



3P Power Contactor AC3:50A 1NO+1NC AC230V 50/60Hz Main circuit: Screw
Auxiliary circuit: Screw

product brand name	SINOVA
product designation	Power contactor
General technical data	
size of contactor	3
product extension auxiliary switch	Yes
power loss [W] for rated value of the current at AC in hot operating state	22.176 W
• per pole	7.392 W
insulation voltage	
• of main circuit with degree of pollution 3 rated value	1 000 V
• of auxiliary circuit with degree of pollution 3 rated value	1 000 V
surge voltage resistance	
• of main circuit rated value	8 kV
• of auxiliary circuit rated value	6 kV
protection class IP	
• on the front	IP20
mechanical service life (operating cycles)	
• of contactor typical	5 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	07/01/2022
Weight	1.082 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	690 V
operational current	
• at AC-1 at 400 V at ambient temperature 40 °C rated value	80 A
• at AC-1 up to 690 V	
— at ambient temperature 40 °C rated value	80 A
— at ambient temperature 60 °C rated value	65 A
• at AC-3	
— at 400 V rated value	50 A

— at 690 V rated value	24 A
operating power	
• at AC-3	
— at 400 V rated value	22 kW
— at 690 V rated value	22 kW
no-load switching frequency	
• at AC	1 200 1/h
operating frequency	
• at AC-1 maximum	600 1/h
• at AC-3 maximum	600 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
• at 50 Hz rated value	230 V
• at 60 Hz rated value	230 V
operating range factor control supply voltage rated value of magnet coil at AC	
• at 50 Hz	0.85 ... 1.1
• at 60 Hz	0.85 ... 1.1
apparent pick-up power of magnet coil at AC	
• at 50 Hz	280 VA
• at 60 Hz	280 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.75
• at 60 Hz	0.75
apparent holding power of magnet coil at AC	
• at 50 Hz	41 VA
• at 60 Hz	40 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.3
• at 60 Hz	0.3
closing delay at AC	17 ... 29 ms
opening delay at AC	6 ... 15 ms
Auxiliary circuit	
number of NC contacts for auxiliary contacts	
• instantaneous contact	1
number of NO contacts for auxiliary contacts	
• instantaneous contact	1
operational current at AC-12 maximum	10 A
operational current at AC-15	
• at 230 V rated value	6 A
• at 400 V rated value	3 A
• at 500 V rated value	2 A
• at 690 V rated value	1 A
operational current at DC-12	
• at 24 V rated value	6 A
• at 110 V rated value	3 A
• at 220 V rated value	1 A
operational current at DC-13	
• at 24 V rated value	6 A
• at 110 V rated value	1 A
• at 220 V rated value	0.3 A
• at 600 V rated value	0.1 A
Short-circuit protection	
design of the fuse link	
• for short-circuit protection of the main circuit	
— with type of coordination 1 required	fuse gG: 100 A
— with type of assignment 2 required	fuse gG: 80 A
• for short-circuit protection of the auxiliary switch required	fuse gG: 10 A
mounting position	22.5° inclination forward and backward & 360° rotation, in relation to normal vertical mounting plane

fastening method	screw and snap-on mounting onto 35 mm or 75 mm standard mounting rail according to DIN EN 60715
height	127.5 mm
width	74.5 mm
depth	113 mm

Connections/ Terminals

type of electrical connection	
• for main current circuit	screw-type terminals
• for auxiliary and control circuit	screw-type terminals
type of connectable conductor cross-sections for main contacts	
• solid or stranded	1x (2.5 ... 25 mm ²), 2x (2.5 ... 16 mm ²)
• finely stranded with core end processing	1x (2.5 ... 25 mm ²), 2x (2.5 ... 10 mm ²)
type of connectable conductor cross-sections	
• for auxiliary contacts	
— solid or stranded	1x (1 ... 4 mm ²), 2x (1 ... 4 mm ²)
— finely stranded with core end processing	1x (1 ... 2.5 mm ²), 2x (1 ... 1.5 mm ²)
tightening torque	
• for main contacts with screw-type terminals	5 N·m
• for auxiliary contacts with screw-type terminals	1.2 N·m
design of the thread of the connection screw	
• for main contacts	M8
• of the auxiliary and control contacts	M3.5

Approvals Certificates

General Product Approval	Test Certificates	other	Environment
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[Type Test Certificates/Test Report](#)

[Confirmation](#)

[Environmental Conformations](#)

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=3MT7050-3AA11-0AL2>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3MT7050-3AA11-0AL2>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3MT7050-3AA11-0AL2>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3MT7050-3AA11-0AL2&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3MT7050-3AA11-0AL2/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3MT7050-3AA11-0AL2&objecttype=14&gridview=view1>



