



power contactor AC-1 2100 A / 690 V / 40 °C 3-pole, U_c: 100-240 V AC(50-60 Hz) / 100-220 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	1 050 W
• at AC in hot operating state per pole	350 W
• without load current share typical	11 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	500 000
Substance Prohibitance (Date)	03/27/2020
Weight	40 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	
• at AC-1	

— up to 690 V at ambient temperature 40 °C rated value	2 100 A
— up to 690 V at ambient temperature 55 °C rated value	2 100 A
— up to 1000 V at ambient temperature 40 °C rated value	2 100 A
— up to 1000 V at ambient temperature 55 °C rated value	2 100 A
minimum cross-section in main circuit at maximum AC-1 rated value	2 000 mm ²
no-load switching frequency	
• at AC	300 1/h
• at DC	300 1/h
operating frequency at AC-1 maximum	300 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 ... 240 V
• at 60 Hz rated value	100 ... 240 V
control supply voltage at DC rated value	100 ... 220 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	1 800 VA
• at 60 Hz	1 800 VA
apparent holding power of magnet coil at AC	
• at 50 Hz	33 VA
• at 60 Hz	33 VA
closing power of magnet coil at DC	2 800 W
holding power of magnet coil at DC	11 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

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: 2500 A (1000 V, 42 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	403 mm
width	431 mm
depth	246 mm
required spacing	
<ul style="list-style-type: none"> for grounded parts <ul style="list-style-type: none"> forwards at the side 	245 mm 215 mm
net weight	35 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	103 mm
thickness of connection bar	10 mm
diameter of holes	15 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
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Approvals Certificates

General Product Approval	EMV
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other	Railway	Environment
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[Confirmation](#)

[Miscellaneous](#)

[Special Test Certificate](#)

[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=3RT1486-6AP36>

Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1486-6AP36>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1486-6AP36>

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

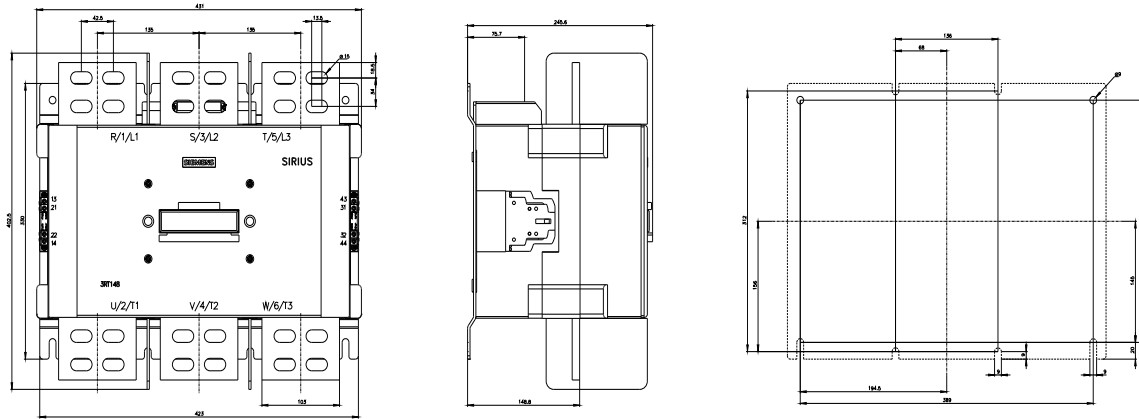
https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1486-6AP36&lang=en

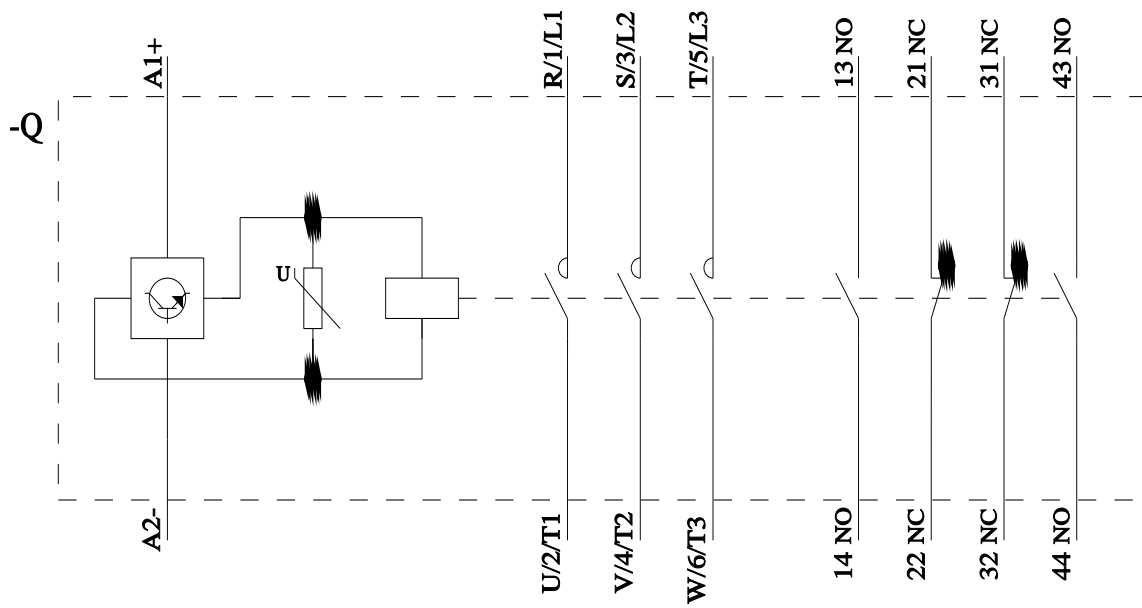
Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1486-6AP36/char>

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

<https://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1486-6AP36&objecttype=14&gridview=view1>





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