



- 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
- Reliable load disconnect switch with positively opening main contacts

MY R. STAHL 8146M



R. STAHL's 8146/5-V11 series load disconnect switches can be used as mains connection switches for distributor systems and motor circuits. The standard variants are designed for rated operational currents of up to 80 A – currents of 16-630 A are possible. They have AC-3, AC-23 and DC-23 motor switching capacity. They have a large, padlockable rotary actuator in black or red/yellow.

Technical Data

Explosion Protection

Scope of validity	Canada IECEX USA
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)
Declaration of Conformity	ATEX (EUK), China (CCC)

Electrical Data

Rated operational voltage AC	690 V
Rated operational current	20 A (T6)
Nominal power	10 HP
Auxiliary contact NC	without
Auxiliary contact NO	without
Short-circuit protection, max.	35 A
Tripping characteristic	gG
Frequency range	50 – 60 Hz

Auxiliary Power

Nominal voltage	480 V AC
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Load Disconnect Switches and Motor Starters



Load disconnect switch

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Ambient Conditions

Ambient temperature	-40°C ... +44°C
Ambient temperature	-40°F ... +111°F

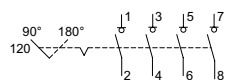
Mechanical Data

Degree of protection (IP)	IP66
Enclosure material	Polyester, Glass fibre reinforced
Additional terminal	without
Min. connection cross section, solid	4 mm ²
Max. connection cross section, solid	0 mm ²
Min. connection cross-section, finely stranded	4 mm ²
Max. connection cross-section, finely stranded	6 mm ²
Min. solid conn. cr.-sect. AWG	AWG 12
Max. solid conn. cr.-sect. AWG	AWG 0
Connection terminal auxiliary contact min. AWG	AWG 0
Connection terminal auxiliary contact solid max.	AWG 0
Connection terminal auxiliary contact finely stranded max.	AWG 0
Construction type	Standard
Width	170 mm
Width in inches	6.69 in
Height	170 mm
Height, inches	6.69 in
Depth	132 mm
Depth, inches	5.2 in
Service life, min.	10 ⁵ operating cycles
Handle colour	Black
Protective collar colour	Black
Seal	Silicone, foamed
Lockable in	Three times in 0 position
Detailed number of poles	3-pole + N
Weight	1.82 kg
Weight	4 lb

Components

Entry type	Standard 8161, moulded material
Cable gland	2x M32 Ø 9 to 21 mm 1x M20 Ø 4 to 13 mm with plug

Technical Drawings – Subject to Alterations



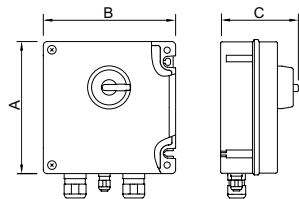
Load Disconnect Switches and Motor Starters



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



Version	Rated operational current	Product Type	Dimension A [mm]	Dimension B [mm]	Dimension C [mm]
3 pole	10 A	8146/ 5- V11- 300- 00- 1050 8146/ 5- V11- 300- 00- 0050	112.5	112.5	131
	16 A	8146/ 5- V11- 302- 00- 0050	170	112,5	132
		8146/ 5- V11- 302- 00- 1050	170	112,5	132
		8146/ 5- V11- 102- 00- 0110	170	170	172
	20 A	8146/ 5- V11- 303- 00- 0010	170	170	132
	25 A	8146/ 5- V11- 104- 00- 0110	227	170	171
		8146/ 5- V11- 304- 00- 1010	170	170	132
40 A	8146/ 5- V11- 305- 00- 0010- K	340.5	170	176.5	
	8146/ 5- V11- 305- 00- 1010- K	340.5	170	176.5	
63 - 80 A	8146/ 5- V11- 306- 00- 0010- K	340.5	170	195	
	8146/ 5- V11- 306- 00- 1010- K	340.5	170	195	
3 pole + N	10 A	8146/ 5- V11- 400- 00- 0050	112.5	112.5	131
	16 A	8146/ 5- V11- 402- 00- 0050	170	112.5	132.0
		8146/ 5- V11- 402- 00- 1050	170	112.5	132.0
	20 A	8146/ 5- V11- 403- 00- 0010K	170	170	132
	25 A	8146/ 5- V11- 404- 00- 0010	170	170	132
	40 A	8146/ 5- V11- 405- 00- 0010- K	340.5	340.5	195
63 - 80 A	8146/ 5- V11- 406- 00- 0010- K	340.5	340.5	195	
	8146/ 5- V11- 406- 00- 1010- K	340.5	340.5	195	
6 pole	25 A	8146/ 5- V11- 604- 60- 0010	227	170	172

Load Disconnect Switches and Motor Starters

Load disconnect switch



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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.