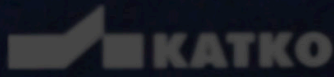




 Load Safe



**LOAD BREAK & CHANGE-OVER SWITCHES**

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## SWITCHES WITHOUT COMPROMISES.

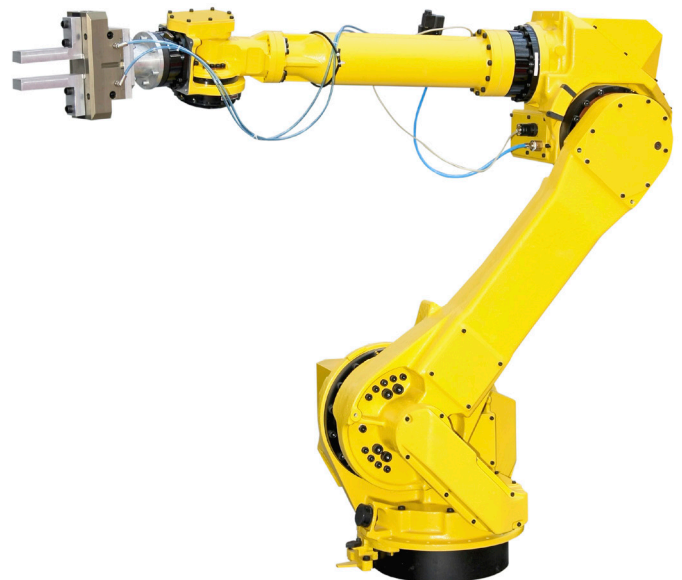


Katko is a Finnish family business specialising in safety switches, load break switches and fused switches with more than 70 years of experience. Not all safety and load break switches on the market come from specialised manufacturers by any means, and that is precisely why we are so proud of ours. We design and manufacture every product ourselves in our own factories. The challenging Finnish climate creates a basis for developing switches that work in all conditions across the globe. Switches without compromises. This is what we at Katko think, as did the generations before us.

## ROBOTICS AND HANDWORK. THE BEST OF BOTH WORLDS.

We manufacture all of our safety switches, load break switches, fused switches and terminal blocks in our own production plants in Finland and Poland. A high level of automation is part of Katko's DNA that ensures a consistent quality level in our products. Katko's flexible and adaptive production philosophy even facilitates the manufacture of smaller batches in a competitive manner. Furthermore, we can provide our customers with more tailored products, and we are ready to do so. This is where Katko's motivated and professional staff come in. We employ approximately 120 people, two thirds of whom are in Finland.

Taking care of people and the environment are among the most important values of our family business. Our environmental thinking is guided by factors such as efficient raw material use, energy-efficient production and the quality and life-cycle of the end product. All of the materials used in our production processes are 100% recyclable. Sales office was opened in Dubai in 2007. Today, Katko products are sold in more than 60 countries on all continents.



## SWITCHES ACCORDING TO IEC 60 947-3

### SWITCH

A mechanical switching device capable of making, carrying and breaking currents under normal circuit conditions which may include specified operating overload conditions and also carrying for a specified time currents under specified abnormal circuit conditions such as those of short circuit.

Note: A switch may be capable of making, but not breaking, short-circuit currents.

### DISCONNECTOR

A mechanical switching device which, in the open position, complies with the requirements specified for the isolating function.

Disconnecter: (working definition) device without on-load making and breaking capacity.

### SWITCH DISCONNECTOR / LOAD BREAK SWITCH

A switch capable of making, carrying and breaking currents under normal circuit conditions and which, in the open position, complies with the isolating requirements specified for a disconnector.

### UTILIZATION CATEGORY

Utilization category	Use / Application
AC-20A	Connecting and disconnecting under no-load.
AC-21A	Switching of resistive loads including moderate overloads
AC-22A	Switching of mixed loads, inductive and resistive loads including moderate overloads
AC-23A	Switching of motor loads or other highly inductive loads
AC-23Ae	Switching of motor loads with higher locked rotor currents *

\* Requirements given by asynchronous motors of design NE and HE, according to IEC 60034-12, having extended/higher locked rotor apparent power and current than design N and H respectively, to achieve a higher efficiency class according to the requirements of IEC 60034-30-1.

### PROTECTION AGAINST OVERVOLTAGE

$U_{imp}$  (Impulse withstand voltage) defines the device's use in abnormal network conditions with overvoltage due to lightning on overhead wires etc.

This characteristic also defines the device's dielectric quality. Overvoltage protection is ensured by choosing the equipment according to  $U_{imp}$ . The 4 impulse withstand categories of use at 400V/ 690V (IEC 60 364-4-44) are:

Category	$U_{imp}$	Applications
1	2,5 kV	pecially protected equipment
2	4 kV	Portable tools, motors, etc.
3	6 kV	Equipment placed in distribution networks
4	8 kV	Equipment placed at the head of an installation.

The  $U_{imp}$  rating for most of the Katko switches is 8kV.

### INSTALLATION ENVIRONMENT TEMPERATURE

To assure the best of operation of KATKO switches the ambient air temperature of installation environment should be in the range of -40°C to + 60°C.

When the ambient temperatures exceed +40°C, the maximum load of the switch may have to be derated. Please contact KATKO for assistance.

### CONFORMITY TO STANDARDS

Katko switches are designed to comply with both national and international standards.

-Switches tested acc. to IEC 60 947

-AC-23A / 690V ratings (KU 250, 400 & 800A AC-23A 1000V)

-50 kA R.M.S values

-CB certificates

-UL,  $\ulcorner$ UL listed (UL 60947-4-1A)



## LOAD BREAK SWITCHES 16-800 A ROTARY AND TOGGLE SWITCHES

### General information:

The professional range of KATKO Load Break Switches consists of rotary and toggle switches. Types KU and VKA are rotary switches while KUE and EVA are toggle switches. The KATKO range is available from 16 A up to 800 A. Also 1000-3150 A is available on request.

- KU 16 - 800 A
- KUE 16 - 125 A
- VKA 200 - 250 A
- EVA 125 - 250 A

Rotary switches are available as 3-pole, 4-pole, 6-pole and 8-pole. Katko switches are rated up to 690V (KU 800, 400 and 250 A switches are rated up to 1000V). Katko Load Break Switches comply with and are tested according to:

### Standards:

IEC 60 947-3  
IEC 60 269-2  
UL 60947-4-1A (16-150 A)

### Approvals and certificates:

CCA  
CB  
Lloyd's Register (KU 16 - 160 A)  
VDE (KU 200 - 800 A)

### Manufacturing and quality processes:

ISO 9001  
ISO 14001

### General installation and life-cycle manual

Katko's general installation manual is available on Katko's website at [www.katko.com/terms-conditions](http://www.katko.com/terms-conditions).

This manual contains important information about installation and maintenance of Katko's products and must be read by any user of Katko products.

## TECHNICAL DATA

### LOAD BREAK SWITCHES

LOAD BREAK SWITCHES		KU ROTARY LBS															
		16A	25A	40A	63A	80A	100A	125A (N)	125A	160A	160A (P)	200A	250A	315A	400A	630A	800A
Rated insulation voltage, $U_i$ (V)		800	800	800	800	800	800	800	800	800	1000	1000	1000	1000	1000	1000	1000
Rated thermal current, $I_{th}$ (A)		25	40	63	80	100	125	125	160	200	200	250	315	315	400	630	800
Nominal values with cable size (mm <sup>2</sup> )		4	10	16	25	35	70	50	70	95	95	95	120	185	240	2x185	2x240
Rated operational current, $I_e$ (A)																	
AC-21A	400/415V	25	40	63	80	100	125	125	160	160	160	200	250	315	400	630	800
	500V	25	40	63	80	100	125	125	160	160	160	200	250	315	400	630	800
	690V	25	40	63	80	100	125	125	160	160	160	200	250	315	400	630	800
AC-22A	400/415V	16	25	40	63	80	100	125	125	160	160	200	250	315	400	630	800
	500V	16	25	40	63	80	100	80	125	160	160	200	250	315	400	630	800
	690V	16	25	40	63	80	100	80	125	160	160	200	250	315	400	630	800
AC-23A	400/415V	16	25	40	40	63	100	63	125	160	160	200	250	315	400	630	800
	500V	16	25	32	40	40	63	40	80	100	160	200	250	315	400	630	800
	690V	16	25	32	40	40	63	40	80	100	160	200	250	315	400	630	800
	1000V	-	-	-	-	-	-	-	-	-	-	-	135	-	200	-	400
Rated operational power for 3-phase (1500 r.p.m.) squirrel cage induction motors (kW)																	
AC-23	400/415V	7.5	11	15	22	30	55	30	55	90	90	110	132	160	200	355	400
	500V	7.5	15	22	30	30	37	30	55	55	110	132	160	200	250	400	560
	690V	11	22	30	37	37	55	37	75	90	132	160	250	315	355	630	800
Rated fused short circuit current																	
Back-up fuse (A)		63	63	63	80	80	160	125	160	160	250	250	250	400	400	630	800
R.M.S. value, $I_k$ (kA)		50	50	50	50	50	65	30	65	65	100****	100****	100****	100	100	100	100
Peak value (kA)		7.2	7.2	7.2	8.7	8.7	15	10	15	15	26	26	26	42	42	76	76
Impulse withstand voltage, $U_{imp}$ (kV)		8	8	8	8	8	8	8	8	8	12	12	12	12	12	12	12
Rated short circuit making capacity, $I_{cm}$ (kA)																	
	690V	2.5	2.5	2.5	3.1**	3.1**	8	3.1**	8	8	14	14	14	27,5	27,5	60	60
Rated short time withstand current (1 s), $I_{cw}$ (kA)																	
	690V	1.7	1.7	1.7	2.0	2.0	5	2.0	5	5	8***	8***	8***	13.5***	13.5***	28***	28***
Rated breaking capacity, $I_{cn}$ (A)																	
AC-23	400/415V	128	200	256	320	504	800	504	1000	1280	1280	1600	2000	2520	3200	5040	6400
	500V	128	200	256	320	320	504	320	640	800	1280	1600	2000	2520	3200	5040	6400
	690V	128	200	256	320	320	504	320	640	800	1280	1600	2000	2520	3200	5040	6400
Electrical endurance (number of operations)		3000	3000	3000	3000	3000	2000	3000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Mechanical endurance (number of operations)		50000	50000	50000	50000	50000	16000	50000	16000	16000	16000	16000	16000	10000	10000	10000	10000
Terminals / Bolt size Cu (mm <sup>2</sup> )		1.5-16	1.5-16	1.5-16	2.5-35	2.5-35	6-70	2.5-35	6-70	6-70	M8	M8	M8	M10	M10	M12	M12
Max terminal torque (Nm)		1.8	1.8	1.8	2.5	2.5	6	2.5	6	6	15-22	15-22	15-22	30-44	30-44	50-75	50-75
* 415 V																	
** 2.5kA when CCC marked																	
*** 1000V																	
**** 50kA with 315A fuse																	

## TECHNICAL DATA LOAD BREAK SWITCHES

KUE TOGGLE LBS						EVA TOGGLE LBS				VKA ROTARY LBS		LOAD BREAK SWITCHES	
16A	25A	40A	63A	80A	125A	125A	160A	200A	250A	200A	250A		
800	800	800	800	800	690	690	690	690	690	1000	1000	Rated insulation voltage, $U_i$ (V)	
25	40	63	80	100	125	160	200	200	250	200	250	Rated thermal current, $I_{th}$ (A)	
4	10	16	25	35	50	70	95	95	120	95	120	Nominal values with cable size (mm <sup>2</sup> )	
												Rated operational current, $I_e$ (A)	
25	40	63	80	100	125	160	200	200	250	200	250	400/415V	AC-21A
25	40	63	80	100	125	-	-	-	-	200	250	500V	
25	40	63	80	100	125	-	-	-	-	200	250	690V	
16	25	40	63	80	125	125	160	200	250	200	250	400/415V	AC-22A
16	25	40	63	80	80	-	-	-	-	-	-	500V	
16	25	40	63	80	80	-	-	-	-	-	-	690V	
16	25	25	40	63	63	80	125	160	200	200	250	400/415V	AC-23A
16	20	20	32	32	32	-	-	-	-	-	-	500V	
16	20	20	32	32	32	-	-	-	-	-	-	690V	
-	-	-	-	-	-	-	-	-	-	-	-	1000V	
												Rated operational power for 3-phase (1500 r.p.m.) squirrel cage induction motors (kW)	
7.5	11	11	22	30	30	45	75	75	90	110	132	400/415V	AC-23
7.5	11	11	22	22	22	55	75	-	-	-	-	500V	
11	15	15	30	30	30	55	90	-	-	-	-	690V	
												Rated fused short circuit current	
63	63	63	80	80	125	160	160	250	250	250	250	Back-up fuse (A)	
50	50	50	50	50	30	50	50	50	50	50	50	R.M.S. value, $I_k$ (kA)	
7.2	7.2	7.2	8.7	8.7	10	15	15	21	21	22	22	Peak value (kA)	
8	8	8	8	8	8	8/6	8/6	6	6	8	8	Impulse withstand voltage, $U_{imp}$ (kV)	
												Rated short circuit making capacity, $I_{cm}$ (kA)	
2.5	2.5	2.5	3.1**	3.1**	3.3	5.1	5.1	11.4*	11.4*	11.4*	11.4*	690V	
												Rated short time withstand current (1 s), $I_{cw}$ (kA)	
1.7	1.7	1.7	2.0	2.0	2.3	3.5	3.5	6.5*	6.5*	6.5*	6.5*	690V	
												Rated breaking capacity, $I_{cn}$ (A)	
128	200	200	320	504	504	800	840	1600	1600	1600	2000	400/415V	AC-23
128	160	160	256	256	320	640	1000	-	-	-	-	500V	
128	160	160	256	256	320	640	1000	-	-	-	-	690V	
3000	3000	3000	3000	3000	3000	2000	2000	2000	2000	2000	2000	Electrical endurance (number of operations)	
50000	50000	50000	50000	50000	50000	16000	16000	16000	16000	16000	16000	Mechanical endurance (number of operations)	
1.5-16	1.5-16	1.5-16	2.5-35	2.5-35	2.5-50	6-70	6-70	M8	M8	M8	M8	Terminals / Bolt size Cu (mm <sup>2</sup> )	
1.8	1.8	1.8	2.5	2.5	2.5	6	6	15-22	15-22	15-22	15-22	Max terminal torque (Nm)	
												· 415 V	
												** 2.5kA when CCC marked	
												*** 1000V	
												**** 50kA with 315A fuse	



## LOAD BREAK SWITCHES 16-80 A & 125A (N) ROTARY SWITCHES LOADSAFE KU SERIES

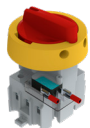


- DIN-rail mounting
- 3-pole and 4-pole KU-switches as standard. 2-pole upon request
- Switch technology by means of silver contacts ensures safe and durable operation
- 4-pole versions with early-make and late-break neutral pole
- Compatible with handles LK10 and LK11
- Shafts L=100/200/300 AD11 and L=100/200/300 AD11/VT

### SWITCHES

Type	EAN	E-number	AC-23A 400/415 V (A)	AC-23A 400/415 V (kW)	AC-23A 690 V (A)	AC-23A 690 V (kW)	Weight (kg)	Switch Type	Number of Poles
KU 316N	6419410214305	3600721	16	7,5	16	11	0,19	Load Break Switch	3
KU 325N	6419410214404	3600722	25	11	25	22	0,19	Load Break Switch	3
KU 340N	6419410214503	3635101	32	15	32	30	0,19	Load Break Switch	3
KU 363N	6419410214602	3600723	40	22	40	37	0,2	Load Break Switch	3
KU 380N	6419410214701	3635104	63	30	40	37	0,2	Load Break Switch	3
KU 3125N	6419410214824	3635431	63	30	40	37	0,2	Load Break Switch	3
KU 416N	6419410215005	3600731	16	7,5	16	11	0,23	Load Break Switch	4
KU 425N	6419410215203	3600732	25	11	25	22	0,23	Load Break Switch	4
KU 440N	6419410215500	3635102	32	15	32	30	0,23	Load Break Switch	4
KU 463N	6419410215906	3600733	40	22	40	37	0,25	Load Break Switch	4
KU 480N	6419410216002	3635105	63	30	40	37	0,25	Load Break Switch	4
KU 4125N	6419410216125	3635432	63	30	40	37	0,25	Load Break Switch	4

### RELATED ACCESSORIES



Type	Accessory	Description	For	EAN	E-number
LK10	Handle	Black	3, 4, 6 or 8-pole	6419410222539	3600934
LK10 Y/R	Handle	Yellow/red	3, 4, 6 or 8-pole	6419410222553	3600935
LK11	Handle	Black	3, 4, 6 or 8-pole	6419410222607	3600936
LK11 Y/R	Handle	Yellow/red	3, 4, 6 or 8-pole	6419410222614	3600937
LK11 IP69K	Handle	Black IP69K	3, 4, 6 or 8-pole	6419410483060	3600967
LK11 IP69K Y/R	Handle	Yellow/red IP69K	3, 4, 6 or 8-pole	6419410483077	3600968
OKA/KU/LK10	Door mounting kit	Black, for 3P switch, with LK10 handle	3-pole	6419410224656	3600268
OKA/KU/LK10 Y/R	Door mounting kit	Yellow/red, for 3P switch, with LK10 handle	3-pole	6419410224663	3600269
OKA/KU4P/LK10	Door mounting kit	Black, for 4P switch, with LK10 handle	4-pole	6419410224700	3600280
OKA/KU4P/LK10 Y/R	Door mounting kit	Yellow/red, for 4P switch, with LK10 handle	4-pole	6419410224717	3600281
OKA 1.V	Door mounting kit	1NO/1NC W/ door mounting, black	3-pole	6419410224106	3635084
OKA 1.V Y/R	Door mounting kit	1NO/1NC W/ door mounting, Y/R	3-pole	6419410224403	3600277
OKA 2.V	Door mounting kit	2NO/2NC W/ door mounting, black	3-pole	6419410224205	3635085
OKA 2.V Y/R	Door mounting kit	2NO/2NC W/ door mounting, Y/R	3-pole	6419410224502	3600278
L=100 AD11	Shaft	Length 100 mm, aluminium	3, 4, 6 or 8-pole	6419410253106	3662291
L=200 AD11	Shaft	Length 200 mm, aluminium	3, 4, 6 or 8-pole	6419410253113	3662292
L=300 AD11	Shaft	Length 300 mm, aluminium	3, 4, 6 or 8-pole	6419410253120	3662293
L=100 AD11/VT	Shaft	Length 100 mm, steel, slanted	3, 4, 6 or 8-pole	6419410253168	3600231
L=200 AD11/VT	Shaft	Length 200 mm, steel, slanted	3, 4, 6 or 8-pole	6419410253175	3600271
L=300 AD11/VT	Shaft	Length 300 mm, steel, slanted	3, 4, 6 or 8-pole	6419410253182	3600272
KU1.V	Auxiliary contact	1NO/1NC	3, 4, 6 or 8-pole	6419410300008	3600490
KU2.V	Auxiliary contact	2NO/2NC	3, 4, 6 or 8-pole	6419410300107	3600491
K/KU 3P	Front plate	Grey plate, black direct handle	3-pole	6419410221600	3635066
K/KU 4P	Front plate	Grey plate, black direct handle	4-pole	6419410222805	3600940
K/KU 3P Y/R	Front plate	Yellow plate, red direct handle	3-pole	6419410221617	3600970
K/KU 4P Y/R	Front plate	Yellow plate, red direct handle	4-pole	6419410222812	3600971
RV 66	Parallel kit	Length 66 mm, center shaft	2 x 3-pole	6419410226285	3600925
RV 66S	Parallel kit	Length 66 mm, side shaft	2 x 3-pole	6419410226261	3600924
RV 80	Parallel kit	Length 80 mm, center shaft	2 x 4-pole	6419410226308	3600926
RV 80S	Parallel kit	Length 80 mm, side shaft	2 x 4-pole	6419410226292	3600960

**Attention! Cable connectors must be used with Al-cables. With Cu-cables cable connector usage is optional. Other connectors may be compatible, ask for more options.**

## CABLE CONNECTORS - SUGGESTIONS PER CABLE CROSS SECTION

16 - 40 A, Al cable	TOP			BOTTOM		
Terminal position	1L1	3L2	5L3	2T1	4T2	6T3
2.5 - 16 mm <sup>2</sup>						
Connector	KKL1x16	KKL1x16	KKL1x16	-	-	-
Terminal cover	-	-	-	-	-	-
25 - 50 mm <sup>2</sup>						
Connector	KKL1x50M	KKL1x50M	KKL1x50M	-	-	-
Terminal cover	-	-	-	-	-	-

63 - 80 A & 125 A (N), Al cable	TOP			BOTTOM		
Terminal position	1L1	3L2	5L3	2T1	4T2	6T3
2.5 - 16 mm <sup>2</sup>						
Connector	KKL1x16	KKL1x16	KKL1x16	-	-	-
Terminal cover	-	-	-	-	-	-
25 - 50 mm <sup>2</sup>						
Connector	KKL1x50T2	KKL1x50T2	KKL1x50T2	KKL1x50T2	-	KKL1x50T2
Terminal cover	-	-	-	-	-	-

**All connectors and more information available in KATKO ConnectSafe Catalogue.**

**You will find it here: [www.katko.com/downloads](http://www.katko.com/downloads)**

## TECHNICAL DATA

LOAD BREAK SWITCHES	KU ROTARY LBS						
	16A	25A	40A	63A	80A	125A (N)	
Rated insulation voltage, $U_i$ (V)	800	800	800	800	800	800	
Rated thermal current, $I_{th}$ (A)	25	40	63	80	100	125	
Nominal values with cable size (mm <sup>2</sup> )	4	10	16	25	35	50	
Rated operational current, $I_p$ (A)							
AC-21A	400/415V	25	40	63	80	100	125
	500V	25	40	63	80	100	125
	690V	25	40	63	80	100	125
AC-22A	400/415V	16	25	40	63	80	125
	500V	16	25	40	63	80	80
	690V	16	25	40	63	80	80
AC-23A	400/415V	16	25	40	40	63	63
	500V	16	25	32	40	40	40
	690V	16	25	32	40	40	40
	1000V	-	-	-	-	-	-
Rated operational power for 3-phase (1500 r.p.m.) squirrel cage induction motors (kW)							
AC-23	400/415V	7.5	11	15	22	30	30
	500V	7.5	15	22	30	30	30
	690V	11	22	30	37	37	37
Rated fused short circuit current							
Back-up fuse (A)	63	63	63	80	80	125	
R.M.S. value, $I_s$ (kA)	50	50	50	50	50	30	
Peak value (kA)	7.2	7.2	7.2	8.7	8.7	10	
Impulse withstand voltage, $U_{imp}$ (kV)	8	8	8	8	8	8	
Rated short circuit making capacity, $I_{sm}$ (kA)							
690V	2.5	2.5	2.5	3.1**	3.1**	3.1**	
Rated short time withstand current (1 s), $I_{sw}$ (kA)							
690V	1.7	1.7	1.7	2.0	2.0	2.0	
Rated breaking capacity, $I_{bn}$ (A)							
AC-23	400/415V	128	200	256	320	504	504
	500V	128	200	256	320	320	320
	690V	128	200	256	320	320	320
Electrical endurance (number of operations)	3000	3000	3000	3000	3000	3000	
Mechanical endurance (number of operations)	50000	50000	50000	50000	50000	50000	
Terminals / Bolt size Cu (mm <sup>2</sup> )	1.5-16	1.5-16	1.5-16	2.5-35	2.5-35	2.5-35	
Max terminal torque (Nm)	1.8	1.8	1.8	2.5	2.5	2.5	
* 415 V							
** 2.5kA when CCC marked							

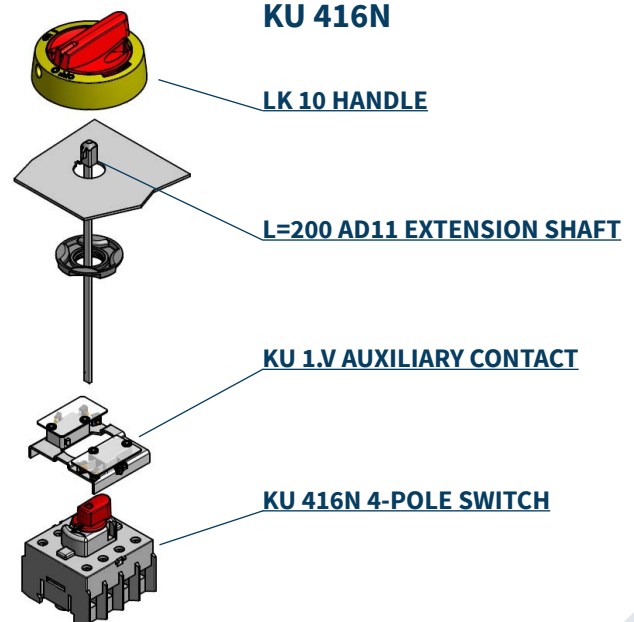
## 6 AND 8-POLE CONFIGURATIONS

- For a 6 or 8 -pole configuration
  - 2 x 3 or 4-pole KU switches
  - 1 x Parallel kit:
  - RV 66, RV 66S, RV 80, RV 80S
  - 1 x External handle for 6 or 8-pole

## CONNECTORS

Type	EAN	E-NO
KKL1X16	6419410378496	1942079
KKL1x50M	6419410378519	1942081
KKL1x50T2	6419410378502	1942080

## ASSEMBLY EXAMPLE KU 416N



## LOAD BREAK SWITCHES 100-160 A ROTARY SWITCHES LOADSAFE KU SERIES



- Modular design
- DIN-rail mounting
- 3- and 4 pole switches as standard
- 6- and 8 pole switches consist of two 3- or 4 pole switches and a parallel kit
- Advanced silver contacts guarantee safe and durable use
- Compatible with handles LK10, LK11(3 and 4 poles) and LK12 (6 and 8 poles)
- Shafts: L=100/200/300 AD11 and L=100/200/300 AD11/VT (3 and 4 poles), L=100/200/300 AD12/T (6 and 8 poles)

### SWITCHES

Type	EAN	E-number	AC-23A 400/415 V (A)	AC-23A 400/415 V (kW)	AC-23A 690 V (A)	AC-23A 690 V (kW)	Weight (kg)	Switch Type	Number of Poles
KU 3100	6419410203484	3600759	100	55	63	55	0,45	Load Break Switch	3
KU 3125	6419410203491	3600785	125	55	80	75	0,45	Load Break Switch	3
KU 3160	6419410203507	3600787	160	90	100	90	0,45	Load Break Switch	3
KU 4100	6419410203675	3600788	100	55	63	55	0,59	Load Break Switch	4
KU 4125	6419410203682	3600791	125	55	80	75	0,59	Load Break Switch	4
KU 4160	6419410203514	3600793	160	90	100	90	0,59	Load Break Switch	4
KU 6100	6419410203521	3600794	100	55	63	55	0,97	Load Break Switch	6
KU 6125	6419410203538	3600795	125	55	80	75	0,97	Load Break Switch	6
KU 6160	6419410203545	3600796	160	90	100	90	0,97	Load Break Switch	6
KU 8100	6419410203552	3600797	100	55	63	55	1,18	Load Break Switch	8
KU 8125	6419410203569	3600798	125	55	80	75	1,18	Load Break Switch	8
KU 8160	6419410203576	3600799	160	90	100	90	1,18	Load Break Switch	8

### ACCESSORIES



Type	Accessory	Description	For	EAN	E-number
LK10	Handle	Black	3- & 4-pole	6419410222539	3600934
LK10 Y/R	Handle	Yellow/red	3- & 4-pole	6419410222553	3600935
LK11	Handle	Black	3- & 4-pole	6419410222607	3600936
LK11 Y/R	Handle	Yellow/red	3- & 4-pole	6419410222614	3600937
LK11 IP69K	Handle	Black	3- & 4-pole	6419410483060	3600967
LK11 IP69K Y/R	Handle	Yellow/red	3- & 4-pole	6419410483077	3600968
L=100 AD11	Shaft	Length 100 mm, aluminium	With LK10 and LK11 handles	6419410253106	3662291
L=200 AD11	Shaft	Length 200 mm, aluminium	With LK10 and LK11 handles	6419410253113	3662292
L=300 AD11	Shaft	Length 300 mm, aluminium	With LK10 and LK11 handles	6419410253120	3662293
L=100 AD11/VT	Shaft	Length 100 mm, steel, slanted	With LK10 and LK11 handles	6419410253168	3600231
L=200 AD11/VT	Shaft	Length 200 mm, steel, slanted	With LK10 and LK11 handles	6419410253175	3600271
L=300 AD11/VT	Shaft	Length 300 mm, steel, slanted	With LK10 and LK11 handles	6419410253182	3600272
PK160KU	Parallel Kit	Parallel kit	For 2 x 3- or 4-pole switches	6419410203668	3600816
1.V160KU	Auxiliary contact	1NO/1NC	For all configurations	6419410300022	3600819
2.V160KU	Auxiliary contact	2NO/2NC	For all configurations	6419410300114	3600825
LS/VS 160 3P	Cover	Terminal cover for 3 poles	For all configurations. Covers 3 poles.	6419410203699	3600817
LS/VS N160	Cover	Terminal cover for N-pole	4- & 8-pole and 4-pole change-over	6419410203705	3600818
LK12	Handle	Black	6- & 8-pole	6419410222683	3600766
LK12 Y/R	Handle	Yellow/red	6- & 8-pole	6419410222690	3600767
L=100 AD12/T	Shaft	Length 100 mm, steel	With LK12 handle	6419410253045	3662301
L=200 AD12/T	Shaft	Length 200 mm, steel	With LK12 handle	6419410253052	3662302
L=300 AD12/T	Shaft	Length 300 mm, steel	With LK12 handle	6419410253069	3662303



**Attention! Cable connectors must be used with Al-cables. With Cu-cables cable connector usage is optional. Other connectors may be compatible, ask for more options.**

## CABLE CONNECTORS - SUGGESTIONS PER CABLE CROSS SECTION

100 - 160 A, Al cable	TOP			BOTTOM			4-POLE	
Terminal position	1L1	3L2	5L3	2T1	4T2	6T3	7N (TOP)	8N (BOTTOM)
2.5 - 50 mm <sup>2</sup>								
Connector	KKL1x50T2	KKL1x50T2	KKL1x50T2	KKL1x50T2	KKL1x50T2	KKL1x50T2	KKL1x50T2	KKL1x50T2
Terminal cover	-	LS/VS 160 3P (for 3 poles)	-	-	LS/VS 160 3P (for 3 poles)	-	LS N160	LS N160
70 - 120 mm <sup>2</sup>								
Connector	KKL1x120T	KKL1x120T	KKL1x120T	KKL1x120T	KKL1x120T	KKL1x120T	KKL1x120T	KKL1x120T
Terminal cover	-	LS/VS 160 3P (for 3 poles)	-	-	LS/VS 160 3P (for 3 poles)	-	LS N160	LS N160

**All connectors and more information available in KATKO ConnectSafe Catalogue. You will find it here: [www.katko.com/downloads](http://www.katko.com/downloads)**

## TECHNICAL DATA

LOAD BREAK SWITCHES	KU ROTARY LBS			
	100A	125A	160A	
Rated insulation voltage, $U_i$ (V)	800	800	800	
Rated thermal current, $I_{th}$ (A)	125	160	200	
Nominal values with cable size (mm <sup>2</sup> )	70	70	95	
Rated operational current, $I_o$ (A)				
AC-21A	400/415V	125	160	160
	500V	125	160	160
	690V	125	160	160
AC-22A	400/415V	100	125	160
	500V	100	125	160
	690V	100	125	160
AC-23A	400/415V	100	125	160
	500V	63	80	100
	690V	63	80	100
	1000V	-	-	-
Rated operational power for 3-phase (1500 r.p.m.) squirrel cage induction motors (kW)				
AC-23	400/415V	55	55	90
	500V	37	55	55
	690V	55	75	90
Rated fused short circuit current				
Back-up fuse (A)	160	160	160	
R.M.S. value, $I_r$ (kA)	65	65	65	
Peak value (kA)	15	15	15	
Impulse withstand voltage, $U_{imp}$ (kV)	8	8	8	
Rated short circuit making capacity, $I_{cm}$ (kA)				
	690V	8	8	8
Rated short time withstand current (1 s), $I_{sw}$ (kA)				
	690V	5	5	5
Rated breaking capacity, $I_{cn}$ (A)				
AC-23	400/415V	800	1000	1280
	500V	504	640	800
	690V	504	640	800
Electrical endurance (number of operations)	2000	2000	2000	
Mechanical endurance (number of operations)	16000	16000	16000	
Terminals / Bolt size Cu (mm <sup>2</sup> )	6-70	6-70	6-70	
Max terminal torque (Nm)	6	6	6	

## 6 AND 8-POLE CONFIGURATIONS

- For a 6 or 8 -pole configuration
  - 2 x 3 or 4-pole KU switches
  - 1 x Parallel kit: PK160KU
  - 1 x External handle (LK12) for 6 or 8-pole
  - 1 x Shaft for LK12

## CONNECTORS

Type	EAN	E-NO
KKL1x50T2	6419410378502	1942080
KKL1x120T	6419410378700	1942102



**KATKO ConnectSafe Catalogue.**  
[www.katko.com/downloads](http://www.katko.com/downloads)

## LOAD BREAK SWITCHES 200-250A & 160A (P) ROTARY SWITCHES LOADSAFE KU SERIES



- Reliable switch for demanding industrial applications
- Made of 100% recyclable thermoplastic material
- The modular structure enables the drive mechanism position to be varied, mention when ordering
- Easy to install auxiliary contacts (1.V160KU & 2.V160KU)
- Available with terminal covers (LS250F (EAN 6419410205402) & LS250H (EAN 6419410205419)) and phase barriers (VS250 (EAN 6419410205396))
- Available with direct handle (Operation = Direct handle); or handle (LKX 100) and shaft (T6 AD12, 200mm shaft) (Operation = Rotary)
- Available with yellow/red handle (LKX 100 Y/R) and different length shaft when ordered separately
- 160 (P) model is an option for Katko's regular 160 A switch and suitable for industrial applications



reddot winner 2021  
industrial design

Made of recyclable halogen-free V0 plastic and next generation modular design. LoadSafe KU 200-800 A range was awarded with Red Dot (2021) industrial product design award

### SWITCHES

Type	EAN	E-number	AC-23A 690 V (A)	AC-23A 690 V (kW)	Weight (kg)	Operation	Switch Type	Number of Poles
External handle and shaft								
KU 3200	6419410205198	3602984	200	160	1	External handle	Load Break Switch	3
KU 3250	6419410205204	3602985	250	250	1	External handle	Load Break Switch	3
KU 4200	6419410205211	3602986	200	160	1,3	External handle	Load Break Switch	4
KU 4250	6419410205228	3602987	250	250	1,3	External handle	Load Break Switch	4
KU 6200	6419410205235	3602988	200	160	2,1	External handle	Load Break Switch	6
KU 6250	6419410205242	3602989	250	250	2,1	External handle	Load Break Switch	6
KU 8200	6419410205259	3602990	200	160	2,6	External handle	Load Break Switch	8
KU 8250	6419410205266	3602991	250	250	2,6	External handle	Load Break Switch	8
KU 3160P	6419410205464	3609223	160	132	1	External handle	Load Break Switch	3
KU 4160P	6419410205471	3609224	160	132	1,3	External handle	Load Break Switch	4
KU 6160P	6419410205488	3609225	160	132	2,1	External handle	Load Break Switch	6
KU 8160P	6419410205495	3609226	160	132	2,6	External handle	Load Break Switch	8
Direct handle								
KU 3200 SV	6419410205310	3602996	200	160	1	Direct handle	Load Break Switch	3
KU 3250 SV	6419410205327	3602997	250	250	1	Direct handle	Load Break Switch	3
KU 4200 SV	6419410205334	3602998	200	160	1,3	Direct handle	Load Break Switch	4
KU 4250 SV	6419410205341	3602999	250	250	1,3	Direct handle	Load Break Switch	4
KU 6200 SV	6419410205426	3609219	200	160	2,1	Direct handle	Load Break Switch	6
KU 6250 SV	6419410205433	3609220	250	250	2,1	Direct handle	Load Break Switch	6
KU 8200 SV	6419410205440	3609221	200	160	2,6	Direct handle	Load Break Switch	8
KU 8250 SV	6419410205457	3609222	250	250	2,6	Direct handle	Load Break Switch	8
KU 3160P SV	6419410205525	3609229	160	132	1	Direct handle	Load Break Switch	3
KU 4160P SV	6419410205532	3609230	160	132	1,3	Direct handle	Load Break Switch	4
KU 6160P SV	6419410205549	3609231	160	132	2,1	Direct handle	Load Break Switch	6
KU 8160P SV	6419410205556	3609232	160	132	2,6	Direct handle	Load Break Switch	8

### RELATED ACCESSORIES

Type	Accessory	Description	For	EAN	E-number
LKX 100	Handle	Black handle	Standard external handle	6419410483565	3602850
LKX 100 Y/R	Handle	Yellow/red handle	Optional external handle	6419410483596	3602852
LS 250H	Terminal cover	1-pole terminal cover. High model.	Use with vertical (VB & VM) cable connectors	6419410205419	3609218
LS 250F	Terminal cover	1-pole terminal cover. Flush model.	Use with regular cable connectors	6419410205402	3609217
VS 250	Phase Barrier	Phase barrier	For all configurations	6419410205396	3609216
L=200 AD12/T6	Shaft	Length 200 mm, 6 mm steel shaft	Standard shaft with external handle	6419410271063	3609237
1.V160KU	Auxiliary contact	1NO/1NC	For all configurations	6419410300022	3600819
2.V160KU	Auxiliary contact	2NO/2NC	For all configurations	6419410300114	3600825



**Attention! Cable connectors must be used with Al-cables. With Cu-cables cable connector usage is optional. Other connectors may be compatible, ask for more options.**

## CABLE CONNECTORS - SUGGESTIONS PER CABLE CROSS SECTION

100 - 160 A, Al cable	TOP			BOTTOM		
	1L1	3L2	5L3	2T1	4T2	6T3
Terminal position						
2.5 - 50 mm <sup>2</sup>						
Connector	KKL2x50	KKL2x50	KKL2x50	KKL2x50	KKL2x50	KKL2x50
Terminal cover	LS250F	LS250F	LS250F	LS250F	LS250F	LS250F
70 - 95 mm <sup>2</sup>						
Connector	KKL1x95	KKL1x95	KKL1x95	KKL1x95	KKL1x95	KKL1x95
Terminal cover	LS250F	LS250F	LS250F	LS250F	LS250F	LS250F
120 - 150 mm <sup>2</sup>						
Connector, option 1	KKL1x150	KKL1x150	KKL1x150	KKL1x150	KKL1x150	KKL1x150
Connector, option 2	KKL2x150VM	KKL2x150VM	KKL2x150VM	KKL2x150VM	KKL2x150VM	KKL2x150VM
Connector, option 3	KKL2x150VB	KKL2x150VB	KKL2x150VB	KKL2x150VB	KKL2x150VB	KKL2x150VB
Connector, option 4	KLH2x150	KLH2x150	KLH2x150	KLH2x150	KLH2x150	KLH2x150
Terminal cover for option 1	LS250F	LS250F	LS250F	LS250F	LS250F	LS250F
Terminal cover for option 2 & 3	LS250H	LS250H	LS250H	LS250H	LS250H	LS250H
Terminal cover for option 4	-	-	-	-	-	-
Spreader	-	-	-	-	-	-

**All connectors and more information available in KATKO ConnectSafe Catalogue. You will find it here: [www.katko.com/downloads](http://www.katko.com/downloads)**

## TECHNICAL DATA

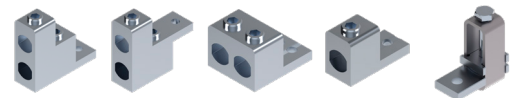
LOAD BREAK SWITCHES	KU ROTARY LBS			
	160A (P)	200A	250A	
Rated insulation voltage, $U_i$ (V)	1000	1000	1000	
Rated thermal current, $I_{th}$ (A)	200	250	315	
Nominal values with cable size (mm <sup>2</sup> )	95	95	120	
Rated operational current, $I_p$ (A)				
AC-21A	400/415V	160	200	250
	500V	160	200	250
	690V	160	200	250
AC-22A	400/415V	160	200	250
	500V	160	200	250
	690V	160	200	250
AC-23A	400/415V	160	200	250
	500V	160	200	250
	690V	160	200	250
	1000V	-	-	135
Rated operational power for 3-phase (1500 r.p.m.) squirrel cage induction motors (kW)				
AC-23	400/415V	90	110	132
	500V	110	132	160
	690V	132	160	250
Rated fused short circuit current				
Back-up fuse (A)	250	250	250	
R.M.S. value, $I_k$ (kA)	100***	100***	100***	
Peak value (kA)	26	26	26	
Impulse withstand voltage, $U_{imp}$ (kV)	12	12	12	
Rated short circuit making capacity, $I_{cm}$ (kA)				
690V	14	14	14	
Rated short time withstand current (1 s), $I_{cw}$ (kA)				
690V	8***	8***	8***	
Rated breaking capacity, $I_{cn}$ (A)				
AC-23	400/415V	1280	1600	2000
	500V	1280	1600	2000
	690V	1280	1600	2000
Electrical endurance (number of operations)	2000	2000	2000	
Mechanical endurance (number of operations)	16000	16000	16000	
Terminals / Bolt size Cu (mm <sup>2</sup> )	M8	M8	M8	
Max terminal torque (Nm)	15-22	15-22	15-22	
*** 1000V				
**** 50kA with 315A fuse				

## 6 AND 8-POLE CONFIGURATIONS

- 6 and 8 -pole configurations are factory assembled and cannot be self-assembled. 6 and 8 -pole configurations are always supplied with an external handle and a shaft.

## CONNECTORS

Type	EAN	E-NO
KKL2x50	6419410378588	1942088
KKL1x95	6419410200230	1942129
KKL1x150	6419410378618	1942091
KKL2x150VM	6419410484302	1942111
KKL2x150VB	6419410484319	1942112
KLH2x150	6419410358580	1942117



**KATKO ConnectSafe Catalogue.**  
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## LOAD BREAK SWITCHES 315-400 A ROTARY SWITCHES LOADSAFE KU SERIES



- Reliable switch for demanding industrial applications
- Made of 100% recyclable thermoplastic material
- The modular structure enables the drive mechanism position to be varied, mention when ordering
- Easy to install auxiliary contacts (1.V160KU & 2.V160KU)
- Available with terminal covers (LS800F & LS800H) and phase barriers (VS800)
- Available with direct handle (Operation = Direct handle); or handle (LKX 150) and shaft (LVK=228, 228mm shaft) (Operation = Rotary)
- Available with yellow/red handle (LKX 150 Y/R) and different length shaft when ordered separately



reddot winner 2021  
industrial design

Made of recyclable halogen-free V0 plastic and next generation modular design. LoadSafe KU 200-800 A range was awarded with Red Dot (2021) industrial product design award

## SWITCHES

Type	EAN	E-number	AC-23A 690 V (A)	AC-23A 690 V (kW)	Weight (kg)	Operation	Switch Type	Number of Poles
<b>External handle and shaft</b>								
KU 3315	6419410300152	3602923	315	315	2,05	External handle	Load Break Switch	3
KU 3400	6419410300169	3602924	400	355	2,05	External handle	Load Break Switch	3
KU 4315	6419410300176	3602925	315	315	2,49	External handle	Load Break Switch	4
KU 4400	6419410300183	3602926	400	355	2,49	External handle	Load Break Switch	4
KU 6315	6419410300190	3602927	315	315	4,884	External handle	Load Break Switch	6
KU 6400	6419410300213	3602928	400	355	4,884	External handle	Load Break Switch	6
KU 8315	6419410300220	3602929	315	315	5,782	External handle	Load Break Switch	8
KU 8400	6419410300237	3602930	400	355	5,782	External handle	Load Break Switch	8
<b>Direct handle</b>								
KU 3315 SV	6419410300282	3602935	315	315	2,05	Direct handle	Load Break Switch	3
KU 3400 SV	6419410300299	3602936	400	355	2,05	Direct handle	Load Break Switch	3
KU 4315 SV	6419410300312	3602937	315	315	2,49	Direct handle	Load Break Switch	4
KU 4400 SV	6419410300329	3602938	400	355	2,49	Direct handle	Load Break Switch	4

## RELATED ACCESSORIES

Type	Accessory	Description	For	EAN	E-number
LS 400H	Terminal cover	1-pole terminal cover. High model.	Use with vertical (VB & VM) cable connectors	6419410300398	3602945
LS 400F	Terminal cover	1-pole terminal cover. Flush model.	Use with regular cable connectors	6419410300381	3602944
VS 400	Phase Barrier	Phase barrier	For all configurations	6419410300374	3602943
1.V160KU	Auxiliary contact	1NO/1NC	For all configurations	6419410300022	3600819
2.V160KU	Auxiliary contact	2NO/2NC	For all configurations	6419410300114	3600825
LVK=228	Shaft	Length 228 mm, steel	Delivered with external handle	6419410221440	3600348
LKX 150	Handle	Black handle	Delivered as external handle	6419410483572	3602851
LKX 150 Y/R	Handle	Yellow/red handle	Option as external handle	6419410483602	3602853



**Attention! Cable connectors must be used with Al-cables. With Cu-cables cable connector usage is optional. Other connectors may be compatible, ask for more options.**

## CABLE CONNECTORS - SUGGESTIONS PER CABLE CROSS SECTION

315 - 400 A, Al cable	TOP			BOTTOM		
Terminal position	1L1	3L2	5L3	2T1	4T2	6T3
<b>2.5 - 50 mm<sup>2</sup></b>						
Connector	KKL2x50	KKL2x50	KKL2x50	KKL2x50	KKL2x50	KKL2x50
Terminal cover	LS400F	LS400F	LS400F	LS400F	LS400F	LS400F
<b>70 - 95 mm<sup>2</sup></b>						
Connector	KKL1x95	KKL1x95	KKL1x95	KKL1x95	KKL1x95	KKL1x95
Terminal cover	LS400F	LS400F	LS400F	LS400F	LS400F	LS400F
<b>120 - 150 mm<sup>2</sup></b>						
Connector, option 1	KKL1x150	KKL1x150	KKL1x150	KKL1x150	KKL1x150	KKL1x150
Connector, option 2	KKL2x150VM	KKL2x150VM	KKL2x150VM	KKL2x150VM	KKL2x150VM	KKL2x150VM
Connector, option 3	KKL2x150VB	KKL2x150VB	KKL2x150VB	KKL2x150VB	KKL2x150VB	KKL2x150VB
Connector, option 4	KLH2x150	KLH2x150	KLH2x150	KLH2x150	KLH2x150	KLH2x150
Terminal cover for option 1	LS400F	LS400F	LS400F	LS400F	LS400F	LS400F
Terminal cover for option 2 & 3	LS400H	LS400H	LS400H	LS400H	LS400H	LS400H
Terminal cover for option 4	-	-	-	-	-	-
Spreader	-	-	-	-	-	-

**All connectors and more information available in KATKO ConnectSafe Catalogue. You will find it here: [www.katko.com/downloads](http://www.katko.com/downloads)**

## TECHNICAL DATA

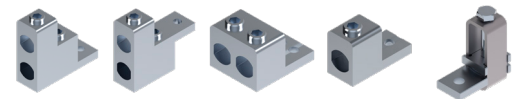
LOAD BREAK SWITCHES	KU ROTARY LBS		
	315A	400A	
Rated insulation voltage, $U_i$ (V)	1000	1000	
Rated thermal current, $I_{th}$ (A)	315	400	
Nominal values with cable size (mm <sup>2</sup> )	185	240	
Rated operational current, $I_n$ (A)			
AC-21A	400/415V	315	400
	500V	315	400
	690V	315	400
AC-22A	400/415V	315	400
	500V	315	400
	690V	315	400
AC-23A	400/415V	315	400
	500V	315	400
	690V	315	400
	1000V	-	200
Rated operational power for 3-phase (1500 r.p.m.) squirrel cage induction motors (kW)			
AC-23	400/415V	160	200
	500V	200	250
	690V	315	355
Rated fused short circuit current			
Back-up fuse (A)	400	400	
R.M.S. value, $I_k$ (kA)	100	100	
Peak value (kA)	42	42	
Impulse withstand voltage, $U_{imp}$ (kV)	12	12	
Rated short circuit making capacity, $I_{cm}$ (kA)			
	690V	27,5	27,5
Rated short time withstand current (1 s), $I_{cw}$ (kA)			
	690V	13.5...	13.5...
Rated breaking capacity, $I_{bn}$ (A)			
AC-23	400/415V	2520	3200
	500V	2520	3200
	690V	2520	3200
Electrical endurance (number of operations)	2000	2000	
Mechanical endurance (number of operations)	10000	10000	
Terminals / Bolt size Cu (mm <sup>2</sup> )	M10	M10	
Max terminal torque (Nm)	30-44	30-44	
*** 1000V			

## 6 AND 8-POLE CONFIGURATIONS

- 6 and 8 -pole configurations are factory assembled and cannot be self-assembled. 6 and 8 -pole configurations are always supplied with an external handle and a shaft.

## CONNECTORS

Type	EAN	E-NO
KKL2x50	6419410378588	1942088
KKL1x95	6419410200230	1942129
KKL1x150	6419410378618	1942091
KKL2x150VM	6419410484302	1942111
KKL2x150VB	6419410484319	1942112
KLH2x150	6419410358580	1942117



**KATKO ConnectSafe Catalogue.**  
[www.katko.com/downloads](http://www.katko.com/downloads)

## LOAD BREAK SWITCHES 630-800 A ROTARY SWITCHES LOADSAFE KU SERIES



- Reliable switch for demanding industrial applications
- Made of 100% recyclable thermoplastic material
- The modular structure enables the drive mechanism position to be varied, mention when ordering
- Easy to install auxiliary contacts (1.V160KU & 2.V160KU)
- Available with terminal covers (LS800F & LS800H) and phase barriers (VS800)
- Available with direct handle (Operation = Direct handle); or handle (LKX 150) and shaft (LVK=228, 228mm shaft) (Operation = Rotary)
- Available with yellow/red handle (LKX 150 Y/R) and different length shaft when ordered separately



reddot winner 2021  
industrial design

Made of recyclable halogen-free V0 plastic and next generation modular design. LoadSafe KU 200-800 A range was awarded with Red Dot (2021) industrial product design award

## SWITCHES

Type	EAN	E-number	AC-23A 400/415 V (A)	AC-23A 400/415 V (kW)	AC-23A 690 V (A)	AC-23A 690 V (kW)	Weight (kg)	Operation	Switch Type	Number of Poles
<b>External handle and shaft</b>										
KU 3630	6419410483626	3602826	630	355	630	630	4,545	External handle	Load Break Switch	3
KU 3800	6419410483633	3602827	800	400	800	800	4,545	External handle	Load Break Switch	3
KU 4630	6419410483640	3602828	630	355	630	630	5,645	External handle	Load Break Switch	4
KU 4800	6419410483657	3602829	800	400	800	800	5,645	External handle	Load Break Switch	4
KU 6630	6419410483664	3602842	630	355	630	630	8,985	External handle	Load Break Switch	6
KU 6800	6419410483671	3602843	800	400	800	800	8,985	External handle	Load Break Switch	6
KU 8630	6419410483688	3602844	630	355	630	630	11,185	External handle	Load Break Switch	8
KU 8800	6419410483695	3602845	800	400	800	800	11,185	External handle	Load Break Switch	8
<b>Direct handle</b>										
KU 3630SV	6419410483992	3602883	630	355	630	630	4,545	Direct handle	Load Break Switch	3
KU 3800SV	6419410484005	3602884	800	400	800	800	4,545	Direct handle	Load Break Switch	3
KU 4630SV	6419410484012	3602885	630	355	630	630	5,645	Direct handle	Load Break Switch	4
KU 4800SV	6419410484029	3602886	800	400	800	800	5,645	Direct handle	Load Break Switch	4

## RELATED ACCESSORIES

Type	Accessory	Description	For	EAN	E-number
1.V160KU	Auxiliary contact	1NO/1NC	For all configurations	6419410300022	3600819
2.V160KU	Auxiliary contact	2NO/2NC	For all configurations	6419410300114	3600825
LVK=228	Shaft	Length 228 mm, steel	Delivered with external handle	6419410221440	3600348
LKX 150	Handle	Black handle	Delivered as external handle	6419410483572	3602851
LKX 150 Y/R	Handle	Yellow/red handle	Option as external handle	6419410483602	3602853
LS800F	Terminal cover	Terminal cover, low model	Use with regular cable connectors	6419410484487	3602913
LS800H	Terminal cover	Terminal cover, high model	Use with vertical (VB & VM) cable connectors	6419410484494	3602914
VS800	Phase barrier	Phase barrier	For all configurations	6419410483756	3602856
ALK800	Spreader	1 pcs	3 and 4-pole	6419410205884	3602982
ALK800C	Spreader	1 pcs	3-pole	6419410205877	3602983





All connectors and more information available in KATKO ConnectSafe Catalogue. You will find it here: [www.katko.com/downloads](http://www.katko.com/downloads)

Attention! Cable connectors must be used with Al-cables. With Cu-cables cable connector usage is optional. Other connectors may be compatible, ask for more options.

## CABLE CONNECTORS - SUGGESTIONS PER CABLE CROSS SECTION

630 - 800 A, Al cable	TOP			BOTTOM		
Terminal position	1L1	3L2	5L3	2T1	4T2	6T3
2,5 - 50 mm <sup>2</sup>						
Connector	KKL2x50	KKL2x50	KKL2x50	KKL2x50	KKL2x50	KKL2x50
Terminal cover	LS800F	LS800F	LS800F	LS800F	LS800F	LS800F
70 - 95 mm <sup>2</sup>						
Connector	KKL1x95	KKL1x95	KKL1x95	KKL1x95	KKL1x95	KKL1x95
Terminal cover	LS800F	LS800F	LS800F	LS800F	LS800F	LS800F
120 - 150 mm <sup>2</sup>						
Connector, option 1	KKL1x150	KKL1x150	KKL1x150	KKL1x150	KKL1x150	KKL1x150
Connector, option 2	KKL2x150VM	KKL2x150VM	KKL2x150VM	KKL2x150VM	KKL2x150VM	KKL2x150VM
Connector, option 3	KKL2x150VB	KKL2x150VB	KKL2x150VB	KKL2x150VB	KKL2x150VB	KKL2x150VB
Connector, option 4	KLH2x150	KLH2x150	KLH2x150	KLH2x150	KLH2x150	KLH2x150
Terminal cover for option 1	LS800F	LS800F	LS800F	LS800F	LS800F	LS800F
Terminal cover for option 2 & 3	LS800H	LS800H	LS800H	LS800H	LS800H	LS800H
Terminal cover for option 4	-	-	-	-	-	-
185 - 240 mm <sup>2</sup>						
Connector, option 1	KKL1x240	KKL1x240	KKL1x240	KKL1x240	KKL1x240	KKL1x240
Connector, option 2	KKL2x240VM	KKL2x240VM	KKL2x240VM	KKL2x240VM	KKL2x240VM	KKL2x240VM
Connector, option 3	KKL2x240VB	KKL2x240VB	KKL2x240VB	KKL2x240VB	KKL2x240VB	KKL2x240VB
Connector, option 4	KLH2x240	KLH2x240	KLH2x240	KLH2x240	KLH2x240	KLH2x240
Terminal cover for option 1	LS800F	LS800F	LS800F	LS800F	LS800F	LS800F
Terminal cover for option 2 & 3	LS800H	LS800H	LS800H	LS800H	LS800H	LS800H
Terminal cover for option 4	-	-	-	-	-	-
300 mm <sup>2</sup>						
Connector, option 1	KKL1x300	KKL1x300	KKL1x300	KKL1x300	KKL1x300	KKL1x300
Connector, option 2	KKL2x300VM	KKL2x300VM	KKL2x300VM	KKL2x300VM	KKL2x300VM	KKL2x300VM
Connector, option 3	KKL2x300VB	KKL2x300VB	KKL2x300VB	KKL2x300VB	KKL2x300VB	KKL2x300VB
Connector, option 4	KLH2x300	KLH2x300	KLH2x300	KLH2x300	KLH2x300	KLH2x300
Terminal cover for option 1	LS800F	LS800F	LS800F	LS800F	LS800F	LS800F
Terminal cover for option 2 & 3	LS800H	LS800H	LS800H	LS800H	LS800H	LS800H
Terminal cover for option 4	-	-	-	-	-	-

## TECHNICAL DATA

LOAD BREAK SWITCHES	KU ROTARY LBS		
	630A	800A	
Rated insulation voltage, $U_i$ (V)	1000	1000	
Rated thermal current, $I_{th}$ (A)	630	800	
Nominal values with cable size (mm <sup>2</sup> )	2x185	2x240	
Rated operational current, $I_n$ (A)			
AC-21A	400/415V	630	800
	500V	630	800
	690V	630	800
AC-22A	400/415V	630	800
	500V	630	800
	690V	630	800
AC-23A	400/415V	630	800
	500V	630	800
	690V	630	800
	1000V	-	400
Rated operational power for 3-phase (1500 r.p.m.) squirrel cage induction motors (kW)			
AC-23	400/415V	355	400
	500V	400	560
	690V	630	800
Rated fused short circuit current			
Back-up fuse (A)	630	800	
R.M.S. value, $I_k$ (kA)	100	100	
Peak value (kA)	76	76	
Impulse withstand voltage, $U_{imp}$ (kV)	12	12	
Rated short circuit making capacity, $I_{cm}$ (kA)			
	690V	60	60
Rated short time withstand current (1 s), $I_{sw}$ (kA)			
	690V	28***	28***
Rated breaking capacity, $I_{bn}$ (A)			
AC-23	400/415V	5040	6400
	500V	5040	6400
	690V	5040	6400
Electrical endurance (number of operations)	2000	2000	
Mechanical endurance (number of operations)	10000	10000	
Terminals / Bolt size Cu (mm <sup>2</sup> )	M12	M12	
Max terminal torque (Nm)	50-75	50-75	
*** 1000V			

## 6 AND 8-POLE CONFIGURATIONS

- 6 and 8 -pole configurations are factory assembled and cannot be self-assembled. 6 and 8 -pole configurations are always supplied with an external handle and a shaft.

## CONNECTORS

Type	EAN	E-NO
KKL2x50	6419410378588	1942088
KKL1x95	6419410200230	1942129
KKL1x150	6419410378618	1942091
KKL2x150VM	6419410484302	1942111
KKL2x150VB	6419410484319	1942112
KLH2x150	6419410358580	1942117
KKL1x240	6419410378632	1942093
KKL2x240VM	6419410484326	1942113
KKL2x240VB	6419410484333	1942114
KLH2x240	6419410358597	1942118
KKL1x300	6419410484289	1942109
KKL2x300VM	6419410484340	1942115
KKL2x300VB	6419410484357	1942116
KLH2x300	6419410358603	1942119

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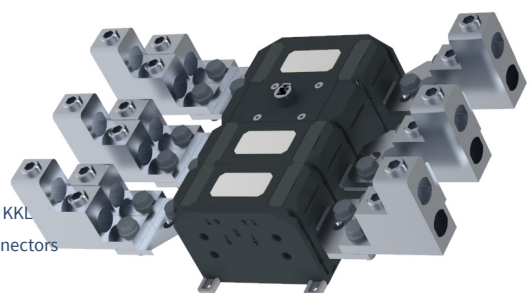


Image:  
KU 3800  
with ALK800 spreaders and KKL  
1x300 and KKL2x300VB connectors

## LOAD BREAK SWITCHES 200-250 A COMPACT ROTARY SWITCHES LOADSAFE VKA SERIES



- Compact size
- 3-pole and 4-pole VKA-switches as standard, 2-pole upon request
- Switch technology by means of silver contacts ensures safe and durable operation
- 4-pole versions with early-make and late-break neutral pole
- 200-250A: Handle LK12 for 200A-250A and shaft L=228 AD12/T6 included, suitable for 250 mm panel board
- Terminal covers LS/VKAC and phase barriers VS/VKAC enable safe use

### SWITCHES

Type	EAN	E-number	AC-23A 400/415 V (A)	AC-23A 400/415 V (kW)	Weight (kg)	Switch Type	Number of Poles
Without terminal covers							
VKA 3200	6419410218020	3609240	200	110	1,4	Load Break Switch	3
VKA 3250	6419410218044	3600226	250	132	1,4	Load Break Switch	3
VKA 4200	6419410219126	3609241	200	110	1,6	Load Break Switch	4
VKA 4250	6419410219140	3600228	250	132	1,6	Load Break Switch	4
With terminal covers							
VKA 3200 LS/VS	6419410218037	3609242	200	110	1,5	Load Break Switch	3
VKA 3250 LS/VS	6419410218051	3600227	250	132	1,5	Load Break Switch	3
VKA 4200 LS/VS	6419410219133	3609243	200	110	1,7	Load Break Switch	4
VKA 4250 LS/VS	6419410219157	3600229	250	132	1,7	Load Break Switch	4



### RELATED ACCESSORIES

Type	Accessory	Description	For	EAN	E-number
LK12	Handle	Black	For all configurations	6419410222683	3600766
LK12 Y/R	Handle	Yellow/red	For all configurations	6419410222690	3600767
L=100 AD12/T	Shaft	Length 100 mm, steel	With LK12 handle	6419410253045	3662301
L=200 AD12/T	Shaft	Length 200 mm, steel	With LK12 handle	6419410253052	3662302
L=300 AD12/T	Shaft	Length 300 mm, steel	With LK12 handle	6419410253069	3662303
LS/VKAC	Terminal cover	Transparent blue plastic	For all configurations	6419410218099	3609238
VS/VKAC	Phase barrier	Transparent white plastic	For all configurations	6419410218082	3609239
VKAC 1.V	Auxiliary contact	1NO/1NC	For all configurations	6419410300800	3600918
VKAC 2.V	Auxiliary contact	2NO/2NC	For all configurations	6419410300909	3600919
L=228 AD12/T6	Shaft	Length 228 mm, steel	With LK12 handle	6419410271087	3600827

**Attention! Cable connectors must be used with Al-cables. With Cu-cables cable connector usage is optional. Other connectors may be compatible, ask for more options.**

## CABLE CONNECTORS - SUGGESTIONS PER CABLE CROSS SECTION

200 - 250 A, Al cable	TOP			BOTTOM		
Terminal position	1L1	3L2	5L3	2T1	4T2	6T3
<b>2.5 - 50 mm<sup>2</sup></b>						
Connector	KKL2x50	KKL2x50	KKL2x50	KKL2x50	KKL2x50	KKL2x50
Terminal cover	(included with LS/VS version)					
<b>70 - 95 mm<sup>2</sup></b>						
Connector	KKL1x95	KKL1x95	KKL1x95	KKL1x95	KKL1x95	KKL1x95
Terminal cover	(included with LS/VS version)					
<b>120 mm<sup>2</sup></b>						
Connector	KKL1x120RS	KKL1x120RS	KKL1x120RS	KKL1x120RS	KKL1x120RS	KKL1x120RS
Terminal cover	(included with LS/VS version)					

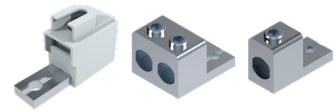
**All connectors and more information available in KATKO ConnectSafe Catalogue. You will find it here: [www.katko.com/downloads](http://www.katko.com/downloads)**

## TECHNICAL DATA

LOAD BREAK SWITCHES	VKA ROTARY LBS		
	200A	250A	
Rated insulation voltage, $U_i$ (V)	1000	1000	
Rated thermal current, $I_{th}$ (A)	200	250	
Nominal values with cable size (mm <sup>2</sup> )	95	120	
Rated operational current, $I_n$ (A)			
AC-21A	400/415V	200	250
	500V	200	250
	690V	200	250
AC-22A	400/415V	200	250
	500V	-	-
	690V	-	-
AC-23A	400/415V	200	250
	500V	-	-
	690V	-	-
	1000V	-	-
Rated operational power for 3-phase (1500 r.p.m.) squirrel cage induction motors (kW)			
AC-23	400/415V	110	132
	500V	-	-
	690V	-	-
Rated fused short circuit current			
Back-up fuse (A)	250	250	
R.M.S. value, $I_k$ (kA)	50	50	
Peak value (kA)	22	22	
Impulse withstand voltage, $U_{imp}$ (kV)	8	8	
Rated short circuit making capacity, $I_{cm}$ (kA)			
	690V	11.4*	11.4*
Rated short time withstand current (1 s), $I_{sw}$ (kA)			
	690V	6.5*	6.5*
Rated breaking capacity, $I_{bn}$ (A)			
AC-23	400/415V	1600	2000
	500V	-	-
	690V	-	-
Electrical endurance (number of operations)	2000	2000	
Mechanical endurance (number of operations)	16000	16000	
Terminals / Bolt size Cu (mm <sup>2</sup> )	M8	M8	
Max terminal torque (Nm)	15-22	15-22	
*415 V			

## CONNECTORS

Type	EAN	E-NO
KKL2x50	6419410378588	1942088
KKL1x95	6419410200230	1942129
KKL1x120RS	6419410378687	1942098



**KATKO ConnectSafe Catalogue.**  
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## LOAD BREAK SWITCHES 16-125 A TOGGLE SWITCHES LOADSAFE KUE SERIES



- DIN-rail mounting
- 3-poles
- Switch technology by means of silver contacts ensures safe and durable operation
- Available with adapter (AD1) to connect the switch to a three-phase section rail
- Available with yellow front plate and red toggle add “Y/R” at the end of the product code when ordering

### SWITCHES

Type	EAN	E-number	AC-23A 400/415 V (A)	AC-23A 400/415 V (kW)	AC-23A 690 V (A)	AC-23A 690 V (kW)	Weight (kg)	Number of Poles
<b>Without front plate</b>								
KUE 316	6419410200308	3609244	16	7,5	16	11	0,17	3
KUE 325	6419410200407	3609245	25	11	20	15	0,17	3
KUE 340	6419410200506	3609246	25	11	20	15	0,17	3
KUE 363	6419410200605	3609247	40	22	32	30	0,18	3
KUE 380	6419410200704	3609248	63	30	32	30	0,18	3
KUE 3125	6419410200902	3635401	63	30	32	30	0,18	3
<b>With front plate and AD1 adapter</b>								
KUE 316 + AD1 + K/KUE	6419410200322	3609249	16	7,5	16	11	0,21	3
KUE 325 + AD1 + K/KUE	6419410200421	3609250	25	11	20	15	0,21	3
KUE 340 + AD1 + K/KUE	6419410200520	3635030	25	11	20	15	0,21	3
KUE 363 + AD1 + K/KUE	6419410200629	3609251	40	22	32	30	0,22	3
KUE 380 + AD1 + K/KUE	6419410200728	3635035	63	30	32	30	0,22	3
KUE 3125 + AD1 + K/KUE	6419410200834	3635402	63	30	32	30	0,22	3



### RELATED ACCESSORIES

Type	Accessory	Description	For	EAN	E-number
K/KUE	Front plate	Rectangular front plate, grey	For all configurations where front plate is not included	6419410221808	3635087
R/KUE	Front plate	Round front plate, grey	For all configurations where front plate is not included	6419410221907	3635086

**Attention! Cable connectors must be used with Al-cables. With Cu-cables cable connector usage is optional. Other connectors may be compatible, ask for more options.**

## CABLE CONNECTORS - SUGGESTIONS PER CABLE CROSS SECTION

16 - 40 A, Al cable	TOP			BOTTOM		
Terminal position	1L1	3L2	5L3	2T1	4T2	6T3
<b>2.5 - 16 mm<sup>2</sup></b>						
Connector	KKL1x16	KKL1x16	KKL1x16	-	-	-
Terminal cover	-	-	-	-	-	-
<b>2.5 - 50 mm<sup>2</sup></b>						
Connector	KKL1x50M	KKL1x50M	KKL1x50M	-	-	-
Terminal cover	-	-	-	-	-	-
<b>63 - 125 A, Al cable</b>						
Terminal position	1L1	3L2	5L3	2T1	4T2	6T3
<b>2.5 - 16 mm<sup>2</sup></b>						
Connector	KKL1x16	KKL1x16	KKL1x16	-	-	-
Terminal cover	-	-	-	-	-	-
<b>25 - 50 mm<sup>2</sup></b>						
Connector	KKL1x50T2	KKL1x50T2	KKL1x50T2	KKL1x50T2	-	KKL1x50T2
Terminal cover	-	-	-	-	-	-

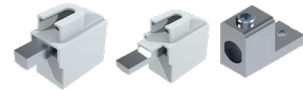
**All connectors and more information available in KATKO ConnectSafe Catalogue. You will find it here: [www.katko.com/downloads](http://www.katko.com/downloads)**

## TECHNICAL DATA

LOAD BREAK SWITCHES	KUE TOGGLE LBS						
	16A	25A	40A	63A	80A	125A	
Rated insulation voltage, $U_i$ (V)	800	800	800	800	800	690	
Rated thermal current, $I_{th}$ (A)	25	40	63	80	100	125	
Nominal values with cable size (mm <sup>2</sup> )	4	10	16	25	35	50	
Rated operational current, $I_n$ (A)							
AC-21A	400/415V	25	40	63	80	100	125
	500V	25	40	63	80	100	125
	690V	25	40	63	80	100	125
AC-22A	400/415V	16	25	40	63	80	125
	500V	16	25	40	63	80	80
	690V	16	25	40	63	80	80
AC-23A	400/415V	16	25	25	40	63	63
	500V	16	20	20	32	32	32
	690V	16	20	20	32	32	32
	1000V	-	-	-	-	-	-
Rated operational power for 3-phase (1500 r.p.m.) squirrel cage induction motors (kW)							
AC-23	400/415V	7.5	11	11	22	30	30
	500V	7.5	11	11	22	22	22
	690V	11	15	15	30	30	30
Rated fused short circuit current							
Back-up fuse (A)	63	63	63	80	80	125	
R.M.S. value, $I_k$ (kA)	50	50	50	50	50	30	
Peak value (kA)	7.2	7.2	7.2	8.7	8.7	10	
Impulse withstand voltage, $U_{imp}$ (kV)	8	8	8	8	8	8	
Rated short circuit making capacity, $I_{cm}$ (kA)							
	690V	2.5	2.5	2.5	3.1**	3.1**	3.3
Rated short time withstand current (1 s), $I_{cw}$ (kA)							
	690V	1.7	1.7	1.7	2.0	2.0	2.3
Rated breaking capacity, $I_{bn}$ (A)							
AC-23	400/415V	128	200	200	320	504	504
	500V	128	160	160	256	256	320
	690V	128	160	160	256	256	320
Electrical endurance (number of operations)	3000	3000	3000	3000	3000	3000	
Mechanical endurance (number of operations)	50000	50000	50000	50000	50000	50000	
Terminals / Bolt size Cu (mm <sup>2</sup> )	1.5-16	1.5-16	1.5-16	2.5-35	2.5-35	2.5-50	
Max terminal torque (Nm)	1.8	1.8	1.8	2.5	2.5	2.5	
** 2.5kA when CCC marked							

## CONNECTORS

Type	EAN	E-NO
KKL1x16	6419410378496	1942079
KKL1x50M	6419410378519	1942081
KKL1x50T2	6419410378502	1942080



**KATKO ConnectSafe Catalogue.**  
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## LOAD BREAK SWITCHES 125-250 A TOGGLE SWITCHES LOADSAFE EVA SERIES



- Switch technology by means of silver contacts ensures a long life expectancy and safe use in demanding conditions

### 125-160 A:

- Available also with yellow front plate and red toggle (Y/R)

### 200-250 A:

- 3-pole and 4-pole
- Available with terminal covers and phase barriers (LS/VS)
- Available also with red toggle (R)

## SWITCHES

Type	EAN	E-number	AC-23A 400/415 V (A)	AC-23A 400/415 V (kW)	Weight (kg)	Switch Type	Number of Poles
<b>125-160 A, with front plate</b>							
EVA 3125+K/EVA	6419410202517	3635033	80	45	0,51	Load Break Switch	3
EVA 3160+K/EVA	6419410203019	3635039	125	75	0,51	Load Break Switch	3
EVA 3125+K/EVA R	6419410202524	3600801	80	45	0,51	Load Break Switch	3
EVA 3160+K/EVA R	6419410203026	3600803	125	75	0,51	Load Break Switch	3
EVA 3125+K/EVA Y/R	6419410202531	3600802	80	45	0,51	Load Break Switch	3
EVA 3160+K/EVA Y/R	6419410203033	3600804	125	75	0,51	Load Break Switch	3
<b>200-250 A, without front plate and terminal covers</b>							
EVA 3200	6419410203156	3609252	160	75	0,9	Load Break Switch	3
EVA 3250	6419410203200	3600806	200	90	0,9	Load Break Switch	3
EVA 3200 R	6419410203163	3609253	160	75	0,9	Load Break Switch	3
EVA 3250 R	6419410203217	3600807	200	90	0,9	Load Break Switch	3
EVA 4200	6419410203262	3600840	160	75	1,1	Load Break Switch	4
EVA 4250	6419410203309	3600841	200	90	1,1	Load Break Switch	4
EVA 4200 R	6419410203279	3600842	160	75	1,1	Load Break Switch	4
EVA 4250 R	6419410203316	3600843	200	90	1,1	Load Break Switch	4
<b>200-250 A, with terminal covers and phase barriers</b>							
EVA 3200 LS/VS	6419410203170	3609254	160	75	0,9	Load Break Switch	3
EVA 3250 LS/VS	6419410203224	3600808	200	90	0,9	Load Break Switch	3
EVA 3200 R LS/VS	6419410203187	3609255	160	75	0,9	Load Break Switch	3
EVA 3250 R LS/VS	6419410203231	3600809	200	90	0,9	Load Break Switch	3
EVA 4200 LS/VS	6419410203286	3600844	160	75	1,2	Load Break Switch	4
EVA 4250 LS/VS	6419410203323	3600845	200	90	1,2	Load Break Switch	4
EVA 4200 R LS/VS	6419410203293	3600846	160	75	1,2	Load Break Switch	4
EVA 4250 R LS/VS	6419410203330	3600847	200	90	1,2	Load Break Switch	4



## RELATED ACCESSORIES

Type	Accessory	Description	For	EAN	E-number
ALK 3160	Spreader	3P switch	3- & 4-pole and change-over	6419410225301	3635078
ALK 4160	Spreader	4P switch	3- & 4-pole and change-over	6419410225400	3635079

**Attention! Cable connectors must be used with Al-cables. With Cu-cables cable connector usage is optional. Other connectors may be compatible, ask for more options.**

## CABLE CONNECTORS - SUGGESTIONS PER CABLE CROSS SECTION

125 - 160 A, Al cable	TOP			BOTTOM		
Terminal position	1L1	3L2	5L3	2T1	4T2	6T3
2.5 - 50 mm <sup>2</sup>						
Connector	KKL1x50T2	KKL1x50T2	KKL1x50T2	KKL1x50T2	KKL1x50T2	KKL1x50T2
Terminal cover	-	-	-	-	-	-
Spreader	-	-	-	-	-	-
70 - 120 mm <sup>2</sup>						
Connector	KKL1x120T3	KKL1x120T2	KKL1x120T1	KKL1x120T1	KKL1x120T2	KKL1x120T3
Terminal cover	-	-	-	-	-	-
Spreader	-	-	-	-	-	-

200 - 250 A, Al cable	TOP			BOTTOM		
Terminal position	1L1	3L2	5L3	2T1	4T2	6T3
2.5 - 50 mm <sup>2</sup>						
Connector	KKL2x50	KKL2x50	KKL2x50	KKL2x50	KKL2x50	KKL2x50
Terminal cover	(included with LS/VS version)					
70 - 95 mm <sup>2</sup>						
Connector	KKL1x95	KKL1x95	KKL1x95	KKL1x95	KKL1x95	KKL1x95
Terminal cover	(included with LS/VS version)					
120 mm <sup>2</sup>						
Connector	KKL1x120RS	KKL1x120RS	KKL1x120RS	KKL1x120RS	KKL1x120RS	KKL1x120RS
Terminal cover	(included with LS/VS version)					

**All connectors and more information available in KATKO ConnectSafe Catalogue.**

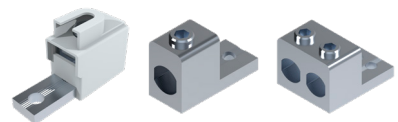
**You will find it here: [www.katko.com/downloads](http://www.katko.com/downloads)**

## TECHNICAL DATA

LOAD BREAK SWITCHES		EVA TOGGLE LBS			
		125A	160A	200A	250A
Rated insulation voltage, $U_i$ (V)		690	690	690	690
Rated thermal current, $I_{th}$ (A)		160	200	200	250
Nominal values with cable size (mm <sup>2</sup> )		70	95	95	120
Rated operational current, $I_o$ (A)					
AC-21A	400/415V	160	200	200	250
	500V	-	-	-	-
	690V	-	-	-	-
AC-22A	400/415V	125	160	200	250
	500V	-	-	-	-
	690V	-	-	-	-
AC-23A	400/415V	80	125	160	200
	500V	-	-	-	-
	690V	-	-	-	-
	1000V	-	-	-	-
Rated operational power for 3-phase (1500 r.p.m.) squirrel cage induction motors (kW)					
AC-23	400/415V	45	75	75	90
	500V	55	75	-	-
	690V	55	90	-	-
Rated fused short circuit current					
Back-up fuse (A)		160	160	250	250
R.M.S. value, $I_s$ (kA)		50	50	50	50
Peak value (kA)		15	15	21	21
Impulse withstand voltage, $U_{imp}$ (kV)		8/6	8/6	6	6
Rated short circuit making capacity, $I_{cm}$ (kA)					
	690V	5.1	5.1	11.4*	11.4*
Rated short time withstand current (1 s), $I_{sw}$ (kA)					
	690V	3.5	3.5	6.5*	6.5*
Rated breaking capacity, $I_{bn}$ (A)					
AC-23	400/415V	800	840	1600	1600
	500V	640	1000	-	-
	690V	640	1000	-	-
Electrical endurance (number of operations)		2000	2000	2000	2000
Mechanical endurance (number of operations)		16000	16000	16000	16000
Terminals / Bolt size Cu (mm <sup>2</sup> )		6-70	6-70	M8	M8
Max terminal torque (Nm)		6	6	15-22	15-22
* 415 V					

## CONNECTORS

Type	EAN	E-NO
KKL1x50T2	6419410378502	1942080
KKL1x120T3	6419410378540	1942084
KKL1x120T2	6419410378533	1942083
KKL1x120T1	6419410378526	1942082
KKL2x50	6419410378588	1942088
KKL1x95	6419410200230	1942129
KKL1x120RS	6419410378687	1942098



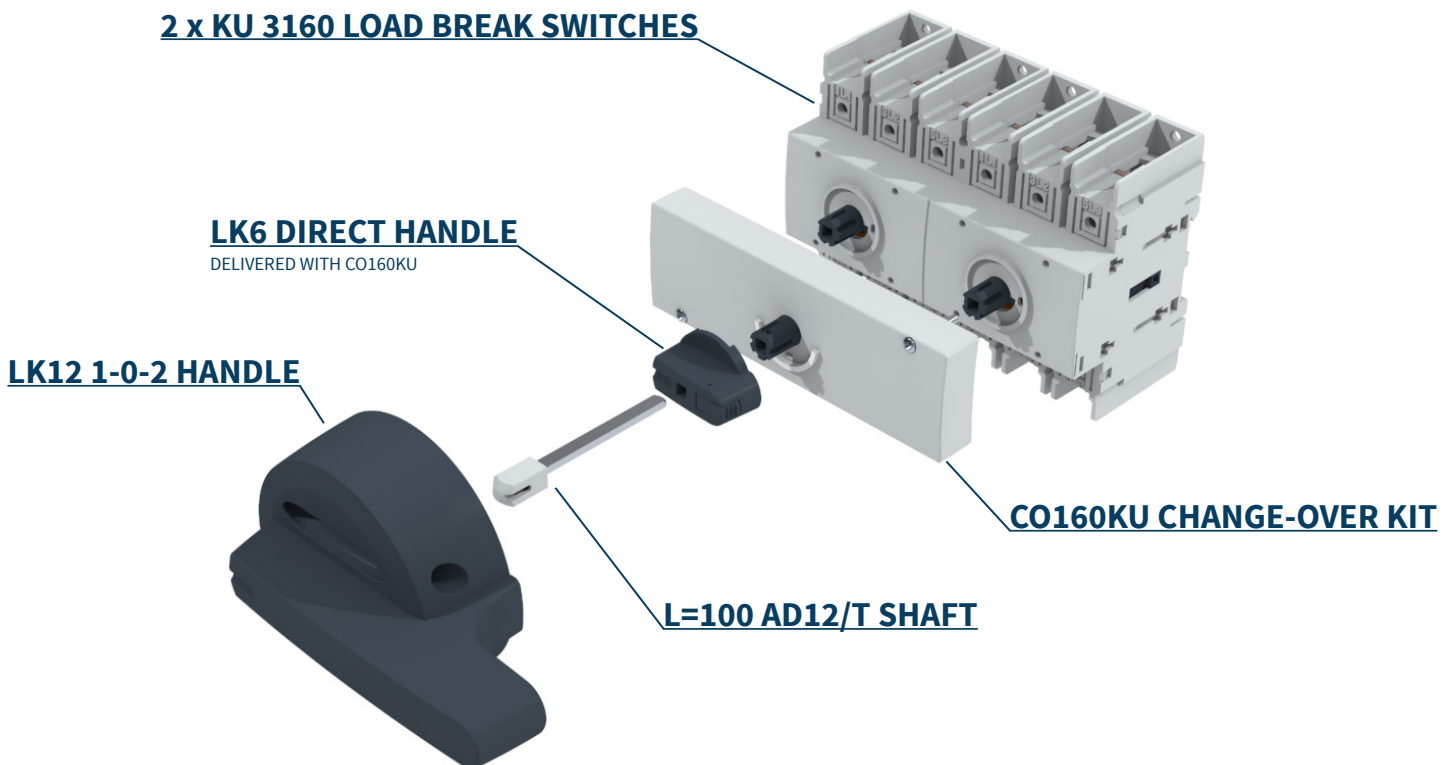
**KATKO ConnectSafe Catalogue.**  
**[www.katko.com/downloads](http://www.katko.com/downloads)**

## CHANGE-OVER SWITCHES 16-800 A ROTARY SWITCHES LOADSAFE KU SERIES

### GENERAL CHARACTERISTICS

- Consists of two 3 or 4-pole switches and a change-over kit
- For KU 16 - 160 A it is possible to assemble change-over switches retrospectively from two 3 or 4-pole switches and a kit
- KU 160 A (Performance) and KU 200 - 800 A are only available as a factory assembled change-over switch
- Switch technology by means of silver contacts ensures safe and durable operation
- All versions are operable with direct handle or external handle and shaft. For KU 16 - 160 purchase shaft and external handle separately when needed. For KU 160 A (Performance) and KU 200 - 800 A external handle and shaft are included.
- KU 16 - 80 A & 125 A (N) use a snap-on auxiliary contact, available in 1NO/1NC or 2NO/2NC
- KU 100 - 800 A use a side-mountable auxiliary contact, available in 1NO/1NC or 2NO/2NC. It is possible to mount two auxiliary contacts on each side making the maximum amount of contacts as 8NO/8NC

### ASSEMBLY EXAMPLE KU 3160 CO CHANGE-OVER SWITCH



## CHANGE-OVER SWITCHES 16-125 A ROTARY SWITCHES LOADSAFE KU SERIES



Image:  
KU 440 VV  
Consists of:  
2 x KU 440N  
1 x KU3/4P VV

### KU 16 - 80 A & 125 A (N) SPECIFIC CHARACTERISTICS

- Compact design
- Consists of two 3 or 4-pole switches and a change-over kit
- Switch technology by means of silver contacts ensures safe and durable operation

### CHANGE-OVER CONFIGURATIONS

- Consists of:
  - 2 x 3 or 4-pole KU switches
  - 1 x Change over kit: KU3/4P VV or KU3/4P VV Y/R
- Optional:
  - 1 x External handle for change-over
  - 1 x Shaft

## SWITCHES

Type	EAN	E-number	AC-23A 400/415 V (A)	AC-23A 400/415 V (kW)	AC-23A 690 V (A)	AC-23A 690 V (kW)	Switch Type	Number of Poles
KU 316 VV	6419410205914	3609256	16	7,5	16	11	Change-over switch	3
KU 325 VV	6419410226704	3609257	25	11	25	22	Change-over switch	3
KU 340 VV	6419410226711	3609258	32	15	32	30	Change-over switch	3
KU 363 VV	6419410226773	3609259	40	22	40	37	Change-over switch	3
KU 380 VV	6419410226728	3609260	63	30	40	37	Change-over switch	3
KU 3125 VV	6419410226759	3609261	63	30	40	37	Change-over switch	3
KU 416 VV	6419410205921	3609262	16	7,5	16	11	Change-over switch	4
KU 425 VV	6419410226797	3609263	25	11	25	22	Change-over switch	4
KU 440 VV	6419410226735	3609264	32	15	32	30	Change-over switch	4
KU 463 VV	6419410226780	3620275	40	22	40	37	Change-over switch	4
KU 480 VV	6419410226742	3602956	63	30	40	37	Change-over switch	4
KU 4125 VV	6419410226766	3602957	63	30	40	37	Change-over switch	4



## RELATED ACCESSORIES

Type	Accessory	Description	For	EAN	E-number
L=100 AD11	Shaft	Length 100 mm, aluminium	3, 4, 6 or 8-pole	6419410253106	3662291
L=200 AD11	Shaft	Length 200 mm, aluminium	3, 4, 6 or 8-pole	6419410253113	3662292
L=300 AD11	Shaft	Length 300 mm, aluminium	3, 4, 6 or 8-pole	6419410253120	3662293
L=100 AD11/VT	Shaft	Length 100 mm, steel, slanted	3, 4, 6 or 8-pole	6419410253168	3600231
L=200 AD11/VT	Shaft	Length 200 mm, steel, slanted	3, 4, 6 or 8-pole	6419410253175	3600271
L=300 AD11/VT	Shaft	Length 300 mm, steel, slanted	3, 4, 6 or 8-pole	6419410253182	3600272
KU3/4P VV	Change-over kit	Positions 1, 0, 2, black handle	3 or 4-pole	6419410221624	3600216
KU3/4P VV Y/R	Change-over kit	Positions 1, 0, 2, red handle	3 or 4-pole	6419410221631	3600217
LK11 VV	Handle	Black	Change-over	6419410222621	3600957
LK11 VV Y/R	Handle	Yellow/red	Change-over	6419410222638	3609265

## CHANGE-OVER SWITCHES 100-160 A ROTARY SWITCHES LOADSAFE KU SERIES



Image:  
KU 3160 CO  
Consists of:  
2 x KU 4-pole  
1 x KU3/4P VV

### KU 100 - 160 A SPECIFIC CHARACTERISTICS

- Consists of two 3 or 4-pole switches and a change-over kit
- Switch technology by means of silver contacts ensures safe and durable operation
- Modular structure
- Auxiliary contacts can be installed on either or both sides

### CHANGE-OVER CONFIGURATIONS

- Consists of
  - 2 x 3 or 4-pole KU switches
  - 1 x CO160KU change-over kit
- Optional:
  - 1 x External LK12 handle for change-over
  - 1 x Shaft (AD12/T)

## SWITCHES

Type	EAN	E-number	AC-23A 400/415 V (A)	AC-23A 400/415 V (kW)	AC-23A 690 V (A)	AC-23A 690 V (kW)	Weight (kg)	Switch Type	Number of Poles
KU 3100 CO	6419410203583	3600800	100	55	63	55	0,97	Change-over Switch	3
KU 3125 CO	6419410203590	3600805	125	55	80	75	0,97	Change-over Switch	3
KU 3160 CO	6419410203606	3600810	160	90	100	90	0,97	Change-over Switch	3
KU 4100 CO	6419410203613	3600811	100	55	63	55	1,18	Change-over Switch	4
KU 4125 CO	6419410203620	3600812	125	55	80	75	1,18	Change-over Switch	4
KU 4160 CO	6419410203637	3600813	160	90	100	90	1,18	Change-over Switch	4



## ACCESSORIES

Type	Accessory	Description	For	EAN	E-number
CO160KU	Change-over Kit	Change-over kit	For 2 x 3- or 4-pole switches	6419410203651	3600815
1.V160KU	Auxiliary contact	1NO/1NC	For all configurations	6419410300022	3600819
2.V160KU	Auxiliary contact	2NO/2NC	For all configurations	6419410300114	3600825
LS/VS 160 3P	Cover	Terminal cover for 3P	For all configurations. Covers 3 poles.	6419410203699	3600817
LS/VS N160	Cover	Terminal cover for 4th pole	4- & 8-pole and 4-pole change-over	6419410203705	3600818
L=100 AD12/T	Shaft	Length 100 mm, steel	With LK12 handle	6419410253045	3662301
L=200 AD12/T	Shaft	Length 200 mm, steel	With LK12 handle	6419410253052	3662302
L=300 AD12/T	Shaft	Length 300 mm, steel	With LK12 handle	6419410253069	3662303
LK12 1-0-2	Handle	Black	Change-over	6419410222881	3600916
LK12 1-0-2 Y/R	Handle	Yellow/red	Change-over	6419410222744	3609266



## CHANGE-OVER SWITCHES 160-250 A ROTARY SWITCHES LOADSAFE KU SERIES



Image:  
KU 4250CO SV

### KU 200 - 250 A & 160 A PERFORMANCE (P) SPECIFIC CHARACTERISTICS

- Consists of two 3 or 4-pole switches
- Modular structure
- Made of 100% recyclable plastic
- Auxiliary contacts can be installed on either or both sides
- 160 (P) model is an option for Katko's regular 160 A switch and suitable for industrial applications

### CHANGE-OVER CONFIGURATIONS

- Change-over configuration:  
2 x 3 or 4-pole switches  
Direct handle or external handle and shaft

## SWITCHES

Type	EAN	E-number	AC-23A 690 V (A)	AC-23A 690 V (kW)	Weight (kg)	Operation	Switch Type	Number of Poles
With external handle (LKX 100 1-0-2) and shaft (L=200 AD12/T6)								
KU 3200CO	6419410205273	3602992	200	160	2,1	External handle	Change-over Switch	3
KU 3250CO	6419410205280	3602993	250	250	2,1	External handle	Change-over Switch	3
KU 4200CO	6419410205297	3602994	200	160	2,6	External handle	Change-over Switch	4
KU 4250CO	6419410205303	3602995	250	250	2,6	External handle	Change-over Switch	4
KU 3160PCO	6419410205501	3609227	160	132	2,1	External handle	Change-over Switch	3
KU 4160PCO	6419410205518	3609228	160	132	2,6	External handle	Change-over Switch	4
With direct handle								
KU 3200CO SV	6419410205358	3609212	200	160	2,1	Direct handle	Change-over Switch	3
KU 3250CO SV	6419410205365	3609213	250	250	2,1	Direct handle	Change-over Switch	3
KU 4200CO SV	6419410205372	3609214	200	160	2,6	Direct handle	Change-over Switch	4
KU 4250CO SV	6419410205389	3609215	250	250	2,6	Direct handle	Change-over Switch	4
KU 3160PCO SV	6419410205563	3609233	160	132	2,1	Direct handle	Change-over Switch	3
KU 4160PCO SV	6419410205570	3609234	160	132	2,6	Direct handle	Change-over Switch	4

## RELATED ACCESSORIES

Type	Accessory	Description	For	EAN	E-number
LKX 100 1-0-2	Handle	Black handle, 1-0-2 positions	Change-over	6419410484708	3609267
LKX 100 1-0-2 Y/R	Handle	Yellow/red handle, 1-0-2 positions	Change-over	6419410484722	3609268
LS 250H	Terminal cover	1-pole terminal cover. High model.	Use with vertical (VB & VM) cable connectors	6419410205419	3609218
LS 250F	Terminal cover	1-pole terminal cover. Flush model.	Use with regular cable connectors	6419410205402	3609217
VS 250	Phase Barrier	Phase barrier	For all configurations	6419410205396	3609216
L=200 AD12/T6	Shaft	Length 200 mm, 6 mm steel shaft	For all configurations	6419410271063	3609237
1.V160KU	Auxiliary contact	1NO/1NC	For all configurations	6419410300022	3600819
2.V160KU	Auxiliary contact	2NO/2NC	For all configurations	6419410300114	3600825



## CHANGE-OVER SWITCHES 315 - 400 A ROTARY SWITCHES LOADSAFE KU SERIES



Image:  
KU 3400CO SV

### KU 315 - 400 A SPECIFIC CHARACTERISTICS

- Consists of two 3 or 4-pole switches
- Modular structure
- Made of 100% recyclable plastic
- Auxiliary contacts can be installed on either or both sides

### CHANGE-OVER CONFIGURATIONS

- Change-over configuration:  
2 x 3 or 4-pole KU switches  
Direct handle or external handle and shaft

## SWITCHES

Type	EAN	E-number	AC-23A 690 V (A)	AC-23A 690 V (kW)	Weight (kg)	Operation	Switch Type	Number of Poles
<b>With external handle (LXX 150 1-0-2) and shaft (LVK=228)</b>								
KU 3315CO	6419410300244	3602931	315	315	5,364	External handle	Change-over Switch	3
KU 3400CO	6419410300251	3602932	400	355	5,364	External handle	Change-over Switch	3
KU 4315CO	6419410300268	3602933	315	315	6,422	External handle	Change-over Switch	4
KU 4400CO	6419410300275	3602934	400	355	6,422	External handle	Change-over Switch	4
<b>With direct handle</b>								
KU 3315CO SV	6419410300336	3602939	315	315	5,364	Direct handle	Change-over Switch	3
KU 3400CO SV	6419410300343	3602940	400	355	5,364	Direct handle	Change-over Switch	3
KU 4315CO SV	6419410300350	3602941	315	315	6,422	Direct handle	Change-over Switch	4
KU 4400CO SV	6419410300367	3602942	400	355	6,422	Direct handle	Change-over Switch	4

## ACCESSORIES



Type	Accessory	Description	For	EAN	E-number
LS 400H	Terminal cover	1-pole terminal cover. High model.	Use with vertical (VB & VM) cable connectors	6419410300398	3602945
LS 400F	Terminal cover	1-pole terminal cover. Flush model.	Use with regular cable connectors	6419410300381	3602944
VS 400	Phase Barrier	Phase barrier	For all configurations	6419410300374	3602943
1.V160KU	Auxiliary contact	1NO/1NC	For all configurations	6419410300022	3600819
2.V160KU	Auxiliary contact	2NO/2NC	For all configurations	6419410300114	3600825
LVK=228	Shaft	Length 228 mm, steel	Delivered with external handle	6419410221440	3600348
LXX 150 1-0-2	Handle	Black handle, 1-0-2 positions	Change-over	6419410484715	3609269
LXX 150 1-0-2 Y/R	Handle	Yellow/red handle, 1-0-2 positions	Change-over	6419410484739	3609270

## CHANGE-OVER SWITCHES 630-800 A ROTARY SWITCHES LOADSAFE KU SERIES



Image:  
KU 3800CO

### KU 630 - 800 A SPECIFIC CHARACTERISTICS

- Consists of two 3 or 4-pole switches
- Modular structure
- Made of 100% recyclable plastic
- Auxiliary contacts can be installed on either or both sides

### CHANGE-OVER CONFIGURATIONS

- Change-over configuration:  
2 x 3 or 4-pole KU switches  
Direct handle or external handle and shaft

## SWITCHES

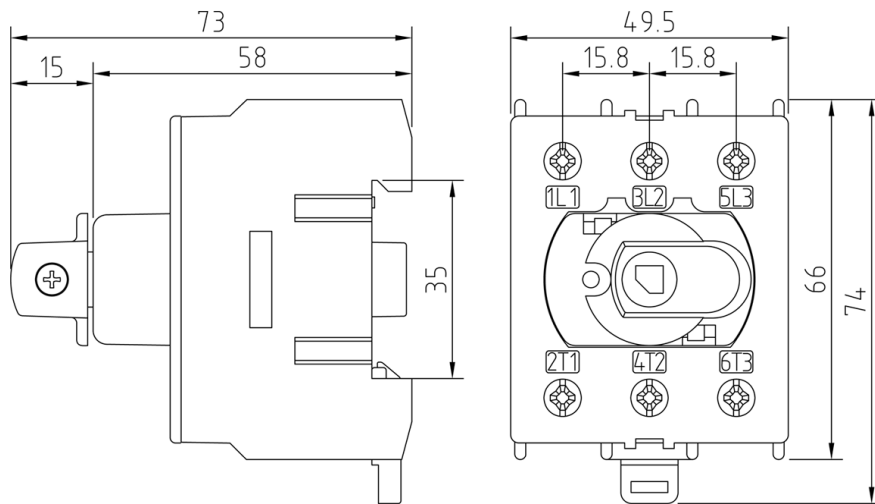
Type	EAN	E-number	AC-23A 690 V (A)	AC-23A 690 V (kW)	Weight (kg)	Operation	Switch Type	Number of Poles
With external handle (LKX 150 1-0-2) and shaft (LVK=228)								
KU 3630CO	6419410483701	3602846	630	630	8,985	External handle	Change-over Switch	3
KU 3800CO	6419410483718	3602847	800	800	8,985	External handle	Change-over Switch	3
KU 4630CO	6419410483725	3602848	630	630	11,185	External handle	Change-over Switch	4
KU 4800CO	6419410483732	3602849	800	800	11,185	External handle	Change-over Switch	4
With direct handle								
KU 3630CO SV	6419410484036	3602887	630	630	8,985	Direct handle	Change-over Switch	3
KU 3800CO SV	6419410484043	3602888	800	800	8,985	Direct handle	Change-over Switch	3
KU 4630CO SV	6419410484050	3602889	630	630	11,185	Direct handle	Change-over Switch	4
KU 4800CO SV	6419410484067	3602890	800	800	11,185	Direct handle	Change-over Switch	4

## ACCESSORIES

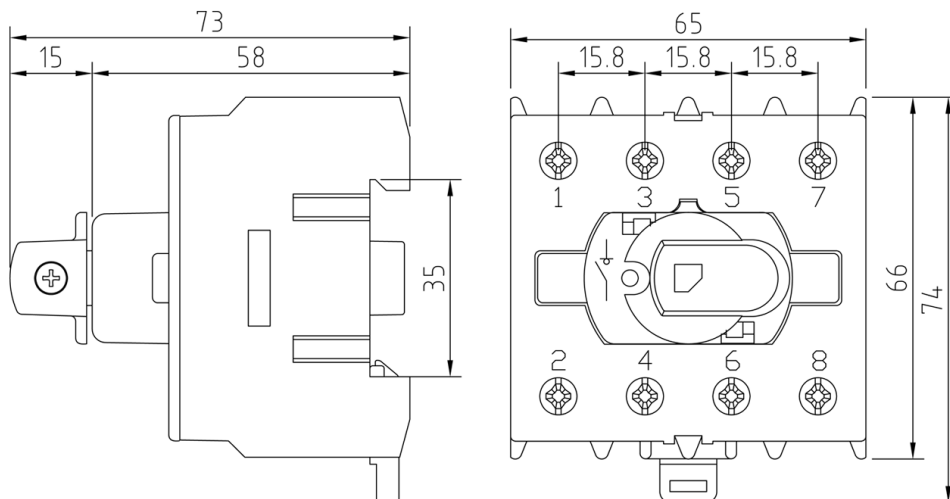


Type	Accessory	Description	For	EAN	E-number
1.V160KU	Auxiliary contact	1NO/1NC	For all configurations	6419410300022	3600819
2.V160KU	Auxiliary contact	2NO/2NC	For all configurations	6419410300114	3600825
LVK=228	Shaft	Length 228 mm, steel	Delivered with external handle	6419410221440	3600348
LKX 150 1-0-2	Handle	Black handle, 1-0-2 positions	Change-over	6419410484715	3609269
LKX 150 1-0-2 Y/R	Handle	Yellow/red handle, 1-0-2 positions	Change-over	6419410484739	3609270
LS800F	Terminal cover	Terminal cover, low model	Use with regular cable connectors	6419410484487	3602913
LS800H	Terminal cover	Terminal cover, high model	Use with vertical (VB & VM) cable connectors	6419410484494	3602914
VS800	Phase barrier	Phase barrier	For all configurations	6419410483756	3602856

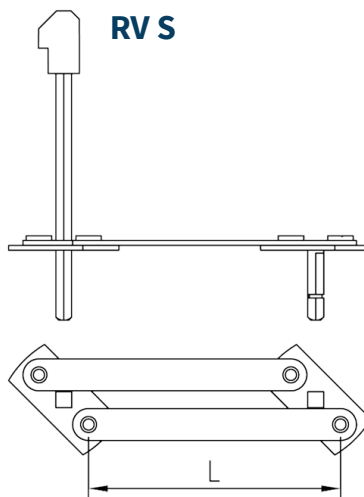
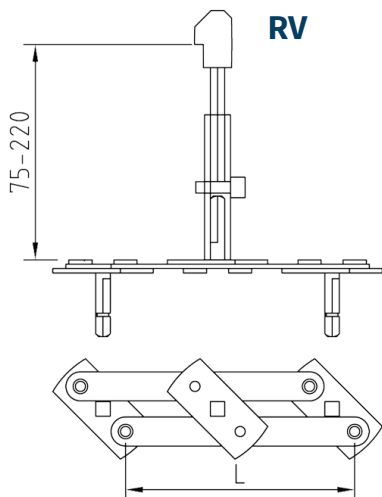
## DIMENSIONAL DRAWINGS KU 16-80 A & 125 A (N)



### KU 3 POLE



### KU 4 POLE

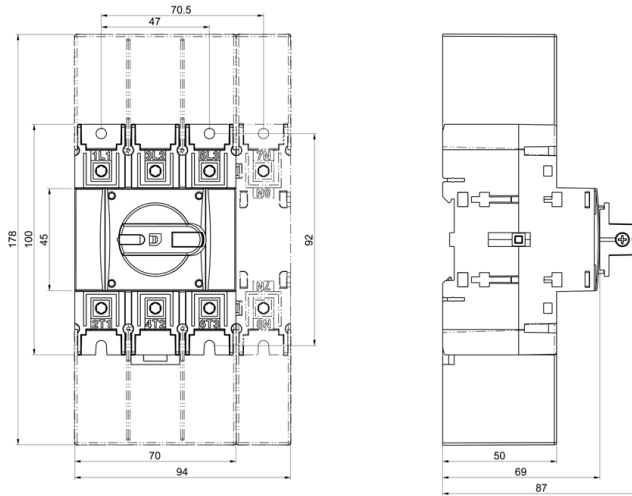


**KU 6-POLE  
LENGTH, L (mm)**  
RV = 66  
RV S = 66

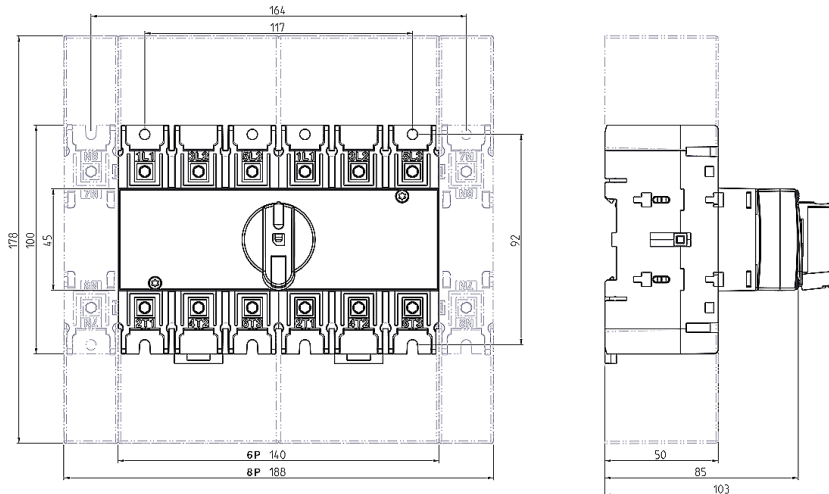
**KU 8-POLE  
LENGTH, L (mm)**  
RV = 80  
RV S = 80

### KU 6-8 POLE PARALLEL KIT

## DIMENSIONAL DRAWINGS KU 100-160 A



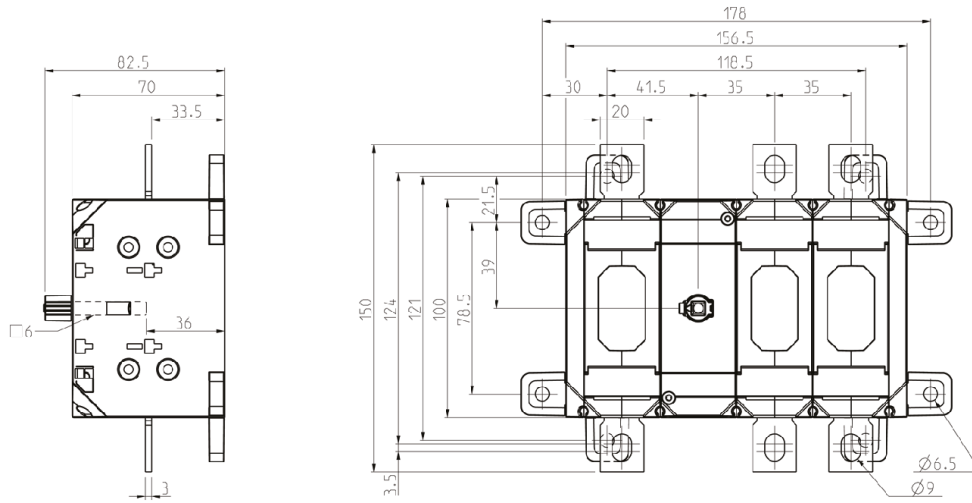
### KU 3-4 POLE, WITH TERMINAL COVERS



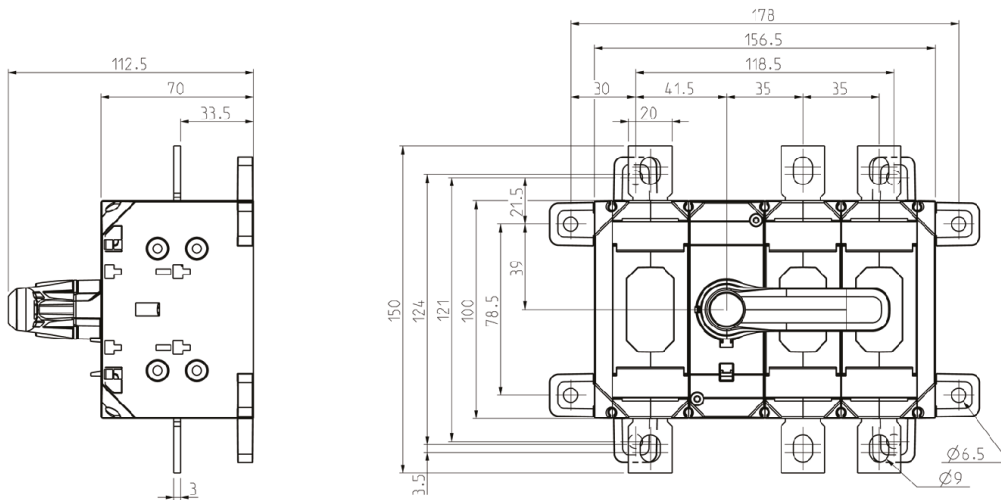
### KU 6-8 POLE, WITH TERMINAL COVERS



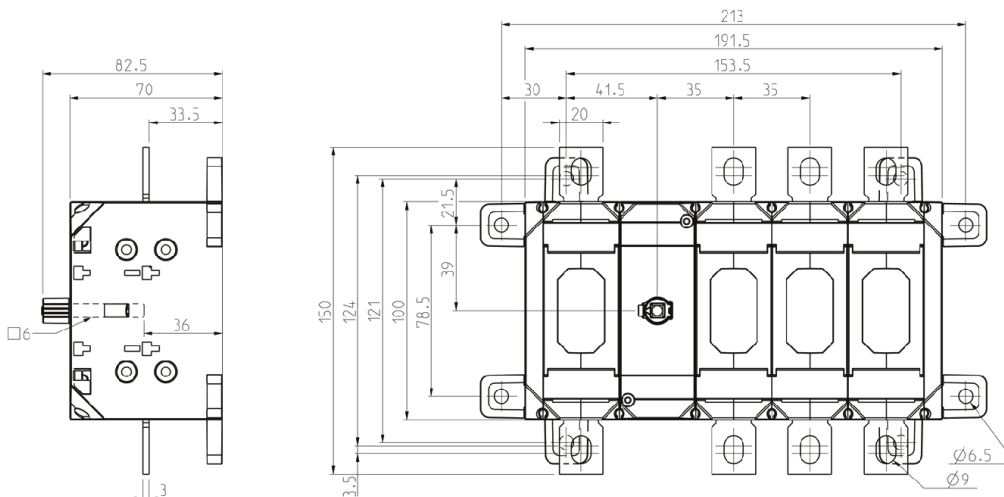
## DIMENSIONAL DRAWINGS KU 200-250A & 160A PERFORMANCE (P)



### KU 3 POLE

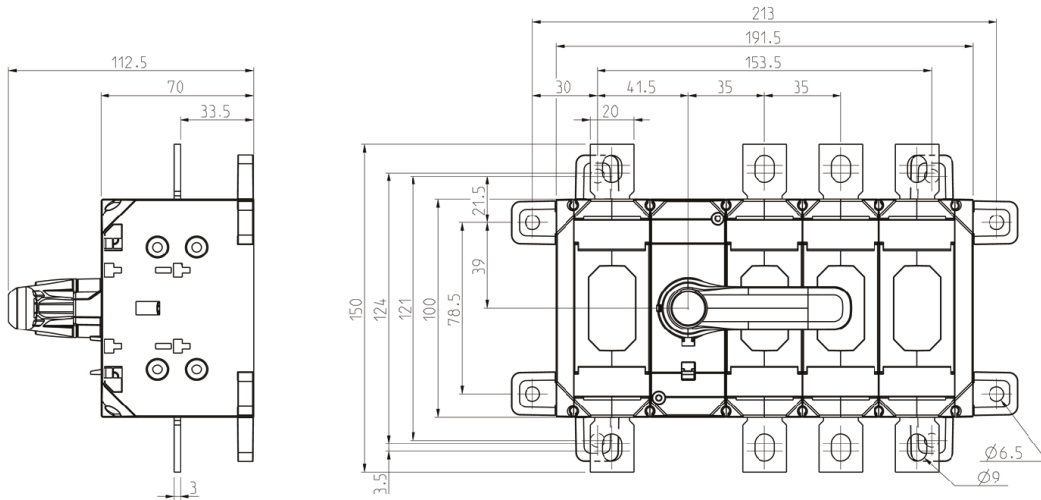


### KU 3 POLE, DIRECT HANDLE

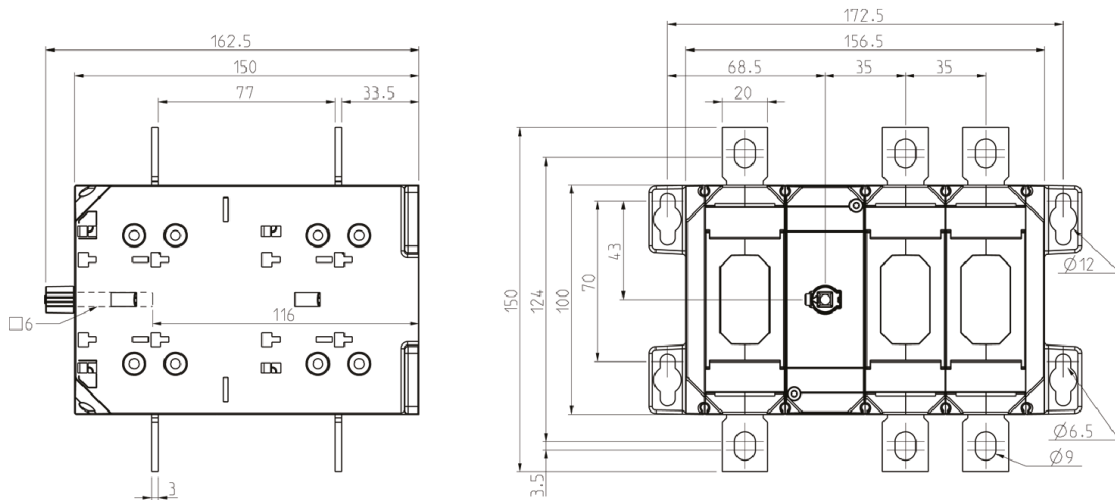


### KU 4 POLE

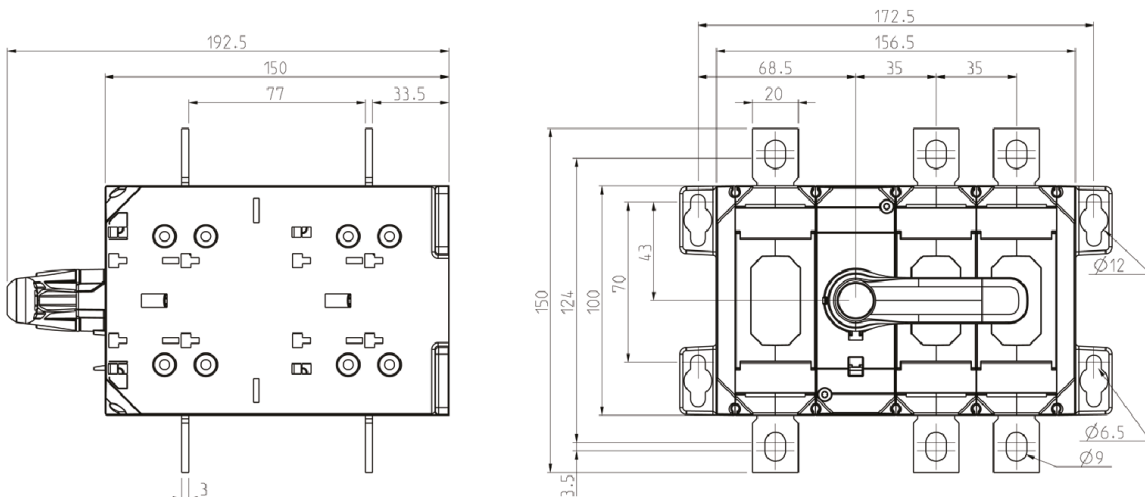
## DIMENSIONAL DRAWINGS KU 200-250A & 160A PERFORMANCE (P)



### KU 4 POLE, DIRECT HANDLE

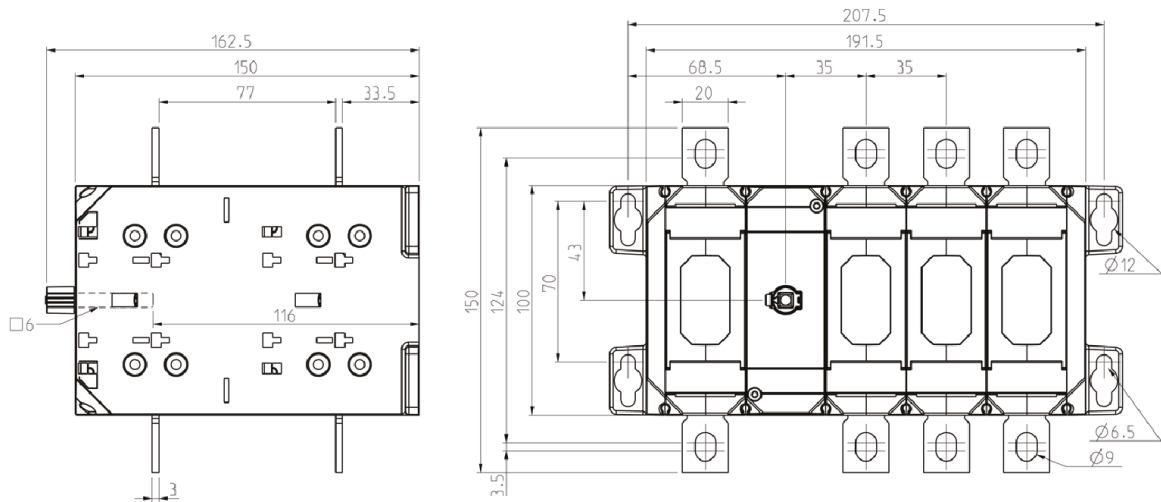


### KU 6 POLE

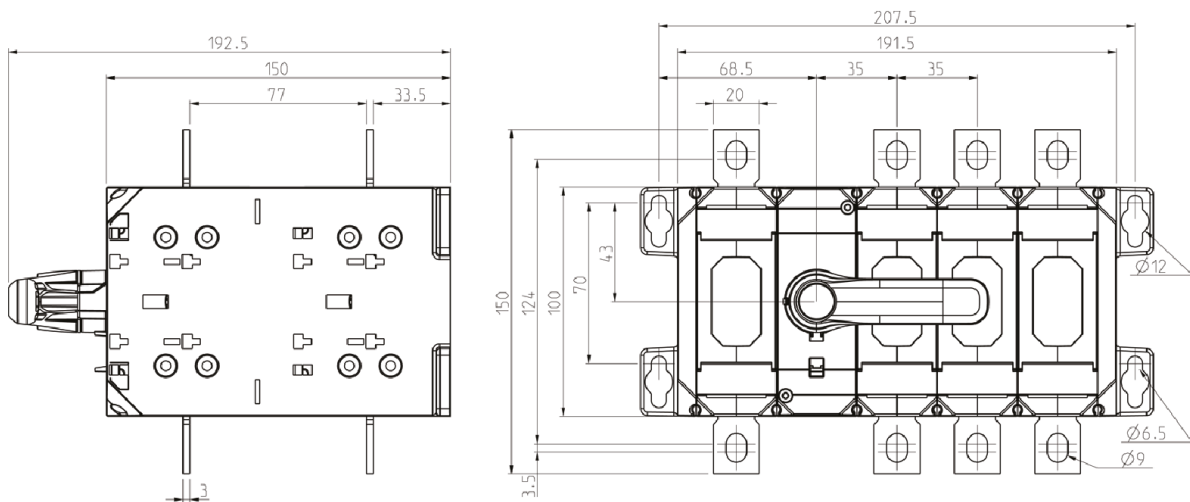


### KU 6 POLE, DIRECT HANDLE

## DIMENSIONAL DRAWINGS KU 200-250A & 160A PERFORMANCE (P)

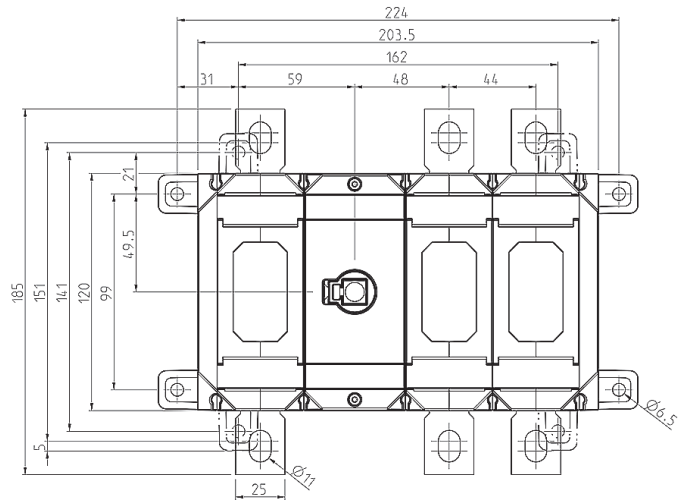
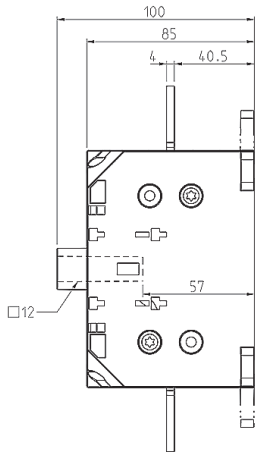


### KU 8 POLE

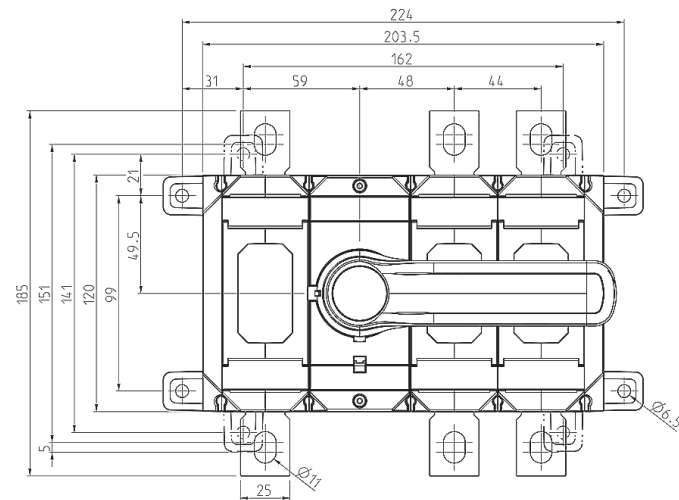
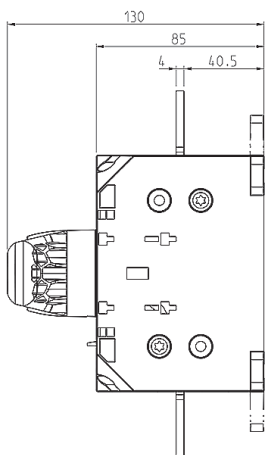


### KU 8 POLE, DIRECT HANDLE

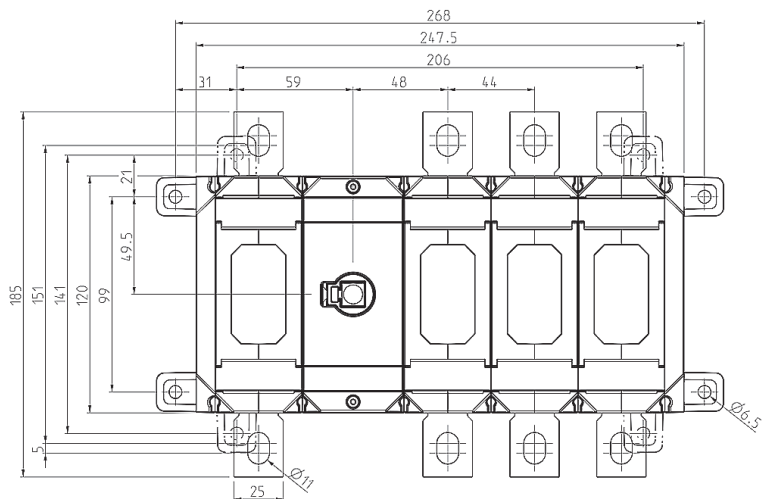
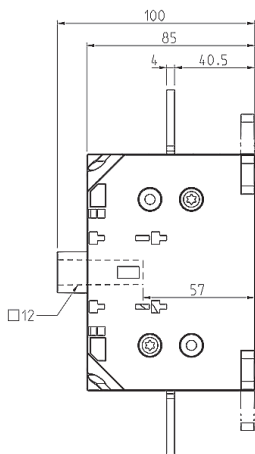
## DIMENSIONAL DRAWINGS KU 315-400A



### KU 3 POLE

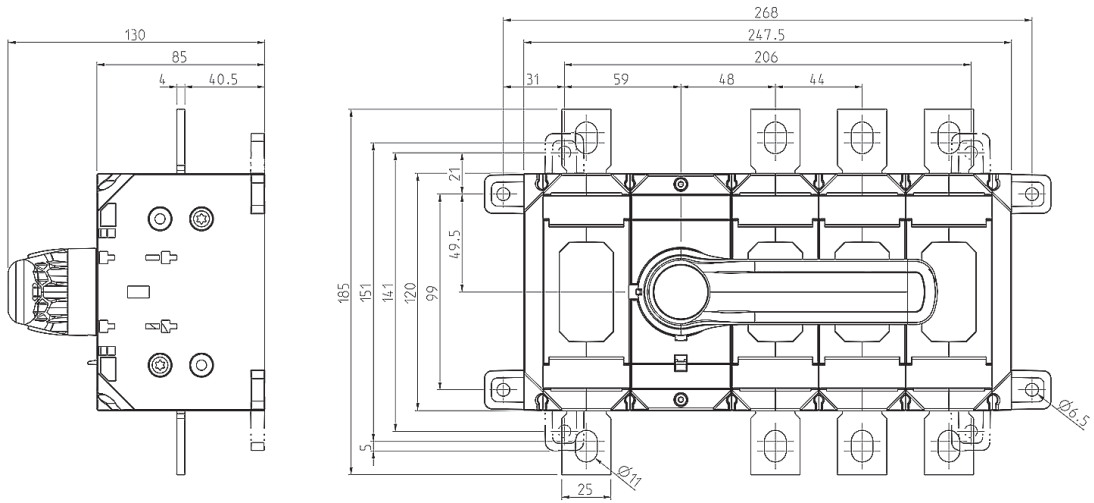


### KU 3 POLE, DIRECT HANDLE

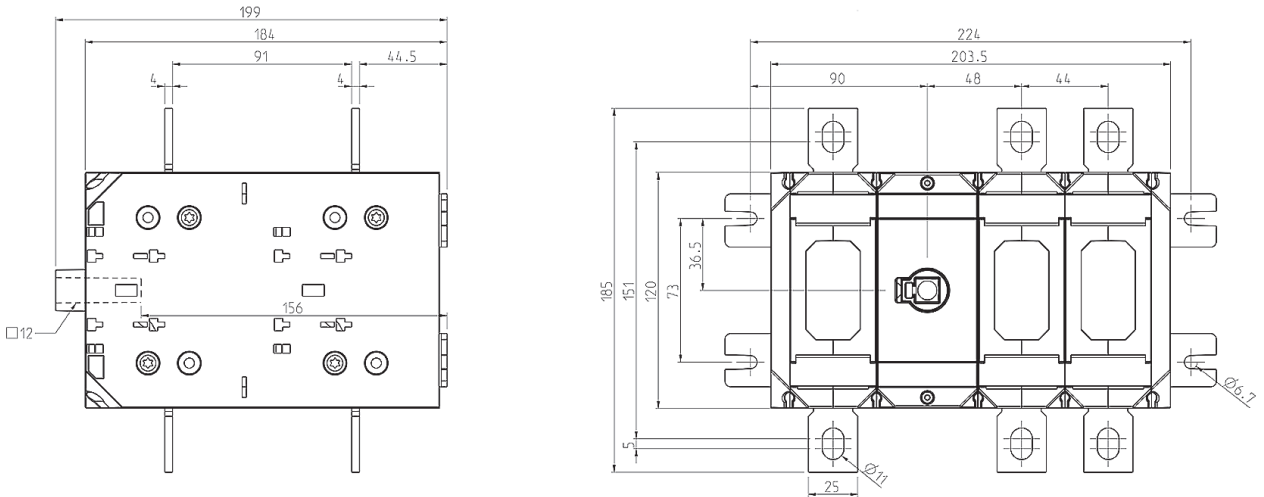


### KU 4 POLE

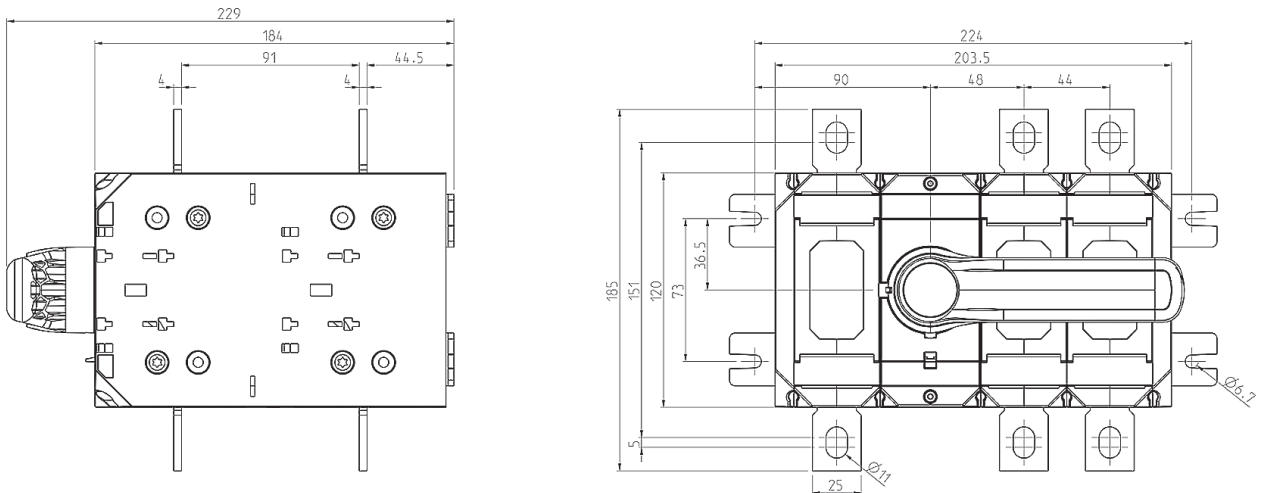
## DIMENSIONAL DRAWINGS KU 315-400A



### KU 4 POLE, DIRECT HANDLE



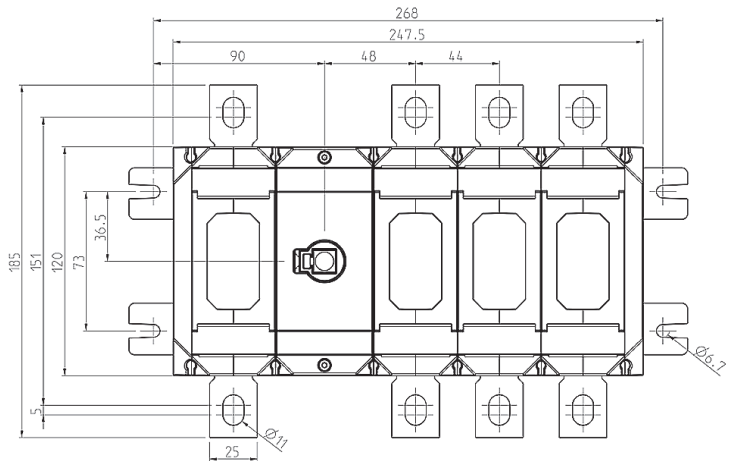
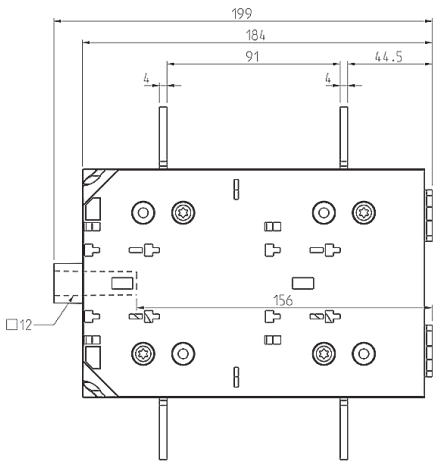
### KU 6 POLE



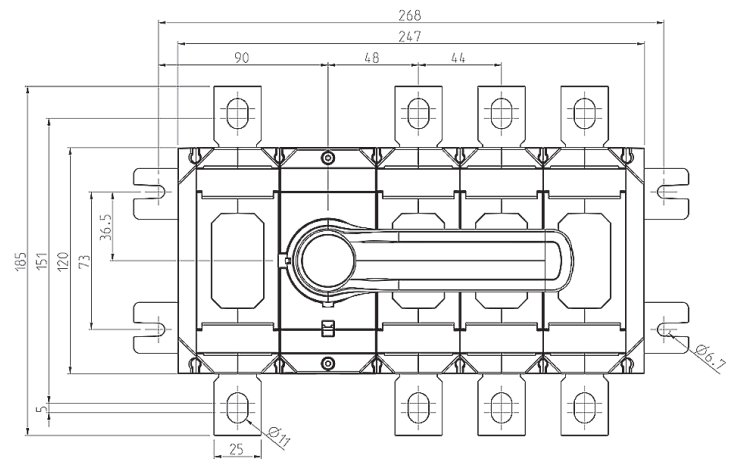
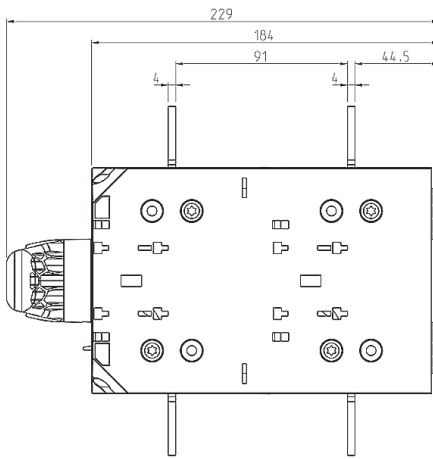
### KU 6 POLE, DIRECT HANDLE



## DIMENSIONAL DRAWINGS KU 315-400A

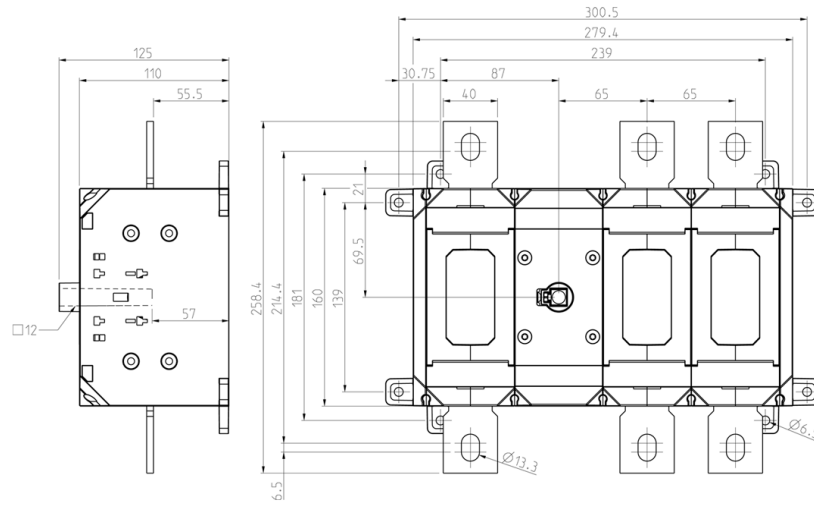


### KU 8 POLE

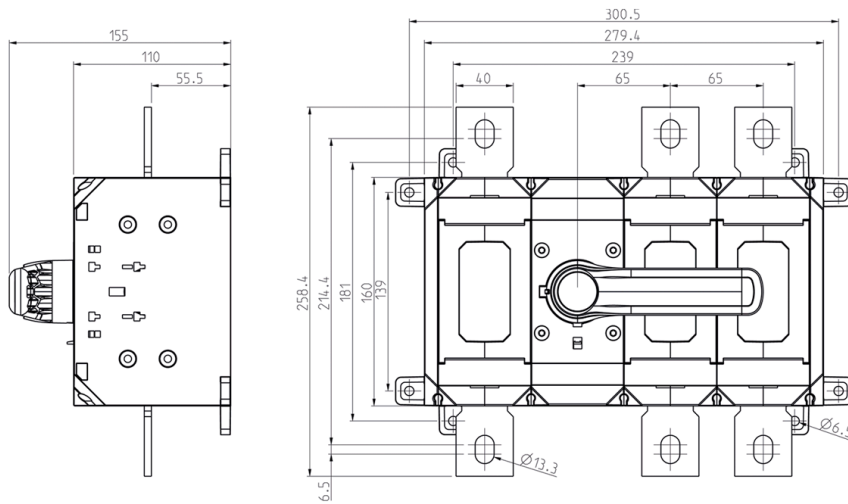


### KU 8 POLE, DIRECT HANDLE

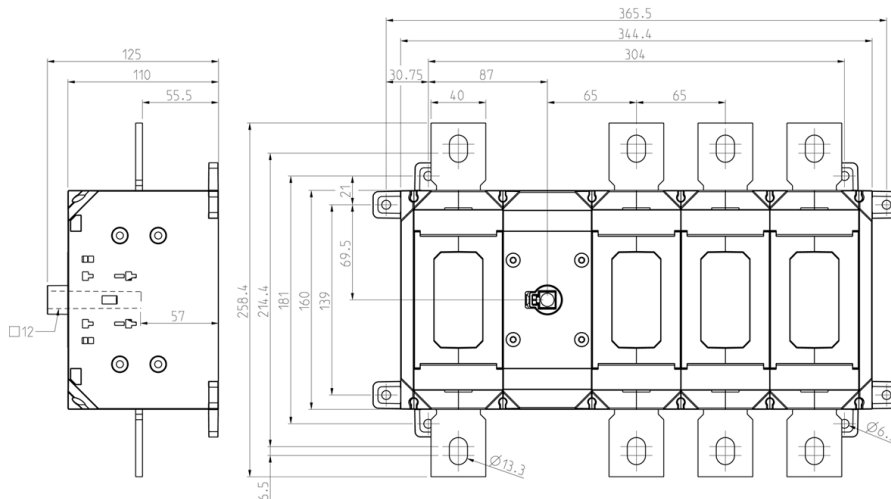
## DIMENSIONAL DRAWINGS KU 630-800A



### KU 3 POLE

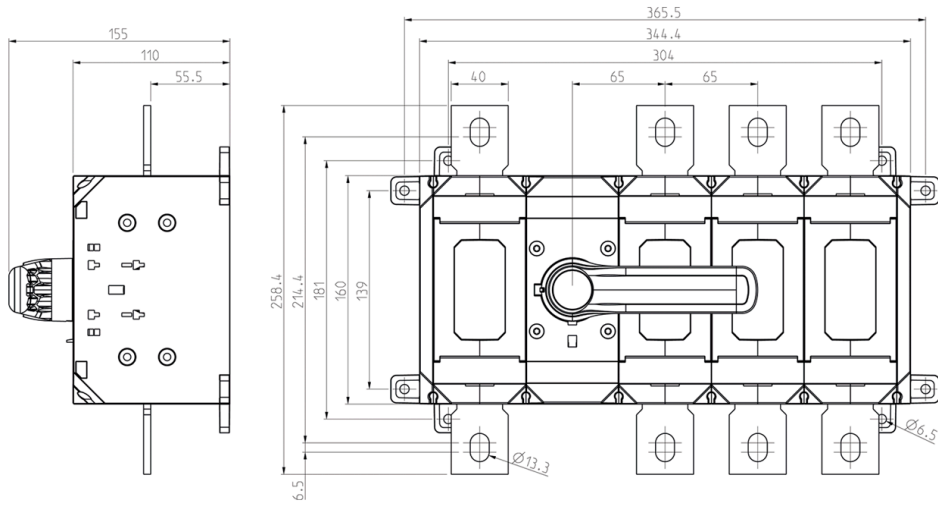


### KU 3 POLE SV

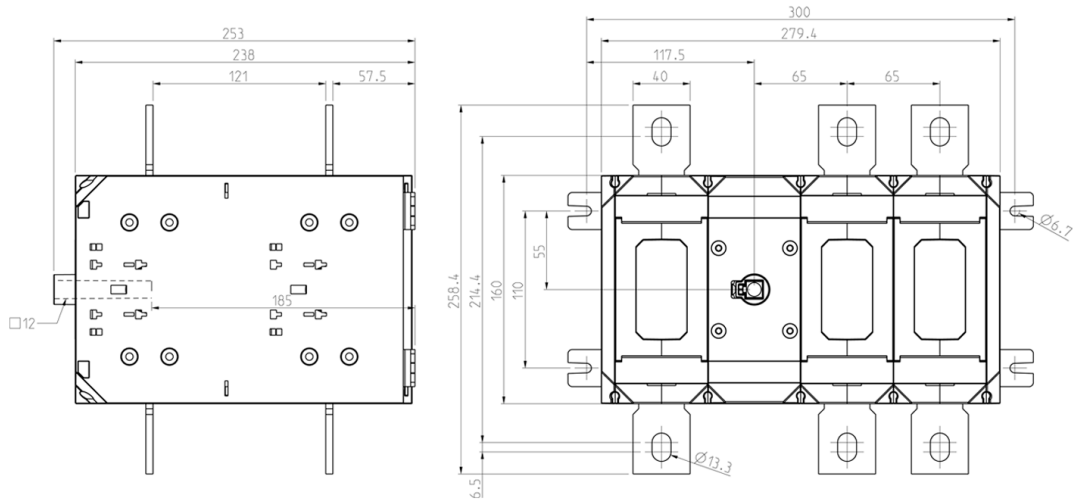


### KU 4 POLE

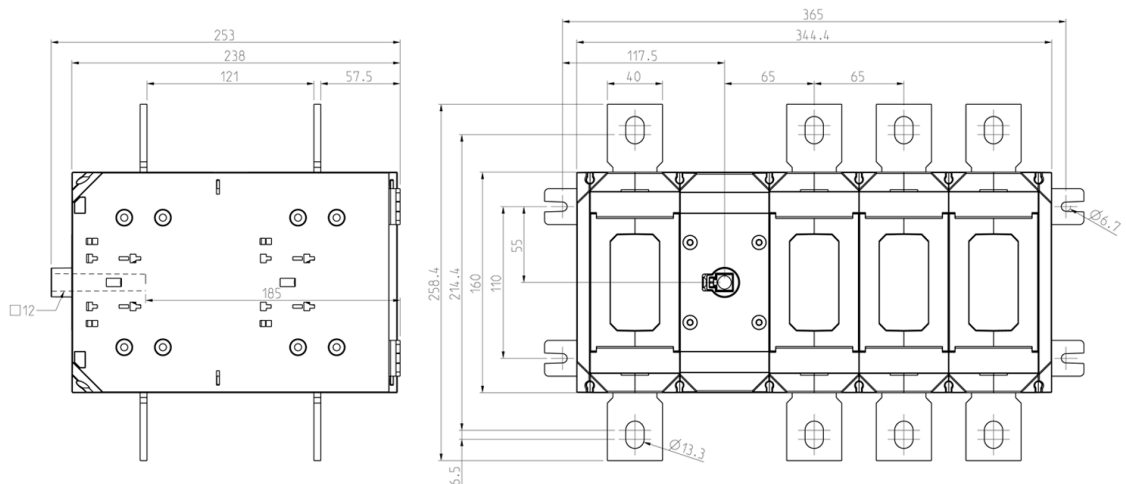
## DIMENSIONAL DRAWINGS KU 630-800A



### KU 4 POLE SV



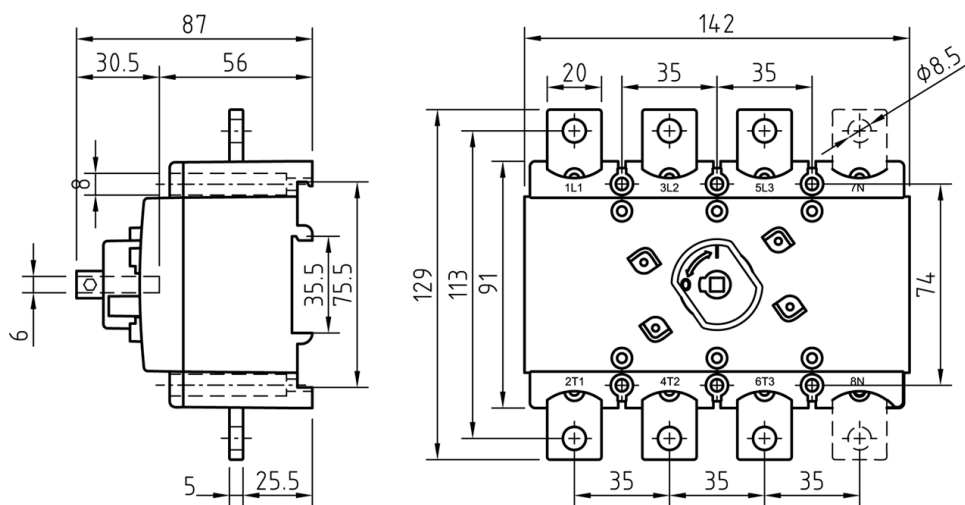
### KU 6 POLE



### KU 8 POLE

## DIMENSIONAL DRAWINGS

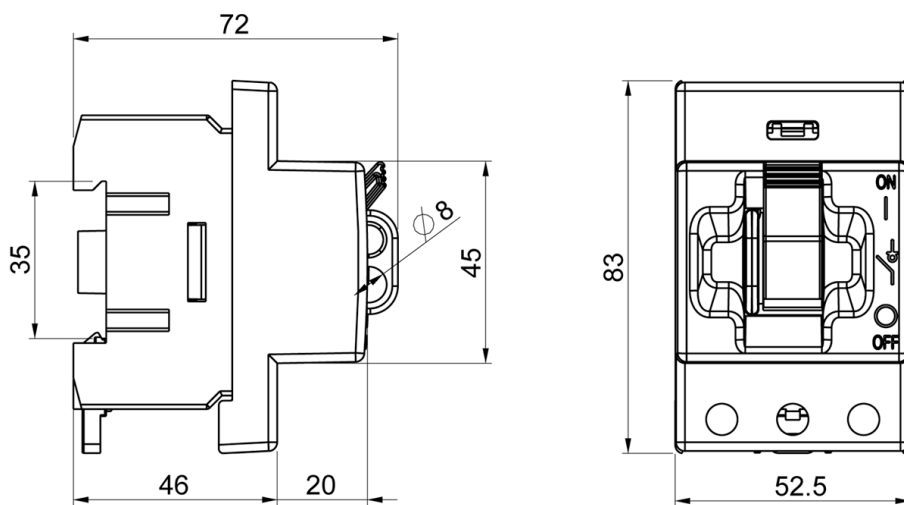
### VKA 200-250A



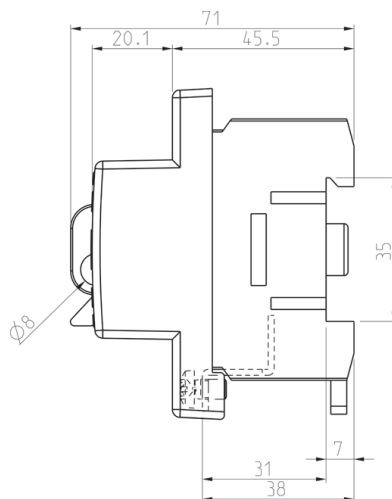
### VKA 3-4 POLE

## DIMENSIONAL DRAWINGS

### KUE 16-125 A



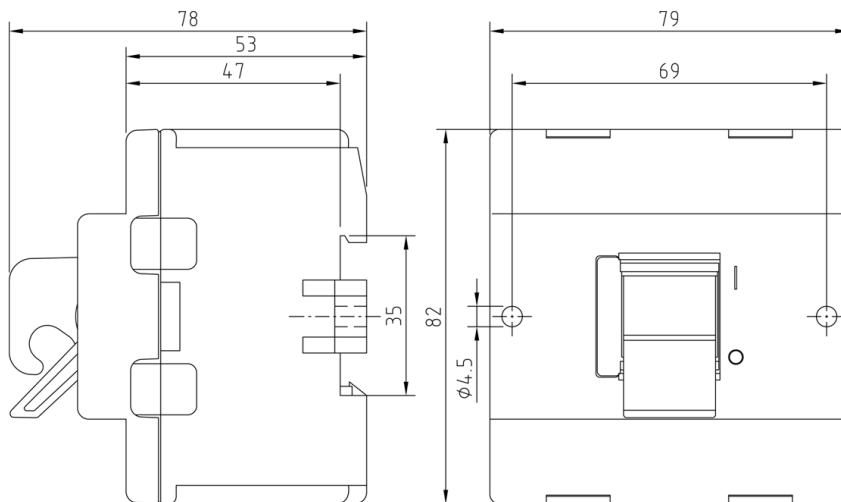
### KUE + K/KUE



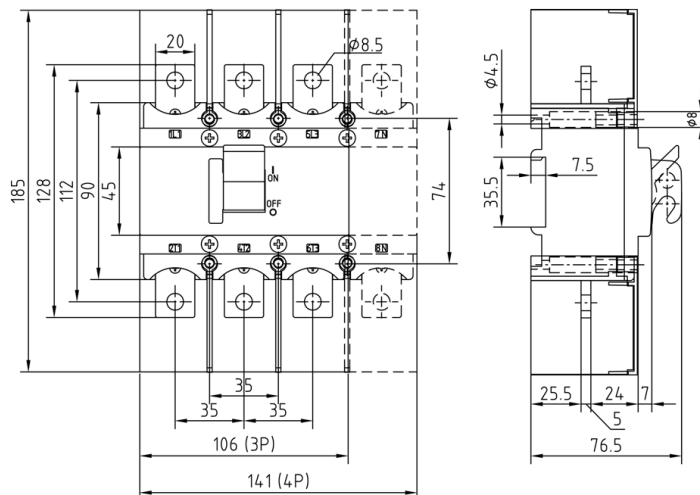
### KUE AD1 + K/KUE



## DIMENSIONAL DRAWINGS EVA 125-250 A



### EVA 125-160 A + K/EVA



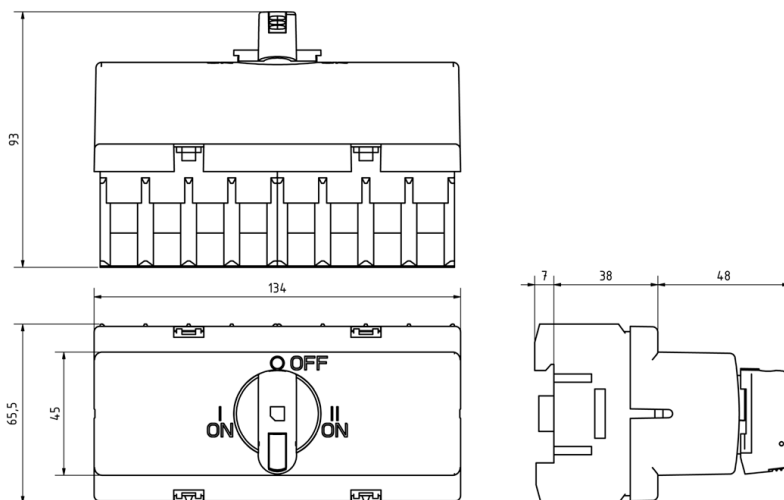
### EVA 200-250 A 3-4 POLE



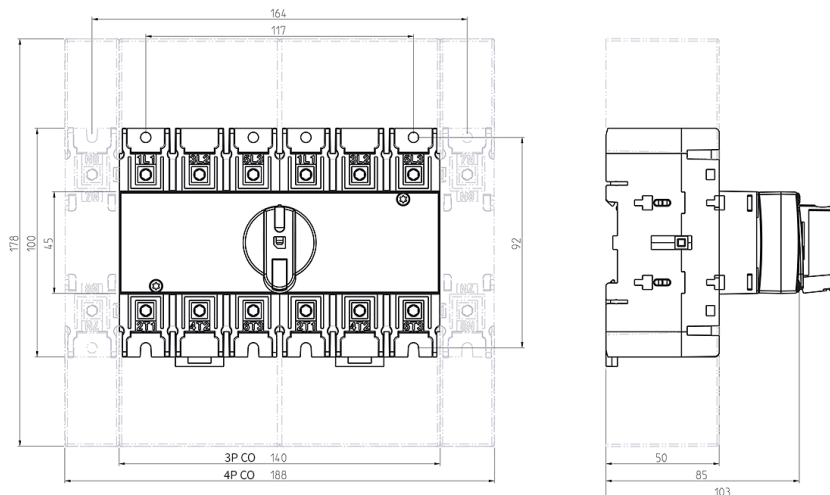
KATKO CONNECTSAFE CATALOGUE AVAILABLE AT:  
[www.katko.com/downloads](http://www.katko.com/downloads)



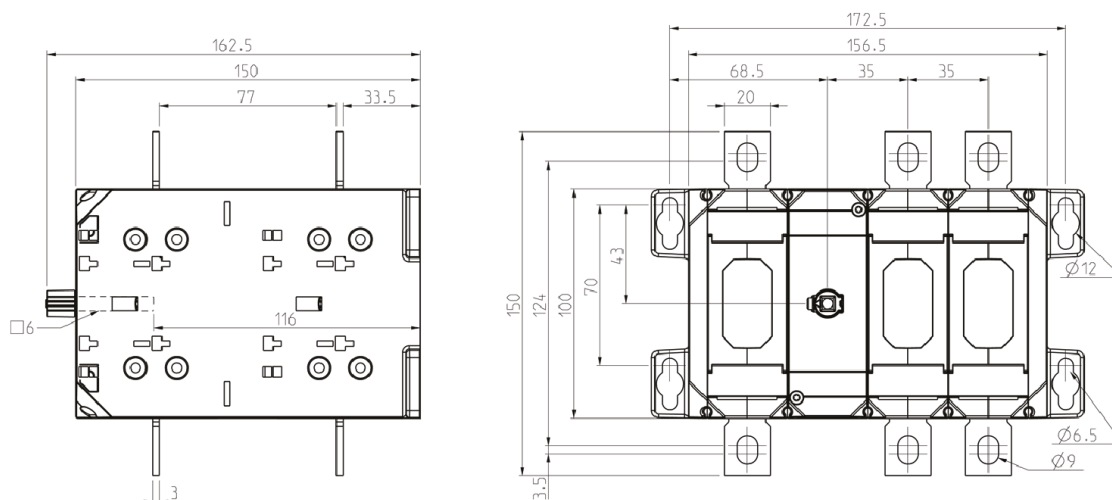
## DIMENSIONAL DRAWINGS CHANGE-OVER SWITCHES



### KU 16-80 A & 125 A (N) 3-4 POLE CHANGE-OVER

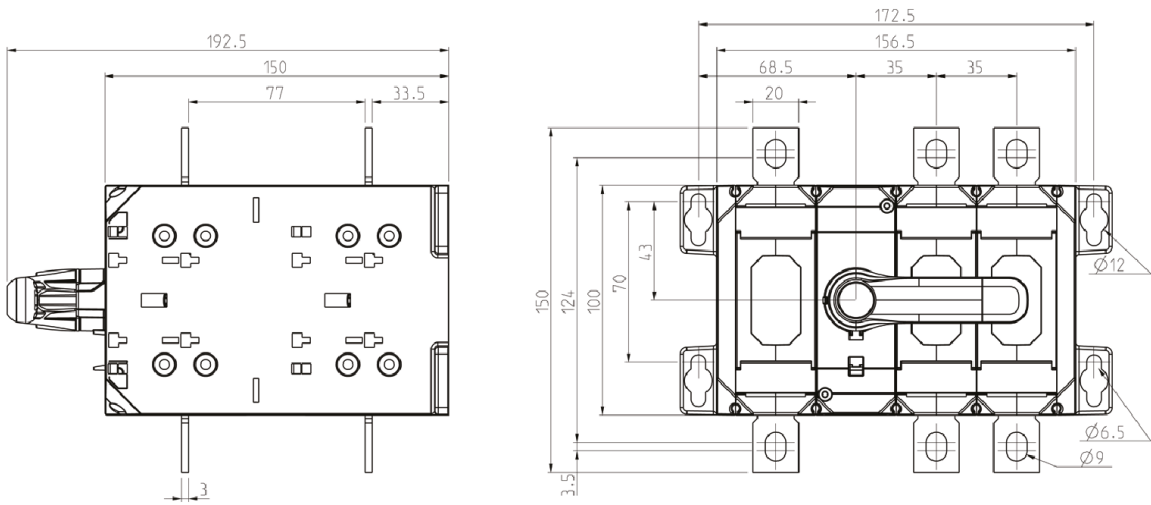


### KU 100-160 A 3-4 POLE CHANGE-OVER

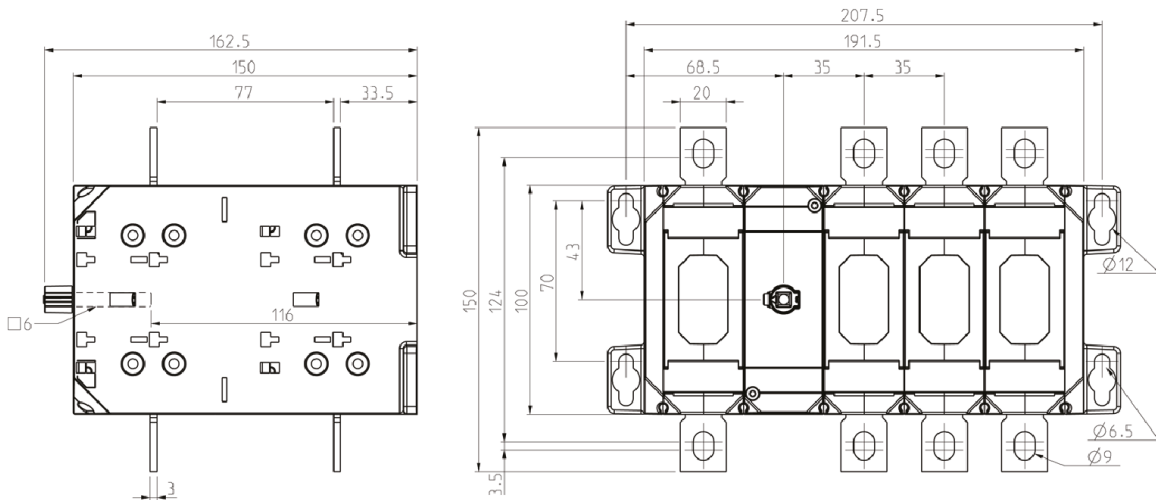


### KU 200-250 A & 160 A PERFORMANCE (P) 3-POLE CHANGE-OVER

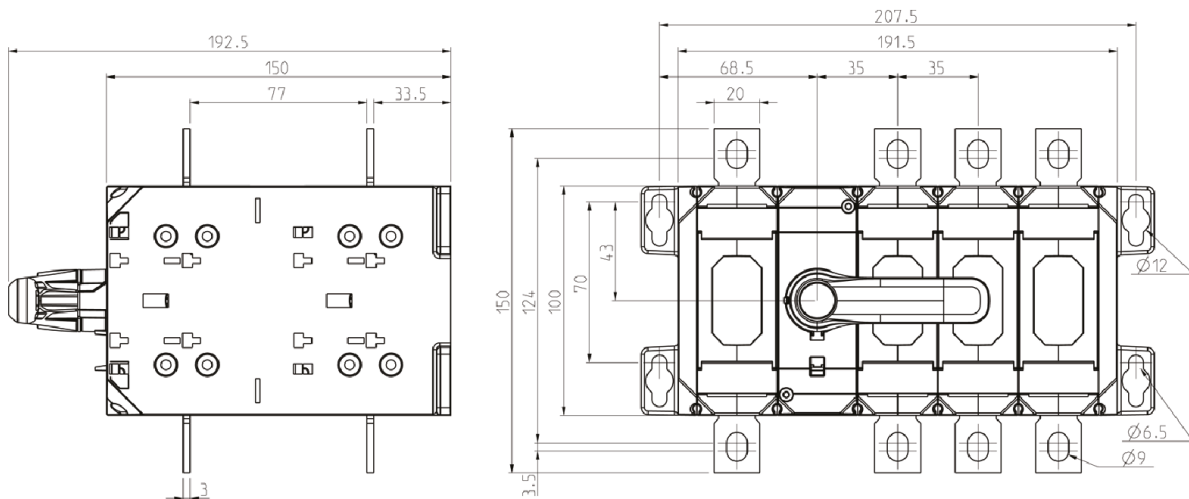
## DIMENSIONAL DRAWINGS CHANGE-OVER SWITCHES



**KU 200-250 A & 160 A PERFORMANCE (P) 3-POLE CHANGE-OVER, DIRECT HANDLE**

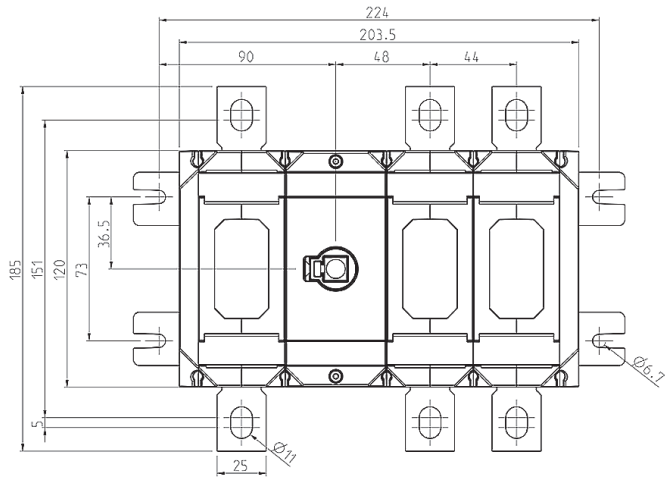
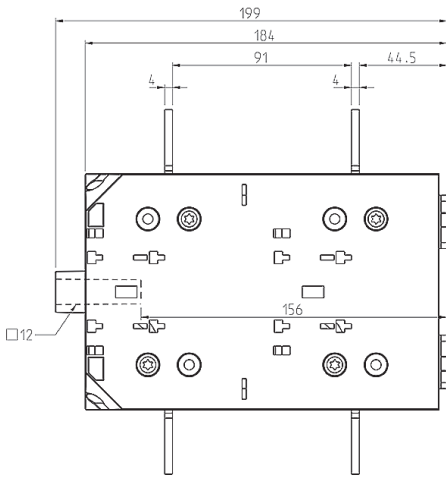


**KU 200-250 A & 160 A PERFORMANCE (P) 4-POLE CHANGE-OVER**

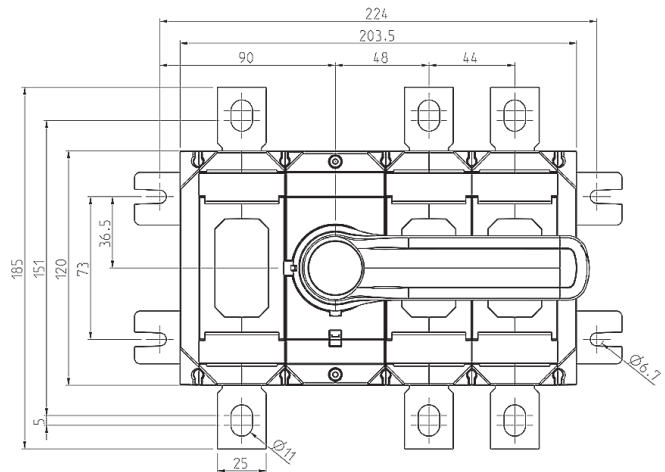
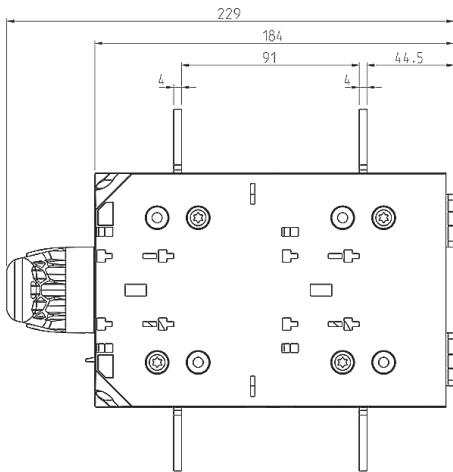


**KU 200-250 A & 160 A PERFORMANCE (P) 4-POLE CHANGE-OVER, DIRECT HANDLE**

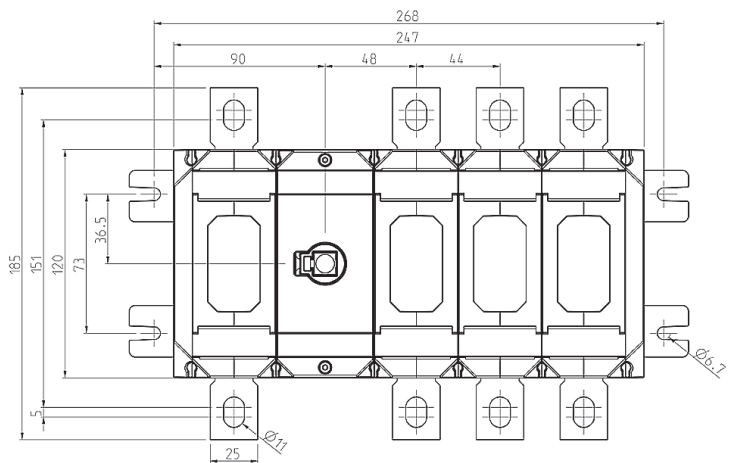
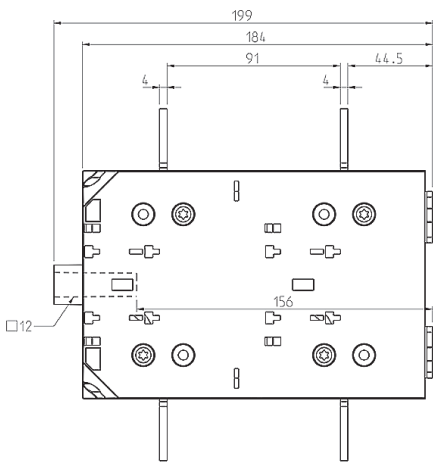
## DIMENSIONAL DRAWINGS CHANGE-OVER SWITCHES



### KU 315-400 A 3-POLE CHANGE-OVER

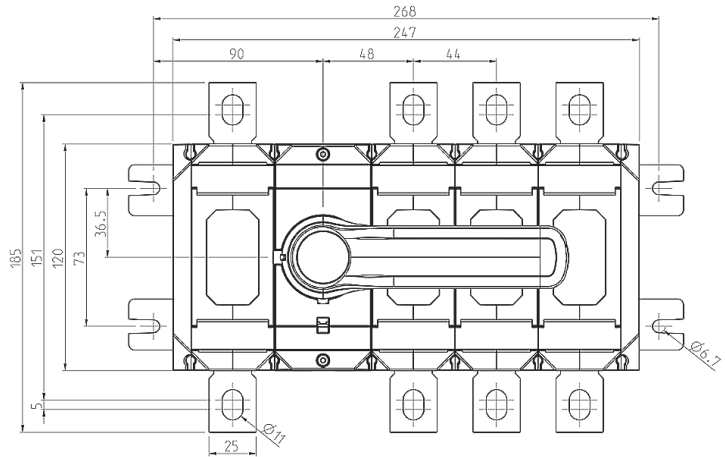
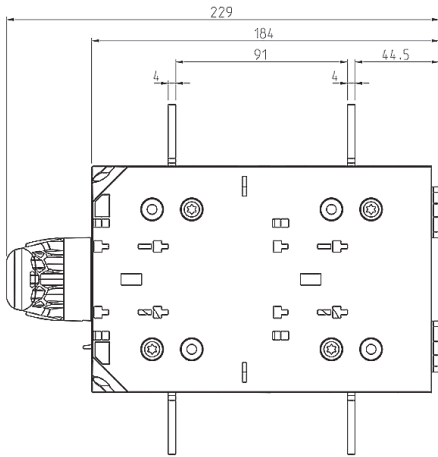


### KU 315-400 A 3-POLE CHANGE-OVER, DIRECT HANDLE

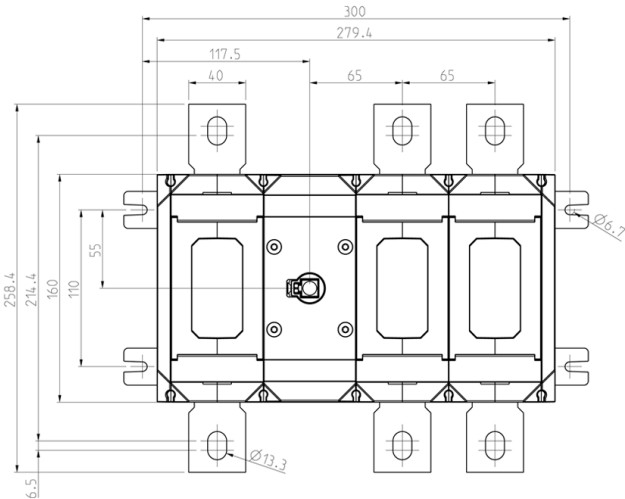
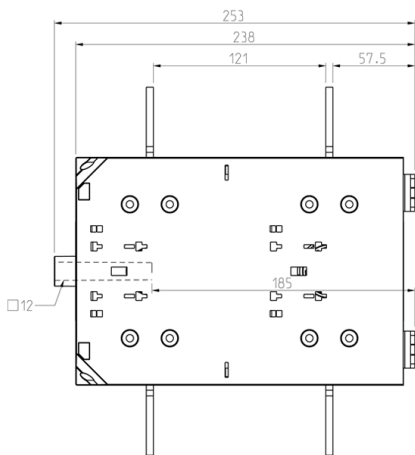


### KU 315-400 A 4-POLE CHANGE-OVER

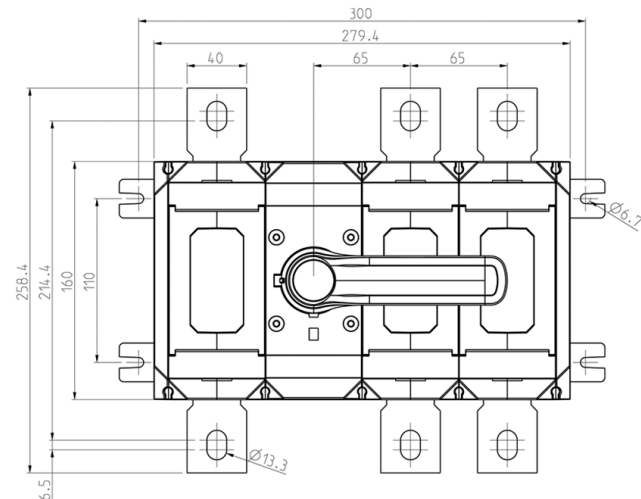
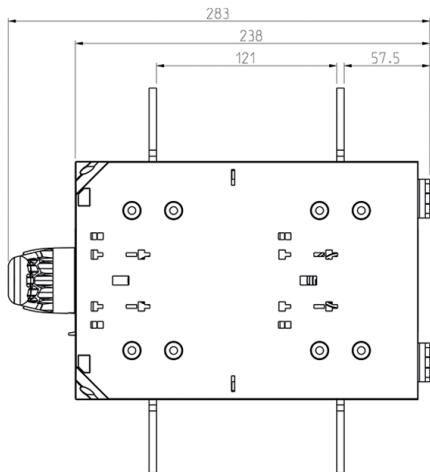
## DIMENSIONAL DRAWINGS CHANGE-OVER SWITCHES



### KU 315-400 A 4-POLE CHANGE-OVER, DIRECT HANDLE



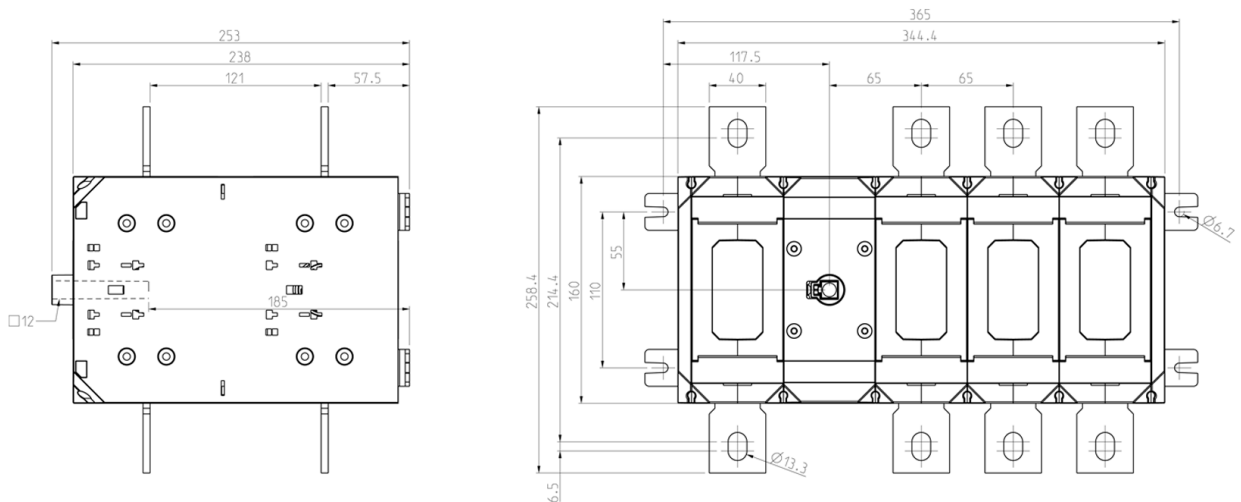
### KU 630-800 A 3-POLE CHANGE-OVER



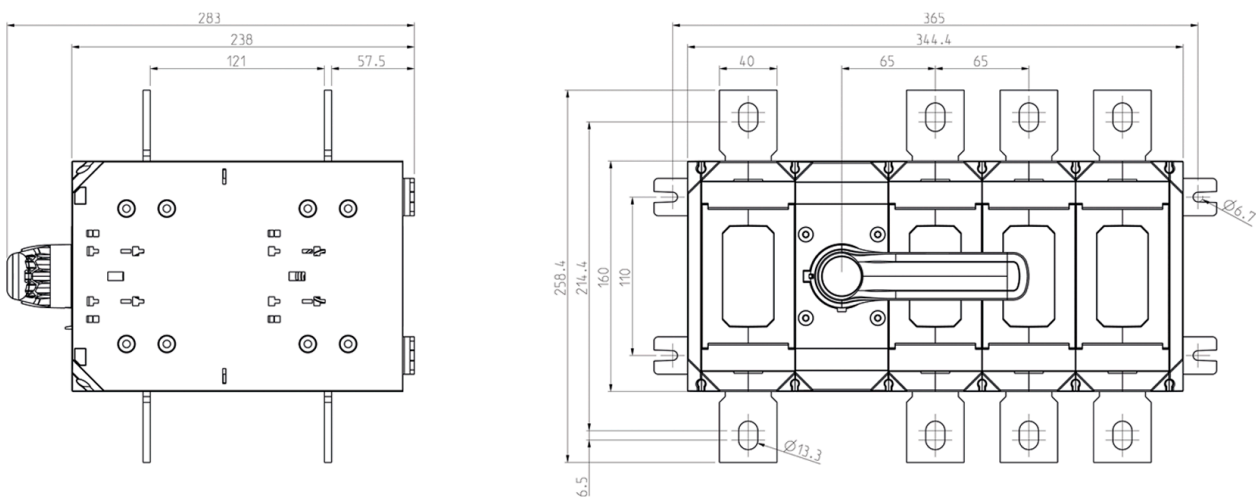
### KU 630-800 A 3-POLE CHANGE-OVER, DIRECT HANDLE



## DIMENSIONAL DRAWINGS CHANGE-OVER SWITCHES

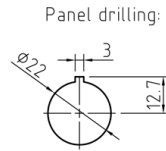
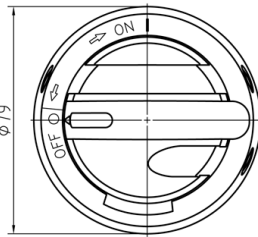
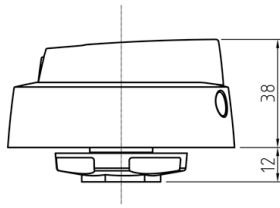


### KU 630-800 A 4-POLE CHANGE-OVER

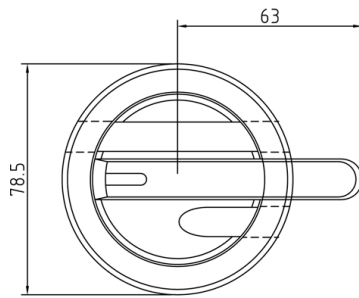
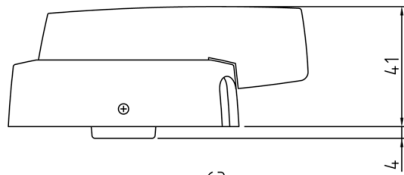


### KU 630-800 A 4-POLE CHANGE-OVER, DIRECT HANDLE

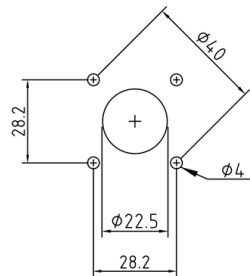
**DIMENSIONAL DRAWINGS  
HANDLES**



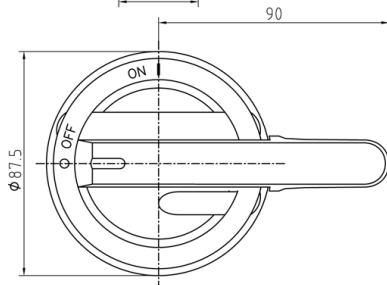
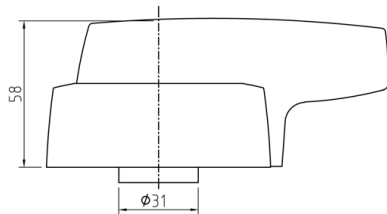
**LK10**



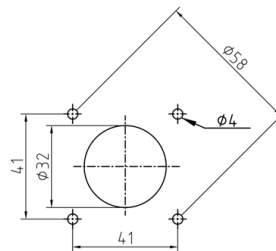
Panel drilling:



**LK11**

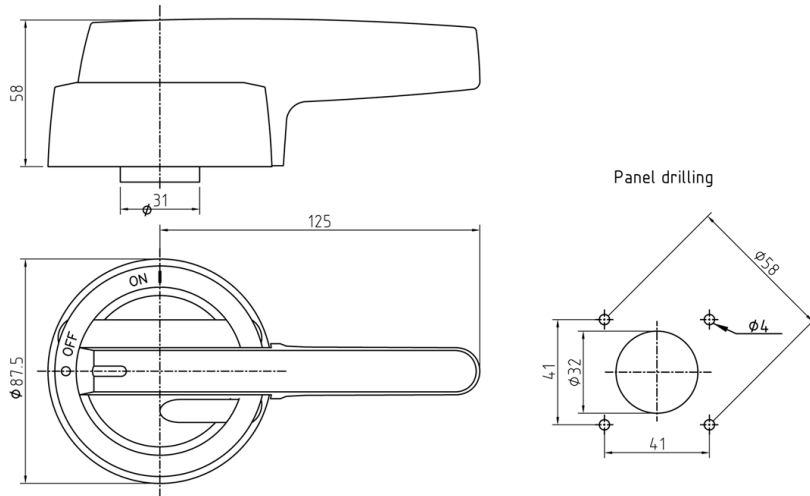


Panel drilling

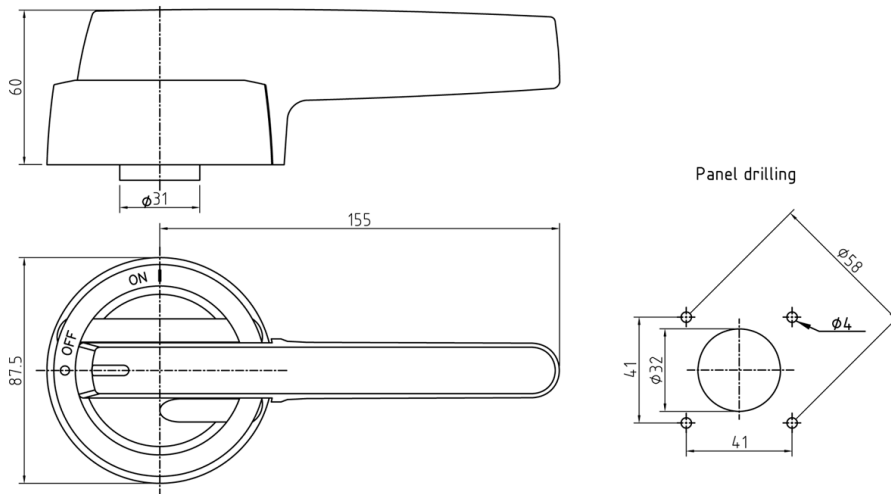


**LK12**

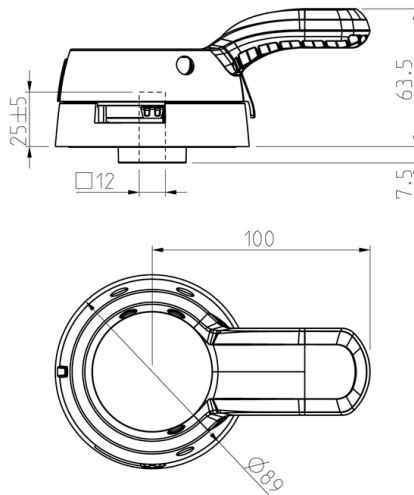
**DIMENSIONAL DRAWINGS  
HANDLES**



**LK13**

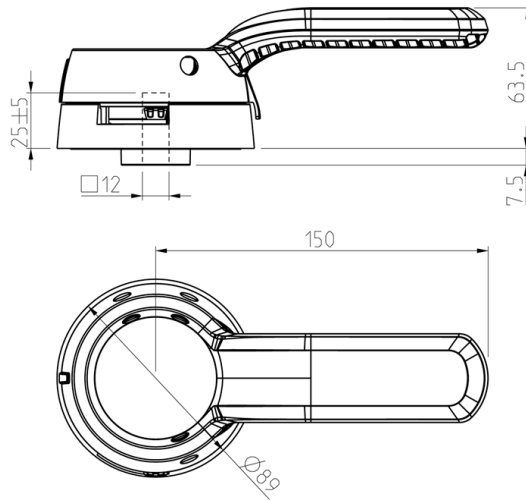


**LK14**



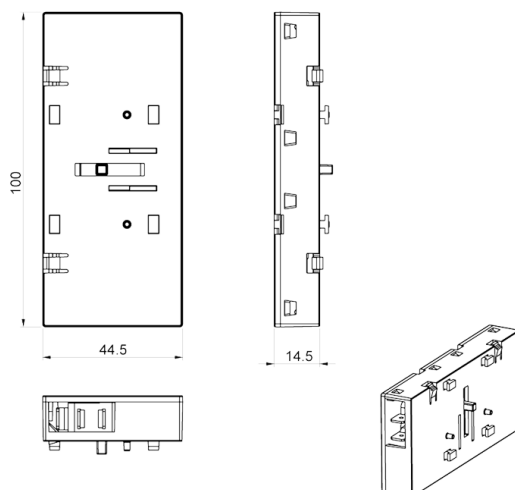
**LKX100**

**DIMENSIONAL DRAWINGS  
HANDLES**



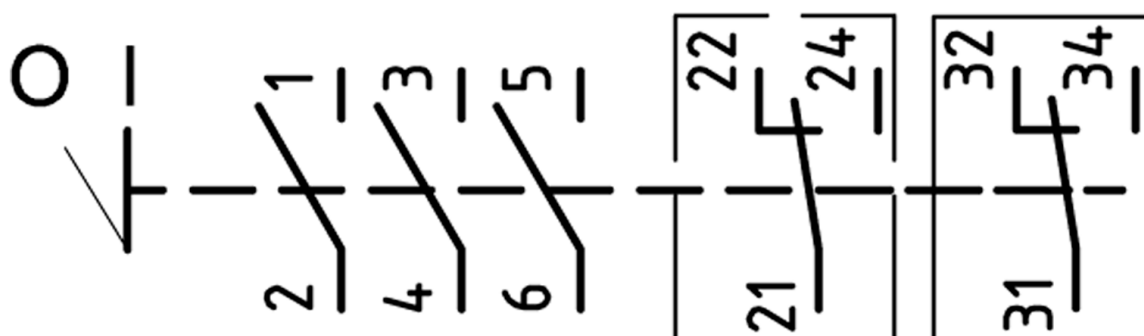
**LKX150**

## DIMENSIONAL DRAWINGS AUXILIARY CONTACTS & SWITCHING DIAGRAMS

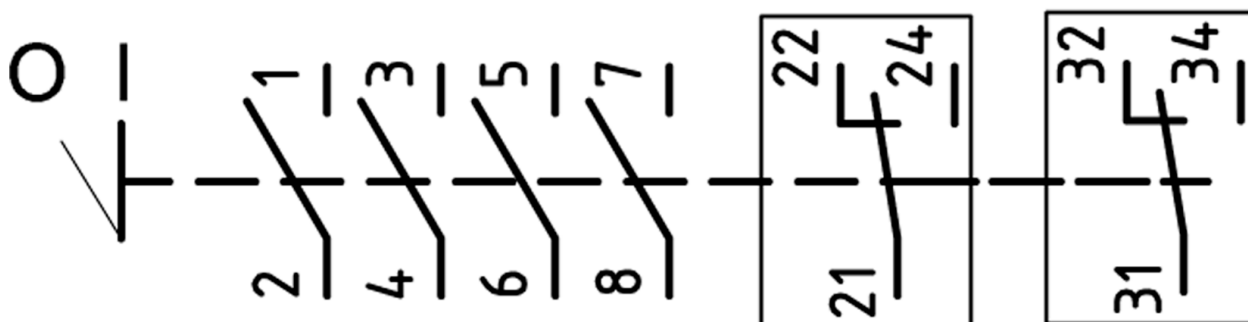


### 1.V160KU & 2.V160KU

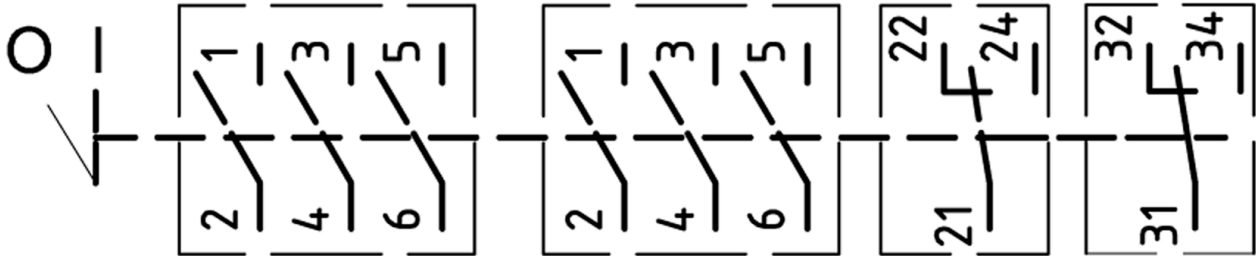
## 3 pole+2NC/NO(Accessory)



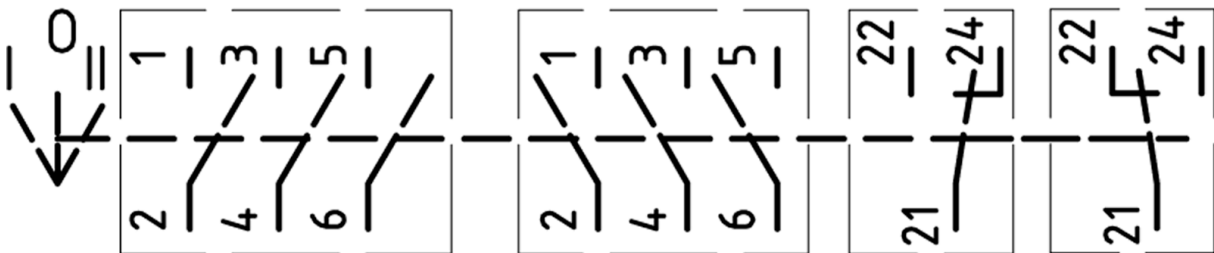
## 4 pole+2NC/NO(Accessory)



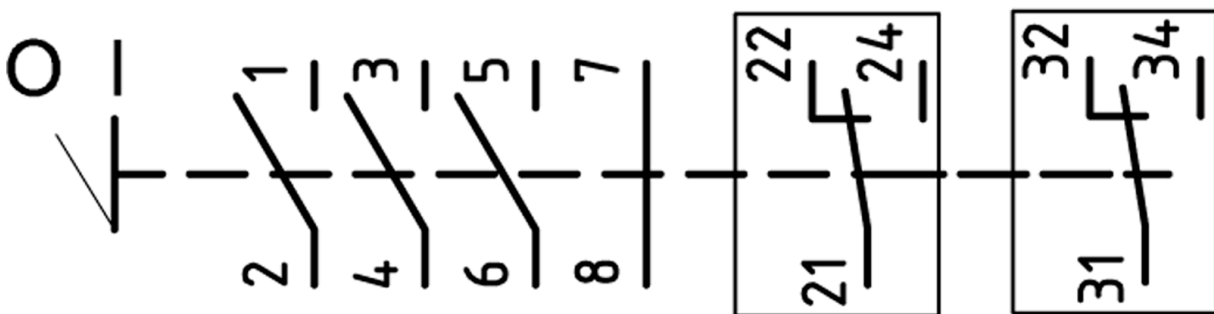
### 6 pole+2NC/NO(Accessory)



### Change-over 3pole+2NC/NO(Accessory)

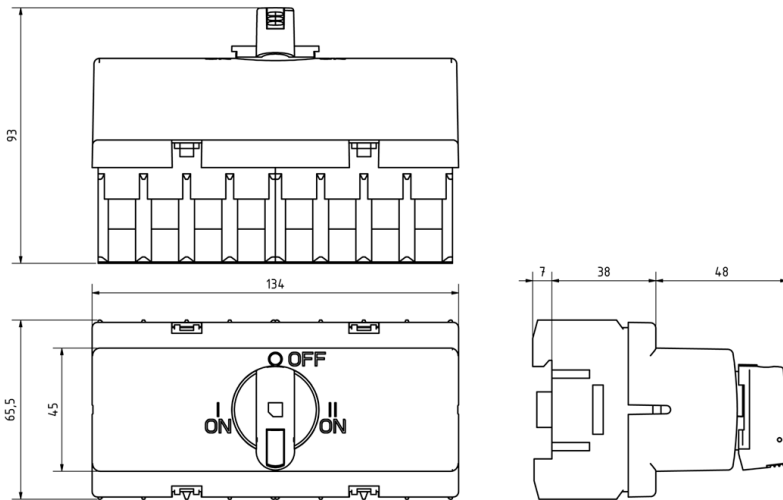


### 3 pole+NT+2NC/NO(Accessory)

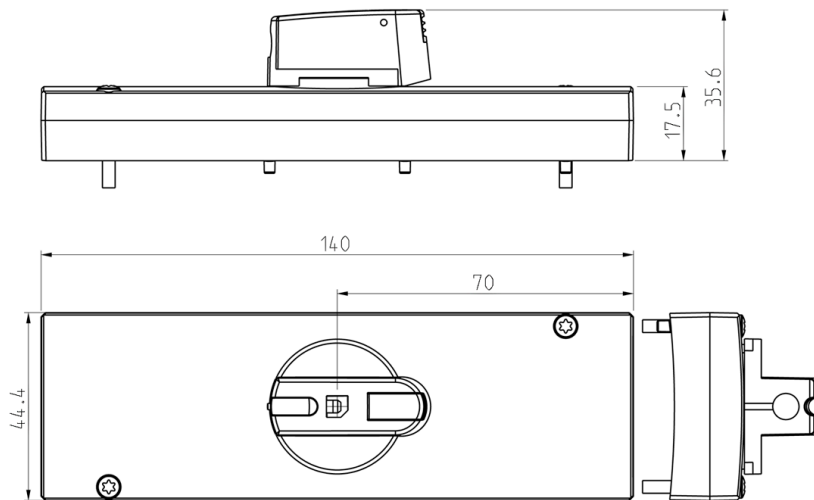




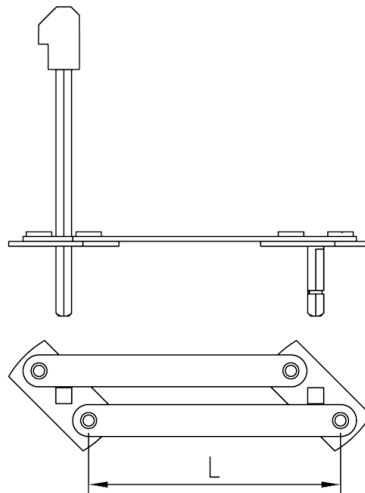
## DIMENSIONAL DRAWINGS CHANGE-OVER KITS & PARALLEL KITS



### KU3-4P/VV

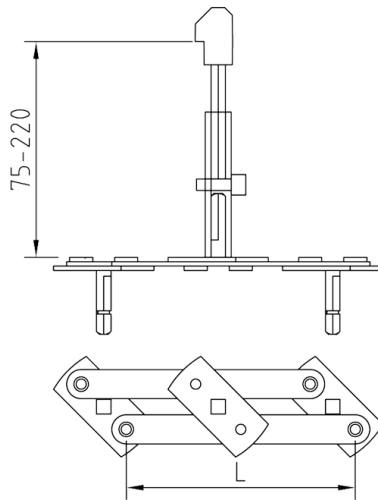


### PK160KU & CO160KU



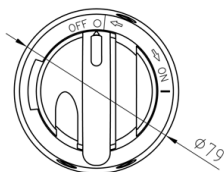
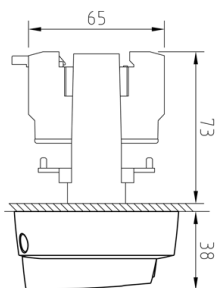
### RV S

**DIMENSIONAL DRAWINGS  
CHANGE-OVER KITS & PARALLEL KITS**

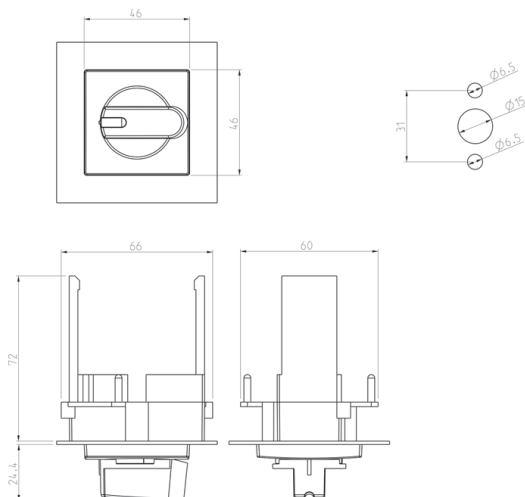


**RV**

**DIMENSIONAL DRAWINGS  
DOOR MOUNTING KITS**

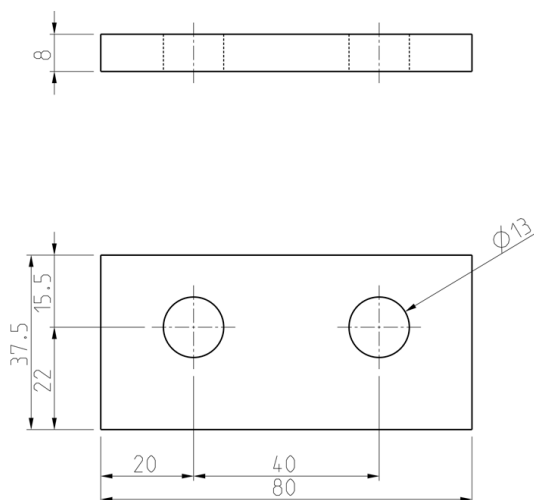


**OKA KU LK10**

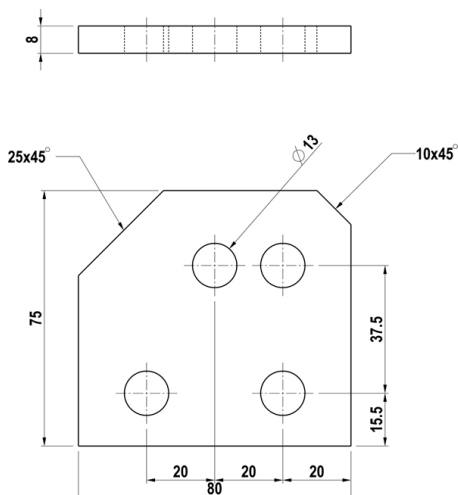


**OKA KU LK6**

**DIMENSIONAL DRAWINGS  
SPREADERS**

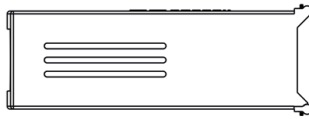
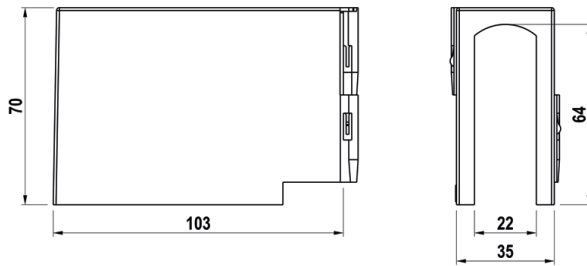


**ALK800C**

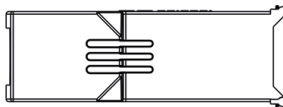
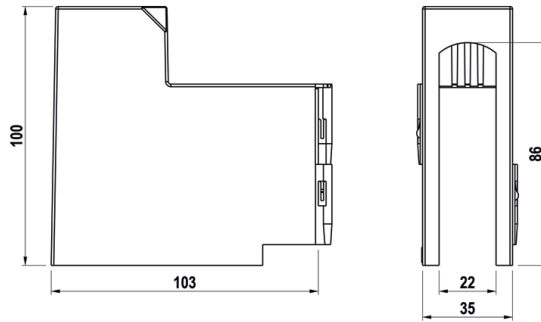


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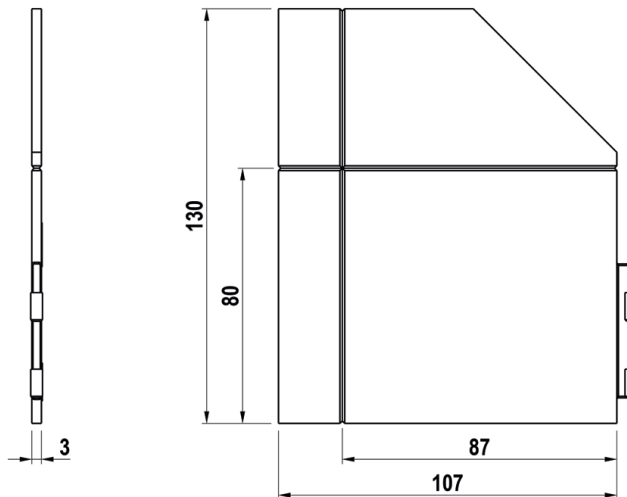
## DIMENSIONAL DRAWINGS TERMINAL COVERS & PHASE BARRIERS



### LS250F

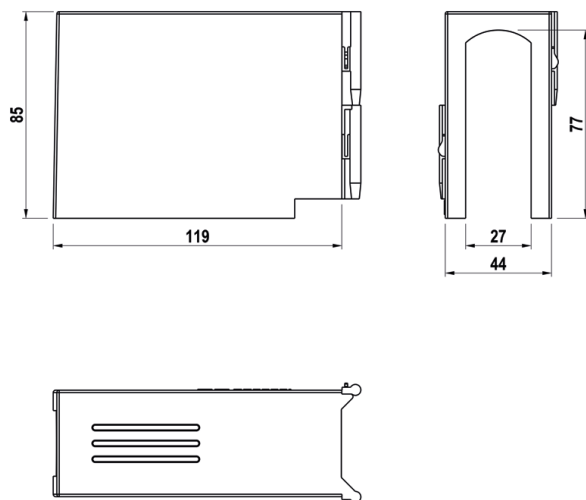


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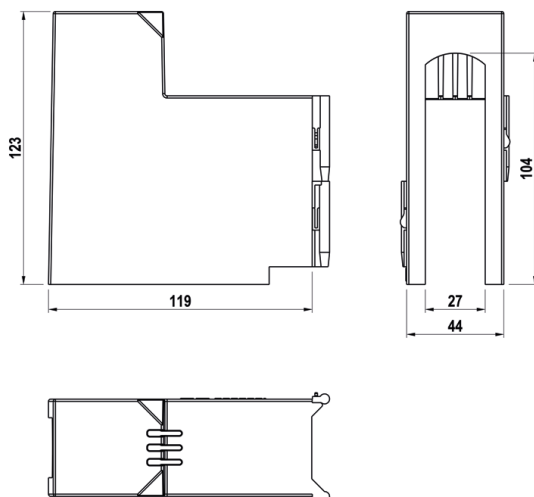


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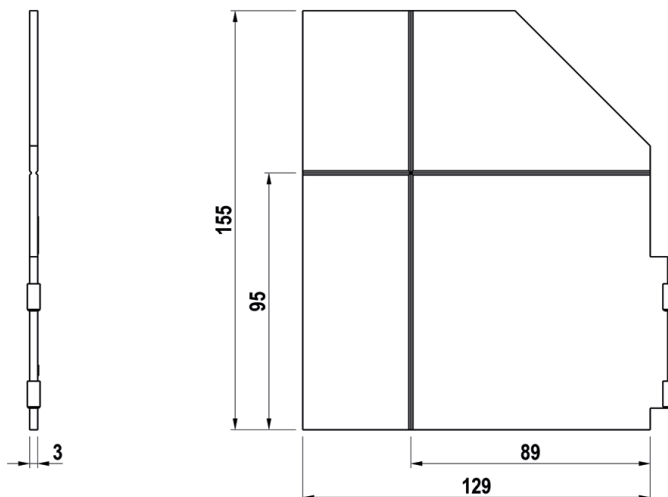
## DIMENSIONAL DRAWINGS TERMINAL COVERS & PHASE BARRIERS



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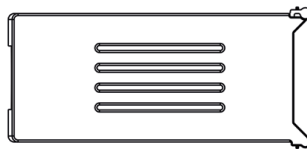
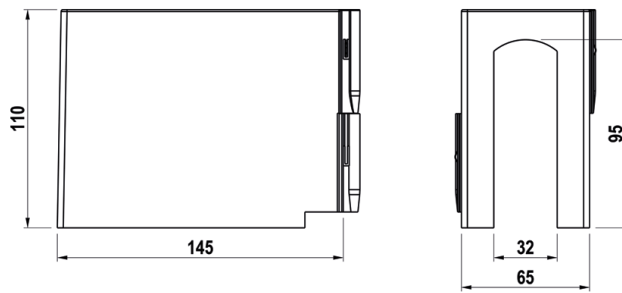
### LS400H



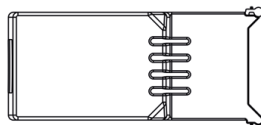
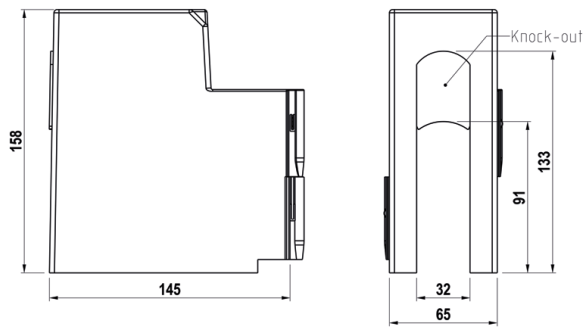
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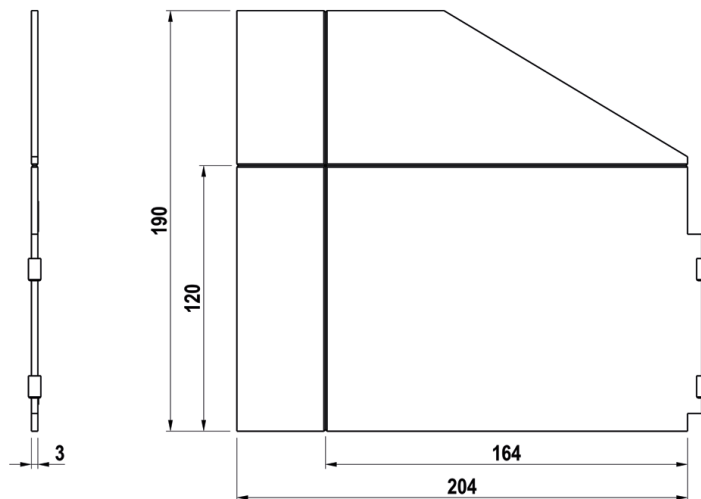
## DIMENSIONAL DRAWINGS TERMINAL COVERS & PHASE BARRIERS



### LS800F



### LS800H



### VS800

## CONDITIONS OF SALE

### 1. Validity

These conditions are subject to any special stipulations set out by KATKO Oy (hereinafter “Katko”) in the Agreement documents. The said conditions and stipulations shall prevail unless otherwise agreed in writing.

### 2. Specifications

All quotations for goods are made in accordance with Katko’s specifications at the time of order.

### 3. Price

Katko reserves the right to undertake reasonable price adjustments in case of fluctuation of cost with two (2) months notice (unless otherwise agreed in written). The adjustment will be applied also to orders already received and confirmed, if the confirmed delivery time is longer than two (2) months. Any change of the prices shall be notified to the Distributor by registered letter, fax or e-mail.

### 4. Delivery

Unless otherwise agreed, deliveries shall be ex-works, Vantaa in accordance with Incoterms 2010. Where the Distributor fails to give Katko adequate instructions for dispatch, or otherwise delays delivery, Katko shall be entitled to store, dispose of or reallocate the goods without being responsible for any loss and at its option to charge for any costs arising and/or to cancel the order.

### 5. Force Major

Katko shall not be under any liability in respect of any delay in delivery arising from Force Major including but not limited to industrial or labour disputes, riots, mobs, fires, floods, wars, civil strife, embargoes, shortages of labour, materials, power, fuels, or means of transportation, whether affecting the Company of any subcontractor, or for circumstances caused by reasons of law, regulations or orders and lack of permission of any government or competent Authority. Any delay caused by such conditions shall be excused and Katko may claim extension of time for as long as such conditions continue. During the period in which delivery of the goods cannot be made for any above-mentioned reason the Distributor shall be entitled, after giving Katko written notice of its intention to do so, to purchase elsewhere at his own cost and risk and Katko shall not be obliged to make up deficiencies which have arisen as aforesaid. If a delay exceeds three months Katko and the Distributor may cancel the Agreement without incurring any liability therefor.

### 6. Payment

a. Unless otherwise agreed, the Distributor shall make full payment in Euro to Katko by confirmed and irrevocable documentary credit (L/C) payable at sight in Helsinki.

b. Katko charges interest for late payment, amounting to one and one half per cent (1 and 1/2%) per month for any unpaid amount from the date such payment is due.

### 7. Claims

No claim for shortage or damage will be considered unless received in writing by Katko within 14 days from receipt of the goods at their destination.

### 8. Guarantee

Katko shall at its option replace at its own cost any goods which on arrival, fail or are found defective, provided that the goods are returned to Katko’s designated factory freight prepaid, and Katko is informed

immediately, the failure or the defect becomes apparent and the same is shown to Katko’s reasonable satisfaction to be due to its faulty workmanship or defective materials.

No other warranties, express or implied, are made or will be deemed to have been made by Katko and Katko neither assumes nor authorises any other person to assume for it any other obligations or liabilities in connection with the distribution and sale of the products or otherwise. This condition shall replace and exclude all common law or statutory warranties, undertakings, statements, representations or conditions whether express or implied. Katko shall not be liable in contract or tort for any indirect, consequential or economic loss (whether relating to quality, despatch, and delivery or otherwise).

The Distributor will assume responsibility for and hold and save Katko harmless from all claims (including but not limited to claims resulting from acts of negligence on the part of the Distributor), liabilities, demand, costs or expenses or the like which may be incurred. The Distributor shall maintain during the term of this Agreement adequate insurance to cover its obligations under these conditions.

### 9. Copyright and confidentiality

The copyright in all Katko documents (including drawings and art work) furnished to the Distributor shall at all times remain vested in Katko and neither the documents nor their contents shall be used without Katko’s express written consent for any purpose other than that for which they were furnished.

### 10. Taxes, duties, fees, charges

The quoted price is exclusive of all taxes, duties and fees and charges of any kind in the country of destination. Such taxes, duties, fees and charges are payable by the Distributor.

### 11. Forbearance

Katko’s rights shall not be affected or restricted by any indulgence or forbearance to the Distributor.

### 12. Orgalime S 2000

Orgalime S 2000 “General Conditions for the Supply of Mechanical, Electrical and Electronic products” (hereafter Orgalime S 2000) shall apply if not otherwise agreed in the Agreement documents or determined in these conditions. Therefore, should there be a conflict between these conditions and Orgalime S 2000, these conditions shall prevail.



## CONTACT

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Established in 1938, KATKO is a family-owned company that generates more than 60% of its export in over 40 countries around the world.