



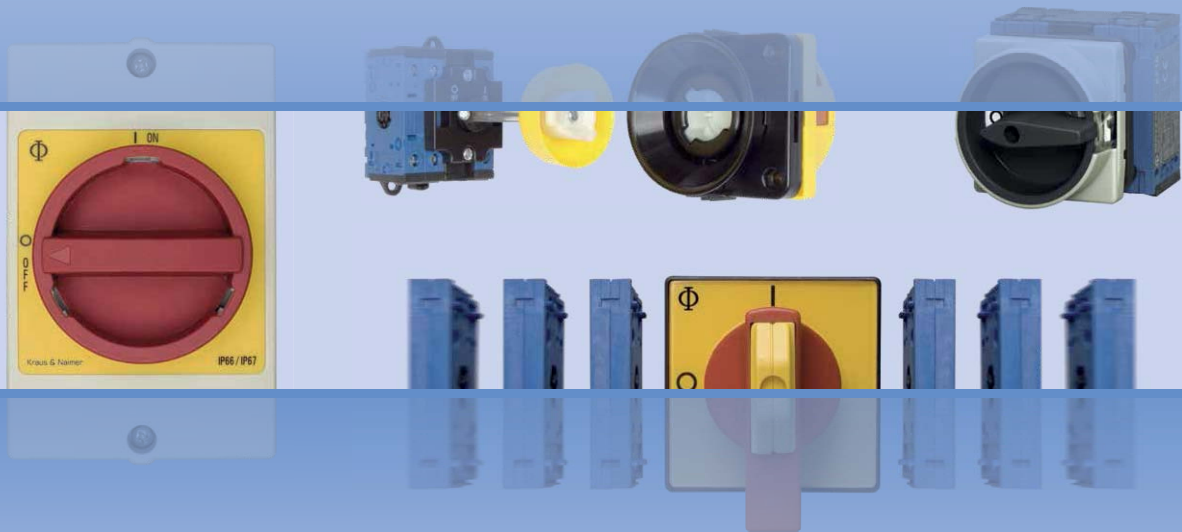
Kraus & Naimer

BLUE LINE switchgear

since 1907

MAIN SWITCHES AND SWITCH DISCONNECTORS 10/2019

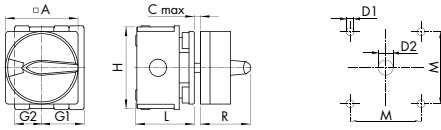
KF type up to 32 A



Dimensions mm
inch

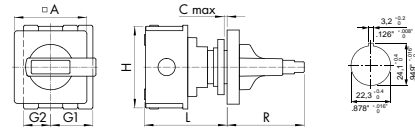
Main Switches and Main Switches with Emergency Function

Front mounting, four hole panel mounting



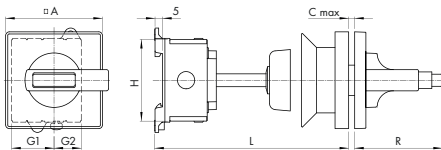
	A	C	G1	G2	H	L	R	D1	D2
KF16B-KF32B	64	4	28	18	54	38,7	33	5	10-15 .39-.59
	2.52	.16	1.10	.71	2.13		1.30	.20	

Front mounting, single hole mounting Ø 22 mm



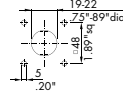
	A	C	G1	G2	H	L	R
KF16B-KF32B	64	6	18	28	54	54	51
	2.52	.24	.71	1.10	2.13	2.13	2.01

Base mounting with door clutch



Mounting dimensions for the VE plate

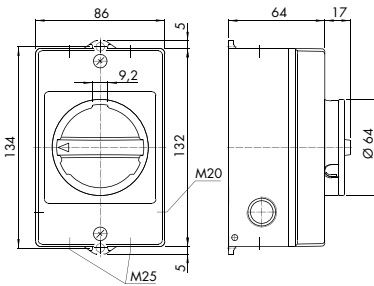
Drilling plan for panel mounting



	A	C	G1	G2	H	L	R	D1	N	P
KF16B-KF32B	64	4	28	18	54	190	58	4,2	22	70
	2.52	.16	1.10	.71	2.13	7.48	2.28	.17	.87	2.76

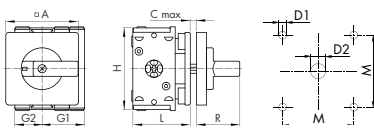
Maintenance and Safety Switches

In plastic enclosure



Switch Disconnectors

Front mounting, four hole panel mounting

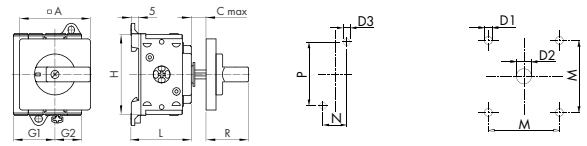


	A	C	G1	G2	H	L	R	D1	D2	M
KF16-KF32	48	4	28	18	54	38,7	29	5	10-15 .39-.59	36
	1.89	.16	1.10	.71	2.13	1.52	1.14	.20		1.42

Base mounting

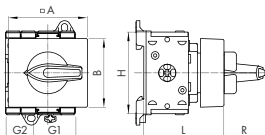
Mounting dimensions for the VE plate

Drilling plan for panel mounting



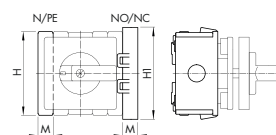
	A	C	G1	G2	H	L	R	D1	D2	M	N	P
KF16-KF32	48	12	28	18	54	38,7	29	4,2	10-15 .38-.59	36	22	60
	1.89	.47	1.10	.71	2.13	1.52	1.14	.17		1.42	.87	2.36

Base mounting with padlock device



	A	B	G1	G2	H	L	R
KF16-KF32	48	45,4	28	18	54	53	28
	1.89	1.79	1.10	.71	2.13	2.09	1.12

Lateral mounted auxiliary contacts (1 NO + 1 NC), 4. Pol, PE, N



	M	H	H1
KF16-KF32	10	54	
	.39	2.13	

Construction Data

The innovative modular system is both simple and very safe while offering enormous flexibility.

The core component, the rotary contact system incorporated in a new type of modular contact block allows high mechanical life expectancy and precise and reliable contact making.

The position of the latching mechanism is more or less unlimited. The design allows for future expansion of the line with different terminal or contact technology like cage clamps, or knife contacts for DC applications.

The same modules can be used for panel mounting, lateral drive and base mounting, minimizing the need for high inventory levels and saving money.

· 1-6 pole On-Off switches are delivered as preassembled units from the factory.

· The precisely working cam-operated auxiliary contacts can be added in the field.

· Coupling profile determines pre-closing function of switched 4th pole, i.e. contact modules per se are always the same

· Rotating contact movement (instead of classical vertical lifting) allows:

- big contact gaps
- high mechanical life expectancy
- very precise movement sequence
- self-cleaning contacts
- forced opening and closing of contacts

· Compact (very shallow) design

· Up to 1000V insulation voltage according to IEC possible

· Design allows a big variation of terminal markings

· Removal from DIN rail can be done without tool change (screw driver for cross-recessed screws sufficient)


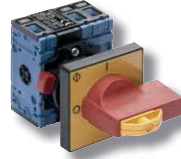








Technical Data according to IEC 60947-3, EN 60947-3 and VDE 0660 part 107

Switch Types		KF16/B	KF20/B	KF25/B	KF32/B		
Rated Insulation Voltage U_i^1	V	690	690	690	690		
Rated Operational Voltage U_e^1	V	690	690	690	690		
Rated Impulse Withstand Voltage U_{imp}^1	kV	6	6	6	6		
Rated Thermal Current I_u/I_{th}	A	16	20	25	32		
Rated Operational Current I_e AC-21A=AC-22A	690 V A	16	20	25	32		
Rated Breaking Capacity							
	220 V-240 V A	140	160	210	260		
	380 V-440 V A	140	160	210	260		
	660 V-690 V A	125	145	165	200		
Disconnection Property	up to ¹	V	690	690	690		
Rated Utilization Category							
AC-3	Direct-on-line starting	3 phase	220 V-240 V kW	3	3,5	4	5,5
		3 pole	380 V-440 V kW	5,5	6,5	7,5	11
			500 V kW	5,5	6,5	7,5	11
			660 V-690 V kW	5,5	5,5	7,5	11
AC-23A	Frequent switching of motors or other high inductive loads (criterion for main switches)	3 phase	220 V-240 V kW	4,5	5,5	7	9
		3 pole	380 V-440 V kW	7,5	10	12	16
			500 V kW	10	12	15	20
			660 V-690 V kW	13	15	17	22
Short Circuit Protection							
	Max. fuse size (gL/gG-characteristic)	A	25	35	35	35	35
	Rated short-time withstand current (1s-current)	A	350	350	350	350	350
Max. Permissible Wire Gage							
	Possible cross sections	single-core and stranded wire	mm ²			0,5 - 6	
		flexible wire without sleeve	AWG			18 - 10	
		flexible wire with sleeving in acc. with DIN 46228	mm ²			0,5 - 4	
			AWG			18 - 10	
			mm ²			0,5 - 4	
Ambient Temperature							
	open at 100 % I_u/I_{th}					50 °C during 24 hours with peaks up to 55 °C	
	enclosed at 100 % I_{the}					35 °C during 24 hours with peaks up to 40 °C	

Technical Data according to the Requirements of North America

Switch Types		KF16/B	KF20/B	KF25/B	KF32/B		
Insulation Voltage	V	600	600	600	600		
Max. Nominal Voltage	3 phase V	600	600	600	600		
Thermal Current							
Ampere Rating	A	16	20	25	30		
Heavy Pilot Duty	Rating Code	A600	A600	A600	A600		
Motor Switching Capacity (DOL-Rating)							
	Standard motor-load	3 phase	110 V-120 V HP	1	1	1,5	2
		3 pole	220 V-240 V HP	2	2	3	5
			440 V-480 V HP	5	5	7,5	10
			550 V-600 V HP	5	5	7,5	10

Product description

Front mounting, four hole panel mounting		
 IP 66	Main switches KF16B T103/01 E KF20B T103/01 E KF25B T103/01 E KF32B T103/01 E	Main switches with emergency function KF16B T203/01 E KF20B T203/01 E KF25B T203/01 E KF32B T203/01 E
Front mounting, single hole mounting Ø 22 mm		
 IP 66	Main switches KF16 T103/04 FT2 KF20 T103/04 FT2 KF25 T103/04 FT2 KF32 T103/04 FT2	Main switches with emergency function KF16 T203/04 FT2 KF20 T203/04 FT2 KF25 T203/04 FT2 KF32 T203/04 FT2
Base mounting with door clutch		
 IP 66/67	Main switches KF16B T103/65 VE KF20B T103/65 VE KF25B T103/65 VE KF32B T103/65 VE	Main switches with emergency function KF16B T203/65 VE KF20B T203/65 VE KF25B T203/65 VE KF32B T203/65 VE
In plastic enclosure		
 IP 66/67	Main switches KF16 T103/33 KT11V KF20 T103/33 KT11V KF25 T103/33 KT11V KF32 T103/33 KT11V	Main switches with emergency function KF16 T203/33 KT11V KF20 T203/33 KT11V KF25 T203/33 KT11V KF32 T203/33 KT11V
Front mounting, four hole panel mounting		
 IP 66	KF16 T303 E KF20 T303 E KF25 T303 E KF32 T303 E	
Base mounting		
 IP 40	KF16 T303 VE KF20 T303 VE KF25 T303 VE KF32 T303 VE	
Base mounting with padlock device		
	KF16 T303/58 VE2 KF20 T303/58 VE2 KF25 T303/58 VE2 KF32 T303/58 VE2	
Lateral mounted auxiliary contacts (1 NO + 1 NC), 4. pole, PE, N		
	PE —  N — 	KO H010B/C11 K KO H052B/A K KO H053B/A K

¹Valid for lines with grounded common neutral termination, overvoltage category III, pollution degree 3. Values for other supply systems on request.