SIEMENS

Data sheet 3MT7140-5AA00-0AP0

3P Power Contactor AC3:140A AC 230V 50 Hz Main circuit: Screw Auxiliary circuit: Screw

product brand name	SINOVA
product designation	Power contactor
General technical data	
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
Weight	3.6 kg
Ambient conditions	
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 %
Main circuit	
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	140 A
— at 690 V rated value	110 A
operating power	
● at AC-3	

— at 400 V rated value	75 kW
— at 690 V rated value	100 kW
no-load switching frequency	
● at AC	5 000 1/h
operating frequency	
● at AC-1 maximum	800 1/h
● at AC-3 maximum	750 1/h
Control circuit/ Control	
type of voltage	AC
type of voltage of the control supply voltage	AC
control supply voltage at AC	
● at 50 Hz rated value	230 V
control supply voltage frequency	
● **1 rated value**	50 Hz
operating range factor control supply voltage rated value of magnet coil at AC	
● at 50 Hz	0.85
apparent pick-up power of magnet coil at AC	
● at 50 Hz	550 VA
inductive power factor with closing power of the coil	
● at 50 Hz	0.45
apparent holding power of magnet coil at AC	
● at 50 Hz	40 VA
inductive power factor with the holding power of the coil	
● at 50 Hz	0.24
closing delay at AC	22 ... 37 ms
opening delay at AC	8 ... 30 ms
Auxiliary circuit	
number of NC contacts for auxiliary contacts	
● attachable	4
Short-circuit protection	
design of the fuse link	
● for short-circuit protection of the main circuit	
— with type of coordination 1 required	fuse gG: 400 A
— with type of coordination 2 required	Fuse gG: 250 A
mounting position	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
fastening method	screw fixing
height	150 mm
width	120 mm
depth	152 mm
required spacing for grounded parts at the side	10 mm
Connections/ Terminals	
type of electrical connection	
● 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)
design of the thread of the connection screw	
● of the auxiliary and control contacts	M3.5 (Control)
Safety related data	
product function	
● positively driven operation according to IEC 60947-5-1	No
Electrical Safety	
touch protection on the front according to IEC 60529	IP00
Approvals Certificates	

General Product Approval	**other**	**Environment**

CB

CB

CE

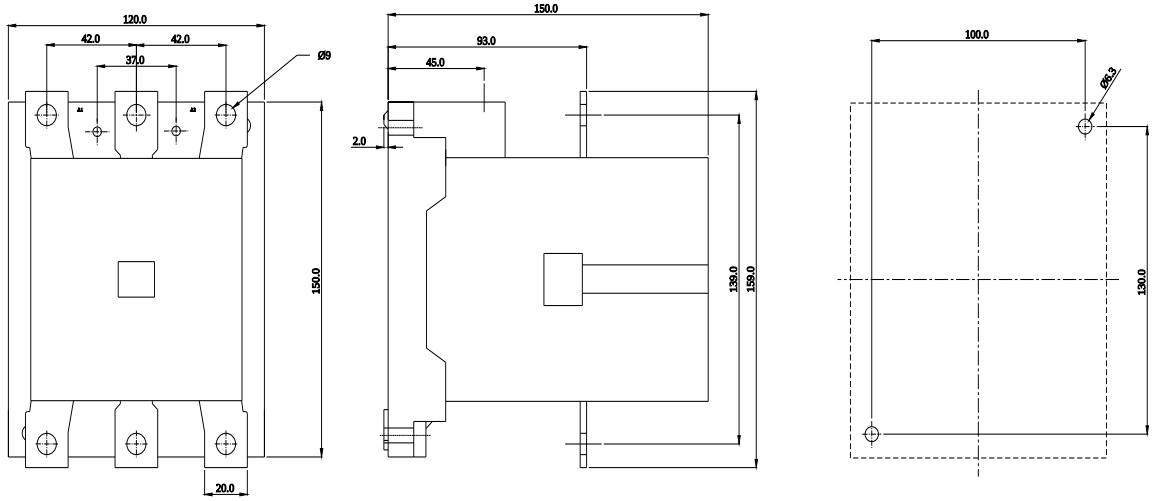
EG-Konf.

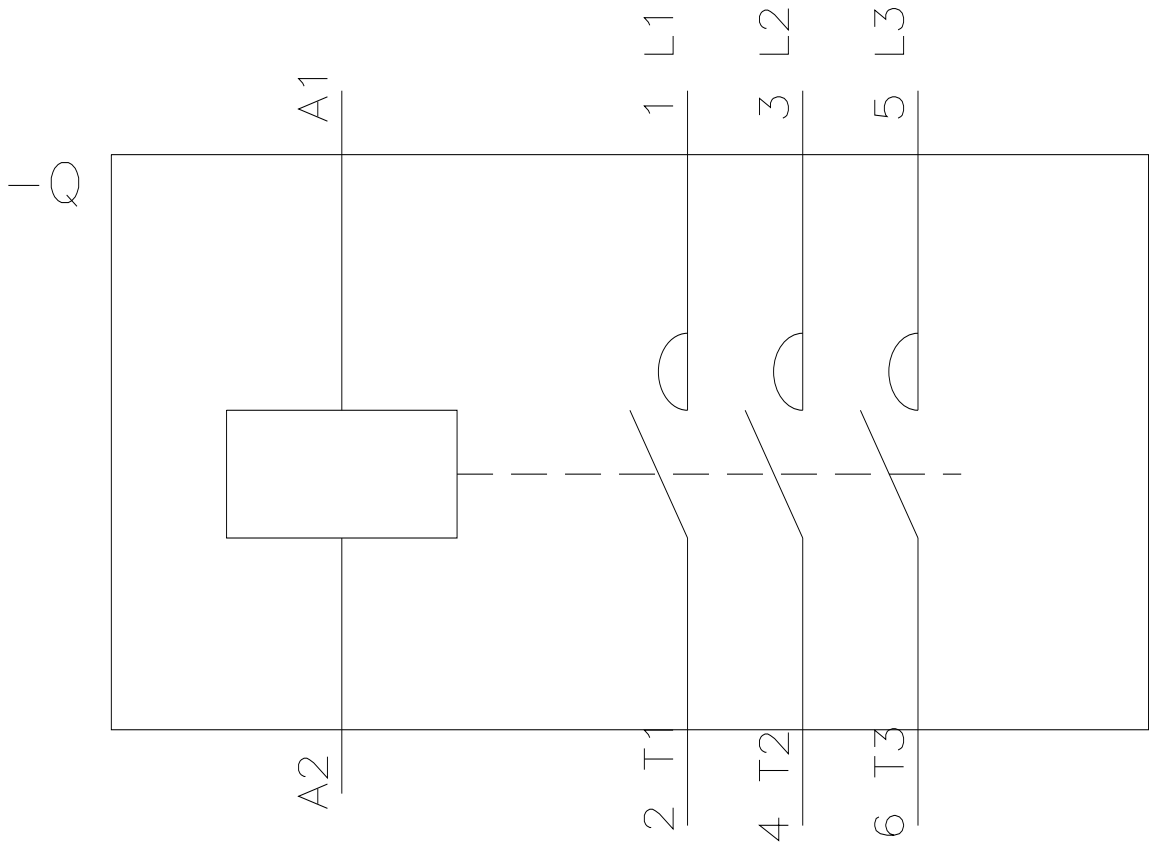
Confirmation

Environmental Confirmations

Further information

Information on the packaging
https://support.industry.siemens.com/cs/ww/en/view/109813875
Information for data generation and storage
https://support.industry.siemens.com/cs/ww/en/view/109995012
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=3MT7140-5AA00-0AP0
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3MT7140-5AA00-0AP0
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3MT7140-5AA00-0AP0
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3MT7140-5AA00-0AP0&lang=en
Characteristic: Tripping characteristics, I²t, Let-through current
https://support.industry.siemens.com/cs/ww/en/ps/3MT7140-5AA00-0AP0/char
Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3MT7140-5AA00-0AP0&objecttype=14&gridview=view1





last modified: 4/4/2025