

Disconnect Switches

Technical Information Technical Data

Rated data

Rated data			H216	H220	H226	H233	B240	B250	B263	H406	H408	H410	H412	K616	K830
Operational voltage U _e	(V AC)		690	690	690	690	690	690	690	690 ¹	690 ¹	690 ¹	690 ¹	690	690
Impulse withstand voltage U _{imp}	(kV)		6	6	6	6	6	6	6	8	8	8	8	6	6
Overvoltage category			III	III	III	III	III	III	III	III	III	III	III	III	III
Pollution degree			3	3	3	3	3	3	3	3	3	3	3	3	3
Uninterrupted current I _u / I _{th} / I _{the}	(A)		20	25	32	40	40	50	63	63	80	100	125	160	315
Load capacity in intermittent operation (class 12)	(AB)		DF: 60% = 1.3 × I _e / 40% = 1.6 × I _e / 25% = 2 × I _e												
Breaking capacity	220–240V	(A)	150	250	300	330	340	340	340	500	550	600	800	900	1800
	380–440V	(A)	150	250	300	330	340	340	340	500	550	600	750	850	1650
	500–690V	(A)	100	150	190	220	200	200	200	270	285	300	320	340	350
Short-circuit rating (max. fuse)	(gL)		20	25	35	40	40	50	63	63	80	100	125	160	315
Conditional short-circuit current	(kA _{ref})		15	15	15	15	—	—	—	25	25	25	25	25	25
Short-circuit making capacity I _{cm}	(kA)		—	—	—	—	1.4	1.6	1.8	—	—	—	—	—	—
Short-time withstand current (1 s)	(A)		—	—	—	—	500	600	750	—	—	—	—	—	—
Isolating characteristics (to EN 60947)	(up to ... V AC)		690	690	690	690	690	690	690	1000	1000	1000	1000	690	690
Switching angle			90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°
Contacts (Current paths) (max.)			8	8	8	8	8	8	8	8	8	8	8	8	8
Current heat loss per contact at I _u	(W)		0.8	0.8	1.8	2.1	2.0	2.4	3.0	3.0	4.1	5.5	6.9	11	28.5
Terminal capacity (ON-OFF Switches)															
solid or stranded	min.	(mm ²)	1	1	1	1	6	6	6	4	4	4	4	95 ²	185 ²
	max.	(mm ²)	10	10	10	10	25	25	25	50	50	50	50	95 ²	185 ²
flexible or multiwire (including ferrule)	min.	(mm ²)	0.75	0.75	0.75	0.75	4	4	4	2.5	2.5	2.5	2.5	95 ²	185 ²
	max.	(mm ²)	6	6	6	6	16	16	16	35	35	35	35	95 ²	185 ²
American Wire Gauge (ON-OFF Switches)	(AWG)		8	8	8	8	4	4	4	1/0	1/0	1/0	1/0	4/0	350MCM
Terminal capacity (Changeover Switches with jumper)															
solid or stranded	min.	(mm ²)	1	1	1	1	6	6	6	4	4	4	4	95 ²	185 ²
	max.	(mm ²)	6	6	6	6	16	16	16	35	35	35	35	95 ²	185 ²
flexible or multiwire (including ferrule)	min.	(mm ²)	0,75	0,75	0,75	0,75	4	4	4	2,5	2,5	2,5	2,5	95 ²	185 ²
	max.	(mm ²)	4	4	4	4	10	10	10	25	25	25	25	95 ²	185 ²
American Wire Gauge (Changeover Switches with jumper)	(AWG)		10	10	10	10	6	6	6	2	2	2	2	4/0	350MCM
Thread dimensions for terminal screw			M4	M4	M4	M4	M4	M4	M4	M5	M5	M5	M5	M10	M12
Terminal tightening torque	min.	(Nm)	1.2	1.2	1.2	1.2	1.2	1.2	1.2	3.0	3.0	3.0	3.0	10	14
	max.	(Nm)	2.5	2.5	2.5	2.5	2.5	2.5	2.5	5.0	5.0	5.0	5.0	20	25
Operational current I _e															
AC-21A	220–500V	(A)	20	25	32	40	40	50	63	63	80	100	125	160	315
	660–690V	(A)	16	20	32	40	40	50	63	63	80	100	100	125	125
AC-22A	400V	(A)	12	16	24	32	32	38	47	47	65	80	97	120	285
cUL General Use	300V AC	(A)	20	25	30	40	40	50	60	63	80	100	125	175	240
	600V AC	(A)	20	25	30	40	40	50	60	63	80	100	125	175	240
Operational power 50–60 Hz (3 phase)															
AC-23A	220–240V	(kW)	3	4	5.5	7.5	7.5	11	15	15	18.5	22	30	37	75
	380–440V	(kW)	5.5	7.5	11	15	15	18.5	22	22	30	37	45	75	132
	500V	(kW)	5.5	7.5	11	15	18.5	18.5	22	22	30	37	45	90	132
	660–690V	(kW)	5.5	7.5	11	15	15	18.5	22	22	30	37	37	55	55
AC-3	220–240V	(kW)	2.2	3	4	5.5	7.5	7.5	11	11	15	22	30	22	37
	380–440V	(kW)	3.7	5.5	7.5	11	11	15	18.5	18.5	22	30	37	45	55
	500V	(kW)	3.7	5.5	7.5	11	15	15	18.5	18.5	30	37	45	45	55
	660–690V	(kW)	3.7	5.5	7.5	11	11	15	18.5	18.5	22	30	37	45	55
cUL	110–120VAC	(HP)	1	1.5	2	3	3	5	5	5	7.5	10	15	15	25
	208V AC	(HP)	2	3	5	7.5	—	—	—	—	10	15	—	15	30
	220–240VAC	(HP)	2	3	5	7.5	7.5	10	10	15	20	25	30	15	30
	440–480VAC	(HP)	3	5	10	15	15	20	20	30	30	30	60	40	50
550–600VAC	(HP)	5	5	10	15	15	20	20	30	30	30	50	50	50	

¹ 1000V, AC-20, no load switching

² with terminal extensions for cable lug connection

Rated data

Rated data (auxiliary contacts)			H216	H220	H226	H233	B240	B250	B263	H406	H408	H410	H412	K616	K830
Operational voltage U_e	(V AC)		500	500	500	500	500	500	500	500	500	500	500	500	500
Uninterrupted current $I_u / I_{th} / I_{the}$	(A)		10	10	10	10	16	16	16	16	16	16	16	20	20
Operational current I_e															
AC-21A	(A)		10	10	10	10	10	10	10	10	10	10	10	20	20
	110–240V	(A)	2,5	2,5	2,5	2,5	6	6	6	6	6	6	6	6	6
	380–440V	(A)	1,5	1,5	1,5	1,5	4	4	4	4	4	4	4	4	4
AC-15	500V	(A)	1	1	1	1	1,5	1,5	1,5	1,5	1,5	1,5	1,5	2	2
	600V AC	(A)	10	10	10	10	10	10	10	10	10	10	10	20	20
cUL General Use															
Heavy Pilot Duty			A600	A600	A600	A600	A600	A600	A600	A600	A600	A600	A600	A600	A600
short-circuit rating (max. fuse)	(gL)		10	10	10	10	16	16	16	16	16	16	16	20	20
Conditional short-circuit current	(kA_{eff})		3	3	3	3	3	3	3	3	3	3	3	10	10
Terminal capacity															
flexible or multiwire (including ferrule)	min.	(mm ²)	1	1	1	1	1	1	1	1	1	1	1	1	1
	max.	(mm ²)	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5
American Wire Gauge	(AWG)		14	14	14	14	14	14	14	14	14	14	14	12	12

General

General			H216	H220	H226	H233	B240	B250	B263	H406	H408	H410	H412	K616	K830	
Standards			IEC 60947 / EN 60947 / IEC 60204 / UL 508 / CSA 22.2, No. 14 / VDE 0660 part 107													
Mechanical lifespan			>10 ⁵	>10 ⁵	>10 ⁵	>10 ⁵	>10 ⁵	>10 ⁵	>10 ⁵	>10 ⁵	>10 ⁵	>10 ⁵	>10 ⁵	>10 ⁵	>10 ⁵	
Max. operating frequency / h			50	50	50	50	50	50	50	50	50	50	50	50	50	
Climatic resistance (damp heat)	constant		to DIN IEC 60068-2-78													
	cyclic		to DIN IEC 60068-2-30													
Ambient temperature (min. / max.)	open	(°C)	–25 / +50													
	enclosed	(°C)	–25 / +40													
Mounting position			as required													
Mechanical shock resistance (shock duration 20ms)	(g)		>25	>25	>25	>25	>25	>25	>25	>25	>25	>25	>25	>25	>10	>10
Rated frequency	(Hz)		50 to 60 (other frequencies on request)													

Conformity

Sälzer Electric Disconnect Switches are conform to the regulations of 'Directive 2014/35/EU on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits', specified as Low Voltage Directive.

The conformity is proved by the by the complete compliance of the harmonized EN 60947-1, EN 60947-3, EN 60947-5-1, EN 60204-1.

Sälzer Electric products are developed, manufactured and tested according to these standards. The CE marking on all our products prove the conformity to the directives.

Disconnect Switches from Sälzer are approved according to UL 60947. The Disconnect Switches H216, H220, B240, B250, B263, H406, H408, H410 and H412 are suitable for use as a motor disconnect.

