

# Kraus & Naimer

## BLUE LINE Load Break Switch V4.6

[www.krausnaimer.com](http://www.krausnaimer.com)

SINCE 1907

### 16 - 1250 Ampere



Type KF/KH/KG Load Break Switch



Type KE Load Break Switch



Enclosed Load Break switch in thermoplastic KT/KS/KL enclosures



Enclosed Load Break switch in metal & thermoplastic enclosures

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## Kraus & Naimer BLUE LINE LOAD BREAK SWITCH

The KE, KF, KG and KH range of Load Break Switches combine both minimal physical dimensions with ideal performance characteristics which make it suitable for use in ventilation, air-conditioning & pumping systems, system main switches and distribution switches in standard distribution systems in industrial installations.

- \* Main Switches
- \* Isolator Switches
- \* Safety Switches
- \* Switch Disconnectors
- \* Couplers
- \* Motor Disconnect Switches



Type KG251/KG316 Load Break Switch with Door Interlock M280D, Padlockable Handle V850.

### KF/KG/KH LOAD BREAK SWITCH

- \* **Ratings**  
Available in ratings from 16A to 315A for AC21 and 5.5kw/415V to 110kw/415V for AC23
- \* **Mounting**
  - Panel mounting Type E
  - Panel mounting (single hole) FT1/FT2
  - Base Mounting Type VE. Suitable for both screw and DIN Rail mounting
  - Base mounting Type VE2 for distribution MCB panels with the standard 45mm knock-outs. Suitable for both screw and DIN Rail mounting.
- \* **Switching Configuration**  
KG switches available in standard block of 3 & 6 poles.  
KH switches available in standard block of 4 poles.
  - ON-OFF Switch
    - 2 poles <sup>1)</sup> - 3 poles
    - 4 poles - 6 poles <sup>2)</sup>
    - 8 poles <sup>4)</sup> - 9 poles (on request) <sup>3)</sup>
  - Change-over 1-OFF-2 Switch
    - 3 poles <sup>6)</sup> - 4 poles <sup>6)</sup>

It is possible to expand the above types by adding on additional contact blocks without the need to dismantle the switch. This feature is specially suitable for site alteration.

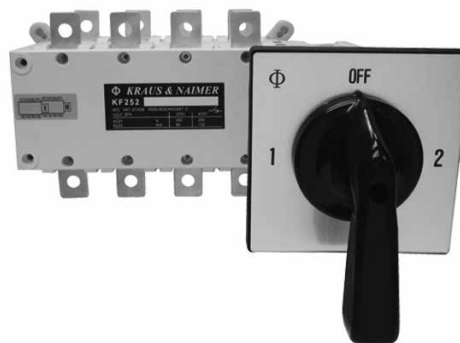
- \* **Finger-proof Terminal IP20 <sup>5)</sup>**
  - Finger-proof terminal prevents inadvertent finger contact with electrified parts, thereby reducing the danger to electric shock and life

Base Switch Type	Version	Stage Material "Halogen Free"	
		Frianyl A63V0GV20	Ultramid KR4480
KF	All	✓	
KH16 - KH80	All		✓
KG20 - KG32	All	✓	
KG41 - KG64	4/8 poles	✓	
KG41 - KG64	3/6 poles	✓	
KG80 - KG105	4/8 poles	✓	
KG80 - KG105	3/6 poles	✓	
KG125 - KG317	All		✓

- \* **Withstand Ambient Temperature**
  - Without load (mechanical load) : > 200°C
  - Under load according ISO75
    - Variation A (1.80 MPA) : 170°C
    - Variation B (045 MPA) : 210°C
- \* **Flammability Class**
  - UL94-V2 Ultramid (by end of 2010 Ultramid will be replaced by Frianyl)
  - UL94-V0 Frianyl

### KE LOAD BREAK SWITCH

- \* **Ratings**  
Available in ratings from 250A to 1250A for AC21 and 250A to 1000A for AC23
- \* **Mounting**
  - Base Mounting. Suitable for screw mounting
- \* **Switching Configuration**
  - ON-OFF Switch
    - 3 poles
    - 4 poles
  - Change-over 1-OFF-2 Switch
    - 4 poles

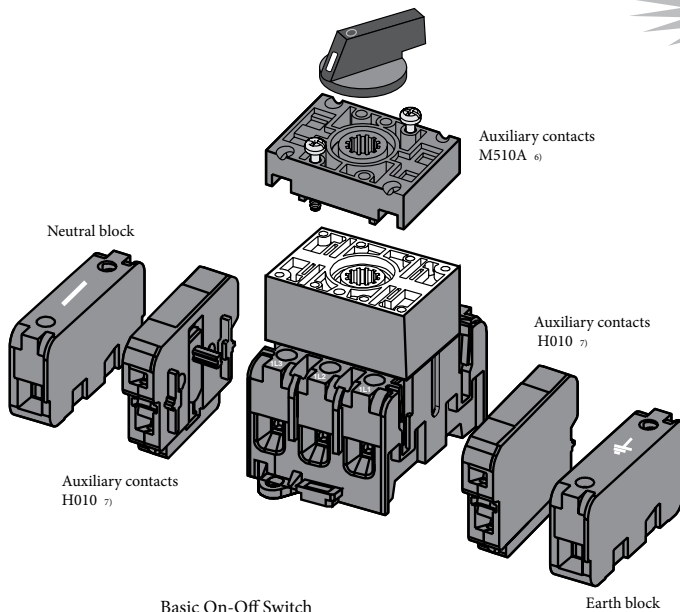


- 1) KG10 to KG64, KF16 to KF32 only
- 2) KG10 to KG162, KF16 to KF32 only
- 3) KG41/KG64/KG80/KG100/KG126/KG161 only
- 4) KG20 to KG100C/KG105C/KG161/KF16 to KF32 only
- 5) Except KG161/KG162/KG250/KG252/KG316/KG317
- 6) KG20 to KG100C/KG105/KG161 only

# KF/KG/KH Load Break Switch

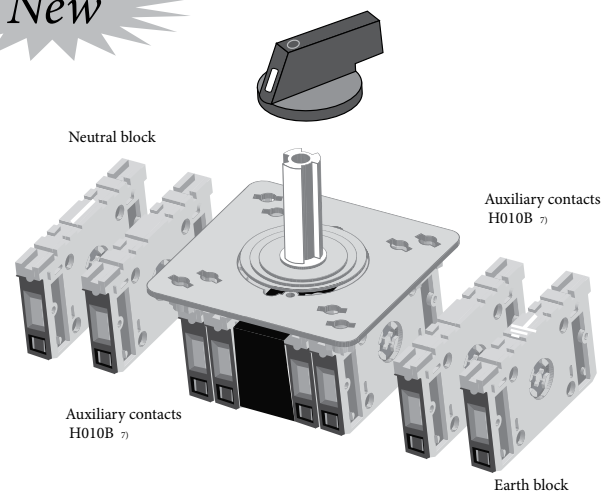
## KG/KH ON-OFF Switch

## KF ON-OFF Switch



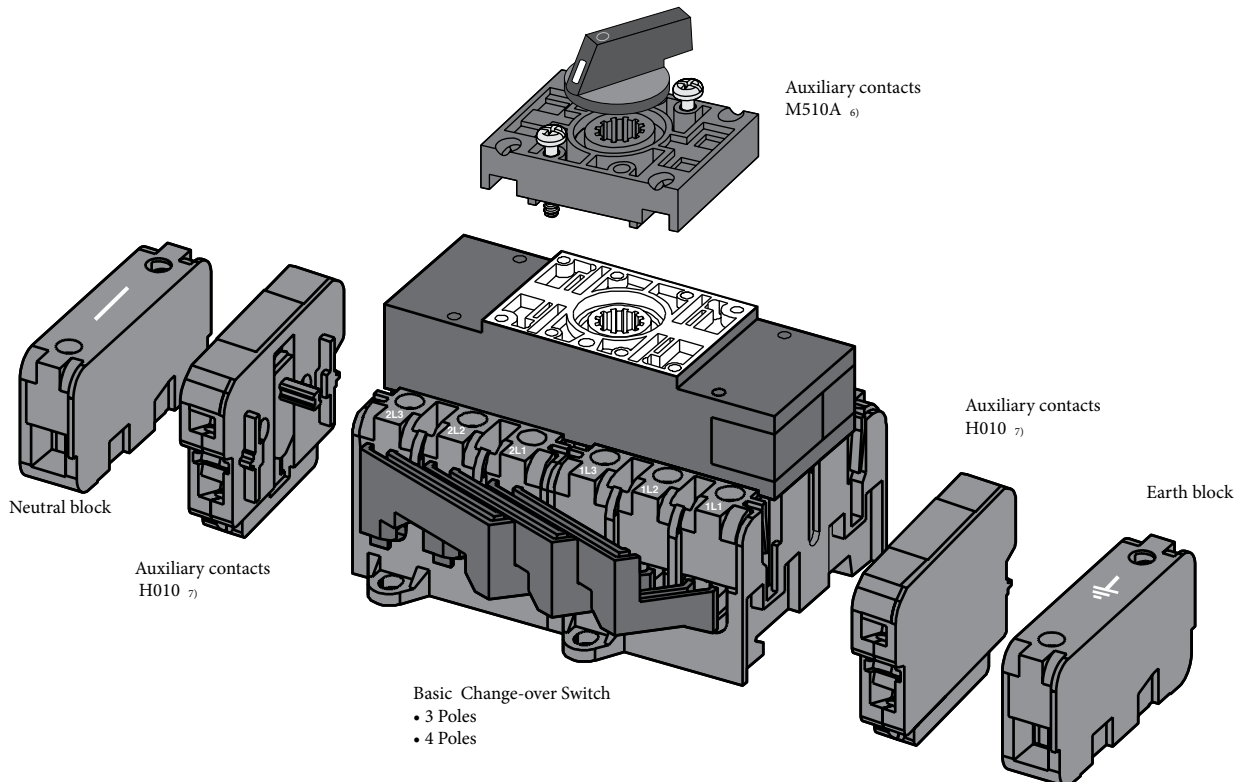
### Basic On-Off Switch

- 2 Poles (KG20 to KG64 & KF16 to KF32)
- 3 Poles
- TPN (KH63 only)
- 4 Poles
- 6 Poles (KG10 to KG162 & KF16 to KF32)



- 16A to 32A Thermal current range
- Wide contacts gap with force opening and closing of contacts
- Suitable for motor on load switching AC23 7.5 to 16kW
- Highly modular system allows flexibility on contacts arrangement
- Enclosure - IP66/IP67 rated & UL94V-0 flame retardant
- Add on accessories available such as auxiliary contacts etc...
- IEC 60947-3 Standard

## KG CHANGE-OVER Switch



### Basic Change-over Switch

- 3 Poles
- 4 Poles

6) Cam operated auxiliary contacts for KG20 to KG105C and rack operated auxiliary contacts for KG161 to KG317.  
All mountings to be done at Kraus & Naimer factory only.

7) Lateral mounted auxiliary contacts. All mountings to be done by trained Kraus & Naimer personnel.

# KE Load Break Switch

## KE ON-OFF Switch

Terminal Cover (IP20 Type)  
for up to 630A

Terminal Cover (ScreenType)  
for 800A to 1600A

Basic On-Off Switch  
• 3P  
• 4P

Shaft extension  
max. 200mm

Auxilliary contacts

Door interlock system

Padlockable handle  
- maximum 3 padlocks

KE800 - KE1250

KE401 - KE631

## KE CHANGE-OVER Switch

Top Terminal cover (IP20 Type) for 250A to 630A

Top Terminal cover (Screen Type) for 800A to 1250A

Basic Change-over  
Switch  
• 4P

Auxilliary contacts


Door interlock system

Padlockable handle  
- maximum 3 padlocks

KE802 - KE1252

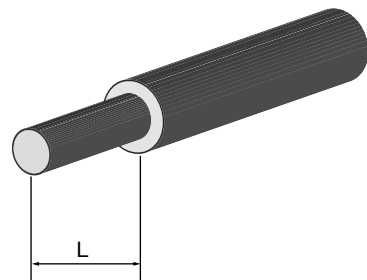
KE402 - KE632

## Mounting for KG/KH Switch

	Size Description	Mounting	K0 KF16 KF20 KF25 KF32	K0 KG20 KG21	K1 KG41 KG64	K2 KG80 KG100 KG105 KH63	K3 KG161	K3A KG211 KG251 KG316
	Panel mounting IP65	E	●	●	●	●	●	●
	22/30mm single hole panel mounting IP65. Without escutcheon plate	FT1 <sub>8)</sub>	●	●				
	22/30mm single hole panel mounting IP65. With escutcheon plate	FT2 <sub>8)</sub>	●	●				
	Base Mounting • DIN Rail mounting • Screw mounting	VE	● ●	● ●	● ●	● ●	●	●
	Base Mounting • DIN Rail mounting • Screw mounting Escutcheon plate for 45mm knockout	VE2	●	●	●	●	●	

### STRIP LENGTH - Dimension in mm

Switch Type	KF16			KG80		KG211	
	KF20			KG100		KG251	
	KF25	KG20	KG41	KG105	KG161	KG316	KH63
	KF32	KG32	KG64				
L (mm)	9	9	10	14	17	22	14



### Terminal Screws:

Terminals, which are not supposed to be used for connecting wires are supplied with tightened terminal screws and should not be unscrewed. If for some reason such terminals are opened nevertheless please mind that no jumper links get lost and that all terminal screws are tightened again after wiring is completed.

8) KG10A, KG20A and KG32A only

## Coding for KF/KH/KG Switch

When ordering a KF/KH/KG Load Break Switch, the following information will be required:

- Rating of the switch
- Switch function and configuration
- Mounting

### RATING

40A

### FUNCTION

3P ON-OFF c/w Door Clutch

### MOUNTING

Base Mounting

KG41B	T3	0	3	/	SGZ001	VE
-------	----	---	---	---	--------	----

Switch Type \_\_\_\_\_

KF16/KF16B	-	16A
KF20/KF20B	-	20A
KF25/ KF25B/KG20/ KG20B	-	25A
KF32/ KF32B/KG32/KG32B	-	32A
KG41/KG41B	-	40A
KG64/KG64B/KH63	-	63A
KG80/KG80C	-	80A
KG100/KG100C	-	100A
KG105/KG105C	-	125A
KG161/KG162	-	160A
KG211	-	200A
KG251	-	250A
KG316	-	315A

Switch Disconnector IEC947-3 \_\_\_\_\_

T1	-	Main Switch
T2	-	Emergency Switch
T3	-	Switch Disconnector (ON-OFF)
T9	-	Switch Disconnector (1-OFF-2)

Number of Poles \_\_\_\_\_

2	-	2 Poles (KG10 to KG64, KF16 to KF32 only)
3	-	3 Poles
4	-	4 Poles
5	-	3 Poles + Neutral + Earth
6	-	6 Poles (KG10 to KG161, KF16 to KF32 only)
7	-	3 Poles + Neutral
8	-	8 Poles (KG20 to KG161, KF16 to KF32 only)






National Dash (Optional) \_\_\_\_\_

SGZ001	-	Door clutch with interlock ( IP40) using • S1 M280E/B24S-01    • S1 M280E/B24S    • S2 M280E/B24S
SGZ002	-	Door clutch with interlock(IP40) and padlockable handle • S1 V840G/D62    • S2 V840D/D6    • S2 V845/A2    • S3 V845/A2
SGZ003	-	Enclosed switch in IP65/IP66/IP67 ABS thermoplastic enclosure
SGZ004	-	Padlockable handle V840B (VE2 mounting)
SGZ005	-	Enclosed switch in IP40 sheet steel enclosure
SGZ006	-	Padlockable handle S1 V840G/D6 (E Panel mounting IP65)
SGZ007	-	With silver auxiliary contacts M510 (1NO + 1NC) + door clutch • S1 M280E/B23S-01    • S1 M280E/B24S    • S2 M280E/B24S
SGZ107	-	With gold auxiliary contacts M510 (1NO + 1NC) + door clutch • S1 M280E/B23S-01    • S1 M280E/B24S    • S2 M280E/B24S
SGZ008	-	With silver auxiliary contacts M510 (1NO + 1NC) + door clutch + padlockable handle • S1 V840G/D62    • S2 V840D/D6    • S2 V845/A2    • S3 V845/A2
SGZ108	-	With gold auxiliary contacts M510 (1NO + 1NC) + door clutch + padlockable handle • S1 V840G/D62    • S2 V840D/D6    • S2 V845/A2    • S3 V845/A2
SGZ009	-	Enclosed switch in IP65/IP66 sheet steel enclosure
SGZ010	-	Enclosed switch in IP65/IP66 stainless steel enclosure
SGZ013	-	Enclosed switch in IP65/IP66/IP67 ABS thermoplastic enclosure With auxiliary contacts M510 (1NO + 1NC)
SGZ133	-	Enclosed switch in IP65/IP66/IP67 polycarbonate (PC) thermoplastic enclosure
SGZ 134	-	Enclosed switch in IP65/IP66/IP67 polycarbonate (PC) thermoplastic enclosure with auxiliary contacts M510 (1NO + 1NC)

Types of Mounting \_\_\_\_\_

E	-	Panel mounting IP65	9P66	-	Enclosure mounting IP66 thermoplastic
FT1	-	Single hole panel mounting 22 mm, IP66	9M40	-	Enclosure mounting IP40 metal
FT2	-	Single hole panel mounting 22 mm, IP66	9M66	-	Enclosure mounting IP66 metal
VE	-	Base mounting IP40	9S66	-	Enclosure mounting IP66 stainless steel
VEB	-	Base mounting IP40	KT	-	Enclosure mounting IP66/IP67 thermoplastic
VE2	-	Base mounting	KL/KLV	-	Enclosure mounting IP66/IP67 thermoplastic



TECHNICAL SPECIFICATION 			NEW KF16	NEW KF20	NEW KF25	KG20	NEW KF32	KG32	KG41
Thermal Current Ith2 IEC947-3			16A	20A	25A	25A	32A	32A	40A
Nominal Current IEC947-3									
AC21A	Switch disconnectors for resistive load Ie		16A	20A	25A	25A	32A	32A	40A
AC23A	Switch disconnectors for motor circuits, main switches, etc.	3 x 220 -240V	4.5kW	5.5kW	7kW	4kW	9kW	5.5kW	7.5kW
		3 x 380V-440V	7.5kW	10kW	12kW	7.5kW	16kW	11kW	15kW
Short Circuit Protection									
Maximum fuse size (gL-characteristic)			25A	35A	32A	35A	35A	35A	50A
Rated short-time withstand current (1s-current)			350A	350A	350A	350A	350A	430A	500A
Nominal Voltage IEC947-3			690V	690V	690V	690V	690V	690V	690V
Fuse			25	20	35	35	35	35	50
Fuse-Protected short-circuit withstand (KA Rms pressured)			15	15	15	15	15	15	7.5
Rated short-circuit making capacity Icm (A peak)			1000	1000	1000	1000	1000	1000	3000
Rated short-time withstand current Icw (ARms 1s)			350	350	350	350	350	430	500
Connection									
Stranded Wire (mm²)			6mm²	6mm²	6mm²	6mm²	6mm²	6mm²	16mm²
Busbar (maximum bar width)			-	-	-	-	-	-	-
Weight of basic switch in kg									
• 3 Poles			0.149	0.149	0.149	0.120	0.149	0.120	0.180
• 4 Poles			0.175	0.175	0.175	0.140	0.175	0.140	0.227
• 6 Poles			0.227	0.227	0.227	0.220	0.227	0.220	0.350
• 8 Poles			-	-	-	0.274	-	0.274	0.422
INTERNATIONAL APPROVALS			KF16	KF20	KF25	KG20	KF32	KG32	KG41
Country	Authority								
USA		Underwriters Laboratory				●		●	●
Canada		Canadian Standard Association				●		●	●
Holland		KEMA							
I.E.C.	IEC 947-3	International Electrical Commission				▲		▲	▲
Germany	VDE 0660 VDE 0113	Verband Deutscher Elektrotechniker	▲	▲	▲	▲	▲	▲	▲
U.K.	BS5419	British Standard Institution	▲	▲	▲	▲	▲	▲	▲
CHINA		Certificate for China Compulsory Product Certification				●		●	●
Marine Approvals			10)	10)	10)	10)	10)	10)	10)
• Germanischer Lloyd • Lloyd Register of Shipping • USSR Register of Shipping									

9) Suitable for no load switching application (AC20) above 660V,  
10) Please consult us.








KH63	KG64	KG80	KG100	KG105	KG161 KG162	KG211	KG251	KG316	KE401	KE631	KE800	KE1250
63A	63A	80A	100A	125A	160A	200A	250A	315A	400A	630A	800A	1250A
63A	63A	80A	100A	125A	160A	200A	250A	315A	400A	630A	800A	1250A
18.5kW	11kW	18.5kW	22kW	25kW	30kW	37kW	37kW	55kW	132kW	132kW	220kW	335kW
30kW	22kW	30kW	37kW	45kW	55kW	75kW	90kW	110kW	220kW	220kW	560kW	710kW
80A	63A	80A	100A	125A	160A	200A	250A	315A	400A	630A	800A	1250A
1200A	580A	1600A	1850A	2000A	3000A	4000A	4600A	5800A	13000A	13000A	26000A	50000A
1000V <sup>9)</sup>	690V	690V	690V	690V	1000V <sup>9)</sup>	1000V <sup>9)</sup>	1000V <sup>9)</sup>	1000V <sup>9)</sup>	1000V	1000V	1000V	1000V
80	63	80	100	125	160	200	250	315	-	-	-	-
15	15	15	15	15	30	30	30	15	100	70	50	100
6000	3000	6000	6000	6000	7500	8000	8000	9000	26000	26000	47000	66000
1600	780	1600	1850	2000	3000	4000	4600	5800	13000	13000	26000	50000
35mm <sup>2</sup>	16mm <sup>2</sup>	35mm <sup>2</sup>	50mm <sup>2</sup>	50mm <sup>2</sup>	95mm <sup>2</sup>	185mm <sup>2</sup>	185mm <sup>2</sup>	185mm <sup>2</sup>	240mm <sup>2</sup>	300mm <sup>2</sup>	400mm <sup>2</sup>	630mm <sup>2</sup>
-	-	-	-	-	-	-	-		40mm	50mm	63mm	100mm
0.340	0.180	0.370	0.370	0.370	1.110	1.806	1.806	1.806	3.500	3.500	8.000	10.500
0.380	0.227	0.461	0.461	1.110	1.110	2.353	2.353	2.353	4.500	4.500	10.000	13.000
-	0.350	0.510	0.734	2.180	2.180	-	-	-	-	-	-	-
-	0.422	0.950	0.950	2.980	2.980	-	-	-	-	-	-	-
KH63	KG64	KG80	KG100	KG105	KG161 KG162	KG211	KG251	KG316	KE401	KE631	KE801	KE1250
○	●	●	●	●	●	●	●	●				
○	●	●	●	●	●	●	●	●				
									●	●		
▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	●	●	●	●	●		●	●				
10)	10)	10)	10)	10)	10)	10)	10)	10)	10)	10)	10)	10)

● Switch approved    ▲ Switch conforms to requirements    ○ Approval pending.

 MAIN SWITCH 	RATING Ith2	 3P	 3P + N
Panel Mounting - Type E <sup>11)</sup> 	16A 20A 25A 32A 40A 63A 63A 80A 100A 125A 160A 200A 250A 315A	KF16B T303/SGZ621E KF20B T303/SGZ621E KG20B T303/SGZ621E KG32B T303/SGZ621E KG41B T303/SGZ621E KG64B T303/SGZ621E KH63 T303/SGZ621E KG80 T303/SGZ621E KG100 T303/SGZ621E KG105 T303/SGZ621E KG161 T303/SGZ621E KG211 T303/SGZ621E KG251 T303/SGZ621E KG316 T303/SGZ621E	KF16B T307/SGZ621E KF20B T307/SGZ621E KG20B T307/SGZ621E KG32B T307/SGZ621E KG41B T307/SGZ621E KG64B T307/SGZ621E KH63 T307/SGZ621E KG80 T307/SGZ621E KG100 T307/SGZ621E KG105 T307/SGZ621E KG161 T307/SGZ621E KG211 T307/SGZ621E KG251 T307/SGZ621E KG316 T307/SGZ621E
Base Mounting - Type VE2 (with padlockable handle V840B) 	16A 20A 25A 32A 40A 63A 63A 80A 100A 125A 160A	KF16 T203/SGZ004VE2 KF20 T203/SGZ004VE2 KG20 T203/SGZ004VE2 KG32 T203/SGZ004VE2 KG41 T203/SGZ004VE2 KG64 T203/SGZ004VE2 KH63 T203/SGZ004VE2 KG80 T203/SGZ004VE2 KG100 T203/SGZ004VE2 KG105 T203/SGZ004VE2 KG161 T203/SGZ004VE2	KF16 T207/SGZ004VE2 KF20 T207/SGZ004VE2 KG20 T207/SGZ004VE2 KG32 T207/SGZ004VE2 KG41 T207/SGZ004VE2 KG64 T207/SGZ004VE2 KH63 T207/SGZ004VE2 KG80 T207/SGZ004VE2 KG100 T207/SGZ004VE2 KG105 T207/SGZ004VE2 KG161 T207/SGZ004VE2
Base Mounting - Type VE <sup>11)</sup> (with Door Interlock) 	16A 20A 25A 32A 40A 63A 63A 80A 100A 125A 160A 200A 250A 315A 400A 630A 800A 1250A	KF16B T303/SGZ001VE KF20B T303/SGZ001VE KG20B T303/SGZ001VE KG32B T303/SGZ001VE KG41B T303/SGZ001VE KG64B T303/SGZ001VE KH63 T303/SGZ001VE KG 80 T303/SGZ001VE KG100 T303/SGZ001VE KG105 T303/SGZ001VE KG161 T303/SGZ001VE KG211 T303/SGZ001VE KG251 T303/SGZ001VE KG316 T303/SGZ001VE 9S KE401K300 SIS1 9S KE631K300 SIS1 9S KE800K300 SIS1 9S KE1250K300 SIS1	KF16B T307/SGZ001VE KF20B T307/SGZ001VE KG20B T307/SGZ001VE KG32B T307/SGZ001VE KG41B T307/SGZ001VE KG64B T307/SGZ001VE KH63 T307/SGZ001VE KG 80 T307/SGZ001VE KG100 T307/SGZ001VE KG105 T307/SGZ001VE KG161 T307/SGZ001VE KG211 T307/SGZ001VE KG251 T307/SGZ001VE KG316 T307/SGZ001VE - - - -
Base Mounting - Type VE <sup>11)</sup> (with Door Interlock/Padlockable Handle) 	16A 20A 25A 32A 40A 63A 63A 80A 100A 125A 160A 200A 250A 315A 400A 630A 800A 1250A	KF16B T203/SGZ002VE KF20B T203/SGZ002VE KG20B T203/SGZ002VE KG32B T203/SGZ002VE KG41B T203/SGZ002VE KG64B T203/SGZ002VE KH63 T203/SGZ002VE KG 80 T203/SGZ002VE KG100 T203/SGZ002VE KG105 T203/SGZ002VE KG161 T203/SGZ002VE KG211 T203/SGZ002VE KG251 T203/SGZ002VE KG316 T203/SGZ002VE 9S KE401K300 SIS2 9S KE631K300 SIS2 9S KE800K300 SIS2 9S KE1250K300 SIS2	KF16B T207/SGZ002VE KF20B T207/SGZ002VE KG20B T207/SGZ002VE KG32B T207/SGZ002VE KG41B T207/SGZ002VE KG64B T207/SGZ002VE KH63 T207/SGZ002VE KG 80 T207/SGZ002VE KG100 T207/SGZ002VE KG105 T207/SGZ002VE KG161 T207/SGZ002VE KG211 T207/SGZ002VE KG251 T207/SGZ002VE KG316 T207/SGZ002VE - - - -

<sup>11)</sup> Front protection IP40 Dust/Damp Proof. IP65 Dust/ Damp Proof available on request.

 <p>4P</p>	 <p>6P</p>	 <p>8P</p>	 <p>3P</p>	 <p>4P</p>
KF16B T304/SGZ621E KF20B T304/SGZ621E KG20B T304/SGZ621E KG32B T304/SGZ621E KG41B T304/SGZ621E KG64B T304/SGZ621E KH63 T304/SGZ621E KG80 T304/SGZ621E KG100 T304/SGZ621E KG105 T304/SGZ621E KG161 T304/SGZ621E KG211 T304/SGZ621E KG251 T304/SGZ621E KG316 T304/SGZ621E	KF16B T306/SGZ621E KF20B T306/SGZ621E KG20B T306/SGZ621E KG32B T306/SGZ621E KG41B T306/SGZ621E KG64B T306/SGZ621E - KG80C T306/SGZ621E KG100C T306/SGZ621E KG105C T306/SGZ621E KG161 T306/SGZ621E - - -	- - KG20B T308/SGZ621E KG32B T308/SGZ621E KG41B T308/SGZ621E KG64B T308/SGZ621E - KG80C T308/SGZ621E KG100C T308/SGZ621E KG105C T308/SGZ621E KG161 T308/SGZ621E - - -	- - KG20B T903/SGZ620E KG32B T903/SGZ620E KG41B T903/SGZ620E KG64B T903/SGZ620E - KG80C T903/SGZ620E KG100C T903/SGZ620E KG105C T903/SGZ620E KG162 T903/SGZ620E - - -	- - KG20B T904/SGZ620E KG32B T904/SGZ620E KG41B T904/SGZ620E KG64B T904/SGZ620E - KG80C T904/SGZ620E KG100C T904/SGZ620E KG105C T904/SGZ620E KG162 T904/SGZ620E - - -
KF16 T204/SGZ004VE2 KF20 T204/SGZ004VE2 KG20 T204/SGZ004VE2 KG32 T204/SGZ004VE2 KG41 T204/SGZ004VE2 KG64 T204/SGZ004VE2 KH63 T204/SGZ004VE2 KG80 T204/SGZ004VE2 KG100 T204/SGZ004VE2 KG105 T204/SGZ004VE2 KG161 T204/SGZ004VE2	KF16 T206/SGZ004VE2 KF20 T206/SGZ004VE2 KG20 T206/SGZ004VE2 KG32 T206/SGZ004VE2 KG41B T206/SGZ004VE2 KG64B T206/SGZ004VE2 - - - - - -	- - - - - - - - - -	- - KG20A T903/SGZ004VE2 KG32A T903/SGZ004VE2 KG41B T903/SGZ004VE2 KG64B T903/SGZ004VE2 - - - - -	- - KG20A T904/SGZ004VE2 KG32A T904/SGZ004VE2 KG41B T904/SGZ004VE2 KG64B T904/SGZ004VE2 - - - - -
KF16B T304/SGZ001VE KF20B T304/SGZ001VE KG20B T304/SGZ001VE KG32B T304/SGZ001VE KG41B T304/SGZ001VE KG64B T304/SGZ001VE KH63 T304/SGZ001VE KG 80 T304/SGZ001VE KG100 T304/SGZ001VE KG105 T304/SGZ001VE KG161 T304/SGZ001VE KG211 T304/SGZ001VE KG251 T304/SGZ001VE KG316 T304/SGZ001VE 9S KE401K400 SIS1 9S KE631K400 SIS1 9S KE800K400 SIS1 9S KE1250K400 SIS1	KF16B T306/SGZ001VE KF20B T306/SGZ001VE KG20B T306/SGZ001VE KG32B T306/SGZ001VE KG41B T306/SGZ001VE KG64B T306/SGZ001VE - KG80C T306/SGZ001VE KG100C T306/SGZ001VE KG105C T306/SGZ001VE KG161 T306/SGZ001VE - - - - - -	- - KG20B T308/SGZ001VE KG32B T308/SGZ001VE KG41B T308/SGZ001VE KG64B T308/SGZ001VE - KG80C T308/SGZ001VE KG100C T308/SGZ001VE KG105C T308/SGZ001VE KG161 T308/SGZ001VE - - - - - -	- - KG20B T903/SGZ001VE KG32B T903/SGZ001VE KG41B T903/SGZ001VE KG64B T903/SGZ001VE - KG80C T903/SGZ001VE KG100C T903/SGZ001VE KG105C T903/SGZ001VE KG162 T903/SGZ001VE - - - - - -	- - KG20B T904/SGZ001VE KG32B T904/SGZ001VE KG41B T904/SGZ001VE KG64B T904/SGZ001VE - KG80C T904/SGZ001VE KG100C T904/SGZ001VE KG105C T904/SGZ001VE KG162 T904/SGZ001VE - 9S KE252K950 SIS1 - 9S KE402K950 SIS1 9S KE632 K950 SIS1 9S KE802K950 SIS1 9S KE1252K950 SIS1
KF16B T204/SGZ002VE KF20B T204/SGZ002VE KG20B T204/SGZ002VE KG32B T204/SGZ002VE KG41B T204/SGZ002VE KG64B T204/SGZ002VE KH63 T204/SGZ002VE KG 80 T204/SGZ002VE KG100 T204/SGZ002VE KG105 T204/SGZ002VE KG161 T204/SGZ002VE KG211 T204/SGZ002VE KG251 T204/SGZ002VE KG316 T204/SGZ002VE 9S KE401K400 SIS2 9S KE631K400 SIS2 9S KE800K400 SIS2 9S KE1250K400 SIS2	KF16B T206/SGZ002VE KF20B T206/SGZ002VE KG20B T206/SGZ002VE KG32B T206/SGZ002VE KG41B T206/SGZ002VE KG64B T206/SGZ002VE - KG80C T206/SGZ002VE KG100C T206/SGZ002VE KG105C T206/SGZ002VE KG161 T206/SGZ002VE - - - - - -	- - KG20B T208/SGZ002VE KG32B T208/SGZ002VE KG41B T208/SGZ002VE KG64B T208/SGZ002VE - KG80C T208/SGZ002VE KG100C T208/SGZ002VE KG105C T208/SGZ002VE KG161 T208/SGZ002VE - - - - - -	- - KG20B T903/SGZ002VE KG32B T903/SGZ002VE KG41B T903/SGZ002VE KG64B T903/SGZ002VE - KG80C T903/SGZ002VE KG100C T903/SGZ002VE KG105C T903/SGZ002VE KG162 T903/SGZ002VE - - - - - -	- - KG20B T904/SGZ002VE KG32B T904/SGZ002VE KG41B T904/SGZ002VE KG64B T904/SGZ002VE - KG80C T904/SGZ002VE KG100C T904/SGZ002VE KG105C T904/SGZ002VE KG162 T904/SGZ002VE - 9S KE252K950 SIS2 - 9S KE402K950 SIS2 9S KE632 K950 SIS2 9S KE802K950 SIS2 9S KE1252K950 SIS2





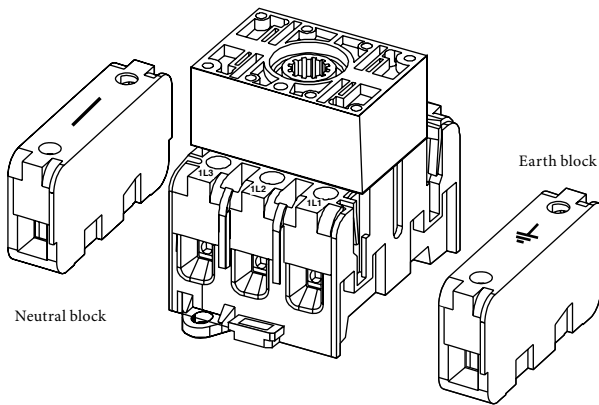
## Optional Extras for KF/KH/KG Switches

The flexibility of the KG/KH/KF modular system offers maximum versatility for the modifying of switches in the field. Modules can be easily added to the switch which has been already installed in equipment, often without having to remove existing wiring. Other important accessories like auxiliary contacts, protective covers, padlockable handles, door interlocks, etc. enhance the flexibility and versatility of the range of KG load break switch.

### 1. Earth and Neutral Blocks

Earth and neutral blocks can be fitted to the side of the switch to enhance the switching configuration to:

- 2P + Earth (KF16 - KF32)
- 3P + Earth
- 3P + Neutral
- 3P + Neutral + Earth
- 4P + Earth
- 6P + Earth
- 8P + Earth (KG20 - KG161, KF16 - KF32 only)



Optional Extra	Switch Type	Panel Mounting	Base Mounting
Earth	KF16 - KF32	K0 H052B/A	K0 H052B/A
	KG20/KG32	K0 H052/A	K0 H052/A
	KG41/KG64	K1 H052/B	K1 H052/B
	KG80/KG100/KG105	K2 H052/C	K2 H052/C
	KG161	K3 H052/J-E	K3 H052/J-VE
	KG251	K3 H052/E-E	K3 H052/E-VE
	KG316	K3 H052/L-E	K3 H052/L-VE
	KH63	K1 H052/P	K1 H052/P
Neutral*	KF16 - KF32	K0 H053B/A	K0 H053B/A
	KG20/KG32	K0 H053/A	K0 H053/A
	KG41/KG64/KH63	K1 H053/B	K1 H053/B
	KG80/KG100/KG105	K2 H053/C	K2 H053/C
	KG161	K3 H053/J-E	K3 H053/J-VE
	KG251	K3 H053/E-E	K3 H053/E-VE
	KG316	K3 H053/L-E	K3 H053/L-VE

\* Neutral for KH switches available as built-in the switch frame.

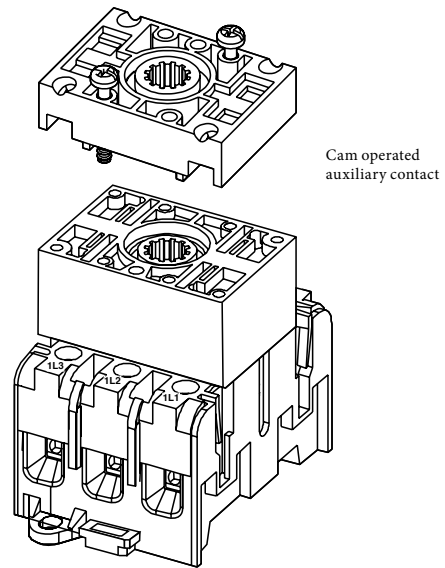
### 2. Cam Operated Auxiliary Contacts

Top mounted cam operated auxiliary contacts of silver oxide are available for KG20 to KG105C up to a maximum of 4 contacts (2 stages).

Gold H-Bridge contacts for low voltage application with the following characteristics:

- Low contact resistance
- Provide protection against corrosion
- Self cleaning contact
- Good contact security

### Cam Operated Auxiliary Contacts



Switch Function	Switch Type	Panel Mounting	Base Mounting
ON-OFF 1 NO	KG20/KG32	K0 M510A/1AA-A	K0M510A/1AA-B
	KG41/KG64	K1 M510A/1AA-A	K1 M510A/1AA-B
	KG80/KG100/KG105	K2 M510A/1AA-A	K2 M510A/1AA-B
	KH63	K1 M510A/10A-A	K1 M510A/10A-B
ON-OFF 2 NO	KG20/KG32	K0 M510A/2AA-A	K0 M510A/2AA-B
	KG41/KG64	K1 M510A/2AA-A	K1 M510A/2AA-B
	KG80/KG100/KG105	K2 M510A/2AA-A	K2 M510A/2AA-B
	KH63	K1 M510A/20A-A	K1 M510A/20A-B
ON-OFF 1 NC	KG20/KG32	K0 M510A/1BA-A	K0 M510A/1BA-B
	KG41/KG64	K1 M510A/1BA-A	K1 M510A/1BA-B
	KG80/KG100/KG105	K2 M510A/1BA-A	K2 M510A/1BA-B
	KH63	K1 M510A/01A-A	K1 M510A/01A-B
ON-OFF 2 NC	KG20/KG32	K0 M510A/2BA-A	K0 M510A/2BA-B
	KG41/KG64	K1 M510A/2BA-A	K1 M510A/2BA-B
	KG80/KG100/KG105	K2 M510A/2BA-A	K2 M510A/2BA-B
	KH63	K1 M510A/02A-A	K1 M510A/02A-B
ON-OFF 1NO+1NC	KG20/KG32	K0 M510A/2CA-A	K0 M510A/2CA-B
	KG41/KG64	K1 M510A/2CA-A	K1 M510A/2CA-B
	KG80/KG100/KG105	K2 M510A/2CA-A	K2 M510A/2CA-B
	KH63	K1 M510A/11A-A	K1 M510A/11A-B
1-OFF-2 1NO+1NO	KG20/KG32	K0 M510A/2DA-A	K0 M510A/2DA-B
	KG41/KG64	K1 M510A/2DA-A	K1 M510A/2DA-B
	KG80/KG100/KG105	K2 M510A/2DA-A	K2 M510A/2DA-B

### 3. Rack Operated Auxiliary Contacts

Top mounted rack operated auxiliary contacts of silver oxide are available for KG161 to KG316 in the following configuration:

- Maximum 4 aux. contacts for KG161 3 pole block
- Maximum 8 aux. contacts for KG161 6 pole block
- Maximum 6 aux. contacts for KG251/KG316

Gold H-Bridge contacts for low voltage application available on request.

## Optional Extras for KF/KH/KG Switches

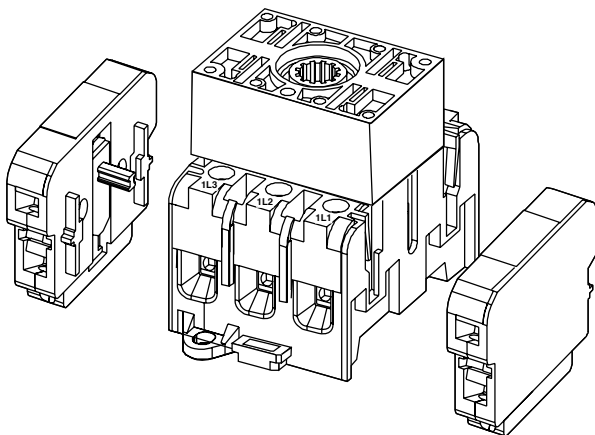
### 3. Rack Operated Auxiliary Contacts

NO	NC	Switch Type	Base Mounting
1	0	KG161 KG251/KG316	K3A M510B/10A-B K3 M510B/10A-B
0	1	KG161 KG251/KG316	K3A M510B/01A-B K3 M510B/01A-B
2	0	KG161 KG251/KG316	K3A M510B/20A-B K3 M510B/20A-B
1	1	KG161 KG251/KG316	K3A M510B/11A-B K3 M510B/11A-B
2	2	KG161 KG251/KG316	K3A M510B/22A-B K3 M510B/22A-B
3	3	KG251/KG316	K3 M510B/33A-B

### 4. Lateral mounted Auxiliary Contacts

These contacts are available as follows:

- KF16 to KF32 - 1NO + 1NC per contact block
  - KG20 to KG105C - 1NO + 1NC per contact block
  - KG161 to KG317 - 2NO + 1NC per contact block
- The contact block can be mounted on either side of the switch or on both sides of the switch. Contacts available are:
- Normal contacts
  - Overlapping or make before break contacts
  - Non overlapping but with NO contact closing only after main contact.



Contact Operation	Switch Type	Panel Mounting	Base Mounting
Non-overlapping 1NO +1NC	KF16 - KF32 KG20/KG32 KG41/KG64 KG80/KG100/KG105 KH63	K0 H010B/A11 K0 H010/A11-E K1 H010/A11-E K2 H010/A11-E K1 H010/11A-E	K0 H010B/A11 K0 H010/A11-VE K1 H010/A11-VE K2 H010/A11-VE K1 H010/11A-VE
Non-overlapping 2NO +1NC	KG161 KG251/KG316	K3A H010/A21-E K3 H010/A21-E	K3AH010/A21-VE K3 H010/A21-VE
Overlapping 1NC +1NC	KF16 - KF32 KG20/KG32 KG41/KG64 KG80/KG100/KG105 KH63	K0 H010B/B11 K0 H010/B11-E K1 H010/B11-E K2 H010/B11-E K1 H010/11B-E	K0 H010B/B11 K0 H010/B11-VE K1 H010/B11-VE K2 H010/B11-VE K1 H010/11B-VE
Overlapping 2NO +1NC	KG161 KG251/KG316	K3A H010/B21-E K3 H010/B21-E	K3AH010/B21-VE K3 H010/B21-VE

Main Contacts  
NO Aux. Contact  
NC Aux. Contact



OFF ON  
Non-Overlapping



OFF ON  
Overlapping

### 5. Protective Covers ( For KG only )

The protective covers are used to:

- Prevent entry of dust into the terminals of KG10 to KG105C switches.
- Provide insulation for the exposed terminals for KG161/KG251/KG316.

A sealable protective cover to prevent unauthorised access to the terminals is available for KG80/KG105.



Sealable protective cover  
for KH63/KH80



Sealable protective cover  
for KG80/KG100/KG105



Protective Cover  
for KG161-KG316

Switch Type	3 Pole Switch	4 Pole Switch
KG20/KG32	K0 M160/3	K0 M160/4
KG41/KG64	K1 M160/3	K1 M160/4
KH63/KH80	-	K1 M160/44-E (E-Panel Mounting)
KH63/KH80	-	K1 M160/44-VE (VE-Base Mounting)
KG80/KG100/KG105	K2 M160/3	K2 M160/4
KG161	K3 M160/33	K3 M160/43
KG251	K3 M160/31	K3 M160/41
KG80/KG100/KG105 (sealable version)	K2 M160/P3	

### 6. Terminals for Control Circuit

Special terminals to allow connection of small size control circuit cables to the main terminals are available.



Switch Type	ON-OFF Switch	CHANGE-OVER Switch
KG41/KG64	K1B D220 KS	
KG80/KG100/KG105	K2B D520 KSA	K2B D520 KSB
KG161	K3A D720 KS	
KG251/KG317	K3B D520 KS	



## Optional Extras for KG Switches

### 7. Door Clutch

Door Clutches are used primarily for when the switch is mounted to the base of the enclosure and the handle and escutcheon plate are mounted on the cover. The types of door clutches available are:

- Without door interlock( simplified ) - cover can be removed at every switch position.
- With door interlock - cover can be removed only when the switch is in the "OFF" position for safety reasons.

In the normal version, the dust and damp proof is IP40 front protection. In the weather-proof version, the dust and damp proof is IP65.



<u>Switch Type</u>	<u>IP</u>	<u>Simplified Door Clutch</u>	<u>Interlock Door Clutch</u>
KF16 - KF 32	40	S1 M280E/A24S-01	S1 M280E/B24S-01
KG20 - KG32	40	S1 M280E/A24S-01	S1 M280E/B24S-01
	65	S1 M280E/A24S-EF/1	S1 M280E/B24S-EF/1
KG41 - KG105	40	S1 M280E/A24S	S1 M280E/B24S
	65	S1 M280E/A24S-EF	S1 M280E/B24S-EF
KG161	40	S2 M280E/A24S	S2 M280E/B24S
	65	S2 M280E/A24S-EF	S2 M280E/B24S-EF
KG251/KG316	40	S3 M280E/A24S	S3 M280E/B24S <sup>14)</sup>
	65	S3 M280E/A24S-EF	S3 M280E/B24S-EF <sup>14)</sup>
KH63	40	S1 M280E/A24S	S1 M280E/B24S
	65	S1 M280E/A24S-EF	S1 M280E/B24S-EF

### 8. Padlockable Handle

The padlockable handle allows the handle to be padlocked at a selected position. This will prevent unauthorised operation.

#### a. Type V840A

- Maximum 2 padlocks
- Available with black, red and electro-grey handle
- Plate size available in S0 (48 x 48 mm) & S1 (64 x 64 mm)



<u>Switch Type</u>	<u>Black handle Aluminium escutcheon</u>	<u>Red Handle Yellow escutcheon</u>
KG20A - KG32A	S0 V840A/A11A	S0 V840A/A26A
KF16B - KF32B	S1 V840A/A11A	S1 V840A/A26A
KG20B - KG64B	S1 V840A/A11A	S1 V840A/A26A
KG80 - KG105	S1 V840A/A11A	S1 V840A/A26A
KH63	S1 V840A/A11A	S1 V840A/A26A

#### b. Type V840D/V840G

- Max. 2 padlocks for KG20A-KG32A (48x48mm)
- Max. 3 padlocks for KG20B to KG105 & KF16B - KF32B (64x64mm)
- Max. 3 padlocks for KG80C/KG105C (88x88mm)
- Available with black, red and electro-grey handle



<u>Switch Type</u>	<u>Black handle Grey escutcheon</u>	<u>Red Handle Yellow escutcheon</u>
KG20A - KG32A		
• E mounting	S0 V840D/A7-E	S0 V840D/D6-E
• VE mounting	S0 V840D/A7	S0 V840D/D6
KF16B - KF32B		
• E mounting	S1 V840G/A72/A1	S1 V840G/D62/A1
• VE mounting	S1 V840G/A72/B1	S1 V840G/D62/B1
KG20B - KG64B		
• E mounting	S1 V840G/A72/A2	S1 V840G/D62/A2
• VE mounting	S1 V840G/A72/B2	S1 V840G/D62/B2
KG80 - KG105		
• E mounting	S1 V840G/A72/A2	S1 V840G/D62/A2
• VE mounting	S1 V840G/A72/B2	S1 V840G/D62/B2
KG80C - KG105C		
• E mounting	S2 V840D/A7	S2 V840D/D6
• VE mounting	S2 V840D/A7	S2 V840D/D6
KG161		
• E mounting	S2 V840D/A7-E	S2 V840D/D6-E
• VE mounting	S2 V840D/A7	S2 V840D/D6
KH63		
• E mounting	S1 V840G/A72/A2	S1 V840G/D62/A2
• VE mounting	S1 V840G/A72/B2	S1 V840G/D62/B2

#### c. Type V845 Padlockable Handle

- Max. 4 padlocks
- Available with black, red and electro-grey handle



<sup>14)</sup> Requires handle cone S3C G000 C

## Optional Extras for KG Switches

### c. Type V845 Padlockable Handle

#### ON-OFF Switch only

<u>Switch Type</u>	<u>Black handle Aluminium escutcheon</u>	<u>Red Handle Yellow escutcheon</u>
KG20A - KG32A		
• E mounting	S0 V845/A21/A12	S0 V845/D21/A12
• VE mounting	S0 V845/A21/B12	S0 V845/D21/B12
KF16B - KF32B		
• E mounting	S1 V845/A21/A11	S1 V845/D21/A11
• VE mounting	S1 V845/A21/B11	S1 V845/D21/B11
KG20B - KG64B		
• E mounting	S1 V845/A21/A12	S1 V845/D21/A12
• VE mounting	S1 V845/A21/B12	S1 V845/D21/B12
KG80 - KG105		
• E mounting	S1 V845/A21/A12	S1 V845/D21/A12
• VE mounting	S1 V845/A21/B12	S1 V845/D21/B12
KG80C - KG105C		
• E mounting	S2 V845/A21/A14	S2 V845/D21/A14
• VE mounting	S2 V845/A21/B14	S2 V845/D21/B14
KG126 - KG161		
• E mounting	S2 V845/A21/A12	S2 V845/D21/A12
• VE mounting	S2 V845/A21/B12	S2 V845/D21/B12
KG251 - KG316		
• E mounting	S3 V845/A21/A21	S3 V845/D21/A21
• VE mounting	S3 V845/A21/B21	S3 V845/D21/B21
KH63		
• E mounting	S1 V845/A21/A12	S1 V845/D21/A12
• VE mounting	S1 V845/A21/B12	S1 V845/D21/B12

#### CHANGE-OVER 1-OFF-2 Switch only

<u>Switch Type</u>	<u>Black handle Aluminium escutcheon</u>	<u>Red Handle Yellow escutcheon</u>
KG20A - KG32A		
• E mounting	S0 V845/A22/A12	S0 V845/D22/A12
• VE mounting	S0 V845/A22/B12	S0 V845/D22/B12
KF16B - KF32B		
• E mounting	S1 V845/A22/A11	S1 V845/D22/A11
• VE mounting	S1 V845/A22/B11	S1 V845/D22/B11
KG20B - KG64B		
• E mounting	S1 V845/A22/A12	S1 V845/D22/A12
• VE mounting	S1 V845/A22/B12	S1 V845/D22/B12
KG80 - KG105		
• E mounting	S1 V845/A22/A12	S1 V845/D22/A12
• VE mounting	S1 V845/A22/B12	S1 V845/D22/B12
KG80C - KG105C		
• E mounting	S2 V845/A22/A14	S2 V845/D22/A14
• VE mounting	S2 V845/A22/B14	S2 V845/D22/B14



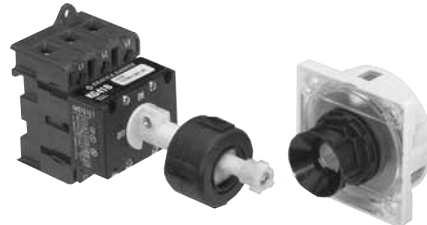
### d. Type V850

- Maximum 2 padlocks for S1 (64 x 64 mm)
- Maximum 3 padlocks for S2 (88 x 88 mm)
- Maximum 6 padlocks for S3 (130 x 130 mm)
- The device can be programmed to lock in several switch positions.

<u>Switch Type</u>	<u>Black Housing</u>	<u>Grey Housing</u>
KG41B - KG64B	S1 V850/A1	S1 V850/A7
KG80/KG100/KG105	S1 V850/A1	S1 V850/A7
KG80C/KG100C/KG105C	S2 V850/A1	S2 V850/A7
KG161	S2 V850/A1	S2 V850/A7
KG251/KG316	S3 V850/A12	S3 V850/A72
KH63	S1 V850/A1	S1 V850/A7

### 9. Shaft centering device

The M600 makes it easy to install the door clutch. It allows a misalignment of as much as +/- 5mm between the shaft and the door. It should be used in conjunction with the integrated door clutch with single hole mounting and padlockable handle S1 V840G or S1 V845.



#### a. Using Fixed shaft (supplied with switch)

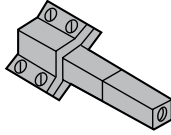
<u>Switch Type</u>	<u>With S1 V840G</u>	<u>With S1 V845</u>
KF16B - KF32B	• S1 M600/A • S1 V840G/D61A2/1	• S1 M600/A • S1 V845/E21A3/11
KG20B/KG32B	• S1 M600/A • S1 V840G/D61A2/2	• S1 M600/A • S1 V845/E21A3/12
KG41B-KG64B	• S1 M600/A • S1 V840G/D61A2/2	• S1 M600/A • S1 V845/E21A3/13
KG80-KG105	• S1 M600/A • S1 V840G/D61A2/2	• S1 M600/A • S1 V845/E21A3/12
KH63	• S1 M600/A • S1 V840G/D61A2/2	• S1 M600/A • S1 V845/E21A3/12

#### b. Using Adjustable shaft Type M004

<u>Switch Type</u>	<u>With S1 V840G</u>	<u>With S1 V845</u>
KG41B - KG64B	• S1 M600/A • S1 V840G/D61A2/2 • S1 M004/160B130	• S1 M600/A • S1 V845/E21A3/13 • S1 M004/160B130
KG80 - KG105	• S1 M600/A • S1 V840G/D61A2/2 • S1 M004/160B130	• S1 M600/A • S1 V845/E21A3/12 • S1 M004/160B130

## Optional Extras for KE Switches

### 1. Shaft Extension

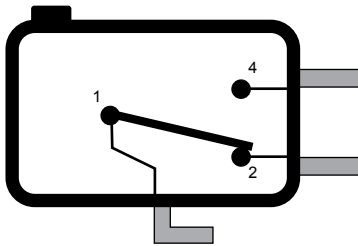


Switch Type	ON-OFF	CHANGE-OVER	Length
• KE252	-	9S 39993005	250mm
• KE401/KF631	9S 39993005	-	250mm
• KE402/KF632	-	9S 39993005	250mm
• KE800/KF1250	9S 27993015	-	200mm
• KE802/KF1252	-	9S 27993015	200mm

### 2. Auxiliary Contacts

#### a. Change-over Contacts

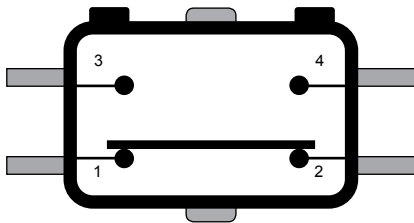
- Nominal Current rating - 16A
- Early break contacts.



Switch Type	ON-OFF Switch	CHANGE-OVER Switch
KE252/KE402/KE632		
• 1st NO/NC per position	-	9S 41090021
• 2nd NO/NC per position	-	9S 41090021
KE401/KF631		
• 1st NO/NC	9S 26990031	-
• 2nd NO/NC	9S 26990032	-
KE800/KF1250		
• 1st NO/NC	9S 26990031	-
• 2nd NO/NC	9S 26990032	-
KE802/KE1252		
• 1st NO/NC per position	-	9S 44090021
• 2nd NO/NC per position	-	9S 44090022

#### b. Electrically Isolated Contacts

- Nominal Current rating - 15A
- Available in 3NO + 3NC and 4NO + 4NC versions.



Switch Type	ON-OFF Switch
KE401/KE631	
• 3 NO + 3NC	9S 26990143
• 4 NO + 4NC	9S 26990144
KE800/KE1250	
• 3 NO + 3NC	9S 26990003
• 4 NO + 4NC	9S 26990004

### c. Auxiliary type M510B (available on request)

- Available for KE252 to KE631/KE632
- Available upto 3 contacts
- Available for normal, gold/H-bridge contact.



### 3. Terminal Cover

Provides protection against direct contact with the incoming (front) and/or outgoing (rear) busbar terminals of the switch.

#### a. 3P ON/OFF Switch

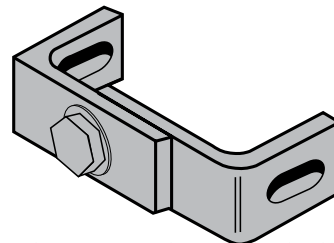
Switch Type	3P Switch	4P Switch	Type
KE401/KE631			
• Top	9S 41943050	9S 26944050	IP20
• Bottom	9S 41958050	9S 41954050	IP20
KE800			
• Top/Bottom	9S 26983080	9S 26984080	Screen
KE1250			
• Top/Bottom	9S 26983120	9S 26984120	Screen

#### b. 4 Pole Change-over Switch

Switch Type	Incoming (Front)	Outgoing (Rear)	Type
KE252/KE402			
• Top	9S 41944025	9S 41944025	IP20
• Bottom	9S 41954025	9S 41954025	IP20
KE632			
• Top	9S 41944050	9S 41954050	IP20
• Bottom	9S 41944050	9S 41954050	IP20
KE802			
• Top	9S 29984080	-	Screen
• Bottom	9S 29984080	-	Screen
KE1252			
• Top	9S 29984120	-	Screen
• Bottom	9S 29984120	-	Screen

### 4. Bridging Bars

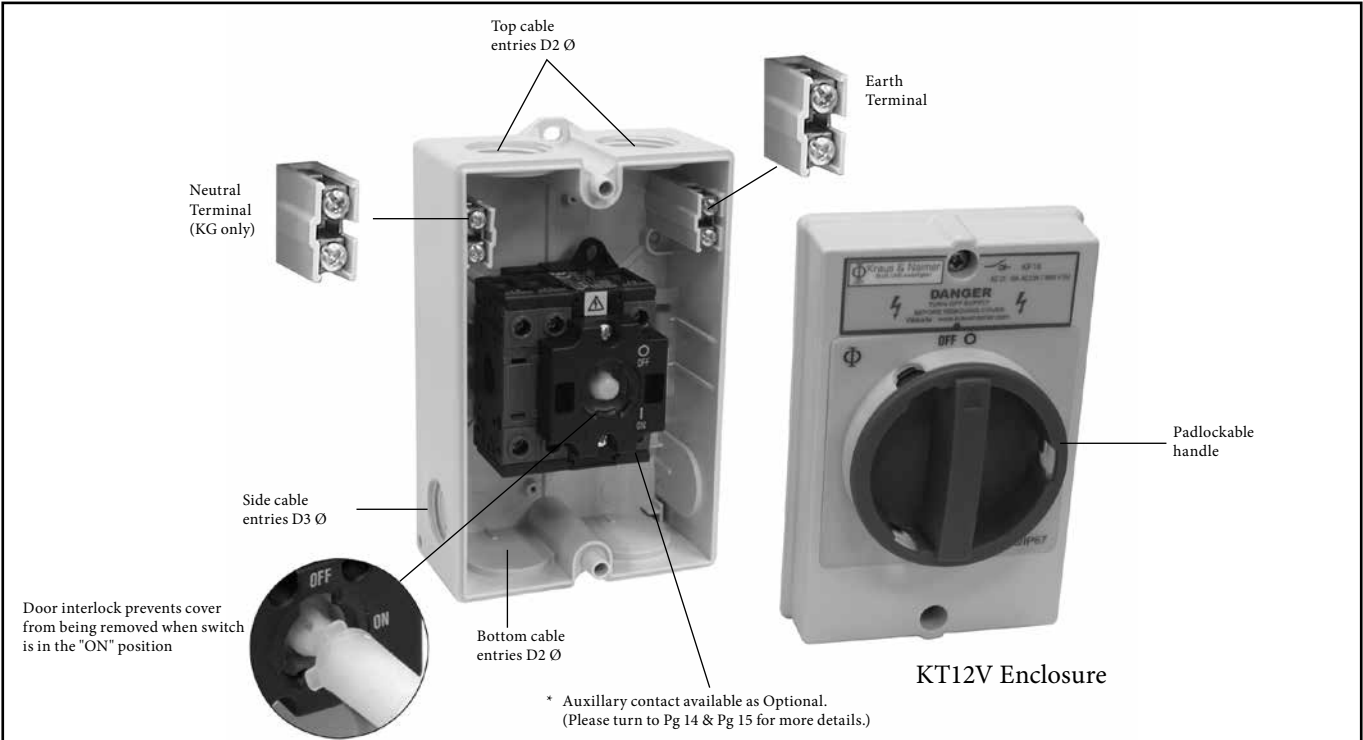
(for Change-over switches only)



The bridging bars connect the outgoing busbar terminals of the Change-over switch to give a common outgoing.

Switch Type	4 Pole CHANGE-OVER Switch	Current Rating
• KE252	9S 41090025	250A
• KE402	9S 41090039	400A
• KE632	9S 41090063	630A
• KE802	9S 44094080	800A
• KE1252	9S 44094120	1250A

# Thermoplastic Enclosed Switch - IP65/IP66/IP67



## Technical Specification

Type KT12V / KS12V / KL52V / KL12V / KL72V

Thermoplastic Enclosure

- Made of thermoplastic XANTAR (Polycarbonate)
- IP66 Dust/Damp Proof according to IEC529 <sup>16)</sup> (IP67 available on request)
- High impact strength (40 kJ/mm<sup>2</sup>)
- Maximum temperature 85°C
- Self-extinguishing UL94 Class V-0 i.e. the material does not support combustion
- Non-hygroscopic i.e. the material does not absorb moisture
- Good resistance to UV radiation

Type CL2V / CS2V Thermoplastic Enclosure

(available on request)

- Made of thermoplastic TERBLEND (ABS + Polyamide)
- IP66 Dust/Damp Proof according to IEC529 <sup>16)</sup>
- Maximum temperature 70°C
- High impact strength
- Non-hygroscopic

Type ABS Thermoplastic Enclosure

- Made of industrial grade thermoplastic ABS
- IP66 Dust/Damp-Proof according to IEC 529 <sup>16)</sup>
- High impact strength
- Able to withstand a temperature range from -20°C to + 70°C
- Chemical resistance to aqueous acids, alkalis, salt & sea water. Concentrated phosphoric & hydrochloric acids have little effect on ABS

Type PC Thermoplastic Enclosure

- Made of industrial grade thermoplastic polycarbonate
- IP66 Dust/Damp-Proof according to IEC529 <sup>16)</sup>
- Self extinguishing to UL94
- Good resistance to UV radiation
- High impact strength
- Able to withstand a temperature range from -50°C to + 130°C.
- Chemical resistance to mineral acids, organic acids, oxidants, reducing agents, grease, oil and alcohol (except methyl alcohol)

Type CAB-P Thermoplastic Enclosure

- Made of industrial grade thermoplastic polyester
- IP66 Dust/Damp-Proof according to IEC529 <sup>16)</sup>
- Self-extinguishing
- Good resistance to UV radiation
- High impact strength
- Able to withstand a temperature range from -50°C to + 150°C

Chemical Resistance of Thermoplastics

Chemical Type	Polycarbonate	ABS
Salt water environment	•••••	••
Acid - low concentration	•••••	•••••
Acid - high concentration	•••	•
Alkalis - low concentration	•••	•••••
Alkalis - high concentration	•	•••••
Hydraulic oil	•••••	•••••
Alcohols	•••••	•••
Cooling fluids	•••	•••••
Petroleum	•••	•

<sup>16)</sup> Dust/Damp Proof Protection according to IEC

IEC529      NEMA      Remarks (According to IEC529)

IP66      4/4X      Complete protection against dust.  
Protection against water jets of water from all direction.

•••••      Excellent  
•      Poor



# IP65/IP66/IP67 Thermoplastic Enclosed Switch ON-OFF

Switch Rating	Number of Poles	Cable Size mm <sup>2</sup>	Switch Reference	Enclosure Type	Enclosure Dimension (mm)			Mounting Dimension (mm)				Entries Dimension	
					A	B	H	E	F	C	D <sub>10</sub>	D <sub>20</sub>	D <sub>30</sub>
16A	2P+E	6.0	KF16 T202/SGZ003*KT12V	KT12V	130	85	65	-	-	132	4.0	25.5	20.5
20A	2P+E	6.0	KF20 T202/SGZ003*KT12V	KT12V	130	85	65	-	-	132	4.0	25.5	20.5
25A	2P+E	6.0	KG20 T202/SGZ003*KS12V	KS12V	120	85	80	-	-	110	4.0	20.5	20.5
32A	2P+E	6.0	KG32 T202/SGZ003*KL52V	KL52V	160	85	80	-	-	150	4.0	20.5	20.5
16A	3P+E	6.0	KF16 T200/SGZ003*KT12V	KT12V	130	85	65	-	-	132	4.0	25.5	20.5
20A	3P+E	6.0	KF20 T200/SGZ003*KT12V	KT12V	130	85	65	-	-	132	4.0	25.5	20.5
25A	3P+E	6.0	KG20 T203/SGZ003*KS12V	KS12V	120	85	80	-	-	110	4.0	20.5	20.5
32A	3P+E	6.0	KG32 T203/SGZ003*KL52V	KL52V	160	85	80	-	-	150	4.0	20.5	20.5
40A	3P+E	16.0	KG41 T203/SGZ003*KL12V	KL12V	190	100	91	-	-	178	5.5	25.5	25.5
63A	3P+E	16.0	KG64 T203/SGZ003*KL12V	KL12V <sup>15)</sup>	190	100	91	-	-	178	5.5	25.5	25.5
63A	3P+E	35.0	KH63 T200/SGZ003*KL72V	KL72V <sup>16)</sup>	250	145	107	124	229	-	5.5	40.5	25.5
80A	3P+E	35.0	KG80 T203/SGZ003*KL72V	KL72V	250	145	107	124	229	-	5.5	40.5	25.5
100A	3P+E	35.0	KG100 T203/SGZ003*KL72V	KL72V	250	145	107	124	229	-	5.5	40.5	25.5
100A	3P+E	50.0	KG100 T203/SGZ003*9P66	ABS <sup>17)</sup>	280	190	130	164	254	-	5.5	-	-
125A	3P+E	70.0	KG105 T203/SGZ003*9P66	ABS <sup>17)</sup>	380	280	130	254	354	-	5.5	-	-
160A	3P+E	95.0	KG161 T203/SGZ003*9P66	ABS <sup>17)</sup>	380	280	180	254	354	-	5.5	-	-
200A	3P+E	185	KG211 T203/SGZ003*9P66	ABS <sup>17)</sup>	380	280	180	254	354	-	5.5	-	-
250A	3P+E	185	KG251 T203/SGZ003*9P66	ABS <sup>17)</sup>	380	280	180	254	354	-	5.5	-	-
315A	3P+E	185	KG316 T203/SGZ003*9P66	ABS <sup>17)</sup>	560	380	180	354	534	-	5.5	-	-
400A	3P+E	240	9S KE401K300P65 SIS1	CAB-P	600	400	220	372 <sup>16)</sup>	572 <sup>16)</sup>	-	10	-	-
630A	3P+E	300	9S KE631K300P65 SIS1	CAB-P	700	500	270	480 <sup>16)</sup>	780 <sup>16)</sup>	-	10	-	-
800A	3P+E	400	9S KE800K300P65 SIS1	CAB-P	800	600	300	580 <sup>16)</sup>	880 <sup>16)</sup>	-	10	-	-
1250A	3P+E	630	9S KE1250K300P65 SIS1	CAB-P	1000	800	300	780 <sup>16)</sup>	1080 <sup>16)</sup>	-	10	-	-
16A	TPNE	6.0	KF16 T203/SGZ003*KT12V	KT12V	130	85	65	-	-	132	4.0	25.5	20.5
20A	TPNE	6.0	KF20 T203/SGZ003*KT12V	KT12V	130	85	65	-	-	132	4.0	25.5	20.5
25A	TPNE	6.0	KG20 T203/SGZ003*KS12V	KS12V	120	85	80	-	-	110	4.0	20.5	20.5
32A	TPNE	6.0	KG32 T203/SGZ003*KL52V	KL52V	160	85	80	-	-	150	4.0	20.5	20.5
40A	TPNE	16.0	KG41 T203/SGZ003*KL12V	KL12V	190	100	91	-	-	178	5.5	25.5	25.5
63A	TPNE	16.0	KG64 T203/SGZ003*KL12V	KL12V	190	100	91	-	-	178	5.5	25.5	25.5
63A	TPNE	35.0	KH63 T207/SGZ003*KL72V	KL72V	250	145	107	124	229	-	5.5	40.5	25.5
80A	TPNE	35.0	KG80 T203/SGZ003*KL72V	KL72V	250	145	107	124	229	-	5.5	40.5	25.5
100A	TPNE	35.0	KG100 T205/SGZ003*KL72V	KL72V	250	145	107	124	229	-	5.5	40.5	25.5
100A	TPNE	50.0	KG100 T205/SGZ003*9P66	ABS <sup>17)</sup>	280	190	130	164	254	-	5.5	-	-
125A	TPNE	70.0	KG105 T205/SGZ003*9P66	ABS <sup>17)</sup>	380	280	130	254	354	-	5.5	-	-
160A	TPNE	95.0	KG161 T205/SGZ003*9P66	ABS <sup>17)</sup>	380	280	180	254	354	-	5.5	-	-
200A	TPNE	185	KG211 T205/SGZ003*9P66	ABS <sup>17)</sup>	380	280	180	254	354	-	5.5	-	-
250A	TPNE	185	KG251 T205/SGZ003*9P66	ABS <sup>17)</sup>	380	280	180	254	354	-	5.5	-	-
315A	TPNE	185	KG316 T205/SGZ003*9P66	ABS <sup>17)</sup>	560	380	180	354	534	-	5.5	-	-
400A	TPNE	240	9S KE401K300P65 SIS2	CAB-P	600	400	220	372 <sup>16)</sup>	572 <sup>16)</sup>	-	10	-	-
630A	TPNE	300	9S KE631K300P65 SIS2	CAB-P	700	500	270	480 <sup>16)</sup>	780 <sup>16)</sup>	-	10	-	-
800A	TPNE	400	9S KE800K300P65 SIS2	CAB-P	800	600	300	580 <sup>16)</sup>	880 <sup>16)</sup>	-	10	-	-
1250A	TPNE	630	9S KE1250K300P65 SIS2	CAB-P	1000	800	300	780 <sup>16)</sup>	1080 <sup>16)</sup>	-	10	-	-
16A	4P+E	6.0	KF16 T204/SGZ003*KT12V	KT12V	130	85	65	-	-	132	4.0	25.5	20.5
20A	4P+E	6.0	KF20 T204/SGZ003*KT12V	KT12V	130	85	65	-	-	132	4.0	25.5	20.5
25A	4P+E	6.0	KG20 T204/SGZ003*KS12V	KS12V	120	85	80	-	-	110	4.0	20.5	20.5
32A	4P+E	6.0	KG32 T204/SGZ003*KL52V	KL52V	160	85	80	-	-	150	4.0	20.5	20.5
40A	4P+E	16	KG41 T204/SGZ003*KL12V	KL12V	190	100	91	-	-	178	5.5	25.5	25.5
63A	4P+E	16	KG64 T204/SGZ003*KL12V	KL12V	190	100	91	-	-	178	5.5	25.5	25.5
63A	4P+E	35	KH63 T204/SGZ003*KL72V	KL72V	250	145	107	124	229	-	5.5	40.5	25.5
80A	4P+E	35	KG80 T204/SGZ003*KL72V	KL72V	250	145	107	124	229	-	5.5	40.5	25.5
100A	4P+E	35	KG100 T204/SGZ003*KL72V	KL72V	250	145	107	164	254	-	5.5	40.5	25.5
100A	4P+E	50	KG100 T204/SGZ003*9P66	ABS <sup>17)</sup>	280	190	130	164	254	-	5.5	-	-
125A	4P+E	70	KG105 T204/SGZ003*9P66	ABS <sup>17)</sup>	380	280	130	254	354	-	5.5	-	-
160A	4P+E	95	KG161 T204/SGZ003*9P66	ABS <sup>17)</sup>	380	280	180	254	354	-	5.5	-	-
200A	4P+E	185	KG211 T204/SGZ003*9P66	ABS <sup>17)</sup>	380	280	180	254	354	-	5.5	-	-
250A	4P+E	185	KG251 T204/SGZ003*9P66	ABS <sup>17)</sup>	380	280	180	254	354	-	5.5	-	-
315A	4P+E	185	KG316 T204/SGZ003*9P66	ABS <sup>17)</sup>	560	380	180	354	534	-	5.5	-	-
400A	4P+E	240	9S KE401K400P65 SIS1	CAB-P	600	400	220	372 <sup>16)</sup>	572 <sup>16)</sup>	-	10	-	-
630A	4P+E	300	9S KE631K400P65 SIS1	CAB-P	700	500	270	480 <sup>16)</sup>	780 <sup>16)</sup>	-	10	-	-
800A	4P+E	400	9S KE800K400P65 SIS1	CAB-P	800	600	300	580 <sup>16)</sup>	880 <sup>16)</sup>	-	10	-	-
1250A	4P+E	400	9S KE1250K400P65 SIS1	CAB-P	1000	800	300	780 <sup>16)</sup>	1080 <sup>16)</sup>	-	10	-	-
16A	6P+E	6.0	KF16B T206/SGZ003*9P66	ABS <sup>17)</sup>	230	140	125	122	212	-	3.5	-	-
20A	6P+E	6.0	KF20B T206/SGZ003*9P66	ABS <sup>17)</sup>	230	140	125	122	212	-	3.5	-	-
25A	6P+E	6.0	KG20B T206/SGZ003*9P66	ABS <sup>17)</sup>	230	140	125	122	212	-	3.5	-	-
32A	6P+E	6.0	KG32B T206/SGZ003*9P66	ABS <sup>17)</sup>	230	140	125	122	212	-	3.5	-	-
40A	6P+E	16	KG41B T206/SGZ003*9P66	ABS <sup>17)</sup>	280	190	130	164	254	-	5.5	-	-
63A	6P+E	16	KG64B T206/SGZ003*9P66	ABS <sup>17)</sup>	280	190	130	164	254	-	5.5	-	-
80A	6P+E	35	KG80C T206/SGZ003*9P66	ABS <sup>17)</sup>	280	280	180	254	254	-	5.5	-	-
100A	6P+E	50	KG100C T206/SGZ003*9P66	ABS <sup>17)</sup>	280	280	180	254	254	-	5.5	-	-
125A	6P+E	70	KG105C T206/SGZ003*9P66	ABS <sup>17)</sup>	380	280	180	254	354	-	5.5	-	-
160A	6P+E	95	KG161 T206/SGZ003*9P66	ABS <sup>17)</sup>	560	380	180	354	534	-	5.5	-	-

15) KG64 - suitable for cable size up to 16mm<sup>2</sup>

16) KH63 - suitable for cable size up to 25mm<sup>2</sup>

17) Polycarbonate PC version available on request

Enclosure Type subject to changes without notice.



## IP65/IP66 Thermoplastic Enclosed Switch CHANGE-OVER 1-OFF-2

Switch Rating	Number of Poles mm <sup>2</sup>	Cable Size	Switch Reference	Enclosure Type	Enclosure Dimension (mm)			Mounting Dimension (mm)		
					A	B	H	E	F	D <sub>10</sub>
25A	3P	6.0	KG20B T903/SGZ003 *9P66	ABS <sup>15)</sup>	230	140	125	122	212	3.5
32A	3P	6.0	KG32B T903/SGZ003 *9P66	ABS <sup>15)</sup>	230	140	125	122	212	3.5
40A	3P	16	KG41B T903/SGZ003 *9P66	ABS <sup>15)</sup>	280	190	130	164	254	5.5
80A	3P	35	KG80C T903/SGZ003 *9P66	ABS <sup>15)</sup>	280	280	180	164	254	5.5
100A	3P	50	KG100C T903/SGZ003 *9P66	ABS <sup>15)</sup>	280	280	180	164	254	5.5
125A	3P	95	KG105C T903/SGZ003 *9P66	ABS <sup>15)</sup>	380	280	180	254	354	5.5
160A	3P	95	KG162 T903/SGZ003 *9P66	ABS <sup>15)</sup>	560	380	180	354	534	5.5
25A	4P	6.0	KG20B T904/SGZ003 *9P66	ABS <sup>15)</sup>	280	140	125	122	212	3.5
32A	4P	6.0	KG32B T904/SGZ003 *9P66	ABS <sup>15)</sup>	280	140	125	122	212	3.5
40A	4P	16	KG41B T904/SGZ003 *9P66	ABS <sup>15)</sup>	280	190	130	164	254	5.5
80A	4P	35	KG80C T904/SGZ003 *9P66	ABS <sup>15)</sup>	280	280	180	254	254	5.5
100A	4P	50	KG100C T904/SGZ003 *9P66	ABS <sup>15)</sup>	280	280	180	254	254	5.5
125A	4P	95	KG105C T904/SGZ003 *9P66	ABS <sup>15)</sup>	380	280	180	254	354	5.5
160A	4P	95	KG162 T904/SGZ003 *9P66	ABS <sup>15)</sup>	560	380	180	354	534	5.5
250A	4P	95	9S KE252 K950P65 SIS1	CAB-P	700	500	270	480 <sup>16)</sup>	780 <sup>16)</sup>	10
400A	4P	240	9S KE402 K950P65 SIS1	CAB-P	800	600	300	580 <sup>16)</sup>	880 <sup>16)</sup>	10
630A	4P	300	9S KE632 K950P65 SIS1	CAB-P	1000	800	300	780 <sup>16)</sup>	1080 <sup>16)</sup>	10

Enclosure Type subject to changes without notice.

### Dimensions in mm



ON-OFF enclosed switch in KT12V Enclosure

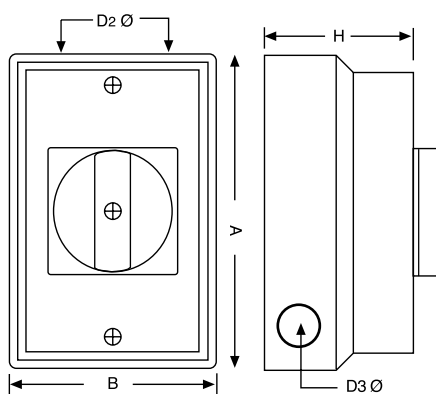
ON-OFF enclosed switch in KL2V/KS2V Enclosure

ON-OFF enclosed switch in ABS/PC Enclosure

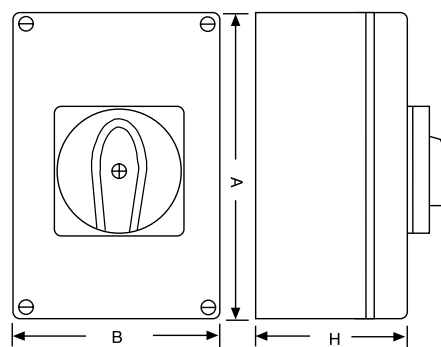
Change-over enclosed switch in ABS/PC Enclosure

ON-OFF enclosed switch in CAB-P Enclosure

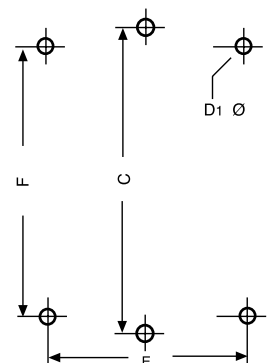
Change-over enclosed switch in CAB-P Enclosure



Dimension of Enclosed switch in KL2V / KS2V / KT12V Enclosure



Dimension of Enclosed switch in ABS/PC/PL Enclosure



Enclosed switch Mounting Dimensions

## Steel Enclosed Switch - General Purpose IP40

### SECURITY

Lockable door to prevent unauthorised entry



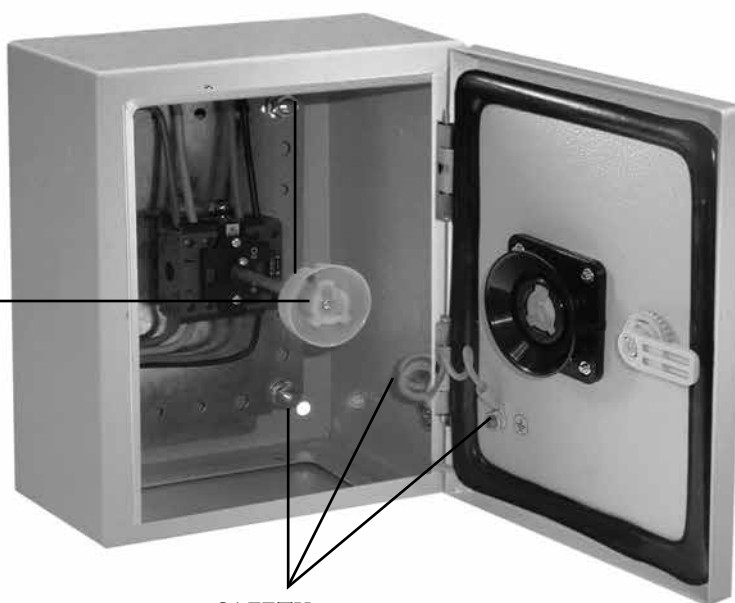
### SECURITY

Padlockable handle prevents unauthorised operation



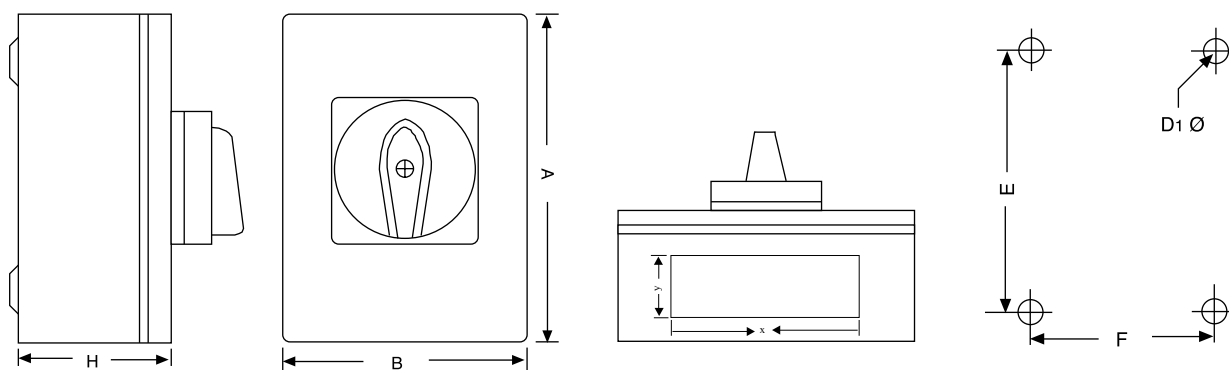
### SAFETY

Door interlock prevents door from being opened when the switch is in the "ON" position



### SAFETY

Earthing points on body, door and mounting plate ensure good earth continuity





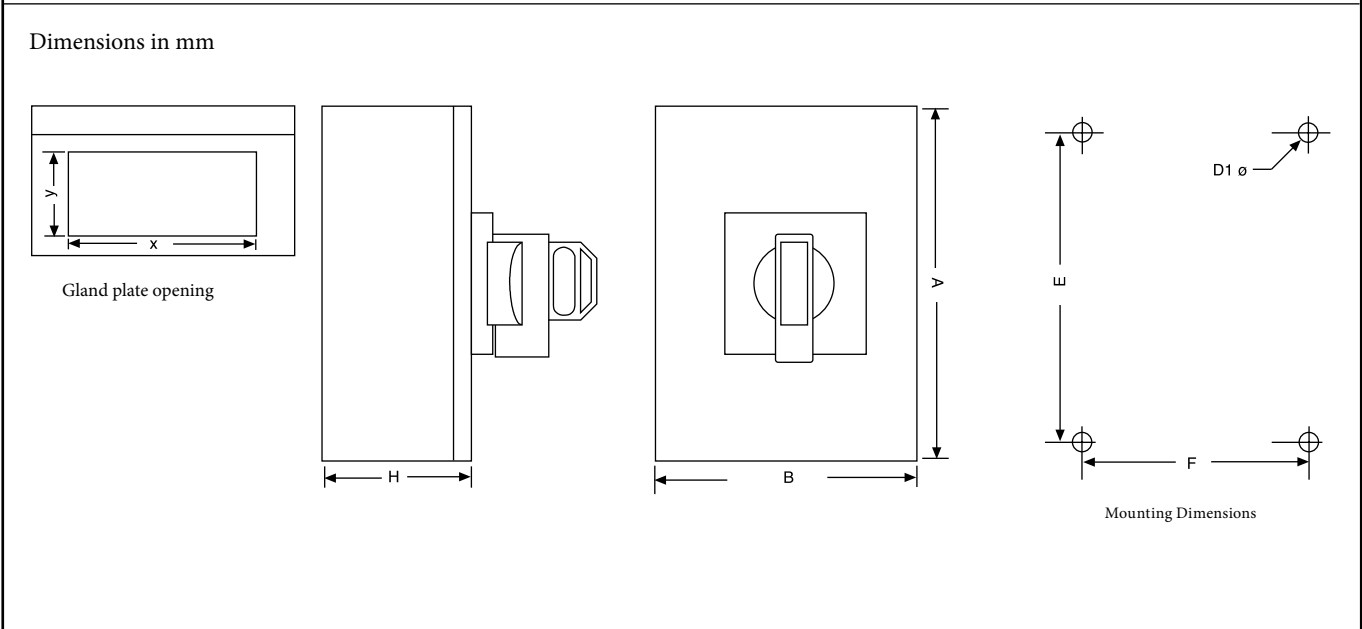
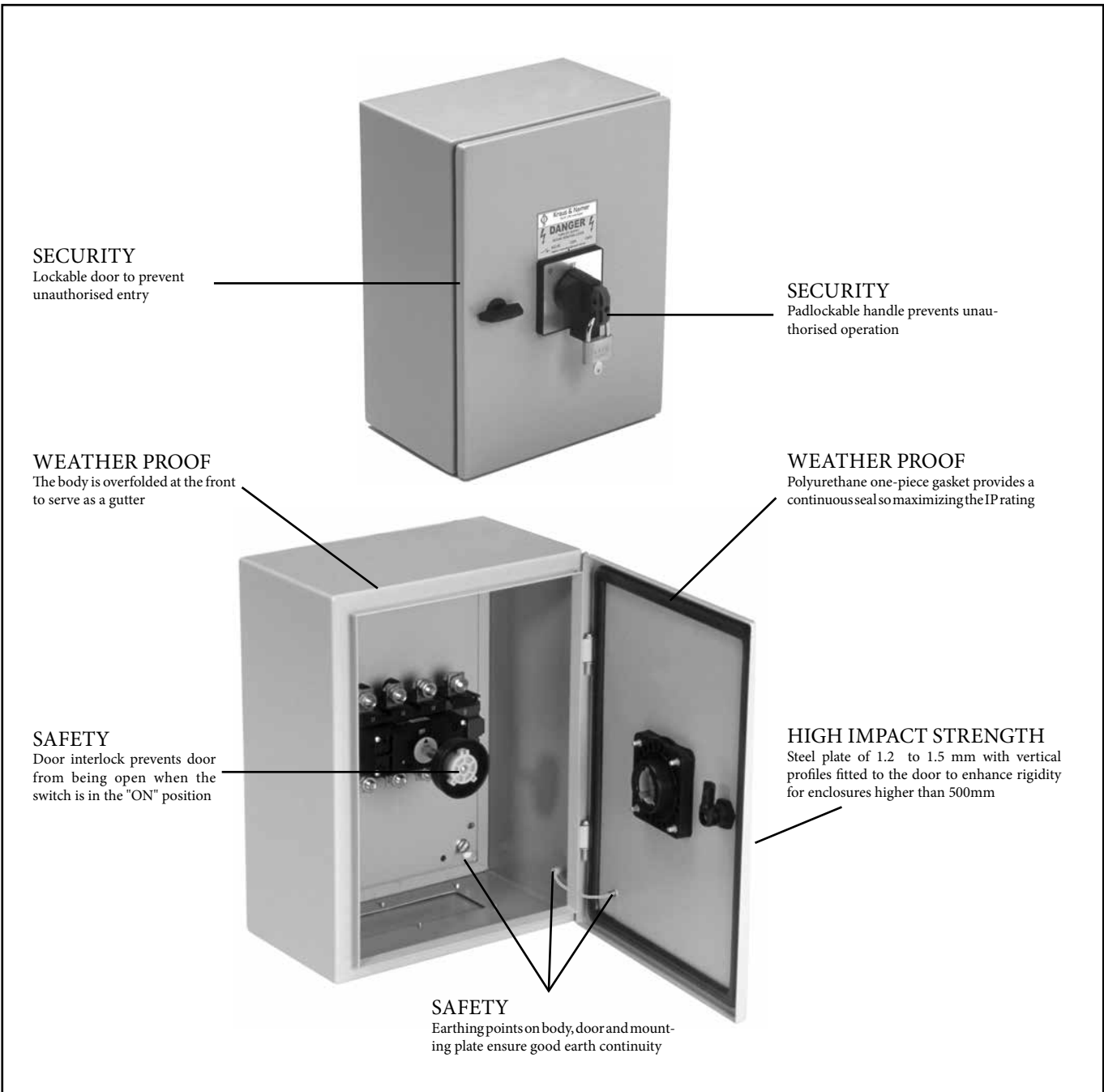


## IP40 General Purpose Steel Enclosed Switch ON-OFF

Switch Rating	Number of Poles	Cable Size mm <sup>2</sup>	Switch Reference	Enclosure Dimension (mm)			Mounting Dimension (mm)			Gland Plate Opening (mm)		Remarks <sup>19)</sup>
				A	B	H	E	F	D1ø	x	y	
16A	2P+E	6.0	KF16B T202/SG2107*9M40	250	220	90	180	140	6	120	50	9A SGM440
20A	2P+E	6.0	KF20B T202/SG2107*9M40	250	220	90	180	140	6	120	50	9A SGM440
25A	2P+E	6.0	KG20B T202/SGZ005*9M40	250	220	90	180	140	6	120	50	9A SGM440
32A	2P+E	6.0	KG32B T202/SGZ005*9M40	250	220	90	180	140	6	120	50	9A SGM440
40A	2P+E	16	KG41B T202/SGZ005*9M40	250	220	90	180	140	6	120	50	9A SGM440
16A	3P+E	6.0	KF16B T203/SG2107*9M40	250	220	90	180	140	6	20	50	9A SGM440
20A	3P+E	6.0	KF20B T203/SG2107*9M40	250	220	90	180	140	6	120	50	9A SGM440
25A	3P+E	6.0	KG20B T203/SGZ005*9M40	250	220	90	180	140	6	120	50	9A SGM440
32A	3P+E	6.0	KG32B T203/SGZ005*9M40	250	220	90	180	140	6	120	50	9A SGM440
40A	3P+E	16	KG41B T203/SGZ005*9M40	250	220	90	180	140	6	120	50	9A SGM440
63A	3P+E	16	KG64B T203/SGZ005*9M40	250	220	90	180	140	6	120	50	9A SGM440
63A	3P+E	35	KH63 T203/SG2133*9M40	250	220	90	180	140	6	120	50	9A SGM440
80A	3P+E	35	KG80 T203/SGZ005*9M40	250	220	90	180	140	6	120	50	9A SGM440
100A	3P+E	50	KG100 T203/SGZ005*9M40	250	220	90	180	140	6	120	50	9A SGM440
125A	3P+E	70	KG105 T203/SGZ005*9M40	300	250	150	260	210	6	175	61	999C ST25315
160A	3P+E	95	KG161 T203/SGZ005*9M40	300	250	200	260	210	6	175	61	999C ST25320
200A	3P+E	185	KG211 T203/SGZ005*9M40	400	300	200	360	260	6	175	61	999C ST3420
250A	3P+E	185	KG251 T203/SGZ005*9M40	400	300	200	360	260	6	175	61	999C ST3420
315A	3P+E	185	KG316 T203/SGZ005*9M40	500	400	250	460	360	6	175	61	999C ST4525
400A	3P+E	240	9S KE401K300M40 SIS1	600	500	250	560	460	6	420	120	999C ST5625
630A	3P+E	300	9S KE631K300M40 SIS1	600	500	250	560	460	6	420	120	999C ST5625
800A	3P+E	400	9S KE800K300M40 SIS1	800	600	250	760	560	6	420	120	999C ST6825
16A	TPNE	6.0	KF16B T207/SG2107*9M40	250	220	90	180	140	6	120	50	9A SGM440
20A	TPNE	6.0	KF20B T207/SG2107*9M40	250	220	90	180	140	6	120	50	9A SGM440
25A	TPNE	6.0	KG20B T207/SG2107*9M40	250	220	90	180	140	6	120	50	9A SGM440
32A	TPNE	6.0	KG32B T207/SG2107*9M40	250	220	90	180	140	6	120	50	9A SGM440
40A	TPNE	16	KG41B T207/SG2131*9M40	250	220	90	180	140	6	120	50	9A SGM440
63A	TPNE	16	KG64B T207/SGZ005*9M40	250	220	90	180	140	6	120	50	9A SGM440
63A	TPNE	35	KH63 T207/SG2133*9M40	250	220	90	180	140	6	120	50	9A SGM440
80A	TPNE	35	KG80 T203/SGC800*9M40	250	220	90	180	140	6	120	50	9A SGM440
100A	TPNE	50	KG100 T207/SG2110*9M40	250	220	90	180	140	6	120	50	9A SGM440
125A	TPNE	70	KG105 T207/SGZ005*9M40	300	250	150	260	210	6	175	61	999C ST25315
160A	TPNE	95	KG161 T207/SGZ005*9M40	300	250	200	260	210	6	175	61	999C ST25320
200A	TPNE	185	KG211 T207/SGZ005*9M40	400	300	200	360	260	6	175	61	999C ST3420
250A	TPNE	185	KG251 T207/SGZ005*9M40	400	300	200	360	260	6	175	61	999C ST3420
315A	TPNE	185	KG316 T207/SGZ005*9M40	500	400	250	460	360	6	175	61	999C ST4525
400A	TPNE	240	9S KE401K300M40 SIS2	600	500	250	560	460	7	420	120	999C ST5625
630A	TPNE	300	9S KE631K300M40 SIS2	600	500	250	560	460	7	420	120	999C ST5625
800A	TPNE	400	9S KE800K300M40 SIS2	800	600	250	760	560	7	420	120	999C ST6825
16A	4P+E	6.0	KF16B T204/SGZ005*9M40	250	220	90	180	140	6	120	50	9A SGM440
20A	4P+E	6.0	KF20B T204/SGZ005*9M40	250	220	90	180	140	6	120	50	9A SGM440
25A	4P+E	6.0	KG20B T204/SGZ005*9M40	250	220	90	180	140	6	120	50	9A SGM440
32A	4P+E	6.0	KG32B T204/SGZ005*9M40	250	220	90	180	140	6	120	50	9A SGM440
40A	4P+E	16	KG41B T204/SGZ005*9M40	250	220	90	180	140	6	120	50	9A SGM440
63A	4P+E	16	KG64B T204/SGZ005*9M40	250	220	90	180	140	6	120	50	9A SGM440
63A	4P+E	35	KH63 T204/SG2133*9M40	250	220	90	180	140	6	120	50	9A SGM440
80A	4P+E	35	KG80 T204/SGZ005*9M40	250	220	90	180	140	6	120	50	9A SGM440
100A	4P+E	50	KG100 T204/SGZ005*9M40	250	220	90	180	140	6	120	50	9A SGM440
125A	4P+E	70	KG105 T204/SGZ005*9M40	300	250	200	260	210	6	175	61	999C ST25315
160A	4P+E	95	KG161 T204/SGZ005*9M40	300	250	200	260	210	6	175	61	999C ST25320
200A	4P+E	185	KG211 T204/SGZ005*9M40	400	300	200	360	260	6	175	61	999C ST3420
250A	4P+E	185	KG251 T204/SGZ005*9M40	400	300	200	360	260	6	175	61	999C ST3420
315A	4P+E	185	KG316 T204/SGZ005*9M40	500	400	250	460	360	6	175	61	999C ST4525
400A	4P+E	240	9S KE401K400M40 SIS1	600	500	250	560	460	7	420	120	999C ST5625
630A	4P+E	300	9S KE631K400M40 SIS1	600	500	250	560	460	7	420	120	999C ST5625
800A	4P+E	400	9S KE800K400M40 SIS1	800	600	250	760	560	7	420	120	999C ST6825

<sup>19)</sup> Enclosure Type subject to changes without notice.

Steel Enclosed Switch - IP65/IP66 Dust/Damp Proof





## IP65/IP66 Dust/Damp Proof Steel Enclosed Switch ON-OFF

Switch Rating	Number of Poles	Cable Size	Switch Reference	Enclosure Dimension (mm)			Mounting Dimension (mm)			Gland Plate Opening(mm)		Remarks <sup>19)</sup>
				A	B	H	E	F	D1ø	x	y	
16A	3P+E	6.0	KF16B T203/SGZ009 *9M66	250	200	150	210	160	6	130	50	999C ST2 2515
20A	3P+E	6.0	KF20B T203/SGZ009 *9M66	250	200	150	210	160	6	130	50	999C ST2 2515
25A	3P+E	6.0	KG20B T203/SGZ009 *9M66	250	200	150	210	160	6	130	50	999C ST2 2515
32A	3P+E	6.0	KG32B T203/SGZ009 *9M66	250	200	150	210	160	6	130	50	999C ST2 2515
40A	3P+E	16	KG41B T203/SGZ009 *9M66	250	200	150	210	160	6	130	50	999C ST2 2515
63A	3P+E	35	KH63 T203/SGZ009 *9M66	300	250	150	260	210	6	175	61	999C ST25 315
80A	3P+E	35	KG80 T203/SGZ009 *9M66	300	250	150	260	210	6	175	61	999C ST25 315
100A	3P+E	50	KG100 T203/SGZ009 *9M66	300	250	150	260	210	6	175	61	999C ST25 315
125A	3P+E	70	KG105 T203/SGZ009 *9M66	300	250	150	260	210	6	175	61	999C ST25 315
160A	3P+E	95	KG161 T203/SGZ009 *9M66	300	250	200	260	210	6	175	61	999C ST25 320
200A	3P+E	185	KG211 T203/SGZ009 *9M66	400	300	200	360	260	6	175	61	999C ST3 420
250A	3P+E	185	KG251 T203/SGZ009 *9M66	400	300	200	360	260	6	175	61	999C ST3 420
315A	3P+E	185	KG316 T203/SGZ009 *9M66	500	400	250	460	360	6	175	61	999C ST4 525
400A	3P+E	240	9S KE401K300M65 SIS1	600	500	250	560	460	10	420	120	999C ST5 625
630A	3P+E	300	9S KE631K300M65 SIS1	600	500	250	560	460	10	420	120	999C ST5 625
800A	3P+E	400	9S KE800K300M65 SIS1	800	600	250	760	560	10	420	120	999C ST6 825
1250A	3P+E	630	9S KE1250K300M65 SIS1	1000	800	250	960	760	10	420	120	999C ST8 1025
16A	TPNE	6.0	KF16B T207/SGZ009 *9M66	250	200	150	210	160	6	130	50	999C ST2 2515
20A	TPNE	6.0	KF20B T207/SGZ009 *9M66	250	200	150	210	160	6	130	50	999C ST2 2515
25A	TPNE	6.0	KG20B T207/SGZ009 *9M66	250	200	150	210	160	6	130	50	999C ST2 2515
32A	TPNE	6.0	KG32B T207/SGZ009 *9M66	250	200	150	210	160	6	130	50	999C ST2 2515
40A	TPNE	16	KG41B T207/SGZ009 *9M66	250	200	150	210	160	6	130	50	999C ST2 2515
63A	TPNE	35	KH63 T207/SGZ009 *9M66	300	250	150	260	210	6	175	61	999C ST25 315
80A	TPNE	35	KG80 T207/SGZ009 *9M66	300	250	150	260	210	6	175	61	999C ST25 315
100A	TPNE	50	KG100 T207/SGZ009 *9M66	300	250	150	260	210	6	175	61	999C ST25 315
125A	TPNE	70	KG105 T207/SGZ009 *9M66	300	250	150	260	210	6	175	61	999C ST25 315
160A	TPNE	95	KG161 T207/SGZ009 *9M66	300	250	200	260	210	6	175	61	999C ST25 320
200A	TPNE	185	KG211 T207/SGZ009 *9M66	400	300	200	360	260	6	175	61	999C ST3 420
250A	TPNE	185	KG251 T207/SGZ009 *9M66	400	300	200	360	260	6	175	61	999C ST3 420
315A	TPNE	185	KG316 T207/SGZ009 *9M66	500	400	250	460	360	6	261	120	999C ST4 525
400A	TPNE	240	9S KE401K300M65 SIS2	600	500	250	560	460	10	420	120	999C ST5 625
630A	TPNE	300	9S KE631K300M65 SIS2	600	500	250	560	460	10	420	120	999C ST5 625
800A	TPNE	400	9S KE800K300M65 SIS2	800	600	250	760	560	10	420	120	999C ST6 825
1250A	TPNE	630	9S KE1250K300M65 SIS2	1000	800	250	960	760	10	420	120	999C ST8 1025
16A	4P+E	6.0	KF16B T204/SGZ009 *9M66	250	200	150	210	160	6	130	50	999C ST2 2515
20A	4P+E	6.0	KF20B T204/SGZ009 *9M66	250	200	150	210	160	6	130	50	999C ST2 2515
25A	4P+E	6.0	KG20B T204/SGZ009 *9M66	250	200	150	210	160	6	130	50	999C ST2 2515
32A	4P+E	6.0	KG32B T204/SGZ009 *9M66	250	200	150	210	160	6	130	50	999C ST2 2515
40A	4P+E	16	KG41B T204/SGZ009 *9M66	250	200	150	210	160	6	130	50	999C ST2 2515
63A	4P+E	35	KH63 T204/SGZ009 *9M66	300	250	150	260	210	6	175	61	999C ST25 315
80A	4P+E	35	KG80 T204/SGZ009 *9M66	300	250	150	260	210	6	175	61	999C ST25 315
100A	4P+E	50	KG100 T204/SGZ009 *9M66	300	250	150	260	210	6	175	61	999C ST25 315
125A	4P+E	70	KG105 T204/SGZ009 *9M66	300	250	150	260	210	6	175	61	999C ST25 315
160A	4P+E	95	KG161 T204/SGZ009 *9M66	300	250	200	260	210	6	175	61	999C ST25 320
200A	4P+E	185	KG211 T204/SGZ009 *9M66	400	300	200	360	260	6	175	61	999C ST3 420
250A	4P+E	185	KG251 T204/SGZ009 *9M66	400	300	200	360	260	6	175	61	999C ST3 420
315A	4P+E	185	KG316 T204/SGZ009 *9M66	500	400	250	460	360	6	261	120	999C ST4 525
400A	4P+E	240	9S KE401K400M65 SIS1	600	500	260	560	460	10	420	120	999C ST5 625
630A	4P+E	300	9S KE631K400M65 SIS1	600	500	260	560	460	10	420	120	999C ST5 625
800A	4P+E	400	9S KE800K400M65 SIS1	800	600	260	760	560	10	420	120	999C ST6 825
1250A	4P+E	630	9S KE1250K400M65 SIS1	1000	800	260	960	760	10	420	120	999C ST8 1025
16A	6P+E	6.0	KF16B T206/SGZ009 *9M66	250	200	150	210	160	6	130	50	999C ST2 2515
20A	6P+E	6.0	KF20B T206/SGZ009 *9M66	250	200	150	210	160	6	130	50	999C ST2 2515
25A	6P+E	6.0	KG20B T206/SGZ009 *9M66	250	200	150	210	160	6	130	50	999C ST2 2515
32A	6P+E	6.0	KG32B T206/SGZ009 *9M66	250	200	150	210	160	6	130	50	999C ST2 2515
40A	6P+E	16	KG41B T206/SGZ009 *9M66	250	200	150	210	160	6	130	50	999C ST2 2515
80A	6P+E	35	KG80C T206/SGZ009 *9M66	400	300	200	360	260	6	175	61	999C ST3 420
100A	6P+E	50	KG100C T206/SGZ009 *9M66	400	300	200	360	260	6	175	61	999C ST3 420
125A	6P+E	70	KG105C T206/SGZ009 *9M66	400	300	200	360	260	6	175	61	999C ST3 420
160A	6P+E	95	KG161 T206/SGZ009 *9M66	500	400	200	460	360	6	261	120	999C ST4 520



## IP65/IP66 Dust/Damp Proof Steel Enclosed Switch CHANGE-OVER 1-OFF-2

Switch Rating	Number of Poles	Cable Size	Switch Reference	Enclosure Dimension (mm)			Mounting Dimension (mm)			Gland Plate Opening(mm)		Remarks <sup>19)</sup>
				A	B	H	E	F	D1ø	x	y	
25A	3P	6	KG20B T903/SGZ009 *9M66	300	250	150	210	160	6	175	61	999C ST25 315
32A	3P	6	KG32B T903/SGZ009 *9M66	300	250	150	210	160	6	175	61	999C ST25 315
40A	3P	16	KG41B T903/SGZ009 *9M66	300	250	150	210	160	6	175	61	999C ST25 315
80A	3P	35	KG80C T903/SGZ009 *9M66	400	300	200	360	260	6	175	61	999C ST3 420
100A	3P	50	KG100C T903/SGZ009 *9M66	400	300	200	360	260	6	175	61	999C ST3 420
125A	3P	70	KG105C T903/SGZ009 *9M66	400	300	200	360	260	6	175	61	999C ST3 420
160A	3P	95	KG162 T903/SGZ009 *9M66	500	400	200	460	360	6	261	120	999C ST4 520
25A	4P	6	KG20B T904/SGZ009 *9M66	300	250	150	260	210	6	175	61	999C ST25 315
32A	4P	6	KG32B T904/SGZ009 *9M66	300	250	150	260	210	6	175	61	999C ST25 315
40A	4P	16	KG41B T904/SGZ009 *9M66	300	250	150	260	210	6	175	61	999C ST25 315
80A	4P	35	KG80C T904/SGZ009 *9M66	400	300	200	360	260	6	175	61	999C ST3 420
100A	4P	50	KG100C T904/SGZ009 *9M66	400	300	200	360	260	6	175	61	999C ST3 420
125A	4P	70	KG105C T904/SGZ009 *9M66	400	300	200	360	260	6	175	61	999C ST3 420
160A	4P	95	KG162 T904/SGZ009 *9M66	500	400	200	460	360	6	261	120	999C ST4 520
250A	4P	95	9S KE252K950M65 SIS1	600	600	300	560	560	10	-	-	999C ST6 630
400A	4P	240	9S KE402K950M65 SIS1	800	600	400	760	560	10	-	-	LA035528
630A	4P	300	9S KE632K950M65 SIS1	800	600	400	760	560	10	-	-	LA035528
800A	4P	400	9S KE802K950M65 SIS1	1000	800	400	960	760	10	-	-	LA035529
1000A	4P	630	9S KE1252K950M65 SIS1	1000	800	400	960	760	10	-	-	LA035529

<sup>19)</sup> Enclosure Type subject to changes without notice.

## Stainless Steel Enclosed Switch - IP65/IP66 Dust/Damp Proof

### SECURITY

Lockable door to prevent unauthorised entry

### SECURITY

Padlockable handle prevents unauthorised operation

### SAFETY

Suitable for use in corrosive and high hygiene environments

### HIGH IMPACT STRENGTH

Body made of AISI 304 stainless steel. Body of enclosure cut from one automatically folded and seam welded steel

### SAFETY

Door interlock prevents door from being opened when the switch is in the "ON" position

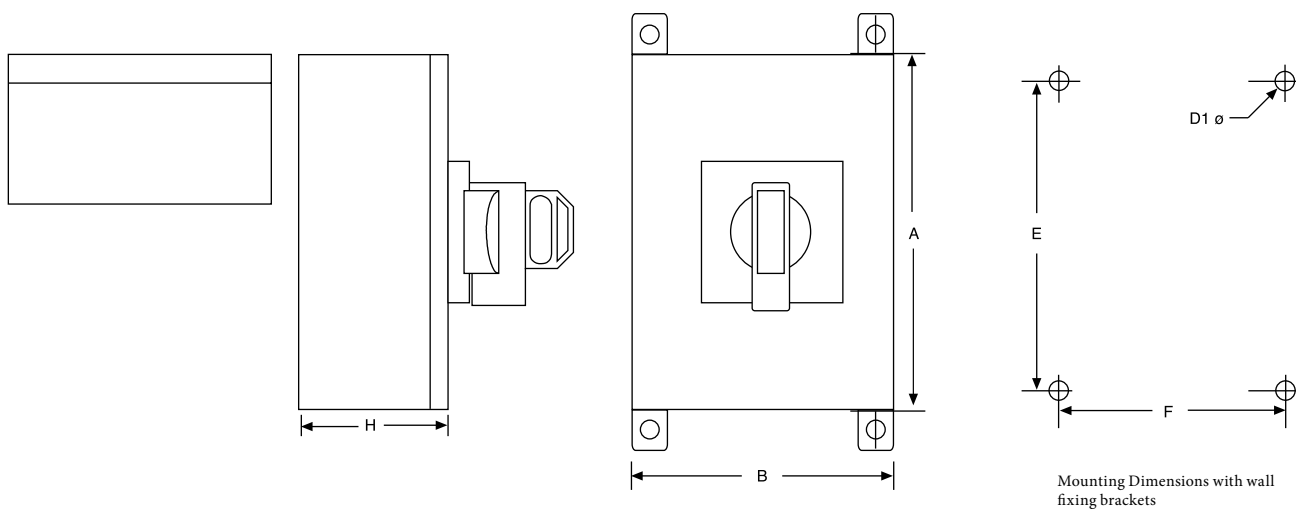
### WEATHER PROOF

Foamed polyurethane gasket provides a continuous seal so maximizing the IP rating

### SAFETY

Earthing points on body door and mounting plate ensures good earth continuity

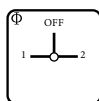
### Dimensions in mm





## IP65/IP66 Dust/Damp Proof Stainless Steel Enclosed Switch ON-OFF

Switch Rating	Number of Poles	Cable Size	Switch Reference	Enclosure Dimension (mm)			Mounting <sup>21)</sup> Dimension (mm)			Remarks <sup>20)</sup>
				A	B	H	E	F	D1ø	
16A	3P+E	6.0	KF16B T203/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
20A	3P+E	6.0	KF20B T203/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
25A	3P+E	6.0	KG20B T203/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
32A	3P+E	6.0	KG32B T203/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
40A	3P+E	16	KG41B T203/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
63A	3P+E	35	KH63 T203/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
80A	3P+E	35	KG80 T203/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
100A	3P+E	50	KG100 T203/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
125A	3P+E	70	KG105 T203/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
160A	3P+E	95	KG161 T203/SGZ010 *9S66	400	300	200	350	250	9	920ES SBOX253-150 / SGX1124
200A	3P+E	185	KG211 T203/SGZ010 *9S66	400	300	200	350	250	9	920ES SBOX34-200 / SGX1125
250A	3P+E	185	KG251 T203/SGZ010 *9S66	400	300	200	350	250	9	920ES SBOX34-200 / SGX1125
315A	3P+E	185	KG316 T203/SGZ010 *9S66	500	400	250	450	350	9	920ES SBOX45-200 / SGX1126
400A	3P+E	240	9S KE401K300S65 SIS1	700	500	250	650	450	9	920ES SBOX57-250 / SGX1127
630A	3P+E	300	9S KE631K300S65 SIS1	700	500	250	650	450	9	920ES SBOX57-250 / SGX1127
800A	3P+E	400	9S KE800K300S65 SIS1	800	600	250	750	550	9	920ES SBOX68-250 / SGX1128
16A	TPNE	6.0	KF16B T207/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
20A	TPNE	6.0	KF20B T207/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
25A	TPNE	6.0	KG20B T207/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
32A	TPNE	6.0	KG32B T207/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
40A	TPNE	16	KG41B T207/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
63A	TPNE	35	KH63 T207/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
80A	TPNE	35	KG80 T207/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
100A	TPNE	50	KG100 T207/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
125A	TPNE	70	KG105 T207/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
160A	TPNE	95	KG161 T207/SGZ010 *9S66	400	300	200	350	250	9	920ES SBOX34-200 / SGX1125
200A	TPNE	185	KG211 T207/SGZ010 *9S66	400	300	200	350	250	9	920ES SBOX34-200 / SGX1125
250A	TPNE	185	KG251 T207/SGZ010 *9S66	400	300	200	350	250	9	920ES SBOX34-200 / SGX1125
315A	TPNE	185	KG316 T207/SGZ010 *9S66	500	400	250	450	350	9	920ES SBOX45-200 / SGX1126
400A	TPNE	240	9S KE401K300S65 SIS2	700	500	250	650	450	9	920ES SBOX57-250 / SGX1127
630A	TPNE	300	9S KE631K300S65 SIS2	700	500	250	650	450	9	920ES SBOX57-250 / SGX1127
800A	TPNE	400	9S KE800K300S65 SIS2	800	600	250	750	560	9	920ES SBOX68-250 / SGX1128
16A	4P+E	6.0	KF16B T204/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
20A	4P+E	6.0	KF20B T204/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
25A	4P+E	6.0	KG20B T204/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
32A	4P+E	6.0	KG32B T204/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
40A	4P+E	16	KG41B T204/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
63A	4P+E	35	KH63 T204/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
80A	4P+E	35	KG80 T204/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
100A	4P+E	50	KG100 T204/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
125A	4P+E	70	KG105 T204/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
160A	4P+E	95	KG161 T204/SGZ010 *9S66	400	300	200	350	250	9	920ES SBOX34-200 / SGX1125
200A	4P+E	185	KG211 T204/SGZ010 *9S66	400	300	200	350	250	9	920ES SBOX34-200 / SGX1125
250A	4P+E	185	KG251 T204/SGZ010 *9S66	400	300	200	350	250	9	920ES SBOX34-200 / SGX1125
315A	4P+E	185	KG316 T204/SGZ010 *9S66	500	400	250	450	350	9	920ES SBOX45-200 / SGX1126
400A	4P+E	240	9S KE401K400S65 SIS1	700	500	250	650	450	9	920ES SBOX57-250 / SGX1127
630A	4P+E	300	9S KE631K400S65 SIS1	700	500	250	650	450	9	920ES SBOX57-250 / SGX1127
800A	4P+E	400	9S KE800K400S65 SIS1	800	600	250	750	550	9	920ES SBOX68-250 / SGX1128
16A	6P+E	6.0	KF16B T206/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
20A	6P+E	6.0	KF20B T206/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
25A	6P+E	6.0	KG20B T206/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
32A	6P+E	6.0	KG32B T206/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
40A	6P+E	16	KG41B T206/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
80A	6P+E	35	KG80C T206/SGZ010 *9S66	400	300	150	350	250	9	920ES SBOX34-150 / SGX1125
100A	6P+E	50	KG100C T206/SGZ010 *9S66	400	300	150	350	250	9	920ES SBOX34-150 / SGX1125
125A	6P+E	70	KG105C T206/SGZ010 *9S66	400	300	200	350	250	9	920ES SBOX34-200 / SGX1125
160A	6P+E	95	KG161 T206/SGZ010 *9S66	500	400	250	450	350	9	920ES SBOX45-200 / SGX1126



## IP65/IP66 Weather Proof Stainless Steel Enclosed Switch CHANGE-OVER

Switch Rating	Number of Poles	Cable Size	Switch Reference	Enclosure Dimension (mm)			Mounting <sup>21)</sup> Dimension (mm)			Remarks <sup>20)</sup>
				A	B	H	E	F	D1ø	
25A	3P	6.0	KG20B T903/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124 32A
3P	6.0	KG32B	T903/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124 40A
3P	16	KG41B	T903/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
80A	3P	35	KG80C T903/SGZ010 *9S66	400	300	150	350	250	9	920ES SBOX34-150 / SGX1125
100A	3P	50	KG100C T903/SGZ010 *9S66	400	300	150	350	250	9	920ES SBOX34-150 / SGX1125
125A	3P	70	KG105C T903/SGZ010 *9S66	400	300	200	350	250	9	920ES SBOX34-200 / SGX1125
160A	3P	95	KG162 T903/SGZ010 *9S66	500	400	250	450	350	9	920ES SBOX45-200 / SGX1126
25A	4P	6.0	KG20B T904/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
32A	4P	6.0	KG32B T904/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
40A	4P	16	KG41B T904/SGZ010 *9S66	300	250	150	250	200	9	920ES SBOX253-150 / SGX1124
80A	4P	35	KG80C T904/SGZ010 *9S66	400	300	150	350	250	9	920ES SBOX34-150 / SGX1125
100A	4P	50	KG100C T904/SGZ010 *9S66	400	300	150	350	250	9	920ES SBOX34-150 / SGX1125
125A	4P	70	KG105C T904/SGZ010 *9S66	400	300	200	350	250	9	920ES SBOX34-200 / SGX1125
160A	4P	95	KG162 T904/SGZ010 *9S66	500	400	250	450	350	9	920ES SBOX45-200 / SGX1126

20) Enclosures type subject to change without notice

21) External mounting with wall fixing brackets

## Panel Mounting Type E - KF16 - KF32, KG20 to KG105/KH63 Dimensions in mm

Escutcheon Mounting Dimension												
Switch	Type	No. of Poles	A	B	Cmax	D1	D2	F	G	H	L	
KF16B-KF25B	On-Off	3P	64	48	4	4	22	46.5	-	55	38	
KF16B-KF32B	On-Off	4P	64	48	4	4	22	57	-	55	38	
KF16B-KF32B	On-Off	3P+N	64	48	4	4	22	57	-	55	38	
KG20B/KG32B	On-Off	3P	64	48	4	4	22	42	-	54	54	
KG20B/KG32B	On-Off	4P	64	48	4	4	22	56	-	54	54	
KG20B/KG32B	On-Off	3P+N	64	48	4	4	22	56	-	54	54	
KG20B/KG32B	On-Off	3P + N + E	64	48	4	4	22	69	-	54	54	
KG20B/KG32B	On-Off	6P	64	48	4	4	22	-	84	54	54	
KG20B/KG32B	On-Off	8P	64	48	4	4	22	-	111	54	54	
KG20B/KG32B	1-OFF-2	3P	64	48	4	4	22	-	84	54	54	
KG20B/KG32B	1-OFF-2	4P	64	48	4	4	22	-	111	54	54	
KG41B/KG64B	On-Off	3P	64	48	4	4	22	50	-	64	61	
KG41B/KG64B	On-Off	4P	64	48	4	4	22	66	-	64	61	
KG41B/KG64B	On-Off	3P+N	64	48	4	4	22	66	-	64	61	
KG41B/KG64B	On-Off	3P + N + E	64	48	4	4	22	82	-	64	61	
KG41B/KG64B	On-Off	6P	64	48	4	4	22	-	100	64	61	
KG41B/KG64B	On-Off	8P	64	48	4	4	22	-	132	64	61	
KG41B/KG64B	1-OFF-2	3P	64	48	4	4	22	-	100	64	61	
KG41B/KG64B	1-OFF-2	4P	64	48	4	4	22	-	132	64	61	
KH63	On-Off	3P	64	48	4	4	22	86	-	90	62	
KH63	On-Off	4P	64	48	4	4	22	86	-	90	62	
KH63	On-Off	3P+N	64	48	4	4	22	86	-	90	62	
KG80/KG100	On-Off	3P	64	48	4	5.5	22	70	-	80	71	
KG105	On-Off	3P/4P	64	48	4	5.5	22	70	-	80	71	
KG80/KG100	On-Off	4P	64	48	4	5.5	22	92	-	80	71	
KG80/KG100	On-Off	3P+N	64	48	4	5.5	22	92	-	80	71	
KG105	On-Off	3P+N	64	48	4	5.5	22	92	-	80	71	
KG80/KG100	On-Off	3P + N + E	64	48	4	5.5	22	114	-	80	71	
KG105	On-Off	3P + N + E	64	48	4	5.5	22	114	-	80	71	
KG80C/KG100C	On-Off	6P	88	68	4	5.5	22	-	140	80	71	
KG80C/KG100C	On-Off	8P	88	68	4	5.5	22	-	162	80	71	
KG105C	On-Off	6P	88	68	4	5.5	22	-	162	80	71	
KG105C	On-Off	8P	88	68	4	5.5	22	-	162	80	71	
KG80C/KG100C	1-OFF-2	3P	88	68	4	5.5	22	-	140	80	71	
KG105C	1-OFF-2	3P/4P	88	68	4	5.5	22	-	162	80	71	
KG80C/KG100C	1-OFF-2	4P	88	68	4	5.5	22	-	162	80	71	

## Panel Mounting Type E - KG211 to KG316 Dimensions in mm

Escutcheon Mounting Dimension												
Switch	Type	No. of Poles	A	B	D1	D2	G	H	L	G1	G2	
KG161	On-Off	3P	88	68	5.5	22	112	110	96	20	36	
KG161	On-Off	4P	88	68	5.5	22	150	110	96	20	36	
KG161	On-Off	3P + N	88	68	5.5	22	150	110	96	20	36	
KG161	On-Off	3P + N + E	88	68	5.5	22	188	110	96	20	36	
KG161	On-Off	6P	88	68	5.5	22	224	110	96	20	36	
KG211KG251/KG316	On-Off	3P	88	68	5.5	22	145	126	103	26 *	44 *	
KG211KG251/KG316	On-Off	4P	88	68	5.5	22	198	126	103	26 *	44 *	
KG211KG251/KG316	On-Off	3P + N	88	68	5.5	22	198	126	103	26 *	44 *	
KG211KG251/KG316	On-Off	3P + N + E	88	68	5.5	22	250	126	103	26 *	44 *	

\* Except for KG316, G1 = 26 and G2 = 52

## Base Mounting Type VE - KF16 - KF32, KG20 to KG105/KH63 Dimensions in mm

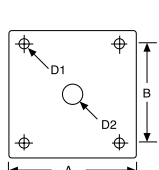
Switch	Type	No. of Poles	A	B	D1	D2	F	G	H	Lmin	Lmax	X1	X2	Y	
KF16B-KF32B	On-Off	3P	64	48	4	22	46.5	-	56	76	133	22	-	60	
KF16B-KF32B	On-Off	4P/ 3P+N	64	48	4	22	57	-	56	76	133	22	-	60	
KG20B/KG32B	On-Off	3P	64	48	4	22	42	-	54	106	176	22	-	60	
KG20B/KG32B	On-Off	4P/ 3P+N	64	48	4	22	56	-	54	106	176	22	-	60	
KG20B/KG32B	On-Off	3P+N+E	64	48	4	22	69	-	54	106	176	22	-	60	
KG20B/KG32B	On-Off	6P	64	48	4	22	42	84	54	123	123	42	32	60	
KG20B/KG32B	On-Off	8P	64	48	4	22	42	111	54	123	123	55.5	45.5	60	
KG20B/KG32B	1-Off-2	3P	64	48	4	22	42	84	54	123	123	42	32	60	
KG20B/KG32B	1-Off-2	4P	64	48	4	22	42	111	54	123	123	55.5	45.5	60	
KG41B/KG64B	On-Off	3P	64	48	4	22	50	-	64	123	193	25	-	70	
KG41B/KG64B	On-Off	4P/ 3P+N	64	48	4	22	66	-	64	123	193	25	-	70	
KG41B/KG64B	On-Off	3P+N+E	64	48	4	22	82	-	64	123	193	25	-	70	
KG41B/KG64B	On-Off	6P	64	48	4	22	-	100	64	126	196	50	37.5	70	
KG41B/KG64B	On-Off	8P	64	48	4	22	-	132	64	126	196	66	53.5	70	
KG41B/KG64B	1-Off-2	3P	64	48	4	22	-	100	64	126	196	50	37.5	70	
KG41B/KG64B	1-Off-2	4P	64	48	4	22	-	132	64	126	196	66	53.5	70	
KH63	On-Off	3P	64	48	4	22	86	-	90	120	189	22	-	90	
KH63	On-Off	4P/ 3P+N	64	48	4	22	86	-	90	120	189	22	-	90	
KG80/KG100	On-Off	3P	64	48	4	22	70	-	80	126	198	25	-	90	
KG80/KG100	On-Off	4P/ 3P+N	64	48	4	22	92	-	80	126	198	25	-	90	
KG105	On-Off	3P/4P/ 3P+N	64	48	4	22	92	-	80	126	198	25	-	90	
KG80/KG100	On-Off	3P+N+E	64	48	4	22	92	-	80	126	198	25	-	90	
KG105	On-Off	3P+N+E	64	48	4	22	92	-	80	126	198	25	-	90	
KG80C/KG100C	On-Off	6P	88	68	5.5	22	-	140	80	137	209	70	47.5	90	
KG80C/KG100C	On-Off	8P	88	68	5.5	22	-	162	80	137	209	92	69.5	90	
KG105C	On-Off	6P	88	68	5.5	22	-	162	80	137	209	70	47.5	90	
KG105C	On-Off	8P	88	68	5.5	22	-	162	80	137	209	70	47.5	90	
KG80C/KG100C	1-Off-2	3P	88	68	5.5	22	-	140	80	137	209	70	47.5	90	
KG80C/KG100C	1-Off-2	4P	88	68	5.5	22	-	162	80	137	209	92	69.5	90	
KG105C	1-Off-2	3P/4P	88	68	5.5	22	-	162	80	137	209	70	47.5	90	

## Base Mounting Type VE2 - KF16 - KF32, KG20 to KG100 Dimensions in mm

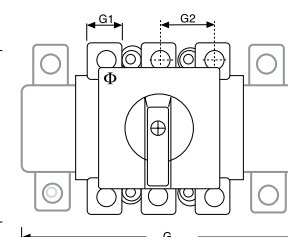
Switch	Type	No. of Poles	A	B	D1	F	H	L	X1	Y
KF16/KF32	On-Off	3P	48	45.4	4	68	55	62	22	60
KF16/KF32	On-Off	4P	48	45.4	4	68	55	62	22	60
KF16/KF32	On-Off	6P	48	45.4	4	68	55	62	42	60
KG20/KG32	On-Off	3P	44	45.4	4	43.7	54	56.5	22	60
KG20/KG32	On-Off	4P	44	45.4	4	43.7	54	56.5	22	60
KG20/KG32	On-Off	6P	44	45.4	4	43.7	54	64	42	60
KG41/KG64	On-Off	3P	53	45.4	4	52.4	64	56.5	25	70
KG41/KG64	On-Off	4P	53	45.4	4	52.4	64	56.5	25	70
KG41/KG64	On-Off	6P	105	45.4	4	52.4	64	62.5	50	70
KG80/KG100	On-Off	3P	70	45	5.5	70	80	65	25	90
KG80/KG100	On-Off	4P	70	45	5.5	70	80	65	25	90
KG105	On-Off	3P	70	45	5.5	92	80	65	25	90
KG105	On-Off	4P	70	45	5.5	92	80	65	25	90
KG161	On-Off	3P	112	45	5.5	112	110	90	36	114
KG161	On-Off	4P	112	45	5.5	112	110	90	36	114



## Base Mounting Type VE - KG161 to KG316 Dimensions in mm

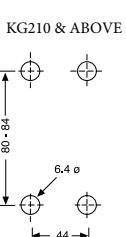


Escutcheon Mounting Dimension

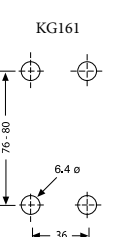


Base Mounting Dimension

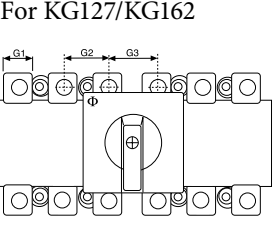
KG210 & ABOVE



KG161



For KG127/KG162



Rating	Switch	Type	No. of Poles	A	B	D1	D2	G	H	Lmin	Lmax	G1	G2	G3
160A	KG161	On-Off	3P	88	68	5.5	30	112	110	151	271	20	36	-
160A	KG161	On-Off	4P	88	68	5.5	30	150	110	151	271	20	36	-
160A	KG161	On-Off	3P+N	88	68	5.5	30	150	110	151	271	20	36	-
160A	KG161	On-Off	3P+N+E	88	68	5.5	30	188	110	151	271	20	36	-
160A	KG161	On-Off	6P	88	68	5.5	30	224	110	151	271	20	36	-
160A	KG162	1-Off-2	3P	88	68	5.5	30	224	109	151	271	20	36	41
160A	KG162	1-Off-2	4P	88	68	5.5	30	300	109	151	271	20	36	41
* KG127 Between														
200A/250A/315A	KG211KG251/KG316	On-Off	3P	88	68	5.5	30	145	126	158	278	26	44	-
200A/250A/315A	KG211KG251/KG316	On-Off	4P	88	68	5.5	30	198	126	158	278	26	44	-
200A/250A/315A	KG211KG251/KG316	On-Off	3P+N	88	68	5.5	30	198	126	158	278	26	44	-
200A/250A/315A	KG211KG251/KG316	On-Off	3P+N+E	88	68	5.5	30	250	126	158	278	26	44	-
* Except for KG316, G1 = 26 and G2 = 52														

## Base Mounting - KE252 to KE1252 Change-over Dimensions in mm

Escutcheon Mounting  
KE252 - KE1252

Escutcheon 65 x 65

Base Mounting Dimension

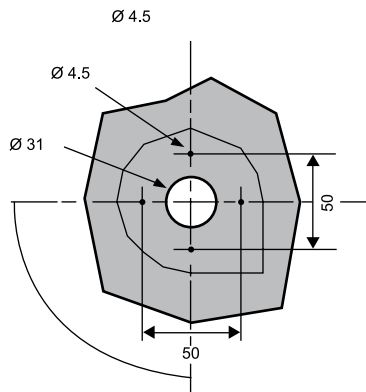
L1 = without shaft extension  
L2 = with shaft extension

F, H, G1, G2

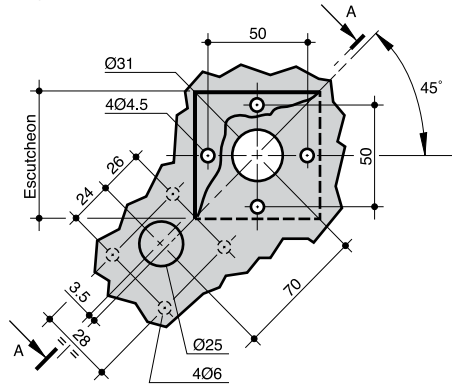
Switch	Type	No. of Poles	F	H	L1	L2max	L3	D Ø	X	Y	G1	G2
KE252	1-Off-2	4P	286	220	249	449	60	7	210	100	25	50
KE402	1-Off-2	4P	361	285	317	517	60	9	260	180	35	50
KE632	1-Off-2	4P	361	285	317	517	60	9	260	180	45	65
KE802	1-Off-2	4P	435	460	374	574	81	11	320	220	50	80
KE1252	1-Off-2	4P	567	460	374	574	81	11	480	220	60	85

# Base Mounting - KE401 to KE1250 ON-OFF Isolators Dimensions in mm

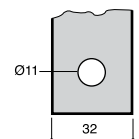
Escutcheon Mounting Dimension  
KE401/KE631



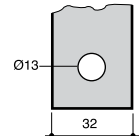
Escutcheon Mounting Dimension  
KE801/KE1251



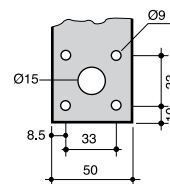
Terminal Connection



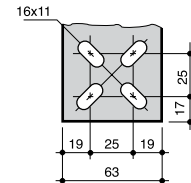
KE251/KF401



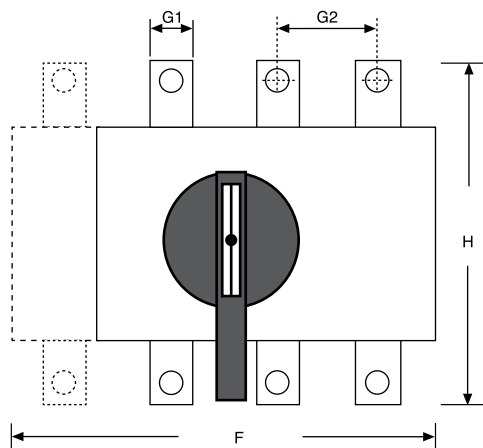
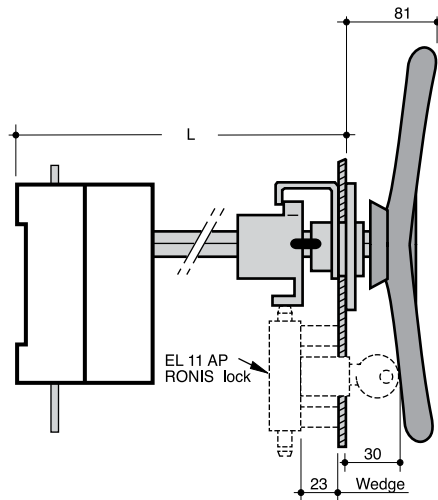
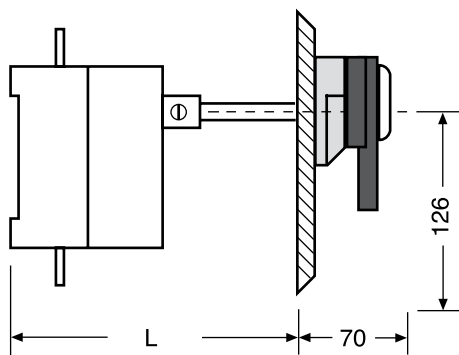
KE631



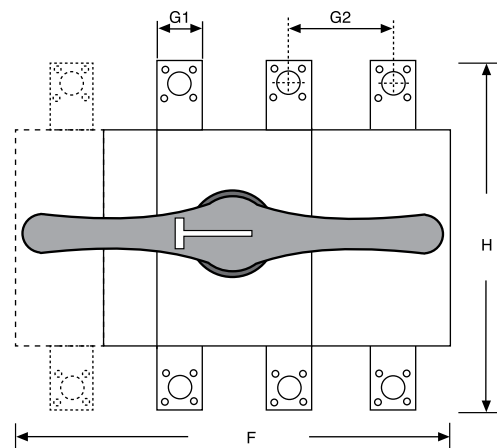
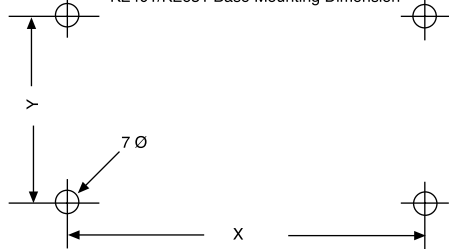
KE800



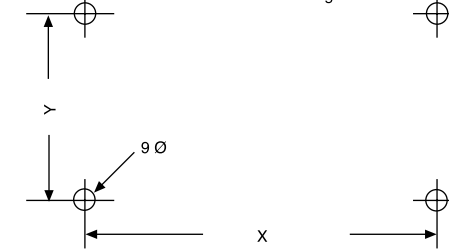
KE1250



KE401/KE631 Base Mounting Dimension



KE800/KE1250 Base Mounting Dimension



Switch	Type	No. of Poles	F	H	Lmin	Lmax	X	Y	G1	G2
KE401/KE631	On-Off	3P	230	235	138	388 1)	210	140	32	65
KE401/KE631	On-Off	4P	290	235	138	388 1)	270	140	32	65
KE800	On-Off	3P	280	321	212	412 2)	255	175	50	80
KE800	On-Off	4P	360	321	212	412 2)	335	175	50	80
KE1250	On-Off	3P	280	330	212	412 2)	255	175	63	85
KE1250	On-Off	4P	360	330	212	412 2)	335	175	63	85

1) With 250mm shaft extension 2) With 200mm shaft extension

## Types of KE/KF/KG/KH Load Break Switch

<p><b>New</b></p>  <p>KF16 - KF32 Switch. The innovative modular systems.</p>	<p><b>New</b></p>  <p>KE401 - KE631, 4pole ON-OFF Switch with interlock &amp; padlockable handle</p>	<p><b>New</b></p>  <p>KE252 - KE631 Base mounted fitted with M510B. Available for Normal, Gold/H-bridge contacts.</p>
 <p>KH32-KH40 with Dual Drive, available in 8 poles ON-OFF.</p>	 <p>KG125-KG162 Base Mounted type VE2/ 3 poles On-Off switch with padlock device V840H.</p>	 <p>KG125-KG317 Angular Drive base mounted type VE. Only for ON/OFF Switches 3 and 4 poles.</p>
 <p>KG20-KG105 ON-OFF switch Base Mounting Type VE with Special Switching Position Available on Request.</p>	 <p>KL Enclosures with wire shield carried through system. Available for KL enclosures in size S0, S1 and S2 and allows the uninterrupted leading through of the wire shield.</p>	 <p>KH16-KH80 Base Mounted type VE ON-OFF switch with side mounted auxillary contact block.</p>
 <p>KG20-KG100 Base Mounted type VE/ 3 poles Change-Over switch.</p>	 <p>KG126-KG316 Base Mounted type VE/ 3 pole ON-OFF switch with door interlock &amp; padlockable handle</p>	 <p>KG126-KG161 Base Mounted type VE/ 9 pole ON-OFF switch with door interlock &amp; padlockable handle</p>



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