



Mini Contactor MB

- DIN or printed circuit mounting
- AC or DC operation
- Long life
- Fingertouch protection
- Twin bifurcated auxiliary contacts
- International approvals including UL and CSA
- Designed to EN 60947-4-1



Options and ordering codes

	MB	09	S
Mini series relay	MR		
Contactors	MB		
Relay		07	
Contactors		09	
		12	
DIN mounting screw terminal			S
Printed circuit mounting			P
Faston terminal 1 x 6.3mm or 2 x 2.8mm			F

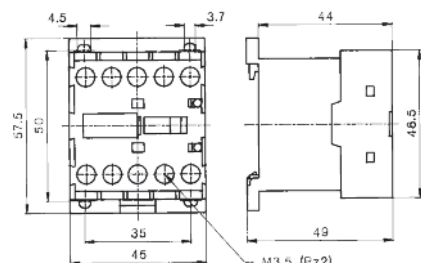
MB09 + MB12	10	Coil Voltage
3 main + 1 make auxiliary	10	
3 main + 1 break auxiliary	01	Standard Coils
MR07		
4 make	40	
3 make 1 break	31	
2 make 2 break	22	
24V 50/60Hz 415V 50Hz		
110V 50/60Hz 24V DC		
220-230V 50Hz 110VDC		

Product selection

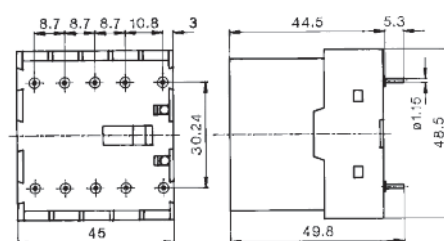
AC operated	DC operated
MR07-S-22	MR07-S-22
MR07-S-31	MR07-S-31
MR07-S-40	MR07-S-40
MB09-S-10	MB09-S-10
MB09-S-01	MB09-S-01
MB09-P-10	MB09-P-10
MB09-P-01	MB09-P-01
MB12-S-10	MB12-S-10
MB12-S-01	MB12-S-01
MB12-P-10	MB12-P-10
MB12-P-01	MB12-P-01

Dimensions (mm)

DIN Mount Screw Terminal



PCB Mount

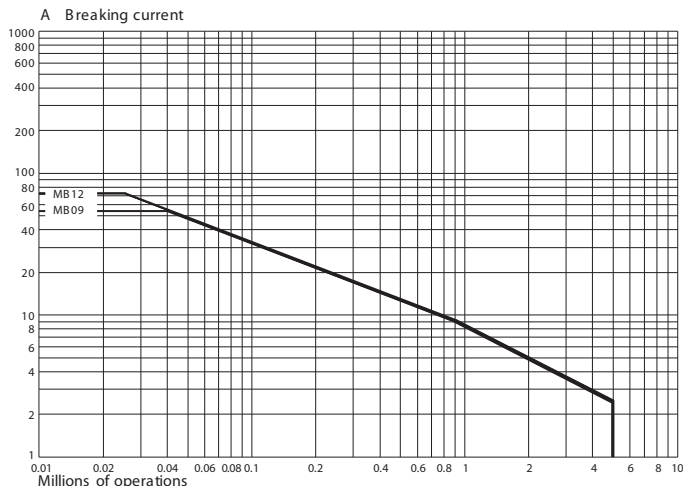
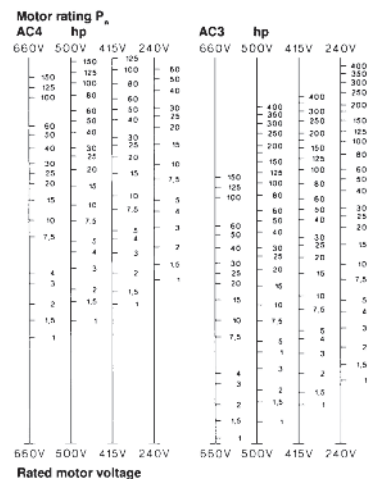


Technical data according to IEC, VDE and BS

Type		MR07-S	MR07-P	MB09-S	MB09-P	MB12-S	MB12-P
Mounting		DIN	Printed Circuit	DIN	Printed Circuit	DIN	Printed Circuit
Main Contacts							
Rated Insulation Volts		690	690	690	690	690	690
Max. Frequency of Operation	AC15 OPS/HR	3000		-		-	
	AC3 OPS/HR	-		600		700	
	Mechanical Life OPS	5 million		5 million		5 million	
	AC1 Amps	16		20	16	20	16
	AC3 Amps 230V	-		11.5		14.5	
	380-400V	-		9		12	
	500V	-		7		9	
	kW	220-240V	-		3		4
	380-400V	-		4		5.5	
	500-690V	-		4		5.5	
Short Circuit Protection	Class gl. Highest Fuse Amps	10		20	16	20	
	Highest Fuse Amps (without welding)	10		10	10	10	
Auxiliary Contacts	AC15 Amps 230V	3		3		3	
	Amps 380-415V	2		2		2	
Short Circuit Protection	Class gl. Highest Fuse Amps	20		20		20	
	AC and DC Range	0.85 - 1.1		0.85 - 1.1		0.85 - 1.1	
Coil Operation	AC Inrush VA	25		25		25	
	AC Sealed VA	5		5		5	
	AC Sealed W	1.2		1.2		1.2	
	DC Inrush and Sealed W	2.5		2.5		2.5	
Cable Cross Section	Solid mm ²	0.75 - 2.5		0.75 - 2.5		0.75 - 2.5	
	Flexible mm ²	0.75 - 2.5		0.75 - 2.5		0.75 - 2.5	
Contacts and Coil	Flexible with Cable End mm ²	0.5 - 2.5		0.5 - 2.5		0.5 - 2.5	
	No. of Conductors	2		2		2	
Maximum Temperature	Normal use °C	-40 to +60		-40 to +60		-40 to +60	
	Storage °C	-50 to +90		-50 to +90		-50 to +90	

Refer to IMO for UL and CSA ratings

Contact life MB09/12



Auxiliary contacts

- Add-on contacts
- Snap on top of contactor
- Twin bifurcated contacts suitable for low level switching



Contacts	For use with	Product
1 make 1 break	MR07	HK11
2 make 2 break	MR07	HK22
1 make 1 break	MB09/12	HKM11
2 make 2 break	MB09/12	HKM22
1 make 1 break	MB09-R-S-01 (LHS)	HKM11V
1 make 1 break	MB09-R-S-01 (RHS)	HKM11X

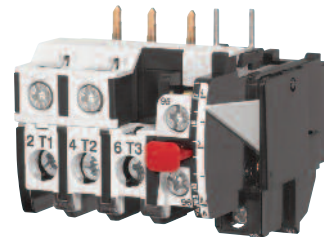
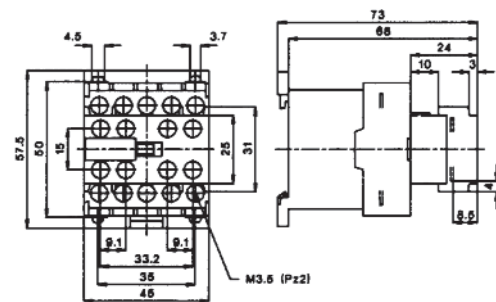
Ratings

AC1 (I _n)	10A	690 V AC
AC15	3A	230 V AC
	2A	400 V AC

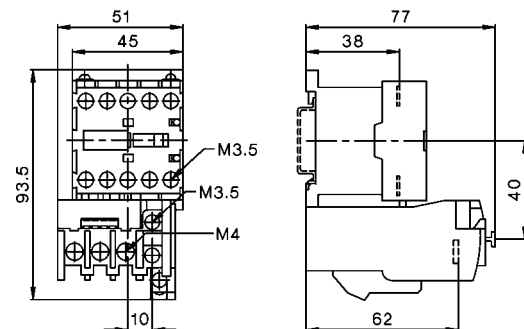
Overload

- Hand reset
- Single phase protection
- Trip and alarm contacts
- Ambient temperature compensation -25 to +40 °C

Dimensions (mm)



Dimensions (mm)



Current Range	Product
0.12–0.18	U1216E 0.18 K1
0.18–0.27	U1216E 0.27 K1
0.27–0.4	U1216E 0.4 K1
0.4–0.6	U1216E 0.6 K1
0.6–0.9	U1216E 0.9 K1
0.8–1.2	U1216E 1.2 K1
1.2–1.8	U1216E 1.8 K1
1.8–2.7	U1216E 2.7 K1
2.7–4	U1216E 4 K1
4–6	U1216E 6 K1
6–9	U1216E 9 K1
8–11	U1216E 11 K1
10–14	U1216E 14 K1