

TECHNICAL DATA

Switch-disconnectors

Switch Type	Thermal Rating	Insulation Voltage, U _i	Rated Operating Current & Power								Short Circuit Protection	Terminal Capacity				
			Operational Current, I _e				Operational Power					Max. fuse gI/gG char.	Single core/stranded wire.	Flexible wire, with sleeve.	Terminal bolt for Cu bar/lug.	
			AC-15		AC-21A	AC-3		AC-23A		A						mm ²
Open rating I _{th}			110v	220-240v	380-415v	690v	220-240v, 1 ph.	220-240v	380-415v	220-240v, 1 ph.	220-240v	380-415v				
A	V		A				kW				A	mm ²	mm ²	mm		
Switch-disconnectors - selection data in accordance with: IEC 60947, IEC 60204, BS EN 60947, BS EN 60204																
CA10Z	20	690	-	-	-	20	2.2	3	5.5	2.5	3.7	7.5	25	2x2.5	2x2.5	-
CA20Z	25	690	-	-	-	25	3	4	7.5	3	5.5	11	35	2x4	2x2.5	-
CA25Z	32	690	-	-	-	32	4	5.5	11	4	7.5	15	35	2x6	2x4	-
C316	315	1000	-	-	-	315	-	37	55	-	75	132	315	185	150	M12
KG10	20	690	-	-	-	20	1.1	2.2	3.7	1.5	3	5.5	20	2.5	1.5	-
KG20	25	690	-	-	-	25	1.5	4	5.5	2.2	5.5	7.5	35	6	4	-
KG32	32	690	-	-	-	32	2.2	5.5	7.5	3	5.5	11	35	6	4	-
KG41	40	690	-	-	-	40	3	7.5	11	4	7.5	15	50	16	10	-
KG64	63	690	-	-	-	63	4	11	18.5	5.5	11	22	63	16	10	-
KG80	80	690	-	-	-	80	7.5	15	22	10	18.5	30	80	35(50) ²⁾	25(35) ²⁾	-
KG100	100	690	-	-	-	100	8.5	18.5	30	11	22	37	100	35(50) ²⁾	25(35) ²⁾	-
KG105	125	690	-	-	-	125	-	22	37	-	25	45	125	50	35	-
KG125	125	1000 ¹⁾	-	-	-	125	-	22	37	-	30	45	125	95	70	-
KG160	160	1000 ¹⁾	-	-	-	160	-	30	45	-	30	55	160	95	70	-
KG210	200	1000 ¹⁾	-	-	-	200	-	37	55	-	37	75	200	185	120	-
KG250	250	1000 ¹⁾	-	-	-	250	-	37	55	-	37	90	250	185	120	-
KG315	315	1000 ¹⁾	-	-	-	315	-	45	75	-	55	110	315	185	120	-
KH16	16	800 ¹⁾	-	-	-	16	1.5	3	5.5	2	4.5	7.5	25	6	4	-
KH20	20	800 ¹⁾	-	-	-	20	2	3.5	6.5	2.5	5.5	10	32	6	4	-
KH25	25	800 ¹⁾	-	-	-	25	2.5	4	7.5	3.3	7	12	35	6	4	-
KH32	32	800 ¹⁾	-	-	-	32	3	5.5	11	4.2	9	16	35	10	6	-
KH40	40	800 ¹⁾	-	-	-	40	4.5	7.5	15	5.5	11	20	50	10	6	-
KH63	63	1000 ¹⁾	-	-	-	63	7.5	11	22	8.5	18.5	30	80	35	25	-
KH80	80	1000 ¹⁾	-	-	-	80	10	15	30	11	23	40	100	35	25	-
KH85	100	1000 ¹⁾	-	-	-	100	10	-	-	11	-	-	100	35	25	-
Auxiliary contacts - selection data in accordance with: IEC 60947, BS EN 60947.																
C316	16	690	6	6	4	16	-	-	-	-	-	-	16	4	2.5	-
KG10	20	690	6	6	4	20	-	-	-	-	-	-	20	2.5	2.5	-
KG20 & KG32	10	500	2.5	2.5	1.5	10	-	-	-	-	-	-	10	1.5	1.5	-
KG41 - KG105	16	690	6	6	3	16	-	-	-	-	-	-	16	2.5	2.5	-
KG125 - KG315	16	690	6	6	3	16	-	-	-	-	-	-	16	2.5	2.5	-
KH16 - KH85	10	440	2.5	2.5	1.5	10	-	-	-	-	-	-	10	1.5	1.5	-

Switch Selection – Common Rating Data and Utilization Categories

Switch Rating or Utilization Category	Description
Rated insulation voltage, U _i	Maximum value of operational voltage
Thermal current, I _{th}	Maximum value of current that the switch can carry (not switch) when mounted in free air Max. ambient air temperature for stated value:- C switches : +55°C average over 24 hours with peaks up to 60°C KG/KH switches : +50°C average over 24 hours with peaks up to 55°C
AC-3	For the selection of switches used for starting off squirrel cage motors and switching off during running
AC-15	For selection of switches to be used for the control of an a.c. electromagnetic load, e.g. contactor coils
AC-21A	For selection of switches required for switching of resistive loads, including moderate overloads
AC-23A	For selection of switches required for switching motor loads or other highly inductive loads Normal selection criteria for emergency-off switches for motors and switches used for safety isolation of motors (switch-disconnectors) such as Off/On, main or main/emergency-off switches.

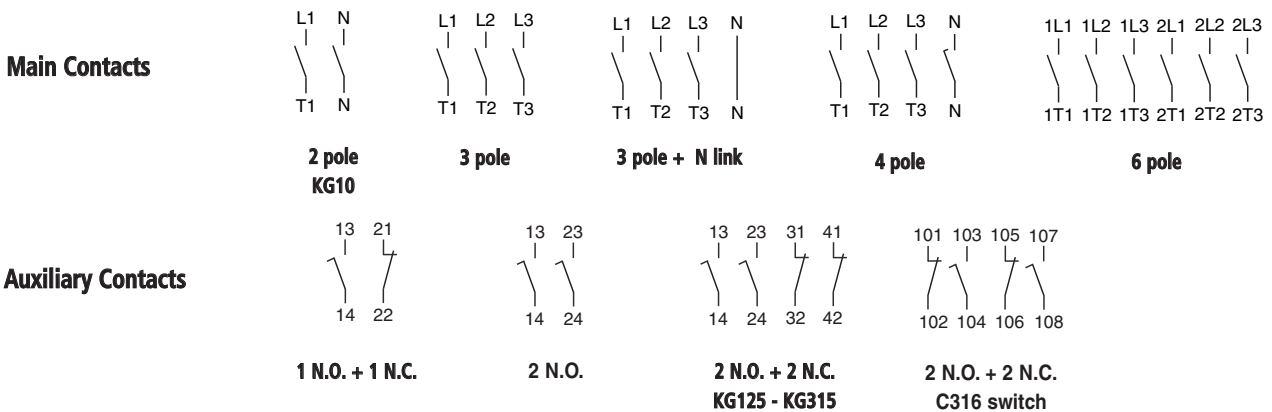
Notes: 1) Only valid for no-load switching (AC-20A) above 690v.

2) Values in () are for 4 pole switches.

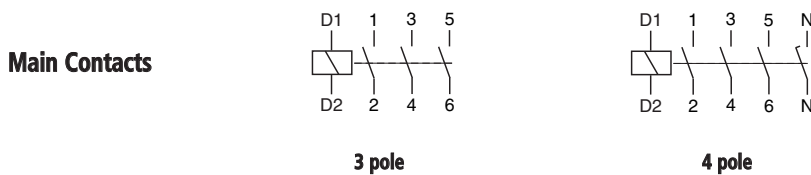
SWITCH-DISCONNECTORS

Connection Diagrams

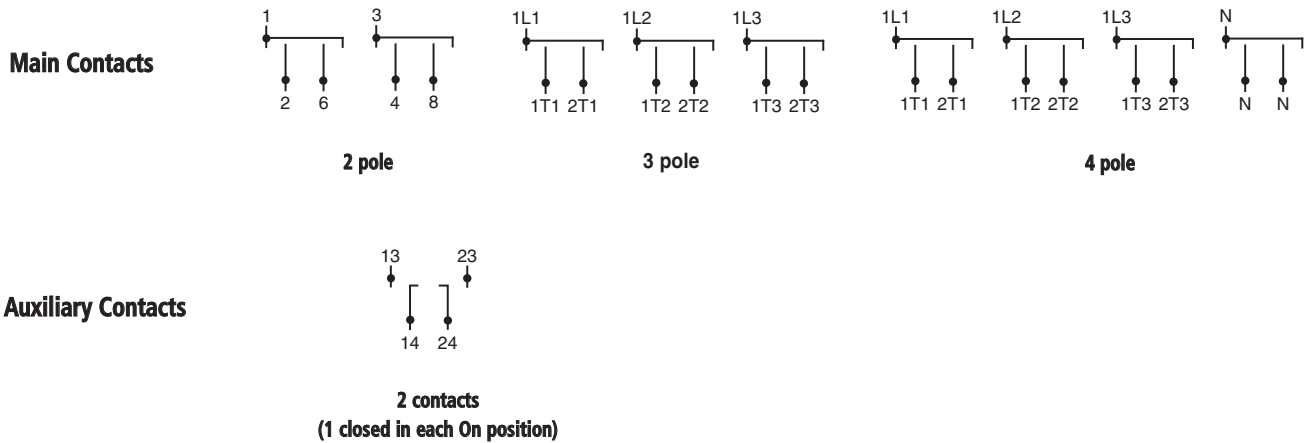
Off - On



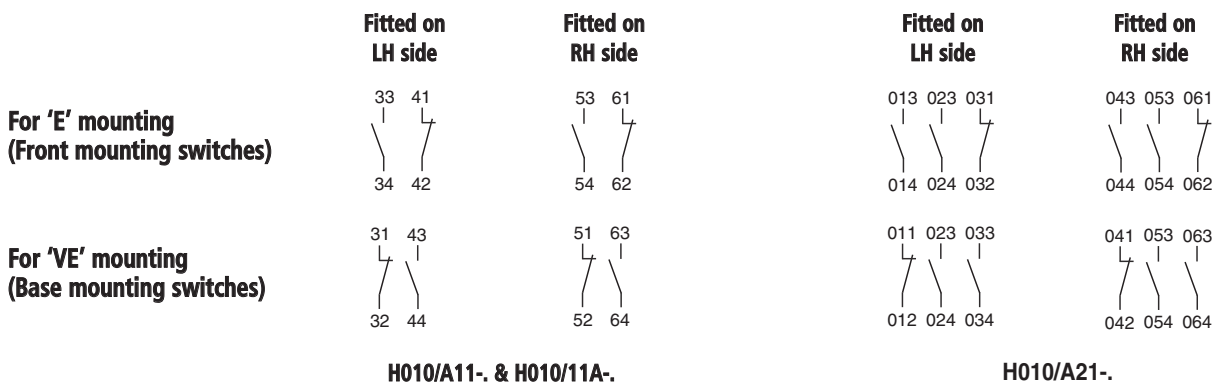
Off - On with Power Failure Release



Changeover with Centre Off



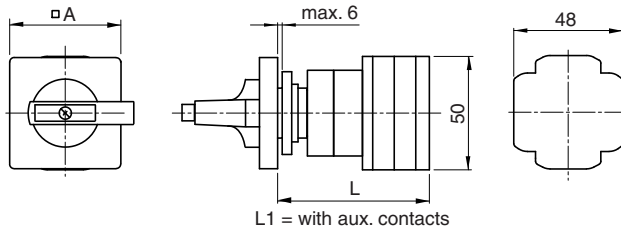
Side Mounting Auxiliary Contacts



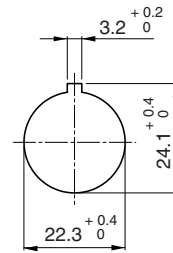
KG Main / Emergency-Off Switches

Front Panel Mounting - Single Hole Fixing

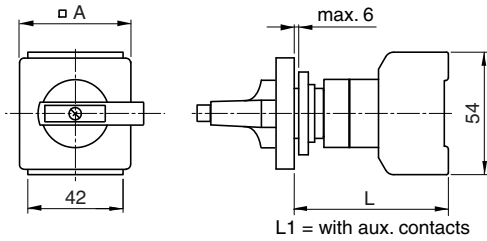
KG10 - 2 & 3 Pole



Mounting Hole



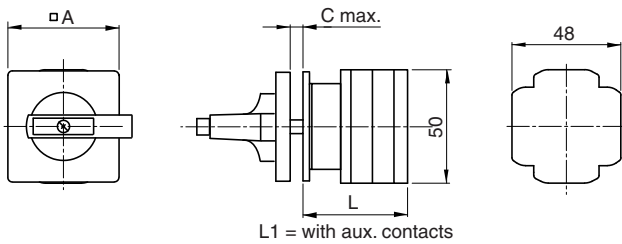
KG20 & KG32 - 3 Pole



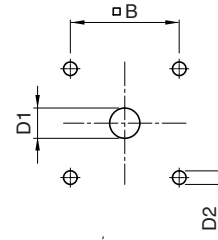
	A	L 2 Pole	L 3 Pole	L1 3 Pole
KG10A	48	57.4	66.9	76.4
KG10B	64	-	66.9	76.4
KG20A, KG32A	48	-	68.3	77.3
KG20B, KG32B	64	-	68.3	77.3

Front Panel Mounting - 4 Hole Fixing

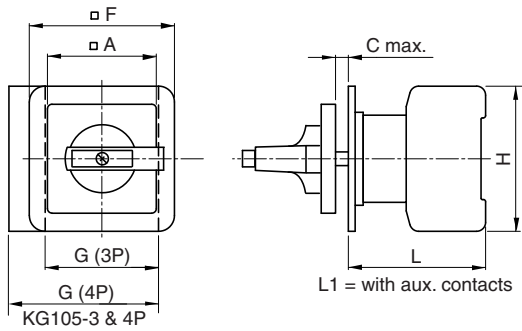
KG10 - 2, 3 & 4 Pole



Mounting Holes

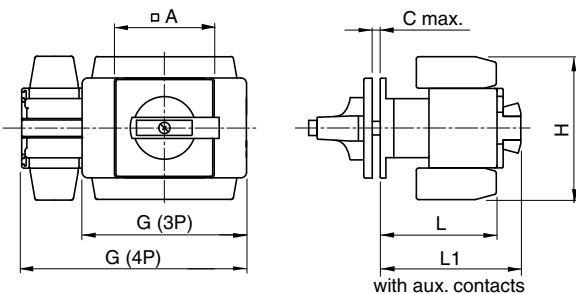


KG20 to KG105 - 3 & 4 Pole



	A	B	C	D1	D2	F
KG10A	48	36	4	11 - 15	5	-
KG10B	64	48	4	11 - 15	5	64
KG20A, KG32A	48	36	4	10 - 15	5	48
KG20B, KG32B	64	48	4	10 - 15	5	64
KG41B, KG64B	64	48	4	10 - 15	5	64
KG80, KG100, KG105	64	48	4	10 - 15	5	88
KG125, KG160	88	68	5.5	13 - 17	6	-
KG210, KG250, KG315	88	68	5.5	13 - 17	6	-

KG125 to KG315 - 3 & 4 Pole



	G 3 Pole	G 4 Pole	H	L	L1
KG10A - 2 pole	-	-	-	38.7	-
KG10A - 3/4 pole	-	-	-	48.2	58.7
KG10B	-	-	-	57.2	66.7
KG20A, KG32A	42	55.5	54	53.8	62.8
KG20B, KG32B	42	55.5	54	53.8	62.8
KG41B, KG64B	50	66	64	60.5	70.5
KG80, KG100	70	92	80	70.6	80.6
KG105	92	92	80	70.6	80.6
KG125, KG160	112	150	108	96	117
KG210, KG250, KG315	145	197.5	126	103	124

'H' dimension does not include the terminal covers. To obtain the dimension across the terminal cover(s) add the following to dimension 'H'.

KG80/100/105: add 26 mm on side that cover is fitted.

KG125/160: add 22.5 mm on side that cover is fitted

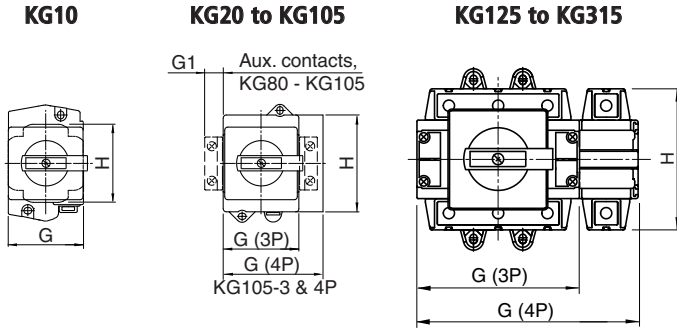
KG210/250/315: add 50 mm to 'H' dimension

Factory fitted auxiliary contacts are integral with the main switch body – they are not side mounting type.

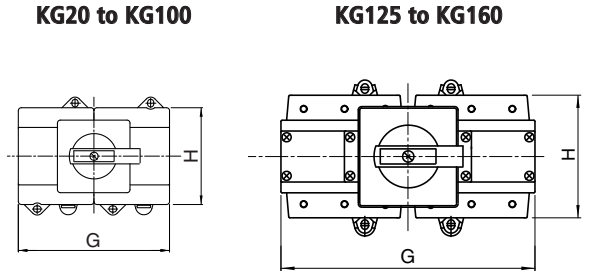
KG Main / Emergency-Off Switches

Base Mounting with Door Interlock

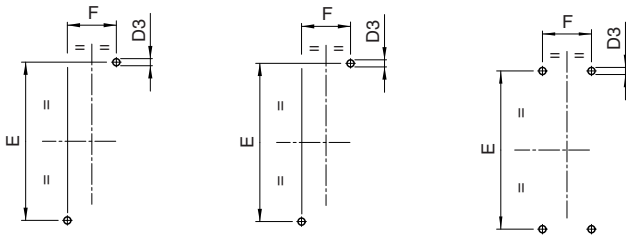
3, 3 + N & 4 Pole - plan view



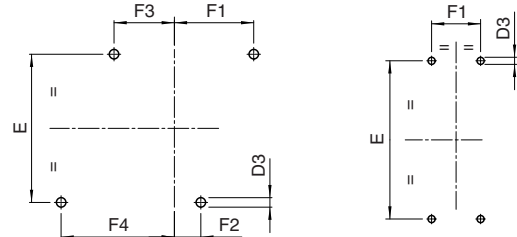
6 Pole - plan view



Base Mounting Holes



Base Mounting Holes



	D3	E	F	F1	F2	F3	F4	G 3 Pole	G 3 Pole+N	G 4 Pole	G 6 Pole	G1	H
KG10A & B	5	60	22	-	-	-	-	48	-	48	-	-	50
KG20A & B, KG32A & B	5	60	22	32	10	10	32	42	-	55.5	84	-	54
KG41B, KG64B	5	70	25	37.5	12.5	12.5	37.5	50	-	66	100	-	64
KG80, KG100	6	90	25	47.5	22.5	22.5	47.5	70	92	92	140	12.2	80
KG105	6	90	25	-	-	-	-	92	92	92	-	12.2	80
KG125, KG160	6.4	120	36	76	-	-	-	112	-	150	224	-	108
KG210, KG250, KG315	6.4	142	44	-	-	-	-	145	-	187.5	-	-	126

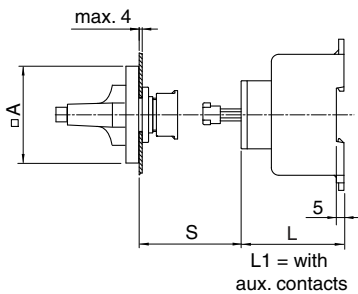
'H' dimension does not include the terminal covers. To obtain the dimension across the terminal cover(s) add the following to dimension 'H'.

- KG80/100/105: add 26 mm on side that cover is fitted.
- KG125/160: add 22.5 mm on side that cover is fitted
- KG210/250/315: add 50 mm to 'H' dimension

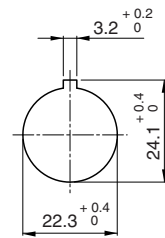
Factory fitted auxiliary contacts are integral with the main switch body – they are not side mounting type.

Door Interlock, Single Hole Fixing. 3, 3+N, 4 & 6 Pole Switches - side view

KG10 to KG105



Handle Mounting Hole

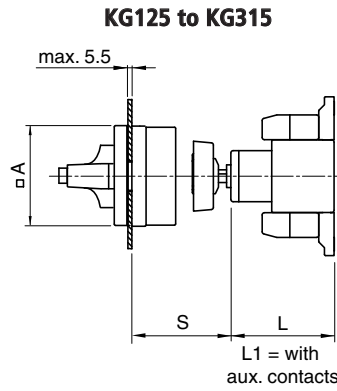
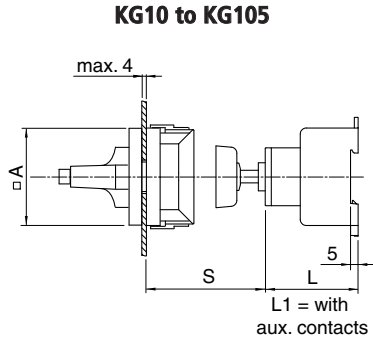


	A	L 3/4 Pole	L1 3/4 Pole	S 3/4 Pole	L 6 Pole	L1 6 Pole	S 6 Pole
KG10A	48	49.2	58.7	31-191	-	-	-
KG20A, KG32A	48	50	59	31-196	-	-	-
KG20B, KG32B	64	-	-	-	57.5	66.5	31-199
KG41B, KG64B	64	61	71	31-192	67	77	31-193
KG80, KG100, KG105	64	68	78	32-189	79.2	89.2	32-189

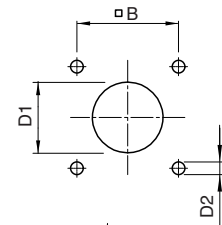
Dimensions for KG100 & KG105 with 3 poles + solid neutral are the same as for 4 pole switch.

Base Mounting with Door Interlock, Continued.

Door Interlock, 4 Hole Fixing. 3, 4 & 6 Pole Switches - side view.

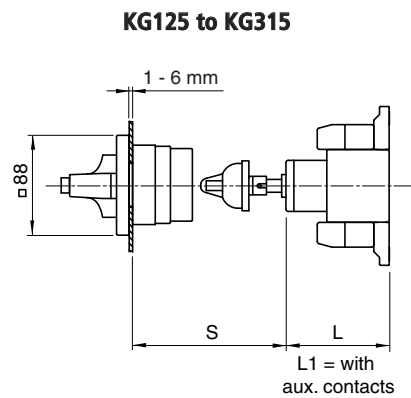
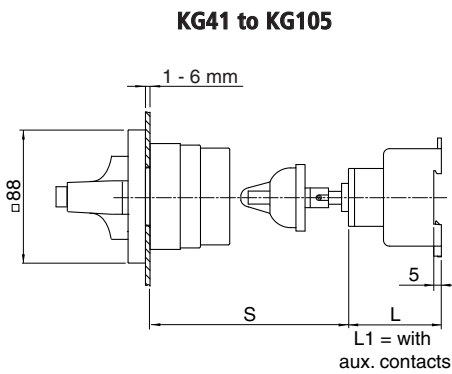


Handle Mounting Holes

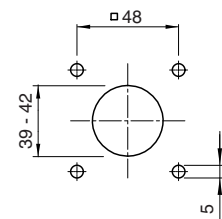


	A	B	D1	D2	L 3/4 Pole	L1 3/4 Pole	S 3/4 Pole	L 6 Pole	L1 6 Pole	S 6 Pole
KG10B	64	48	19 - 22	5	56.2	65.7	38-117	-	-	-
KG20B, KG32B	64	48	19 - 22	5	50	59	37-122	57.5	66.5	37-125
KG41B, KG64B	64	48	19 - 22	5	61	71	35-130	67	77	35-131
KG80, KG100, KG105	64	48	19 - 22	5	68	78	36-127	79.2	89.2	36-127
KG125, KG160	88	68	26 - 30	6	91	91	45-306	93	93	45-306
KG210, KG250, KG315	88	68	26 - 30	6	98	98	45-306	-	-	-

Defeatable Door Interlock, 4 Hole Fixing. 3, 4 & 6 Pole Switches - side view.



Handle Mounting Holes

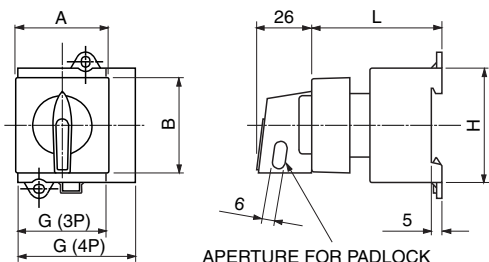


	L 3/4 Pole	L1 3/4 Pole	S 3/4 Pole	L 6 Pole	L1 6 Pole	S 6 Pole
KG41B, KG64B	61	71	72-224	67	77	72-225
KG80, KG100, KG105	68	78	73-221	79.2	89.2	73-221
KG125, KG160	91	91	83-336	93	93	83-336
KG210, KG250, KG315	98	98	83-336	-	-	-

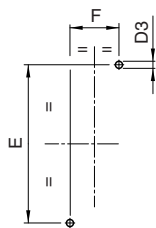
KG Main Switches

Base Mounting - For 45 mm Installation Cut-Out

KG20 to 100 - 3 & 4 Pole



Mounting Holes



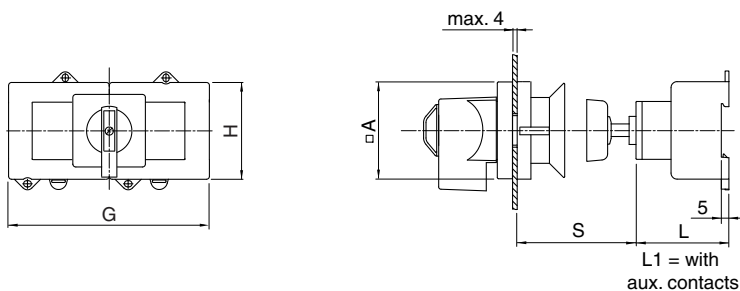
	A	B	D3	E	F
KG20A, KG32A	43.7	45.4	5	60	22
KG41B, KG64B	52.4	45.4	5	70	25
KG80, KG100	70	45	6	90	25

	G 3 Pole	G 4 Pole	H	L
KG20A, KG32A	42	55.5	54	61.5
KG41B, KG64B	50	66	64	61.5
KG80, KG100	70	92	80	70

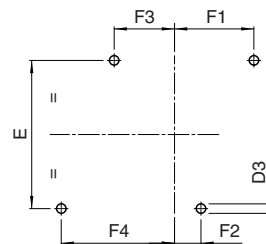
KG Changeover Switches

Base Mounting with Door Interlock, 4 Hole Fixing

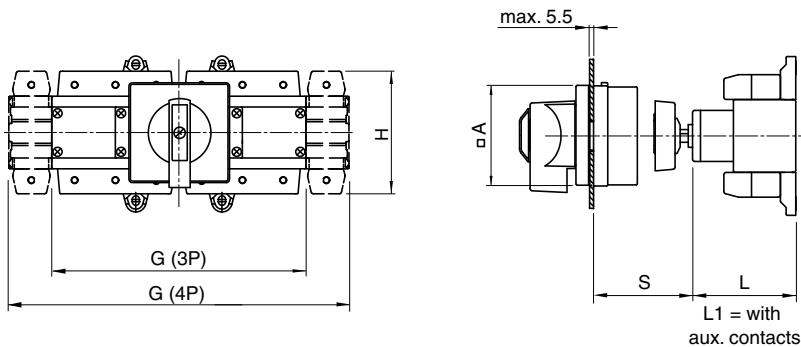
KG20 to KG100 - 3 & 4 Pole



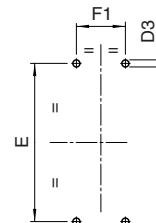
Base Mounting Holes



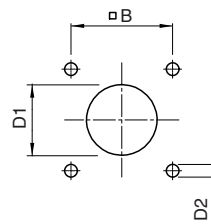
KG125 to KG160 - 3 & 4 Pole



Base Mounting Holes



Handle Mounting Holes



	A	B	D1	D2	D3	E	F1	F2	F3 3 Pole
KG20B, KG32B	64	48	19 - 22	5	5	60	32	10	10
KG41B, KG64B	64	48	19 - 22	5	5	70	37.5	12.5	12.5
KG80, KG100	88	48	19 - 22	5	6	90	47.5	22.5	22.5
KG105	88	48	19 - 22	5	6	90	47.5	22.5	-
KG125, KG160	88	68	26 - 30	6	6.4	120	76	-	-

	F4 3 Pole	F3 4 Pole	F4 4 Pole	G 3 Pole	G 4 Pole	H	L	L1	S
KG20B, KG32B	32	23.5	45.5	84	111	54	57.5	66.5	37-125
KG41B, KG64B	37.5	28.5	53.5	100	132	64	67	77	35-131
KG80, KG100	47.5	44.5	69.5	140	184	80	79.2	89.2	36-127
KG105	-	44.5	69.5	-	184	80	79.2	89.2	36-127
KG125, KG160	-	-	-	224	300	108	93	93	45-196

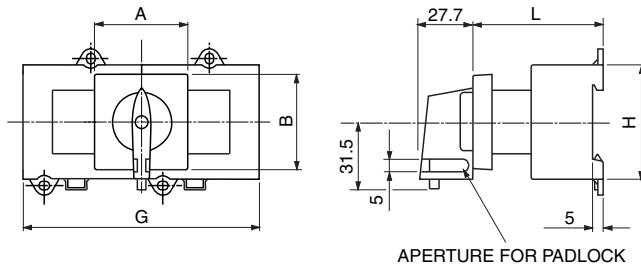
Factory fitted auxiliary contacts are integral with the main switch body – they are not side mounting type.

DIMENSIONS MM

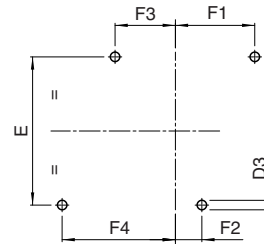
KG Changeover Switches

Base Mounting - For 45 mm Installation Cut - Out

KG41 to KG105 - 4 Pole



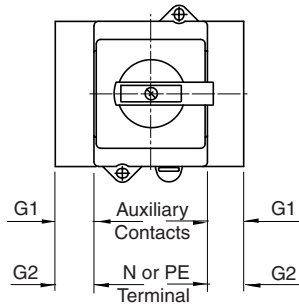
Mounting Holes



	A	B	D3	E	F1	F2	F3	F4	G	H	L
KG41B, KG64B	52.4	45.4	5	70	37.5	12.5	28.5	53.5	132	64	67.5
KG80, KG100, KG10570	70	45	6	90	47.5	22.5	44.5	69.5	184	80	81.2

KG Switch Options

Side Mounting Modules.



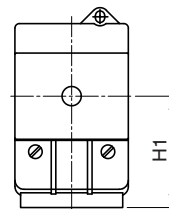
	G1	G2
KG20A & B, KG32A & B	10	13.5
KG41B, KG64B	11	16
KG80, KG100, KG105	11	22
KG125, KG160	14	38
KG210, KG250, KG315	14	52.5

Note:

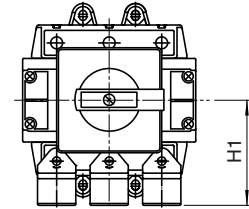
KG125 to KG315 4 pole switches cannot have additional modules fitted on the side adjacent to the 4th pole (switched neutral).

Terminal Covers.

KG10 to KG105



KG125 to KG315

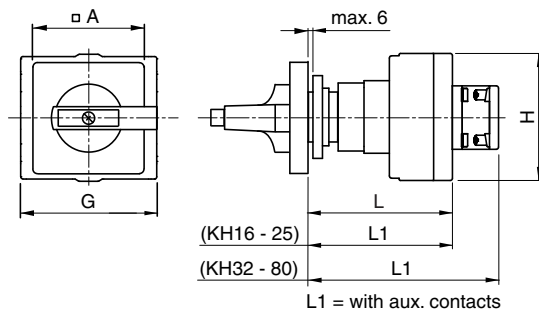


	H1
KG10A & B	32
KG20A & B, KG32A & B	47
KG41B, KG64B	49
KG80, KG100, KG105	66
KG125, KG160	76.2
KG210, KG250, KG315	88

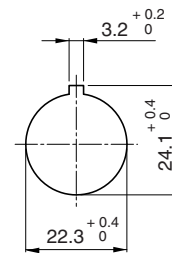
KH Main/Emergency-Off Switches

Front Panel Mounting - Single Hole Fixing

KH16 to KH80 - 3 Pole+N & 4 Pole



Mounting Hole Details



	A	G	H	L	L1
KH16, KH20, KH25	48	60	56	63.5	72.5
KH32, KH40	64	70	62	68.7	89.2
KH63, KH80	64	86	90	77.1	95.6

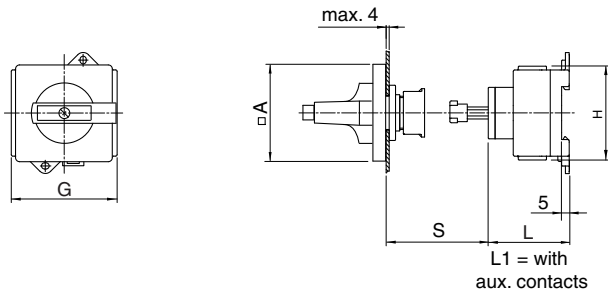
'H' dimension for KH63/80 does not include the terminal cover. To obtain the dimension across the terminal cover(s) add 23.5 mm on side that cover is fitted.

Factory fitted auxiliary contacts are integral with the main switch body – they are not side mounting type.

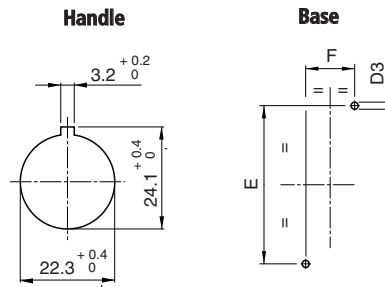
KH Main/Emergency-Off Switches

Base Mounting With Door Interlock, Single Hole Fixing

KH16 to KH80 - 3 Pole+N & 4 Pole



Mounting Holes



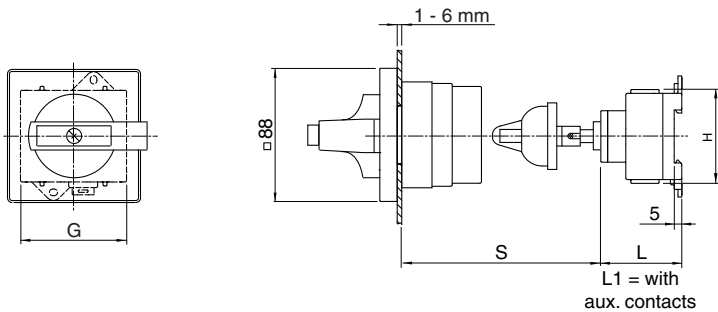
	A	D3	E	F	G	H	L	L1	S
KH16, KH20, KH25	48	5	60	22	60	56	47	56	31-196
KH32, KH40	64	5	70	25	70	62	53.5	53.5	35-194
KH63, KH80	64	6	90	25	86	90	59.5	59.5	35-194

'H' dimension for KH63/80 does not include the terminal cover. To obtain the dimension across the terminal cover(s) add 23.5 mm on side that cover is fitted.

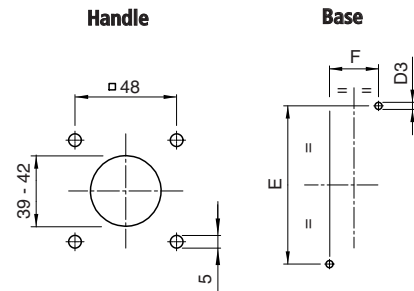
Factory fitted auxiliary contacts are integral with the main switch body – they are not side mounting type.

Base Mounting With Defeatable Door Interlock, 4 Hole Fixing

KH32 to KH80 - 4 Pole



Mounting Holes



	D3	E	F	G	H	L	L1	S
KH32, KH40	5	70	25	70	62	53.5	53.5	76-226
KH63, KH80	6	90	25	86	90	59.5	59.5	76-226

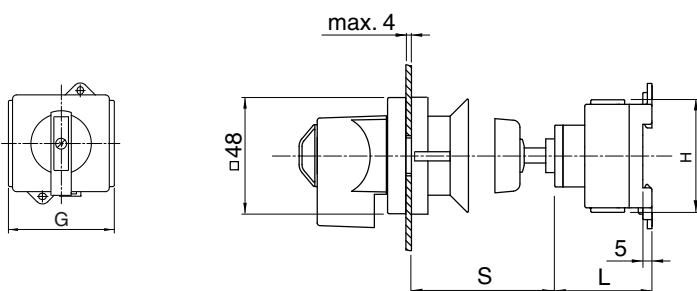
'H' dimension for KH63/80 does not include the terminal cover. To obtain the dimension across the terminal cover(s) add 23.5 mm on side that cover is fitted.

Factory fitted auxiliary contacts are integral with the main switch body – they are not side mounting type.

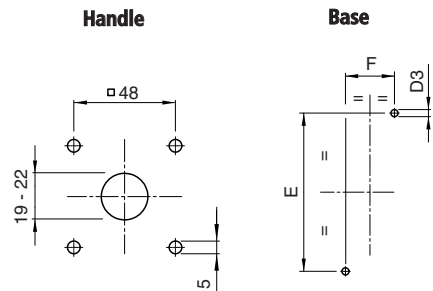
KH Changeover Switches

Base Mounting With Door Interlock, 4 Hole Fixing

KH16 to KH85 - 2 Pole



Mounting Holes



	D3	E	F	G	H	L	S
KH16, KH20, KH25	5	60	22	60	56	47	37-122
KH32, KH40	5	70	25	70	62	53.5	39-132
KH63, KH80, KH85	6	90	25	86	90	59.5	39-132

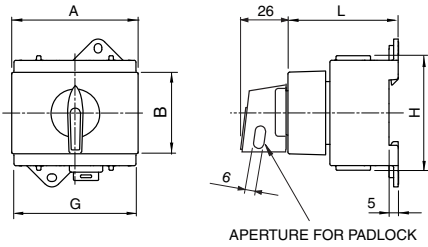
'H' dimension for KH63/80 does not include the terminal cover. To obtain the dimension across the terminal cover(s) add 23.5 mm on side that cover is fitted.

DIMENSIONS MM

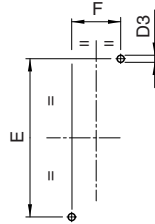
KH Changeover Switches

Base Mounting - For 45 mm Installation Cut-Out

KH16 to KH85 - 2 Pole



Mounting Holes

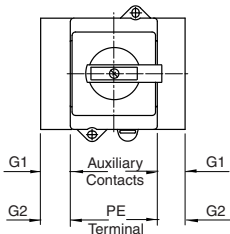


	A	B	D3	E
KH16, KH20, KH25	43.7	45.4	5	60
KH32, KH40	70.4	45.4	5	70
KH63, KH80, KH85	70.4	45.4	6	90

	F	G	H	L
KH16, KH20, KH25	22	60	56	58.5
KH32, KH40	25	70	62	59.7
KH63, KH80, KH85	25	86	90	66.7

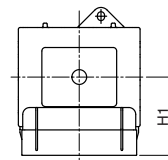
KH Switch Options

Side Mounting Modules



	G1	G2
KH16, KH20, KH25	10	13.5
KH32, KH40	10	13.5
KH63, KH80, KH85	10	20

Terminal Covers.

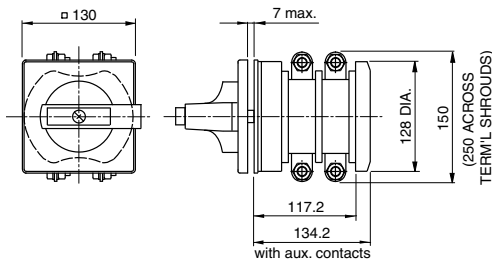


	H1
KH32, KH40	45
KH63, KH80, KH85	68.5

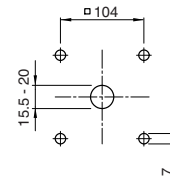
C & CA Main/Emergency - Off Switches

Front Panel Mounting - 4 Hole Fixing

C316 - 3 & 4 Pole

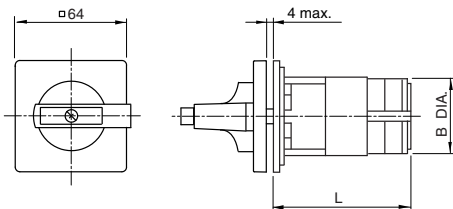


Mounting Holes

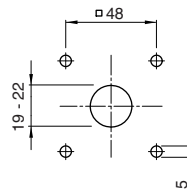


Front Panel Mounting, With Power Failure Release - 4 Hole Fixing

CA10Z to CA25Z - 3 & 4 Pole



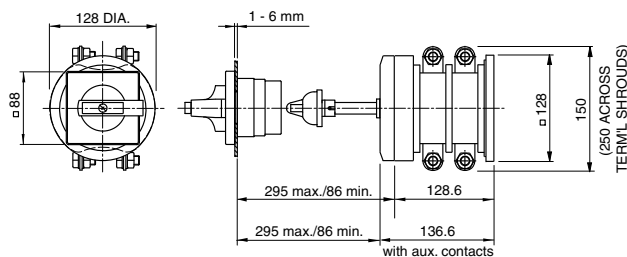
Mounting Holes



	B	L
CA10Z	43	78.7
CA20Z	45	86.1
CA25Z	48	88.7

Base Mounting, With Defeatable Door Interlock - 4 Hole Fixing

C316 - 3 & 4 Pole



Mounting Holes

