

# Load Disconnect Switches and Motor Starters

## Moulded case circuit breaker for The motor protection



8146/5-V27-407-145-12-41-1 Art. No. 249235



- 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 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

Switching capacity	7 kW
AC release voltage	230 V
Current-setting range	20 – 22.5 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

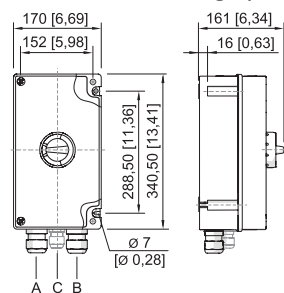
### Mechanical Data

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 20
Max. solid conn. cr.-sect. AWG	AWG 8
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	4.4 kg
Weight	9.7 lb

### Components

Cable glands and entries  
 2 x M32 Ø 9 to 21 mm  
 1 x M25 Ø 7 to 17 mm

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



Current adjustment range 16 ... 20 A and 20 ... 22.5 A;  
 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.