

# Load Disconnect Switches and Motor Starters

## Moulded case circuit breaker for The motor protection



8146/5-V27-301-145-00-31-1 Art. No. 147204



- 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)<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 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

|                       |             |
|-----------------------|-------------|
| AC release voltage    | -           |
| Current-setting range | 20 – 22.5 A |
| Ammeter present       | No          |
| Auxiliary contacts    | without     |
| Release               | without     |
| No. of poles          | 3           |
| Frequency range       | 50 – 60 Hz  |

#### Ambient Conditions

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

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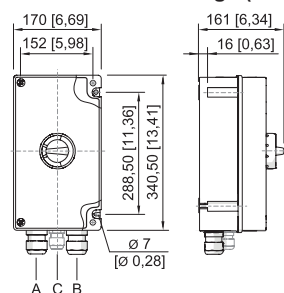
### Mechanical Data

|                                |   |
|--------------------------------|---|
| 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 20                                  |
| Max. solid conn. cr.-sect. AWG | AWG 8                                   |
| Type of stopping plug          | 8290                                    |
| Type of screw connection       | 8161                                    |
| Width                          | 170 mm                                  |
| Width in inches                | 6.69 in                                 |
| Height                         | 340.5 mm                                |
| Height, inches                 | 13.41 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                         | 4.2 kg                                  |
| Weight                         | 9.26 lb                                 |

### Components

|                          |                      |
|--------------------------|----------------------|
| Cable glands and entries | 2 x M32 Ø 9 to 21 mm |
| Stopping plugs           | 1 x M25              |

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



Current adjustment range 16 ... 20 A and 20 ... 22.5 A; with / without auxiliary contact

### 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      | --                         |

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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.