

Bulletin 100-M Miniature Contactors



- Compact Size
- Uniform Panel Mounting Dimensions
- Full Voltage Non-Reversing and Reversing Contactors
- 5, 9, and 12 A Contactors
- Compatible with Bulletin 193-E solid-state and 193-M bimetal Overload Relays

Your order must include: cat. no. of the miniature contactor specified with coil voltage code and, if required, cat. no. of any accessories

Allen-Bradley miniature contactors are designed for commercial and light industrial applications where panel space is at a premium. These miniature devices, while 45 mm wide, are shallower and have less panel depth requirements than standard IEC contactors.

These mini-contactors are designed with flexibility in mind. They are available in several contact ratings, offer 2- and 4-pole adder decks, and a wide variety of contact configurations. Additionally, the contactor is available with both AC or DC operating coils.

Standards Compliance and Certifications

Standards Compliance

EN/IEC 60947
CSA C22.2 No. 14
UL 508

Certifications

CE Marked (Per EU Low
Voltage Directive 73/23/EEC 93/68/EEC)
CSA Certified (File No. LR1234)
UL Listed (File No. E3125;
Guide No. NLDX 2nd NVT)

Product Selection

Mini-Contactors

Non-Reversing Mini-Contactors 3 N.O. Power Poles/Auxiliary Contact

Rated Operation al Current	Ratings for switching AC motors										Auxiliary Contact Configuratio n		Pkg. Qty.★	Cat. No.			
	AC- 3	AC- 1	3Ø AC-3 kW Ratings (50 Hz) ‡		500	Hp (60 Hz)		115	230	200	230	460			575	N.O.	N.C.
		V	V	V	1Ø	3Ø	V	V	V	V	V	V	V				
5.3	20	1.5	2.2	2.2	1/2	1	1- 1/2	1	1- 1/2	3	3	3	3	1	0	10	100-M05N⊗3
														0	1	10	100- M05N⊗31
9	20	3	4	4	1/2	1- 1/2	2	2	2	5	5	5	5	1	0	10	100-M09N⊗3
														0	1	10	100- M09N⊗31
12	20	3	5.5	4	1/2	2	3	3	3	7- 1/2	10	10	10	1	0	10	100-M12N⊗3
														0	1	10	100- M12N⊗31

★ Contactors may be ordered in quantities of 1. Add the letter S to the end of the cat. no. (Example: **100-M09ND3S**).

Reversing Mini-Contactors 3 N.O. Power Poles/Auxiliary Contact

Rated Operationa l Current	Ratings for switching AC motors										Auxiliary Contact Configuratio n		Pkg Qty	Cat. No.✱			
	AC-3	AC-1	3Ø AC-3 kW Ratings (50 Hz) ‡		500	Hp (60 Hz)		115	230	200	230	460			575	N.O.	N.C.
		V	V	V	1Ø	3Ø	V	V	V	V	V	V	V				
5.3	20	1.5	2.2	2.2	1/2	1	1-1/2	1	1-1/2	1	1	1	1	1	0	1	104-M05N⊗3
														0	1	1	104- M05N⊗31
9	20	3	4	4	1/2	1-1/2	2	2	2	5	5	5	5	1	0	1	104-M09N⊗3
														0	1	1	104- M09N⊗31
12	20	3	5.5	4	1/2	2	3	3	3	7-1/2	10	10	10	1	0	1	104-M12N⊗3
														0	1	1	104- M12N⊗31

‡ Preferred value according to IEC 60072-1.

✱ Contactors may be ordered in quantities of 1. Add the letter S to the end of the cat. no. (Example: **100-M09ND3S**).

✳ Not available with DC coil.

⊗ Coil Voltage Code




The cat. no. as listed is incomplete. Select a Coil Voltage Code from the table below to complete the cat. no. Example: Cat. No. **100-M05N**⊗**3** becomes **Cat. No. 100-M05NKD3**. For other voltages, consult your local Allen-Bradley distributor.

Voltage	24V	48V	110V	110...120V	220...230V	230...240V	380V
50 Hz	KD	KH	D	—	A	—	KK
60 Hz	KD	KH	—	D	—	A	KK
DC	Z24	—	—	—	—	—	—
DC with integrated diode	ZD24	—	—	—	—	—	—

★ Contactors may be ordered in quantities of 1. Add the letter **S** to the end of the cat. no. (Example: **100-M09ND3S**).

✳ Not available with DC coil.

Bulletin 100-M/104-M Accessories

	Description	Type	For Use With	Cat. No.★
 Cat. No. 195-MB22	Auxiliary Contact Adder Deck	2 N.C. 2 N.O.	100/104-M05...M12	195-MB02 195-MA20
	Top mounted	1 N.O./1 N.C. 4 N.O.		195-MB11 195-MA40
	Solid-State Timing Element	0.3...3 s On-Delay, 110...250V AC or DC	100-M	195-MB22 196-MT3S
	Star-Delta Timer	1...30 s On-Delay, 110...250V AC or DC		196-MT30S
	35 mm DIN Rail Mounting Adapter for Above Timers	110V AC 220V AC 48V		196-MTSDA1 196-MTSDA2 196-MTSDA3
	Mechanical Interlock Kit	Mechanical Interlock Only	100-M05...M12 (AC Coils Only)	196-MT30S
	Power Wiring Kit	For Reversing Contactors	100-M05...M12	196-MTSDA1 196-MTSDA2 196-MTSDA3
	R-C Suppressor MOV	24...48V AC 110...280V AC 12...55V	100/104-M05...M12	199-MSMA48 199-MSMA1 199-MSMV1
	Suppressor	AC/12...77V DC		
	MOV			



	56...136V AC/78...162V DC		199-MSMV2
	137...277V AC/163...350V DC		199-MSMV3
Diode Suppressor	12...250V DC		199-MSMD1
R-C Suppressor	24...48V AC	100M	199-MSMNA48
	110...280V AC		199- MSMNA280
	380...480V AC		199- MSMNA480
MOV Suppressor	12...55V AC/12...77V DC		199-MSMV4
	56...136V AC/78...162V DC		199-MSMV5
	137...277V AC/181...350V DC		199-MSMV6
Diode Suppressor	12...250V DC		199-MSMD2

PQ = Package Quantity

Discount Group PRO

★ Must be ordered in multiples of 10.

✳ Sold in quantities of 1.

‡ Not for use with direct-mounted overload relays.

Bulletin 100-M Miniature Contactors Labelling Material

Description	Pkg.	Qty.	Cat. No.
Labels	10		199-ID1
Adhesive Paper			
105 per sheet			
Marking Tags	10		199-ID2
160 per sheet			
Cover	100		199-ID3
Transparent/Tag			
Tag Carrier	100		199-ID4
For Clip-On Tags			

Bulletin 100-M/104-M Life-Load Curves

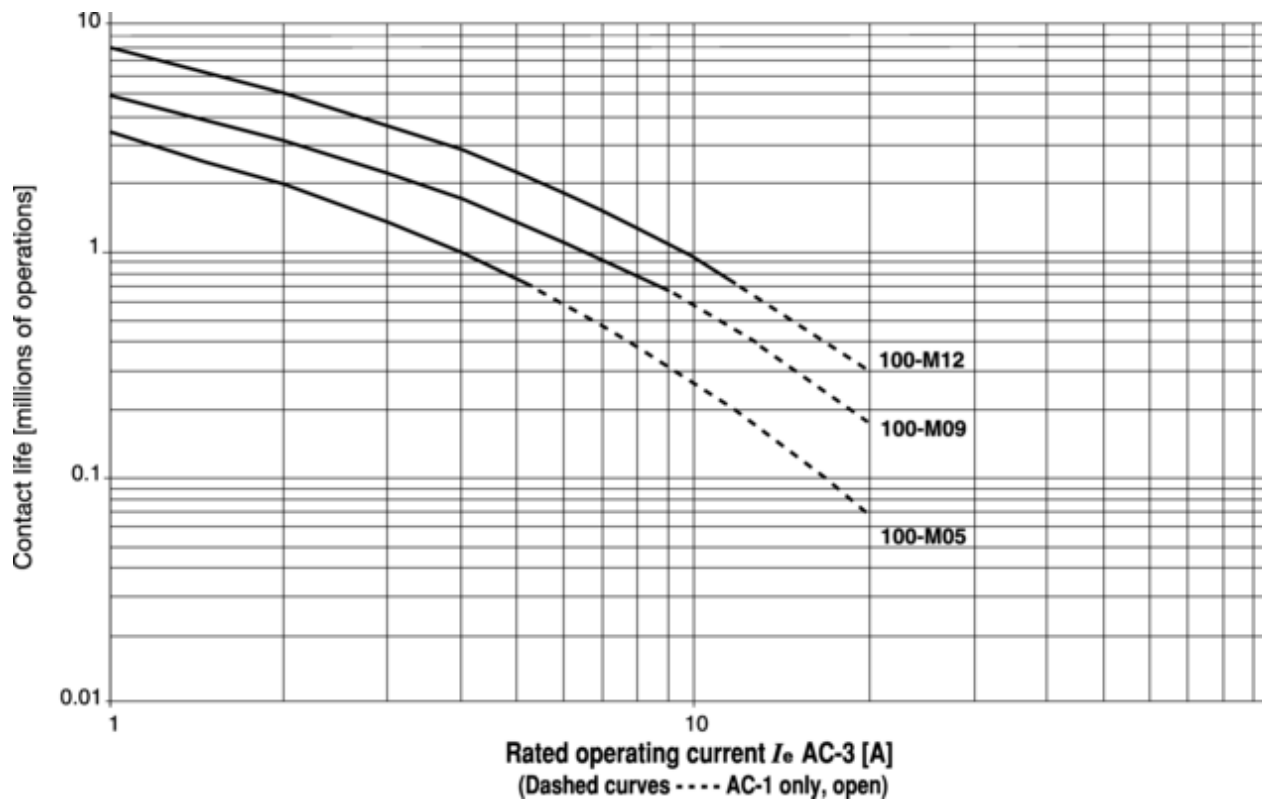
Electrical life; $U_e = 400...460V$ AC

AC-3

Switching of squirrel-cage motors while starting

AC-1

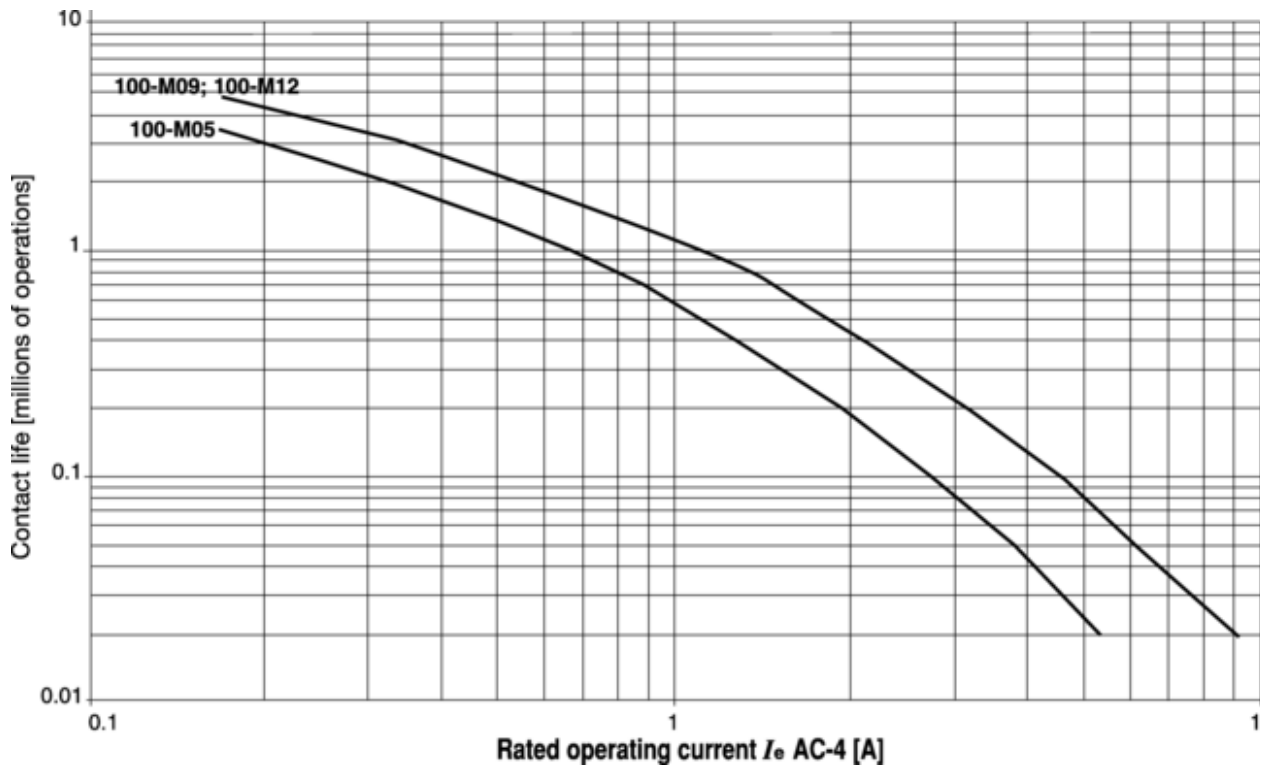
Non- or slightly inductive loads, resistance furnaces



Electrical life; $U_e = 400 \dots 460V$ AC

AC-4

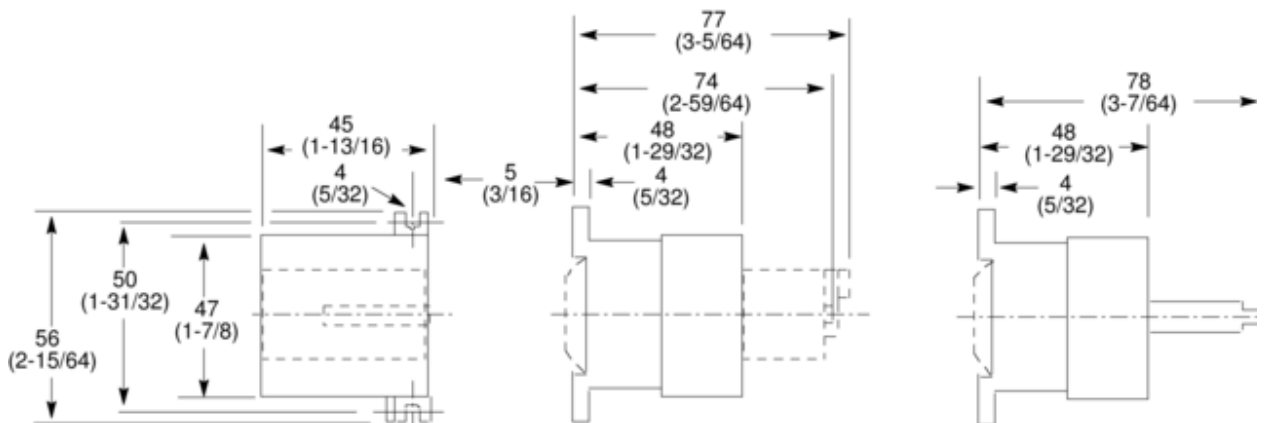
Stepping of squirrel-cage motors



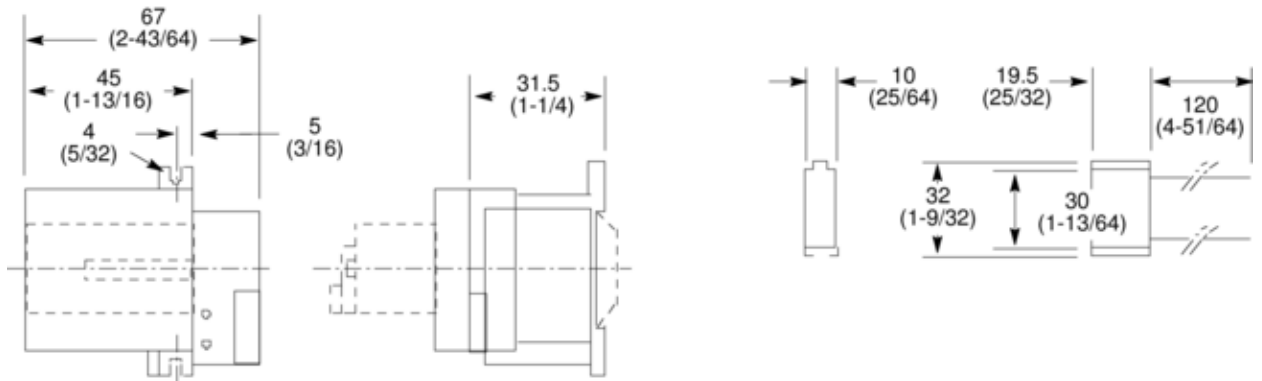
Bulletin 100-M/104-M Approximate Dimensions

Bulletin 100-M Miniature Contactors and Accessories

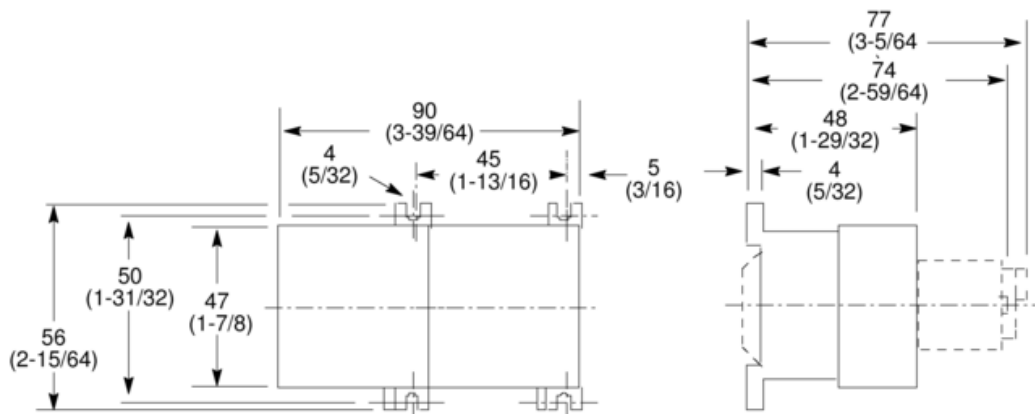
Dimensions are shown in millimeters (inches). Dimensions are not intended for manufacturing purposes.



Mini-Contactor or Mini-Relay With Auxiliary Contact Adder Deck or Timer Mounted to Front. Cat. No. 100-M or 700-M
 Mini-Contactor or Mini-Relay With Surge Suppressor Mounted to Front. Cat. No. 100-M or 700-M



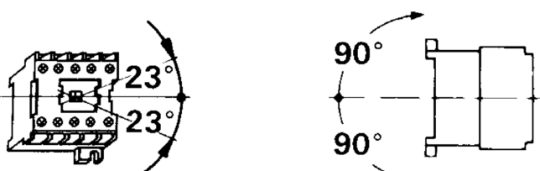
Mini-Contactor or Mini-Relay With Auxiliary Contact Adder Deck Mounted to Front and Timer Mounted to Side
 Cat. No. 100-M or 700-M
 Surge Suppressor Cat. No. 199-MSM



Reversing Mini-Contactors With Auxiliary Contact Adder Deck
 Cat. No. 104-M



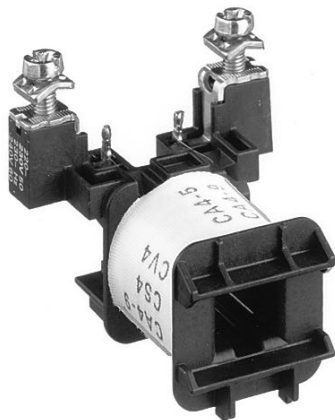
Timer With DIN Rail Mounting Adapter on 35 mm DIN Rail
 Cat. No. 196-MT
 Timer With DIN Rail Mounting Adapter on 35 mm DIN Rail
 Cat. No. 196-MT



Mounting Position

Renewal Parts

Bulletin 100-M Replacement Coils ★



Description	Pkg. Qty.	Cat. No.
24V 50/60 Hz	10	MA014
48V 50/60 Hz	10	MA024
110V 50 Hz/110...120V 60 Hz	10	MA034
220V 50/60 Hz	10	MA050
240V 50/60 Hz	10	MA052
380V 50/60 Hz	10	MA062
440V 50 Hz/480V 60 Hz	10	MA082
12V DC	10	MB708
18V DC	10	MB710
24V DC	10	MB714
48V DC	10	MB724
60V DC	10	MB734
110V DC	10	MB744
125V DC	10	MB746
220V DC	10	MB766
24V DC with Diode Suppressor	10	MD714

★ AC and DC coils are not interchangeable.

Bulletin 100-C Replacement Coils



AC Standard Control Voltages [V]			AC Coil Code	100-C09...100-C16 Cat. No.	100-C23...100-C37, 100L-C20 Cat. No.	100-C40, - C43 Cat. No.	100-C60...100-C85 Cat. No.	100-C90 Cat. No.
50 Hz	60 Hz	50/60 Hz						
—	12	—	Q	TA006	TC006	TD006	TE006	TF006
12	—	—	R	TA404	TC404	TD404	TE404	TF404
—	24	—	J	TA013	TC013	TD013	TE013	TF013
24	—	—	K	TA407	TC407	TD407	TE407	TF407
—	—	24	KJ	TA855	TC855	TD855	TE855	TF855
32	36	—	V	TA481	TC481	TD481	TE481	TF481
36	—	—	W	TA410	TC410	TD410	TE410	TF410
42	48	—	X	TA482	TC482	TD482	TE482	TF482
48	—	—	Y	TA414	TC414	TD414	TE414	TF414
—	—	48	KY	TA860	TC860	TD860	TE860	TF860
100	100...110	100	KP	TA861	TC861	TD861	TE861	TF861
110	120	—	D	TA473	TC473	TD473	TE473	TF473
—	—	110	KD	TA856	TC856	TD856	TE856	TF856
120	—	—	P	TA425	TC425	TD425	TE425	TF425

127	—	—	S	TA428	TC428	TD428	TE428	TF428
200	200...220	200	KG	TA862	TC862	TD862	TE862	TF862
—	208	—	H	TA049	TC049	TD049	TE049	TF049
200...220	208...240	—	L	TA296	TC296	TD296	TE296	TF296
—	—	200...230	KL	TA864	TC864	TD864	TE864	—
220	240	—	A	TA474	TC474	TD474	TE474	TF474
220...230	260	—	F	TA441	TC441	TD441	TE441	TF441
—	—	230	KF	TA851	TC851	TD851	TE851	TF851
230...240	—	—	VA	TA440	TC440	TD440	TE440	TF440
240	277	—	T	TA480	TC480	TD480	TE480	TF480
—	—	240	KA	TA858	TC858	TD858	TE858	TF858
—	347	—	I	TA065	TC065	TD065	TE065	TF065
—	380	—	E	TA067	TC067	TD067	TE067	TF067
380...400	440	—	N	TA071	TC071	TD071	TE071	TF071
—	—	400	KN	TA863	TC863	TD863	TE863	TF863
400...415	—	—	G	TA457	TC457	TD457	TE457	TF457
440	480	—	B	TA475	TC475	TD475	TE475	TF475
—	—	440	KB	TA859	TC859	TD859	TE859	TF859
500	—	—	M	TA479	TC479	TD479	TE479	TF479
550	600	—	C	TA476	TC476	TD476	TE476	TF476

Coils, Continued



DC Standard Control Voltage [V]	DC Coil Code	100-C09...100-C16 Cat. No.	100-C23...100-C37, 100L-C20 Cat. No.	100-C40, - C43 Cat. No.	100-C60...100-C85 Cat. No.	100-C90 Cat. No.
9★	ZR	TA766	TC766	TD766	—	—
9V Diode★	DR	—	—	—	TE766M	TF766M
12	ZQ	TA708	TC708	TD708	—	—
12V Diode	DQ	—	—	—	TE708M	TF708M
24✳	ZJ	TA714	TC714	TD714	—	—
24 Diode✳	DJ	TA714M	TC714M	TD714M	TE714M	TF714M
36	ZW	TA719	TC719	TD719	—	—
36V Diode	DW	—	—	—	TE719M	TF719M
48	ZY	TA724	TC724	TD724	—	—
48V Diode	DY	—	—	—	TE724M	TF724M
60	ZZ	TA774	TC774	TD774	—	—
60V Diode	DZ	—	—	—	TE774M	TF774M
64	ZB	TA727	TC727	TD727	—	—
64V Diode	DB	—	—	—	TE727M	TF727M
72	ZG	TA728	TC728	TD728	—	—
72V Diode	DG	—	—	—	TE728M	TF728M
80	ZE	TA729	TC729	TD729	—	—

80V Diode	DE	—	—	—	TE729M	TF729M
110	ZD	TA733	TC733	TD733	—	—
110V Diode	DD	—	—	—	TE733M	TF733M
115	ZP	TA734	TC734	TD734	—	—
115V Diode	DP	—	—	—	TE734M	TF734M
125	ZS	TA737	TC737	TD737	—	—
125V Diode	DS	—	—	—	TE737M	TF737M
220	ZA	TA747	TC747	TD747	—	—
220V Diode	DA	—	—	—	TE747M	TF747M
230	ZF	TA749	TC749	TD749	—	—
230V Diode	DF	—	—	—	TE749F	TF749F
250	ZT	TA751	TC751	TD751	—	—
250V Diode	DT	—	—	—	TE751F	TF751F

★ Voltage operating range: 0.65...1.3 x Us.

✱ Voltage operating range: 0.7...1.25 x Us.

Bulletin 190 IEC Modular Starter System

AC Operating Coils

Used with Cat. Nos. 190-A40, 190-CPS40, and 190R-CPS40

Voltage [V]	Frequency [Hz]	Cat. No.
24	50	JB407
24	60	JB013
110	50	JB473
120	60	JB473
208	60	JB049
220	50	JB474
240	60	JB474
380	50	JB454
415	50	JB457
440	50	JB475
480	60	JB475
550	50	JB476
600	60	JB476

Bulletin 193 Overload Relays with Current Transformers

For Use With	Panel Adapter Assembly Cat. No.	Overload Relay Only Cat. No.
193-HPD110	40781-607-01	193-NX23
193-DPC88	40781-607-01	193-NX24
193-DPD120	40781-607-01	193-NX25
193-DPD200	40781-607-01	193-NX26
193-EPD180	40781-607-01	193-NX27
193-EPD300	40781-607-01	193-NX28
193-FPD240	40781-607-01	193-NX29
193-FPD40	40781-607-01	193-NX30
193-GPD378★	40781-607-01	193-NX32
193-GPD630★	40781-607-01	193-NX33

★ Contact kits for Cat. Nos. 100-A09...100-A30 are not available as replacement parts.

AC Operating Coils

Used with 193-GPD Devices

Voltage	Frequency [Hz]	Cat. No.
24V AC	50	HA407
24V AC	60	HA013
110V AC	50	HA473
110 V AC	60	—
120 V AC	50	—
120V AC	60	HA473
208 V AC	50	—
208V AC	60	HA049
220V AC	50	HA474
220V AC	60	HA051
240V AC	50	HA442
240V AC	60	HA474
277V AC	60	HA060
380V AC	50	HA454
380 V AC	60	—
415V AC	50	HA457
440V AC	50	HA475
440V AC	60	HA071
480 V AC	50	—
480V AC	60	HA475
500V AC	50	HA464
500 V AC	60	—
600V AC	60	HA476



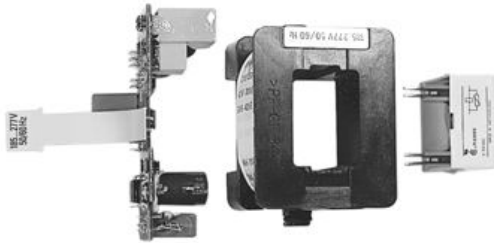
Description	Coil Type	For Use With	Cat. No.	
Arc Chambers for Contactors For 3-pole 100-D Contactors	Conventional	100-D95	100-DA-95	
		100-D110	100-DA-110	
		100-D140	100-DA-140	
		100-D180	100-DA-180	
		Electronic	100-D95	100-DAE-95
			100-D110	100-DAE-110
	100-D140		100-DAE-140	
	100-D180		100-DAE-180	
	100-D210		100-DAE-210	
	100-D250		100-DAE-250	
	Conventional	100-D300	100-DAE-300	
		100-D420	100-DAE-420	
100-D95		100-DC-95		
Set for 3-pole 100-D Contactors	100-D110	100-DC-110		
	100-D140	100-DC-140		



Terminal Hardware
Set of 6

Electronic	100-D180	100-DC-180	
	100-D95	100-DCE-95	
	100-D110	100-DCE-110	
	100-D140	100-DCE-140	
	100-D180	100-DCE-180	
	100-D210	100-DCE-210	
	100-D250	100-DCE-250	
	100-D300	100-DCE-300	
	100-D420	100-DCE-420	
	100-D630	100-DCE-630	
	100-D860	100-DCE-860	
	Conventional	100-D95...D110	100-DHF110
		100-D140...D180	100-DHF180
	Electronic	100-D95...D180	100-DHF180
	100-D210...D420	100-DHF420	
	100-D630...D860	100-DHF860	

Bulletin 100-D Replacement coils







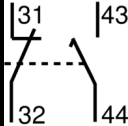
Conventional AC				Conventional DC						
AC Standard				DC Standard						
Control Voltages				Control Voltages						
50 Hz	60 Hz	50/60 Hz	Coil	100-180	100-420	100-860	DC	100-180	100-420	100-860
			Cat. No.	Cat. No.	Cat. No.	Cat. No.	Control Voltage	Cat. No.	Cat. No.	Cat. No.
24V	—	—	K TG407	—	—	—	12V	ZQ TG708	—	—
—	24V	—	J TG013	—	—	—	24V	ZJ TG714	—	—
32V	36V	—	V TG481	—	—	—	36V	ZW TG719	—	—
36V	42V	—	W TG410	—	—	—	48V	ZY TG724	—	—
48V	—	—	Y TG414	—	—	—	60V	ZZ TG774	—	—
42V	48V	—	X TG482	—	—	—	110V	ZD TG733	—	—
—	—	100V*	KP TG861	—	—	—	125V	ZS TG737	—	—
110V	120V	—	D TG473	—	—	—	130V	ZF TG738	—	—
—	—	110V*	KN TG856	—	—	—	220V	ZA TG761	—	—
—	208V	—	H TG049	—	—	—	240V	ZL TG750	—	—

—	—	200V★	KG	TG862	—	—	250V	ZT	TG751	—	—					
—	—	220V★	KL	TG857	—	—										
220...230V	240V	—	A	TG441	—	—										
240V	277V	—	T	TG480	—	—										
—	—	277V★	KT	TG060	—	—										
—	—	230V★	KF	TG851	—	—										
—	—	240V★	KA	TG858	—	—										
380...400V	440V	—	N	TG071	—	—										
415V	480V	—	B	TG475	—	—										
440V	—	—	G	TG478	—	—										
500V	—	—	M	TG479	—	—										
550V	600V	—	C	TG476	—	—										
Electronic AC												Electronic DC				
AC Standard Control Voltages			AC Coil	100-D95...D300	100-D420	100-D630...D860						DC Standard Control Voltage	DC Coil	100-D95...D300	100-D420	100-D630...D860
50 Hz	60 Hz	50/60 Hz	Code	Cat. No.	Cat. No.	Cat. No.	Control Voltage	Code	Cat. No.	Cat. No.	Cat. No.					
—	—	24V	EJ*	TGE855	—	—	24V	EZJ	TGE708	—	—					
—	—	42...64V	EY	TGE864	—	—	48...72V	EZY	TGE779	—	—					
—	—	100V	EP	TGE861	THE861	TJE861	110...130V	EZD	TGE780	THE780	—					
—	—	110...130V	ED	TGE865	THE865	TJE865		ED	—	—	TJE865					
—	—	200V	EG	TGE862	THE862	—	200...255V	EZA	TGE781	THE781	—					
—	—	208...277V	EA	TGE866	THE866	—		EA	—	—	TJE879					
—	—	200...220V	EG	—	—	—										
—	—	230...250V	EA	—	—	—										
—	—	277V	ET	—	—	—										
—	—	380...500V	EN	TGE867	THE867	—										
—	—	380...415V	EN	—	—	—										
—	—	440...480V	EB	—	—	—										
—	—	500V	EM	—	—	—										
—	600V	—	EC	—	—	—										

★ Applies to 100-D95...-D110 contactors only. Not available with 100-D140...-D180 contactors.

✳ Not available on 100/104-D300.

Bulletin 100-G Renewal Parts

	Description	For Use With	Cat. No.
	Arcing Chamber For 3 poles	100-G550	100-AC550
		100-G700, 100-G860	100-AC860
	Arcing Chamber For 1 pole	100-G1000, 100-G1200	100-AC1200
	Main Contact Set Set for 1 pole	100-G550	100-CP550
		100-G700	100-CP700
		100-G860	100-CP860
		100-G1000	100-CP1000
		100-G1200	100-CP1200
	Auxiliary Contact Block Special 2-pole design: 1 N.O. delayed make, 1 N.C. contact N.O. delayed make contact used for operation of the Feeder/Group Coil mechanism One contact block supplied standard with contactor		100-G1000, 100-G1200
			100-EB11DC

Coils and Supply Modules



AC Standard Control Voltages 50/60 Hz	DC Standard Control Voltage	Coil Code	100-G550	100-G700...100-G860
110...120V	100...110V	KD	TX734	TXS734 TY734 TYS734
220...240V	200...220V	KF	TX747	TXS747 TY747 TYS747
380...415V	345...380V	KN	TX779	TXS779 TY779 TYS779
440...480V	400...440V	KB	TX780	TXS780 TY780 TYS780

★ Coils sold in pairs.

AC	Coil Code	100-G1000...	100-G1200
Standard	Control	Coil Cat. No.★	Supply Module Cat. No.
Voltages			
50/60 Hz			
110...115V	KD	TZ734	TZS734
220...230V	KF	TZ747	TZS747
380...400V	KN	TZ779	TZS779
440V	KB	TZS780	TZS780