

Load disconnect switch

Series 8146/5-V11



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00653E00

- > Motor switching capacity AC-3 and AC-23 acc. to DIN VDE 0660 part 107 IEC/EN 60947-3
- > Isolating characteristics acc. to IEC/EN 60947-3
- > Positive opening operation of the main contacts
- > Available for rated operating currents of 16 A to 630 A
- > Robust enclosure made of glass fibre reinforced polyester resin
- > Large handle, lockable, black or yellow / red colours
- > Degree of protection IP66



E7

Series 8146/5-V11 load and motor switches are used as main connection switches for distribution units and motor circuits. The standard range of switches have rated operating currents up to 80 A. Switches for higher rated operating currents are designed and manufactured to order.

		ATEX						Class I (NEC 505) (NEC 506)						Class I Class II Class III							
Zone		0	1	2	20	21	22	Zone	0	1	2	20	21	22	Division	1	2	1	2	1	2
For use in		x	x			x	x	For use in		x ¹⁾					For use in	x ¹⁾					

¹⁾ Special version on request

Explosion Protection	
Global (IECEX)	
Gas and dust	8146/5: IECEX PTB 06.0090 8146/5: Ex d e ia/ib [iaGa] mb q IIA, IIB, IIC T6, T5, T4 Gb 8146/5: Ex tb IIIA, IIIB, IIIC T80°C, T95°C, T130°C Db
Europe (ATEX)	
Gas and dust	8146/5: PTB 01 ATEX 1024 8146/5: E II 2 G Ex d e ia ib [ia Ga] mb q IIA, IIB, IIC T6, T5, T4 Gb 8146/5: E II 2 D Ex tb IIIA, IIIB, IIIC T80°C, T95°C, T130°C Db IP66 (marking on rating plate possible)
Certifications and certificates	
Certificates	IECEX, ATEX, Kazakhstan (TR), Russia (TR), Belarus (TR)

WebCode 8146M

Load disconnect switch

Series 8146/5-V11

Selection Table

Version	Enclosure material	Equipment		Cable dia. range [mm]	Order number	Weight kg
		Colour	Additional device			
10 A, 3-pole	Polyester resin	black handle, black protective collar	--	2 x 7 ... 17 (M25), 1 x 4 ... 13 (M20)	8146/5-V11-300-00-0050	1,377
	Polyester resin	red handle, yellow protective collar	--	2 x 7 ... 17 (M25), 1 x 4 ... 13 (M20)	8146/5-V11-300-00-1050	1,377
10 A, 3-pole + N	Polyester resin	black handle, black protective collar	--	2 x 7 ... 17 (M25), 1 x 4 ... 13 (M20)	8146/5-V11-400-00-0050	1,377
	Polyester resin	red handle, yellow protective collar	--	2 x 7 ... 17 (M25), 1 x 4 ... 13 (M20)	8146/5-V11-400-00-1050	1,377

Reversing switches are available only in V11, not as safety switches V37.

Technical Data

Design	10 A																															
Mechanical data																																
Degree of protection	IP66 acc. to IEC/EN 60529																															
Enclosure cover	V11: In switching position ON locked, in OFF position removable																															
Handle	Can be locked with 3 padlocks in 0-position																															
Mounting / Installation																																
Cable entries	Standard: In polyamide, Series 8161 Special: In metal																															
Main contacts																																
Electrical data																																
Rated operational voltage	690 V AC																															
Rated insulation voltage	750 V																															
Rated impulse withstand voltage	6 kV																															
Rated operational current	10 A																															
Switching capacity	acc. to IEC/EN 60947-3; DIN VDE 0660, part 107																															
	<table border="1"> <thead> <tr> <th rowspan="2">U_e</th> <th colspan="2">AC-3</th> </tr> <tr> <th>I</th> <th>P</th> </tr> </thead> <tbody> <tr> <td>230 V ~</td> <td>10 A</td> <td>2.2 kW</td> </tr> <tr> <td>400 V ~</td> <td>10 A</td> <td>4.0 kW</td> </tr> <tr> <td>440 V ~</td> <td>10 A</td> <td>4.0 kW</td> </tr> <tr> <td>500 V ~</td> <td>10 A</td> <td>5.5 kW</td> </tr> <tr> <td>690 V ~</td> <td>10 A</td> <td>7.5 kW</td> </tr> </tbody> </table>			U _e	AC-3		I	P	230 V ~	10 A	2.2 kW	400 V ~	10 A	4.0 kW	440 V ~	10 A	4.0 kW	500 V ~	10 A	5.5 kW	690 V ~	10 A	7.5 kW									
U _e	AC-3																															
	I	P																														
230 V ~	10 A	2.2 kW																														
400 V ~	10 A	4.0 kW																														
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U _e	DC-1		DC-13 (L/R = 300 ms)																													
	I		U _e	I																												
220 V	6 A ³⁾		230 V	0.4 A																												
110 V	6 A ²⁾																															
60 V	6 A ¹⁾																															
24 V	10 A ¹⁾																															
	¹⁾ 1 conducting path ²⁾ 2 conducting paths in series ³⁾ 3 conducting paths in series																															

Load disconnect switch

Series 8146/5-V11



Technical Data

Service life of electrical / mechanical parts	40.000 operations
Max. short-circuit protection	16 A, tripping characteristic: gG acc. to IEC/EN 60291-1
Auxiliary contacts	
Electrical data	
Rated operating voltage	400 V AC
Rated operational current	6 A
Mechanical data	
Switch	1 NO (ON delayed - OFF advanced)
Mounting / Installation	
Terminals	2,5 ... 4 mm ² finely stranded / solid wire

Type 8146/5-V..-	No. of poles		max. current [A]	Conductor cross-section ¹⁾ [mm ²]		Temperature class / perm. ambient temperature
	Main contacts	Auxiliary contacts		min.	max.	
300-...	3	1	10	2,5	4	T6: -40 ... +51 °C T6: -40 ... +54 °C ²⁾ T5: -40 ... +69 °C ²⁾
300-00-...	3	0				
400-...	3	0	10	2,5	4	

¹⁾ 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 cable > 70 °C on cable entries or/and > 85 °C on clamping points

Grease: specified on rating plate

E7

Load disconnect switch

Series 8146/5-V11

Selection Table

Version	Enclosure material	Equipment		Cable dia. range [mm]	Order number	Weight
		Colour	Additional device			
16 A, 3-pole	Polyester resin	black handle, black protective collar	--	2 x 7 ... 17 (M25), 1 x 4 ... 13 (M20)	8146/5-V11-302-00-0050	1,670
	Polyester resin	red handle, yellow protective collar	--	2 x 7 ... 17 (M25), 1 x 4 ... 13 (M20)	8146/5-V11-302-00-1050	1,670
	Polyester resin	black handle, black protective collar	with N-terminal	2 x 7 ... 17 (M25), 1 x 4 ... 13 (M20)	8146/5-V11-102-00-0110	2,679
16 A, 3-pole + N	Polyester resin	black handle, black protective collar	--	2 x 7 ... 17 (M25), 1 x 4 ... 13 (M20)	8146/5-V11-402-00-0050	1,730
	Polyester resin	red handle, yellow protective collar	--	2 x 7 ... 17 (M25), 1 x 4 ... 13 (M20)	8146/5-V11-402-00-1050	1,730

Reversing switches are available only in V11, not as safety switches V37.

Technical Data

Design	16 A
Mechanical data	
Degree of protection	IP66 acc. to IEC/EN 60529
Enclosure cover	V11: In switching position ON locked, in OFF position removable
Handle	Can be locked with 3 padlocks in 0-position
Mounting / Installation	
Cable entries	Standard: In polyamide, Series 8161 Special: In metal
Main contacts	
Electrical data	
Rated operational voltage	690 V AC
Rated insulation voltage	690 V
Rated impulse withstand voltage	6 kV
Rated operational current	16 A

Load disconnect switch

Series 8146/5-V11



Technical Data

Switching capacity	acc. to IEC/EN 60947-3; DIN VDE 0660, part 107			
	AC-3			
	U _e	I	P	
	230 V ~	16 A	4.0 kW	
	400 V ~	16 A	7.5 kW	
	440 V ~	16 A	7.5 kW	
	500 V ~	16 A	7.5 kW	
	690 V ~	16 A	11.0 kW	
		DC-1, DC-23	DC-13 (L/R = 300 ms)	
	U _e	I	U _e	I
	220 V	16 A ³⁾	250 V	1.1 A
	120 V	16 A ²⁾	125 V	2.2 A
	60 V	16 A ¹⁾	60 V	5.0 A
Service life of electrical / mechanical parts	40.000 operations			
Max. short-circuit protection	25 A, tripping characteristic: gG acc. to IEC/EN 60291-1			
Auxiliary contacts				
Electrical data				
Rated operating voltage	400 V AC			
Rated operational current	10 A			
Mechanical data				
Switch	3-pole: 1 NO (ON delayed - OFF advanced) 6-pole: 2 NO (1 x ON delayed - OFF advanced / 1 x switching normally)			
Mounting / Installation				
Terminals	2.5 ... 10 mm ² finely stranded / solid			

- 1) 1 conducting path
2) 2 conducting paths in series
3) 3 conducting paths in series

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Ambient conditions 16 A

Type 8146/5-V...-	No. of poles		max. current [A]	Conductor cross-section ¹⁾ [mm ²]		Temperature class / Perm. ambient temperature
	Main contacts	Auxiliary contacts		min.	max.	
302-...	3	0	16	2.5	6	T6: -40 ... +51 °C T6: -40 ... +54 °C ²⁾ T5: -40 ... +69 °C ²⁾
102-...	3	0				
402-...	4	0	16	2.5	6	

¹⁾ 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 cable > 70 °C on cable entries or/and > 85 °C on clamping points

Grease: specified on rating plate

Load disconnect switch

Series 8146/5-V11

Selection Table

Version	Enclosure material	Equipment		Cable dia. range [mm]	Order number	Weight kg
		Colour	Additional device			
20 A, 3-pole	Polyester resin	black handle, black protective collar	--	2 x 9 ... 21 (M32), 1 x 4 ... 13 (M20)	8146/5-V11-303-00-0010	1,795
	Polyester resin	red handle, yellow protective collar	--	2 x 9 ... 21 (M32), 1 x 4 ... 13 (M20)	8146/5-V11-303-00-1010	1,795
20 A, 3-pole + N	Polyester resin	black handle, black protective collar	--	2 x 9 ... 21 (M32), 1 x 4 ... 13 (M20)	8146/5-V11-403-00-0010	1,815
	Polyester resin	red handle, yellow protective collar	--	2 x 9 ... 21 (M32), 1 x 4 ... 13 (M20)	8146/5-V11-403-00-1010	1,815

Reversing switches are available only in V11, not as safety switches V37.

Technical Data

Design 20 A

Mechanical data

Degree of protection IP66 acc. to IEC/EN 60529
 Enclosure cover V11: In switching position ON locked, in OFF position removable
 Handle Can be locked with 3 padlocks in 0-position

Mounting / Installation

Cable entries Standard: In polyamide, Series 8161
 Special: In metal

Main contacts

Electrical data

Rated operational voltage 690 V AC
 Rated insulation voltage 690 V
 Rated operational current 20 A
 Switching capacity acc. to IEC/EN 60947-3; DIN VDE 0660, part 107

U _e	AC-3		U _e	I		
	I	P				
230 V ~	20 A	5.5 kW	DC-13 (L/R = 300 ms)	I		
400 V ~	20 A	7.5 kW				
440 V ~	20 A	11.0 W				
500 V ~	20 A	11.0 kW				
690 V ~	20 A	18.5 kW				
U _e	DC-1, DC-23		U _e	I		
	I					
	220 V	20 A ³⁾			250 V	1.1 A
	120 V	20 A ²⁾			125 V	2.2 A
60 V	20 A ¹⁾	60 V	5.0 A			

1) 1 conducting path
 2) 2 conducting paths in series
 3) 3 conducting paths in series

Service life of electrical / mechanical parts 40.000 operations

Load disconnect switch

Series 8146/5-V11



Technical Data

Max. short-circuit protection	35 A, tripping characteristic: gG acc. to IEC/EN 60291-1
Auxiliary contacts	
Electrical data	
Rated operating voltage	500 V AC
Rated operational current	10 A
Mounting / Installation	
Terminals	4 ... 6 mm ² finely stranded / solid

Ambient conditions 20 A

Type 8146/5-V..-	No. of poles		max. current [A]	Conductor cross-section ¹⁾ [mm ²]		Temperature class / Perm. ambient temperature
	Main contacts	Auxiliary contacts		min.	max.	
303-...	3	0	20	4	6	T6: -40 ... +40 °C T5: -40 ... +55 °C ²⁾
403-...	4	0	20	4	6	T5: -40 ... +51 °C ²⁾

¹⁾ 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 cable > 70 °C on cable entries or/and > 85 °C on clamping points

Grease: specified on rating plate

E7

Load disconnect switch

Series 8146/5-V11

Selection Table

Version	Enclosure material	Equipment		Cable dia. range [mm]	Order number	Weight
		Colour	Additional device			
25 A, 3-pole	Polyester resin	black handle, black protective collar	--	2 x 9 ... 21 (M32), 1 x 4 ... 13 (M20)	8146/5-V11-304-00-0010	1,975
	Polyester resin	red handle, yellow protective collar	--	2 x 9 ... 21 (M32), 1 x 4 ... 13 (M20)	8146/5-V11-304-00-1010	1,975
	Polyester resin	red handle, yellow protective collar	with N-terminal	2 x 9 ... 21 (M32), 1 x 4 ... 13 (M20)	8146/5-V11-104-00-0110	2,621
25 A, 3-pole + N	Polyester resin	black handle, black protective collar	--	2 x 9 ... 21 (M32), 1 x 4 ... 13 (M20)	8146/5-V11-404-00-0010	2,108
	Polyester resin	red handle, yellow protective collar	--	2 x 9 ... 21 (M32), 1 x 4 ... 13 (M20)	8146/5-V11-404-00-1010	2,108
25 A, 6-pole	Polyester resin	black handle, black protective collar	--	4 x 7 ... 17 (M25), 1 x 4 ... 13 (M20)	8146/5-V11-604-60-0010	2,839
	Polyester resin	red handle, yellow protective collar	--	4 x 7 ... 17 (M25), 1 x 4 ... 13 (M20)	8146/5-V11-604-60-1010	2,839

Reversing switches are available only in V11, not as safety switches V37.

Technical Data

Design 25 A

Mechanical data

Degree of protection IP66 acc. to IEC/EN 60529
 Enclosure cover V11: In switching position ON locked, in OFF position removable
 Handle Can be locked with 3 padlocks in 0-position

Mounting / Installation

Cable entries Standard: In polyamide, Series 8161
 Special: In metal

Main contacts

Electrical data
 Rated operational voltage 690 V AC
 Rated insulation voltage 690 V
 Rated operational current 25 A

Load disconnect switch

Series 8146/5-V11



Technical Data

Switching capacity	acc. to IEC/EN 60947-3; DIN VDE 0660, part 107				
	U _e	AC-3 I	P	AC-23 I	P
	230 V ~	25 A	5.5 kW		
	400 V ~	25 A	11.0 kW		
	440 V ~	25 A	11.0 kW		
	500 V ~ 690 V ~	25 A	15.0 kW	25 A	22.0 kW
		DC-1, DC-23 I	DC-13 (L/R = 300 ms)		
	U _e	I	U _e	I	
	220 V	25 A ³⁾	250 V	1.1 A	1) 1 conducting path 2) 2 conducting paths in series 3) 3 conducting paths in series
	120 V	25 A ²⁾	125 V	2.2 A	
	60 V	25 A ¹⁾	60 V	5.0 A	
Service life of electrical / mechanical parts	40.000 operations				
Max. short-circuit protection	35 A, tripping characteristic: gG acc. to IEC/EN 60291-1				
Auxiliary contacts					
Electrical data					
Rated operating voltage	500 V AC				
Rated operational current	10 A				
Mounting / Installation					
Terminals	4 ... 6 mm ² finely stranded / solid				

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Ambient conditions 25 A

Type 8146/5-V..-	No. of poles		max. current [A]	Conductor cross-section ¹⁾ [mm ²]		Temperature class / Perm. ambient temperature
	Main contacts	Auxiliary contacts		min.	max.	
304-...	3	0	25	4	6	T6: -40 ... +40 °C T5: -40 ... +55 °C ²⁾
104-...	3	0				
404-...	4	0	25	4	6	T5: -40 ... +51 °C ²⁾
	4	0				
			25	6	6	T6: -40 ... +44 °C T5: -40 ... +52 °C T5: -40 ... +59 °C ²⁾
604-...	6	2				
	6	2	25	4	6	T5: -40 ... +49 °C ²⁾
	6	2				
	6	0	20	4	6	T6: -40 ... +46 °C T5: -40 ... +61 °C ²⁾ T5: -40 ... +52 °C
	6	0				
	6	0	22.5	4	6	T5: -40 ... +53 °C ²⁾ T5: -40 ... +48 °C
	6	0				
	6	0	25	4	6	T5: -40 ... +45 °C
	6	0				
	6	0	25	6	6	T5: -40 ... +52 °C ²⁾ T5: -40 ... +48 °C
	6	0				

¹⁾ 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 cable > 70 °C on cable entries or/and > 85 °C on clamping points

Grease: specified on rating plate

Load disconnect switch

Series 8146/5-V11

Selection Table

Version	Enclosure material	Equipment		Cable dia. range [mm]	Order number	Weight
		Colour	Additional device			
40 A, 3-pole	Polyester resin	black handle, black protective collar	--	2 x 12 ... 28 (M40), 1 x 4 ... 13 (M20)	8146/5-V11-305-00-0010-K	5,210 kg
	Polyester resin	red handle, yellow protective collar	--	2 x 12 ... 28 (M40), 1 x 4 ... 13 (M20)	8146/5-V11-305-00-1010-K	5,210
40 A, 3-pole + N	Polyester resin	black handle, black protective collar	--	2 x 12 ... 28 (M40), 1 x 4 ... 13 (M20)	8146/5-V11-405-00-0010-K	7,214
	Polyester resin	red handle, yellow protective collar	--	2 x 12 ... 28 (M40), 1 x 4 ... 13 (M20)	8146/5-V11-405-00-1010-K	7,214
40 A, 6-pole	Polyester resin	black handle, black protective collar	--	4 x 12 ... 28 (M40), 1 x 4 ... 13 (M20)	8146/5-V11-605-00-0010-K	9,000
	Polyester resin	red handle, yellow protective collar	--	4 x 12 ... 28 (M40), 1 x 4 ... 13 (M20)	8146/5-V11-605-00-1010-K	9,000

Reversing switches are available only in V11, not as safety switches V37.

Technical Data

Design	40 A
Mechanical data	
Degree of protection	IP66 acc. to IEC/EN 60529
Enclosure cover	V11: In switching position ON locked, in OFF position removable
Handle	Can be locked with 3 padlocks in 0-position
Mounting / Installation	
Cable entries	Standard: In polyamide, Series 8161 Special: In metal
Main contacts	
Electrical data	
Rated operational voltage	690 V AC
Rated insulation voltage	750 V
Rated operational current	40 A

Load disconnect switch

Series 8146/5-V11



Technical Data

Switching capacity	acc. to IEC/EN 60947-3; DIN VDE 0660, part 107		
	U _e	AC-3 I	P
	240 V ~	40 A	11.0 kW
	400 V ~	40 A	22.0 kW
	440 V ~	40 A	22.0 kW
	500 V ~	40 A	22.0 kW
	690 V ~	40 A	37.0 kW
	U _e	DC-23, DC-1 I	
	220 V	40 A ³⁾	
	120 V	40 A ²⁾	
	60 V	40 A ¹⁾	
Service life of electrical / mechanical parts	40.000 operations		
Max. short-circuit protection	80 A, tripping characteristic: gG acc. to IEC/EN 60291-1		
Auxiliary contacts			
Electrical data			
Rated operating voltage	500 V AC		
Rated operational current	6 A		
Mounting / Installation			
Terminals	1.5 ... 2.5 mm ² finely stranded / solid		

- 1) 1 conducting path
- 2) 2 conducting paths in series
- 3) 3 conducting paths in series

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Ambient conditions 40 A

Type 8146/5-V..-	No. of poles		max. current [A]	Conductor cross-section 1) [mm ²]		Temperature class / Perm. ambient temperature
	Main contacts	Auxiliary contacts		min.	max.	
305-...-K	3	0	40	10	25	T6: -40 ... +48 °C T6: -40 ... +51 °C ²⁾ T5: -40 ... +66 °C ²⁾
405-...-K	4	0	40	10	25	T6: -40 ... +45 °C T6: -40 ... +48 °C ²⁾ T5: -40 ... +63 °C ²⁾
605-...-K	6	0	40	10	25	T6: -40 ... +47 °C T5: -40 ... +51 °C T5: -40 ... +62 °C ²⁾

1) 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 cable > 70 °C on cable entries or/and > 85 °C on clamping points

Grease: specified on rating plate

Load disconnect switch

Series 8146/5-V11

Selection Table

Version	Enclosure material	Equipment		Cable dia. range [mm]	Order number	Weight kg
		Colour	Additional device			
63 / 80 A, 3-pole	Polyester resin	black handle, black protective collar	--	2 x 16 ... 35 (M50), 1 x 4 ... 13 (M20)	8146/5-V11-306-00-0010-K	5,315
	Polyester resin	red handle, yellow protective collar	--	2 x 16 ... 35 (M50), 1 x 4 ... 13 (M20)	8146/5-V11-306-00-1010-K	5,315
63 / 80 A, 3-pole + N	Polyester resin	black handle, black protective collar	--	2 x 16 ... 35 (M50), 1 x 4 ... 13 (M20)	8146/5-V11-406-00-0010-K	7,860
	Polyester resin	red handle, yellow protective collar	--	2 x 16 ... 35 (M50), 1 x 4 ... 13 (M20)	8146/5-V11-406-00-1010-K	7,860
63 / 80 A, 6-pole	Polyester resin	black handle, black protective collar	--	4 x 16 ... 35 (M50), 1 x 4 ... 13 (M20)	8146/5-V11-606-00-0010	12,473
	Polyester resin	red handle, yellow protective collar	--	4 x 16 ... 35 (M50), 1 x 4 ... 13 (M20)	8146/5-V11-606-00-1010	12,473

Reversing switches are available only in V11, not as safety switches V37.

Technical Data

Design	63 / 80 A
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Mechanical data

Degree of protection	IP66 acc. to IEC/EN 60529
Enclosure cover	V11: In switching position ON locked, in OFF position removable
Handle	Can be locked with 3 padlocks in 0-position

Mounting / Installation

Cable entries	Standard: In polyamide, Series 8161 Special: In metal
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Main contacts

Electrical data					
Rated operational voltage	500 V AC (80 A) / 690 V AC (63 A)				
Rated insulation voltage	750 V				
Rated operational current	63 / 80 A				
Switching capacity	acc. to IEC/EN 60947-3; DIN VDE 0660, part 107				
		AC-3		AC-3	
U_e	I	P	I	P	
230 V ~	63 A	18.5 kW	80 A	22.0 kW	
400 V ~	63 A	30.0 kW	80 A	45.0 kW	
440 V ~	63 A	37.0 kW	80 A	45.0 kW	
500 V ~	63 A	37.0 kW	80 A	55.0 kW	
690 V ~	63 A	55.0 kW			
		DC-23, DC-1			
U_e	I				
220 V	80 A ³⁾				
120 V	80 A ²⁾				
60 V	80 A ¹⁾				

- 1) 1 conducting path
- 2) 2 conducting paths in series
- 3) 3 conducting paths in series

Load disconnect switch

Series 8146/5-V11



Technical Data

Service life of electrical / mechanical parts	40.000 operations
Max. short-circuit protection	63 A: 125 A, 80 A: 160 A, tripping characteristic: gG according to IEC/EN 60291-1
Auxiliary contacts	
Electrical data	
Rated operating voltage	500 V AC
Rated operational current	6 A
Mounting / Installation	
Terminals	1.5 ... 2.5 mm ² finely stranded / solid

Ambient conditions 63 / 80 A

Type 8146/5-V..-	No. of poles		max. current [A]	Conductor cross-section ¹⁾ [mm ²]		Temperature class / Perm. ambient temperature
	Main contacts	Auxiliary contacts		min.	max.	
306-...-K	3	0	50	10	25	T6: -40 ... +43 °C
	3	0	63	16	25	T6: -40 ... +42 °C T5: -40 ... +57 °C ²⁾
	3	0	80	25	25	T6: -40 ... +40 °C T5: -40 ... +44 °C T5: -40 ... +55 °C ²⁾
406-...-K	4	0	63	35	50	T6: -40 ... +55 °C T5: -40 ... +70 °C ²⁾
	4	0	63	50	50	T6: -40 ... +57 °C T5: -40 ... +72 °C ²⁾
	4	0	80	35	50	T6: -40 ... +45 °C T5: -40 ... +50 °C T5: -40 ... +60 °C ²⁾
	4	0	80	50	50	T6: -40 ... +50 °C T5: -40 ... +54 °C T5: -40 ... +65 °C ²⁾
606-...	6	0	50	10	50	T6: -40 ... +41 °C T5: -40 ... +56 °C ²⁾
	6	0	63	16	50	T6: -40 ... +41 °C T5: -40 ... +56 °C ²⁾
	6	0	63	25	50	T6: -40 ... +47 °C T5: -40 ... +62 °C ²⁾
	6	0	80	25	50	T5: -40 ... +51 °C ²⁾
	6	0	80	35	50	T6: -40 ... +43 °C T5: -40 ... +58 °C ²⁾

¹⁾ 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 cable > 70 °C on cable entries or/and > 85 °C on clamping points

Grease: specified on rating plate

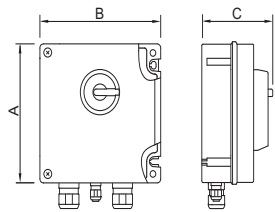
We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.

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Load disconnect switch

Series 8146/5-V11

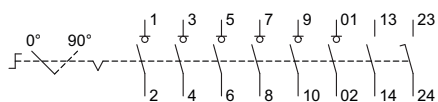
Dimensional drawings (all dimensions in mm) - subject to alterations



04120E00

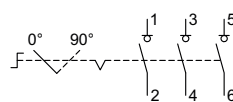
			Dimensions [mm]		
			A	B	C
3-pole	10 A	8146/5-V11-300-00-...	112.5	112.5	131
		8146/5-V11-400-...-...	112.5	112.5	131
	16 A	8146/5-V11-302-...-...	170	112.5	132
		8146/5-V11-402-...-...	170	112.5	132
		8146/5-V11-102-...-...	170	170	172
	20 A	8146/5-V11-303-...-...	170	170	132
		8146/5-V11-403-...-...	170	170	132
25 A	8146/5-V11-304-...-...	170	170	132	
	8146/5-V11-104-...-...	227	170	171	
	8146/5-V11-404-...-...	170	170	132	
40 A	8146/5-V11-305-...-K	340.5	170	176.5	
	8146/5-V11-405-...-...-K	340.5	340.5	195	
63 / 80 A	8146/5-V11-306-...-K	340.5	170	195	
	8146/5-V11-406-...-...-K	340.5	340.5	195	
6-pole	25 A	8146/5-V11-604-...-...	227	170	172
	40 A	8146/5-V11-605-...-...-K	340.5	340.5	205
	63 / 80 A	8146/5-V11-606-...-...	681.5	340.5	205

Circuit diagrams



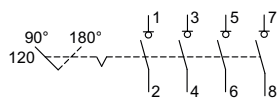
15622E00

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



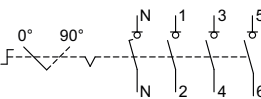
15581E00

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



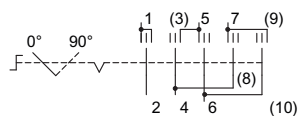
01846E00

-V11-4...00
3-pole + N



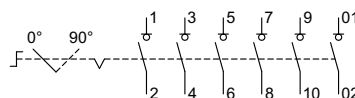
15582E00

-V11-400-00
3-pole + N



12198E00

-V11-102
-V11-104
3-pole reversing switch



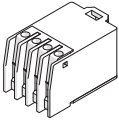

15579E00

-V...6...00...
6-pole

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Accessories and Spare Parts

Designation	Figure	Description	Art. no.	Weight
Auxiliary contact	 12446E00	2 NC contacts (8080/1-3) ²⁾	168356	0.026
		1 NC contact + 1 NO contact (8080/1-1) ¹⁾	168351	0.026
		2 NO contacts (8080/1-4) ²⁾	168353	0.026
		The switching function of the auxiliary contact depends on the installation slot used. ¹⁾ Left: delayed (ON), leading (OFF); Right: synchronising ²⁾ Left and right: synchronising		
		Note: The auxiliary contacts can only be retrofitted for 40 A and 63/80 A versions. For all other versions, the auxiliary contact must be ordered separately when placing the order. Retrofitting is not possible for this.		
Auxiliary contact key	 14151E00	for removing the mounted auxiliary contact	201909	0.035

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