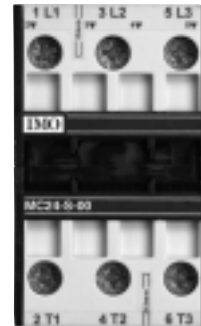


Contactors and Overloads MC

IMO

- Up to 700A AC3
- Up to 1000A AC1
- DIN rail mounting to 74A, 37kW
- Add on auxiliary contacts top or side mounted
- International approvals
- Designed to EN60947-1
- Compact design for panel space saving, only 45mm wide upto 40A AC3



Options and ordering codes

	MC	10	S	10	Coil Voltage
Series	MC K3				Standard Coils Standard coils 24V AC, 110V AC, 230V AC, 400V AC
AC3 rating		10			
Screw terminals			S		
				00	No auxiliaries
				10	1 make auxiliary
				01	1 break auxiliary
				11	1 make 1 break auxiliary
				22	2 make 2 break auxiliary



3-pole contactors

Standard coil voltages

24V 50/60Hz, 110V 50/60Hz
220-240V 50Hz, 380-415V 50Hz
24V DC



6mm² cable terminal

AC operated	Type:	MC10-S-10..	MC14-S-10..	MC18-S-10..	MC22-S-10..
	Auxiliary contacts:	1NO	1NO	1NO	1NO
	Type:	MC10-S-01..	MC14-S-01..	MC18-S-01..	MC22-S-01..
	Auxiliary contacts:	1NC	1NC	1NC	1NC
DC operated	Type:	MC10-S-10=	MC14-S-10=	MC18-S-10=	MC22-S-10=
	Auxiliary contacts:	1NO	1NO	1NO	1NO
	Type:	MC10-S-01=	MC14-S-01=	MC18-S-01=	MC22-S-01=
	Auxiliary contacts:	1NC	1NC	1NC	1NC
Main contacts	AC1 690V at 40°C A	25	25	32	32
	AC3 A	10	14	18	22
	230V kW	3	4	5	6
	380/400V kW	4	5.5	7.5	11
	500V kW	5.5	7.5	10	15
	660/690V kW	5.5	7.5	10	10
Cable cross-section	Solid mm ²	1.5-6	1.5-6	1.5-6	1.5-6
	Flexible mm ²	1.5-4	1.5-4	1.5-4	1.5-4
	Cables per clamp	2	2	2	2
Auxiliary contacts	I _m at 40°C A	6	16	16	16
	AC15 at 230V A	12	12	12	12
	at 400V A	4	4	4	4
Coil AC operated	Inrush VA	33-45	33-45	33-45	33-45
	Hold VA	7-10	7-10	7-10	7-10
Additional aux. contact blocks	Front mounting: type	MCA-10/MCA-01 – MCAH-10/MCAH-01			
	Side mounting: type				
Overload relay	Type:	MCOR-1-..	MCOR-1-..	MCOR-1-..	MCOR-1-..

3-pole contactors

Standard coil voltages

24V 50/60Hz, 110V 50/60Hz

220-240V 50Hz, 380-415V 50Hz

24V DC



25mm² cable terminal

AC operated	Type:	MC24-S-00..	MC32-S-00..	MC40-S-00..
	Auxiliary contacts:	-	-	-
	Type:	-	-	-
DC operated	Auxiliary contacts:	-	-	-
	Type:	-	-	-
	Auxiliary contacts:	-	-	-
Main contacts	Type:	MC24-S-00=	MC32-S-00=	MC40-S-00=
	Auxiliary contacts:	-	-	-
	Type:	-	-	-
	Auxiliary contacts:	-	-	-
	AC1 690V at 40°C A	50	65	80
	AC3 A	24	32	40
Cable cross-section	230V kW	6	8.5	11
	380/400V kW	11	15	18.5
	500V kW	15	18.5	18.5
	660/690V kW	15	18.5	18.5
Auxiliary contacts	Solid mm ²	2.5-25	2.5-25	2.5-25
	Flexible mm ²	2.5-16	2.5-16	2.5-16
	Cables per clamp	1+1	1+1	1+1
Coil AC operated	I _m at 40°C A	-	-	-
	AC15 at 230V A	-	-	-
	at 400V A	-	-	-
Additional aux. contact blocks	Inrush VA	90-115	90-115	90-115
	Hold VA	9-13	9-13	9-13
Overload relay	Front mounting: type	MCA-10/MCA-01 – MCAH-10/MCAH-01		
	Side mounting: type	MCAS-11	MCAS-11	MCAS-11
Overload relay	Type:	MCOR-1../MCOR-2..	MCOR-1../MCOR-2..	MCOR-2..

3-pole contactors

Standard coil voltages

24V 50/60Hz, 110V 50/60Hz

220-240V 50Hz, 380-415V 50Hz

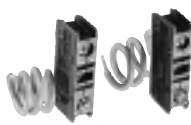
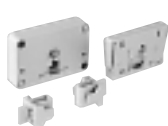
24V DC



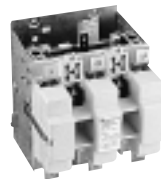
25mm² cable terminal

AC operated	Type:	MC50-S-00..	MC62-S-00..	MC74-S-00..
	Auxiliary contacts:	-	-	-
	Type:	-	-	-
DC operated	Auxiliary contacts:	-	-	-
	Type:	-	-	-
	Auxiliary contacts:	-	-	-
Main contacts	Type:	MC50-S-00=	MC62-S-00=	MC74-S-00=
	Auxiliary contacts:	-	-	-
	Type:	-	-	-
	Auxiliary contacts:	-	-	-
	AC1 690V at 40°C A	115	130	140
	AC3 A	50	62	74
Cable cross-section	230V kW	12.5	18.5	22
	380/400V kW	22	30	37
	500V kW	30	37	45
	660/690V kW	30	37	45
Auxiliary contacts	Solid mm ²	4-50	4-50	-50
	Flexible mm ²	6-35	6-35	6-35
	Cables per clamp	1+1	1+1	1+1
Coil AC operated	I _m at 40°C A	-	-	-
	AC15 at 230V A	-	-	-
	at 400V A	-	-	-
Additional aux. contact blocks	Inrush VA	140-165	140-165	40-165
	Hold VA	13-18	13-18	13-18
Overload relay	Front mounting: type	MCA-10/MCA-01 – MCAH-10/MCAH-01		
	Side mounting: type	MCAS-11	MCAS-11	MCAS-11
Overload relay	Type:	MCOR-3..	MCOR-3..	MCOR-3..

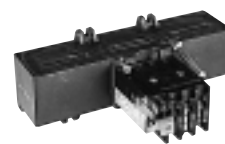
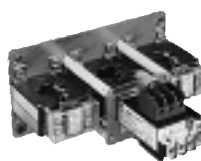
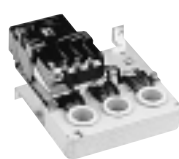
Accessories

	Auxiliary Contacts		Description	Product	
	For use with MC10 to MC74				
	Twin bifurcated for low level switching		1 make	MCA10	
	Rating	AC1 @ 690V 10A	1 break	MCA01	
		AC15 @ 400V 2A – @ 230V 3A	Early make	MCA10U	
	Maximum of 4 per contactor		Late break	MCA01U	
	For use with K3–150 – K3–175 max 1 piece		1M 1B INSIDE	HKS11	
	For use with K3–150 – K3–175 max 2 pieces		1M 1B OUTSIDE	HKS11A	
	For use with K3–200 – K3–315 max 3 pieces		1M 1B	HKD11	
	For use with K3–450 – K3–700 max 1 piece		2M 2B	HKF22	
	Rating	AC1 @ 690V 10A			
		AC15 @ 400V 2A – @230V 3A			
	Electronic Timer				
	For use with MC10 to MC74		Delay-on		
	Delay timer with LED indicator		1-30 secs	MCT-A30	
	Repeat accuracy 1% – Recovery time 50mS		10-180 secs	MCT-A180	
	Rating AC15 0.75A @ 60V-0.15A @ 250V		30-600 secs	MCT-A600	
			Delay-off		
	Max. inrush 25A – min. switching 5mA		1-30 secs	MCT-B30	
	Delay-on supply 24–60V AC or DC – 100–250V AC or DC		10-180 secs	MCT-B180	
	Delay-off supply 24–60V AC, 100–120V AC or 200-250V AC		30-600 secs	MCT-B600	
		Indicator			
		For use with MC10 to MC74			
		Current indicator		Green (LED)	MC-ING
24–660V AC or DC (voltage drop 2V)		Red (LED)	MC-INR		
Voltage indicator					
220 – 415V AC or DC		White (Lamp)	MC-UN		
24 – 120V AC or DC		Red (LED)	MC-UNR		
		Auxiliary Contacts		Description	Product
		Interface Relay			
		For use with MC10 to MC74			
		Relay to interface with electronic circuits			MC-IM 24V
		1 make contact rated 0.75A max 250V AC 30V DC			
		Mechanical Interlock			
		For use with MC10 to MC40			MCI-W
		MC24 to MC74			MCI-X
		K85A22 to K110A22			LG8511
		K3–150A11 to K3–175A11			LG10397H
		K3–200A11			LG10398H
		K3–315A11 to K3–550A22			LG10400H
K3–700A22			LG10402H		
		Coil Suppressor			
		For use with	MC10 to MC22	12–24V AC/DC	MC-E24
				24–48V AC/DC	MC-E48
				110–230V AC/DC	MC-E220
	250–415V AC/DC			MC-E380	
		MC24 to MC74	12–24V AC/DC	VG-MC/24	
			24–48V AC/DC	VG-MC/48	
			110–230V AC/DC	VG-MC/250	
			250–415V AC/DC	VG-MC/415	
		Overload Mounting			
For separate mounting of overloads					
For use with		U1216	With terminal	U12SM	

Contactors and Overloads MC continued



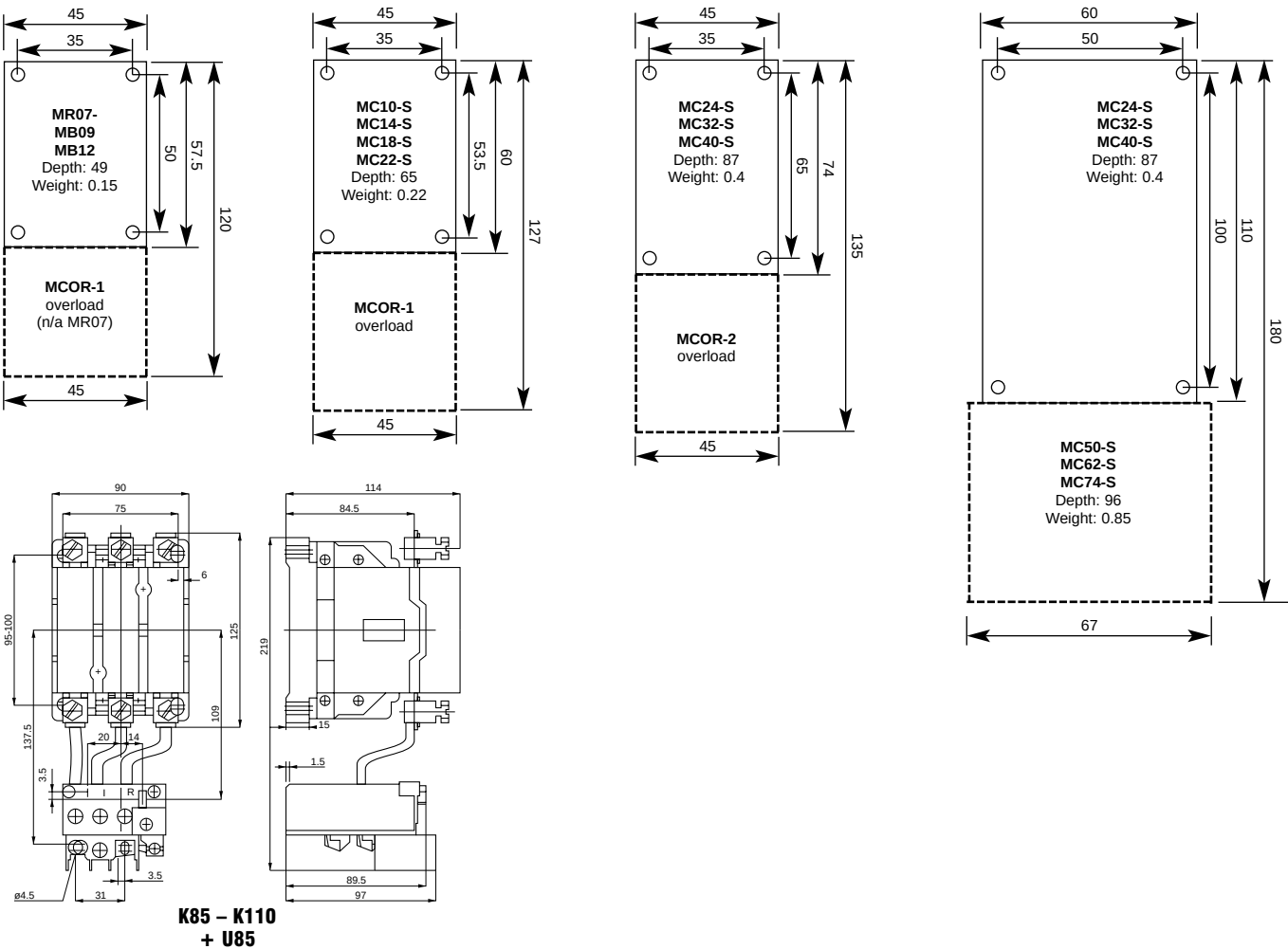
Contactors		K85A22	K110A22	K3-150A11	K3-175A11	K3-200A11	K3-315A11	K3-450A22	K3-550A22	K3-700A22
Main Contacts		3	3	3	3	3	3	3	3	3
Ratings at 400V AC	AC1 40°C Amps	150	170	200	250	350	450	600	760	1000
	60°C Amps	100	125	160	200	250	320	450	550	750
	AC3 Amps	85	110	150	175	200	315	450	550	700
	HP	65	85	–	130	160	230	330	420	550
	kW	45	55	75	90	110	160	250	315	400
Cable cross-section	Solid mm²	10 - 70		Busbar		Busbar	Busbar	Busbar	Busbar	Busbar
	Flexible mm²	10 - 50		18 x 5		22 x 4	25 x 5	30 x 5	40 x 6	50 x 8
	Cables per clamp	1		1		1	1	2	2	2
Auxiliary Contact Ratings at 400V AC	AC1 40°C Amps	16		10		10		10		
	60°C Amps	12								
	AC15 400V Amps	6		2		2		2		
	230V Amps	12		3		3		3		
Cable cross-section	Solid mm²	0.75 - 2.5		0.75 - 2.5		0.5 - 4		0.5 - 4		
	Flexible mm²	0.75 - 2.5		0.75 - 2.5		0.5 - 2.5		0.5 - 2.5		
	Cables per clamp	2		2		2		2		
Coil	Inrush VA	280 - 350	350 - 420	550		1100	2300	800 - 950	800 - 950	1350 - 1600
	Hold VA	16 - 23	23 - 29	130		66	120	9 - 11	9 - 11	21 - 25
	Voltage range	0.85 - 1.1	0.85 - 1.1	0.85 - 1.1		0.85 - 1.1	0.85 - 1.1	0.85 - 1.1	0.85 - 1.1	0.85 - 1.1
Operate times	Energise mS	13 - 30	13 - 30	12 - 30		30 - 40	25 - 50	50 - 100	50 - 100	50 - 100
	Release mS	8 - 15	8 - 15	15 - 40		15 - 45	15 - 30	150 - 200	150 - 200	150 - 200
Max. ambient temperature	Contactor °C	-40 to +60		-40 to +70		-40 to +70		-40 to +70		
	With overload °C	-25 to +40		-25 to +60		-25 to +55		-25 to +55		
Mounting		Base		Base		Base		Base		



Thermal overload relays Single-phase protection Hand reset Trip and alarm contacts	U85		U205		U840	
	Current ranges Amps	Product	Current ranges Amps	Product	Current ranges Amps	Product
	60-90	U85 90	100-150	U205 150	200-340	U840 340
	80-120	U85 120	140-210	U205 210	320-540	U840 340
	120-180	U85 180			500-840	U840 840

For DC coil contactors please contact IMO for further information

3-pole contactors dimensions (mm) and weights (kg)

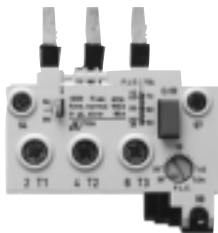


Overload relays



MCOR-1
for use with MC10-S to MC32-S

Setting range	
DOL Star	Delta
0.12-0.18	—
0.18-0.27	—
0.27-0.4	—
0.4-0.6	—
0.6-0.9	—
0.8-1.2	—
1.2-1.8	—
1.8-2.7	3.1-4.7
2.7-4	4.7-7
4-6	7-10.5
6-9	10.5-15.5
8-11	14-19
10-14	18-24
13-18	23-31
17-24	30-41
23-32	40-52



MCOR-2
for use with MC24-S to MC40-S

Setting range	
DOL Star	Delta
10-18	18-24
14-20	24-35
20-28	35-48
28-42	48-73

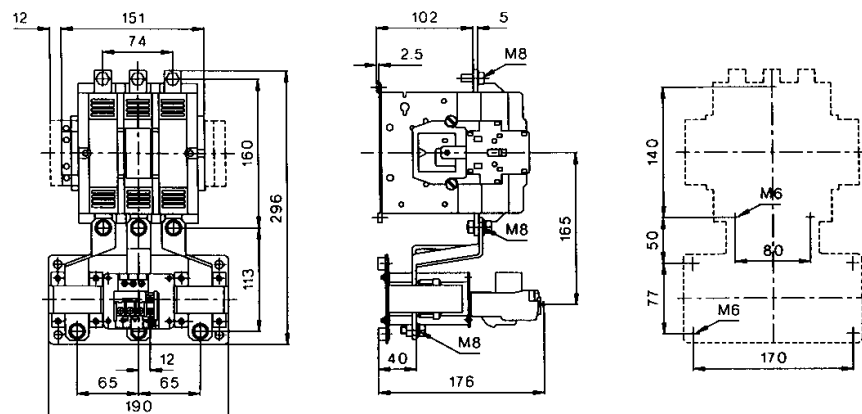


MCOR-3
for use with MC50-S to MC74-S

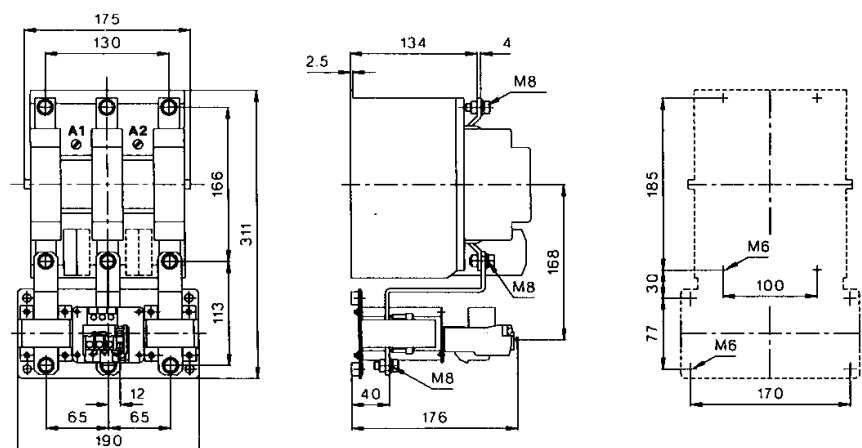
Setting range	
DOL Star	Delta
20-28	35-48
28-42	48-73
40-52	70-90
52-65	90-112
60-74	104-128

Dimensions (mm)

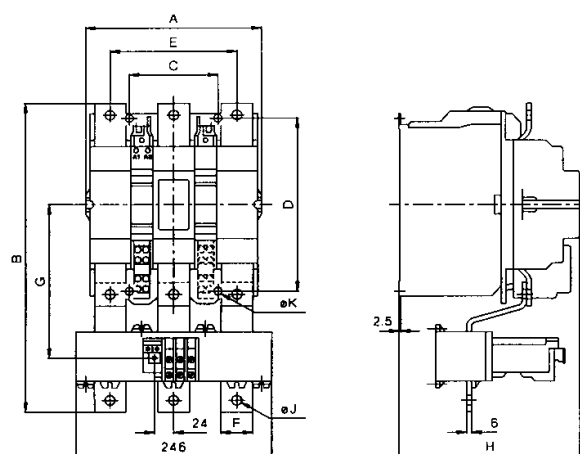
K3-150 to K3-175A11 + U205



K3-200A11 + U205



U840 + K3-...



U840	A	B	C	D	E	F	G	H	J	K
+K3-315	210	366	110	158	158	40	179	220	12.5	9
+K3-450	220	372	110	220	158	40	185	233	12.5	9
+K3-550	220	395	110	220	158	40	196	258	12.5	9
+K3-700	280	487	175	280	202	50	257	291	14.5	11
+K3-860	280	540	175	280	202	50	280	291	14.5	11