

# 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 <sup>1</sup>	690 <sup>1</sup>	690 <sup>1</sup>	690 <sup>1</sup>	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% = $1,3 \times I_e$ / 40% = $1,6 \times I_e$ / 25% = $2 \times I_e$												
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	( $kA_{eff}$ )		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															
solid or stranded	min.	(mm <sup>2</sup> )	1	1	1	1	6	6	6	4	4	4	4	95 <sup>2</sup>	185 <sup>2</sup>
	max.	(mm <sup>2</sup> )	10	10	10	10	25	25	25	50	50	50	50	95 <sup>2</sup>	185 <sup>2</sup>
flexible or multiwire (including ferrule)	min.	(mm <sup>2</sup> )	0,75	0,75	0,75	0,75	4	4	4	2,5	2,5	2,5	2,5	95 <sup>2</sup>	185 <sup>2</sup>
	max.	(mm <sup>2</sup> )	6	6	6	6	16	16	16	35	35	35	35	95 <sup>2</sup>	185 <sup>2</sup>
American Wire Gauge	(AWG)		8	8	8	8	4	4	4	1/0	1/0	1/0	1/0	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	2,0	2,0	2,0	2,0	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	— <sup>3</sup>	— <sup>3</sup>	— <sup>3</sup>	— <sup>3</sup>	80	100	— <sup>3</sup>	175	240
	600V AC	(A)	20	25	30	40	— <sup>3</sup>	— <sup>3</sup>	— <sup>3</sup>	— <sup>3</sup>	80	100	— <sup>3</sup>	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	110–120V AC	(HP)	1	1,5	2	3	— <sup>3</sup>	— <sup>3</sup>	— <sup>3</sup>	— <sup>3</sup>	7,5	10	— <sup>3</sup>	15	25
	208V AC	(HP)	2	3	5	7,5	— <sup>3</sup>	— <sup>3</sup>	— <sup>3</sup>	— <sup>3</sup>	10	15	— <sup>3</sup>	15	30
	220–240V AC	(HP)	2	3	5	7,5	— <sup>3</sup>	— <sup>3</sup>	— <sup>3</sup>	— <sup>3</sup>	20	25	— <sup>3</sup>	15	30
	440–480V AC	(HP)	3	5	10	15	— <sup>3</sup>	— <sup>3</sup>	— <sup>3</sup>	— <sup>3</sup>	30	30	— <sup>3</sup>	40	50
550–600V AC	(HP)	5	5	10	15	— <sup>3</sup>	— <sup>3</sup>	— <sup>3</sup>	— <sup>3</sup>	30	30	— <sup>3</sup>	50	50	

<sup>1</sup> 1000V, AC-20, no load switching

<sup>2</sup> with terminal extensions for cable lug connection

<sup>3</sup> in testing

### 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
AC-15	380–440V	(A)	1,5	1,5	1,5	1,5	4	4	4	4	4	4	4	4	4
	500V	(A)	1	1	1	1	1,5	1,5	1,5	1,5	1,5	1,5	1,5	2	2
cUL General Use	600V AC	(A)	10	10	10	10	10	10	10	10	10	10	10	20	20
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	min.	(mm <sup>2</sup> )	1	1	1	1	1	1	1	1	1	1	1	1	1
(including ferrule)	max.	(mm <sup>2</sup> )	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 <sup>5</sup>	>10 <sup>5</sup>	>10 <sup>5</sup>	>10 <sup>5</sup>	>10 <sup>5</sup>	>10 <sup>5</sup>	>10 <sup>5</sup>	>10 <sup>5</sup>	>10 <sup>5</sup>	>10 <sup>5</sup>	>10 <sup>5</sup>	>10 <sup>6</sup>	>10 <sup>6</sup>	
Max. operating frequency / h			50	50	50	50	50	50	50	50	50	50	50	50	50	
Climatic resistance	constant		to DIN IEC 60068-2-78													
(damp heat)	cyclic		to DIN IEC 60068-2-30													
Ambient temperature	open	(°C)	–25 / +50													
(min. / max.)	enclosed	(°C)	–25 / +40													
Mounting position			as required													
Mechanical shock resistance		(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

The Disconnect Switches H, B and K conform to the regulations of the EC guideline 2006/95/EG 'Electrical equipment for application within certain voltage limits' – specified as directive for low voltage devices.

The conformity is proved 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 cUL 508 and GOST R500 30.3-99.

