

# Load disconnect switches and motor starters



## Safety switch

16 A

8146/5-V37-302-50-1050 Art. No. 201405



- 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,  $\geq 20$  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)<br>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 are labelled with 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 |
| Frequency range               | 50 – 60 Hz   |

### Ambient Conditions

|      |   |
|------|---|
| Note | You can find information about the ambient temperature online at <a href="http://r-stahl.com">r-stahl.com</a> . MY R. STAHL 8146L |
|------|---|

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### Ambient conditions

| Ambient conditions  | Number of poles |                    | Max. current (A) | Conductor cross-section <sup>1)</sup> (mm <sup>2</sup> ) |      | Temperature class/<br>perm. ambient<br>temperature   |
|---|-----------------|--------------------|------------------|--|------|--|
|   | Main contacts   | Auxiliary contacts |                  | min.   | max. |  |
|   | 3               | 1                  | 16               | 2.5  | 6    | <b>T6: -40 to +51 °C</b><br>T6: -40 to +54 °C <sup>2)</sup><br>T5: -40 to +69 °C <sup>2)</sup> |
| When using a conductor cross-section of min. 1.5 mm <sup>2</sup> , the temperature class and ambient temperature are reduced to T4: -40 °C to +40 °C  |                 |                    |                  |  |      |  |
| <sup>1)</sup> Project engineering note:<br>The maximum conductor cross-sections given were determined using the H07V.<br>The minimum bending radius was assumed to be 4 x outer diameter in accordance with VDE 0298-3. |                 |                    |                  |  |      |  |
| <sup>2)</sup> Only with heat-resistant conductor > 70 °C at cable entries and/or > 85 °C at clamping units  |                 |                    |                  |  |      |  |
| <b>Bold:</b> 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  |
| Min. solid conn. cr.-sect. AWG                 | AWG 14   |
| Min. f.stra. con. cr.-sec. AWG                 | AWG 14   |
| Connection terminal auxiliary contact min. AWG | AWG 16   |
| Connection cross section                       | 2.5 ... 6 mm <sup>2</sup>  |
| Auxiliary connection connection terminals      | 1.5 ... 6 mm <sup>2</sup>  |
| 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                                    | 170 mm   |
| Dimension A inch                               | 6.69 in  |
| Dimension B                                    | 112.5 mm   |
| Dimension B inch                               | 4.43 in  |
| Dimension C                                    | 132 mm   |
| Dimension C inch                               | 5.2 in   |
| Handle colour                                  | Yellow shroud, red 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  |

### Components

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

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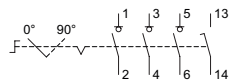


## Safety switch

16 A

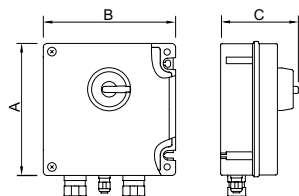
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### Technical Drawings – Subject to Alterations



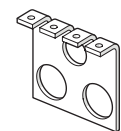
81../5--V..-3..-50-..  
3-pole + 1 NO  
(ON delayed – OFF leading)

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



## Accessories

### Brass plate



SZ 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.