



Kraus & Naimer

BLUE LINE switchgear

2015

Enclosed Product Catalogue

isolating | main/emergency off
changeover | grp | insulated | stainless steel
mild steel | red painted mild steel | photovoltaic

For free expert advice and technical
help contact our sales team
on 01635 262626

www.krausnaimer.co.uk

The development of the Blue Line rotary switch is based on more than one hundred years experience by Kraus & Naimer in the design and manufacture of electrical switchgear.

Kraus & Naimer pioneered the introduction of the cam operated rotary switch and continues to be recognised as the world leader in that product field.

Blue Line products are protected by numerous patents throughout the industrial world. They are built to national and international standards and designed to withstand adverse temperatures and climates. Our extensive range includes cam operated rotary switches up to 2400A, main/main emergency-off switch-disconnectors up to 1250A and changeover switches up to 2400A. They can be supplied for mounting on machines, in switch panels or in enclosures using materials such as polycarbonate, GRP, painted mild steel and stainless steel.

Kraus & Naimer's Blue Line products are accepted and universally recognised for their quality and workmanship.

Kraus & Naimer Limited is part of the worldwide Kraus & Naimer Group which celebrated its 100 year anniversary in 2007.


A key to our success is the outstanding level of technical product support through our dedicated team of internal and external technical sales engineers. With many years experience, training and unbeatable product knowledge the team can find a suitable solution for most switch applications.



WORLDWIDE SYMBOL
FOR QUALITY SWITCHGEAR

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The content of the catalogue has been designed for ease of use and selection; with 'one-line' product coding for ordering purposes. Please contact our Sales Team at Newbury if you would like assistance in the selection of a product or require additional information on the range of products available from Kraus & Naimer.

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Main/Emergency-Off Switch - 3, 4, 6 & 8 Pole 20A - 315A



- IP66/67 protection
- red/yellow padlockable handle
- optional black handle available
- grey insulated enclosure (RAL7035)
- earth terminal included
- switch interlocked with lid to prevent opening in 'ON' position

Without Auxiliaries	le AC-21A	3 Pole	Encl. Ref		3 Pole + Solid Neutral (TP&N)	Encl. Ref		
	20A	KG10 T203/GBA270 *KS1V	KSAV		KG10 T203/GBA355 *KS1V	KSAV		
	25A	KG20 T203/GBA270 *KS1V	KSAV		KG20 T203/GBA355 *KS1V	KSAV		
	32A	KG32 T203/GBA270 *KS1V	KSAV		KG32 T203/GBA355 *KS1V	KSAV		
	40A	KG41 T203/GBA270 *KL1V	KLCV		KG41 T203/GBA355 *KL1V	KLCV		
	63A	KG64 T203/GBA270 *KL1V	KLCV		KG64 T203/GBA355 *KL1V	KLCV		
	80A	KG80 T203/GBA270 *KL1V	KLDV		KG80 T203/GBA355 *KL1V	KLDV		
	100A	KG100 T203/GBA270 *KL1V	KLDV		KG100 T203/GBA355 *KL1V	KLDV		
	125A	KG105 T203/GBA270 *KL1V	KLDV		KG105 T203/GBA355 *KL1V	KLDV		
	125A ³⁾	KG125 T203/GBA270 *ST	ST3		KG125 T207/GBA355 *ST	ST3		
160A	KG160 T203/GBA270 *ST	ST3		KG160 T207/GBA355 *ST	ST3			
200A	KG210 T203/GBA270 *ST	ST3		KG210 T207/GBA355 *ST	ST4			
250A	KG250 T203/GBA270 *ST	ST3		KG250 T207/GBA355 *ST	ST4			
315A	KG315 T203/GBA270 *ST	ST3		KG315 T207/GBA355 *ST	ST4			

With Auxiliaries ¹	le AC-21A	3 Pole	Encl. Ref		3 Pole + Solid Neutral (TP&N)	Encl. Ref		
	20A	KG10 T203/GBA281 *KS1V	KSAV		KG10 T203/GBA374 *KS1V	KSAV		
	25A	KG20 T203/GBA280 *KS1V	KSAV		KG20 T203/GBA373 *KS1V	KSAV		
	32A	KG32 T203/GBA280 *KS1V	KSAV		KG32 T203/GBA373 *KS1V	KSAV		
	40A	KG41 T203/GBA280 *KL1V	KLCV		KG41 T203/GBA373 *KL1V	KLCV		
	63A	KG64 T203/GBA280 *KL1V	KLCV		KG64 T203/GBA373 *KL1V	KLCV		
	80A	KG80 T203/GBA280 *KL1V	KLDV		KG80 T203/GBA373 *KL1V	KLDV		
	100A	KG100 T203/GBA280 *KL1V	KLDV		KG100 T203/GBA373 *KL1V	KLDV		
	125A	KG105 T203/GBA280 *KL1V	KLDV		KG105 T203/GBA373 *KL1V	KLDV		
	125A ³⁾	KG125 T203/GBA065 *ST	ST3		KG125 T207/GBA110 *ST	ST3		
160A	KG160 T203/GBA065 *ST	ST3		KG160 T207/GBA110 *ST	ST3			
200A	KG210 T203/GBA070 *ST	ST3		KG210 T207/GBA120 *ST	ST4			
250A	KG250 T203/GBA070 *ST	ST3		KG250 T207/GBA120 *ST	ST4			
315A	KG315 T203/GBA070 *ST	ST3		KG315 T207/GBA120 *ST	ST4			

Notes

- The following auxiliary contacts are provided:-
 - KG10 3 to 6 Pole 1 N.O. (early break) + 1 N.C.
 - KG20 to KG105 3 to 6 Pole 2 N.O. (early break)
 - KG10 to KG100 8 Pole 1 N.O. (early break) + 1 N.C.
 - KG125 to KG315 3 to 8 Pole 2 N.O. (early break) + 2 N.C.

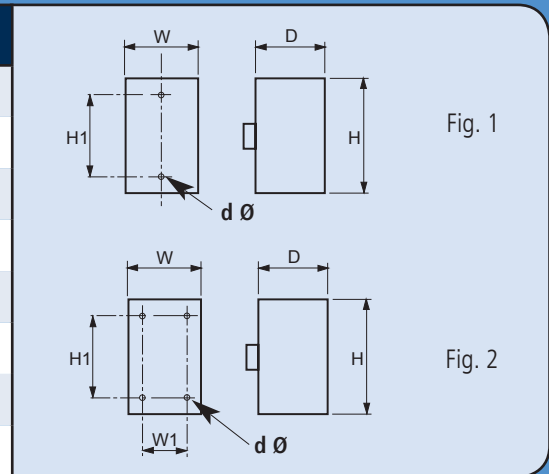
2) Switched neutral pole is early make/late break.

3) KG125 suitable for applications requiring larger cable termination and increased enclosure size.



DIMENSIONS

Encl. Ref.	Encl. Dim.			Encl. Dim.			Cable Entries.	Line Drg.
	H	W	D	H1	W1	d		
KSAV	120	85	90	110	-	4.2	4 x 20/25mm k'outs	Fig. 1
KLCV	190	100	93	178	-	5.6	4 x 20/25mm k'outs	Fig. 1
KLD	250	145	107	229	124	6.5	4 x 25/40mm k'outs	Fig. 2
KLDV	250	145	107	229	124	6.5	4 x 25/40mm k'outs	Fig. 2
STE	280	190	180	254	164	7	2 x gland plates	Fig. 2
ST2	280	190	130	254	164	7	2 x gland plates	Fig. 2
ST3	380	280	180	354	254	7	2 x gland plates	Fig. 2
ST4	560	380	180	534	354	7	2 x gland plates	Fig. 2



4 Pole (3ph + Sw N²)		Encl. Ref	6 Pole		Encl. Ref	le AC-21A
KG10	T204/GBA290 *KS1V	KSAV	KG10B	T206/GBA320 *KS1V	KSAV	20A
KG20	T204/GBA290 *KS1V	KSAV	KG20B	T206/GBA320 *KL1V	KLCV	25A
KG32	T204/GBA290 *KS1V	KSAV	KG32B	T206/GBA320 *KL1V	KLCV	32A
KG41	T204/GBA290 *KL1V	KLCV	KG41B	T206/GBA320 *KL1V	KLDV	40A
KG64	T204/GBA290 *KL1V	KLCV	KG64B	T206/GBA320 *KL1V	KLDV	63A
KG80	T204/GBA290 *KL1V	KLDV	KG80	T206/GBA967 *ST	STE	80A
KG100	T204/GBA290 *KL1V	KLDV	KG100	T206/GBA967 *ST	STE	100A
KG105	T204/GBA290 *KL1V	KLDV	KG105	T206/GBA967 *ST	STE	125A
KG125	T204/GBA290 *ST	ST3	KG125	T206/GBA967 *ST	ST4	125A ³⁾
KG160	T204/GBA290 *ST	ST3	KG160	T206/GBA967 *ST	ST4	160A
KG210	T204/GBA290 *ST	ST4				200A
KG250	T204/GBA290 *ST	ST4				250A
KG315	T204/GBA290 *ST	ST4				315A

4 Pole (3ph + Sw N²)		Encl. Ref	6 Pole		Encl. Ref	8 Pole (2 x 3ph + Sw N²)		Encl. Ref	le AC-21A
KG10	T204/GBA311 *KS1V	KSAV	KG10	T206/40 *KS51V	KSAV	KG10	T208/GBA002 *KS1V	KSAV	20A
KG20	T204/GBA310 *KS1V	KSAV	KG20B	T206/GBA330 *KL1V	KLCV	KG20B	T208/GBA008 *KL	KLD	25A
KG32	T204/GBA310 *KS1V	KSAV	KG32B	T206/GBA330 *KL1V	KLCV	KG32B	T208/GBA008 *KL	KLD	32A
KG41	T204/GBA310 *KL1V	KLCV	KG41B	T206/GBA330 *KL1V	KLDV	KG41B	T208/GBA008 *ST	ST2	40A
KG64	T204/GBA310 *KL1V	KLCV	KG64B	T206/GBA330 *KL1V	KLDV	KG64B	T208/GBA008 *ST	ST2	63A
KG80	T204/GBA310 *KL1V	KLDV	KG80	T206/GBA907 *ST	STE	KG80	T208/GBA008 *ST	ST3	80A
KG100	T204/GBA310 *KL1V	KLDV	KG100	T206/GBA907 *ST	STE	KG100	T208/GBA008 *ST	ST3	100A
KG105	T204/GBA310 *KL1V	KLDV	KG105	T206/GBA907 *ST	STE				125A
KG125	T204/GBA075 *ST	ST3	KG125	T206/GBA085 *ST	ST4	KG125	T208/GBA010 *ST	ST4	125A ³⁾
KG160	T204/GBA075 *ST	ST3	KG160	T206/GBA085 *ST	ST4	KG160	T208/GBA010 *ST	ST4	160A
KG210	T204/GBA080 *ST	ST4							200A
KG250	T204/GBA080 *ST	ST4							250A
KG315	T204/GBA080 *ST	ST4							315A



Main/Emergency-Off Switch - 3, 4, 6, 9 & 12 Pole 20A - 315A



MB8

MB4

MB3

MB2

- IP66 protection
- red/yellow padlockable handle
- optional black handle available
- grey powder paint finish, (RAL7032)
- earth terminal & lid bonding link included
- switch interlocked with lid to prevent opening in 'ON' position

Without Auxiliaries	le AC-21A	3 Pole		3 Pole + Solid Neutral (TP&N)		4 Pole (3ph + Sw N ²)	
	20A	KG10	T203/GBA119 *MB2			KG10	T204/GBA219 *MB2
	25A	KG20	T203/GBA119 *MB2	KG20	T207/GBA170 *MB2	KG20	T204/GBA219 *MB2
	32A	KG32	T203/GBA119 *MB2	KG32	T207/GBA170 *MB2	KG32	T204/GBA219 *MB2
	40A	KG41	T203/GBA109 *MB2	KG41	T207/GBA170 *MB2	KG41	T204/GBA209 *MB2
	63A	KG64	T203/GBA109 *MB2	KG64	T207/GBA170 *MB2	KG64	T204/GBA209 *MB2
	80A	KG80	T203/GBA109 *MB3	KG80	T207/GBA170 *MB3	KG80	T204/GBA209 *MB3
	100A	KG100	T203/GBA109 *MB3	KG100	T207/GBA170 *MB3	KG100	T204/GBA209 *MB3
	125A	KG105	T203/GBA109 *MB3	KG105	T207/GBA170 *MB3	KG105	T204/GBA209 *MB3
	125A ³⁾	KG125	T203/GBA109 *MB8	KG125	T207/GBA170 *MB8	KG125	T204/GBA209 *MB8
160A	KG160	T203/GBA109 *MB8	KG160	T207/GBA170 *MB8	KG160	T204/GBA209 *MB8	
200A	KG210	T203/GBA109 *MB9	KG210	T207/GBA170 *MB9	KG210	T204/GBA209 *MB9	
250A	KG250	T203/GBA109 *MB9	KG250	T207/GBA170 *MB9	KG250	T204/GBA209 *MB9	
275A							
315A	KG315	T203/GBA109 *MB9	KG315	T207/GBA170 *MB9	KG315	T204/GBA209 *MB9	

With Auxiliaries ¹	le AC-21A	3 Pole		3 Pole + Solid Neutral (TP&N)		4 Pole (3ph + Sw N ²)	
	20A	KG10	T203/GBA168 *MB2			KG10	T204/GBA268 *MB2
	25A	KG20	T203/GBA169 *MB2	KG20	T207/GBA175 *MB2	KG20	T204/GBA269 *MB2
	32A	KG32	T203/GBA169 *MB2	KG32	T207/GBA175 *MB2	KG32	T204/GBA269 *MB2
	40A	KG41	T203/GBA159 *MB2	KG41	T207/GBA175 *MB2	KG41	T204/GBA259 *MB2
	63A	KG64	T203/GBA159 *MB2	KG64	T207/GBA175 *MB2	KG64	T204/GBA259 *MB2
	80A	KG80	T203/GBA159 *MB3	KG80	T207/GBA175 *MB3	KG80	T204/GBA259 *MB3
	100A	KG100	T203/GBA159 *MB3	KG100	T207/GBA175 *MB3	KG100	T204/GBA259 *MB3
	125A	KG105	T203/GBA159 *MB3	KG105	T207/GBA175 *MB3	KG105	T204/GBA259 *MB3
	125A ³⁾	KG125	T203/GBA165 *MB8	KG125	T207/GBA180 *MB8	KG125	T204/GBA265 *MB8
160A	KG160	T203/GBA165 *MB8	KG160	T207/GBA180 *MB8	KG160	T204/GBA265 *MB8	
200A	KG210	T203/GBA175 *MB9	KG210	T207/GBA185 *MB9	KG210	T204/GBA275 *MB9	
250A	KG250	T203/GBA175 *MB9	KG250	T207/GBA185 *MB9	KG250	T204/GBA275 *MB9	
275A							
315A	KG315	T203/GBA175 *MB9	KG315	T207/GBA185 *MB9	KG315	T204/GBA275 *MB9	

Main Switches - 3 & 4 Pole (IP65) - with black padlockable handle 250A - 1250A

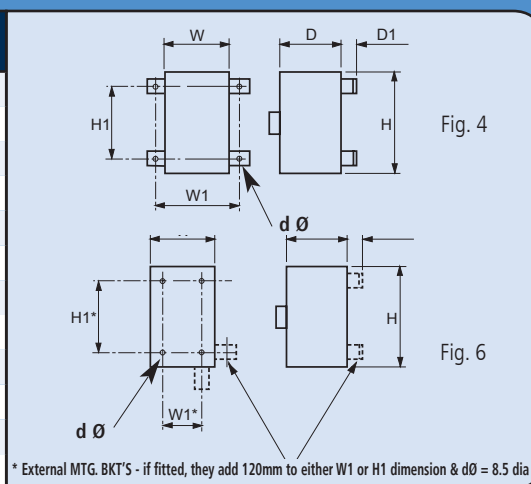


With Auxiliaries ¹	le AC-21A	3 Pole + aux		3 Pole + aux + Neutral Link		4 Pole + aux	
	250A	UK250/A	3011ST02 *MB25	UK250/A	3111ST02 *MB25	UK250/A	4011ST02 *MB25
	315A	UK315/A	3011ST02 *MB26	UK315/A	3111ST02 *MB26	UK315/A	4011ST02 *MB26
	400A	UK400/A	3011ST02 *MB26	UK400/A	3111ST02 *MB26	UK400/A	4011ST02 *MB26
	630A	UK630/A	3011ST02 *MB27	UK630/A	3111ST02 *MB27	UK630/A	4011ST02 *MB27
	800A	UK800/A	3011ST02 *MB28	UK800/A	3111ST02 *MB28	UK800/A	4011ST02 *MB28
	1000A	UK1000/A	3011ST02 *MB28	UK1000/A	3111ST02 *MB28	UK1000/A	4011ST02 *MB28
	1250A	UK1250/A	3011ST02 *MB28	UK1250/A	3111ST02 *MB28	UK1250/A	4011ST02 *MB28

DIMENSIONS



Encl. Ref.	Encl. Dim.				Encl. Dim.			Cable Entries.	Line Drg.
	H	W	D	D1	H1	W1	d		
MB2	194	119	115	8	133	137	6	-	Fig. 4
MB3	254	149	125	8	193	167	6	-	Fig. 4
MB4	309	234	150	8	248	252	6	-	Fig. 4
MB8	400	300	175	-	340	240	6.5	2 x gland plates	Fig. 6
MB9	500	400	175	-	440	340	6.5	2 x gland plates	Fig. 6
MB10	500	400	300	-	440	340	6.5	2 x gland plates	Fig. 6
MB20	250	175	175	-	225	195	6	-	Fig. 4
MB25	650	450	225	-	590	390	6.5	2 x gland plates	Fig. 6
MB26	800	550	225	-	740	490	6.5	2 x gland plates	Fig. 6
MB27	900	600	300	-	840	540	6.5	2 x gland plates	Fig. 6
MB28	1000	800	400	-	940	740	6.5	4 x gland plates	Fig. 6
MB29	750	450	300	-	690	390	6.5	2 x gland plates	Fig. 6



Please refer to end of part no. for enclosure reference. See tables below:

6 Pole	9 Pole	12 Pole	le AC-21A
KG20B T206/GBA309 *MB2	UK 20/9000ST01 *MB20	UK 20/12000ST01 *MB20	20A
KG32B T206/GBA309 *MB2	UK 25/9000ST01 *MB20	UK 25/12000ST01 *MB20	25A
KG41B T206/GBA309 *MB3	UK 32/9000ST01 *MB20	UK 32/12000ST01 *MB20	32A
KG64B T206/GBA309 *MB3			40A
KG80 T206/GBA309 *MB4			63A
KG100 T206/GBA309 *MB4			80A
			100A
			125A
KG125 T206/GBA309 *MB9			125A ³⁾
KG160 T206/GBA309 *MB9			160A
C200-4 T206/GBA309 *MB10			200A
			250A
C316 T206/GBA309 *MB10			275A
C316 T206/GBA309 *MB29			315A

6 Pole	9 Pole	12 Pole	le AC-21A
KG20B T206/GBA359 *MB2	UK 20/9020ST01 *MB20	UK 20/12020ST01 *MB20	20A
KG32B T206/GBA359 *MB2	UK 25/9020ST01 *MB20	UK 25/12020ST01 *MB20	25A
KG41B T206/GBA359 *MB3	UK 32/9020ST01 *MB20	UK 32/12020ST01 *MB20	32A
KG64B T206/GBA359 *MB3			40A
KG80 T206/GBA359 *MB4			63A
KG100 T206/GBA359 *MB4			80A
			100A
			125A
KG125 T206/GBA365 *MB9			125A ³⁾
KG160 T206/GBA365 *MB9			160A
C200-4 T206/GBA385 *MB10			200A
			250A
C316 T206/GBA006 *MB10			275A
C316 T206/GBA365 *MB29			315A

Notes

- 1) The following auxiliary contacts are provided:-
 KG10 1 N.O. (early break) + 1 N.C.
 KG20 to KG105 2 N.O. (early break)
 KG125 to KG315 2 N.O. (early break) + 2 N.C.
 UK20 to UK32 2 N.O. (early break)
 C316/C200-4 2 N.O. (early break)
 UK250/A to UK1250/A 1 N.O. (early break) + 1 N.C.

2) Switched neutral pole is early make/late break.

3) KG125 suitable for applications requiring larger cable termination and increased enclosure size.



Main/Emergency-Off Switch - 3, 4, 6, 9 & 12 Pole 20A - 315A



RB10

RB4

RB2

- IP66 protection
- red/yellow padlockable handle
- optional black handle available
- red powder paint finish (RAL3000)
- earth terminal & lid bonding link included
- switch interlocked with lid to prevent opening in 'ON' position

Without Auxiliaries	le AC-21A	3 Pole		3 Pole + Solid Neutral (TP&N)		4 Pole (3ph + Sw N ²)	
	20A	KG10	T203/GBA119 *RB2			KG10	T204/GBA219 *RB2
	25A	KG20	T203/GBA119 *RB2	KG20	T207/GBA170 *RB2	KG20	T204/GBA219 *RB2
	32A	KG32	T203/GBA119 *RB2	KG32	T207/GBA170 *RB2	KG32	T204/GBA219 *RB2
	40A	KG41	T203/GBA109 *RB2	KG41	T207/GBA170 *RB2	KG41	T204/GBA209 *RB2
	63A	KG64	T203/GBA109 *RB2	KG64	T207/GBA170 *RB2	KG64	T204/GBA209 *RB2
	80A	KG80	T203/GBA109 *RB3	KG80	T207/GBA170 *RB3	KG80	T204/GBA209 *RB3
	100A	KG100	T203/GBA109 *RB3	KG100	T207/GBA170 *RB3	KG100	T204/GBA209 *RB3
	125A	KG105	T203/GBA109 *RB3	KG105	T207/GBA170 *RB3	KG105	T204/GBA209 *RB3
	125A ³⁾	KG125	T203/GBA109 *RB8	KG125	T207/GBA170 *RB8	KG125	T204/GBA209 *RB8
160A	KG160	T203/GBA109 *RB8	KG160	T207/GBA170 *RB8	KG160	T204/GBA209 *RB8	
200A	KG210	T203/GBA109 *RB9	KG210	T207/GBA170 *RB9	KG210	T204/GBA209 *RB9	
250A	KG250	T203/GBA109 *RB9	KG250	T207/GBA170 *RB9	KG250	T204/GBA209 *RB9	
275A							
315A	KG315	T203/GBA109 *RB9	KG315	T207/GBA170 *RB9	KG315	T204/GBA209 *RB9	

With Auxiliaries ¹	le AC-21A	3 Pole		3 Pole + Solid Neutral (TP&N)		4 Pole (3ph + Sw N ²)	
	20A	KG10	T203/GBA168 *RB2			KG10	T204/GBA268 *RB2
	25A	KG20	T203/GBA169 *RB2	KG20	T207/GBA175 *RB2	KG20	T204/GBA269 *RB2
	32A	KG32	T203/GBA169 *RB2	KG32	T207/GBA175 *RB2	KG32	T204/GBA269 *RB2
	40A	KG41	T203/GBA159 *RB2	KG41	T207/GBA175 *RB2	KG41	T204/GBA259 *RB2
	63A	KG64	T203/GBA159 *RB2	KG64	T207/GBA175 *RB2	KG64	T204/GBA259 *RB2
	80A	KG80	T203/GBA159 *RB3	KG80	T207/GBA175 *RB3	KG80	T204/GBA259 *RB3
	100A	KG100	T203/GBA159 *RB3	KG100	T207/GBA175 *RB3	KG100	T204/GBA259 *RB3
	125A	KG105	T203/GBA159 *RB3	KG105	T207/GBA175 *RB3	KG105	T204/GBA259 *RB3
	125A ³⁾	KG125	T203/GBA165 *RB8	KG125	T207/GBA180 *RB8	KG125	T204/GBA265 *RB8
160A	KG160	T203/GBA165 *RB8	KG160	T207/GBA180 *RB8	KG160	T204/GBA265 *RB8	
200A	KG210	T203/GBA175 *RB9	KG210	T207/GBA185 *RB9	KG210	T204/GBA275 *RB9	
250A	KG250	T203/GBA175 *RB9	KG250	T207/GBA185 *RB9	KG250	T204/GBA275 *RB9	
275A							
315A	KG315	T203/GBA175 *RB9	KG315	T207/GBA185 *RB9	KG315	T204/GBA275 *RB9	

Main Switches - 3 & 4 Pole (IP65) - with black padlockable handle 250A - 1250A

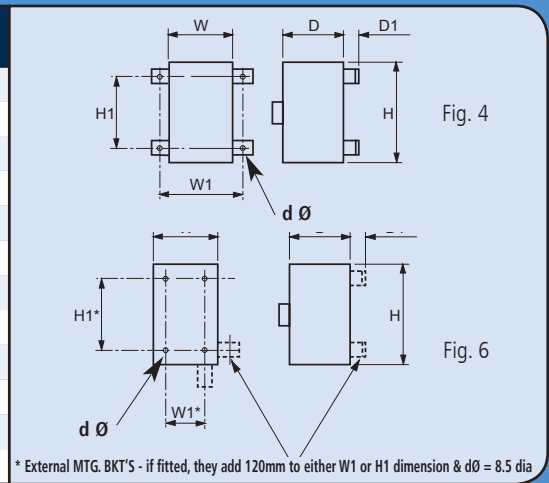


With Auxiliaries ¹	le AC-21A	3 Pole + aux		3 Pole + aux + Neutral Link		4 Pole + aux	
	250A	UK250/A	3011ST02 *RB25	UK250/A	3111ST02 *RB25	UK250/A	4011ST02 *RB25
	315A	UK315/A	3011ST02 *RB26	UK315/A	3111ST02 *RB26	UK315/A	4011ST02 *RB26
	400A	UK400/A	3011ST02 *RB26	UK400/A	3111ST02 *RB26	UK400/A	4011ST02 *RB26
	630A	UK630/A	3011ST02 *RB27	UK630/A	3111ST02 *RB27	UK630/A	4011ST02 *RB27
	800A	UK800/A	3011ST02 *RB28	UK800/A	3111ST02 *RB28	UK800/A	4011ST02 *RB28
	1000A	UK1000/A	3011ST02 *RB28	UK1000/A	3111ST02 *RB28	UK1000/A	4011ST02 *RB28
1250A	UK1250/A	3011ST02 *RB28	UK1250/A	3111ST02 *RB28	UK1250/A	4011ST02 *RB28	

DIMENSIONS



Encl. Ref.	Encl. Dim.				Encl. Dim.			Cable Entries.	Line Drg.
	H	W	D	D1	H1	W1	d		
RB2	194	119	115	8	133	137	6	-	Fig. 4
RB3	254	149	125	8	193	167	6	-	Fig. 4
RB4	309	234	150	8	248	252	6	-	Fig. 4
RB8	400	300	175	-	340	240	6.5	2 x gland plates	Fig. 6
RB9	500	400	175	-	440	340	6.5	2 x gland plates	Fig. 6
RB10	500	400	300	-	440	340	6.5	2 x gland plates	Fig. 6
RB20	250	175	175	-	225	195	6	-	Fig. 4
RB25	650	450	225	-	590	390	6.5	2 x gland plates	Fig. 6
RB26	800	550	225	-	740	490	6.5	2 x gland plates	Fig. 6
RB27	900	600	300	-	840	540	6.5	2 x gland plates	Fig. 6
RB28	1000	800	400	-	940	740	6.5	4 x gland plates	Fig. 6
RB29	750	450	300	-	690	390	6.5	2 x gland plates	Fig. 6



Please refer to end of part no. for enclosure reference. See tables below:

6 Pole		9 Pole		12 Pole		le AC-21A
			UK 20/9000ST01 *RB20		UK 20/12000ST01 *RB20	20A
KG20B	T206/GBA309 *RB2		UK 25/9000ST01 *RB20		UK 25/12000ST01 *RB20	25A
KG32B	T206/GBA309 *RB2		UK 32/9000ST01 *RB20		UK 32/12000ST01 *RB20	32A
KG41B	T206/GBA309 *RB3					40A
KG64B	T206/GBA309 *RB3					63A
KG80	T206/GBA309 *RB4					80A
KG100	T206/GBA309 *RB4					100A
						125A
KG125	T206/GBA309 *RB9					125A ³⁾
KG160	T206/GBA309 *RB9					160A
C200-4	T206/GBA309 *RB10					200A
						250A
C316	T206/GBA309 *RB10					275A
C316	T206/GBA309 *RB29					315A

6 Pole		9 Pole		12 Pole		le AC-21A
			UK 20/9020ST01 *RB20		UK 20/12020ST01 *RB20	20A
KG20B	T206/GBA359 *RB2		UK 25/9020ST01 *RB20		UK 25/12020ST01 *RB20	25A
KG32B	T206/GBA359 *RB2		UK 32/9020ST01 *RB20		UK 32/12020ST01 *RB20	32A
KG41B	T206/GBA359 *RB3					40A
KG64B	T206/GBA359 *RB3					63A
KG80	T206/GBA359 *RB4					80A
KG100	T206/GBA359 *RB4					100A
						125A
KG125	T206/GBA365 *RB9					125A ³⁾
KG160	T206/GBA365 *RB9					160A
C200-4	T206/GBA365 *RB10					200A
						250A
C316	T206/GBA006 *RB10					275A
C316	T206/GBA365 *RB29					315A

Notes

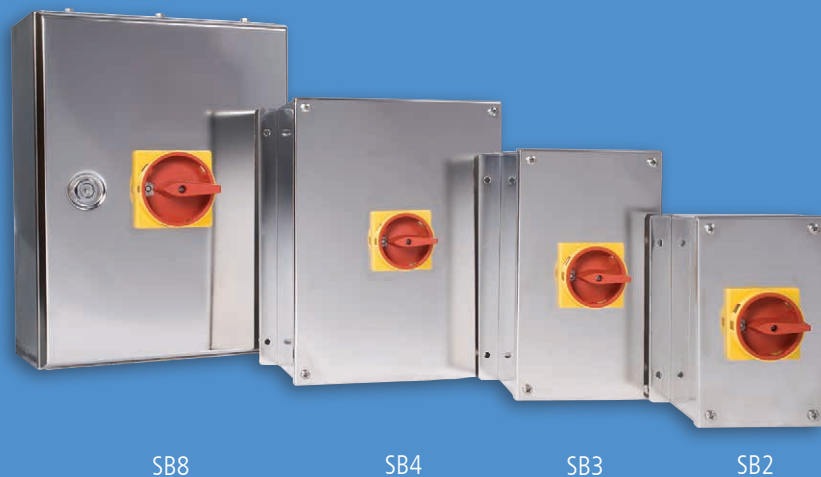
- The following auxiliary contacts are provided:-
 - KG10 1 N.O. (early break) + 1 N.C.
 - KG20 to KG105 2 N.O. (early break)
 - KG125 to KG315 2 N.O. (early break) + 2 N.C.
 - UK20 to UK32 2 N.O. (early break)
 - C316/C200-4 2 N.O. (early break)
 - UK250/A to UK1250/A 1 N.O. (early break) + 1 N.C.

2) Switched neutral pole is early make/late break.

3) KG125 suitable for applications requiring larger cable termination and increased enclosure size.



Main/Emergency-Off Switch - 3, 4 & 6 Pole 20A - 315A



- IP66 protection
- red/yellow padlockable handle
- optional black handle available
- bright stainless steel enclosure, grade 316L
- earth terminal & lid bonding link included
- switch interlocked with lid to prevent opening in 'ON' position

Without Auxiliaries	le AC-21A	3 Pole		3 Pole + Solid Neutral (TP&N)		4 Pole (3ph + Sw N ²)	
	20A	KG10	T203/GBA419 *SB2			KG10	T204/GBA519 *SB2
	25A	KG20	T203/GBA419 *SB2	KG20	T207/GBA420 *SB2	KG20	T204/GBA519 *SB2
	32A	KG32	T203/GBA419 *SB2	KG32	T207/GBA420 *SB2	KG32	T204/GBA519 *SB2
	40A	KG41	T203/GBA409 *SB2	KG41	T207/GBA420 *SB2	KG41	T204/GBA509 *SB2
	63A	KG64	T203/GBA409 *SB2	KG64	T207/GBA420 *SB2	KG64	T204/GBA509 *SB2
	80A	KG80	T203/GBA409 *SB3	KG80	T207/GBA420 *SB3	KG80	T204/GBA509 *SB3
	100A	KG100	T203/GBA409 *SB3	KG100	T207/GBA420 *SB3	KG100	T204/GBA509 *SB3
	125A	KG105	T203/GBA409 *SB3	KG105	T207/GBA420 *SB3	KG105	T204/GBA509 *SB3
	125A ³⁾	KG125	T203/GBA409 *SB8	KG125	T207/GBA420 *SB8	KG125	T204/GBA509 *SB8
160A	KG160	T203/GBA409 *SB8	KG160	T207/GBA420 *SB8	KG160	T204/GBA509 *SB8	
200A	KG210	T203/GBA409 *SB9	KG210	T207/GBA420 *SB9	KG210	T204/GBA509 *SB9	
250A	KG250	T203/GBA409 *SB9	KG250	T207/GBA420 *SB9	KG250	T204/GBA509 *SB9	
315A	KG315	T203/GBA409 *SB9	KG315	T207/GBA420 *SB9	KG315	T204/GBA509 *SB9	

With Auxiliaries ¹	le AC-21A	3 Pole		3 Pole + Solid Neutral (TP&N)		4 Pole (3ph + Sw N ²)	
	20A	KG10	T203/GBA468 *SB2			KG10	T204/GBA568 *SB2
	25A	KG20	T203/GBA469 *SB2	KG20	T207/GBA480 *SB2	KG20	T204/GBA569 *SB2
	32A	KG32	T203/GBA469 *SB2	KG32	T207/GBA480 *SB2	KG32	T204/GBA569 *SB2
	40A	KG41	T203/GBA459 *SB2	KG41	T207/GBA480 *SB2	KG41	T204/GBA559 *SB2
	63A	KG64	T203/GBA459 *SB2	KG64	T207/GBA480 *SB2	KG64	T204/GBA559 *SB2
	80A	KG80	T203/GBA459 *SB3	KG80	T207/GBA480 *SB3	KG80	T204/GBA559 *SB3
	100A	KG100	T203/GBA459 *SB3	KG100	T207/GBA480 *SB3	KG100	T204/GBA559 *SB3
	125A	KG105	T203/GBA459 *SB3	KG105	T207/GBA480 *SB3	KG105	T204/GBA559 *SB3
	125A ³⁾	KG125	T203/GBA475 *SB8	KG125	T207/GBA490 *SB8	KG125	T204/GBA565 *SB8
160A	KG160	T203/GBA475 *SB8	KG160	T207/GBA490 *SB8	KG160	T204/GBA565 *SB8	
200A	KG210	T203/GBA485 *SB9	KG210	T207/GBA495 *SB9	KG210	T204/GBA575 *SB9	
250A	KG250	T203/GBA485 *SB9	KG250	T207/GBA495 *SB9	KG250	T204/GBA575 *SB9	
315A	KG315	T203/GBA485 *SB9	KG315	T207/GBA495 *SB9	KG315	T204/GBA575 *SB9	

Main Switches - 3 & 4 Pole (IP65) - with black padlockable handle 250A - 1250A



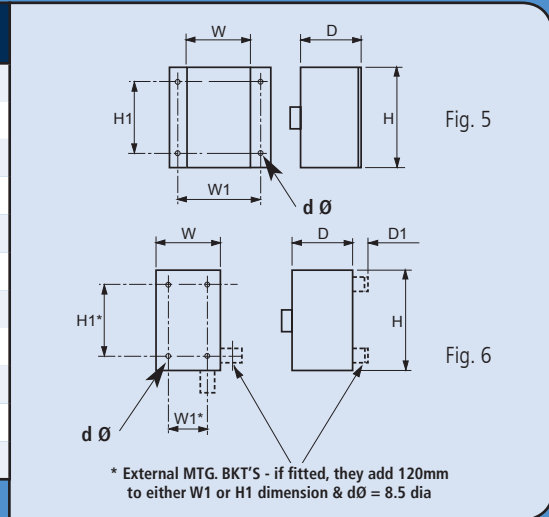
With Auxiliaries ¹	le AC-21A	3 Pole + aux		3 Pole + aux + Neutral Link		4 Pole + aux	
	250A	UK250/A	3011ST02 *SB25	UK250/A	3111ST02 *SB25	UK250/A	4011ST02 *SB25
	315A	UK315/A	3011ST02 *SB26	UK315/A	3111ST02 *SB26	UK315/A	4011ST02 *SB26
	400A	UK400/A	3011ST02 *SB26	UK400/A	3111ST02 *SB26	UK400/A	4011ST02 *SB26
	630A	UK630/A	3011ST02 *SB27	UK630/A	3111ST02 *SB27	UK630/A	4011ST02 *SB27
	800A	UK800/A	3011ST02 *SB28	UK800/A	3111ST02 *SB28	UK800/A	4011ST02 *SB28
	1000A	UK1000/A	3011ST02 *SB28	UK1000/A	3111ST02 *SB28	UK1000/A	4011ST02 *SB28
1250A	UK1250/A	3011ST02 *SB28	UK1250/A	3111ST02 *SB28	UK1250/A	4011ST02 *SB28	



DIMENSIONS

Encl. Ref.	H	Encl. Dim.			Encl. Dim.			Cable Entries.	Line Drg.
		W	D	D1	H1	W1	d		
SB2	194	119	116.5	-	133	137	6	-	Fig. 5
SB3	254	149	126.5	-	193	167	6	-	Fig. 5
SB4	309	234	151.5	-	248	252	6	-	Fig. 5
SB8	400	300	175	-	340	240	6.5	2 x gland plates	Fig. 6
SB9	500	400	175	-	440	340	6.5	2 x gland plates	Fig. 6
SB10	500	400	300	-	440	340	6.5	2 x gland plates	Fig. 6
SB25	650	450	225	-	590	390	6.5	2 x gland plates	Fig. 6
SB26	800	550	225	-	740	490	6.5	2 x gland plates	Fig. 6
SB27	900	600	300	-	840	540	6.5	2 x gland plates	Fig. 6
SB28	1000	800	400	-	940	740	6.5	2 x gland plates	Fig. 6
SB29	750	450	300	-	690	390	6.5	2 x gland plates	Fig. 6

Please refer to end of part no. for enclosure reference. See tables below:



6 Pole		le AC-21A
KG20B	T206/GBA609 *SB2	20A
KG32B	T206/GBA609 *SB2	25A
KG41B	T206/GBA609 *SB3	32A
KG64B	T206/GBA609 *SB3	40A
KG80	T206/GBA609 *SB4	63A
KG100	T206/GBA609 *SB4	80A
KG125	T206/GBA609 *SB9	100A
KG160	T206/GBA609 *SB9	125A ³⁾
C200-4	T206/GBA609 *SB10	160A
C316	T206/GBA609 *SB29	200A
		250A
		315A

6 Pole		le AC-21A
KG20B	T206/GBA659 *SB2	20A
KG32B	T206/GBA659 *SB2	25A
KG41B	T206/GBA659 *SB3	32A
KG64B	T206/GBA659 *SB3	40A
KG80	T206/GBA659 *SB4	63A
KG100	T206/GBA659 *SB4	80A
KG125	T206/GBA665 *SB9	100A
KG160	T206/GBA665 *SB9	125A
C200-4	T206/GBA003 *SB10	160A
C316	T206/GBA659 *SB29	200A
		250A
		315A

Notes

- The following auxiliary contacts are provided:-
 - KG10 1 N.O. (early break) + 1 N.C.
 - KG20 to KG105 2 N.O. (early break)
 - KG125 to KG315 2 N.O. (early break) + 2 N.C.
 - C316/C200-4 2 N.O. (early break)
 - UK250/A to UK1250/A 1 N.O. (early break) + 1 N.C.

2) Switched neutral pole is early make/late break.

3) KG125 suitable for applications requiring larger cable termination and increased enclosure size.

we can help you...

- 20-2400 Amps I_{th}
- Ex-stock availability
- Vast range of optional extras

NEW

Snap-on version CA10

Kraus & Naimer Cam Switches



Main/Emergency-Off Switch in sloping roof enclosure - 3 Pole, 3 Pole + Neutral & 4 Pole 25A - 125A



- IP65 protection
- red/yellow handle as standard
- optional black handle available
- range from 25A-125A - 3 pole, 3 pole+neutral & 4 pole, complete with 2 n/o auxilliary contacts
- brushed stainless steel enclosure, grade 304L
- integral canopy
- other options available on request



le AC-21A	Encl. Ref.	3 Pole +2 n/o aux			3 Pole + solid neutral +2 n/o aux			
25A	SR14	KG20	T203/GBA601 *SR14		KG20	T207/GBA603 *SR14		
32A	SR14	KG32	T203/GBA601 *SR14		KG32	T207/GBA603 *SR14		
40A	SR14	KG41	T203/GBA601 *SR14		KG41	T207/GBA603 *SR14		
63A	SR14	KG64	T203/GBA601 *SR14		KG64	T207/GBA603 *SR14		
80A	SR24	KG80	T203/GBA601 *SR24		KG80	T207/GBA603 *SR24		
100A	SR24	KG100	T203/GBA601 *SR24		KG100	T207/GBA603 *SR24		
125A	SR24	KG105	T203/GBA601 *SR24		KG105	T207/GBA603 *SR24		

Main/emergency-Off Switch with flush mounting - 2, 3 & 4 Pole 20A - 63A



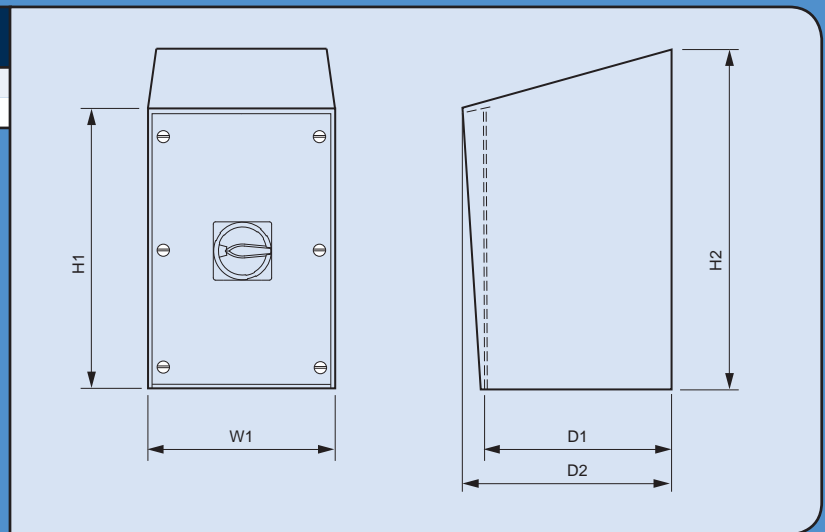
- IP40 protection. IP65 can be achieved if suitable sealant is used between faceplate/mounting surface and under the head of the countersunk fixing screws
- red/yellow padlockable handle
- optional black handle available
- bright stainless steel flush mounting front plate, grade 316L (earth stud included)
- galvanised steel adaptable box included, with M20 conduit knock outs and earth stud
- auxiliary contacts available

DIMENSIONS



Encl. Ref.	Front Plate				
	H1	W1	D1	D2	H2
SR14	193	130	132	151	233
SR24	278	185	152	170	323

- the 15° Sloping Roof deflects water and prevents items from being placed on top of the enclosure, making it easier and safer to clean

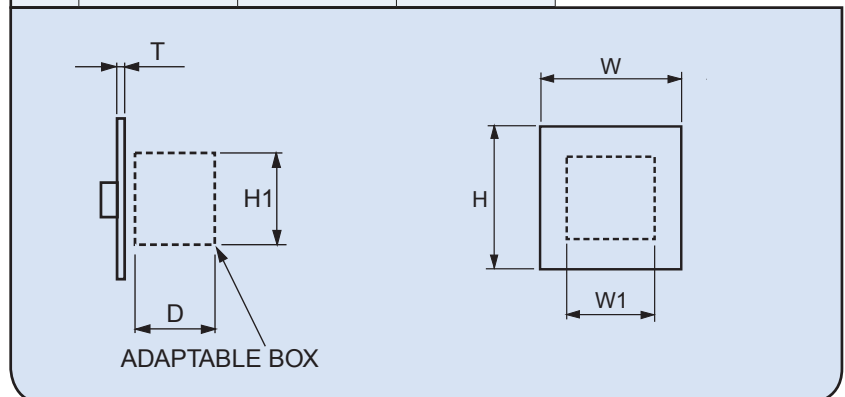


4 Pole +2 n/o aux			le AC-21A
KG20	T204/GBA602	*SR14	25A
KG32	T204/GBA602	*SR14	32A
KG41	T204/GBA602	*SR14	40A
KG64	T204/GBA602	*SR14	63A
KG80	T204/GBA602	*SR24	80A
KG100	T204/GBA602	*SR24	100A
KG105	T204/GBA602	*SR24	125A

DIMENSIONS

le AC-21A	Order Code No.		
2 pole			
20A	KG10	T202/GBA011*SF1	
3 pole			
20A	KG10	T203/GBA286*SF1	
25A	KG20	T203/GBA286*SF2	
32A	KG32	T203/GBA286*SF2	
40A	KG41	T203/GBA286*SF3	
63A	KG64	T203/GBA286*SF3	
4 pole			
20A	KG10	T204/GBA304*SF1	
25A	KG20	T204/GBA304*SF2	
32A	KG32	T204/GBA304*SF2	
40A	KG41	T204/GBA304*SF3	
63A	KG64	T204/GBA304*SF3	

Encl. Ref.	Front Plate			Adaptable Box			Cable Entries.
	H	W	T	H1	W1	D	
SF1	100	100	2	78	78	77	8 x 20mm k'outs
SF2	125	125	2	103	103	77	12 x 20mm k'outs
SF3	175	175	2	153	153	102	16 x 20mm k'outs





Main/Emergency-Off Switch - 3, 4, & 6 Pole 25A - 315A



- IP66 protection
- red/yellow padlockable handle
- optional black handle available
- GRP enclosure, grey RAL7035
- earth terminal included
- switch interlocked with lid to prevent opening in 'ON' position

Without Auxiliaries	le AC-21A	3 Pole		3 Pole + Solid Neutral (TP&N)		4 Pole (3ph + Sw N ²)			
	25A	KG20	T203/GB00U2 *GP1	KG20	T207/GB00U2 *GP1	KG20	T204/GB00U2 *GP1		
	32A	KG32	T203/GB00U2 *GP1	KG32	T207/GB00U2 *GP1	KG32	T204/GB00U2 *GP1		
	40A	KG41	T203/GB00U2 *GP1	KG41	T207/GB00U2 *GP1	KG41	T204/GB00U2 *GP1		
	63A	KG64	T203/GB00U2 *GP1	KG64	T207/GB00U2 *GP1	KG64	T204/GB00U2 *GP1		
	80A	KG80	T203/GB00U2 *GP1	KG80	T207/GB00U2 *GP1	KG80	T204/GB00U2 *GP1		
	100A	KG100	T203/GB00U2 *GP1	KG100	T207/GB00U2 *GP1	KG100	T204/GB00U2 *GP1		
	125A	KG105	T203/GB00U2 *GP1	KG105	T207/GB00U2 *GP1	KG105	T204/GB00U2 *GP1		
	125A ³⁾	KG125	T203/GB00T2 *GP6	KG125	T207/GB00T2 *GP6	KG125	T204/GB00T2 *GP6		
	160A	KG160	T203/GB00T2 *GP6	KG160	T207/GB00T2 *GP6	KG160	T204/GB00T2 *GP6		
200A	KG210	T203/GB00T1 *GP6	KG210	T207/GB00T1 *GP6	KG210	T204/GB00T1 *GP6			
250A	KG250	T203/GB00T1 *GP6	KG250	T207/GB00T1 *GP6	KG250	T204/GB00T1 *GP6			
315A	KG315	T203/GB00T1 *GP6	KG315	T207/GB00T1 *GP6	KG315	T204/GB00T1 *GP6			

With Auxiliaries 1	le AC-21A	3 Pole		3 Pole + Solid Neutral (TP&N)		4 Pole (3ph + Sw N ²)			
	25A	KG20	T203/GB20U2 *GP1	KG20	T207/GB20U2 *GP1	KG20	T204/GB20U2 *GP1		
	32A	KG32	T203/GB20U2 *GP1	KG32	T207/GB20U2 *GP1	KG32	T204/GB20U2 *GP1		
	40A	KG41	T203/GB20U2 *GP1	KG41	T207/GB20U2 *GP1	KG41	T204/GB20U2 *GP1		
	63A	KG64	T203/GB20U2 *GP1	KG64	T207/GB20U2 *GP1	KG64	T204/GB20U2 *GP1		
	80A	KG80	T203/GB20U2 *GP1	KG80	T207/GB20U2 *GP1	KG80	T204/GB20U2 *GP1		
	100A	KG100	T203/GB20U2 *GP1	KG100	T207/GB20U2 *GP1	KG100	T204/GB20U2 *GP1		
	125A	KG105	T203/GB20U2 *GP1	KG105	T207/GB20U2 *GP1	KG105	T204/GB20U2 *GP1		
	125A ³⁾	KG125	T203/GB22T2 *GP6	KG125	T207/GB22T2 *GP6	KG125	T204/GB22T2 *GP6		
	160A	KG160	T203/GB22T2 *GP6	KG160	T207/GB22T2 *GP6	KG160	T204/GB22T2 *GP6		
200A	KG210	T203/GB22T1 *GP6	KG210	T207/GB22T1 *GP6	KG210	T204/GB22T1 *GP6			
250A	KG250	T203/GB22T1 *GP6	KG250	T207/GB22T1 *GP6	KG250	T204/GB22T1 *GP6			
315A	KG315	T203/GB22T1 *GP6	KG315	T207/GB22T1 *GP6	KG315	T204/GB22T1 *GP6			

Notes

1) The following auxiliary contacts are provided:-
 KG20 to KG105 2 N.O. (early break)
 KG125 to KG315 2 N.O. (early break) + 2 N.C.

2) Switched neutral pole is early make/late break.

3) KG125 suitable for applications requiring larger cable termination and increased enclosure size.

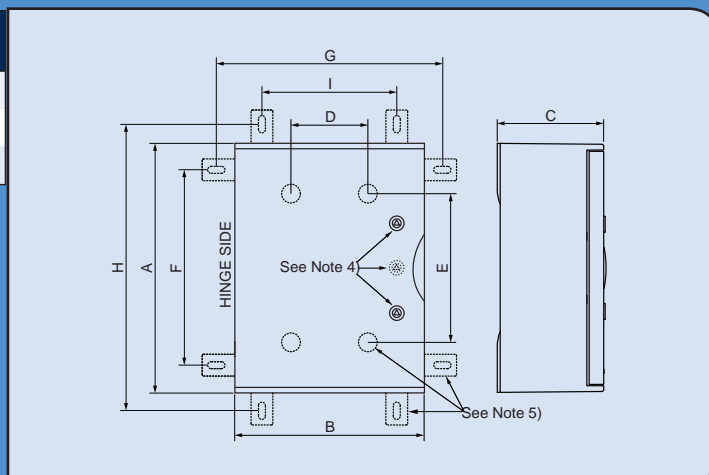
4) GP1 enclosures have only 1 quarter turn lock, GP3 & GP6 enclosures have 2 quarter turn locks.

5) Dimensions 'D' and 'E' show the position for drilling internal fixing holes. External mounting brackets, which can be fixed either horizontally or vertically, are also available as an optional extra. See Part No. UK 08-0412 on facing page.



DIMENSIONS

Encl. Ref.	A	B	C	D	E	F	G	H	I
GP1	303	265	167	110	150	222	316	354	184
GP3	428	325	183	132	255	348	377	480	245
GP6	500	430	210	240	330	423	485	555	353



Please refer to end of part no. for enclosure reference. See tables below:

	6 Pole		le AC-21A
KG20B	T206/GB00U2 *GP1		25A
KG32B	T206/GB00U2 *GP1		32A
KG41B	T206/GB00U2 *GP1		40A
KG64B	T206/GB00U2 *GP1		63A
KG80	T206/GB00U2 *GP3		80A
KG100	T206/GB00U2 *GP3		100A
KG105	T206/GB00U2 *GP3		125A
KG125	T206/GB00T2 *GP6		125A ³⁾
KG160	T206/GB00T2 *GP6		160A
			200A
			250A
			315A

	6 Pole		le AC-21A
KG20B	T206/GB20U2 *GP1		25A
KG32B	T206/GB20U2 *GP1		32A
KG41B	T206/GB20U2 *GP1		40A
KG64B	T206/GB20U2 *GP1		63A
KG80	T206/GB20U2 *GP3		80A
KG100	T206/GB20U2 *GP3		100A
KG105	T206/GB20U2 *GP3		125A
KG125	T206/GB22T2 *GP6		125A ³⁾
KG160	T206/GB22T2 *GP6		160A
			200A
			250A
			315A

Optional Extra - Mounting Brackets:

Set of four zinc plated passivated steel mounting brackets.
(Refer to page 17 for dimensions)

Part No	
UK 08-0412	

Combine a number of different switches and devices. Maximum flexibility whilst remaining cost effective.

Options available:

- emergency stop with/without shroud
- terminals
- start/stop buttons
- indicator lights
- switches up to 315amps AC-21A



See page 18



Defeatable door interlock



- IP66 protection
- red/yellow padlockable handle
- earth terminal included
- GRP enclosure, grey (RAL7035)
- when required for maintenance purposes, qualified personnel can defeat the door interlock and enable the door to be opened whilst the switch is in the "ON" position

le AC-21A	3 Pole + Aux		4 Pole (3ph + Sw N ²) + aux ¹	
40A	KG41	T203/GB20V3 *GP1	KG41	T204/GB20V3 *GP1
63A	KG64	T203/GB20V3 *GP1	KG64	T204/GB20V3 *GP1
80A	KG80	T203/GB20V3 *GP1	KG80	T204/GB20V3 *GP1
100A	KG100	T203/GB20V3 *GP1	KG100	T204/GB20V3 *GP1
125A	KG105	T203/GB20V3 *GP1	KG105	T204/GB20V3 *GP1
125A ³⁾	KG125	T203/GB22V5 *GP18	KG125	T204/GB22V5 *GP18
160A	KG160	T203/GB22V5 *GP18	KG160	T204/GB22V5 *GP18
200A	KG210	T203/GB22V5 *GP18	KG210	T204/GB22V5 *GP18
250A	KG250	T203/GB22V5 *GP18	KG250	T204/GB22V5 *GP18
315A	KG315	T203/GB22V5 *GP18	KG315	T204/GB22V5 *GP18

Need a base mounting switch?

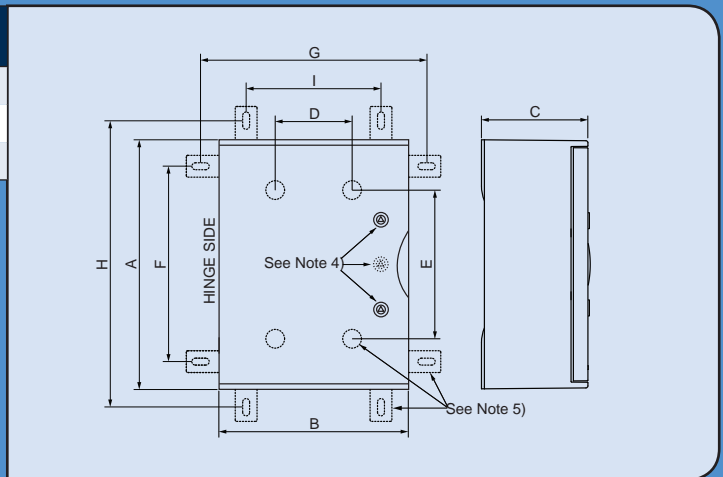
Take a look at **page 9** of our **green catalogue**

BASE MOUNTING - DEFEATABLE DOOR INTERLOCK Four hole fixing handle
3 , 4 & 6 Pole, 40A - 315A

DIMENSIONS



Encl. Ref.	A	B	C	D	E	F	G	H	I
GP1	303	265	167	110	150	222	316	354	184
GP17	428	325	183	132	255	348	377	480	245
GP18	500	430	210	240	330	423	485	555	353



Please refer to end of part no. for enclosure reference. See table below:

	6 Pole + aux ¹		le AC-21A
KG41B	T206/GB20V5 *GP17		40A
KG64B	T206/GB20V5 *GP17		63A
KG80	T206/GB20V5 *GP17		80A
KG100	T206/GB20V5 *GP17		100A
KG105	T206/GB20V5 *GP17		125A
KG125	T206/GB22V5 *GP18		125A ³⁾
KG160	T206/GB22V5 *GP18		160A
			200A
			250A
			315A

Notes

- The following auxiliary contacts are provided:-
 KG41 to KG105 2 N.O. (early break)
 KG125 to KG160 2 N.O. (early break) + 2 N.C.
- Switched neutral pole is early make/late break.
- KG125 suitable for applications requiring larger cable termination and increased enclosure size.
- GP1 enclosures have 1 quarter turn lock, GP17 & GP18 enclosures have 2 quarter turn locks.
- Dimensions 'D' and 'E' show the position for drilling internal fixing holes. External mounting brackets (which can be fixed either horizontally or vertically), are also available as an optional extra. See Part No. UK 08-0412 below.
- In normal operation the switch handle is padlockable in the OFF position only and interlocked with the shaft in the ON position to prevent opening of the panel door. Shaft and handle are also interlocked in the OFF position if a padlock is fitted to the handle with the panel door closed.

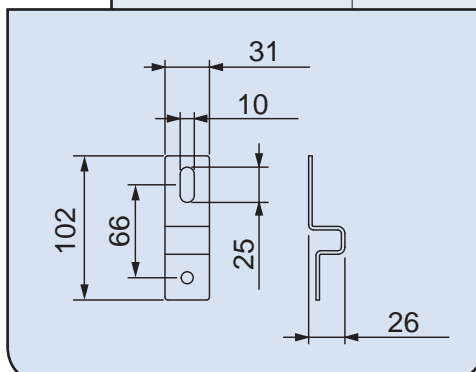
KG41 - KG105, 3 & 4 pole items above utilise the M800 defeatable door interlock device. (See note 6)

KG125 - KG160, 3 & 4 pole + KG41B - KG160, 6 pole items above utilise the M700 defeatable door interlock device. (See note 6)

Optional Extra - Mounting Brackets:

Set of four zinc plated passivated steel mounting brackets.

Part No	
UK 08-0412	



Options can include:

- terminal blocks
- push buttons & pilot lights can be fitted to the enclosure lid as required
- emergency stop push button
- lockable door



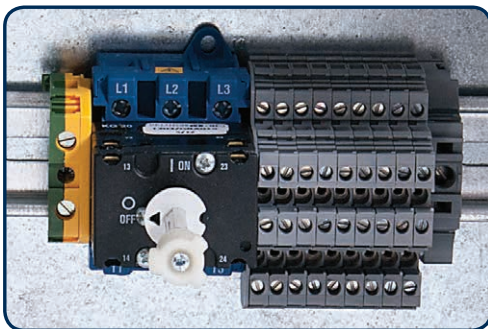
Main/Emergency-Off Switch - 3, 4, & 6 Pole 25A - 315A



- IP65 protection
- red/yellow padlockable handle
- optional black handle available
- GRP enclosure grey (RAL7035) or red (RAL3000)
- earth terminal included
- key lockable hinged lid
- lid interlock to prevent opening in 'ON' position

Combine a number of different switches/devices in one enclosure.

Kraus & Naimer offer a standard range of rotary isolators/changeover switches in GRP enclosures ranging from 25A to 315A, from 3 - 6 Pole and can offer a variety of different options fitted to these from stock.



Please contact us to discuss exact requirements. Our team are highly trained and ready to help with any technical questions you may have.

Options can include:

1. isolating switch + emergency stop push button
2. emergency stop push button with/without shroud
3. isolating switch + up to 3 push buttons/ pilot lights
4. defeatable door interlock
5. terminal block as required
6. lockable door



Main/emergency-Off Switch - 4 & 6 Pole + Emergency Stop Pushbutton
25A - 100A



- IP66 protection
- red/yellow padlockable handle
- stayput emergency- stop pushbutton, 1 N.C. contact, twist to reset
- insulated enclosure, grey (RAL7035)
- earth terminal included
- switch interlocked with lid to prevent opening in 'ON' position

le AC-21A	Order Code No.		Encl.Ref.
4 pole (3 ph+Sw N¹) + 1 n.o. (early break) + 1 n.c. aux			
25A	KG20	T204/GBA285*KL	KLD
32A	KG32	T204/GBA285*KL	KLD
40A	KG41	T204/GBA285*KL	KLD
63A	KG64	T204/GBA285*KL	KLD
80A	KG80	T204/GBA285*KL	KLD
100A	KG100	T204/GBA285*KL	KLD
6 pole + 1 n.o. (early break) + 1 n.c. aux			
25A	KG20B	T206/GBA095*KL	KLD
32A	KG32B	T206/GBA095*KL	KLD
40A	KG41B	T206/GBA095*KL	KLD
63A	KG64B	T206/GBA095*KL	KLD

Main/emergency-Off Switch - 4 & 6 Pole + Emergency Stop Pushbutton
25A - 100A



- IP66 protection
- red/yellow padlockable handle
- stayput emergency- stop pushbutton, 1 N.C. contact, twist to reset
- grey powder paint finish (RAL7032) also available in red powder paint finish (RAL3000)
- earth terminal and lid bonding link included
- switch interlocked with lid to prevent opening in 'ON' position

le AC-21A	Order Code No.		Encl.Ref.
4 pole (3 ph+Sw N¹) + 1 n.o. (early break) + 1 n.c. aux			
25A	KG20	T204/GBA350* MB3E	MB3E
32A	KG32	T204/GBA350* MB3E	MB3E
40A	KG41	T204/GBA350* MB3E	MB3E
63A	KG64	T204/GBA350* MB3E	MB3E
80A	KG80	T204/GBA350* MB3E	MB3E
100A	KG100	T204/GBA350* MB3E	MB3E
6 pole + 1 n.o. (early break) + 1 n.c. aux			
25A	KG20B	T206/GBA155*MB3E	MB3E
32A	KG32B	T206/GBA155*MB3E	MB3E
40A	KG41B	T206/GBA155*MB3E	MB3E
63A	KG64B	T206/GBA155*MB3E	MB3E

Main/emergency-Off Switch - 4 & 6 Pole + Emergency Stop Pushbutton
25A - 100A



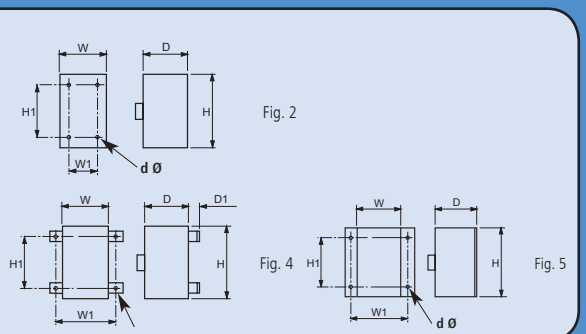
- IP66 protection
- red/yellow padlockable handle
- stayput emergency-stop pushbutton, 1 N.C. contact, twist to reset
- bright stainless steel enclosure, grade316L
- earth terminal and lid bonding link included
- switch interlocked with lid to prevent opening in 'ON' position

le AC-21A	Order Code No.		Encl.Ref.
4 pole (3 ph+Sw N¹) + 1 n.o. (early break) + 1 n.c. aux			
25A	KG20	T204/GBA440* SB3E	SB3E
32A	KG32	T204/GBA440* SB3E	SB3E
40A	KG41	T204/GBA440* SB3E	SB3E
63A	KG64	T204/GBA440* SB3E	SB3E
80A	KG80	T204/GBA440* SB3E	SB3E
100A	KG100	T204/GBA440* SB3E	SB3E
6 pole + 1 n.o. (early break) + 1 n.c. aux			
25A	KG20B	T206/GBA555*SB3E	SB3E
32A	KG32B	T206/GBA555*SB3E	SB3E
40A	KG41B	T206/GBA555*SB3E	SB3E
63A	KG64B	T206/GBA555*SB3E	SB3E

Notes 1) Switched neutral pole is early make / late break

DIMENSIONS

Encl. Ref.	H	Encl. Dim.			Encl. Dim.			Cable Entries.	Line Drg.
		W	D	D1	H1	W1	d		
KLD	250	145	107	-	229	124	6.5	4 x 25/40mm k'outs	Fig. 2
MB3E	254	149	125	8	193	167	6	-	Fig. 4
SB3E	254	149	126.5	-	193	167	6	-	Fig. 5



Changeover Switch with Centre Off - 2, 3 & 4 Pole 16A - 160A



Insulated



- IP66/67 protection
- auxiliary contacts provided with 3 & 4 pole switches
- black handle, padlockable in 'OFF' position
- earth terminal
- grey insulated enclosed (RAL7035)
- switch interlocked with lid to prevent opening in 'ON' position

le AC-21A	2 Pole		Encl. Ref		
16A	KH16	T902/GBA002 *KS52	KSA		
20A	KH20	T902/GBA002 *KS52	KSA		
25A	KH25	T902/GBA002 *KS52	KSA		
32A	KH32	T902/GBA002 *KL12	KLC		
40A	KH40	T902/GBA002 *KL12	KLC		
63A	KH63	T902/GBA002 *KL72	KLE		
80A	KH80	T902/GBA002 *KL72	KLE		
100A	KH85	T902/GBA012 *KL72	KLE		
125A					
125A ³⁾					
160A					

Mild Steel



- IP66 protection
- auxiliary contacts provided with 3 & 4 pole switches
- black handle, padlockable in 'OFF' position
- earth terminal & lid bonding link included
- grey powder paint finish (RAL7032) also available in red powder paint finish (RAL3000)
- switch interlocked with lid to prevent opening in 'ON' position

le AC-21A	2 Pole		Encl. Ref		
16A	KH16	T902/GBA020 *MB2	MB2		
20A	KH20	T902/GBA020 *MB2	MB2		
25A	KH25	T902/GBA020 *MB2	MB2		
32A	KH32	T902/GBA020 *MB2	MB2		
40A	KH40	T902/GBA020 *MB2	MB2		
63A	KH63	T902/GBA020 *MB3	MB3		
80A	KH80	T902/GBA020 *MB3	MB3		
100A	KH85	T902/GBA020 *MB3	MB3		
125A					
125A ³⁾					
160A					

Stainless Steel



- IP66 protection
- auxiliary contacts provided with 3 & 4 pole switches
- black handle, padlockable in 'OFF' position
- earth terminal & lid bonding link included
- bright stainless steel enclosure, grade 316L
- switch interlocked with lid to prevent opening in 'ON' position

le AC-21A	2 Pole		Encl. Ref		
16A	KH16	T902/GBA025 *SB2	SB2		
20A	KH20	T902/GBA025 *SB2	SB2		
25A	KH25	T902/GBA025 *SB2	SB2		
32A	KH32	T902/GBA025 *SB2	SB2		
40A	KH40	T902/GBA025 *SB2	SB2		
63A	KH63	T902/GBA025 *SB3	SB3		
80A	KH80	T902/GBA025 *SB3	SB3		
100A	KH85	T902/GBA025 *SB3	SB3		
125A					
125A ³⁾					
160A					

- Notes**
- 1) 2-off electrically isolated early break auxiliary contacts are provided with the 3 & 4 pole switches. One of these contacts closes in position 1 and the other contact closes in position 2. Both of the contacts are open in the Off position.
 - 2) Switched neutral pole is early make/late break.
 - 3) KG125 suitable for applications requiring larger cable termination and increased enclosure size.





Kraus & Naimer **Changeover Switches** meeting your requirement for a high quality, reliable and safe solution.
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Confident of your Changeover?

Choice of Insulated, Mild Steel or Stainless Steel enclosure

DIMENSIONS

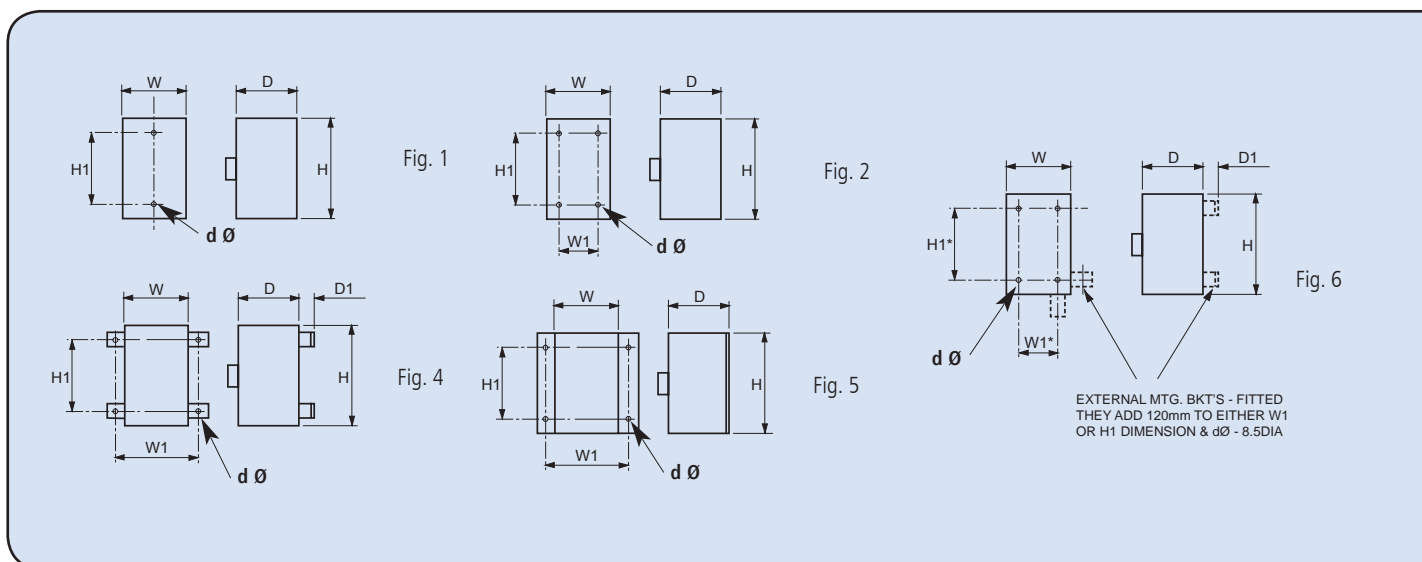
3 Pole ¹⁾			Encl. Ref	4 Pole (3ph+S _w N ²⁾ ¹⁾			Encl. Ref
KG20B	T903/GBA013 *KL	KLC		KG20B	T904/GBA014 *KL	KLD	
KG32B	T903/GBA013 *KL	KLC		KG32B	T904/GBA014 *KL	KLD	
KG41B	T903/GBA013 *KL	KLD		KG41B	T904/GBA004 *ST	ST2	
KG64B	T903/GBA013 *KL	KLD		KG64B	T904/GBA004 *ST	ST2	
KG80	T903/GBA013 *ST	STE		KG80	T904/GBA004 *ST	ST3	
KG100	T903/GBA013 *ST	STE		KG100	T904/GBA004 *ST	ST3	
				KG105	T904/GBA004 *ST	ST3	
KG125	T903/GBA035 *ST	ST4		KG125	T904/GBA045 *ST	ST4	
KG160	T903/GBA035 *ST	ST4		KG160	T904/GBA045 *ST	ST4	

3 Pole ¹⁾			Encl. Ref	4 Pole (3ph+S _w N ²⁾ ¹⁾			Encl. Ref
KG20B	T903/GBA030 *MB3	MB3		KG20B	T904/GBA040 *MB3	MB3	
KG32B	T903/GBA030 *MB3	MB3		KG32B	T904/GBA040 *MB3	MB3	
KG41B	T903/GBA030 *MB3	MB3		KG41B	T904/GBA040 *MB3	MB3	
KG64B	T903/GBA030 *MB3	MB3		KG64B	T904/GBA040 *MB3	MB3	
KG80	T903/GBA030 *MB4	MB4		KG80	T904/GBA040 *MB4	MB4	
KG100	T903/GBA030 *MB4	MB4		KG100	T904/GBA040 *MB4	MB4	
				KG105	T904/GBA040 *MB4	MB4	
KG125	T903/GBA055 *MB9	MB9		KG125	T904/GBA065 *MB9	MB9	
KG160	T903/GBA055 *MB9	MB9		KG160	T904/GBA065 *MB9	MB9	

3 Pole ¹⁾			Encl. Ref	4 Pole (3ph+S _w N ²⁾ ¹⁾			Encl. Ref
KG20B	T903/GBA050 *SB3	SB3		KG20B	T904/GBA060 *SB3	SB3	
KG32B	T903/GBA050 *SB3	SB3		KG32B	T904/GBA060 *SB3	SB3	
KG41B	T903/GBA050 *SB3	SB3		KG41B	T904/GBA060 *SB3	SB3	
KG64B	T903/GBA050 *SB3	SB3		KG64B	T904/GBA060 *SB3	SB3	
KG80	T903/GBA050 *SB4	SB4		KG80	T904/GBA060 *SB4	SB4	
KG100	T903/GBA050 *SB4	SB4		KG100	T904/GBA060 *SB4	SB4	
				KG105	T904/GBA060 *SB4	SB4	
KG125	T903/GBA075 *SB9	SB9		KG125	T904/GBA085 *SB9	SB9	
KG160	T903/GBA075 *SB9	SB9		KG160	T904/GBA085 *SB9	SB9	

Encl. Ref.	Encl. Dim.				Encl. Dim.		
	H	W	D	D1	H1	W1	d
KSA	120	85	80	-	110	-	4.2
KLC	190	100	91	-	178	-	5.6
KLD	250	145	107	-	229	124	6.5
KLE	250	145	107	-	229	124	6.5
STE	280	190	230	-	254	164	7
ST2	280	190	130	-	254	164	7
ST3	380	280	180	-	354	254	7
ST4	560	380	180	-	534	354	7
MB2	194	119	115	-	133	137	6
MB3	254	149	125	8	193	167	6
MB4	309	234	150	8	248	252	6
MB9	500	400	175	-	440	340	6.5
SB2	194	119	116.5	-	133	137	6
SB3	254	149	126.5	-	193	167	6
SB4	309	234	151.5	-	248	252	6
SB9	500	400	175	-	440	340	6.5

Encl. Ref.	Cable Entries.	Line Drg.
KSA	4 x 20/25mm k'outs	Fig. 1
KLC	4 x 20/25mm k'outs	Fig. 1
KLD	4 x 25/40mm k'outs	Fig. 2
KLE	4 x 25/40mm k'outs	Fig. 2
STE	1 x gland plate	Fig. 2
ST2	2 x gland plates	Fig. 2
ST3	2 x gland plates	Fig. 2
ST4	2 x gland plates	Fig. 2
MB2	-	Fig. 4
MB3	-	Fig. 4
MB4	-	Fig. 4
MB9	2 x gland plates	Fig. 6
SB2	-	Fig. 5
SB3	-	Fig. 5
SB4	-	Fig. 5
SB9	2 x gland plates	Fig. 6



Changeover Switch with Centre Off - 2, 3 & 4 Pole 16A - 160A



- IP66 protection
- black handle, padlockable in 'OFF' position
- earth terminal included
- GRP enclosure, grey (RAL7035)
- switch interlocked with lid to prevent opening in 'ON' position

le AC-21A	2 Pole		3 Pole + aux ¹			
16A	KH16	T902/GBC0T1 *GP2				
20A	KH20	T902/GBC0T1 *GP2				
25A	KH25	T902/GBC0T1 *GP2	KG20B	T903/GBC1U1 *GP1		
32A	KH32	T902/GBC0T1 *GP2	KG32B	T903/GBC1U1 *GP1		
40A	KH40	T902/GBC0T1 *GP2	KG41B	T903/GBC1U1 *GP1		
63A	KH63	T902/GBC0T1 *GP2	KG64B	T903/GBC1U1 *GP1		
80A	KH80	T902/GBC0T1 *GP2	KG80	T903/GBC1U1 *GP3		
100A	KH85	T902/GBC0T1 *GP2	KG100	T903/GBC1U1 *GP3		
125A			KG105	T903/GBC1U1 *GP3		
125A ³⁾			KG125	T903/GBC1T1 *GP6		
160A			KG160	T903/GBC1T1 *GP6		

If padlocking in "ALL POSITIONS" is required then change the 6th character of the GBC references above to "6" for example:
Part number - KH16 T902/GBC0T1 *GP2 becomes KH16 T902/GBC0T6 *GP2, pricing remains the same.

LOAD SWITCH - Changeover Switch with Centre Off - 4 Pole 32A - 315A

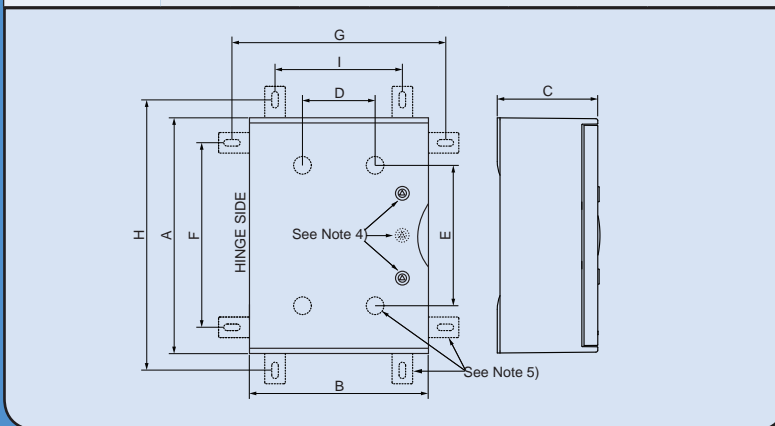


- IP66 protection
- black handle, padlockable in 'OFF' position
- earth terminal & lid bonding link included
- grey powder paint finish, (RAL7032) also available in red powder finish (RAL3000)
- switch interlocked with lid to prevent opening in 'ON' position

le AC-21A	Order Code No.		Encl. Ref.	
4 Pole				
32A	CA25	A213/GBA009 *MB20	MB20	
40A	C32	A213/GBA009 *MB20	MB20	
63A	C42	A213/GBA009 *MB20	MB20	
100A	C80	A213/GBA009 *MB22	MB22	
150A	C125	A213/GBA009 *MB22	MB22	
200A	C200-4	A213/GBA002 *MB10	MB10	
275A	C315	A213/GBA002 *MB10	MB10	
315A	C315	A213/GBA010 *MB29	MB29	

DIMENSIONS

Encl. Ref.	A	B	C	D	E	F	G	H	I
GP1/GP2	303	265	167	110	150	222	316	354	184
GP3	428	325	183	132	255	348	377	480	245
GP6	500	430	210	240	330	423	485	555	353



Options can include:

- terminal blocks
- push buttons & pilot lights fitted to the enclosure lid
- emergency stop push button
- key lockable door

Please refer to end of part no. for enclosure reference. See tables below:

	4 Pole (3ph + Sw N ²) + aux ¹		le AC-21A
			16A
			20A
KG20B	T904/GBC1U1 *GP1		25A
KG32B	T904/GBC1U1 *GP1		32A
KG41B	T904/GBC1U1 *GP1		40A
KG64B	T904/GBC1U1 *GP1		63A
KG80	T904/GBC1U1 *GP3		80A
KG100	T904/GBC1U1 *GP3		100A
KG105	T904/GBC1U1 *GP3		125A
KG125	T904/GBC1T1 *GP6		125A ³⁾
KG160	T904/GBC1T1 *GP6		160A

Notes

- 1) 2-off electrically isolated early break auxiliary contacts are provided. One of these contacts closes in position 1 and the other contact closes in position 2. Both of the contacts are open in the OFF position.
- 2) Switched neutral pole is early make/late break.
- 3) KG125 suitable for applications requiring larger cable termination and increased enclosure size.
- 4) GP1/GP2 enclosures have 1 quarter turn lock, GP3 & GP6 enclosures have 2 quarter turn locks.
- 5) Dimensions 'D' and 'E' show the position for drilling internal fixing holes. External mounting brackets, which can be fixed either horizontally or vertically, are also available as an optional extra. See Part No. UK 08-0412 below.

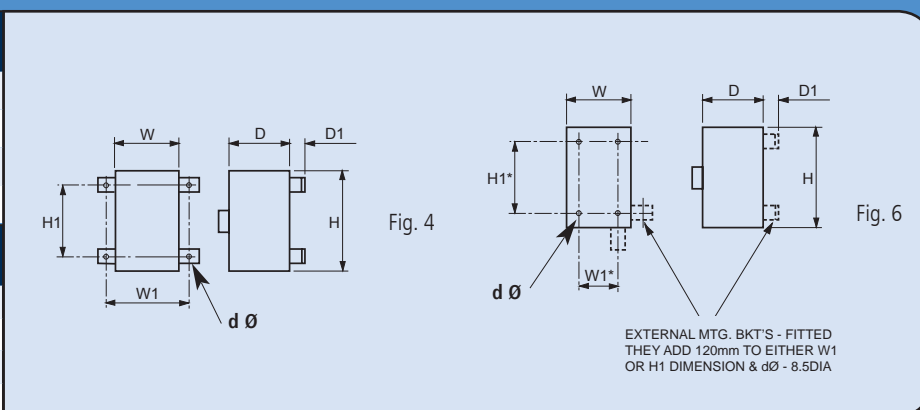
Optional Extra - Mounting Brackets:

Set of four zinc plated passivated steel mounting brackets.
(Refer to page 17 for dimensions)

Part No	
UK 08-0412	

DIMENSIONS

Encl. Ref.	Encl. Dim.				Encl. Dim.		
	H	W	D	D1	H1	W1	d
MB10	500	400	300	-	440	340	6.5
MB20	250	175	175	-	225	195	6
MB22	400	300	275	-	340	240	6.5
MB29	750	450	300	-	690	390	6.5
Encl. Ref.	Cable Entries.		Line Drg.				
MB10	2 x gland plates		Fig. 6				
MB20	-		Fig. 4				
MB22	2 x gland plates		Fig. 6				
MB29	2 x gland plates		Fig. 6				



AC Switch Disconnectors - Single & Three Phase AC-21A
25 - 40A



Switch - Disconnecter 3 & 4 pole.

- IP66/67 Protection
- red/yellow padlockable handle
- grey insulated enclosure (RAL7035)
- earth terminal included
- switch interlocked with lid to prevent opening in 'ON' position

AC Switch Disconnectors - for Single Phase

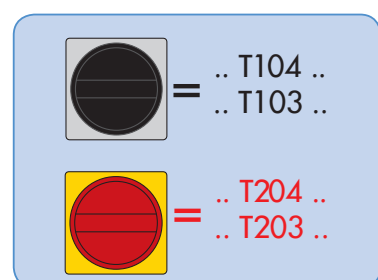
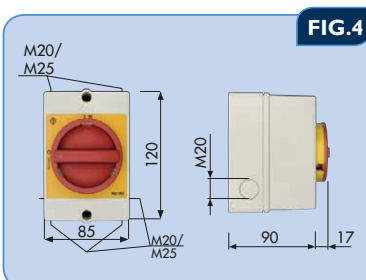
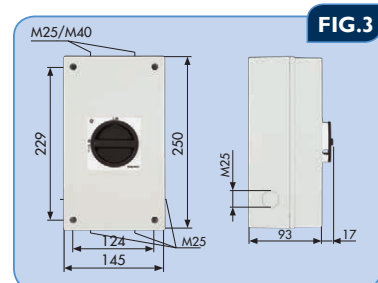
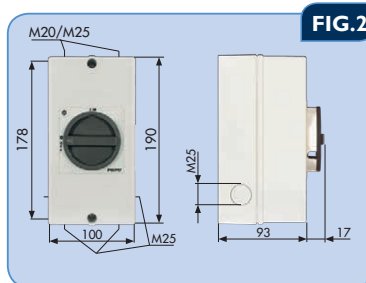
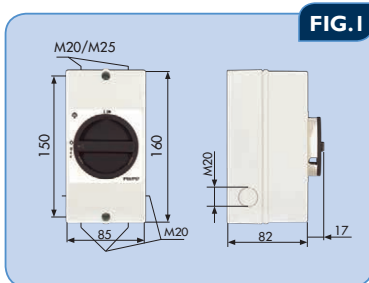
Single Phase	Current Rating AC-21A (per contact)	Order Code No.	FIG.
	25A	KG20 T203/GBA270*KS1V	4
	25A	KG20 T203/GBA294*KL ¹⁾	1
	32A	KG32 T203/GBA294*KL ¹⁾	1
	40A	KG41 T203/GBA270*KL1V	2

AC Switch Disconnectors - for Three Phase (3ph + Sw N²⁾)

Three Phase	Current Rating AC-21A (per contact)	Order Code No.	FIG.
	25A	KG20 T204/GBA290*KS1V	4
	25A	KG20 T204/GBA486 KL51V ¹⁾	1
	32A	KG32 T204/GBA486 KL51V ¹⁾	1
	40A	KG41 T204/GBA290*KL1V	2

¹⁾ Larger enclosure to match KG20/32 T104 DC enclosure

²⁾ Switched neutral pole is early make / late break.



Switch - Disconnecter 2 & 4 pole.

- IP66/67 Protection
- black/grey padlockable handle
- grey insulated enclosure (RAL7035)
- switch interlocked with lid to prevent opening in 'ON' position
- class II compliant
- rated for use in ambient temperatures up to 50°C



KGD40 only:

- up to 50 amps @1000 VDC to give higher rating
- permanent magnets in the contact body used to reduce arcing time
- non-polarity sensitive

Single String DC Switch Disconnectors - Selection Chart DC-21B

Single String	Voltage													Order Code No.	FIG.
	250V	375V	400V	450V	500V	600V	650V	660V	750V	800V	850V	920V	1000V		
	25A	25A	25A	25A	21A	20A	20A	18A	18A	18A	11A	11A		KG20 T104/D-P003 KL51V	FIG 1
						25A	25A	23A	23A	23A	15A	15A	12A	KG32 T104/D-P003 KL51V	FIG 1
	50A	40A	40A	30A	30A									KGD40 TD102/D-P003 KL11V	FIG 2
		50A		40A	40A	40A	30A	30A	30A		20A	20A	20A	KGD40 TD103/D-P003 KL11V	FIG 2
			50A	50A	50A		40A	40A	40A	40A	30A	30A	30A	KGD40 TD104/D-P003 KL11V	FIG 2
						50A	50A	50A	50A		40A	40A	40A	KGD40B TD106/D-P003 KL11V	FIG 3
										50A	50A	50A	50A	KGD40B TD108/D-P003 KL11V	FIG 3

Two String DC Switch Disconnectors - Selection Chart DC-21B

Two String	Ratings Per String (220V - 500V)												Order Code No.	FIG.
	220V	250V	280V	330V	340V	375V	400V	420V	440V	460V	500V			
	25A	21A	21A	20A	20A	18A	18A	11A	11A	11A			KG20 T104/GB-P103 KL51V	FIG 1
	28A	28A	28A	25A	25A	23A	23A	15A	15A	15A	12A		KG32 T104/GB-P103 KL51V	FIG 1
	50A	50A	40A	40A	40A	40A	40A	30A	30A	30A	30A		KGD40 TD104/D-P004 KL11V	FIG 2
			50A	50A	50A	50A		40A	40A	40A	40A		KGD40B TD106/D-P004 KL11V	FIG 3
							50A	50A	50A	50A	50A		KGD40B TD108/D-P004 KL11V	FIG 3
Two String	Ratings Per String (510V - 1000V)												Order Code No.	FIG.
	510V	560V	600V	660V	680V	690V	750V	800V	920V	1000V				
	20A	20A	20A	20A	12A	12A	12A	12A	8A	8A			KGD40 TD104/D-P004 KL11V	FIG 2
	25A	23A	23A		15A	15A							KG32B T106/GB-P103 KL11V	FIG 2
					20A	18A	18A	18A	11A				KG20B T108/GB-P103 KL11V	FIG 3
	40A	40A	40A	30A	30A	30A	30A	20A	20A	20A			KGD40B TD106/D-P004 KL11V	FIG 3
				40A	40A	40A	40A	40A	30A	30A			KGD40B TD108/D-P004 KL11V	FIG 3

Please select the switch disconnecter according to the maximum voltage and current output of all upstream PV modules, this must include all corrective factors according to relevant standards.



Emergency Stop Pushbutton Station - without protective shroud
 38mm diameter red mushroom head - twist to reset. 1 N.C. contact. Complies with EN 418/EN 60204-1.



Order Code No.	P SN-GB0001	P N261/GBA005 *SF1A	P N091/GBA023 *SB31	P N091/GBA016 *RB31	P N091/GBA017 *MB31
Encl.Ref.	P1Y	SF1A	SB31	RB31	MB31
	<ul style="list-style-type: none"> insulated enclosure IP67/IP69K 	<ul style="list-style-type: none"> flush mounted stainless steel 316L IP40 (IP65 achievable with sealant) galvanised back box earth stud included 	<ul style="list-style-type: none"> surface mounted stainless steel grade 316L IP66 earth terminal & lid bonding link 	<ul style="list-style-type: none"> surface mounted Red RAL3000 mild steel IP66 earth terminal & lid bonding link 	<ul style="list-style-type: none"> surface mounted Grey RAL7032 mild steel IP66 earth terminal & lid bonding link

Emergency Stop Pushbutton Station - without protective shroud
 38mm diameter red mushroom head - key operate to reset (1 key included)



Order Code No.	P SN-GB0003	P N261/GBA007 *SF1A	P N091/GBA024 *SB31	P N091/GBA018 *RB31	P N091/GBA019 *MB31
Encl.Ref.	P1Y	SF1A	SB31	RB31	MB31
	<ul style="list-style-type: none"> insulated enclosure IP67/IP69K 	<ul style="list-style-type: none"> flush mounted stainless steel 316L IP40 (IP65 achievable with sealant) galvanised back box earth stud included 	<ul style="list-style-type: none"> surface mounted stainless steel grade 316L IP66 earth terminal & lid bonding link 	<ul style="list-style-type: none"> surface mounted Red RAL3000 mild steel IP66 earth terminal & lid bonding link 	<ul style="list-style-type: none"> surface mounted Grey RAL7032 mild steel IP66 earth terminal & lid bonding link

Emergency Stop Pushbutton Station - without protective shroud
 94mm diameter red mushroom head, palm/foot switch - Pull to reset.



Order Code No.	P SN-GB0024	
Encl.Ref.	P2Y	<ul style="list-style-type: none"> insulated enclosure IP67/IP69K

Take a LOOK at our FLUSH MOUNTING options

Go to page 12

- ideal for applications where hygiene is a high priority i.e. kitchens and hospitals
- auxiliary contacts available

Emergency Stop Pushbutton Station - with protective shroud

38mm diameter red mushroom head - twist to reset. 1 N.C. contact. Complies with EN 418/EN 60204-1.



Order Code No.	P SN-GB0053	P N261/GBA010 *SF1A	P N091/GBA025 *SB31	P N091/GBA020 *RB31	P N091/GBA021 *MB31
Encl.Ref.	P1Y	SF1A	SB31	RB31	MB31
	<ul style="list-style-type: none"> insulated enclosure IP67/IP69K 	<ul style="list-style-type: none"> flush mounted stainless steel 316L IP40 (IP65 achievable with sealant) galvanised back box earth stud included 	<ul style="list-style-type: none"> surface mounted stainless steel grade 316L IP66 earth terminal & lid bonding link 	<ul style="list-style-type: none"> surface mounted Red RAL3000 mild steel IP66 earth terminal & lid bonding link 	<ul style="list-style-type: none"> surface mounted Grey RAL7032 mild steel IP66 earth terminal & lid bonding link

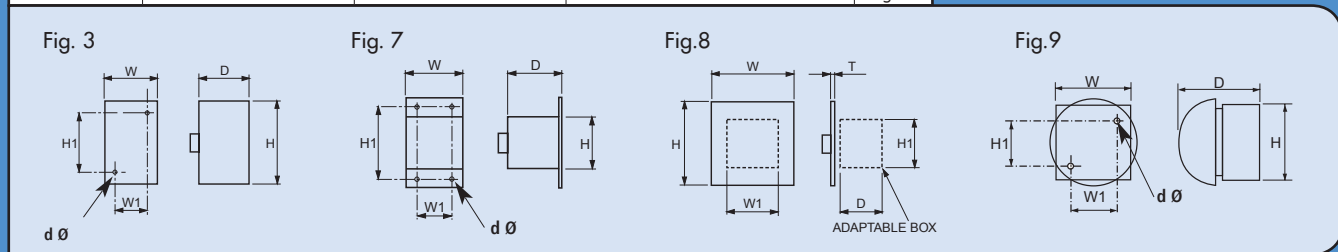
Emergency Stop Pushbutton Station - with protective shroud

38mm diameter red mushroom head - key operate to reset (1 key included)



Order Code No.	P SN-GB0054	P N261/GBA011 *SF1A	P N091/GBA026 *SB31	P N091/GBA022 *RB31	P N091/GBA023 *MB31
Encl.Ref.	P1Y	SF1A	SB31	RB31	MB31
	<ul style="list-style-type: none"> insulated enclosure IP67/IP69K 	<ul style="list-style-type: none"> flush mounted stainless steel 316L IP40 (IP65 achievable with sealant) galvanised back box earth stud included 	<ul style="list-style-type: none"> surface mounted stainless steel grade 316L IP66 earth terminal & lid bonding link 	<ul style="list-style-type: none"> surface mounted Red RAL3000 mild steel IP66 earth terminal & lid bonding link 	<ul style="list-style-type: none"> surface mounted Grey RAL7032 mild steel IP66 earth terminal & lid bonding link

Encl. Ref.	Front Plate			Cable Entries.			Line Drg.
	H	W	D	H1	W1	D	
P1Y	80	72	56	66.5	58.5	4.5	1 x 20mm + 2 x20/25mm k'outs Fig. 3
P2Y	85	85	101	40	65	5.5	3 x 20mm k'outs Fig. 9
SF1A	100	100	2	78	78	52	8 x 20mm k'outs Fig. 8
SB31	100	100	60	120	70	6.5	- Fig. 7
RB31	100	100	60	120	70	6.5	- Fig. 7
MB31	100	100	60	120	70	6.5	- Fig. 7





Rotary Control Switch - Insulated Enclosure



Grey Enclosure IP65

			Order Code No.	Encl. Ref.
Off-On	1 pole		KN1	PF1A
Off-On	3 pole		KN3	PF1B
Changeover, without Off	1 pole		KN2	PF1A
Changeover, with Off	2 pole		KN10	PF1B

Key Operated Control Switch - Insulated Enclosure



Grey Enclosure IP40

			Order Code No.	Encl. Ref.
Notes 1) Key removable in all positions. 2) Key removable in '0' position only.				
Off-On ¹⁾	3 pole		CA10 A202/GBA003 *PN	PN1G
Off-On ¹⁾	4 pole		CA10 A203/GBA003 *PN	PN1G
Changeover, with Off ¹⁾	2 pole		CA10 A211/GBA009 *PN	PN1G
Changeover, without Off ¹⁾	2 pole		CA10 A221/GBA003 *PN	PN1G
Changeover, spring return to Off ²⁾	2 pole		CA10 A215/GBA002 *PN	PN1G
Step, 3 pos'n, without Off ¹⁾	1 pole		CA10 A230/GBA002 *PN	PN1G
Step, 4 pos'n, without Off ¹⁾	1 pole		CA10 A231/GBA004 *PN	PN1G

LOAD SWITCHES

insulated enclosure

Emergency-Off Switch - 3 & 4 Pole
25A & 32A



- grey insulated enclosure
- IP65 protection
- red/yellow padlockable handle
- earth terminal included
- suitable for safety isolation in accordance with IEC 60947-3/BS EN 60947-3

Ie AC-21A	Order Code No.	Encl. Ref.
3 pole		
25A	KN5	PF1E
32A	KN7	PF1E
4 pole (3 ph+Sw N¹⁾)		
25A	KN6	PF1E
32A	KN8	PF1E

Motor Reversing Switch
3 Phase 5.5kW @ 415v & 1 Phase 1.5kW @ 240v

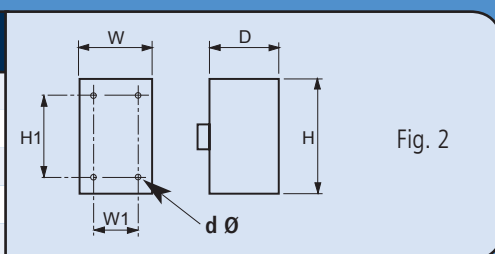


- grey insulated enclosure
- IP42 protection
- grey handle/silver legend
- earth terminal included

Order Code No.	Encl. Ref.
KN4	PN1C

DIMENSIONS

Encl. Ref.	Encl. Dim.			Encl. Dim.			Cable Entries.	Line Drg.
	H	W	D	H1	W1	d		
PF1A	72	64	42	36	50	4.4	4 x 20mm ISO	Fig. 2
PF1B	72	64	51	36	50	4.4	4 x 20mm ISO	Fig. 2
PF1E	92	82	65	52	68	4.4	4 x 20mm ISO	Fig. 2
PN1C	72	64	56	36	50	4.4	4 x 20mm ISO	Fig. 2
PN1G	72	64	69	36	50	4.4	4 x 20mm ISO	Fig. 2



Ask our technical sales team for further options

Quality, Choice & Service are important at Kraus & Naimer.

We will do our utmost to perfectly match your switch requirements. Here are some other standard options, for more information please call 01635 262626



See page 7 for 9 & 12 pole Enclosed Multipole Cam Switches

- insulated enclosure, grey RAL7032.
- IP66 protection.
- red/yellow padlockable handle.
- optional black handle available.
- switch interlocked with lid to prevent opening in 'ON' position.

MB20

Require a specific colour you've not seen in the catalogue?



- black powder paint finish
- IP66 protection.
- red/yellow padlockable handle.
- optional black handle available.
- earth terminal & lid bonding link included.
- switch interlocked with lid to prevent opening in 'ON' position.

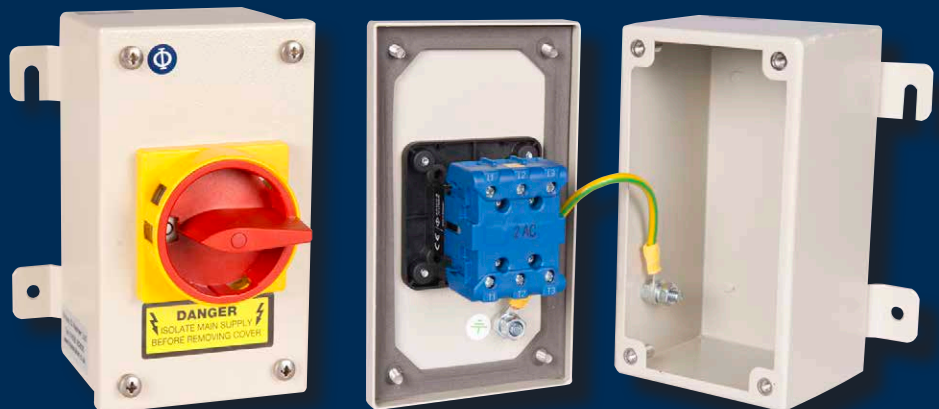
Fire Alarm Isolators (Switch Disconnectors)



Further options are available and come as standard for many of the switches you see in this catalogue. Simply ask about options when you call.

Compact Range

3 Pole with or without Aux
4 Pole with or without Aux



IP Codes


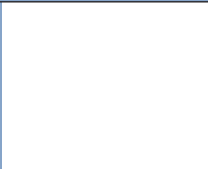
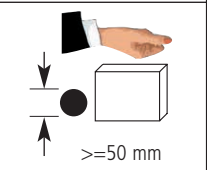
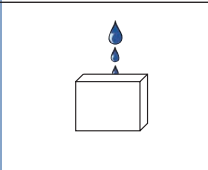
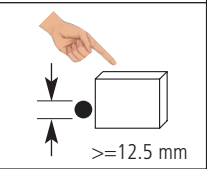
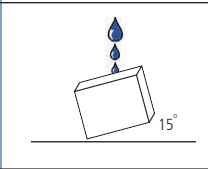
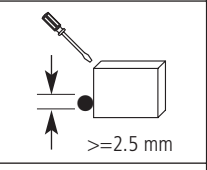
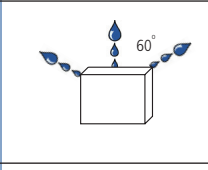
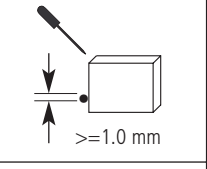
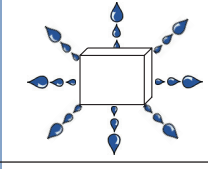
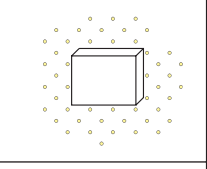
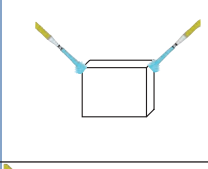
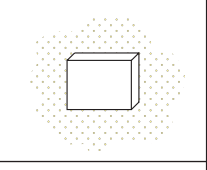
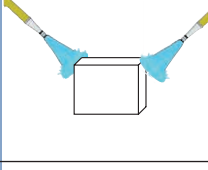
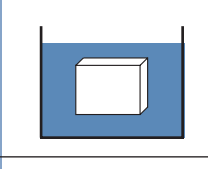
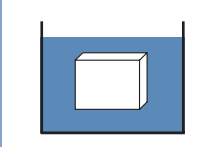
A coding system is defined by BS EN 60529 for the classification of degrees of protection provided by enclosures of electrical equipment against solid objects and water. This coding comprises the letters 'IP' followed by a two digit code as follows:-

IP 6 5

Defines protection against solid objects and access to hazardous parts.

Defines protection against water.

Degrees of protection indicated by a number up to and including '6' implies compliance with the requirements for all lower numbers. For a code with a second digit of 7 or 8, a second code must be stated to specify protection against water jets or spray, eg IP66/IP67.

1st Digit	Protection against solid objects and access to hazardous parts.		2nd Digit	Protection against water	
0		No protection	0		No protection
1		No ingress by solid objects ≥ 50 mm dia nor access to hazardous parts with the back of the hand	1		Vertically falling drops of water shall have no harmful effect.
2		No ingress by solid objects ≥ 12.5 mm dia nor access to hazardous parts with a finger.	2		Vertically falling drops of water shall have no harmful effect when the enclosure is tilted at any angle up to 15° from vertical.
3		No ingress by solid objects ≥ 2.5 mm dia nor access to hazardous parts with a tool.	3		Water sprayed at up to 60° from the vertical shall have no harmful effect.
4		No ingress by solid objects ≥ 1.0 mm dia nor access to hazardous parts with a wire.	4		Water splashed from any direction shall have no harmful effect.
5		Dust protected. Ingress of dust is not completely prevented, but there should be no harmful deposits. No access to hazardous parts with a wire.	5		Jets of water projected from any direction shall have no harmful effect.
6		Dust-tight. No ingress of dust. No access to hazardous parts with a wire.	6		Strong jets of water projected from any direction shall have no harmful effect.
			7		Temporary immersion in water shall not result in ingress of harmful quantities of water.
			8		Continuous immersion in water shall not result in ingress of harmful quantities of water.

Reference should be made to BS EN 60529:1992 for full details concerning test and acceptance criteria.

Switch Type	Thermal Rating	Insulation Voltage, U _i	Rated operating Current & power				Short Circuit Protection	Terminal Capacity			
			Operational current, I _e		Operational Power, 3 ph.			Max. fuse gL/gG char.	Single core/stranded wire.	Flexible wire, with sleeve.	Terminal bolt for Cu bar/lug.
			AC-15	AC-21A	AC-3	AC-23A					
	Enclosed rating I _{the}		110V 220-240V 380-415V	690V	220V-240V 380-415V	230V-240V 400-415V	A	mm ²	mm ²	mm ²	
	A	V	A		kW		A				
Switch-disconnectors - selection data in accordance with: IEC 60947, IEC 60204, BS EN 60947, BS EN 60204											
KG10	20	690	- - -	20	2.2 3.7	3 5.5	20	2.5	1.5	-	
KG20	25	690	- - -	25	4 5.5	5.5 7.5	35	6	4	-	
KG32	32	690	- - -	32	5.5 7.5	5.5 11	35	6	4	-	
KG41	40	690	- - -	40	7.5 11	7.5 15	50	16	10	-	
KG64	63	690	- - -	63	11 18.5	11 22	63	16	10	-	
KG80	80	690	- - -	80	15 22	18.5 30	80	50	35	-	
KG100	100	690	- - -	100	18.5 30	22 37	100	50	35	-	
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	3 5.5	4.5 7.5	25	6	4	-	
KH20	20	800 ¹⁾	- - -	20	3.5 6.5	5.5 10	32	6	4	-	
KH25	25	800 ¹⁾	- - -	25	4 7.5	7 12	35	6	4	-	
KH32	32	800 ¹⁾	- - -	32	5.5 11	9 16	35	10	6	-	
KH40	40	800 ¹⁾	- - -	40	7.5 15	11 20	50	10	6	-	
KH63	63	1000 ¹⁾	- - -	63	11 22	18.5 30	80	35	25	-	
KH80	80	1000 ¹⁾	- - -	80	15 30	23 40	100	35	25	-	
KH85	100	1000 ¹⁾	- - -	100	3) 3)	3) 3)	100	35	25	-	
UK20	20	690	5 5 4	20	3 5.5	3.7 7.5	25	2x2.5	2x2.5	-	
UK25	25	690	8 8 5	25	4 7.5	5.5 11	35	2x4	2x2.5	-	
UK32	32	690	12 12 6	32	5.5 11	7.5 15	35	2x6	2x4	-	
UK250/A	250	1000	- - -	250	- -	75 140	315	150		M8	
UK315/A	315	1000	- - -	315	- -	100 160	500	240		M10	
UK400/A	400	1000	- - -	400	- -	132 220	500	240		M10	
UK630/A	630	1000	- - -	630	- -	200 355	800	400/2x155		M12	
UK800/A	800	1000	- - -	800	- -	250 450	800	500/2x240		M12	
UK1000/A	1000	1000	- - -	1000	- -	- 560	1250	630/2x400		M12	
UK1250/A	1250	1000	- - -	1250	- -	- 710	1250	2x400		M12	
C316 (6 pole) (in RB10, MB10, SB10 encl)	275	1000	- - -	275	37 55	75 132	315	150	150	M12	
C316 (6 pole) (in RB29, MB29, SB29 encl)	315	1000	- - -	315	37 55	75 132	315	185	150	M12	
Switch & Control Stations - selection data in accordance with: IEC 60947, BS EN 60947.											
CA10	20	690	5 5 4	20	3 5.5	3.7 7.5	25	2x2.5	2x2.5	-	
CA25	32	690	12 12 6	32	5.5 11	7.5 15	35	2x6	2x4	-	
C32	50	690	16 16 7	40	7.5 15	11 22	63	2x10	2x6	-	
C42	63	690	- - -	63	11 18.5	15 30	80	2x16	2x10	-	
C80	115	690	- - -	100	15 30	30 45	125	35	25	-	
C125	150	690	- - -	150	22 37	37 75	200	70	50	-	
C200-4	200	690	- - -	200	22 37	37 75	200	95	95	M8	
C315 (In MB10 encl)	275	690	- - -	275	37 55	75 132	315	150	150	M12	
C315 (In MB29 encl)	315	690	- - -	315	37 55	75 132	315	185	150	M12	
KN1/KN2/KN3/KN10	20	690	5 5 4	20	3 5.5	3.7 7.5	25	2x2.5	2x2.5	-	
KN4	20	690	- - -	-	3 ²⁾ 5.5 ²⁾	- -	25	2x2.5	2x2.5	-	
KN5/KN6	25	690	8 8 5	25	4 7.5	5.5 11	35	2x4	2x2.5	-	
KN7/KN8	32	690	14 14 6	32	5.5 11	7.5 15	50	2x6	2x4	-	
P N/P SN	6	500	6 6 4	-	- -	- -	10	2.5	1.5	-	

Notes: 1) Only valid for no-load switching (AC-20A) above 690v. 3) KH85 is only available as 2 pole changeover switch.
 2) 1 phase, 240v, rating = 1.5kW. Single phase rating @240v: AC-3 = 10kW, 62A. AC-23A = 11kW, 68A.

...it can only be Kraus & Naimer



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