

Load Disconnect Switches and Motor Starters

Moulded case circuit breaker for The motor protection



8146/5-V27-207-125-12-21-1 Art. No. 249225



- Electric line and system protection for Ex e and Ex d motors
- Robust enclosure made from glass fibre-reinforced polyester resin
- Optional: Undervoltage release, shunt trip, ammeter, auxiliary contact

MY R. STAHL 8146N



R. STAHL's 8146/5-V27 series moulded case circuit breakers for motor protection protect Ex e and Ex d motors and their associated electric lines and systems. The standard variants feature an adjustable, phase-sensitive thermal overcurrent release or electromagnetic tripping mechanism, which has to be specified during the ordering process. They cannot be retrofitted.

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 T4 Gb |
| IECEX dust certificate | IECEX PTB 06.0090 |
| IECEX dust explosion protection | Ex tb IIIC T130 °C Db |
| ATEX gas certificate | PTB 01 ATEX 1024 |
| ATEX gas explosion protection | ⊕ II 2 G Ex db eb IIC T4 Gb |
| ATEX dust certificate | PTB 01 ATEX 1024 |
| ATEX dust explosion protection | ⊕ II 2 D Ex tb IIIC T130 °C Db |
| Certificates | ATEX (PTB), Canada (FM), China (NEPSI), IECEX (PTB), India (PESO) |
| Declaration of Conformity | ATEX (EUK), China (CCC) |

Electrical Data

| | |
|-----------------------|----------------------|
| Switching capacity | 7 kW |
| AC release voltage | 230 V |
| Current-setting range | 12.5 – 16 A |
| Ammeter present | No |
| Auxiliary contacts | 1 NC 1 NO |
| Release | Undervoltage release |
| No. of poles | 3 |
| Frequency range | 50 – 60 Hz |

Ambient Conditions

| | |
|---------------------|-----------------|
| Ambient temperature | -20°C ... +40°C |
|---------------------|-----------------|

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Ambient Conditions

| | |
|---------------------|-------------------|
| Ambient temperature | -4 °F ... +104 °F |
|---------------------|-------------------|

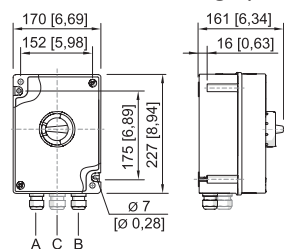
Mechanical Data

| | |
|--------------------------------|---|
| Degree of protection (IP) | IP66 |
| Degree of protection note | acc. to EN/IEC 60529 |
| Enclosure material | Polyester resin, Glass fibre reinforced |
| Min. solid conn. cr.-sect. AWG | AWG 16 |
| Max. solid conn. cr.-sect. AWG | AWG 8 |
| Type of screw connection | 8161 |
| Width | 170 mm |
| Width in inches | 6.69 in |
| Height | 227 mm |
| Height, inches | 8.94 in |
| Depth | 131 mm |
| Depth, inches | 5.16 in |
| Handle colour | Black |
| Protective collar colour | Black |
| Rotary actuator labelling | 0 - I |
| Seal | Silicone, foamed |
| Lockable in | Three times in 0 position |
| Weight | 3.7 kg |
| Weight | 8.16 lb |

Components

| | |
|--------------------------|---------------------|
| Cable glands and entries | 3 x M25 Ø 7 – 17 mm |
|--------------------------|---------------------|

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



Current adjustment range up to 16 A; 1 NO / 1 NC

Cable entries

| Version | Auxiliary contacts | Cable glands Series 8161 | | Stopping plugs Series 8290 |
|---|--------------------|--------------------------|-----------|----------------------------|
| | | M25 x 1.5 | M32 x 1.5 | M25 x 1.5 |
| Current adjustment range up to 16 A | without | A, B | -- | C |
| | with | A, B, C | -- | -- |
| Current adjustment range 16 to 20 A, 20 to 22.5 A | without | -- | A, B | C |
| | with | C | A, B | -- |

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.