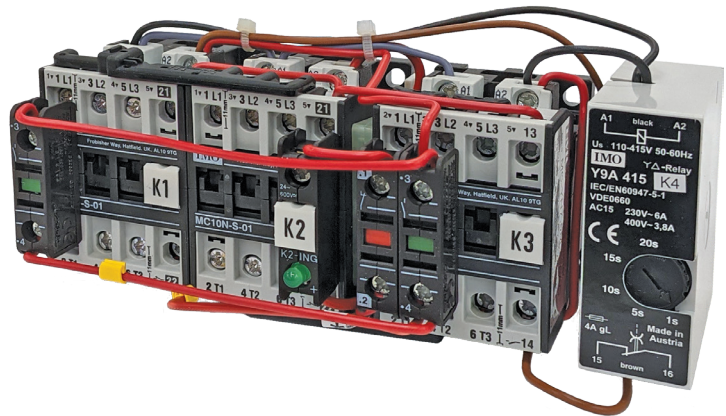


MC-Y Series Star Delta Starter



Key Features

- Open type - assembled and pre-wired to accept separate overload
- LED indication in Delta position up to 55kW
- Variable electronic timer with inherent dwell period
- DIN Rail mountable up to 55kW
- Mechanical & electrical interlock between Star and Delta contactors
- Designed to EN60947-4-1



Options & Ordering Codes

MC-Y		22	M	24AC	
Series				Coil Voltage	
Star Delta Starter		MC-Y		24AC	24V AC
Rating				24DC	24V DC
7.5kW	N7.5	45kW	45	110AC	110V AC
15kW	N15	55kW	55	230AC	230V AC
22kW	22	75kW	75	400AC	400V AC
30kW	30	110kW	110		
		M		Mechanical Interlock	

Specification

Rating @400VAC		Construction						Product Code	Associated Overload
kW	Amps	Line K1	Delta K2	Star K3	Star-Delta Inter Link	Mechanical Interlock	Timer		
7.5	16	MC10N-S-01 + MCA10	MC10N-S-01	MC10N-S-10 + MCA10 + MCA01	MCY-C-22	MC-I-W	Y9A..	MC-YN7.5M..	MCOR-1 U12/16E..-MC
15	30	MC18N-S-01 + MCA10	MC18N-S-01	MC14N-S-10 + MCA10 + MCA01	MCY-C-22	MC-I-W	Y9A..	MC-YN15M..	MCOR-1 U12/16E..-MC
22	45	MC24-S-00 + MCA10 + MCA01	MC24-S-00 + MCA01	MC18N-S-10 + MCA10 + MCA01	MCY-C-40	MC-I-W	Y9A..	MC-Y22M..	MCOR-2
30	60	MC32-S-00 + MCA10	MC32-S-00 + MCA01 + MCA01	MC24-S-00 + 2x MCA10 + MCA01	MCY-C-40	MC-I-W	Y9A..	MC-Y30M..	MCOR-2
45	85	MC50-S-00 + MCA10 + MCA01	MC50-S-00 + MCA01	MC32-S-00 + 2x MCA10 + MCA01	-	MC-I-X	Y9A..	MC-Y45M..	MCOR-3
55	109	MC62-S-00 + MCA10 + MCA01	MC62-S-00 + MCA01	MC50-S-00 + 2x MCA10 + MCA01	-	MC-I-X	Y9A..	MC-Y55M..	MCOR-3
75	150	MC90-S-00 + MCA10 + MCA01	MC90-S-00 + MCA01	MC90-S-00 + 2x MCA10 + MCA01	-	MC-I-Y	Y9AL..	MC-Y75M..	MCOR-4
110	205	MC115-S-00 + MCA10 + MCA01	MC115-S-00 + MCA01	MC90-S-00 + 2x MCA10 + MCA01	-	MC-I-Y	Y9AL..	MC-Y110M..	MCOR-4

MC-Y Series Star Delta Starter

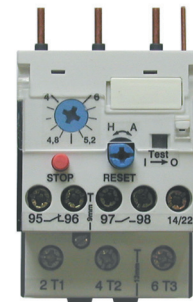
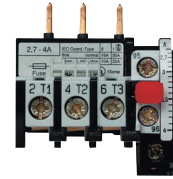


Technical Datasheet

Thermal Overloads

Ordering Codes

Amps	MCOR-1 Hand/Auto Reset	U12/16E Hand Reset	MCOR-2 Hand/Auto Reset	MCOR-3 Hand/Auto Reset	MCOR-4 Hand Reset
7.0-10.5	MCOR-1-6	U12/16E6-MC	-	-	-
10.5-15.5	MCOR-1-9	U12/16E9-MC	-	-	-
14.0-19.0	MCOR-1-11	U12/16E11-MC	-	-	-
18.0-24.0	MCOR-1-14	U12/16E14-MC	MCOR-2-14	-	-
23.0-31.0	MCOR-1-18	U12/16E18-MC	-	-	-
24.0-35.0	-	-	MCOR-2-20	-	-
30.0-40.0	-	U12/16E23-MC	MCOR-2-28	-	-
30.0-41.0	MCOR-1-24	-	-	-	-
35.0-48.0	-	-	-	MCOR-3-28	-
38.0-52.0	-	U12/16E30-MC	-	-	-
40.0-55.0	MCOR-1-32	-	-	-	-
48.0-73.0	-	-	MCOR-2-42	MCOR-3-42	-
70.0-90.0	-	-	-	MCOR-3-52	-
90.0-112.0	-	-	-	MCOR-3-65	-
104.0-156.0	-	-	-	-	MCOR-4-90
140.0-207.0	-	-	-	-	MCOR-4-120



Y9A Timer

Electronic timer specifically designed for use in Star Delta applications.

Variable run-up time with an inherent dwell period of 20-30ms during changeover from Star to Delta position, for Y9A times and 40-80. DIN Rail mounting. Contacts rated 4A @ 400VAC, for Y9AL timers.

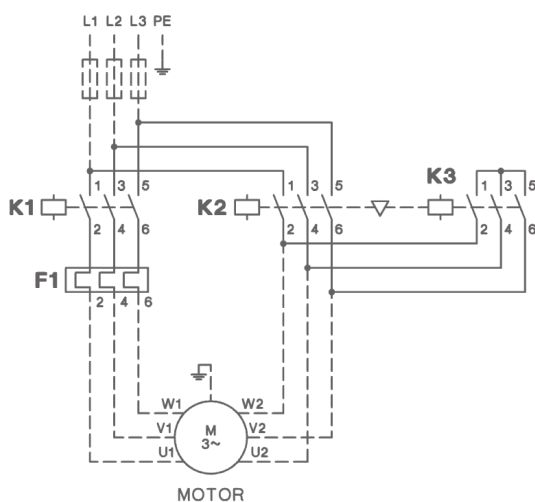
The timer is not continuously rated and must be wired in accordance with circuit diagram as detailed.

Time	Voltage	Part Number
1-20 secs	24-60VAC	Y9A60
1-20 secs	110-415VAC	Y9A415
1-20 secs	24-60VAC	Y9AL60
1-20 secs	110-415VAC	Y9AL415

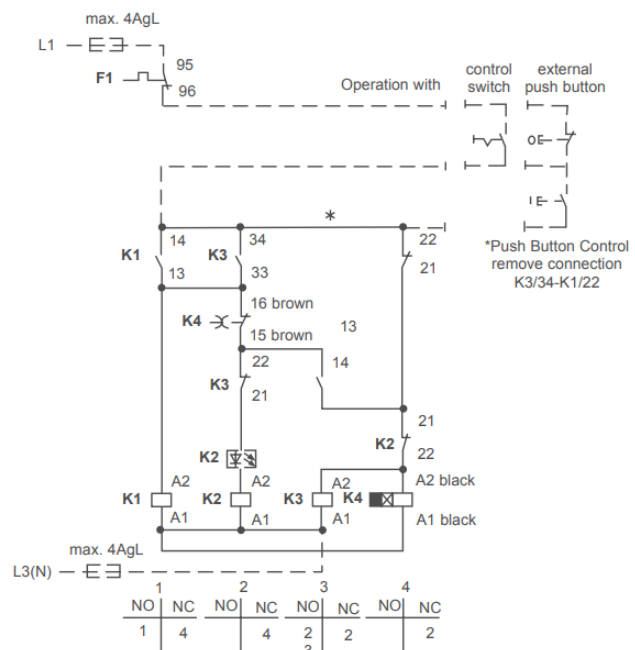
Accessories

Description	Part Number
Additional Auxiliary Contacts	
Normally Open 10A @ 690V AC1	MCA10
Normally Closed 10A @ 690V AC1	MCA01
Normally Open 25A @ 690V AC1	MCAH10
Normally Closed 25A @ 690V AC1	MCAH10
DIN Rail Mounting Set for Overloads	
For U12/16E..-MC	U12SM-MC
For MCOR-1	U3/32SM

Wiring Diagram - Main Circuit



Wiring Diagram - Control Circuit



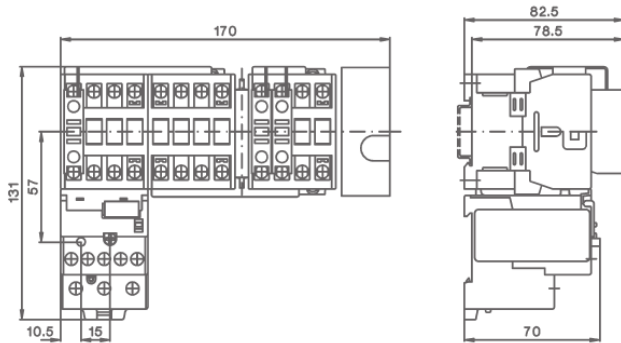
MC-Y Series Star Delta Starter



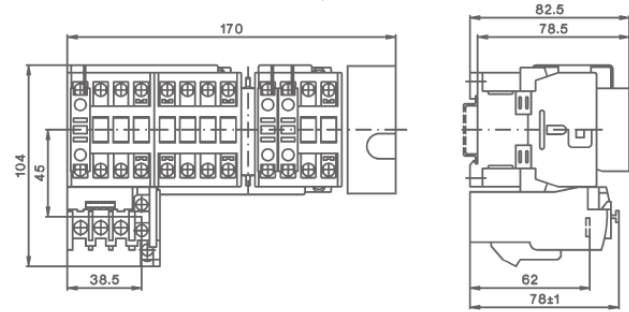
Technical Datasheet

Dimensions (mm)

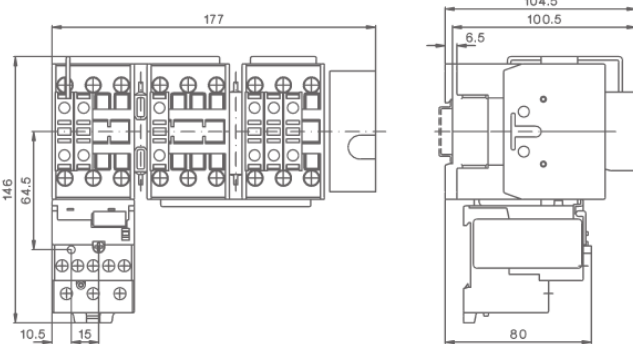
MC-YN7.5M.. MC-YN15M.. + MCOR-1



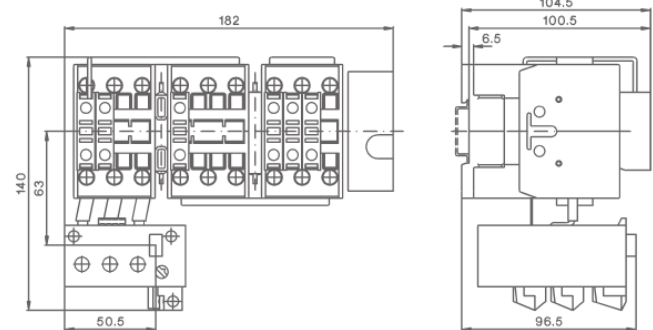
MC-YN7.5M.. MC-YN15M.. + U12/16E..-MC



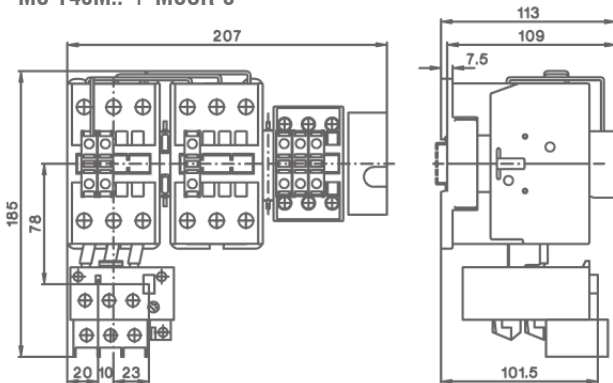
MC-Y22M.. MC-Y30M.. + MCOR-1



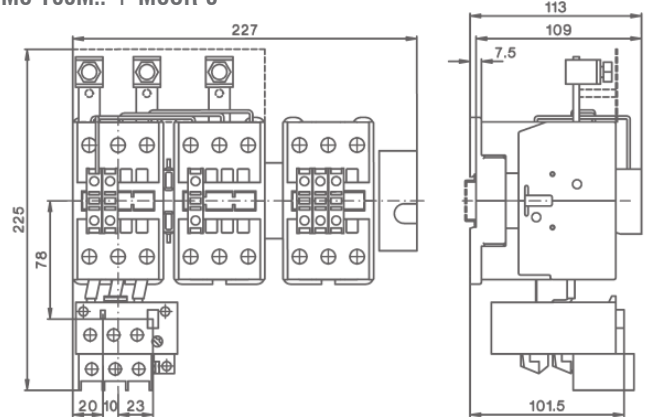
MC-Y22M.. MC-Y30M.. + MCOR-2



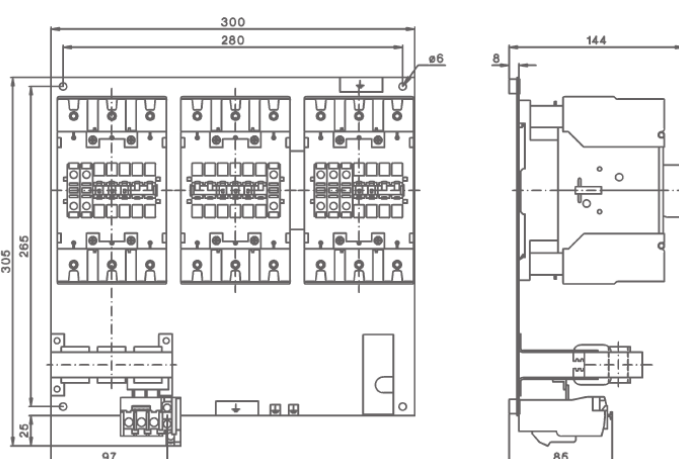
MC-Y45M.. + MCOR-3



MC-Y55M.. + MCOR-3



MC-Y75M.. MC-Y110M.. + MCOR-4



NOTE: Setting of Timer

It is essential to adjust the timer for the correct changeover from Star to Delta position. This will vary according to application.