








power contactor AC-1 900 A / 690 V / 40 °C 3-pole, U_c: 220-240 V AC(50-60 Hz) / 200-220 V DC, drive: conventional auxiliary contacts 2 NO + 2 NC main circuit: busbar control and auxiliary circuit: screw terminal

product brand name	SIRIUS
product designation	Contacteur
product type designation	3RT14
General technical data	
product extension	
• function module for communication	No
• auxiliary switch	Yes
power loss [W] for rated value of the current	
• at AC in hot operating state	300 W
• at AC in hot operating state per pole	100 W
• without load current share typical	7 W
type of calculation of power loss depending on pole	quadratic
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	600 V
surge voltage resistance	
• of main circuit rated value	8 kV
• of auxiliary circuit rated value	6 kV
shock resistance with sine pulse	
• at AC	8g / 11 ms
• at DC	8g / 11 ms
mechanical service life (operating cycles)	
• of contactor typical	1 000 000
Substance Prohibition (Date)	03/27/2020
SVHC substance name	Lead - 7439-92-1
Net Weight	23.451 kg
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
• during operation	-25 ... +55 °C
• during storage	-40 ... +80 °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
number of NC contacts for main contacts	0
type of voltage for main current circuit	AC

operational current	
<ul style="list-style-type: none"> ● at AC-1 <ul style="list-style-type: none"> — up to 690 V at ambient temperature 40 °C rated value — up to 690 V at ambient temperature 55 °C rated value — up to 1000 V at ambient temperature 40 °C rated value — up to 1000 V at ambient temperature 55 °C rated value 	<p>900 A</p> <p>900 A</p> <p>900 A</p> <p>900 A</p>
minimum cross-section in main circuit at maximum AC-1 rated value	600 mm ²
no-load switching frequency	
<ul style="list-style-type: none"> ● at AC ● at DC 	<p>600 1/h</p> <p>600 1/h</p>
operating frequency at AC-1 maximum	600 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage at AC	
<ul style="list-style-type: none"> ● at 50 Hz rated value ● at 60 Hz rated value 	<p>200 ... 240 V</p> <p>200 ... 240 V</p>
control supply voltage at DC rated value	200 ... 220 V
operating range factor control supply voltage rated value of magnet coil at DC	
<ul style="list-style-type: none"> ● initial value ● full-scale value 	<p>0.85</p> <p>1.1</p>
operating range factor control supply voltage rated value of magnet coil at AC	
<ul style="list-style-type: none"> ● at 50 Hz ● at 60 Hz 	<p>0.85 ... 1.1</p> <p>0.85 ... 1.1</p>
design of the surge suppressor	with varistor
apparent pick-up power of magnet coil at AC	
<ul style="list-style-type: none"> ● at 50 Hz ● at 60 Hz 	<p>1 000 VA</p> <p>1 000 VA</p>
apparent holding power of magnet coil at AC	
<ul style="list-style-type: none"> ● at 50 Hz ● at 60 Hz 	<p>23 VA</p> <p>23 VA</p>
closing power of magnet coil at DC	2 000 W
holding power of magnet coil at DC	7 W
closing delay	
<ul style="list-style-type: none"> ● at AC ● at DC 	<p>80 ms</p> <p>80 ms</p>
opening delay	
<ul style="list-style-type: none"> ● at AC ● at DC 	<p>70 ms</p> <p>70 ms</p>
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts	2
<ul style="list-style-type: none"> ● attachable ● instantaneous contact 	<p>4</p> <p>2</p>
number of NO contacts for auxiliary contacts	2
<ul style="list-style-type: none"> ● attachable ● instantaneous contact 	<p>4</p> <p>2</p>
operational current at AC-12 maximum	16 A
operational current at AC-15	
<ul style="list-style-type: none"> ● at 230 V rated value ● at 400 V rated value ● at 500 V rated value 	<p>3 A</p> <p>1.5 A</p> <p>1.4 A</p>
operational current at DC-13	
<ul style="list-style-type: none"> ● at 48 V rated value ● at 60 V rated value 	<p>2 A</p> <p>2 A</p>

<ul style="list-style-type: none"> • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value 	<p>1 A</p> <p>0.55 A</p> <p>0.27 A</p> <p>0.1 A</p>	
Short-circuit protection		
design of the fuse link <ul style="list-style-type: none"> • for short-circuit protection of the main circuit <ul style="list-style-type: none"> — with type of coordination 2 required • for short-circuit protection of the auxiliary switch required 	<p>aR: 1000 A (1000 V, 30 kA)</p> <p>gG: 16 A (600 V, 1 kA)</p>	
Installation/ mounting/ dimensions		
mounting position	+/-30° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 30° on vertical mounting surface	
fastening method side-by-side mounting	No	
fastening method	screw fixing	
height	352 mm	
width	285 mm	
depth	250 mm	
required spacing <ul style="list-style-type: none"> • for grounded parts <ul style="list-style-type: none"> — forwards — at the side 	<p>125 mm</p> <p>75 mm</p>	
net weight	22 kg	
Connections/ Terminals		
type of electrical connection <ul style="list-style-type: none"> • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil 	<p>busbar connection</p> <p>screw-type terminals</p> <p>Screw-type terminals</p> <p>Screw-type terminals</p>	
width of connection bar	40 mm	
thickness of connection bar	10 mm	
diameter of holes	17 mm	
connectable conductor cross-section for auxiliary contacts <ul style="list-style-type: none"> • solid or stranded • finely stranded with core end processing 	<p>1 ... 2.5 mm²</p> <p>1 ... 2.5 mm²</p>	
type of connectable conductor cross-sections <ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — solid — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts 	<p>2x (1 ... 2,5 mm²)</p> <p>2x (1 ... 2.5 mm²)</p> <p>2x (1 ... 2,5 mm²)</p> <p>2x (16 ... 14)</p>	
AWG number as coded connectable conductor cross section for auxiliary contacts	16 ... 14	
Safety related data		
product function <ul style="list-style-type: none"> • mirror contact according to IEC 60947-4-1 • positively driven operation according to IEC 60947-5-1 	<p>Yes</p> <p>No</p>	
service life maximum	20 a	
Electrical Safety		
protection class IP on the front according to IEC 60529	IP00	
Approvals Certificates		
Environment	General Product Approval	
Environmental Conformations	    	
EMV	other	Railway



Confirmation



Miscellaneous

Special Test Certificate

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=3RT1481-6AP36>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1481-6AP36>

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

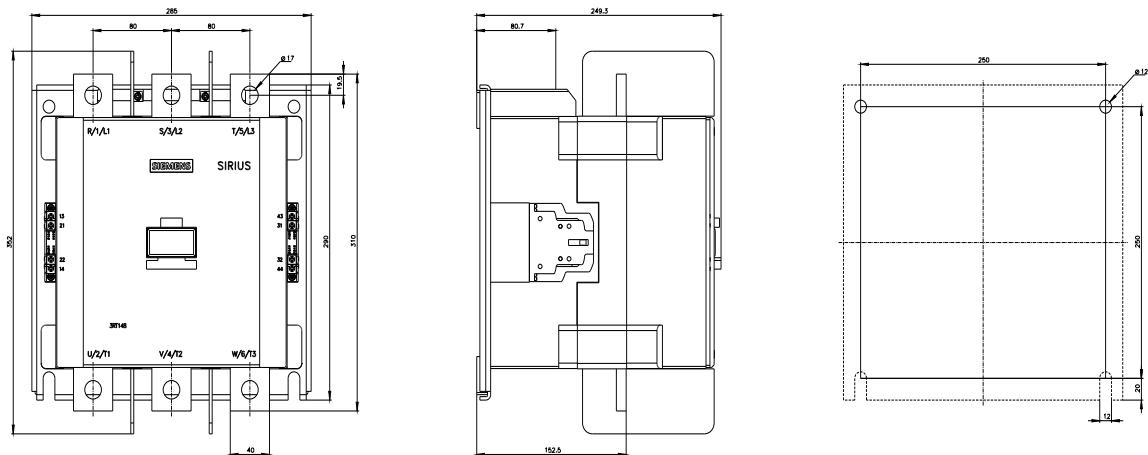
https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1481-6AP36&lang=en

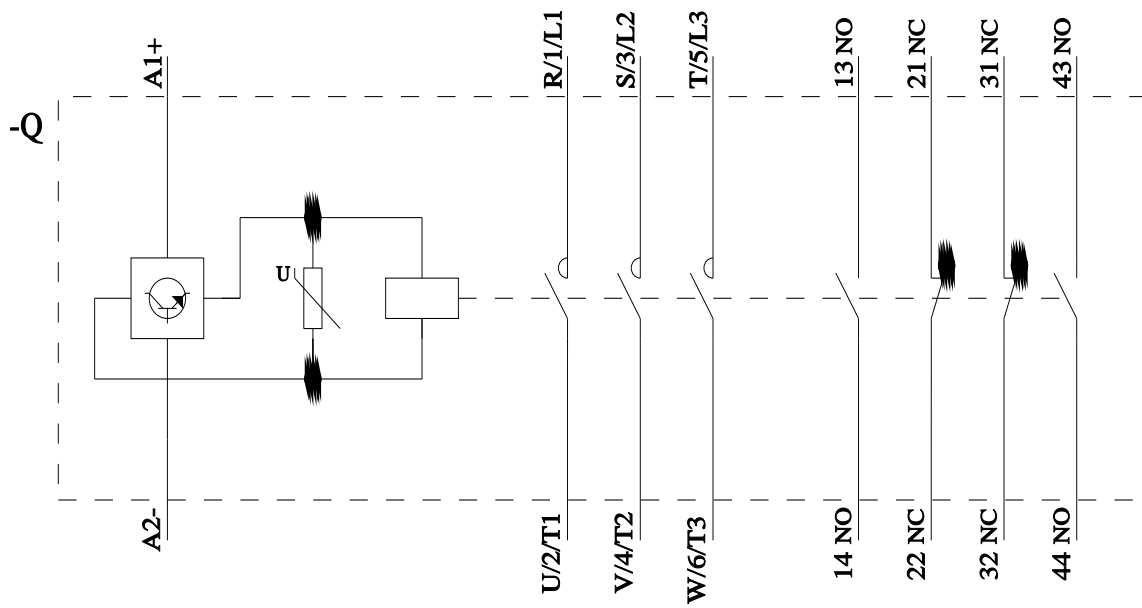
Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1481-6AP36>

Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)





last modified:

12/16/2025