

# XMC0 Series

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## Definite Purpose Contactors

### Description

American Zettler XMC0 series of Definite Purpose Contactors are electro-mechanical switching devices designed ideally for the HVAC industry. The most common applications of our contactors are found in refrigeration, air conditioning and heating. Other applications include elevators, food service equipment, cranes, hoists, welding machines, power supplies, vending machines, lighting, pumps and compressors. XMC0 contactors are built to the ARI 780/790 standard in our ISO 9001 manufacturing facility for high performance and great reliability. XMC0 is available in various pole configurations and load ratings up to 90 amps.



### Features

- A variety of termination options for specific application requirements
- Universal mounting plate: Easy replacement of competitor's contactors
- Heavy-duty contacts ensure long electrical life
- EE lamination (magnetic assembly) provides optimum performance while reducing power consumption
- Performance unaffected by position mounting
- Dust-free internal construction
- UL, CUR file no. E222994



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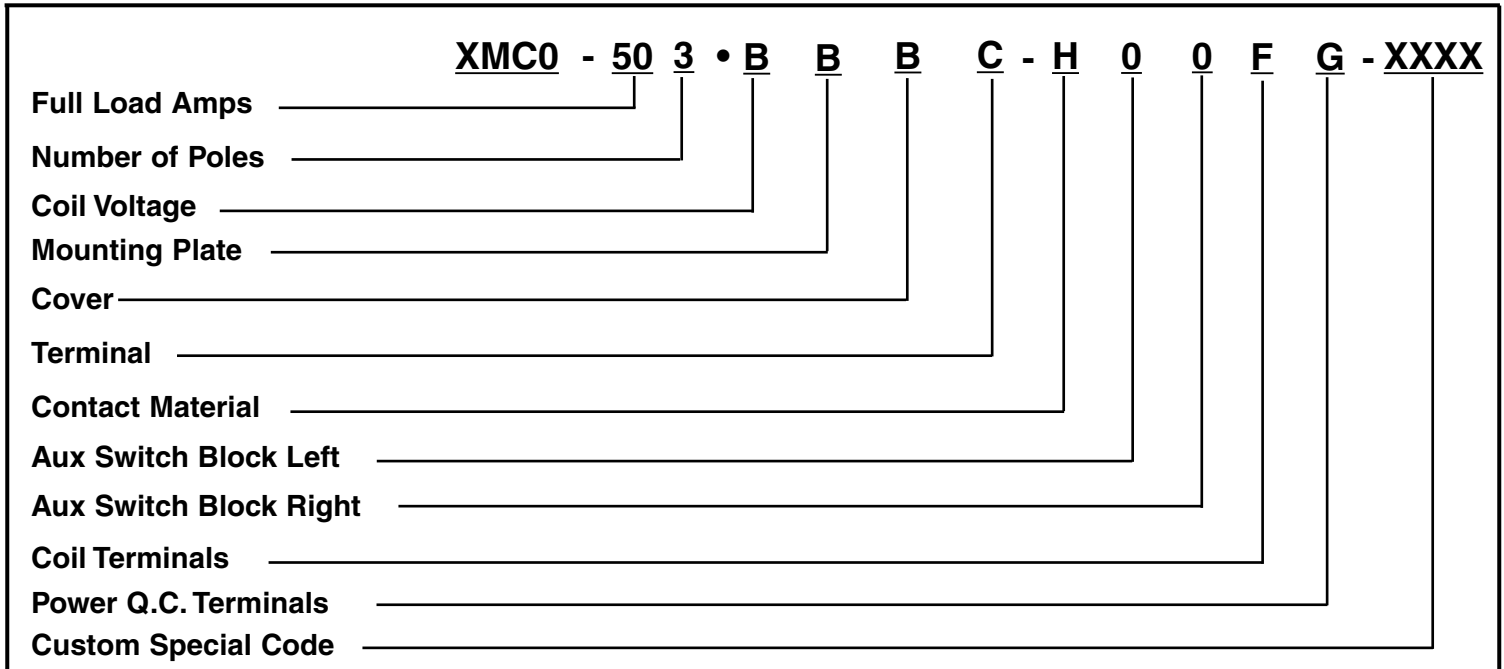
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# XMCO Series

## PART NUMBERING SYSTEM



### Full Load Amp

25	25 FLA
32	32 FLA
40	40 FLA
50	50 FLA
63	63 FLA
75	75 FLA
90	90 FLA

### Mounting Plate

A	Plastic Base
B	Metal Plate
C	Metal Plate with DIN rail mounting*

\* Available for 50 & 63 Amp versions only

### Auxiliary Contact Options ( Right and Left)

0	None ( standard type)
1	1NC+1NO, pressure plate screws w/ Q.C.
3	1NC, pressure plate screws w/ Q.C.
4	1NO, pressure plate screws w/ Q.C.
5	2NC, pressure plate screws w/ Q.C.
6	2NO, pressure plate screws w/ Q.C.
1P	1NC+1NO, pressure plate screws
3P	1NC, pressure plate screws
4P	1NO, pressure plate screws
5P	2NC, pressure plate screws
6P	2NO, pressure plate screws

### Number of Poles

1	1-pole + 1 shunt - Compact
2	2-pole - Compact
7	1-pole - Compact
3	3-pole* - Standard
3A	2-pole - Standard

\* 3P is only option for 50/63/75/90 Amp models

### Terminal with Quick Connects

A	Screw
B	Sems clamp
C	Slotted & Hex head washer
D	Box lug
E	Box lug (Line) Slotted & Hex head washer
F	Slotted & Hex head washer (Line) Box lug

### Cover

A	Long cover
B	Short cover

### Contact Material

Nil	AgSnO <sub>2</sub>
H	AgCdO

\*Contact option available in 40A version only. All other amperages use AgCdO

### Coil Terminals

Nil	Dual Terminals w/o screws in 1 & 2 pole and single terminals w/ screw in 3 pole
F	Dual Terminals w/ screws in 3 pole

### Power Terminals

Nil	Quad Terminals 1&2 poles Dual Terminals 3 pole
G	Without any terminals
D	Dual terminals in 1&2 poles
Q	Dual terminals at the side near coil terminal and quad terminals on opposite side in 3 pole

D	12V	12V
E	24V	24V
F	110-120V	110-120V
I	208-220V	208-240V
L		277V
N	380-415	440-480V
U	550-600V	550-600V



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### General Data

Rated insulation voltage	690 Vrms
Di-electric strength	2500Vrms (coil to contact & contact to contact)
Designs/conforms to	IEC 60947-4-1, GB14048.4, EN60947-4, ARI780 / 790
Agency approvals	UL, CUR file E220475
Operating position	Vertical and Horizontal mounting recommended
Operating altitude	2000 meters without derating
Ambient temperature	-20°C to 70°C
	-40°C to 70°C
Shock resistance (1/2 ~ wave) = 11ms	Contact Open: 6g ; Contact Closed: 15g
Vibration resistance (5-300Hz)	Contact Open: 2g ; Contact Closed: 4g
Weight	20-40A: 230-420g, 50/63A: 650g, 75/90A: 1550g
Torque	Screws 25 lb-in/Lugs 25 lb-in for 20-40FLA types
	Screws 45 lb-in/Lugs 50 lb-in for 50-63FLA types
	Screws 50 lb-in/Lugs 60 lb-in for 75-90FLA types
	Screws 8 lb-in for Auxiliary Contact Blocks
	Coil Screws 8 lb-in for 3-pole 30-40FLA and 12 lb-in for 50-90FLA types
	Main Screws 12 lb-in/Auxiliary Screws 8 lb-in/ Coil Screws 8 lb-in for small frame types
QC Wiring	The female connector should meet IEC 60760, necessary to ensure the reliability of connection between female connectors and QC terminals

### Electrical

Rated Operating voltage	12V-600V max.
Make capacity (230V, cos Ø=0.45)	12 x FLA
Break capacity (230V, cos Ø=0.45)	10 x FLA
Switching frequency	360 operations/hour
Electrical endurance (ARI 780/790)	250,000 cycles
Mechanical endurance (ARI 780/790)	3,000,000 cycles

### Auxiliary Contact Block Data

Conventional thermal current ( A )		10
Rated Insulation Voltage ( V )		690
Rated Operational Current (A)	AC600 (AC-15) 230/380V	3/1.9
	N600(DC-13) 110/230V	2.2/1.1



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### Electrical Ratings

Size	Full Load Amps (FLA)	Resistive Load Amps (RLA)	Locked Rotor Amps (LRA)			Pole Form	Order Number
			240VAC	480VAC	600VAC		
Compact	25	32	150	125	100	1P	XMCO-257
						1P+1shunt	XMCO-251
						2P	XMCO-252
	32	40	180	150	120	1P	XMCO-327
						1P+1shunt	XMCO-321
						2P	XMCO-322
	40	50	240	200	160	1P	XMCO-407
						1P+1shunt	XMCO-401
						2P	XMCO-402
Standard	25	32	150	125	100	2P	XMCO-253A
						3P	XMCO-253
	32	40	180	150	120	2P	XMCO-323A
						3P	XMCO-323
	40	50	240	200	160	2P	XMCO-403A
						3P	XMCO-403
	50	63	300	250	200	3P	XMCO-503
	63	80	360	300	240	3P	XMCO-633
	75	95	450	375	300	3P	XMCO-753
	90	120	540	450	360	3P	XMCO-903

### Coil Data

Pole Form	Inrush VA	Sealed VA	Sealed (W)	Pickup Voltage	Dropout Voltage
1 pole, 1 pole + 1 shunt	32	5.0	1.5 - 3	≤ 0.8 Us*	≥ 0.2 Us*
2 pole	40	6.0	2.5 - 4.5		
3 pole, 2 pole standard (3A)	60	8.0	3.6 - 6		
3 pole -503 & 633	120	17.0	3.5 - 8		
3 pole -753 & 903	235	32.0	6.0 - 17		

\*Us = nominal coil voltage



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### Dimensions

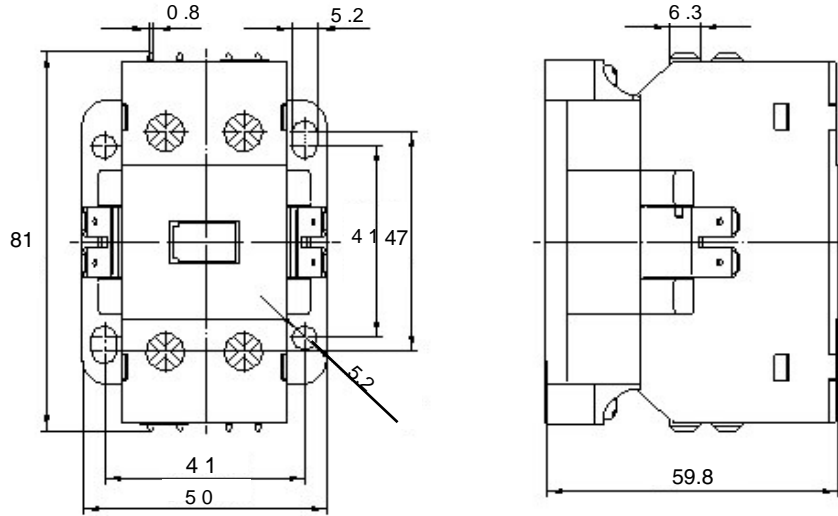


Fig 1 -1-pole/1-pole +shunt 2 pole (plastic base, 25-40 A Compact)

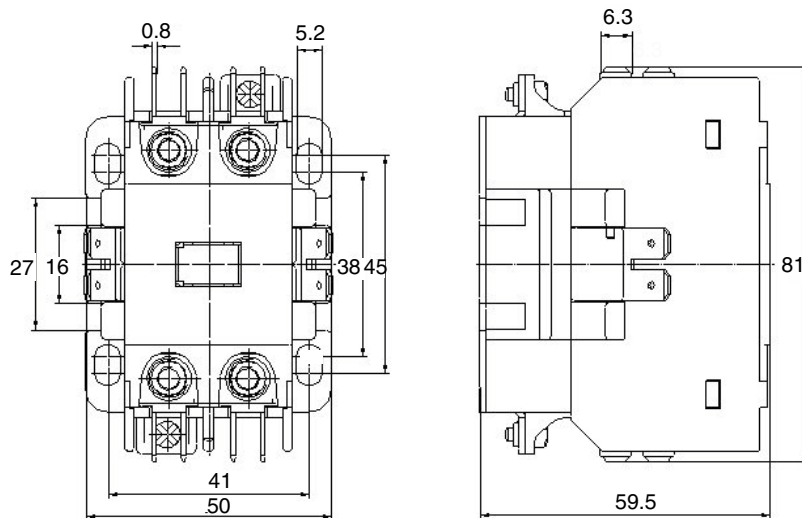


Fig 2 -1-pole/1-pole +shunt 2 pole (metal base, 25-40 A Compact)



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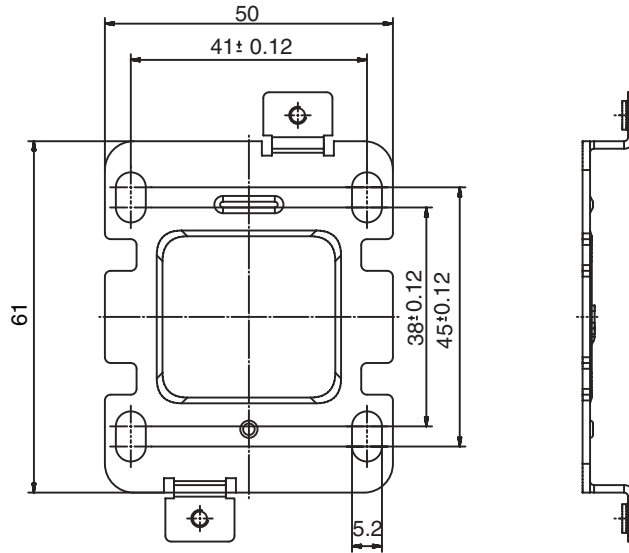


Fig 3 -2-pole (metal base, 25-40 A Compact)

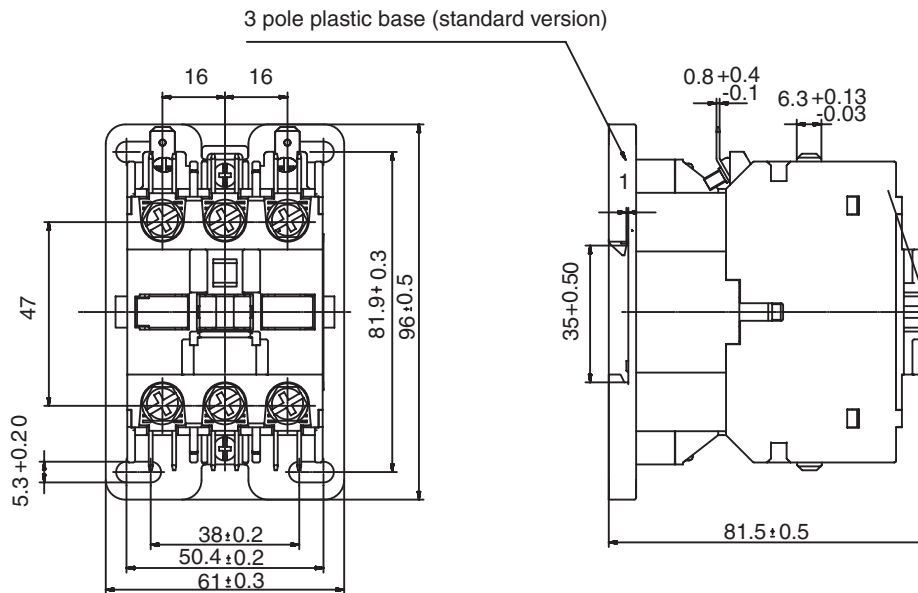


Fig 4 -3-pole (plastic base, 25-40 A Standard)



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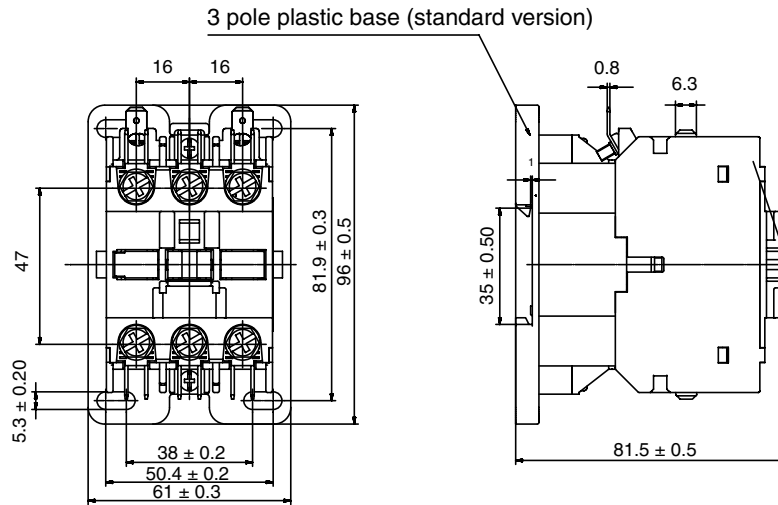


Fig 5 -3-pole (plastic base, 25-40 A Standard)

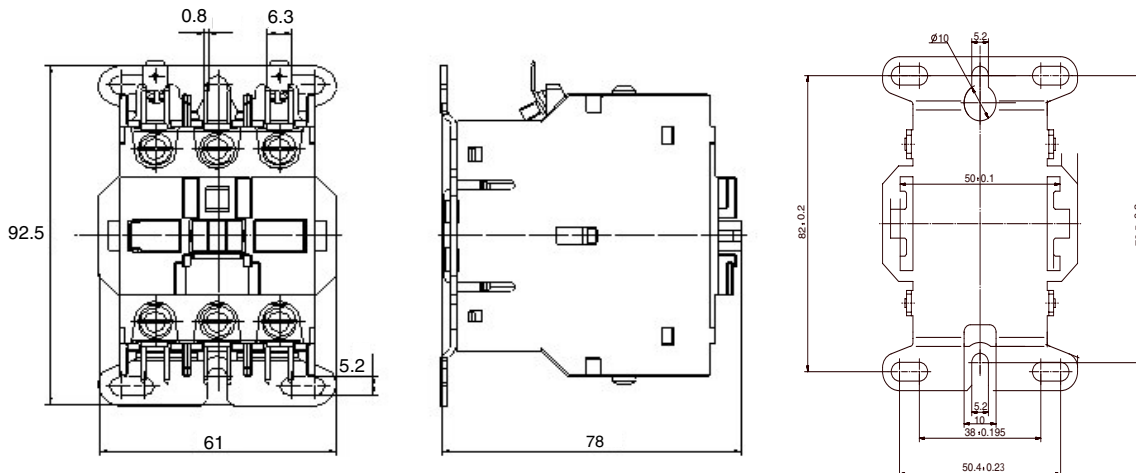


Fig 6 -3-pole (metal base, 25-40 A Standard)



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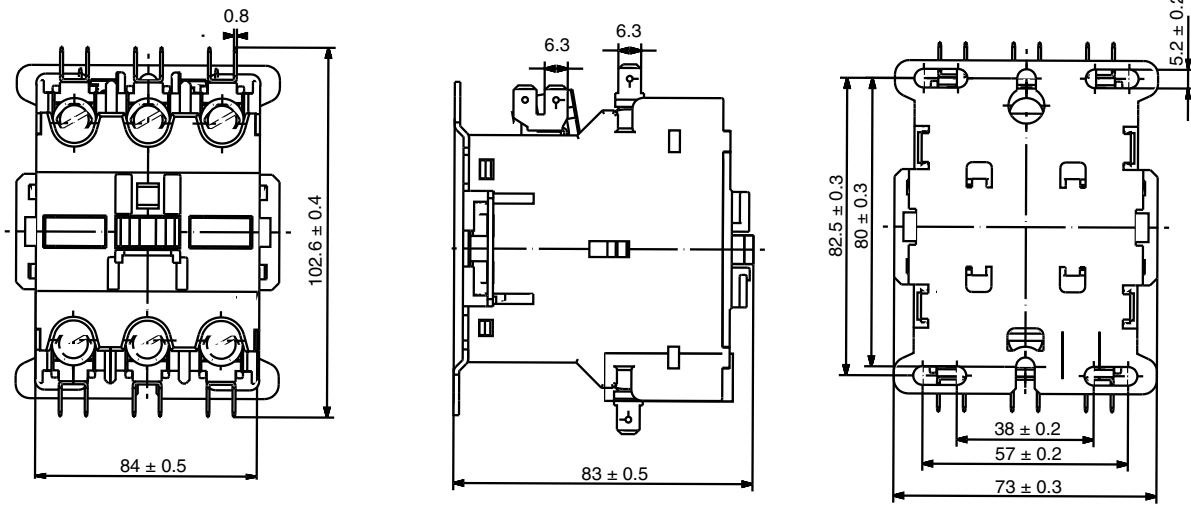


Fig 7 -3-pole (metal base, 50-63 A Standard)

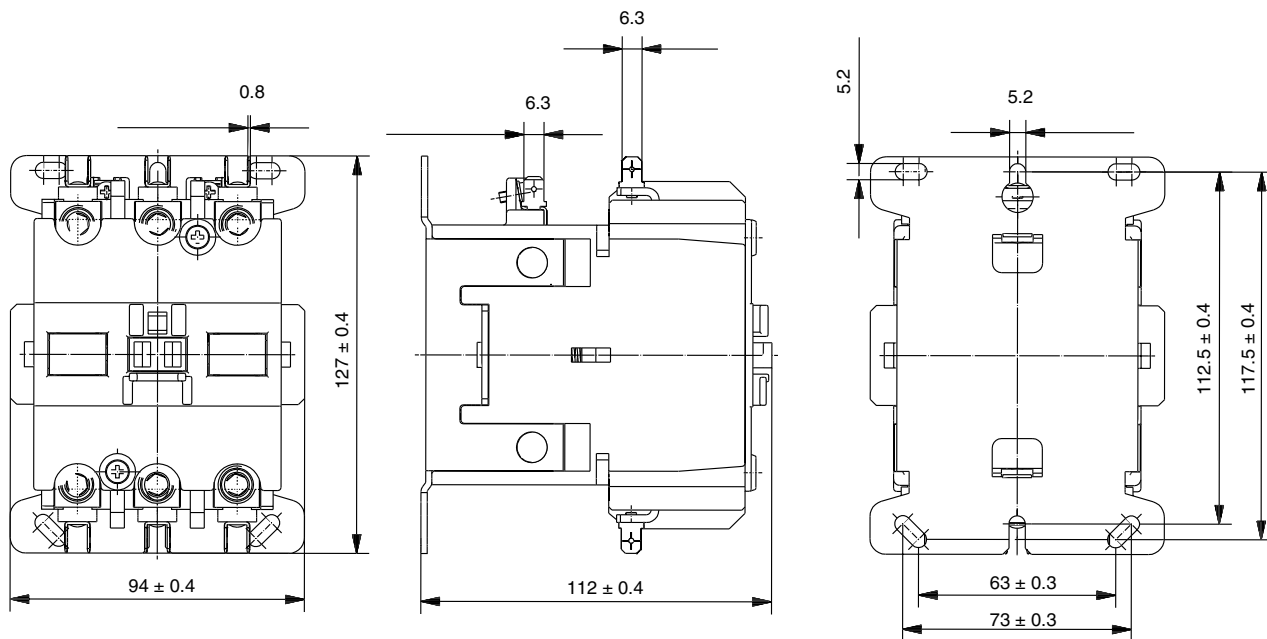


Fig 8 -3-pole (metal base, 75-90 A Standard)



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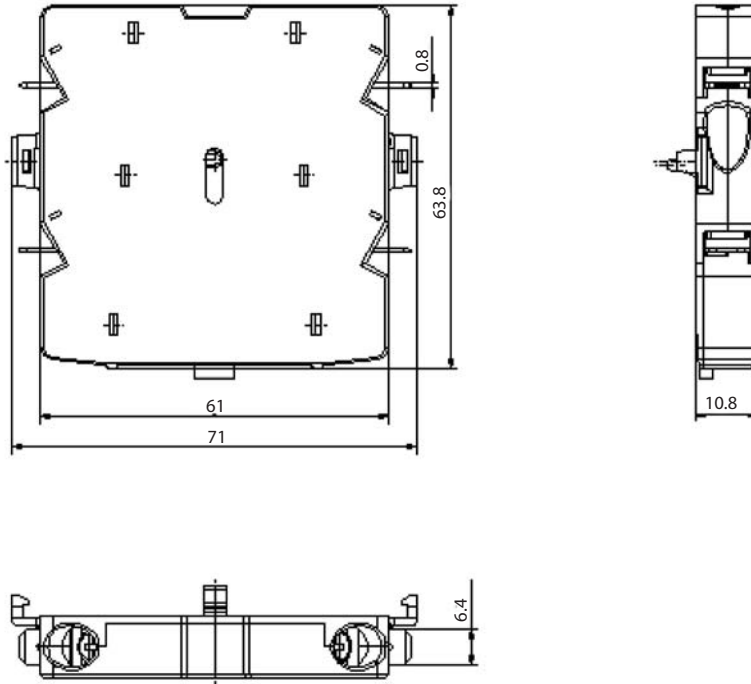


Fig1. XMCO Aux. Contact Block



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