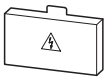
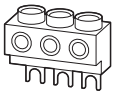
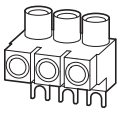
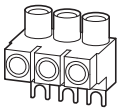
	Circuit-breakers	For use with	Unit width	Part no. Article no.	Price See price list	Std. pack	Notes
	Number		mm				
Shroud for unused terminals							
Protection against direct contact. For covering unused terminals on three-phase commoning link B3...-PKZ0							
	–	–	–	**H-B3-PKZ0**[1] 032721		20 off	–
Incoming terminals							
	–	PKZM0 PKE	–	**BK25/3-PKZ0**[2] 032720		5 off	For three-phase commoning link, protected against accidental contact, U_e = 690 V, I_u = 63 A For conductor cross-sections: 2.5 - 25 mm² stranded 2.5 - 16 mm² flexible with ferrule AWG 14 - 6, usable on terminals 1, 3, and 5
	–	PKZM0	–	**BK25/3-PKZ0-E**[3] 262518		5 off	For three-phase commoning link, protected against accidental contact, U_e = 690 V, I_u = 60 A For conductor cross-sections: 2.5 - 25 mm² stranded 2.5 - 16 mm² flexible with ferrule AWG 14 - 6 For assembly of Type E starters.
	–	PKZM4	–	**BK50/3-PKZ4-E**[4] 272165		1 off	Can be combined with three-phase commoning link B3…PKZ4. I_u = 120 A. For assembly of Type E starters.

Information relevant for export to North America

1)

Product Standards	UL 508; CSA-C22.2 No. 14; IEC60947-4-1; CE marking
UL File No.	E36332
UL CCN	NLRV
CSA File No.	98494
CSA Class No.	3211-06
NA Certification	UL Listed, CSA certified

2)

Product Standards	UL 508; CSA-C22.2 No. 14; IEC60947-4-1; CE marking
UL File No.	E36332
UL CCN	NLRV
CSA File No.	12528
CSA Class No.	3211-05
NA Certification	UL Listed, CSA certified

3)

Product Standards	UL 508; CSA-C22.2 No. 14; IEC60947-4-1; CE marking
UL File No.	E36332
UL CCN	NLRV
CSA File No.	98494
CSA Class No.	3211-06
NA Certification	UL Listed, CSA certified
Specially designed for NA	✓
Suitable for	PKZM0/PKE, line terminal required for Type E/F applications

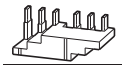
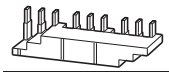
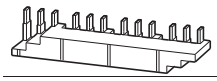
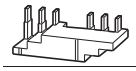
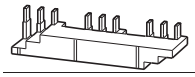
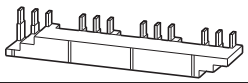
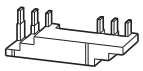
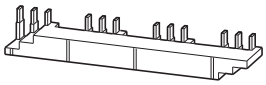
4)

Product Standards	UL 508; CSA-C22.2 No. 14; IEC60947-4-1; CE marking
UL File No.	E36332
UL CCN	NLRV
CSA File No.	12528
CSA Class No.	3211-06
NA Certification	UL Listed, CSA certified
Specially designed for NA	✓
Suitable for	PKZM4/PKE, line terminal required for Type E/F applications

Three-phase commoning links

B3...PKZ0-U, B3...-PKZ4

HPL07028EN

	Circuit-breakers Number	Length mm	Unit width mm	**Part no.** Article no.	**Price** See price list	Std. pack	**Information relevant for export to North America**
Three-phase commoning links							
Finger- and back-of-hand-proof, short-circuit proof U_e= 690 V, I_u= 128 A							
For PKZM4 without side-mounted auxiliary contacts or voltage releases							
	2	110	55	**B3.0/2-PKZ4** 220220		1 off	Product Standards UL 508; CSA-C22.2 No. 14; IEC60947-4-1; CE marking UL File No. E36332 UL CCN NLRV CSA File No. 12528 CSA Class No. 3211-06 NA Certification UL Listed, CSA certified
	3	165		**B3.0/3-PKZ4** 220221			
	4	220		**B3.0/4-PKZ4** 220222			
For PKZM4 with one auxiliary contact or trip-indicating auxiliary contact each fitted on the right side							
	2	119	55 + 9	**B3.1/2-PKZ4** 220223		1 off	
	3	183		**B3.1/3-PKZ4** 220224			
	4	247		**B3.1/4-PKZ4** 220225			
For PKZM4 with one auxiliary contact or trip-indicating auxiliary contact each fitted to right side, or one voltage release fitted to left side							
	2	128	55 + 18	**B3.2/2-PKZ4** 220226		1 off	
	4	274		**B3.2/4-PKZ4** 220227			
Shroud for unused terminals							
Protection against direct contact. To cover unused terminals on three-phase commoning link							
	–	–	–	**H-B3-PKZ4** 220228		10 off	Product Standards UL 508; CSA-C22.2 No. 14; IEC60947-4-1; CE marking UL File No. E36332 UL CCN NLRV CSA File No. 12528 CSA Class No. 3211-06 NA Certification UL Listed, CSA certified

Actuating voltage	**Part no.** Article no.	**Price** See price list	Std. pack	**Part no.** Article no.	**Price** See price list	Std. pack	**Notes**
Shunt release, undervoltage release							
AC							
Standard voltage							
24 V 50 Hz	**A-PKZ0(24V50HZ)**[1] 073181		2 off	**U-PKZ0(24V50HZ)**[1] 073129		2 off	
110 V 50 Hz	**A-PKZ0(110V50HZ)**[1] 073184		2 off	**U-PKZ0(110V50HZ)**[1] 073132		2 off	
220 V 50 Hz	**A-PKZ0(220V50HZ)**[1] 073186		2 off	**U-PKZ0(220V50HZ)**[1] 073134		2 off	
230 V 50 Hz	**A-PKZ0(230V50HZ)**[1] 073187		2 off	**U-PKZ0(230V50HZ)**[1] 073135		2 off	Only A(U)-PKZ0... with serial number 02 or higher can be fitted
240 V 50 Hz	**A-PKZ0(240V50HZ)**[1] 073188		2 off	**U-PKZ0(240V50HZ)**[1] 073136		2 off	
380 V 50 Hz	**A-PKZ0(380V50HZ)**[1] 073189		2 off	**U-PKZ0(380V50HZ)**[1] 073137		2 off	
400 V 50 Hz	**A-PKZ0(400V50HZ)**[1] 073190		2 off	**U-PKZ0(400V50HZ)**[1] 073138		2 off	
415 V 50 Hz	**A-PKZ0(415V50HZ)**[1] 073191		2 off	**U-PKZ0(415V50HZ)**[1] 073139		2 off	
120 V 60 Hz	**A-PKZ0(120V60HZ)**[1] 073195		2 off	**U-PKZ0(120V60HZ)**[1] 073143		2 off	
240 V 60 Hz	**A-PKZ0(240V60HZ)**[1] 073198		2 off	**U-PKZ0(240V60HZ)**[1] 073146		2 off	
440 V 60 Hz	**A-PKZ0(440V60HZ)**[1] 082164		2 off	**U-PKZ0(440V60HZ)**[1] 082161		2 off	
480 V 60 Hz	**A-PKZ0(480V60HZ)**[1] 073199		2 off	**U-PKZ0(480V60HZ)**[1] 073147		2 off	
Non-standard voltages not covered by above standard voltages							
…V 50 Hz (24 - 500 V)	**A-PKZ0(*V50HZ)**[1] 982165		2 off	**U-PKZ0(*V50HZ)** 982162			The part number for ordering consists of the basic part number and the actuating voltage. For non-standard voltages, specify the required actuating voltage within the indicated range (... - ... V). Minimum order quantity is 10 units
…V 60 Hz (24 – 600 V)	**A-PKZ0(*V60HZ)**[1] 982166		2 off	**U-PKZ0(*V60HZ)** 982163			
DC							
Standard voltage							
24 V DC	**A-PKZ0(24VDC)**[1] 073200		2 off				PKE can be fitted only with A(U)-PKZ0... with serial number 02 or higher.
110 V DC	**A-PKZ0(110VDC)**[1] 073203		2 off				

Information relevant for export to North America

1)

Product Standards	UL 508; CSA-C22.2 No. 14; IEC60947-4-1; CE marking
UL File No.	E36332
UL CCN	NLRV
CSA File No.	12528
CSA Class No.	3211-05
NA Certification	UL Listed, CSA certified

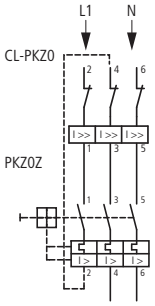
PKZ, PKZM

Engineering

1- and 2-pole-connected PKZM0, PKZM4 and PKZ2 with AC and DC



2-pole-connected PKZM0(1) and PKZM4 with CL-PKZ0



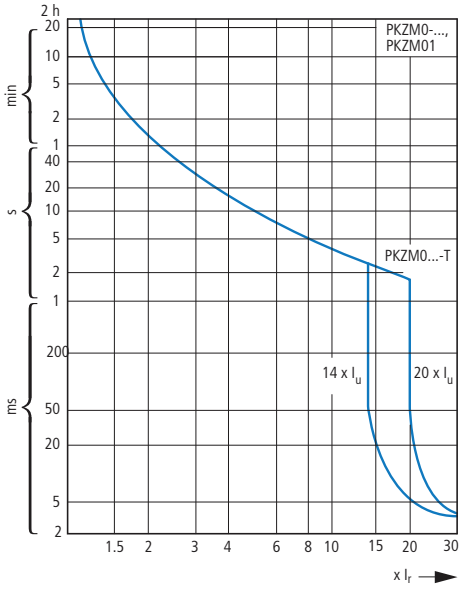
Protection of PVC-insulated cables against thermal overload on short-circuits

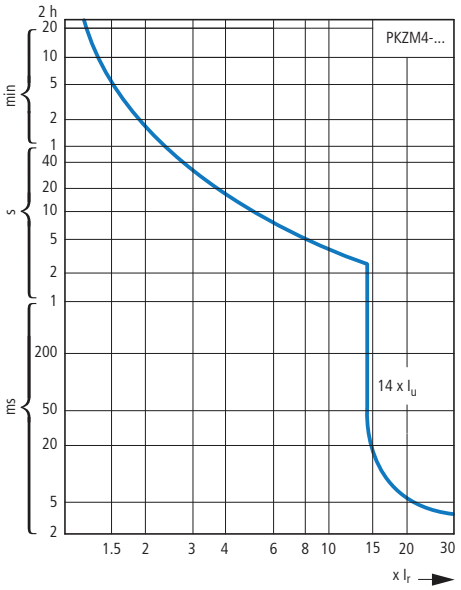
The table specifies which minimum conductor cross-sections are protected by motor-protective circuit-breaker PKZ(M) up to their rated conditional short-circuit current I_q.

Min. cross-section protected 380 – 415 V, 50 Hz, Cu mm²					Device Part no.
4	2.5	1.5	1	0.75	
					PKZM0-0,16
					⋮
					PKZM0-6.3
					PKZM0-10
					PKZM0-12
					PKZM0-16
					PKZM0-20
					PKZM0-25
					PKZM0-32
					PKZM4-16
					PKZM4-25
					PKZM4-32
					PKZM4-40
					PKZM4-50
					PKZM4-58
					PKZM4-63

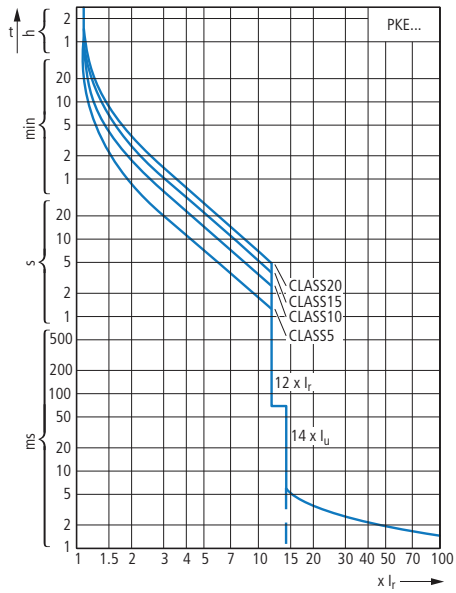
Min. cross-section protected 380 – 415 V, 50 Hz, Cu mm²	Device Part no.
	PKZ2/ZM-0.6
	⋮
	PKZ2/ZM-2.4
	PKZ2/ZM-4
	PKZ2/ZM-6
	PKZ2/ZM-10
	PKZ2/ZM-16
	PKZ2/ZM-25
	PKZ2/ZM-32
	PKZ2/ZM-40

PKZM0-...T tripping characteristics (not for PKM0-...), PKZM01

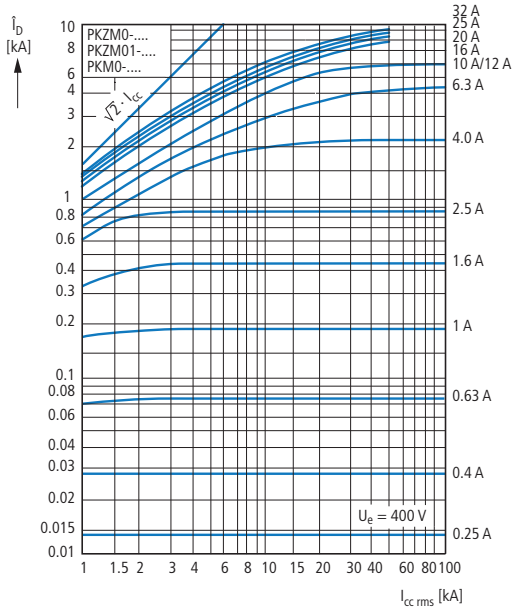


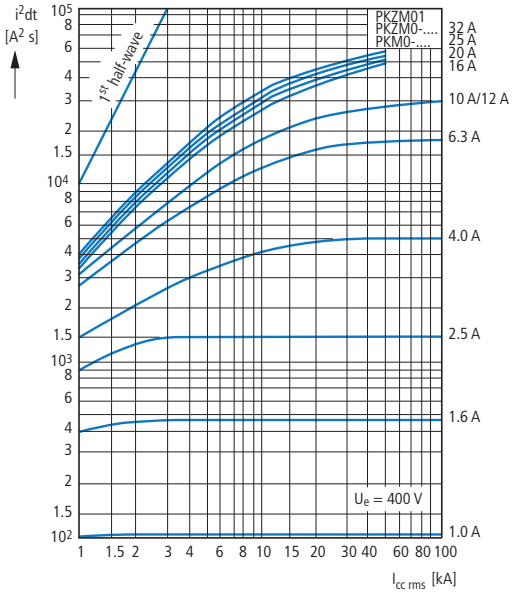


Tripping characteristic curves, wide-range circuit-breaker PKE

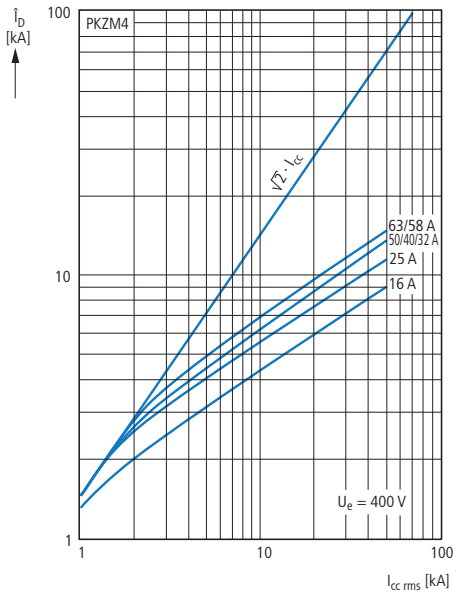


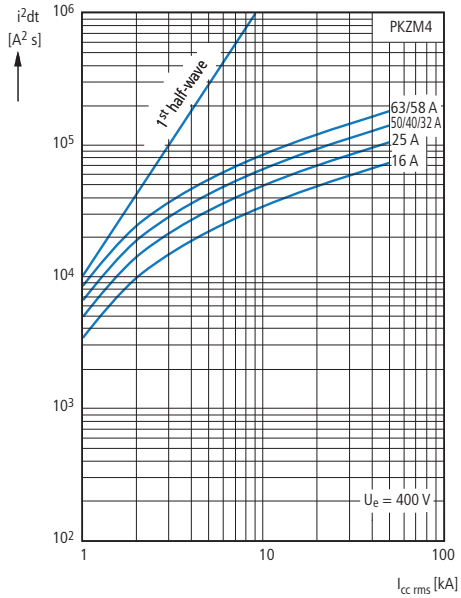
Let-through characteristics, motor-protective circuit-breaker, transformer-protective circuit-breakers, circuit-breaker for starter combinations





Motor-protective circuit-breaker let-through characteristics





Switching capacity

PKZM0

Circuit-breaker switching capacity from serial no. 04

Rated uninterrupted current I_u
Rated conditional short-circuit current I_q IEC/EN 60947-4-1
Rated ultimate short-circuit breaking capacity I_{cu} } IEC/EN 60947-2
Rated breaking capacity I_{cs}

I_u	230 V				400 V				440 V				500 V				690 V			
	I_q	I_{cu}	I_{cs}		I_q	I_{cu}	I_{cs}		I_q	I_{cu}	I_{cs}		I_q	I_{cu}	I_{cs}		I_q	I_{cu}	I_{cs}	
A	kA	kA	kA	A[1]	kA	kA	kA	A[1]	kA	kA	kA	A[1]	kA	kA	kA	A[1]	kA	kA	kA	A[1]
PKZM0, PKZM0...-T, PKM0 with type “1” and “2” coordination																				
0.16 – 1	150	150	150	N	150	150	150	N				N				N				N
1.6	150	150	150	N	150	150	150	N				N				N				N
2.5	150	150	150	N	150	150	150	N				N				N	5	5	5	50
4	150	150	150	N	150	150	150	N				N				N	3	3	3	50
6.3	150	150	150	N	150	150	150	N				N	42	42	11	50	3	3	2	50
10	150	150	150	N	150	150	150	N	42	42	12	50	42	42	11	50	3	3	2	50
12	50	50	13	50	50	50	13	50	15	15	12	50	15	15	8	50	3	3	2	50
16	50	50	13	50	50	50	13	50	15	15	12	50	15	15	8	50	3	3	2	50
20	50	50	13	50	50	50	13	50	10	10	13	50	6	6	3	50	3	3	1	50
25	50	50	13	50	50	50	13	50	10	10	13	50	6	6	3	50	3	3	1	50
32	50	50	13	50	50	50	13	50	10	10	13	50	6	6	3	50	3	3	1	50
PKZM0 (PKZM0...-T, PKM0) + CL-PKZ0																				
0.16 – 1				N				N				N				N			20	N
1.6				N				N				N				N			20	N
2.5				N				N				N				N	20	20	20	N
4				N				N				N				N	20	20	20	N
6.3				N				N				N			50	N	20	20	20	N
10				N				N				N			20	N	20	20	20	N
12				N				N				N			20	N	5	5	2.5	N
16				N				N				N			20	N	5	5	2.5	N
20				N				N				N	10	10	10	N	5	5	2.5	N
25				N				N				N	10	10	10	N	5	5	2.5	N
32				N				N				N	10	10	10	N	5	5	2.5	N
PKZM0 (PKZM0...-T, PKM0) + 2 CL-PKZ0																				
0.16 – 1				N				N				N				N			20	N
1.6				N				N				N				N			20	N
2.5				N				N				N				N	40	40	20	N
4				N				N				N				N	40	40	20	N
6.3				N				N				N			50	N	20	20	20	N
10				N				N				N			40	N	20	20	20	N
12				N				N				N			40	N	10	10	2.5	N
16				N				N				N			40	N	10	10	2.5	N
20				N				N				N	20	20	20	N	10	10	2.5	N
25				N				N				N	20	20	20	N	10	10	2.5	N
32				N				N				N	20	20	20	N	10	10	2.5	N

Notes

No upstream protective device required, as it is the auto-protected range (100/150 kA)

N Not necessary

[1] Required back-up fuse if the short-circuit current exceeds the device's rated conditional short-circuit current ($I_{cc} > I_q$).