



- 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,  $\geq 20$  ms leading auxiliary contact for safely disconnecting the frequency converter
- Reliable load disconnect switch with positively opening main contacts

WebCode **8146M**



R. STAHL's 8146/5-V11 series load disconnect switches can be used as mains connection switches for distributor systems and motor circuits. The standard variants are designed for rated operational currents of up to 80 A – currents of 16-630 A are possible. They have AC-3, AC-23 and DC-23 motor switching capacity. They have a large, padlockable rotary actuator in black or red/yellow.

### Technical Data

#### Explosion Protection

|                                 |                                                      |
|---------------------------------|------------------------------------------------------|
| Scope of validity               | European Union (ATEX)<br>IECEx                       |
| Application range (zones)       | 1<br>2<br>21<br>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) |

#### Electrical Data

|                                |            |
|--------------------------------|------------|
| DC rated operational voltage   | -999 V     |
| Rated operational current      | 10 A (T6)  |
| Auxiliary contact NC           | without    |
| Auxiliary contact NO           | without    |
| Short-circuit protection, max. | 16 A       |
| Tripping characteristic        | gG         |
| Frequency range                | 50 – 60 Hz |

#### Ambient Conditions

|                     |                  |
|---------------------|------------------|
| Ambient temperature | -40°C ... +51°C  |
| Ambient temperature | -40°F ... +123°F |

# Load Disconnect Switches and Motor Starters

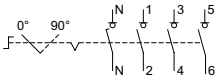
## Load disconnect switch



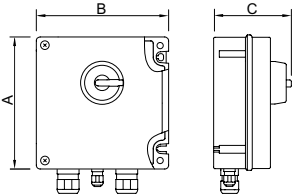
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|                           |                                                        |
|---------------------------|--------------------------------------------------------|
| <b>Mechanical Data</b>    |                                                        |
| Degree of protection (IP) | IP66                                                   |
| Enclosure material        | Polyester, Glass fibre reinforced                      |
| Additional terminal       | without                                                |
| Construction type         | Standard                                               |
| Dimension A               | 112.5 mm                                               |
| Dimension B               | 112.5 mm                                               |
| Dimension C               | 131 mm                                                 |
| Service life, min.        | 10 <sup>5</sup> operating cycles                       |
| Handle colour             | Black shroud and handle                                |
| Seal                      | Silicone, foamed                                       |
| Lockable in               | 3x in 0                                                |
| Detailed number of poles  | 3-pole + N                                             |
| Weight                    | 1.377 kg                                               |
| Weight                    | 3.04 lb                                                |
| <b>Components</b>         |                                                        |
| Additional device         | Brass plate drilled                                    |
| Entry type                | Standard 8161, moulded material                        |
| Cable gland               | 2 x M25 Ø 7 ... 17 mm<br>1x M20 Ø 4 ... 13mm with plug |

**Technical Drawings – Subject to Alterations**



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



| Version | Rated operational current | Product Type | Dimension A [mm] | Dimension B [mm] | Dimension C [mm] |
|---------|---------------------------|--------------|------------------|------------------|------------------|
|---------|---------------------------|--------------|------------------|------------------|------------------|

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|            |            |                                                                                           |                   |                       |                   |
|------------|------------|-------------------------------------------------------------------------------------------|-------------------|-----------------------|-------------------|
| 3 pole     | 10 A       | 8146/ 5- V11- 300- 00- 1050<br>8146/ 5- V11- 300- 00- 0050                                | 112.5             | 112.5                 | 131               |
|            | 16 A       | 8146/ 5- V11- 302- 00- 0050<br>8146/ 5- V11- 302- 00- 1050<br>8146/ 5- V11- 102- 00- 0110 | 170<br>170<br>170 | 112,5<br>112,5<br>170 | 132<br>132<br>172 |
|            | 20 A       | 8146/ 5- V11- 303- 00- 0010                                                               | 170               | 170                   | 132               |
|            | 25 A       | 8146/ 5- V11- 104- 00- 0110<br>8146/ 5- V11- 304- 00- 1010                                | 227<br>170        | 170<br>170            | 171<br>132        |
|            | 40 A       | 8146/ 5- V11- 305- 00- 0010- K<br>8146/ 5- V11- 305- 00- 1010- K                          | 340.5<br>340.5    | 170<br>170            | 176.5<br>176.5    |
|            | 63 - 80 A  | 8146/ 5- V11- 306- 00- 0010- K<br>8146/ 5- V11- 306- 00- 1010- K                          | 340.5<br>340.5    | 170<br>170            | 195<br>195        |
|            | 3 pole + N |                                                                                           |                   |                       |                   |
| 3 pole + N | 10 A       | 8146/ 5- V11- 400- 00- 0050                                                               | 112.5             | 112.5                 | 131               |
|            | 16 A       | 8146/ 5- V11- 402- 00- 0050<br>8146/ 5- V11- 402- 00- 1050                                | 170<br>170        | 112.5<br>112.5        | 132.0<br>132.0    |
|            | 20 A       | 8146/ 5- V11- 403- 00- 0010K                                                              | 170               | 170                   | 132               |
|            | 25 A       | 8146/ 5- V11- 404- 00- 0010                                                               | 170               | 170                   | 132               |
|            | 40 A       | 8146/ 5- V11- 405- 00- 0010- K                                                            | 340.5             | 340.5                 | 195               |
|            | 63 - 80 A  | 8146/ 5- V11- 406- 00- 0010- K<br>8146/ 5- V11- 406- 00- 1010- K                          | 340.5<br>340.5    | 340.5<br>340.5        | 195<br>195        |
|            | 6 pole     |                                                                                           |                   |                       |                   |
| 6 pole     | 25 A       | 8146/ 5- V11- 604- 60- 0010                                                               | 227               | 170                   | 172               |

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.