

Load Disconnect Switches and Motor Starters



Safety switch

16 A

8146/5-V37-302-50-0250 Art. No. 222088



- Can be used with conventional drives and drives controlled by frequency converters
- Intelligent design: A single rotary actuator for actuating both main and auxiliary contacts, ≥ 20 ms leading auxiliary contact for safely disconnecting the frequency converter
- Version complies with IEC/EN 62626-1, Class 1
- The rotary actuator can be locked with 3 padlocks in the 0-position

MY R. STAHL 8146L



R. STAHL's 8146/5-V37 series safety switches safely disconnect the power supply to machinery and system components for cleaning and repair as prescribed. All of the installed load disconnect switches have an AC-3 switching capacity. The switches can be locked in the 0-position using padlocks.

Technical Data

Explosion Protection

| | |
|---------------------------------|--|
| Scope of validity | 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 (KGS), Korea (KTL) |
| Declaration of Conformity | ATEX (EUK), China (CCC) |
| Notes | Product label may vary. Series devices have certification according to ATEX and IECEX. |

Electrical Data

| | |
|-------------------------------|--------------|
| Rated operational voltage AC | 690 V |
| Rated operational current | 16 A |
| Switching capacity AC-3 230 V | 4 kW |
| Switching capacity AC-3 400 V | 7.5 kW |
| Switching capacity AC-3 440 V | 7.5 kW |
| Switching capacity AC-3 500 V | 7.5 kW |
| Switching capacity AC-3 690 V | 11 kW |
| Auxiliary contact NC | without |
| Auxiliary contact NO | 1 NO/delayed |

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Electrical Data

| | |
|-----------------|------------|
| Frequency range | 50 – 60 Hz |
|-----------------|------------|

Ambient Conditions

| | |
|------|---|
| Note | Information regarding ambient conditions can be found on the Internet at r-stahl.com . MY R. STAHL 8146L |
|------|---|

Ambient conditions

| Ambient conditions | Number of poles | | max. current (A) | Conductor cross-section ¹⁾ (mm ²) | | Temperature class / perm. ambient temperature |
|--------------------|-----------------|-------------------|------------------|--|------|---|
| | Main contacts | Auxiliary contact | | min. | max. | |
| | 3 | 1 | 16 | 2,5 | 6 | T6: -40 ... +51 °C T6: -40 ... +54 °C ²⁾ T5: -40 ... +69 °C ²⁾ |

When using a conductor cross section of min. 1,5 mm², the temperature class and ambient temperature are reduced to T4: -40 °C ... + 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: Observe information on the type plate

Mechanical Data

| | |
|--|--|
| Degree of protection (IP) | IP66 |
| Degree of protection note | acc. to EN/IEC 60529 |
| Enclosure material | Polyester resin, Glass fibre reinforced |
| Additional terminal | PTC resistor terminal |
| Min. solid conn. cr.-sect. AWG | AWG 14 |
| Connection terminal auxiliary contact min. AWG | AWG 16 |
| Connection cross section | 2.5 ... 4 mm ² |
| Auxiliary connection connection terminals | 1.5 ... 6 mm ² |
| Connection cross-section note | Depending on the application, for more detailed information see operating instructions at r-stahl.com |
| Construction type | Standard |
| Dimension A | 227 mm |
| Dimension A inch | 8.94 in |
| Dimension B | 112.5 mm |
| Dimension B inch | 4.43 in |
| Dimension C | 172 mm |
| Dimension C inch | 6.77 in |
| Handle colour | Black shroud and handle |
| Seal | Silicone, foamed |
| Lockable in | Three times in 0 position |
| Detailed number of poles | 3-pole |
| Weight | 1.59 kg |
| Weight | 3.51 lb |

Load Disconnect Switches and Motor Starters



Safety switch

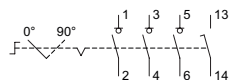
16 A

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Components

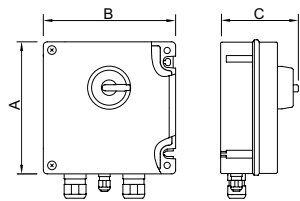
| | |
|-------------------|--|
| Additional device | Brass plate drilled |
| Entry type | Standard 8161, moulded material |
| Cable gland | 2 x M25 Ø 7 to 17 mm 1 x M20 Ø 4 to 13 mm |

Technical Drawings – Subject to Alterations



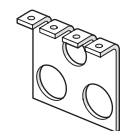
81../5--V...3...50...
3-pole + 1 NO
(ON delayed – OFF leading)

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



Accessories

Brass plate



size 041 A
2 x M25, 1 x M20

Art. No.

202079

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.