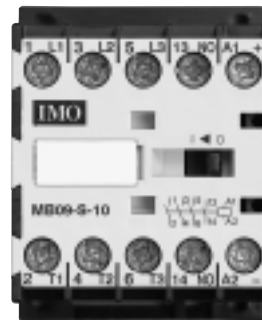


# Mini Contactor MB



- 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

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

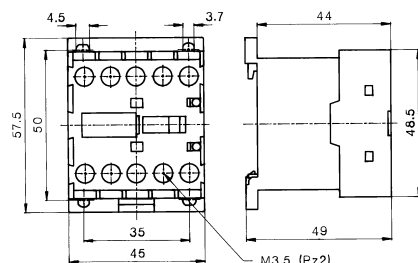
<b>MB09 + MB12</b>	<b>10</b>	<b>Coil Voltage</b>
3 main + 1 make auxiliary	<b>10</b>	
3 main + 1 break auxiliary	<b>01</b>	
<b>MR07</b>		<b>Standard Coils</b>
4 make	<b>40</b>	
3 make 1 break	<b>31</b>	
2 make 2 break	<b>22</b>	
24V 50/60Hz 415V 50Hz		
110V 50/60Hz 24V DC		
220-230V 50Hz 110VDC		

## Product selection

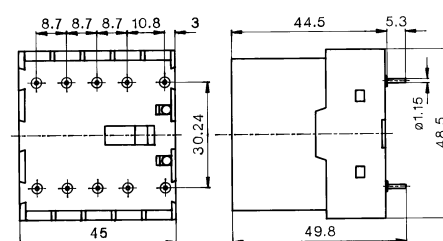
AC operated	DC operated
MR07-S-22	MR07-S-22
MR07-S-31	MR07-S-31
MR07-S-40	MR07-S-40
MB09-S-10	MB09-S-10
MB09-S-01	MB09-S-01
MB09-P-10	MB09-P-10
MB09-P-01	MB09-P-01
MB12-S-10	MB12-S-10
MB12-S-01	MB12-S-01
MB12-P-10	MB12-P-10
MB12-P-01	MB12-P-01

## Dimensions (mm)

### DIN Mount Screw Terminal



### PCB Mount

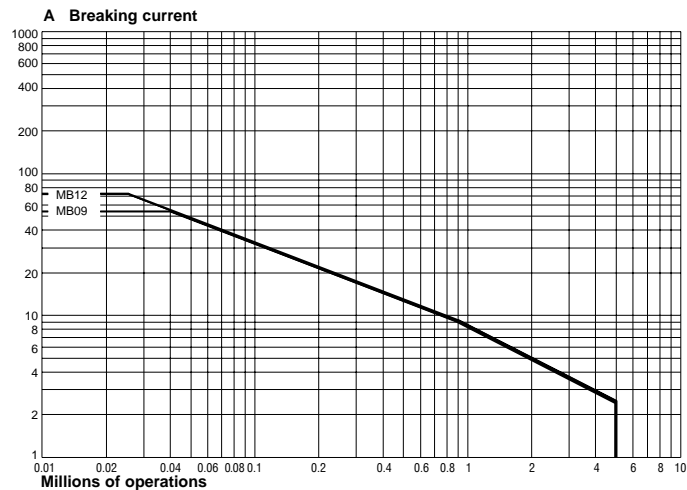
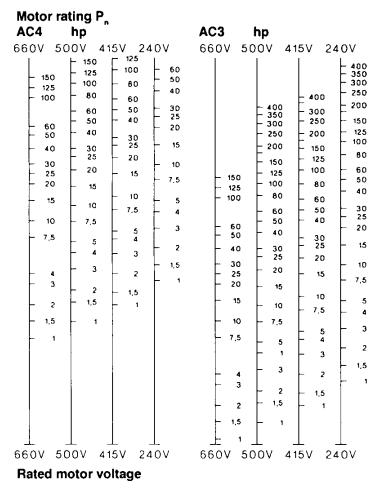


## Technical data according to IEC, VDE and BS

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	
Short Circuit Protection	380-400V	-		9		12	
	KW 230V	-		3		4	
	380-400V	-		4		5.5	
	Class gl. Highest Fuse Amps	10		20	16	20	
Auxiliary Contacts	Highest Fuse Amps (without welding)	10		10	10	10	
	AC15 Amps 230V	3		3		3	
Short Circuit Protection	Amps 380-415V	2		2		2	
	Class gl. Highest Fuse Amps	20		20		20	
Coil Operation	AC and DC Range	0.85 - 1.1		0.85 - 1.1		0.85 - 1.1	
	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 <sup>2</sup>	0.75 - 2.5		0.75 - 2.5		0.75 - 2.5	
	Flexible mm <sup>2</sup>	0.75 - 2.5		0.75 - 2.5		0.75 - 2.5	
Contacts and Coil	Flexible with Cable End mm <sup>2</sup>	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



# Mini Contactor MB continued



## 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

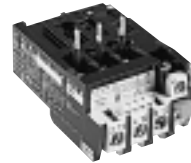
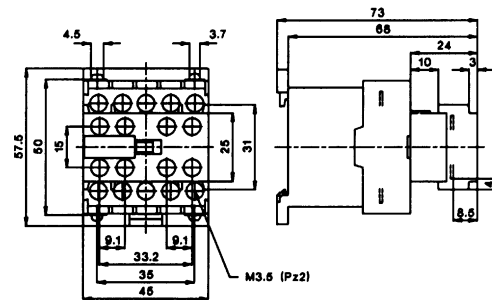
AC1 ( $I_n$ )	10A	690 V AC
AC15	3A	230 V AC
	2A	400 V AC

## Overload

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

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

## Dimensions (mm)



## Dimensions (mm)

