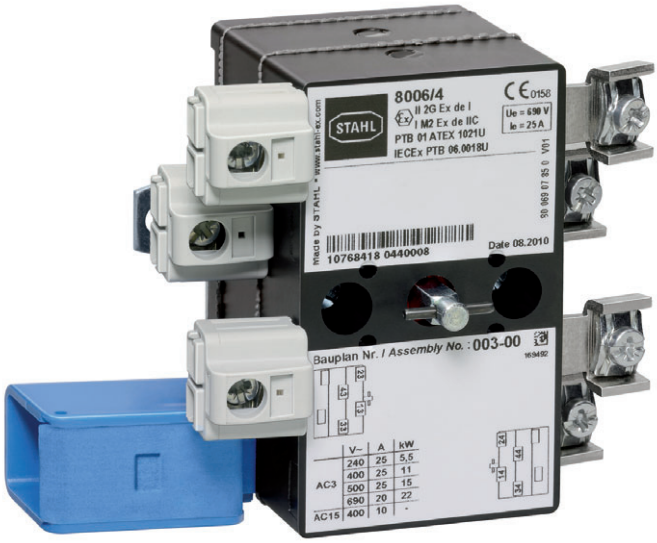
Load and Motor Switch / Control Switch
Series 8006/4



14227E00

- Isolator features
- Switching capacity
- Rated working voltage up to 690 V AC
- Different switching arrangements available

Load and motor switches Series 8006 meets all requirements for use as motor switches or main switches.
Since these switches are components (U-certificate), they must be installed in enclosures with type of protection „Ex e“ increased safety.

	ATEX / IECEx					
Zone	0	1	2	20	21	22
For use in		x	x			

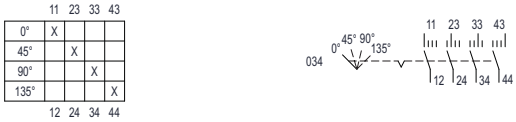
WebCode 8006B

Load and Motor Switch / Control Switch
Series 8006/4

Selection Table

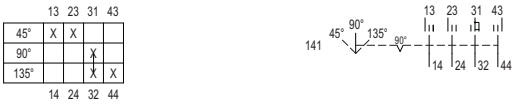
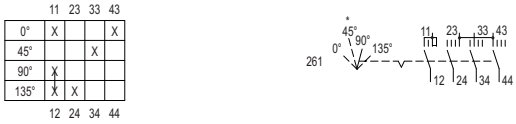
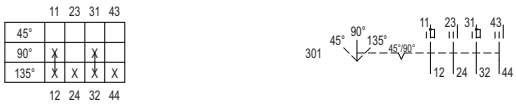
Version		Description	Order number
14792E00 Load and motor switch 25 A Series 8006/4	2-pole	10056E00 Switching arrangement no. 007 Contact material: silver-tin oxide	**8006/4-007-00**
		14645E00 Switching arrangement no. 052 Contact material: silver-tin oxide	**8006/4-052-00**
		14666E00 Switching arrangement no. 110 Contact material: silver-tin oxide	**8006/4-110-00**
	3-pole	08889E00 Switching arrangement no. 045 Contact material: silver-tin oxide	**8006/4-045-00**
		08898E00 Switching arrangement no. 082 Contact material: silver-tin oxide	**8006/4-082-00**
		10083E00 Switching arrangement no. 122 Safety switch Safety switch Contact material: silver-tin oxide	**8006/4-122-00**
		10083E00 Switching arrangement no. 122 Safety switch Safety switch With N-terminal at the base Contact material: silver-tin oxide	**8006/4-122-20**
		10083E00 Switching arrangement no. 122 Safety switch Safety switch With earth terminal and N-terminal at the base Contact material: silver-tin oxide	**8006/4-122-30**
		14667E00 Switching arrangement no. 154 Contact material: gold-plated	**8006/4-154-08**

Selection Table

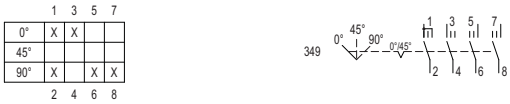
Version		Description	Order number
14792E00 Load and motor switch 25 A Series 8006/4	3-pole	 10820E00 Switching arrangement no. 177 Contact material: gold-plated	**8006/4-177-08**
	4-pole	 08891E00 Switching arrangement no. 003 Contact material: silver-tin oxide	**8006/4-003-00**
		 10058E00 Switching arrangement no. 004 Safety switch Safety switch Contact material: silver-tin oxide	**8006/4-004-00**
		 10058E00 Switching arrangement no. 004 Safety switch Safety switch With earth terminal at the base Contact material: silver-tin oxide	**8006/4-004-10**
		 10058E00 Switching arrangement no. 004 Safety switch Safety switch With N-terminal at the base Contact material: silver-tin oxide	**8006/4-004-20**
		 10058E00 Switching arrangement no. 004 Safety switch Safety switch With earth terminal and N-terminal at the base Contact material: silver-tin oxide	**8006/4-004-30**
		 08892E00 Switching arrangement no. 034 Contact material: silver-tin oxide	**8006/4-034-00**
		 06084E00 Switching arrangement no. 042 Contact material: silver-tin oxide	**8006/4-042-00**

Load and Motor Switch / Control Switch
Series 8006/4

Selection Table

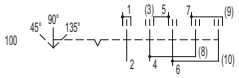
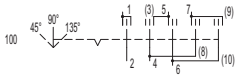
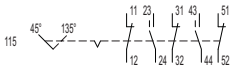
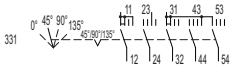
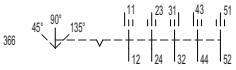
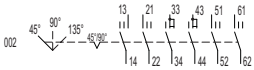
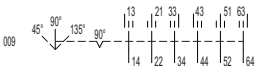
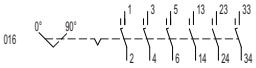
Version		Description	Order number
14792E00 Load and motor switch 25 A Series 8006/4	4-pole	 Switching arrangement no. 056 Contact material: silver-tin oxide	**8006/4-056-00**
		 Switching arrangement no. 120 Safety switch Safety switch Contact material: silver-tin oxide	**8006/4-120-00**
		 Switching arrangement no. 120 Safety switch Safety switch With earth terminal at the base Contact material: silver-tin oxide	**8006/4-120-10**
		 Switching arrangement no. 141 Contact material: silver-tin oxide	**8006/4-141-00**
		 Switching arrangement no. 191 Contact material: silver-tin oxide	**8006/4-191-00**
		 Switching arrangement no. 192 * pressure point Contact material: silver-tin oxide	**8006/4-192-00**
		 Switching arrangement no. 261 * pressure point Contact material: silver-tin oxide	**8006/4-261-00**
		 Switching arrangement no. 301 Contact material: silver-tin oxide	**8006/4-301-00**

Selection Table

Version		Description	Order number
14792E00 Load and motor switch 25 A Series 8006/4	4-pole	 14676E00 Switching arrangement no. 349 Contact material: silver-tin oxide	**8006/4-349-00**
		16516E00 Switching arrangement no. 370 Contact material: silver-tin oxide	**8006/4-370-00**
	5-pole	10076E00 Switching arrangement no. 026 Contact material: silver-tin oxide	**8006/4-026-00**
		10077E00 Switching arrangement no. 094 Safety switch Safety switch Contact material: silver-tin oxide	**8006/4-094-00**
		10077E00 Switching arrangement no. 094 Safety switch Safety switch With earth terminal at the base Contact material: silver-tin oxide	**8006/4-094-10**
		10078E00 Switching arrangement no. 099 Safety switch Safety switch Contact material: silver-tin oxide	**8006/4-099-00**
		10078E00 Switching arrangement no. 099 Safety switch Safety switch With earth terminal at the base Contact material: silver-tin oxide	**8006/4-099-10**
		10078E00 Switching arrangement no. 099 Safety switch Safety switch Contact material: silver-tin oxide	**8006/4-099-20**

Load and Motor Switch / Control Switch
Series 8006/4

Selection Table

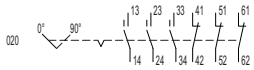
Version		Description	Order number
 14792E00 Load and motor switch 25 A Series 8006/4	5-pole	1 (3) 5 7 (9) 45° X X X 90° 135° X X X 2 4 6 (8) (10)  10079E00 Switching arrangement no. 100 Reversing switch Contact material: silver-tin oxide	**8006/4-100-00**
		1 (3) 5 7 (9) 45° X X X 90° 135° X X X 2 4 6 (8) (10)  10079E00 Switching arrangement no. 100 Reversing switch With N-terminal at the base Contact material: silver-tin oxide	**8006/4-100-20**
		11 23 31 43 51 45° X X X 135° X X 12 24 32 44 52  14950E00 Switching arrangement no. 115 Contact material: silver-tin oxide	**8006/4-115-00**
		11 23 31 43 53 0° X X X 45° X X 90° X 135° X X 12 24 32 44 54  10096E00 Switching arrangement no. 331 Contact material: silver-tin oxide	**8006/4-331-00**
		11 23 31 43 51 45° X 90° X X X 135° X 12 24 32 44 52  16521E00 Switching arrangement no. 366 Contact material: silver-tin oxide	**8006/4-366-00**
	6-pole	13 21 33 43 51 61 45° X X X 90° X X 135° X X X 14 22 34 44 52 62  14951E00 Switching arrangement no. 002 Contact material: silver-tin oxide	**8006/4-002-00**
		13 21 33 43 51 63 45° X X X 90° X X 135° X X 14 22 34 44 52 64  10061E00 Switching arrangement no. 009 Contact material: silver-tin oxide	**8006/4-009-00**
		1 3 5 13 23 33 0° 90° X X X X X X 2 4 6 14 24 34  10062E00 Switching arrangement no. 016 Safety switch Safety switch Contact material: silver-tin oxide	**8006/4-016-00**

Selection Table

Version		Description	Order number
14792E00 Load and motor switch 25 A Series 8006/4	6-pole		

8006/4-020-00

	13	23	33	41	51	61
0°				X	X	X
90°	X	X	X			
	14	24	34	42	52	62

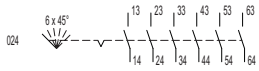


10063E00

Switching arrangement no. 020
Contact material: silver-tin oxide

8006/4-024-00

	13	23	33	43	53	63
0°						
45°	X					
90°		X				
135°			X			
180°				X		
225°					X	
270°						X
	14	24	34	44	54	64

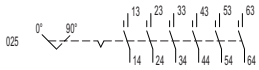


08893E00

Switching arrangement no. 024
Contact material: silver-tin oxide

8006/4-025-00

	13	23	33	43	53	63
0°						
90°	X	X	X	X	X	X
	14	24	34	44	54	64

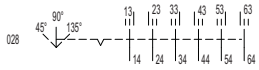


14952E00

Switching arrangement no. 025
Contact material: silver-tin oxide

8006/4-028-00

	13	23	33	43	53	63
45°		X		X		X
90°						
135°	X		X		X	
	14	24	34	44	54	64

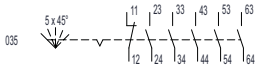


04647E00

Switching arrangement no. 028
Contact material: silver-tin oxide

8006/4-035-00

	11	23	33	43	53	63
0°	X					
45°		X				
90°			X			
135°				X		
180°					X	
225°						X
	12	24	34	44	54	64

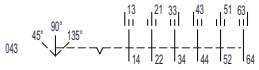


04678E00

Switching arrangement no. 035
Contact material: silver-tin oxide

8006/4-043-00

	13	21	33	43	51	63
45°	X			X		
90°		X			X	
135°			X			X
	14	22	34	44	52	64

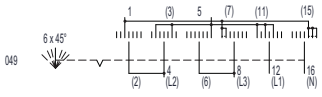


06087E00

Switching arrangement no. 043
Contact material: silver-tin oxide

8006/4-049-00

	1	(3)	5	(7)	(11)	(15)
315°				X	X	
0°		X		X		
45°	X				X	
90°						
135°					X	X
180°		X				X
225°			X			X
	(2)	4 (L2)	(6)	8 (L3)	12 (L1)	16 (N)

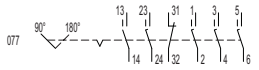


06089E00

Switching arrangement no. 049
Voltmeter selector switch
Contact material: silver-tin oxide

8006/4-077-00

	13	23	31	1	3	5
90°			X			
180°	X	X		X	X	X
	14	24	32	2	4	6

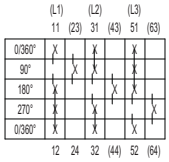
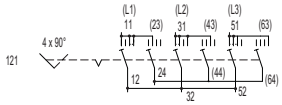
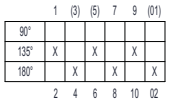
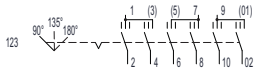
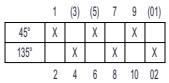
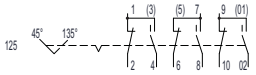
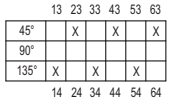
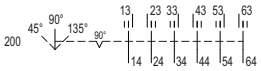
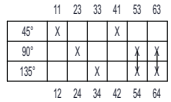
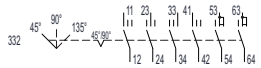
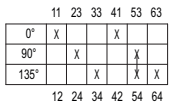
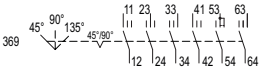
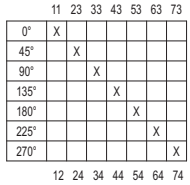
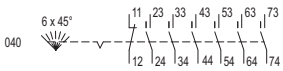


08896E00

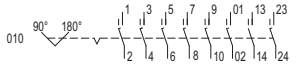
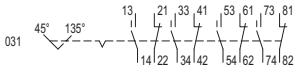
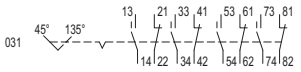
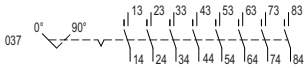
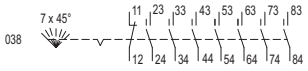
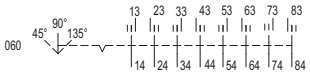
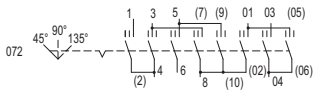
Switching arrangement no. 077 Safety switch
Safety switch
Contact material: silver-tin oxide

Load and Motor Switch / Control Switch
Series 8006/4

Selection Table

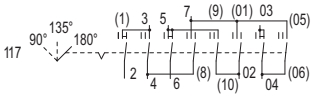
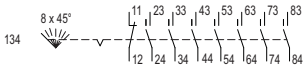
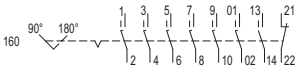
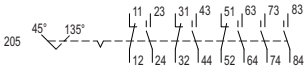
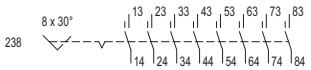
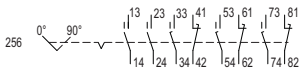
Version		Description	Order number
14792E00 Load and motor switch 25 A Series 8006/4	6-pole	 (L1) (L2) (L3) 11 (23) 31 (43) 51 (63) 0/360° X X X 90° X X X 180° X X X 270° X X X 0/360° X X X 12 24 32 (44) 52 (64)  121 4 x 90° (L1) (L2) (L3) 11 (23) 31 (43) 51 (63) 12 24 32 (44) 52 (64) 10082E00 Switching arrangement no. 121 Ammeter selector switch with OFF-positon for 3 transformers Contact material: silver-tin oxide	8006/4-121-00
		 1 (3) (5) 7 9 (01) 90° 135° X X X 180° X X X 2 4 6 8 10 02  123 90° 135° 180° 1 (3) (5) 7 9 (01) 2 4 6 8 10 02 10084E00 Switching arrangement no. 123 Pol-changing switch with OFF-position With N-terminal at the base Contact material: silver-tin oxide	8006/4-123-20
		 1 (3) (5) 7 9 (01) 45° X X X 135° X X X 2 4 6 8 10 02  125 45° 135° 1 (3) (5) 7 9 (01) 2 4 6 8 10 02 10086E00 Switching arrangement no. 125 Change-over switch without OFF-position With N-terminal at the base Contact material: silver-tin oxide	8006/4-125-20
		 13 23 33 43 53 63 45° X X X 90° 135° X X X 14 24 34 44 54 64  200 45° 90° 135° 90° 13 23 33 43 53 63 14 24 34 44 54 64 14953E00 Switching arrangement no. 200 Contact material: silver-tin oxide	8006/4-200-00
		 11 23 33 41 53 63 45° X X X 90° X X X 135° X X X 12 24 34 42 54 64  332 45° 90° 135° 45°/90° 11 23 33 41 53 63 12 24 34 42 54 64 10097E00 Switching arrangement no. 332 Contact material: silver-tin oxide	8006/4-332-00
		 11 23 33 41 53 63 0° X X X 90° X X X 135° X X X 12 24 34 42 54 64  369 45° 90° 135° 45°/90° 11 23 33 41 53 63 12 24 34 42 54 64 15466E00 Switching arrangement no. 369 Contact material: silver-tin oxide	8006/4-369-00
	7-pole	 11 23 33 43 53 63 73 0° X 45° X 90° X 135° X 180° X 225° X 270° X 12 24 34 44 54 64 74  040 6 x 45° 11 23 33 43 53 63 73 12 24 34 44 54 64 74 04785E00 Switching arrangement no. 040 Contact material: silver-tin oxide	8006/4-040-00

Selection Table

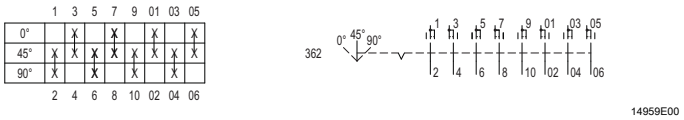
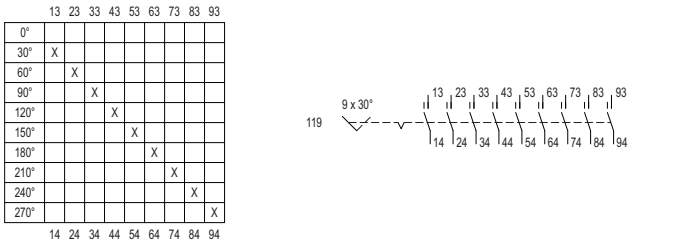
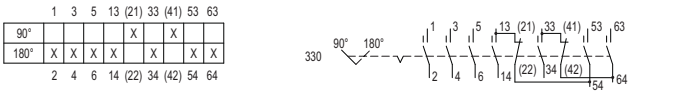
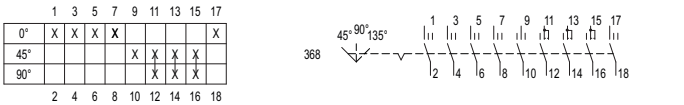
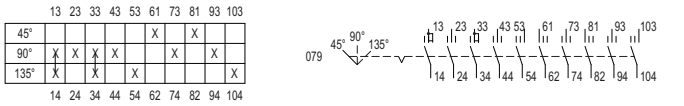
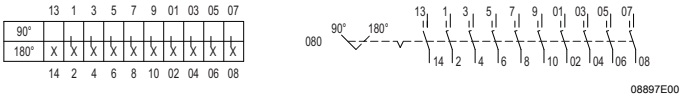
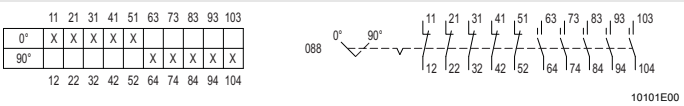
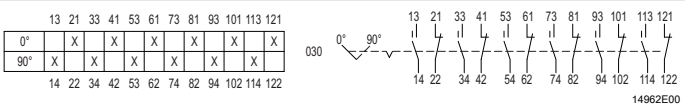
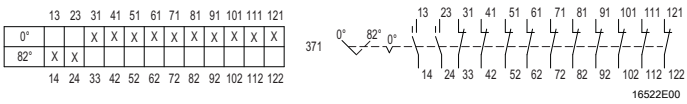
Version		Description	Order number
14792E00 Load and motor switch 25 A Series 8006/4	8-pole	1 3 5 7 9 01 13 23 90° · 180° X X X X X X X X 2 4 6 8 10 02 14 24  10075E00 Switching arrangement no. 010 Safety switch Safety switch Contact material: silver-tin oxide	**8006/4-010-00**
		13 21 33 41 53 61 73 81 45° · X · X · X · X 135° X · X · X · X · 14 22 34 42 54 62 74 82  04648E00 Switching arrangement no. 031 Contact material: silver-tin oxide	**8006/4-031-00**
		13 21 33 41 53 61 73 81 45° · X · X · X · X 135° X · X · X · X · 14 22 34 42 54 62 74 82  04648E00 Switching arrangement no. 031 Contact material: gold-plated	**8006/4-031-08**
		13 23 33 43 53 63 73 83 0° · 90° X X X X X X X X 14 24 34 44 54 64 74 84  14954E00 Switching arrangement no. 037 Contact material: silver-tin oxide	**8006/4-037-00**
		11 23 33 43 53 63 73 83 0° X 45° X 90° X 135° X 180° X 225° X 270° X 315° X 12 24 34 44 54 64 74 84  06082E00 Switching arrangement no. 038 Contact material: silver-tin oxide	**8006/4-038-00**
		13 23 33 43 53 63 73 83 45° X X X X 90° 135° X X X X 14 24 34 44 54 64 74 84  06090E00 Switching arrangement no. 060 Contact material: silver-tin oxide	**8006/4-060-00**
		11 23 33 43 51 63 73 83 0° X X 45° X X 90° X X 135° X X 12 24 34 44 52 64 74 84 08894E00 Switching arrangement no. 061 Contact material: silver-tin oxide	**8006/4-061-00**
		1 3 5 (7) (9) 01 03 (05) 0° 45° X X X 90° X X X X X X (2) 4 6 8 (10) (02) 04 (06)  08895E00 Switching arrangement no. 072 "Dahlanderschalter" Contact material: silver-tin oxide	**8006/4-072-00**

E9

Selection Table

Version		Description	Order number
14792E00 Load and motor switch 25 A Series 8006/4	8-pole	(1) 3 5 7 (9) (01) 03 (05) 90° 135° X X X X X 180° X X X X X 2 4 6 (8) (10) 02 04 (06)  10080E00 Switching arrangement no. 117 Star-delta switch Contact material: silver-tin oxide	**8006/4-117-20**
		11 23 33 43 53 63 73 83 0/360° X 45° X 90° X 135° X 180° X 225° X 270° X 315° X 12 24 34 44 54 64 74 84  14955E00 Switching arrangement no. 134 Contact material: silver-tin oxide	**8006/4-134-00**
		1 3 5 7 9 01 13 21 90° X 180° X X X X X X X 2 4 6 8 10 02 14 22  10089E00 Switching arrangement no. 160 Safety switch Safety switch Contact material: silver-tin oxide	**8006/4-160-00**
		11 23 31 43 51 63 73 83 45° X X X 135° X X X X X 12 24 32 44 52 64 74 84  14956E00 Switching arrangement no. 205 Contact material: silver-tin oxide	**8006/4-205-00**
		11 23 33 41 53 61 73 81 0° X X X X X 45° X X X X X 90° X X X X X 135° X X X X X 12 24 34 42 54 62 74 82 15464E00 Switching arrangement no. 216 Contact material: silver-tin oxide	**8006/4-216-00**
		13 23 33 43 53 63 73 83 0° 30° X 60° X 90° X 120° X 150° X 180° X 210° X 240° X 14 24 34 44 54 64 74 84  10823E00 Switching arrangement no. 2 38 Contact material: silver-tin oxide	**8006/4-238-00**
		13 23 33 41 53 61 73 81 0° X X X X 90° X X X X X X X 14 24 34 42 54 62 74 82  14957E00 Switching arrangement no. 256 Contact material: gold-plated	**8006/4-256-08**
		1 3 5 7 9 11 13 15 45° X X X X 90° X X X 135° X X X 2 4 6 8 10 12 14 16 14958E00 Switching arrangement no. 361 Contact material: silver-tin oxide	**8006/4-361-00**

Selection Table

Version		Description	Order number
 14792E00 Load and motor switch 25 A Series 8006/4	8-pole	 Switching arrangement no. 362 Contact material: silver-tin oxide	8006/4-362-00
	9-pole	 Switching arrangement no. 119 Contact material: silver-tin oxide	8006/4-119-00
		 Switching arrangement no. 330 Contact material: silver-tin oxide, auxiliary contacts: gold-plated	8006/4-330-06
		 Switching arrangement no. 368 Contact material: silver-tin oxide	8006/4-368-00
	10-pole	 Switching arrangement no. 079 Contact material: silver-tin oxide	8006/4-079-00
		 Switching arrangement no. 080 With earth terminal at the base Contact material: silver-tin oxide, auxiliary contacts: gold-plated	8006/4-080-16
		 Switching arrangement no. 088 Contact material: silver-tin oxide	8006/4-088-00
	12-pole	 Switching arrangement no. 030 Contact material: silver-tin oxide	8006/4-030-00
		 Switching arrangement no. 371 Contact material: silver-tin oxide	8006/4-371-00

E9

Explosion Protection

Global (IECEx)	
Gas and dust	IECEx PTB 06.0018U Ex db eb IIC Gb Ex db eb I Mb
Europe (ATEX)	
Gas and dust	PTB 01 ATEX 1021 U Ⓔx II 2 G Ex db eb IIC Gb Ⓔx I M2 Ex db eb I Mb
USA (UL)/Canada (UL)	
Gas	c UL us LISTED 4R27 US: Class I, Zone 1, AEx d e IIC T6 ... T5 (Class I, Div. 2, Groups ABCD) C: Class I, Zone 1, Ex d e IIC T6 ... T5 Gb (Class I, Div. 2 per CEC J18-150) T6 (Ta = -50 ... +50 °C) T5 (Ta = -50 ... +65 °C) T4 (Ta = -50 ... +70 °C)
USA (FM)/Canada (FM)	
Gas	FM APPROVED 3044997 US: Class I, Zone 1, AEx d e IIC T6 ... T5 (Class I, Div. 2, Groups ABCD) C: Class I, Zone 1, Ex d e IIC T6 ... T5 Gb (Class I, Div. 2 per CEC J18-150) T6 (Ta = -50 ... +40 °C) T5 (Ta = -50 ... +55 °C)
Certifications and certificates	
Certificates	IECEx, ATEX, USA (FM, UL)

Technical Data

Version	**IECEx / ATEX**
Electrical data	
Rated insulation voltage	max. 690 V AC
Rated frequency	50 / 60 Hz
Rated operational voltage	max. 690 V AC / 220 V DC (load and motor switch); 250 V DC (control switch) min. 24 V AC / DC (recommended for contact safety)
Rated impulse withstand voltage	6 kV
Rated operational current	max. 25 A min. 100 mA (recommended for contact safety: min. one switching operation per week)
Contacts	max. 12 pole / 6 switching levels *) *) The switches have two switching chambers per level. Individual switching levels with 1 or 2 contacts each to form a unit provide an optimal solution for individual applications. The contact chambers are being operated by the ratched wheels in a staggered fashion, thus enabling all around switching without interference.
Switching capacity	according to IEC/EN 60947-3; IEC/EN 60947-4-1; IEC/EN 60947-5-1:

AC-3	AC-15	AC-23	DC-1, DC-23	DC-13 (L/R=300 ms)
690 V, 25 A	400 V, 10 A	690 V, 25 A	220 V, 25 A[3]	250 V, 1.1 A[1]
			120 V, 25 A[2]	125 V, 2.2 A[1]
			60 V, 25 A[1]	60 V, 5.0 A[1]

[1] 1 contact
[2] 2 contacts in series
[3] 3 contacts in series

Max. rated motor power	690 V, 22 kW	500 V, 15 kW	400 V, 11 kW	240 V, 5.5 kW

Short-circuit protection	max. 35 A gG
Rated conditional short-circuit current	20 kA

Technical Data

Ambient conditions	
Ambient temperature	16 A: Ta = -60 ... +80 °C 25 A: Ta = -60 ... +70 °C

Rated operational current max.	Ambient temperature max.				
	+40 °C	+50 °C	+60 °C	+70 °C	+80 °C
	Surface temperature max.				
16 A (min 2.5 mm²)	+80 °C	+80 °C	+80 °C	+95 °C	+130 °C
25 A (min 4.0 mm²)	+80 °C	+80 °C	+95 °C	+130 °C	Ð

Technical Data

Version	**USA (UL) / Canada (UL)**
Electrical data	
Rated insulation voltage	max. 690 V AC
Rated operational voltage	max. 600 V AC / 240 V DC min. 24 V AC / DC
Rated impulse withstand voltage	6 kV
Rated operational current	max. 25 A (load and motor switch) max. 10 A (control switch) min. 100 mA (recommended for contact safety: min. one switching operation per week)

Switching capacity	AC	DC
	600 V, 25 A	240 V, 25 A[3)]
		125 V, 25 A[2)]
		62.5 V, 25 A[1)]

[1)] 1 contact
[2)] 2 contacts in series
[3)] 3 contacts in series

Motor switching capacity		
	600 V, 15 HP	240 V, 5 HP
	480 V, 15 HP	125 V, 3 HP
	240 V, 7.5 HP	
	208 V, 7.5 HP	

	Single Phase			
Voltage	227 V	240 V	208 V	120 V
Current	25 A	25 A	25 A	25 A
Horse Power	5	3	3	2

Control Switch Ratings (UL 508):
A600 (AC)
N300 (DC)

Short circuit protection	(40 A Class J

E9

Technical Data

Version	**USA (FM) / Canada (FM)**
Electrical data	
Rated insulation voltage	max. 690 V AC
Rated operational voltage	max. 600 V AC / 125 V DC min. 24 V AC / DC
Rated impulse withstand voltage	6 kV
Rated operational current	T6 max. 40°C up to 4 pole: max. 25 A; Field wiring. Use 75 °C copper conductors. up to 8 pole: max. 15 A; Field wiring. Use 75 °C copper conductors. up to 12 pole: max. 10 A; Field wiring. Use 75 °C copper conductors. T5 max. 55°C up to 4 pole: max. 25 A; Factory wiring. Use 90 °C copper conductors. up to 8 pole: max. 15 A; Factory wiring. Use 90 °C copper conductors. up to 12 pole: max. 10 A; Factory wiring. Use 90 °C copper conductors. max. 25 A (load and motor switch) max. 10 A (control switch) min. 100 mA (recommended for contact safety: min. one switching operation per week)
Switching capacity	AC: 600 V, 25 A DC: 125 V, 25 A[2)] 62.5 V, 25 A[1)] [1)] 2 contacts in series [2)] 3 contacts in series
Motor switching capacity	600 V, 15 HP 480 V, 15 HP 240 V, 7.5 HP 208 V, 7.5 HP 125 V, 3 HP

	Single Phase			
Voltage	227 V	240 V	208 V	120 V
Current	25 A	25 A	25 A	25 A
Horse Power	5	3	3	2

	Control Switch Ratings (UL 508): A600 (AC) N300 (DC)
Short circuit protection	(40 A Class J

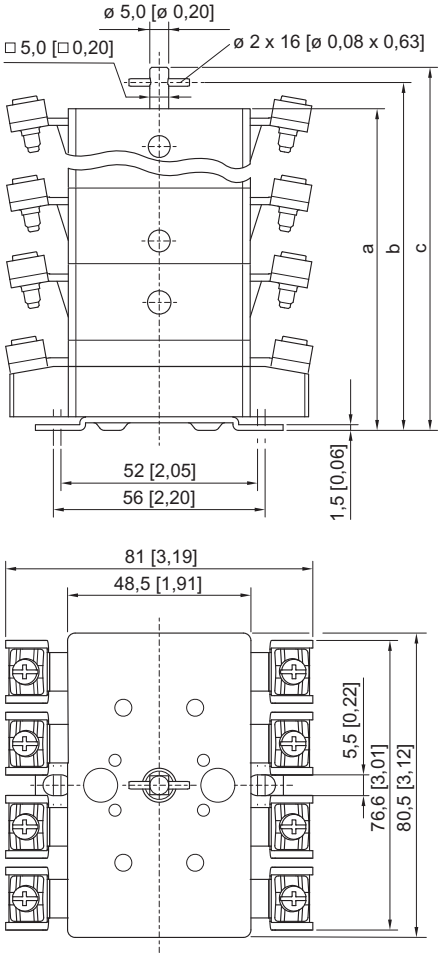
Technical Data

Version	**General**
Electrical data	
Short-circuit strength	20 kA
Contacts	max. 12 pole / 6 switching levels [*)] [*)] The switches have two switching chambers per level. Individual switching levels with 1 or 2 contacts each to form a unit provide an optimal solution for individual applications. The contact chambers are being operated by the ratched wheels in a staggered fashion, thus enabling all around switching without interference.
Service life	mechanical: 200,000 operating cycles electric: 20,000 operating cycles
Mechanical data	
Material	
Enclosure	Epoxy resin
Contacts	Silver-tin oxide, silver-tin oxide gold plated

Accessories and Spare Parts

Designation	Figure	Description	Art. no.	Weight kg
Rotary actuator	05529E00	handle: black protective collar: black Ø 64 mm padlockable labels have to be ordered separately 8602A0731-1-ss	**155338**	0.062
		handle: red protective collar: yellow Ø 64 mm three times padlockable in OFF-position labels have to be ordered separately 8602A0730-1-rg	**155304**	0.063
Symbol discs for rotary actuator		Text 0/OFF - I/ON	**155750**	0.001
		Text 0/OFF • I/ON	**155856**	0.001
		Text 0 - Betrieb - I	**155762**	0.001
		Text 0 - I - II	**155772**	0.001
		Text I - 0 - II	**155785**	0.001
		label printed acc. to specification, please specify marking	**155870**	0.002
		plain	**155871**	0.001
Ex i cover	14963E00	to connect intrinsically safe circuits (2 pieces)	**213610**	0.024
IP20 cover	14705E00	1 piece An IP20 cover is required per contact.	**204108**	0.003

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



Switching-chamber levels	Dimensions in mm [inches] a	b	c
1	44 [1,73]	52 [2,05]	58 [2,28]
2	64 [2,52]	72 [2,83]	76 [2,99]
3	84 [3,31]	92 [3,62]	98 [3,86]
4	105 [4,13]	112 [4,41]	116 [4,57]
5	125 [4,92]	132 [5,20]	136 [5,35]
6	145 [5,71]	152 [5,98]	156 [6,14]

Load and motor switches 25 ASeries 8006/4

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.