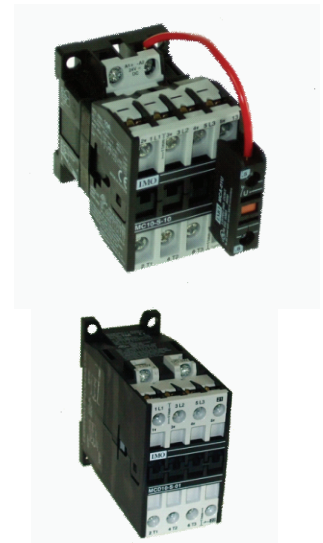
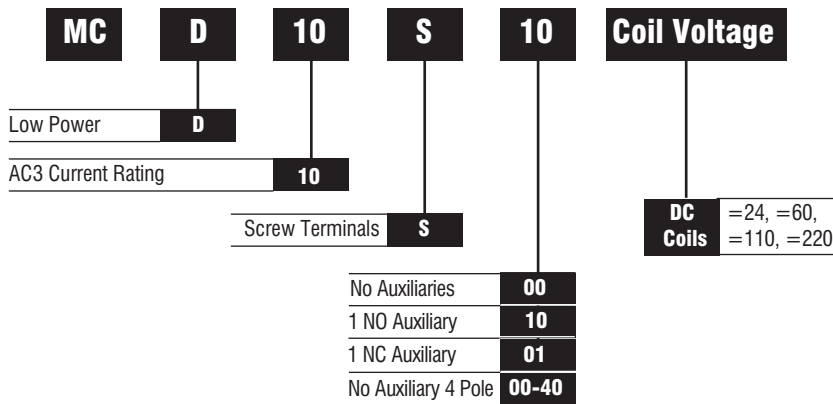


# Contactor - DC Operated

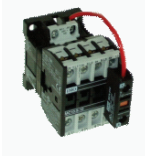
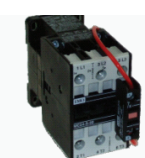
Standard and low power consumption





## Ordering information



## Standard Contactors

	Motor AC3 (400V) [kW]	Motor AC3 (690V) [kW]	Rated Current Ith [A] AC1 (690V)	Aux. Contacts Built in: Open	Aux. Contacts Built in: Closed	Max 4 Auxiliary Contacts	Type	Coil Power Inrush / Sealed [W]
3 Pole 	4	5.5	25	1	-	MCA.. or MCAH..	MC10-S-10=...	75 / 2
	4	5.5	25	-	1	MCA.. or MCAH..	MC10-S-01=...	75 / 2
	5.5	7.5	25	1	-	MCA.. or MCAH..	MC14-S-10=...	75 / 2
	5.5	7.5	25	-	1	MCA.. or MCAH..	MC14-S-01=...	75 / 2
	7.5	10	32	1	-	MCA.. or MCAH..	MC18-S-10=...	75 / 2
	7.5	10	32	-	1	MCA.. or MCAH..	MC18-S-01=...	75 / 2
	11	10	32	1	-	MCA.. or MCAH..	MC22-S-10=...	75 / 2
	11	10	32	-	1	MCA.. or MCAH..	MC22-S-01=...	75 / 2
	11	15	50	-	-	MCA.. or MCAH..	MC24-S-00=...	140 / 2
	15	18.5	65	-	-	MCA.. or MCAH..	MC32-S-00=...	140 / 2
4 Pole 	4	5.5	25	-	-	MCA.. or MCAH..	MC10-S-00-40=...	75 / 2
	5.5	7.5	25	-	-	MCA.. or MCAH..	MC14-S-00-40=...	75 / 2
	7.5	10	32	-	-	MCA.. or MCAH..	MC18-S-00-40=...	75 / 2
	11	10	32	-	-	MCA.. or MCAH..	MC22-S-00-40=...	75 / 2

## Low Power Consumption Contactors

	Motor AC3 (400V) [kW]	Motor AC3 (690V) [kW]	Rated Current Ith [A] AC1 (690V)	Aux. Contacts Built in: Open	Aux. Contacts Built in: Closed	Max 4 Auxiliary Contacts	Type	Coil Power Inrush / Sealed [W]
3 Pole 	4	5.5	25	1	-	MCA.. or MCAH..	MC10D-S-10=...	3 / 3
	4	5.5	25	-	1	MCA.. or MCAH..	MC10D-S-01=...	3 / 3
	5.5	7.5	25	1	-	MCA.. or MCAH..	MC14D-S-10=...	3 / 3
	5.5	7.5	25	-	1	MCA.. or MCAH..	MC14D-S-01=...	3 / 3
	7.5	10	32	1	-	MCA.. or MCAH..	MC18D-S-10=...	3 / 3
	7.5	10	32	-	1	MCA.. or MCAH..	MC18D-S-01=...	3 / 3
	11	10	32	1	-	MCA.. or MCAH..	MC22D-S-10=...	3 / 3
	11	10	32	-	1	MCA.. or MCAH..	MC22D-S-01=...	3 / 3
	11	15	50	-	-	MCA.. or MCAH..	MC24D-S-00=...	4 / 4
	15	18.5	65	-	-	MCA.. or MCAH..	MC32D-S-00=...	4 / 4
4 Pole 	4	5.5	25	-	-	MCA.. or MCAH..	MC10D-S-00-40=...	3 / 3
	5.5	7.5	25	-	-	MCA.. or MCAH..	MC14D-S-00-40=...	3 / 3
	7.5	10	32	-	-	MCA.. or MCAH..	MC18D-S-00-40=...	3 / 3
	11	10	32	-	-	MCA.. or MCAH..	MC22D-S-00-40=...	3 / 3

# Contactor - DC Operated

Standard and low power consumption



## Technical Data

Data according to IEC 947-4-1, EN 60947-1, VDE 0660

		Unit	MC(D)10-S	MC(D)14-S	MC(D)18-S	MC(D)22-S	MC(D)24-S	MC(D)32-S	MC(D)40-S
<b>Rated insulation voltage <math>U_i</math></b>		V AC	690	690	690	690	690	690	690
<b>Making capacity <math>I_{eff}</math></b>	at $U_e = 690V$ AC	A	200	200	200	200	400	500	500
<b>Breaking capacity <math>I_{eff}</math></b>	400V AC	A	180	180	200	200	380	400	400
<b>Frequency of operations <math>Z</math></b>		1/h	10000	100000	10000	100000	7000	7000	7000
<b>Mechanical life</b>	MC version	S x 10 <sup>6</sup>	10	10	10	10	10	10	10
	MCD version	S x 10 <sup>6</sup>	50	50	50	50	50	50	50
<b>Utilisation category AC1</b>									
Rated operational									
Current $I_e$	40°C 690V	A	25	25	32	32	50	65	80
Per pole	60°C 690V	A	25	25	32	32	40	65	65
<b>Utilisation category AC2 and AC3</b>									
Rated operational	230V	A	11.5	14.5	18	22	24	30	40
Current $I_e$	240V	A	11	14	18	22	24	32	40
Per pole	380-400V	A	10	14	18	22	24	32	40
<b>Power consumption of coils</b>									
	Inrush	W	75				140		
	Sealed	W	2				2		
	Inrush (MCD)	W	3				4		
	Sealed (MCD)	W	3				4		
<b>Operations range of coils</b>									
in multiples of control voltage $U_s$									
0.8 - 1.1									
<b>Switching time at control voltage <math>U_s \pm 10\%</math></b>									
	Make time	ms	8 - 12				10 - 20		
	Release time	ms	8 - 13				10 - 15		
	Make time (MCD)	ms	65 - 85				65 - 85		
	Release time (MCD)	ms	20 - 30				20 - 30		
<b>Maximum ambient temperature</b>									
Operation	Open	°C	-40 to + 60 (+90)*						
	Closed	°C	-40 to +40						
with thermal overload relay	Open	°C	-25 to +60						
	Closed	°C	-25 to +40						
Storage			-50 to +90						
<b>Cable cross-section</b>									
for contactors without thermal overload relay									
1 cable per clamp									
Main connector	Solid or stranded	mm <sup>2</sup>	0.75 - 6				1.5 - 25		
	Flexible	mm <sup>2</sup>	1 - 4				2.5 - 16		
	Flexible with multicore cable end	mm <sup>2</sup>	0.75 - 4				1.5 - 16		
Magnetic coil	Solid or stranded	mm <sup>2</sup>	0.75 - 2.5						
	Flexible	mm <sup>2</sup>	0.75 - 2.5						
	Flexible with multicore cable end	mm <sup>2</sup>	0.5 - 1.5						

\* With reduced voltage range 0.9 up to 1.0  $U_s$  and with reduced rated current  $I_e/AC1$  according to  $I_e/AC3$

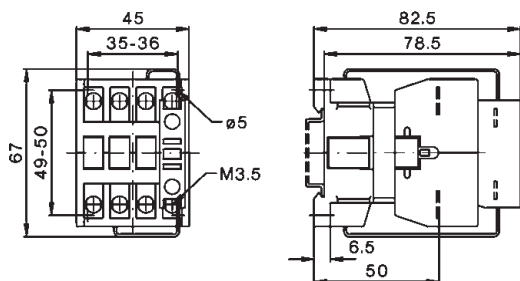
# Contactors - DC Operated

Standard and low power consumption

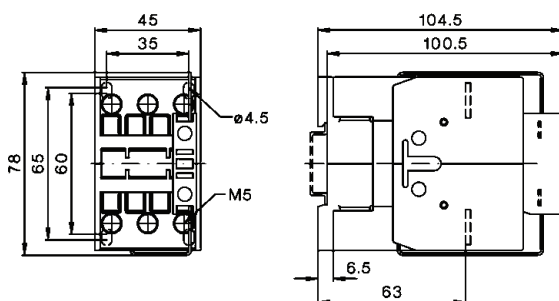


## Dimensions

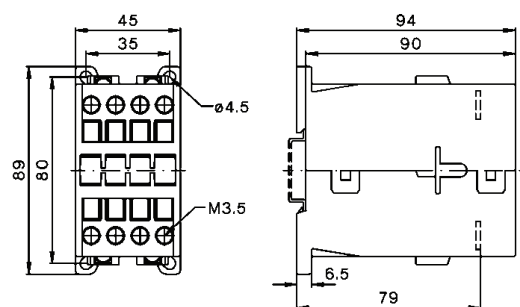
MC10-22



MC10-22



MCD10-22



MCD24-40

