

easy to install



LOAD BREAK SWITCHES AND SWITCH FUSES **KATKO**

easy to install



The history of KATKO dates back to 1938 when the brothers Kauko and Tauno Hyryläinen started their first company to repair car engines. In 1946, after World War II, they started manufacturing electrical switches. Already in 1959 Mr. Kauko Hyryläinen created the modern-day switch fuse. Today KATKO's products not only meet the highest quality requirements but are also designed to be environmentally friendly.

Sixty years of innovation in developing and producing high-quality switches

When Mr Kauko Hyryläinen founded KATKO in 1941, one of his key targets was innovation in developing new products and production methods. The idea was to give our customers the best possible solutions to match their needs. From the outset, the goal of the company was to manufacture high-quality products using the latest technical knowledge. This is still our goal today.

KATKO ensures the quality of its products by using independent, approved testing houses to ensure that the products comply with current worldwide standards.

Since then our business has changed and expanded. We have grown from a domestic player into a company that supplies most of the market areas around the world. Today we have manufacturing companies in Finland and Poland, a sales company in the United Kingdom, and a marketing office in Dubai.

Our global network has also grown. We now have partners in over forty countries on six continents, and more than 60% of our production is exported.

Our programme of strong investment in product and production development have recently created a number of new products which we believe have good market opportunities.

I know that KATKO and our partners face interesting times ahead. We will encounter many new challenges, but we will also enjoy working together for a better future. Our aim in KATKO, along with our partners, is to leave a better world so that our children will have the best possibilities to sail on these waters.

I am sure you will find solutions for your needs in our product catalogue.

Jukka Hyryläinen
Managing Director & CEO



CONTENTS

IEC 60 947-3 ON SWITCHES	5
KATKO LOAD BREAK SWITCHES	6
Technical data 16-250 A	7
Rotary Switches	8
Toggle Switches	12
UL listed	15
Accessories	17
Technical data 125-630 A	19
VKE series	20
Accessories	24
KATKO SWITCH FUSES	25
Technical data 16-32 A	25
KKV-series	26
Technical data 20-630 A	27
KVKE series	28
Accessories	36
ACCESSORIES	37
CABLE CONNECTORS	42
TERMINAL BLOCKS	44
CABLE GLANDS	47
KATKO WORLDWIDE	52
CONDITIONS OF SALE	54



SWITCHES

According to IEC 60 947-3

SWITCH

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

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

DISCONNECTOR

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

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

SWITCH DISCONNECTOR / LOAD BREAK SWITCH

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

SWITCH DISCONNECTOR FUSE / SWITCH FUSE

A switch-disconnector/switch in which one or more poles have a fuse in series in a composite unit.

UTILIZATION CATEGORY

Utilization category	Use / Application
----------------------	-------------------

AC-20	Connecting and disconnecting under no-load.
AC-21	Switching of resistive loads including moderate overloads
AC-22	Switching of mixed loads, inductive and resistive loads including moderate overloads
AC-23	Switching of motor loads or other highly inductive loads

PROTECTION AGAINST OVERVOLTAGE

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

This characteristic also defines the dielectric quality of the device.

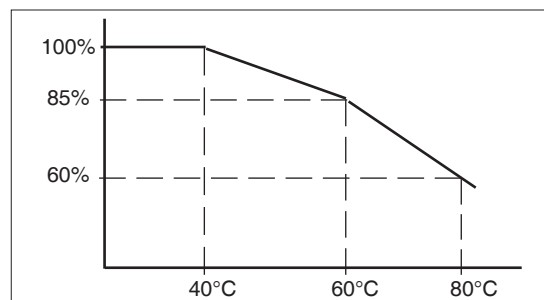
Overvoltage protection is ensured by choosing the equipment according to U_{imp} . The 4 impulse withstand categories of use at 400V/ 690V (IEC 60 364-4-44) are:

Category	U_{imp}	Applications
1	2.5 kV	Specially protected equipment
2	4 kV	Portable tools, motors, etc
3	6 kV	Equipment placed in distribution networks
4	8 kV	Equipment placed at the head of an installation.

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

OPERATING TEMPERATURE

The normal operating temperature for Katko switches is in the range -20 to +40°C. For higher ambient temperatures than 40°C the switch must be de-rated accordingly. The figure below shows maximum load as a function of ambient temperature. Maximum operating temperature in continuous use is +80°C.

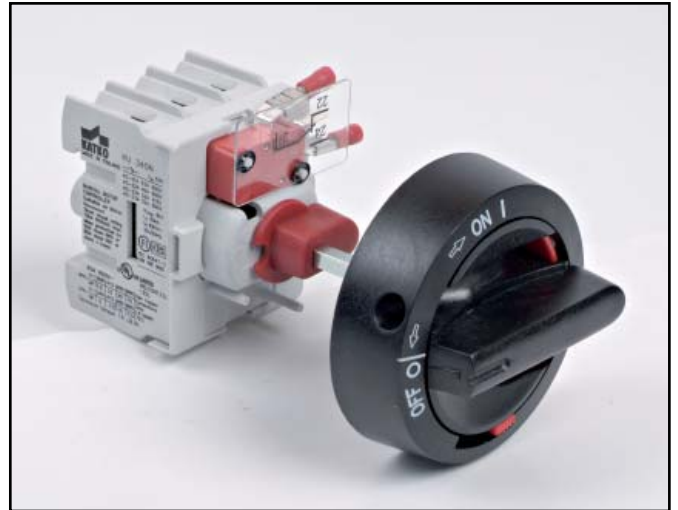


CONFORMANCE WITH STANDARDS

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

- Switches tested according to IEC 60 947-3
- AC 23 / 690V ratings
- 50 kA RMS values
- CB certificates
- UL, cUL listed (UL 508)
- Fuse holder according to IEC 269 / UL512

LOAD BREAK SWITCHES 16-630 A ROTARY AND TOGGLE SWITCHES



General information:

The professional range of Katko Load Break Switches consists of rotary and toggle switches. Types KU and VKA are rotary switches and KUE while EVA are toggle switches. The Katko range is available from 16 A up to 630 A. Also 800-3150 A is available on request.

- **KU/VKA** **16 - 250 A**
- **KUE/EVA** **16 - 250 A**
- **VKE** **125 - 630 A**

Rotary switches are available as 3-pole, 4-pole, 6-pole and 8-pole. Katko Load Break Switches comply with, and are tested according to, IEC 60 947-3 and UL 508 (16-150 A).

Certificates:	In accordance with:
CCA, CB	IEC 60 947-3
ISO 9001	IEC 60 269-2
RINA (KU, VKA, KKV332)	UL 508 (16-150 A)

Features:

- Compact size
- DIN-rail mounting
- Double break with silver rivets
- 12.5 mm air gap in open position
- AC-23, 690 V
- 50 kA RMS
- Position indicator
- Snap-on auxiliary contacts
- Adjustable shaft
- Door interlock
- Lockable handles
- Load break (will break at least 8xAC-23 current)



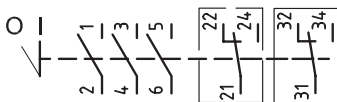
LOAD BREAK SWITCHES 16-250 A TECHNICAL DATA: KU, KUE, VKA, EVA

Load Break Switches		16A	25A	40A	63A	80A	125A		160A	200A		250A	
		KU / KUE	KU / KUE	KU / KUE	KU / KUE	KU / KUE	KU / KUE	VKA / EVA	VKA / EVA	VKA	EVA	VKA	EVA
Rated insulation voltage, U_i (V)		690	690	690	690	690	690	690	690	1000	690	1000	690
Rated thermal current, I_{th} (A)		25	40	63	80	100	125	160	200	200	200	250	250
Nominal values with cable size (mm ²)		4	10	16	25	35	50	70	95	95	95	120	120
Rated operational current, I_o (A)													
AC-21	400/415V	25	40	63	80	100	125	160	200	200	200	250	250
	500V	25	40	63	80	100	125	160	200	200	-	250	-
	690V	25	40	63	80	100	125	160	200	200	-	250	-
AC-22	400/415V	16	25	40	63	80	125	160	200	200	200	250	250
	500V	16	25	40	63	80	80	125	160	-	-	-	-
	690V	16	25	40	63	80	80	125	160	-	-	-	-
AC-23	400/415V	16	25	32/25	40	63	63	80	135	200	160	250	200
	500V	16	25/20	32/20	40/32	40/32	40/32	80	125	-	-	-	-
	690V	16	25/20	32/20	40/32	40/32	40/32	80	125	-	-	-	-
Rated operational power for 3-phase (1500 r.p.m.) squirrel cage induction motors (kW)													
AC-23	400/415V	7,5	11	15/11	22	30	30	45	75	110	75	132	90
	500V	7,5	15/11	22/11	30/22	30/22	30/22	55	75	-	-	-	-
	690V	11	22/15	30/15	37/30	37/30	37/30	55	90	-	-	-	-
Rated fused short circuit current													
Back-up fuse (A)		63	63	63	80	80	125	160	160	250	250	250	250
R.M.S. value, I_k (A)		50	50	50	50	50	30	50	50	50	50	50	50
Peak value (kA)		7,2	7,2	7,2	8,7	8,7	10	15	15	22	21	22	21
Rated short circuit making capacity, I_{cm} (kA)													
690V		2,5	2,5	2,5	3,3	3,3	3,3	5,1	5,1	7*	7*	7*	7*
Rated short time withstand current (1 s), I_{tw} (kA)													
690V		1,7	1,7	1,7	2,3	2,3	2,3	3,5	3,5	6*	6*	6*	6*
Rated breaking capacity, I_{cn} (A)													
AC-23	400/415V	128	200	256/200	320	504	504	640	1080	1600	1600	2000	2000
	500V	128	200/160	256/160	320/256	320/256	320	640	1000	-	-	-	-
	690V	128	200/160	256/160	320/256	320/256	320	640	1000	-	-	-	-
Electrical endurance (number of operations)		3000	3000	3000	3000	3000	3000	2000	2000	2000	2000	2000	2000
Mechanical endurance (number of operations)		50000	50000	50000	50000	50000	50000	16000	16000	16000	16000	16000	16000
Terminals / Bolt size Cu (mm ²)		1,5-16	1,5-16	1,5-16	2,5-35	2,5-35	2,5-35	6-70	6-70	M8	M8	M8	M8
Max terminal torque (Nm)		1,8	1,8	1,8	2,5	2,5	2,5	6	6	15-22	15-22	15-22	15-22

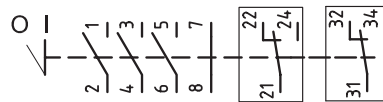
*415 V

KATKO SWITCH DIAGRAMS

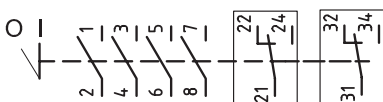
3-pole + 2NC/NO (Accessory)



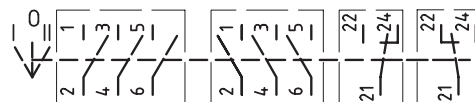
3-pole + NT + 2NC/NO (Accessory)



4-pole + 2NC/NO (Accessory)



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

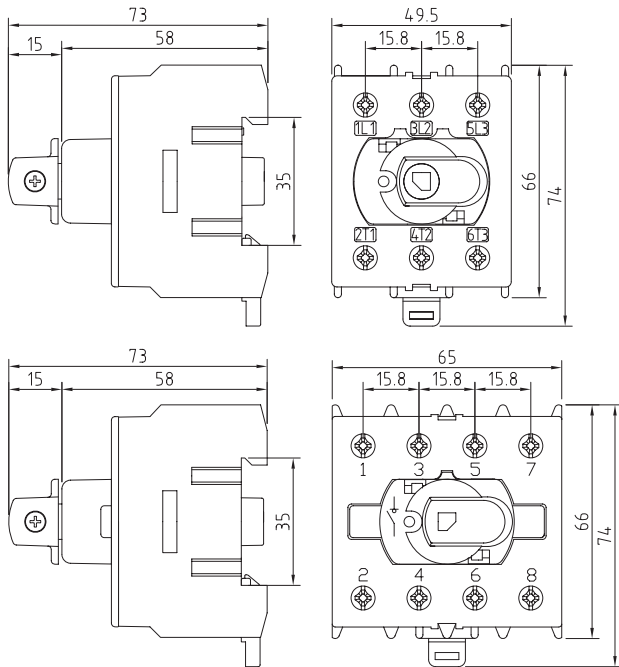


6-pole + 2NC/NO (Accessory)



LOAD BREAK SWITCHES 16-125 A ROTARY SWITCHES, KU SERIES

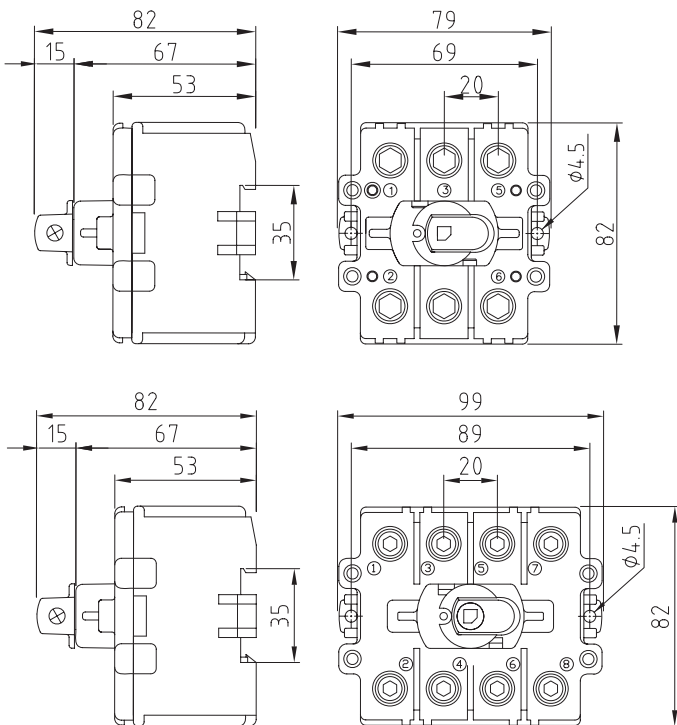
- Compact size
- DIN-rail mounting
- 3-pole and 4-pole KU-switches as standard
- 2-pole upon request
- 6-pole and 8-pole versions consist of two 3-pole or 4-pole KU-switches connected by a parallel kit
- Switch technology by means of silver contacts ensures safe and durable operation
- Compatible with handles LK10 and LK11
- Shafts L=100/200/300 AD11 and L=100/200/300 AD11/VT



Type	400 V	400 V	AC-23	400 V	AC-23	690 V	EAN-Code	Weight
	AC-21	AC-22						
	415 V	415 V ¹⁾		415 V				
	690 V	690 V ²⁾						
	I _e / A	I _e / A	I _e / A	P / kW	I _e / A	P / kW		
3-pole								
KU 316N	25 A	16 A	16 A	7,5 kW	16 A	11 kW	6419410214305	0,19
KU 325N	40 A	25 A	25 A	11 kW	25 A	22 kW	6419410214404	0,19
KU 340N	63 A	40 A	32 A	15 kW	32 A	30 kW	6419410214503	0,19
KU 363N	80 A	63 A	40 A	22 kW	40 A	37 kW	6419410214602	0,19
KU 380N	100 A	80 A	63 A	30 kW	40 A	37 kW	6419410214701	0,19
KU 3125N	125 A	125 ¹⁾ / 80 ²⁾ A	63 A	30 kW	40 A	37 kW	6419410214824	0,19
4-pole								
KU 416N	25 A	16 A	16 A	7,5 kW	16 A	11 kW	6419410215005	0,22
KU 425N	40 A	25 A	25 A	11 kW	25 A	22 kW	6419410215203	0,22
KU 440N	63 A	40 A	32 A	15 kW	32 A	30 kW	6419410215500	0,22
KU 463N	80 A	63 A	40 A	22 kW	40 A	37 kW	6419410215906	0,22
KU 480N	100 A	80 A	63 A	30 kW	40 A	37 kW	6419410216002	0,22
KU 4125N	125 A	125 ¹⁾ / 80 ²⁾ A	63 A	30 kW	40 A	37 kW	6419410216125	0,22

LOAD BREAK SWITCHES 125-160 A ROTARY SWITCHES, VKA SERIES

- Compact size
- 3-pole and 4-pole VKA-switches as standard
- 2-pole upon request
- 6-pole and 8-pole versions consist of two 3-pole or 4-pole VKA-switches connected by a parallel kit
- Switch technology by means of silver contacts ensures safe and durable operation
- Compatible with handles LK10 and LK11
- Shafts L=100/200/300 AD11 and L=100/200/300 AD11/VT

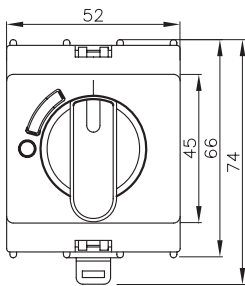


Type	400 V AC-21 415 V 690 V	400 V AC-22 415 V 690 V	AC-23	400 V 415 V	AC-23	690 V	EAN-Code	Weight kg
	I_e / A	I_e / A	I_e / A	P / kW	I_e / A	P / kW		
3-pole								
VKA 3125N	160 A	125 A	80 A	45 kW	80 A	55 kW	6419410217504	0,51
VKA 3160N	200 A	160 A	135 A	75 kW	125 A	90 kW	6419410218600	0,51
4-pole								
VKA 4125N	160 A	125 A	80 A	45 kW	80 A	55 kW	6419410218006	0,66
VKA 4160N	200 A	160 A	135 A	75 kW	125 A	90 kW	6419410219102	0,66

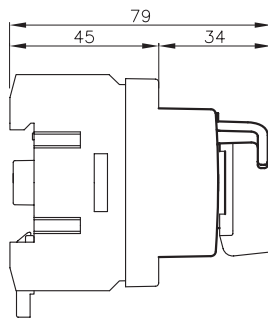
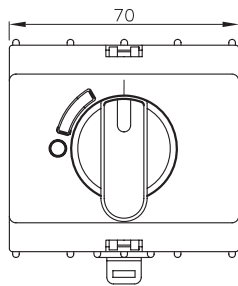
LOAD BREAK SWITCHES 16-160 A FRONT PLATES FOR KU AND VKA

- Front plates for KU and VKA switches with direct handle
- Available with grey front plate and black handle, or yellow front plate and red handle (Y/R)

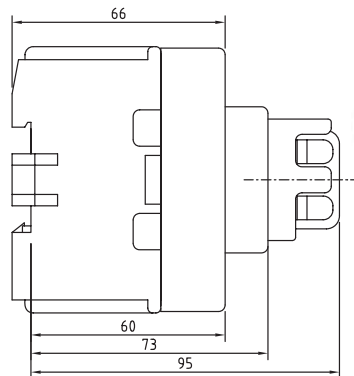
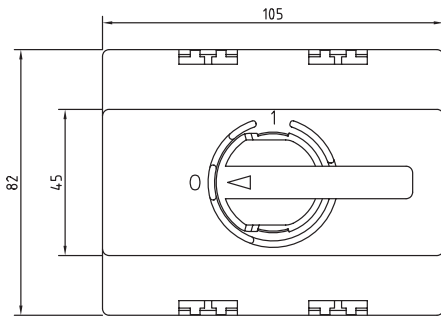
K/KU 3P:



K/KU 4P:



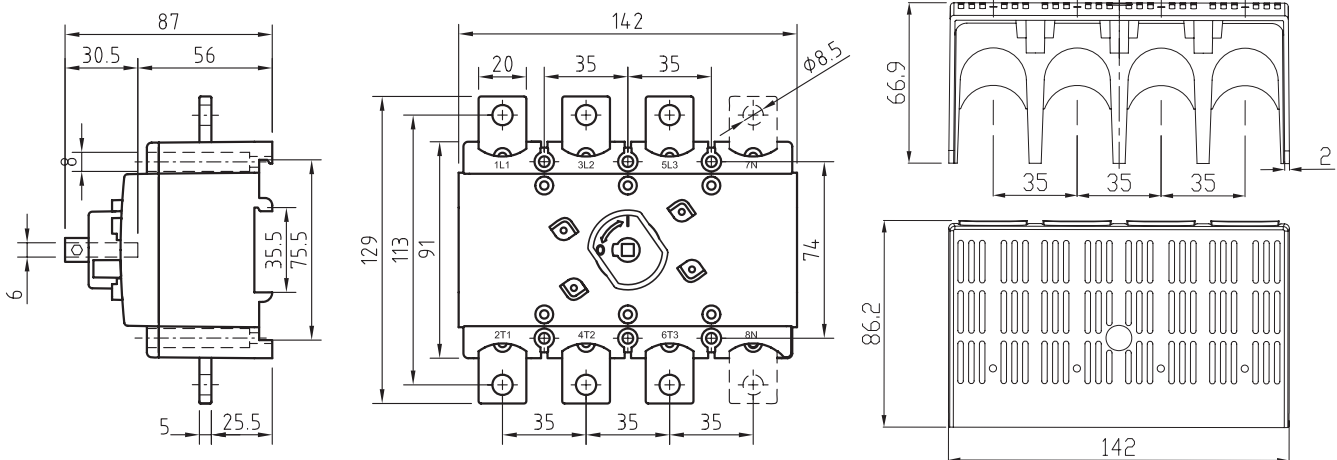
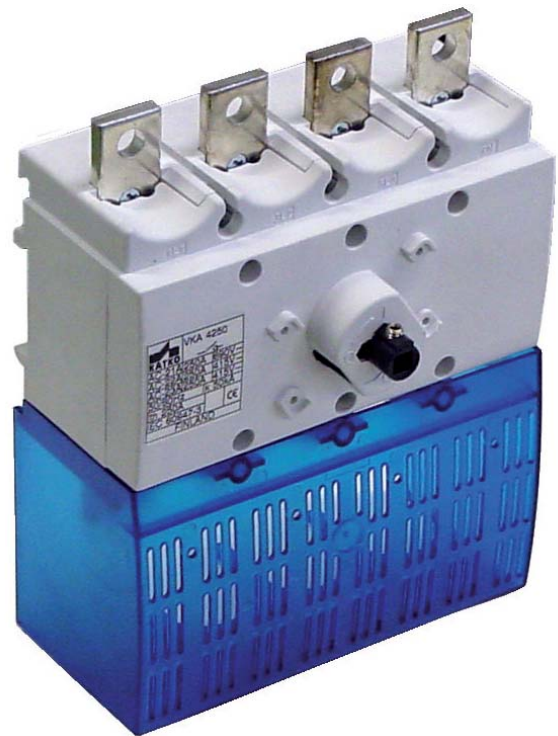
K/VKA 3-4P:



Type	For	Description	EAN-code
K/KU 3P	KU 3P	Grey plate, black direct handle	6419410221600
K/KU 4P	KU 4P	Grey plate, black direct handle	6419410222805
K/KU 3P Y/R	KU 3P	Yellow plate, red direct handle	6419410221617
K/KU 4P Y/R	KU 4P	Yellow plate, red direct handle	6419410222812
K/VKA 3P-4P	VKA 3-4P	Grey plate, black direct handle	6419410218709
K/VKA 3P-4P Y/R	VKA 3-4P	Grey plate, black direct handle	6419410218808

LOAD BREAK SWITCHES 200-250 A ROTARY SWITCHES, VKA SERIES

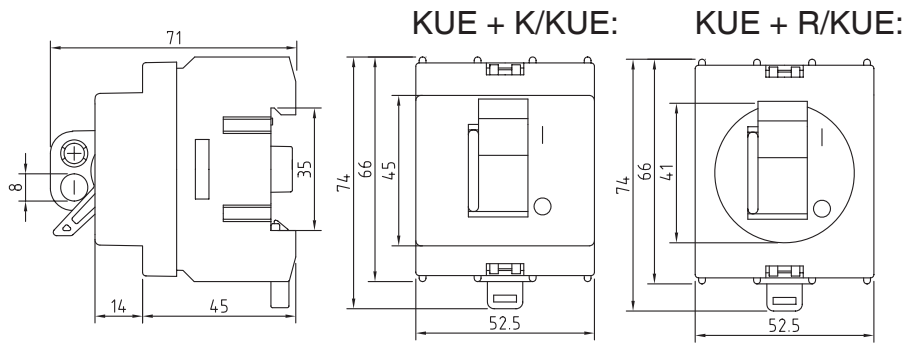
- Compact size saves space
- Early break auxiliary contacts are easy to install, max available 2x1NC/NO (change-over contact)
- Available as 3-pole and 4-pole version
- Included terminal covers LS/VKAC and phase barriers VS/VKAC enable safe use
- Connecting rivets with 350 µm silver alloy ensure a long life expectancy and safe operation in demanding conditions
- Handle LK12 and shaft L=228 mm included, suitable for 300 mm deep panel boards



Type	AC-21 400 V 415 V	AC-21 690 V	AC-22 400 V 415 V	AC-23 400 V 415 V	EAN-Code	Weight kg
	I _e / A	I _e / A	I _e / A	I _e / A P / kW		
3-pole						
VKA 3200	200 A	200 A	200 A	200 A	6419410218020	1,4
VKA 3250	250 A	250 A	250 A	250 A	6419410218044	1,4
VKA 3200 LS/VS	200 A	200 A	200 A	200 A	6419410218037	1,5
VKA 3250 LS/VS	250 A	250 A	250 A	250 A	6419410218051	1,5
4-pole						
VKA 4200	200 A	200 A	200 A	200 A	6419410219126	1,6
VKA 4250	250 A	250 A	250 A	250 A	6419410219140	1,6
VKA 4200 LS/VS	200 A	200 A	200 A	200 A	6419410219133	1,7
VKA 4250 LS/VS	250 A	250 A	250 A	250 A	6419410219157	1,7

LOAD BREAK SWITCHES 16-125 A TOGGLE SWITCHES, KUE SERIES

- Compact size
- DIN-rail mounting
- 3-pole
- Switch technology by means of silver contacts ensures safe and durable operation
- Available with adapter to connect the switch to a three-phase section rail. Three different connections heights (see next page for dimensions)
- Available with yellow front plate and red toggle: Add Y/R at the end of the product type when ordering

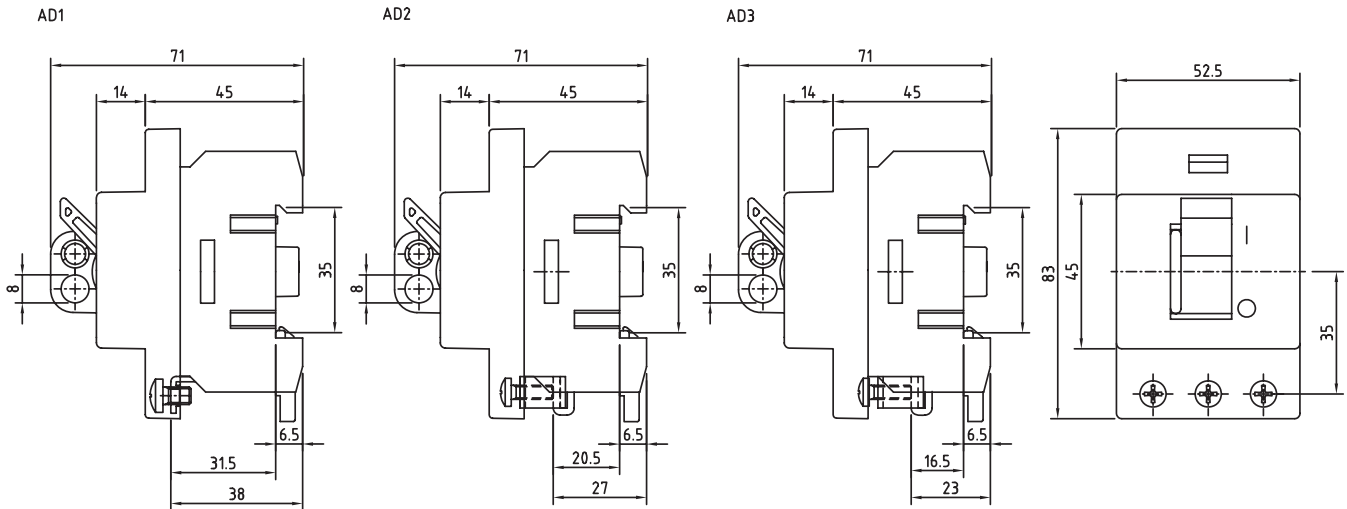


Type	400 V AC-21 415 V 690 V	400 V AC-22 415 V ¹⁾ 690 V ²⁾	400 V AC-23	400 V 415 V	AC-23	690 V	EAN-Code	Weight kg
	I _e / A	I _e / A	I _e / A	P / kW	I _e / A	P / kW		
KUE 316	25 A	16 A	16 A	7,5 kW	16 A	11 kW	6419410200308	0,17
KUE 325	40 A	25 A	25 A	11 kW	20 A	15 kW	6419410200407	0,17
KUE 340	63 A	40 A	25 A	11 kW	20 A	15 kW	6419410200506	0,17
KUE 363	80 A	63 A	40 A	22 kW	32 A	30 kW	6419410200605	0,18
KUE 380	100 A	80 A	63 A	30 kW	32 A	30 kW	6419410200704	0,18
KUE 3125	125 A	125 ¹⁾ / 80 ²⁾ A	63 A	30 kW	32 A	30 kW	6419410200902	0,18
KUE 316 + AD1 + K/KUE	25 A	16 A	16 A	7,5 kW	16 A	11 kW	6419410200322	0,21
KUE 325 + AD1 + K/KUE	40 A	25 A	25 A	11 kW	20 A	15 kW	6419410200421	0,21
KUE 340 + AD1 + K/KUE	63 A	40 A	25 A	11 kW	20 A	15 kW	6419410200520	0,21
KUE 363 + AD1 + K/KUE	80 A	63 A	40 A	22 kW	32 A	30 kW	6419410200629	0,22
KUE 380 + AD1 + K/KUE	100 A	80 A	63 A	30 kW	32 A	30 kW	6419410200728	0,22
KUE 3125 + AD1 + K/KUE	125 A	125 ¹⁾ / 80 ²⁾ A	63 A	30 kW	32 A	30 kW	6419410200834	0,22
KUE 316 + AD2 + K/KUE	25 A	16 A	16 A	7,5 kW	16 A	11 kW	6419410200339	0,21
KUE 325 + AD2 + K/KUE	40 A	25 A	25 A	11 kW	20 A	15 kW	6419410200438	0,21
KUE 340 + AD2 + K/KUE	63 A	40 A	25 A	11 kW	20 A	15 kW	6419410200537	0,21
KUE 363 + AD2 + K/KUE	80 A	63 A	40 A	22 kW	32 A	30 kW	6419410200636	0,22
KUE 380 + AD2 + K/KUE	100 A	80 A	63 A	30 kW	32 A	30 kW	6419410200735	0,22
KUE 3125 + AD2 + K/KUE	125 A	125 ¹⁾ / 80 ²⁾ A	63 A	30 kW	32 A	30 kW	6419410200841	0,22
KUE 316 + AD3 + K/KUE	25 A	16 A	16 A	7,5 kW	16 A	11 kW	6416410200346	0,21
KUE 325 + AD3 + K/KUE	40 A	25 A	25 A	11 kW	20 A	15 kW	6419410200445	0,21
KUE 340 + AD3 + K/KUE	63 A	40 A	25 A	11 kW	20 A	15 kW	6419410200810	0,21
KUE 363 + AD3 + K/KUE	80 A	63 A	40 A	22 kW	32 A	30 kW	6419410200643	0,22
KUE 380 + AD3 + K/KUE	100 A	80 A	63 A	30 kW	32 A	30 kW	6419410200827	0,22
KUE 3125 + AD3 + K/KUE	125 A	125 ¹⁾ / 80 ²⁾ A	63 A	30 kW	32 A	30 kW	6419410200858	0,22

ADDITIONAL FRONT PLATES

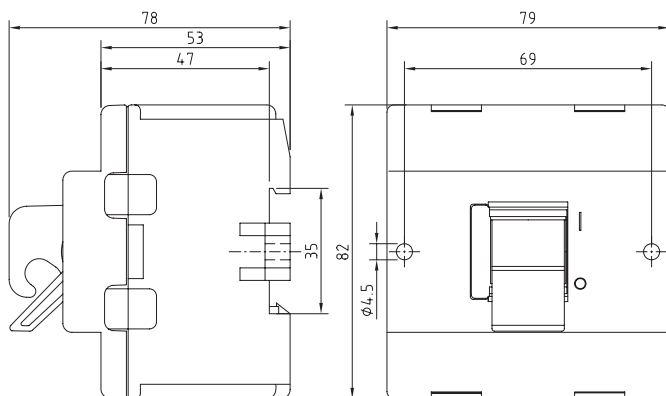
K/KUE	Rectangular front plate	6419410221808	0,02
R/KUE	Round front plate	6419410221907	0,02
K/KUE AD	Long front plate	6419410221815	0,02

TOGGLE SWITCHES, KUE SERIES ADAPTER DIMENSIONS



LOAD BREAK SWITCHES 125-160 A TOGGLE SWITCHES, EVA SERIES

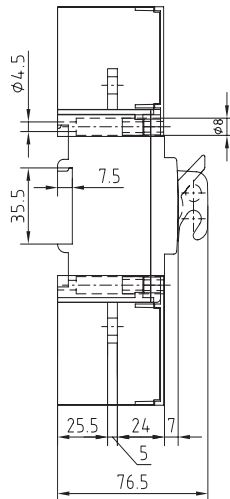
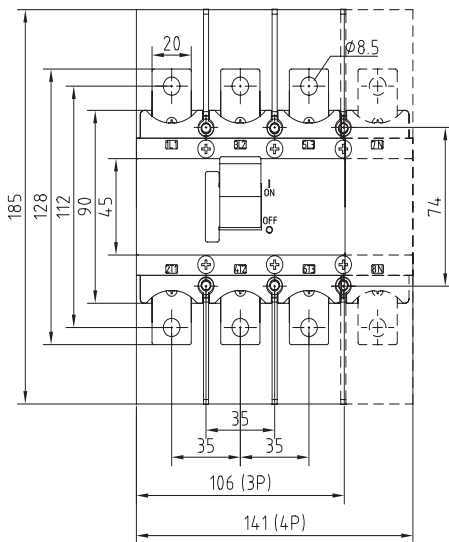
- Compact size
- 3-pole
- Switch technology by means of silver contacts ensures safe and durable operation
- Includes front plate K/EVA
- Available with red toggle (R) or with yellow front plate and red toggle (Y/R)



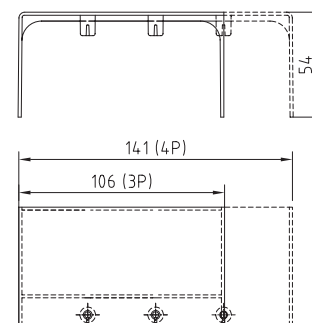
Type	400 V AC-21	400 V AC-22	AC-23	400 V 415 V	AC-23	690 V	EAN-Code	Weight kg
	415 V 690 V	415 V 690 V						
	I _e / A	I _e / A	I _e / A	P / kW	I _e / A	P / kW		
EVA 3125+K/EVA	160 A	125 A	80 A	45 kW	80 A	55 kW	6419410202517	0,51
EVA 3160+K/EVA	200 A	160 A	125 A	75 kW	125 A	90 kW	6419410203019	0,51
EVA 3125+K/EVA R	160 A	125 A	80 A	45 kW	80 A	55 kW	6419410202524	0,51
EVA 3160+K/EVA R	200 A	160 A	125 A	75 kW	125 A	90 kW	6419410203026	0,51
EVA 3125+K/EVA Y/R	160 A	125 A	80 A	45 kW	80 A	55 kW	6419410202531	0,51
EVA 3160+K/EVA Y/R	200 A	160 A	125 A	75 kW	125 A	90 kW	6419410203033	0,51

LOAD BREAK SWITCHES 200-250 A TOGGLE SWITCHES, EVA SERIES

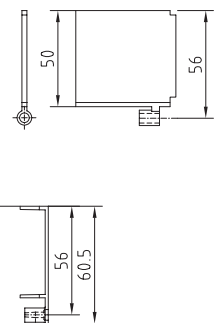
- Compact size
- 3-pole and 4-pole
- Switch technology by means of silver contacts ensures a long life expectancy and safe use in demanding conditions
- Available with terminal covers and phase barriers (LS/VS)
- Available with red toggle (R)



Terminal cover



Phase barrier



Type	AC-21 400 V 415 V	AC-22 400 V 415 V	AC-23	400 V 415 V	EAN-Code	Weight kg
	I _e / A	I _e / A	I _e / A	P / kW		
3-pole						
EVA 3200	200 A	200 A	160 A	75 kW	6419410203156	0,87
EVA 3250	250 A	250 A	200 A	90 kW	6419410203200	0,87
EVA 3200 R	200 A	200 A	160 A	75 kW	6419410203163	0,87
EVA 3250 R	250 A	250 A	200 A	90 kW	6419410203217	0,87
EVA 3200 LS/VS	200 A	200 A	160 A	75 kW	6419410203170	0,94
EVA 3250 LS/VS	250 A	250 A	200 A	90 kW	6419410203224	0,94
EVA 3200 R LS/VS	200 A	200 A	160 A	75 kW	6419410203187	0,94
EVA 3250 R LS/VS	250 A	250 A	200 A	90 kW	6419410203321	0,94
4-pole						
EVA 4200	200 A	200 A	160 A	75 kW	6419410203262	1,1
EVA 4250	250 A	250 A	200 A	90 kW	6419410203309	1,1
EVA 4200 R	200 A	200 A	160 A	75 kW	6419410203279	1,1
EVA 4250 R	250 A	250 A	200 A	90 kW	6419410203316	1,1
EVA 4200 LS/VS	200 A	200 A	160 A	75 kW	6419410203286	1,2
EVA 4250 LS/VS	250 A	250 A	200 A	90 kW	6419410203323	1,2
EVA 4200 R LS/VS	200 A	200 A	160 A	75 kW	6419410203293	1,2
EVA 4250 R LS/VS	250 A	250 A	200 A	90 kW	6419410203330	1,2

UL508 LISTED MANUAL MOTOR CONTROLLERS WITH DISCONNECTING MEANS MOTOR DISCONNECT SWITCHES



- UL 508
- CCA, CB certificates
- ISO 9001
- Compact size
- Across the line, motor starting up to 75 hp / 600 V
- General use rating 25 A to 150 A / 600 V
- Retrofit snap-on auxiliary contacts
- Comprehensive range of accessories
- Advanced switch technology by means of silver rivets ensures safe and durable operation
- DIN-rail mounting, screw mounting adapter for VKA and EVA series



ROTARY SWITCHES - EXTENDED HANDLE

Type	Amp rating (600V)	208V	415V	480V	600V	Wire size Cu only	EAN	Weight kg
3-pole								
KU 316N	16A	3HP	7.5HP	10HP	7.5HP	14-8 AWG	6419410214305	0,19
KU 325N	25A	5HP	10HP	15HP	10HP	14-8 AWG	6419410214404	0,19
KU 340N	40A	7.5HP	15HP	20HP	15HP	14-8 AWG	6419410214503	0,19
KU 363N	60A	10HP	20HP	25HP	25HP	12-4 AWG	6419410214602	0,19
VKA 380N	80A	15HP	25HP	30HP	40HP	4-1/0 AWG	6419410217443	0,51
VKA 3100N	100A	15HP	30HP	40HP	50HP	4-1/0 AWG	6419410217450	0,51
VKA 3125N	125A	20HP	40HP	50HP	60HP	4-1/0 AWG	6419410217504	0,51
VKA 3160N	150A	25HP	50HP	60HP	75HP	4-1/0 AWG	6419410218006	0,51
4-pole								
KU 416N	16A	3HP	7.5HP	10HP	7.5HP	14-8 AWG	6419410215005	0,22
KU 425N	25A	5HP	10HP	15HP	10HP	14-8 AWG	6419410215203	0,22
KU 440N	40A	7.5HP	15HP	20HP	15HP	14-8 AWG	6419410215500	0,22
KU 463N	60A	10HP	20HP	25HP	25HP	12-4 AWG	6419410215906	0,22
VKA 480N	80A	15HP	25HP	30HP	40HP	4-1/0 AWG	6419410218440	0,66
VKA 4100N	100A	15HP	30HP	40HP	50HP	4-1/0 AWG	6419410218556	0,66
VKA 4125N	125A	20HP	40HP	50HP	60HP	4-1/0 AWG	6419410218600	0,66
VKA 4160N	150A	25HP	50HP	60HP	75HP	4-1/0 AWG	6419410219102	0,66
6-pole								
KU 616N	16A	3HP	7.5HP	10HP	7.5HP	14-8 AWG	6419410223512	0,43
KU 625N	25A	5HP	10HP	15HP	10HP	14-8 AWG	6419410223529	0,43
KU 640N	40A	7.5HP	15HP	20HP	15HP	14-8 AWG	6419410223536	0,43
KU 663N	60A	10HP	20HP	25HP	25HP	12-4 AWG	6419410223543	0,43
VKA 680N	80A	15HP	25HP	30HP	40HP	4-1/0 AWG	6419410223680	1,07
VKA 6100N	100A	15HP	30HP	40HP	50HP	4-1/0 AWG	6419410223697	1,07
VKA 6125N	125A	20HP	40HP	50HP	60HP	4-1/0 AWG	6419410223703	1,07
VKA 6160N	150A	25HP	50HP	60HP	75HP	4-1/0 AWG	6419410223710	1,07

UL508 LISTED MANUAL MOTOR CONTROLLERS WITH DISCONNECTING MEANS MOTOR DISCONNECT SWITCHES



ROTARY SWITCHES - DIRECT HANDLE, TOGGLE SWITCHES

	Amp rating (600V)	208V	415V	480V	600V	Wire size Cu only	EAN	Weight kg
ROTARY SWITCHES								
3-pole								
KU 316	16A	3HP	7.5HP	10HP	7.5HP	14-8 AWG	6419410210307	0,19
KU 325	25A	5HP	10HP	15HP	10HP	14-8 AWG	6419410210406	0,19
KU 340	40A	7.5HP	15HP	20HP	15HP	14-8 AWG	6419410210505	0,19
KU 363	60A	10HP	20HP	25HP	25HP	12-4 AWG	6419410210604	0,19
VKA 380	80A	15HP	25HP	30HP	40HP	4-1/0 AWG	6419410213445	0,51
VKA 3100	100A	15HP	30HP	40HP	50HP	4-1/0 AWG	6419410213452	0,51
VKA 3125	125A	20HP	40HP	50HP	60HP	4-1/0 AWG	6419410213506	0,51
VKA 3160	150A	25HP	50HP	60HP	75HP	4-1/0 AWG	6419410214008	0,51
4-pole								
KU 416	16A	3HP	7.5HP	10HP	7.5HP	14-8 AWG	6419410211007	0,22
KU 425	25A	5HP	10HP	15HP	10HP	14-8 AWG	6419410211205	0,22
KU 440	40A	7.5HP	15HP	20HP	15HP	14-8 AWG	6419410211502	0,22
KU 463	60A	10HP	20HP	25HP	25HP	12-4 AWG	6419410211908	0,22
VKA 480	80A	15HP	25HP	30HP	40HP	4-1/0 AWG	6419410218433	0,66
VKA 4100	100A	15HP	30HP	40HP	50HP	4-1/0 AWG	6419410218457	0,66
VKA 4125	125A	20HP	40HP	50HP	60HP	4-1/0 AWG	6419410218501	0,66
VKA 4160	150A	25HP	50HP	60HP	75HP	4-1/0 AWG	6419410219003	0,66
TOGGLE SWITCHES								
3-pole								
KUE 316	16A	3HP	7.5HP	10HP	7.5HP	14-8 AWG	6419410200308	0,17
KUE 325	25A	5HP	10HP	15HP	10HP	14-8 AWG	6419410200407	0,17
KUE 340	40A	7.5HP	15HP	20HP	15HP	14-8 AWG	6419410200506	0,17
KUE 363	60A	10HP	20HP	25HP	25HP	12-4 AWG	6419410200605	0,18
EVA 380	80A	15HP	25HP	30HP	40HP	4-1/0 AWG	6419410202449	0,51
EVA 3100	100A	15HP	30HP	40HP	50HP	4-1/0 AWG	6419410202456	0,51
EVA 3125	125A	20HP	40HP	50HP	60HP	4-1/0 AWG	6419410202517	0,51
EVA 3160	150A	25HP	50HP	60HP	75HP	4-1/0 AWG	6419410203019	0,51
ACCESSORIES								
K/KU.3P	Direct handles for rotary switches	Suitable for:		KU 325/340/363		6419410221600		0,03
K/KU.3P Y/R						6419410221617		0,03
K/KU.4P		Suitable for:		KU 425/440/463		6419410222805		0,04
K/KU.4P Y/R						6419410222812		0,04
K/VKA 3-4P		Suitable for:		VKA 380/3100/3125/3160		6419410218709		0,05
K/VKA 3-4P Y/R			VKA 3480/4100/4125/4160		6419410218808		0,05	
K/KUE	Front plates for toggle switches	Rectangular (DIN)				6419410221808		0,02
R/KUE		Round (Ø 41.3 mm)				6419410221907		0,02

LOAD BREAK SWITCHES 16-250 A ACCESSORIES FOR KU, VKA, KUE AND EVA SWITCHES

Type	For	Description	EAN-code	Page
Handles				
LK10	KU	Black	6419410222539	37
LK10 Y/R		Yellow/red	6419410222553	
LK11	VKA 125-160 A	Black	6419410222607	
LK11 Y/R		Yellow/red	6419410222614	
LK12	VKA 200-250 A	Black	6419410222683	
LK12 Y/R		Yellow/red	6419410222690	
Shafts				
L=100 AD11	Handles LK10 LK11	Length 100 mm, aluminium	6419410253106	38
L=200 AD11		Length 200 mm, aluminium	6419410253113	
L=300 AD11		Length 300 mm, aluminium	6419410253120	
L=100 AD11/T		Length 100 mm, steel	6419410253137	
L=200 AD11/T		Length 200 mm, steel	6419410253144	
L=300 AD11/T		Length 300 mm, steel	6419410253151	
L=100 AD11/VT		Length 100 mm, steel, slanted	6419410253168	
L=200 AD11/VT		Length 200 mm, steel, slanted	6419410253175	
L=300 AD11/VT		Length 300 mm, steel, slanted	6419410253182	
Parallel kits				
RV 52S	KU	For 2 x KU 3P	6419410226223	41
RV 66		For 2 x KU 3P	6419410226285	
RV 66S		For 2 x KU 3P	6419410226261	
RV 80	KU, VKA	For 2 x KU 4P / 2 x VKA 3P	6419410226308	
RV 80S		For 2 x KU 4P / 2 x VKA 3P	6419410226292	
RV 104	VKA 125-160 A	For 2 x (VKA 3P+ALK 3160) / 2 x VKA 4P	6419410226322	
RV 104S		For 2 x (VKA 3P+ALK 3160) / 2 x VKA 4P	6419410226315	
RV 126		For 2 x (VKA 4P+ALK 4160)	6419410226346	
RV 126S		For 2 x (VKA 4P+ALK 4160)	6419410226339	
RV 143S/6	200-250 A	For 2 x VKA 3P	6419410226353	
Cable connectors				
KKL 1x50	63-160 A	Al 16-50 mm , Cu 2,5-50 mm	6419410358108	42
Contact protections				
KU 0.V	KU	For 3/4P switch	6419410300404	
VKA 0.V	VKA	For 3/4P switch	6419410300503	
KKS/VKA 3P		For 3P switch	6419410225509	
Auxiliary contacts				
KU1.V	KU	1NO+1NC	6419410300008	39
KU2.V		2NO+2NC	6419410300107	
OKA 1.V		1NO+1NC with door mounting kit, black	6419410224052	
OKA 1.V Y/R		1NO+1NC with door mounting kit, yellow/red	6419410224403	
OKA 2.V		2NO+2NC with door mounting kit, black	6419410224205	
OKA 2.V Y/R		2NO+2NC with door mounting kit, yellow/red	6419410224502	
VKA 1.V	VKA 125-160 A	1NO+1NC	6419410300206	
VKA 2.V		2NO+2NC	6419410300305	
VKAC 1.V	VKA 200-250 A	1NO+1NC	6419410300800	
VKAC 2.V		2NO+2NC	6419410300909	
OKA/VKA1.V	VKA 125-160 A	1NO+1NC with door mounting kit, black	6419410224632	
OKA/VKA1.V Y/R		1NO+1NC with door mounting kit, yellow/red	6419410224649	
OKA/VKA2.V		2NO+2NC with door mounting kit, black	6419410224625	
OKA/VKA2.V Y/R		2NO+2NC with door mounting kit, yellow/red	6419410224694	
Spreaders				
ALK 3160	VKA, EVA	For 3P switch	6419410225301	39
ALK 4160	125-160 A	For 4P switch	6419410225400	

LOAD BREAK SWITCHES 16-250 A ACCESSORIES FOR KU, VKA, KUE AND EVA SWITCHES

	For	Description	EAN-code	Page
Screw fixing adaptors for DIN rail				
RKA-3P	KU	For 3P switch	6419410222003	
RKA-4P		For 4P switch	6419410222706	
Door mounting kits				
OKA/KU/LK10	KU	Black, for 3P switch, with LK10 handle	6419410224656	41
OKA/KU/LK10 Y/R		Yellow/red, for 3P switch, with LK10 handle	6419410224663	
OKA/KU4P/LK10		Black, for 4P switch, with LK10 handle	6419410224700	
OKA/KU4P/LK10 Y/R		Yellow/red, for 4P switch, with LK10 handle	6419410224717	
OKA/VKA	VKA	Black, with LK11 handle	6419410224601	
OKA/VKA Y/R		Yellow/red, with LK11 handle	6419410224618	
OKA/VKA/LK10		Black, with LK10 handle	6419410224670	
OKA/VKA/LK10 Y/R		Yellow/red, with LK10 handle	6419410224687	
Change over kits				
KU3/4P VV	KU	Direct handle, black	6419410221624	
KU3/4P VV Y/R		Direct handle, red	6419410221631	
VV 1-2	VKA	No 0-position	6419410226506	40
VV 1-0-2		Positions 1, 0, 2	6419410226407	
VV.1-0-2/K		Positions 1, 0, 2 with supporting steel	6419410226421	
VV.1-0-2/LK12		Positions 1, 0, 2 with LK12 handle	6419410226605	

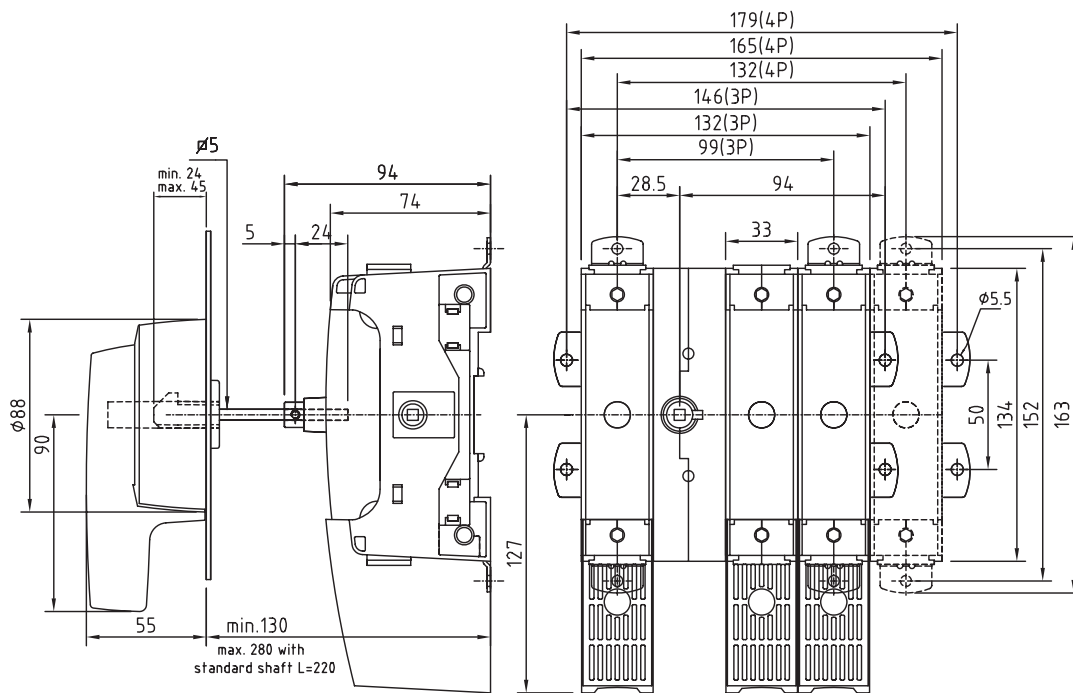


LOAD BREAK SWITCHES 125-630 A TECHNICAL DATA: VKE

Load Break Switches		125 A	160 A	200 A	250 A	315 A	400 A	630 A	
Rated insulation voltage, U_i (V)		690	690	1000	1000	1000	1000	1000	
Rated thermal current, I_{th} (A)		160	160	200	250	315	400	630	
Nominal values with cable size (mm ²)		70	70	95	120	185	240	2x185	
Rated operational current, I_e (A)									
AC-21	400/415V	160	160	200	250	315	400	630	
	500V	160	160	200	250	315	400	630	
	690V	160	160	200	250	315	400	630	
AC-22	400/415V	125	160	200	250	315	400	630	
	500V	125	160	200	250	315	400	630	
	690V	125	160	200	250	315	400	630	
AC-23	400/415V	125	125	200	250	315	400	630	
	500V	125	125	200	250	315	400	500	
	690V	125	125	200	250	315	400	500	
Rated operational power for 3-phase (1500 r.p.m.) squirrel cage induction motors (kW)									
AC-23	400/415V	55	55	110	132	160	200	355	
	500V	75	75	132	160	200	250	355	
	690V	90	90	160	250	315	355	500	
Rated fused short circuit current									
Back-up fuse (A)		125	160	250	250	400	400	630	
R.M.S. value, I_k (A)		50	25	50	50	50	50	50	
Peak value (kA)		11	11	18	18	26	26	32	
Rated short circuit making capacity, I_{cm} (kA)									
		690V	6	6	7	7	12	12	17
Rated short time withstand current (1 s), I_{cw} (kA)									
		690V	4	4	5	5	7	7	10
Rated breaking capacity, I_{cn} (A)									
AC-23	400/415V	1000	1000	1600	2000	2520	3200	5040	
	500V	1000	1000	1600	2000	2520	3200	4000	
	690V	1000	1000	1600	2000	2520	3200	4000	
Electrical endurance (number of operations)		2000	2000	2000	2000	2000	2000	2000	
Mechanical endurance (number of operations)		16000	16000	16000	16000	1000	10000	10000	
Terminals / Bolt size Cu (mm ²)		6-70	6-70	M10	M10	M10	M10	M12	
Max terminal torque (Nm)		6	6	30-44	30-44	30-44	30-44	50-75	

LOAD BREAK SWITCHES 125-160 A VKE SERIES

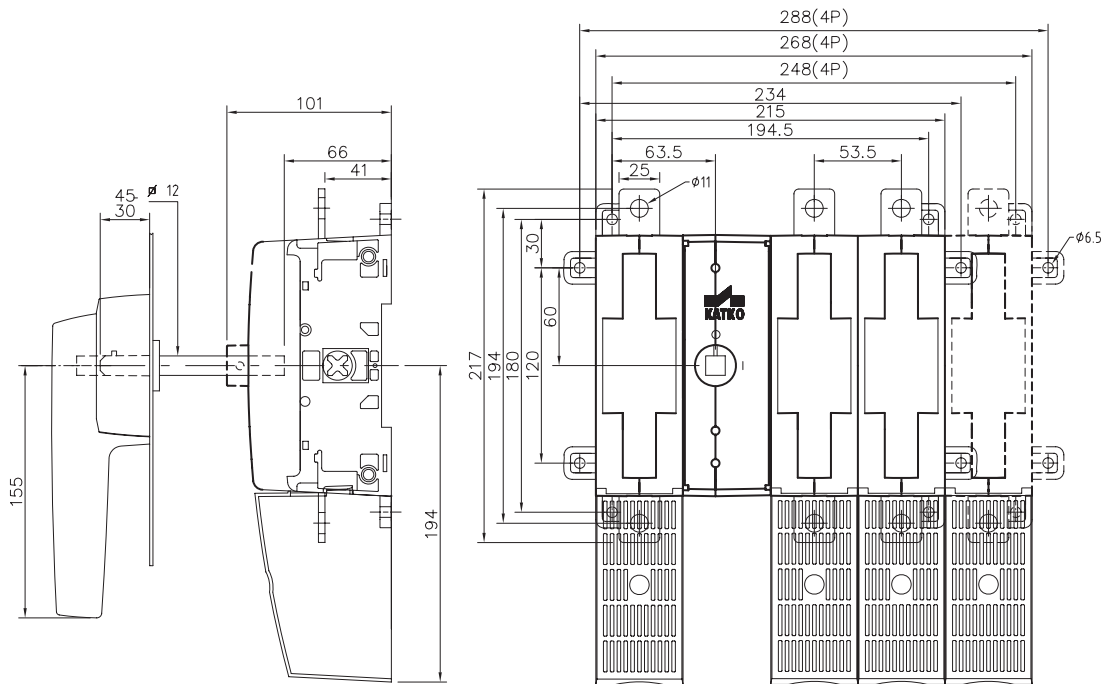
- Compact size saves space
- The modular structure enables the drive mechanism position to be varied
- Front operated
- Available as 1-, 2-, 3- and 4-pole
- Includes shaft L=220 and LK12 handle
- Available with terminal covers (LS)
- Easy to install auxiliary contacts



Type	400 V	400 V	AC-23	400 V	AC-23	690 V	EAN-Code	Weight kg
	AC-21	AC-22		415 V		415 V		
	690 V	690 V	I_e / A	I_e / A	I_e / A	P / kW		
3-pole								
VKE 3125	160 A	125 A	125 A	55 kW	125 A	90 kW	6419410205006	1,6
VKE 3160	160 A	160 A	125 A	55 kW	125 A	90 kW	6419410205013	1,6
VKE 3125 NT	160 A	125 A	125 A	55 kW	125 A	90 kW	6419410285848	1,9
VKE 3160 NT	160 A	160 A	125 A	55 kW	125 A	90 kW	6419410285855	1,9
4-pole								
VKE 4125	160 A	125 A	125 A	55 kW	125 A	90 kW	6419410205020	1,9
VKE 4160	160 A	160 A	125 A	55 kW	125 A	90 kW	6419410205037	1,9

LOAD BREAK SWITCHES 200-250 A VKE SERIES

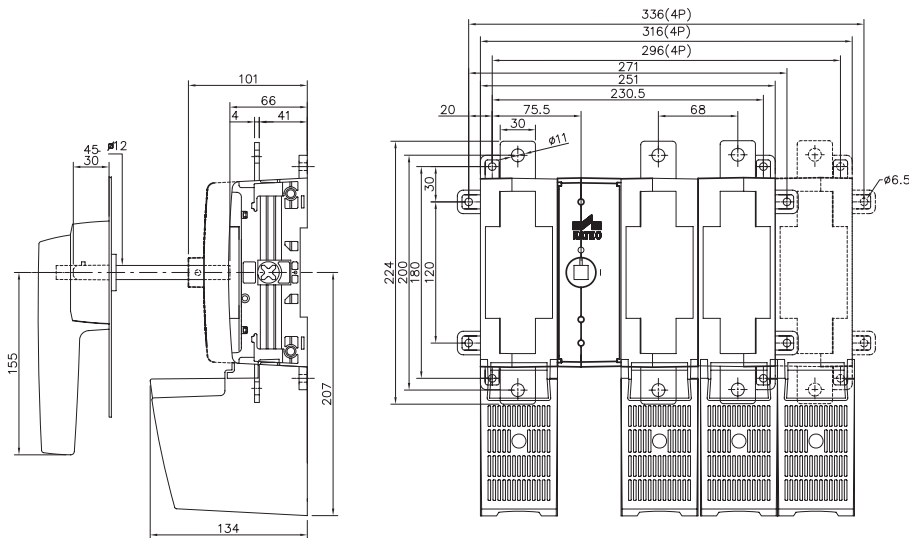
- Compact size saves space
- The modular structure enables the drive mechanism position to be varied
- Front operated
- Available as 1-, 2-, 3-, 4- and 6-pole
- Includes shaft L=228 and LK14 handle
- Available with terminal covers (LS)
- Easy to install auxiliary contacts



Type	400 V	400 V	AC-23	400 V	AC-23	EAN-Code	Weight kg
	AC-21	AC-22		415 V	690 V		
	415 V	415 V	I _e / A	415 V	I _e / A		
	690 V	690 V		P / kW			
	I _e / A	I _e / A			I _e / A		
3-pole							
VKE 3200	200 A	200 A	200 A	110 kW	200 A	6419410280010	4,0
VKE 3250	250 A	250 A	250 A	132 kW	250 A	6419410280119	4,0
VKE 3200 NT	200 A	200 A	200 A	110 kW	200 A	6419410285862	4,6
VKE 3250 NT	250 A	250 A	250 A	132 kW	250 A	6419410285879	4,6
4-pole							
VKE 4200	200 A	200 A	200 A	110 kW	200 A	6419410280027	4,6
VKE 4250	250 A	250 A	250 A	132 kW	250 A	6419410280126	4,6
6-pole							
VKE 6200	200 A	200 A	200 A	110 kW	200 A	6419410280607	6,3
VKE 6250	250 A	250 A	250 A	132 kW	250 A	6419410280652	6,3

LOAD BREAK SWITCHES 315-400 A VKE SERIES

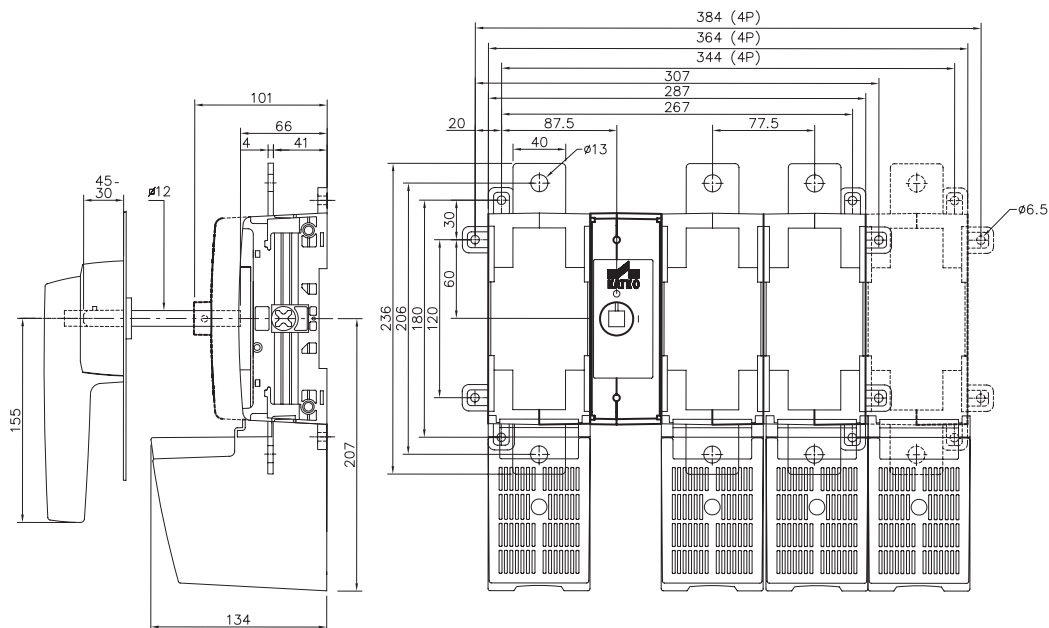
- Compact size saves space
- The modular structure enables the drive mechanism position to be varied
- Front operated
- Available as 1-, 2-, 3-, 4- and 6-pole
- Includes shaft L=228 and LK14 handle
- Available with terminal covers (LS)
- Easy to install auxiliary contacts



Type	400 V	400 V	AC-23	400 V	AC-23	690 V	EAN-Code	Weight kg
	AC-21 415 V 690 V	AC-22 415 V 690 V		415 V				
	I_e / A	I_e / A	I_e / A	P / kW	I_e / A	P / kW		
3-pole								
VKE 3315	315 A	315 A	315 A	160 kW	315 A	315 kW	6419410285886	4,6
VKE 3400	400 A	400 A	400 A	200 kW	400 A	355 kW	6419410280133	4,6
VKE 3315 NT	315 A	315 A	315 A	160 kW	315 A	315 kW	6419410285893	5,4
VKE 3400 NT	400 A	400 A	400 A	200 kW	400 A	355 kW	6419410285916	5,4
4-pole								
VKE 4315	315 A	315 A	315 A	160 kW	315 A	315 kW	6419410285909	5,4
VKE 4400	400 A	400 A	400 A	200 kW	400 A	355 kW	6419410280140	5,4
6-pole								
VKE 6315	315 A	315 A	315 A	160 kW	315 A	315 kW	6419410280706	7,2
VKE 6400	400 A	400 A	400 A	200 kW	400 A	355 kW	6419410280737	7,2

LOAD BREAK SWITCHES 630 A VKE SERIES

- Compact size saves space
- The modular structure enables the drive mechanism position to be varied
- Front operated
- Available as 1-, 2-, 3-, 4- and 6-pole
- Includes shaft L=228 and LK14 handle
- Available with terminal covers (LS)
- Easy to install auxiliary contacts



Type	400 V	400 V	AC-23	400 V	AC-23	690 V	EAN-Code	Weight kg
	AC-21	AC-22		415 V				
	415 V	415 V		415 V				
	690 V	690 V						
	I_e / A	I_e / A	I_e / A	P / kW	I_e / A	P / kW		
3-pole								
VKE 3630	630 A	630 A	630 A	355 kW	500 A	500 kW	6419410284858	5,3
VKE 3630 NT	630 A	630 A	630 A	355 kW	500 A	500 kW	6419410284865	6,6
4-pole								
VKE 4630	630 A	630 A	630 A	355 kW	500 A	500 kW	6419410280164	6,6
6-pole								
VKE 6630	630 A	630 A	630 A	355 kW	500 A	500 kW	6419410280751	10,6

LOAD BREAK SWITCHES 125-630 A ACCESSORIES, VKE SERIES

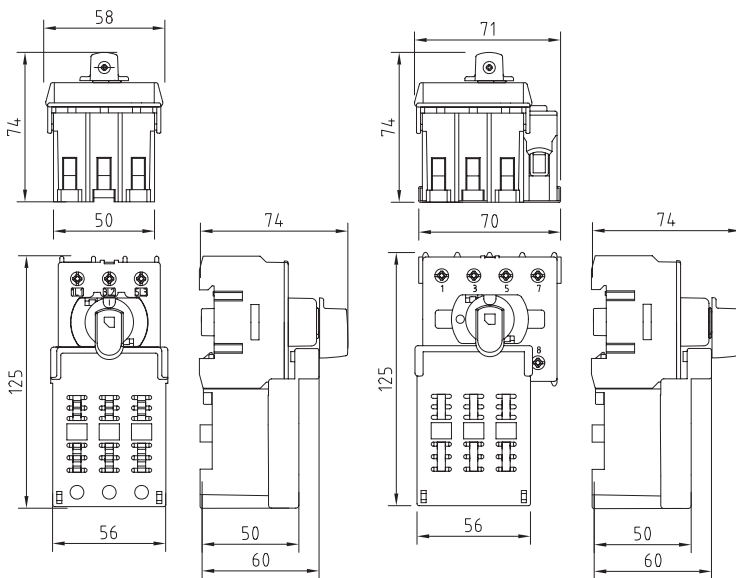
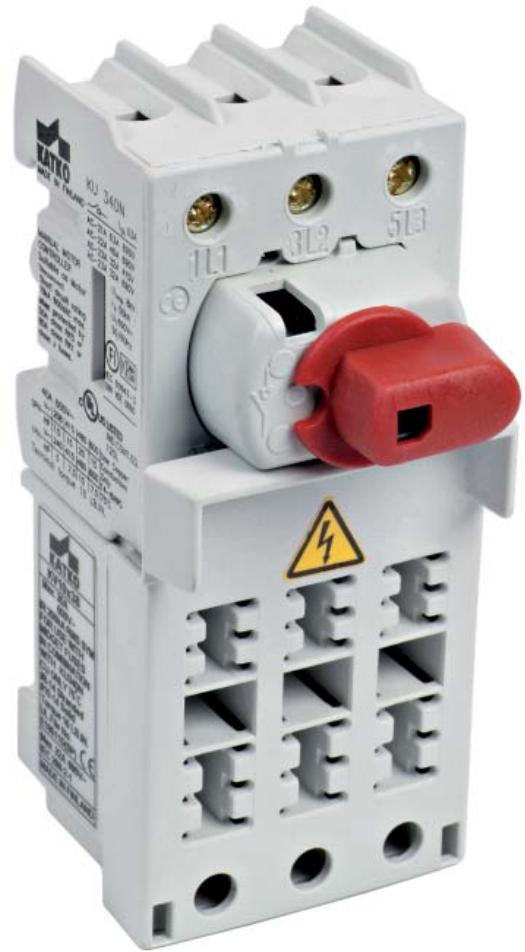
Type	For	Description	EAN-code	Page
Terminal covers				
LS 125	VKE	For 125-160 A switch	6419410286937	
LS 250		For 200-250 A switch	6419410287729	
LS 400		For 315-400 A switch	6419410287866	
LS 630		For 630 A switch	6419410284957	
Spreaders				
KVKE ALK 160 3P	125-160 A	For 3P switch	6419410286999	39
KVKE ALK 160 4P		For 4P switch	6419410287002	
Cable connectors				
KKL 1x50	VKE	Al 16-50 mm , Cu 2,5-50 mm	6419410358108	42
KKL 1x70T		Al/Cu 6-70 mm	6419410358740	
KKL 1x70R		Al/Cu 6-70 mm	6419410358757	
KKL 1x95T		Al/Cu 25-95 mm	6419410358801	
KKL 1x95R		Al/Cu 25-95 mm	6419410358818	
KKL 1x120T		Al/Cu 25-120 mm	6419410358849	
KKL 1x185		Al/Cu 95-185 mm	6419410358825	
KKL 2x185		Al/Cu 95-185 mm	6419410358856	
KKL 1x300		Al/Cu 185-300 mm	6419410358832	
KKL 2x300		Al/Cu 185-300 mm	6419410358863	
Auxiliary contacts				
KVKE 1.V	VKE	1NO+1NC	6419410286982	39
KVKE 2.V		2NO+2NC	6419410287781	
Handles				
LK11	125-160 A	Black	6419410222607	37
LK 11Y/R		Yellow/red	6419410222614	
LK12		Black	6419410222683	
LK12 Y/R		Yellow/red	6419410222690	
LK13	125-400 A	Black	6419410222645	
LK13 Y/R		Yellow/red	6419410222652	
LK14	200-630 A	Black	6419410222669	
LK14 Y/R		Yellow/red	6419410222676	
Shafts				
L=100 AD11	LK11 handle	Length 100 mm, aluminium	6419410253106	38
L=200 AD11		Length 200 mm, aluminium	6419410253113	
L=300 AD11		Length 300 mm, aluminium	6419410253120	
L=100 AD11/T		Length 100 mm, steel	6419410253137	
L=200 AD11/T		Length 200 mm, steel	6419410253144	
L=300 AD11/T		Length 300 mm, steel	6419410253151	
L=100 AD11/VT		Length 100 mm, steel, slanted	6419410253168	
L=200 AD11/VT		Length 200 mm, steel, slanted	6419410253175	

FUSE SWITCH DISCONNECTORS 16-32 A TECHNICAL DATA, KKV-MODELS

Fuse Switch Disconnectors		16 A	25 A	32 A
Rated insulation voltage, U_i (V)		690	690	690
Rated thermal current, I_{th} (A)		16	25	32
Nominal values with cable size (mm ²)		2,5	4	6
Rated operational current, I_e (A)				
AC-21	400/415V	16	25	32
	500V	16	25	32
	690V	16	25	32
AC-22	400/415V	16	25	32
	500V	16	25	32
	690V	16	25	32
AC-23	400/415V	16	25	32
	500V	16	25	32
	690V	16	25	32
Rated operational power for 3-phase (1500 r.p.m.) squirrel cage induction motors (kW)				
AC-23	400/415V	7,5	11	15
	500V	7,5	15	22
	690V	11	22	30
Rated fused short circuit current				
Back-up fuse (A)		63	63	63
R.M.S. value, I_k (A)		50	50	50
Peak value (kA)		7,2	7,2	7,2
Rated short circuit making capacity, I_{cm} (kA)				
	690V	2,5	2,5	2,5
Rated short time withstand current (1 s), I_{cw} (kA)				
	690V	1,7	1,7	1,7
Rated breaking capacity, I_{cn} (A)				
AC-23	400/415V	128	200	256
	500V	128	200	256
	690V	128	200	256
Electrical endurance (number of operations)		3000	3000	3000
Mechanical endurance (number of operations)		50000	50000	50000
Terminals / Bolt size Cu (mm ²)		1,5-16	1,5-16	1,5-16
Max terminal torque (Nm)		1,8	1,8	1,8

FUSE SWITCH DISCONNECTORS 16-32 A KKV SERIES

- Available as 3-pole and 4-pole
- Consists of KU switch and KV 10 x 38 fuse holder
- Compatible with handles LK10 and LK11
- Shafts L=100/200/300 AD11 and L=100/200/300 AD11/VT



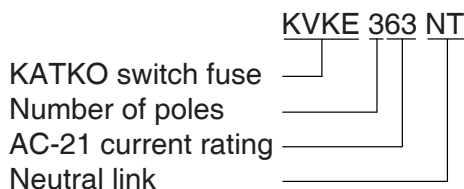
Type	400 V	400 V	AC-23	400 V	AC-23	690 V	EAN-Code	Weight kg
	AC-21	415 V		AC-22		415 V		
	I _e / A	I _e / A	I _e / A	P / kW	I _e / A	P / kW		
3-pole								
KKV 316	16 A	16 A	16 A	7,5 kW	16 A	11 kW	6419410212608	0,32
KKV 325	25 A	25 A	25 A	11 kW	25 A	22 kW	6419410212707	0,32
KKV 332	32 A	32 A	32 A	15 kW	32 A	30 kW	6419410212806	0,32
4-pole								
KKV 416	16 A	16 A	16 A	7,5 kW	16 A	11 kW	6419410212653	0,36
KKV 425	25 A	25 A	25 A	11 kW	25 A	22 kW	6419410212752	0,36
KKV 432	32 A	32 A	32 A	15 kW	32 A	30 kW	6419410212851	0,36

FUSE SWITCH DISCONNECTORS 20-630 A TECHNICAL DATA, KVKE SERIES

Switch fuses		20A	32A	63A	80A	100A	125A	160A	200A	250A	315A	400A	630A
Rated insulation voltage, U_i (V)		1000	1000	690	690	690	690	690	1000	1000	1000	1000	1000
Rated thermal current, I_{th} (A) ¹⁾		20	32	63	80	100	125	160	200	250	315	400	630
Nominal values with cable size (mm ²)		4	6	16	25	35	50	70	95	120	185	240	2x185
Rated operational current, I_e (A)													
AC-21	400/415V	20	32	63	80	100	125	160	200	250	315	400	630
	500V	-	-	63	80	100	125	160	200	250	315	400	630
	690V	-	-	63	80	100	125	160	200	250	315	400	630
AC-22	400/415V	20	32	63	80	100	125	160	200	250	315	400	630
	500V	-	-	63	80	100	125	160	200	250	315	400	630
	690V	-	-	63	80	100	125	160	200	250	315	400	630
AC-23	400/415V	20	32	63	80	100	125	125	200	250	315	400	630
	500V	-	-	63	80	100	125	125	200	250	315	400	500
	690V	-	-	63	80	100	125	125	200	250	315	400	500
Rated operational power for 3-phase (1500 r.p.m.) squirrel cage induction motors (kW)													
AC-23	400/415V	10	15	30	45	55	55	55	110	132	160	200	355
	500V	-	-	37	55	55	75	75	132	160	200	250	355
	690V	-	-	55	75	90	110	110	160	250	315	355	500
Rated fused short circuit current													
Back-up fuse (A)		32	32	63	80	100	125	160	200	250	400	400	630
R.M.S. value, I_k (A)		50	50	50	50	50	50	25	50	50	50	50	50
Peak value (kA)		-	-	11	11	11	11	11	18	18	26	26	32
Rated short circuit making capacity, I_{cm} (kA)													
690V		-	-	6	6	6	6	6	7	7	12	12	17
Rated short time withstand current (1 s), I_{cw} (kA)													
690V		-	-	4	4	4	4	4	5	5	7	7	10
Rated breaking capacity, I_{cn} (A)													
AC-23	400/415V	160	256	504	640	800	1000	1000	1600	2000	2520	3200	5040
	500V	-	-	504	640	800	1000	1000	1600	2000	2520	3200	4000
	690V	-	-	504	640	800	1000	1000	1600	2000	2520	3200	4000
Electrical endurance (no. of operations)		2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Mechanical endurance (no. of operations)		20000	20000	20000	20000	20000	20000	20000	16000	16000	10000	10000	10000
Terminals / Bolt size Cu (mm ²)		2,5-35	2,5-35	6-70	6-70	6-70	6-70	6-70	M10	M10	M10	M10	M12
Max terminal torque (Nm)		2,2	2,2	6	6	6	6	6	30-44	30-44	30-44	30-44	50-75
Fuse type													
DIN		-	-	00	00	00	00	00	1	1	2	2	3
BS88		A1	A1	A2-A3	A2-A3	A2-A3	A2-A3	A2-A3	B1-B2	B1-B3	B1-B4	B1-B4	B1-B4
- size of screws		M4	M4	M5	M5	M5	M5	M5	M8	M8	M8	M8	M8
- fixing centres (mm)		44,5	44,5	73	73	73	73	73	111	111	111	111	111
- torque (Nm)		1,8	1,8	3	3	3	3	3	15	15	15	15	15

NEUTRAL LINKS FOR KVKE SWITCH FUSES

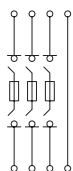
All KVKE switches are available with the neutral links specified below. Product code example:



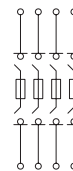
Switched neutral (all standard 4P switch fuses)



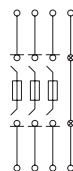
Solid neutral, NT
Uninsulated solid neutral, NU



Fused switched neutral, F



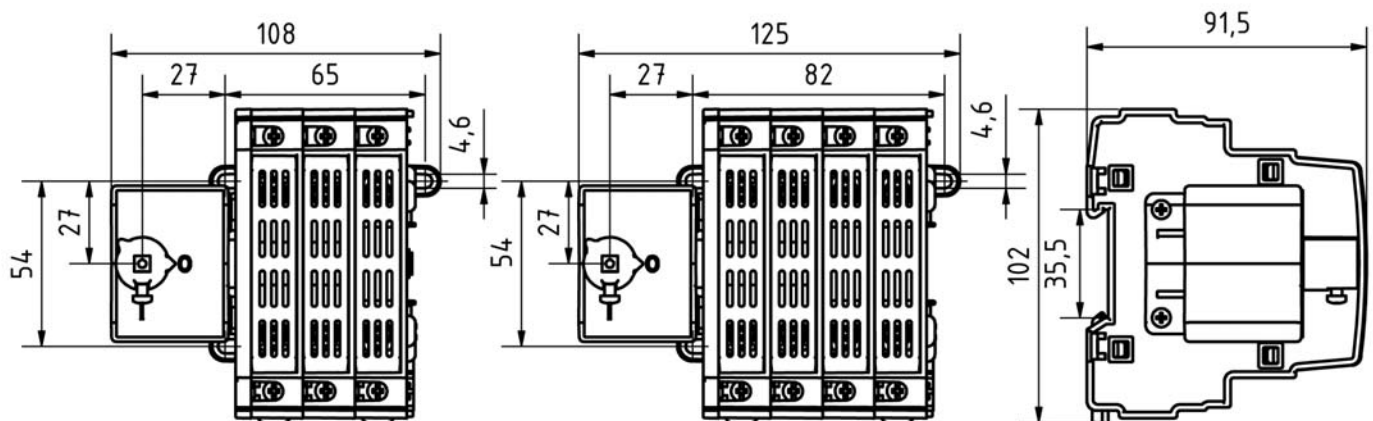
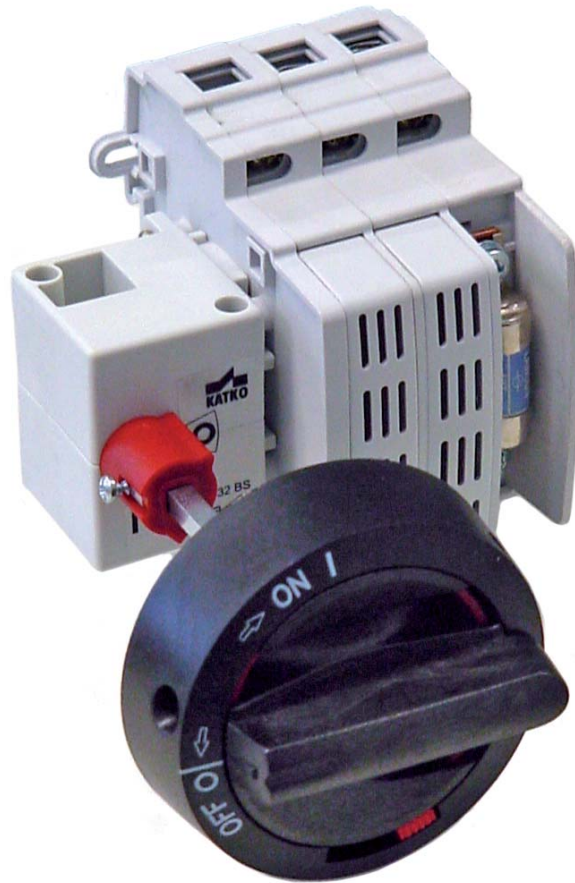
Detachable neutral, NL



¹⁾ KVKE 63-630A mounting in horizontal position:
Derating 0% in ventilated enclosure, ambient temperature $\leq 40^\circ\text{C}$
Derating 5% totally enclosed (KVKE 63-400A)
Derating 8% totally enclosed (KVKE 630A)

SWITCH FUSE 20 - 32 A KVKE SERIES

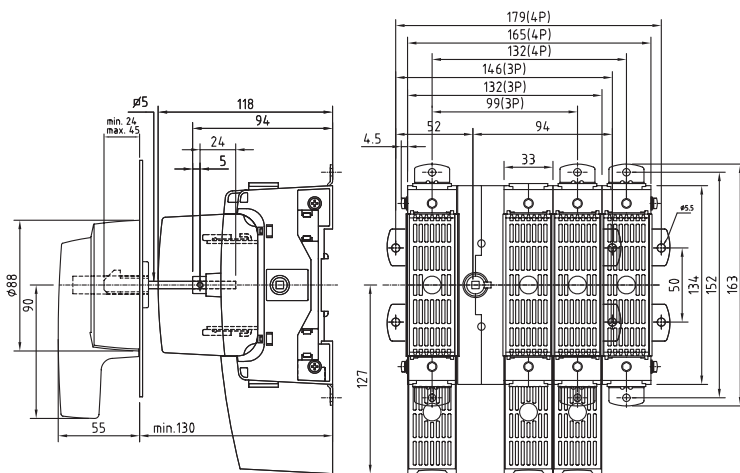
- Compact size saves space
- Early break auxiliary contacts are easy to install
- DIN rail or base mounted as standard
- Available as 3-pole and 4-pole version, 1-pole and 2-pole versions on request
- Connecting rivets with 350 µm silver alloy ensure a long life expectancy and safe operation in demanding conditions
- Handle LK10 and shaft L=180 mm included, suitable for 250 mm deep panel boards
- Fuse covers included
- IP66 handle, door interlocked in both "ON" and "padlocked OFF" position
- Black or yellow/red handle (add Y/R to description)
- For BS fuses



Type	AC-21	AC-22	AC-23	400 V 415 V P / kW	EAN-Code	Weight kg
	400 V 415 V I _e / A	400 V 415 V I _e / A				
3-pole						
KVKE 320 BS	20 A	20 A	20 A	10 kW	6419410285220	0,55
KVKE 332 BS	32 A	32 A	32 A	15 kW	6419410285244	0,55
4-pole						
KVKE 420 BS	20 A	20 A	20 A	10 kW	6419410285237	0,68
KVKE 432 BS	32 A	32 A	32 A	15 kW	6419410285251	0,68

SWITCH FUSES 63-160 A KVKE SERIES

- Four breaking points per phase
- Connecting silver rivets have a silver alloy 350 μm thick, thus ensuring a long life expectancy and safe use in demanding conditions
- Compact size saves space
- Modular structure enables position of drive mechanism to be varied
- Available as 1-, 2-, 3- and 4-pole
- Handle LK12 and shaft L=220 included
- Black or yellow/red handle (add Y/R to description)
- Auxiliary contacts are easy to install
- Accessories include terminal and fuse covers

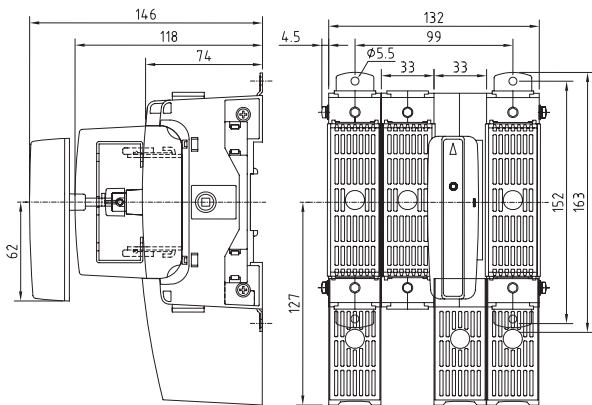


SWITCH FUSES 63-160 A KVKE SERIES

Type	AC-21	400 V 415 V 690 V	AC-22	400 V 415 V 690 V	AC-23	400 V 415 V	AC-23	690 V	EAN-Code	Weight kg
	I _e / A	I _e / A	I _e / A	P / kW	I _e / A	P / kW				
DIN FUSE VERSION										
3-pole										
KVKE 363	63 A	63 A	63 A	30 kW	63 A	55 kW	6419410286029	1,7		
KVKE 380	80 A	80 A	80 A	45 kW	80 A	75 kW	6419410286043	1,7		
KVKE 3100	100 A	100 A	100 A	55 kW	100 A	90 kW	6419410286067	1,7		
KVKE 3125	125 A	125 A	125 A	55 kW	125 A	110 kW	6419410286081	1,7		
KVKE 3160	160 A	160 A	125 A	55 kW	125 A	110 kW	6419410286104	1,7		
KVKE 363 NT	63 A	63 A	63 A	30 kW	63 A	55 kW	6419410285640	2,0		
KVKE 380 NT	80 A	80 A	80 A	45 kW	80 A	75 kW	6419410284377	2,0		
KVKE 3100 NT	100 A	100 A	100 A	55 kW	100 A	90 kW	6419410284384	2,0		
KVKE 3125 NT	125 A	125 A	125 A	55 kW	125 A	110 kW	6419410285657	2,0		
KVKE 3160 NT	160 A	160 A	125 A	55 kW	125 A	110 kW	6419410285664	2,0		
KVKE 363 NL	63 A	63 A	63 A	30 kW	63 A	55 kW	6419410285749	2,0		
KVKE 380 NL	80 A	80 A	80 A	45 kW	80 A	75 kW	6419410284452	2,0		
KVKE 3100 NL	100 A	100 A	100 A	55 kW	100 A	90 kW	6419410284469	2,0		
KVKE 3125 NL	125 A	125 A	125 A	55 kW	125 A	110 kW	6419410285756	2,0		
KVKE 3160 NL	160 A	160 A	125 A	55 kW	125 A	110 kW	6419410285763	2,0		
4-pole										
KVKE 463	63 A	63 A	63 A	30 kW	63 A	55 kW	6419410286128	2,0		
KVKE 480	80 A	80 A	80 A	45 kW	80 A	75 kW	6419410286142	2,0		
KVKE 4100	100 A	100 A	100 A	55 kW	100 A	90 kW	6419410286166	2,0		
KVKE 4125	125 A	125 A	125 A	55 kW	125 A	110 kW	6419410286180	2,0		
KVKE 4160	160 A	160 A	125 A	55 kW	125 A	110 kW	6419410286203	2,0		
KVKE 463 F	63 A	63 A	63 A	30 kW	63 A	55 kW	6419410285541	2,0		
KVKE 480 F	80 A	80 A	80 A	45 kW	80 A	75 kW	6419410284292	2,0		
KVKE 4100 F	100 A	100 A	100 A	55 kW	100 A	90 kW	6419410284308	2,0		
KVKE 4125 F	125 A	125 A	125 A	55 kW	125 A	110 kW	6419410285558	2,0		
KVKE 4160 F	160 A	160 A	125 A	55 kW	125 A	110 kW	6419410285565	2,0		
BS FUSE VERSION										
3-pole										
KVKE 363 BS	63 A	63 A	63 A	30 kW	63 A	55 kW	6419410286227	1,7		
KVKE 380 BS	80 A	80 A	80 A	45 kW	80 A	75 kW	6419410286241	1,7		
KVKE 3100 BS	100 A	100 A	100 A	55 kW	100 A	90 kW	6419410286265	1,7		
KVKE 3125 BS	125 A	125 A	125 A	55 kW	125 A	110 kW	6419410286289	1,7		
KVKE 3160 BS	160 A	160 A	125 A	55 kW	125 A	110 kW	6419410285312	1,7		
KVKE 363 NT BS	63 A	63 A	63 A	30 kW	63 A	55 kW	6419410285695	2,0		
KVKE 380 NT BS	80 A	80 A	80 A	45 kW	80 A	75 kW	6419410284414	2,0		
KVKE 3100 NT BS	100 A	100 A	100 A	55 kW	100 A	90 kW	6419410284421	2,0		
KVKE 3125 NT BS	125 A	125 A	125 A	55 kW	125 A	110 kW	6419410285701	2,0		
KVKE 3160 NT BS	160 A	160 A	125 A	55 kW	125 A	110 kW	6419410285718	2,0		
KVKE 363 NL BS	63 A	63 A	63 A	30 kW	63 A	55 kW	6419410285794	2,0		
KVKE 380 NL BS	80 A	80 A	80 A	45 kW	80 A	75 kW	6419410284490	2,0		
KVKE 3100 NL BS	100 A	100 A	100 A	55 kW	100 A	90 kW	6419410284506	2,0		
KVKE 3125 NL BS	125 A	125 A	125 A	55 kW	125 A	110 kW	6419410285800	2,0		
KVKE 3160 NL BS	160 A	160 A	125 A	55 kW	125 A	110 kW	6419410285817	2,0		
4-pole										
KVKE 463 BS	63 A	63 A	63 A	30 kW	63 A	55 kW	6419410286302	2,0		
KVKE 480 BS	80 A	80 A	80 A	45 kW	80 A	75 kW	6419410286326	2,0		
KVKE 4100 BS	100 A	100 A	100 A	55 kW	100 A	90 kW	6419410286340	2,0		
KVKE 4125 BS	125 A	125 A	125 A	55 kW	125 A	110 kW	6419410286364	2,0		
KVKE 4160 BS	160 A	160 A	125 A	55 kW	125 A	110 kW	6419410285350	2,0		
KVKE 463 F BS	63 A	63 A	63 A	30 kW	63 A	55 kW	6419410285596	2,0		
KVKE 480 F BS	80 A	80 A	80 A	45 kW	80 A	75 kW	6419410284339	2,0		
KVKE 4100 F BS	100 A	100 A	100 A	55 kW	100 A	90 kW	6419410284346	2,0		
KVKE 4125 F BS	125 A	125 A	125 A	55 kW	125 A	110 kW	6419410285602	2,0		
KVKE 4160 F BS	160 A	160 A	125 A	55 kW	125 A	110 kW	6419410285619	2,0		

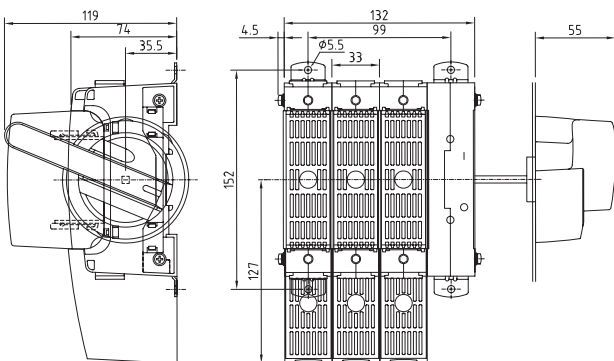
OPERATION OPTIONS FOR 63-160 A SWITCH FUSES SWITCH FUSE WITH DIRECT HANDLE

- Direct handle SV11 offers a higher level of safety
- Prevents fuse removal in ON-position
- Fuse covers included



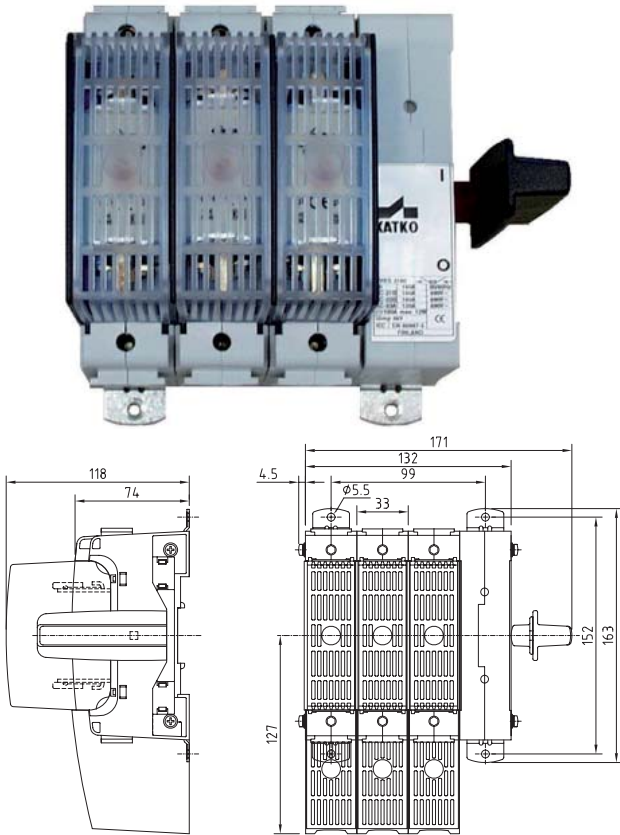
Type	EAN-Code
DIN FUSE VERSION	
3-pole	
KVKE 363+SV11	6419410287187
KVKE 380+SV11	6419410285923
KVKE 3100+SV11	6419410285930
KVKE 3125+SV11	6419410287217
KVKE 3160+SV11	6419410287224
4-pole	
KVKE 463+SV11	6419410287231
KVKE 480+SV11	6419410285947
KVKE 4100+SV11	6419410285954
KVKE 4125+SV11	6419410287262
KVKE 4160+SV11	6419410287279
BS FUSE VERSION	
3-pole	
KVKE 363+SV11 BS	6419410285428
KVKE 380+SV11 BS	6419410285961
KVKE 3100+SV11 BS	6419410285978
KVKE 3125+SV11 BS	6419410285435
KVKE 3160+SV11 BS	6419410285442
4-pole	
KVKE 463+SV11 BS	6419410285459
KVKE 480+SV11 BS	6419410285985
KVKE 4100+SV11 BS	6419410285992
KVKE 4125+SV11 BS	6419410285466
KVKE 4160+SV11 BS	6419410285473

SWITCH FUSE WITH SIDE-OPERATED HANDLE



Type	EAN-Code
DIN FUSE VERSION	
3-pole	
KVKS 363	6419410287132
KVKS 380	6419410284056
KVKS 3100	6419410284063
KVKS 3125	6419410287163
KVKS 3160	6419410287170
4-pole	
KVKS 463	6419410287385
KVKS 480	6419410284070
KVKS 4100	6419410284087
KVKS 4125	6419410287415
KVKS 4160	6419410287422
BS FUSE VERSION	
3-pole	
KVKS 363 BS	6419410285480
KVKS 380 BS	6419410284094
KVKS 3100 BS	6419410284100
KVKS 3125 BS	6419410285497
KVKS 3160 BS	6419410285503
4-pole	
KVKS 463 BS	6419410285510
KVKS 480 BS	6419410284117
KVKS 4100 BS	6419410284124
KVKS 4125 BS	6419410285527
KVKS 4160 BS	6419410285534

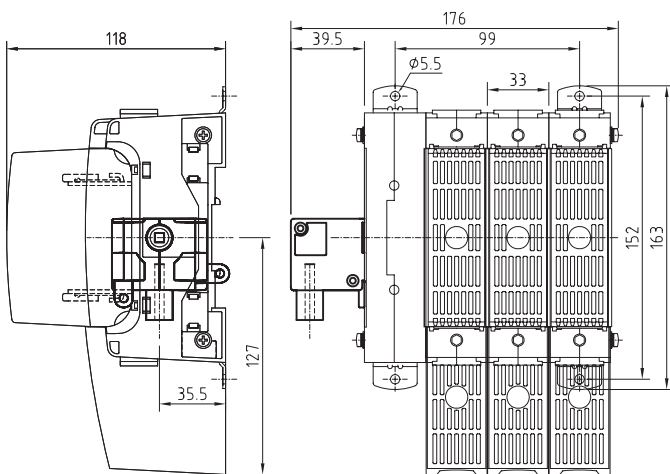
OPERATION OPTIONS FOR 63-160 A SWITCH FUSES SIDE OPERATED SWITCH FUSE WITH DIRECT HANDLE



Type	EAN-Code
3-pole	
KVKS 363/S	6419410287538
KVKS 380/S	6419410284131
KVKS 3100/S	6419410284148
KVKS 3125/S	6419410287569
KVKS 3160/S	6419410287576
4-pole	
KVKS 463/S	6419410287583
KVKS 480/S	6419410284155
KVKS 4100/S	6419410284162
KVKS 4125/S	6419410287613
KVKS 4160/S	6419410287620
BS FUSE VERSION	
3-pole	
KVKS 363/S BS	6419410285367
KVKS 380/S BS	6419410284179
KVKS 3100/S BS	6419410284186
KVKS 3125/S BS	6419410285374
KVKS 3160/S BS	6419410285381
4-pole	
KVKS 463/S BS	6419410285398
KVKS 480/S BS	6419410284193
KVKS 4100/S BS	6419410284209
KVKS 4125/S BS	6419410285404
KVKS 4160/S BS	6419410285411

OSM-MODULE (DRIVE DIRECTION ADAPTER)

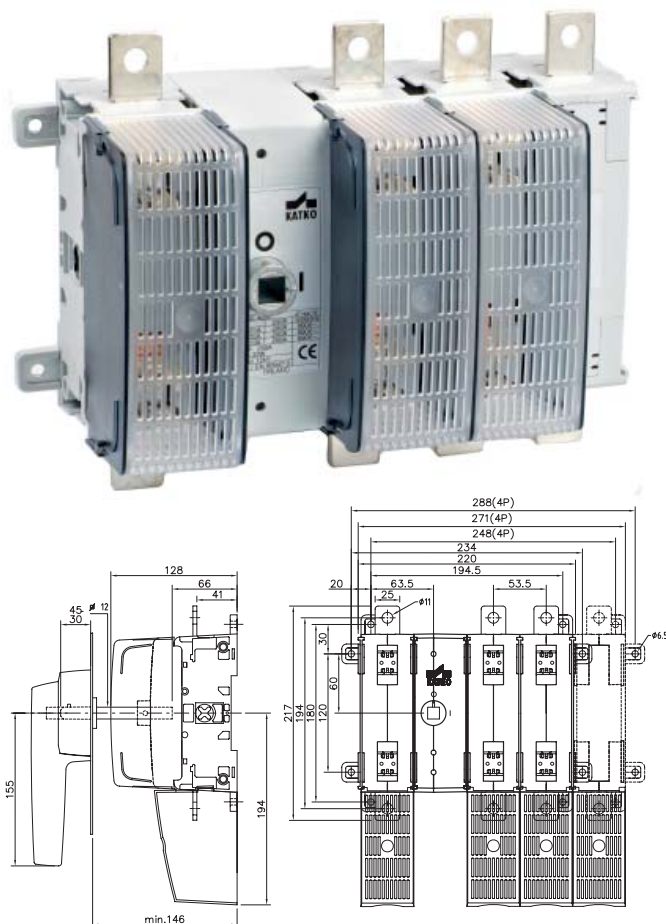
- Drive mechanism can be installed either horizontally or vertically



Type	EAN-Code
DIN FUSE VERSION	
3-pole	
KVKS 363/OSM	6419410287873
KVKS 380/OSM	6419410284216
KVKS 3100/OSM	6419410284223
KVKS 3125/OSM	6419410287897
KVKS 3160/OSM	6419410287903
4-pole	
KVKS 463/OSM	6419410287910
KVKS 480/OSM	6419410284230
KVKS 4100/OSM	6419410284247
KVKS 4125/OSM	6419410287927
KVKS 4160/OSM	6419410287934
BS FUSE VERSION	
3-pole	
KVKS 363/OSM BS	6419410287941
KVKS 380/OSM BS	6419410284254
KVKS 3100/OSM BS	6419410284261
KVKS 3125/OSM BS	6419410287958
KVKS 3160/OSM BS	6419410287965
4-pole	
KVKS 463/OSM BS	6419410287972
KVKS 480/OSM BS	6419410284278
KVKS 4100/OSM BS	6419410284285
KVKS 4125/OSM BS	6419410287989
KVKS 4160/OSM BS	6419410287996

SWITCH FUSE 200-250 A KVKE SERIES

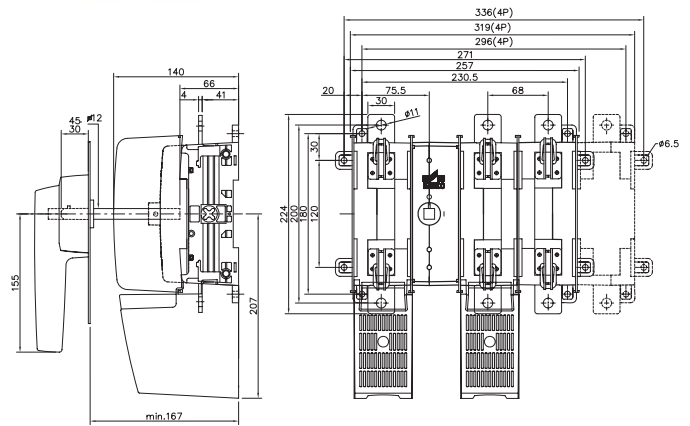
- Four breaking points per phase
- Connecting silver rivets have a silver alloy 350 µm thick, thus ensuring a long life expectancy and safe use in demanding conditions.
- Compact size saves space
- Modular structure enables position of drive mechanism to be varied
- Available as 1-, 2-, 3-, 4- and 6-pole
- Handle LK14 and shaft L=228 included
- Auxiliary contacts are easy to install
- Accessories include terminal and fuse covers
- DIN and BS fuse versions



Type	400 V AC-21 415 V 690 V		400 V AC-22 415 V 690 V		AC-23 400 V 415 V	AC-23 690 V	EAN-Code	Weight kg
	I _e / A	I _e / A	I _e / A	P / kW				
DIN FUSE VERSION								
3-pole								
KVKE 3200	200 A	200 A	200 A	110 kW	200 A	160 kW	6419410287682	4,0
KVKE 3250	250 A	250 A	250 A	132 kW	250 A	250 kW	6419410287705	4,0
KVKE 3200 NT	200 A	200 A	200 A	110 kW	200 A	160 kW	6419410284391	4,7
KVKE 3250 NT	250 A	250 A	250 A	132 kW	250 A	250 kW	6419410285671	4,7
KVKE 3200 NL	200 A	200 A	200 A	110 kW	200 A	160 kW	6419410284476	4,7
KVKE 3250 NL	250 A	250 A	250 A	132 kW	250 A	250 kW	6419410285770	4,7
4-pole								
KVKE 4200	200 A	200 A	200 A	110 kW	200 A	160 kW	6419410287699	4,7
KVKE 4250	250 A	250 A	250 A	132 kW	250 A	250 kW	6419410287712	4,7
KVKE 4200 F	200 A	200 A	200 A	110 kW	200 A	160 kW	6419410284315	4,7
KVKE 4250 F	250 A	250 A	250 A	132 kW	250 A	250 kW	6419410285572	4,7
BS FUSE VERSION								
3-pole								
KVKE 3200 BS	200 A	200 A	200 A	110 kW	200 A	160 kW	6419410287644	4,0
KVKE 3250 BS	250 A	250 A	250 A	132 kW	250 A	250 kW	6419410287651	4,0
KVKE 3200 NT BS	200 A	200 A	200 A	110 kW	200 A	160 kW	6419410284438	4,7
KVKE 3250 NT BS	250 A	250 A	250 A	132 kW	250 A	250 kW	6419410285725	4,7
KVKE 3200 NL BS	200 A	200 A	200 A	110 kW	200 A	160 kW	6419410284513	4,7
KVKE 3250 NL BS	250 A	250 A	250 A	132 kW	250 A	250 kW	6419410285824	4,7
4-pole								
KVKE 4200 BS	200 A	200 A	200 A	110 kW	200 A	160 kW	6419410287668	4,7
KVKE 4250 BS	250 A	250 A	250 A	132 kW	250 A	250 kW	6419410287675	4,7
KVKE 4200 F BS	200 A	200 A	200 A	110 kW	200 A	160 kW	6419410284353	4,7
KVKE 4250 F BS	250 A	250 A	250 A	132 kW	250 A	250 kW	6419410285626	4,7

SWITCH FUSE 315-400 A KVKE SERIES

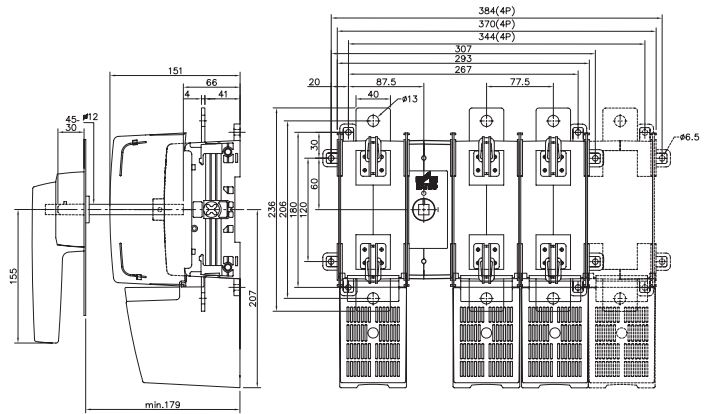
- Four breaking points per phase
- Connecting silver rivets have a silver alloy 350 µm thick, thus ensuring a long life expectancy and safe use in demanding conditions.
- Compact size saves space
- Modular structure enables position of drive mechanism to be varied
- Available as 1-, 2-, 3-, 4- and 6-pole
- Handle LK14 and shaft L=228 included
- Auxiliary contacts are easy to install
- Accessories include terminal and fuse covers
- DIN and BS fuse versions



Type	400 V		400 V		AC-23	400 V		AC-23	690 V		EAN-Code	Weight kg
	AC-21	415 V	AC-22	415 V		400 V	415 V		AC-23	690 V		
	I _e / A	690 V	I _e / A	690 V	I _e / A	P / kW	I _e / A	P / kW				
DIN FUSE VERSION												
3-pole												
KVKE 3315	315 A		315 A		315 A	160 kW	315 A	315 kW	6419410284537		5,2	
KVKE 3400	400 A		400 A		400 A	200 kW	400 A	355 kW	6419410287835		5,2	
KVKE 3315 NT	315 A		315 A		315 A	160 kW	315 A	315 kW	6419410284407		6,1	
KVKE 3400 NT	400 A		400 A		400 A	200 kW	400 A	355 kW	6419410285688		6,1	
KVKE 3315 NL	315 A		315 A		315 A	160 kW	315 A	315 kW	6419410284483		6,1	
KVKE 3400 NL	400 A		400 A		400 A	200 kW	400 A	355 kW	6419410285787		6,1	
4-pole												
KVKE 4315	315 A		315 A		315 A	160 kW	315 A	315 kW	6419410284544		6,1	
KVKE 4400	400 A		400 A		400 A	200 kW	400 A	355 kW	6419410287841		6,1	
KVKE 4315 F	315 A		315 A		315 A	160 kW	315 A	315 kW	6419410284322		6,1	
KVKE 4400 F	400 A		400 A		400 A	200 kW	400 A	355 kW	6419410285589		6,1	
BS FUSE VERSION												
3-pole												
KVKE 3315 BS	315 A		315 A		315 A	160 kW	315 A	315 kW	6419410284551		5,2	
KVKE 3400 BS	400 A		400 A		400 A	200 kW	400 A	355 kW	6419410287941		5,2	
KVKE 3315 NT BS	315 A		315 A		315 A	160 kW	315 A	315 kW	6419410284445		6,1	
KVKE 3400 NT BS	400 A		400 A		400 A	200 kW	400 A	355 kW	6419410285732		6,1	
KVKE 3315 NL BS	315 A		315 A		315 A	160 kW	315 A	315 kW	6419410284520		6,1	
KVKE 3400 NL BS	400 A		400 A		400 A	200 kW	400 A	355 kW	6419410285831		6,1	
4-pole												
KVKE 4315 BS	315 A		315 A		315 A	160 kW	315 A	315 kW	6419410284568		6,1	
KVKE 4400 BS	400 A		400 A		400 A	200 kW	400 A	355 kW	6419410287958		6,1	
KVKE 4315 F BS	315 A		315 A		315 A	160 kW	315 A	315 kW	6419410284360		6,1	
KVKE 4400 F BS	400 A		400 A		400 A	200 kW	400 A	355 kW	6419410285633		6,1	

SWITCH FUSE 630 A KVKE SERIES

- Four breaking points per phase
- Connecting silver rivets have a silver alloy 350 µm thick, thus ensuring a long life expectancy and safe use in demanding conditions.
- Compact size saves space
- Modular structure enables position of drive mechanism to be varied
- Available as 1-, 2-, 3-, 4- and 6-pole
- Handle LK14 and shaft L=228 included
- Auxiliary contacts are easy to install
- Accessories include terminal and fuse covers
- DIN and BS fuse versions



Type	400 V	400 V	AC-23	400 V	AC-23	EAN-Code	Weight kg	
	AC-21	AC-22		415 V	690 V			
	415 V	415 V		415 V				
	690 V	690 V						
	I _e / A	I _e / A	I _e / A	P / kW	I _e / A	P / kW		
DIN FUSE VERSION								
3-pole								
KVKE 3630	630 A	630 A	630 A	355 kW	500 A	500 kW	6419410284759	6,2
KVKE 3630 NT	630 A	630 A	630 A	355 kW	500 A	500 kW	6419410284766	7,4
KVKE 3630 NL	630 A	630 A	630 A	355 kW	500 A	500 kW	6419410284773	7,4
4-pole								
KVKE 4630	630 A	630 A	630 A	355 kW	500 A	500 kW	6419410284827	7,4
KVKE 4630 F	630 A	630 A	630 A	355 kW	500 A	500 kW	6419410284834	7,4
BS FUSE VERSION								
3-pole								
KVKE 3630 BS	630 A	630 A	630 A	355 kW	500 A	500 kW	6419410284780	6,2
KVKE 3630 NT BS	630 A	630 A	630 A	355 kW	500 A	500 kW	6419410284797	7,4
KVKE 3630 NL BS	630 A	630 A	630 A	355 kW	500 A	500 kW	6419410284803	7,4
4-pole								
KVKE 4630 BS	630 A	630 A	630 A	355 kW	500 A	500 kW	6419410284735	7,4
KVKE 4630 F BS	630 A	630 A	630 A	355 kW	500 A	500 kW	6419410284919	7,4

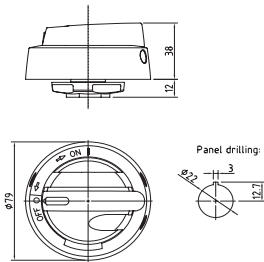
SWITCH FUSE 20-630 A ACCESSORIES

Type	For	Description	EAN-code	Page
Fuse covers				
SS 32	20-32 A		6419410285022	
SS 125 DIN	63-160 A	DIN fuse version	6419410286944	
SS 125 BS		BS fuse version	6419410286951	
SS 250	200-250 A		6419410287736	
SS 400	315-400 A		6419410287873	
SS 630	630 A		6419410284964	
Terminal covers				
LS 125	63-160 A		6419410286937	
LS 250	200-250 A		6419410287729	
LS 400	315-400 A		6419410287866	
LS 630	630A		6419410284957	
Spreaders				
KVKE ALK 160 3P	63-160 A	For a 3P KVKE switch fuse	6419410286999	39
KVKE ALK 160 4P		For 4 4P KVKE switch fuse	6419410287002	
Cable connectors				
KKL 1x50	KVKE	Al 16-50 mm , Cu 2,5-50 mm	6419410358108	42
KKL 1x70T		Al/Cu 6-70 mm	6419410358740	
KKL 1x70R		Al/Cu 6-70 mm	6419410358757	
KKL 1x95T		Al/Cu 25-95 mm	6419410358801	
KKL 1x95R		Al/Cu 25-95 mm	6419410358818	
KKL 1x120T		Al/Cu 25-120 mm	6419410358849	
KKL 1x185		Al/Cu 95-185 mm	6419410358825	
KKL 2x185		Al/Cu 95-185 mm	6419410358856	
KKL 1x300		Al/Cu 185-300 mm	6419410358832	
KKL 2x300		Al/Cu 185-300 mm	6419410358863	
Auxiliary contacts				
KVKEC 1.V	20-32 A	1NO+1NC	6419410285039	39
KVKEC 2.V		2NO+2NC	6419410285046	
KVKE 1.V	63-630 A	1NO+1NC	6419410286982	
KVKE 2.V		2NO+2NC	6419410287781	
Handles				
LK10	20-32 A	Black	6419410222539	37
LK10 Y/R		Yellow/red	6419410222553	
LK12	63-160 A	Black	6419410222683	
LK12 Y/R		Yellow/red	6419410222690	
LK13	125-400 A	Black	6419410222645	
LK13 Y/R		Yellow/red	6419410222652	
LK14	200-630 A	Black	6419410222669	
LK14 Y/R		Yellow/red	6419410222676	
Shafts				
L=100 AD11	LK10 handle	Length 100 mm, aluminium	6419410253106	38
L=200 AD11		Length 200 mm, aluminium	6419410253113	
L=300 AD11		Length 300 mm, aluminium	6419410253120	
L=100 AD11/T		Length 100 mm, steel	6419410253137	
L=200 AD11/T		Length 200 mm, steel	6419410253144	
L=300 AD11/T		Length 300 mm, steel	6419410253151	
L=100 AD11/VT		Length 100 mm, steel, slanted	6419410253168	
L=200 AD11/VT		Length 200 mm, steel, slanted	6419410253175	
L=300 AD11/VT		Length 300 mm, steel, slanted	6419410253182	
Neutral links				
KVKEC NT-module	20-32 A	Insulated solid neutral module	6419410285053	
KVKEC NU-terminal		Uninsulated solid neutral terminal	6419410285060	

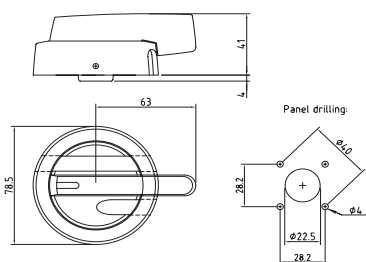
ACCESSORIES HANDLES

- Padlocking in OFF-position prevents access to the actuator
- Door interlock with defeat mechanism
- Available in black or yellow/red (Y/R)
- LK10: IP66
- LK11: IP66-IP67
- LK12-LK14: IP65

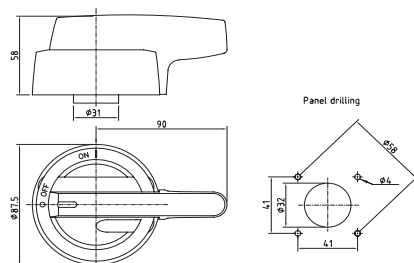
LK10



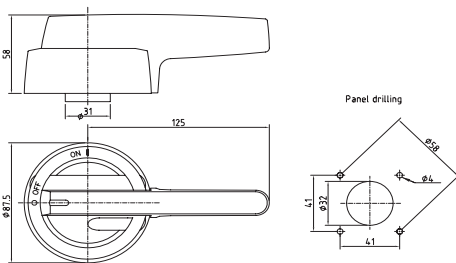
LK11



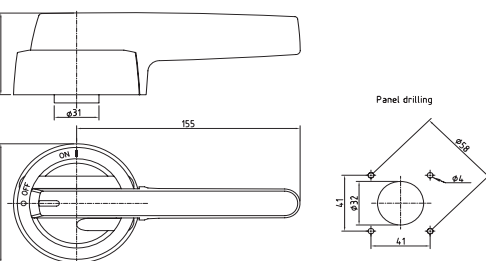
LK12



LK13



LK14



LK10 Y/R



LK11



LK12



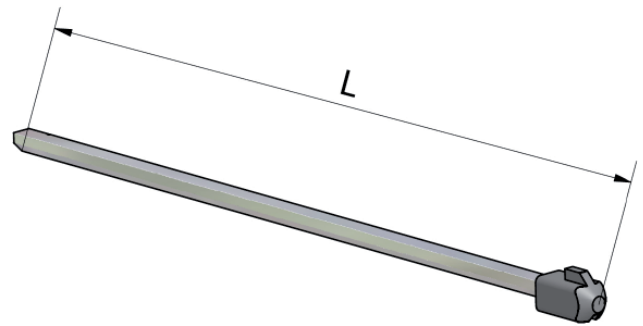
LK13 Y/R



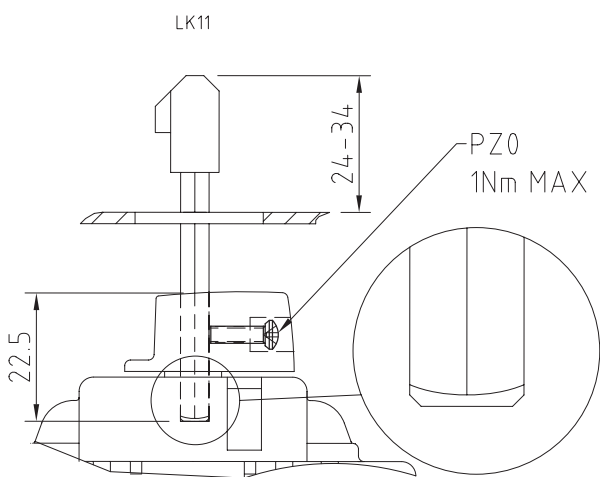
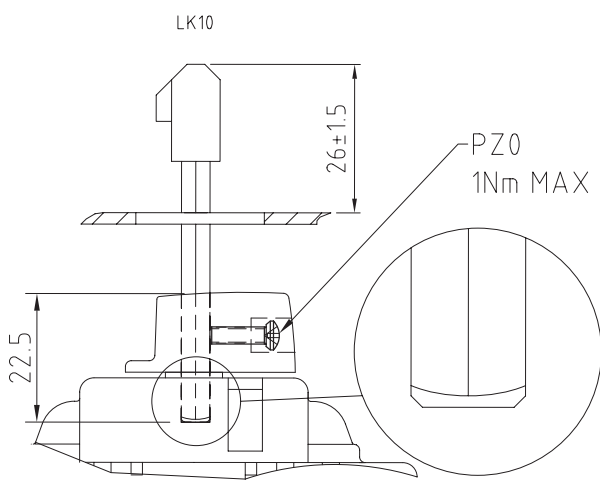
LK14 Y/R

ACCESSORIES SHAFTS

- With adapter AD11 for LK10 and LK11
- Length 100/200/300 mm
- Available in aluminium, steel (T), or steel and slanted (VT)
- Shafts are easy to cut to the correct length

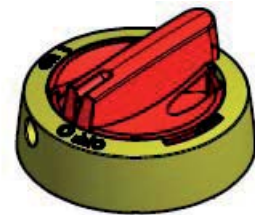


Dimensioning of the extension shaft for LK10 and LK11 handles

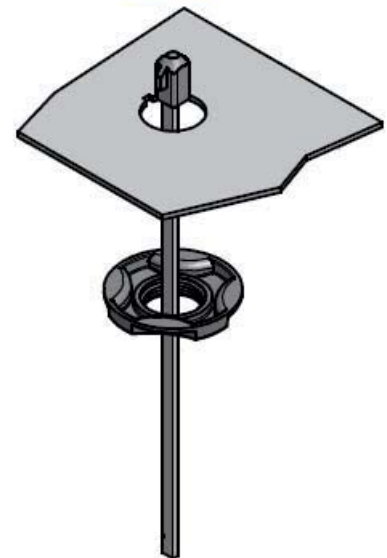


ASSEMBLY EXAMPLE

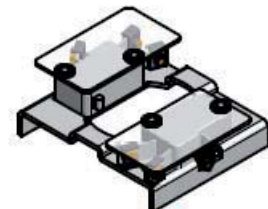
LK10 handle



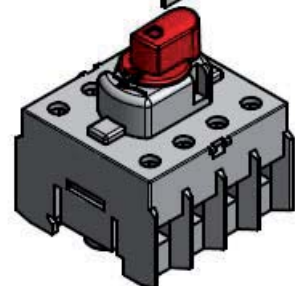
L=200 AD11 extension shaft



"Snap-on" Auxiliary contact



4P KU-switch

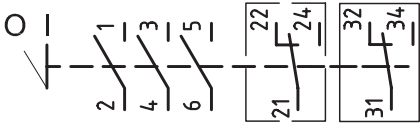


ACCESSORIES AUXILIARY CONTACTS

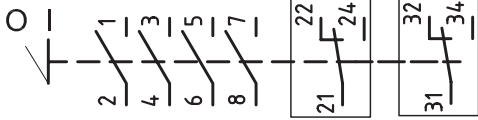
- 1NO+1NC
- 2NO+2NC
- For KU, VKA and VKE switches
- For KVKE switch fuses
- Available with door mounting kit (OKA) with black or yellow/red handle (Y/R)

SWITCH DIAGRAMS:

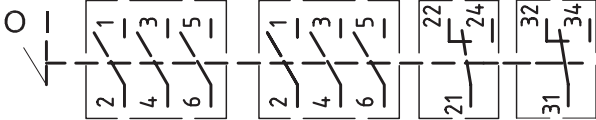
3 pole + 2NC/NO



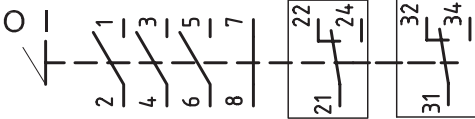
4 pole + 2NC/NO



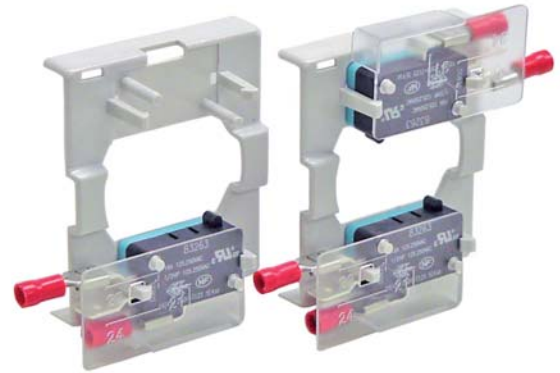
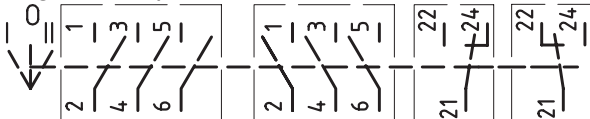
6 pole + 2NC/NO



3 pole + NT + 2NC/NO



Change-over 3 pole + 2NC/NO



KU 1.V & KU 2.V



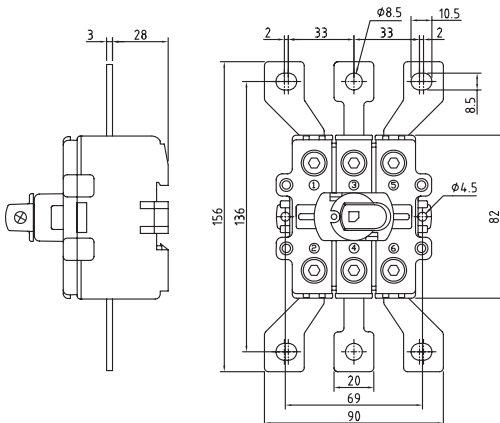
VKA 1.V & VKA 2.V



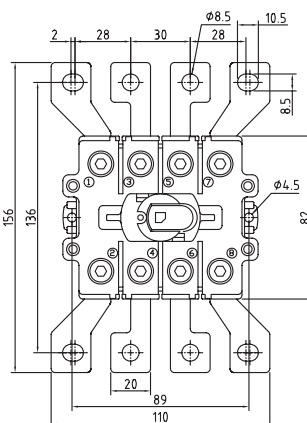
KVKE 1.V

SPREADERS

ALK 3160:



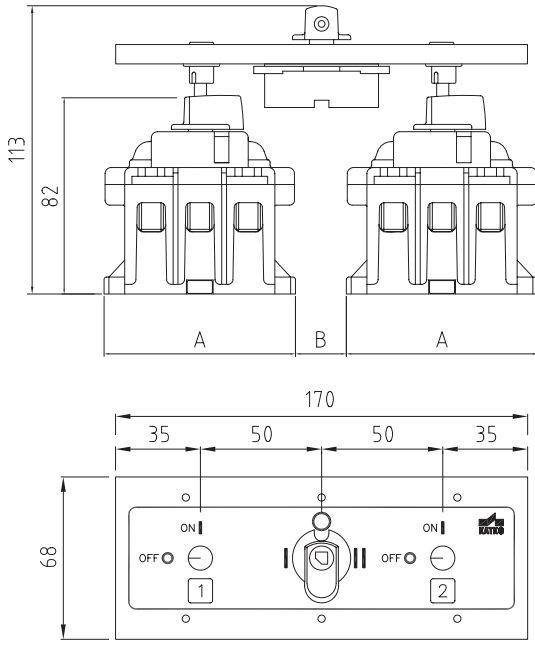
ALK 4160:



ALK 3160

ACCESSORIES CHANGE-OVER KITS

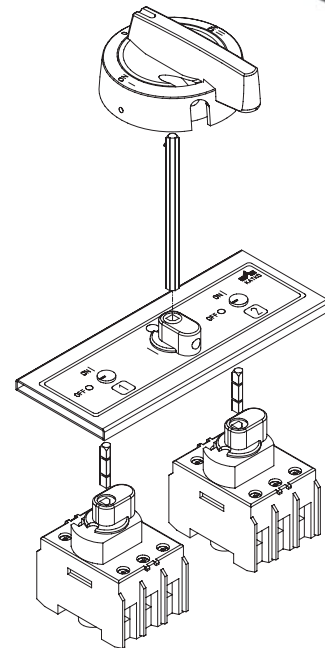
- For 2 KU or VKA switches
- Includes handle and shaft
- Available with black or yellow/red handle (Y/R)



Dim	VKA 3125-3160	VKA 4125-4160
A	79	99
B	21	1

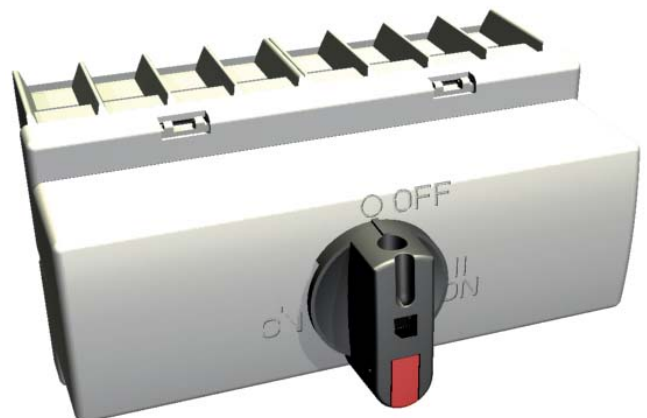
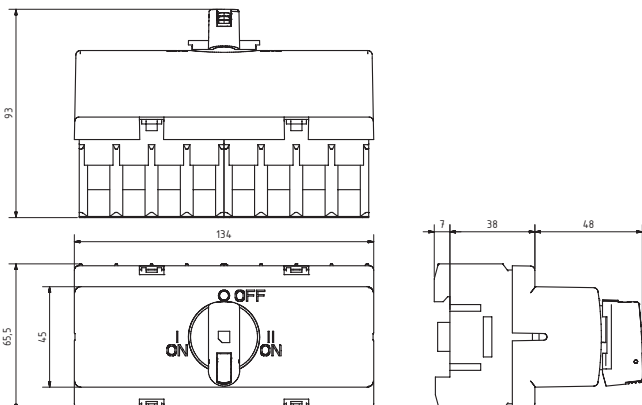


VV 1-0-2



COMING IN SPRING 2009: KU3/4P VV

- New extremely compact design for KU switches
- Fast and easy to install
- Available with black or red direct handle (Y/R)
- Compatible with LK10 handle

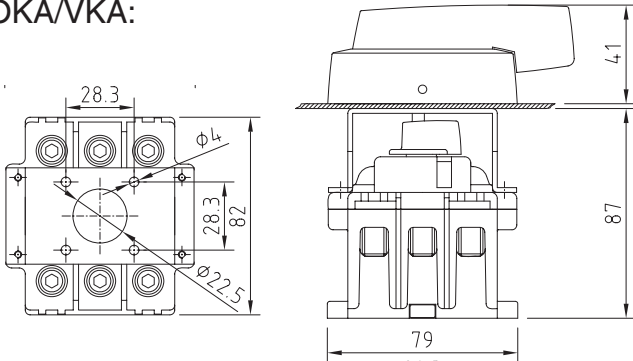


KU3/4P VV

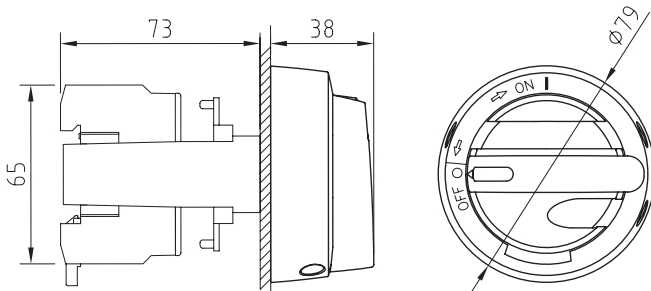
ACCESSORIES DOOR MOUNTING KITS

- For KU and VKA-switches
- With LK10 or LK11 handle
- Available as black or yellow/red (Y/R)

OKA/VKA:



OKA/KU/LK10:

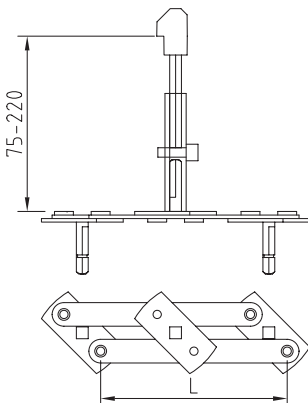


OKA/KU/LK10

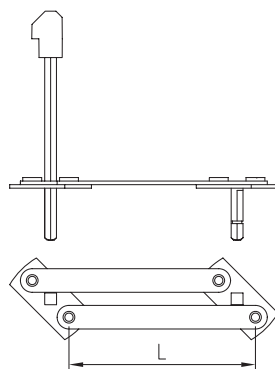
PARALLEL KITS

- For KU and VKA-switches
- Assembly depth for KU 155-300 mm
- Assembly depth for VKA 164-310 mm
- Length shown in the product code, for example RV 66, L=66 mm
- Handle not included

RV 66-126



RV 52S-143S



RV 80S & RV 104S

CABLE CONNECTORS

- Suitable for Al/Cu cables:
 - Al 16-300mm²
 - Cu 2.5-300mm²
- Material: tin-coated aluminium
(KKL 1x70/95/185/300 stainless steel and tin-coated copper)
- In accordance with VDE 0220 part 1/11.71 and 2/11.71, SEN 24 15 10, SEN 24 50 12, SFS 2663 and IEC 61238-1



KKL 1x50



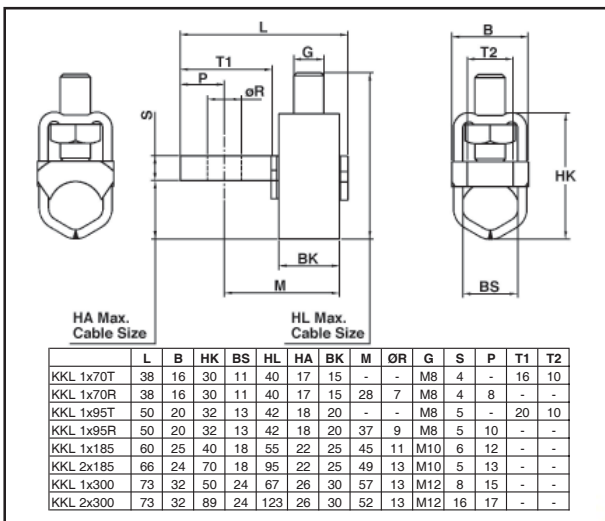
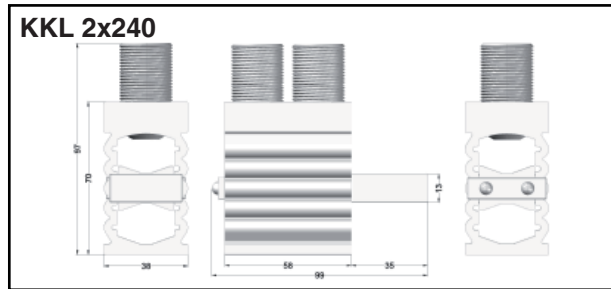
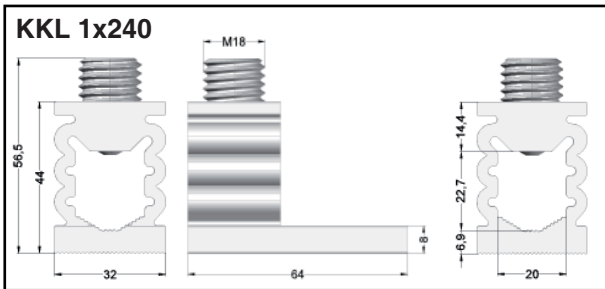
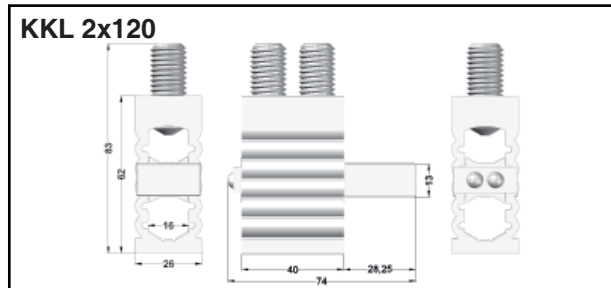
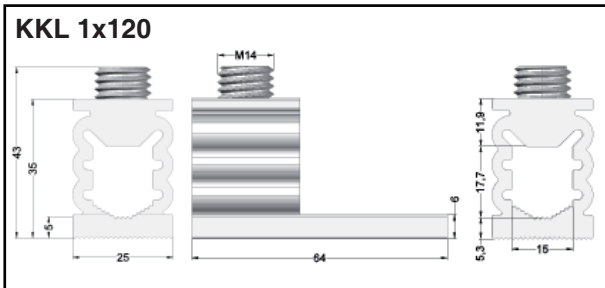
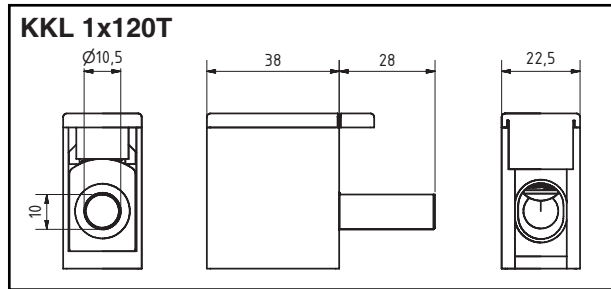
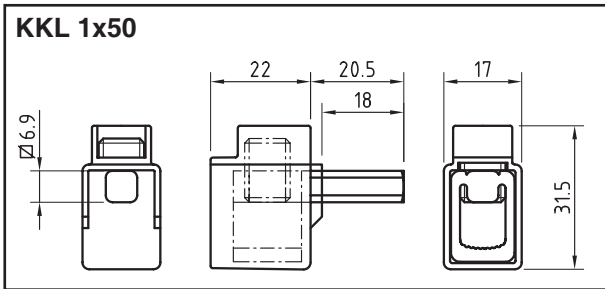
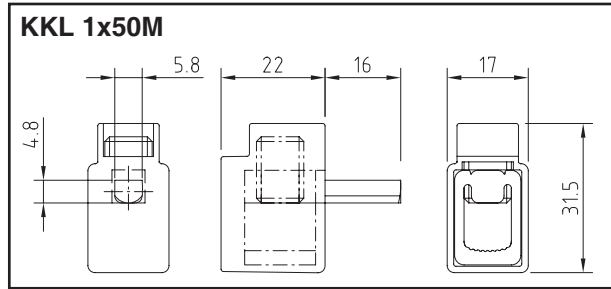
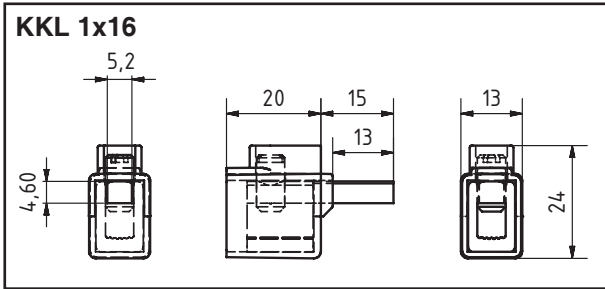
KKL 1x95R



KKL 1x95T

Type	EAN-code	Un (V)	In (A)	Al mm ²	Cu mm ²	Torque Al/Cu (Nm)	Number of conductors	Hexagonal terminal screw	Allen key size	Mounting	Weight (kg)
KKL 1x16	6419410358887	690	63	1,5-16	1,5-16	2,5	1	M6	3	Direct	0,01
KKL 1x50	6419410358108	690	63	16-50	2,5-50	6 (<10 mm ²)	1	M10	5	Direct	0,02
KKL 1x50M	6419410358122	690	63	16-50	2,5-50	10 (> 10 mm ²)	1	M10	5	Direct	0,02
KKL 1x70T	6419410358740	690	240	6-70	6-70	15	1	M8	4	Direct	0,04
KKL 1x70R	6419410358757	690	240	6-70	6-70	15	1	M8	4	Bolt M6	0,04
KKL 1x95T	6419410358801	690	285	25-95	25-95	20	1	M8	4	Direct	0,06
KKL 1x95R	6419410358818	690	285	25-95	25-95	20	1	M8	4	Bolt M10	0,07
KKL 1x120T	6419410358849	690	200	16-120	16-120	7,5 (16-35 mm ²) 16 (50-120 mm ²)	1	M12	6	Direct	0,05
KKL 1x120	6419410358306	690	280	16-120	16-120	12 (16-35 mm ²) 25 (50-120 mm ²)	1	M14	6	Bolt M12	0,05
KKL 2x120	6419410358351	690	400	25-120	25-120	10 (25-35 mm ²) 20 (50-120 mm ²)	2	M14	6	Bolt M12	0,19
KKL 1x185	6419410358825	690	420	95-185	95-185	40	1	M10	5	Bolt M10	0,16
KKL 2x185	6419410358856	690	420	95-185	95-185	40	2	M10	5	Bolt M10	0,29
KKL 1x240	6419410358405	690	425	35-240	35-240	26 (35-120 mm ²) 55 (150-240 mm ²)	1	M18	6	Bolt M12	0,09
KKL 2x240	6419410358504	690	630	70-240	70-240	35 (70-120 mm ²) 45 (150-240 mm ²)	2	M24	8	Bolt M12	0,46
KKL 1x300	6419410358832	690	540	185-300	185-300	70	1	M12	6	Bolt M12	0,32
KKL 2x300	6419410358863	690	800	185-300	185-300	70	2	M12	6	Bolt M12	0,58

CABLE CONNECTORS DIMENSIONAL DRAWINGS



TERMINAL BLOCKS

- Suitable for Al/Cu cables: 1.5-300 mm²
- Available in grey (H), blue (S) and yellow/green (K/V)
- Touchproof, IP 20
- Housing and cover in polyamide
- Terminal material tin-coated, greased aluminium
- Hexagonal terminal screws, Allen key type
- KL-terminals 16-95 mm² for DIN-rail mounting
- KL-terminals 120-300 mm² for base mounting
- Terminals in accordance with VDE 0220 part 1/11.71 and 2/11.71, SEN 24 15 10, SEN 24 50 12 and SFS 2663

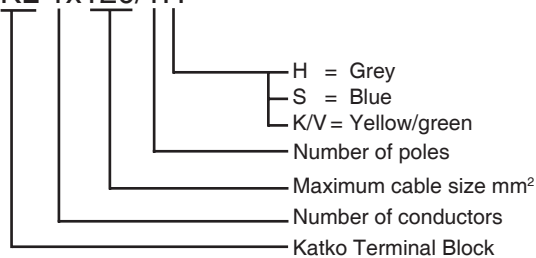


KL 1 x 50 / 1H

Type	EAN-code	Un (V)	In (A)	Al/Cu mm ²	Torque Al/Cu (Nm)	Number of conductors	Hexagonal terminal screw	Allen key size	Mounting	Weight (kg)
KL 4x16/1H	6419410355107	690	164	1,5-16	1,5 (1,5-2,5 mm ²) 6 (4-16 mm ²)	4	M8	4	DIN	0,041
KL 4x16/1S	6419410355305									
KL 4x16/1K/V	6419410355404									
KL 2x16/2H	6419410355206	690	3x270	1,5-35	6 (1,5-10 mm ²) 10 (16-35 mm ²)	12	M10	5	DIN	0,207
KL 4x35/3H	6419410355909									
KL 1x50/1H	6419410356111									
KL 1x50/1S	6419410356128	690	160	1,5-50	1,5 (1,5-2,5 mm ²) 5 (4-10 mm ²) 12 (16-50 mm ²)	2	M10	5	DIN	0,032
KL 1x50/1K/V	6419410356135									
KL 2x50/1H	6419410356142									
KL 2x50/1S	6419410356159	690	320	1,5-50	1,5 (1,5-2,5 mm ²) 5 (4-10 mm ²) 12 (16-50 mm ²)	4	M10	5	DIN	0,090
KL 2x50/1K/V	6419410356166									
KL 1x95/1H	6419410356722									
KL 1x95/1S	6419410356746	690	245	6-95	12 (6-25 mm ²) 22 (35-95 mm ²)	2	M12	5	DIN	0,068
KL 1x95/1K/V	6419410356760									
KL 2x95/1H	6419410356777									
KL 2x95/1S	6419410356784	690	490	6-95	12 (6-25 mm ²) 22 (35-95 mm ²)	4	M12	5	DIN	0,130
KL 2x95/1K/V	6419410356791									
KL 1x120/1H/R	6419410356869									
KL 1x120/1S/R	6419410356876	690	280	16-120	12 (16-35 mm ²) 25 (50-120 mm ²)	2	M12	5	BOLT	0,089
KL 1x120/1K/V/R	6419410356883									
KL 2x120/1H/R	6419410356845									
KL 2x120/1S/R	6419410356944	690	560	16-120	12 (16-35 mm ²) 25 (50-120 mm ²)	4	M12	5	BOLT	0,160
KL 2x120/1K/V/R	6419410356951									
KL 1x150/1H /R	6419410357149									
KL 1x150/1S /R	6419410357156	690	320	25-150	14 (25-50 mm ²) 30 (70-150 mm ²)	2	M12	5	BOLT	0,102
KL 1x150/1K/V /R	6419410357163									
KL 2x150/1H /R	6419410357170									
KL 2x150/1S /R	6419410357187	690	640	25-150	14 (25-50 mm ²) 30 (70-150 mm ²)	4	M12	5	BOLT	0,174
KL 2x150/1K/V /R	6419410357194									
KL 1x240/1H /R	6419410356913									
KL 1x240/1S /R	6419410356920	690	425	35-240	26 (35-120 mm ²) 55 (150-240 mm ²)	2	M18	6	BOLT	0,201
KL 1x240/1K/V /R	6419410356937									
KL 2x240/1H /R	6419410356975									
KL 2x240/1S /R	6419410356999	690	850	35-240	26 (35-120 mm ²) 55 (150-240 mm ²)	4	M18	6	BOLT	0,345
KL 2x240/1K/V /R	6419410357019									
KL 1x300/1H /R	6419410357118									
KL 1x300/1S /R	6419410357125	690	490	95-300	28 (95-120 mm ²) 60 (150-300 mm ²)	2	M18	6	BOLT	0,276
KL 1x300/1K/V /R	6419410357132									

Product code e.g:

KL 1x120/1H

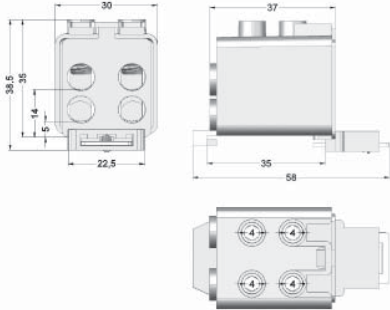


KL 2 x 95 / 1S

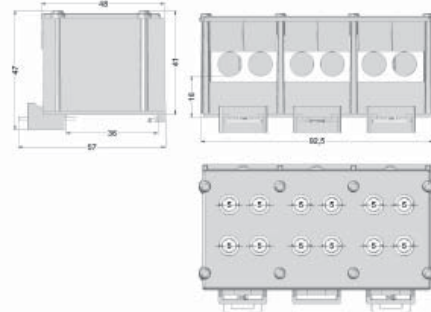


**TERMINAL BLOCKS
DIMENSIONAL DRAWINGS**

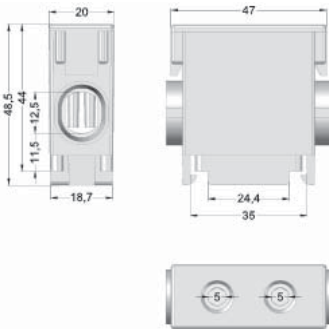
KL 4x16/1 KL 2x16/2



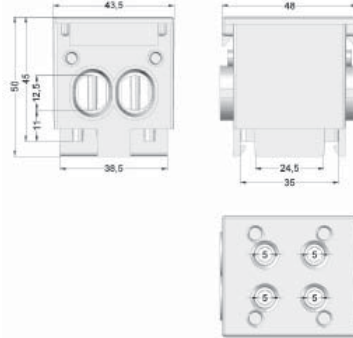
KL 4x35/3



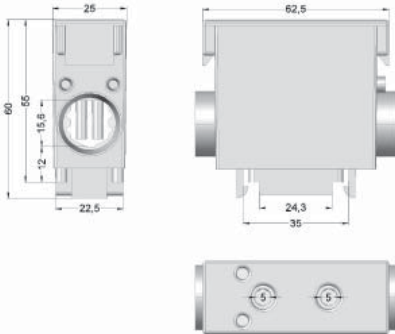
KL 1x50/1H



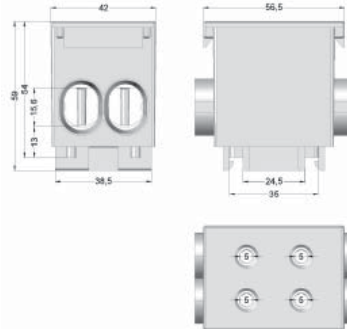
KL 2x50/1H



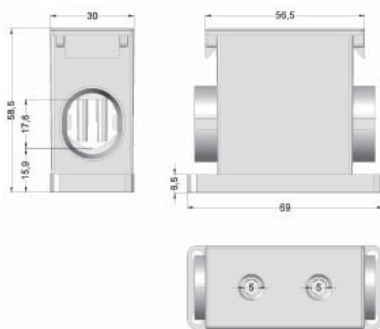
KL 1x95/1H



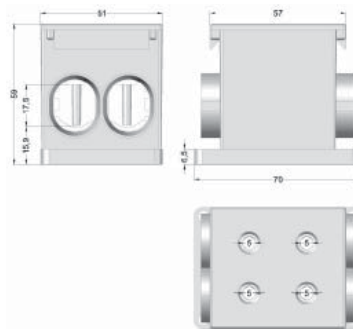
KL 2x95/1H



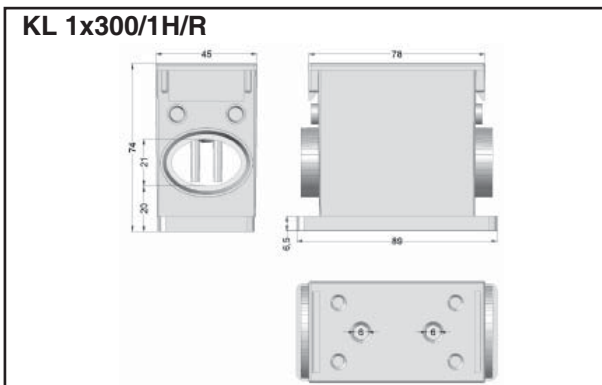
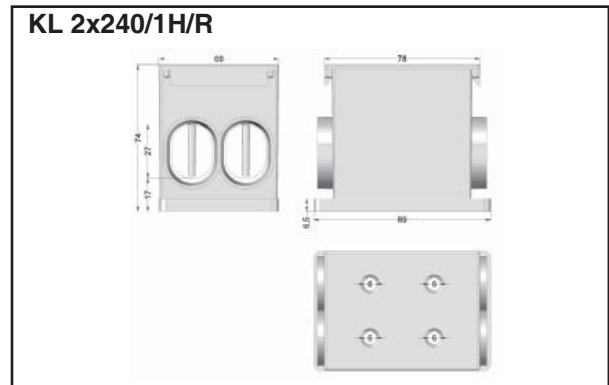
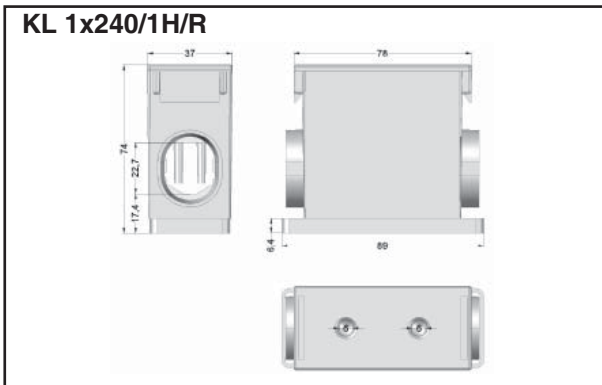
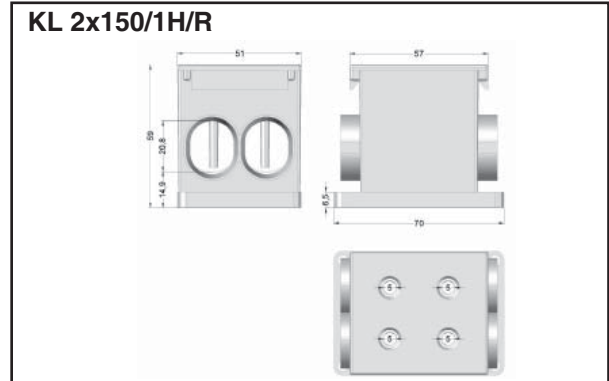
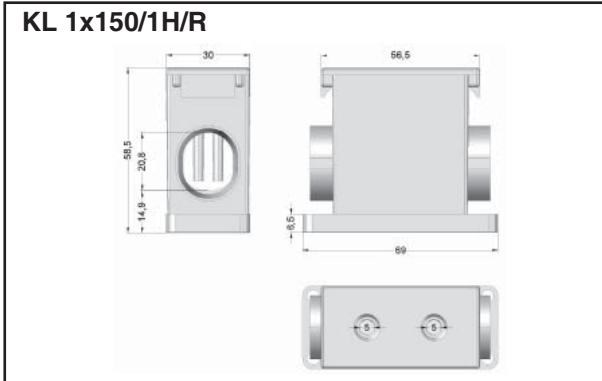
KL 1x120/1H/R



KL 2x120/1H/R



TERMINAL BLOCKS
DIMENSIONAL DRAWINGS



METRIC CABLE GLANDS (PLASTIC)

MOULDED CABLE GLANDS WITH STRAIN RELIEF



KPK-MVP

Material: Polyamide
Colour: Grey, RAL 7001
IP68

Type	EAN-code	Cable Ø mm	Thread mm	Width mm	Pcs
KPK M12 MVP	6419410362808	3...6	8,0	15,0	100
KPK M16 MVP	6419410362815	5...10	8,0	20,0	100
KPK M20 MVP	6419410362822	8...13	8,0	24,0	100
KPK M25 MVP	6419410362839	11...17	8,0	29,0	50
KPK M32 MVP	6419410362846	15...21	10,0	36,0	25
KPK M40 MVP	6419410362853	19...28	10,0	46,0	10
KPK M50 MVP	6419410362860	27...35	12,0	55,0	5
KPK M63 MVP	6419410362877	32...42	12,0	68,0	5

ATEX CABLE GLANDS WITH STRAIN RELIEF



KPK-MVP EX

Material: Polyamide
Colour: Black, RAL 9005
Ex II 2 GD EEx e
IP66

Type	EAN	Cable Ø mm	Thread mm	Width mm	Pcs
KPK M20 MVP EX	6419410362761	5,5...13	8,0	24,0	100
KPK M25 MVP EX	6419410362778	8...17	8,0	29,0	50
KPK M32 MVP EX	6419410362785	12...21	10,0	36,0	25
KPK M40 MVP EX	6419410362792	17...28	10,0	46,0	10

ENLARGING FITTINGS



KE

Material: Polyamide
Colour: Grey, RAL 7035

Type	EAN-code	Thread mm	Width mm	Height mm	Pcs
KE M12-16	6419410461181	8,0	20,0	20,5	100
KE M16-20	6419410461198	8,0	24,0	20,5	100
KE M20-25	6419410461204	8,0	30,0	21,0	100
KE M25-32	6419410461211	8,0	37,0	23,0	50
KE M32-40	6419410461228	10,0	45,0	25,0	50

REDUCING FITTINGS



KR

Material: Polyamide
Colour: Grey, RAL 7035

Type	EAN-code	Thread mm	Width mm	Height mm	Pcs
KR M20-12	6419410361795	8,0	24,0	12,0	100
KR M20-16	6419410361801	8,0	24,0	12,0	100
KR M25-12	6419410361818	8,0	29,0	14,0	100
KR M25-16	6419410361825	8,0	29,0	14,0	100
KR M25-20	6419410361832	8,0	29,0	14,0	100
KR M32-12	6419410361849	10,0	36,0	16,0	50
KR M32-16	6419410361856	10,0	36,0	16,0	50
KR M32-20	6419410361863	10,0	36,0	16,0	50
KR M32-25	6419410361870	10,0	36,0	16,0	50
KR M40-16	6419410361887	10,0	46,0	16,0	50
KR M40-20	6419410361894	10,0	46,0	16,0	50
KR M40-25	6419410361900	10,0	46,0	16,0	50
KR M40-32	6419410361917	10,0	46,0	16,0	50
KR M50-20	6419410361924	12,0	55,0	18,0	25
KR M50-25	6419410361931	12,0	55,0	18,0	25
KR M50-32	6419410361948	12,0	55,0	18,0	25
KR M50-40	6419410361955	12,0	55,0	18,0	25
KR M63-25	6419410361962	12,0	68,0	18,0	25
KR M63-32	6419410361979	12,0	68,0	18,0	25
KR M63-40	6419410361986	12,0	68,0	18,0	25
KR M63-50	6419410361993	12,0	68,0	18,0	25

METRIC CABLE GLANDS (PLASTIC)

ADAPTERS



PG-M

Material: Polyamide
Colour: Grey, RAL 7035

Type	EAN-code	Thread mm	Width mm	Height mm	Pcs
KR PK7-M12	6419410459911	8,0	15,0	20,0	100
KR PK7-M16	6419410459928	8,0	20,0	20,0	100
KR PK9-M12	6419410429935	8,0	19,0	20,0	100
KR PK9-M16	6419410459942	8,0	20,0	20,0	100
KR PK9-M20	6419410459959	8,0	24,0	20,0	100
KR PK11-M16	6419410459966	8,0	22,0	20,0	100
KR PK11-M20	6419410459973	8,0	24,0	20,0	100
KR PK13-M16	6419410459980	9,0	24,0	21,0	100
KR PK13-M20	6419410459997	9,0	24,0	21,0	100
KR PK13-M25	6419410461006	9,0	30,0	21,5	100
KR PK16-M20	6419410461013	10,0	27,0	22,0	100
KR PK16-M25	6419410461020	10,0	30,0	22,5	100
KR PK21-M25	6419410461037	11,0	33,0	23,5	50
KR PK21-M32	6419410461044	11,0	37,0	25,5	50
KR PK29-M32	6419410461051	11,0	42,0	25,5	50
KR PK29-M40	6419410461068	11,0	45,0	25,5	50



M-PG

Material: Polyamide
Colour: Grey, RAL 7035
H = Hexagon

Type	EAN-code	Thread mm	Width mm	Height mm	Pcs
KR M12-PK7 H	6419410461075	8,0	15,0	21,0	100
KR M12-PK9 H	6419410461082	11,0	19,0	23,5	100
KR M16-PK9 H	6419410461099	11,0	19,0	24,5	100
KR M20-PK11 H	6419410461105	11,0	22,0	26,5	100
KR M20-PK13,5 H	6419410461112	11,0	24,0	26,0	100
KR M25-P16 H	6419410461129	11,0	27,0	29,0	50
KR M25-PK21 H	6419410461136	11,0	32,0	31,0	50
KR M32-PK29 H	6419410461143	11,0	42,0	33,0	25
KR M40-PK29 H	6419410461150	11,0	42,0	34,0	10
KR M50-PK36 H	6419410461167	11,0	53,0	37,0	10
KR M50-PK42 H	6419410461174	11,0	60,0	39,0	10
KR M63-PK48 H	6419410461310	11,0	65,0	40,0	10

STOPPING PLUGS



KST

Material: Polyamide
Colour: Grey, RAL 7035

Type	EAN-code	Thread mm	Width mm	Height mm	Pcs
KST M12	6419410461235	6,0	15,0	10,0	100
KST M16	6419410461242	6,0	20,0	10,5	100
KST M20	6419410461259	6,0	24,0	10,5	100
KST M25	6419410461266	8,0	30,0	13,0	100
KST M32	6419410461273	8,0	37,0	13,5	100
KST M40	6419410461280	8,0	46,0	14,0	50
KST M50	6419410461297	10,0	56,0	16,5	50
KST M63	6419410461303	12,0	70,0	17,0	50

HEXAGON LOCKNUTS



KVM

Material: Polyamide
Colour: Grey, RAL 7035

Type	EAN-code	Width mm	Height mm	Pcs
KVM M12	6419410359709	17,0	5,0	100
KVM M16	6419410359716	22,0	5,0	100
KVM M20	6419410359723	27,0	6,0	100
KVM M25	6419410359730	32,0	6,0	100
KVM M32	6419410359747	41,0	7,0	100
KVM M40	6419410359754	50,0	7,0	50
KVM M50	6419410359761	60,0	8,0	50
KVM M63	6419410359778	75,0	8,0	50

METRIC CABLE GLANDS (METAL)

CABLE GLANDS WITH STRAIN RELIEF



KPK-TVP

Material:
Nickel-coated brass
IP68

Type	EAN	Cable Ø mm	Thread mm	Width mm	Pcs
KPK M12 TVP	6419410362884	3...6	5,0	14,0	100
KPK M16 TVP	6419410362891	5...9	5,0	17,0	100
KPK M20 TVP	6419410362907	9...13	6,0	22,0	100
KPK M25 TVP	6419410362914	11...16	7,0	27,0	50
KPK M32 TVP	6419410362921	14...21	8,0	34,0	25
KPK M40 TVP	6419410362938	19...27	8,0	43,0	10
KPK M50 TVP	6419410362945	24...35	9,0	55,0	5
KPK M63 TVP	6419410362952	32...42	10,0	65,0	5

EMC-PROTECTED CABLE GLANDS WITH STRAIN RELIEF



KPK-TVP/EMC-Y

Material:
EMC-protected
nickel-coated brass
IP68

Type	EAN	Cable Ø mm	Thread mm	Width mm	Pcs
KPK M12 TVP/EMC-Y	6419410363287	3...6,5	5,0	14,0	100
KPK M16 TVP/EMC-Y	6419410363263	4,5...10	5,0	17,0	100
KPK M20 TVP/EMC-Y	6419410363201	6...12	6,0	22,0	100
KPK M25 TVP/EMC-Y	6419410363218	11...17	7,0	27,0	50
KPK M32 TVP/EMC-Y	6419410363225	15...21	8,0	34,0	25
KPK M40 TVP/EMC-Y	6419410363232	19...28	8,0	43,0	10
KPK M50 TVP/EMC-Y	6419410363249	27...38	9,0	55,0	5
KPK M63 TVP/EMC-Y	6419410363256	34...44	10,0	65,0	5

ATEX CABLE GLANDS WITH STRAIN RELIEF



KPK-TVP EX

Material:
Nickel-coated brass
Ex II 2 GD EEx e
IP68

Type	EAN	Cable Ø mm	Thread mm	Width mm	Pcs
KPK M20 TVP EX	6419410362686	9...13	6,0	22,0	100
KPK M25 TVP EX	6419410362693	11...16	7,0	27,0	50
KPK M32 TVP EX	6419410362709	14...21	8,0	34,0	25
KPK M40 TVP EX	6419410362716	19...27	8,0	43,0	10

ACID PROOF CABLE GLANDS WITH STRAIN RELIEF



KPK-HVP

Material:
Acid proof steel,
according to AISI 316
IP68
Hexagon locknuts
included

Type	EAN	Cable Ø mm	Thread mm	Width mm	Pcs
KPK M16 HVP	6419410461419	7...11,5	6,0	20,0	10
KPK M20 HVP	6419410461426	8...15	6,0	24,0	10
KPK M25 HVP	6419410461433	13...20	7,5	32,0	10
KPK M32 HVP	6419410461440	18...25,5	8,0	38,0	10

HEXAGON ENLARGING FITTINGS



KE-TH

Material:
Nickel-coated brass

Type	EAN	Thread mm	Width mm	Height mm	Pcs
KE M12-16 TH	6419410361405	5,0	18,0	16,0	100
KE M16-20 TH	6419410361412	5,0	22,0	16,5	100
KE M20-25 TH	6419410361429	6,0	27,0	18,5	50
KE M25-32 TH	6419410361436	7,0	34,0	20,5	25
KE M32-40 TH	6419410361443	8,0	42,0	23,5	25
KE M40-50 TH	6419410361450	8,0	52,0	30,0	10
KE M50-63 TH	6419410361467	9,0	65,0	32,5	10

METRIC CABLE GLANDS (METAL)

REDUCING FITTINGS



KR-T

Material:
Nickel-coated brass

Type	EAN	Thread mm	Width mm	Height mm	Pcs
KR M16-12 T	6419410360767	6,0	20,0	8,5	100
KR M20-12T	6419410360774	6,5	24,0	9,0	100
KR M20-16 T	6419410360781	6,5	24,0	9,0	100
KR M25-16 T	6419410360798	7,0	30,0	10,0	100
KR M25-20T	6419410360804	7,0	30,0	10,0	100
KR M32-20 T	6419410360811	8,0	39,0	11,5	50
KR M32-25 T	6419410360828	8,0	39,0	11,5	50
KR M40-25T	6419410360835	9,0	50,0	12,5	25
KR M40-32 T	6419410360842	9,0	50,0	12,5	25
KR M50-32 T	6419410360859	10,0	57,0	14,0	10
KR M50-40 T	6419410360866	10,0	57,0	14,0	10
KR M63-40T	6419410360873	10,0	70,0	14,0	10
KR M63-50 T	6419410360880	10,0	70,0	14,0	10

ADAPTERS



PK-M

Material:
Nickel-coated brass

Type	EAN	Thread mm	Width mm	Height mm	Pcs
KR PK16 M20 T	6419410362211	6,5	24,0	9,5	100
KR PK21 M25 T	6419410362228	7,0	30,0	10,0	100
KR PK29 M25 T	6419410362235	8,0	39,0	11,5	100



M-PK

Material:
Nickel-coated brass

Type	EAN	Thread mm	Width mm	Height mm	Pcs
KR M16 PK7 TH	6419410360606	5,0	17,0	8,0	100
KR M20 PK9 TH	6419410360613	6,0	22,0	9,0	100
KR M25 PK11 TH	6419410360620	7,0	27,0	10,0	100
KR M25 PK13,5 TH	6419410360637	7,0	27,0	10,0	100
KR M32 PK13,5 TH	6419410360644	8,0	34,0	11,0	50
KR M32 PK16 TH	6419410360651	8,0	34,0	11,0	50
KR M32 PK21 TH	6419410360668	8,0	34,0	11,0	50
KR M40 PK16 TH	6419410360675	8,0	43,0	12,0	25
KR M40 PK21 TH	6419410360682	8,0	43,0	12,0	25
KR M40 PK29 TH	6419410360699	8,0	43,0	12,0	25
KR M50 PK21 TH	6419410360705	9,0	55,0	13,0	25
KR M50 PK29 TH	6419410360712	9,0	55,0	13,0	25
KR M50 PK36 TH	6419410360729	9,0	55,0	13,0	10
KR M63 PK29 TH	6419410360739	10,0	65,0	14,0	10
KR M63 PK36 TH	6419410360743	10,0	65,0	14,0	10
KR M63 PK42 TH	6419410360750	10,0	65,0	14,0	10

STOPPING PLUGS



KST-TT

Material:
Nickel-coated brass

Type	EAN	Thread mm	Width mm	Height mm	Pcs
KST M12 TT	6419410361702	5,0	16,0	8,0	100
KST M16 TT	6419410361719	6,0	20,0	9,0	100
KST M20 TT	6419410361726	6,5	24,0	9,5	100
KST M25 TT	6419410361733	7,0	28,0	11,0	100
KST M32 TT	6419410361740	8,0	35,0	12,0	50
KST M40 TT	6419410361757	8,0	45,0	12,0	50
KST M50 TT	6419410361764	9,0	55,0	15,0	25
KST M63 TT	6419410361771	10,0	68,0	16,0	10

METRIC CABLE GLANDS (METAL)

ATEX STOPPING PLUGS



KST-T EX

Material:
Nickel-coated brass
Ex II 2 GD EEx e
IP68

Type	EAN	Thread mm	Width mm	Height mm	Pcs
KST M20 T EX	6419410362242	6,5	24,0	9,5	100
KST M25 T EX	6419410362259	7,0	28,0	11,0	100
KST M32 T EX	6419410362266	8,0	35,0	12,0	50

HEXAGON LOCKNUTS

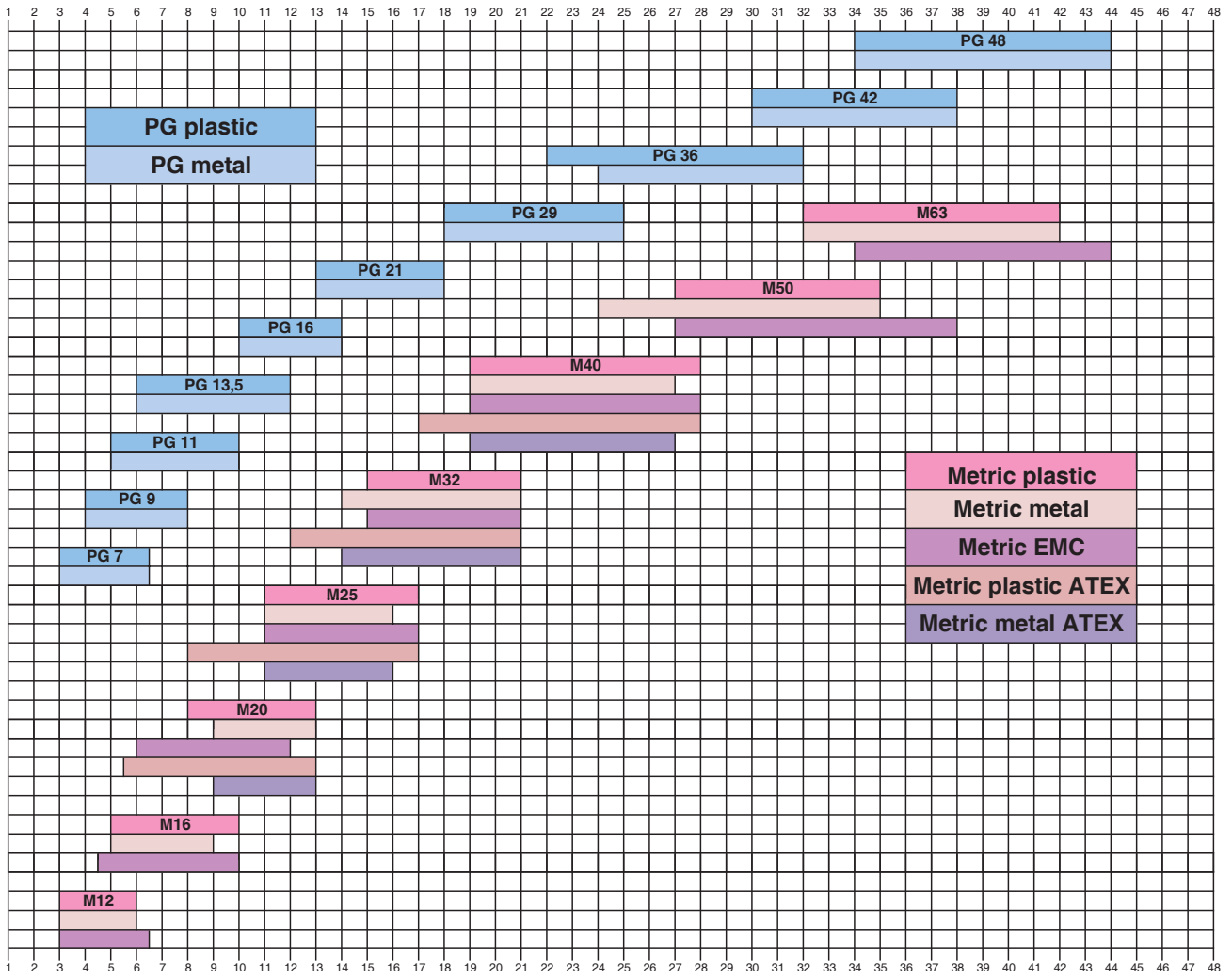


KVM-T

Material:
Nickel-coated brass

Type	EAN	Width mm	Height mm	Pcs
KVM M12 T	6419410359914	15,0	2,8	100
KVM M16 T	6419410359921	19,0	2,8	100
KVM M20 T	6419410359938	24,0	3,0	100
KVM M25 T	6419410359945	30,0	3,5	100
KVM M32 T	6419410359952	36,0	4,0	100
KVM M40 T	6419410359969	46,0	5,0	50
KVM M50 T	6419410359976	60,0	5,0	50
KVM M63 T	6419410359983	70,0	6,0	50

PG-METRIC SIZE COMPARISON TABLE



KATKO WORLDWIDE



LOAD BREAK SWITCHES AND SWITCH FUSES



CONDITIONS OF SALE

1. Validity

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

2. Specifications

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

3. Price

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

4. Delivery

Unless otherwise agreed, deliveries shall be ex-works, Vantaa in accordance with Incoterms 2000. Where the Distributor fails to give Katko adequate instructions for dispatch, or otherwise delays delivery, Katko shall be entitled to store, dispose of or reallocate the goods without being responsible for any loss and at its option to charge for any costs arising and/or to cancel the order.

5. Force Major

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

6. Payment

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

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

7. Claims

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

8. Guarantee

Katko shall at its option replace at its own cost any goods which on arrival, fail or are found defective, provided that the goods are returned to Katko's designated factory freight prepaid, and Katko is informed immediately, the failure or the defect becomes apparent and the same is shown to Katko's reasonable satisfaction to be due to its faulty workmanship or defective materials.

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

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

9. Copyright and confidentiality

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

10. Taxes, duties, fees, charges

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

11. Forbearance

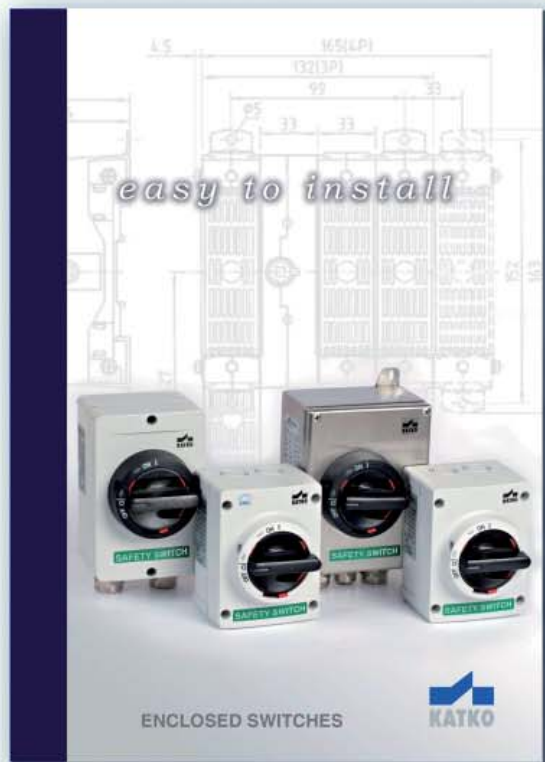
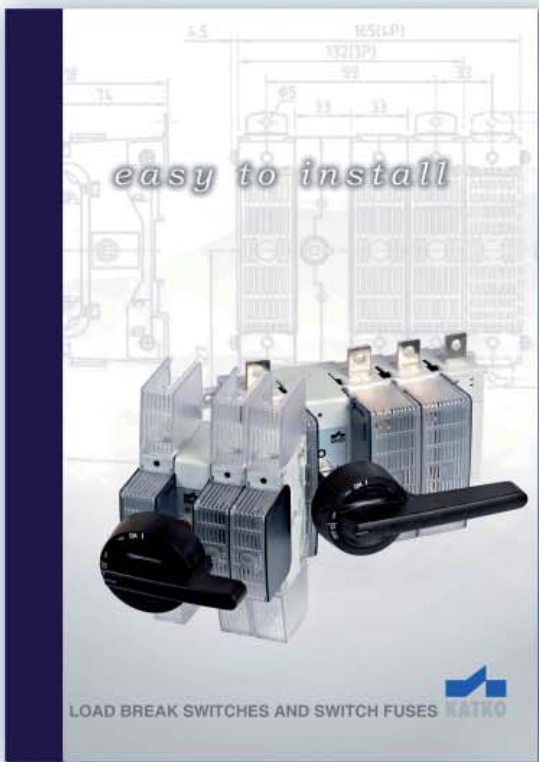
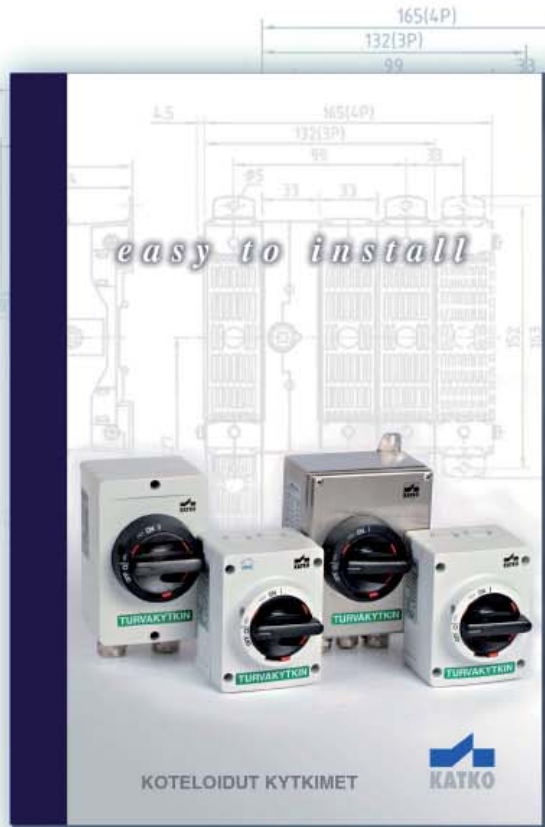
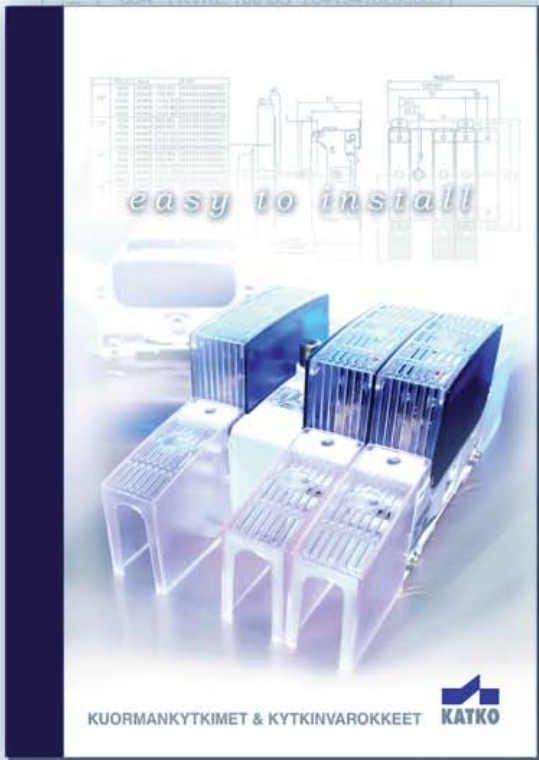
Katko's rights shall not be affected or restricted by any indulgence or forbearance to the Distributor.

12. Orgalime S 2000

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

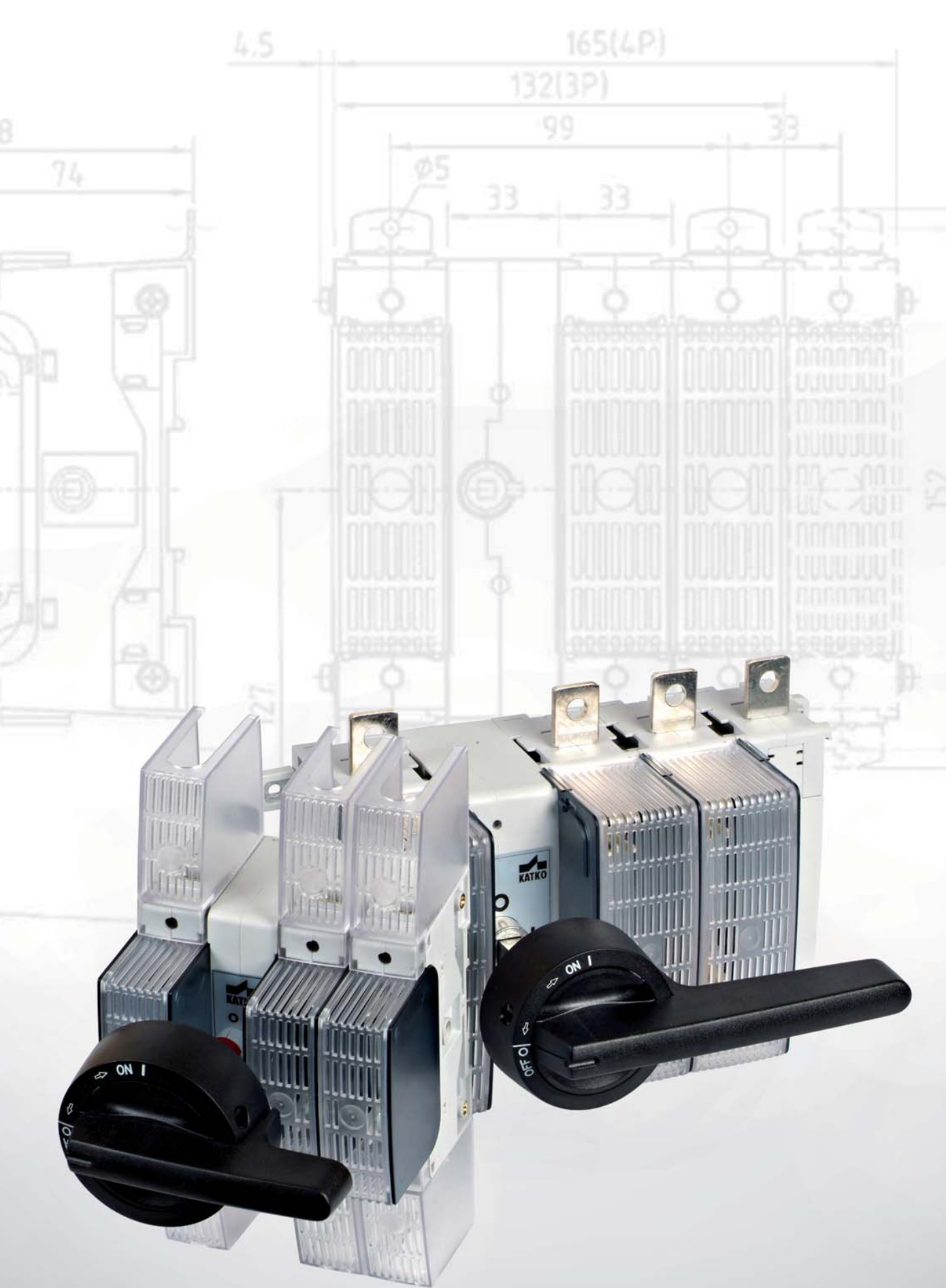
KATKO'S CATALOGUES

AC-22	Type	EAN
63A	KVKE 163 BS	6419410296661
80A	KVKE 180 BS	6419410296665



PLEASE SEE ALSO:

WWW.KATKO.COM



KATKO Oy

Karhunkierros 6, P.O.Box 12
FIN 01641 Vantaa, Finland
Tel. +358 9 849 600
Fax. +358 9 849 60800
www.katko.com

KATKO UK Ltd.

Unit 1 Blacknest Business Park
Blacknest road, Blacknest
Hampshire GU34, 4PX, UK
Tel. +44 (0) 1420 520 530
Fax. +44 (0) 1420 520 560
www.katko.co.uk

KATKO POLAND Sp. z o. o.

Remontowa 10
PL 03-616 Warszawa
Tel. +48 22 678 63 93
Fax. +48 22 678 95 31
www.katko.pl