

3P Power Contactor AC3:120A AC 220V 50 Hz Main circuit: Screw Auxiliary circuit: Screw

product brand name	SINOVA
product designation	Power contactor
<b>General technical data</b>	
size of contactor	5
power loss [W] for rated value of the current at AC in hot operating state	50.4 W
• per pole	16.8 W
insulation voltage	
• of main circuit with degree of pollution 3 rated value	1 000 V
degree of pollution	3
surge voltage resistance	
• of main circuit rated value	8 kV
protection class IP	
• on the front	IP00
• of the terminal	IP00
mechanical service life (operating cycles)	
• of contactor typical	3
electrical endurance (operating cycles)	600 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	11/07/2022
<b>Ambient conditions</b>	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
• during operation	-5 ... +55 °C
• during storage	-25 ... +70 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
<b>Main circuit</b>	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage at AC-3 rated value maximum	1 000 V
operational current	
• at AC-1 at 400 V at ambient temperature 40 °C rated value	160 A
• at AC-3	
— at 400 V rated value	120 A
— at 690 V rated value	110 A
operating power	
• at AC-3	
— at 400 V rated value	55 kW

— at 690 V rated value	100 kW	
<b>no-load switching frequency</b>		
• at AC	5 000 1/h	
<b>operating frequency</b>		
• at AC-1 maximum	800 1/h	
• at AC-3 maximum	750 1/h	
<b>Control circuit/ Control</b>		
<b>type of voltage</b>	AC	
<b>type of voltage of the control supply voltage</b>	AC	
<b>control supply voltage at AC</b>		
• at 50 Hz rated value	220 V	
<b>control supply voltage frequency</b>		
• 1 rated value	50 Hz	
<b>operating range factor control supply voltage rated value of magnet coil at AC</b>		
• at 50 Hz	0.85	
<b>apparent pick-up power of magnet coil at AC</b>		
• at 50 Hz	550 VA	
<b>inductive power factor with closing power of the coil</b>		
• at 50 Hz	0.45	
<b>apparent holding power of magnet coil at AC</b>		
• at 50 Hz	40 VA	
<b>inductive power factor with the holding power of the coil</b>		
• at 50 Hz	0.24	
closing delay at AC	22 ... 37 ms	
opening delay at AC	8 ... 30 ms	
<b>Auxiliary circuit</b>		
<b>number of NC contacts for auxiliary contacts</b>		
• attachable	4	
<b>Short-circuit protection</b>		
<b>design of the fuse link</b>		
• for short-circuit protection of the main circuit		
— with type of coordination 1 required	fuse gG: 400 A	
— with type of assignment 2 required	Fuse gG: 200 A	
<b>mounting position</b>	22.5° Inclination forward and backward & 90° to right / 90° to left, in relation to normal vertical mounting plane i.e. coil terminals always on top side	
<b>fastening method</b>	screw fixing	
<b>height</b>	150 mm	
<b>width</b>	120 mm	
<b>depth</b>	152 mm	
required spacing for grounded parts at the side	10 mm	
<b>Connections/ Terminals</b>		
<b>type of electrical connection</b>		
• for main current circuit	Connection bar	
type of connectable conductor cross-sections for main contacts		
• solid or stranded	2x (50 ... 120 mm²)	
• finely stranded with core end processing	2x (35 ... 95 mm²)	
<b>design of the thread of the connection screw</b>		
• of the auxiliary and control contacts	M3.5 (Control)	
<b>Safety related data</b>		
<b>product function</b>		
• positively driven operation according to IEC 60947-5-1	No	
Electrical Safety		
<b>touch protection on the front according to IEC 60529</b>	IP00	
<b>Approvals Certificates</b>		
<b>General Product Approval</b>	<b>other</b>	<b>Environment</b>



[Confirmation](#)

[Environmental Con-  
firmations](#)

## Further information

### Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

### Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/ic10>

### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3MT7120-5AA00-0AM0>

### Cax online generator

<http://support.automation.siemens.com/VW/CAXorder/default.aspx?lang=en&mlfb=3MT7120-5AA00-0AM0>

### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3MT7120-5AA00-0AM0>

### Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

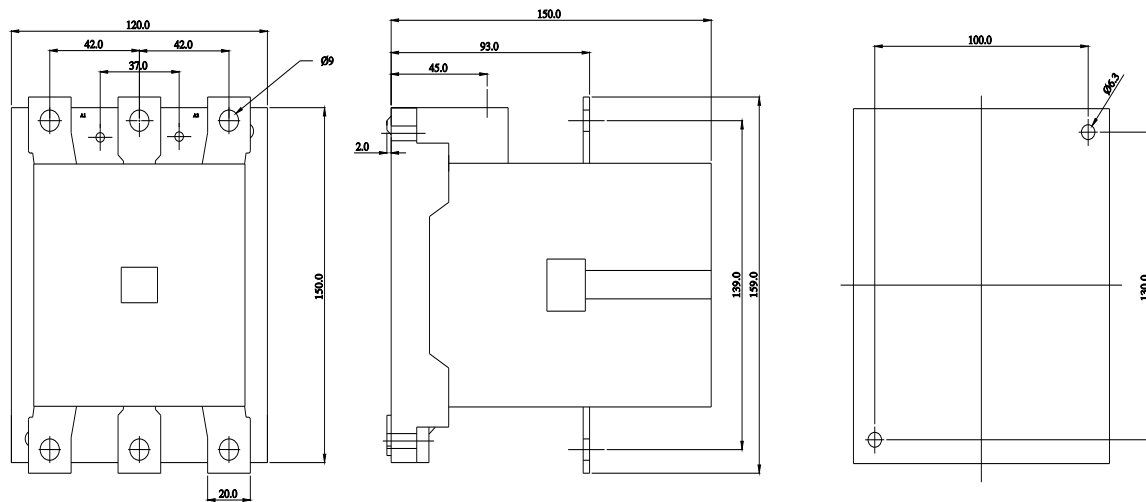
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3MT7120-5AA00-0AM0&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3MT7120-5AA00-0AM0&lang=en)

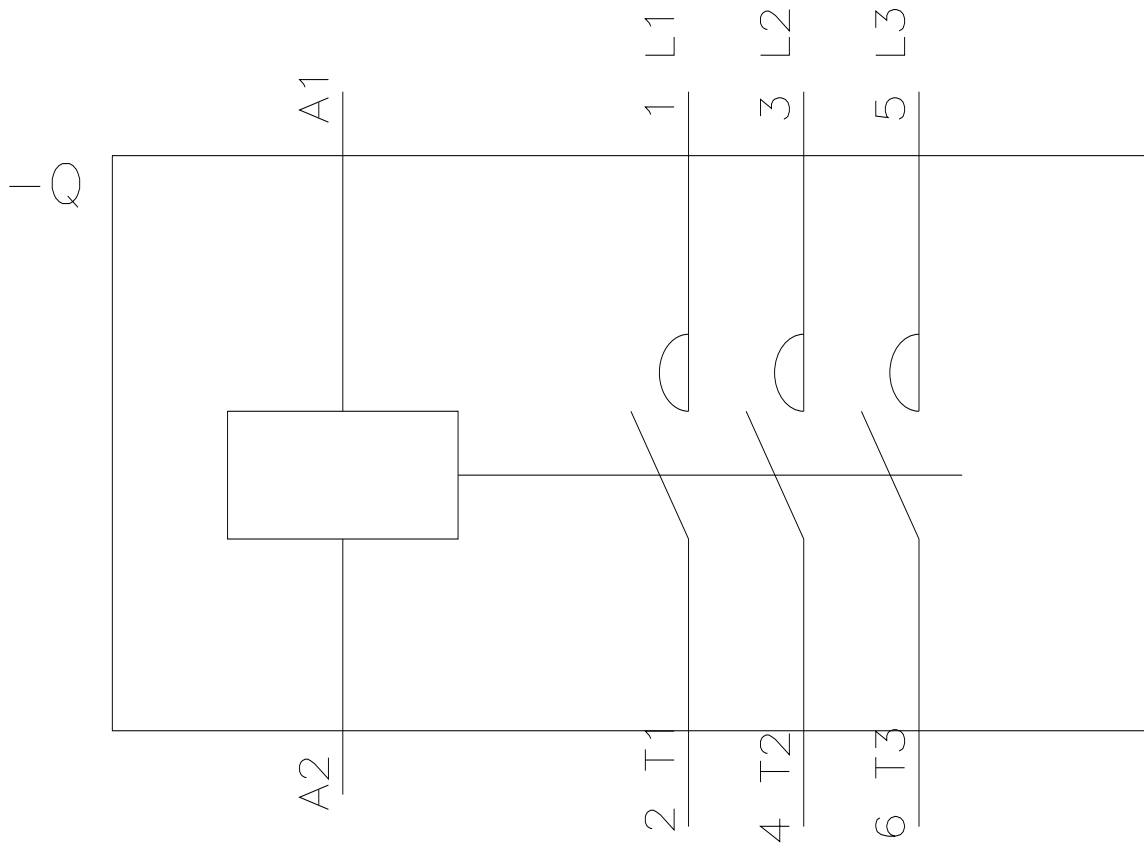
### Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3MT7120-5AA00-0AM0/char>

### Further characteristics (e.g. electrical endurance, switching frequency)

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3MT7120-5AA00-0AM0&objecttype=14&gridview=view1>





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