SIEMENS

Data sheet 3RT1065-6AF36



power contactor, AC-3e/AC-3 265 A, 132 kW / 400 V AC (50-60 Hz) / DC Uc: 110-127 V 3-pole, auxiliary contacts 2 NO + 2 NC drive: conventional main circuit: busbar control and auxiliary circuit: screw terminal

product brand name	SIRIUS		
product designation	Power contactor		
product type designation	3RT1		
General technical data			
size of contactor	S10		
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	54 W		
at AC in hot operating state per pole	18 W		
without load current share typical	7.4 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	500 V		
surge voltage resistance			
of main circuit rated value	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)			
 of contactor typical 	10 000 000		
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000		
of the contactor with added auxiliary switch block typical	10 000 000		
reference code according to IEC 81346-2	Q		
Substance Prohibitance (Date)	05/01/2012		
SVHC substance name	Blei - 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			
ain circuit			
number of poles for main current circuit	3		
number of NO contacts for main contacts	3		
operating voltage			
at AC-3 rated value maximum	1 000 V		
at AC-3e rated value maximum	1 000 V		
operational current			
 at AC-1 at 400 V at ambient temperature 40 °C rated value 	330 A		
• at AC-1			
— up to 690 V at ambient temperature 40 $^{\circ}\text{C}$ 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	150 A		
— up to 1000 V at ambient temperature 60 °C rated value	150 A		
at AC-3 — at 400 V rated value	265 A		
	265 A		
— at 500 V rated value	265 A		
— at 690 V rated value	265 A		
— at 1000 V rated value	95 A		
• at AC-3e	005.4		
— 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	95 A		
• at AC-4 at 400 V rated value	230 A		
at AC-5a up to 690 V rated value	290 A		
at AC-5b up to 400 V rated value	219 A		
• at AC-6a			
— up to 230 V for current peak value n=20 rated value	265 A		
— up to 400 V for current peak value n=20 rated value	265 A		
— up to 500 V for current peak value n=20 rated value	265 A		
— up to 690 V for current peak value n=20 rated value	265 A		
 up to 1000 V for current peak value n=20 rated value 	95 A		
• at AC-6a			
— up to 230 V for current peak value n=30 rated value	184 A		
— up to 400 V for current peak value n=30 rated value	184 A		
— up to 500 V for current peak value n=30 rated value	184 A		
— up to 690 V for current peak value n=30 rated value	184 A		
— up to 1000 V for current peak value n=30 rated	95 A		
value value ninimum cross-section in main circuit at maximum AC-1 rated	185 mm ²		
value operational current for approx. 200000 operating cycles at			
AC-4			
at 400 V rated value	117 A		
at 690 V rated value	105 A		
pperational current			
• at 1 current path at DC-1			
— at 24 V rated value	300 A		
— at 60 V rated value	300 A		
— at 110 V rated value	33 A		
— at 220 V rated value	3.8 A		
— at 440 V rated value	0.9 A		
— at 600 V rated value	0.6 A		
 with 2 current paths in series at DC-1 			
— at 24 V rated value	300 A		
— at 60 V rated value	300 A		

— at 110 V rated value	300 A			
— at 220 V rated value	300 A			
— at 440 V rated value	4 A			
— at 600 V rated value	2 A			
with 3 current paths in series at DC-1				
— at 24 V rated value	300 A			
— at 60 V rated value	300 A			
— at 110 V rated value	300 A			
— at 220 V rated value	300 A			
— at 440 V rated value	11 A			
— at 600 V rated value	5.2 A			
at 1 current path at DC-3 at DC-5	000 4			
— at 24 V rated value	300 A			
— at 60 V rated value	11 A			
— at 110 V rated value	3 A			
— at 220 V rated value	0.6 A			
— at 440 V rated value	0.18 A			
— at 600 V rated value	0.125 A			
with 2 current paths in series at DC-3 at DC-5	200 A			
— at 24 V rated value	300 A			
— at 60 V rated value — at 110 V rated value	300 A 300 A			
— at 110 V rated value — at 220 V rated value	2.5 A			
— at 440 V rated value	0.65 A			
— at 600 V rated value	0.37 A			
with 3 current paths in series at DC-3 at DC-5	U.SI A			
— at 24 V rated value	300 A			
— at 60 V rated value	300 A			
— at 110 V rated value	300 A			
— at 220 V rated value	300 A			
— at 440 V rated value	1.4 A			
— at 600 V rated value	0.75 A			
operating power				
• at AC-3				
— 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	132 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	132 kW			
operating power for approx. 200000 operating cycles at AC-				
at 400 V rated value	66 kW			
• at 690 V rated value	102 kW			
operating apparent power at AC-6a				
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	160 000 VA			
operating apparent power at AC-6a				
• up to 230 V for current peak value n=30 rated value	70 000 VA			
• up to 400 V for current peak value n=30 rated value	120 000 VA			
• up to 500 V for current peak value n=30 rated value	150 000 VA			
• up to 690 V for current peak value n=30 rated value	220 000 VA			
• up to 1000 V for current peak value n=30 rated value	160 000 VA			

short-time withstand current in cold operating state up to 40 °C				
Iimited to 1 s switching at zero current maximum	4 880 A; Use minimum cross-section acc. to AC-1 rated value			
Ilmited to 1 s switching at zero current maximum	4 880 A; Use minimum cross-section acc. to AC-1 rated value 4 045 A; Use minimum cross-section acc. to AC-1 rated value			
limited to 10 s switching at zero current maximum	2 785 A; Use minimum cross-section acc. to AC-1 rated value			
Ilmited to 30 s switching at zero current maximum	1 664 A; Use minimum cross-section acc. to AC-1 rated value			
limited to 60 s switching at zero current maximum	1 276 A; Use minimum cross-section acc. to AC-1 rated value			
no-load switching frequency				
• at AC	2 000 1/h			
• at DC	2 000 1/h			
operating frequency				
• at AC-1 maximum	800 1/h			
• at AC-2 maximum	250 1/h			
• at AC-3 maximum	500 1/h			
at AC-3e maximum	500 1/h			
• at AC-4 maximum	130 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	110 127 V			
• at 60 Hz rated value	110 127 V			
control supply voltage at DC				
• rated value	110 127 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				
at minimum rated control supply voltage at AC				
— at 50 Hz	490 VA			
— at 60 Hz	490 VA			
at maximum rated control supply voltage at AC				
— at 60 Hz	590 VA			
— at 50 Hz	590 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 	6.1 VA			
at maximum rated control supply voltage at DC	7.4 VA			
apparent holding power				
 at minimum rated control supply voltage at AC 				
— at 50 Hz	5.6 VA			
— at 60 Hz	5.6 VA			
 at maximum rated control supply voltage at AC 				
— at 50 Hz	6.7 VA			
— at 60 Hz	6.7 VA			
apparent holding power of magnet coil at AC				
• at 50 Hz	6.7 VA			
at 60 Hz	6.7 VA			
inductive power factor with the holding power of the coil				
at 50 Hz	0.9			
● at 60 Hz	0.9			
closing power of magnet coil at DC	650 W			

	7.411			
holding power of magnet coil at DC	7.4 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 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	1A			
at 600 V rated value	0.15 A			
operational current at DC-13	U.IUA			
at 24 V rated value	10 A			
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	0.9 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: 400 A (690 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50 kA)			
• for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)			
Installation/ mounting/ dimensions				
mounting position	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back			
fastening method	screw fixing			
side-by-side mounting	Yes			
height	210 mm			
width	145 mm			

depth	202 mm				
required spacing					
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				
Connections/ Terminals					
type of electrical connection					
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				
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 mm²				
type of connectable conductor cross-sections					
 for auxiliary contacts 					
— 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)				
 finely stranded with core end processing 	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				
Safety related data					
product function					
 mirror contact according to IEC 60947-4-1 	Yes				
 positively driven operation according to IEC 60947-5-1 	No				
suitability for use safety-related switching OFF	Yes				
B10 value with high demand rate according to SN 31920	1 000 000				
	20 a				
T1 value for proof test interval or service life according to IEC 61508					
	IP00; IP20 with box terminal/cover				
61508	IP00; IP20 with box terminal/cover finger-safe, for vertical contact from the front with box terminal/cover				
protection class IP on the front according to IEC 60529					

General Product Approva



Confirmation





<u>KC</u>





Type Examination Certificate





Type Test Certificates/Test Report

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

Test Certificates

Marine / Shipping

Miscellaneous











other				Railway	
<u>Miscellaneous</u>	Confirmation	<u>Miscellaneous</u>	Confirmation	Vibration and Shock	Special Test Certificate

Environment

Environmental Confirmations

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=3RT1065-6AF36

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1065-6AF36

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT1065-6AF36

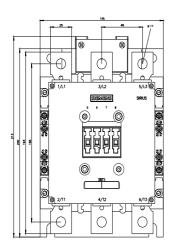
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

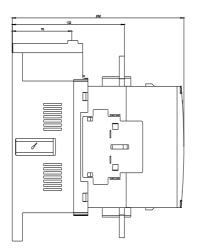
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1065-6AF36&lang=en

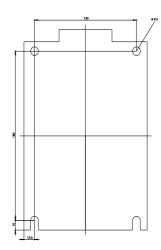
Characteristic: Tripping characteristics, I²t, Let-through current

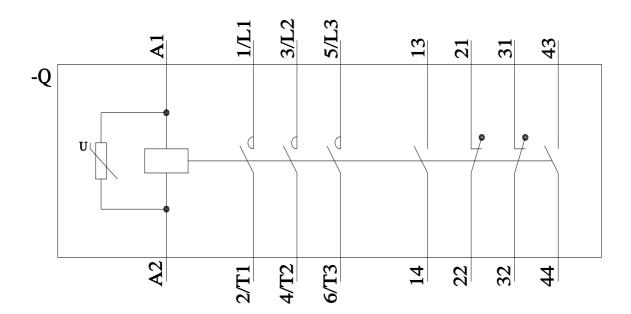
https://support.industry.siemens.com/cs/ww/en/ps/3RT10

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1065-6AF36&objecttype=14&gridview=view1









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