



INDUSTRY SWITCHING SOLUTIONS



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While all care is taken, we cannot guarantee that all of the information in this publication is up to date and accurate. Specifications may change without notice. It is up to the customer to determine the suitability of a product for an application. APS Industrial assumes no responsibility for the use of the information in this publication.

KATKO IN INDUSTRY

KATKO is a specialised manufacturer of load break switches, switch fuses, safety switches, motor protection switches and a range of complementary accessories. With close to 80 years of experience in designing and manufacturing load break switches, isolators and switch fuses, from their inception, Katko have been focused on product innovation and customer service.

Based in Finland and with manufacturing facilities both there and in Poland, APS Industrial are proud national distributors of the Katko range in Australia. The product portfolio covers a full range of enclosed switches in polycarbonate, ABS, aluminium, stainless steel and sheet steel to match all specifications in a broad spectrum of applications and industries.



FOOD INDUSTRY

Food processing, Dairy, Meat packing & processing, Beverage-making.

Katko is a solution provider for the global dairy industry, leading the way in both food hygiene and work safety. Katko products can be tailored in collaboration with the customer to suit their specific hygiene and performance needs: endurance of both cold and warm jet water sprays, moisture, chemicals and detergents.



HEAVY INDUSTRY

Water and Waste-Water, Power Generation, Metal Manufacturing, Timber, Pulp and Paper.

Katko solutions cover all fields of heavy industry. They have served pulp and paper companies for decades and have grown to be an essential part of the value chain for the widest spectrum of industries all around the world – ranging from metal manufacturing to water purification to strip mills.



HAZARDOUS AND DEMANDING AREAS

Mining and Processing, Oil and Gas, Fire and Marine.

Even the world's most demanding and hostile environments need to be switched on and off. Katko delivers stainless steel casings and extra-strong handles for the mining industry in both the northern and southern hemispheres. Their ATEX products serve high-risk areas and their RINA-certified marine product range was chosen for the world's largest passenger vessel.



RENEWABLE ENERGY

Photovoltaic, Wind power and Recycling.

Katko continuously works on new solutions for renewable energy – today's fastest growing area of energy production. The Nordic operational environment is the perfect laboratory setting for product development both because of the region's high-standard of research facilities and also because of its harsh and intensely varied climate.

KATKO MANUFACTURING PROCESSES

General compliances

- | ISO 9001: 2015 and ISO 14001 Compliance
- | RoHS 3 (EU) 2015/863 (Restriction of Hazardous Substances)
- | REACH (Registration, Evaluation, Authorization, and Restriction of Chemicals)
- | Manufacturers Declaration of Conflict Materials (Dodd-Frank Act of Conflict Materials) Compliance
- | CE Declaration of Conformity



ENCLOSED ISOLATORS

Certification, testing or compliance to:

- | IEC 60 947.3 and AS/NZS 60947.3
- | IEC 60947.1
- | CB
- | VDE
- | UL
- | CSA
- | EMC - Electromagnetic Compatibility (EMC)
- | UV Light
- | EN-12101-3 - High temperature rated FR types



LOAD BREAK SWITCHES

Certification, testing or compliance to:

KU, RT Switches

- | Tested according to IEC 60 947.3 and AS/NZS 60947.3
- | IEC 60 269-2
- | UL 60947-4-1A (16-150 A)
- | CCA
- | CB
- | CSA
- | Lloyd's Register (KU 16 - 160 A)
- | VDE (KU 16 - 40 A & 200 - 800 A)



KCS ISOLATORS

Certification, testing or compliance to:

- | IEC/EN 62208
- | AS/NZS 61439.1
- | AS/NZS 61439.4
- | IEC/EN 61439.1
- | IEC/EN 61439.4
- | IEC/EN 60529
- | IEC/EN 62262
- | CCC Self Declaration for KU16 - 125 (China)
- | RINA



KL TERMINAL CONNECTORS

Certification, testing and compliance to:

- | KL range: Certified according to IEC 61238-1 Class A
- | UL Certificate of Compliance
- | RoHS

KEM POLYCARBONATE ENCLOSED ISOLATING SWITCHES

16 A – 40 A enclosed switch shown below:

Polycarbonate (IP66) or ABS (1P65):

High resistance against UV and many chemicals.
Available in grey/black or yellow/red.

Neutral & earth terminals

fitted on 3 pole switch. 1 and 4 pole switches only earth.

Retrofit 'snap on' auxiliary contacts.

No need to touch existing cabling.

Multiple entries: dual M20 & M25 mm as standard on the top and bottom and 1 x M20 at the rear of base. Knock-out glands are easy to open.

Large cable terminals
1.5 - 16 mm² up to 40A
2.5 - 35 mm² up to 80A



Door interlock with defeat mechanism. Self-extinguishing material and excellent insulating properties. Padlock in OFF position prevents unauthorised or unsafe operation. Padlock ON option. Reliable position indication.



Provision for 3 padlocks Padlock ON is optional.

Refer special switch part number with "LON" included. Sliding padlock access lever, and door defeat mechanism.

Enclosure mounting screws (4.5 mm dia.) isolated from the inside housing, keeping the integrity of the IP65/IP66 rating.

Auxiliary Contact Blocks, can be installed to an enclosed switch. Auxiliary contacts are early break by design. Depending on switch size and type, the max. quantity can vary, and some auxiliary contact types are either top or side mounting.

Stainless steel screw lid fixing, screws will not rust and become hard to remove

Fully rated Load Break Switch.

Breaking capacity of 8 x AC23 rating. Back-up fuse rating for short circuit backup. Switch unplugs from enclosure for easy cabling or replacement.

CHOOSING THE CORRECT SWITCH FOR BEST ELECTRICAL PERFORMANCE, AND MECHANICAL ENDURANCE

ELECTRICAL PERFORMANCE:

Utilisation Categories for Alternating Current (AC)

AC-20 A	Connecting and disconnecting under no-load.
AC-21 A	Switching of resistive loads, including moderate overloads.
AC-22 A	Switching of mixed loads, inductive and resistive loads including moderate overloads (applicable for switchboard main switches)
AC-23 A	Switching of motor loads or other highly inductive loads (applicable when used as an isolator for a machine or a motor)

UTILISATION CATEGORIES FOR DIRECT CURRENT (DC)

DC-21 B Switching of resistive loads, including moderate overloads.

The Utilisation category defines the product current ratings in the table (1.1 or 1.2). In the "Selection Table" you will find the utilisation categories AC-22 and AC-23 for 415V, as these are the most commonly used categories. 500V and 690V ratings can also be found in the ratings chart at the rear of this catalogue. Why 690V ratings? Heavy industrial sites are typically using higher voltages to minimize sizing of cables in high power applications.

Protection against over-voltage: IEC 60364-4-44 defines four categories for impulse withstand, the highest one of which is 8 kV (equipment placed at the head of an installation). Most Katko products are rated 8 kV or 12 kV – refer ratings chart on following pages.



MECHANICAL ENDURANCE – PROTECTION OF THE SWITCH:

Multiple options for enclosures are offered in order to maximise the longevity of the switch without compromising its electrical performance. When determining the correct enclosure material for the installation environment should be considered. For example, Katko polycarbonate enclosures are manufactured from the highest grade polycarbonate that incorporates, UV, and chemical resistance improving and flame retardant additives, and are IP66 protection class. However, in certain indoor and outdoor installations Aluminum enclosures will outlast a Polycarbonate enclosure. Users can be reminded that “saving money in the short-term” doesn’t necessarily mean saving money. Having to later replace the lower price point isolator and discontinuing operations for the duration of installation, the overall costs associated with the lower price point isolator far exceed the difference in price of the appropriate solution for the application. This view point can be high lightened with sustainable values; buying 1 product instead of buying 2 products. As well, the recycling properties of Aluminum are better than those of many Plastics.

| IP54

Protected against dust – limited ingress permitted (no deposit)
Protected against water sprayed from all directions – limited ingress permitted

| IP55

IP55 Protected against dust – limited ingress permitted (no deposit)
Protected against low pressure jets of water from all directions – limited ingress permitted

| IP65

Totally protected against dust
Protected against low pressure jets of water from all directions – limited ingress permitted

| IP66

Totally protected against dust
Protected against strong jets of water e.g. for use on ship decks – limited ingress permitted

| IP67

Totally protected against dust
Protected against the effects of immersion between 15 cm and 1m

| IP69K

Totally protected against dust
Protected against close-range high pressure, high temperature spray downs of up to 80°C



AC RATINGS - ENCLOSED ISOLATOR AND LOAD BREAK SWITCHES

RATINGS DATA		ENCLOSED ISOLATOR SWITCHES													
		Switches used internally in the part numbers are based on that switches AC22 rating 1)													
		KEM	KEM	KEM	KEM	KEM	KEM	KEM	KEM	KEM	KEM	KEM	KEM	KEM	-
		KEA	KEA	KEA	KEA	KEA	KEA	KEA	KEA	KEA	KEA	-	-	-	-
		KER	KER	KER	KER	KER	KER	KER	KER	KER	KER	KER	KER	KER	KER
		KET	KET	KET	KET	KET	KET	KET	KET	KET	KET	KET	KET	KET	KET
		16	25	40	63	80	100	125	160	200	250	315	400	630	800
		KU ROTARY LOAD BREAK SWITCHES													
		KU	KU	KU	KU_N	KU_N	KU	KU	KU	KU	KU	KU	KU	KU	KU
		16	25	40	63	80	100	125	160	200	250	315	400	630	800
Rated insulation voltage, Ui (V)		800	800	800	800	800	800	800	1000	1000	1000	1000	1000	1000	1000
Rated thermal current, Ith (A)		25	40	63	80	100	125	160	200	250	315	315	400	630	800
Nominal values with cable size (mm²)		4	10	16	25	35	70	70	95	95	120	185	240	2 x 185	2 x 185
Rated operational current, Ie (A)															
AC 21A	400/415 V	16	25	40	80	100	125	160	160	200	250	315	400	630	800
	500 V	16	25	40	80	100	125	160	160	200	250	315	400	630	800
	690 V	16	25	40	80	100	125	160	160	200	250	315	400	630	800
AC 22A	400/415 V	16	25	40	63	80	100	125	160	200	250	315	400	630	800
	500 V	16	25	40	63	80	100	125	160	200	250	315	400	630	800
	690 V	16	25	40	63	80	100	125	160	200	250	315	400	630	800
AC 23A	400/415 V	16	25	40	40	63	100	125	160	200	250	315	400	630	800
	500 V	16	25	25	40	40	63	80	100	200	250	315	400	630	800
	690 V	16	25	25	40	40	63	80	100	200	250	315	400	630	800
	1000 V	-	-	-	-	-	-	-	-	-	135	-	200	-	400
Rated operational power for 3-phase (1500 r.p.m.) squirrel cage induction motors (kW)															
AC 23A kW	400/415 V	7.5	11	22	22	30	55	55	90	110	132	160	200	355	400
	500 V	7.5	15	22	30	30	37	55	55	132	160	200	250	400	560
	690 V	11	22	22	37	37	55	75	90	160	250	315	355	630	800
Rated fused short circuit current															
Back up fuse (A)		25	25	40	80	80	160	160	160	250	250	400	400	630	800
R.M.S. value, Ik (kA)		50	50	25	50	50	65	65	65	100 ***	100 ***	100	100	100	100
Peak value (kA)		3.8	3.8	4.5	8.7	8.7	15	15	15	26	26	42	42	76	76
Impulse withstand voltage, Uimp (kV)		8	8	8	8	8	8	8	8	12	12	12	12	12	12
Rated short circuit making capacity, Icm (kA)															
690 V		1	1	1	3.1	3.1	8	8	8	14	14	27.5	27.5	60	60
Rated short time withstand current (1 s), Icw (kA)															
690 V		0.7	0.7	0.7	2	2	5	5	5	8 **	8 **	13.5 **	13.5 **	28 **	28 **
Rated breaking capacity, Icn (A) AC-23A															
AC 23A kW	400/415 V	128	200	320	320	504	800	1000	1280	1600	2000	2520	3200	5040	6400
	500 V	128	200	200	320	320	504	640	800	1600	2000	2520	3200	5040	6400
	690 V	128	200	200	320	320	504	640	800	1600	2000	2520	3200	5040	6400
Electrical endurance (number of operations)		3000	3000	3000	3000	3000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Mechanical endurance (number of operations)		50000	50000	50000	50000	50000	16000	16000	16000	16000	10000	10000	10000	10000	10000
Terminals / Bolt size Cu (mm²)		1.5 – 16	1.5 – 16	1.5 – 16	2.5 – 3.5	2.5 – 3.5	6 - 70	6 - 70	6 - 70	M8	M8	M10	M10	M12	M12
Max terminal torque (Nm)		1.8	1.8	1.8	2.5	2.5	6	6	6	15 - 22	15 - 22	30 - 44	30 - 44	50 - 75	50 - 75
Standards		AS/NZS 60947.1 and IEC 60947.1, AS/NZS 60947.3 and IEC 60947.3													
		RoHS													
		CE													
		IEC 60204.1													
* 415 V															
** 1000V															
*** 50kA with 315A fuse															

Examples:

- | KEM 3 63 YR M3, uses a KU363N switch which has an AC22A rating of 63A.
- | KEA 3 100 A4, uses a KU3100 switch internally which has an AC22A rating of 100A.

DC RATINGS - ENCLOSED ISOLATOR AND LOAD BREAK SWITCHES

RATINGS DATA		ENCLOSED ISOLATOR SWITCHES								
		Switches used internally in the part numbers are based on that switches AC 22A - DC 22 rating 1)								
		KEM	KEM	KEM	KEM	KEM	KEM	KEM	KEM	-
		KEA	KEA	KEA	KEA	KEA	KEA	KEA	KEA	-
		KER	KER	KER	KER	KER	KER	KER	KER	-
		KET	KET	KET	KET	KET	KET	KET	KET	-
		16	25	40	63	80	100	125	160	-
		KU	KU	KU	KU_N	KU_N	KU	KU	KU	VKA
Rated insulation voltage, U _i (V)		690	690	690	690	690	690	690	690	690
Rated thermal current, I _{th} (A)		25	40	63	80	100	125	160	200	250
Nominal values with cable size (mm ²)		4	10	16	25	35	70	70	95	120
Rated operational current, I _e (A)										
DC 21 Amperes / Series Poles	24 V	16 / -	25 / -	40 / -	63 / -	80 / -	100 / -	125 / -	160 / -	250 / -
	48 V	16 / 3	25 / 3	40 / 3	63 / 3	80 / 3	100 / 3	125 / 3	160 / 3	250 / 3
	110 V	16 / 3	25 / 3	40 / 3	63 / 3	80 / 3	100 / 3	125 / 3	160 / 3	250 / 3
	220 V	16 / 3	25 / 3	40 / 3	63 / 3	80 / 3	100 / 3	125 / 3	160 / 3	250 / 3
	440 V	16 / 3	25 / 4	40 / 4	63 / 4	80 / 4	100 / 4	125 / 4	160 / 4	250 / 4
DC 22 Amperes / Series Poles	24 V	16 / -	25 / -	40 / -	63 / -	80 / -	100 / -	125 / -	160 / -	250 / -
	48 V	16 / 3	25 / 3	40 / 3	63 / 3	80 / 3	100 / 3	125 / 3	160 / 3	250 / 3
	110 V	16 / 3	25 / 3	40 / 3	63 / 3	80 / 3	100 / 3	125 / 3	160 / 3	250 / 3
	220 V	16 / 3	25 / 3	40 / 3	63 / 3	80 / 3	100 / 3	125 / 3	160 / 3	250 / 3
	440 V	6 / 4	10 / 4	16 / 4	25 / 4	32 / 4	50 / 4	50 / 4	63 / 4	125 / 3
DC 23 Amperes / Series Poles	24 - 48 V	16 / 3	25 / 3	40 / 3	63 / 3	80 / 3	100 / 3	125 / 3	160 / 3	250 / 3
	110 V	16 / 3	25 / 3	40 / 3	63 / 3	80 / 3	100 / 3	125 / 3	160 / 3	250 / 3
	220 V	10 / 3	16 / 3	20 / 3	32 / 3	40 / 3	80 / 3	100 / 3	125 / 3	160 / 3
Rated breaking capacity, (A) DC 23										
DC 23 Amperes / Series Poles	24 - 48 V	64 / 3	100 / 3	160 / 3	252 / 3	320 / 3	400 / 3	500 / 3	640 / 3	1000 / 3
	110 V	64 / 3	100 / 3	160 / 3	252 / 3	320 / 3	400 / 3	500 / 3	640 / 3	1000 / 3
	220 V	40 / 3	64 / 3	80 / 3	128 / 3	160 / 3	320 / 3	400 / 3	500 / 3	640 / 3
Rated fused short circuit current										
Back up fuse (A)		25	25	50	63	80	100	125	160	250
Impulse withstand voltage, U _{imp} (kV)		8	8	8	8	8	8	8	8	8
Mechanical endurance (number of operations)		50000	50000	50000	50000	50000	16000	16000	16000	10000
Terminals / Bolt size Cu (mm ²)		1.5 - 16	1.5 - 16	1.5 - 16	2.5 - 3.5	2.5 - 3.5	6 - 70	6 - 70	6 - 70	M8
Max terminal torque (Nm)		1.8	1.8	1.8	2.5	2.5	6	6	6	15 - 22
Standards		AS/NZS 60947.1 and IEC 60947.1, AS/NZS 60947.3 and IEC 60947.3 (AC Ratings)								
		RoHS								
		CE								
		Low Voltage Directive 2014/35/EU, The Electrical Equipment (Safety) Regulations 2016 for the UKCA, ISO 9001:2015								

Examples:

KEM 3 63 YR M3, uses a KU363N switch which has an DC 22 rating of 63A.

KEA 3 100 A4, uses a KU3100 switch internally which has an DC 22 rating of 100A.

ABS SINGLE POLE ENCLOSED ISOLATORS 16 - 63 A (KEM)

- | IP65 Enclosure types M2, M3 (ABS).
- | ABS enclosure type (Acrylonitrile Butadiene Styrene).
- | 1 Pole version,
- | Available 16 A to 80 A.
- | Self-extinguishing material.
- | Wide operating temperature range.
- | Padlockable OFF, lock ON optional.
- | Door interlock when ON, with lid interlock defeat mechanism.
- | Excellent insulating properties.
- | High UV resistance.
- | High chemical resistance.
- | Enclosures can be grey black or yellow red.
- | New KU 16 – 40A switch types have “IsoSafe” printed on the enclosure lids.



Enclosure type	Width mm	Height mm	Depth mm	Material	IP rating
M2	96.4	130.4	106	ABS	65
M3	144	190	96	ABS	65

1 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
Grey Enclosure Black Handle	Grey Enclosure Yellow Red Handle		415 V		415 V		415 V		-	
			690 V		690 V		-		690	
			le / A		le / A		P / kW		le / A	
KEM116 M2 ABS	KEM116YR M2 ABS	16	16	16	3.0	-	-	-	-	1NO40KU (1NO) or 1NC40KU (1NC)
KEM125 M2 ABS	KEM125YR M2 ABS	25	25	25	4.0	-	-	-	-	
KEM140 M2 ABS	KEM140YR M2 ABS	40	40	40	7.5	-	-	-	-	
KEM163 M3 ABS	KEM163YR M3 ABS	80	63	40	7.5	-	-	-	-	
KEM180 M3 ABS	KEM180YR M3 ABS	100	80	63	11.0	-	-	-	-	

POLYCARBONATE ENCLOSED ISOLATORS 16 - 630 A (KEM)

- | IP66; Enclosure types M2, M3, M4
- | IP65; Enclosure types MF11, MF03, MF04
- | Self-extinguishing material
- | Wide operating temperature range
- | Padlockable OFF, lock ON optional
- | Door interlock when ON, with lid interlock defeat mechanism
- | Excellent insulating properties
- | High UV and chemical resistance
- | Available up to 630 A,
- | 3P, 4P, 6P, 8 Pole versions
- | For M2, M3 enclosures Y/R is yellow cover with red handle
- | For large enclosure sizes Y/R is grey enclosure with yellow/red handle
- | Cable gland knockouts std: M1, M2, M3, MF11 enclosures – hole sizes ref. dimensions
- | M4 enclosure – user makes own entries.
- | Gland plate entries provided for enclosure types MF01, MF02, MF03, MF04.
- | New KU 16 – 40A switch types have “IsoSafe” printed on the enclosure lids. Refer auxiliary fitting below.

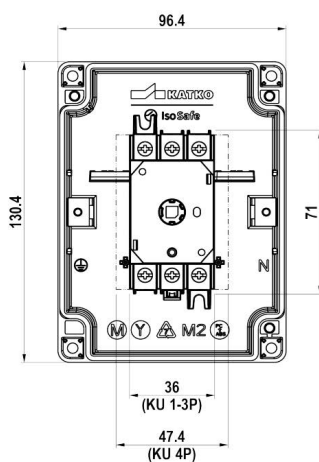


Outline dimensions:

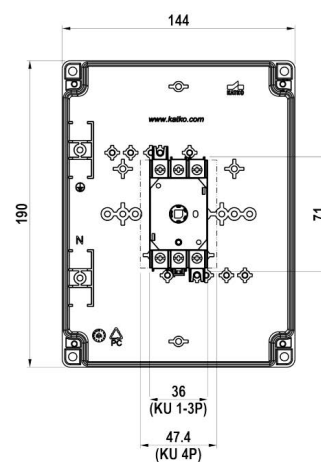
Enclosure type	Width mm	Height mm	Depth mm	Material	IP rating
M2	96.4	130.4	106	Polycarbonate	66
M3	144	190	96	Polycarbonate	66
M4	180	255	100	Polycarbonate	66
MF11	280	380	130	Polycarbonate	65
MF03	380	560	180	Polycarbonate	65
MF04	560	760	250	Polycarbonate	65

Auxiliaries

Part Numbers shown in **BOLD** on the following pages include the new KU compact switches 16A – 40A. Select new side mount auxiliaries to suit from the table on the following pages or from the KU series pages in this catalogue. Older KU_N switches, use top mount auxiliary types KU1V and KU2V which are incompatible.



M2 Enclosure



M3 Enclosure



< KU 16 – 40 A switch with side mounting auxiliary contact.

POLYCARBONATE ENCLOSED ISOLATORS 16 - 630 A (KEM)



3 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit	
Grey Enclosure Black Handle	Grey Enclosure Yellow Red Handle		415 V		415 V		415 V		-		-
			690 V		690 V		-		690		
		Ie / A	Ie / A	Ie / A	P / kW	Ie / A	P / kW	Ie / A	P / kW		
KEM316 M2	KEM316YR M2	16		16		16	7.5	16	11	1NO40KU (1NO) or 1NC40KU (1NC)	
KEM325 M2	KEM325YR M2	25		25		25	11	25	22		
KEM325 M3	KEM325YR M3	40		25		25	11	25	22		
KEM340 M2	KEM340YR M2	40		40		40	22	25	22		
KEM340 M3	KEM340YR M3	40		40		40	22	25	22		
KEM363 M3	KEM363YR M3	80		63		40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO	
KEM380 M3	KEM380YR M3	100		80		63	30	40	37		
KEM3100 M4	KEM3100YR M4	125		100		100	55	63	55	1.V160KU (1 NO/NC CO) or 2.V160KU (2 NO/NC CO)	
KEM3125 M4	KEM3125YR M4	160		125		125	55	80	75		
KEM3160 MF11	KEM3160YR MF11	160		160		160	90	100	90		
KEM3200 MF03	KEM3200YR MF03	200		200		200	110	200	160		
KEM3250 MF03	KEM3250YR MF03	250		250		250	132	250	250		
KEM3250C MF11 *	KEM3250CYRMF11 *	250		250		250	132	-	-		
KEM3400 MF03	KEM3400YR MF03	400		400		400	200	400	355		
KEM3630 MF04	KEM3630YR MF04	630		630		630	355	630	630		

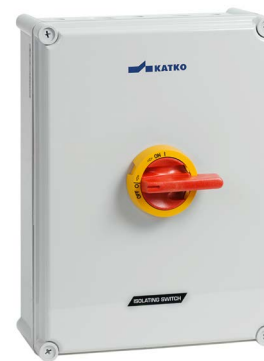
*Compact type

4 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
Grey Enclosure Black Handle	Grey Enclosure Yellow Red Handle		415 V		415 V		415 V		-	
			690 V		690 V		-		690	
			Ie / A		Ie / A		P / kW		Ie / A	
KEM416 M2	KEM416YR M2	16		16		16	7.5	16	11	1NO40KU (1NO) or 1NC40KU (1NC)
KEM425 M2	KEM425YR M2	25		25		25	11	25	22	
KEM425 M3	KEM425YR M3	40		25		25	11	25	22	
KEM440 M2	KEM440YR M2	40		40		40	22	25	22	
KEM440 M3	KEM440YR M3	40		40		40	22	25	22	
KEM463 M3	KEM463YR M3	80		63		40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO
KEM480 M3	KEM480YR M3	100		80		63	30	40	37	
KEM4100 M4	KEM4100YR M4	125		100		100	55	63	55	1.V160KU (1 NO/NC CO) or 2.V160KU (2 NO/NC CO)
KEM4125 M4	KEM4125YR M4	160		125		125	55	80	75	
KEM4160 MF11	KEM4160YR MF11	160		160		160	90	100	90	
KEM4200 MF03	KEM4200YR MF03	200		200		200	110	200	160	
KEM4250 MF03	KEM4250YR MF03	250		250		250	132	250	250	
KEM4250C MF11 *	KEM4250CYRMF11 *	250		250		250	132	-	-	
KEM4400 MF03	KEM4400YR MF03	400		400		400	200	400	355	
KEM4630 MF04	KEM4630YR MF04	630		630		630	355	630	630	

*Compact type

POLYCARBONATE ENCLOSED ISOLATORS 16 - 630 A (KEM)



6 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
Grey Enclosure Black Handle	Grey Enclosure Yellow Red Handle		415 V		415 V		415 V		-	
			690 V		690 V		-		690	
			le / A		le / A		P / kW		P / kW	
KEM616 M3	KEM616YR M3	16		16		16	7.5	16	11	1NO40KU (1NO) or 1NC40KU (1NC)
KEM625 M3	KEM625YR M3	25		25		25	11	25	22	
KEM640 M3	KEM640YR M3	40		40		40	22	25	22	
KEM663 M3	KEM663YR M3	80		63		40	22	40	37	Cannot be installed
KEM680 M3	KEM680YR M3	100		80		63	30	40	37	
KEM6100 MF11	KEM6100YR MF11	125		100		100	55	63	55	1V160KU 2V160KU
KEM6125 MF11	KEM6125YR MF11	160		125		125	55	80	75	
KEM6160 MF11	KEM6160YR MF11	160		160		160	90	100	90	

8 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
Grey Enclosure Black Handle	Grey Enclosure Yellow Red Handle		415 V		415 V		415 V		-	
			690 V		690 V		-		690	
			le / A		le / A		P / kW		P / kW	
KEM816 M3	KEM816YR M3	16		16		16	7.5	16	11	1NO40KU (1NO) or 1NC40KU (1NC)
KEM825 M3	KEM825YR M3	25		25		25	11	25	22	
KEM840 M3	KEM840YR M3	40		40		40	22	25	22	
KEM863 M3	KEM863YR M3	80		63		40	22	40	37	Cannot be installed
KEM880 M3	KEM880YR M3	100		80		63	30	40	37	
KEM8100 MF11	KEM8100YR MF11	125		100		100	55	63	55	1V160KU 2V160KU
KEM8125 MF11	KEM8125YR MF11	160		125		125	55	80	75	
KEM8160 MF11	KEM8160YR MF11	160		160		160	90	100	90	



POLYCARBONATE ENCLOSED ISOLATORS 16 - 630 A (KEM)

- | IP66; Enclosure types A2, A4
- | IP65; Enclosure types A5, A6
- | IK08; A2, A4 (Degree of mechanical impact)
- | IK10: A4, A6
- | Wide operating temperature range
- | High resistance against many chemicals
- | High UV resistance
- | Excellent in extreme weather conditions
- | Padlockable OFF, Lock ON optional
- | Door interlock when ON, with lid interlock defeat mechanism
- | Available up to 250 A
- | Yellow-red handle versions in all enclosure sizes have a beige-grey base and cover
- | Bottom knock-out cable gland entries provided in A2 enclosures.
- | For A2 enclosure sizes with threaded bottom entries refer to KEA_A2 EMC types.
- | Users make their own entries as required in A4 enclosures.
- | Gland plate entries provided for enclosures types A5, A6
- | New KU 16 – 40 A switch types have "IsoSafe" printed on the enclosure lids. Refer auxiliary fitting below.



Outline dimensions:

Enclosure type	Width mm	Height mm	Depth mm	Material	IP rating
A2	104	158.5	79.5	Aluminium	66
A4	162	262	108	Aluminium	66
A5	300	400	170	Aluminium	65
A6	400	500	170	Aluminium	65

Auxiliaries

Part Numbers shown in **BOLD** on the following pages include the new KU compact switches 16A – 40A. Select new side mount auxiliaries to suit from the table on the following pages or from the KU series pages in this catalogue. Older KU_N switches, use top mount auxiliary types KU1V and KU2V which are incompatible.

EMC Applications (Electro-Magnetic Compatibility)

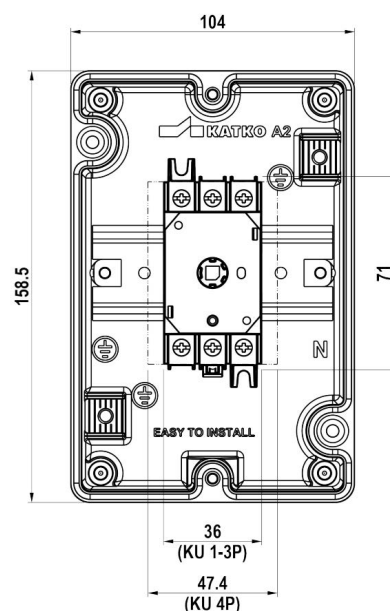
Katko KEA_EMC enclosed switches are available using a single part number. However, to use a KEA standard switch for an EMC application, EMC cable glands must be used. Refer EMC Enclosed switch types in this catalogue for EMC cable gland part numbers.



KEA 200/250A Isolator, cast aluminium enclosure, showing top, bottom, side gland plates.



A2 Enclosure



ALUMINIUM ENCLOSED ISOLATORS 16 - 250 A (KEA)



3 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
Grey Enclosure Black Handle	Grey Enclosure Yellow Red Handle		415 V		415 V		415 V		-	
			690 V		690 V		-		690	
			Ie / A		Ie / A		P / kW		Ie / A	
KEA316 A2	KEA316YR A2	16		16		16	7.5	16	11	
KEA316 A4	KEA316YR A4	16		16		16	7.5	16	11	
KEA325 A2	KEA325YR A2	25		25		25	11	25	22	
KEA325 A4	KEA325YR A4	25		25		25	11	25	22	
KEA340 A2	KEA340YR A2	40		40		40	22	25	22	
KEA340 A4	KEA340YR A4	40		40		40	22	25	22	
KEA363 A4	KEA363YR A4	80		63		40	22	40	37	
KEA380 A4	KEA380YR A4	100		80		63	30	40	37	
KEA3125 A4	KEA3125YR A4	160		125		125	55	80	75	
KEA3160 A4	KEA3160YR A4	160		160		160	90	100	90	
KEA3200 A6	KEA3200YR A6	200		200		200	110	200	160	
KEA3200C A5*	KEA3200CYR A5*	200		200		200	110	-	-	
KEA3250 A6	KEA3250YR A6	250		250		250	132	250	250	

*Compact type

4 Pole Enclosed Isolators

KEA416 A2	KEA416YR A2	16	16	16	7.5	16	11	1NO40KU (1NO) or 1NC40KU (1NC)		
KEA416 A4	KEA416YR A4	16	16	16	7.5	16	11			
KEA425 A2	KEA425YR A2	25	25	25	11	25	22			
KEA425 A4	KEA425YR A4	25	25	25	11	25	22			
KEA440 A2	KEA440YR A2	40	40	40	22	25	22			
KEA440 A4	KEA440YR A4	40	40	40	22	25	22			
KEA463 A4	KEA463YR A4	80	63	40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO		
KEA480 A4	KEA480YR A4	100	80	63	30	40	37			
KEA4125 A4	KEA4125YR A4	160	125	125	55	80	75	1.V160KU (1 NO/NC CO) or 2.V160KU (2 NO/NC CO)		
KEA4160 A4	KEA4160YR A4	160	160	160	90	100	90			
KEA4200 A6	KEA4200YR A6	200	200	200	110	200	160			
KEA4200C A5*	KEA4200CYR A5*	200	200	200	110	-	-			
KEA4250 A6	KEA4250YR A6	250	250	250	132	250	250			

*Compact type

6 Pole Enclosed Isolators

KEA616 A4	KEA616YR A4	16	16	16	7.5	16	11	1NO40KU (1NO) or 1NC40KU (1NC)		
KEA625 A4	KEA625YR A4	25	25	25	11	25	22			
KEA640 A4	KEA640YR A4	40	40	40	22	25	22			
KEA663 A4	KEA663YR A4	80	63	40	22	40	37	KU1V (1NO+1NC) KU2V (2NO+2NC)		
KEA680 A4	KEA680YR A4	100	80	63	30	40	37			
KEA6125 A5	KEA6125YR A5	160	125	125	55	80	75	1.V160KU 2.V160KU		
KEA6160 A5	KEA6160YR A5	160	160	160	90	100	90			

*Compact type

8 Pole Enclosed Isolators

KEA816 A4	KEA816YR A4	16	16	16	7.5	16	11	1NO40KU (1NO) or 1NC40KU (1NC)		
KEA825 A4	KEA825YR A4	25	25	25	11	25	22			
KEA840 A4	KEA840YR A4	40	40	40	22	25	22			
KEA863 A4	KEA863YR A4	80	63	40	22	40	37	KU1V (1NO+1NC) KU2V (2NO+2NC)		
KEA880 A4	KEA880YR A4	100	80	63	30	40	37			
KEA8125 A5	KEA8125YR A5	160	125	125	55	80	75	1.V160KU 2.V160KU		
KEA8160 A5	KEA8160YR A5	160	160	160	90	100	90			

*Compact type

For applications such as when isolators for AC drives or other harmonic emitting applications, Katko EMC enclosed switches are available using a single part number. In order to use a standard metal enclosed switch for an EMC application, EMC cable glands must be used. Refer EMC switch types on the following pages for EMC cable glands.

STAINLESS STEEL ENCLOSED ISOLATORS 16 - 1600 A (KER)

- | IP66; Enclosure types RA2, RA4, RA5 are AISI 316 stainless steel.
- | Acid and other chemical proof.
- | IP65; Enclosure types R6, R7, R8, R9, R10 are AISI 304 stainless steel. (316 stainless steel on request).
- | Where hygiene and high protection against corrosion are required
- | Padlockable OFF, Lock ON optional.
- | Door interlock when ON, with lid interlock defeat mechanism.
- | Available up to 1600 A.
- | Unthreaded cable gland entries provided for enclosures as standard for RA2, RA4.
- | RA2: 16-40 A, 3P/4P: 2 x M25 / 1 x M16. 6P/8P types include additional entries.
- | RA4: 63-125 A, 3P/4P: 2 x M32 / 1 x M16. 6P/8P types include additional entries.
- | RA5 to R10 – user to make own.
- | New KU 16 – 40 A switch types have “IsoSafe” printed on the enclosure lids.
- | Refer auxiliary fitting below.

Outline dimensions:

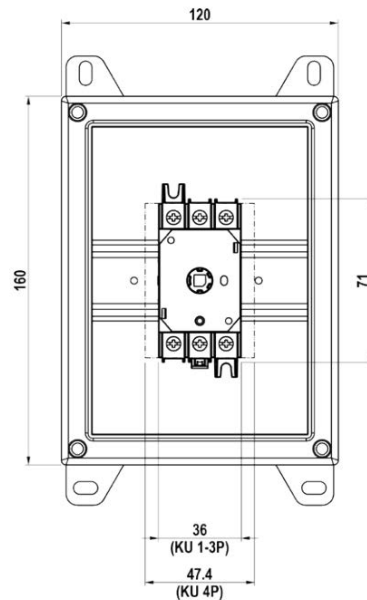
Enclosure type	Width mm	Height mm	Depth mm	Material	IP rating
RA2	120	160	77	AISI 316 SS	66
RA4	160	260	90	AISI 316 SS	66
RA5	300	420	120	AISI 316 SS	66
R6	400	600	200	AISI 304 SS	65
R7	600	800	200	AISI 304 SS	65
R8	800	800	300	AISI 304 SS	65
R9	800	1000	300	AISI 304 SS	65
R10	800	1200	300	AISI 304 SS	65

Auxiliaries

Part Numbers shown in BOLD below include the new KU compact switches 16A – 40A. Select new side mount auxiliaries to suit from the table on the following pages or from the KU series pages in this catalogue. Older KU_N switches, use top mount auxiliary types KU1V and KU2V which are incompatible.

EMC Applications (Electro-Magnetic Compatibility)

Katko KER_EMC enclosed switches are available using a single part number. However, to use a KER standard switch for an EMC application, EMC cable glands must be used. Refer EMC Enclosed switch types in this catalogue for EMC cable gland part numbers.



RA2 Enclosure

STAINLESS STEEL ENCLOSED ISOLATORS 16 - 1600 A (KER)



3 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
Grey Enclosure Black Handle	Grey Enclosure Yellow Red Handle		415 V		415 V		415 V		-	
			690 V		690 V		-		690	
			le / A		le / A		P / kW		le / A	
KER316 RA2	KER316YR RA2	16		16		16	7.5	16	11	1NO40KU (1NO) or 1NC40KU (1NC)
KER325 RA2	KER325YR RA2	25		25		25	11	25	22	
KER340 RA2	KER340YR RA2	40		40		40	22	25	22	
KER363 RA4	KER363YR RA4	80		63		40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO
KER380 RA4	KER380YR RA4	100		80		63	30	40	37	
KER3125 RA4	KER3125YR RA4	160		125		125	55	80	75	1.V160KU (1 NO/NC CO) or 2.V160KU (2 NO/NC CO)
KER3160 RA5	KER3160YR RA5	160		160		160	90	100	90	
KER3200 R6	KER3200YR R6	200		200		200	110	200	160	
KER3200C RA5*	KER3200CYR RA5*	200		200		200	110	-	-	
KER3250 R6	KER3250YR R6	250		250		250	132	250	250	
KER3315 R6	KER3315 YR R6	315		315		315	160	315	315	
KER3400 R6	KER3400YR R6	400		400		400	200	400	355	
KER3630 R7	KER3630 YR R7	630		630		630	355	630	630	
KER3800 R9	KER3800 YR R9	800		800		800	400	800	800	VKT1V160 (1NO+1NC)
KER31000 R10	KER31000 YR R10	1000		1000		1000	560	1000	800	
KER31250 R10	KER31250 YR R10	1250		1250		1250	710	1250	1000	
KER31600 R10	KER31600 YR R10	1600		1600		1600	900	1600	1200	

*Compact type

4 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
Grey Enclosure Black Handle	Grey Enclosure Yellow Red Handle		415 V		415 V		415 V			
			690 V		690 V		-			
			le / A		le / A		P / kW		le / A	
KER416 RA2	KER416YR RA2	16		16		16	7.5	16	11	1NO40KU (1NO) or 1NC40KU (1NC)
KER425 RA2	KER425YR RA2	25		25		25	11	25	22	
KER440 RA2	KER440YR RA2	40		40		40	22	25	22	
KER463 RA4	KER463YR RA4	80		63		40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO
KER480 RA4	KER480YR RA4	100		80		63	30	40	37	
KER4125 RA4	KER4125YR RA4	160		125		125	55	80	75	1.V160KU (1 NO/NC CO) or 2.V160KU (2 NO/NC CO)
KER4160 RA5	KER4160YR RA5	160		160		160	90	100	90	
KER4200 R6	KER4200YR R6	200		200		200	110	200	160	
KER4200C RA5*	KER4200CYR RA5*	200		200		200	110	-	-	
KER4250 R6	KER4250YR R6	250		250		250	132	250	250	
KER4315 R6	KER4315 YR R6	315		315		315	160	315	315	
KER4400 R6	KER4400YR R6	400		400		400	200	400	355	
KER4630 R7	KER4630 YR R7	630		630		630	355	630	630	
KER4800 R9	KER4800 YR R9	800		800		800	400	800	800	VKT1V160 (1NO+1NC)
KER41000 R10	KER41000 YR R10	1000		1000		1000	560	1000	800	
KER41250 R10	KER41250 YR R10	1250		1250		1250	710	1250	1000	
KER41600 R10	KER41600 YR R10	1600		1600		1600	900	1600	1200	

*Compact type

For applications such as when isolators for AC drives or other harmonic emitting applications, Katko EMC enclosed switches are available using a single part number. In order to use a standard metal enclosed switch for an EMC application, EMC cable glands must be used. Refer EMC switch types on the following pages for EMC cable glands.

STAINLESS STEEL ENCLOSED ISOLATORS 16 - 1600 A (KER)



6 Pole Enclosed Isolators

Part Number		AC-21A	400 V 415 V 690 V	AC-22A	400 V 415 V 690 V	AC-23A	400 V 415 V 690 V	AC-23A	- - 690	Auxiliaries to suit
Grey Enclosure Black Handle	Grey Enclosure Yellow Red Handle									
		le / A	le / A	le / A	P / kW	le / A	P / kW	le / A	P / kW	
KER616 RA2	KER616YR RA2	16		16		16	7.5	16	11	1NO40KU (1NO) or 1NC40KU (1NC)
KER625 RA2	KER625YR RA2	25		25		25	11	25	22	
KER640 RA2	KER640YR RA2	40		40		40	22	25	22	
KER663 RA4	KER663YR RA4	80		63		40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO
KER680 RA4	KER680YR RA4	100		80		63	30	40	37	
KER6125 RA4	KER6125YR RA4	160		125		125	55	80	75	1.V160KU (1 NO/NC CO) or 2.V160KU (2 NO/NC CO)
KER6160 RA5	KER6160YR RA5	160		160		160	90	100	90	
KER6200 R7	KER6200 YR R7	200		200		200	110	200	160	
KER6250 R7	KER6250 YR R7	250		250		250	132	250	250	
KER6315 R8	KER6315 YR R8	315		315		315	160	315	315	
KER6400 R8	KER6400 YR R8	400		400		400	200	400	355	

8 Pole Enclosed Isolators

Part Number		AC-21A	400 V 415 V 690 V	AC-22A	400 V 415 V 690 V	AC-23A	400 V 415 V 690 V	AC-23A	- - 690	Auxiliaries to suit
Grey Enclosure Black Handle	Grey Enclosure Yellow Red Handle									
		le / A	le / A	le / A	P / kW	le / A	P / kW	le / A	P / kW	
KER816 RA2	KER816YR RA2	16		16		16	7.5	16	11	1NO40KU (1NO) or 1NC40KU (1NC)
KER825 RA2	KER825YR RA2	25		25		25	11	25	22	
KER840 RA2	KER840YR RA2	40		40		40	22	25	22	
KER863 RA4	KER863YR RA4	80		63		40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO
KER880 RA4	KER880YR RA4	100		80		63	30	40	37	
KER8125 RA4	KER8125YR RA4	160		125		125	55	80	75	1.V160KU 2.V160KU
KER8160 RA5	KER8160YR RA5	160		160		160	90	100	90	

STAINLESS STEEL FLAT OR SLOPED TOP ENCLOSED ISOLATORS 16 - 160 A (KER)

- | Designed for hygienic and industrial or outdoor environments
- | Easy to install and to keep clean
- | IP66, enclosure
- | Acid proof, AISI 316 stainless steel
- | Flat roof or angled rainhood roof versions for dusty or wet environments
- | Padlockable in OFF position stainless steel handle
- | Available up to 160 A (other versions 200 – 800A see following pages)
- | Cable gland entries provided for enclosure type RA2R, RA2S, RA4R, RA4RS
- | Unthreaded cable gland entries provided for enclosures as below,
- | RA2R / RA2RS: 16-40 A, 3P/4P: 2 x M25 / 1 x M16. 6P types include additional entries.
- | RA4R / RA4RS: 63-125 A, 3P/4P: 2 x M32 / 1 x M16. 6P types include additional entries.
- | RA5R and 5RA5S – user to make own
- | New KU 16 – 40 A switch types have "IsoSafe" printed on the enclosure lids.
- | Refer auxiliary fitting below.



Outline dimensions:

Enclosure type	Width mm	Height mm	Depth mm	Material	IP rating
RA2R	120	160	77	AISI 316 SS	66
RA2RS	120	258	113	AISI 316 SS	66
RA4R	160	260	90	AISI 316 SS	66
RA4RS	160	369	127	AISI 316 SS	66
RA5R	300	400	120	AISI 316 SS	66
RA5RS	300	532	156	AISI 316 SS	66

Auxiliaries

Part Numbers shown in **BOLD** below include the new KU compact switches 16A – 40A. Select new side mount auxiliaries to suit from the table following pages or from the KU series pages in this catalogue. Older KU_N switches, use top mount auxiliary types KU1V and KU2V which are incompatible.

EMC Applications (Electro-Magnetic Compatibility)

Katko KER_EMC enclosed switches are available using a single part number. However, to use a KER standard switch for an EMC application, EMC cable glands must be used. Refer EMC Enclosed switch types in this catalogue for EMC cable gland part numbers.



STAINLESS STEEL FLAT TOP ENCLOSED ISOLATORS 16 - 160 A (KER_R)



3 Pole FLAT TOP Enclosed Isolators

Part Number	AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
SS Enclosure SS Handle		415 V		415 V		415 V		-	
		690 V		690 V		-		690	
	Ie / A	Ie / A	Ie / A	P / kW	Ie / A	P / kW	Ie / A	P / kW	
KER316 RA2R	16		16		16	7.5	16	11	1NO40KU (1NO) or 1NC40KU (1NC)
KER325 RA2R	25		25		25	11	25	22	
KER340 RA2R	40		40		40	22	25	22	
KER363 RA4R	80		63		40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO
KER380 RA4R	100		80		63	30	40	37	
KER3125 RA4R	160		125		125	55	80	75	1.V160KU 2.V160KU
KER3160 RA5R	160		160		160	90	100	90	

4 Pole FLAT TOP Enclosed Isolators

Part Number	AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
SS Enclosure SS Handle		415 V		415 V		415 V		-	
		690 V		690 V		-		690	
	Ie / A	Ie / A	Ie / A	P / kW	Ie / A	P / kW	Ie / A	P / kW	
KER416 RA2R	16		16		16	7.5	16	11	1NO40KU (1NO) or 1NC40KU (1NC)
KER425 RA2R	25		25		25	11	25	22	
KER440 RA2R	40		40		40	22	25	22	
KER463 RA4R	80		63		40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO
KER480 RA4R	100		80		63	30	40	37	
KER4125 RA4R	160		125		125	55	80	75	1.V160KU 2.V160KU
KER4160 RA5R	160		160		160	90	100	90	

6 Pole FLAT TOP Enclosed Isolators

Part Number	AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
SS Enclosure SS Handle		415 V		415 V		415 V		-	
		690 V		690 V		-		690	
	Ie / A	Ie / A	Ie / A	P / kW	Ie / A	P / kW	Ie / A	P / kW	
KER416 RA2R	16		16		16	7.5	16	11	1NO40KU (1NO) or 1NC40KU (1NC)
KER425 RA2R	25		25		25	11	25	22	
KER440 RA2R	40		40		40	22	25	22	
KER463 RA4R	80		63		40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO
KER480 RA4R	100		80		63	30	40	37	
KER4125 RA4R	160		125		125	55	80	75	1.V160KU 2.V160KU
KER4160 RA5R	160		160		160	90	100	90	

For applications such as when isolators for AC drives or other harmonic emitting applications, Katko EMC enclosed switches are available using a single part number. In order to use a standard metal enclosed switch for an EMC application, EMC cable glands must be used. Refer EMC switch types on the following pages for EMC cable glands.

STAINLESS STEEL SLOPED TOP ENCLOSED ISOLATORS 16 - 160 A (KER_R)



3 Pole SLOPED TOP Enclosed Isolators

Part Number	AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
SS Enclosure SS Handle	le / A	415 V	le / A	415 V	le / A	415 V	le / A	-	
		690 V		690 V		-		690	
		le / A		P / kW		P / kW		P / kW	
KER316 RA2RS	16		16		16	7.5	16	11	1NO40KU (1NO) or 1NC40KU (1NC)
KER325 RA2RS	25		25		25	11	25	22	
KER340 RA2RS	40		40		40	22	25	22	
KER363 RA4RS	80		63		40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO
KER380 RA4RS	100		80		63	30	40	37	
KER3125 RA4RS	160		125		125	55	80	75	1.V160KU 2.V160KU
KER3160 RA5RS	160		160		160	90	100	90	

4 Pole SLOPED TOP Enclosed Isolators

Part Number	AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
SS Enclosure SS Handle	le / A	415 V	le / A	415 V	le / A	415 V	le / A	-	
		690 V		690 V		-		690	
		le / A		P / kW		P / kW		P / kW	
KER416 RA2RS	16		16		16	7.5	16	11	1NO40KU (1NO) or 1NC40KU (1NC)
KER425 RA2RS	25		25		25	11	25	22	
KER440 RA2RS	40		40		40	22	25	22	
KER463 RA4RS	80		63		40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO
KER480 RA4RS	100		80		63	30	40	37	
KER4125 RA4RS	160		125		125	55	80	75	1.V160KU 2.V160KU
KER4160 RA5RS	160		160		160	90	100	90	

6 Pole SLOPED TOP Enclosed Isolators

Part Number	AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
SS Enclosure SS Handle	le / A	415 V	le / A	415 V	le / A	415 V	le / A	-	
		690 V		690 V		-		690	
		le / A		P / kW		P / kW		P / kW	
KER616 RA4RS	16		16		16	7.5	16	11	1NO40KU (1NO) or 1NC40KU (1NC)
KER625 RA4RS	25		25		25	11	25	22	
KER640 RA4RS	40		40		40	22	25	22	
KER663 RA4RS	80		63		40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO
KER680 RA4RS	100		80		63	30	40	37	
KER6125 RA4RS	160		125		125	55	80	75	1.V160KU 2.V160KU
KER6160 RA5RS	160		160		160	90	100	90	

For applications such as when isolators for AC drives or other harmonic emitting applications, Katko EMC enclosed switches are available using a single part number. In order to use a standard metal enclosed switch for an EMC application, EMC cable glands must be used. Refer EMC switch types on the following pages for EMC cable glands.

STAINLESS STEEL SLOPED TOP ENCLOSED ISOLATORS 160 - 800 A (KER)

- | AISI 316 stainless steel enclosed, IP66.
- | Chemical and impact resistant, and many types of acid proof.
- | Added rain protection via angled top.
- | Single rotary handle on door with 3-point locking mechanism.
- | Handles can be black or yellow red types.
- | Padlockable in OFF. Padlock ON option.
- | Door interlock when ON, with lid interlock defeat mechanism.
- | Isolation rated to IEC 60947.3 and AS/NZS 60947.3.
- | Visual status window in enclosure in front of KU switch body.
- | KU load break switches include a visual status window in the front of the switch body.
- | Available in ampere ratings 200 - 800 A.
- | 3 and 4 pole versions standard, 6 and 8 pole versions optional.
- | Rated to 415 VAC and 690 VAC.
- | Earth and neutral terminals supplied with 3 pole, earth terminals only with 4 pole.
- | 4 stainless steel wall fixing brackets supplied.
- | Orange versions on request.



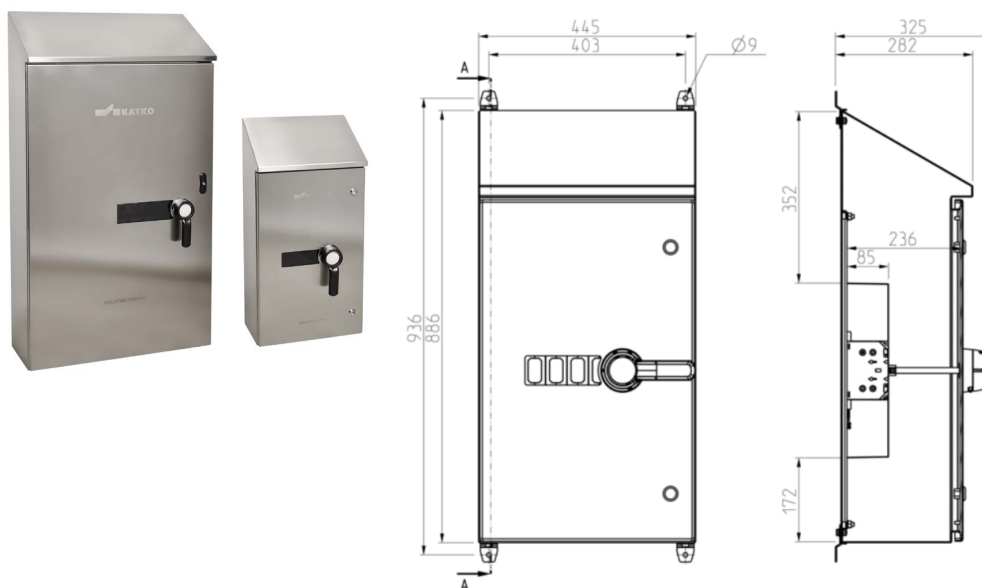
3 Pole Enclosed Isolators

Part Number		AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
SS Enclosure Black Handle	SS Enclosure Yellow Red Handle		415 V		415 V		-	
			690 V		-		690	
			le / A		P / kW		le / A	
KER3160 RA6 AVS	KER3160YR RA6 AVS	160	160	160	90	160	132	1.V160KU (1 NO/NC CO) or 2.V160KU (2 NO/NC CO)
KER3200 RA6 AVS	KER3200YR RA6 AVS	200	200	200	110	200	160	
KER3250 RA6 AVS	KER3250YR RA6 AVS	250	250	250	132	250	250	
KER3400 RA7 AVS	KER3400YR RA7 AVS	400	400	400	200	400	355	
KER3630 RA7 BVS	KER3630YR RA7 BVS	630	630	630	355	630	630	
KER3800 RA10 VS	KER3800YR RA10 VS	800	800	800	400	800	800	

4 Pole Enclosed Isolators

KER4160 RA6 AVS	KER4160YR RA6 AVS	160	160	160	90	160	132	1.V160KU (1 NO/NC CO) or 2.V160KU (2 NO/NC CO)
KER4200 RA6 AVS	KER4200YR RA6 AVS	200	200	200	110	200	160	
KER4250 RA6 AVS	KER4250YR RA6 AVS	250	250	250	132	250	250	
KER4400 RA7 AVS	KER4400YR RA7 AVS	400	400	400	200	400	355	
KER4630 RA7 BVS	KER4630YR RA7 BVS	630	630	630	355	630	630	
KER4800 RA10 VS	KER4800YR RA10 VS	800	800	800	400	800	800	

Typical internal arrangement RA7AVS enclosure shown, used for 315 – 400 A versions.
Note wall fixing brackets.



IP69K STAINLESS STEEL ENCLOSED ISOLATORS 16 - 160 A (KER)

- | AISI 316 stainless steel enclosed
- | Enclosure types, RA2, RA4 rated to IP69K
- | IP69K safety switches protect against close range high pressure and high temperature spraydowns.
- | Available in 2 different enclosure sizes and larger sizes on request
- | 3 and 4 pole up to 125A, larger sizes available.
- | Padlockable in OFF as standard
- | Door interlock when ON, with lid interlock defeat mechanism
- | Black handle or red/yellow safety handle versions
- | Unthreaded cable gland entries provided for enclosures as standard for RA2, RA4.
- | RA2: 16-40 A, 3P/4P: 2 x M25 / 1 x M16. 6P/8P types include additional entries.
- | RA4: 63-160 A, 3P/4P: 2 x M32 / 1 x M16. 6P/8P types include additional entries.
- | New KU 16 – 40 A switch types have “IsoSafe” printed on the enclosure lids. Refer auxiliary fitting below.



3 Pole Enclosed Isolators

Enclosure type	Width mm	Height mm	Depth mm	Material	IP rating
RA2	120	160	77	AISI 316 SS	66
RA4	160	260	90	AISI 316 SS	66

Auxiliaries

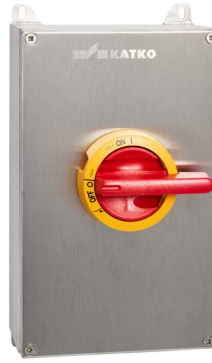
Part Numbers shown in BOLD below include the new KU compact switches 16A – 40A. Select new side mount auxiliaries to suit from the table on the following pages or from the KU series pages in this catalogue. Older KU_N switches, use top mount auxiliary types KU1V and KU2V which are incompatible.

EMC Applications (Electro-Magnetic Compatibility)

Katko KER_EMCC enclosed switches are available using a single part number. However, to use a KER standard switch for an EMC application, EMC cable glands must be used. Refer EMC Enclosed switch types in this catalogue for EMC cable gland part numbers.



IP69K STAINLESS STEEL ENCLOSED ISOLATORS 16 - 160 A (KER)



3 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit	
SS Enclosure Black Handle	SS Enclosure Yellow Red Handle		415 V		415 V		415 V		-		-
			690 V		690 V		-		690 V		
			Ie / A		Ie / A		Ie / A		P / kW		Ie / A
KER316 IP69KRA2	KER316 YRIP69KRA2	16		16		16	7.5	16	11	1NO40KU (1NO) and / or 1NC40KU (1NC)	
KER325 IP69KRA2	KER325 YRIP69KRA2	25		25		25	11	25	22		
KER340 IP69KRA2	KER340 YRIP69KRA2	40		40		40	22	25	22		
KER363 IP69KRA4	KER363 YRIP69KRA4	80		63		40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO	
KER380 IP69KRA4	KER380 YRIP69KRA4	100		80		63	30	40	37		
KER3100 IP69KRA4	KER3100 YRIP69KRA4	125		100		100	55	63	55	1.V160KU 2.V160KU	
KER3125 IP69KRA4	KER3125 YRIP69KRA4	160		125		125	55	80	75		
KER3160 IP69KRA4	KER3160 YRIP69KRA4	160		160		160	90	100	90		

4 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
SS Enclosure Black Handle	SS Enclosure Yellow Red Handle		415 V		415 V		415 V		-	
			690 V		690 V		-		690 V	
			Ie / A		Ie / A		Ie / A		P / kW	
KER416 IP69KRA2	KER416 YRIP69KRA2	16	16	16	7.5	16	11	1NO40KU (1NO) and / or 1NC40KU (1NC)		
KER425 IP69KRA2	KER425 YRIP69KRA2	25	25	25	11	25	22			
KER440 IP69KRA2	KER440 YRIP69KRA2	40	40	40	22	25	22			
KER463 IP69KRA4	KER463 YRIP69KRA4	80	63	40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO		
KER480 IP69KRA4	KER480 YRIP69KRA4	100	80	63	30	40	37			
KER4100 IP69KRA4	KER4100 YRIP69KRA4	125	100	100	55	63	55	1.V160KU 2.V160KU		
KER4125 IP69KRA4	KER4125 YRIP69KRA4	160	125	125	55	80	75			
KER6160 IP69KRA4	KER4160 YRIP69KRA4	160	160	160	90	100	90			

6 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
SS Enclosure Black Handle	SS Enclosure Yellow Red Handle		415 V		415 V		415 V		-	
			690 V		690 V		-		690 V	
			Ie / A		Ie / A		Ie / A		P / kW	
KER616 IP69KRA4	KER616 YRIP69KRA4	16		16		16	7.5	16	11	1NO40KU (1NO) and / or 1NC40KU (1NC)
KER625 IP69KRA4	KER625 YRIP69KRA4	25		25		25	11	25	22	
KER640 IP69KRA4	KER640 YRIP69KRA4	40		40		40	22	25	22	
KER663 IP69KRA4	KER663 YRIP69KRA4	80		63		40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO
KER680 IP69KRA4	KER680 YRIP69KRA4	100		80		63	30	40	37	

8 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit	
SS Enclosure Black Handle	SS Enclosure Yellow Red Handle		415 V		415 V		415 V		-		-
			690 V		690 V		690 V		-		690 V
			Ie / A		Ie / A		Ie / A		P / kW		Ie / A
KER816 IP69KRA4	KER816 YRIP69KRA4	16		16		16	7.5	16	11	1NO40KU (1NO) and / or 1NC40KU (1NC)	
KER825 IP69KRA4	KER825 YRIP69KRA4	25		25		25	11	25	22		
KER840 IP69KRA4	KER840 YRIP69KRA4	40		40		40	22	25	22		
KER863 IP69KRA4	KER863 YRIP69KRA4	80		63		40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO	
KER880 IP69KRA4	KER880 YRIP69KRA4	100		80		63	30	40	37		

IP69K STAINLESS STEEL SLOPED TOP ENCLOSED ISOLATORS 16 - 160 A

- | AISI 316 stainless steel enclosed
- | Enclosure types, RA2RS, RA4RS rated to IP69K
- | IP69K safety switches protect against close range high pressure and high temperature spraydowns.
- | Available in 2 different enclosure sizes and larger sizes on request
- | 3 and 4 pole standard, 6 or 8 pole optional.
- | Rated up to 160A, larger sizes on request.
- | Door interlock when ON, with lid interlock defeat mechanism
- | Black handle or red/yellow safety handle versions
- | LK11 handle, Black handle or red/yellow safety handle versions
- | Sloped roof for extra protection
- | Where hygiene and high protection against corrosion are required
- | Padlockable in OFF as standard, ON locking optional.
- | Cable gland entries provided for enclosure type RA2S, RA4S
- | Unthreaded cable gland entries provided for enclosures as below,
 - RA2RS: 16-40 A, 3P/4P: 2 x M25 / 1 x M16. 6P/8P types include additional entries.
 - RA4RS: 63-125 A, 3P/4P: 2 x M32 / 1 x M16. 6P/8P types include additional entries.
- | New KU 16 – 40 A switch types have “IsoSafe” printed on the enclosure lids. Refer auxiliary fitting below.



Outline dimensions:

Enclosure type	Width mm	Height mm	Depth mm	Material	IP rating
RA2	120	160	77	AISI 316 SS	66
RA4	160	260	90	AISI 316 SS	66

Auxiliaries

Part Numbers shown in **BOLD** below include the new KU compact switches 16A – 40A. Select new side mount auxiliaries to suit from the table below or from the KU series pages in this catalogue. Older KU_N switches, use top mount auxiliary types KU1V and KU2V which are incompatible.

EMC Applications (Electro-Magnetic Compatibility)

Katko KER_EMC enclosed switches are available using a single part number. However, to use a KER standard switch for an EMC application, EMC cable glands must be used. Refer EMC Enclosed switch types in this catalogue for EMC cable gland part numbers.



IP69K STAINLESS STEEL ENCLOSED ISOLATORS, IP69K, 16 - 160 A (KER)



3 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
SS Enclosure Black Handle	SS Enclosure Yellow Red Handle		415 V		415 V		415 V		-	
			690 V		690 V		-		690 V	
		Ie / A		Ie / A		Ie / A	P / kW	Ie / A	P / kW	
KER316 IP69KRA2S	KER316 YRIP69KRA2S	16		16		16	7.5	16	11	NO40KU and / or 1NC40KU
KER325 IP69KRA2S	KER325 YRIP69KRA2S	25		25		25	11	25	22	
KER340 IP69KRA2S	KER340 YRIP69KRA2S	40		40		40	22	25	22	
KER363 IP69KRA4S	KER363 YRIP69KRA4S	80		63		40	22	40	37	KU1V KU2V
KER380 IP69KRA4S	KER380 YRIP69KRA4S	100		80		63	30	40	37	
KER3100 IP69KRA4S	KER3100 YRIP69KRA4S	125		100		100	55	63	55	1.V160KU 2.V160KU
KER3125 IP69KRA4S	KER3125 YRIP69KRA4S	160		125		125	55	80	75	
KER3160 IP69KRA4S	KER3160 YRIP69KRA4S	160		160		160	90	100	90	

4 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
SS Enclosure Black Handle	SS Enclosure Yellow Red Handle		415 V		415 V		415 V		-	
			690 V		690 V		-		690 V	
			Ie / A		Ie / A		Ie / A		P / kW	
KER416 IP69KRA2S	KER416 YRIP69KRA2S	16	16	16	7.5	16	11	NO40KU and / or 1NC40KU		
KER425 IP69KRA2S	KER425 YRIP69KRA2S	25	25	25	11	25	22			
KER440 IP69KRA2S	KER440 YRIP69KRA2S	40	40	40	22	25	22			
KER463 IP69KRA4S	KER463 YRIP69KRA4S	80	63	40	22	40	37	KU1V KU2V		
KER480 IP69KRA4S	KER480 YRIP69KRA4S	100	80	63	30	40	37			
KER4100 IP69KRA4S	KER4100 YRIP69KRA4S	125	100	100	55	63	55	1.V160KU 2.V160KU		
KER4125 IP69KRA4S	KER4125 YRIP69KRA4S	160	125	125	55	80	75			
KER4160 IP69KRA4S	KER4160 YRIP69KRA4S	160	160	160	90	100	90			

6 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
SS Enclosure Black Handle	SS Enclosure Yellow Red Handle		415 V		415 V		415 V		-	
			690 V		690 V		-		690 V	
			Ie / A		Ie / A		Ie / A		P / kW	
KER616 IP69KRA2S	KER616 YRIP69KRA2S	16	16	16	7.5	16	11	NO40KU and / or 1NC40KU		
KER625 IP69KRA2S	KER625 YRIP69KRA2S	25	25	25	11	25	22			
KER640 IP69KRA2S	KER640 YRIP69KRA2S	40	40	40	22	25	22			
KER663 IP69KRA4S	KER663 YRIP69KRA4S	80	63	40	22	40	37	KU1V KU2V		
KER680 IP69KRA4S	KER680 YRIP69KRA4S	100	80	63	30	40	37			

8 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
SS Enclosure Black Handle	SS Enclosure Yellow Red Handle		415 V		415 V		415 V		-	
			690 V		690 V		-		690 V	
			Ie / A		Ie / A		Ie / A		P / kW	
KER816 IP69KRA2S	KER816 YRIP69KRA2S	16	16		16	7.5	16	11	NO40KU and / or 1NC40KU	
KER825 IP69KRA2S	KER825 YRIP69KRA2S	25	25		25	11	25	22		
KER840 IP69KRA2S	KER840 YRIP69KRA2S	40	40		40	22	25	22		
KER863 IP69KRA4S	KER863 YRIP69KRA4S	80	63		40	22	40	37	KU1V KU2V	
KER880 IP69KRA4S	KER880 YRIP69KRA4S	100	80		63	30	40	37		

SHEET STEEL ENCLOSED ISOLATORS 16 - 1600 A (KET)

- | IP65.
- | Ratings from 16A to 1600A.
- | 3P, 4P, 6P, 8 Pole versions.
- | High corrosion resistance.
- | Wide operating temperature range.
- | Padlockable OFF, lock ON optional.
- | Door interlock when ON, with lid interlock defeat mechanism
- | High UV resistance.
- | High resistance against many chemicals.
- | Cable gland entries provided for enclosure T3.
- | Gland plate entries provided for enclosures T7, T10A
- | New KU 16 – 40A switch types have “IsoSafe” printed on the enclosure lids. Refer auxiliary fitting below.



Outline dimensions:

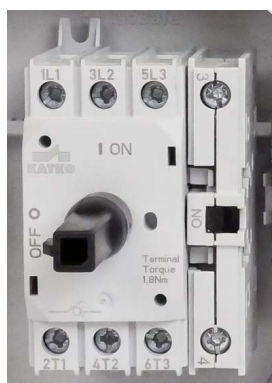
Enclosure type	Width mm	Height mm	Depth mm	Material	IP rating
T3	150	200	120	Sheet Steel	65
T4	150	300	120	Sheet Steel	65
T5	300	400	120	Sheet Steel	65
T6	400	600	200	Sheet Steel	65
T7	600	800	250	Sheet Steel	65
T10A	600	1200	300	Sheet Steel	65

Auxiliaries

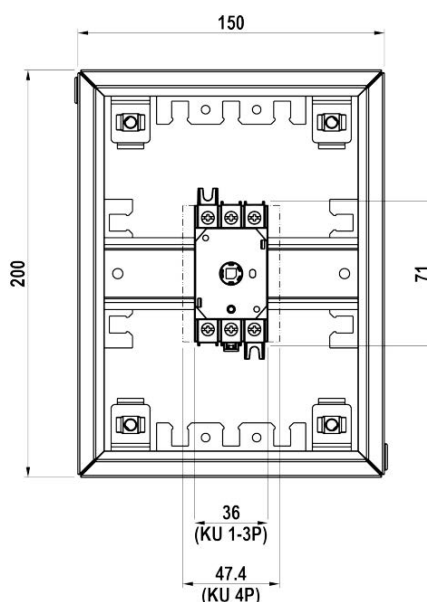
Part Numbers shown in BOLD below include the new KU compact switches 16A – 40A. Select new side mount auxiliaries to suit from the table on the following pages or from the KU series pages in this catalogue. Older KU_N switches, use top mount auxiliary types KU1V and KU2V which are incompatible.

EMC Applications (Electro-Magnetic Compatibility)

Katko KET_EMC enclosed switches are available using a single part number. However, to use a KET standard switch for an EMC application, EMC cable glands must be used. Refer EMC Enclosed switch types in this catalogue for EMC cable gland part numbers.



T3 Enclosure >



SHEET STEEL ENCLOSED ISOLATORS 16 - 1600 A (KET)



3 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
Grey Enclosure Black Handle	Grey Enclosure Yellow Red Handle		415 V		415 V		415 V		-	
			690 V		690 V		-		690 V	
			Ie / A		Ie / A		Ie / A		P / kW	
KET340 T3	KET340YR T3	40		40		40	22	25	22	1NO40KU or 1NC40KU
KET363 T3	KET363YR T3	80		63		40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO
KET380 T3	KET380YR T3	100		80		63	30	40	37	
KET3100 T4	KET3100YR T4	125		100		100	55	63	55	1.V160KU (1 NO/NC CO) or 2.V160KU (2 NO/NC CO)
KET3125 T4	KET3125 YR T4	160		125		125	55	80	75	
KET3160 T5	KET3160 YR T5	160		160		160	90	100	90	
KET3200 T6	KET3200 YR T6	200		200		200	110	200	160	
KET3250 T6	KET3250 YR T6	250		250		250	132	250	250	
KET3400 T6	KET3400 YR T6	400		400		400	200	400	355	
KET3630 T7	KET3630 YR T7	630		630		630	355	630	630	
KET3800 T10A	KET3800 YR T10A	800		800		800	400	800	800	
KET31000T T10A	KET31000T YR T10A	1000		1000		1000	560	1000	800	VKT1V160 (1NO+1NC)
KET31250T T10A	KET31250T YR T10A	1250		1250		1250	710	1250	1000	
KET31600T T10A	KET31600T YR T10A	1600		1600		1600	900	1600	1200	

4 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
Grey Enclosure Black Handle	Grey Enclosure Yellow Red Handle		415 V		415 V		415 V		-	
			690 V		690 V		-		690 V	
		Yellow Red Handle	Ie / A		Ie / A	P / kW	Ie / A	P / kW		
KET440 T3	KET440YR T3	40	40		40	22	25	22	1NO40KU or 1NC40KU	
KET463 T3	KET463YR T3	80	63		40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO	
KET480 T3	KET480YR T3	100	80		63	30	40	37		
KET4100 T4	KET4100YR T4	125	100		100	55	63	55	1.V160KU (1 NO/NC CO) or 2.V160KU (2 NO/NC CO)	
KET4125 T4	KET4125 YR T4	160	125		125	55	80	75		
KET4160 T5	KET4160 YR T5	160	160		160	90	100	90		
KET4200 T6	KET4200 YR T6	200	200		200	110	200	160		
KET4250 T6	KET4250 YR T6	250	250		250	132	250	250		
KET4400 T6	KET4400 YR T6	400	400		400	200	400	355		
KET4630 T7	KET4630 YR T7	630	630		630	355	630	630		
KET4800 T10A	KET4800 YR T10A	800	800		800	400	800	800		
KET41000T T10A	KET41000T YR T10A	1000	1000		1000	560	1000	800	VKT1V160 (1NO+1NC)	
KET41250T T10A	KET41250T YR T10A	1250	1250		1250	710	1250	1000		
KET41600T T10A	KET41600T YR T10A	1600	1600		1600	900	1600	1200		

For applications such as when isolators for AC drives or other harmonic emitting applications, Katko EMC enclosed switches are available using a single part number. In order to use a standard metal enclosed switch for an EMC application, EMC cable glands must be used. Refer EMC switch types on the following pages for EMC cable glands.

SHEET STEEL ENCLOSED ISOLATORS 16 - 1600 A (KET)



6 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
Grey Enclosure Black Handle	Grey Enclosure Yellow Red Handle		415 V		415 V		415 V		-	
			690 V		690 V		-		690 V	
			Ie / A		Ie / A		Ie / A		P / kW	
KET640 T3	KET640YR T3	40	40	40	22	25	22	1NO40KU or 1NC40KU		
KET663 T3	KET663YR T3	80	63	40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO		
KET680 T3	KET680YR T3	100	80	63	30	40	37			
KET6100 T4	KET6100YR T4	125	100	100	55	63	55	1.V160KU (1 NO/NC CO) or 2.V160KU (2 NO/NC CO)		
KET6125 T4	KET6125 YR T4	160	125	125	55	80	75			
KET6160 T5	KET6160 YR T5	160	160	160	90	100	90			
KET6200 T6	KET6200 YR T6	200	200	200	110	200	160			
KET6250 T6	KET6250 YR T6	250	250	250	132	250	250			
KET6400 T6	KET6400 YR T6	400	400	400	200	400	355			

8 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
Grey Enclosure Black Handle	Grey Enclosure Yellow Red Handle		415 V		415 V		415 V		-	
			690 V		690 V		-		690 V	
		Yellow Red Handle	Ie / A		Ie / A	P / kW	Ie / A	P / kW		
KET840 T3	KET840YR T3	40	40		40	22	25	22	1NO40KU or 1NC40KU	
KET863 T3	KET863YR T3	80	63		40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO	
KET880 T3	KET880YR T3	100	80		63	30	40	37		
KET8100 T4	KET8100YR T4	125	100		100	55	63	55	1.V160KU 2.V160KU	
KET8125 T4	KET8125 YR T4	160	125		125	55	80	75		
KET8160 T5	KET8160 YR T5	160	160		160	90	100	90		

EMC PROTECTED ENCLOSED ISOLATORS

- | Electro-Magnetic Compatibility for safe use in electromagnetic disturbance applications.
- | Tested according to EN 55011 with EMC glands with shielded power cables.
- | IP ratings vary from IP65 to IP66 depending on enclosure type.
- | Enclosed types available: Polycarbonate, Aluminium, Sheet Steel, Stainless Steel.
- | Ampere ratings 16A to 630A.
- | 1P, 3P, 4P, 6P and 8 Pole versions.
- | Padlockable OFF, lock ON optional.
- | Door interlock when ON, with lid interlock defeat mechanism
- | EMC cable glands included as standard. More info next page.
- | Cable gland entries standard in enclosures up to 160 A.
- | Handle types available are black and yellow-red.
- | New KU 16 – 40A switch types have “IsoSafe” printed on the enclosure lids.



Outline dimensions:

Enclosure type	Width mm	Height mm	Depth mm	Material	IP rating
A2	104	158.5	79.5	Aluminium	66
A4	162	262	108	Aluminium	66
M2	96.4	130.4	106	Polycarbonate	66
M3	144	190	96	Polycarbonate	65
M4	180	255	100	Polycarbonate	65
T5	300	400	120	Sheet Steel	65
T6	400	600	200	Sheet Steel	65
T7	600	800	250	Sheet Steel	65
RA2	120	160	77	AISI 316 SS	66
RA4	160	260	90	AISI 316 SS	66
RA5	300	420	120	AISI 316 SS	66

Auxiliaries

Part Numbers shown in BOLD below include the new KU compact 16 – 40 A switches.

Select new side mount auxiliaries to suit from the table on the following pages or from the KU series pages in this catalogue.

Older KU_N switches, use top mount auxiliary types KU1V and KU2V which are incompatible.

About EMC types in different Katko enclosures

- | **KEM** Polycarbonate EMC enclosed switches include a copper spray coating inside the enclosure, and 2 x Nickel-plated Brass, EMC cable glands with a lock nut.
- | **KEA** Aluminium EMC enclosed switches are intrinsically EMC resistant. They are supplied with 2 x Nickel-plated Brass, EMC cable glands as standard. EMC glands are also available individually for spares or replacements.
- | **KER** Stainless Steel EMC enclosed switches are intrinsically EMC resistant. They are supplied with 2 x Nickel-plated Brass, EMC cable glands with lock nuts as standard. EMC glands are also available individually for spares or replacements.
- | **KET** Sheet Steel EMC enclosed switches are intrinsically EMC resistant. They are supplied with 2 x Nickel-plated Brass, EMC cable glands with lock nuts as standard. EMC glands are also available individually for spares or replacements.

Questions and answers about EMC enclosed switches

What the difference is between standard brass and EMC brass or stainless steel EMC glands?

- | Standard cable glands are not suitable for EMC use.
- | EMC glands have contact springs that make contact with the shielding of the cable for correct earthing.
- | Katko EMC cable glands are Nickel plated brass. However, brass or stainless steel types are common.
- | EMC paint piercing locking nuts should be used with painted enclosures (KET types).

Are Katko KER Stainless Steel IP69K enclosed switches suitable for EMC applications?

- | Yes, if they are supplied with the appropriate EMC cable glands, the glands themselves will have the same IP69K rating.

Are Katko EMC cable glands available for separate order for use with various metal enclosures?

- | Yes - refer following pages.

EMC PROTECTED ENCLOSED ISOLATORS 16 - 630 A

POLYCARBONATE ENCLOSED, 16 A TO 160 A

M2 enclosures have 2 x M20/25 knockouts, top and bottom.

M3 enclosures have 2 x M25/32 knockouts and 1 x M16 knockout, top and bottom.



EMC cable
glands
included

3 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
Grey Enclosure Black Handle	Enclosure with Yellow Red Handle		415 V		415 V		415 V		-	
			690 V		690 V		690 V		-	
		le / A	le / A	le / A	P / kW	le / A	P / kW			
KEM316 M2 EMC	KEM316YR M2 EMC	16	16	16	7.5	16	11	1NO40KU (1NO) or 1NC40KU (1NC)		
KEM325 M2 EMC	KEM325YR M2 EMC	25	25	25	11	25	22			
KEM340 M2 EMC	KEM340YR M2 EMC	40	40	40	22	25	22			
KEM363 M3 EMC	KEM363YR M3 EMC	80	63	40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO		
KEM380 M3 EMC	KEM380YR M3 EMC	100	80	63	30	40	37			
KEM3125 M4 EMC	KEM3125YR M4 EMC	160	125	125	55	80	75	1.V160KU 2.V160KU		
KEM3160 MF11 EMC	KEM3160YR MF11 EMC	160	160	160	90	100	90			

4 Pole Enclosed Isolators

KEM416 M2 EMC	KEM416YR M2 EMC	16		16		16	7.5	16	11		1NO40KU (1NO) or 1NC40KU (1NC)
KEM425 M2 EMC	KEM425YR M2 EMC	25		25		25	11	25	22		
KEM440 M2 EMC	KEM440YR M2 EMC	40		40		40	22	25	22		
KEM463 M3 EMC	KEM463YR M3 EMC	80		63		40	22	40	37		KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO
KEM480 M3 EMC	KEM480YR M3 EMC	100		80		63	30	40	37		
KEM4125 M4 EMC	KEM4125YR M4 EMC	160		125		125	55	80	75		1.V160KU 2.V160KU
KEM4160 MF11 EMC	KEM4160YR MF11 EMC	160		160		160	90	100	90		

ALUMINIUM ENCLOSED, 16 A TO 160 A

A2 and A4 enclosures have 2 large threaded cable entries and 1 x threaded M16 entry for auxiliary wiring. Bottom entry only.

3 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
Grey Enclosure Black Handle	Grey Enclosure Yellow Red Handle		415 V		415 V		415 V		-	
			690 V		690 V		-		-	
									690 V	
		le / A		le / A		P / kW	le / A	P / kW		
KEA316 A2 EMC	KEA316YR A2 EMC	16		16		16	7.5	16	11	1NO40KU (1NO) or 1NC40KU (1NC)
KEA325 A2 EMC	KEA325YR A2 EMC	25		25		25	11	25	22	
KEA340 A2 EMC	KEA340YR A2 EMC	40		40		40	22	25	22	
KEA363 A4 EMC	KEA363YR A4 EMC	80		63		40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO
KEA380 A4 EMC	KEA380YR A4 EMC	100		80		63	30	40	37	
KEA3125 A4 EMC	KEA3125YR A4 EMC	160		125		125	55	80	75	1.V160KU 2.V160KU
KEA3160 A4 EMC	KEA3160YR A4 EMC	160		160		160	90	100	90	

4 Pole Enclosed Isolators

KEA416 A2 EMC	KEA416YR A2 EMC	16		16		16	7.5	16	11		1NO40KU (1NO) or 1NC40KU (1NC)
KEA425 A2 EMC	KEA425YR A2 EMC	25		25		25	11	25	22		
KEA440 A2 EMC	KEA440YR A2 EMC	40		40		40	22	25	22		
KEA463 A4 EMC	KEA463YR A4 EMC	80		63		40	22	40	37		KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO
KEA480 A4 EMC	KEA480YR A4 EMC	100		80		63	30	40	37		
KEA4125 A4 EMC	KEA4125YR A4 EMC	160		125		125	55	80	75		1.V160KU 2.V160KU
KEA4160 A4 EMC	KEA4160YR A4 EMC	160		160		160	90	100	90		

Cable Glands EMC types, less lock nuts

Note: 2 x EMC cable glands included when enclosed EMC switches are ordered.

Part Number	Description	Suits enclosure types
KPKM16MEMC	EMC NP Brass Cable Gland M16	M2, M3, M4, MF11, A2, A4, RA2, RA2R, RA2RS, RA4, RA4R, RA4RS, T3 - T10
KPKM20MEMC	EMC NP Brass Cable Gland M20	M2, M4, MF11, A2, A4, RA4, RA4R, RA4RS, T4 - T10
KPKM25MEMC	EMC NP Brass Cable Gland M25	M2, M3, M4, MF11, A2, A4, RA2, RA2R, RA2RS, RA4, RA4R, RA4RS, T3 - T10
KPKM32MEMC	EMC NP Brass Cable Gland M32	M3, M4, A4, RA4, RA4R, RA4RS, T4 - T10
KPKM40MEMC	EMC NP Brass Cable Gland M40	M3, M4, MF11, A4, RA4, RA4R, RA4RS, T4 - T10
KPKM50MEMC	EMC NP Brass Cable Gland M50	RA5, RA5R, RA5RS, R6 - R10, T4 - T10
KPKM63MEMC	EMC NP Brass Cable Gland M63	RA5, RA5R, RA5RS, R6 - R10, T4 - T10

EMC PROTECTED ENCLOSED ISOLATORS 16 - 630 A

STAINLESS STEEL ENCLOSED, 16 A TO 160 A



3 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
Grey Enclosure Black Handle	Enclosure with Yellow Red Handle		415 V		415 V		415 V		-	
			690 V		690 V		-		690 V	
		Ie / A		Ie / A		Ie / A	P / kW	Ie / A	P / kW	
KER316 RA2 EMC	KER316YR RA2 EMC	16		16		16	7.5	16	11	1NO40KU (1NO) or 1NC40KU (1NC)
KER325 RA2 EMC	KER325YR RA2 EMC	25		25		25	11	25	22	
KER340 RA2 EMC	KER340YR RA2 EMC	40		40		40	22	25	22	
KER363 RA4 EMC	KER363YR RA4 EMC	80		63		40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO
KER380 RA4 EMC	KER380YR RA4 EMC	100		80		63	30	40	37	
KER3125 RA4 EMC	KER3125YR RA4 EMC	160		125		125	55	80	75	1.V160KU 2.V160KU
KER3160 RA5 EMC	KER3160YR RA5 EMC	160		160		160	90	100	90	

4 Pole Enclosed Isolators

KER416 RA2 EMC	KER416YR RA2 EMC	16	16	16	7.5	16	11	1NO40KU (1NO) or 1NC40KU (1NC)
KER425 RA2 EMC	KER425YR RA2 EMC	25	25	25	11	25	22	
KER440 RA2 EMC	KER440YR RA2 EMC	40	40	40	22	25	22	
KER463 RA4 EMC	KER463YR RA4 EMC	80	63	40	22	40	37	KU1V: 1 NO/NC CO KU2V: 2 NO/NC CO
KER480 RA4 EMC	KER480YR RA4 EMC	100	80	63	30	40	37	
KER4125 RA4 EMC	KER4125YR RA4 EMC	160	125	125	55	80	75	1.V160KU 2.V160KU
KER4160 RA5 EMC	KER4160YR RA5 EMC	160	160	160	90	100	90	

SHEET STEEL ENCLOSED, 100 A TO 630 A

3 Pole Enclosed Isolators

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
Grey Enclosure Black Handle	Enclosure with Yellow Red Handle		415 V		415 V		415 V		-	
			690 V		690 V		-		690 V	
			Ie / A		Ie / A		Ie / A		P / kW	
KET3100 T4 EMC	KET3100 YR T4 EMC	125	100	100	55	63	55	1.V160KU (1 NO/NC CO) or 2.V160KU (2 NO/NC CO)		
KET3125 T4 EMC	KET3125 YR T4 EMC	160	125	125	55	80	75			
KET3160 T5 EMC	KET3160 YR T5 EMC	160	160	160	90	100	90			
KET3200 T6 EMC	KET3200 YR T6 EMC	200	200	200	110	200	160			
KET3250 T6 EMC	KET3250 YR T6 EMC	250	250	250	132	250	250			
KET3400 T6 EMC	KET3400 YR T6 EMC	400	400	400	200	400	355			
KET3630 T7 EMC	KET3630 YR T7 EMC	630	630	630	355	630	630			

4 Pole Enclosed Isolators

KET4100 T4 EMC	KET4100 YR T4 EMC	125	100	100	55	63	55	1.V160KU (1 NO/NC CO) or 2.V160KU (2 NO/NC CO)
KET4125 T4 EMC	KET4125 YR T4 EMC	160	125	125	55	80	75	
KET4160 T5 EMC	KET4160 YR T5 EMC	160	160	160	90	100	90	
KET4200 T6 EMC	KET4200 YR T6 EMC	200	200	200	110	200	160	
KET4250 T6 EMC	KET4250 YR T6 EMC	250	250	250	132	250	250	
KET4400 T6 EMC	KET4400 YR T6 EMC	400	400	400	200	400	355	
KET4630 T7 EMC	KET4630 YR T7 EMC	630	630	630	355	630	630	

Cable Glands EMC types, less lock nuts

Part Number	Description	Suits enclosure types
KPKM16MEMC	EMC NP Brass Cable Gland M16	M2, M3, M4, MF11, A2, A4, RA2, RA2R, RA2RS, RA4, RA4R, RA4RS, T3 - T10
KPKM20MEMC	EMC NP Brass Cable Gland M20	M2, M4, MF11, A2, A4, RA4, RA4R, RA4RS, T4 - T10
KPKM25MEMC	EMC NP Brass Cable Gland M25	M2, M3, M4, MF11, A2, A4, RA2, RA2R, RA2RS, RA4, RA4R, RA4RS, T3 - T10
KPKM32MEMC	EMC NP Brass Cable Gland M32	M3, M4, A4, RA4, RA4R, RA4RS, T4 - T10
KPKM40MEMC	EMC NP Brass Cable Gland M40	M3, M4, MF11, A4, RA4, RA4R, RA4RS, T4 - T10
KPKM50MEMC	EMC NP Brass Cable Gland M50	RA5, RA5R, RA5RS, R6 - R10, T4 - T10

Note: 2 x EMC cable glands included when enclosed EMC switches are ordered.

SIDE OPERATED POLYCARBONATE ENCLOSED ISOLATORS 25 A (KSM)

- | IP67 rated.
- | Fully rated Load Break Switch.
- | Padlockable handle in OFF position - allows one padlock.
- | Handle sealable in ON position.
- | High resistance against UV and many chemicals.
- | Enclosure can be sealed against removal of lid.
- | Membrane gasket cable entries with strain relief, 2 x 20mm on top, 2 x 20mm on bottom and 2 x 15mm on base.
- | Membrane gasket cable entries are permanently fixed in position, and allow the user to punch a hole and feed the cable through. Nylon cable glands optional.
- | Wall mounting dimensions: 90 x 62 mm.
- | Available 2, 3, 4 poles.
- | 1.5 - 16 mm² cable terminals for single or 3 phase connections.
- | 1.5 - 16 mm² Neutral and earth terminals on 3P switch, earth on 2P and 4P switches.
- | Door interlock in ON position.
- | Applications include air-conditioning (split units, domestic HVAC), Neon light assemblies etc.



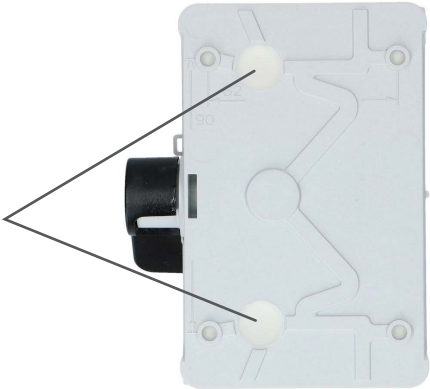
Waterproof membrane sealing cable entry standard



Cable gland option



Rear membrane cable entries



Outline dimensions:

Enclosure type	Width mm	Height mm	Depth mm	Material	IP rating
M1	83	128	55.6	Polycarbonate	67

KSM side operated switches – Polycarbonate

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
Grey Enclosure Black Handle	Enclosure with Yellow Red Handle		415 V		415 V		415 V		-	
			690 V		690 V		-		690 V	
			Ie / A		Ie / A		Ie / A		P / kW	
KSM225 M1	2	25	25	25	11	-	-			
KSM325 M1	3	25	25	25	11	-	-			
KSM425 M1	4	25	25	25	11	-	-			

FIRE RATED ALUMINIUM ENCLOSED ISOLATORS 16 A TO 200 A

Fire rated Aluminium Enclosed Isolators are suitable for installations that require high durability. KEA_FR types have been to 200°C or 300°C for up to 2 or 3 hours, depending on the type.

- | F200 rated 200°C for 3 hours
- | F300 rated 300°C for 2 hours
- | Rated to IEC 60947-3, AS/NZS 60947-3.
- | IP66 rating in enclosures A2 and A4
- | IP65 rating in enclosures A5 and A6
- | Available up to 200 A
- | Door interlock when ON, with lid interlock defeat mechanism
- | Padlockable, OFF locking as standard, Lock ON types refer next page.
- | High corrosion and UV resistance
- | Suitable for extreme weather conditions
- | Knock-out cable gland entries provided for A2 enclosure types.
- | Users make their own entries as required in A4 enclosures.
- | Gland plate entries provided for A5 enclosure.
- | Standard Nickel plated brass or stainless steel cable glands can be used.
- | Standard Katko auxiliary contact switches can be used for FR2 types.
- | Suitable for use in Tunnels, Car Parks, Industrial Buildings, Warehouses, other smoke and heat applications.
- | Load Break Switches used are the KU316N – KU380N series, and use auxiliaries for that series.



Outline dimensions:

Enclosure type	Width mm	Height mm	Depth mm	Material	IP rating
A2	104	158.5	79.5	Aluminium	66
A4	162	262	108	Aluminium	66
A5	300	400	170	Aluminium	65

EMC Applications (Electro-Magnetic Compatibility)

Katko KEA_EMC enclosed switches are available using a single part number. However, to use a KEA standard switch for an EMC application, EMC cable glands must be used. Refer EMC Enclosed switch types in this catalogue for EMC cable gland part numbers.



AC drives application with fire rated isolators >

FIRE RATED ALUMINIUM ENCLOSED ISOLATORS 16 A TO 200 A (KEA)



3 Pole, LOCK OFF types

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
F200 3H 200°C for 3 hours	F300 2H 300°C for 2 hours		415 V		415 V		415 V		-	
			690 V		690 V		-		690 V	
			Ie / A		Ie / A		Ie / A		P / kW	
KEA316 FR A2	KEA316 FR3 A2	25	16	16	7.5	16	11	KU1V 1 NO/NC CO KU2V 2 NO/NC CO		
KEA325 FR A2	KEA325 FR3 A2	40	25	25	11	25	22			
KEA340 FR A2	KEA340 FR3 A2	63	40	40	22	40	30			
KEA363 FR A4	KEA363 FR3 A4	80	63	40	22	40	37			
KEA380 FR A4	KEA380 FR3 A4	100	80	63	30	40	37			
KEA3125C FR A4	-	160	125	125	55	80	75	1.V160KU (1 NO/NC CO) or 2.V160KU (2 NO/NC CO)		
-	KEA3125C FR3 A4	160	125 415V max.	100	55	80	55			
KEA3160C FR A4	-	160	160	160	90	100	90			
-	KEA3160C FR3 A4	200	160 415V max.	135	75	125	90			
KEA3200C FR A5	KEA3200C FR3 A5	200	200	200	110	-	-			

3 Pole, LOCK ON types

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
F200 3H 200°C for 3 hours	F300 2H 300°C for 2 hours		415 V		415 V		415 V		-	
			690 V		690 V		-		690 V	
			Ie / A		Ie / A		Ie / A		P / kW	
KEA316 FRLON A2	KEA316 FR3LONA2	25	16	16	7.5	16	11	KU1V KU2V		
KEA325 FRLON A2	KEA325 FR3LONA2	40	25	25	11	25	22			
KEA340 FRLON A2	KEA340 FR3LONA2	63	40	40	22	40	30			
KEA363 FRLON A4	KEA363 FR3LONA4	80	63	40	22	40	37			
KEA380 FRLON A4	KEA380 FR3LONA4	100	80	63	30	40	37			
KEA3125CFRLONA4	-	160	125	125	55	80	75	1.V160KU or 2.V160KU		
-	KEA3125CFR3LONA4	160	125 415V max.	100	55	80	55			
KEA3160CFRLONA4	-	160	160	160	90	100	90			
-	KEA3160CFR3LONA4	200	160 415V max.	135	75	125	90			
KEA3200CFRLONA5	KEA3200CFR3LONA5	200	200	200	110	-	-			

4 Pole, LOCK OFF types ¹⁾

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
F200 3H 200°C for 3 hours	F300 2H 300°C for 2 hours		415 V		415 V		415 V		-	
			690 V		690 V		-		690 V	
			Ie / A		Ie / A		Ie / A		P / kW	
KEA416 FR A2	KEA416 FR3 A2	25	16	16	7.5	16	11	KU1V 1 NO/NC CO KU2V 2 NO/NC CO		
KEA425 FR A2	KEA425 FR3 A2	40	25	25	11	25	22			
KEA440 FR A2	KEA440 FR3 A2	63	40	40	22	40	30			
KEA463 FR A4	KEA463 FR3 A4	80	63	40	22	40	37			
KEA480 FR A4	KEA480 FR3 A4	100	80	63	30	40	37			
KEA4125C FR A4	-	160	125	125	55	80	75	1.V160KU (1 NO/NC CO) or 2.V160KU (2 NO/NC CO)		
-	KEA4125C FR3 A4	160	125 415V max.	100	55	80	55			
KEA4160C FR A4	-	160	160	160	90	100	90			
-	KEA4160C FR3 A4	200	160 415V max.	135	75	125	90			
KEA4200C FR A5	KEA4200C FR3 A5	200	200	200	110	-	-			

Ordering notes

- For Lock ON, insert "LON" before the letter "A". Example: KEA425FR LON A2.
The Lock ON option allows lock ON only – it cannot be locked OFF.

FIRE RATED ALUMINIUM ENCLOSED ISOLATORS 16 A TO 200 A (KEA)



6 Pole, LOCK OFF types ¹⁾

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
F200 3H 200°C for 3 hours	F300 2H 300°C for 2 hours		415 V		415 V		415 V		-	
			690 V		690 V		-		690 V	
			Ie / A		Ie / A		P / kW		P / kW	
KEA616 FR A2	KEA616 FR3 A2	25	16	16	7.5	16	11	KU1V 1 NO/NC CO KU2V 2 NO/NC CO		
KEA625 FR A2	KEA625 FR3 A2	40	25	25	11	25	22			
KEA640 FR A2	KEA640 FR3 A2	63	40	40	22	40	30			
KEA663 FR A4	KEA663 FR3 A4	80	63	40	22	40	37			
KEA680 FR A4	KEA680 FR3 A4	100	80	63	30	40	37			
KEA6125C FR A4	-	160	125	125	55	80	75	1.V160KU (1 NO/NC CO) or 2.V160KU (2 NO/NC CO)		
-	KEA6125C FR3 A4	160	125 415V max.	100	55	80	55			
KEA6160C FR A4	-	160	160	160	90	100	90			
-	KEA6160C FR3 A4	200	160 415V max.	135	75	125	90			
KEA6200C FR A5	KEA6200C FR3 A5	200	200	200	110	-	-			

8 Pole, LOCK OFF types ¹⁾

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
F200 3H 200°C for 3 hours	F300 2H 300°C for 2 hours		415 V		415 V		415 V		-	
			690 V		690 V		-		690 V	
			Ie / A		Ie / A		P / kW		P / kW	
KEA816 FR A2	KEA816 FR3 A2	25	16	16	7.5	16	11	KU1V 1 NO/NC CO KU2V 2 NO/NC CO		
KEA825 FR A2	KEA825 FR3 A2	40	25	25	11	25	22			
KEA840 FR A2	KEA840 FR3 A2	63	40	40	22	40	30			
KEA863 FR A4	KEA863 FR3 A4	80	63	40	22	40	37			
KEA880 FR A4	KEA880 FR3 A4	100	80	63	30	40	37			
KEA8125C FR A4	-	160	125	125	55	80	75	1.V160KU (1 NO/NC CO) or 2.V160KU (2 NO/NC CO)		
-	KEA8125C FR3 A4	160	125 415V max.	100	55	80	55			
KEA8160C FR A4	-	160	160	160	90	100	90			
-	KEA8160C FR3 A4	200	160 415V max.	135	75	125	90			
KEA8200C FR A5	KEA8200C FR3 A5	200	200	200	110	-	-			

Ordering notes

- For Lock ON, insert "LON" before the letter "A". Example: KEA625FR LON A2.
The Lock ON option allows lock ON only – it cannot be locked OFF.

ENCLOSED CHANGEOVER SWITCHES 25 A – 160 A (TKM, KEM, KEA)

- | Polycarbonate (TKM, KEM) or aluminium (KEA) enclosures.
- | TKM-models with cam switch 25 to 40 A, other types to 160A.
- | KEM and KEA models consist of two KU or VKA switches interlocked, from 40A to 160A.
- | 3 and 4 pole types.
- | IP66; enclosure types M2, M3.
- | IP65; enclosure type MF11.
- | Self-extinguishing material.
- | Excellent insulating properties.
- | Wide operating temperature range.
- | High resistance against many chemicals.
- | High UV resistance.
- | Padlockable in OFF.
- | Door interlock when in positions 1 or 2, with lid interlock defeat mechanism
- | IEC 60947-3, AS /NZS 60947-3.
- | Cable gland knock out entries provided for enclosure types M2, M3, MF11.

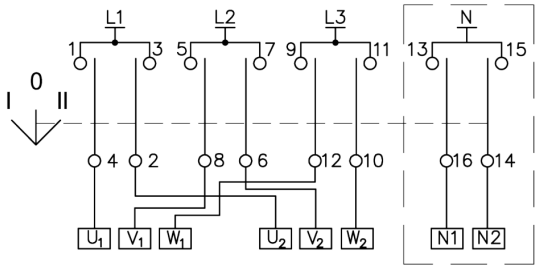


Outline dimensions:

Enclosure type	Width mm	Height mm	Depth mm	Material	IP rating
A4	162	262	108	Aluminium	66
M2	96.4	130.4	106	Polycarbonate	66
M3	144	190	96	Polycarbonate	66
M4	180	255	100	Polycarbonate	66
MF11	280	380	130	Polycarbonate	66

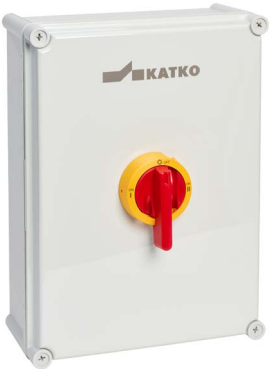
TK VV Changeover switch wiring and connections

These types consist of single integral changeover switch.



KEM / KEA changeover switch wiring and connections.

These types consist of two mechanically interlocked 3 or 4 pole KU switches.



ENCLOSED CHANGEOVER SWITCHES 25 A – 160 A (TKM, KEM, KEA)

CHANGEOVER SWITCHES - POLYCARBONATE



3 Pole

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
Grey Enclosure Black Handle	Enclosure with Yellow Red Handle		415 V		415 V		415 V		-	
			690 V		690 V		-		690 V	
			Ie / A		Ie / A		Ie / A		P / kW	
TKM 325VV M2 3XM25P	TKM 325VV YR M2 3XM25P	25		25		25	11	-	-	-
TKM 340VV M2 3XM32P	TKM 340VV YR M2 3XM32P	40		40		40	18.5	-	-	
KEM325VV M3	KEM325VV YR M3	40		25		25	11	25	22	
KEM340VV M3	KEM340VV YR M3	63	40	40	22	25	22			
KEM363VV M3	KEM363VV YR M3	80	63	40	22	40	37			
KEM380VV M3	KEM380VV YR M3	100	80	63	30	40	37			
KEM3100 CVV MF11	KEM3100 CVV YR MF11	100	100	63	30	40	37			
KEM3125 CO MF11	KEM3125 CO YR MF11	160	125	125	55	80	75			
KEM3160 CO MF11	KEM3160 CO YR MF11	160	160	160	90	100	90			
										1.V160KU 2.V160KU

4 Pole

TKM 425VV M2 3XM25P	TKM 425VV YR M2 3XM25P	25		25		25		11		-		-	-
TKM 440VV M2 3XM32P	TKM 440VV YR M2 3XM32P	40		40		40		18.5		-		-	
KEM425VV M3	KEM425VV YR M3	40		25		25		11		25		22	
KEM440VV M3	KEM440VV YR M3	63	40	40	22	25	22						
KEM463VV M3	KEM463VV YR M3	80	63	40	22	40	37						
KEM480VV M3	KEM480VV YR M3	100	80	63	30	40	37						
KEM4100 CVV M4	KEM4100 CVV YR MF11	100	100	63	30	40	37						1.V160KU 2.V160KU
KEM4125 CO MF11	KEM4125 CO YR MF11	160	125	125	55	80	75						
KEM4160 CO MF11	KEM4160 CO YR MF11	160	160	160	90	100	90						

CHANGEOVER SWITCHES – ALUMINIUM



3 Pole

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
Grey Enclosure Black Handle	Grey Enclosure Yellow Red Handle		415 V		415 V		415 V		-	
			690 V		690 V		-		690 V	
			Ie / A		Ie / A		Ie / A		P / kW	
KEA325VV A4	KEA325VV YR A4	40	25	25	11	25	22	-		
KEA340VV A4	KEA340VV YR A4	63	40	40	22	25	22			
KEA363VV A4	KEA363VV YR A4	80	63	40	22	40	37			
KEA380VV A4	KEA380VV YR A4	100	80	63	30	40	37			

4 Pole

KEA425VV A4	KEA425VV YR A4	40		25		25		11		25		22	-
KEA440VV A4	KEA440VV YR A4	63		40		40		22		25		22	
KEA463VV A4	KEA463VV YR A4	80		63		40		22		40		37	
KEA480VV A4	KEA480VV YR A4	100		80		63		30		40		37	

ENCLOSED CHANGEOVER SWITCHES 25 A – 160 A (TKM, KEM, KEA)

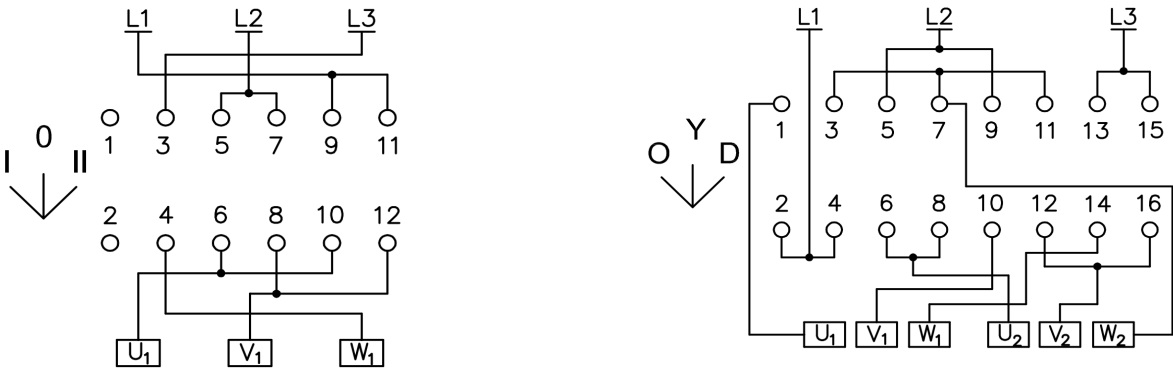
- | TK= star delta
- | SK= reverse switch
- | Cam switch based operation.
- | Polycarbonate enclosure.
- | Rated thermal current Ie 16 - 40 A.
- | AC21, 22, 23 rated.
- | Padlockable in OFF, Other locking options refer APS.
- | Door interlock in 1 or 2, or Star / Delta.
- | Door interlock defeat mechanism using red bottom lever.
- | Terminals: Cu 1,5 - 16 mm²
- | Max. terminal torque: 1.8 Nm
- | IEC 60 947-3
- | IP66NW (AS/NZS 60947-3: 2018)
- | IEC 60947-3, AS/NZS 60947-3
- | Cable gland knock out entries provided, top and bottom



Outline dimensions:

Enclosure type	Width mm	Height mm	Depth mm	Material	IP rating
M2	96.4	130.4	106	Polycarbonate	66

Connection diagrams



Star Delta Switch

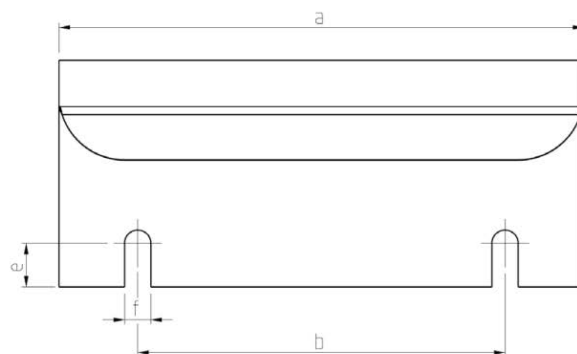
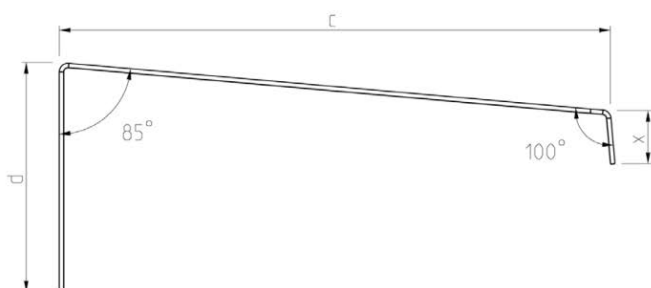
Part Number		AC-21A	400 V	AC-22A	400 V	Star Delta TKM_TK	400 V	-	Auxiliaries to suit
Grey Enclosure Black Handle	Yellow Enclosure Yellow Red Handle		415 V		415 V		415 V	-	
			690 V		690 V		-	690 V	
			Ie / A		Ie / A		Ie / A	P / kW	
TKM 316TK M2 3XM25P	TKM 316TK YR M2 3XM25P	16	16	16	7.5	-	-	-	
TKM 325TK M2 3XM25P	TKM 325TK YR M2 3XM25P	25	25	25	11	-	-	-	
TKM 340TK M2 3XM32P	TKM 340TK YR M2 3XM32P	40	40	40	18.5	-	-	-	

Reversing Switch

TKM 316SK M2 3XM25P	TKM 316SK YR M2 3XM25P	16	16	16	7.5	-	-	-
TKM 325SK M2 3XM25P	TKM 325SK YR M2 3XM25P	25	25	25	11	-	-	
TKM 340SK M2 3XM32P	TKM 340SK YR M2 3XM32P	40	40	40	18.5	-	-	

PROTECTIVE HOOD & EARTHING PLATES

- | KSL type is Steel, AlZn: Aluminium-Zinc hot dipped galvanised.
- | KSLR type is Stainless steel AISI 316.
- | Installs on a wall at the same time as switch is installed.
- | Offers a degree of protection against falling objects, or moisture from above



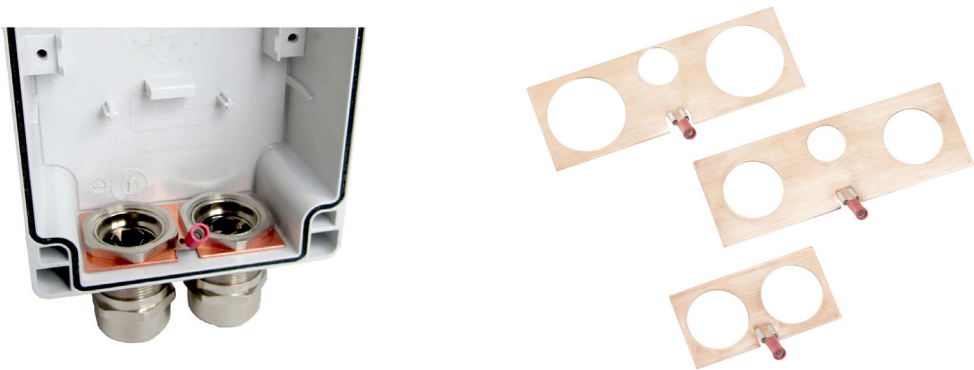
Protective Hood

Type	Enclosure	Dimensions mm						
		a	b	c	d	e	f	x
Steel, AlZn: Aluminium - Zinc hot dipped galvanised								
KSL 5	M1	130	62	75	52	10	6	12
KSL 10	M2	120	84	125	52	10	6	12
KSL 12	RA2	140	99	135	52	10	6	12
KSL 20	M3	156	131	140	62	10	6	13
KSL 22	RA4	180	139	145	55	10	6	13
KSL 25	M4, MF11	200	163	150	62	20	6	13
KSL 28	MF01, MF11	350	254	200	83	40	9	25
KSL 55	MF03	400	354	250	83	20	9	25
KSL 65	MF04	580	534	320	80	20	9	25
KSLE 15	T3, T4	200	108	200	80	20	9	12
KSLE 30	T5, RA5, A5	350	258	230	100	20	9	25
KSLE 50	T6, RA6, R6	450	358	300	100	20	9	25
KSLE 70	T7, RA7, R7	650	558	350	100	20	9	25
KSLE 80	T10A	650	558	400	110	20	9	25
KSLE 90	T8, RA8, R8	850	758	300	100	20	9	25
KSLE 100	T10, R10, RA10	850	758	400	110	20	9	25
Stainless Steel (AISI 316)								
KSLR 10	M2	120	84	125	52	10	6	12
KSLR 12	RA2	140	99	135	52	10	6	12
KSLR 20	M3	156	131	140	62	10	6	13
KSLR 22	RA4	180	139	145	55	10	6	13
KSLR 25	M4, MF10	200	163	150	62	20	9	13
KSLR 28	MF01, MF11	350	254	200	83	40	9	25
KSLR 55	MF03	400	354	250	83	20	9	25
KSLR 65	MF04	580	534	320	80	20	9	25
KSLRE 15	T3, T4, RA4	200	108	200	80	20	9	15
KSLRE 30	T5, RA5, A5	350	258	230	100	20	9	25
KSLRE 50	T6, RA6, R6	450	358	300	100	20	9	25
KSLRE 70	T7, RA7	650	558	350	100	20	9	25
KSLRE 80	T10A	650	558	400	110	20	9	25
KSLRE 90	T8, RA8, R8	850	758	300	100	20	9	25

EPM EARTHING PLATES

EARTHING PLATES

- | Provides an earthing terminal for shielded cables and cable glands in Katko polycarbonate enclosures.
- | Earthing plates are not a complete conversion device for EMC applications. Refer enclosed EMC types.
- | Material: Copper.
- | Quick connect lug terminal supplied with kit.



Earthing plate installed in a KEM Polycarbonate M2 size enclosure

Ordering

Part Number	Suits Enclosure types	Description
EPM20M2	M2 enclosure with 2 x M20	2 x M20
EPM25M2	M2 enclosure with 2 x M25	2 x M25
EPM25M16M3	M3 enclosure with 2 x M25 + M16	2 x M25 + M16
EPM32M16M3	M3 enclosure with 2 x M32 + M16	2 x M32 + M16
EPM32M16M4	M4 enclosure with 2 x M32 + M16	2 x M32 + M16
EPM40M4	M4 enclosure with 2 x M40	2 x M40
EPM40M16MF11	MF11 enclosure with 2 x M40 + M16	2 x M40 + M16
EPM20M16M3	M3 enclosure with 2 x M20 + M16	2 x M20 + M16

ENCLOSED SWITCH DATA AND CABLE SIZES

Enclosure types

- | Polycarbonate (KEM) IP66/IP65
- | Polycarbonate (KSM) IP67
- | ABS (KEM) IP65
- | Sheet steel (KET) IP65
- | Aluminium (KEA) IP66/IP65
- | Stainless steel (KER) IP69K/IP66/IP65

Other data

- | Tested according to IEC 60 947.3 and AS/NZS 60947.3
- | CB certificates
- | VDE certificates
- | Complies with ISO 9001 and ISO 14001
- | AC-23, 690V ratings
- | Multiple break with silver rivets
- | Airgap 12.5 mm
- | Door interlock
- | Lockable handle
- | Reliable position indication
- | Standard grey/black and yellow/red series
 - grey/black= grey cover, black handle
 - yellow/red= yellow cover, red handle
- | Standard models 3P, 4P, 6P and 8P
- | 1P and 2P available
- | Retrofit snap - on auxiliary contacts



KATKO SWITCH switches for heavy duty applications

- | Superior life span even in most demanding environments such as papermills, chemical plants, steel works and food processing plants.

Cable Installation

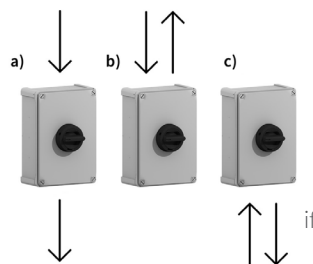
A KU 250 A switch installed in a stainless steel R6 size enclosure >



ENCLOSED SWITCH DATA AND CABLE SIZES

Cable Installation

- | Flexible installation, incoming and outgoing cables for example:
 - a. KEM3400: In from the top, out from the bottom of the enclosure
 - b. KEM3400: In and outgoing cables from the top of the enclosure
 - c. KEM3400: In and outgoing cables from the bottom of the enclosure
- | If ordering switches with ampere rating 200A or higher, consider the intended cabling directions other than shown in a) due to cable size.



Recommended enclosures for different size cables (guide only)

The various enclosure types used with Katko switches will limit the size of cable that can be terminated into a switch. The terminal capacity of the switches in fact may be larger than the maximum size cable that can be used in an enclosure.

If the application is for an AC23 load, cable sizes less than the switch maximum terminal capacity can be used. The table below is to be used as an approximate guide only, cable type and temperature rise limitations may apply.

The question may be asked “what is the maximum size cable can I fit into my enclosure ?”

The correct answer depends on a number of factors. Different cable types and installation conditions will affect the current carrying capacity cables. Tables can be found in AS/NZS 3008.1.1.

Cable temperature ratings

- | In Australia and New Zealand, current carrying electrical cables often have temperatures ratings of 75°C, 90°C or 110°C per cable type.
- | Cables rated for higher temperatures can carry a given current, yet can be smaller in size than the same cable Cross Sectional Area (CSA) cable rated for a lower temperature. For example, 110°C cables can be smaller in size for the same current compared to 90°C rated cables. Even though both may have the same conductor mm2 CSA, but the insulation and other properties of the cable set the maximum temperature limits for each cable type.
- | As well, cables rated 110°C may be carrying current at either 30°C or 50°C and this can be also rated at different ampere ratings.

Other factors:

- | If the cable is 1, 2, 3 or 4 core, aluminium or copper, solid or flexible core, above or below ground, grouped or spaced apart cables, indoor or outdoor installation, and cable length etc.

The tables below indicate approximately which cable sizes will fit into a Katko enclosure, though because of the above factors this may vary.

Enclosures and installed switches and cable sizing

(based on flexible cable, spaced or grouped, with a 90°C temperature rating)

Application Amperes (A)	Polycarbonate Enclosures	3 Phase + N Cable size mm2	Sheet Steel Enclosures	3 Phase + N Cable size mm2	Aluminium Enclosures	3 Phase + N Cable size mm2	Stainless Steel Enclosures	3 Phase + N Cable size mm2
23 - 30 A	M1, M2	3 x 2.5 + 2.5	T3	3 x 2.5 + 2.5	A2	3 x 2.5 + 2.5	RA2	3 x 2.5 + 2.5
40 - 50 A	M1, M2	3 x 6 + 6	T3	3 x 6 + 6	A2	3 x 6 + 6	RA2	3 x 6 + 6
50 - 69 A	M3	3 x 10 + 10	T3	3 x 10 + 10	A4	3 x 10 + 10	RA4	3 x 10 + 10
85 - 91 A	M3	3 x 16 + 16	T3	3 x 16 + 16	A4	3 x 16 + 16	RA4	3 x 16 + 16
141 - 151 A	M4	3 x 35 + 16	T4	3 x 35 + 16	A4	3 x 35 + 16	RA5	3 x 35 + 16
178 - 191 A	M4	3 x 50 + 25	T5	3 x 50 + 25	A5	3 x 50 + 25	RA5	3 x 50 + 25
225 - 241 A	MF01	3 x 70 + 35	T5	3 x 70 + 35	A5	3 x 70 + 35	RA5	3 x 70 + 35
271 - 290 A	MF03, MF04	3 x 95 + 50	T6	3 x 95 + 50	A6	3 x 95 + 50	R6	3 x 95 + 50
322 - 346 A	MF03, MF04	3 x 120 + 70	T6	3 x 120 + 70	-	-	R6	3 x 120 + 70
427 - 459 A	MF03, MF04	3 x 185 + 95	T6	3 x 185 + 95	-	-	R6	3 x 185 + 95
553 - 651 A	MF03, MF04	3 x 240 + 120	T7 - T10A	3 x 240 + 120	-	-	R7 - R10	3 x 240 + 120

Cable sizes by switch size

(based on flexible cable, spaced or grouped, with a 90°C temperature rating)

Application Amperes (A)	3 Phase + N Cable size mm2	Load Break Switches used	LB Switch terminal capacity	Polycarbonate Enclosures	Sheet Steel Enclosures	Aluminium Enclosures	Stainless Steel Enclosures
23 - 30 A	3 x 2.5 + 2.5	KU 16A, KU 25A	1.5 - 16 mm2	M1, M2	T3	A2	RA2
40 - 50 A	3 x 6 + 6	KU 40 A	1.5 - 16 mm2	M1, M2	T3	A2	RA2
50 - 69 A	3 x 10 + 10	KU 63 A	2.5 - 35 mm2	M3	T3	A4	RA4
85 - 91 A	3 x 16 + 16	KU 80 A	2.5 - 35 mm2	M3	T3	A4	RA4
141 - 151 A	3 x 35 + 16	KU 100 A, KU 125A	6 - 70 mm2	M4	T4	A4	RA5
178 - 191 A	3 x 50 + 25	KU 160 A	6 - 70 mm2	M4	T5	A5	RA5
225 - 241 A	3 x 70 + 35	KU 200A, KU 250A	M8 Bolt terminal	MF01	T5	A5	RA5
271 - 290 A	3 x 95 + 50	KU 250 A	M8 Bolt terminal	MF03, MF04	T6	A6	R6
322 - 346 A	3 x 120 + 70	KU 315 A	M10 Bolt terminal	MF03, MF04	T6	-	R6
427 - 459 A	3 x 185 + 95	KU 400 A	M10 Bolt terminal	MF03, MF04	T6	-	R6
553 - 651 A	3 x 240 + 120	KU 630 A	M12 Bolt terminal	MF03, MF04	T7	-	R7

UTILISATION CATEGORIES AND IK IMPACT RATINGS

Type of Current	Utilisation Category Frequent operation	Occasional operation	Typical applications
AC	AC 20A	AC 20B	Making and breaking without load
	AC 21A	AC 21B	Switching resistive loads including low overloads
	AC 22A	AC 22B	Switching mixed resistive and inductive loads, including low overloads
	AC 23A	AC 23B	Switching motors and other highly inductive loads
DC	DC 20A	DC 20B	Making and breaking without load
	DC 21A	DC 21B	Switching resistive loads including low overloads
	DC 22A	DC 22B	Switching mixed resistive/inductive loads, or low overloads (ex: shunt motors)
	DC 23A	DC 23B	Switching highly inductive loads (e. g. series motors)

Category AC 23 includes occasional switching of individual motors. The utilisation categories in the above table do not apply to equipment normally used to start, accelerate and/or stop individual motors. The utilisation categories for such an equipment are dealt with the following table:

Type of Current	Utilisation Category	Typical applications
AC	AC 2	Slip-ring motors: starting, plugging 1), switching off
	AC 3	Squirrel-cage motors: starting, switching off running motors
	AC 4	Squirrel-cage motors: starting, plugging 1), inching 2)
DC	DC 3	Shunt motors: starting, plugging 1), inching 2) , dynamic breaking of DC motors
	DC 4	Series motors: starting, plugging 1), inching 2) , dynamic breaking of DC motors

1. Plugging is understood to mean stopping or reversing the motor rapidly by reversing motor primary connections while the motor is running. Inching (jogging) is understood to mean energising a motor once or repeatedly for short periods to obtain small movements of the driven mechanism.
2. The switching of rotor circuits, capacitors or tungsten filament lamps shall be subject to special agreements between manufacturer and user.

IK Ratings Katko Enclosed Switches

An IK rating is a measure of the mechanical impact resistance of an electrical device or equipment. It is used to determine the level of protection that an enclosure or housing provides against external mechanical impacts.

The IK rating system is defined in the International Electrotechnical Commission (IEC) 62262 standard. It ranges from IK00 to IK10, with IK10 being the highest level of impact resistance. The rating is determined by subjecting the device or equipment to a series of impact tests using a pendulum hammer. The impact energy and number of impacts are increased until the device or equipment fails or reaches its maximum IK rating.

The IK rating is important for devices and equipment that are installed in areas with a high risk of mechanical impact, such as outdoor areas, factories, or construction sites. It is also important for devices and equipment that are likely to be subjected to deliberate or accidental impacts.

IK table Katko enclosures

Katko Enclosure	Katko Switches	Type	IK Class
M2	16 – 40 A	Polycarbonate	IK 07
M3	16 – 80 A	Polycarbonate	IK 07
M4	100 – 125 A	Polycarbonate	IK 08
MF11 – MF11	160 A	Polycarbonate	IK 08
MF03 – MF04	200 – 250 A	Polycarbonate	IK 08
A2	16 – 40 A	Aluminium	IK 08
A4	40 – 160 A	Aluminium	IK 08
A5 – A6	200 – 250 A	Aluminium	IK 10
RA2	16 – 40 A	Stainless Steel	7J
RA4	63 – 125 A	Stainless Steel	7J
RA5	160 A	Stainless Steel	7J
R6	200 – 400 A	Stainless Steel	IK 10
T3	16 – 80 A	Sheet Steel	IK 10
T4	100 – 125 A	Sheet Steel	IK 10
T5	160 A	Sheet Steel	IK 10
T6	200 – 400 A	Sheet Steel	IK 10
T7	630 A	Sheet Steel	IK 10
T10A	800 A	Sheet Steel	IK 10

IK (IMPACT PROTECTION) RATING CHART

1 200g 0.15 joule impact 	2 200g 0.20 joule impact 	3 200g 0.35 joule impact 	4 200g 0.5 joule impact 	5 500g 0.7 joule impact 
6 500g 1 joule impact 	7 500g 2 joule impact 	8 5kg 5 joule impact 	9 5kg 10 joule impact 	10 10kg 20 joule impact 

ENCLOSED SWITCH PART NUMBER CROSS REFERENCE



KEM340 YR M3



KEM3315 MF03



POLYCARBONATE 16 A – 630 A				
Katko part no.	Old Katko part no	Current box type	Older box type	Obsolete
KEM310 M2	KEM310U	M2	U2	ISO 316PG
KEM316 M2	KEM316U	M2	U2	ISO 325PG
KEM416 M2	KEM416U	M2	U2	ISO 425PG
KEM325 M2	KEM325U	M2	U2	ISO 340PG
KEM425 M2	KEM425U	M2	U2	ISO 440PG
KEM340 M2	KEM340U	M2	U2	ISO 363PG
KEM440 M2	KEM440U	M2	U2	ISO 463PG
KEM363 M3	KEM363U	M3	U3	ISO 380PG
KEM463 M3	KEM463U	M3	U3	ISO 480PG
KEM380 M3	KEM380U	M3	U3	ISO 3100PG
KEM480 M3	KEM480U	M3	U3	ISO 4100PG
KEM3125 M4	KEM3125U	M4	U4	ISO 3160PG
KEM4125 M4	KEM4125U	M4	U4	ISO 4160PG
KEM3160 MF01	KEM3160	MF01	MF01	ISO 3200PG
KEM4160 MF01	KEM4160	MF01	MF01	ISO 4200PG
KEM3250C MF01	KEM3250C	MFOI	MFOI	ISO 3250PG
KEM4250C MF01	KEM4250C	MFOI	MFOI	ISO 4250PG
KEM3315 MF03	KEM3315	MF03	MF03	ISO 3315PG
KEM3400 MF03	KEM3400	MF03	MF03	ISO 3400PG
KEM3630 MF04	KEM3630	MF04	MF04	ISO 3630PG
KEM310 YR M2	KEM310UY/R	M2	U2	ISO 316PYS
KEM316 YR M2	KEM316UY/R	M2	U2	ISO 325PYS
KEM416 YR M2	KEM416UY/R	M2	U2	ISO 425PYS
KEM325 YR M2	KEM325UY/R	M2	U2	ISO 340PY
KEM425 YR M2	KEM425UY/R	M2	U2	ISO 440PY
KEM340 YR M2	KEM340UY/R	M2	U2	ISO 363PY
KEM440 YR M2	KEM440UY/R	M2	U2	ISO 463PY
KEM363 YR M3	KEM363UY/R	M3	U3	ISO 380PY
KEM463 YR M3	KEM463UY/R	M3	U3	ISO 480PY
KEM380 YR M3	KEM380UY/R	M3	U3	ISO 3100PY
KEM480 YR M3	KEM480UY/R	M3	U3	ISO 4100PY
KEM3125 YR M4	KEM3125UY/R	M4	U4	ISO 3160PY
KEM4125 YR M4	KEM4125UY/R	M4	U4	ISO 4160PY
KEM3160 YR MF01	KEM3160Y/R	MF01	MF01	ISO 3200PY
KEM4160 YR MF01	KEM4160Y/R	MF01	MF01	ISO 4200PY
KEM3250 YR MF03	KEM3250Y/R	MF03	MF03	ISO 3250PY
KEM3315 YR MF03	KEM3315Y/R	MF03	MF03	ISO 3315PY
KEM3400 YR MF03	KEM3400Y/R	MF03	MF03	ISO 3400PY
KEM3630 YR MF04	KEM3630Y/R	MF04	MF04	ISO 3630PY

POLYCARBONATE Larger box versions 25 A – 40 A				
Katko part no.	Old Katko part no	Current box type	Older box type	Obsolete
KEM325 M3	KEM325/U3	M3	U3	ISO 340 PGLE
KEM340 M3	KEM340/U3	M3	U3	ISO 363 PGLE
KEM425 M3	KEM425/U3	M3	U3	ISO 440 PGLE
KEM440 M3	KEM440/U3	M3	U3	ISO 463 PGLE
KEM325 YR M3	KEM325/U3Y/R	M3	U3	ISO 340 PYLE
KEM340 YR M3	KEM340/U3Y/R	M3	U3	ISO 363 PYLE
KEM425 YR M3	KEM425/U3Y/R	M3	U3	ISO 440 PYLE
KEM440 YR M3	KEM440/U3Y/R	M3	U3	ISO 463 PYLE

EMC POLYCARBONATE 16 A – 125 A				
Older box type	Obsolete	Current box type	Older box type	Obsolete
KEM316 M2 EMC	KEM316U/EMC	M2	U2	ISO325PGEMC
KEM325 M2 EMC	KEM325U/EMC	M2	U2	ISO340PGEMC
KEM340 M2 EMC	KEM340U/EMC	M2	U2	ISO363PGEMC
KEM363 M3 EMC	KEM363U/EMC	M3	U3	ISO380PGEMC
KEM380 M3 EMC	KEM380U/EMC	M3	U3	ISO3100PGEMC
KEM3125 M4 EMC	KEM3125U/EMC	M4	U4	ISO3160PGEMC
KEM316 M2 EMC YR	KEM316U/EMCY/R	M2	U2	ISO325PYEMC
KEM325 M2 EMC YR	KEM325U/EMCY/R	M2	U2	ISO340PYEMC
KEM340 M2 EMC YR	KEM340U/EMCY/R	M2	U2	ISO363PYEMC
KEM363 M3 EMC YR	KEM363U/EMCY/R	M3	U3	ISO380PYEMC
KEM380 M3 EMC YR	KEM380U/EMCY/R	M3	U3	ISO3100PYEMC
KEM3125 M4 EMC YR	KEM3125U/EMCY/R	M4	U4	ISO3160PYEMC

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ENCLOSED SWITCH PART NUMBER CROSS REFERENCE



ALUMINIUM 16 A - 250 A				
Katko part no.	Old Katko part no	Current box type	Older box type	Obsolete
KEA416 A2	KEA416	A2	A2	ISO 425MG
KEA325 A2	KEA325	A2	A2	ISO 340MG
KEA425 A2	KEA425	A2	A2	ISO 440MG
KEA340 A2	KEA340	A2	A2	ISO 363MG
KEA440 A2	KEA440	A2	A2	ISO 463MG
KEA625 A4	KEA625	A4	A3	ISO 640MG
KEA363 A4	KEA363	A4	A3	ISO 380MG
KEA463 A4	KEA463	A4	A3	ISO 480MG
KEA380 A4	KEA380	A4	A3	ISO 3100MG
KEA480 A4	KEA480	A4	A3	ISO 4100MG
KEA3125 A4	KEA3125	A4	A3	ISO 3160MG
KEA4125 A4	KEA4125	A4	A3	ISO 4160MG
KEA3160 A5	KEA3160	A5	A4	ISO 3200MG
KEA3200 A6	KEA3200	A6	A5	ISO 3250MG
KEA3200C A5	KEA3200C	A5	A4	ISO 3250MG
KEA3250 A6	KEA3250	A6	A5	ISO 3250MG
KEA4200C A5	KEA4200C	A5	A4	ISO 3250MG
KEA4250C A5	KEA4250C	A5	A4	ISO 3250MG
KEA4160 A4	KEA4160	A4	A3	ISO 4200MG
KEA316 YR A2	KEA316Y/R	A2	A2	ISO 325MY
KEA416 YR A2	KEA416Y/R	A2	A2	ISO 425MY
KEA325 YR A2	KEA325Y/R	A2	A2	ISO 340MY
KEA425 YR A2	KEA425Y/R	A2	A2	ISO 440MY
KEA340 YR A2	KEA340Y/R	A2	A2	ISO 363MY
KEA440 YR A2	KEA440Y/R	A2	A2	ISO 463MY
KEA363 YR A4	KEA363Y/R	A4	A3	ISO 380MY
KEA463 YR A4	KEA463Y/R	A4	A3	ISO 480MY
KEA380 YR A4	KEA380Y/R	A4	A3	ISO 3100MY
KEA480 YR A4	KEA480Y/R	A4	A3	ISO 4100MY
KEA3125 YR A4	KEA3125Y/R	A4	A3	ISO 3160MY
KEA4125 YR A4	KEA4125Y/R	A4	A3	ISO 4160MY
KEA3160 YR A5	KEA3160Y/R	A5	A4	ISO 3200MY
KEA4160 YR A4	KEA4160Y/R	A4	A3	ISO 4200MY
KEA3200 YR A6	KEA3200 Y/R	A6	A5	ISO 3250MY
KEA3200C YR A5	KEA3200C Y/R	A5	A4	ISO 3250MY
KEA3250 YR A6	KEA3250 Y/R	A6	A5	ISO 3250MY
KEA4200C YR A5	KEA4200C Y/R	A5	A4	ISO 4250MY
KEA4250C YR A5	KEA4250C Y/R	A5	A4	ISO 4200MY
KEA325 A4	KEA325/A3	A4	A3	ISO 340 MGLE
KEA340 A4	KEA340/A3	A4	A3	ISO 363 MGLE
KEA425 A4	KEA425/A3	A4	A3	ISO 440 MGLE
KEA440 A5	KEA440/A4	A5	A4	ISO 463 MGLE
KEA325 YR A4	KEA325/A3Y/R	A4	A3	ISO 340 MYLE
KEA340 YR A4	KEA340/A3Y/R	A4	A3	ISO 363 MYLE
KEA425 YR A4	KEA425/A3Y/R	A4	A3	ISO 440 MYLE
KEA440 YR A5	KEA440/A4Y/R	A5	A4	ISO 463 MYLE

EMC ALUMINUM 16 A - 125 A				
Katko part no.	Old Katko part no	Current box type	Older box type	Obsolete
KEA316 A2 EMC	KEA316U/EMC	A2	A2	ISO325MGEMC
KEA325 A2 EMC	KEA325U/EMC	A2	A2	ISO340MGEMC
KEA340 A2 EMC	KEA340U/EMC	A2	A2	ISO363MGEMC
KEA363 A4 EMC	KEA363/EMC	A4	A3	ISO380MGEMC
KEA380 A4 EMC	KEA380/EMC	A4	A3	ISO3100MGEMC
KEA3125 A4 EMC	KEA3125/EMC	A4	A3	ISO3160MGEMC
KEA316 A2 EMC YR	KEA316U/EMCY/R	A2	A2	ISO325MYEMC
KEA325 A2 EMC YR	KEA325U/EMCY/R	A2	A2	ISO340MYEMC
KEA340 A2 EMC YR	KEA340U/EMCY/R	A2	A2	ISO363MYEMC
KEA363 A4 EMC YR	KEA363/EMCY/R	A4	A3	ISO380MYEMC
KEA380 A4 EMC YR	KEA380/EMCY/R	A4	A3	ISO3100MYEMC
KEA3125 A4 EMC YR	KEA3125/EMCY/R	A4	A3	ISO3160MYEMC

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ENCLOSED SWITCH PART NUMBER CROSS REFERENCE



KER363 RA4



KEA340 RA2RS



KEM340VV M3

STAINLESS STEEL 16 A - 200 A				
Katko part no.	Old Katko part no	Current box type	Older box type	Obsolete
KER316 RA2	KER316	RA2	H23	ISO 325SS
KER325 RA2	KER325	RA2	H23	ISO 340SS
KER340 RA2	KER340	RA2	H23	ISO 363SS
KER363 RA4	KER363	RA4	H32	ISO 380SS
KER380 RA4	KER380	RA4	H32	ISO 3100SS
KER316 YR RA2	KER316Y/R	RA2	H23	ISO 325SS Y/R
KER325 YR RA2	KER325Y/R	RA2	H23	ISO 340SS Y/R
KER340 YR RA2	KER340Y/R	RA2	H23	ISO 363SS Y/R
KER363 YR RA4	KER363Y/R	RA4	H32	ISO 380SS Y/R
KER380 YR RA4	KER380Y/R	RA4	H32	ISO 3100SS Y/R
KER616 YR RA4	KER616Y/R	RA4	H32	ISO 625 SSY
KER625 YR RA4	KER625Y/R	RA4	H32	ISO 640 SSY
KER640 YR RA4	KER640Y/R	RA4	H32	ISO 663 SSY
KER663 YR RA4	KER663Y/R	RA4	H32	ISO 680 SSY
KER680 YR RA4	KER680Y/R	RA4	H32	ISO 6100 SSY
KER6125 YR RA5	KER6125Y/R	RA5	H02	ISO 6160 SSY
KER6160 YR RA5	KER6160Y/R	RA5	H02	ISO 6200 SSY
KER3200 YR RA5	KER3200Y/R	RA5	H02	ISO 3250SSY

STAINLESS STEEL 16 A - 80 A SS HANDLE / FLAT ROOF OR SLOPED ROOF				
Katko part no.	Old Katko part no	Current box type	Older box type	Obsolete
KER316 RA2R	KER316R	RA2R	H23T	ISO 325SST
KER325 RA2R	KER325R	RA2R	H23T	ISO 340SST
KER340 RA2R	KER340R	RA2R	H23T	ISO 363SST
KER363 RA2R	KER363R	RA4R	H32T	ISO 380SST
KER380 RA2R	KER380R	RA4R	H32T	ISO 3100SST
KER416 RA2R	KER416R	RA2R	H23T	ISO 425SST
KER425 RA2R	KER425R	RA2R	H23T	ISO 440SST
KER440 RA2R	KER440R	RA2R	H23T	ISO 463SST
KER463 RA4R	KER463R	RA4R	H32T	ISO 480SST
KER480 RA4R	KER480R	RA4R	H32T	ISO 4100SST
KER616 RA4R	KER616R	RA4R	H32T	ISO 625SST
KER625 RA4R	KER625R	RA4R	H32T	ISO 640SST
KER640 RA4R	KER640R	RA4R	H32T	ISO 663SST
KER663 RA4R	KER663R	RA4R	H32T	ISO 680SST
KER680 RA4R	KER680R	RA4R	H32T	ISO 6100SST
KER316 RA2RS	KER316RS	RA2RS	H24T	ISO 325SSTS
KER325 RA2RS	KER325RS	RA2RS	H24T	ISO 340SSTS
KER340 RA2RS	KER340RS	RA2RS	H24T	ISO 363SSTS
KER416 RA2RS	KER 416RS	RA2RS	H24T	ISO 425SSTS
KER425 RA2RS	KER425RS	RA2RS	H24T	ISO 440SSTS
KER440 RA2RS	KER440RS	RA2RS	H24T	ISO 463SSTS
KER363 RA4RS	KER363RS	RA4RS	H34T	ISO 380SSTS
KER380 RA4RS	KER380RS	RA4RS	H34T	ISO 3100SSTS
KER463 RA4RS	KER463RS	RA4RS	H34T	ISO 480SSTS
KER480 RA4RS	KER480RS	RA4RS	H34T	ISO 4100SSTS

CHANGEOVER SWITCHES 16 A - 160 A (POLYCARBONATE)				
Katko part no.	Old Katko part no	Current box type	Older box type	Obsolete
KEM340VV M3	KEM340VV	M3	U3	ISO 363 VV
KEM363VV M3	KEM363VV	M3	U3	ISO 380 VV
KEM380VV M3	KEM380VV	M3	U3	ISO 3100 VV
KEM440VV M3	KEM440VV	M3	U3	ISO 463 VV
KEM463VV M3	KEM463VV	M3	U3	ISO 480 VV
KEM480VV M3	KEM480VV	M3	U3	ISO 4100 VV

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KATKO ISOLATORS & AUXILIARIES TO SUIT FROM 2024 AND BEFORE

How to use the table below

- Part numbers in BOLD above are types that take the new auxiliaries 1NO40KU and 1NC40KU from 2024 onwards.
- Until the end of 2023, enclosed switches rated 16A – 40A used KU1V or KU2V auxiliaries.
- When ordering auxiliaries for enclosed switches, consider that only 1NO contact may be needed. There is usually no need for separate 1 x N/O and
- 1 x N/C contacts, which not only takes up more room in the enclosure, but costs more. 1 x NC should be ordered only if needed.
- 3 and 4 pole types fit the same auxiliaries.
- EMC types fit the same auxiliaries as standard 3 or 4 pole types.
- All larger enclosed and open switches 100A to 800A not shown below, use 1V160KU or 2V160KU auxiliaries.

Katko Switches and Auxiliaries used from 2024

KATKO part number	Enclosure Material	AC22 rating (A) 415-690VAC	AC23 rating (A) 415 VAC	KU Load Break switch used	Auxiliary to suit (1 NO)	Auxiliary to suit (1 NO)	Auxiliary to suit 1 x NO/NC CO	Auxiliary to suit 1 x NO/NC CO	Auxiliary mounting position	Enclosure
KEM316 M2	Polycarbonate	16	16	KU316	1NO40KU	1NC40KU	-	-	SIDE of switch	M2
KEM325 M2	Polycarbonate	25	25	KU325	1NO40KU	1NC40KU	-	-	SIDE of switch	M2
KEM340 M2	Polycarbonate	40	40	KU340	1NO40KU	1NC40KU	-	-	SIDE of switch	M2
KEM363 M3	Polycarbonate	63	40	KU363N	-	-	KU1V	KU2V	Front of switch	M3
KEM380 M3	Polycarbonate	80	63	KU380N	-	-	KU1V	KU2V	Front of switch	M3
KEM3100 M4	Polycarbonate	100	100	KU3100	-	-	1V160KU	2V160KU	SIDE of switch	M4
KEM3125 M4	Polycarbonate	125	125	KU3125	-	-	1V160KU	2V160KU	SIDE of switch	M4
KEA325 A2	Aluminium	25	25	KU325	1NO40KU	1NC40KU	-	-	SIDE of switch	A2
KEA340 A2	Aluminium	40	40	KU340	1NO40KU	1NC40KU	-	-	SIDE of switch	A2
KEA363 A4	Aluminium	63	40	KU363N	-	-	KU1V	KU2V	Front of switch	A4
KEA380 A4	Aluminium	80	63	KU380N	-	-	KU1V	KU2V	Front of switch	A4
KEA3125 A4	Aluminium	125	125	KU3125	-	-	1V160KU	2V160KU	SIDE of switch	A4
KEA363 A4	Aluminium	63	40	KU363N	-	-	KU1V	KU2V	Front of switch	A4
KEA380 A4	Aluminium	80	63	KU380N	-	-	KU1V	KU2V	Front of switch	A4
KEA3125 A4	Aluminium	125	125	KU3125	-	-	1V160KU	2V160KU	SIDE of switch	A4
KEA325 A4	Aluminium	25	25	KU325	1NO40KU	1NC40KU	-	-	SIDE of switch	A4
KEA340 A4	Aluminium	40	40	KU340	1NO40KU	1NC40KU	-	-	SIDE of switch	A4
KEA325 YR A4	Aluminium	25	25	KU325	1NO40KU	1NC40KU	-	-	SIDE of switch	A4
KEA340 YR A4	Aluminium	40	40	KU340	1NO40KU	1NC40KU	-	-	SIDE of switch	A4
KER316 YR RA2	Stainless Steel	16	16	KU316	1NO40KU	1NC40KU	-	-	SIDE of switch	RA2
KER325 YR RA2	Stainless Steel	25	25	KU325	1NO40KU	1NC40KU	-	-	SIDE of switch	RA2
KER340 YR RA2	Stainless Steel	40	40	KU340	1NO40KU	1NC40KU	-	-	SIDE of switch	RA2
KER363 YR RA4	Stainless Steel	63	40	KU363N	-	-	KU1V	KU2V	Front of switch	RA4
KER380 YR RA4	Stainless Steel	80	63	KU380N	-	-	KU1V	KU2V	Front of switch	RA4
KER3200C YR RA5	Stainless Steel	200	200	KU3200	-	-	1V160KU	2V160KU	SIDE of switch	RA5
KER316 RA2R	Stainless Steel	16	16	KU316	1NO40KU	1NC40KU	-	-	SIDE of switch	RA2R
KER325 RA2R	Stainless Steel	25	25	KU325	1NO40KU	1NC40KU	-	-	SIDE of switch	RA2R
KER340 RA2R	Stainless Steel	40	40	KU340	1NO40KU	1NC40KU	-	-	SIDE of switch	RA2R
KER363 RA2R	Stainless Steel	63	40	KU363N	-	-	KU1V	KU2V	Front of switch	RA4R
KER380 RA2R	Stainless Steel	80	63	KU380N	-	-	KU1V	KU2V	Front of switch	RA4R
KER316 RA2RS	Stainless Steel	16	16	KU316	1NO40KU	1NC40KU	-	-	SIDE of switch	RA2RS
KER325 RA2RS	Stainless Steel	25	25	KU325	1NO40KU	1NC40KU	-	-	SIDE of switch	RA2RS
KER340 RA2RS	Stainless Steel	40	40	KU340	1NO40KU	1NC40KU	-	-	SIDE of switch	RA2RS
KER363 RA4RS	Stainless Steel	63	40	KU363N	-	-	KU1V	KU2V	Front of switch	RA4RS
KER380 RA4RS	Stainless Steel	80	63	KU380N	-	-	KU1V	KU2V	Front of switch	RA4RS
KET3200 YR T6	Sheet Steel	200	200	KU3200	-	-	1V160KU	2V160KU	SIDE of switch	T6

Katko Switches and Auxiliaries used until 2023 and before

KATKO part number	Enclosure Material	AC22 rating (A) 415-690VAC	AC23 rating (A) 415 VAC	KU Load Break switch used	Auxiliary to suit (1 NO)	Auxiliary to suit (1 NC)	Auxiliary to suit 1 x NO/NC CO	Auxiliary to suit 1 x NO/NC CO	Auxiliary mounting position	Enclosure
KEM316 M2	Polycarbonate	16	16	KU316N	-	-	KU1V	KU2V	Front of switch	M2
KEM325 M2	Polycarbonate	25	25	KU325N	-	-	KU1V	KU2V	Front of switch	M2
KEM340 M2	Polycarbonate	40	40	KU340N	-	-	KU1V	KU2V	Front of switch	M2
KEA325 A2	Aluminium	25	25	KU325N	-	-	KU1V	KU2V	Front of switch	A2
KEA340 A2	Aluminium	40	40	KU340N	-	-	KU1V	KU2V	Front of switch	A2
KER316 YR RA2	Stainless Steel	16	16	KU316N	-	-	KU1V	KU2V	Front of switch	RA2
KER325 YR RA2	Stainless Steel	25	25	KU325N	-	-	KU1V	KU2V	Front of switch	RA2
KER340 YR RA2	Stainless Steel	40	40	KU340N	-	-	KU1V	KU2V	Front of switch	RA2
KER316 RA2R	Stainless Steel	16	16	KU316N	-	-	KU1V	KU2V	Front of switch	RA2R
KER325 RA2R	Stainless Steel	25	25	KU325N	-	-	KU1V	KU2V	Front of switch	RA2R
KER340 RA2R	Stainless Steel	40	40	KU340N	-	-	KU1V	KU2V	Front of switch	RA2R
KER316 RA2RS	Stainless Steel	16	16	KU316N	-	-	KU1V	KU2V	Front of switch	RA2RS
KER325 RA2RS	Stainless Steel	25	25	KU325N	-	-	KU1V	KU2V	Front of switch	RA2RS
KER340 RA2RS	Stainless Steel	40	40	KU340N	-	-	KU1V	KU2V	Front of switch	RA2RS

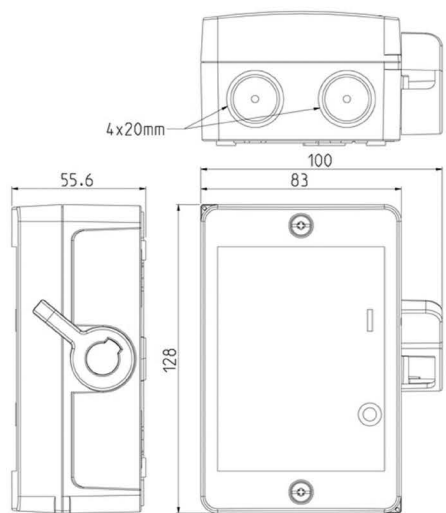
Engineering Disclaimer

In this document, APS has sought to show the Katko items that are the closest match to competitor products. However, we do not guarantee that this information is complete, accurate or up to date. We recommend that product specifications are checked to ensure that products are fit for the intended application.

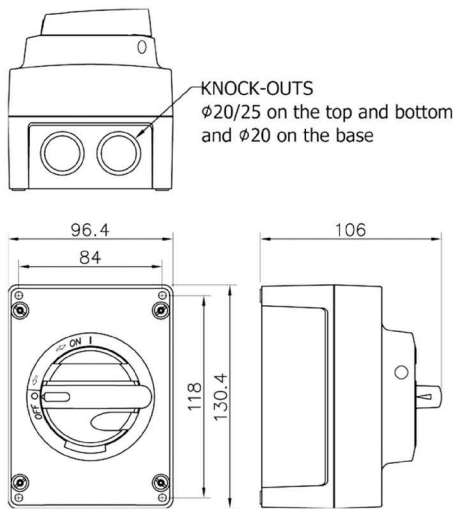


DIMENSIONS KATKO ENCLOSED SWITCHES

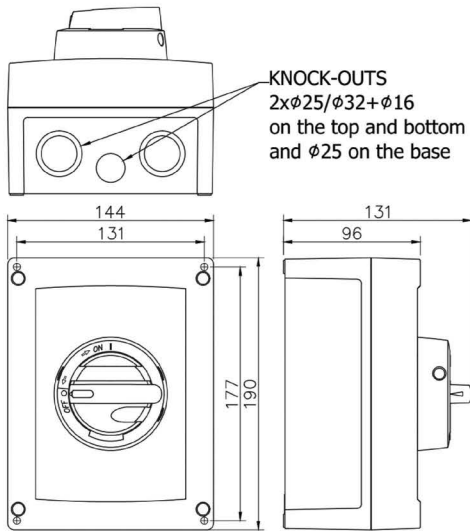
POLYCARBONATE ENCLOSURES



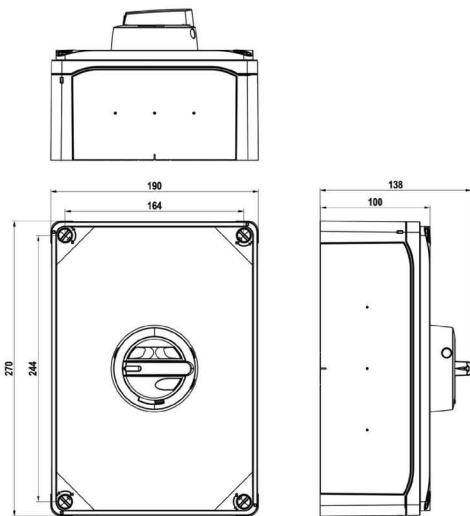
M1



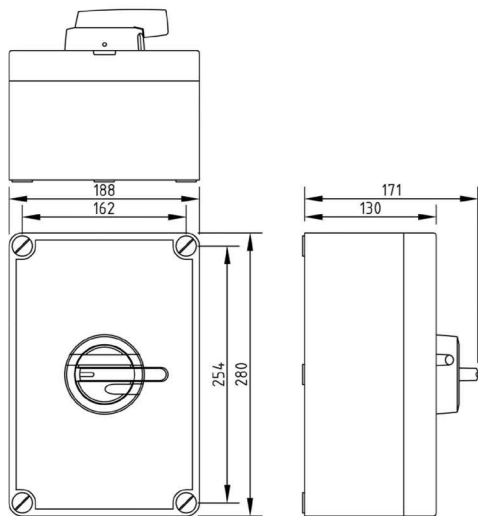
M2



M3

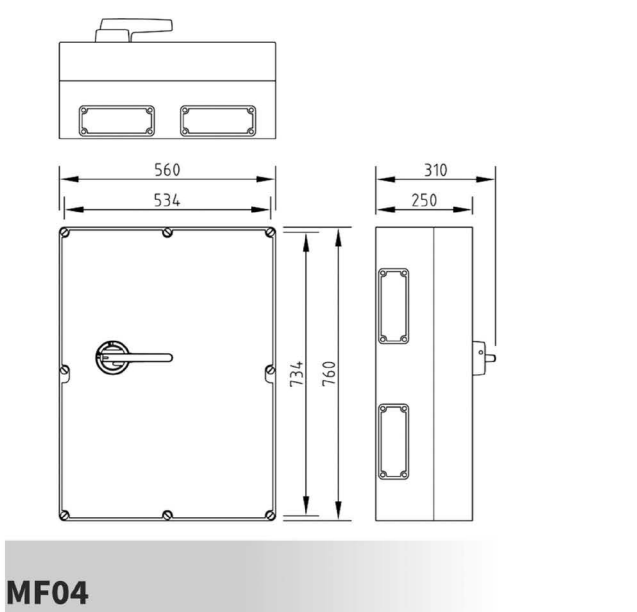
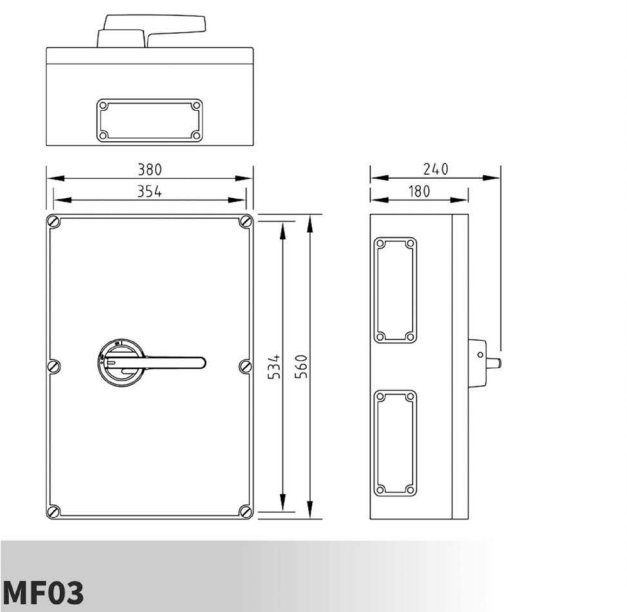
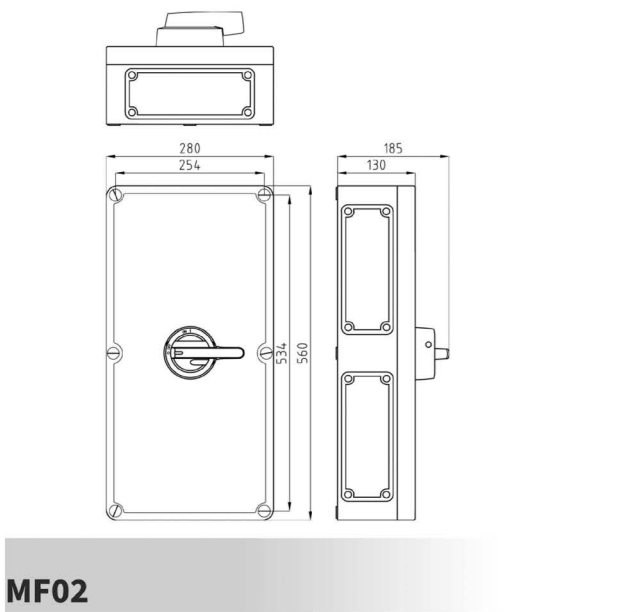
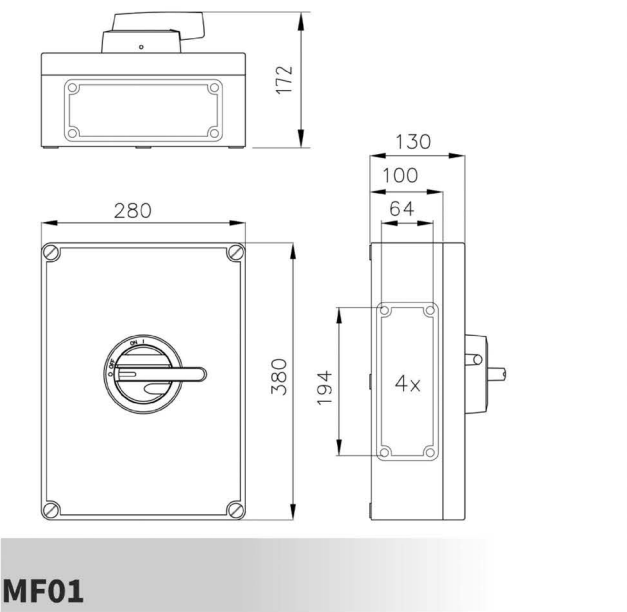
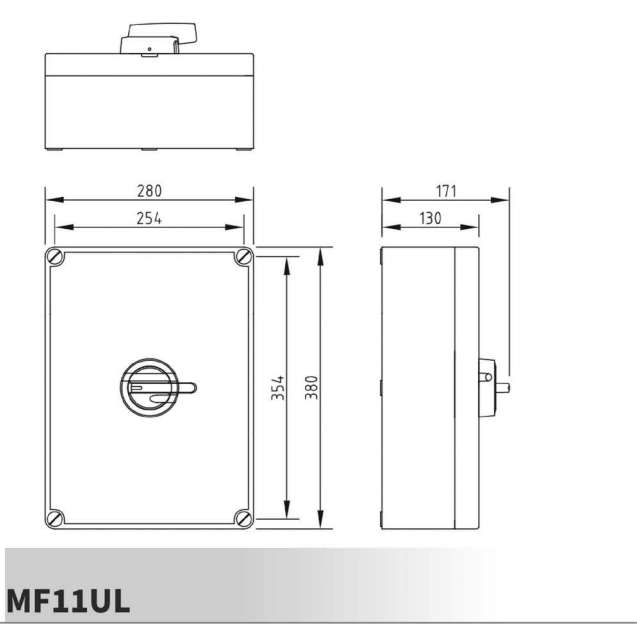
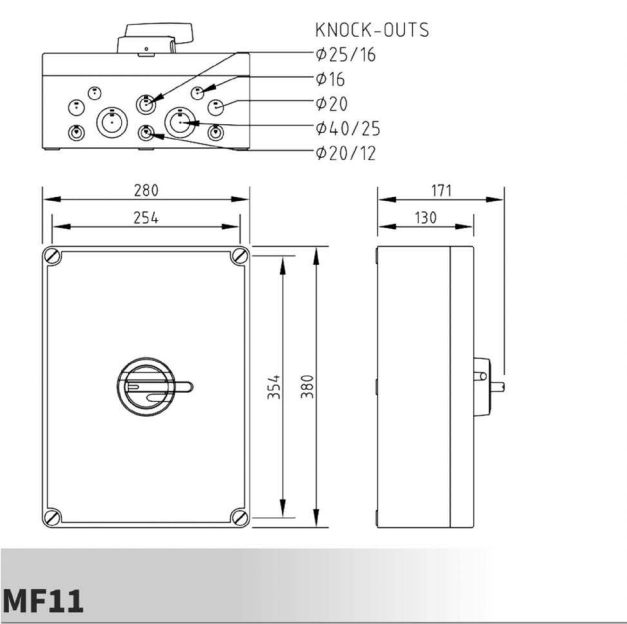


M4



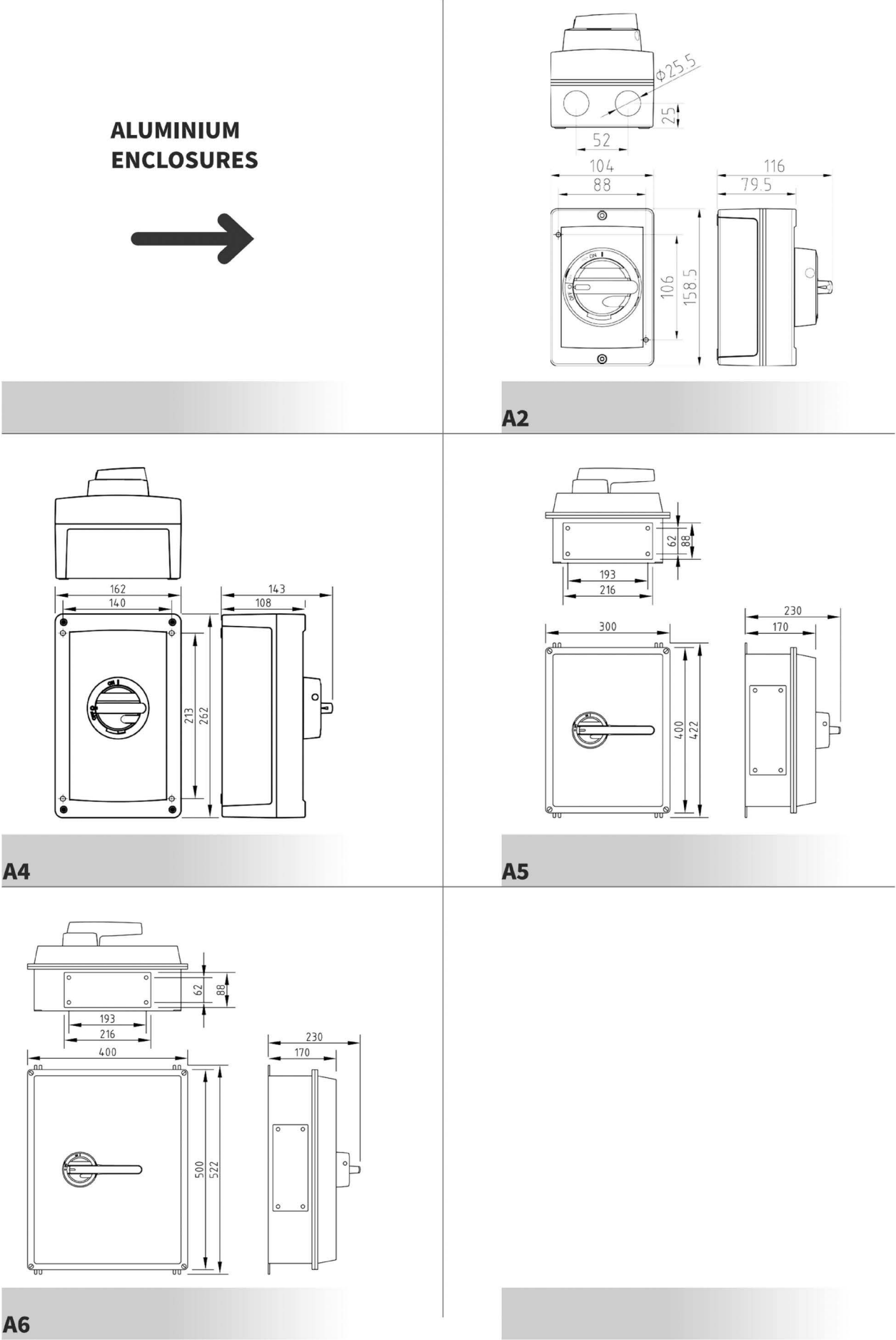
MF10

DIMENSIONS KATKO ENCLOSED SWITCHES



DIMENSIONS KATKO ENCLOSED SWITCHES

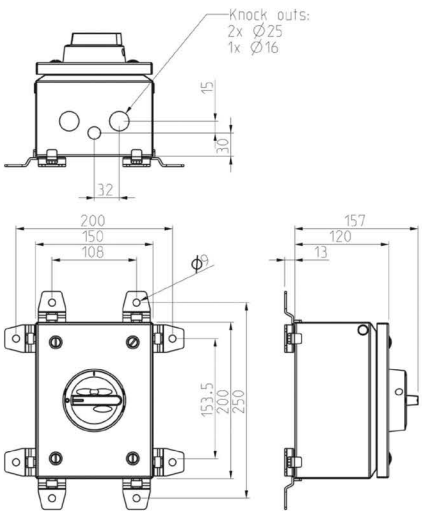
Dimensions in (mm)



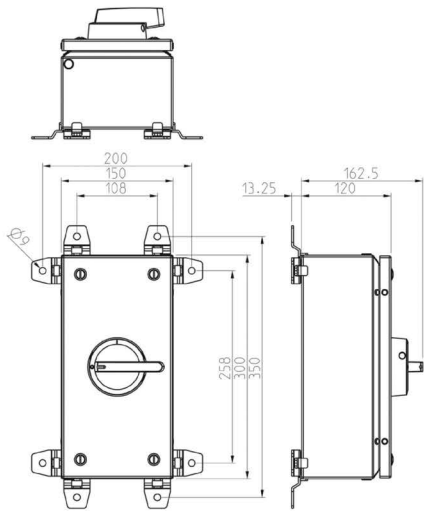
DIMENSIONS KATKO ENCLOSED SWITCHES

(mm)

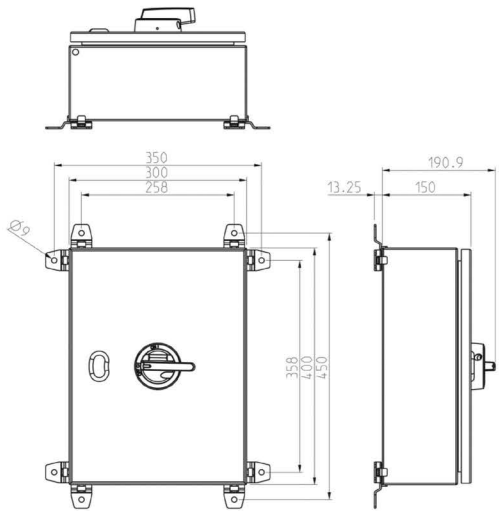
SHEET STEEL
ENCLOSURES



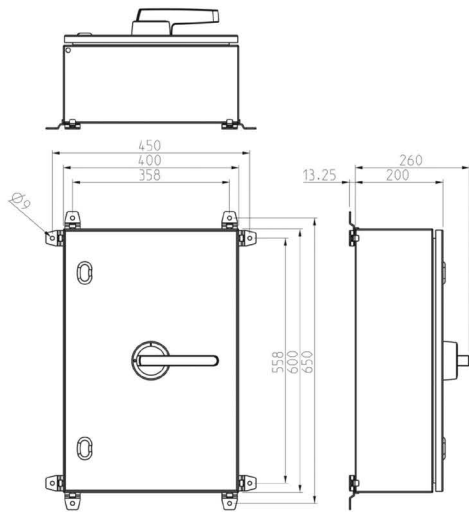
T3



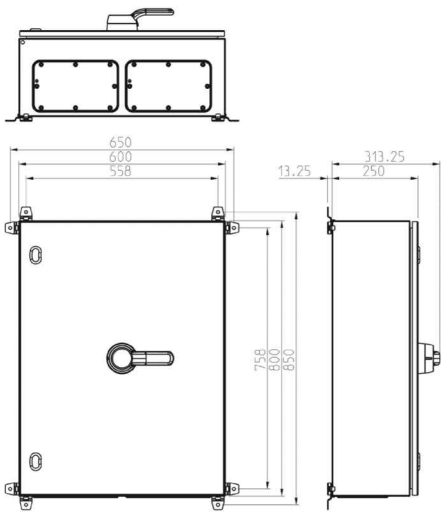
T4



T5



T6

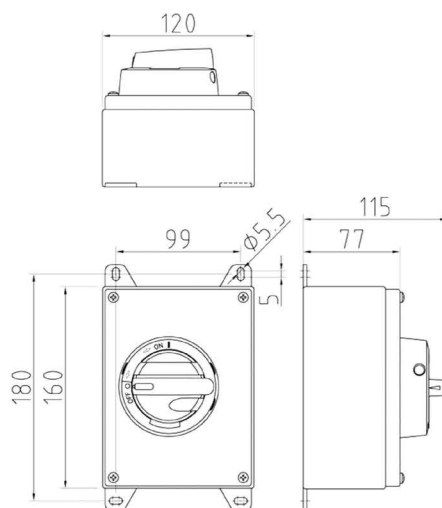


T7

Dimensions in (mm)



Dimensions in (mm)



Technical drawings of the MAXQ8 module showing dimensions in millimeters (mm).

Top View:

- Overall width: 120 mm
- Overall height: 99 mm
- Pin 1 location: Indicated by a dot in a square at the top center.
- Mounting holes: Three circular holes with diameters $\varnothing 25$ mm (left and right) and $\varnothing 16$ mm (center).
- Pin 1 offset: 64 mm from the left edge.
- Pin 1 offset: 21 mm from the top edge.
- Pin 1 offset: 32 mm from the right edge.

Front View:

- Overall width: 106 mm
- Overall height: 77 mm
- Mounting holes: Two circular holes with diameter $\varnothing 5.5$ mm.
- Switch: A slide switch labeled "ON" and "OFF".
- Switch height: 160 mm from the bottom edge.
- Switch height: 180 mm from the bottom edge.

Side View:

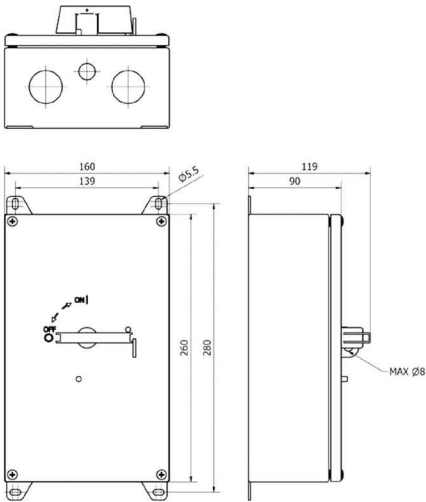
- Overall width: 106 mm
- Overall height: 77 mm
- MAXQ8 chip: Indicated by an arrow pointing to the component on the right side.

[illegible][illegible]

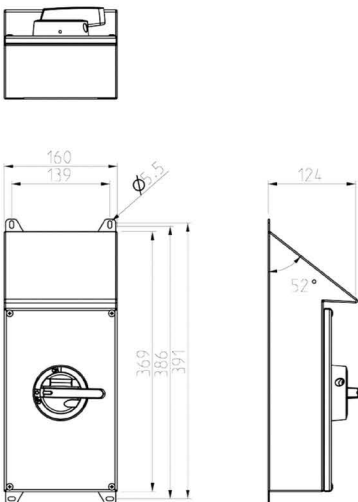
RA4

DIMENSIONS KATKO ENCLOSED SWITCHES

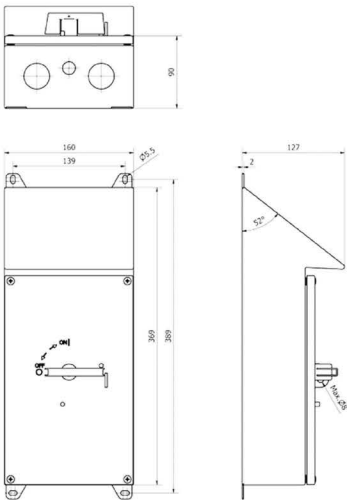
Dimensions in (mm)



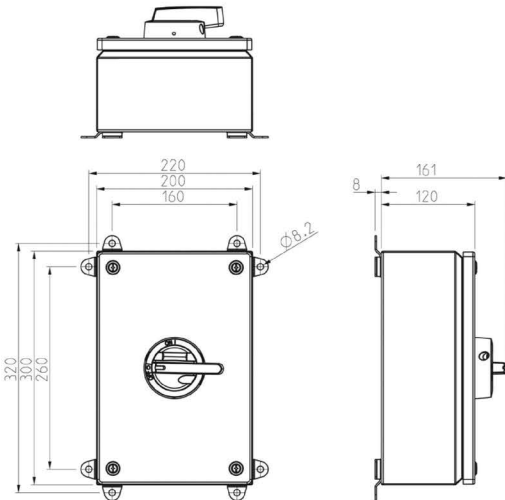
RA4R



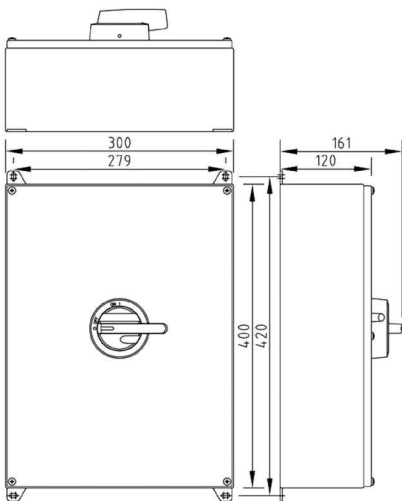
RA4S



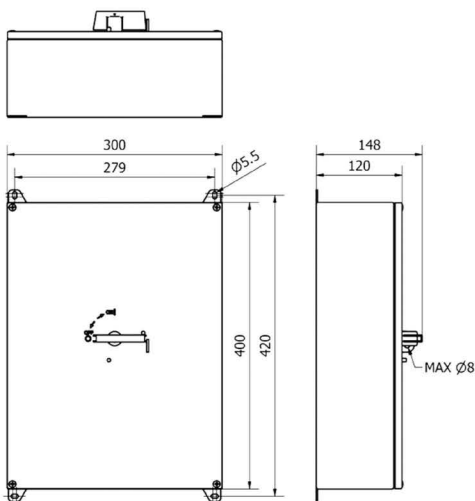
RA4RS



RA4B



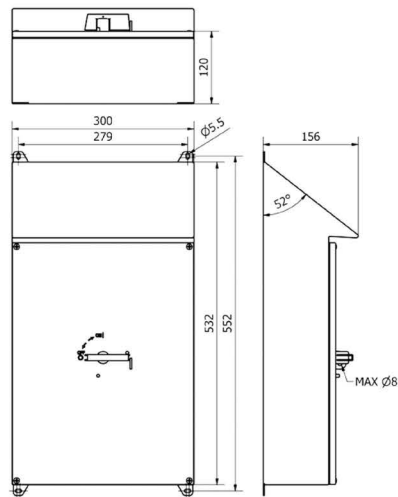
RA5



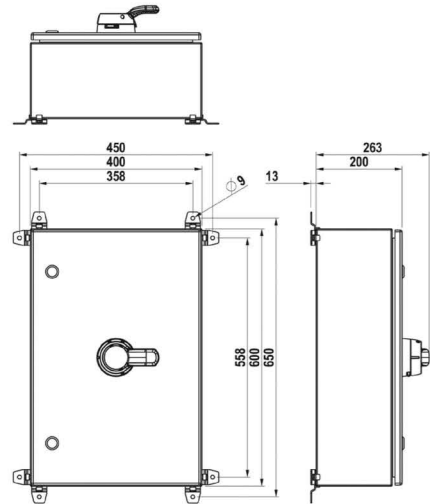
RA5R

DIMENSIONS KATKO ENCLOSED SWITCHES

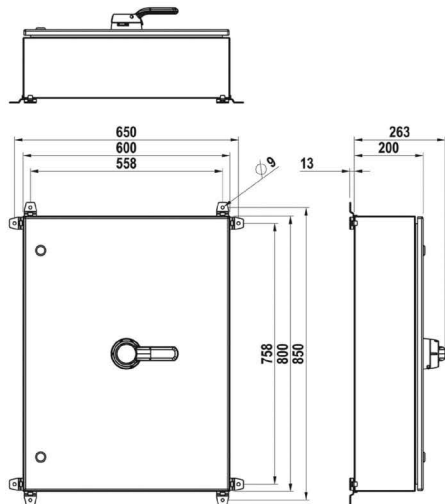
Dimensions in (mm)



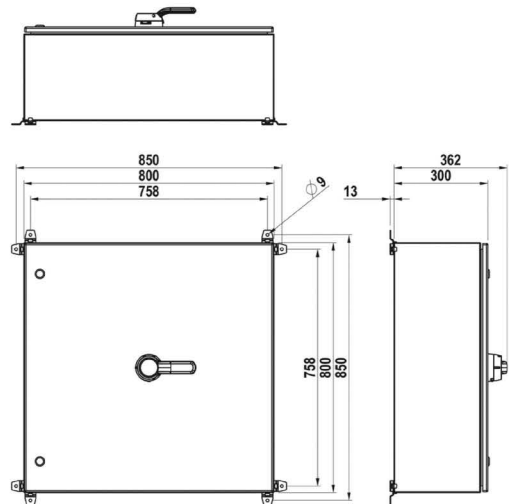
RA5RS



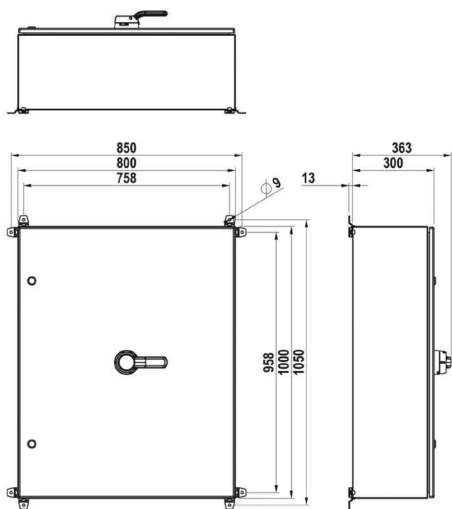
R6



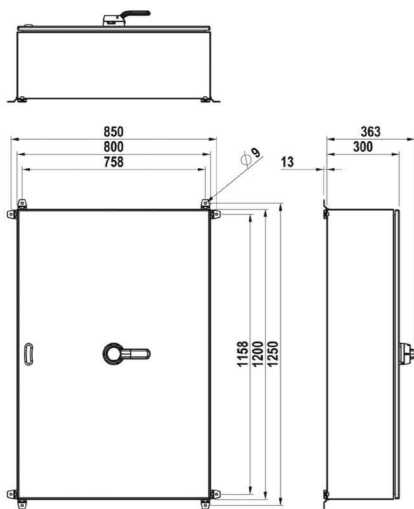
R7



R8



R9

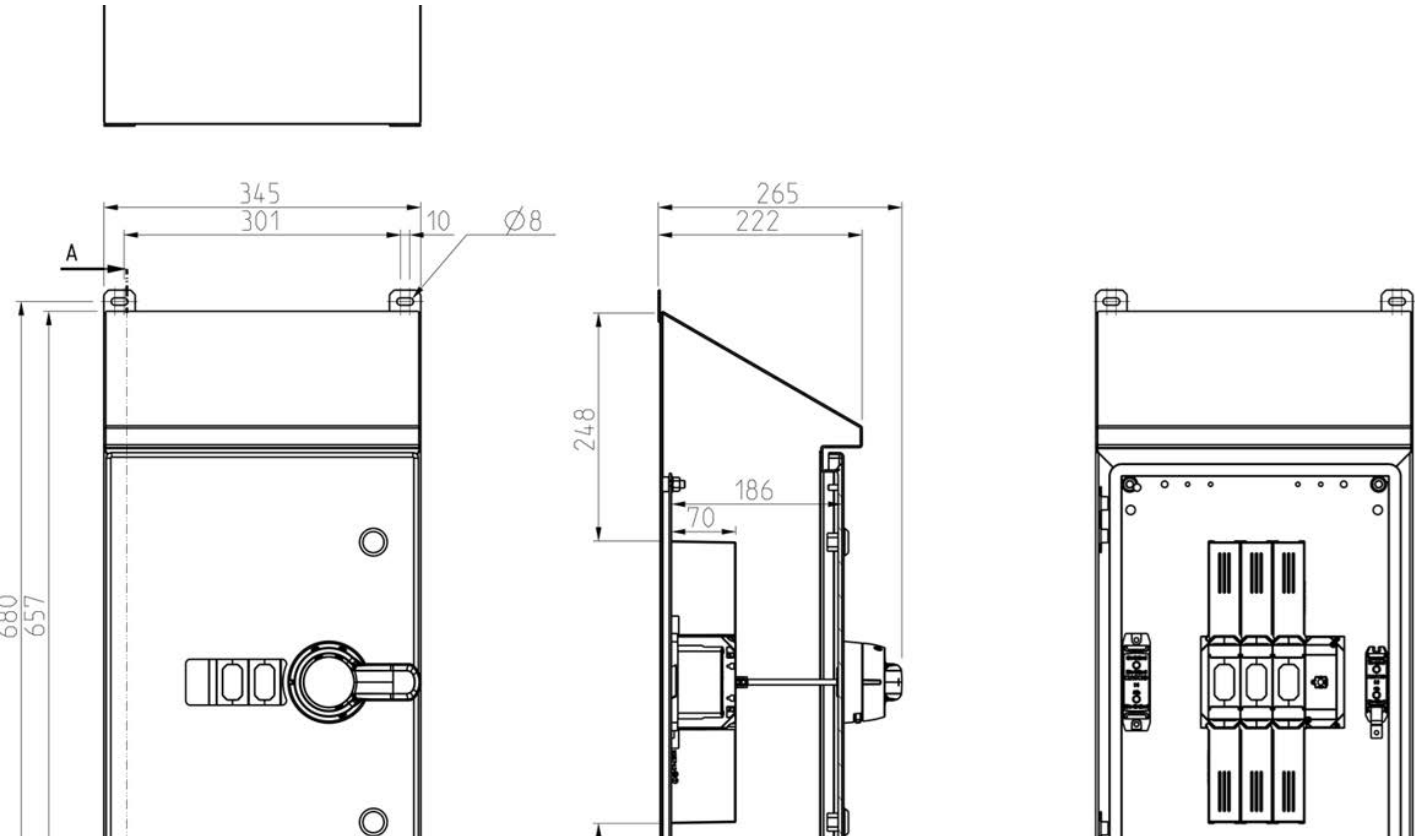


R10

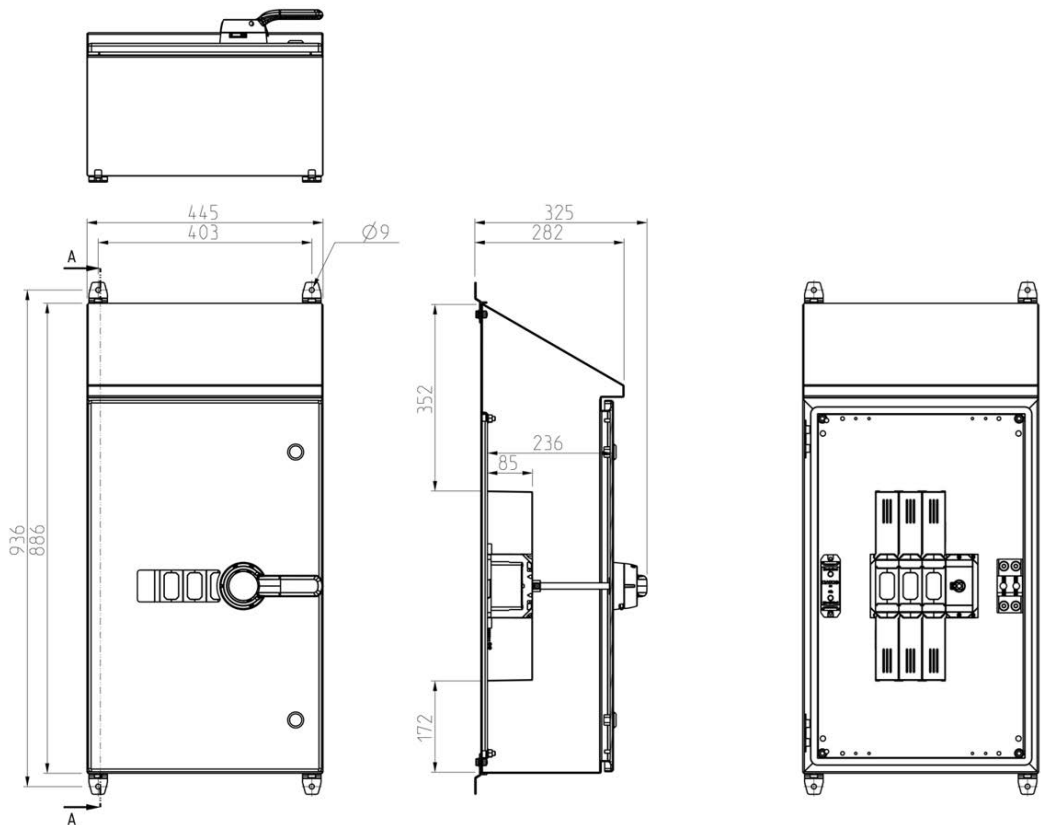
DIMENSIONS KATKO ENCLOSED SWITCHES

Dimensions in (mm)

Stainless Steel RA6AVS
200A, 250A
3 and 4 pole types



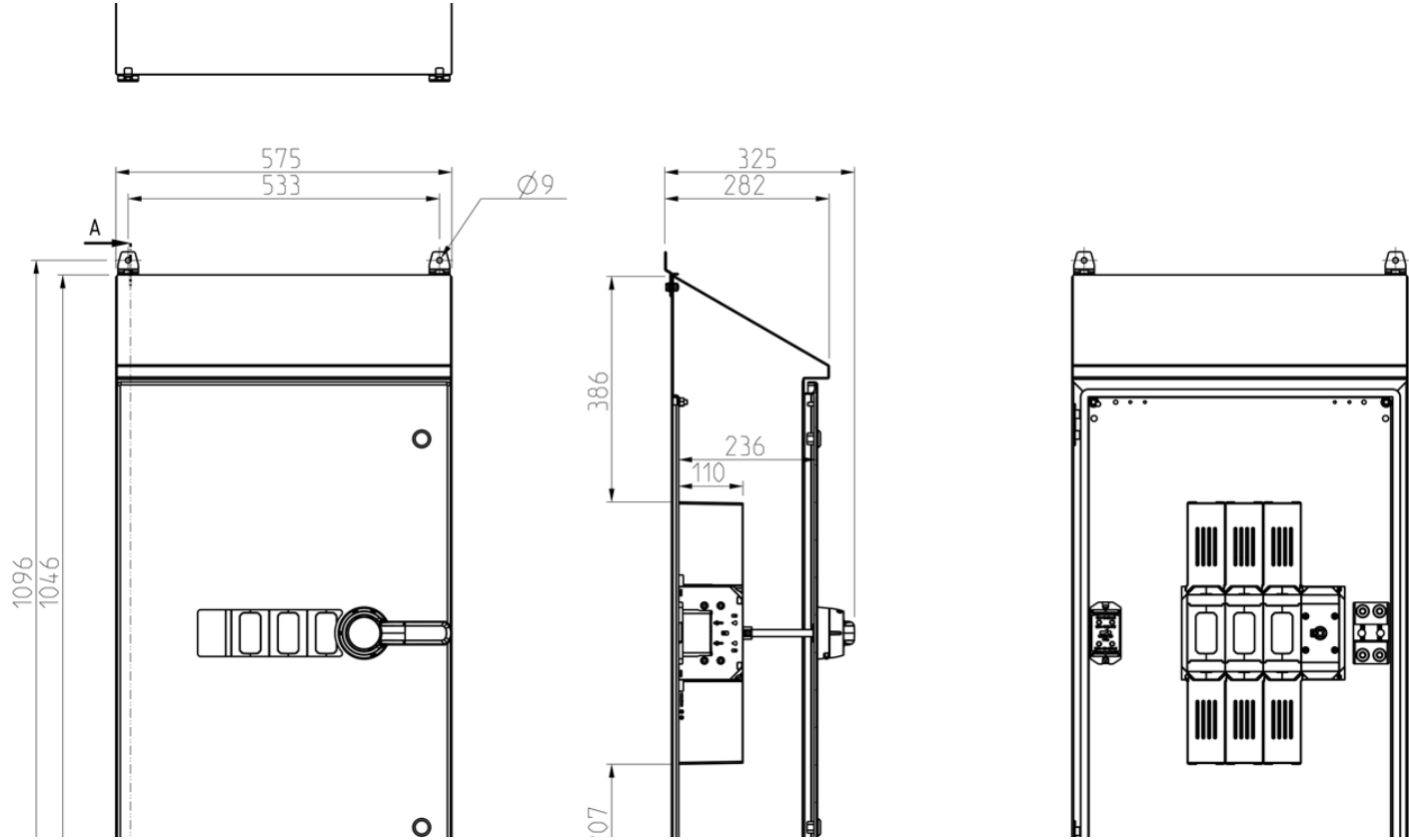
Stainless Steel RA7AVS
400A
3 and 4 pole types



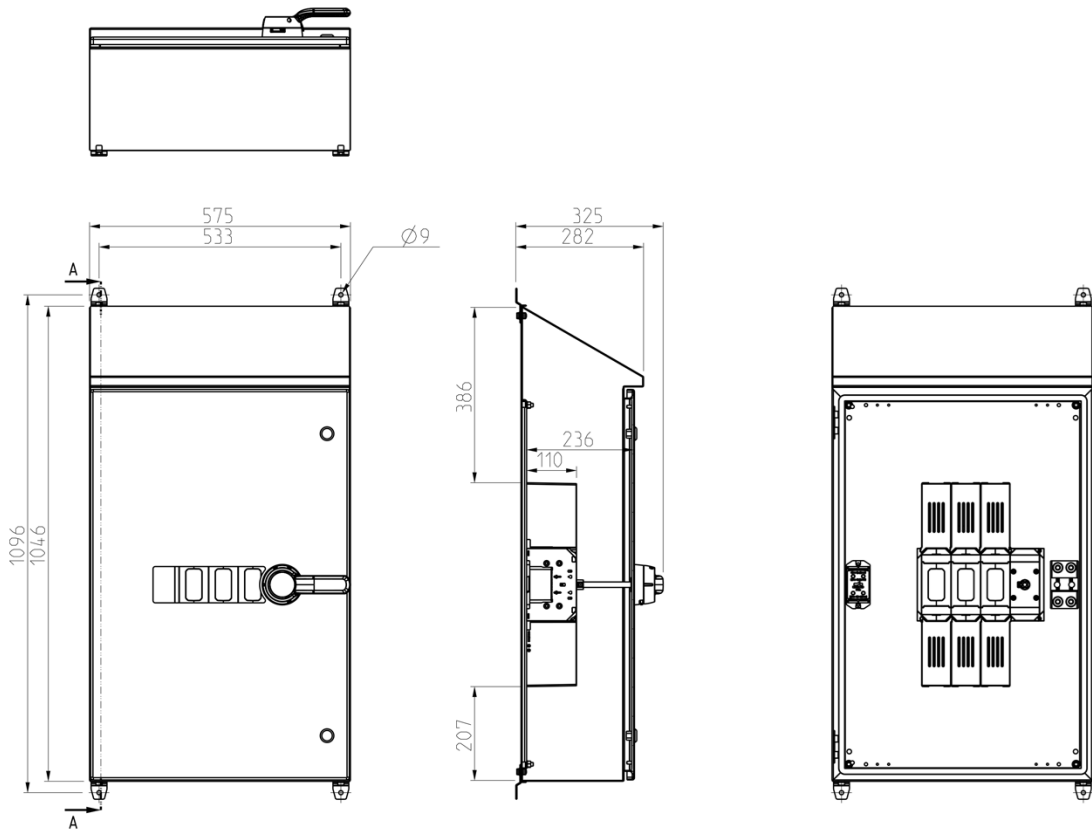
DIMENSIONS KATKO ENCLOSED SWITCHES

Dimensions in (mm)

Stainless Steel RA7BVS
630A
3 and 4 pole types



Stainless Steel RA10VS
400A
3 and 4 pole types



LOAD BREAK SWITCHES

NEW
RT Series

DOOR MOUNT ROTARY SWITCHES 16 - 40 A (RT SERIES)

- | Compact size, Door – Panel mounting
 - | Mounts in a 22.5 mm hole, using a rear retaining ring
 - | 3 pole versions
 - | Switch technology by means of silver contacts ensures safe and durable operation.
 - | RT version is suitable for door mounting and will be delivered with 42 mm shaft and LKX50 (black) or LKX50YR (yellow/red) handle
 - | AC21A, AC22A, AC23A rated to 690 VAC
 - | I_{th} thermal ratings, RT3 16 = 25A, RT3 25 = 40A, RT3 40 = 63 A
- Switch supplied with door mounting bracket including door mount handle and 40mm shaft



RT 3P Black handle
Door mount type



RT 3P Yellow Red handle
Door mount type

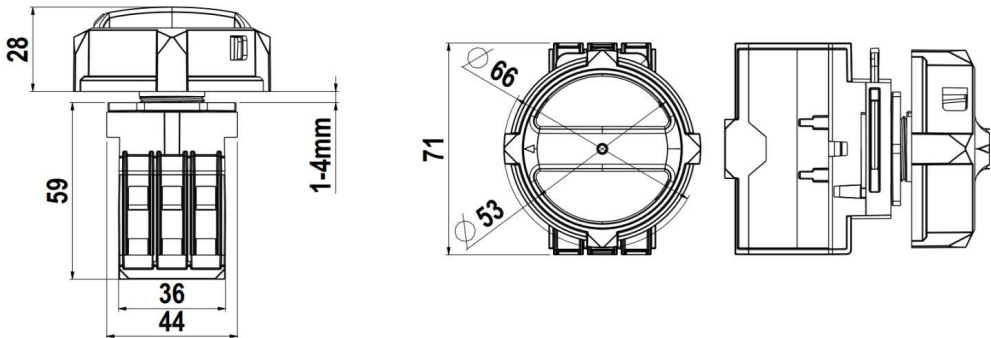
Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Switch type	Poles
Switch with Black Handle	Switch with Yellow Red Handle		415 V		415 V		415 V		-		
			690 V		690 V		-		690 V		
			Ie / A		Ie / A		Ie / A		P / kW		
RT 316 L42 AD11 LKX50	RT 316 L42 AD11 LKX50YR	16	16	16	7.5	16	11	Door mount LBS	3		
RT 325 L42 AD11 LKX50	RT 325 L42 AD11 LKX50YR	25	25	25	11	25	22				
RT 340 L42 AD11 LKX50	RT 340 L42 AD11 LKX50YR	40	40	25	22	25	22				

RT Switch related accessories



Part Number	Accessory	Description	For
1NO40RT	Auxiliary, RT screw type	1NO screw terminals, positive drive contacts	RT switch 16A to 40A
1NC40RT		1NC screw terminals, positive drive contacts	

Dimensions in (mm)



PANEL MOUNT ROTARY SWITCHES

NEW
KU Series

16 - 40 A (KU SERIES)

- Compact size, DIN-rail or screw mounting.
- 3 pole and 4 pole versions.
- Used in Katko enclosed switches as standard for sizes 16A to 40A.
- Switching technology by means of silver contacts ensures safe and durable operation.
- Compatible with handles LKX50, LK10, LK11.
- KU switches are supplied standard with black direct mount, lock OFF handle.
- Direct mount and extension handles lock OFF as standard.
- Handle locking is via a padlock with a hasp size up to 5 mm.
- Yellow-red or black handle options.
- Shaft length options are 100, 200, 300 mm AD11 (aluminium) or AD11VT (steel).
- AC21A, AC22A, AC23A rated to 690 VAC.
- Ith thermal ratings, KU_16 = 25A, KU_25 = 40A, KU_40 = 63 A.
- Side mount clip-on auxiliary contacts, 1NO or 1NC, with a max. of 2 either side of switch.
- Auxiliaries are bridge contact types, direct drive, Early break, late make switching.



KU 3P Load Break Switch



KU 4 pole Load Break Switch

Switches supplied with direct mount black handle

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Switch type	
3 Pole	4 Pole				415 V		415 V		415 V		415 V
			690 V		690 V		-		690 V		
			Ie / A		Ie / A		Ie / A		P / kW		Ie / A
KU 316	KU 416	16	16	16	7.5	16	11	Door mount LBS			
KU 325	KU 425	25	25	25	11	25	22				
KU 340	KU 440	40	40	25	22	25	22				

KU Switch accessories



Shaft



Screw Auxiliary



Quick Connect Auxiliary



LKX Handle



LK10 Handle

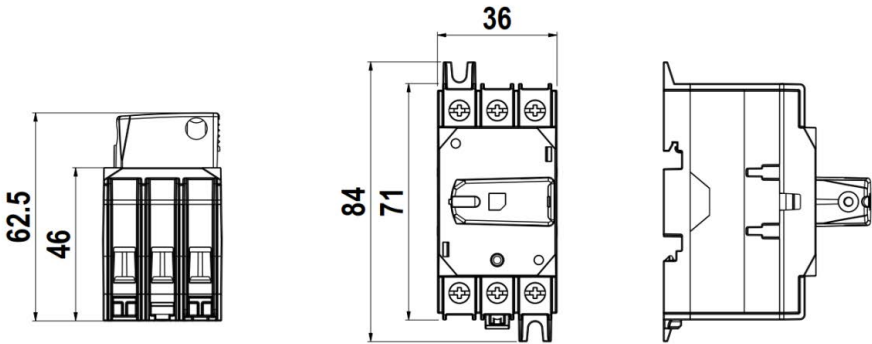
Accessories

Part Number	Accessory	Description	For
LKX50	Handle, padlock OFF, Black	Black	KU switches 16A to 40A
LKX50YR	Handle, Padlock OFF, Yellow Red	Yellow/red	
LK10	Handle, padlock OFF, Black	Black	
LK10YR	Handle, Padlock OFF, Yellow Red	Yellow/red	
L200AD11	Shaft	Length 200 mm, aluminium	
L300AD11	Shaft	Length 300 mm, aluminium	
L100AD11VT	Shaft	Length 100 mm, steel, slanted	
L300AD11VT	Shaft	Length 300 mm, steel, slanted	
1NO40QC	Auxiliary, QC push on terminals	1NO quick connect terminals, positive drive	
KU40C	Changeover accessory	Changeover kit front mounting 3 or 4 pole	
1NC40QC	Auxiliary, QC push on terminals	1NC, positive drive contacts	
1NO40KU	Auxiliary, screw terminals	1NO, positive drive contacts	
1NC40KU	Auxiliary, screw terminals	1NC, positive drive contacts	

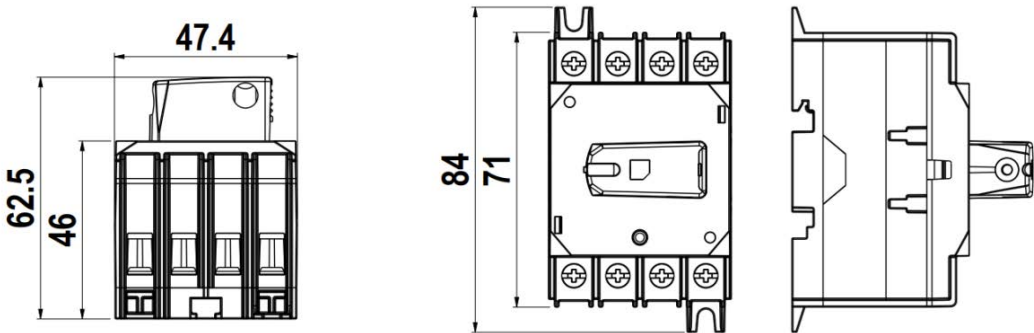
KU SERIES, 16 – 40 A, PANEL MOUNT ROTARY SWITCHES

Dimensions in (mm)

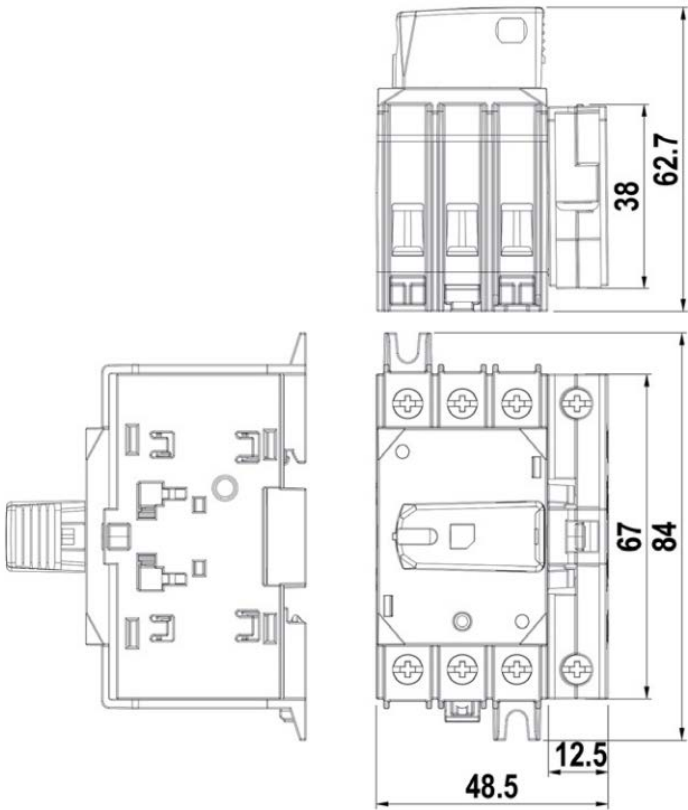
3 Pole



4 Pole



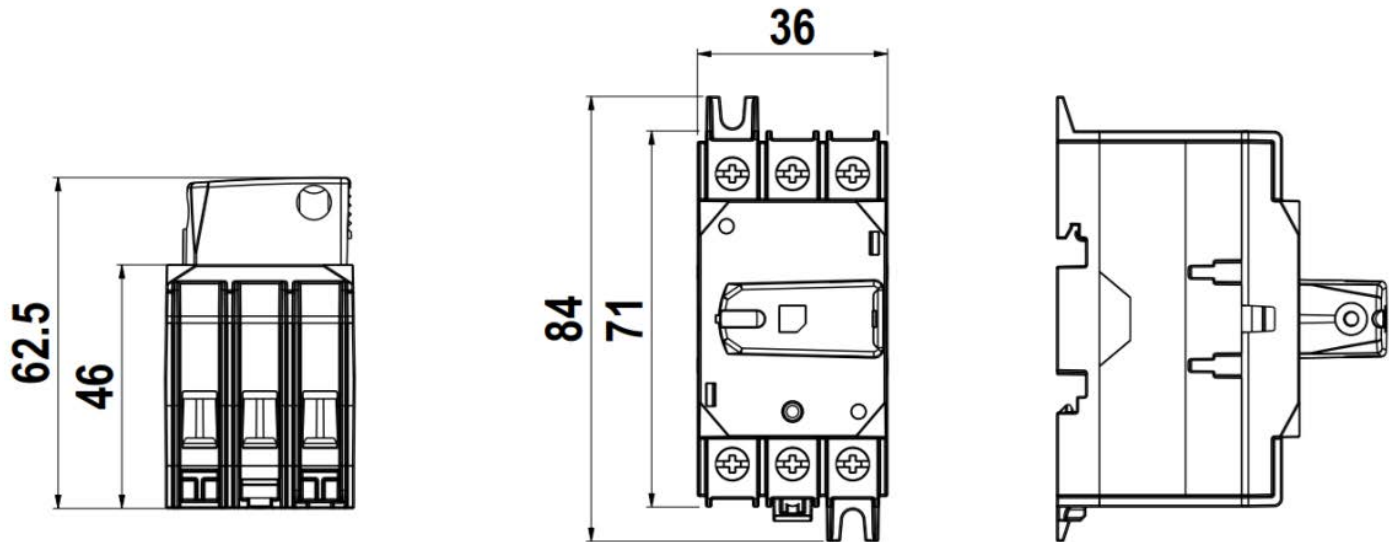
Auxiliaries 1NO40KU / 1NC40KU mounted on a 3-pole KU switch



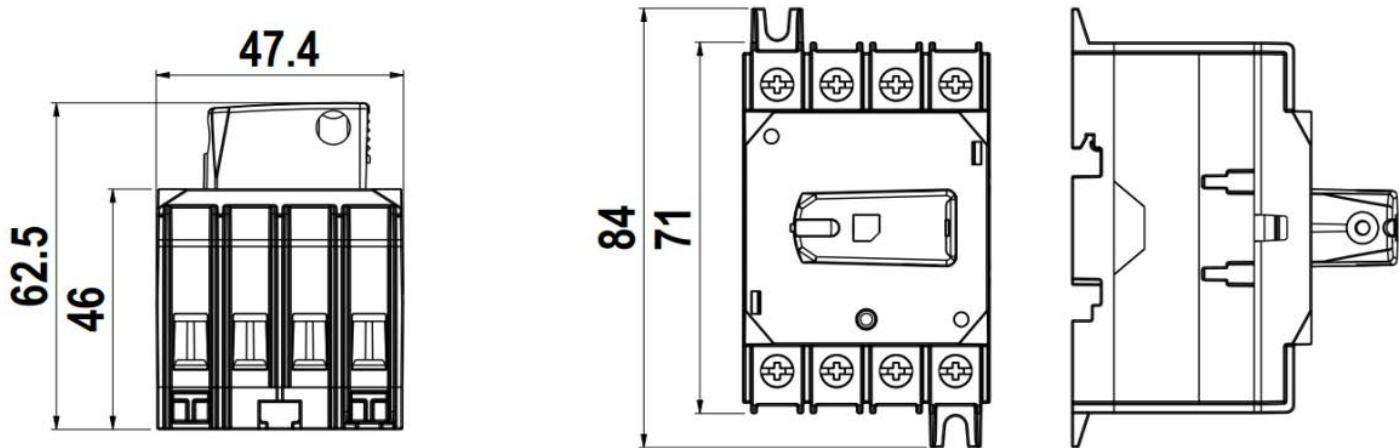
KU SERIES, 16 – 40 A, PANEL MOUNT ROTARY SWITCHES

Dimensions in (mm)

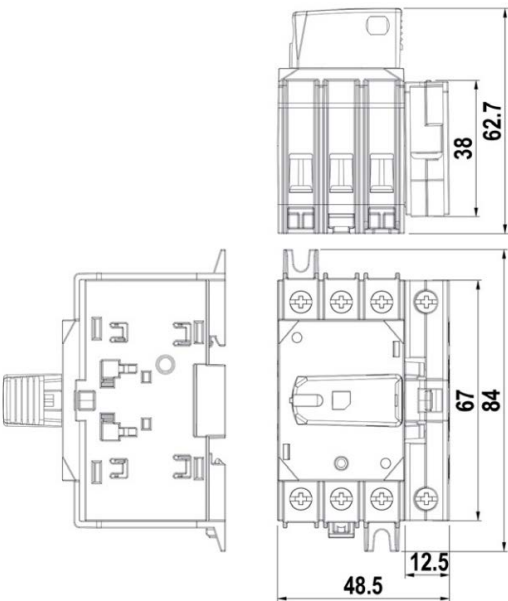
3 Pole



4 Pole



Auxiliaries 1NO40KU / 1NC40KU mounted on a 3-pole KU switch



PANEL MOUNT ROTARY SWITCHES

63 - 80 A (KU SERIES)

- Compact size, DIN-rail mounting.
- 6 and 8-pole versions consist of two 3-pole or 4-pole KU-switches connected by a parallel kit.
- 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 AD11/VT.
- Auxiliary contacts 1NO/NC or 2NO/NC changeover types, snap action, front mounting.
- KU 16A – 40 A types on the previous page have replaced the now obsolete KU_N, 16-40A 1) 2)



Switches supplied with direct mount red handle

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-
3 Pole	4 Pole				415 V		415 V		
			690 V		690 V		-		690 V
			Ie / A		Ie / A		Ie / A		P / kW
KU363N	KU463N	80	63	40	22	40	37		
KU380N	KU480N	100	80	63	30	40	37		



KU Switch accessories

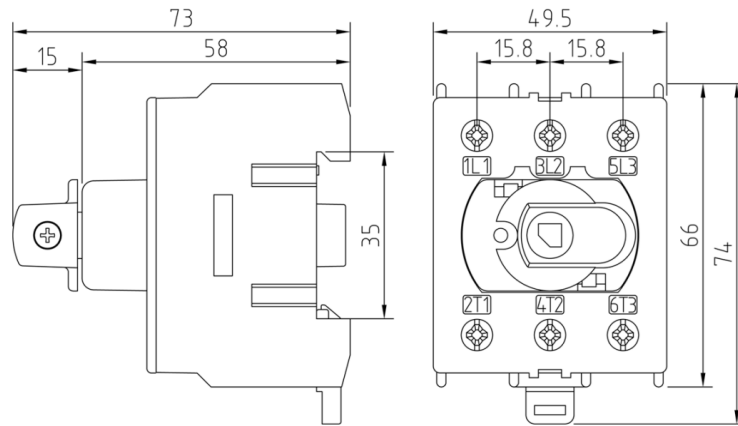
Part Number	Accessory	Description	For
LK10	Handle	Black	3 & 4 pole, lock OFF
LK10YR	Handle	Yellow/red	3 & 4 pole, lock OFF
LK10YRON	Handle	Yellow/red	3 & 4 pole, lock ON
LK11	Handle	Black	3 & 4 pole, lock OFF, with lever
LK11YR	Handle	Yellow/red	3 & 4 pole, lock OFF, with lever
LK11P69K	Handle	Black	3 & 4 pole, lock OFF, with lever
LK11YRIP69K	Handle	Yellow/red	3 & 4 pole, lock OFF, with lever
LK11YRON	Handle	Yellow/red	3 & 4 pole, lock ON, with lever
L200AD11	Shaft	Length 200 mm, Aluminium	With LK10 and LK11 handles
L300AD11	Shaft	Length 300 mm, Aluminium	With LK10 and LK11 handles
L100AD11VT	Shaft	Length 100 mm, steel, slanted	With LK10 and LK11 handles
L300AD11VT	Shaft	Length 300 mm, steel, slanted	With LK10 and LK11 handles
KKU3P	Front plate	Grey plate, black direct handle	3-pole
KKU4P	Front plate	Grey plate, black direct handle	4-pole
KKU3PYR	Front plate	Yellow plate, red direct handle	3-pole
KKU4PYR	Front plate	Yellow plate, red direct handle	4-pole
KU1V	Auxiliary contact	1 x NO/NC CO, fit max: 1	For all configurations 3-8 pole
KU2V	Auxiliary contact	2 x NO/NC CO, fit max: 1	For all configurations 3-8 pole
RV66	Parallel kit	Length 66 mm, center shaft	2 x 3-pole
RV66S	Parallel kit	Length 66 mm, side shaft	2 x 3-pole
RV80	Parallel kit	Length 80 mm, center shaft	2 x 4-pole
RV80S	Parallel kit	Length 80 mm, side shaft	2 x 4-pole
LK11CO102	Handle	Black	Change-over
LK11CO102YR	Handle	Yellow/red	Change-over
KUVV	Change-over kit	Positions 1, 0, 2, black handle	3 or 4-pole
KUVVYR	Change-over kit	Positions 1, 0, 2, red handle	3 or 4-pole

- KU_N, 63 – 80 A, 3 and 4 pole switches have the same dimensions as the now obsolete KU_N, 16 – 40 A, types, and can therefore be used as a replacement substitute if required.
- For KEM enclosed switch replacement, KU_N 63 – 80 A switches will plug in to replace 16A – 40 A switches, where as a new style KU 16A – 40 A type cannot be fitted to older enclosures.

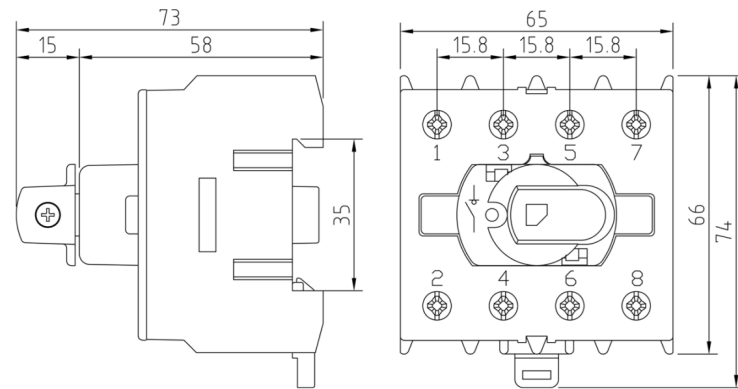
KU_N SERIES, 63 – 80 A, PANEL MOUNT ROTARY SWITCHES

Dimensions in (mm)

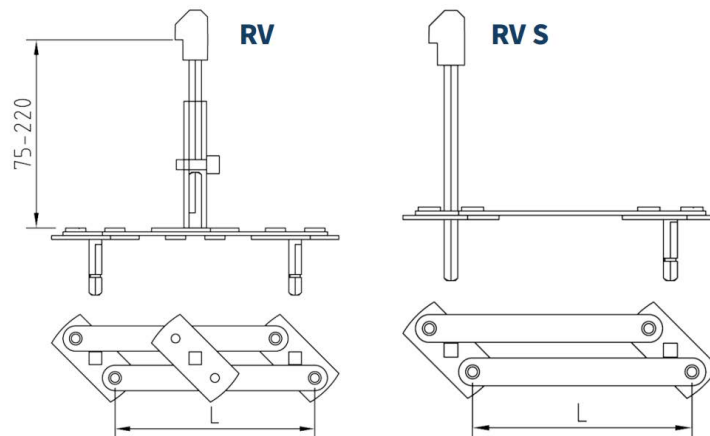
3 Pole 63A – 80A



4 Pole 63A – 80A



KU 6 – 8 Pole, Parallel Kit, 63A – 80A



KU 6-Pole

- Length, L (mm)
- RV = 66
- RV S = 66

KU 8-Pole

- Length, L (mm)
- RV = 80
- RV S = 80

LOAD BREAK SWITCHES

KU 100 TO 160 A, PANEL MOUNT ROTARY SWITCHES

- Compact size, Modular design, DIN-rail mounting
- Panel or DIN rail mount as standard
- 3, 4, 6 and 8 pole switches
- 4 pole versions with early-make and late-break neutral pole, on the right.
- 6 pole and 8 pole switches consist of two 3 pole or 4 pole switches and a parallel operation kit
- Silver contacts increase the degree of safety and overall reliability of switching
- Compatible with handles LK10, LK11(3 pole and 4 poles) and LK12 (6 and 8 poles and change-over switch)
- IP66 extension shaft handles LK10, LK11 or LK12.
- Black or yellow red handles
- Handles padlockable in OFF as standard. Padlock ON option 1)
- ON position door defeat via lever at base of handle
- Shafts: 100 or 300 mm lengths, 11VT steel types for use with LK11 handles, 3 and 4 pole switches
- Shafts: 100 or 300 mm lengths, 12VT steel types for use with LK12 handles, 6 and 8 pole switches
- Terminal cover option for additional installation safety.
- AC21, AC22, AC23 rated to 415 and 690 VAC.
- Auxiliary contacts 1NO/NC or 2NO/NC changeover types, snap action, side mount



RT 3P Black handle
Door mount type



RT 3P Black handle
Door mount type



RT 3P Black handle
Door mount type

Switches supplied with direct mount black handle

Part Number	AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-
				415 V		415 V		-
		690 V		690 V		-		690 V
	Ie / A		Ie / A		Ie / A	P / kW	Ie / A	P / kW
3 Pole								
KU3100	125	100	100	55	63	55		
KU3125	160	125	125	55	80	75		
KU3160	160	160	160	90	100	90		
4 Pole								
KU4100	125	100	100	55	63	55		
KU4125	160	125	125	55	80	75		
KU4160	160	160	160	90	100	90		
6 Pole	(pre-assembled type below, though 6 and 8 pole can be assembled from components)							
KU6100	125	100	100	55	63	55		
KU6125	160	125	125	55	80	75		
KU6160	160	160	160	90	100	90		
8 Pole	(pre-assembled type below, though 6 and 8 pole can be assembled from components)							
KU8100	125	100	100	55	63	55		
KU8125	160	125	125	55	80	75		
KU8160	160	160	160	90	100	90		

LOAD BREAK SWITCHES

KU 100 TO 160 A, PANEL MOUNT ROTARY SWITCH ACCESSORIES



Parallel or changeover mechanism



Handle shafts



Extension handles

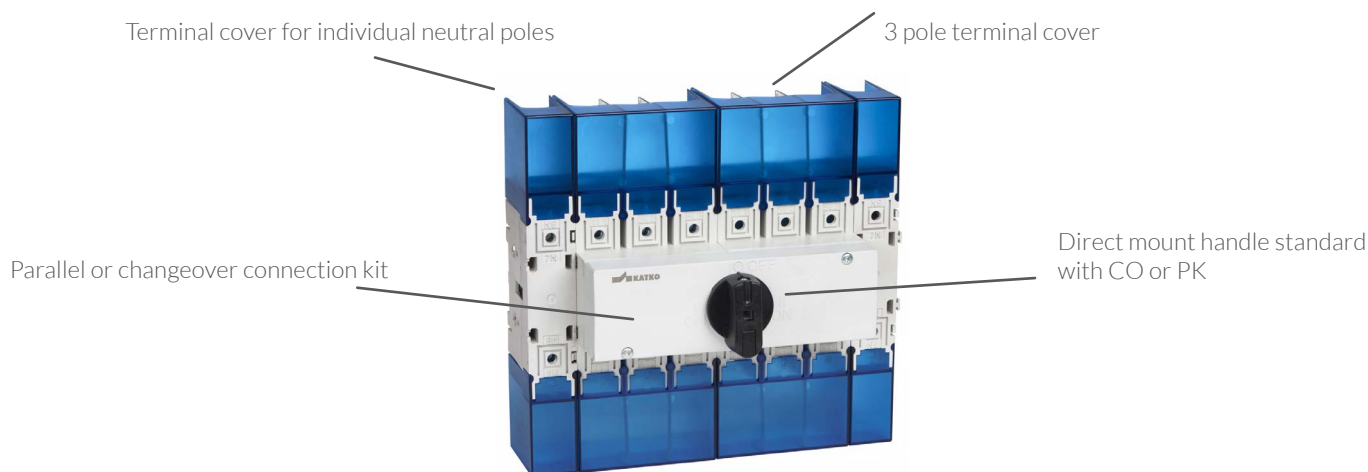


Auxiliary contacts

KU SWITCH ACCESSORIES

Part Number	Accessory	Description	For
LK10	Handle	Black	3 & 4 pole, lock OFF
LK10YR	Handle	Yellow/red	3 & 4 pole, lock OFF
LK10YRON	Handle	Yellow/red	3 & 4 pole, lock ON
LK11	Handle	Black	3 & 4 pole, lock OFF, with lever
LK11YR	Handle	Yellow/red	3 & 4 pole, lock OFF, with lever
LK11P69K	Handle	Black	3 & 4 pole, lock OFF, with lever
LK11YRIP69K	Handle	Yellow/red	3 & 4 pole, lock OFF, with lever
LK11YRON	Handle	Yellow/red	3 & 4 pole, lock ON, with lever
L200AD11	Shaft	Length 200 mm, Aluminium	With LK10 and LK11 handles
L300AD11	Shaft	Length 300 mm, Aluminium	With LK10 and LK11 handles
L100AD11VT	Shaft	Length 100 mm, steel, slanted	With LK10 and LK11 handles
L300AD11VT	Shaft	Length 300 mm, steel, slanted	With LK10 and LK11 handles
KKU3P	Front plate	Grey plate, black direct handle	3-pole
KKU4P	Front plate	Grey plate, black direct handle	4-pole
KKU3PYR	Front plate	Yellow plate, red direct handle	3-pole
KKU4PYR	Front plate	Yellow plate, red direct handle	4-pole
KU1V	Auxiliary contact	1 x NO/NC CO, fit max: 1	For all configurations 3-8 pole
KU2V	Auxiliary contact	2 x NO/NC CO, fit max: 1	For all configurations 3-8 pole
RV66	Parallel kit	Length 66 mm, center shaft	2 x 3-pole
RV66S	Parallel kit	Length 66 mm, side shaft	2 x 3-pole
RV80	Parallel kit	Length 80 mm, center shaft	2 x 4-pole
RV80S	Parallel kit	Length 80 mm, side shaft	2 x 4-pole
LK11CO102	Handle	Black	Change-over
LK11CO102YR	Handle	Yellow/red	Change-over
KUVV	Change-over kit	Positions 1, 0, 2, black handle	3 or 4-pole
KUVVYR	Change-over kit	Positions 1, 0, 2, red handle	3 or 4-pole

1. Add "ON" to part number for a LOCK ON handle type.



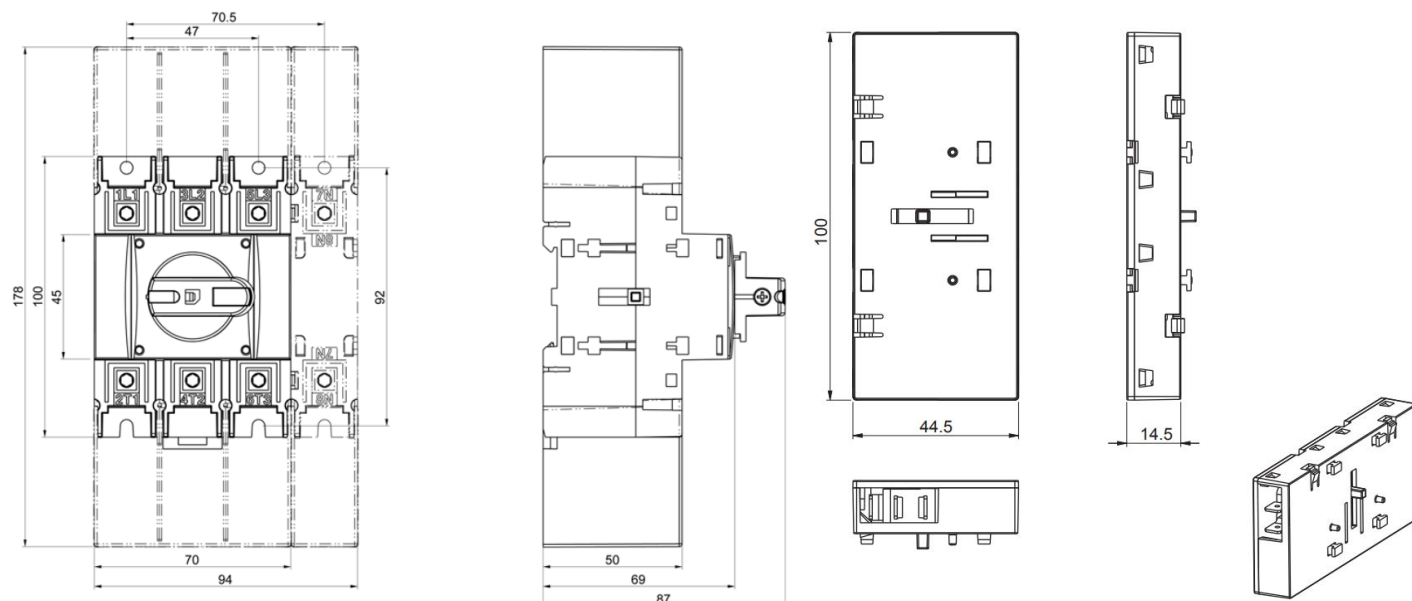
4P + 4P Changeover switch configurations:

Refer pre-assembled types: KU4100CO, KU4125CO or KU4160CO, or refer APS. These are an APS factory assembled item.

KU 100 TO 160 A, PANEL MOUNT ROTARY SWITCHES

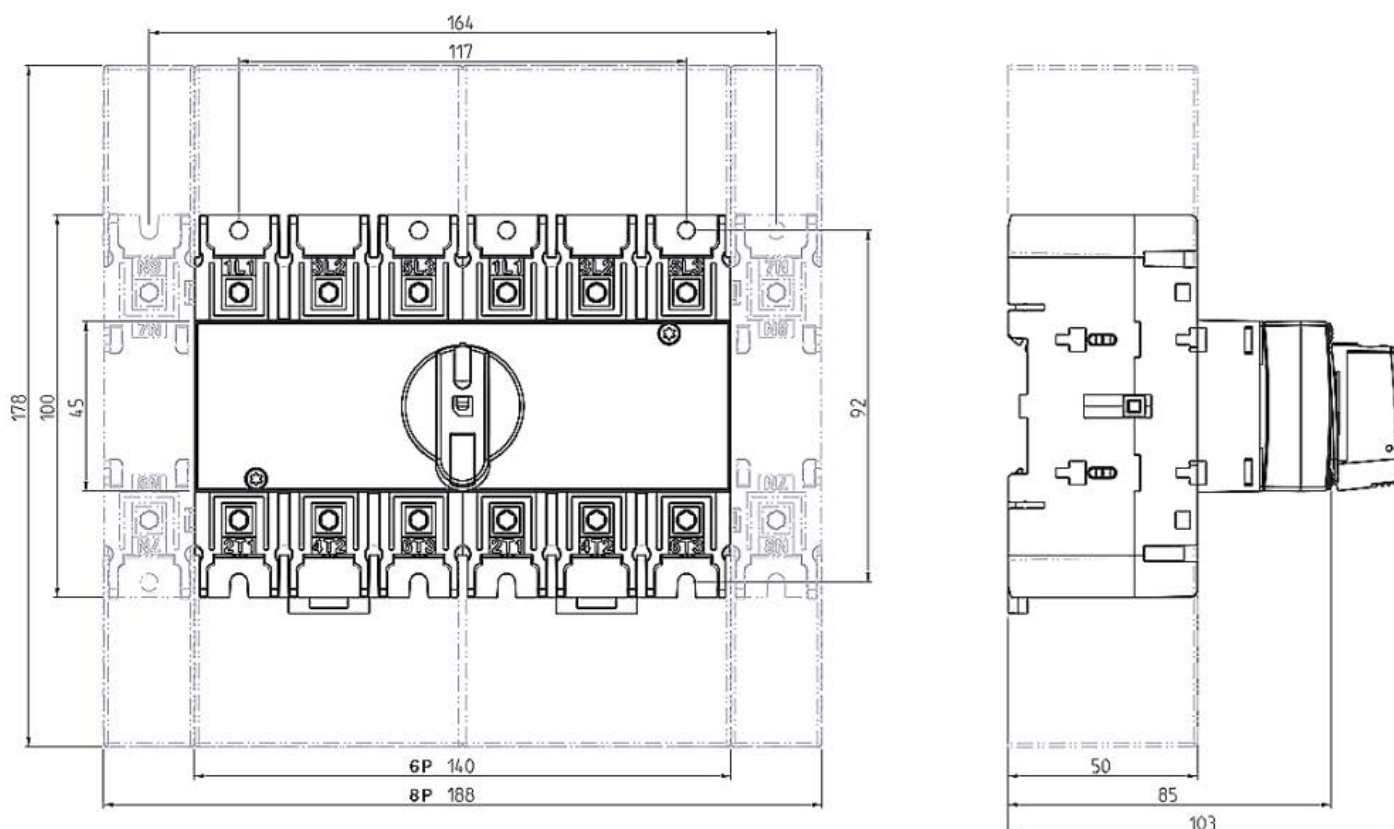
Dimensions in (mm)

3 and 4 Pole 100 A – 160 A



Auxiliary contacts

KU 6 – 8 Pole switches or 3 – 4 Pole Changeover Switches with Terminal Covers, 100 A – 160 A



VKA 250A, PANEL MOUNT, EXTENSION HANDLE, ROTARY SWITCH

- | Compact size for a 250A switch.
- | Panel or DIN rail mount - either mounting option is standard.
- | 3 pole and 4 pole types. The physical frame size is 4 poles wide for 3 and 4 pole types.
- | AC21, AC22, AC23 rated to 415 VAC.
- | AC21 rated to 690 VAC.
- | Rated short time withstand current I_{cw} for 1 second = 6.5 kA @ 690 VAC.
- | Rated short time making capacity I_{cm} = 11.4 kA @ 690 VAC
- | Switching technology by means of silver contacts ensures safe and durable operation.
- | 4 pole versions with early-make and late-break neutral pole, on the right.
- | VKA_250 has external terminal bars. LS/VKAC terminal covers, and VS/VKAC phase barriers included.
- | Black Handle LK12 and shaft L228AD12T6 included, suitable for 250 mm deep distribution boards.
- | IP66 extension shaft handle
- | Handles padlockable in OFF as standard. Padlock ON option.
- | ON position door defeat via lever at base of handle.
- | Terminal covers LSVKAC and phase barriers VSVKAC enable safe use.
- | Auxiliary contacts 1NO/NC or 2NO/NC changeover types, snap action, front mount.

Part Number		AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
					415 V		415 V		-	
			690 V		690 V		-		690 V	
VKA Switch type	Poles	Ie / A		Ie / A		Ie / A	P / kW	Ie / A	P / kW	
VKA3250S+HLSVS	3	250		250		250	132	-	-	VKAC1V (1NO + 1NC) VKAC2V (2NO + 2NC)
VKA4250S+HLSVS	4									



Part Number	Accessory	Description	For
VKAC1V	Auxiliary contact	1 x NO/NC, CO, snap action MS	For VKA 3 and 4 pole, max. 2
VKAC2V	Auxiliary contact	2 x NO/NC, CO, snap action MS	For VKA 3 and 4 pole, max. 2
LSVKAC	Terminal Cover	Transparent blue plastic	For VKA 3 and 4 pole, Qty 1
VSVKAC	Phase barrier	Transparent white plastic	For VKA 3 and 3 pole, Qty 1
LK12	Handle	Black	For VKA 3 and 4 pole
LK12YR	Handle	Yellow/red	For VKA 3 and 4 pole
L228AD12T6	Shaft 228 mm	Length 228 mm, steel, slanted	Use with LK12 or LK12YR handles
L400AD12T6	Shaft 400 mm	Length 400 mm, steel, slanted	Use with LK12 or LK12YR handles

LOAD BREAK SWITCHES

VKA 250A, PANEL MOUNT, EXTENSION HANDLE, ROTARY SWITCH

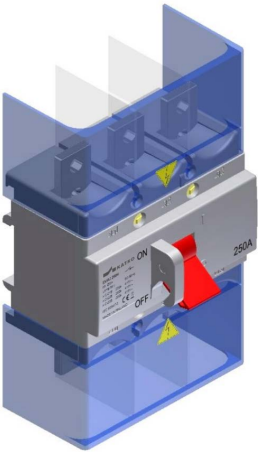
RATINGS DATA		LOAD BREAK SWITCHES
		VKA
		250 A
Rated insulation voltage, U_i (V)		1000
Rated thermal current, I_{th} (A)		250
Nominal values with cable size (mm ²)		120
Rated operational current, I_e (A)		
AC 21A	400/415 V	250
	500 V	250
	690 V	250
AC 22A	400/415 V	250
	500 V	-
	690 V	-
AC 23A`	400/415 V	250
	500 V	-
	690 V	-
	1000 V	-
Rated operational power for 3-phase (1500 r.p.m.) squirrel cage induction motors (kW)		
AC 23A	400/415 V	132
	500 V	-
	690 V	-
Rated fused short circuit current		
Back up fuse (A)		250
R.M.S. value, I_k (kA)		50
Peak value (kA)		22
Impulse withstand voltage, U_{imp} (kV)		8
Rated short circuit making capacity, I_{cm} (kA)		
415 V		11.4
Rated short time withstand current (1 s), I_{cw} (kA)		
415 V		6.5
Rated breaking capacity, I_{cn} (A) AC-23A		
AC 23A	400/415 V	2000
	500 V	-
	690 V	-
Electrical endurance (number of operations)		2000
Mechanical endurance (number of operations)		16000
Terminals / Bolt size Cu (mm ²)		M8
Max terminal torque (Nm)		15 - 22
Standards		AS/NZS 60947.3 and IEC 60947.3
		RoHS
		CE
		IEC 60204.1



LOAD BREAK SWITCHES

PANEL MOUNT TOGGLE OPERATED SWITCHES 160 - 250 A (EVA SERIES)

- | Compact size for a 250 A switch.
- | Panel or DIN rail mount - either mounting option is standard.
- | Switch technology using silver contacts ensures a long life expectancy and safe use in demanding conditions.
- | EVA switches supplied with 2 terminal covers, phase barriers, and terminal bolt kit.
- | Padlockable in OFF.
- | Rated to AS/NZS 60947.3 and IEC 60947.3.
- | AC21B, AC22B, AC23B rated to 415 VAC.
- | Rated short time withstand current I_{cs} for 1 second = 6.5 kA @ 415 VAC.
- | Rated short time making capacity I_{cm} = 11.4 kA @ 415 VAC.
- | 4 pole versions with early-make and late-break neutral pole, on the right.
- | EVA toggle switches are supplied as main switches for APS ECO, ESS and ULT distribution boards.
- | EVA main switches TUV tested in Australia to AS/NZS 61439.2 for use in APS DB Distribution Boards.
- | RED toggles as standard. Previous GREY toggle types have identical physical size and ratings.

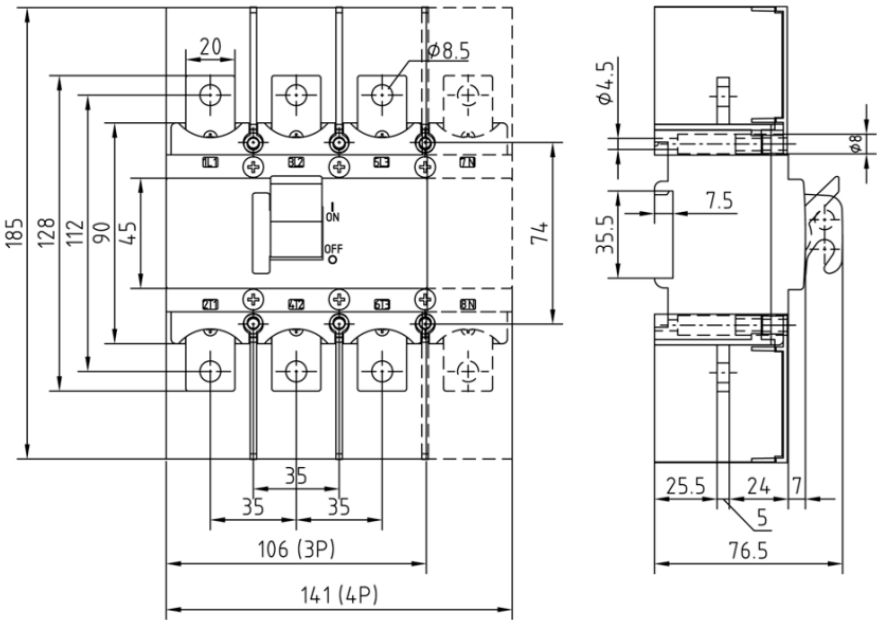


Part Number	AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	Auxiliaries to suit
				415 V		415 V		-	
		690 V		690 V		-		690 V	
	Ie / A		Ie / A		Ie / A	P / kW	Ie / A	P / kW	
3 Pole									
EVA 3160H	160		160		160	75	-	-	-
EVA 3250H	250		250		200	90	-	-	
Pole									
EVA 4160H	160		160		160	75	-	-	-
EVA 4250H	250		250		200	90	-	-	

EVA series Accessories

Part Number	Accessory
EVA LS2VS	A single 3 pole terminal cover and 2 internal phase barriers. For the top and bottom of switch order 2
EVA LS3VS	A single 4 pole terminal cover and 3 internal phase barriers. For the top and bottom of switch order 2

Dimensions in (mm)



LOAD BREAK SWITCHES

EVA SERIES, 160 A – 250 A, PANEL MOUNT, TOGGLE OPERATED

RATINGS DATA		LOAD BREAK SWITCHES	
		EVA	EVA
		160 A	250 A
Rated insulation voltage, U_i (V)		690	690
Rated thermal current, I_{th} (A)		200	250
Nominal values with cable size (mm ²)		95	120
Rated operational current, I_e (A)			
AC 21A	400/415 V	160	250
	500 V	-	-
	690 V	-	-
AC 22A	400/415 V	160	250
	500 V	-	-
	690 V	-	-
AC 23A	400/415 V	160	200
	500 V	-	-
	690 V	-	-
	1000 V	-	-
Rated operational power for 3-phase (1500 r.p.m.) squirrel cage induction motors (kW)			
AC 23A	400/415 V	75	90
	500 V	-	-
	690 V	-	-
Rated fused short circuit current			
Back up fuse (A)		250	250
R.M.S. value, I_k (kA)		50	50
Peak value (kA)		15	21
Impulse withstand voltage, U_{imp} (kV)		6	6
Rated short circuit making capacity, I_{cm} (kA)			
415 V		11.4	11.4
Rated short time withstand current (1 s), I_{cw} (kA)			
415 V		6.5	6.5
Rated breaking capacity, I_{cn} (A) AC-23A			
AC 23A	400/415 V	840	1600
	500 V	-	-
	690 V	-	-
Electrical endurance (number of operations)		2000	2000
Mechanical endurance (number of operations)		16000	16000
Terminals / Bolt size Cu (mm ²)		M8	M8
Max terminal torque (Nm)		15 - 22	15 - 22
Standards		AS/NZS 60947.3 and IEC 60947.3	
		RoHS	
		CE	
		IEC 60204.1	



ULTIMATE Distribution Board with
EVA3250H main switch

LOAD BREAK SWITCHES

PANEL MOUNT 200 - 800 A (KU SERIES)

- | KU 800, 400 & 250 A have been rated for AC-23A 1000V, and the whole range has been rated for AC-23A, 690V.
- | All switches have been tested and approved by VDE according to DIN EN 60947-3 (VDE 0660 Teil 107):2017-02; EN 60947-3:2009/A1:2012/A2:2015
- | The LoadSafe range has an option for a test position for testing auxiliary contacts while main contacts remain open. Note, only available on request.
- | The LoadSafe range has excellent thermal resistance and short circuit withstand strength.
- | The LoadSafe range is available in 3, 4, 6, 8 pole versions as well as 3 and 4 pole changeovers.

All LoadSafe switches from 200 to 800 amps & 160 amp (P) are available with direct handle or external handle. Both handles are easily installed and padlockable. Standard external handle for 315-800 amps is LKX 150 (left). For 200-250 amps and 160 amp (P) LKX 100 (middle) is the standard option. Both versions are also available in yellow/red colours when needed.

Easy to install auxiliary contacts are side mounting and available in 1NO/NC C/O and 2NO/NC C/O versions. It is possible to install two auxiliary units on either side making. The same auxiliary contact unit is compatible with KU switches ranging 100 to 800 amps.

- 1 x NO/NC CO, fit max: 2 each side
- 2 x NO/NC CO, fit max: 2 each side



LOAD BREAK SWITCHES

KU SERIES, 200 – 800 A, PANEL MOUNT

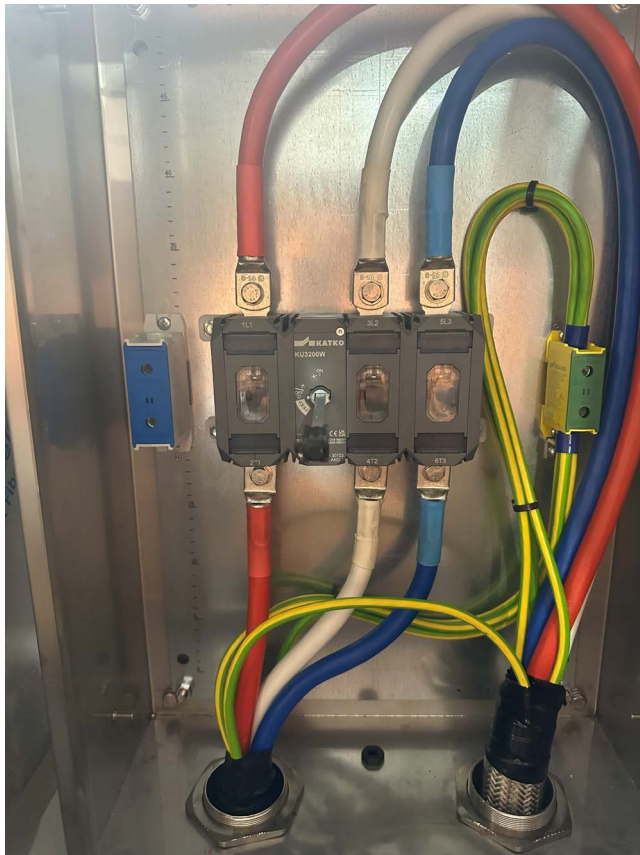
Terminal covers are available in two versions – flush (left) and high (middle). The high terminal cover type is specifically made to be used with KATKO's vertical cable connectors.

Phase barriers (right) are flexible rubber and can be fitted in with many types and sizes of connectors.



Visual contacts provide increased safety and reassurance to the user. Locking the switch to OFF-position and visually inspecting the contacts ensures safe operation of Katko LoadSafe switches.

KU 3 200A switch installed and wired.



reddot winner 2021
industrial design

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

LOAD BREAK SWITCHES

KU SERIES, 200 – 800 A, PANEL MOUNT, EXTENSION SHAFT HANDLES

- Consists of 3, 4, 6 or 8 pole changeover switches integrally housed within the one switchbody.
- Switch technology by means of silver contacts ensures safe and durable operation.
- Available with extensions shaft handles, or direct mount handles.
- Handles available as black or yellow-red types.
- Due to the modular construction alternative handle shaft positions are optional.
- Side mount auxiliary contacts, either 1NO + 1NC or 2NO + 2NC.
- Auxiliaries can be side mounted for each switching position and stacked to a total of 4NO + 4NC.
- Supplied as standard with a 228 mm extension shaft and handle or a fitted direct mount handle, and a main terminal bolt set.



Load Break Switches, 3 and 4 pole, supplied with an EXTENSION SHAFT and HANDLE

Part Number	AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	AC-23A	-	
		415 V		415 V		415 V		-		-	
		690 V		690 V		-		690 V		-	-
		-		-		-		-		1000 VAC	
	Ie / A		Ie / A		Ie / A	P / kW	Ie / A	P / kW	Ie / A		
3 Pole											
KU3200WL200AD12T6LKX	200		200		200	110	200	132	-		
KU3250WL250AD12T6LKX	250		250		250	132	250	250	135		
KU3315LVK228LKX150	315		315		315	160	315	315	-		
KU3400LVK228LKX150	400		400		400	200	400	355	200		
KU3630LVK228LKX150	630		630		630	355	630	630	-		
KU3800LVK228LKX150	800		800		800	400	800	800	400		
4 Pole											
KU4200WL200AD12T6LKX	200		200		200	110	200	132	-		
KU4250WL200AD12T6LKX	250		250		250	132	250	250	135		
KU4315LVK228LKX150	315		315		315	160	315	315	-		
KU4400LVK228LKX150	400		400		400	200	400	355	200		
KU4630LVK228LKX150	630		630		630	355	630	630	-		
KU4800LVK228LKX150	800		800		800	400	800	800	400		
6 Pole											
KU6200WL200AD12T6LKX	200		200		200	110	200	132	-		
KU6250WL250AD12T6LKX	250		250		250	132	250	250	135		
KU6315LVK228LKX150	315		315		315	160	315	315	-		
KU6400LVK228LKX150	400		400		400	200	400	355	200		
KU6630LVK228LKX150	630		630		630	355	630	630	-		
KU6800LVK228LKX150	800		800		800	400	800	800	400		
8 Pole											
KU8200WL200AD12T6LKX	200		200		200	110	200	132	-		
KU8250WL250AD12T6LKX	250		250		250	132	250	250	135		
KU8315LVK228LKX150	315		315		315	160	315	315	-		
KU8400LVK228LKX150	400		400		400	200	400	355	200		
KU8630LVK228LKX150	630		630		630	355	630	630	-		
KU8800LVK228LKX150	800		800		800	400	800	800	400		

LOAD BREAK SWITCHES

KU SERIES, 200 – 800 A, PANEL MOUNT, DIRECT MOUNT HANDLES

- Consists of 3, 4, 6 or 8 pole changeover switches integrally housed within the one switchbody.
- Switch technology by means of silver contacts ensures safe and durable operation.
- Available with extensions shaft handles, or direct mount handles.
- Handles available as black or yellow-red types.
- Due to the modular construction alternative handle shaft positions are optional.
- Side mount auxiliary contacts, either 1NO + 1NC or 2NO + 2NC.
- Auxiliaries can be side mounted for each switching position and stacked to a total of 4NO + 4NC.
- Supplied as standard with a 228 mm extension shaft and handle or a fitted direct mount handle, and a main terminal bolt set.



Load Break Switches, 3 and 4 pole, supplied with a DIRECT MOUNT HANDLE

Part Number	AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	AC-23A	-
		415 V		415 V		415 V		-		-
		690 V		690 V		-		690 V		-
		-		-		-		-		1000 VAC
	Ie / A		Ie / A		Ie / A	P / kW	Ie / A	P / kW	Ie / A	
3 Pole										
KU3200WSV	200		200		200	110	200	132	-	
KU3250WSV	250		250		250	132	250	250	135	
KU3315SV	315		315		315	160	315	315	-	
KU3400SV	400		400		400	200	400	355	200	
KU3630SV	630		630		630	355	630	630	-	
KU3800SV	800		800		800	400	800	800	400	
4 Pole										
KU4200WSV	200		200		200	110	200	132	-	
KU4250WSV	250		250		250	132	250	250	135	
KU4315SV	315		315		315	160	315	315	-	
KU4400SV	400		400		400	200	400	355	200	
KU4630SV	630		630		630	355	630	630	-	
KU4800SV	800		800		800	400	800	800	400	
6 Pole										
KU6200WSV	200		200		200	110	200	132	-	
KU6250WSV	250		250		250	132	250	250	135	
KU6315SV	315		315		315	160	315	315	-	
KU6400SV	400		400		400	200	400	355	200	
KU6630SV	630		630		630	355	630	630	-	
KU6800SV	800		800		800	400	800	800	400	
8 Pole										
KU8200WSV	200		200		200	110	200	132	-	
KU8250WSV	250		250		250	132	250	250	135	
KU8315SV	315		315		315	160	315	315	-	
KU8400SV	400		400		400	200	400	355	200	
KU8630SV	630		630		630	355	630	630	-	
KU8800SV	800		800		800	400	800	800	400	

LOAD BREAK SWITCHES

KU SERIES, 200 – 800 A, PANEL MOUNT SWITCH ACCESSORIES

Auxiliary Contacts

Snap action, Spade terminal, (lugs supplied), Side mount. Max. 2 auxiliaries each side of switch
Rated 16A - 250V (AC12), 4A - 250 VAC (AC13-15). Early break, late make operation.

Part Number	Accessory	Description	For
1V160KU	Auxiliary contact	1 x NO/NC C/O, snap action MS	KU 100 – 800
2V160KU	Auxiliary contact	2 x NO/NC C/O, snap action MS	KU 100 – 800

Terminal Covers

Suits 1 pole only. Order (x 3) or (x 4) as needed for 3 or 4 pole switches.

Part Number	Description	For
VS250	Flexible rubber phase barrier (1 piece), order qty as required	KU 200 – 250
VS400	Flexible rubber phase barrier (1 piece), order qty as required	KU 315 – 400
VS800	Flexible rubber phase barrier (1 piece), order qty as required	KU 630 – 800

Phase Barrier

Part Number	Description	For
VS250	Flexible rubber phase barrier (1 piece), order qty as required	KU 200 – 250
VS400	Flexible rubber phase barrier (1 piece), order qty as required	KU 315 – 400
VS800	Flexible rubber phase barrier (1 piece), order qty as required	KU 630 – 800

Spreader Bars

Part Number	Description	For
ALK800C	Spreader Bar, 2 hole, 3 Pole, Qty 1, KU630-800	KU 630 – 800
ALK800	Spreader Bar, 4 hole, 3P or 4P, Qty 1, KU630-800	KU 630 – 800

Handle Operators

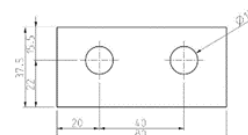
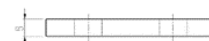
- | Suits KU load break switches, 200A – 800A
- | Handles and shafts are supplied with new load break switches. For spares or replacements refer below.
- | Mounts in a 32 mm panel hole, with 4 mounting screws.
- | Padlock OFF standard. Up to 4 padlocks.
- | Can be field converted to padlock ON
- | Door interlocking in ON position.
- | Door defeat facility standard – will not operate if handle padlocked in ON position.
- | IP66 rated.

Part Number	Description	For
LKX100	Black External Handle 0 – 1 (extension shaft needed)	KU 200 – 250
LKX100YR	Yellow/Red External Handle 0 – 1 (extension shaft needed)	KU 200 – 250
LKX150	Black External Handle, positions 0 – 1 (extension shaft needed)	KU 315 – 800
LKX150YR	Yellow/Red Ext. Handle, positions 0 – 1 (extension shaft needed)	KU 315 – 800

Extension Shafts

Handles and shafts are supplied with new load break switches. For alternative types, refer below

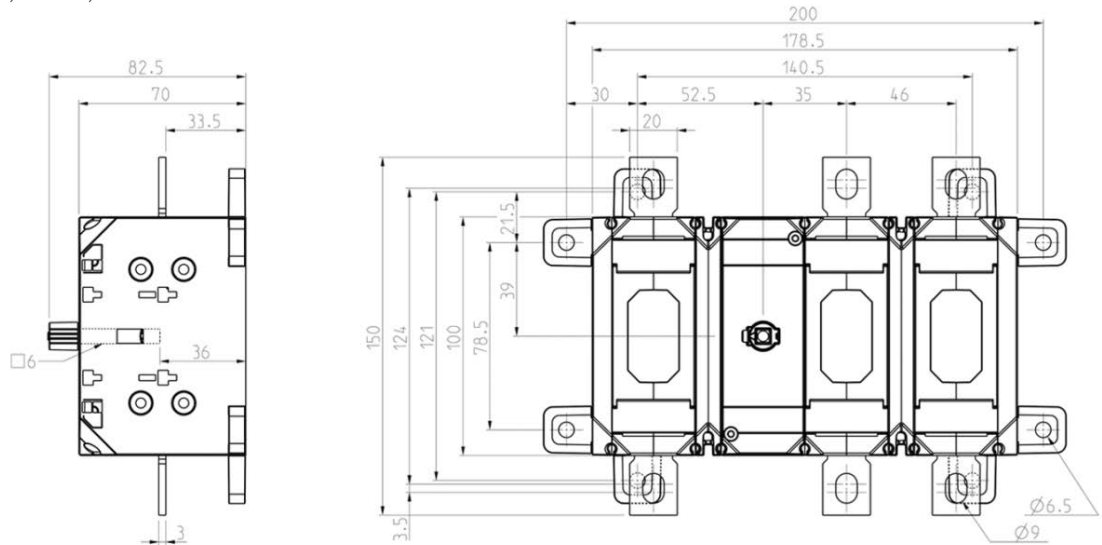
Part Number	Description	For
L200AD12T6	Steel Shaft, length 200 mm, 6 mm ² , suits LKX100	KU 200 – 250
L400AD12T6	Steel Shaft, length 400 mm, 6 mm ² , suits LKX100	KU 200 – 250
LVK228	Steel Shaft. length 228 mm, 12.1 mm ² , suits LKX150	KU 315 – 800
LVK320	Steel Shaft. length 320 mm, 12.1 mm ² , suits LKX150	KU 315 – 800
LVK500	Steel Shaft. length 500 mm, 12.1 mm ² , suits LKX150	KU 315 – 800



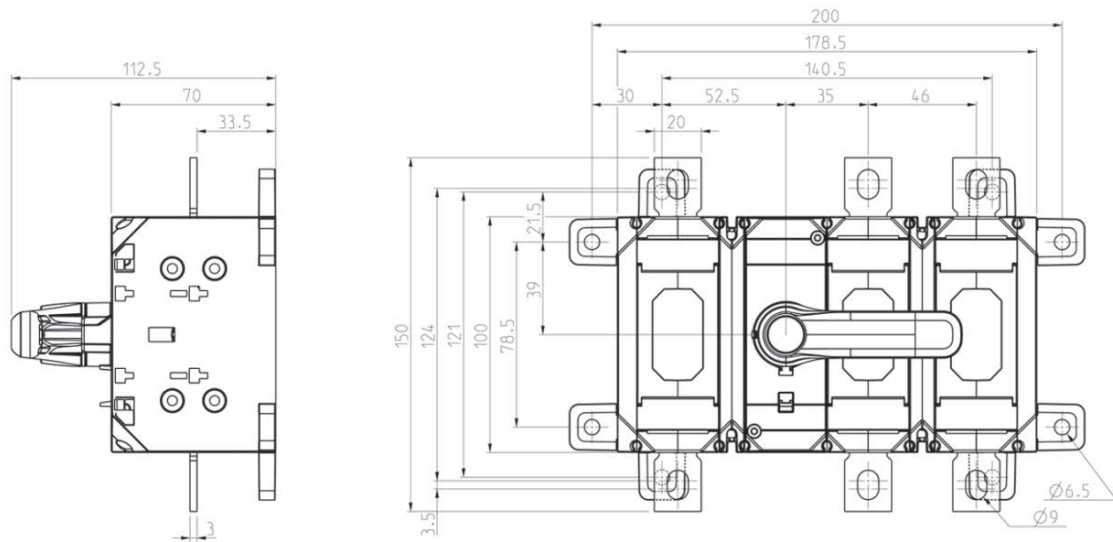
KU 200 – 800A DIMENSIONS

Dimensions in (mm)

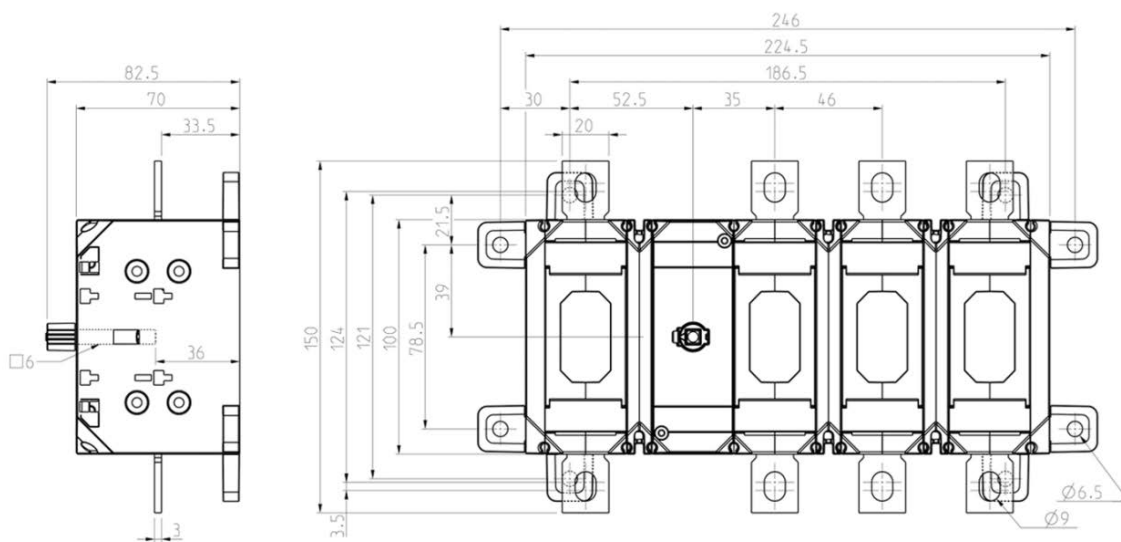
KU 200 - 250 A, 3 Pole, EXTENSION Shaft Handle



KU 200 - 250 A, 3 Pole, DIRECT Mount Handle



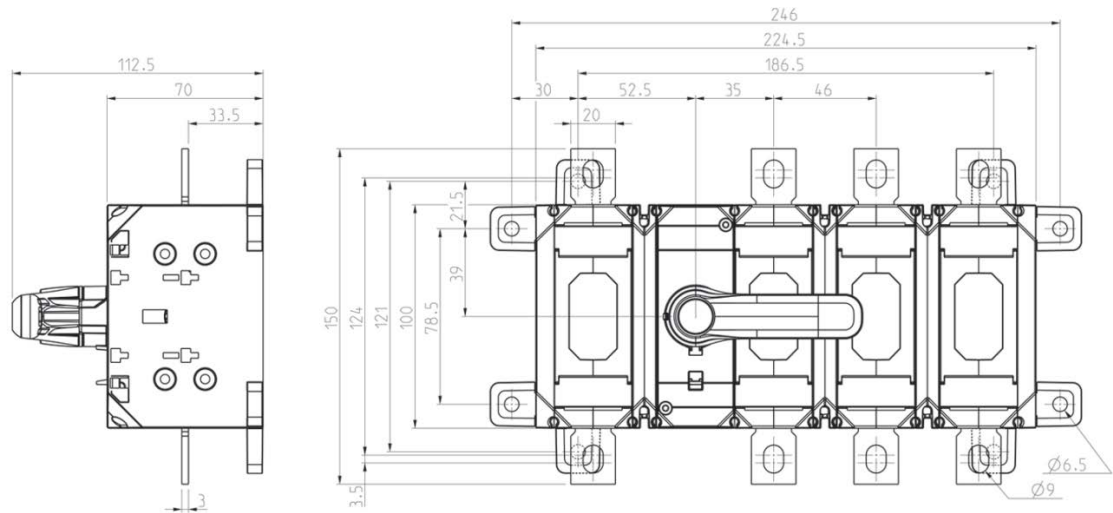
KU 200 - 250 A, 4 Pole, EXTENSION Shaft Handle



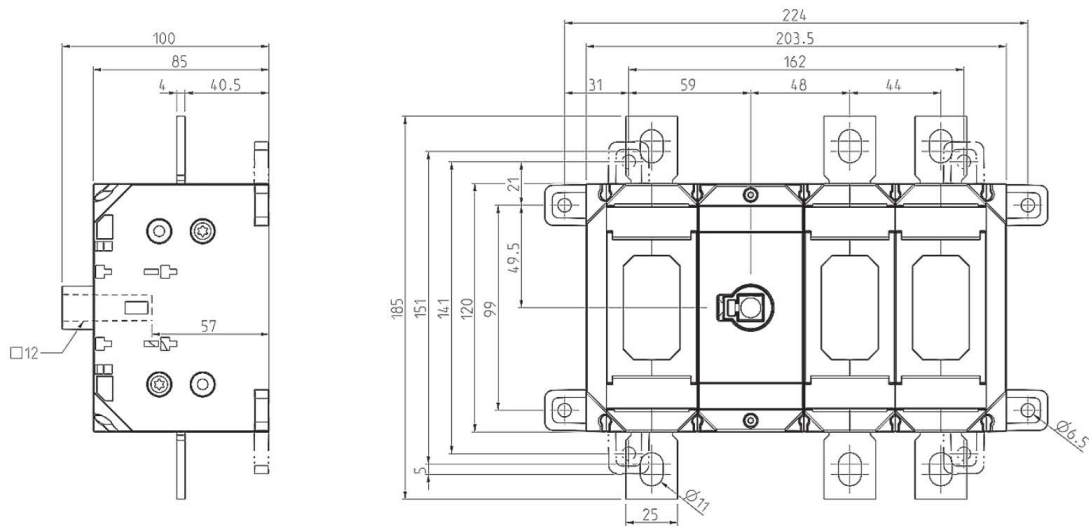
KU 200 – 800A DIMENSIONS

Dimensions in (mm)

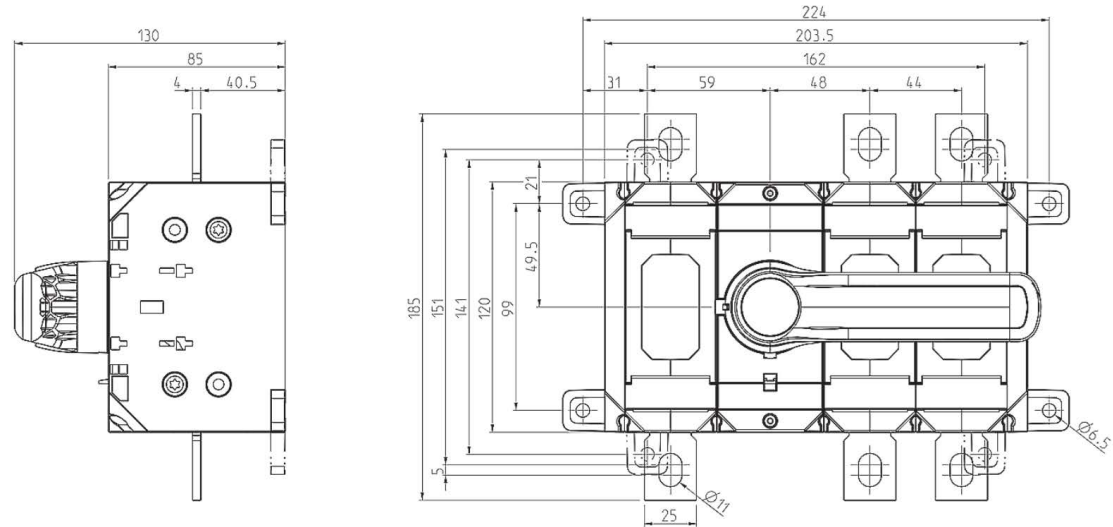
KU 200 - 250 A, 4 Pole, DIRECT Mount Handle



KU 315 - 400 A, 3 Pole, EXTENSION Shaft Handle



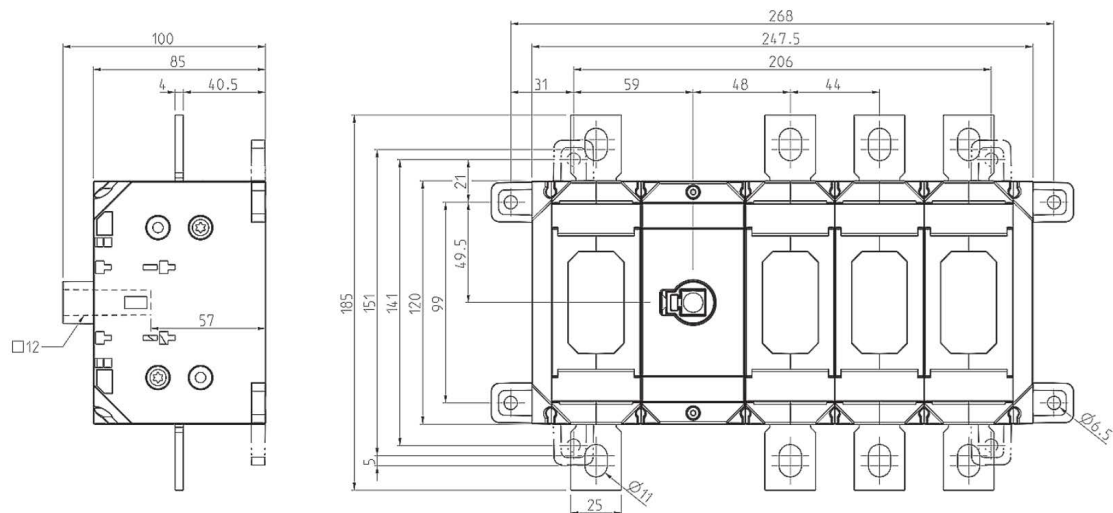
KU 315 - 400 A, 3 Pole, DIRECT Mount Handle



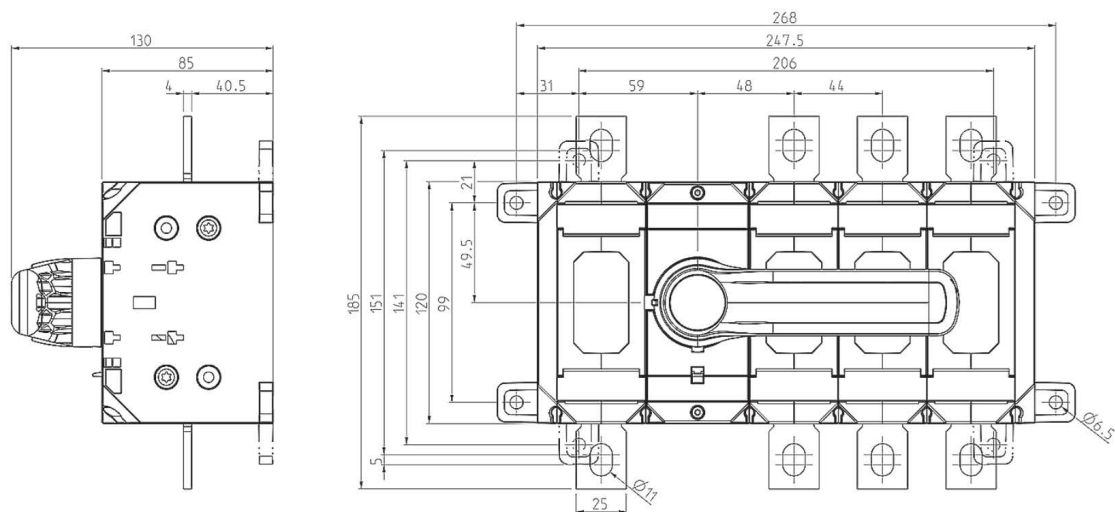
KU 200 – 800A DIMENSIONS

Dimensions in (mm)

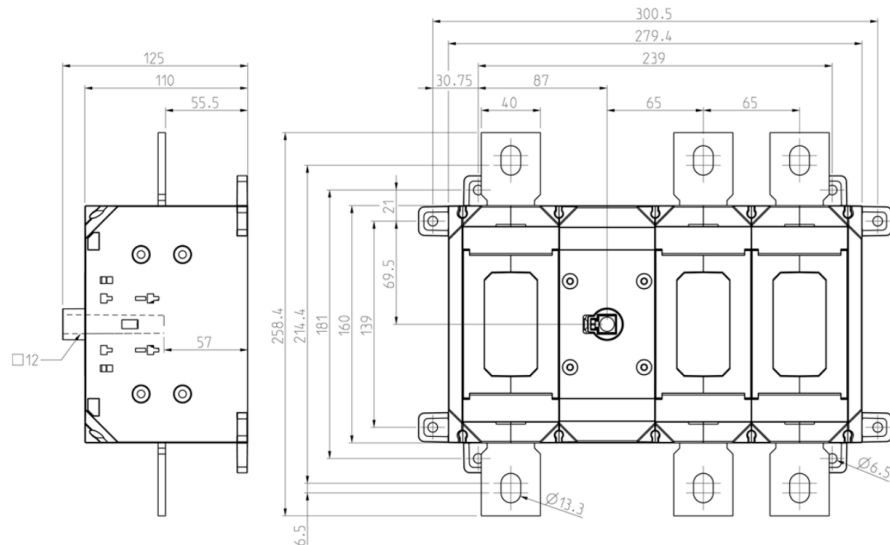
KU 315 - 400 A, 4 Pole, EXTENSION Shaft Handle



KU 315 - 400 A, 4 Pole, DIRECT Mount Handle



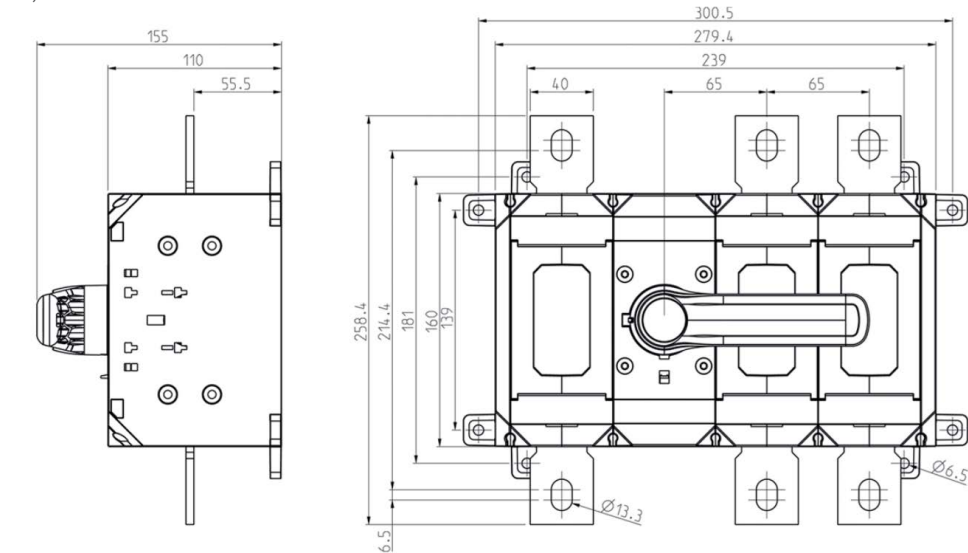
KU 630 - 800 A, 3 Pole, EXTENSION Shaft Handle



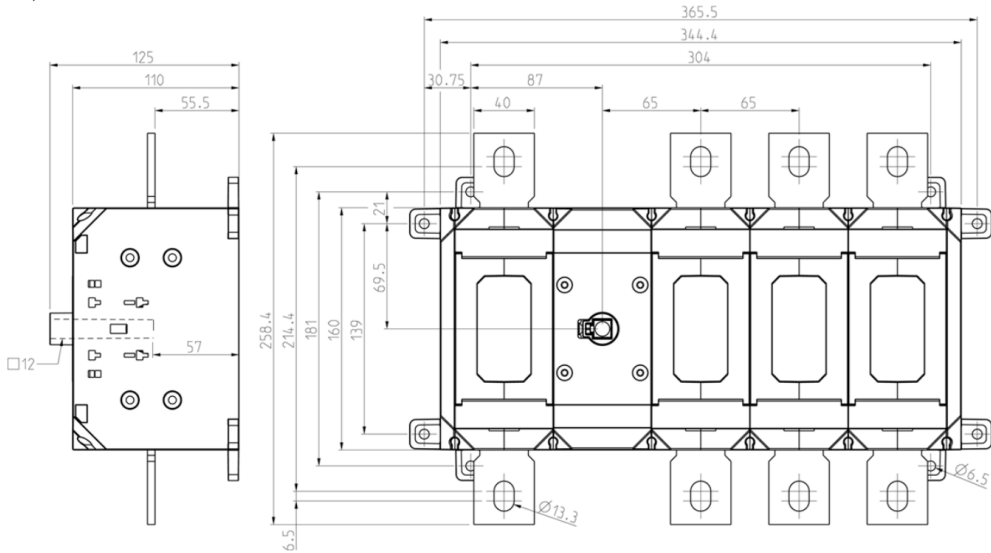
KU 200 – 800A DIMENSIONS

Dimensions in (mm)

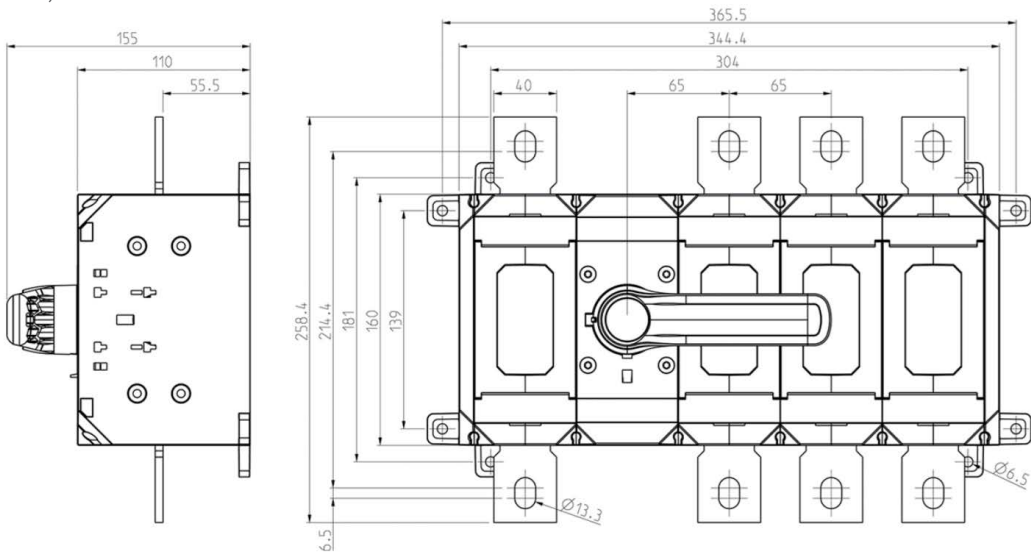
KU 630 - 800 A, 3 Pole, DIRECT Mount Handle



KU 630 - 800 A, 4 Pole, EXTENSION Shaft Handle



KU 630 - 800 A, 4 Pole, DIRECT Mount Handle



CHANGEOVER LOAD BREAK SWITCHES

KU_N SERIES, 63 – 80 A, PANEL MOUNT ROTARY OPERATION

- Features: KU_63N and KU_80N Changeover switches
- Compact design
- Switch technology by means of silver contacts ensures safe and durable operation
- KU_63N and KU_80N changeover switches are assembled from two 3 or 4 pole switches and a changeover switch kit.
- Can be operated with a direct handle or external handle and shaft. For KU_63N and KU_80N a shaft and external handle can be ordered separately as needed.
- Axiliary contacts are not available for this configuration of changeover switch. Refer following page for KU100 – 160 changeover types for auxiliary contact compatible types.

Changeover configurations consist of:

- Two 3 pole or 4 pole KU 63A or 80A switches
- 1 x Change over mechanism either : KUVV (grey-black) or KUVVYR (yellow-red)

Optional:

- 1 x Changeover type external handle (1 ON – OFF – 2 ON), either black or yellow red.
- 1 x Shaft



Ordering

Part Number	AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-
		415 V		415 V		415 V		-
		690 V		690 V		-		690 V
		-		-		-		-
	Ie / A		Ie / A		Ie / A	P / kW	Ie / A	P / kW
3 Pole								
KU363N	80		63		40	22	40	37
KU380N	100		80		63	30	40	37
4 Pole								
KU463N	80		63		40	22	40	37
KU480N	100		80		63	30	40	37



Extension shafts



LK11CO handles



KUVV / KUVVYR changeover mechanisms

KU_N Accessories

Part Number	Accessory	Description	For
L200AD11	Shaft	Length 200 mm, Aluminium	With LK10 and LK11 handles
L300AD11	Shaft	Length 300 mm, Aluminium	With LK10 and LK11 handles
L100AD11VT	Shaft	Length 100 mm, steel, slanted	With LK10 and LK11 handles
L300AD11VT	Shaft	Length 300 mm, steel, slanted	With LK10 and LK11 handles
LK11CO102	Handle	Black	Change-over
LK11CO102YR	Handle	Yellow/red	Change-over
KUVV	Change-over kit	Positions 1, 0, 2, black handle	3 or 4-pole
KUVVYR	Change-over kit	Positions 1, 0, 2, red handle	3 or 4-pole

CHANGEOVER LOAD BREAK SWITCHES

KU SERIES, 100A, 125A, 160 A, PANEL MOUNT ROTARY OPERATION

- | Consists of two 3 or 4-pole switches and a change-over kit.
- | KU 100 - 160 A, 3 pole changeover switches are user assembled using two 3 pole switches and a changeover kit.
- | KU 100 - 160 A, 4 pole changeover switches are APS factory assembled using two 4-pole switches and a changeover kit.
- | 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_100 to KU_160, a shaft and external handle can be ordered separately when needed.
- | KU_100 to KU_160 use a side-mountable auxiliary contact, available in 1NO + 1NC or 2NO + 2NC.
- | It is possible to mount two auxiliary contacts on each switch, making up a maximum number of contacts of 4NO + 4NC on each switch.



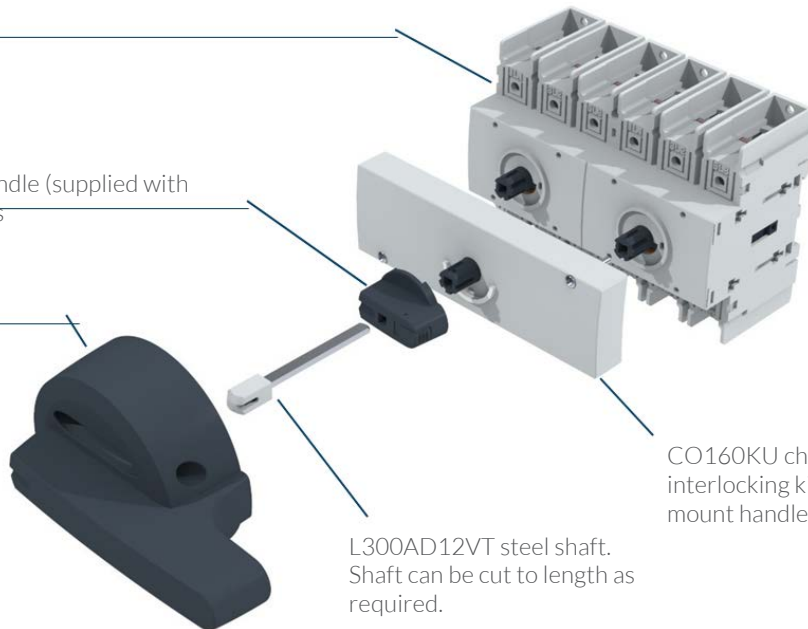
Assembly and ordering;

Example of a **KU3160CO**, 3 pole, 100 A, changover switch with direct mount or extension handle. A **KU3160CO** consists of 2 x KU3160, 3 pole load break switches, and 1 x CO160KU top mount, clip-on changeover kit.

Assembly example: 2 x KU3160 load break switches

LK6 direct mounting handle (supplied with CO160KU interlock kits)

LK12CO102 Extension shaft handle. Order a shaft for this also



CO160KU changeover mechanical interlocking kit. Black LK6 direct mount handle included.

L300AD12VT steel shaft. Shaft can be cut to length as required.

Assembly and options:

Different switch configurations using the CO160KU changeover interlock using standard 3P or specially assembled 4 pole switches.

3P + 3P or 3P + 4P switch configurations

The standard CO160KU can be assembled straight onto a left 3P switch, and right side 3P or 4P switch.

4P + 3P switch configurations

For this combination, a factory re-assembly of the left side 4P switch is required, which makes this an APS factory assembled item – refer APS.

4P + 4P switch configurations

Refer pre-assembled types: KU4100CO, KU4125CO or KU4160CO, or refer APS.

If these changeover types are not in stock, in order to create them using stocked 4P switches.

A factory reassembly of the left 4P switch is required, which makes this an APS factory assembled item.



4P + 4P configuration

CHANGEOVER LOAD BREAK SWITCHES

KU SERIES, 100A, 125A, 160 A, PANEL MOUNT ROTARY OPERATION



Individual Load Break Switches

(Order a changeover mechanism below for self assembly)

Part Number	AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-
		415 V		415 V		415 V		-
		690 V		690 V		-		690 V
		-		-		-		-
	Ie / A		Ie / A		Ie / A	P / kW	Ie / A	P / kW
3 Pole								
KU3100	125		100		100	55	63	55
KU3125	160		125		125	55	80	75
KU3160	160		160		160	90	100	90
4 Pole								
4 pole KU100 – 160 changeover switches are an APS factory or branch assembly item. Refer below for pre-assembled 4 pole changeover switches.								



Pre-Assembled, Interlocked Switches

Part Number	AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-
		415 V		415 V		415 V		-
		690 V		690 V		-		690 V
		-		-		-		-
	Ie / A		Ie / A		Ie / A	P / kW	Ie / A	P / kW
3 Pole								
KU3100CO	125		100		100	55	63	55
KU3125CO	160		125		125	55	80	75
KU3160CO	160		160		160	90	100	90
4 Pole								
KU4100CO	125		100		100	55	63	55
KU4125CO	160		125		125	55	80	75
KU4160CO	160		160		160	90	100	90



Extension shafts



Handles



Auxiliary contacts



Terminal covers

KU_100 - 160 Accessories

Part Number	Accessory	Description	For
CO160KU	Changeover Kit	CO kit for 3 pole changeover switches	3 Pole switches 100 A to 160 A
1V160KU	Auxiliary contact	1NO/1NC	For all configurations
2V160KU	Auxiliary contact	2NO/2NC	For all configurations
LS160	Cover	Terminal cover for 3 poles	For KU_100 – KU_160. Covers 3 poles
LSN160	Cover	Terminal cover for N-pole	4 & 8 pole and 4 pole change-over
LK12CO102	Handle	Black	Changeover switch
LK12CO102YR	Handle	Yellow/red	Changeover switch
L100AD12T	Shaft	Length 100 mm, steel, slanted	With LK12 handle

CHANGEOVER LOAD BREAK SWITCHES

KU SERIES, 200 – 800 A, PANEL MOUNT

- | Consists of 3 or 4-pole changeover switches integrally housed within the one switchbody.
- | Switch technology by means of silver contacts ensures safe and durable operation.
- | Changeover side mount auxiliary contacts, either 1NO + 1NC or 2NO + 2NC.
- | Auxiliaries can be side mounted for each switching position and stacked to a total of 4NO + 4NC.
- | Changeover switches are supplied as standard with a 228 mm extension shaft, black handle, common load side C shape linking bars: 3 bars for 3P, 4 bars for 4P types, and a main terminal bolt set.



Changeover Load Break Switches, 3 and 4 pole, supplied with an EXTENSION SHAFT and HANDLE

Part Number	AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	AC-23A	-
		415 V		415 V		-		-		
		690 V		690 V		-		690 V		-
		-		-		-		-		1000 VAC
	Ie / A		Ie / A		Ie / A	P / kW	Ie / A	P / kW	Ie / A	
3 Pole										
KU3200WCOSH	200		200		200	110	200	132	-	
KU3250WCOSH	250		250		250	132	250	250	135	
KU3315COSH	315		315		315	160	315	315	-	
KU3400COSH	400		400		400	200	400	355	200	
KU3630COSH	630		630		630	355	630	630	-	
KU3800COSH	800		800		800	400	800	800	400	
4 Pole										
KU4200WCOSH	200		200		200	110	200	132	-	
KU4250WCOSH	250		250		250	132	250	250	135	
KU4315COSH	315		315		315	160	315	315	-	
KU4400COSH	400		400		400	200	400	355	200	
KU4630COSH	630		630		630	355	630	630	-	
KU4800COSH	800		800		800	400	800	800	400	

CHANGEOVER LOAD BREAK SWITCHES

KU SERIES, 200 – 800 A, PANEL MOUNT

- Consists of 3 or 4-pole changeover switches integrally housed within the one switchbody.
- Switch technology by means of silver contacts ensures safe and durable operation.
- Changeover side mount auxiliary contacts, either 1NO + 1NC or 2NO + 2NC.
- Auxiliaries can be side mounted for each switching position and stacked to a total of 4NO + 4NC.
- Changeover switches are supplied as standard with a black direct mount handle, common load side C shape linking bars: 3 bars for 3P, 4 bars for 4P types, and a main terminal bolt set.
- Tested and approved by VDE according to DIN EN 60947-3, EN 60947-3: 2009



Changeover Load Break Switches, 3 and 4 pole, supplied with a DIRECT MOUNT HANDLE

Part Number	AC-21A	400 V	AC-22A	400 V	AC-23A	400 V	AC-23A	-	AC-23A	-
		415 V		415 V		415 V		-		-
		690 V		690 V		-		690 V		-
		-		-		-		-		1000 VAC
	Ie / A		Ie / A		Ie / A	P / kW	Ie / A	P / kW	Ie / A	
3 Pole										
KU3200WCOSV	200		200		200	110	200	132	-	
KU3250WCOSV	250		250		250	132	250	250	135	
KU3315COSV	315		315		315	160	315	315	-	
KU3400COSV	400		400		400	200	400	355	200	
KU3630COSV	630		630		630	355	630	630	-	
KU3800COSV	800		800		800	400	800	800	400	
4 Pole										
KU4200WCOSV	200		200		200	110	200	132	-	
KU4250WCOSV	250		250		250	132	250	250	135	
KU4315COSV	315		315		315	160	315	315	-	
KU4400COSV	400		400		400	200	400	355	200	
KU4630COSV	630		630		630	355	630	630	-	
KU4800COSV	800		800		800	400	800	800	400	

Note; Refer ratings chart in this catalogue for additional ratings and other information

CHANGEOVER LOAD BREAK SWITCHES

KU SERIES, 200 – 800 A, PANEL MOUNT SWITCH ACCESSORIES

Auxiliary Contacts

- | Snap action, Spade terminal, (lugs supplied), Side mount.
- | Maximum 2 auxiliaries in each 1 or 2 position on each side of switch, making up a total of 8 x 1NO/NC.
- | Rated 16A - 250V (AC12), 4A - 250 VAC (AC13-15). Early break, late make

Part Number	Accessory	Description	For
1V160KU	Auxiliary contact	1 x NO/NC CO, fit max: 2 each side	For all configurations
2V160KU	Auxiliary contact	2 x NO/NC CO, fit max: 2 each side	For all configurations

Terminal Covers

- | Suits 1 pole only. Order (x 3) or (x 4) as needed for 3 or 4 pole switches.

Part Number	Accessory	For
LS250F	Clear blue clip on terminal cover 200A – 250A	KU 200 – 250
LS400F	Clear blue clip on terminal cover 315A – 400A	KU 315 – 400
LS800F	Clear blue clip on terminal cover 630A – 800A	KU 630 – 800

Phase Barrier

Part Number	Accessory	For
VS250	Flexible rubber phase barrier (1 piece), order qty as required	KU 200 – 250
VS400	Flexible rubber phase barrier (1 piece), order qty as required	KU 315 – 400
VS800	Flexible rubber phase barrier (1 piece), order qty as required	KU 630 – 800

Spreader Bars

Part Number	Accessory	For
ALK800C	Spreader Bar, 2 hole, 3 Pole, Qty 1, KU630-800	KU 630 – 800
ALK800	Spreader Bar, 4 hole, 3P or 4P, Qty 1, KU630-800	KU 630 – 800

Handle Operators

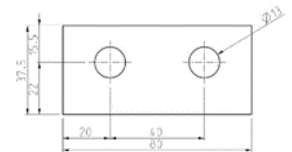
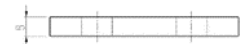
- | Suits KU Changeover switches, 200A – 800A Padlockable in 0 (OFF), field change for 1-0-2 locking.
- | Door interlock in positions 1 or 2
- | Handles and shafts are supplied with new changeover switches, though for other types, refer below/

Part Number	Accessory	For
LKX100CO102	Black External Handle (extension shaft needed)	KU 200 – 250
LKX100CO102YR	Yellow/Red External Handle (extension shaft needed)	KU 200 – 250
LKX150CO102	Black External Handle, positions 1-0-2 (extension shaft needed)	KU 315 – 800
LKX150CO102YR	Yellow/Red External Handle, positions 1-0-2 (extension shaft needed)	KU 315 – 800

Extension Shafts

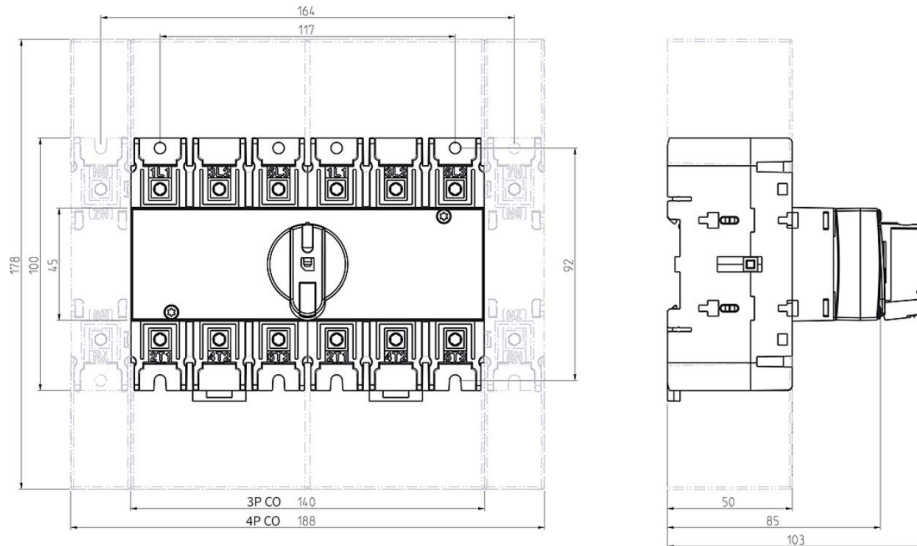
- | Handles and shafts are supplied with new changeover switches, though for other types, refer below

Part Number	Accessory	For
L200AD12T6	Steel Shaft, length 200 mm, 6 mm sq, suits LKX100	KU 200 – 250
L400AD12T6	Steel Shaft, length 400 mm, 6 mm sq, suits LKX100	KU 200 – 250
LVK228	Steel Shaft, length 228 mm, 12.1 mm sq, suits LKX150	KU 315 – 800
LVK320	Steel Shaft, length 320 mm, 12.1 mm sq, suits LKX150	KU 315 – 800
LVK500	Steel Shaft, length 500 mm, 12.1 mm sq, suits LKX150	KU 315 – 800

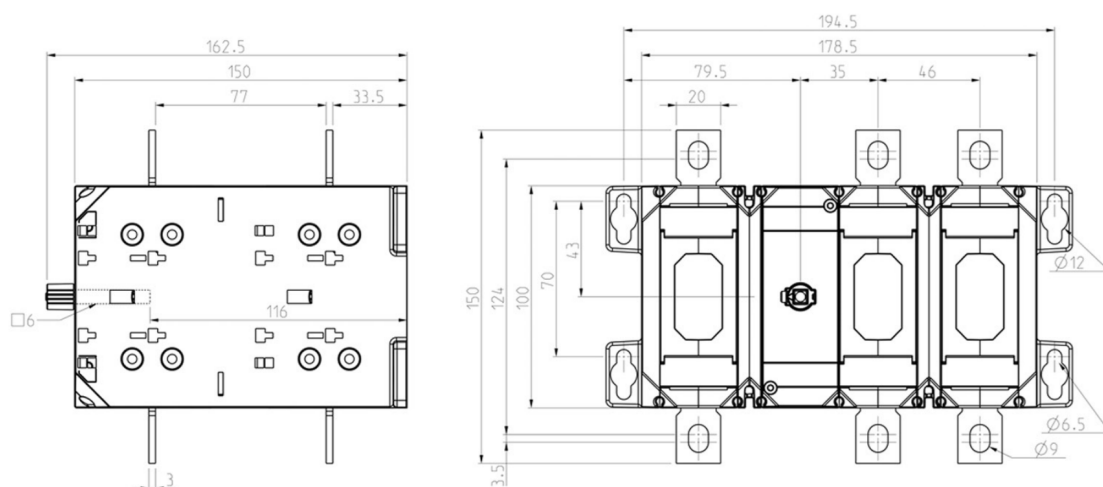


KU_N, 63 - 80 A, 3 or 4 Pole, DIRECT Mount Handle, Changeover Switch

KU, 100 - 160 A, 3 or 4 Pole, DIRECT Mount Handle, Changeover Switch



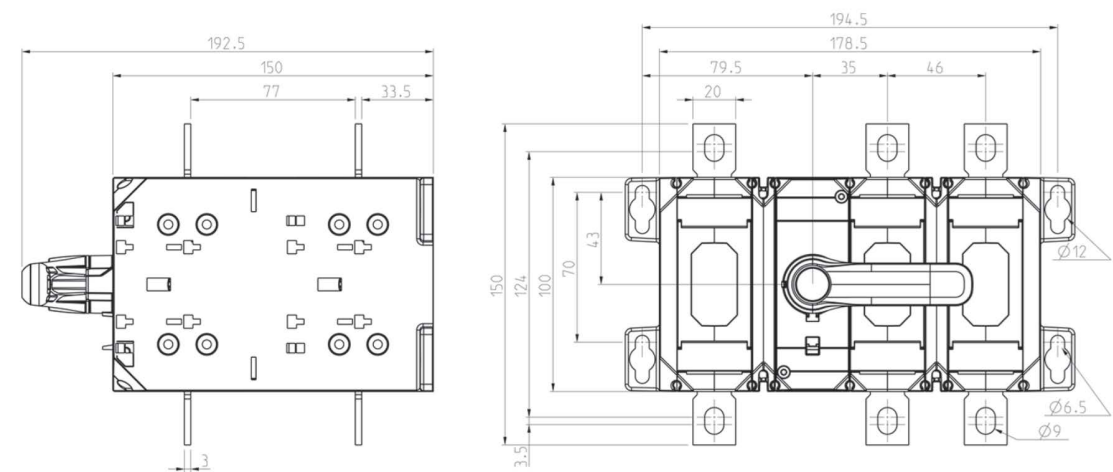
KU, 200 – 250 A, 3 Pole, EXTENSION Shaft Handle, Changeover Switch



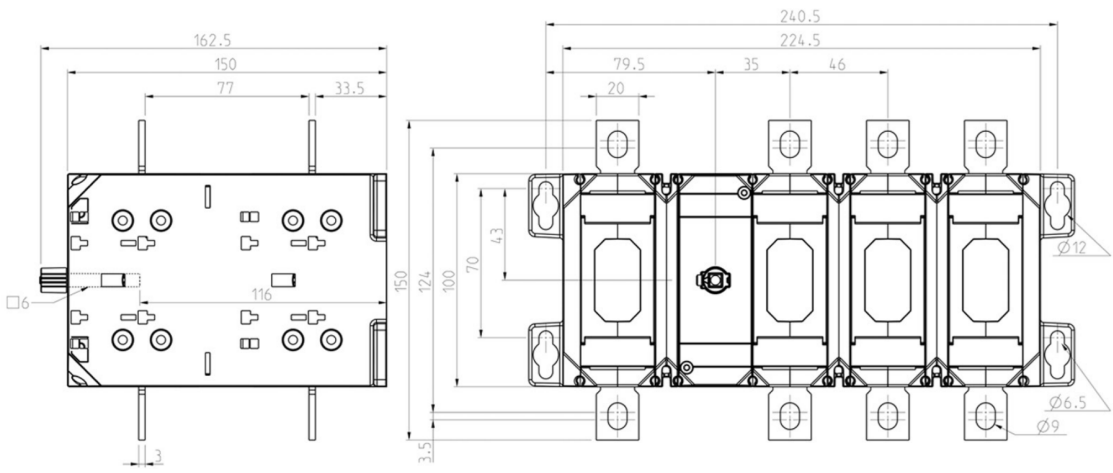
KU CHANGEOVER SWITCH DIMENSIONS

Dimensions in (mm)

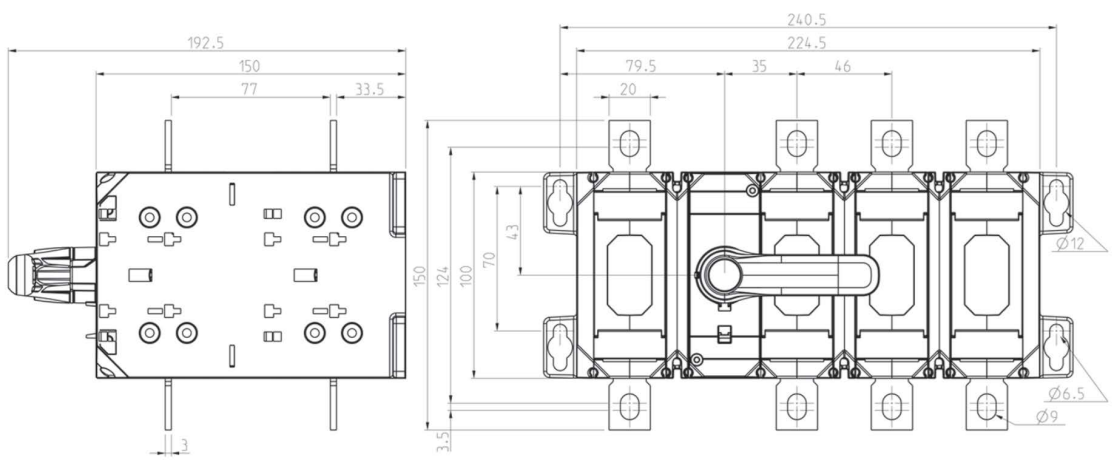
KU, 200 – 250 A, 3 Pole, DIRECT Mount Handle, Changeover Switch



KU, 200 – 250 A, 4 Pole, EXTENSION Shaft Handle, Changeover Switch



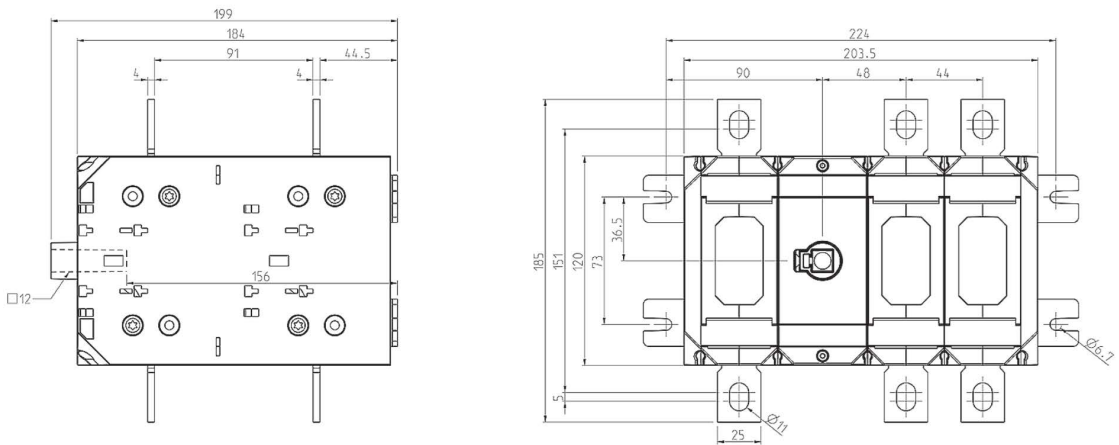
KU, 200 – 250 A, 4 Pole, DIRECT Mount Handle, Changeover Switch



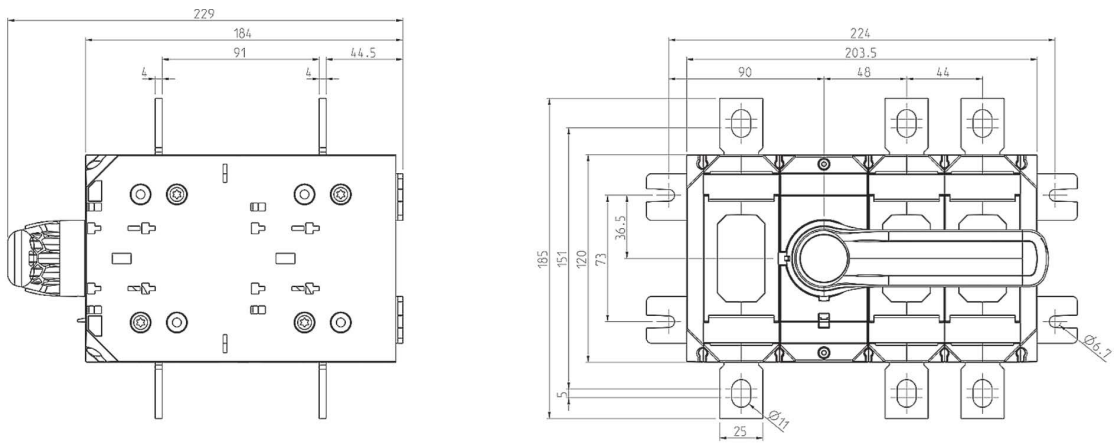
KU CHANGEOVER SWITCH DIMENSIONS

Dimensions in (mm)

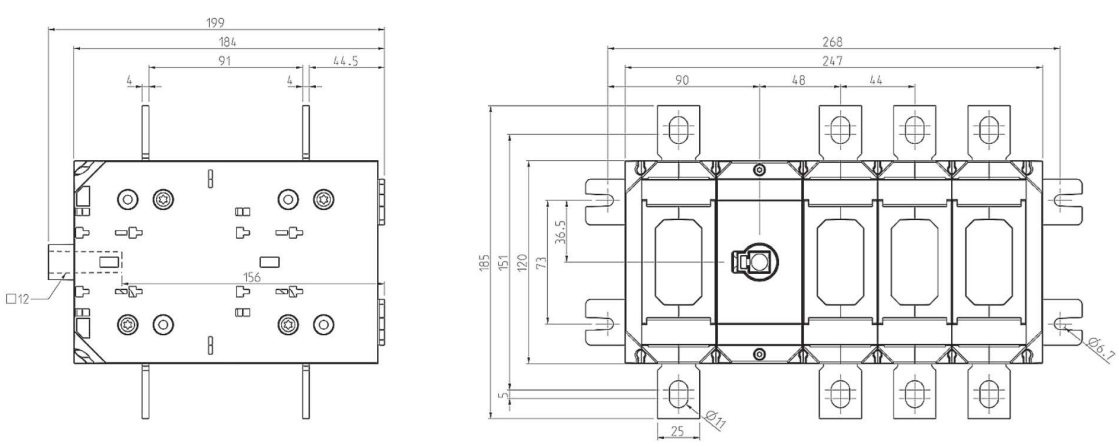
KU, 315 – 400 A, 3 Pole, EXTENSION Shaft Handle, Changeover Switch



KU, 315 – 400 A, 3 Pole, DIRECT Mount Handle, Changeover Switch



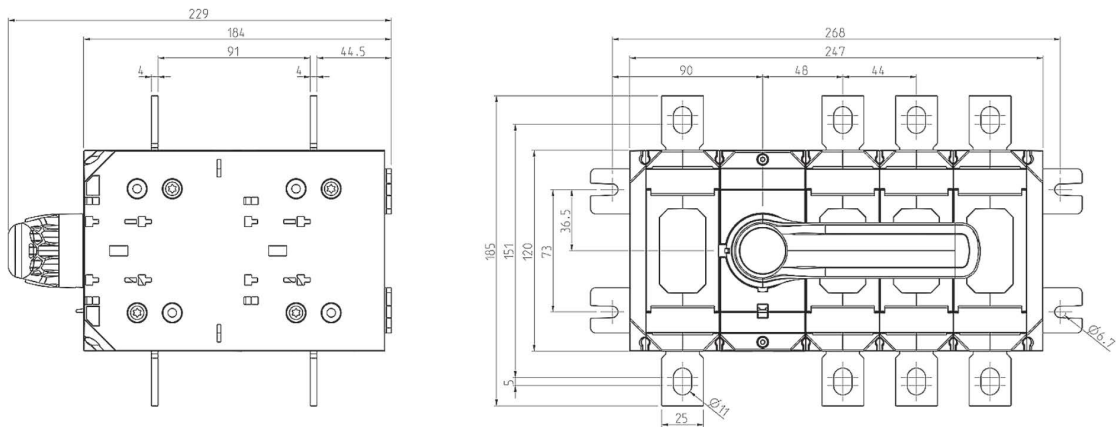
KU, 315 – 400 A, 4 Pole, EXTENSION Shaft Handle, Changeover Switch



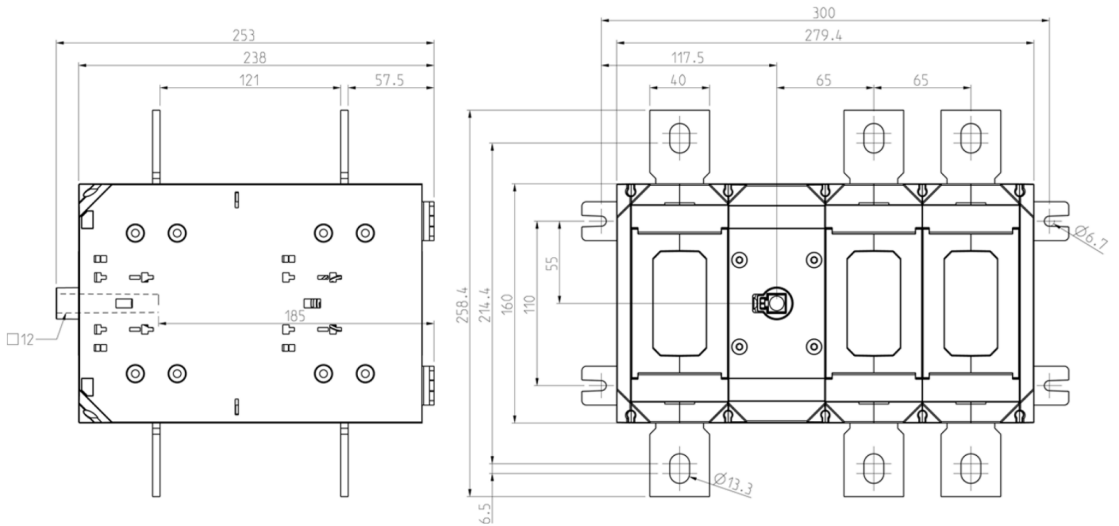
KU CHANGEOVER SWITCH DIMENSIONS

Dimensions in (mm)

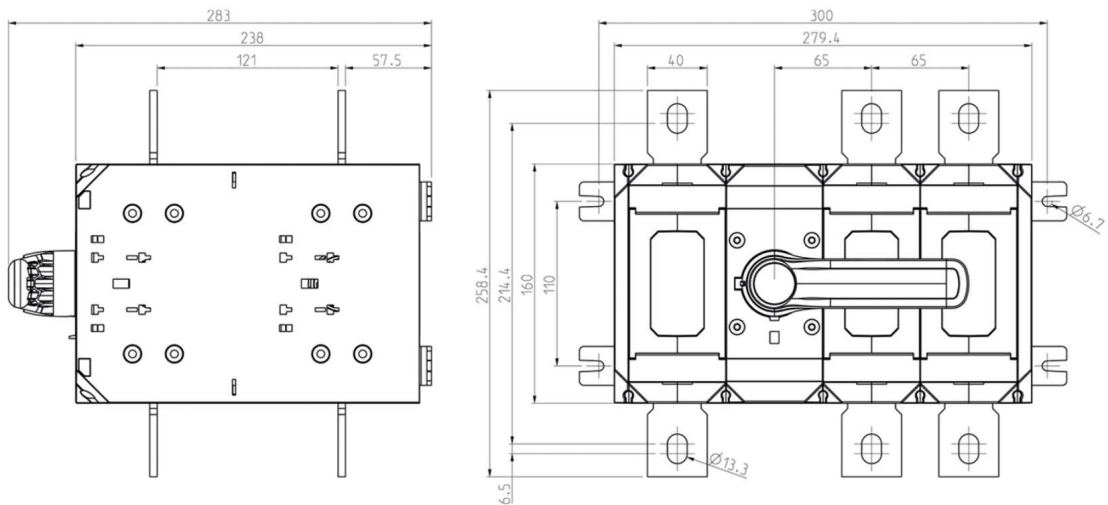
KU, 315 – 400 A, 4 Pole, DIRECT Mount Handle, Changeover Switch



KU, 630 – 800 A, 3 Pole, EXTENSION Shaft Handle, Changeover Switch



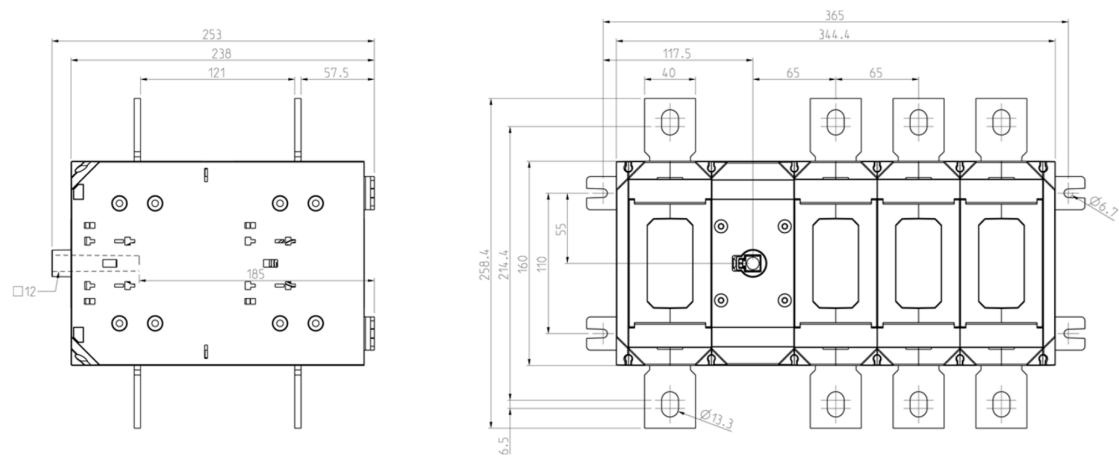
KU, 630 – 800 A, 3 Pole, DIRECT Mount Handle, Changeover Switch



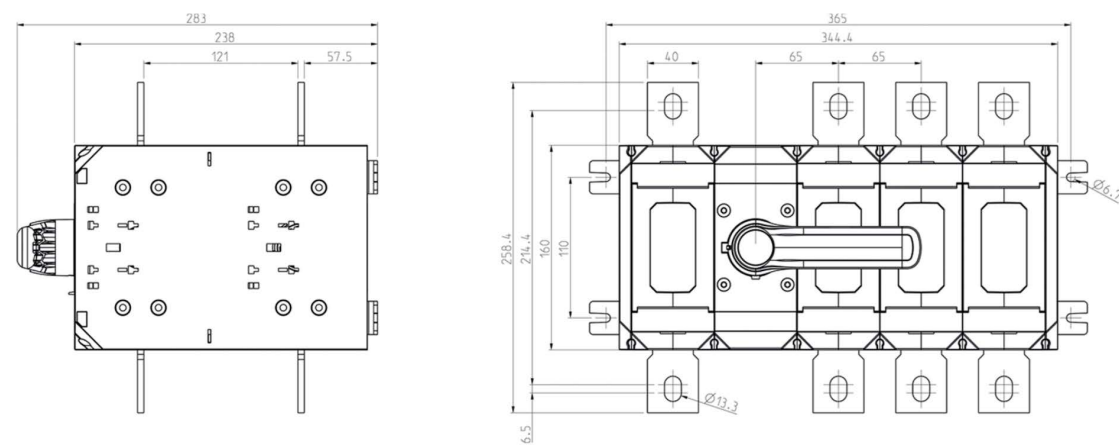
KU CHANGEOVER SWITCH DIMENSIONS

Dimensions in (mm)

KU, 630 – 800 A, 4 Pole, EXTENSION Shaft Handle, Changeover Switch



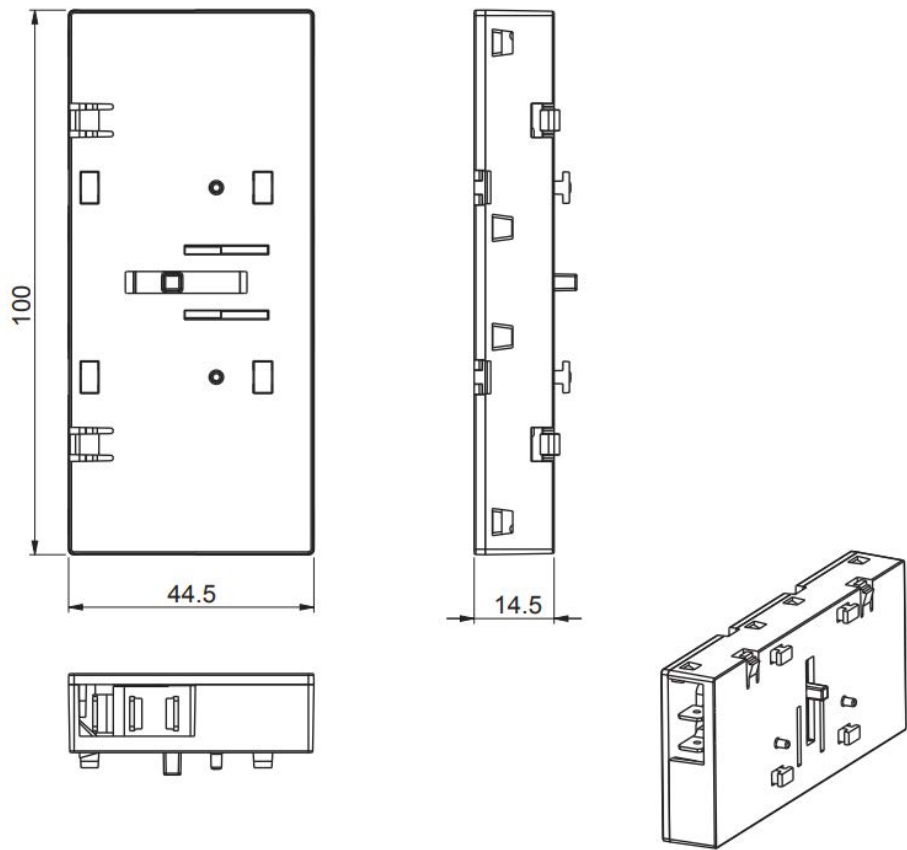
KU, 630 – 800 A, 4 Pole, DIRECT Mount Handle, Changeover Switch



KU CHANGEOVER SWITCH DIMENSIONS

Dimensions in (mm)

Auxiliary contacts 1V160KU and 2V160KU



AUXILIARY TYPES AND OPERATION

- | 1NO or 1NC bridge contact or 1 x NO/NC or 2 x NO/NC changeover types
- | Early Break, Late Make switching as standard
- | 16 A, 250 VAC (EN 61058-1)
- | For KU, 16 A to 800 A, VKA LBS Isolators
- | For RT, 16 A – 40 A Door mount LBS isolators
- | For KU_N, 16 A – 80 A LBS Isolators
- | For KU_N, 63 A – 80 A : door mounting kit (OKA) with black or yellow/red handle (Y/R)
- | 1NO40KU & 1NC40KU

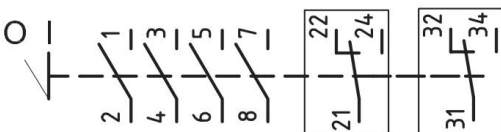


1NO40KU & 1NC40KU

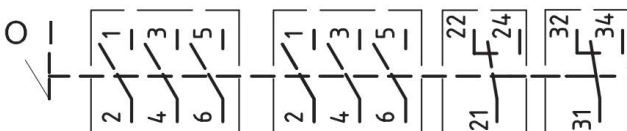
SWITCH DIAGRAMS:



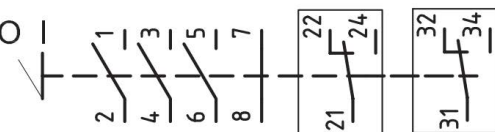
3 pole + 2NC/NO



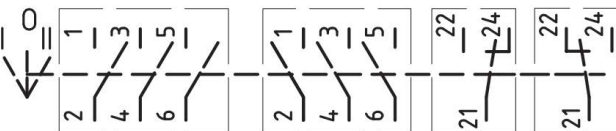
4 pole + 2NC/NO



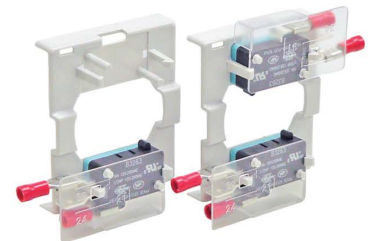
6 pole + 2NC/NO



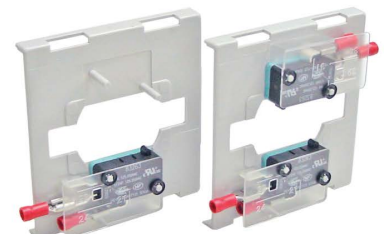
3 pole + NT + 2NC/NO



Change-over 3 pole + 2NC/NO



KU 1.V & KU 2.V



VKA 1.V & VKA 2.V



KVKE 1.V



1.V160KU

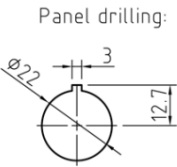
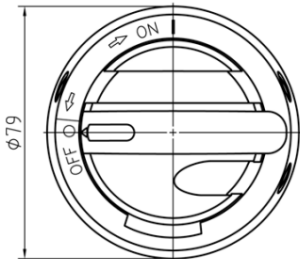
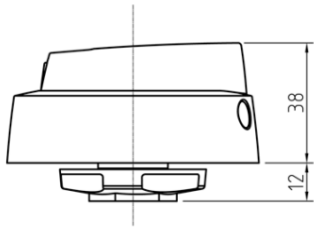
Auxiliary types, Mounting and Ratings, to IEC 60947.5.1 / AS/NZS 60947.5.1

Type	For	Auxiliary Operation	Description	Mounting	Ith A	AC12 250 VAC	AC15 250 VAC	DC13 24 VDC	Uimp kV
1NO40KU	KU 16 – 40 A	Direct drive bridge contacts	1 NO	Side	16	16A	4A	1A	2.5 kV
1NC40KU	KU 16 – 40 A		1 NC						
1NO40RT	RT 16 – 40 A		1 NO	Side	16	16A	4A	1A	2.5 kV
1NC40RT	RT 16 – 40 A		1 NC						
KU1V	KU_N 16 – 80 A	Snap action Top	1 NO/NC CO	Top	16	16A	4A	-	2.5 kV
KU2V	KU_N 16 – 80 A		2 NO/NC CO						
1V160KU	KU 100 – 800 A		1 NO/NC CO	Side	16	16A	4A	-	2.5 kV
2V160KU	KU 100 – 800 A		2 NO/NC CO						
VKA1V	VKA250		1 NO/NC CO	Top	16	16A	4A	-	2.5 kV
VKA2V	VKA250		2 NO/NC CO						

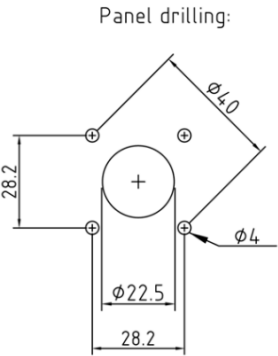
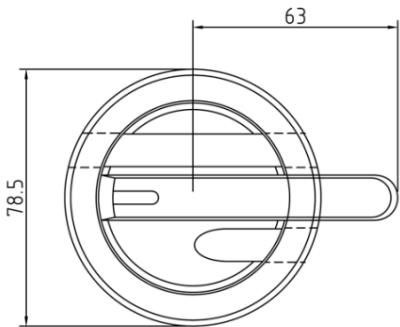
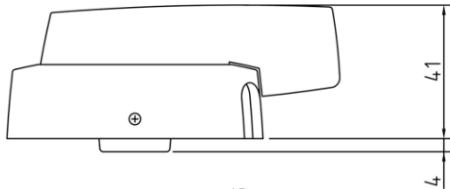
EB/LM: The operation of the above auxiliary contacts is Early Break / Late Make, which means the contacts open at least 20ms before the main contacts of the load-break switch opens, while for closing, the auxiliary contacts should close at least the same time or shortly after, the main contacts of the load-break switch close.

LK, LKX HANDLES

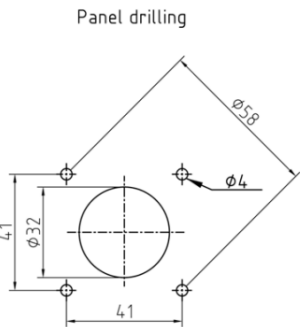
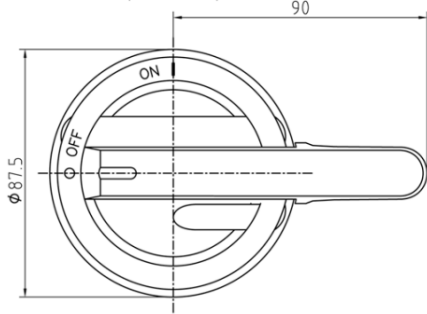
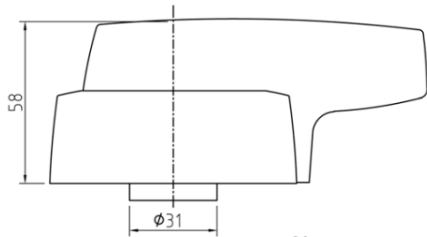
LK10



LK11

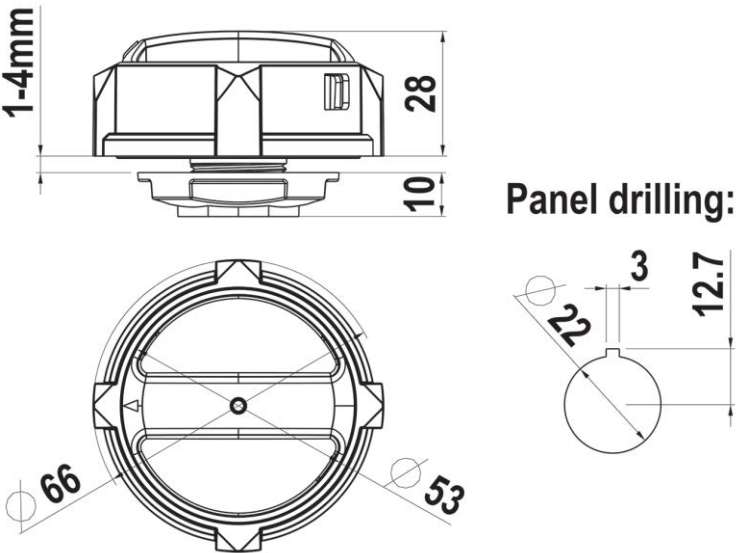


LK12

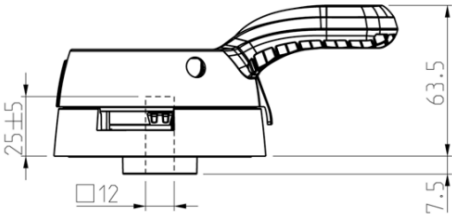


LK, LKX HANDLES

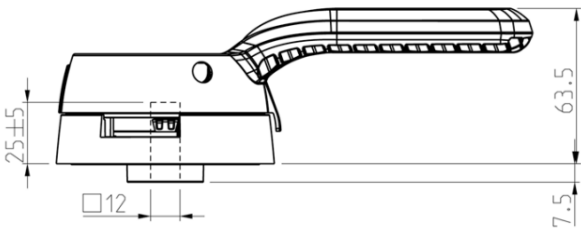
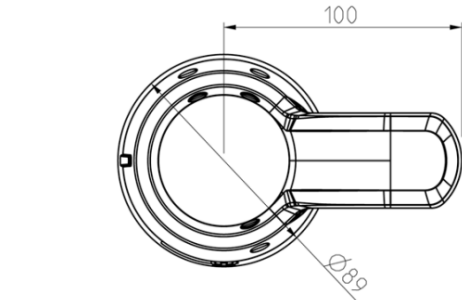
LKX50



LKX100



LKX150



HANDLES & SHAFTS (LK & KX)

- | Extension handles for switches 16 A to 800 A.
- | For standard load break switches and changeover switches
- | Padlocking in OFF-position, Padlock ON option.
- | Door defeat facility standard – will not operate if handle padlocked in ON position.
- | Door defeat does not work when handle padlocked OFF.
- | Available in black or yellow-red.



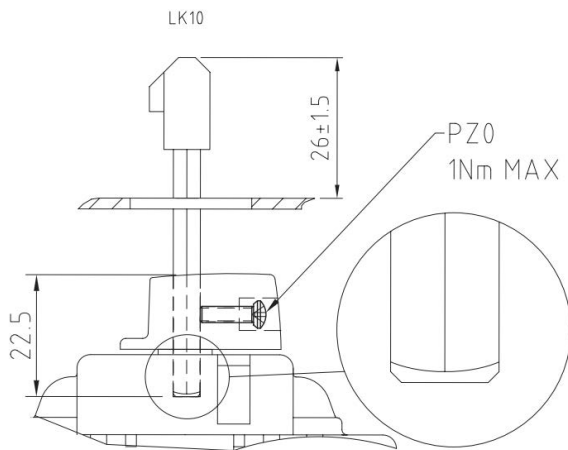
Extension Handle Types

Part Number	Suits switch type	Position Marking	IP Rating	Colour	Locking Position
LKX50	KU 16 – 160 A, RT, 16A to 40A	OFF-ON	IP65	Black	OFF
LKX50YR	KU 16 – 160 A, RT, 16A to 40A	OFF-ON	IP65	Yellow Red	OFF
LKX100	KU 100 – 250 A, VKA 250	OFF-ON	IP66 NW	Black	OFF, field converts to ON & OFF
LKX100YR	KU 100 – 250 A, VKA 250	OFF-ON	IP66 NW	Yellow Red	OFF, field converts to ON & OFF
LKX100CO102	KU 100 – 250 A	1 – O – 2	IP66 NW	Black	OFF, field converts to pos. 1 or 2
LKX100YRCO102YR	KU 100 – 250 A	1 – O – 2	IP66 NW	Yellow Red	OFF, field converts to pos. 1 or 2
LKX150	KU 315 – 800 A, PV 4400	OFF-ON	IP66 NW	Black	OFF, field converts to ON & OFF
LKX150YR	KU 315 – 800 A, PV 4400	OFF-ON	IP66 NW	Yellow Red	OFF, field converts to ON & OFF
LKX150CO102	KU 315 – 800 A	1 – O – 2	IP66 NW	Black	OFF, field converts to pos. 1 or 2
LKX150YRCO102YR	KU 315 – 800 A	1 – O – 2	IP66 NW	Yellow Red	OFF, field converts to pos. 1 or 2
LK10	KU 16 – 160 A	OFF-ON	IP66	Black	OFF
LK10YR	KU 16 – 160 A	OFF-ON	IP66	Yellow Red	OFF
LK10LON	KU 16 – 160 A	OFF-ON	IP66	Black	ON
LK10YRLON	KU 16 – 160 A	OFF-ON	IP66	Yellow Red	ON
LK11	KU 16 – 160 A	OFF-ON	IP66	Black	OFF
LK11YR	KU 16 – 160 A	OFF-ON	IP66	Yellow Red	OFF
LK11LON	KU 16 – 160 A	OFF-ON	IP66	Black	ON
LK11YRLON	KU 16 – 160 A	OFF-ON	IP66	Yellow Red	ON
LK11IP69K	KU 16 – 160 A	OFF-ON	IP67 – IP69K	Black	OFF
LK11YRIP69K	KU 16 – 160 A	OFF-ON	IP67 – IP69K	Yellow Red	OFF
LK11CO102	KU 63 – 160A Changeover	1 – O – 2	IP66	Black	OFF
LK11CO102YR	KU 63 – 160A Changeover	1 – O – 2	IP66	Yellow Red	OFF
LK12	VKA 250, KU 100 – 160A	OFF-ON	IP65	Black	OFF
LK12YR	VKA 250, KU 100 – 160A	OFF-ON	IP65	Yellow Red	OFF
LK12LON	VKA 250, KU 100 – 160A	OFF-ON	IP65	Black	ON
LK12YRON	VKA 250, KU 100 – 160A	OFF-ON	IP65	Yellow Red	ON
LK12CO102	KU 100 – 160A Changeover	1 – O – 2	IP65	Black	OFF
LK12CO102YR	KU 100 – 160A Changeover	1 – O – 2	IP65	Yellow Red	OFF

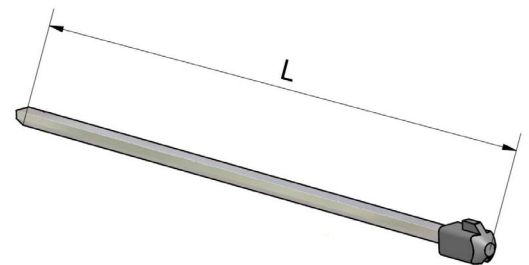
Handles and applicable shafts		Shaft types			
Handle Part Number	Suits switch types	Part Number	Length (mm)	Shaft sides (mm)	Material
LKX50 (YR)	KU 16 – 160, RT 16 - 40	L300 AD11	300	5 x 5	Aluminium
		L300, 400, 500 AD11VT	300, 400, 500	5 x 5	Steel
LK10 (YR)	KU 16 – 160, RT 16 - 40	L100, 300 AD11	100, 300	5 x 5	Aluminium
		L300, 400, 500 AD11VT	300, 400, 500	5 x 5	Steel
LK11 (YR)	KU 16 – 160, RT 16 - 40	L100, 300 AD11	100, 300	5 x 5	Aluminium
	VKA 125 – 160	L300, 400, 500 AD11VT	300, 400, 500	5 x 5	Steel
LK12 (YR)					
LKX100 (YR)	KU 100 – 160A, VKA 125 - 160	L228, 300 AD12VT	228, 300	5 x 5	Steel
		L400AD12VT	400	5 x 5	Steel
LKX100 (YR)					
LK12 (YR)	KU 200 – 250 A, VKA 250	L228AD12T6	228	6 x 6	Steel
		L400AD12T6	400	6 x 6	Steel
LKX150 (YR)	KU 315 – 800 A, PV 4400	LVK228, LVK320	228, 320	12 x 12	Steel
		LVK400, LVK500	400, 500	12 x 12	Steel

SHAFTS FOR HANDLES

- Shafts will fit various older and newer handle types.
- Lengths range 42 - 500 mm, refer table below.
- Available in aluminium, steel (T), or steel and slanted (VT).
- All 5 mm² shafts have one corner of the shaft machined away, so that the shaft is "keyed" into the same hole in the switch which only accepts a similar keyed shaft.
- 6 mm² and 12 mm² shafts are square with no corner cut out.
- Shafts are easy to cut to suit the application depth required.



LK 10, 11, 12 handle mounted at top



Length of the extension shafts for handles

Shafts to suit extension handles

Shaft Type					Handle Type	
Shaft Part Number	Length (mm)	Material	Shaft size (mm)	Corner cutout	Part Number	Suits switch types
L42AD11	42	Aluminium	5 x 5	Yes	LKX50 (YR)	KU 16 - 160, RT 16 to 40
L100AD11	100	Aluminium		Yes		
L300AD11	300	Aluminium		Yes		
L300AD11VT	300	Steel		Yes		
L400AD11VT	400	Steel		Yes		
L500AD11VT	500	Steel		Yes		
L100AD11	100	Aluminium	5 x 5	Yes	LK10 (YR)	KU 16 - 160, RT 16 - 40
L300AD11	300	Aluminium		Yes		
L300AD11VT	300	Steel		Yes		
L400AD11VT	400	Steel		Yes		
L500AD11VT	500	Steel		Yes		
L100AD11	100	Aluminium	5 x 5	Yes	LK11 (YR)	KU 16 - 160, RT 16 - 40
VKA 125 - 160						
L300AD11	300	Aluminium		Yes		
L300AD11VT	300	Steel		Yes		
L400AD11VT	400	Steel		Yes		
L500AD11VT	500	Steel		Yes		
L228AD12VT	228	Steel	5 x 5	Yes	LK12 (YR)	
LKX100 (YR)	KU 100 - 160, VKA 125 - 160					
L300AD12VT	300			Yes		
L400AD12VT	400			Yes		
L228AD12T6	228	Steel	6 x 6	No	LK12 (YR)	
LKX100 (YR)	VKA 250, KU 200 - 250					
L400AD12T6	400			No		
LVK228	228	Steel	12 x 12	No	LKX150 (YR)	KU 315 - 800, PV 4400
LVK320	320			No		
LVK400	400			No		
LVK500	500			No		

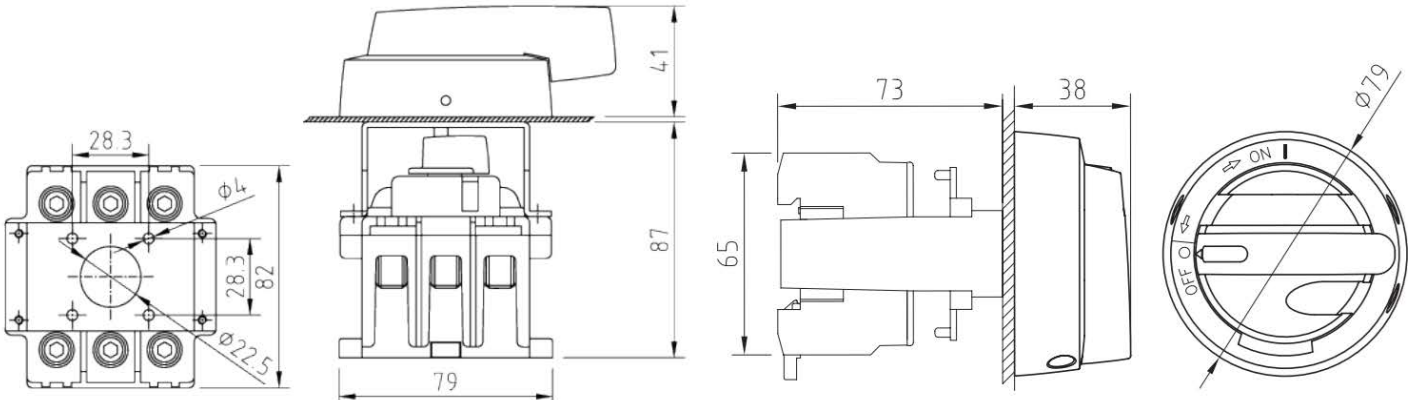
Door Mounted Load Break Switches KU_63N, KU_80N

- | Switchboard or panel door mounting of switches.
- | For 63 A and 80 A switch sizes.
- | 3 and 4 pole.
- | A choice of centre or offset shafts.
- | For smaller switch sizes refer new RT, 16 A – 40 A sizes on previous pages.



Part Number	Description	Suit Switch Types
OKAKULK10	With black LK10 handle, door mount kit, 3P	KU363N, KU463N KU480N, KU480N For lower amperes refer RT types 16 – 40A
OKAKULK10YR	With yellow-red LK10YR handle, door mount kit, 3P	
OKAKU40LK10	With black LK10 handle, door mount kit, 4P	
OKAKU40LK10YR	With yellow-red LK10YR handle, door mount kit, 4P	

Dimensions in (mm)



New RT types 16 A to 40 A, refer previous pages.



RT 3P Black handle
Door mount type



RT 3P Yellow Red handle
Door mount type

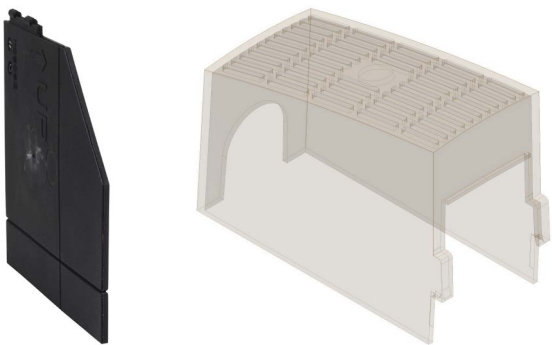
TERMINAL COVERS AND PHASE BARRIERS

Terminal covers are available in two versions – flush (left) and high (middle). The high terminal cover type is specifically made to be used with Katko's vertical cable connectors.

Phase barriers (right) are flexible rubber and can be fitted in with many types and sizes of connectors.

Terminal Covers

Type	For
LS1603P	KU 100 – 160
LSN160	4th Pole, KU 100 – 160
LSVKAC	VKA 250
LS250F	KU 200 – 250, Flush terminal cover
LS400F	KU 315 – 400, Flush terminal cover
LS800F	KU 630 – 800, Flush terminal cover
LS250H	KU 200 – 250, High terminal cover
LS400H	KU 315 – 400, High terminal cover
LS800H	KU 630 – 800, High terminal cover



Phase Barriers

Type	For
VS160	KU 100 – 160
VSVKAC	VKA 250
VS250	KU 200 - 250
VS400	KU 315 – 400
VS800	KU 630 – 800, PV 4400



Flush covers fitted



High covers fitted

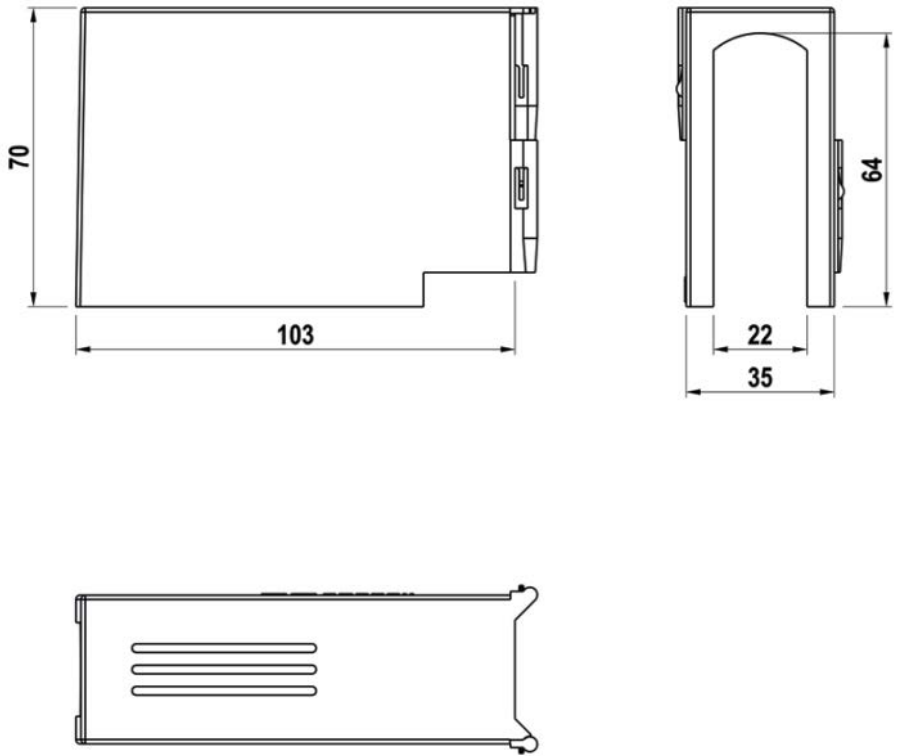


Phase Barriers fitted

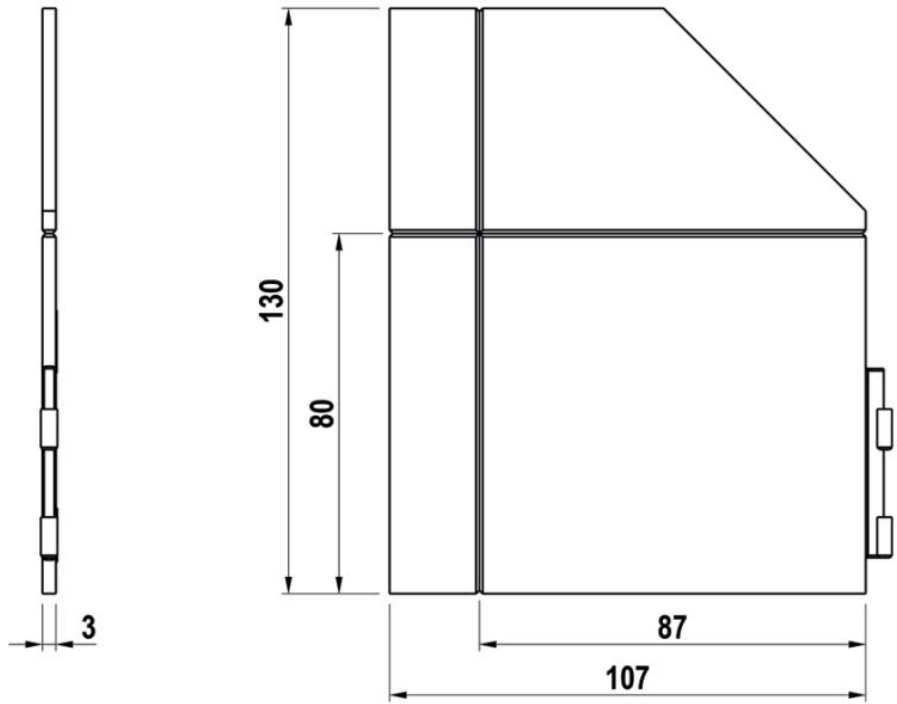
TERMINAL COVERS AND PHASE BARRIER DIMENSIONS

Dimensions in (mm)

LS250F



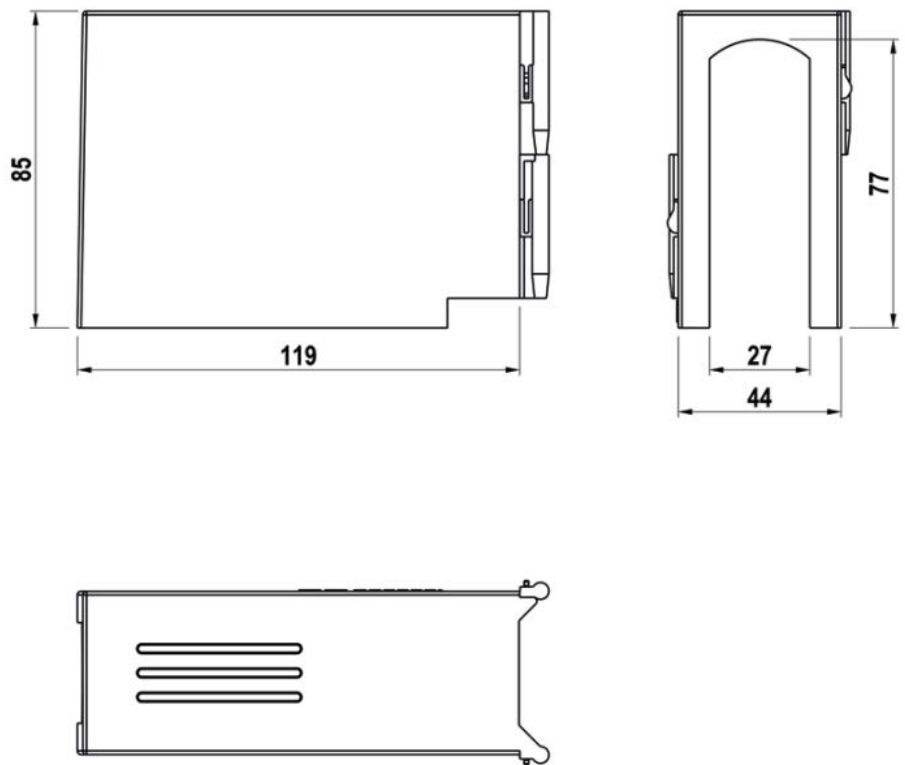
VS250



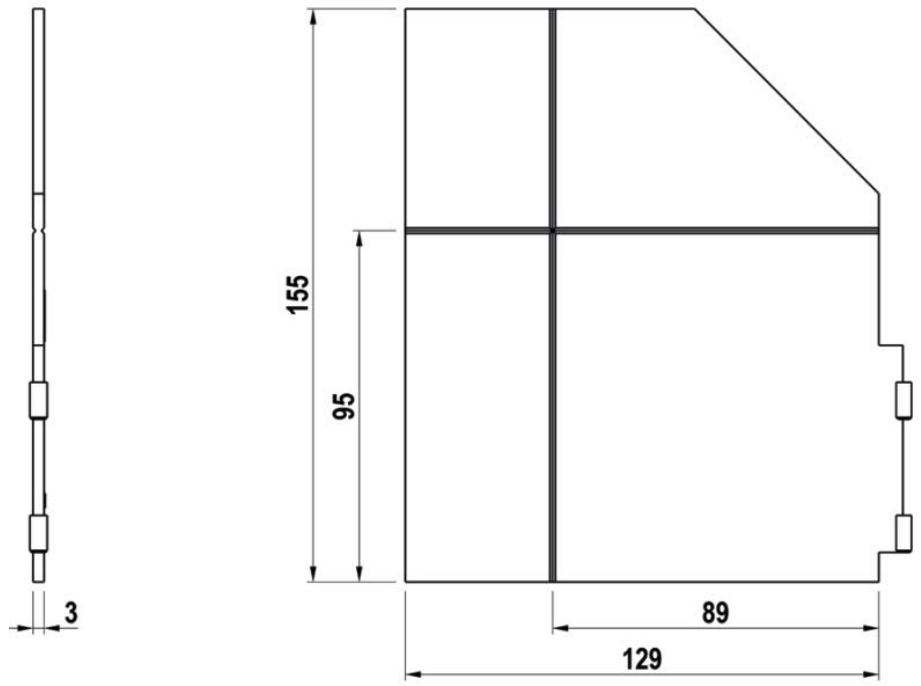
TERMINAL COVERS AND PHASE BARRIER DIMENSIONS

Dimensions in (mm)

LS400F



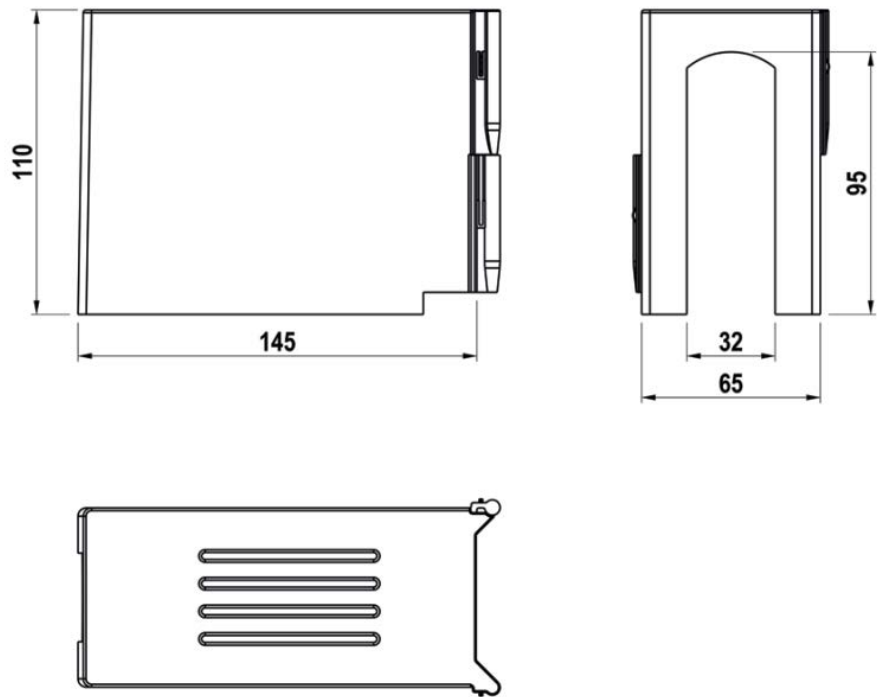
VS400



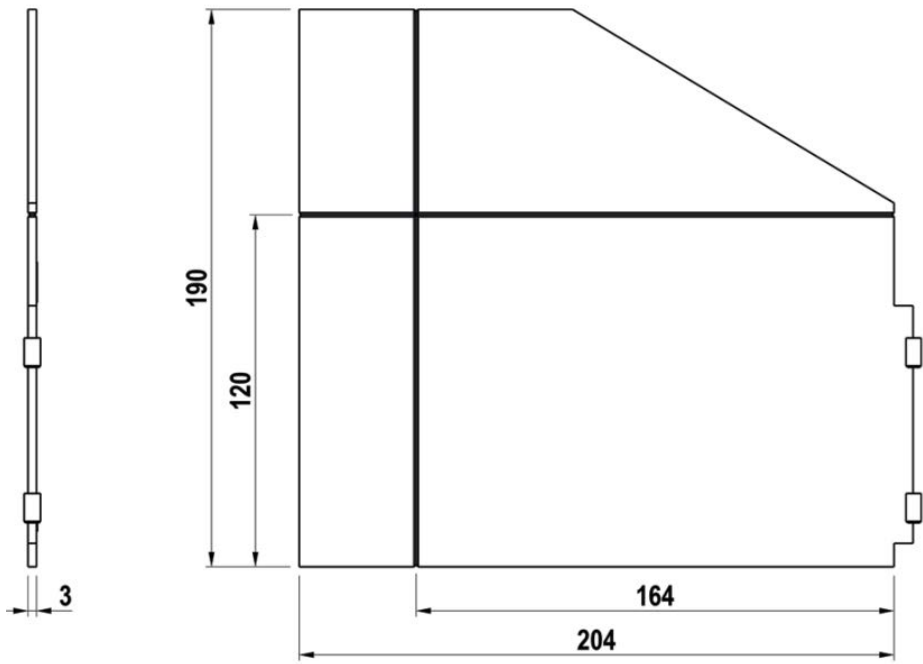
TERMINAL COVERS AND PHASE BARRIER DIMENSIONS

Dimensions in (mm)

LK800F



VS800



PARALLEL SWITCH KITS

- | For KU switches.
- | Used to create 6 and 8 pole switches using two connected 3 or 4 pole switches.
- | Ensures simultaneous operation of the two connected switches.
- | Assembly depth for KU 155-300 mm.
- | Length shown in the product code, for example: RV 66, L=66 mm.
- | Suits steel shaft type L300AD11VT, cut to a maximum 200 mm in length.
- | Handle not included.
- | Length dimension indicated in the part number, for example: RV 66, L=66 mm



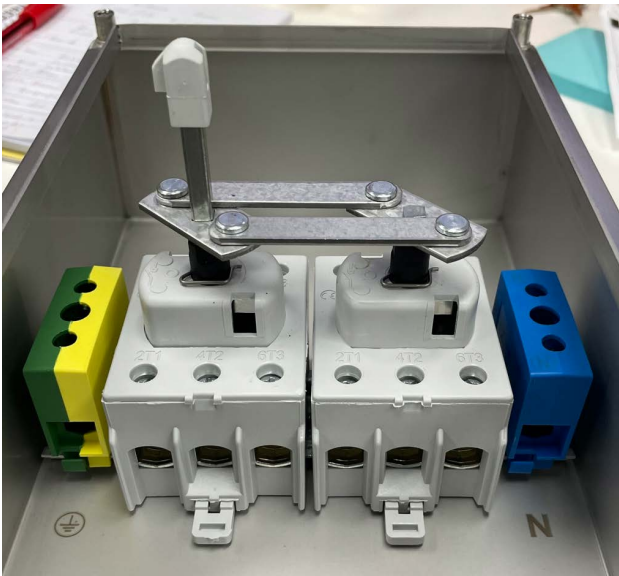
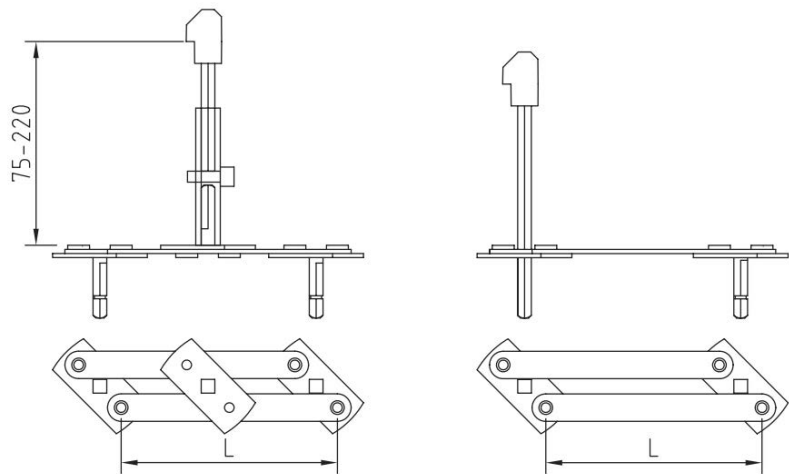
Parallel Kits

Part Number	Shaft position	L Dimension below	Description	Suits Switch type
RV52S	Left side S	52 mm	KU 16 A - 80 A	2 x KU 3P
RV66	Centre	66 mm	KU 16 A - 80 A	2 x KU 3P
RV66S	Left side S	66 mm	KU 16 A - 80 A	2 x KU 3P
RV80	Centre	80 mm	KU 16 A - 80 A	2 x KU 4P
RV80S	Left side S	80 mm	KU 16 A - 80 A	2 x KU 4P

Types:

RV66, RV80

RV52S, RV66S, RV80S



Example of a 6 pole switch in a KER Stainless Steel enclosure

JUNCTION BOX AND GENERAL PURPOSE ENCLOSURES

Discover Katko's KCS Junction Box / General Enclosure Range – durable, versatile, and made from environmentally sustainable materials.

Manufactured from either polycarbonate or ABS. With five sizes to choose from, these enclosures will accommodate a range of electrical components and configurations. These enclosures are a high quality European made design.

Applications:

- | Junction boxes.
- | Pushbutton, indicator light and selector switch enclosures.
- | Motor starter enclosures.
- | Enclosed load break switch enclosures.

Features:

- | Available in Polycarbonate or ABS
- | Polycarbonate types are offered with grey or transparent covers.
- | Quick fixing quarter turn screws for stable & reliable sealing.
- | IP ratings: IP66 (Polycarbonate) for indoor and outdoor applications, and IP65 (ABS) for indoor use.
- | Polycarbonate grey lid enclosures: f1 tested: suitable for outdoor use with respect to exposure to ultraviolet light, water exposure and immersion in accordance with UL746C. Polycarbonate transparent lid enclosures f2 tested.
- | ABS = Acrylonitrile Butadiene Styrene types, IP65 indoor use, no specific UV protection.
- | Single packaging includes all necessary items for basic use (screws, cover & bottom).
- | Multiple installation methods.
- | Available with optional mounting plates and Din rail.

NEW
KCS Series

Certification and tested according to:

- | IEC/EN 62208
- | AS/NZS 61439.1
- | AS/NZS 61439.4
- | IEC/EN 61439.1
- | IEC/EN 61439.4
- | IEC/EN 60529
- | IEC/EN 62262



KATKO KCS JUNCTION BOX AND GENERAL PURPOSE ENCLOSURES

Features:

- | Either Polycarbonate or ABS
- | Polycarbonate types are offered with a grey or transparent cover.
- | Quick fixing quarter turn screws for stable & reliable sealing.
- | IP Class: IP66 (Polycarbonate) for indoor and outdoor applications, and IP65 (ABS) for indoor use.
- | Mechanical Impact: IK06 to IK08 rated, refer type below.
- | Temperature range: - 40°C to + 60°C. Can go up to + 80°C with some derating for the internal equipment, refer APS.
- | Polycarbonate grey lid enclosures: f1 tested: suitable for outdoor use with respect to exposure to ultraviolet light, water exposure and immersion in accordance with UL746C. Polycarbonate transparent lid enclosures f2 tested.
- | ABS = Acrylonitrile Butadiene Styrene types, IP65 indoor use, no specific UV protection.
- | Single packaging includes all necessary items for basic use (screws, cover & bottom).
- | Multiple installation methods.
- | Rear hole knock outs, as well as top, bottom and side hole location marker dots
- | Available with optional mounting plates and Din rail.

Ordering:

Description	Dimensions H x W x D (mm)	IP rating	Application location	IK Impact (-25°C)	IK Impact (+35°C)	Part Number
Polycarbonate Grey Box & Cover						
Polycarbonate, Grey	95 x 95 x 65	IP66	Outdoor	IK06	IK07	KCS996PC
Polycarbonate, Grey	135 x 95 x 70	IP66	Outdoor	IK06	IK07	KCS1397PC
Polycarbonate, Grey	135 x 135 x 75	IP66	Outdoor	IK06	IK07	KCS13137PC
Polycarbonate, Grey	190 x 135 x 90	IP66	Outdoor	IK06	IK07	KCS19139PC
Polycarbonate, Grey	270 x 190 x 100	IP66	Outdoor	IK08	IK08	KCS271910PC
Polycarbonate Grey Box & Transparent Cover						
Polycarbonate, Grey, Transparent cover	95 x 95 x 65	IP66	Outdoor	IK06	IK06	KCS996PCT
Polycarbonate, Grey, Transparent cover	135 x 95 x 70	IP66	Outdoor	IK06	IK06	KCS1397PCT
Polycarbonate, Grey, Transparent cover	135 x 135 x 75	IP66	Outdoor	IK06	IK06	KCS13137PCT
Polycarbonate, Grey, Transparent cover	190 x 135 x 90	IP66	Outdoor	IK06	IK06	KCS19139PCT
Polycarbonate, Grey, Transparent cover	270 x 190 x 100	IP66	Outdoor	IK07	IK07	KCS271910PCT
ABS Recycled Grey Box & Cover						
ABS, Grey	95 x 95 x 65	IP65	Indoor	IK06	IK07	KCS996ABS
ABS, Grey	135 x 95 x 70	IP65	Indoor	IK06	IK07	KCS1397ABS
ABS, Grey	135 x 135 x 75	IP65	Indoor	IK06	IK07	KCS13137ABS
ABS, Grey	190 x 135 x 90	IP65	Indoor	IK06	IK07	KCS19139ABS
ABS, Grey	270 x 190 x 100	IP65	Indoor	IK07	IK08	KCS271910ABS

Optional mounting plates and DIN rail

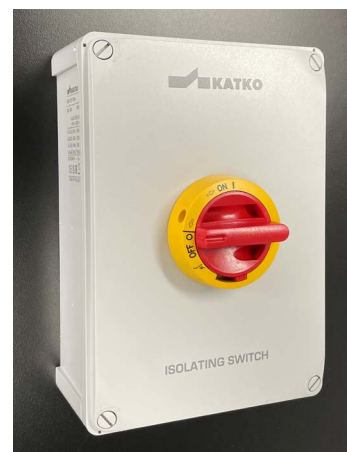
- | KCS enclosures are not supplied with mounting plates or DIN rail as standard.
- | KCS enclosures when used as Junction Boxes, may not need mounting plates or DIN rail, though it is required for terminal blocks or other equipment. Refer next page for mounting plates and DIN rail.

Installing APS-Katko load break switches and handles

- | KCS enclosures are ideally suited for installation of Katko KU & RT series load break switches, using
- | Black or Yellow-red LK series handles. In fact Katko KEM 80 A to 125 A encloses switches are already using KCS271910PC enclosures. Example; KEM enclosed switch "M4" sizes use a KCS271910PC.

Ordering example:

- | | |
|-------------------|----------------------------------|
| KCS271910PC | Enclosed Katko load break switch |
| KCS271910MTGPLATE | Enclosure, 270 x 190 x 100 mm |
| KCSDINRAIL175 | Mounting plate |
| KU4125 | Din rail horizontal |
| LK11YR | 125A, 4 pole load break switch |
| L300AD11VT | Yellow Red IP66 handle |
| | Steel shaft (cut to length) |



KATKO KCS JUNCTION BOX AND GENERAL PURPOSE ENCLOSURES

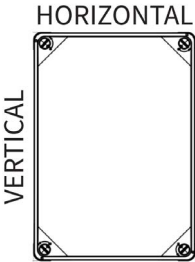
Optional Items

Mounting Plates		
KCS996 Mounting plate	Steel mounting plate	KCS996MTGPLATE
KCS1397 Mounting plate	Steel mounting plate	KCS1397MTGPLATE
KCS13137 Mounting plate	Steel mounting plate	KCS13137MTGPLATE
KCS19139 Mounting plate	Steel mounting plate	KCS19139MTGPLATE
KCS271910 Mounting plate	Steel mounting plate	KCS271910MTGPLATE

Mounting plates are available for all sizes and are ready to be installed out of the box. Mounting screws are always supplied with the enclosure.

DIN Rail		
KCS DIN RAIL 83	KCS 996 Horizontal & Vertical, KCS 1397 Horizontal	KCSDINRAIL83
KCS DIN RAIL 122	KCS 1397 Vertical, KCS 13137 Horizontal & Vertical, KCS 19139 Horizontal	KCSDINRAIL122
KCS DIN RAIL 175	KCS 19139 Vertical, KCS 271910 Horizontal	KCSDINRAIL175
KCS DIN RAIL 255	KCS 271910 Vertical	KCSDINRAIL255

Horizontal (short), Vertical (long)
Standard steel DIN rail is available as horizontal or vertical for all sizes. Please refer to the table and reference layout to select the correct type. Mounting screws are always supplied with the enclosure.



KCS Replament Parts		
Replacement lid peg screws	Replacement quarter-turn screws, 4 pcs, Polycarbonate	KCSQTPCSET

Katko KCS Switches are packaged in a cardboard partial box.



KATKO KCS JUNCTION BOX AND GENERAL PURPOSE ENCLOSURES

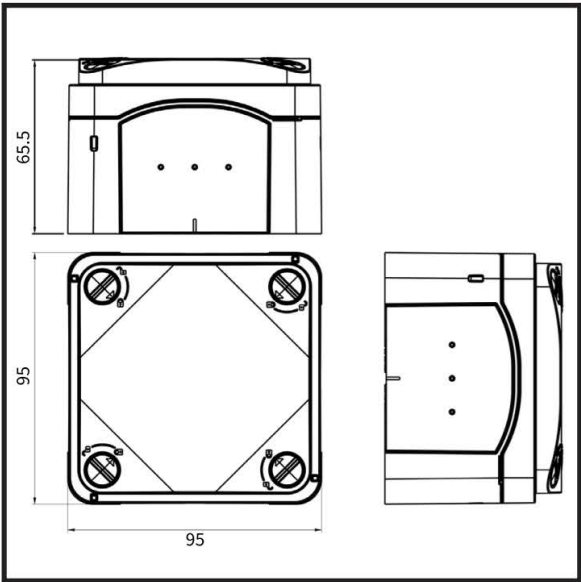
ADDITIONAL TECHNICAL INFORMATION

Outdoor Suitability - UL 746C (Underwriters Laboratories, USA)
Materials considered suitable for outdoor use have been subjected to ultraviolet (UV) light exposure and/or water immersion, via a standardised UL testing process. Materials whose properties are not significantly degraded in any of these areas are considered to have passed and are suitable for outdoor use.

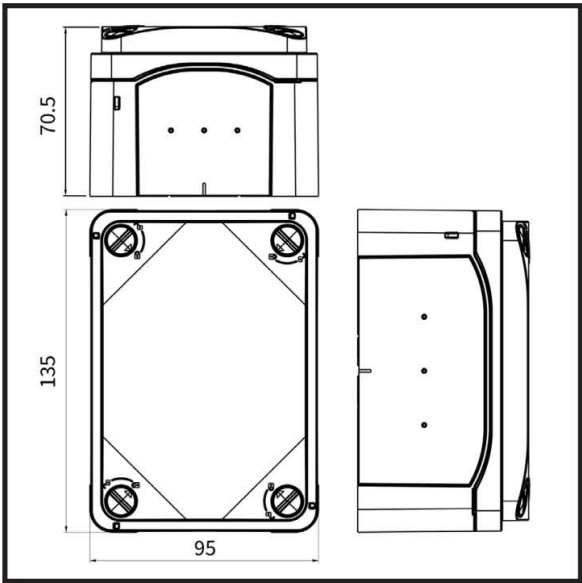
Rating	Description	Applicable KCS product
f1	The material has met both UV and water immersion requirements.	Poly boxes with a grey lid
f2	The material has met either UV or water immersion requirements or has only been partially tested.	Poly boxes with a transparent lid



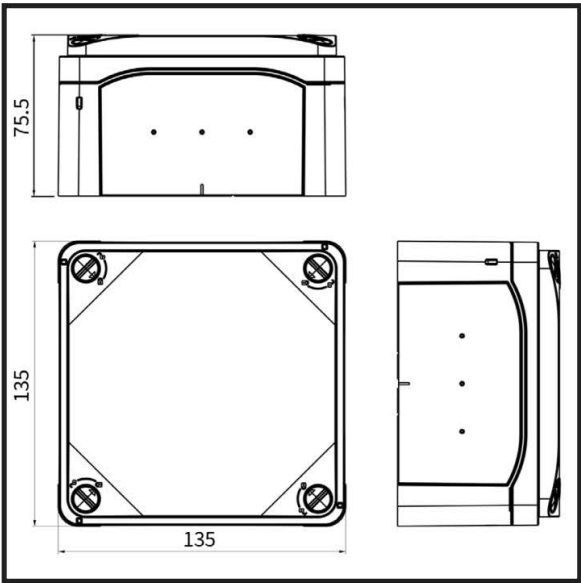
DIMENSIONAL DRAWINGS



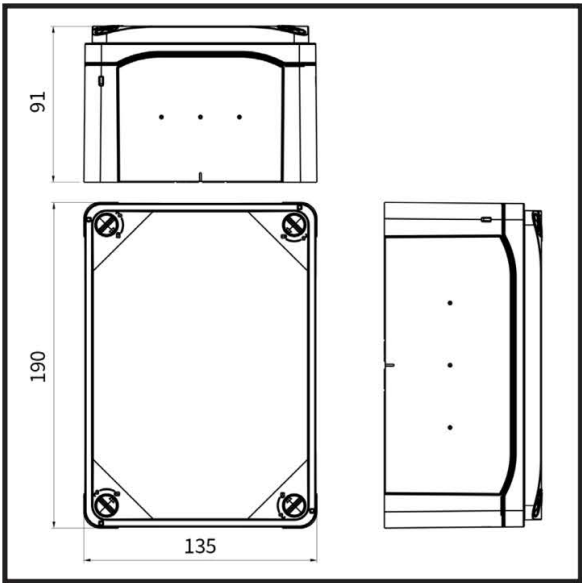
KCS1397



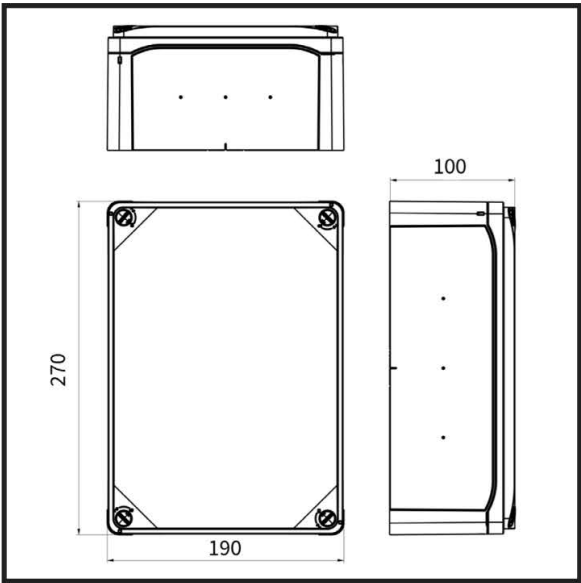
KCS13137



KCS19139



KCS271910



IP AND NEMA RATINGS

IEC / IP INTERNATIONAL PROTECTION DEGREE

The international protection for enclosures is given in the form of an IP (Ingress Protection) rating classification. The standards covering this are IEC 60529 and AS / NZS 60529 – 2004 and reconfirmed in 2018. A common example of an IP rating is IP65, the first number (6) represents protection against solid objects. The second number (5) represents protection against liquids. IP65 means the enclosure is protected against dust, and from low pressure jets of water from all directions. A small amount of water entry is permissible. IP56 in contrast, is a typical outdoors rating for equipment, or even better; IP66. ISO Katko enclosed switches are IP66 when installed correctly. To easily identify the IP rating of our Katko enclosed switches, refer to the features / technical data information for each enclosed Katko type. Below is a table outlining how IP ratings are determined.

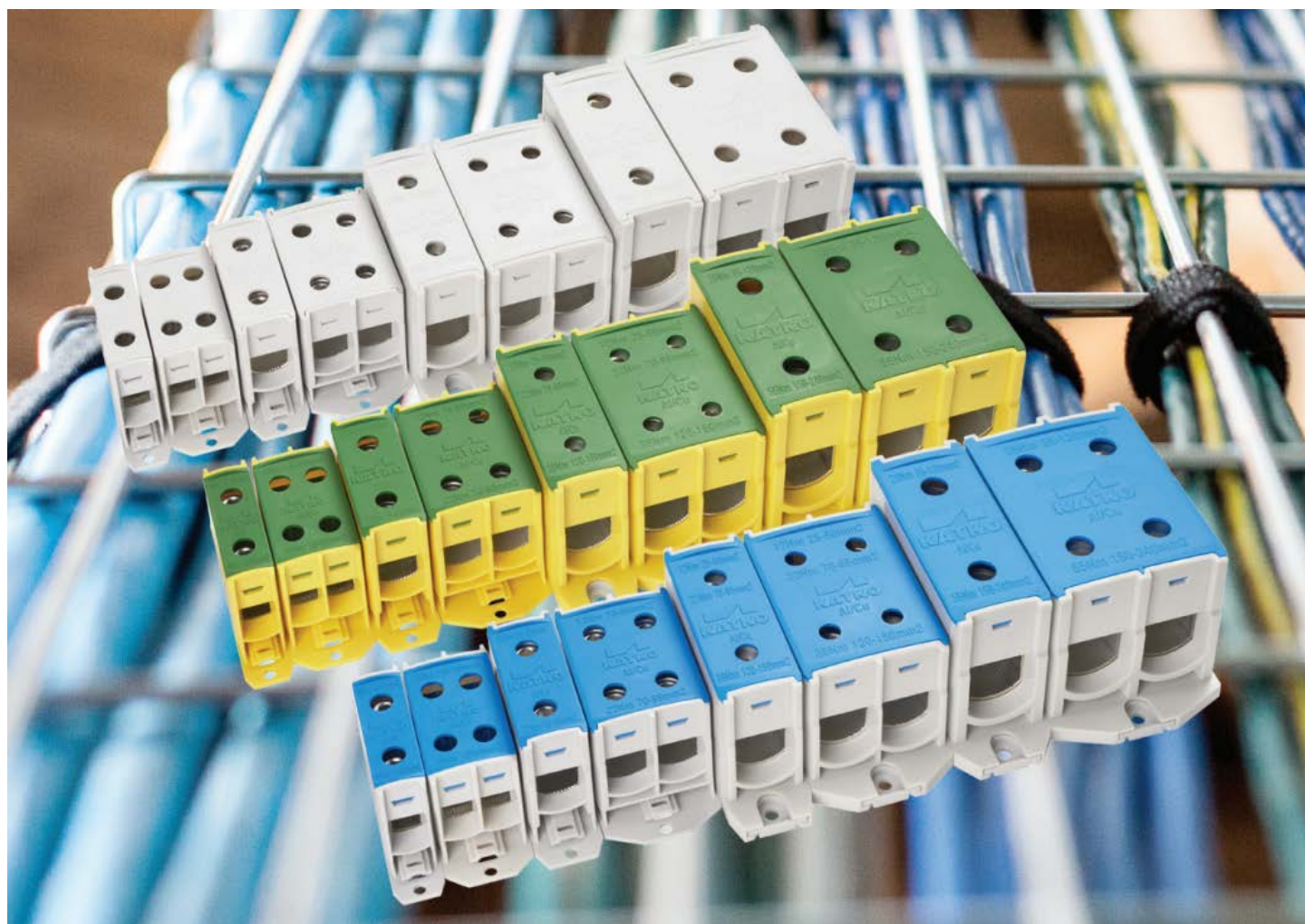
NEMA / UL CLASSIFICATION PROTECTION DEGREE

The National Electrical Manufacturers Association (NEMA) is a US Manufacturers organisation. NEMA performance criteria and test methods are used by Underwriters' Laboratories as guidelines for investigation and listing of electrical enclosures.

FIRST NUMBER		SECOND NUMBER		NEMA
Protection against solid objects		Protection against liquids		
0	No protection.	0	No protection.	1 Indoor use primarily to provide a degree of protection against contact with the enclosed equipment and against a limited amount of falling dirt.
1	Protected against solid objects up to 50mm eg accidental touch by hands.	1	Protected against vertically falling drops of water.	2 Indoor use to provide a degree of protection against limited amounts of falling water and dirt.
2	Protected against solid objects up to 12mm eg fingers.	2	Protected against direct sprays of water up to 15° from the vertical.	3 Outdoor use to provide a degree of protection against windblown dust, rain and sleet; undamaged by the formation of ice on the enclosure.
3	Protected against solid objects up to 2,5mm eg (tools + small wires).	3	Protected against sprays up to 60° from the vertical.	3R Outdoor use to provide a degree of protection against rain and sleet; undamaged by the formation of ice on the enclosure.
4	Protected against solid objects up to 1mm eg (tools + small wires).	4	Protected against water sprayed from all directions - limited ingress permitted.	3S Outdoor use to provide a degree of protection against windblown dust, rain and sleet; external mechanisms remain operable while ice laden.
5	Protected against dust - limited ingress permitted (no harmful deposit).	5	Protected against low pressure jets of water from all directions - limited ingress permitted.	4 Indoor or outdoor use to provide a degree of protection against splashing water, windblown dust and rain, hose directed water; undamaged by the formation of ice on the enclosure.
6	Totally protected against dust.	6	Protected against strong jets of water eg for use on shipdecks - limited ingress permitted.	4X Indoor or outdoor use to provide a degree of protection against splashing water, windblown dust and rain, hose directed water; undamaged by the formation of ice on the enclosure. Resists corrosion.
		6NW	Protected against strong jets of water eg for use on shipdecks - no ingress permitted.	6 Indoor or outdoor use to provide a degree of protection against the entry of water during temporary submersion at a limited depth; undamaged by the formation of ice on the enclosure.
		7	Protected against the affects of immersion between 15cm and 1m.	6P Indoor or outdoor use to provide a degree of protection against the entry of water during prolonged submersion at a limited depth.
		8	Protected against long periods of immersion under pressure.	11 Indoor use to provide by oil immersion a degree of protection of the enclosed equipment against the corrosive effects of corrosive liquids and gases.
		9K	Protected against close-range high pressure, high temperature spray downs.	12/12K Indoor use to provide a degree of protection against dust, falling dirt and dripping noncorrosive liquids.
				13 Indoor use to provide a degree of protection against dust, and spraying of water oil and noncorrosive coolants.

KATKO CONNECTSAFE KC AND KL TERMINAL BLOCKS 63 A – 1040 A

- | KL range: Certified according to IEC 61238-1 Class A.
- | KL terminal blocks compatible with markers.
- | For Al / Cu cables: 1.5 - 300 mm²
- | Available in grey, blue (N) and yellow / green (PE).
- | **X1, X2 or X3 types:** Terminal blocks are available in 1, 2 or 3 poles where all poles are internally parallel connected.
- | **3X1X types:** 50 and 95 mm² connectors available in 3 pole types where the poles are electrically isolated from the other.
- | Touch-proof, IP20.
- | Terminal material tin-coated, greased aluminium.
- | KL1X16 & KC-terminals 16 - 35 mm² for DIN-rail mounting.
- | KL-terminals 50 - 300 mm² for DIN-rail or base mounting.
- | Environmentally friendly materials.
- | Durable laser markings.



ConnectSafe represents an extensive selection of Katko terminal blocks and connectors suitable for both aluminium and copper cables.

Easy to install directly onto a DIN rail or with screws

KATKO CONNECTSAFE KC AND KL TERMINAL BLOCKS

Ordering: Sale unit is a minimum of 1 piece

Part Number	Un (V)	In (Al) (A)	In (Cu) (A)	Al / Cu mm2	Torque Al/Cu (Nm)	No of conductors	Key size	Mounting	Weight (kg)
KC1X16	800	-	63	1.5 - 16 Copper only	1.8	2 1 pole Parallel conn	PZ2	DIN rail	0.021
KC1X16N									
KC1X16PE									
KC2X16	800	-	125	1.5 - 16 Copper only	1.8	2 1 pole Parallel conn	PZ2	DIN rail	0.047
KC2X16N									
KC2X16PE									
KC1X35	800	-	135	2.5 - 35 Copper only	2.5	2 1 pole Parallel conn.	PZ2	DIN rail	0.03
KC1X35N									
KC1X35PE									
KC2X35	800	-	270	2.5 - 35 Copper only	2.5	4 2 pole Parallel conn.	PZ2	DIN rail	0.069
KC2X35N									
KC2X35PE									
KL1X16	1000	75	76	1.6 - 16	5	2 1 pole Parallel conn.	Hex 4	DIN	0.22
KL1X16N									
KL1X16PE									
KL1X50	1000	160	160	2.5 - 50	5 (2.5 - 16 mm2) 10 (25 - 50 mm2)	2 1 pole Parallel conn.	Hex 5	Screw/DIN	0.060
KL1X50N									
KL1X50PE									
KL2X50	1000	200	320	2.5 - 50	5 (2.5 - 16 mm2) 10 (25 - 50 mm2)	4 2 pole Parallel conn.	Hex 5	Screw/DIN	0.104
KL2X50N									
KL2X50PE									
KL3X50	1000	160	160	2.5 - 50	5 (2.5 - 16 mm2) 10 (25 - 50 mm2)	6 3 pole Parallel conn.	Hex 5	Screw/DIN	0.098
KL3X50N									
KL3X50PE									
KL3X1X50	1000	160	160	2.5 - 50	5 (2.5 - 16 mm2) 10 (25 - 50 mm2)	6 3 electrically separate poles 1)	Hex 5	Screw/DIN	0.098
KL3X1X50N									
KL3X1X50PE									
KL1X95	1000	200	245	16 - 95	12 (16 - 50 mm2) 22 (70 - 95 mm2)	2 1 pole Parallel conn.	Hex 6	Screw/DIN	0.096
KL1X95N									
KL1X95PE									
KL2X95	1000	400	490	16 - 95	12 (16 - 50 mm2) 22 (70 - 95 mm2)	4 2 pole Parallel conn.	Hex 6	Screw/DIN	0.169
KL2X95N									
KL2X95PE									
KL3X95	1000	200	245	16 - 95	12 (16 - 50 mm2) 22 (70 - 95 mm2)	6 3 pole Parallel conn.	Hex 6	Screw/DIN	0.202
KL3X95N									
KL3X95PE									
KL3X1X95	1000	200	245	16 - 95	12 (16 - 50 mm2) 22 (70 - 95 mm2)	6 3 electrically separate poles 1)	Hex 6	Screw/DIN	0.202
KL3X1X95N									
KL3X1X95PE									
KL1X150	1000	250	320	25 - 150	12 (25 - 50 mm2) 22 (70 - 95 mm2) 38 (120 - 150 mm2)	2 1 pole Parallel conn.	Hex 6	Screw/DIN	0.181
KL1X150N									
KL1X150PE									
KL2X150	1000	500	640	25 - 150	12 (25 - 50 mm2) 22 (70 - 95 mm2) 38 (120 - 150 mm2)	4 2 pole Parallel conn.	Hex 6	Screw/DIN	0.317
KL2X150N									
KL2X150PE									
KL1X240	1000	315	425	35 - 240	25 (35 - 120 mm2) 55 (150 - 240 mm2)	2 1 pole Parallel conn.	Hex 8	Screw/DIN	0.293
KL1X240N									
KL1X240PE									
KL2X240	1000	630	850	35 - 240	25 (35 - 120 mm2) 55 (150 - 240 mm2)	4 2 pole Parallel conn.	Hex 8	Screw/DIN	0.522
KL2X240N									
KL2X240PE									
KL1X300	1000	400	520	95 - 300	45 (95 - 120 mm2) 75 (150 - 300 mm2)	2 1 pole Parallel conn.	Hex 12	Screw/DIN	0.491
KL1X300N									
KL1X300PE									
KL2X300	1000	800	1040	93 - 300	45 (95 - 120 mm2) 75 (150 - 300 mm2)	4 2 pole Parallel conn.	Hex 12	Screw/DIN	0.901
KL2X300N									
KL2X300PE									

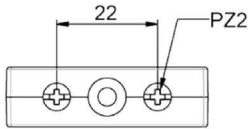
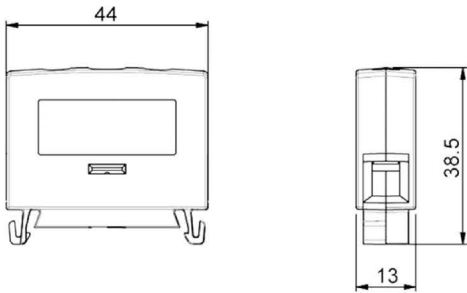
Note 1

X1, X2 or X3 types: Terminal blocks are available in 1, 2 or 3 poles where all poles are internally parallel connected.

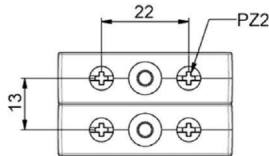
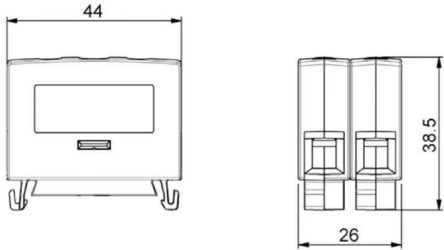
3X1X types: 50 and 95 mm2 connectors available in 3 pole types where the poles are electrically isolated from each other.

KC AND KL TERMINAL BLOCKS

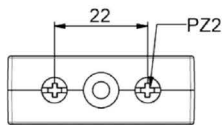
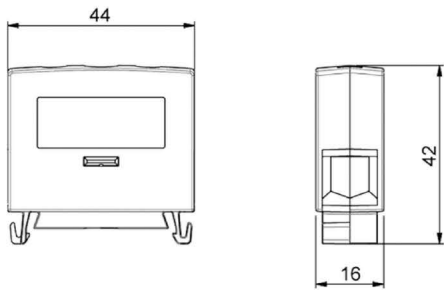
Dimensions in (mm)



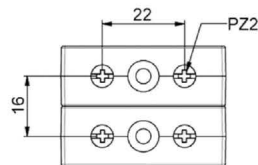
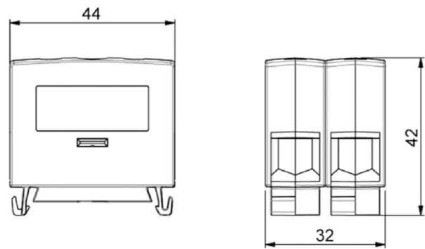
KC1X16



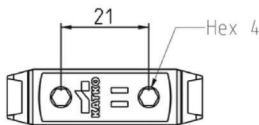
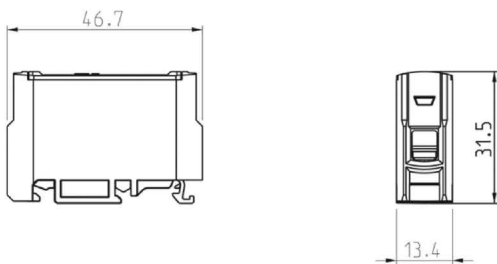
KC2X16



KC1X35



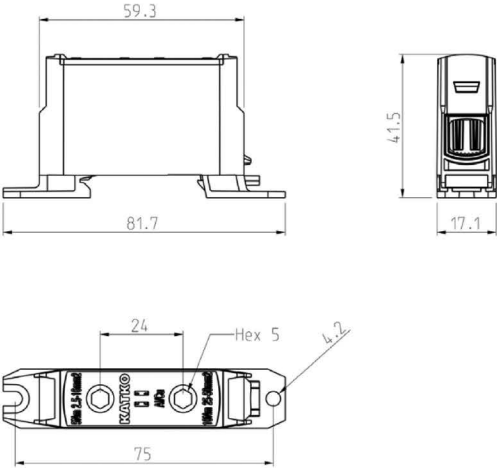
KC2X35



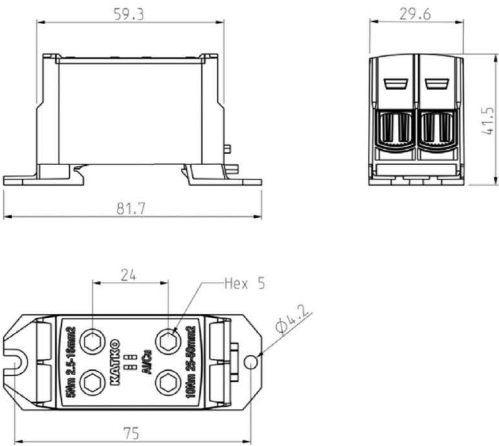
KL1X16

KC AND KL TERMINAL BLOCKS

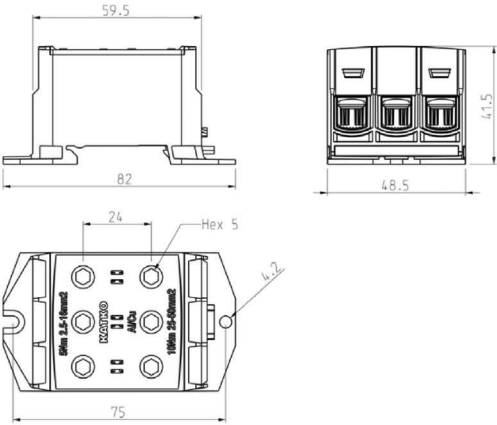
Dimensions in (mm)



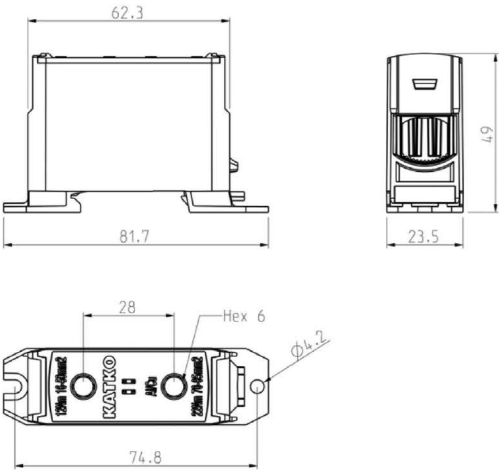
KL1X50



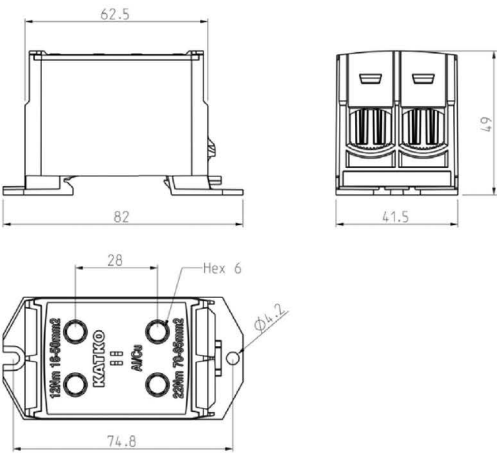
KL2X50



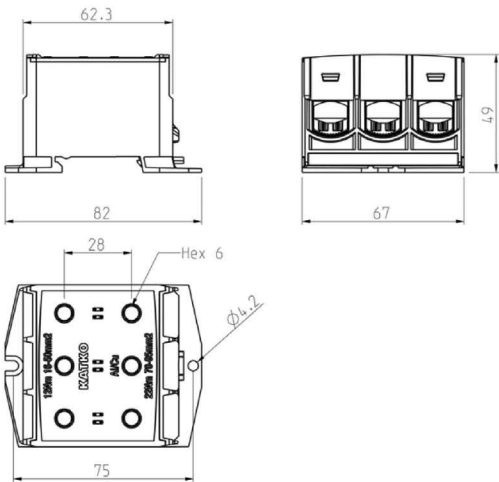
KL3X50 / 3X1X50



KL1X95



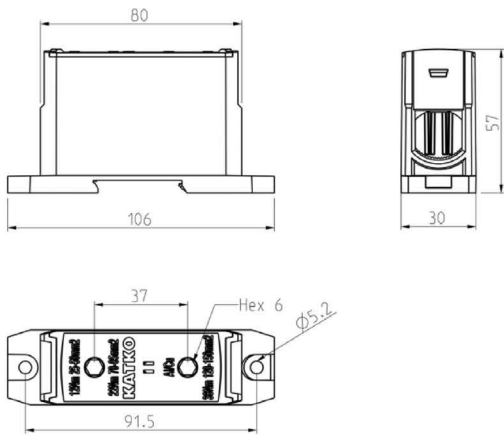
KL2X95



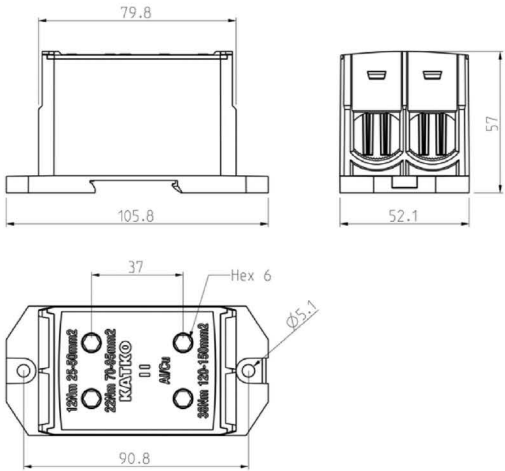
KL3X95 / 3X1X95

KC AND KL TERMINAL BLOCKS

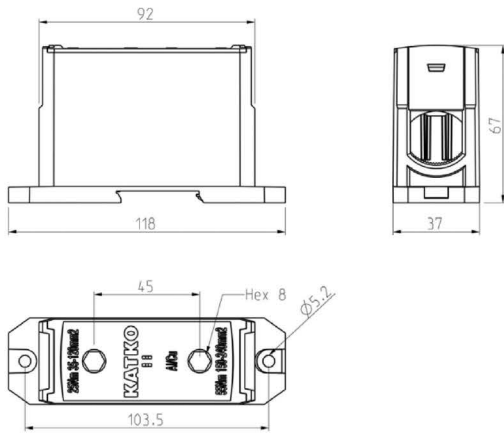
Dimensions in (mm)



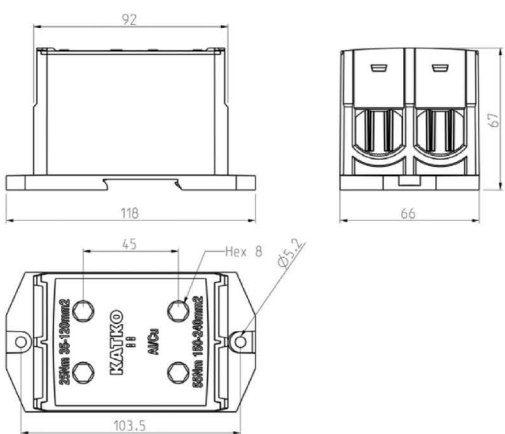
KL1X150



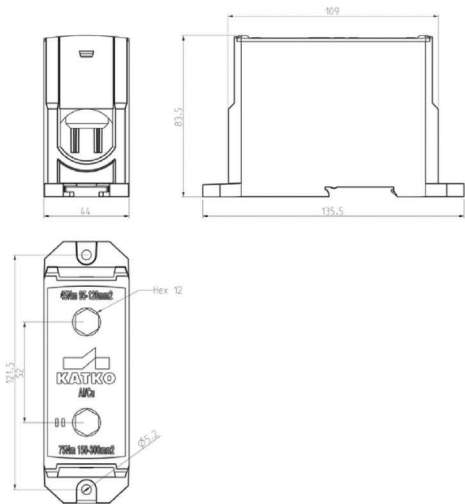
KL2X150



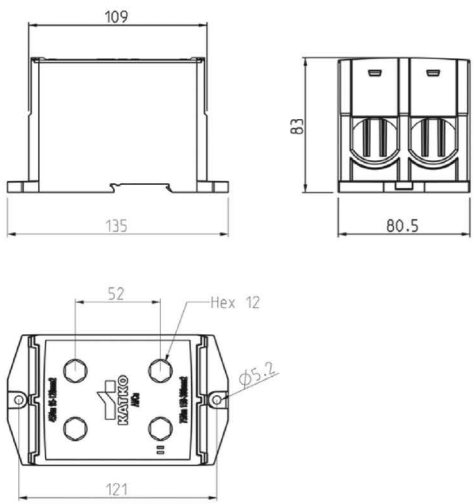
KL1X240



KL2X240



KL1X300

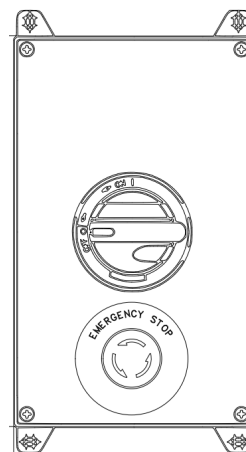


KL2X300

OTHER PRODUCTS AVAILABLE

SPECIAL APS CUSTOMISED ENCLOSED SWITCH ASSEMBLIES

APS can modify Katko enclosed switches to include other equipment such as emergency stop buttons, indicator lights, selector switches, additional terminal blocks or special labelling.



SPECIAL APS CUSTOMISED ENCLOSED SWITCHES FEATURING GRACE LED VOLTAGE INDICATOR

Grace voltage indicators and safe test points and other Grace products can be added to Katko enclosed switches, to provide additional functions.



9 TO 15 POLE SWITCHES

Katko can provide parallel connected load break switches either open types or enclosed in 1, 3, 4, 6, and 8 poles as standard. In addition switches of up to 9, 12, 15 poles are also available.



KE SIDE OPERATED SWITCHES

Side operated switches are available in polycarbonate or aluminium, with black or yellow red handles. Fire engine red types are available to act as fire switches in some applications.
Rated 16 – 40 A.



KUM AND KUT BYPASS SWITCHES

Available for bypass of soft starters or variable frequency drives.
40 – 100 A ratings.



UL ENCLOSED AND OPEN SWITCHES

UL 98 and UL 60947-4-1A listed Katko products are available for the North American or any NEMA market. Polycarbonate, Aluminium, Sheet Steel and Stainless Steel enclosed types.
Nema 4, 4X, ratings 16 – 150 A.



OTHER PRODUCTS AVAILABLE

KUE TOGGLE SWITCHES

Available in ratings, 16 – 125A. 3 or 4 poles. Padlockable in the OFF position.
Available with a yellow front plate, with red toggle.



KVKE SWITCH FUSES

Available in switch frame sizes 32A to 800A.
DIN or BS fuse types, 3 or 4 pole, direct mount or extension handles.
Panel mount types.



SPREADER BARS

Available in various configurations for Katko load break switch sizes 125 – 630A.



KLM AND KLR ENCLOSED TERMINAL BLOCK ASSEMBLIES

Polycarbonate and Stainless Steel enclosed enclosures fitted with standardised combinations of terminals, in ratings 160 – 540 A, for AL or Cu conductors, cable gland entries.

All models include:

- | L1, L2, L3 terminal blocks, grey (single or double)
- | N terminal blocks (Blue, single or double)
- | PE terminal block (Yellow/Green, single or double)
- | Other custom combinations on request.



KKL, KLH CABLE CONNECTORS

- | For 1.5 - 300 mm² Al/Cu cables
- | Material: tin-coated aluminium
- | Certified according to IEC 61238-1, Class A
- | Environmentally friendly materials
- | Sale unit = 1 pc



KPKM CABLE GLANDS

Metric sizes, polycarbonate, nickel plated brass, and stainless steel types.
In cable size diameters 3 mm to 42 mm. M12 to M63.





OUR LOCATIONS

National footprint with strategic local stockholdings.

APS Industrial is headquartered in Melbourne and in addition has a national network of offices in Adelaide, Perth, Sydney, Brisbane and Tasmania supported by strategic local stockholdings and expert technical and application knowledge.

apsindustrial.com.au

CONNECT WITH US



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Email: vic@apsindustrial.com.au

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Sales: 1300 309 303
Email: nsw@apsindustrial.com.au

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Email: qld@apsindustrial.com.au

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Email: sa@apsindustrial.com.au

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Email: wa@apsindustrial.com.au

HOBART

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Sales: 1300 309 303
Email: tas@apsindustrial.com.au