



- Large current range from 10 A to 180 A
- Can be used with conventional drives or with variable-frequency drives
- Intelligent design: A single rotary actuator for actuating the main and auxiliary contacts, ≥ 20 ms leading auxiliary contact for safe disconnection
- Designed in accordance with IEC/EN 62626-1, class 1
- The rotary actuator can be locked in the 0-position with three padlocks
- Cover can only be removed in the I-position

E7

MY R. STAHL 8146L



R. STAHL Series 8146/5-V37 safety switches safely disconnect machines and system parts from the energy supply for cleaning and repair as prescribed. All of the installed load disconnect switches have AC-3 switching capacity. The switches can be locked in the 0-position using padlocks.

	IECEx / ATEX					
Zone	0	1	2	20	21	22
Installation in		•	•		•	•

Selection Table										
Rated operational current		10 A								
Rated operational voltage AC		690 V								
Switching capacity AC-3 230 V		2.2 kW								
Switching capacity AC-3 400 V		4 kW								
Switching capacity AC-3 440 V		4 kW								
Switching capacity AC-3 500 V		5.5 kW								
Switching capacity AC-3 690 V		7.5 kW								
Detailed number of poles	Handle colour and handle	Additional terminal	Additional device	Entry type	Cable gland	Auxiliary contact NC	Auxiliary contact NO	Product Type	Art. No.	Weight
3-pole	Black shroud and handle	–	Brass plate drilled	Standard 8161, moulded material	2 x M25 \varnothing 7 to 17 mm 1 x M20 \varnothing 4 to 13 mm	without	1 NO/delayed	8146/5-V37-300-50-0050	220275	1.7 kg
	Yellow shroud, red handle	–	Brass plate drilled	Standard 8161, moulded material	2 x M25 \varnothing 7 to 17 mm 1 x M20 \varnothing 4 to 13 mm	without	1 NO/delayed	8146/5-V37-300-50-1050	220277	1.7 kg

Selection Table

Rated operational current		12 A / 16 A								
Rated operational voltage AC		690 V / 690 V								
Switching capacity AC-3 230 V		3 kW / 4 kW								
Switching capacity AC-3 400 V		5.5 kW / 7.5 kW								
Switching capacity AC-3 440 V		5.5 kW / 7.5 kW								
Switching capacity AC-3 500 V		7.5 kW / 7.5 kW								
Switching capacity AC-3 690 V		7.5 kW / 11 kW								
Detailed number of poles	Handle colour	Additional terminal	Additional device	Entry type	Cable gland	Auxiliary contact NC	Auxiliary contact NO	Product Type	Art. No.	Weight
3-pole	Black shroud and handle	–	Brass plate drilled	Standard 8161, moulded material	2 x M25 Ø 7 to 17 mm 1 x M20 Ø 4 to 13 mm	without	1 NO/delayed	8146/5-V37-301-50-0050	147855	962 g
		N-terminal	Brass plate drilled	Standard 8161, moulded material	2 x M25 Ø 7 to 17 mm 1 x M20 Ø 4 to 13 mm	without	1 NO/delayed	8146/5-V37-301-50-0150	147857	982 g
	Yellow shroud, red handle	–	Brass plate drilled	Standard 8161, moulded material	2 x M25 Ø 7 to 17 mm 1 x M20 Ø 4 to 13 mm	without	1 NO/delayed	8146/5-V37-301-50-1050	147856	958 g
		N-terminal	Brass plate drilled	Standard 8161, moulded material	2 x M25 Ø 7 to 17 mm 1 x M20 Ø 4 to 13 mm	without	1 NO/delayed	8146/5-V37-301-50-1150	147858	978 g
Rated operational current		16 A								
Rated operational voltage AC		690 V								
Switching capacity AC-3 230 V		4 kW								
Switching capacity AC-3 400 V		7.5 kW								
Switching capacity AC-3 440 V		7.5 kW								
Switching capacity AC-3 500 V		7.5 kW								
Switching capacity AC-3 690 V		11 kW								
Detailed number of poles	Handle colour	Additional terminal	Additional device	Entry type	Cable gland	Auxiliary contact NC	Auxiliary contact NO	Product Type	Art. No.	Weight
3-pole	Black shroud and handle	–	Brass plate drilled	Standard 8161, moulded material	2 x M25 Ø 7 to 17 mm 1 x M20 Ø 4 to 13 mm	without	1 NO/delayed	8146/5-V37-302-50-0050	201404	1.59 kg
		PTC resistor terminal	Brass plate drilled	Standard 8161, moulded material	2 x M25 Ø 7 to 17 mm 1 x M20 Ø 4 to 13 mm	without	1 NO/delayed	8146/5-V37-302-50-0250	222088	1.59 kg
	Yellow shroud, red handle	Main contact on terminals	–	Standard 8161, moulded material	2 x M32 Ø 9 to 21 mm 1 x M20 Ø 4 to 13 mm	without	without	8146/5-V37-302-00-1510	226354	2.5 kg
		–	Brass plate drilled	Standard 8161, moulded material	2 x M25 Ø 7 to 17 mm 1 x M20 Ø 4 to 13 mm	without	1 NO/delayed	8146/5-V37-302-50-1050	201405	1.59 kg
		N-terminal	Brass plate drilled	Standard 8161, moulded material	2 x M25 Ø 7 to 17 mm 1 x M20 Ø 4 to 13 mm	without	1 NO/delayed	8146/5-V37-302-50-1150	201406	1.59 kg
6-pole	Black shroud and handle	–	–	Standard 8161, moulded material	4 x M25 Ø 7 to 17 mm 1 x M20 Ø 4 to 13 mm	without	2 NO/1x delayed	8146/5-V37-602-60-0010	201420	2.64 kg
	Yellow shroud, red handle	–	–	Standard 8161, moulded material	4 x M25 Ø 7 to 17 mm 1 x M20 Ø 4 to 13 mm	without	2 NO/1x delayed	8146/5-V37-602-60-1010	201421	2.64 kg

Selection Table										
Rated operational current		20 A								
Rated operational voltage AC		690 V								
Switching capacity AC-3 230 V		5.5 kW								
Switching capacity AC-3 400 V		7.5 kW								
Switching capacity AC-3 440 V		11 kW								
Switching capacity AC-3 500 V		11 kW								
Switching capacity AC-3 690 V		18.5 kW								
Detailed number of poles	Handle colour	Additional terminal	Additional device	Entry type	Cable gland	Auxiliary contact NC	Auxiliary contact NO	Product Type	Art. No.	Weight
3-pole	Black shroud and handle	–	–	Standard 8161, moulded material	2 x M32 Ø 13 to 21 mm 1 x M20 Ø 4 to 13 mm	without	1 NO/delayed	8146/5-V37-303-50-0010	220278	2.02 kg
	Yellow shroud, red handle	–	–	Standard 8161, moulded material	2 x M25 Ø 7 to 17 mm 1 x M20 Ø 4 to 13 mm	without	1 NO/delayed	8146/5-V37-303-50-1010	220279	2.02 kg
Rated operational current		25 A								
Rated operational voltage AC		690 V								
Switching capacity AC-3 230 V		5.5 kW								
Switching capacity AC-3 400 V		11 kW								
Switching capacity AC-3 440 V		11 kW								
Switching capacity AC-3 500 V		15 kW								
Switching capacity AC-3 690 V		22 kW								
Detailed number of poles	Handle colour	Additional terminal	Additional device	Entry type	Cable gland	Auxiliary contact NC	Auxiliary contact NO	Product Type	Art. No.	Weight
3-pole	Black shroud and handle	–	–	Standard 8161, moulded material	2 x M32 Ø 9 to 21 mm 1 x M20 Ø 4 to 13 mm	without	1 NO/delayed	8146/5-V37-304-50-0010	201422	1.96 kg
	Yellow shroud, red handle	–	–	Standard 8161, moulded material	2 x M32 Ø 9 to 21 mm 1 x M20 Ø 4 to 13 mm	without	1 NO/delayed	8146/5-V37-304-50-1010	201423	2.02 kg
		N-terminal	–	Standard 8161, moulded material	2 x M32 Ø 9 to 21 mm 1 x M20 Ø 4 to 13 mm	without	1 NO/delayed	8146/5-V37-304-50-1110	201462	2.02 kg
Rated operational current		25 A								
Rated operational voltage AC		690 V								
Switching capacity AC-3 230 V		5.5 kW								
Switching capacity AC-3 400 V		11 kW								
Switching capacity AC-3 440 V		11 kW								
Switching capacity AC-3 500 V		15 kW								
Switching capacity AC-23 690 V		22 kW								
Detailed number of poles	Handle colour	Additional terminal	Additional device	Entry type	Cable gland	Auxiliary contact NC	Auxiliary contact NO	Product Type	Art. No.	Weight
6-pole	Black shroud and handle	–	–	Standard 8161, moulded material	4 x M25 Ø 7 to 17 mm 1 x M20 Ø 4 to 13 mm	without	2 NO/1x delayed	8146/5-V37-604-60-0010	201464	2.79 kg
	Yellow shroud, red handle	–	–	Standard 8161, moulded material	4 x M25 Ø 7 to 17 mm 1 x M20 Ø 4 to 13 mm	without	2 NO/1x delayed	8146/5-V37-604-60-1010	201447	2.79 kg

Selection Table

Rated operational current		40 A								
Rated operational voltage AC		690 V								
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								
Detailed number of poles	Handle colour	Additional terminal	Additional device	Entry type	Cable gland	Auxiliary contact NC	Auxiliary contact NO	Product Type	Art. No.	Weight
3-pole	Black shroud and handle	–	–	Standard 8161, moulded material	2 x M40 Ø 12 to 28 mm 1 x M20 Ø 4 to 13 mm	without	without	8146/5-V37-305-00-0010-K	242415	5.52 kg
		–	–	Standard 8161, moulded material	2 x M40 Ø 12 to 28 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-305-51-0010-K	200206	5.56 kg
	Yellow shroud, red handle	Main contact on terminals	–	Standard 8161, moulded material	2 x M40 Ø 12 to 28 mm 1 x M20 Ø 4 to 13 mm	without	without	8146/5-V37-305-00-1510	226355	7.5 kg
	–	–	Standard 8161, moulded material	2 x M40 Ø 12 to 28 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-305-51-1010-K	200207	5.52 kg	
	N-terminal	–	Standard 8161, moulded material	2 x M40 Ø 12 to 28 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-305-51-1110-K	200208	5.9 kg	
3-pole + N	Black shroud and handle	–	–	Standard 8161, moulded material	2 x M40 Ø 12 to 28 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-405-51-0010-K	256841	6.2 kg
6-pole	Black shroud and handle	–	–	Standard 8161, moulded material	2 x M40 Ø 12 to 28 mm 1 x M20 Ø 4 to 13 mm	without	without	8146/5-V37-605-00-0010-K	200311	11 kg
		–	–	Standard 8161, moulded material	4 x M40 Ø 12 to 28 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-605-51-0010-K	200290	11 kg
	Yellow shroud, red handle	–	–	Standard 8161, moulded material	2 x M40 Ø 12 to 28 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-605-51-1010-K	200321	11 kg
Rated operational current		63 A								
Rated operational voltage AC		690 V								
Switching capacity AC-3 230 V		18.5 kW / 22 kW								
Switching capacity AC-3 400 V		30 kW / 45 kW								
Switching capacity AC-3 440 V		37 kW / 45 kW								
Switching capacity AC-3 500 V		37 kW / 55 kW								
Switching capacity AC-3 690 V		55 kW / -- kW								
Detailed number of poles	Handle colour	Additional terminal	Additional device	Entry type	Cable gland	Auxiliary contact NC	Auxiliary contact NO	Product Type	Art. No.	Weight
3-pole	Yellow shroud, red handle	Main contact on terminals	–	Standard 8161, moulded material	2 x M50 Ø 16 to 35 mm 1 x M20 Ø 4 to 13 mm	without	without	8146/5-V37-306-00-1510	226356	10.7 kg

Selection Table

Rated operational current	63 A / 80 A
Rated operational voltage AC	690 V / 500 V
Switching capacity AC-3 230 V	18.5 kW / 22 kW
Switching capacity AC-3 400 V	30 kW / 45 kW
Switching capacity AC-3 440 V	37 kW / 45 kW
Switching capacity AC-3 500 V	37 kW / 55 kW
Switching capacity AC-3 690 V	55 kW / -- kW

Detailed number of poles	Handle colour and handle	Additional terminal	Additional device	Entry type	Cable gland	Auxiliary contact NC	Auxiliary contact NO	Product Type	Art. No.	Weight
3-pole	Black shroud and handle	–	–	Standard 8161, moulded material	2 x M50 Ø 16 to 35 mm 1 x M20 Ø 4 to 13 mm	without	without	8146/5-V37-306-00-0010-K	242416	5.68 kg
		–	–	Standard 8161, moulded material	2 x M50 Ø 16 to 35 mm 1 x M20 Ø 4 to 13 mm	without	without	8146/5-V37-306-00-0010	213115	7.55 kg
		–	–	Standard 8161, moulded material	2 x M50 Ø 16 to 35 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-306-51-0010-K	200558	5.68 kg
		–	–	Standard 8161, moulded material	2 x M50 Ø 16 to 35 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-306-51-0010	213395	7.55 kg
		–	Brass plate drilled	Only drilled holes	2 x M50 1 x M20	1 NC	1 NO/delayed	8146/5-V37-306-51-0040	213398	11.8 kg
	Yellow shroud, red handle	–	–	Standard 8161, moulded material	2 x M50 Ø 16 to 35 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-306-51-1010-K	200559	5.68 kg
		–	–	Standard 8161, moulded material	2 x M50 Ø 16 to 35 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-306-51-1010	213396	7.55 kg
		N-terminal	–	Standard 8161, moulded material	2 x M50 Ø 16 to 35 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-306-51-1110-K	200560	5.68 kg
		N-terminal	–	Standard 8161, moulded material	2 x M50 Ø 16 to 35 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-306-51-1110	213397	7.55 kg
		3-pole + N	Black shroud and handle	–	–	Standard 8161, moulded material	2 x M50 Ø 16 to 35 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-406-51-0010-K
6-pole	Black shroud and handle	–	–	Standard 8161, moulded material	4 x M50 Ø 16 to 35 mm 1 x M20 Ø 4 to 13 mm	without	without	8146/5-V37-606-00-0010	200573	10.1 kg
		–	–	Standard 8161, moulded material	4 x M50 Ø 16 to 35 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-606-51-0010	200574	10.1 kg
	Yellow shroud, red handle	–	–	Standard 8161, moulded material	4 x M50 Ø 16 to 35 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-606-51-1010	200575	10.1 kg

Selection Table

Rated operational current		80 A								
Rated operational voltage AC		500 V								
Switching capacity AC-3 230 V		22 kW								
Switching capacity AC-3 400 V		45 kW								
Switching capacity AC-3 440 V		45 kW								
Switching capacity AC-3 500 V		55 kW								
Detailed number of poles	Handle colour	Additional terminal	Additional device	Entry type	Cable gland	Auxiliary contact NC	Auxiliary contact NO	Product Type	Art. No.	Weight
3-pole	Yellow shroud, red handle	Main contact on terminals	–	Standard 8161, moulded material	2 x M63 Ø 28 to 48 mm 1 x M20 Ø 4 to 13 mm	without	without	8146/5-V37-307-00-1510	226357	14.4 kg
Rated operational current		125 A / 160 A								
Rated operational voltage AC		690 V / 400 V								
Switching capacity AC-3 230 V		37 kW / 45 kW								
Switching capacity AC-3 400 V		55 kW / 90 kW								
Switching capacity AC-3 440 V		75 kW / 90 kW								
Switching capacity AC-3 500 V		75 kW / -- kW								
Switching capacity AC-3 690 V		110 kW / -- kW								
Detailed number of poles	Handle colour	Additional terminal	Additional device	Entry type	Cable gland	Auxiliary contact NC	Auxiliary contact NO	Product Type	Art. No.	Weight
3-pole	Black shroud and handle	–	–	Standard 8161, moulded material	2 x M63 Ø 28 to 48 mm 1 x M20 Ø 4 to 13 mm	without	without	8146/5-V37-308-00-0010-K	201396	14.4 kg
		–	–	Standard 8161, moulded material	2 x M63 Ø 28 to 48 mm 1 x M20 Ø 4 to 13 mm	without	without	8146/5-V37-308-00-0010	212478	18.5 kg
		–	–	Standard 8161, moulded material	2 x M63 Ø 28 to 48 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-308-51-0010-K	201397	14.4 kg
		–	–	Standard 8161, moulded material	2 x M63 Ø 28 to 48 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-308-51-0010	212209	18.5 kg
	–	Brass plate drilled	Only drilled holes	2 x M63 1 x M20	1 NC	1 NO/delayed	8146/5-V37-308-51-0040-K	201400	21.3 kg	
	–	Brass plate drilled	Only drilled holes	2 x M63 1 x M20	1 NC	1 NO/delayed	8146/5-V37-308-51-0040	212212	22.8 kg	
	Yellow shroud, red handle	–	–	Standard 8161, moulded material	2 x M63 Ø 28 to 48 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-308-51-1010-K	201398	14.4 kg
		–	–	Standard 8161, moulded material	2 x M63 Ø 28 to 48 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-308-51-1010	212210	18.5 kg
		N-terminal	–	Standard 8161, moulded material	2 x M63 Ø 28 to 48 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-308-51-1110-K	201399	14.4 kg
		N-terminal	–	Standard 8161, moulded material	2 x M63 Ø 28 to 48 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-308-51-1110	212211	23.2 kg

Selection Table											
Rated operational current		125 A / 160 A									
Rated operational voltage AC		690 V / 400 V									
Switching capacity AC-3 230 V		37 kW / 45 kW									
Switching capacity AC-3 400 V		55 kW / 90 kW									
Switching capacity AC-3 440 V		75 kW / 90 kW									
Switching capacity AC-3 500 V		75 kW / -- kW									
Switching capacity AC-3 690 V		110 kW / -- kW									
Detailed number of poles	Handle colour	Additional terminal	Additional device	Entry type	Cable gland	Auxiliary contact NC	Auxiliary contact NO	Product Type	Art. No.	Weight	
6-pole	Black shroud and handle	–	–	Standard 8161, moulded material	4 x M63 Ø 28 to 48 mm 1 x M20 Ø 4 to 13 mm	without	without	8146/5-V37-608-00-0010	201401	22.8 kg	
		–	–	Standard 8161, moulded material	4 x M63 Ø 28 to 48 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-608-51-0010	201402	22.8 kg	
	Yellow shroud, red handle	–	–	Standard 8161, moulded material	4 x M63 Ø 28 to 48 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-608-51-1010	201403	22.8 kg	
		N-terminal	–	Standard 8161, moulded material	4 x M63 Ø 28 to 48 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-608-51-1110	212766	22.8 kg	
Rated operational current		180 A									
Rated operational voltage AC		400 V									
Switching capacity AC-3 230 V		55 kW									
Switching capacity AC-3 400 V		90 kW									
Detailed number of poles	Handle colour	Additional terminal	Additional device	Entry type	Cable gland	Auxiliary contact NC	Auxiliary contact NO	Product Type	Art. No.	Weight	
3-pole	Black shroud and handle	–	–	Standard 8161, moulded material	2 x M63 Ø 28 to 48 mm 1 x M20 Ø 4 to 13 mm	without	without	8146/5-V37-310-00-0010-K	213475	14.4 kg	
		–	–	Standard 8161, moulded material	2 x M63 Ø 28 to 48 mm 1 x M20 Ø 4 to 13 mm	without	without	8146/5-V37-310-00-0010	213482	19.6 kg	
		–	–	Standard 8161, moulded material	2 x M63 Ø 28 to 48 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-310-51-0010-K	213476	14.4 kg	
		–	–	Standard 8161, moulded material	2 x M63 Ø 28 to 48 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-310-51-0010	213483	19.6 kg	
	Yellow shroud, red handle	–	–	Brass plate drilled	Only drilled holes	2 x M63 1 x M20	1 NC	1 NO/delayed	8146/5-V37-310-51-0040-K	213479	15.1 kg
		–	–	Brass plate drilled	Only drilled holes	2 x M63 1 x M20	1 NC	1 NO/delayed	8146/5-V37-310-51-0040	213486	22.8 kg
		–	–	Standard 8161, moulded material	2 x M63 Ø 28 to 48 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-310-51-1010-K	213477	14.4 kg	
		–	–	Standard 8161, moulded material	2 x M63 Ø 28 to 48 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-310-51-1010	213484	19.6 kg	

Selection Table

Rated operational current		180 A								
Rated operational voltage AC		400 V								
Switching capacity AC-3 230 V		55 kW								
Switching capacity AC-3 400 V		90 kW								
Detailed number of poles	Handle colour	Additional terminal	Additional device	Entry type	Cable gland	Auxiliary contact NC	Auxiliary contact NO	Product Type	Art. No.	Weight
6-pole	Black shroud and handle	–	–	Standard 8161, moulded material	4 x M63 Ø 28 to 48 mm 1 x M20 Ø 4 to 13 mm	without	without	8146/5-V37-610-00-0010	213489	37.4 kg
		–	–	Standard 8161, moulded material	4 x M63 Ø 28 to 48 mm 1 x M20 Ø 4 to 13 mm	1 NC	1 NO/delayed	8146/5-V37-610-51-0010	213490	37.4 kg

NO auxiliary contact (ON delayed – OFF leading)

8146/5-V37-.....K: Versions with smaller design size; see dimensional drawings

In this context, particular attention must be paid to bending radii, temperature classes and permissible ambient temperatures.

Technical Data

Variant 8146/5-V37

Explosion Protection

IECEX gas explosion protection	Ex db eb IIC T6 / T4 Gb
IECEX dust explosion protection	Ex tb IIIC T80 °C / T130 °C Db
ATEX gas explosion protection	Ex II 2 G Ex db eb IIC T6 / T4 Gb
ATEX dust explosion protection	Ex II 2 D Ex tb IIIC T80 °C / T130 °C Db

Declaration of Conformity

ATEX (EUK), China (CCC)

Certificates

ATEX (PTB), China (NEPSI), IECEX (PTB), India (PESO)

Notes

Product label may vary. Series devices are labelled with ATEX and IECEX.

Electrical Data

Notes

NO auxiliary contact (1 x ON delayed – OFF leading)

Mechanical Data

Degree of protection (IP)	IP66
Enclosure material	Polyester resin, Glass fibre reinforced
Seal	Silicone, foamed
Lockable in	Three times in 0 position

Ambient conditions

Type	Number of poles		Max. current (A)	Conductor cross-section ¹⁾ (mm ²)		Temperature class/ perm. ambient temperature
	Main contacts	Auxiliary contacts		min.	max.	
8146/5-V37-300-...*	3	1	10	2.5	4	T6: -40 °C to +51 °C T6: -40 °C to +54 °C ²⁾ T5: -40 °C to +69 °C ²⁾
8146/5-V37-301-...*	3	1	12/16	2.5	4	T6: -40 °C to +51 °C T6: -40 °C to +54 °C ²⁾ T5: -40 °C to +69 °C ²⁾
8146/5-V37-302-...*	3	1	16	2.5	6	T6: -40 °C to +51 °C T6: -40 °C to +54 °C ²⁾ T5: -40 °C to +69 °C ²⁾
8146/5-V37-302-...-5*	3	0	16	2.5	10	T4: -40 °C to +60 °C
8146/5-V37-602-...*	6	2	16	2.5	6	T6: -40 °C to +47 °C T5: -40 °C to +62 °C ²⁾
8146/5-V37-303-...*	3	1	20	4	6	T6: -40 °C to +40 °C T5: -40 °C to +55 °C ²⁾
8146/5-V37-304-...*	3	1	25	4	6	T6: -40 °C to +40 °C T5: -40 °C to +55 °C ²⁾
8146/5-V37-604-...	6	2	25	4	6	T5: -40 °C to +49 °C ²⁾
	6	2	25	6	6	T6: -40 °C to +42 °C T5: -40 °C to +50 °C T5: -40 °C to +57 °C ²⁾
	6	0	25	4	6	T5: -40 °C to +45 °C
	6	0	25	6	6	T5: -40 °C to +52 °C ²⁾ T5: -40 °C to +48 °C
8146/5-V37-305-...-K	3	2	40	10	25	T6: -40 °C to +48 °C T6: -40 °C to +51 °C ²⁾ T5: -40 °C to +66 °C ²⁾
8146/5-V37-305-00-...-K	3	0	40	10	25	
8146/5-V37-305-...-5	3	0	40	10	35	T4: -40 °C to +60 °C
8146/5-V37-605-...-K	6	2	40	10	25	T6: -40 °C to +47 °C T5: -40 °C to +51 °C T5: -40 °C to +62 °C ²⁾
8146/5-V37-605-00-...-K	6	0	40	10	25	T5: -40 °C to +62 °C ²⁾
8146/5-V37-306-...-K	3	2	50	10	25	T6: -40 °C to +43 °C
	3	2	63	16	25	T6: -40 °C to +42 °C T5: -40 °C to +57 °C ²⁾
	3	2	80	25	25	T6: -40 °C to +40 °C T5: -40 °C to +44 °C T5: -40 °C to +55 °C ²⁾
8146/5-V37-306-00-...-K	3	0	50	10	25	T6: -40 °C to +43 °C
	3	0	63	16	25	T6: -40 °C to +42 °C T5: -40 °C to +57 °C ²⁾
	3	0	80	25	25	T6: -40 °C to +40 °C T5: -40 °C to +44 °C T5: -40 °C to +55 °C ²⁾
8146/5-V37-306-...	3	2	63	35	50	T6: -40 °C to +58 °C T5: -40 °C to +73 °C ²⁾
	3	2	63	50	50	T6: -40 °C to +60 °C T5: -40 °C to +75 °C ²⁾
	3	2	80	35	50	T6: -40 °C to +48 °C T5: -40 °C to +53 °C T5: -40 °C to +63 °C ²⁾
	3	2	80	50	50	T6: -40 °C to +53 °C T5: -40 °C to +57 °C T5: -40 °C to +68 °C ²⁾

Type	Number of poles		Max. current (A)	Conductor cross-section ¹⁾ (mm ²)		Temperature class/ perm. ambient temperature
	Main contacts	Auxiliary contacts		min.	max.	
8146/5-V37-306-00-...	3	0	63	35	50	T6: -40 °C to +58 °C T5: -40 °C to +73 °C ²⁾
	3	0	63	50	50	T6: -40 °C to +60 °C T5: -40 °C to +75 °C ²⁾
	3	0	80	3	50	T6: -40 °C to +48 °C T5: -40 °C to +53 °C T5: -40 °C to +63 °C ²⁾
	3	0	80	50	50	T6: -40 °C to +53 °C T5: -40 °C to +57 °C T5: -40 °C to +68 °C ²⁾
8146/5-V37-306-...-5	3	0	63	25	95	T4: -40 °C to +60 °C
8146/5-V37-307-...-5	3	0	80	50	150	T4: -40 °C to +60 °C
8146/5-V37-606-...	6	2	50	10	50	T6: -40 °C to +41 °C T5: -40 °C to +56 °C ²⁾
	6	2	63	16	50	T6: -40 °C to +41 °C T5: -40 °C to +56 °C ²⁾
	6	2	63	25	50	T6: -40 °C to +47 °C T5: -40 °C to +62 °C ²⁾
	6	2	80	25	50	T5: -40 °C to +51 °C ²⁾
	6	2	80	35	50	T6: -40 °C to +43 °C T5: -40 °C to +58 °C ²⁾
8146/5-V37-606-00-...	6	0	50	10	50	T6: -40 °C to +41 °C T5: -40 °C to +56 °C ²⁾
	6	0	63	16	50	T6: -40 °C to +41 °C T5: -40 °C to +56 °C ²⁾
	6	0	63	25	50	T6: -40 °C to +47 °C T5: -40 °C to +62 °C ²⁾
	6	0	80	25	50	T5: -40 °C to +51 °C ²⁾
	6	0	80	35	50	T6: -40 °C to +43 °C T5: -40 °C to +58 °C ²⁾
8146/5-V37-308-...-K	3	1	125	95	120	T6: -40 °C to +46 °C T5: -40 °C to +62 °C ²⁾ T4: -40 °C to +72 °C ²⁾
	3	1	125	120	120	T6: -40 °C to +46 °C T5: -40 °C to +62 °C ²⁾ T4: -40 °C to +72 °C ²⁾
	3	1	160	95	120	T5: -40 °C to +40 °C T5: -40 °C to +50 °C ²⁾ T4: -40 °C to +55 °C ²⁾
	3	1	160	120	120	T5: -40 °C to +45 °C T5: -40 °C to +49 °C T4: -40 °C to +60 °C ²⁾
8146/5-V37-308-...	3	1	125	95	150	T6: -40 °C to +47 °C T5: -40 °C to +62 °C ²⁾ T4: -40 °C to +72 °C ²⁾
	3	1	160	95	150	T5: -40 °C to +40 °C T5: -40 °C to +47 °C ²⁾ T4: -40 °C to +55 °C ²⁾
	3	1	160	120	150	T5: -40 °C to +45 °C T5: -40 °C to +51 °C ²⁾ T4: -40 °C to +60 °C ²⁾

Type	Number of poles		Max. current (A)	Conductor cross-section ¹⁾ (mm ²)		Temperature class/ perm. ambient temperature
	Main contacts	Auxiliary contacts		min.	max.	
8146/5-V37-608-...	6	2	125	95	150	T6: -40 °C to +40 °C T5: -40 °C to +55 °C ²⁾ T4: -40 °C to +72 °C ²⁾
	6	2	160	95	150	T4: -40 °C to +40 °C T4: -40 °C to +55 °C ²⁾
	6	2	160	120	150	T4: -40 °C to +45 °C T4: -40 °C to +55 °C ²⁾
8146/5-V37-310-...-K	3	1	180	95	120	T4: -40 °C to +40 °C ²⁾
	3	1	180	120	120	T4: -40 °C to +50 °C ²⁾
8146/5-V37-310-...	3	1	180	95	150	T4: -40 °C to +40 °C ²⁾
	3	1	180	120	150	T4: -40 °C to +50 °C ²⁾
8146/5-V37-610-...	6	2	180	120	150	T4: -40 °C to +50 °C ²⁾

¹⁾ When using a conductor cross-section of min. 1.5 mm², the temperature class and ambient temperature are reduced to T4: -40 °C to +40 °C

²⁾ Project engineering note:

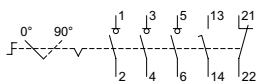
The maximum conductor cross-sections given were determined using the H07V.

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

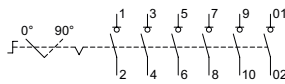
²⁾ Only with heat-resistant conductor > 70 °C at cable entries and/or > 85 °C at clamping units

Bold: Information on the rating plate

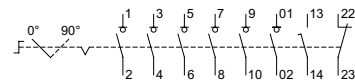
Technical Drawings – Subject to Alterations



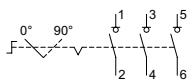
81../5-V..-3..-51..
3-pole + 1 NO
(1x ON delayed – OFF leading), 1 NC



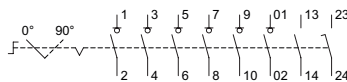
81../5-V..-6..-00..
6-pole



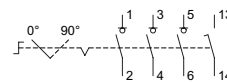
8146/5-V..-6..-51..
6-pole + 1 NO
(ON delayed – OFF leading), 1 NC



81..-V..-3..-00..
3-pole



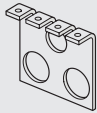
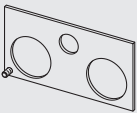
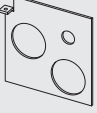
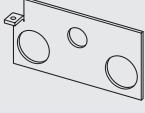
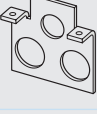
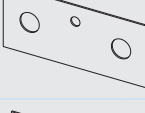

81..-V..-6..-60..
6-pole + 1 NO
(1x ON delayed – OFF leading/1 x switching normally)




81../5-V..-3..-50..
3-pole + 1 NO
(ON delayed – OFF leading)

Accessories

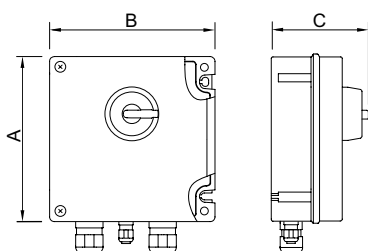
Figure	Description	Art. No.	Weight
Auxiliary contact			
	2 NC (8080/1-3) 250 V AC/DC Max. 6 A 1.5 to 2.5 mm ² , solid/finely stranded The switching function of the auxiliary contact depends on the installation slot used. Left and right: Synchronising	168356	26 g
	1 NC + 1 NO (8080/1-1) 250 V AC/DC Max. 6 A 1.5 to 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	26 g
	2 NO (8080/1-4) 250 V AC/DC Max. 6 A 1.5 to 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	26 g

Accessories				
Figure	Description	Art. No.	Weight	
Brass plate				
	SZ 041 A 2 x M25, 1 x M20	202079	81 g	
	SZ 073 A/B 2 x M40, 1 x M20	200215	190 g	
	SZ 073 A/B 2 x M50, 1 x M20	201948	370 g	
	SZ 051/061 2xM32, 1xM20	226934	155 g	
	SZ 031 2 x M25, 1 x M20	148207	81 g	
	SZ S73/83/93 2xM40, 1xM20	226935	840 g	
	SZ S73/083/093 2 x M63, 1 x M20	227586	750 g	

Spare Parts				
Figure	Description	Art. No.	Weight	
Auxiliary contact key				
	For removing installed auxiliary contacts	201909	35 g	

For the brass plate, see the individual data sheet at r-stahl.com, or available on request

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, 12/16 A	8146/5-V37-300-50-...	112.5	112.5	131
		8146/5-V37-301-50-...	112.5	112.5	131
	16 A	8146/5-V37-302-50-...	170	112.5	132
		8146/5-V37-302-...-5..	340.5	170	132
		8150/5-V37-302-50-...	176.5	176.5	132
		8146/5-V37-302-50-0250	227	112.5	172
	20 A	8146/5-V37-303-50-...	170	170	132
	25 A	8146/5-V37-304-50-...	170	170	132
		8150/5-V37-304-50-...	176.5	176.5	132
	40 A	8146/5-V37-305-...-K	340.5	170	176.5
		8146/5-V37-305-...-5..	340.5	340.5	195
		8150/5-V37-305-...-K	360	176.5	194
	63/80 A	8146/5-V37-306-...-K	340.5	170	195
		8146/5-V37-306-...	340.5	340.5	195
8146/5-V37-306-...-5..		681.5	340.5	195	
8150/5-V37-306-S1-...		360	360	196	
80 A	8146/5-V37-307-...-5..	681.5	340.5	195	
125/160 A	8146/5-V37-308-...-K	681.5	340.5	205	
	8146/5-V37-308-...	681.5	681.5	205	
180 A	8146/5-V37-310-...-K	681.5	340.5	205	
	8146/5-V37-310-...	681.5	681.5	205	
6-pole	16 A	8146/5-V37-602-60-...	170	170	172
	25 A	8146/5-V37-604-60-...	227	170	172
	40 A	8146/5-V37-605-...-K	340.5	340.5	205
	63/80 A	8146/5-V37-606-...	681.5	340.5	205
	125/160 A	8146/5-V37-608-...	1023	681.5	243
	180 A	8146/5-V37-610-...	1023	681.5	243