

Replacement AC Magnetic Coils

Table 16.331: Replacement AC Magnet Coils for Magnetic Contactors and Starters

Equipment To Be Serviced				Coil Prefix, or Class and Type	Hz	Suffix Number (Complete Coil Number Consists of the Prefix or the Class and Type, Followed by the Suffix)												Coil VA	
Device	Size	Type	Poles			24 V	110-115 V	120 V	208 V	220 V	240 V	277 V	380 V	440 V	480 V	550 V	600 V	In-rush	Sealed
Coils for Present Design Magnetic Contactors and Starters Classes 8502, 8536, 8538, 8539, 8606, 8630, 8640, 8647, 8650, 8651, 8702, 8736, 8738, 8739, 8810, 8811, 8812, 8903, 8910 ^[1] and 8940 (except NP)	30 A	L	2-6	9998L	60	23	—	44	50	^[2] 52	53	55	—	—	62	—	65	150	30
			8-12	9998LH	60	23	—	44	50	^[2] 52	53	55	—	—	62	—	65	180	35
		LX (Latch)	2-4	9998L	60	23	—	44	50	—	53	55	—	—	62	—	65	150	—
			6-12	9998LH	60	23	—	44	50	—	53	55	—	—	62	—	65	180	—
	00	SA ^[3] (Series B)	All	9998SAC	60	23	^[2] 45	—	52	^[2] 54	—	55	—	59	^[2] 62	^[2] 65	—	165	33
	00, 0, 1, 1-P, & 30 A	SA (Series A) SB, SC, & SM	All	31041400	60	20	^[2] 42	42	48	^[2] 51	51	52	56	58	60	^[2] 62	62	245	27
	2 & 60 A	SD & SP	2 & 3	31063409	60	16	^[2] 38	38	44	^[2] 47	47	49	53	^[2] 54	57	^[2] 60	60	311	37
			4 & 5	31063400	60	16	^[2] 38	38	44	^[2] 47	47	49	53	^[2] 54	57	^[2] 60	60	438	38
	3 & 100 A	DPA12, SE, SQ, & SYD138	2 & 3	31074400	60	16	^[2] 38	38	44	^[2] 47	47	49	53	^[2] 54	57	^[2] 60	60	700	46
			4 & 5	31091400	60	—	^[2] 38	38	44	^[2] 47	47	49	53	^[2] 54	57	^[2] 60	60	1185	85
	4 & 200 A	SF, SV, & SYD230	All	31091400	60	—	^[2] 38	38	44	^[2] 47	47	49	53	^[2] 54	57	^[2] 60	60	1185	85
			All	31096400	60	—	^[2] 09	09	15	^[2] 18	18	19	21	^[2] 24	24	^[2] 29	29	2970	212
	5 & 300 A	SG, SX, & SYD368 Series A ^[4]	All	31096400	60	—	^[2] 09	09	15	^[2] 18	18	19	21	^[2] 24	24	^[2] 29	29	2970	212
		SG, SX, & SYD368 Series B ^[4]	All	31096320	60	—	50	50	51	52	52	53	54	55	55	—	—	1300	14
	6 & 7	SH & SJ	2-3	Coil Part Number 3110440050 (All System Voltages)														1780	48
	400, 600 & 800 A	SY, SZ, SJ (Elect. Held)	2-3	Coil Part Number 3110440050 (All System Voltages)														1960	59
		SY, SZ, SJ (Mech. Held)	2-3	31104418	60	—	^[2] 09	09	15	^[2] 18	18	19	—	^[2] 24	24	^[2] 29	29	1530	—

NOTE: Refer to Table 16.333 for mechanically held unlatch coils.

Table 16.332: Size 5 Coil Modification Kits

Catalog Number	Voltage
9998SG120	120 V
9998SG208	208 V
9998SG240	240 V
9998SG277	277 V
9998SG380	380 V
9998SG480	480 V

NEMA Size 5, Type S, E-Coil Modification Kit for Series A Devices

Applies to Classes 8502, 8536, 8538, 8539, 8606, 8630, 8640, 8647, 8650, 8651, 8702, 8736, 8738, 8739, 8810, 8811, 8812, 8910 and 8903. Consists of:

- E-coil (31096320** from Table 16.331).
- Armature
- 15 A, 600 V fuse and holder (Class 9999SFR)
- Bottom magnet
- Instruction material

NOTE: No 600 V coil nor mechanically held lighting contactor.

^[1] For 8910DPA1 to DPA9, see page 16-90.^[2] Use a 60 Hz coil of the next higher voltage.^[3] Use on Type S Series B devices only.^[4] Size 5 Series A devices should use these only as replacements for the exact part number. Another option is to use the coil modification kits in Table 16.332 for the Series B coil.

Relays, Timers, and Contactors

Table 16.333: Replacement AC Magnet Coils for Relays, Timers, and Contactors

Equipment To Be Serviced			Coil Prefix or Class and Type	Hz	Suffix Number (Complete Coil Number Consists of Prefix or Class and Type Followed by Suffix Number)												Coil VA	
Device	Type	Poles			24 V	110-115 V	120 V	208 V	220 V	240 V	277 V	380 V	440 V	480 V	550 V	600 V	In-rush	Sealer
Classes 8501 and 9050																		
8501 (Relays)	X	All	9998X [5]	60 50	23 24	— 44	44 —	51 52	52 53	53 —	55 —	— —	— 62	62 —	— 65	65 —	148 143	23 25
9050 (Timer)	A	All	2959-S49-	60 50	W25A W25B	W31B W32A	W32A W32B	W34A W34B	W34B W35A	W35A W35B	W35B W36A	— —	W37B W38A	W38A W38B	W38B W39A	W39A W39B	74 68	17 17
	B [6]	All	31017-400-	60 50	33 34	— —	54 55	61 —	61 63	63 64	65 —	— 72	70 72	72 73	73 75	75 76	165 155	27 27
Mechanically Held Unlatch Coils —Classes 8508 and 8903																		
NOTE: A latch coil is also used with mechanically held devices. For selection, see Table 16.331 .																		
8903 (Lighting Contactors)	LX	All	9998LX	60 50	23 —	— 44	44 —	51 —	— 53	53 —	55 —	— —	— 62	62 —	— 65	65 —	25 —	— —
	SM, SP	All	2959-S13	60 50	W23B W24B	[7] W30B	W30B W31B	W33A —	[7] W33B	W33B W34B	W34A —	— W36A	[7] W36B	W36B —	[7] W37B	W37B —	80 —	— —
	SQ, SV, SX, SY, SZ	All	31096-416	60 50	03 —	[7] 09	09 —	15 —	[7] 18	18 —	20 —	— 22	[7] 24	24 —	[7] 28	28 —	550 —	— —
	SJ	All	31123-403	60 50	03 —	[7] 09	09 —	15 —	[7] 18	18 —	20 —	— 22	[7] 24	24 —	[7] 28	28 —	2100 —	— —

Table 16.334: Replacement DC Magnet Coils for Magnetic Relays and Timers

Equipment To Be Serviced			Coil Prefix or Class and Type	Suffix Number (Complete Coil Number Consists of Prefix or Class and Type Followed by Suffix Number.)												Coil Burden Watts	
Class	Type	Poles		6 V	12 V	18 V	24 V	32 V	48 V	64 V	72 V	90 V	110 V	115/125 V	220 V	230/250 V	
8501 (Relays)	XD	All	9998XD	19	28	34	37	40	46	49	52	55	—	58	—	67	18
	XDL	—	9998XDL	19	28	34B	37B	40B	46B	49B	52B	55B	—	58B	—	67B	50
	XUD	All	9998XUD	19	28	—	37	—	46	—	—	—	—	58 [8]	—	67 [8]	16
9050 (Timers)	C	—	31018-400-	22	31	—	40	—	49	—	—	—	—	61	—	70	14
	H	—	4491S1	W21	W24	—	W27	—	W30	—	—	—	—	W34	—	W37	14

Table 16.335: Replacement Coil for 8903 Panel Board Lighting Contactors

Class	Type	Replacement Solenoid	Catalog Number
8903	PB	120 V	9998PBV02
		208 V	9998PBV08
		240/277 V	9998PBV39
		480 V	9998PBV28

[5] To order an unlatch coil, add L to the Type number and B to the suffix. Example: For a 120 V 60 Hz unlatch coil, order 9998XL44B.

[6] Series C (double pole) and Series E (single pole).

[7] Use a 60 Hz coil of the next higher voltage.

[8] Not dual rated. 125 Vdc or 250 Vdc only.