

Load disconnect switches and motor starters



Load disconnect switch

16 A

8146/5-V11-402-00-0050 Art. No. 205679



- 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 safely disconnecting the frequency converter
- Reliable load disconnect switch with positive opening operation of the main contacts

MY R. STAHL 8146M



R. STAHL Series 8146/5-V11 load disconnect switches can be used as mains connection switches for distributor systems and motor circuits. The standard versions are designed for rated operational currents of up to 80 A – currents of 16 to 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

| | |
|---------------------------------|--|
| Area of application | Canada IECEX USA |
| Application range (zones) | 1, 2, 21, 22 |
| IECEX gas certificate | IECEX PTB 06.0090 |
| 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 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) |
| Declaration of Conformity | ATEX (EUK), China (CCC) |

Electrical Data

| | |
|-------------------------------|------------|
| Rated operational voltage AC | 690 V |
| Rated operational current | 16 A |
| Nominal power | 10 hp |
| Auxiliary contact NC | without |
| Auxiliary contact NO | without |
| Max. short-circuit protection | 25 A |
| Tripping characteristic | gG |
| Frequency range | 50 – 60 Hz |

Auxiliary Power

| | |
|-----------------|----------|
| Nominal voltage | 480 V AC |
|-----------------|----------|

Load disconnect switches and motor starters



Load disconnect switch

16 A

8146/5-V11-402-00-0050 Art. No. 205679

Ambient Conditions

| | |
|---------------------|------------------|
| Ambient temperature | -40°C ... +48°C |
| Ambient temperature | -40°F ... +118°F |

Mechanical Data

| | |
|--|-----------------------------------|
| Degree of protection (IP) | IP66 |
| Enclosure material | Polyester, Glass fibre reinforced |
| Additional terminal | without |
| Min. connection cross section, solid | 2,5 mm ² |
| Max. connection cross section, solid | 0 mm ² |
| Min. connection cross-section, finely stranded | 2,5 mm ² |
| Max. connection cross-section, finely stranded | 6 mm ² |
| Min. solid conn. cr.-sect. AWG | AWG 14 |
| Min. solid con. cr.-sect. AWG2 | AWG 0 |
| Max. solid conn. cr.-sect. AWG | AWG 0 |
| Min. f.stra. con. cr.-sec. AWG | AWG 14 |
| Min. f.str. con. cr.-sec. AWG2 | AWG 0 |
| Connection terminal auxiliary contact min. AWG | AWG 0 |
| Connection terminal auxiliary contact solid max. | AWG 0 |
| Connection terminal auxiliary contact finely stranded max. | AWG 0 |
| Construction type | Standard |
| Width | 112.5 mm |
| Width, inches | 4.43 in |
| Height | 170 mm |
| Height in inches | 6.69 in |
| Depth | 132 mm |
| Depth in inches | 5.2 in |
| Service life, min. | 10 ⁵ operating cycles |
| Handle colour | Black |
| Protective collar colour | Black |
| Seal | Silicone, foamed |
| Lockable in | Three times in 0 position |
| Detailed number of poles | 3-pole + N |
| Weight | 1.73 kg |
| Weight | 3.81 lb |

Components

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

Load disconnect switches and motor starters

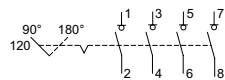


Load disconnect switch

16 A

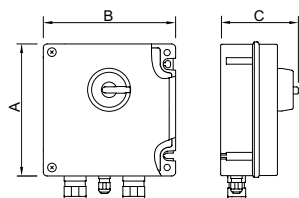
8146/5-V11-402-00-0050 Art. No. 205679

Technical Drawings – Subject to Alterations



8146/5-V11-40.-00-.0.0
3-pole + N

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] |
|-----------------------------|--------------------------------|--|------------------|------------------|------------------|
| 3-pole | 10 A | 8146/ 5- V11- 300- 00- 1050 8146/ 5- V11- 300- 00- 0050 | 112.5 | 112.5 | 131 |
| | 16 A | 8146/ 5- V11- 302- 00- 0050 | 170 | 112.5 | 132 |
| | | 8146/ 5- V11- 302- 00- 1050 | 170 | 170 | 132 |
| | | 8146/ 5- V11- 102- 00- 0110 | 170 | 170 | 172 |
| | 20 A | 8146/ 5- V11- 303- 00- 0010 | 170 | 170 | 132 |
| | 25 A | 8146/ 5- V11- 104- 00- 0110 | 227 170 | 170 170 | 171 132 |
| 8146/ 5- V11- 304- 00- 1010 | | | | | |
| 40 A | 8146/ 5- V11- 305- 00- 0010- K | 340.5 340.5 | 170 170 | 176.5 176.5 | |
| | 8146/ 5- V11- 305- 00- 1010- K | | | | |
| 63–80 A | 8146/ 5- V11- 306- 00- 0010- K | 340.5 340.5 | 170 170 | 195 195 | |
| | 8146/ 5- V11- 306- 00- 1010- K | | | | |

Load disconnect switches and motor starters



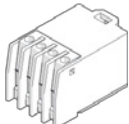
Load disconnect switch

16 A

8146/5-V11-402-00-0050 Art. No. 205679

| | | | | | |
|---------------|---------|--|----------------|----------------|----------------|
| 3-pole + N | 10 A | 8146/ 5- V11- 400- 00- 0050 | 112.5 | 112.5 | 131 |
| | 16 A | 8146/ 5- V11- 402- 00- 0050 8146/ 5- V11- 402- 00- 1050 | 170 170 | 112.5 112.5 | 132.0 132.0 |
| | 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 8146/ 5- V11- 406- 00- 1010- K | 340.5 340.5 | 340.5 340.5 | 195 195 |
| 6-pole | 25 A | 8146/ 5- V11- 604- 60- 0010 | 227 | 170 | 172 |

Accessories

| Auxiliary contact | Art. No. |
|--|--|
|  | Note: The auxiliary contacts can only be retrofitted for 40 A, 63 A and 80 A versions. For all other versions, the auxiliary contact must be ordered separately when placing the order. Retrofitting is not possible for this. |

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.