

# Load disconnect switches and motor starters

## Molded case circuit breaker for motor protection



8146/5-V27-108-095-10-21-1 Art. No. 249176



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

MY R. STAHL 8146N



R. STAHL Series 8146/5-V27 moulded case circuit breakers for motor protection protect Ex e and Ex d motors as well as the associated conductors and systems. The standard versions feature an adjustable, phase-sensitive thermal overcurrent release or an electromagnetic quick release, which has to be specified during the ordering process. They cannot be retrofitted.

### 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 T5 Gb  |
| IECEX dust certificate          | IECEX PTB 06.0090   |
| IECEX dust explosion protection | Ex tb IIIC T95 °C Db  |
| ATEX gas certificate            | PTB 01 ATEX 1024  |
| ATEX gas explosion protection   | ⊕ II 2 G Ex db eb IIC T5 Gb                                       |
| ATEX dust certificate           | PTB 01 ATEX 1024  |
| ATEX dust explosion protection  | ⊕ II 2 D Ex tb IIIC T95 °C Db                                     |
| Certificates                    | ATEX (PTB), Canada (FM), China (NEPSI), IECEX (PTB), India (PESO) |
| Declaration of conformity       | ATEX (EUK), China (CCC)   |

#### Electrical Data

|                       |                      |
|-----------------------|----------------------|
| Frequency range       | 50 – 60 Hz           |
| Switching capacity    | 12.4 kW              |
| Release               | Undervoltage release |
| AC release voltage    | 400 V                |
| Release frequency     | 50 – 60 Hz           |
| Current-setting range | 4 – 6.3 A            |
| Auxiliary contacts    | without              |
| No. of poles          | 3                    |

#### Ambient Conditions

|                     |                   |
|---------------------|-------------------|
| Ambient temperature | -20°C ... +40°C   |
| Ambient temperature | -4 °F ... +104 °F |

#### Mechanical Data

|                           |      |
|---------------------------|------|
| Degree of protection (IP) | IP66 |
|---------------------------|------|

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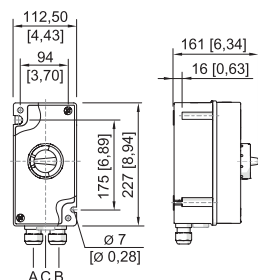
### Mechanical Data

|  |   |
|--|---|
| Degree of protection note                | according to EN/IEC 60529               |
| Enclosure material                       | Polyester resin, Glass fibre reinforced |
| Min. solid conn. cr.-sect. AWG           | AWG 16                                  |
| Max. connection cross section, solid AWG | AWG 8                                   |
| Min. f.stra. con. cr.-sec. AWG           | AWG 16                                  |
| Width                                    | 112.5 mm                                |
| Width, inches                            | 4.43 in                                 |
| Height                                   | 227 mm                                  |
| Height in inches                         | 8.94 in                                 |
| Depth                                    | 131 mm                                  |
| Depth in 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                                   | 2.8 kg                                  |

### Components

|                          |                       |
|--------------------------|-----------------------|
| Cable glands and entries | 3 x M25 Ø 7 ... 17 mm |
| Type of screw connection | 8161                  |

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



Current-setting range up to 16 A; without auxiliary contacts

### 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-setting range up to 16 A               | without            | A, B                     | --        | C                          |
|  | with               | A, B, C                  | --        | --                         |
| Current-setting 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.