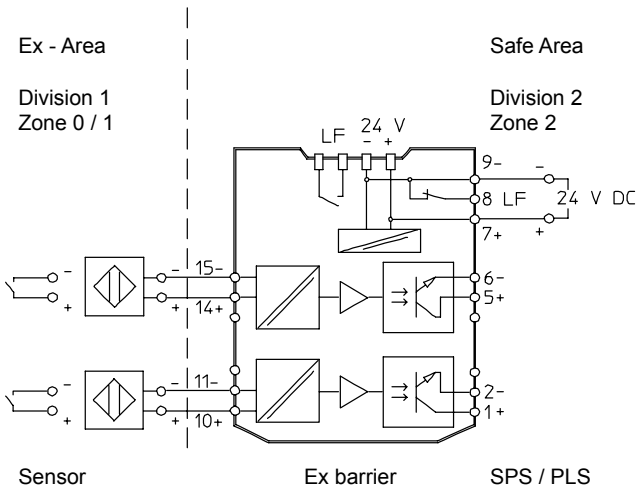
Certificate:

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] 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 µF / IIB 26 µF
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

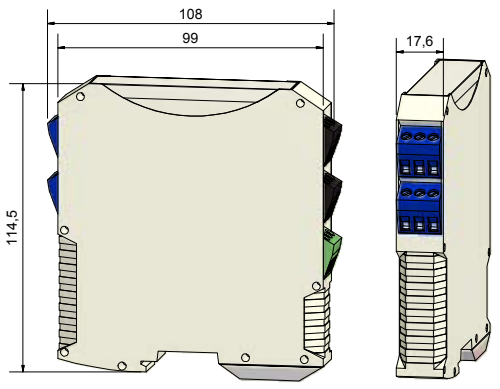
- For connection of 1 ATEX certified 2-wire analogue sensor e. g. our KAS-40...IL with 4...20 mA output signal
- Transmitter for use in areas with the risk of gas explosion, zone 2
- Galvanic isolation between input, output and power supply
- Compact design - only 17.6 mm width
- Removable screw terminals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

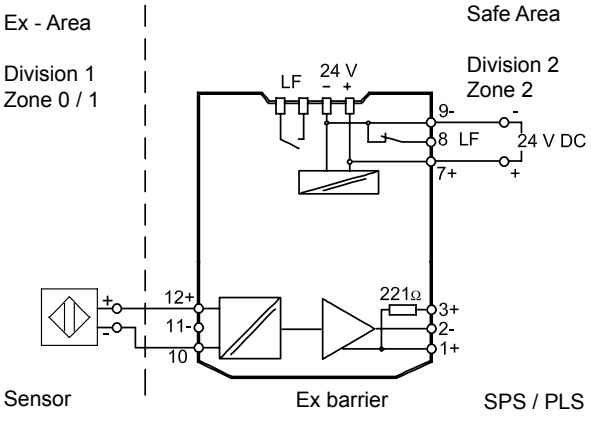
Certificate:

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_o IIC / IIB	2.3 mH / 14 mH
	Insulation voltage U_m	253 V
Power supply	Nominal voltage U_N	24 V DC
	Voltage range	18...31.2 V DC
	Nominal current (with U_N and I_{Amax})	70 mA
	Power consumption (with U_N and I_{Amax})	1.7 W
Ex i Input	Transmitter supply voltage	16 V
	Input signal	0/4...20 mA
Output	Resistance range (load)	600 Ω
	Output range	0/4...20 mA
Ambient conditions	Ambient temperature	-20...+70 °C
	Storage temperature	-40....+80 °C
	Relative humidity (no condensation)	< 95 %
LED-Display		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

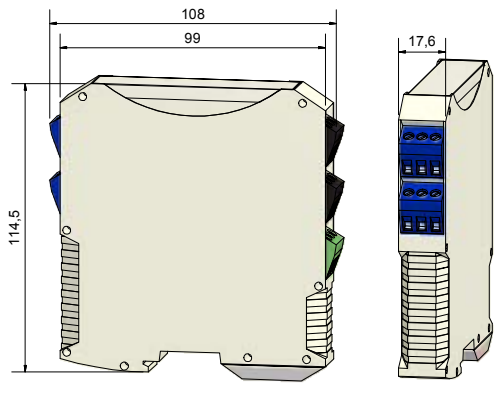
- For connection of 2 ATEX certified 2-wire analogue sensors e. g. our KAS-40...IL with 4...20 mA output signal
- Transmitter for use in areas with the risk of gas explosion, zone 2
- Galvanic isolation between input, output and power supply
- Compact design - only 17.6 mm width
- Removable screw terminals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

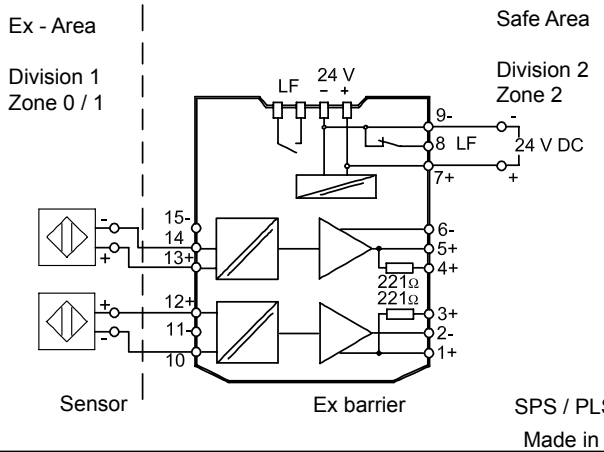
Certificate:

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-132/2/4-20-IL**
Art. No.		**N 00023**
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_o IIC / IIB	2.3 mH / 14 mH
	Insulation voltage U_m	253 V
Power supply	Nominal voltage U_N	24 V DC
	Voltage range	18...31.2 V DC
	Nominal current (with U_N and I_{Amax})	125 mA
	Power consumption (with U_N and I_{Amax})	3 W
Ex i Input	Transmitter supply voltage	16 V
	Input signal	0/4...20 mA
Output	Resistance range (load)	600 Ω
	Output range	0/4...20 mA
Ambient conditions	Ambient temperature	-20...+70 °C
	Storage temperature	-40....+80 °C
	Relative humidity (no condensation)	< 95 %
LED-Display		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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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.

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

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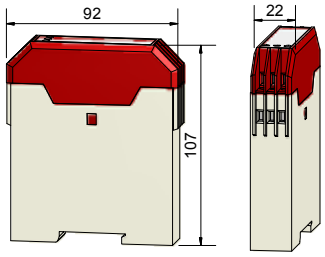
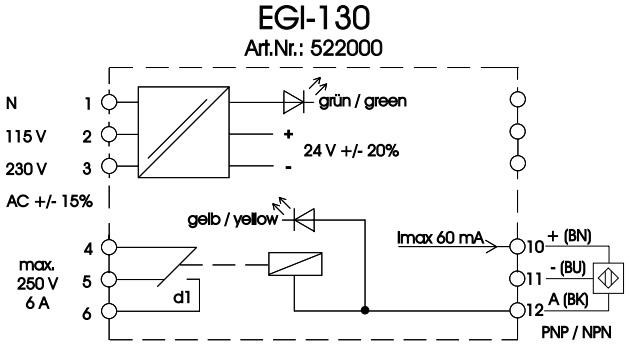
Power Supply EG I-130
Series 130 - Relay Output

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

Certificate: CE RoHS COMPLIANT

Technical data	
Operating voltage (U_B)	115 / 230 V AC ± 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 ± 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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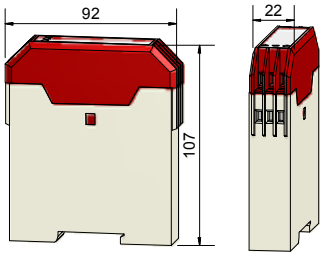
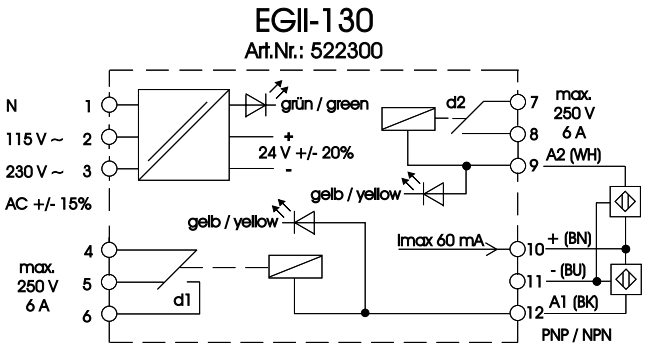
Power Supply EG II-130
Series 130 - Relay Output

- 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: CE RoHS

Technical data	
Operating voltage (U_B)	115 / 230 V AC ± 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 ± 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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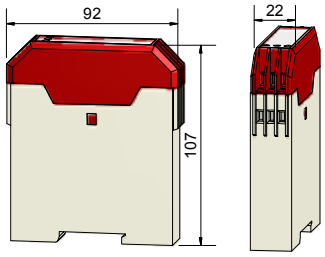
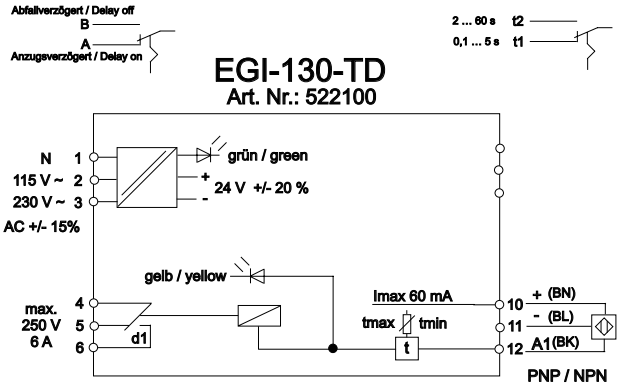
Power Supply EG I-130-TD
Series 130 - Relay Output With Time Delay

- 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: CE RoHS COMPLIANT

Technical data	
Operating voltage (U_B)	115 / 230 V AC ± 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 ± 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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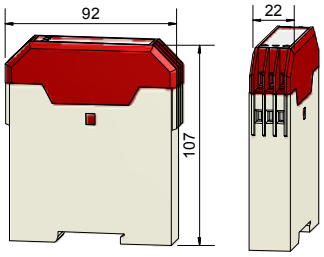
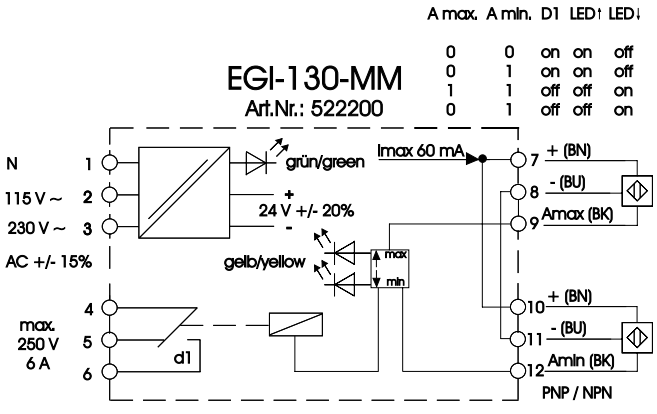
Power Supply EG I-130-MM
Series 130 - Relay Output- MIN / MAX-Control

- 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: CE RoHS COMPLIANT

Technical data	
Operating voltage (U_B)	115 / 230 V AC ± 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 ± 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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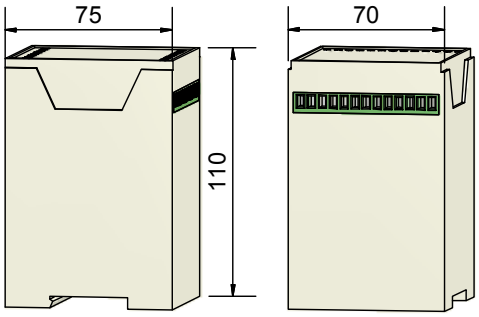
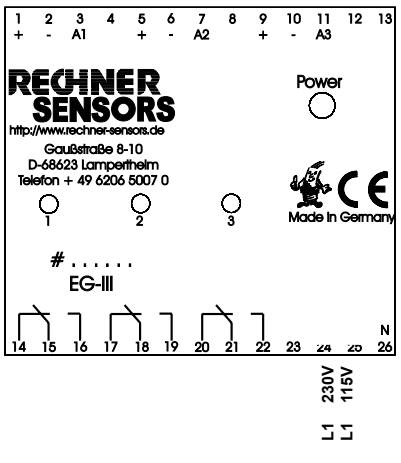
Power Supply EG III - 130
Series 130 - Relay Output

- To connect three 2, 3 or 4-wire sensors with NPN or PNP transistor output. When connecting an antivalent 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 ± 15 % 40 ... 60 Hz
No-load current (I_o)	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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All specifications are subject to change without notice. (09/2011)

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Accessories

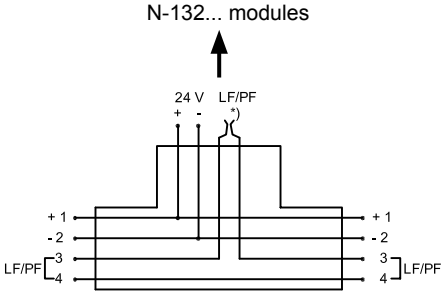
	Pages:
Pac-Bus single-element	22 - 23
Terminal set for pac-Bus	22 - 23

pac-Bus System

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

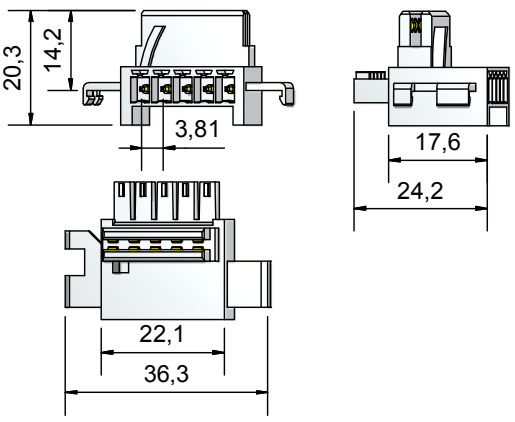
pac-Bus System

- 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



LF = Line fault
PF = Power supply failure

*) Contact self closing



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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	⟨Ex⟩ 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 mm² or N-132 24 V DC	Screw terminals, 5-pole, maximum 1,5 mm² 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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