

AC Modular switch - disconnectors and changeover switches

Modular switch – disconnectors and changeover switches of reduced size, available in different fixation types with a wide range of currents and a variety of accessories.

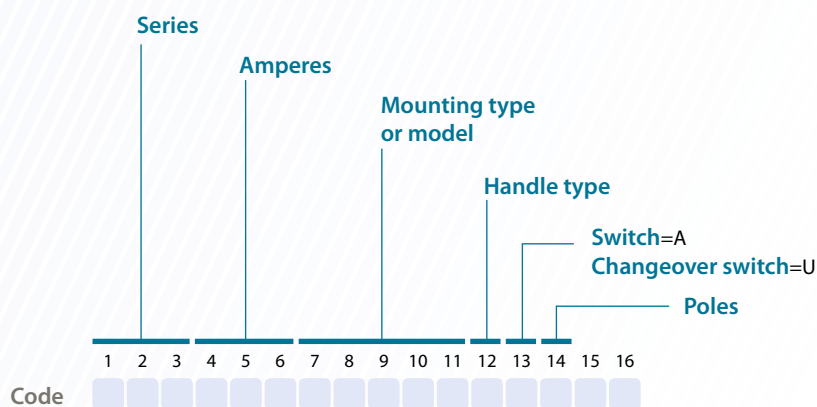


The ZBK switch - disconnectors are 3, 4, 6 and 8-pole modular devices with a high breaking capacity and contact pressure, which respond well to short circuits. They are designed for use in low voltage civil and industrial machines and facilities and made of different models depending on the type of mounting. Manufactured under strict quality controls to provide a reliable product that meets the most demanding requirements.

The ZBK series also includes a range of 1-0-2 changeover switches plus applications with plastic enclosures and various accessories.

Range codification:

The **ZBK** series, are identified by a code that describes their most important characteristics as described below.



According to:
VDE 0660, IEC 60947-3, IEC 60947-5-1
UL & cUL
RoHS



Testing and approvals:



series ZBK O-I



Door mounting fixing by screws.
Two sizes of padlockable handles .
Auxiliary terminals and other accessories.

Base mounting fixing by screws or DIN rail and handle ø22
Two sizes of padlockable handles .
Shaft extension depth-adjustable.
Auxiliary terminals and other accessories.

Base mounting fixing by screws or DIN rail.
Direct handle (modular) with lock .
Auxiliary terminals and other accessories.

series ZBK I-O-II



Modular switch in plastic enclosure (sealable).
Padlockable handles .

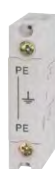


Base mounting fixing by screws or DIN rail.
Direct handle (modular) with lock .
Supplied with bridging links included.
Auxiliary terminals and other accessories.

Accessories



Auxiliary contacts



PE - Terminal



N - Terminal



N - Fixed neutral



Shaft extensions

ZBK

Switch door mounting with padlockable handle IP66

3P - 3P+N

Size 0

A 20|25|40|63|80|125



		CODE - 20A	CODE - 25A	CODE - 40A	CODE - 63A	CODE - 80A	CODE - 125A
64	3P	ZBK20EHN4A3	ZBK25EHN4A3	ZBK40EHN4A3	ZBK63EHN4A3	ZBK80EHN4A3	ZBK125EHN4A3
	3P + N	ZBK20EHN4A4	ZBK25EHN4A4	ZBK40EHN4A4	ZBK63EHN4A4	ZBK80EHN4A4	ZBK125EHN4A4
	3P	ZBK20EH4A3	ZBK25EH4A3	ZBK40EH4A3	ZBK63EH4A3	ZBK80EH4A3	ZBK125EH4A3
	3P + N	ZBK20EH4A4	ZBK25EH4A4	ZBK40EH4A4	ZBK63EH4A4	ZBK80EH4A4	ZBK125EH4A4
48	3P	ZBK20EHN1A3	ZBK25EHN1A3	ZBK40EHN1A3	ZBK63EHN1A3	ZBK80EHN1A3	-
	3P + N	ZBK20EHN1A4	ZBK25EHN1A4	ZBK40EHN1A4	ZBK63EHN1A4	ZBK80EHN1A4	-
	3P	ZBK20EH1A3	ZBK25EH1A3	ZBK40EH1A3	ZBK63EH1A3	ZBK80EH1A3	-
	3P + N	ZBK20EH1A4	ZBK25EH1A4	ZBK40EH1A4	ZBK63EH1A4	ZBK80EH1A4	-

Technical information



According to VDE 0660, IEC 60947-3, IEC 60947-5-1

			20	25	40	63	80	125
Rated thermal current	I _{th}	A	20	25	40	63	80	125
Rated thermal current enclosed	I _{the}	A	20	25	40	63	80	110
Rated insulation voltage	U _i	V	690	690	690	690	690	1000
Rated impulse withstand voltage	U _{imp}	kV	6	6	6	6	6	8
AC rated operational current	I _e	AC21A	20	25	40	63	80	125
Making capacity	I _{eff}	3x380-440V	160	190	300	370	440	850
Breaking capacity		3x220-240V	160	180	250	330	380	680
		3x380-440V	160	180	250	330	380	680
		3x660-690V	80	110	170	190	220	420
Direct switching motors	AC3	3x400V	12	16	30	37	37	72
	AC3	3x220-240V	3	4	7,5	11	11	22
		3x380-440V	5,5	7,5	15	18,5	18,5	37
		3x660-690V	5,5	7,5	15	18,5	18,5	30
Main & safety switch	AC23	3x400V	16	20	32	45	45	85
	AC23A	3x220-240V	4	5,5	9	15	15	30
	AC23B	3x380-440V	7,5	10	16	22	22	45
		3x660-690V	5,5	7,5	15	18,5	18,5	37
Rated conditional short-circuit current		kA _{eff}	10	10	10	10	10	10
Max. fuse size	gL(gG)	A	25	35	50	63	80	125
Rated short-time withstand current (1sec.)	I _{cw}	A	250	300	500	600	850	1500
Mechanical life		x10 ³	200	200	200	100	100	100
Connecting capacity								
Solid or stranded cable		mm ²	0,5-10		1-25 ^{*(1)}		4-50	
		AWG	20-8 (10)		16-4 (10)		10-0 (10)	
Flexible cable		mm ²	0,5-6		4-16 ^{*(1)}		10-35	
		AWG	20-10		16-6		8-2	
Size of terminal screw			M3,5		M5		M6	
Tightening torque		Nm	0,8-1,7		2-4		3,5-4,5	

According to UL & cUL FILE NO. E123623

			20	25	40	63	80	125
Rated voltage		V	600	600	600	600	600	600
Ampere-Rating "General use"		A	20	25	40	63	80	125
DOL-Rating 3-phase		110-220V	1	1,5	2	3	5	15
		220-240V	3	5	5	10	10	30
		440-480V	7,5	10	10	20	20	60
		550-600V	10	10	15	25	25	60
DOL-Rating 1-phase		110-120V	1	1	1	2	2	7,5
		200-208V	1	2	2	3	3	10
		220-240V	2	2	3	5	5	15
Fuse size (RK5)	Manual Motor Controller	A	40	50	70	90	110	125
5kA / 600V	Motor Disconnect	A	40	50	50	70	70	125
Tightening torque		Nm	1,2-2,3	1,2-2,3	1,2-2,3	2,8-4	2,8-4	1,7-4,5
		lb.Inch	11-20	11-20	11-20	24-35	24-35	15-40

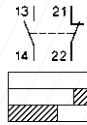
*⁽¹⁾ ZBK63___U stranded 16 mm² / flexible 10 mm²

Accessories

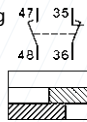
» Auxiliary contacts



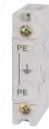
1NO+1NC

A
20
125CODE
ZBKLH11main contact
NC aux contact
NO aux contact

1NO+1NC overlapping

A
20
125CODE
ZBKLH11Xmain contact
NC aux contact
NO aux contact

» PE - Terminal

PE
PEA
20
80

CODE

ZBKPE80E

» N - Terminal

N
N1A
20
40

CODE

ZBKN40E

A
63
80

CODE

ZBKN80E

» N - Fixed neutral

N
NA
20
80

CODE

ZBKPEN80E

Auxiliary contacts technical information

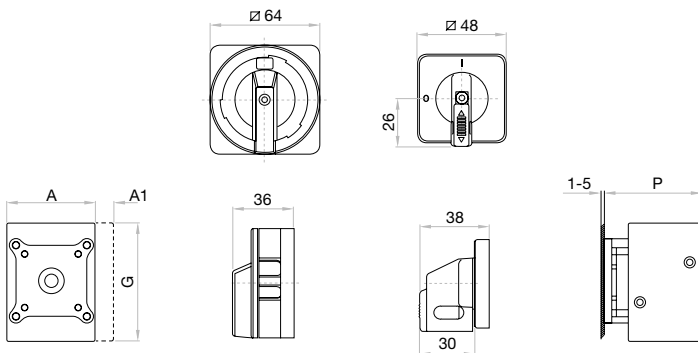
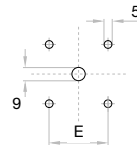
Rated insulation voltage	Ui	V	690	
Rated thermal current	Ith - Ithe	A	10	
Switching capacity	AC15	220-240V	A	2,5
	AC15	380-440V	A	1,5
Rated conditional short-circuit current		kAeff	3	
Max. short circuit protection	gL(gG)	A	10	

Connecting capacity

Solid or stranded cable	mm ²	0,75-2,5
	AWG	14-12
Flexible cable (+ multicore cable end)	mm ²	0,75-2,5 (1,5)
	AWG	18-14

Dimensions (mm)

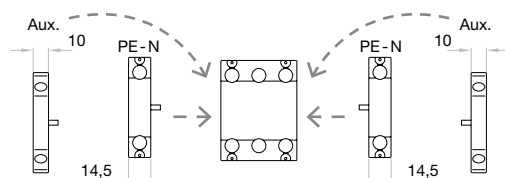
Door drilling for external handle



	3P		4P		E	G	P
	A	A	A	A			
20-80 A □ 48	48	62,5	36	64	54		
20-80 A □ 64	48	62,5	48	64	54		
125 A □ 64	78	78	48	85	60		

Auxiliary contacts

A1



- » Other options also available on request:
- Products external mounting fixing ø22
 - Terminal shrouds

ZBK

Switch base mounting ø 22 door clutch padlockable handle IP66

3P - 3P+N

Size 0

A 20|25|40|63|80|125



		CODE - 20A	CODE - 25A	CODE - 40A	CODE - 63A	CODE - 80A	CODE - 125A
64	3P	ZBK20VZVHN4A3	ZBK25VZVHN4A3	ZBK40VZVHN4A3	ZBK63VZVHN4A3	ZBK80VZVHN4A3	ZBK125VZVHN4A3
	3P + N	ZBK20VZVHN4A4	ZBK25VZVHN4A4	ZBK40VZVHN4A4	ZBK63VZVHN4A4	ZBK80VZVHN4A4	ZBK125VZVHN4A4
	3P	ZBK20VZVH4A3	ZBK25VZVH4A3	ZBK40VZVH4A3	ZBK63VZVH4A3	ZBK80VZVH4A3	ZBK125VZVH4A3
	3P + N	ZBK20VZVH4A4	ZBK25VZVH4A4	ZBK40VZVH4A4	ZBK63VZVH4A4	ZBK80VZVH4A4	ZBK125VZVH4A4
48	3P	-	ZBK25VZVHN1A3	ZBK40VZVHN1A3	ZBK63VZVHN1A3	ZBK80VZVHN1A3	ZBK125VZVHN1A3
	3P + N	-	ZBK25VZVHN1A4	ZBK40VZVHN1A4	ZBK63VZVHN1A4	ZBK80VZVHN1A4	ZBK125VZVHN1A4
	3P	-	ZBK25VZVH1A3	ZBK40VZVH1A3	ZBK63VZVH1A3	ZBK80VZVH1A3	ZBK125VZVH1A3
	3P + N	-	ZBK25VZVH1A4	ZBK40VZVH1A4	ZBK63VZVH1A4	ZBK80VZVH1A4	ZBK125VZVH1A4

Technical information



3P

3P + N

According to VDE 0660, IEC 60947-3, IEC 60947-5-1

			20	25	40	63	80	125
Rated thermal current	I _{th}	A	20	25	40	63	80	125
Rated thermal current enclosed	I _{the}	A	20	25	40	63	80	110
Rated insulation voltage	U _i	V	690	690	690	690	690	1000
Rated impulse withstand voltage	U _{imp}	kV	6	6	6	6	6	8
AC rated operational current	I _e	AC21A	20	25	40	63	80	125
Making capacity	I _{eff}	3x380-440V	160	190	300	370	440	850
Breaking capacity		3x220-240V	160	180	250	330	380	680
		3x380-440V	160	180	250	330	380	680
		3x660-690V	80	110	170	190	220	420
		3x400V	12	16	30	37	37	72
Direct switching motors	AC3	3x220-240V	3	4	7,5	11	11	22
		3x380-440V	5,5	7,5	15	18,5	18,5	37
		3x660-690V	5,5	7,5	15	18,5	18,5	30
		3x400V	16	20	32	45	45	85
Main & safety switch	AC23A	3x220-240V	4	5,5	9	15	15	30
	AC23B	3x380-440V	7,5	10	16	22	22	45
		3x660-690V	5,5	7,5	15	18,5	18,5	37
		3x400V	16	20	32	45	45	85
Rated conditional short-circuit current		kA _{eff}	10	10	10	10	10	10
Max. fuse size	gL(gG)	A	25	35	50	63	80	125
Rated short-time withstand current (1sec.)	I _{cw}	A	250	300	500	600	850	1500
Mechanical life		x10 ³	200	200	200	100	100	100
Connecting capacity								
Solid or stranded cable		mm ²	0,5-10			1-25 ^{*(1)}		4-50
		AWG	20-8 (10)			16-4 (10)		10-0 (10)
Flexible cable		mm ²	0,5-6			4-16 ^{*(1)}		10-35
		AWG	20-10			16-6		8-2
Size of terminal screw			M3,5			M5		M6
Tightening torque		Nm	0,8-1,7			2-4		3,5-4,5

According to UL & cUL FILE NO. E123623

			20	25	40	63	80	125
Rated voltage		V	600	600	600	600	600	600
Ampere-Rating "General use"		A	20	25	40	63	80	125
DOL-Rating 3-phase	110-220V	HP	1	1,5	2	3	5	15
	220-240V	HP	3	5	5	10	10	30
	440-480V	HP	7,5	10	10	20	20	60
	550-600V	HP	10	10	15	25	25	60
DOL-Rating 1-phase	110-120V	HP	1	1	1	2	2	7,5
	200-208V	HP	1	2	2	3	3	10
	220-240V	HP	2	2	3	5	5	15
Fuse size (RK5)	Manual Motor Controller	A	40	50	70	90	110	125
5kA / 600V	Motor Disconnect	A	40	50	50	70	70	125
Tightening torque		Nm	1,2-2,3	1,2-2,3	1,2-2,3	2,8-4	2,8-4	1,7-4,5
		lb.Inch	11-20	11-20	11-20	24-35	24-35	15-40

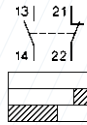
*(1) ZBK63__U stranded 16 mm² / flexible 10 mm²

Accessories

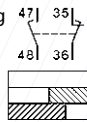
» Auxiliary contacts



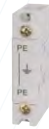
1NO+1NC

A
20
125CODE
ZBK^{LH}11main contact
NC aux contact
NO aux contact

1NO+1NC overlapping

A
20
125CODE
ZBK^{LH}11Xmain contact
NC aux contact
NO aux contact

» PE - Terminal

PE
PEA
20
80CODE
ZBK^{PE}80V

» N - Terminal

N
N1A
20
40CODE
ZBK^N40VA
63
80CODE
ZBK^N80V

» N - Fixed neutral

N
NA
20
80CODE
ZBK^{PE}N80V

» Shaft extensions

A
20
125CÓDIGO
ZBK-0002
ZBK-0003L
200
300

Auxiliary contacts technical information

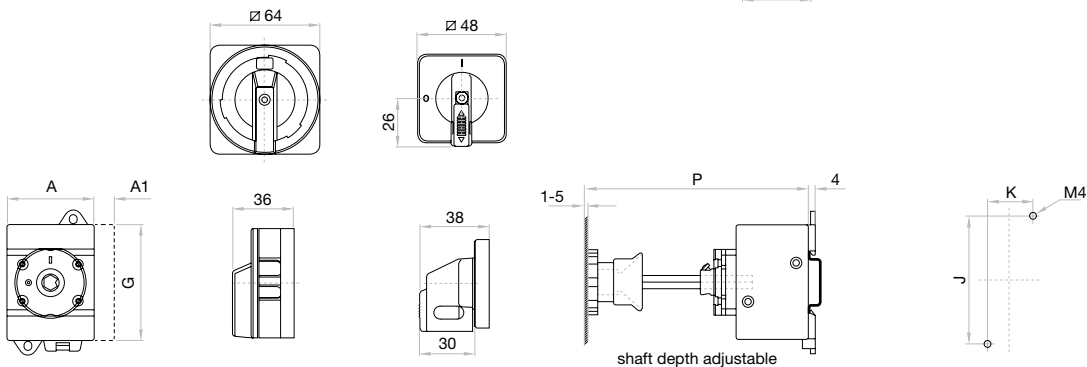
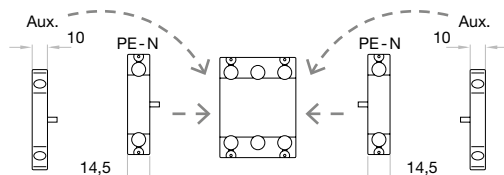
Rated insulation voltage	Ui	V	690
Rated thermal current	Ith - Ithe	A	10
Switching capacity	AC15	220-240V	A
	AC15	380-440V	A
Rated conditional short-circuit current		kAeff	3
Max. short circuit protection	gL(gG)	A	10

Connecting capacity

Solid or stranded cable	mm ²	0,75-2,5
	AWG	14-12
Flexible cable (+ multicore cable end)	mm ²	0,75-2,5 (1,5)
	AWG	18-14

Dimensions (mm)

Door drilling for external handle

Auxiliary contacts
A1

	3P		4P		G	J	K	P	
	A	A	A	A				min	max
20 - 40 A	48	48	64	70	25	91	190		
63 - 80 A	48	62,5	64	70	25	91	190		
125 A	78	78	85	90	38	95	190		

- » Other options also available on request:
- Products with customized shaft dimensions (L max = 400mm)
 - Terminal shrouds

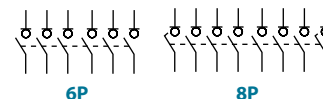
ZBK**Switch base mounting ø 22
door clutch padlockable handle IP66****6P - 8P**

Size 0

A 25|40|80



		CODE - 25A	CODE - 40A	CODE - 80A
	6P	ZBK25VZVHN4A6	ZBK40VZVHN4A6	ZBK80VZVHN4A6
	8P	ZBK25VZVHN4A8	ZBK40VZVHN4A8	ZBK80VZVHN4A8
	6P	ZBK25VZVH4A6	ZBK40VZVH4A6	ZBK80VZVH4A6
	8P	ZBK25VZVH4A8	ZBK40VZVH4A8	ZBK80VZVH4A8

Technical information

According to VDE 0660, IEC 60947-3, IEC 60947-5-1

				25	40	80
Rated thermal current	I _{th}	A		25	40	80
Rated thermal current enclosed	I _{the}	A		25	40	80
Rated insulation voltage	U _i	V		690	690	690
Rated impulse withstand voltage	U _{imp}	kV		6	6	6
AC rated operational current	I _e	AC21A	A	25	40	80
Making capacity	I _{eff}	3x380-440V	A	190	300	440
Breaking capacity		3x220-240V	A	180	250	380
		3x380-440V	A	180	250	380
		3x660-690V	A	110	170	220
		3x400V	A	16	30	37
Direct switching motors	AC3	3x220-240V	kW	4	7,5	11
		3x380-440V	kW	7,5	15	18,5
		3x660-690V	kW	7,5	15	18,5
		3x400V	A	20	32	45
Main & safety switch	AC23A	3x220-240V	kW	5,5	9	15
		3x380-440V	kW	10	16	22
		3x660-690V	kW	7,5	15	18,5
		3x400V	A	20	32	45
Rated conditional short-circuit current		kA _{eff}		10	10	10
Max. fuse size	gL(gG)	A		35	50	80
Rated short-time withstand current (1sec.)	I _{cw}	A		300	500	850
Mechanical life		x10 ³		200	200	100
Connecting capacity						
Solid or stranded cable		mm ²		0,5-10		1-25
		AWG		20-8 (10)		16-4 (10)
Flexible cable		mm ²		0,5-6		4-16
		AWG		20-10		16-6
Size of terminal screw				M3,5		M5
Tightening torque		Nm		0,8-1,7		2-4

According to UL & cUL FILE NO. E123623

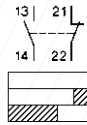
				25	40	80
Rated voltage		V		600	600	600
Ampere-Rating "General use"		A		25	40	80
DOL-Rating 3-phase	110-220V	HP		1,5	2	5
	220-240V	HP		5	5	10
	440-480V	HP		10	10	20
	550-600V	HP		10	15	25
	110-120V	HP		1	1	2
DOL-Rating 1-phase	200-208V	HP		2	2	3
	220-240V	HP		2	3	5
	220-240V	HP		2	3	5
Fuse size (RK5)	Manual Motor Controller	A		50	70	110
5kA / 600V	Motor Disconnect	A		50	50	70
Tightening torque		Nm		1,2-2,3	1,2-2,3	2,8-4
		lb.Inch		11-20	11-20	24-35

Accessories

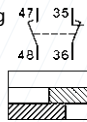
» Auxiliary contacts



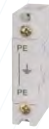
1NO+1NC

A
25
80CODE
ZBKLH11main contact
NC aux contact
NO aux contact

1NO+1NC overlapping

A
25
80CODE
ZBKLH11Xmain contact
NC aux contact
NO aux contact

» PE - Terminal

PE
PEA
25
80CODE
ZBKPE80V

» N - Terminal

N
N1A
25
40CODE
ZBKN40VA
80CODE
ZBKN80V

» N - Fixed neutral

N
NA
25
80CODE
ZBKPEN80V

» Shaft extensions



L (mm)

A
20
125CÓDIGO
ZBK-0002
ZBK-0003L
200
300

Auxiliary contacts technical information

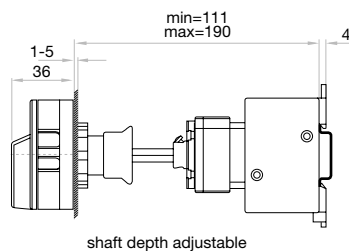
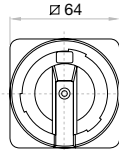
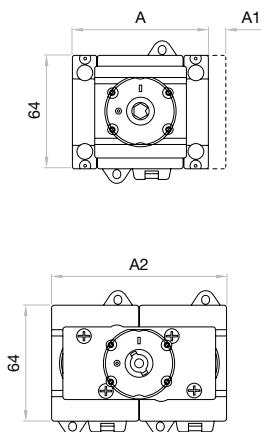
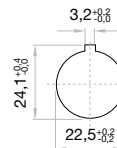
Rated insulation voltage	Ui	V	690	
Rated thermal current	Ith - Ithe	A	10	
Switching capacity	AC15	220-240V	A	2,5
	AC15	380-440V	A	1,5
Rated conditional short-circuit current		kAeff	3	
Max. short circuit protection	gL(gG)	A	10	

Connecting capacity

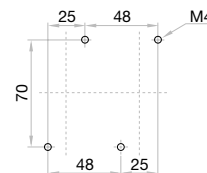
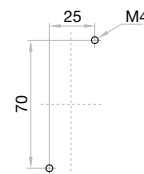
Solid or stranded cable	mm ²	0,75-2,5
	AWG	14-12
Flexible cable (+ multicore cable end)	mm ²	0,75-2,5 (1,5)
	AWG	18-14

Dimensions (mm)

Door drilling for external handle



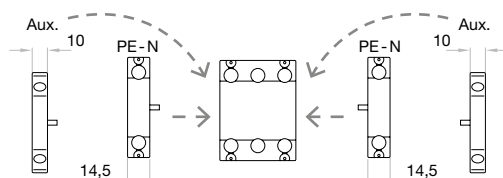
shaft depth adjustable



	6P A	6P A2	8P A2
25 - 40 A	77	-	97
80 A	-	97	126

Auxiliary contacts

A1



- » Other options also available on request:
- Products with customized shaft dimensions (L max = 400mm)
 - Terminal shrouds

ZBK

Switch & changeover

DIN rail mounting modular padlockable handle IP40 3P - 3P+N - 6P - 8P

Size 0

A 20|25|40|63|80|125



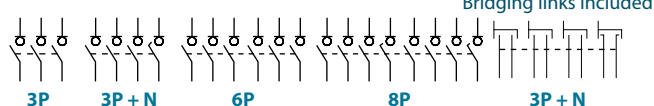
Switch



Changeover

		CODE - 20A	CODE - 25A	CODE - 40A	CODE - 63A	CODE - 80A	CODE - 125A
Switch	3P	ZBK20SMAHN1A3	ZBK25SMAHN1A3	ZBK40SMAHN1A3	ZBK63SMAHN1A3	ZBK80SMAHN1A3	ZBK125SMAHN1A3
	3P + N	ZBK20SMAHN1A4	ZBK25SMAHN1A4	ZBK40SMAHN1A4	ZBK63SMAHN1A4	ZBK80SMAHN1A4	ZBK125SMAHN1A4
	3P	ZBK20SMAH1A3	ZBK25SMAH1A3	ZBK40SMAH1A3	ZBK63SMAH1A3	ZBK80SMAH1A3	ZBK125SMAH1A3
	3P + N	ZBK20SMAH1A4	ZBK25SMAH1A4	ZBK40SMAH1A4	ZBK63SMAH1A4	ZBK80SMAH1A4	ZBK125SMAH1A4
	6P	-	ZBK25SMAHN1A6	ZBK40SMAHN1A6	-	ZBK80SMAHN1A6	-
	8P	-	ZBK25SMAHN1A8	ZBK40SMAHN1A8	-	ZBK80SMAHN1A8	-
	6P	-	ZBK25SMAH1A6	ZBK40SMAH1A6	-	ZBK80SMAH1A6	-
	8P	-	ZBK25SMAH1A8	ZBK40SMAH1A8	-	ZBK80SMAH1A8	-
Changeover	3P + N	ZBK20SMAH1U4	ZBK25SMAH1U4	ZBK40SMAH1U4	ZBK63SMAH1U4	-	-

Technical information



Bridging links included

According to VDE 0660, IEC 60947-3, IEC 60947-5-1

			20	25	40	63	80	125
Rated thermal current	I _{th}	A	20	25	40	63	80	125
Rated thermal current enclosed	I _{the}	A	20	25	40	63	80	110
Rated insulation voltage	U _i	V	690	690	690	690	690	1000
Rated impulse withstand voltage	U _{imp}	kV	6	6	6	6	6	8
AC rated operational current	I _e	AC21A	20	25	40	63	80	125
Making capacity	I _{eff}	3x380-440V	160	190	300	370	440	850
Breaking capacity		3x220-240V	160	180	250	330	380	680
		3x380-440V	160	180	250	330	380	680
		3x660-690V	80	110	170	190	220	420
Direct switching motors	AC3	3x400V	12	16	30	37	37	72
	AC3	3x220-240V	3	4	7,5	11	11	22
		3x380-440V	5,5	7,5	15	18,5	18,5	37
		3x660-690V	5,5	7,5	15	18,5	18,5	30
Main & safety switch	AC23	3x400V	16	20	32	45	45	85
	AC23A	3x220-240V	4	5,5	9	15	15	30
	AC23B	3x380-440V	7,5	10	16	22	22	45
		3x660-690V	5,5	7,5	15	18,5	18,5	37
Rated conditional short-circuit current		kA _{eff}	10	10	10	10	10	10
Max. fuse size	gL(gG)	A	25	35	50	63	80	125
Rated short-time withstand current (1sec.)	I _{cw}	A	250	300	500	600	850	1500
Mechanical life		x10 ³	200	200	200	100	100	100
Connecting capacity								
Solid or stranded cable		mm ²	0,5-10			1-25 ^{*(1)}		4-50
		AWG	20-8 (10)			16-4 (10)		10-0 (10)
Flexible cable		mm ²	0,5-6			4-16 ^{*(1)}		10-35
		AWG	20-10			16-6		8-2
Size of terminal screw		M3,5				M5		M6
Tightening torque		Nm	0,8-1,7			2-4		3,5-4,5

According to UL & cUL FILE NO. E123623

			20	25	40	63	80	125
Rated voltage		V	600	600	600	600	600	600
Ampere-Rating "General use"		A	20	25	40	63	80	125
DOL-Rating 3-phase	110-220V	HP	1	1,5	2	3	5	15
	220-240V	HP	3	5	5	10	10	30
	440-480V	HP	7,5	10	10	20	20	60
	550-600V	HP	10	10	15	25	25	60
DOL-Rating 1-phase	110-120V	HP	1	1	1	2	2	7,5
	200-208V	HP	1	2	2	3	3	10
	220-240V	HP	2	2	3	5	5	15
Fuse size (RK5)	Manual Motor Controller	A	40	50	70	90	110	125
5kA / 600V	Motor Disconnect	A	40	50	50	70	70	125
Tightening torque		Nm	1,2-2,3	1,2-2,3	1,2-2,3	2,8-4	2,8-4	1,7-4,5
		lb.Inch	11-20	11-20	11-20	24-35	24-35	15-40

*⁽¹⁾ ZBK63___U stranded 16 mm² / flexible 10 mm²

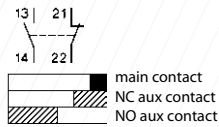
Accessories



» Auxiliary contacts

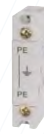
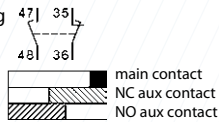
1NO+1NC
A 20
125

CODE
ZBKLH11



1NO+1NC overlapping
A 20
125

CODE
ZBKLH11X



» PE - Terminal



A 20
80

CODE
ZBKPE80V



» N - Fixed neutral

N
N

A 20
80

CODE
ZBKPEN80V

Auxiliary contacts technical information

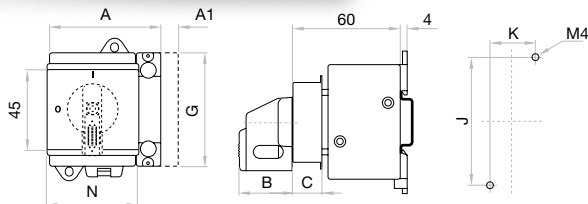
Rated insulation voltage	Ui	V	690
Rated thermal current	Ith - Ithe	A	10
Switching capacity	AC15	220-240V	A
	AC15	380-440V	A
Rated conditional short-circuit current		kAeff	3
Max. short circuit protection	gL(gG)	A	10

Connecting capacity

Solid or stranded cable	mm ²	0,75-2,5
	AWG	14-12
Flexible cable (+ multicore cable end)	mm ²	0,75-2,5 (1,5)
	AWG	18-14

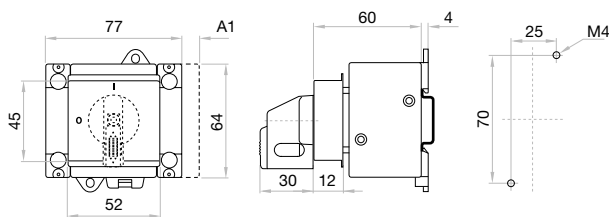
Dimensions (mm)

Switch

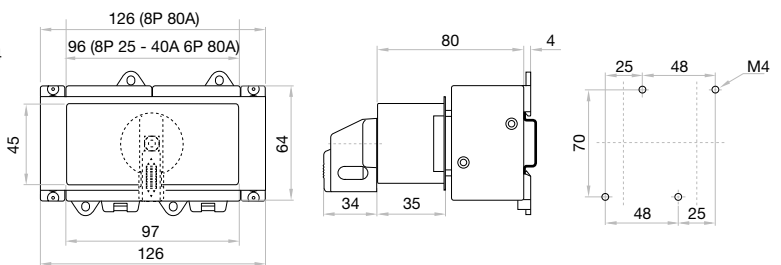
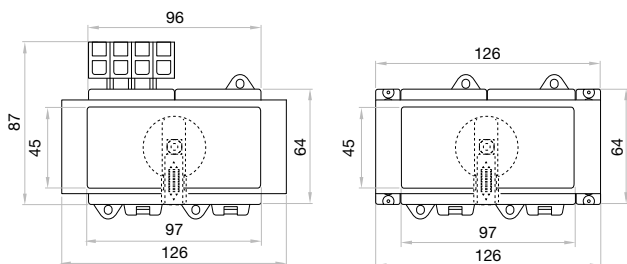


3P-4P 20-125A

	3P		4P								
	A	A	B	C	G	J	K	N			
20-40 A	48	48	30	12	64	70	25	52			
63-80 A	48	62,5	30	12	64	70	25	52			
125 A	78	78	35	10	85	90	38	78			



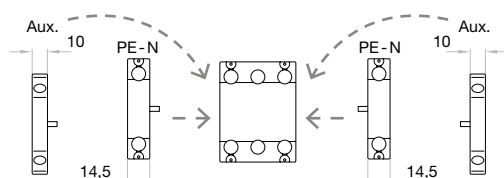
6P 25-40A

8P 25-40A
6P-8P 80A

20-40A

63A

Changeover

Auxiliary contacts
A1

- » Other options also available on request:
- Terminal shrouds
 - 3P changeovers

ZBK

Switch plastic enclosure padlockable handle IP66

Size 0
A 20|25|40|63|80|125

3P - 3P+N - 6P - 8P

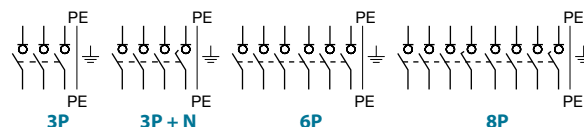


3P-3P+N

6P-8P

	CODE-20A	CODE-25A	CODE-40A	CODE-63A	CODE-80A	CODE-125A
3P	ZBK20PFHN4A3	ZBK25PFHN4A3	ZBK40PFHN4A3	ZBK63PFLHN4A3	ZBK80PFLHN4A3	ZBK125PFLHN4A3
3P + N	ZBK20PFHN4A4	ZBK25PFHN4A4	ZBK40PFHN4A4	ZBK63PFLHN4A4	ZBK80PFLHN4A4	ZBK125PFLHN4A4
6P	-	ZBK25PFLHN4A6	ZBK40PFLHN4A6	-	ZBK80PFLHN4A6	-
8P	-	ZBK25PFLHN4A8	ZBK40PFLHN4A8	-	ZBK80PFLHN4A8	-

Technical information



According to VDE 0660, IEC 60947-3, IEC 60947-5-1

			20	25	40	63	80	125
Rated thermal current	I _{th}	A	20	25	40	63	80	125
Rated thermal current enclosed	I _{the}	A	20	25	40	63	80	110
Rated insulation voltage	U _i	V	690	690	690	690	690	1000
Rated impulse withstand voltage	U _{imp}	kV	6	6	6	6	6	8
AC rated operational current	I _e	AC21A	20	25	40	63	80	125
Making capacity	I _{eff}	3x380-440V	160	190	300	370	440	850
Breaking capacity		3x220-240V	160	180	250	330	380	680
		3x380-440V	160	180	250	330	380	680
		3x660-690V	80	110	170	190	220	420
Direct switching motors	AC3	3x400V	12	16	30	37	37	72
	AC3	3x220-240V	3	4	7,5	11	11	22
		3x380-440V	5,5	7,5	15	18,5	18,5	37
		3x660-690V	5,5	7,5	15	18,5	18,5	30
Main & safety switch	AC23	3x400V	16	20	32	45	45	85
	AC23A	3x220-240V	4	5,5	9	15	15	30
	AC23B	3x380-440V	7,5	10	16	22	22	45
		3x660-690V	5,5	7,5	15	18,5	18,5	37
Rated conditional short-circuit current		kA _{eff}	10	10	10	10	10	10
Max. fuse size	gL(gG)	A	25	35	50	63	80	125
Rated short-time withstand current (1sec.)	I _{cw}	A	250	300	500	600	850	1500
Mechanical life		x10 ³	200	200	200	100	100	100
Connecting capacity								
Solid or stranded cable		mm ²	0,5-10			1-25 ^{*(1)}		4-50
		AWG	20-8 (10)			16-4 (10)		10-0 (10)
Flexible cable		mm ²	0,5-6			4-16 ^{*(1)}		10-35
		AWG	20-10			16-6		8-2
Size of terminal screw			M3,5			M5		M6
Tightening torque		Nm	0,8-1,7			2-4		3,5-4,5

According to UL & cUL FILE NO. E123623

			20	25	40	63	80	125
Rated voltage		V	600	600	600	600	600	600
Ampere-Rating "General use"		A	20	25	40	63	80	125
DOL-Rating 3-phase		110-220V	1	1,5	2	3	5	15
		220-240V	3	5	5	10	10	30
		440-480V	7,5	10	10	20	20	60
		550-600V	10	10	15	25	25	60
DOL-Rating 1-phase		110-120V	1	1	1	2	2	7,5
		200-208V	1	2	2	3	3	10
		220-240V	2	2	3	5	5	15
Fuse size (RK5)	Manual Motor Controller	A	40	50	70	90	110	125
5kA / 600V	Motor Disconnect	A	40	50	50	70	70	125
Tightening torque		Nm	1,2-2,3	1,2-2,3	1,2-2,3	2,8-4	2,8-4	1,7-4,5
		lb.Inch	11-20	11-20	11-20	24-35	24-35	15-40

*(1) ZBK63___U stranded 16 mm² / flexible 10 mm²

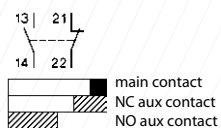
Accessories



>> Auxiliary contacts ^{*(a1)}

1NO+1NC
A
20
125

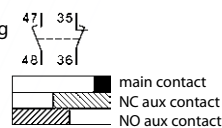
CODE
ZBKLH11



>> Auxiliary contacts ^{*(a1)}

1NO+1NC overlapping
A
20
125

CODE
ZBKLH11X



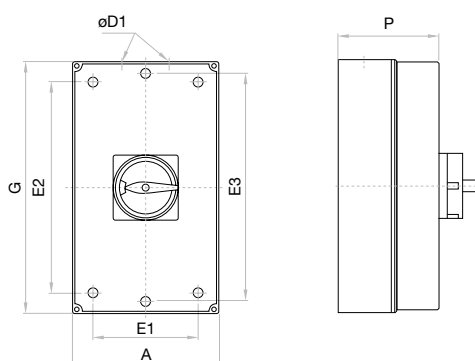
Auxiliary contacts technical information

Rated insulation voltage	Ui	V	690	
Rated thermal current	Ith - Ithe	A	10	
Switching capacity	AC15	220-240V	A	2,5
	AC15	380-440V	A	1,5
Rated conditional short-circuit current		kAeff	3	
Max. short circuit protection	gL(gG)	A	10	

Connecting capacity

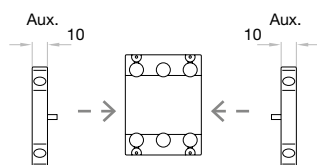
Solid or stranded cable	mm ²	0,75-2,5
	AWG	14-12
Flexible cable (+ multicore cable end)	mm ²	0,75-2,5 (1,5)
	AWG	18-14

Dimensions (mm)



		A	D1	E1	E2	E3	G	P
20 - 40 A	3/4P	98	2 x 25,5/20,5/16,5/12,5	75	150	170	180	76
63 - 125 A	3/4P	140	40,5/32,5 + 16,5 + 12,5	100	160	188,5	200	86
25 - 40 A	6P	140	40,5/32,5 + 16,5 + 12,5	100	160	188,5	200	86
25 - 40 A	8P	176	2x40,5 / 32,5	120	200	228,5	240	120
80 A	6/8P	176	2x40,5 / 32,5	120	200	228,5	240	120

Auxiliary contacts ^{*(a1)}



^{*(a1)} Standard enclosure capacity switch + 1 aux.
For other needs please consult.

>> Other options also available on request:
- Changeovers
- Black/grey handle