## **SIEMENS**

Data sheet 3RT1265-6AR36



vacuum contactor AC-3e/AC-3 265 A, 132 kW / 400 V, 3-pole, Uc: 440-480 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	Vacuum contactor
product type designation	3RT12
General technical data	
size of contactor	S10
product extension	
<ul> <li>function module for communication</li> </ul>	No
auxiliary switch	Yes
power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	36 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	12 W
<ul> <li>without load current share typical</li> </ul>	8.2 W
type of calculation of power loss depending on pole	quadratic
insulation voltage	
<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	1 000 V
<ul> <li>of auxiliary circuit with degree of pollution 3 rated value</li> </ul>	500 V
surge voltage resistance	
<ul> <li>of main circuit rated value</li> </ul>	8 kV
of auxiliary circuit rated value	6 kV
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	690 V
shock resistance at rectangular impulse	
• at AC	8,5g / 5 ms, 4,2g / 10 ms
• at DC	8,5g / 5 ms, 4,2g / 10 ms
shock resistance with sine pulse	
• at AC	13,4g / 5 ms, 6,5g / 10 ms
• at DC	13,4g / 5 ms, 6,5g / 10 ms
mechanical service life (operating cycles)	
<ul> <li>of contactor typical</li> </ul>	10 000 000
<ul> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> </ul>	5 000 000
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	05/01/2012
SVHC substance name	Lead - 7439-92-1
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
during operation	-25 +60 °C
during storage	-55 +80 °C
relative humidity minimum	10 %

relative humidity at 55 °C according to IEC 60068-2-30	95 %
maximum	
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
<ul> <li>at AC-3 rated value maximum</li> </ul>	1 000 V
at AC-3e rated value maximum	1 000 V
operational current	
<ul> <li>at AC-1 at 400 V at ambient temperature 40 °C rated value</li> </ul>	330 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	330 A
— up to 690 V at ambient temperature 60 °C rated value	300 A
— up to 1000 V at ambient temperature 40 °C rated value	330 A
<ul> <li>up to 1000 V at ambient temperature 60 °C rated value</li> <li>at AC-3</li> </ul>	300 A
— at 400 V rated value	265 A
— at 500 V rated value	265 A
— at 690 V rated value	265 A
— at 1000 V rated value	265 A
• at AC-3e	
— at 400 V rated value	265 A
— at 500 V rated value	265 A
— at 690 V rated value	265 A
— at 1000 V rated value	265 A
<ul> <li>at AC-4 at 400 V rated value</li> </ul>	230 A
• at AC-6a	
<ul> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	265 A
— up to 400 V for current peak value n=20 rated value	265 A
<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	265 A
— up to 690 V for current peak value n=20 rated value	265 A
<ul> <li>up to 1000 V for current peak value n=20 rated value</li> </ul>	265 A
• at AC-6a	
— up to 230 V for current peak value n=30 rated value	209 A
— up to 400 V for current peak value n=30 rated value	209 A
— up to 500 V for current peak value n=30 rated value	209 A
— up to 690 V for current peak value n=30 rated value	209 A
<ul> <li>up to 1000 V for current peak value n=30 rated value</li> </ul>	209 A
minimum cross-section in main circuit at maximum AC-1 rated value	185 mm²
operational current for approx. 200000 operating cycles at AC-4	
at 400 V rated value	115 A
at 690 V rated value	115 A
operating power	
• at AC-3	75 NW
— at 230 V rated value — at 400 V rated value	75 kW 132 kW
— at 400 V rated value  — at 500 V rated value	160 kW
— at 690 V rated value	250 kW
— at 1000 V rated value	355 kW
• at AC-3e	
— at 230 V rated value	75 kW
— at 400 V rated value	132 kW
— at 500 V rated value	160 kW
— at 690 V rated value	250 kW
— at 1000 V rated value	355 kW

operating power for approx. 200000 operating cycles at AC-	
at 400 V rated value	65 kW
at 400 V rated value     at 690 V rated value	112 kW
	112 KVV
operating apparent power at AC-6a	400,000 IA/A
up to 230 V for current peak value n=20 rated value	100 000 kVA
up to 400 V for current peak value n=20 rated value	180 000 VA
• up to 500 V for current peak value n=20 rated value	220 000 VA
up to 690 V for current peak value n=20 rated value	310 000 VA
up to 1000 V for current peak value n=20 rated value	450 000 VA
operating apparent power at AC-6a	
• up to 230 V for current peak value n=30 rated value	80 000 VA
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	140 000 VA
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	180 000 VA
<ul> <li>up to 690 V for current peak value n=30 rated value</li> </ul>	250 000 VA
<ul> <li>up to 1000 V for current peak value n=30 rated value</li> </ul>	360 000 VA
no-load switching frequency	
• at AC	2 000 1/h
• at DC	2 000 1/h
operating frequency	
• at AC-1 maximum	750 1/h
• at AC-2 maximum	250 1/h
• at AC-3 maximum	750 1/h
• at AC-3e maximum	750 1/h
• at AC-4 maximum	250 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	440 480 V
at 60 Hz rated value	440 480 V
control supply voltage at DC rated value	
•	440 480 V
operating range factor control supply voltage rated value of	
magnet coil at DC	
initial value	0.8
• full-scale value	1.1
operating range factor control supply voltage rated value of	
magnet coil at AC	
• at 50 Hz	0.8 1.1
● at 60 Hz	0.8 1.1
design of the surge suppressor	with varistor
apparent pick-up power	
<ul> <li>at minimum rated control supply voltage at AC</li> </ul>	
— at 50 Hz	530 VA
— at 60 Hz	530 VA
<ul> <li>at maximum rated control supply voltage at AC</li> </ul>	
— at 60 Hz	630 VA
— at 50 Hz	630 VA
apparent pick-up power of magnet coil at AC	
• at 50 Hz	590 VA
● at 60 Hz	590 VA
inductive power factor with closing power of the coil	
● at 50 Hz	0.9
● at 60 Hz	0.9
apparent holding power	
at minimum rated control supply voltage at DC	6.8 VA
at maximum rated control supply voltage at DC	8.2 VA
apparent holding power	
at minimum rated control supply voltage at AC	
— at 50 Hz	6.1 VA
	6.1 VA
— at 60 Hz	
— at 60 Hz  • at maximum rated control supply voltage at AC	0.1 VA

— at 50 Hz	7.4 VA
	7.4 VA 7.4 VA
— at 60 Hz	Αν Ε.Τ
inductive power factor with the holding power of the coil	0.0
• at 50 Hz	0.9
• at 60 Hz	0.9
closing power of magnet coil at DC	700 W
holding power of magnet coil at DC	8.2 W
closing delay	
• at AC	30 95 ms
• at DC	30 95 ms
opening delay	
• at AC	40 80 ms
• at DC	40 80 ms
arcing time	10 15 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous contact	2
number of NO contacts for auxiliary contacts instantaneous contact	2
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	10 A
at 48 V rated value	6 A
at 60 V rated value	6 A
at 110 V rated value	3 A
• at 125 V rated value	2 A
• at 220 V rated value	1 A
at 600 V rated value	0.15 A
operational current at DC-13	
• at 24 V rated value	10 A
• at 48 V rated value	2 A
<ul> <li>at 60 V rated value</li> </ul>	2 A
<ul> <li>at 110 V rated value</li> </ul>	1 A
<ul> <li>at 125 V rated value</li> </ul>	0.9 A
• at 220 V rated value	0.3 A
at 600 V rated value	0.1 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	240 A
at 600 V rated value	242 A
yielded mechanical performance [hp]	
• for 3-phase AC motor	
— at 200/208 V rated value	75 hp
— at 220/230 V rated value	100 hp
— at 460/480 V rated value	200 hp
— at 575/600 V rated value	250 hp
contact rating of auxiliary contacts according to UL	A600 / Q600
Short-circuit protection	
design of the fuse link	
for short-circuit protection of the main circuit	
with type of coordination 1 required	gG: 500 A (690 V, 100 kA)
with type of assignment 2 required	gG: 500 A (690 V, 100 kA), aM: 400 A (690 V, 50 kA), BS88: 450 A (415 V, 50
for short-circuit protection of the auxiliary switch required	kA) gG: 10 A (500 V, 1 kA)
processor of the durinary officer required	J

mounting position	+/-22,5° rotation possible on vertical mounting surface; can be tilted forward
mounting position	and backward by +/- 22.5° on vertical mounting surface; standing, on horizontal mounting surface
fastening method	screw fixing
height	210 mm
width	145 mm
depth	206 mm
required spacing	250 (1111)
with side-by-side mounting	
— forwards	20 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
for grounded parts	
— forwards	20 mm
— upwards	10 mm
— at the side	10 mm
— downwards	10 mm
for live parts	
— forwards	20 mm
— upwards	10 mm
— downwards	10 mm
— at the side	10 mm
onnections/ Terminals	
type of electrical connection	Connection has
• for main current circuit	Connection bar
for auxiliary and control circuit	screw-type terminals
at contactor for auxiliary contacts	Screw-type terminals
of magnet coil	Screw-type terminals
width of connection bar	25 mm
thickness of connection bar	6 mm
diameter of holes	11 mm
number of holes	1
type of connectable conductor cross-sections	
<ul> <li>for AWG cables for main contacts</li> </ul>	2/0 500 kcmil
connectable conductor cross-section for main contacts	
stranded	70 240 mm²
connectable conductor cross-section for auxiliary contacts	
solid or stranded	0.5 4 mm²
finely stranded with core end processing	0.5 2.5 mm <sup>2</sup>
	0.5 2.5 (((()))
type of connectable conductor cross-sections	
for auxiliary contacts	0 (05, 45, 3) 0 (075, 05, 3)
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)
— solid or stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), max. 2x (0,75 4 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
for AWG cables for auxiliary contacts	2x (20 16), 2x (18 14), 1x 12
AWG number as coded connectable conductor cross section	
for auxiliary contacts	18 14
afety related data	
product function	
<ul> <li>mirror contact according to IEC 60947-4-1</li> </ul>	Yes
<ul> <li>positively driven operation according to IEC 60947-5-1</li> </ul>	No
Electrical Safety	
protection class IP on the front according to IEC 60529	IP00; IP20 with box terminal/cover
p	
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front with box terminal/cover









<u>KC</u>

**General Product Ap**proval

**EMV** 

**Functional Saftey** 

**Test Certificates** 

Marine / Shipping





Type Examination Cer**tificate** 

Type Test Certificates/Test Report

**Special Test Certific-**<u>ate</u>



Marine / Shipping







Confirmation

other

Confirmation

other

Railway

**Environment** 

**Miscellaneous** 

Special Test Certific-<u>ate</u>

**Environmental Con**firmations

## 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=3RT1265-6AR36

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT1265-6AR36}}$ 

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT1265-6AR30

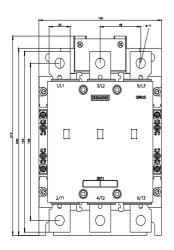
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

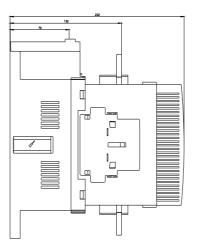
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT1265-6AR36&lang=en

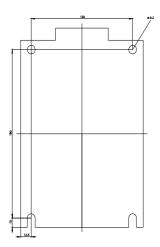
Characteristic: Tripping characteristics, I2t, Let-through current

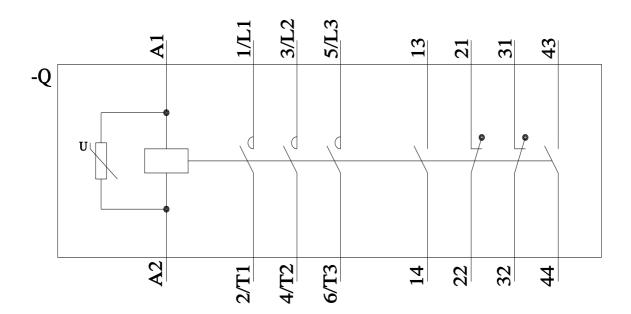
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1265-6AR36&objecttype=14&gridview=view1









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