



- Universal use for transmitters and mA sources (4-wire transmitters) with two configurable limit values and one 4 to 20 mA output
- Bidirectional HART transmission

A3

MY R. STAHL 9162A



9162 series transmitter supply units with limit values can be used for the intrinsically safe operation of two- and three-wire transmitters or for connecting to intrinsically safe mA sources. Two limit values can be easily set using the "ISpac Wizard" software. If the value exceeds or falls below these limit values, these units will trip an electronic contact. A wire-breakage and short-circuit monitoring function provides increased availability.

| | IECEX / ATEX | | | | | |
|-----------------|--------------|---|---|----|----|----|
| | 0 | 1 | 2 | 20 | 21 | 22 |
| Zone | | | | | | |
| Ex interface | • | • | • | • | • | • |
| Installation in | | | • | | | |

| | NEC® 500 CE Code Appendix J | | | | | |
|-----------------|--------------------------------|---|----------|---|-----------|---|
| | Class I | | Class II | | Class III | |
| | 1 | 2 | 1 | 2 | 1 | 2 |
| Division | | | | | | |
| Ex interface | • | • | • | • | • | • |
| Installation in | | • | | | | |

| | CE Code Section 18 | | | | | |
|-----------------|---------------------|---|---|----------|----|----|
| | NEC® 505 Class I | | | NEC® 506 | | |
| | 0 | 1 | 2 | 20 | 21 | 22 |
| Zone | | | | | | |
| Ex interface | • | • | • | | | |
| Installation in | | | • | | | |

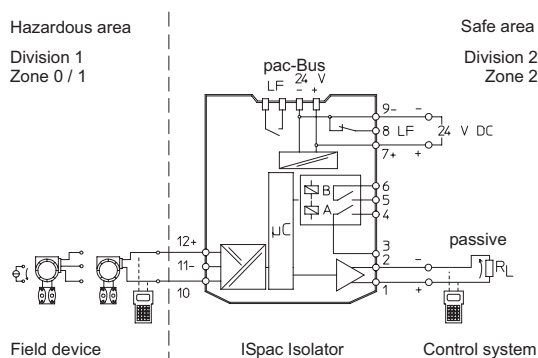
| Selection Table | | | | | | |
|----------------------|----------------------|-----------------------------|-----------------------|----------------|----------|--------|
| Number of channels | 1 | | | | | |
| Input | Output | Limit contact (per channel) | Connection type | Product Type | Art. No. | Weight |
| 4 to 20 mA with HART | 4 to 20 mA with HART | 2 NO | Screw terminal | 9162/13-11-14s | 238251 | 225 g |
| | | 2 NO | Spring clamp terminal | 9162/13-11-14k | 238252 | 225 g |

Parameterisation ex works optionally available for all variants. Art. No. 270538

| Technical Data | |
|---------------------------------|--|
| Explosion Protection | |
| IECEX gas explosion protection | Ex nA nC [ia Ga] IIC T4 Gc |
| IECEX dust explosion protection | [Ex ia Da] IIIC |
| ATEX gas explosion protection | ⊕ II 3 (1) G Ex nA nC [ia Ga] IIC T4 Gc |
| ATEX dust explosion protection | ⊕ II (1) D [Ex ia Da] IIIC |
| Certificates | ATEX (BVS), Canada (FM), China (NEPSI), IECEX (BVS), SIL (exida), USA (FM) |
| Ship approval | CCS, EU RO MR (DNV) |
| Declaration of Conformity | ATEX (EUK), China (CCC) |
| Safety Data | |
| Max. voltage U_o | 27 V |
| Max. current I_o | 87.9 mA |
| Max. power P_o | 574 mW |
| Safety-related max. voltage | 253 V |

| Technical Data | |
|--|---|
| Electrical Data | |
| Limiting values configuration | Using ISpac Wizard (V3.04 and more recent) |
| Auxiliary Power | |
| Auxiliary power | 24 V DC |
| Nominal current | 85 mA |
| Input | |
| Line fault and loss of power signalisation | - Contact (30 V/100 mA), closed against earth in case of error - pac-Bus, potential-free contact (30 V/100 mA) |
| Output | |
| Output signal | 4 to 20 mA with HART |
| Load resistance R_L | 0 to 600 Ω (terminal 1+/2-) |
| Switching voltage limiting values | $\leq \pm 30$ V |
| Switching current limiting values | ≤ 170 mA |
| Ambient Conditions | |
| Ambient temperature | -40 °C ... +70 °C (Single device) -40 °C ... +60 °C (Group assembly) |
| Storage temperature | -40 °C ... +80 °C |
| Mounting / Installation | |
| Mounting type | DIN rail NS35/15, NS35/7.5 |


Technical Drawings – Subject to Alterations



Connection diagram 9162/13-11-14

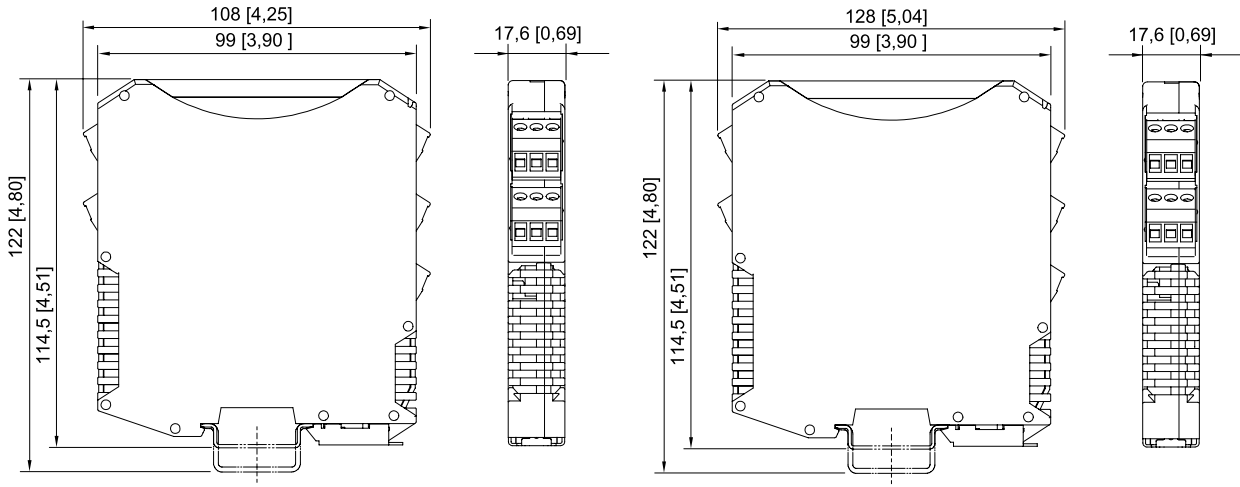
| Accessories | | | |
|---------------------------------|---|----------|--------|
| Figure | Description | Art. No. | Weight |
| 9162 Parameterisation | | | |
| | Parameterisation ex works optionally available for all variants. | 270538 | - |
| ISpac Wizard parameterising set | | | |
| | The software is used to commission, configure and diagnose Series 9146, 9162 and 9182 ISpac isolators. For further information, see the operating instructions. Delivery form: USB stick; parameterising software incl. parameterising cable/adaptor System requirements: IBM-compatible PC with MS XP, Vista, Windows 7, 10 RS 232 C interface RS 232/USB adaptor | 202595 | 235 g |

Accessories

| Figure | Description | Art. No. | Weight |
|---|--|----------|--------|
| Resistive coupling element | | | |
|  | The 0/4 to 20 mA signal of channel 1 is converted to a 0/2 to 10 V signal. The resistive coupling element replaces the existing connection terminal. (Set with 5 pieces) | 273968 | 60 g |

Spare Parts

| Figure | Description | Art. No. | Weight |
|---|---|----------|--------|
| Screw terminal | | | |
|  | 3-pole plug, screw connector thread: M3 stripping length: 7 mm colour: green | 112817 | 5 g |
|  | 3-pole plug, screw connector thread: M3 stripping length: 7 mm colour: black | 112816 | 4 g |
|  | 3-pole plug, screw connector thread: M3 stripping length: 7 mm colour: blue | 112818 | 5 g |
| Screw terminal with test tap | | | |
|  | 3-pole plug with test tap, screw connector thread: M3 stripping length: 7 mm colour: black | 113005 | 1 g |
|  | 3-pole plug with test tap, screw connector thread: M3 stripping length: 7 mm colour: blue | 113004 | 1 g |
| Spring clamp terminal | | | |
|  | 3-pole plug with test tap, spring clamp connection stripping length: 10 mm colour: green | 112825 | 5 g |
|  | 3-pole plug with test tap, spring clamp connection stripping length: 10 mm colour: black | 112824 | 5 g |
|  | 3-pole plug with test tap, spring clamp connection stripping length: 10 mm colour: blue | 112826 | 5 g |



ISpac Series 9143, 9146, 9147, 9160, 9162, 9163, 9165, 9167, 9170, 9172, 9175, 9176, 9180, 9182, 9193, ISbus Series 9412 with screw terminal

ISpac Series 9146, 9147, 9160, 9162, 9163, 9165, 9167, 9170, 9172, 9175, 9176, 9180, 9182, 9193, ISbus Series 9412 with spring clamp terminal