

Load Disconnect Switches and Motor Starters



Safety switch

40 A

8146/5-V37-305-51-0010-K Art. No. 200206



- Can be used with conventional drives and drives controlled by frequency converters
- Intelligent design: A single rotary actuator for actuating both main and auxiliary contacts, ≥ 20 ms leading auxiliary contact for safely disconnecting the frequency converter
- Version complies with IEC/EN 62626-1, Class 1
- The rotary actuator can be locked with 3 padlocks in the 0-position

WebCode 8146L



R. STAHL's 8146/5-V37 series safety switches safely disconnect the power supply to machinery and system components for cleaning and repair as prescribed. All of the installed load disconnect switches have an AC-3 switching capacity. The switches can be locked in the 0-position using padlocks.

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 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 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), Korea (KGS), Korea (KTL)
Notes	Product label may vary. Series devices have certification according to ATEX and IECEX.

Electrical Data

Rated operational voltage AC	690 V
Rated operational current	40 A
Switching capacity AC-3 230 V	11 kW
Switching capacity AC-3 400 V	22 kW
Switching capacity AC-3 440 V	22 kW
Switching capacity AC-3 500 V	22 kW
Switching capacity AC-3 690 V	37 kW
Auxiliary contact NC	1 NC
Auxiliary contact NO	1 NO/delayed
Frequency range	50 – 60 Hz

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Ambient conditions

Ambient conditions	Number of poles		max. current (A)	Conductor cross-section ¹⁾ (mm ²)		Temperature class / perm. ambient temperature
	Main contacts	Auxiliary contact		min.	max.	
	3	2	40	10	25	T6: -40 ... +48 °C T6: -40 ... +51 °C ²⁾ T5: -40 ... +66 °C ²⁾

¹⁾ Project engineering note:

The maximum conductor cross-sections given were determined using the H07V.

The minimum bending radius was assumed to be 4 x outer diameter in accordance with VDE 0298-3.

²⁾ only with heat-resistant conductor > 70 °C at cable entries and/or > 85 °C at clamping units

Bold: Observe information on the type plate

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 8
Connection terminal auxiliary contact min. AWG	AWG 18
Connection cross section	10 ... 25 mm ²
Auxiliary connection connection terminals	0.75 ... 2.5 mm ²
Connection cross-section note	Depending on the application, for more detailed information see operating instructions at r-stahl.com
Construction type	Compact design
Dimension A	340.5 mm
Dimension A inch	13.41 in
Dimension B	170 mm
Dimension B inch	6.69 in
Dimension C	176.5 mm
Dimension C inch	6.95 in
Handle colour	Black shroud and handle
Seal	Silicone, foamed
Lockable in	3x in 0
Detailed number of poles	3-pole
Weight	5.56 kg
Weight	12.26 lb

Components

Entry type	Standard 8161, moulded material
Cable gland	2 x M40 Ø 12 to 28 mm 1 x M20 Ø 4 to 13 mm

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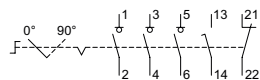


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Technical Drawings – Subject to Alterations

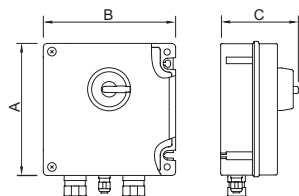


81../5--V..-3..-51-..

3-pole + 1S

(1x ON delayed – OFF leading), 1 NC

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



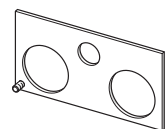
Accessories

Auxiliary contact



	Art. No.
2 NC contacts (8080/1-3) 250 V AC/DC max. 6 A 1.5 ... 2.5 mm ² solid / finely stranded The switching function of the auxiliary contact depends on the installation slot used. Left and right: synchronising	168356
1 NC contact + 1 NO contact (8080/1-1) 250 V AC/DC max. 6 A 1.5 ... 2.5 mm ² solid / finely stranded The switching function of the auxiliary contact depends on the installation slot used. Left: delayed (ON), leading (OFF) Right: synchronising	168351
2 NO contacts (8080/1-4) 250 V AC/DC max. 6 A 1.5 ... 2.5 mm ² solid / finely stranded The switching function of the auxiliary contact depends on the installation slot used. Left and right: synchronising	168353

Brass plate



size 073 A/B
2 x M40, 1 x M20

Art. No.

200215

Spare Parts

Auxiliary contact key



for removing the mounted auxiliary contact

Art. No.

201909

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