



power contactor AC-1 900 A / 690 V / 40 °C 3-pole, U_c: 110-127 V AC(50-60 Hz) / DC drive: conventional auxiliary contacts 2 NO + 2 NC main circuit: busbar control and auxiliary circuit: screw terminal

product brand name	SIRIUS
product designation	Contactor
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	6 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	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 Prohibitance (Date)	03/27/2020
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	
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	900 A
— up to 690 V at ambient temperature 55 °C rated	900 A

value	
— up to 1000 V at ambient temperature 40 °C rated value	900 A
— up to 1000 V at ambient temperature 55 °C rated value	900 A
minimum cross-section in main circuit at maximum AC-1 rated value	600 mm ²
no-load switching frequency	
• at AC	600 1/h
• at DC	600 1/h
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	
• at 50 Hz rated value	100 ... 127 V
• at 60 Hz rated value	100 ... 127 V
control supply voltage at DC	
• rated value	100 ... 110 V
operating range factor control supply voltage rated value of magnet coil at DC	
• initial value	0.85
• full-scale value	1.1
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
design of the surge suppressor	with varistor
apparent pick-up power of magnet coil at AC	
• at 50 Hz	1 000 VA
• at 60 Hz	1 000 VA
apparent holding power of magnet coil at AC	
• at 50 Hz	18 VA
• at 60 Hz	18 VA
closing power of magnet coil at DC	1 400 W
holding power of magnet coil at DC	6 W
closing delay	
• at AC	80 ms
• at DC	80 ms
opening delay	
• at AC	70 ms
• at DC	70 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts	2
• attachable	4
• instantaneous contact	2
number of NO contacts for auxiliary contacts	2
• attachable	4
• instantaneous contact	2
operational current at AC-12 maximum	16 A
operational current at AC-15	
• at 230 V rated value	3 A
• at 400 V rated value	1.5 A
• at 500 V rated value	1.4 A
operational current at DC-13	
• at 48 V rated value	2 A
• at 60 V rated value	2 A
• at 110 V rated value	1 A
• at 125 V rated value	0.55 A
• at 220 V rated value	0.27 A
• at 600 V rated value	0.1 A
Short-circuit protection	

product function short circuit protection	No		
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 assignment 2 requiredfor short-circuit protection of the auxiliary switch required	aR: 1000 A (1000 V, 30 kA) gG: 16 A (600 V, 1 kA)		
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 <ul style="list-style-type: none">side-by-side mounting	screw fixing No		
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">forwardsat the side	125 mm 75 mm		
net weight	22.2 kg		
Connections/ Terminals			
type of electrical connection <ul style="list-style-type: none">for main current circuitfor auxiliary and control circuitat contactor for auxiliary contactsof magnet coil	busbar connection screw-type terminals Screw-type terminals Screw-type terminals		
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 strandedfinely stranded with core end processing	1 ... 2.5 mm² 1 ... 2.5 mm²		
type of connectable conductor cross-sections <ul style="list-style-type: none">for auxiliary contacts<ul style="list-style-type: none">solidsolid or strandedfinely stranded with core end processingfor AWG cables for auxiliary contacts	2x (1 ... 2,5 mm²) 2x (1 ... 2.5 mm²) 2x (1 ... 2,5 mm²) 2x (16 ... 14)		
Safety related data			
product function <ul style="list-style-type: none">mirror contact according to IEC 60947-4-1positively driven operation according to IEC 60947-5-1	Yes No		
protection class IP on the front according to IEC 60529	IP00		
Certificates/ approvals			
General Product Approval		EMC	Declaration of Con- formity

[Confirmation](#)



Declaration of Con- formity	other	Railway
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[Confirmation](#)

[Miscellaneous](#)

[Special Test Certi-
ficate](#)

Further information

Siemens has decided to exit the Russian market (see here).
<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=3RT1481-6AF36>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1481-6AF36>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1481-6AF36>

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

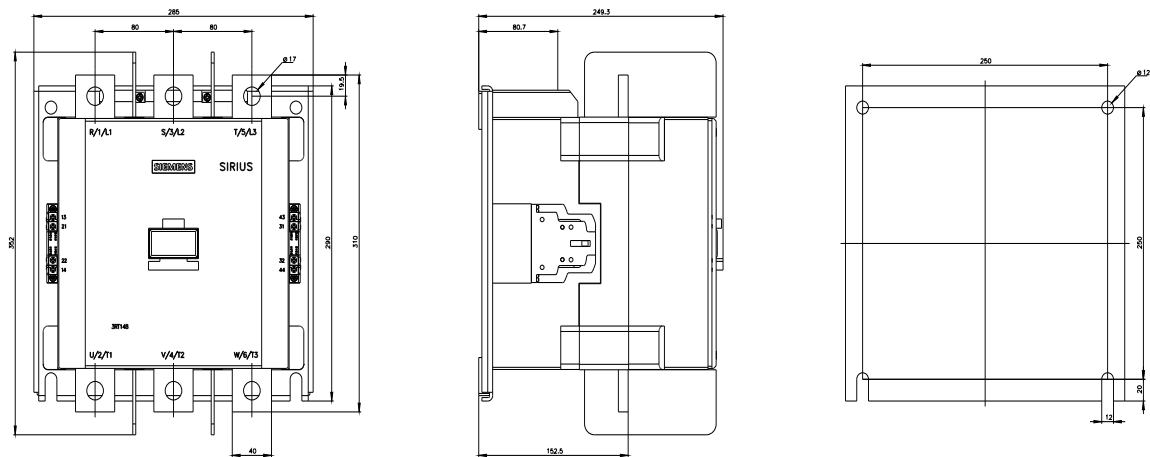
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1481-6AF36&lang=en

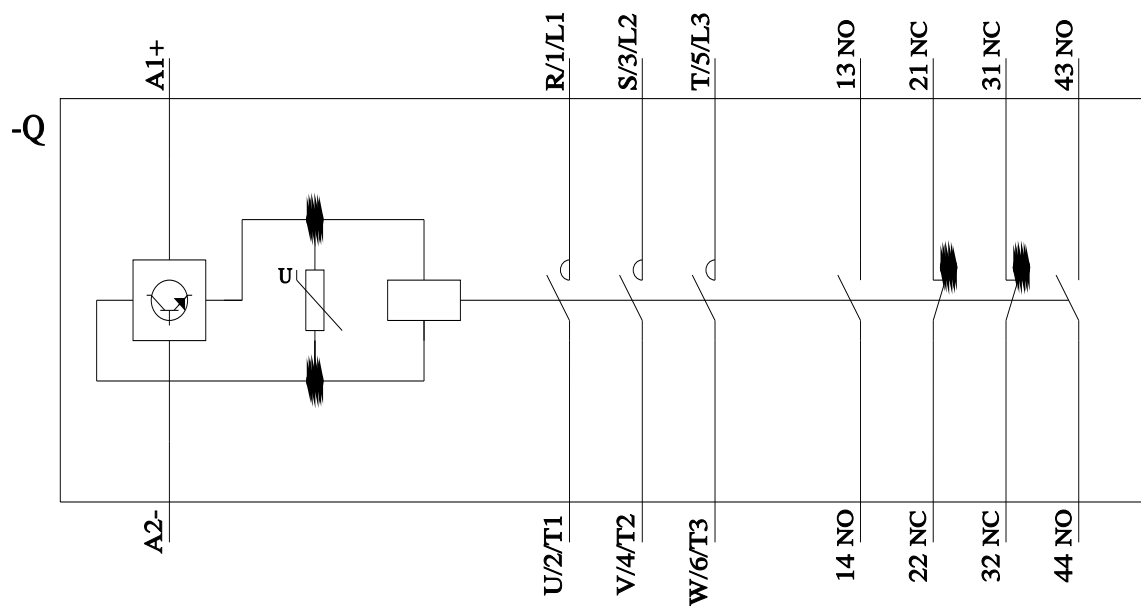
Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1481-6AF36/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1481-6AF36&objecttype=14&gridview=view1>





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