

Load disconnect switches and motor starters



Safety switch

12 A / 16 A

8146/5-V37-301-50-1150 Art. No. 147858



- Large current range from 10 A to 180 A
- Can be used with conventional drives or with variable-frequency drives
- Intelligent design: A single rotary actuator for actuating the main and auxiliary contacts, ≥ 20 ms leading auxiliary contact for safe disconnection
- Designed in accordance with IEC/EN 62626-1, class 1
- The rotary actuator can be locked in the 0-position with three padlocks
- Cover can only be removed in the I-position

MY R. STAHL 8146L



R. STAHL Series 8146/5-V37 safety switches safely disconnect machines and system parts from the energy supply for cleaning and repair as prescribed. All of the installed load disconnect switches have AC-3 switching capacity. The switches can be locked in the 0-position using padlocks.

Technical Data

Explosion Protection

| | |
|---------------------------------|--|
| Area of application | European Union (ATEX) IECEX |
| Application range (zones) | 1, 2, 21, 22 |
| IECEX gas certificate | IECEX PTB 06.0090 |
| IECEX gas explosion protection | Ex db eb IIC T6 Gb |
| IECEX dust certificate | IECEX PTB 06.0090 |
| IECEX dust explosion protection | Ex tb IIIC T80 °C Db |
| ATEX gas certificate | PTB 01 ATEX 1024 |
| ATEX gas explosion protection | Ex II 2 G Ex db eb IIC T6 Gb |
| ATEX dust certificate | PTB 01 ATEX 1024 |
| ATEX dust explosion protection | Ex II 2 D Ex tb IIIC T80 °C Db |
| Certificates | ATEX (PTB), China (NEPSI), IECEX (PTB), India (PESO), Korea (KTL) |
| Declaration of conformity | ATEX (EUK), China (CCC) |
| Notes | Product label may vary. Series devices are labelled with ATEX and IECEX. |

Electrical Data

| | |
|-------------------------------|-----------------|
| Rated operational voltage AC | 690 V / 690 V |
| Rated operational current | 12 A / 16 A |
| Switching capacity AC-3 230 V | 3 kW / 4 kW |
| Switching capacity AC-3 400 V | 5.5 kW / 7.5 kW |
| Switching capacity AC-3 440 V | 5.5 kW / 7.5 kW |
| Switching capacity AC-3 500 V | 7.5 kW / 7.5 kW |
| Switching capacity AC-3 690 V | 7.5 kW / 11 kW |
| Auxiliary contact NC | without |
| Auxiliary contact NO | 1 NO/delayed |
| Frequency range | 50 – 60 Hz |

Ambient Conditions

| | |
|------|---|
| Note | You can find information about the ambient temperature online at r-stahl.com . MY R. STAHL 8146L |
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Ambient conditions

| Ambient conditions | Number of poles | | Max. current (A) | Conductor cross-section ¹⁾ (mm ²) | | Temperature class/ perm. ambient temperature |
|---|-----------------|--------------------|------------------|--|------|--|
| | Main contacts | Auxiliary contacts | | min. | max. | |
| | 3 | 1 | 12/16 | 2.5 | 4 | T6: -40 to +51 °C T6: -40 to +54 °C ²⁾ T5: -40 to +69 °C ²⁾ |
| When using a conductor cross-section of min. 1.5 mm ² , the temperature class and ambient temperature are reduced to T4: -40 °C to +40 °C | | | | | | |
| ¹⁾ Project engineering note: The maximum conductor cross-sections given were determined using the H07V. The minimum bending radius was assumed to be 4 x outer diameter in accordance with VDE 0298-3. | | | | | | |
| ²⁾ Only with heat-resistant conductor > 70 °C at cable entries and/or > 85 °C at clamping units | | | | | | |
| Bold: Information on the rating plate | | | | | | |

Mechanical Data

| | |
|--|--|
| Degree of protection (IP) | IP66 |
| Degree of protection note | according to EN/IEC 60529 |
| Enclosure material | Polyester resin, Glass fibre reinforced |
| Additional terminal | N-terminal |
| Solid con. cross-section min.2 | 2.5 mm ² |
| Min. fin.str. conn. cr.-sec. 2 | 2.5 mm ² |
| Min. solid conn. cr.-sect. AWG | AWG 14 |
| Min. solid con. cr.-sect. AWG2 | AWG 14 |
| Min. f.stra. con. cr.-sec. AWG | AWG 14 |
| Min. f.str. con. cr.-sec. AWG2 | AWG 14 |
| Connection terminal auxiliary contact min. AWG | AWG 16 |
| Connection cross section | 2.5 ... 4 mm ² |
| Auxiliary connection connection terminals | 1.5 ... 4 mm ² |
| Connection cross-section note | Depending on the application; for more detailed information, see the operating instructions at r-stahl.com |
| Construction type | Standard |
| Dimension A | 112.5 mm |
| Dimension A inch | 4.43 in |
| Dimension B | 112.5 mm |
| Dimension B inch | 4.43 in |
| Dimension C | 131 mm |
| Dimension C inch | 5.16 in |
| Handle colour | Yellow shroud, red handle |
| Seal | Silicone, foamed |
| Lockable in | Three times in 0 position |
| Detailed number of poles | 3-pole |
| Weight | 978 g |
| Weight | 2.16 lb |

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Safety switch

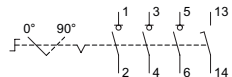
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Components

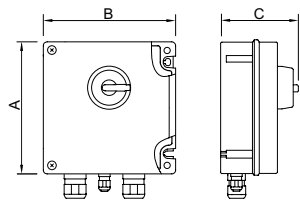
| | |
|-------------------|--|
| Additional device | Drilled brass plate |
| Entry type | Standard 8161, moulded material |
| Cable gland | 2 x M25 Ø 7 ... 17 mm 1 x M20 Ø 4 ... 13 mm |

Technical Drawings – Subject to Alterations



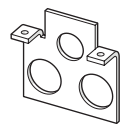
81..5--V...3..-50-..
3-pole + 1 NO
(ON delayed – OFF leading)

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



Accessories

Brass plate



SZ 031
2 x M25, 1 x M20

Art. No.

148207

We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.