



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 Prohibitance (Date)	03/27/2020
SVHC substance name	Lead - 7439-92-1
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 	900 A
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 	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	
<ul style="list-style-type: none"> ● at 50 Hz rated value ● at 60 Hz rated value 	200 ... 240 V
control supply voltage at DC rated value	200 ... 240 V
operating range factor control supply voltage rated value of magnet coil at DC	200 ... 220 V
<ul style="list-style-type: none"> ● initial value ● full-scale value 	0.85
operating range factor control supply voltage rated value of magnet coil at AC	1.1
<ul style="list-style-type: none"> ● at 50 Hz ● at 60 Hz 	0.85 ... 1.1
design of the surge suppressor	0.85 ... 1.1
apparent pick-up power of magnet coil at AC	with varistor
<ul style="list-style-type: none"> ● at 50 Hz ● at 60 Hz 	1 000 VA
apparent holding power of magnet coil at AC	1 000 VA
<ul style="list-style-type: none"> ● at 50 Hz ● at 60 Hz 	23 VA
closing power of magnet coil at DC	23 VA
holding power of magnet coil at DC	2 000 W
closing delay	7 W
<ul style="list-style-type: none"> ● at AC ● at DC 	80 ms
opening delay	80 ms
<ul style="list-style-type: none"> ● at AC ● at DC 	70 ms
control version of the switch operating mechanism	70 ms
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 	4
number of NO contacts for auxiliary contacts	2
<ul style="list-style-type: none"> ● attachable ● instantaneous contact 	4
operational current at AC-12 maximum	2
operational current at AC-15	16 A
<ul style="list-style-type: none"> ● at 230 V rated value ● at 400 V rated value ● at 500 V rated value 	3 A
operational current at DC-13	1.5 A
<ul style="list-style-type: none"> ● at 48 V rated value ● at 60 V rated value ● at 110 V rated value ● at 125 V rated value ● at 220 V rated value 	1.4 A
	2 A
	2 A
	1 A
	0.55 A
	0.27 A

<ul style="list-style-type: none"> at 600 V rated value 	0.1 A
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 	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 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 	125 mm 75 mm
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 	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 stranded finely stranded with core end processing 	1 ... 2.5 mm ² 1 ... 2.5 mm ²
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 	2x (1 ... 2,5 mm ²) 2x (1 ... 2.5 mm ²) 2x (1 ... 2,5 mm ²) 2x (16 ... 14)
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 	Yes No
suitability for use safety-related switching OFF	No
service life maximum	20 a
Electrical Safety	
protection class IP on the front according to IEC 60529	IP00
Approvals Certificates	
General Product Approval	EMV



other

[Confirmation](#)



[Miscellaneous](#)

Railway

[Special Test Certificate](#)

Environment

[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=3RT1481-6AP36>

Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&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, ...)

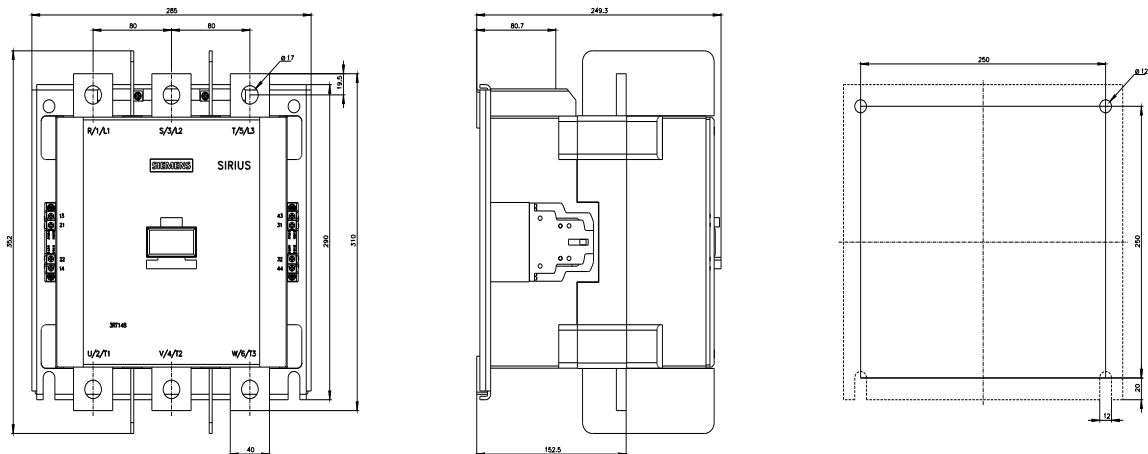
https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1481-6AP36&lang=en

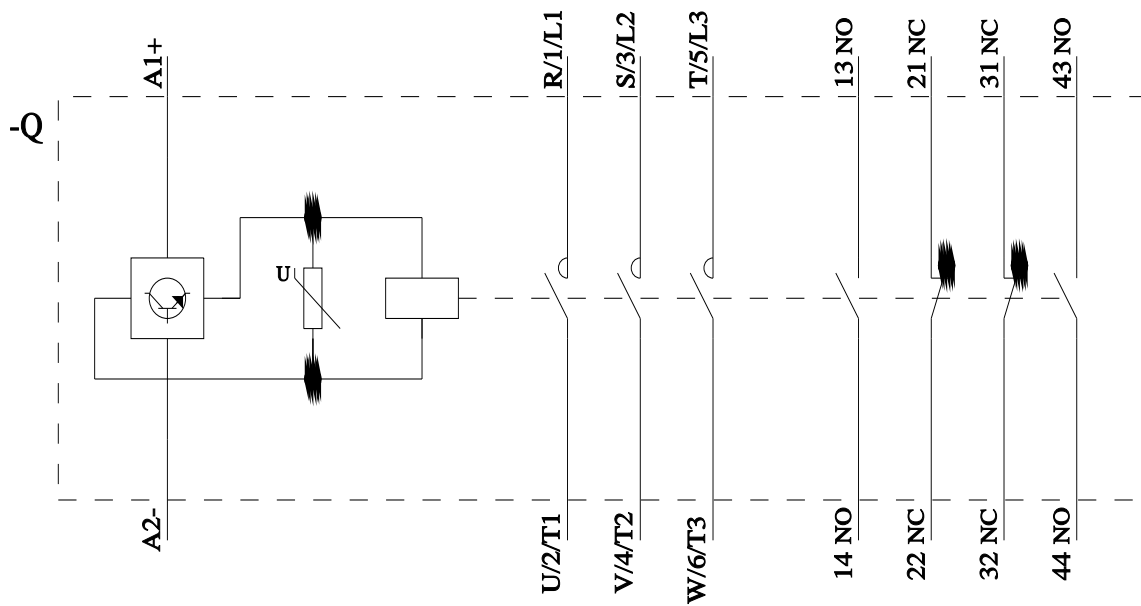
Characteristic: Tripping characteristics, I²t, Let-through current

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

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

<https://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1481-6AP36&objecttype=14&gridview=view1>





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