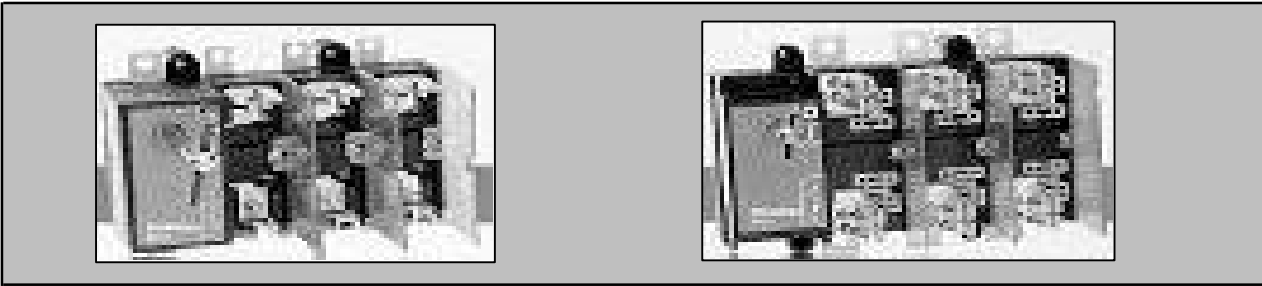


SWITCH FUSES 3KL71 from 32A to 800A

Description



SWITCH FUSES 3KL71

3KL71 is a range of load-break switches suitable for making and breaking on load and disconnecting low voltage electrical circuits. They are commonly used for the following purposes:
main switches, switches for motors, disconnectors, safety switches.
according to the different utilization category AC-21A - AC-22A - AC-23A.
They are available in 5 sizes and 13 current ratings.

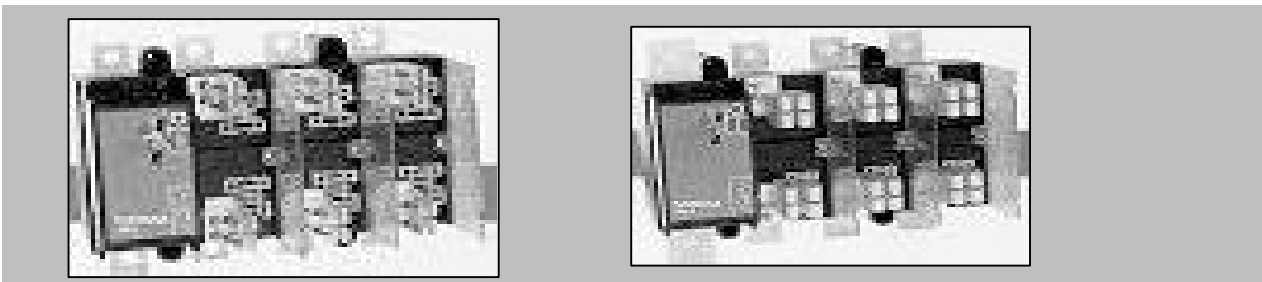
General characteristics

- Rated insulation voltage 1000V AC and 1500V DC
- 3-4-6-8 poles available
- Change-over and BY-PASS available
- High breaking capacity (AC-23A IEC 947-3)
- High electrical and mechanical endurance
- Four break contacts
- Self cleaning contacts
- Contact position positively indicated by the handle
- Visibility of fixed and moving contacts by means of windows
- Independent manual operation
- Neutral contact makes earlier and opens later than the phase contacts

- Solid neutral version available
- Suitable protection to prevent accidental touching of live parts
- Switchbox in self-extinguishing, low hygroscopic and high mechanical resistance isolating material
- Resistant to damp heat (IEC 68-2)
- Wide range of accessories
- Rotary front operation by means of:
 - external double insulated handle with door-interlock in ON position, IP55 degree of protection. Padlockable with up to 3 padlocks in OFF position.
 - Direct handle (padlockable in OFF position on request)
- Both fuse terminals are not alive when the switch is in **0** position.
- Suitable for DIN, BS and NFC fuses

Conformity to standards:

IEC 947-3
HD422 - IEC 408 - CEI 17-11
EN 60439 - IEC 439 -
CEI7713/1
HD 384 - IEC 364 - CEI 64-8
VDE 0660-107
BS 5419





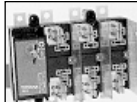
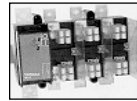
SWITCH FUSES 3KL71
From 32A to 800A

Technical data							
Type		3KL71 11	3KL71 12	3KL71 13	3KL71 14	3KL71 15	3KL71 16
Rated thermal current	lth (A)	32A	45A	63A	80A	100A	125A
Rated frequency	(Hz)	50-60					
Rated insulation voltage	Ui (V)	1000	1000	1000	1000	1000	1000
	c.c. DC	1500	1500	1500	1500	1500	1500
Rated operational current	le (A)						
AC-21A	240/380/415/500/690V	32	45	63	80	100	125
AC-22A	240/380/415/500/690V	32	45	63	80	100	125
AC - 23A	240/380/415V	32	45	63	80	100	125
	500V	25	32	45	63	80	100
	690V	20	25	32	45	63	80
DC-21A	48/110/220V	32	45	63	80	100	125
DC-22A	48/110/220V (220V 3poles in series)	32	45	63	80	100	125
DC-23A	48V	32	45	63	80	100	125
	110V (3 poles in series)	25	35	45	63	80	100
	220V (3 poles in series)	20	30	35	45	63	80
Rated operational power	(kW)						
AC-23A	240V	10	13	19	24	30	38
	380/415V	17	23	33	42	52	65
	500V	17	24	34	43	55	70
	690V	18	27	36	50	57	75
Rated fused short circuit current							
Back-up fuse	(A)	32	45	63	80	100	125
R.M.S. value	(kA)	100	100	100	100	50	50
Peak value	(kA)	6	9	10	12	12	15
Rated making capacity	(A)						
420V AC cosfi 0,35 (0,45*)		320*	450*	630*	800*	1000*	1250
Rated breaking capacity							
420V AC cosfi 0,35 (0,45*)		256*	360*	504*	640*	800*	1000
Rated making and breaking capacity DC (3 poles in series)		80	120	140	180	252	320
Rated capacitor power 400V	(KVA _r)	15	20	30	40	45	50
Working ambient temperature	(°C)	-20 45					
Relative humidity max	%	95					
Pollution degree acc. IEC 947-1		3					
Altitude max	m.a.s.l.	2000					
Mechanical endurance	n° ops.	10000	10000	10000	10000	8000	8000
Electrical endurance	n° ops.	1500	1500	1500	1500	1000	1000
Max cable section	bars (mm)	12x3	12x3	12x3	12x3	16x4	16x4
	cables (mm ²)	25	25	25	25	70	70
Operating torque	to ON (Nm)	8	8	8	8	12	12
	to OFF	8	8	8	8	12	12
Power losses per pole	(W)	1,2	1,2	1,2	1,2	4,8	4,8
Net weight	3P (Kg)	1	1	1	1	1,9	1,9
	4P	1,1	1,1	1,1	1,1	2	2

SWITCH FUSES 3KL71
From 32A to 800A

Technical data								
Type		3KL71 21	3KL71 22	3KL71 23	3KL71 31	3KL71 32	3KL71 41	3KL71 51
Rated thermal current	lth (A)	160A	200A	250A	315A	400A	630A	800A
Rated frequency	(Hz)							
Rated insulation voltage c.c.	Ui (V)	1000	1000	1000	1000	1000	1000	1000
	DC	1500	1500	1500	1500	1500	1500	1500
Rated operational current	le (A)							
AC-21A 240/380/415/500/690V		160	200	250	315	400	630	800
AC-22A 240/380/415/500/690V		160	200	250	315	400	630	800
AC - 23A 240/380/415V 500V 690V		160	200	250	315	400	630	800
		125	160	200	250	315	500	630
		100	125	160	200	250	400	500
DC-21A 48/110/220V	le (A)	160	200	250	315	400	630	800
DC-22A 48/110/220V (220V 3poles in series)		160	200	250	315	400	630	800
DC-23A 48V 110V (3 poles in series) 220V (3 poles in series)		160	200	250	315	400	630	800
		125	160	200	250	315	500	630
		100	125	160	200	250	400	500
Rated operational power	(kW)							
AC-23A 240V 380/415V 500V 690V		48	60	75	95	120	190	250
		85	105	130	165	210	330	420
		87	110	140	175	220	350	435
		90	115	150	180	230	370	460
Rated fused short circuit current								
Back-up fuse	(A)	160	200	250	315	400	630	800
R.M.S. value	(kA)	50	50	50	50	50	50	50
Peak value	(kA)	15	20	25	25	30	40	40
Rated making capacity 420V AC cosfi 0,35 (0,45*)	(A)	1600	2000	2500	3150	4000	6300	8000
Rated breaking capacity 420V AC cosfi 0,35 (0,45*)		1280	1600	2000	2520	3200	5040	6400
Rated making and breaking capacity DC (3 poles in series)		400	500	640	800	1000	1600	2000
Rated capacitor power 400V	(KVAr)	70	90	110	140	180	300	370
Working ambient temperature	(°C)	-20						
		45						
Relative humidity max	%	95						
Pollution degree acc. IEC 947-1		3						
Altitude max	m.a.s.l.	2000						
Mechanical endurance	n° ops.	8000	7000	7000	7000	7000	4000	4000
Electrical endurance	n° ops.	1000	1000	1000	1000	1000	1000	1000
Max cable section bars cables	(mm)	16x4	25x4	25x4	32x5	32x5	2x40x6	2x40x6
	(mm²)	70	120	120	240	240	2x185	2x185
Operating torque to ON to OFF	(Nm)	12	13,5	13,5	22	22	35	35
		12	14	14	25	25	37	37
Power losses per pole	(W)	4,8	12	12	19,2	19,2	30	30
Net weight	3P	(Kg)	1,9	5	5	7	7	13
	4P		2	5,3	5,3	7,4	7,4	14,5

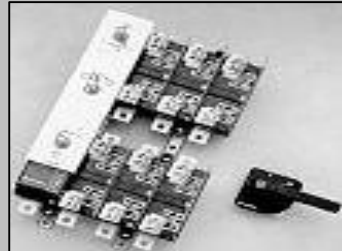
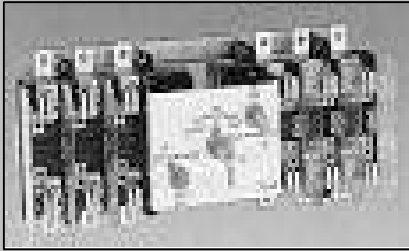
SWITCH FUSES 3KL71 from 32A to 800A , 3 and 4 poles

Order references table							
	Size	Rating A	Fuse type	Order references			
				3-pole	4-pole		
						solid neutral	
	S. 1	32A	DIN 43620 NFC 63210 BS 88	NH C00 14x51 A2+A3	3KL71 11 - 3AA00 - 3BA00 - 3CA00	3KL71 11 - 4AA00 - 4BA00 - 4CA00	3KL71 11 - 5AA00 - 5BA00 - 5CA00
		45A	DIN 43620 NFC 63210 BS 88	NH C00 14x51 A2+A3	3KL71 12 - 3AA00 - 3BA00 - 3CA00	3KL71 12 - 4AA00 - 4BA00 - 4CA00	3KL71 12 - 5AA00 - 5BA00 - 5CA00
		63A	DIN 43620 NFC 63210 BS 88	NH C00 22x58 A2+A3	3KL71 13 - 3AA00 - 3BA00 - 3CA00	3KL71 13 - 4AA00 - 4BA00 - 4CA00	3KL71 13 - 5AA00 - 5BA00 - 5CA00
		80A	DIN 43620 NFC 63210 BS 88	NH C00 22x58 A2+A3	3KL71 14 - 3AA00 - 3BA00 - 3CA00	3KL71 14 - 4AA00 - 4BA00 - 4CA00	3KL71 14 - 5AA00 - 5BA00 - 5CA00
	S. 2	100A	DIN 43620 NFC 63210 BS 88	NH 00 22x58 A4	3KL71 21 - 3DA00 - 3BA00 - 3CA00	3KL71 21 - 4DA00 - 4BA00 - 4CA00	3KL71 21 - 5DA00 - 5BA00 - 5CA00
		125A	DIN 43620 NFC 63210 BS 88	NH 00 NH 0 22x58 A4	3KL71 22 - 3DA00 - 3AA00 - 3BA00 - 3CA00	3KL71 22 - 4DA00 - 4AA00 - 4BA00 - 4CA00	3KL71 22 - 5DA00 - 5AA00 - 5BA00 - 5CA00
		160A	DIN 43620 BS 88	NH 00 NH 0 A4	3KL71 23 - 3DA00 - 3AA00 - 3CA00	3KL71 23 - 4DA00 - 4AA00 - 4CA00	3KL71 23 - 5DA00 - 5AA00 - 5CA00
	S. 3	200A	DIN 43620 BS 88	NH 1 B1+B2	3KL71 31 - 3A . 00 - 3CA00	3KL71 31 - 4A . 00 - 4CA00	3KL71 31 - 5AA00 - 5CA00
		250A	DIN 43620 BS 88	NH 1 B1+B2	3KL71 32 - 3A . 00 - 3CA00	3KL71 32 - 4A . 00 - 4CA00	3KL71 32 - 5AA00 - 5CA00
	S. 4	315A	DIN 43620 BS 88	NH 2 B2+B3	3KL71 41 - 3A . 00 - 3CA00	3KL71 41 - 4A . 00 - 4CA00	3KL71 41 - 5AA00 - 5CA00
		400A	DIN 43620 BS 88	NH 2 B2+B3	3KL71 42 - 3A . 00 - 3CA00	3KL71 42 - 4A . 00 - 4CA00	3KL71 42 - 5AA00 - 5CA00
	S. 5	630A	DIN 43620 BS 88	NH 3 C1+C3	3KL71 51 - 3A . 00 - 3CA00	3KL71 51 - 4A . 00 - 4CA00	3KL71 51 - 5AA00 - 5CA00
		800A	BS 88 DIN 43620	C1+C3 NH 3	3KL71 52 - 3CA00 3KL71 52 - 3AA00	3KL71 52 - 4CA00 3KL71 52 - 4AA00	3KL71 52 - 5CA00 3KL71 52 - 5AA00
Operation Type:					↓	↓	
Without handle					A	A	
Motorized operation ¹⁾					D	D	

1) power supply for motor operator: 24 Vdc - 110, 220, 380 Vac

SWITCH FUSES 3KL71
from 32A to 800A

Accessories



SWITCH FUSES 3KL71

Direct handle

Supplied with main contacts cover shields and, on request, in padlockable version.

Door interlock handle

On door mounting with door interlock in ON position. Padlockable in OFF position by max 3 padlocks (on request for double handle 460mm) IP65 degree of protection, padlocks diameter 8mm. Sheet-steel thickness from 1,5 to 3 mm

Door interlock handle with key lock

Lockable handle in OFF position (contacts open) by a key that can be released only in OFF position. Key with code H235 is usually supplied if not otherwise specified. If different key code is requested, add **-Z** and the new key code to the code of the handle. Key code available are the following:

H208, H217, H226, H230, H231, H232, H235, H248, H277, H278, H279, H329, H330, H338, H348.

Door interlock handle with defeat mechanism (special tool)

It allows to defeat, by a special tool supplied with the handle, the door interlock mechanism and therefore to open the door of the switchboard even with switch in ON position.

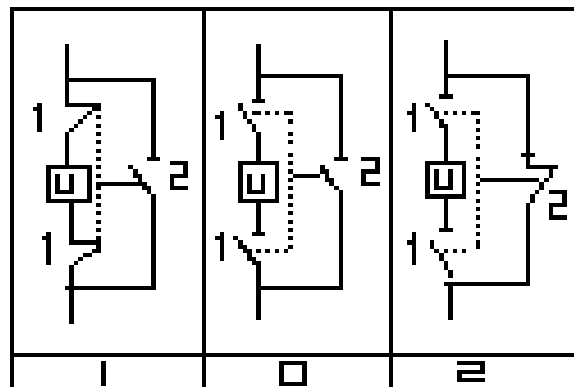
The door interlock mechanism is automatically reestablished on closing the door.

Assembling kit for 6 / 8 poles switches

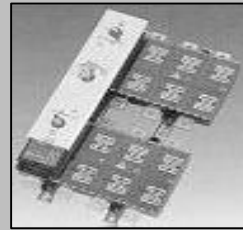
To assemble 6 / 8 poles switches by using standard switches of 3KL71 series. The **I-0** door interlock handle is included and the **fixing bars**, if requested, must be ordered separately (each type of fixing bars allows either vertical or horizontal assembling of the switches). The same assembling kit can be used either for type 3KA71 switches.

Assembling kit for vertical BY-PASS

To assemble BY-PASS switches by using standard switches of 3KL71 series. BY-PASS switches are a combination of three mechanically interlocked switches in order to constitute a device able to shunt sections under maintenance. The **I-0-II** door interlock handle is included and the **fixing bars**, if requested, must be ordered separately. Available only for vertical execution. ordinate separatamente.



Accessories



SWITCH FUSES 3KL71

Assembling kit for change-over switches

To assemble change-over switches by using standard switches of 3KL71 series

The **I-0-II** door interlock handle is included and the **fixing bars**, if requested, must be ordered separately (each type of fixing bars allows either vertical or horizontal assembling of the switches).

The same assembling kit can be used either for type 3KA71 switches.

Motorized operating mechanism

It ensures the remote control of load-break switches of the 3KL71 series.

- Fixed execution from 200 up to 800A
- Two stable positions (I-0) with motorized and manual operation
- Motorized operation inhibits manual operation
- Manual operation inhibits motorized operation
- Key lock in all positions that allows to inhibit both manual and motorized operation.
- Do not reduce mechanical and electrical characteristics of the switches.
- Visibility of fixed and moving contacts by means of windows
- Resistant to damp heat (tropicalized)
- Rating of motor:
three-phase = 220-380V 50/60Hz
single-phase = 220V 50/60Hz
24V DC - 60V DC
Other voltages available on request

Fuse monitoring with the 3RV1611-0BD10 circuit-breaker

A fuse is connected in parallel with each conducting path of the breaker. When a fuse blows, the current flows via the parallel conducting path of the breaker, releasing it.

The auxiliary contacts (**1NO+1NC**) can be used for signalling or control purposes, for example, to induce all-pole shutdown of a faulty circuit via a circuit-breaker.

The 3RV16 is suitable for the following voltages:




AC from 24V to 690V - 50 / 60Hz

DC from 24V to 250V

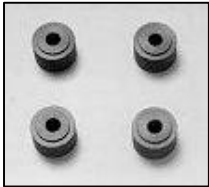



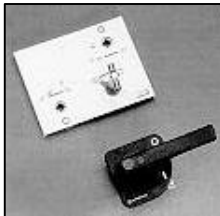
SWITCH FUSES 3KL71

Accessories		
	Description	Order References
	Direct handle (with fuse cover shields) black 70 mm for 3KL71 1 - NH00 black 70 mm for 3KL71 2 - NH00 and NFC black 70 mm for 3KL71 2 - NH0-BS black 120 mm for 3KL71 3 black 120 mm for 3KL71 4 black 160 mm for 3KL71 5	3KX71 14-1AA00 3KX71 14-2BA00 3KX71 14-2CA00 3KX71 14-3AA00 3KX71 14-4AA00 3KX71 14-5AA00
	Door interlock handle black 70 mm for 3KL71 1, 3KL71 2 black 120 mm for 3KL71 3, 3KL71 4 black 160 mm for 3KL71 5 black double 260 mm for 3KL71 5	3KX71 12-2AA00 3KX71 12-4AA00 3KX71 12-5AA00 3KX71 12-5BA00
	Emergency door interlock handle red/yellow 70 mm for 3KL71 1, 3KL71 2 red/yellow 120 mm for 3KL71 3, 3KL71 4 red/yellow 160 mm for 3KL71 5 red/yellow double 260 mm for 3KL71 5	3KX71 12-2AB00 3KX71 12-4AB00 3KX71 12-5AB00 3KX71 12-5BB00
	Door interlock handle with key lock black 120 mm for 3KL71 1, 3KL71 2, 3KL71 3, 3KL71 4 black 160 mm for 3KL71 5 black double 260 mm for 3KL71 5 up to 1250A	3KX71 11-4AA00 3KX71 11-4AA00 3KX71 11-5BA00
	Door interlock handle with defeat mechanism (special tool) black 70 mm for 3KL71 1, 3KL71 2 black 120 mm for 3KL71 3, 3KL71 4 black 160 mm for 3KL71 5 black double 260 mm for 3KL71 5	3KX71 13-2AA00 3KX71 13-4AA00 3KX71 13-5AA00 3KX71 13-5BA00
	Emergency door interlock handle with defeat mechanism (special tool) red/yellow 70 mm for 3KL71 1, 3KL71 2 red/yellow 120 mm for 3KL71 3, 3KL71 4 red/yellow 160 mm for 3KL71 5 red/yellow double 260 mm for 3KL71 5	3KX71 13-2AB00 3KX71 13-4AB00 3KX71 13-5AB00 3KX71 13-5BB00


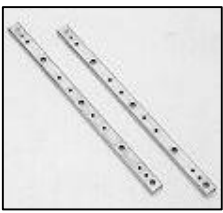

SWITCH FUSES 3KL71

Accessories		
	Description	Order References
	<p>Shaft extension A shaft extention of 200mm already included in the 3KA71 packing</p> <p>400 mm, square 8 mm for 3KL71 1, 3KL71 2 400 mm, square 10 mm for 3KL71 3 400 mm, square 12 mm for 3KL71 4, 3KL71 5</p>	<p>3KX71 16-2AD00 3KX71 16-3AD00 3KX71 16-5AD00</p>
	<p>Auxiliary contacts Break before main contacts</p> <p>1NA + 1NC for 3KL71 1 and 3KL71 2 2NA + 2NC for 3KL71 1 and 3KL71 2 1NA + 1NC for 3KL71 3 and 3KL71 4 2NA + 2NC for 3KL71 3 and 3KL71 4 1NA + 1NC for 3KL71 5 2NA + 2NC for 3KL71 5 1NA + 1NC for change-over switches 2NA + 2NC for change-over switches</p>	<p>3KX71 41-2AB00 3KX71 42-2AB00 3KX71 41-5AA00 3KX71 42-5AA00 3KX71 41-6AA00 3KX71 42-6AA00 3KX71 43-5AA00 3KX71 44-5AA00</p>
	<p>Upper terminal covers</p> <p>for 3KL71 1 for 3KL71 2 for 3KL71 3 for 3KL71 4 for 3KL71 5</p>	<p>3KX71 31-1AA00 3KX71 31-2AA00 3KX71 31-3AA00 3KX71 31-4AA00 3KX71 31-5AA00</p>
	<p>Lower terminal covers</p> <p>for 3KL71 1 for 3KL71 2 for 3KL71 3 for 3KL71 4 for 3KL71 5</p>	<p>3KX71 31-1AB00 3KX71 31-2AB00 3KX71 31-3AB00 3KX71 31-4AB00 3KX71 31-5AB00</p>
	<p>Fuse covers</p> <p>for 3KL71 1 NH00 for 3KL71 2 NH00 for 3KL71 2 NH0 - BS for 3KL71 3 NH00 for 3KL71 4 NH00 for 3KL71 5 NH00</p>	<p>3KX71 32-1AA00 3KX71 32-2AA00 3KX71 32-2BA00 3KX71 32-3AA00 3KX71 32-4AA00 3KX71 32-5AA00</p>

SWITCH FUSES 3KL71

Accessories		
	Description	Order References
	<p>Risers (1 packing 4 pieces) Stackable, to increase the distance of switches from the bottom plate.</p> <p>for 3KL71 1 for 3KL71 2 for 3KL71 3 for 3KL71 4 - 3KL71 5</p>	<p>3KX71 61-1AA00 3KX71 61-2AA00 3KX71 61-3AA00 3KX71 61-5AA00</p>
	<p>Fuse link</p> <p>for 3KL71 1 for 3KL71 2 for 3KL71 3 for 3KL71 4 for 3KL71 5</p>	<p>3KX71 71-1AA00 3KX71 71-2AA00 3KX71 71-3AA00 3KX71 71-4AA00 3KX71 71-5AA00</p>
	<p>Assembling kit for horizontal change-over switches I-0-II door interlock handle included</p> <p>for 3KL71 1 for 3KL71 2 for 3KL71 3 for 3KL71 4 for 3KL71 5</p>	<p>3KX71 21-1AA00 3KX71 21-2AA00 3KX71 21-3AA00 3KX71 21-4AA00 3KX71 21-5AA00</p>
	<p>Assembling kit for vertical change-over switches I-0-II door interlock handle included</p> <p>for 3KL71 1 for 3KL71 2 for 3KL71 3 for 3KL71 4 for 3KL71 5</p>	<p>3KX71 21-1AB00 3KX71 21-2AB00 3KX71 21-3AB00 3KX71 21-4AB00 3KX71 21-5AB00</p>
	<p>Assembling kit for 6-8 poles (horizontal) door interlock handle included</p> <p>for 3KL71 1 for 3KL71 2 for 3KL71 3 for 3KL71 4 for 3KL71 5</p>	<p>3KX71 22-1AA00 3KX71 22-2AA00 3KX71 22-3AA00 3KX71 22-4AA00 3KX71 22-5AA00</p>

SWITCH FUSES 3KL71

Accessories		
	Description	Order References
	Assembling kit for 6-8 poles (vertical) door interlock handle included for 3KL71 1 for 3KL71 2 for 3KL71 3 for 3KL71 4 for 3KL71 5	3KX71 22-1AB00 3KX71 22-2AB00 3KX71 22-3AB00 3KX71 22-4AB00 3KX71 22-5AB00
	Assembling kit for vertical BY-PASS door interlock handle included for 3KL71 1 for 3KL71 2 for 3KL71 3 for 3KL71 4 for 3KL71 5	3KX71 23-1AB00 3KX71 23-2AB00 3KX71 23-3AB00 3KX71 23-4AB00 3KX71 23-5AB00
	Fixing bars for change-over and 6 / 8 poles switches for 3KL71 1 for 3KL71 2 for 3KL71 3 for 3KL71 4 for 3KL71 5	3KX71 63-1AA00 3KX71 63-2AA00 3KX71 63-3AA00 3KX71 63-4AA00 3KX71 63-5AA00
	Fixing bars for BY-PASS for 3KL71 1 for 3KL71 2 for 3KL71 3 for 3KL71 4 for 3KL71 5	3KX71 64-1AA00 3KX71 64-2AA00 3KX71 64-3AA00 3KX71 64-4AA00 3KX71 64-5AA00
	Shaft extension for change-over switches 100 mm, square 8 mm for 3KL71 1, 3KL71 2 100 mm, square 10 mm for 3KL71 3 100 mm, square 12 mm for 3KL71 4, 3KL71 5	3KX71 16-2BA00 3KX71 16-3BA00 3KX71 16-5BA00
	200 mm, square 8 mm for 3KL71 1, 3KL71 2 200 mm, square 10 mm for 3KL71 3 200 mm, square 12 mm for 3KL71 4, 3KL71 5	3KX71 16-2BB00 3KX71 16-3BB00 3KX71 16-5BB00
	Fuse melting detector	3RV1611-0BD10 + 3RV1901-1E

On request:
 - Switches with tripping device from 315A up to 800A.