



Load break switches

Our range of load break switches consists of three-pole switch disconnectors, additional poles and accessories. The switches are certified according to EN 60947-3. Our product range also includes UL-listed motor controllers suitable as motor disconnect (UL 508, File # 164205) with a strong position on the North American market in particular.

BENEFITS:

- › Combined switch and disconnector
- › Designed and tested to work as a disconnector
- › Load break switch for demanding use
- › Suitable for overvoltage category IV

Ensto Compact switch disconnectors

Rotary switches from 16 A to 125 A



Ensto Compact switch disconnectors in brief:

- The frame of the 16 – 63 A switches is only two modules wide, 63 A – 125 A with a width of three modules
- The series also includes:
 - Direct door mounted switches
 - Switches with factory-mounted neutral pole
- Wide range of accessories available (including e.g. 4th pole, switched neutral pole, auxiliary contact, handle, changeover mechanism)
- UL-listed versions available
- Compact in size
- Advanced design with two frame sizes
- Handle padlockable in 0-position

Conformity	
Standards	
EN 60947-3	
Technical information	
Nominal current range:	16 – 125 A
Cross-section range:	Cu 1.5 – 50 mm ²
Rated insulation voltage:	800 V
Mechanical features	
Screw head:	+/-
Mounting:	Screws or DIN rail

Ensto Compact switch disconnectors, three-pole, panel and DIN rail mounted

Product code	Amperage	Conductor cross-section	Tightening torque	Mounting	Dimensions W x L x H (mm)	Weight (kg)	Package size (pcs)	GTIN-13
Three-pole with direct handle								
KS3.16	3 x 16 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	36 x 81 x 76	0.133	50	6418677171345
KS3.20	3 x 20 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	36 x 81 x 76	0.133	50	6418677171352
KS3.25	3 x 25 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	36 x 81 x 76	0.133	50	6418677170003
KS3.32	3 x 32 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	36 x 81 x 76	0.133	50	6418677171420
KS3.40	3 x 40 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	36 x 81 x 76	0.133	50	6418677170010
KS3.63	3 x 63 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	36 x 81 x 76	0.133	50	6418677170027
KSM3.63	3 x 63 A	Cu 10–50 mm ²	4 Nm	Din rail/screw	52 x 100 x 80	0.266	50	6418677169748
KSM3.80	3 x 80 A	Cu 10–50 mm ²	4 Nm	Din rail/screw	52 x 100 x 80	0.266	50	6418677169755
KSM3.100	3 x 100 A	Cu 10–50 mm ²	4 Nm	Din rail/screw	52 x 100 x 80	0.266	50	6418677169762
KSM3.125	3 x 125 A	Cu 10–50 mm ²	4 Nm	Din rail/screw	52 x 100 x 80	0.266	50	6418677169779
Three-pole, yellow with red handle								
KS3.16RY	3 x 16 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	36 x 81 x 76	0.133	50	6418677171444
KS3.20RY	3 x 20 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	36 x 81 x 76	0.133	50	6418677171451
KS3.25RY	3 x 25 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	36 x 81 x 76	0.133	50	6418677171468
KS3.32RY	3 x 32 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	36 x 81 x 76	0.133	50	6418677171475
KS3.40RY	3 x 40 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	36 x 81 x 76	0.133	50	6418677171482
KS3.63RY	3 x 63 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	36 x 81 x 76	0.133	50	6418677171499
KSM3.63RY	3 x 63 A	Cu 10–50 mm ²	4 Nm	Din rail/screw	52 x 100 x 80	0.266	50	6418677169847
KSM3.80RY	3 x 80 A	Cu 10–50 mm ²	4 Nm	Din rail/screw	52 x 100 x 80	0.266	50	6418677169854
KSM3.100RY	3 x 100 A	Cu 10–50 mm ²	4 Nm	Din rail/screw	52 x 100 x 80	0.266	50	6418677169861
KSM3.125RY	3 x 125 A	Cu 10–50 mm ²	4 Nm	Din rail/screw	52 x 100 x 80	0.266	50	6418677169878
Three-pole without handle								
KS31.16	3 x 16 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	36 x 81 x 70	0.129	50	6418677171284
KS31.20	3 x 20 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	36 x 81 x 70	0.129	50	6418677171291
KS31.25	3 x 25 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	36 x 81 x 70	0.129	50	6418677171307
KS31.32	3 x 32 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	36 x 81 x 70	0.129	50	6418677171314
KS31.40	3 x 40 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	36 x 81 x 70	0.129	50	6418677171321
KS31.63	3 x 63 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	36 x 81 x 70	0.129	50	6418677171338
KSM31.63	3 x 63 A	Cu 10–50 mm ²	4 Nm	Din rail/screw	52 x 100 x 70	0.260	50	6418677169700
KSM31.80	3 x 80 A	Cu 10–50 mm ²	4 Nm	Din rail/screw	52 x 100 x 70	0.260	50	6418677169717
KSM31.100	3 x 100 A	Cu 10–50 mm ²	4 Nm	Din rail/screw	52 x 100 x 70	0.260	50	6418677169724
KSM31.125	3 x 125 A	Cu 10–50 mm ²	4 Nm	Din rail/screw	52 x 100 x 70	0.260	50	6418677169731



KSM3.63



KS3.16RY



KSM31.63

Ensto Compact switch disconnectors, three-pole with factory-mounted switched neutral pole and handle

Product code	Amperage	Conductor cross-section	Tightening torque	Mounting	Dimensions W x L x H (mm)	Weight (kg)	Package size (pcs)	GTIN-13
KS3.40N	3 x 40 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	49 x 81 x 76	0.177	50	6438100099343
KS3.63N	3 x 63 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	49 x 81 x 76	0.177	50	6438100099350
KSM3.80N	3 x 80 A	Cu 10–50 mm ²	4 Nm	Din rail/screw	70 x 100 x 80	0.362	50	6438100099381
KSM3.100N	3 x 100 A	Cu 10–50 mm ²	4 Nm	Din rail/screw	70 x 100 x 80	0.362	50	6438100099398



KS3.40N



Ensto Compact switch disconnectors, fourth pole

Product code	Amperage (A)	Conductor cross-section (mm ²)	Tightening torque	Mounting	Dimensions W x L x H (mm)	Weight (kg)	Package size (pcs)	GTIN-13
KS1.16	16 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	13 x 71.5 x 55.3	0.046	50	6418677171253
KS1.20	20 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	13 x 71.5 x 55.3	0.046	50	6418677171260
KS1.25	25 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	13 x 71.5 x 55.3	0.046	50	6418677170065
KS1.32	32 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	13 x 71.5 x 55.3	0.046	50	6418677171277
KS1.40	40 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	13 x 71.5 x 55.3	0.046	50	6418677170072
KS1.63	63 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	13 x 71.5 x 55.3	0.046	50	6418677170089
KSM1.63	63 A	Cu 10–50 mm ²	4 Nm	Din rail/screw	17.5 x 83 x 62	0.095	50	6418677169786
KSM1.80	80 A	Cu 10–50 mm ²	4 Nm	Din rail/screw	17.5 x 83 x 62	0.095	50	6418677169793
KSM1.100	100 A	Cu 10–50 mm ²	4 Nm	Din rail/screw	17.5 x 83 x 62	0.095	50	6418677169809
KSM1.125	125 A	Cu 10–50 mm ²	4 Nm	Din rail/screw	17.5 x 83 x 62	0.095	50	6418677169816



KS1.63

Additional poles

Product code	Description	Amperage (A)	Tightening torque (Nm)	Weight (kg)	Package size (pcs)	GTIN-13
Switched neutral poles						
KS1N	For KS3- and KS31 switches	Max. 63 A	2 Nm	0.046	50	6438100094300
KSM1N	For KSM switch	Max. 125 A	4 Nm	0.095	50	6438100094324
Fixed neutral poles						
KSN1	For KS3- and KS31 switches	Max. 63 A	2 Nm	0.042	50	6418677170126
KSMN1	For KSM switch	Max. 125 A	4 Nm	0.087	50	6418677169823
Fixed PE poles						
KSP1	For KS3- and KS31 switches	Max. 63 A	2 Nm	0.042	50	6418677170140
KSMP1	For KSM switch	Max. 125 A	4 Nm	0.087	50	6418677169830
Standard auxiliary contact						
KSA1	NO+NC auxiliary contact 16 A for 16–125 A switches	16 A	2 Nm	0.051	50	6418677170164



Switched neutral pole, KS1N.



Fixed neutral pole, KSN1.



Fixed PE pole KSP1.



Standard auxiliary contact, KSA1.

Handles

Product code	Description	Weight (kg)	Package size (pcs)	GTIN-13
Direct handles				
PMR241B	Direct handle for KS switch	0.005	100	6418677171437
PMR301B	Direct handle for KSM switch	0.006	100	6418677169915
External handles				
KSH29	Not padlockable, IP54, 0I1, black	0.033	100	6418677170188
KSH48	Padlockable, IP65, yellow with red handle, 0 OFF11 ON	0.043	100	6418677170195
KSH48.01	Padlockable, IP65, black, 0 OFF11 ON	0.043	100	6418677170201
KSH75	Pistol grip handle, black, padlockable, IP65, 0 OFF11 ON	0.070	50	6418677169885
KSH75RY	Pistol grip handle, yellow with red handle, padlockable, IP65, 0 OFF11 ON	0.070	50	6418677169892



Small direct handle for KS switch, PMR241B.



External handle, not padlockable, KSH29.



External handle, padlockable, KSH48.



External handle, padlockable, KSH48.01.



Pistol grip handle, padlockable, KSH75RY.

Extension shafts

Product code	Description	Weight (kg)	Package size (pcs)	GTIN-13
KS23.055	55 mm for KSH29, KSH48 and KSH75 handles	0.014	100	6418677170232
KS23.070	70 mm for KSH29, KSH48 and KSH75 handles	0.017	100	6418677170249
KS23.090	90 mm for KSH29, KSH48 and KSH75 handles	0.021	100	6418677170256
KS23.150	150 mm for KSH29, KSH48 and KSH75 handles	0.032	100	6418677170263
KS23.200	200 mm for KSH29, KSH48 and KSH75 handles	0.042	100	6418677170270
KS23.300	300 mm for KSH29, KSH48 and KSH75 handles	0.061	100	6418677170287



KS23.055

Other accessories

Product code	Description	Weight (kg)	Package size (pcs)	GTIN-13
PMR121	Terminal shroud for KS1 and KS11 poles	0.004	100	6418677171598
PMR123	Terminal shroud for KS3, KS31 and KS13 switch	0.008	100	6418677171604
PMR111	Terminal shroud for KSM1 pole	0.006	100	6418677171611
PMR113	Terminal shroud for KSM3 and KSM31 switch	0.013	100	6418677171628
KK66	Parallel mechanism for mounting two switches to work simultaneously	0.078	1	6418677171642
KK102.712	Changeover kit incl. shafts and black handle	0.234	20	6418677169922
KK102.7RY12	Changeover kit incl. shafts and red/yellow handle	0.234	20	6418677169939



Terminal shroud for KS1 and KS11 poles, PMR121.



Terminal shroud for KS3, KS31 and KS13 switch, PMR123.



Parallel mechanism, KK66.



Changeover kit, KK102.712.



Changeover kit, KK102.7RY12.

Ensto Compact switch disconnectors, three-pole, direct door mounted

Product code	Amperage	Conductor cross-section	Tightening torque	Mounting	Dimensions W x L x H (mm)	Weight (kg)	Package size (pcs)	GTIN-13
KS13.16	3 x 16 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	39.4 x 80 x 72	0.149	50	6418677171161
KS13.20	3 x 20 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	39.4 x 80 x 72	0.149	50	6418677171178
KS13.25	3 x 25 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	39.4 x 80 x 72	0.149	50	6418677170034
KS13.32	3 x 32 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	39.4 x 80 x 72	0.149	50	6418677171246
KS13.40	3 x 40 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	39.4 x 80 x 72	0.149	50	6418677170041
KS13.63	3 x 63 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	13 x 71.5 x 55.3	0.149	50	6418677170058



KS13.16

Ensto Compact switch disconnectors, fourth pole

Product code	Amperage	Conductor cross-section	Tightening torque	Mounting	Dimensions W x L x H (mm)	Weight (kg)	Package size (pcs)	GTIN-13
KS11.16	16 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	13 x 71.5 x 55.3	0.045	50	6418677171130
KS11.20	20 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	13 x 71.5 x 55.3	0.045	50	6418677171147
KS11.25	25 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	13 x 71.5 x 55.3	0.045	50	6418677170096
KS11.32	32 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	13 x 71.5 x 55.3	0.045	50	6418677171154
KS11.40	40 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	13 x 71.5 x 55.3	0.045	50	6418677170102
KS11.63	63 A	Cu 1.5–16 mm ²	2 Nm	Din rail/screw	13 x 71.5 x 55.3	0.045	50	6418677170119



KS11.16

Accessories

Product code	Description	Amperage	Tightening torque	Weight (kg)	Package size (pcs)	GTIN-13
Additional poles						
KS11N	Switched neutral pole	Max. 63 A	2 Nm	0.046	50	6438100094317
KSN11	Fixed neutral pole	Max. 63 A	2 Nm	0.042	50	6418677170133
KSP11	Fixed PE pole	Max. 63 A	2 Nm	0.042	50	6418677170157
KSA11	NO+NC auxiliary contact	16 A	2 Nm	0.051	50	6418677170171
Handles						
KSH48	Padlockable, IP65, yellow with red handle, 0 OFF/1 ON			0.043	100	6418677170195
KSH48.01	Padlockable, IP65, black, 0 OFF/1 ON			0.043	100	6418677170201
Terminal shrouds						
PMR121	Terminal shroud for KS1 and KS11 poles			0.004	100	6418677171598
PMR123	Terminal shroud for KS3, KS31 and KS13 switch			0.008	100	6418677171604



KSH48.01

Electrical and mechanical characteristics

According to EN 60947-3

		3-pole		KS3.20		KS3.32		KS3.40		KS3.63		KS3.63N		
		KS3.16	KS3.16	KS3.20	KS3.25	KS3.32	KS3.40	KS3.63	KS3.63	KS3.63N	KS3.63N			
		KS13.16	KS13.16	KS13.20	KS13.25	KS13.32	KS13.40	KS13.40	KS13.40	KS13.40	KS13.40	KS13.40	KS13.40	
		KS11.16	KS11.16	KS11.20	KS11.25	KS11.32	KS11.40	KS11.40	KS11.40	KS11.40	KS11.40	KS11.40	KS11.40	KS1N KS11N
Conventional free air thermal current I _{th}	A	16	20	25	32	40	40	40	40	63	63	63	63	63
Rated insulation voltage U _i	V	800	800	800	800	800	800	800	800	800	800	800	800	800
Rated impulse withstand voltage U _{imp}	kV	8	8	8	8	8	8	6	8	8	6	6	6	6
Rated operational current I _e AC 21 A	415V	A	16	20	25	32	40	40	40	63	63	63	63	63
	500V	A	16	20	25	32	40	40	40	63	63	63	63	63
	690V	A	16	20	25	32	40	40	40	63	63	63	63	63
AC 22 A	415V	A	16	20	25	32	40	40	40	63	63	63	63	63
		500V	A	16	20	25	32	40	40	63	63	63	63	63
		690V	A	16	20	25	32	40	40	63	63	63	63	63
AC 23 A	415V	A	16	20	25	32	40	40	40	63	63	63	63	63
		500V	A	16	20	25	32	40	40	40	40	40	40	40
		690V	A	16	20	25	25	25	25	25	25	25	25	25
Rated operational power P _e AC 23 A (for standard motor)	415V	kW	7.5	7.5	11	15	18.5	18.5	18.5	30	30	30	30	30
	500V	kW	7.5	11	15	18.5	22	22	22	22	22	22	22	22
	690V	kW	11	15	22	22	22	22	22	22	22	22	22	22
Short-circuit characteristics (415 VAC)														
Rated short-time withstand current, 1s, I _{cw}	Arms	1260	1260	1260	1260	1260	1260	1260	1260	1260	1260	1260	1260	1260
Rated conditional short-circuit current	kArms	50	50	50	50	50	50	50	50	20/50	20/50	20/50	20/50	20/50
Max. fuse (gG)	A	16	20	25	32	40	40	40	40	63/40	63/40	63/40	63/40	63/40
Max. cut-off current	kA _{peak}	6	6	6	6	6	6	6	6	6/6	6/6	6/6	6/6	6/6
Max. Joule integral	kA ² s	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	15/6.8	15/6.8	15/6.8	15/6.8	15/6.8
Making and breaking characteristics														
Making capacity	415V AC 23 A	A	160	200	250	320	400	400	400	630	630	630	630	630
Breaking capacity	415V AC 23 A	A	128	160	200	256	320	320	320	504	504	504	504	504
Endurance (number of operations)														
Mechanical			100 000	100 000	100 000	100 000	100 000	100 000	100 000	100 000	100 000	100 000	100 000	100 000
Electrical			3 000	3 000	3 000	3 000	3 000	3 000	3 000	3 000	3 000	3 000	3 000	3 000
Terminals (Cu)	mm ²		1.5-16	1.5-16	1.5-16	1.5-16	1.5-16	1.5-16	1.5-16	1.5-16	1.5-16	1.5-16	1.5-16	1.5-16
Tightening torque	Nm		2	2	2	2	2	2	2	2	2	2	2	2

		3-pole		KSM3.80		KSM3.100		KSM3.100N		KSM3.125		KSM3.125		
		KSM3.63	KSM3.63	KSM3.80	KSM3.80	KSM3.100	KSM3.100	KSM3.100N	KSM3.100N	KSM3.125	KSM3.125			
		KSM1.63	KSM1.63	KSM1.80	KSM1.80	KSM1.100	KSM1.100	KSM1.100	KSM1.100	KSM1N	KSM1N	KSM1.125	KSM1.125	
Conventional free air thermal current I _{th}	A	63	80	80	80	100	100	100	100	100	100	125	125	125
Rated insulation voltage U _i	V	800	800	800	800	800	800	800	800	800	800	800	800	800
Rated impulse withstand voltage U _{imp}	kV	8	8	6	8	6	8	6	8	6	6	8	8	8
Rated operational current I _e AC 21 A	415V	A	63	80	80	100	100	100	100	100	100	125	125	125
	500V	A	63	80	80	100	100	100	100	100	100	125	125	125
	690V	A	63	80	80	100	100	100	100	100	100	125	125	125
AC 22 A	415V	A	63	80	80	100	100	100	100	100	100	125	125	125
		500V	A	63	80	80	100	100	100	100	100	100	125	125
		690V	A	63	80	80	100	100	100	100	100	100	125	125
AC 23 A	415V	A	63	80	80	80	80	80	80	80	80	80	80	80
		500V	A	63	63	63	63	63	63	63	63	63	63	63
		690V	A	50	50	50	50	50	50	50	50	50	50	50
Rated operational power P _e AC 23 A (for standard motor)	415V	kW	30	45	45	45	45	45	45	45	45	45	45	45
	500V	kW	37	37	37	37	37	37	37	37	37	37	37	37
	690V	kW	45	45	45	45	45	45	45	45	45	45	45	45
Short-circuit characteristics (415 VAC)														
Rated short-time withstand current, 1s, I _{cw}	Arms	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Rated conditional short-circuit current	kArms	25	25	25	25	25	25	25	25	25	25	11	11	
Max. fuse (gG)	A	63	80	80	100	100	100	100	100	100	100	125	125	
Max. cut-off current	kA _{peak}	9	9	9	9	9	9	9	9	9	9	9	9	
Max. Joule integral	kA ² s	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	83	83	
Making and breaking characteristics														
Making capacity	415V AC 23 A	A	630	800	800	800	800	800	800	800	800	800	800	800
Breaking capacity	415V AC 23 A	A	504	640	640	640	640	640	640	640	640	640	640	640
Endurance (number of operations)														
Mechanical			30 000	30 000	30 000	30 000	30 000	30 000	30 000	30 000	30 000	30 000	30 000	30 000
Electrical			1 500	1 500	1 500	1 500	1 500	1 500	1 500	1 500	1 500	1 500	1 500	1 500
Terminals (Cu)	mm ²		10-50	10-50	10-50	10-50	10-50	10-50	10-50	10-50	10-50	10-50	10-50	10-50
Tightening torque	Nm		4	4	4	4	4	4	4	4	4	4	4	4