

Specifications

COIL CHARACTERISTIC AND DATA - MC SERIES

Type MC-9B-150A AC Coils

Frame Type	Rated Voltage	Inrush Current (A)		Holding Current (A)		Closing Time (ms)	Opening Time (ms)	Inrush (VA)	Holding (VA)	Consumption(W)		Pick-up Voltage		Drop-out Voltage	
		AC50HZ	AC60HZ	AC50HZ	AC60HZ					AC50HZ	AC60HZ	AC50HZ	AC60HZ	AC50HZ	AC60HZ
MC-9B-22B (50/60Hz)	24	2.975	2.915	0.430	0.330	12~22ms	4~19ms	90	11	2.1	1.5	16.0	18.5	11.00	11.0
	110	0.657	0.636	0.095	0.074	12~22ms	4~19ms	90	11	2.1	1.5	72.0	75.0	49.00	58.0
	220	0.340	0.320	0.040	0.028	12~22ms	4~19ms	90	11	2.1	1.5	140.0	142.0	100.00	105.0
	240	0.286	0.264	0.038	0.027	12~22ms	4~19ms	90	11	2.1	1.5	145.0	155.0	110.00	125.0
MC-9B-22B (60Hz)	208	-	0.340	-	0.042	12~22ms	4~19ms	90	11	-	1.5	-	133.0	-	100.0
	480	-	0.106	-	0.018	12~22ms	4~19ms	90	11	-	1.5	-	350.0	-	255.0
MC-32A, 40A (50/60Hz)	24	2.935	2.842	0.460	0.360	12~22ms	4~19ms	115	11	2.7	2.2	16.0	18.5	11.00	11.0
	110	0.652	0.631	0.100	0.077	12~22ms	4~19ms	115	11	2.7	2.2	75.0	75.0	48.00	57.0
	220	0.335	0.316	0.050	0.040	12~22ms	4~19ms	115	11	2.7	2.2	150.0	142.0	100.00	105.0
	240	0.289	0.264	0.046	0.035	12~22ms	4~19ms	115	11	2.7	2.2	145.0	155.0	110.00	125.0
MC-32A, 40A (60Hz)	208	-	0.340	-	0.044	12~22ms	4~19ms	115	11	-	2.2	-	133.0	-	100.0
	480	-	0.108	-	0.020	12~22ms	4~19ms	115	11	-	2.2	-	350.0	-	255.0
MC-50A,60A (50/60Hz)	24	4.597	4.411	0.524	0.401	12~22ms	4~19ms	160	11	2.8	2.4	16.0	18.5	9.00	12.0
	110	1.025	0.994	0.114	0.085	12~22ms	4~19ms	160	11	2.8	2.4	69.0	77.0	53.00	59.0
	220	0.608	0.592	0.058	0.046	12~22ms	4~19ms	160	11	2.8	2.4	150.0	155.0	100.00	105.0
	240	0.474	0.425	0.053	0.039	12~22ms	4~19ms	160	11	2.8	2.4	145.0	165.0	115.00	125.0
MC-50A, 60A (60Hz)	208	-	0.600	-	0.048	12~22ms	4~19ms	160	11	-	2.4	-	85.0	-	100.0
	480	-	0.198	-	0.020	12~22ms	4~19ms	160	11	-	2.4	-	315.0	-	230.0
MC-75A-100A (50/60Hz)	24	7.956	7.765	0.768	0.645	15~30ms	10~30ms	190	16	5.4	4.7	16.0	17.5	11.50	14.0
	110	1.782	1.710	0.176	0.145	15~30ms	10~30ms	190	16	5.4	4.7	66.0	75.0	51.00	60.0
	220	1.018	0.980	0.078	0.062	15~30ms	10~30ms	190	16	5.4	4.7	150.0	160.0	100.00	105.0
	240	0.870	0.820	0.082	0.066	15~30ms	10~30ms	190	16	5.4	4.7	133.0	170.0	105.00	115.0
MC-75A-100A (60Hz)	208	-	1.013	-	0.065	15~30ms	10~30ms	190	16	-	4.7	-	135.0	-	100.0
	480	-	0.460	-	0.035	15~30ms	10~30ms	190	16	-	4.7	-	330.0	-	265.0
MC-130A, 150A (50/60Hz)	24	8.800	9.190	0.350	0.410	20~40ms	60~70ms	220	25	2.7	3.6	18.0	17.5	14.00	13.0
	48	3.950	4.240	0.168	0.198	20~40ms	60~70ms	220	25	2.7	3.6	34.0	37.1	25.00	23.0
	110	1.500	1.580	0.205	0.231	20~40ms	60~70ms	220	25	2.7	3.6	84.0	80.0	60.00	55.0
	220	0.720	0.760	0.085	0.099	20~40ms	60~70ms	220	25	2.7	3.6	165.0	160.0	105.00	100.0
	300	0.690	0.710	0.050	0.059	20~40ms	60~70ms	220	25	2.7	3.6	210.0	200.0	165.00	160.0
	400	0.490	0.500	0.040	0.046	20~40ms	60~70ms	220	25	2.7	3.6	280.0	270.0	240.00	200.0
	500	0.310	0.320	0.027	0.032	20~40ms	60~70ms	220	25	2.7	3.6	360.0	340.0	290.00	270.0

Type MC-9B-150A DC Coils

Frame Type	Rated Voltage	Inrush Current(A)	Holding Current (A)	Pick-up Voltage	Drop-out Voltage	Closing time (ms)	Opening time (ms)
MC-6A-22B	12	0.790	0.790	7.5	3.0	35~50ms	4~19ms
	24	0.380	0.380	16.0	5.5		
MC-32A, 40A	12	0.702	0.702	8.5	3.4	50~65ms	4~19ms
	24	0.350	0.350	16.3	6.3		
MC-50A, 65A	12	0.790	0.790	8.7	2.6	50~65ms	4~19ms
	24	0.380	0.380	17.5	5.0		
MC-75A-100A	12	0.790	1.450	8.1	2.5	100~120ms	10~25ms
	24	0.380	0.740	17.5	4.4		
MC-130A, 150A	24	6.700	0.240	17.5	4.5	70~80ms	60~70ms
	48	3.300	0.155	33.0	11.0		
	110	2.000	0.068	75.0	25.0		
	220	0.950	0.040	150.0	50.0		

Type MC-185A-800A AC/DC Common Coils

Frame Type	Rated Voltage	Voltage	Inrush Current (A)			Holding Current (mA)			Closing Time (ms)			Opening Time (ms)			Coil Consumption(W)		
			AC50HZ	AC60HZ	DC	AC50HZ	AC60HZ	DC	AC50HZ	AC60HZ	DC	AC50HZ	AC60HZ	DC	AC50HZ	AC60HZ	DC
MC-185A,225A	24V	24	9.53	9.6	7	307	319	143	41	40	38.1	65.3	35	39.9	3.6	3.6	3.5
	48V	48	3.836	3.774	2.71	70	72	39	51.7	45.7	43.8	38.6	40.7	46.8	2.2	2.3	1.9
	100~240V	110	2.108	2.092	1.532	57	57	36	53.38	52.2	53.3	66.1	64.4	67.8	4.1	4.1	4.3
	100~240V	220	1.256	1.22	1.34	42	43	22	43.5	41.7	41	67.2	67.6	68.8	6.3	6.2	5.8
MC-265A-400A	100~240V	110	4.3	4.33	4.2	443	434	439	47.8	50.3	48.7	57	56	55.8	5.8	5.7	6.3
	100~240V	220	4.1	4	4.4	329	310	278	42	41	39	57.6	58.3	56.5	6.2	6	6.2
MC-500A-800A	100V	110	11.2	10.7	18.2	91	91	46	55.2	56	50.5	41	40	41	5.3	5.3	6
	200V	220	5.2	4.9	6.1	68	67	34	56.3	55.7	55.3	38	35.5	37.2	8.3	8.5	8.6

IEC Ratings

MC Series

IEC Ratings (AC-1, AC-3) MC - Series

Type IEC60947-4 Ratings	MC-9B		MC-12B		MC-18B		MC-22B		MC-32A		MC-40A		MC-50A	
	kW	A	kW	A	kW	A	kW	A	kW	A	kW	A	kW	A
AC-1	-	25	-	25	-	32	-	40	-	50	-	60	-	70
AC-3 200/240V	2.5	11	3.5	13	4.5	18	5.5	22	7.5	32	11	40	15	55
380/440V	4	9	5.5	12	7.5	18	11	22	15	32	18.5	40	22	50
500/550V	4	7	7.5	12	7.5	13	15	20	18.5	28	22	32	30	43
690V	4	6	7.5	9	7.5	9	15	18	18.5	20	22	23	30	28

Type IEC60947-4 Ratings	MC-65A		MC-75A		MC-85A		MC-100A		MC-130A		MC-150A		MC-185A	
	kW	A	kW	A	kW	A	kW	A	kW	A	kW	A	kW	A
AC-1	-	100	-	110	-	135	-	160	-	160	-	210	-	230
AC-3 200/240V	18.5	65	22	75	25	85	30	105	37	130	45	150	55	185
380/440V	30	65	37	75	45	85	55	105	60	130	75	150	90	185
500/550V	33	60	37	64	45	75	55	85	60	90	70	100	110	180
690V	33	35	37	42	45	45	45	65	55	60	55	60	110	120

Type IEC60947-4 Ratings	MC-225A		MC-265A		MC-330A		MC-400A		MC-500A		MC-630A		MC-800A	
	kW	A	kW	A	kW	A	kW	A	kW	A	kW	A	kW	A
AC-1	-	275	-	300	-	350	-	450	-	580	-	660	-	900
AC-3 200/240V	75	225	80	265	90	330	125	400	147	500	190	630	220	800
380/440V	132	225	147	265	160	330	200	400	265	500	330	630	440	800
500/550V	132	200	147	225	160	280	225	350	265	400	330	500	500	720
690V	140	150	160	185	200	225	250	300	300	380	400	420	500	630