SIEMENS

Data sheet 3RT1075-6AT36



power contactor, AC-3e/AC-3 400 A, 200 kW / 400 V AC (50-60 Hz) / DC Uc: 575-600 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	S12			
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 	105 W			
 at AC in hot operating state per pole 	35 W			
 without load current share typical 	10 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	1 000 V
at AC-1 at 400 V at ambient temperature 40 °C rated	430 A
value	700 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated	430 A
value	
 up to 690 V at ambient temperature 60 °C rated 	400 A
value	222.4
 up to 1000 V at ambient temperature 40 °C rated value 	200 A
— up to 1000 V at ambient temperature 60 °C rated	200 A
value	200 A
• at AC-3	
— at 400 V rated value	400 A
— at 500 V rated value	400 A
— at 690 V rated value	400 A
— at 1000 V rated value	180 A
• at AC-3e	
— at 400 V rated value	400 A
— at 500 V rated value	400 A
— at 690 V rated value	400 A
	180 A
— at 1000 V rated value	
at AC-4 at 400 V rated value	350 A
at AC-5a up to 690 V rated value	378 A
at AC-5b up to 400 V rated value	332 A
• at AC-6a	
— up to 230 V for current peak value n=20 rated value	395 A
 up to 400 V for current peak value n=20 rated value 	395 A
 up to 500 V for current peak value n=20 rated value 	395 A
 up to 690 V for current peak value n=20 rated value 	395 A
 up to 1000 V for current peak value n=20 rated value 	180 A
at AC-6a	
	004.4
— up to 230 V for current peak value n=30 rated value	264 A
— up to 400 V for current peak value n=30 rated value	264 A
— up to 500 V for current peak value n=30 rated value	264 A
— up to 690 V for current peak value n=30 rated value	264 A
 up to 1000 V for current peak value n=30 rated value 	180 A
ninimum cross-section in main circuit at maximum AC-1 rated	300 mm²
pperational current for approx. 200000 operating cycles at	
AC-4	450.0
at 400 V rated value	150 A
at 690 V rated value	135 A
operational current	
at 1 current path at DC-1 At 24 V arted value.	400 A
— at 24 V rated value	400 A
— at 60 V rated value	330 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	400 A
— at 60 V rated value	400 A

-1 440 V1 dl	400 A
— at 110 V rated value	400 A
— at 220 V rated value	400 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	400 A
— at 60 V rated value	400 A
— at 110 V rated value	400 A
— at 220 V rated value	400 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 	
— at 24 V rated value	400 A
— at 60 V rated value	11 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 	
— at 24 V rated value	400 A
— at 60 V rated value	400 A
— at 110 V rated value	400 A
— 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 	
— at 24 V rated value	400 A
— at 60 V rated value	400 A
— at 110 V rated value	400 A
— at 220 V rated value	400 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	132 kW
— at 400 V rated value	200 kW
— at 500 V rated value	250 kW
— at 690 V rated value	400 kW
— at 1000 V rated value	250 kW
• at AC-3e	
— at 230 V rated value	132 kW
— at 400 V rated value	200 kW
— at 500 V rated value	250 kW
— at 690 V rated value	400 kW
— at 1000 V rated value	250 kW
operating power for approx. 200000 operating cycles at AC-	
4	OF IAM
at 400 V rated value	85 kW
• at 690 V rated value	133 kW
operating apparent power at AC-6a	450 000 13/4
• up to 230 V for current peak value n=20 rated value	150 000 kVA
up to 400 V for current peak value n=20 rated value	270 000 VA
up to 500 V for current peak value n=20 rated value up to 600 V for current peak value n=20 rated value	340 000 VA
• up to 690 V for current peak value n=20 rated value	470 000 VA
up to 1000 V for current peak value n=20 rated value	310 000 VA
operating apparent power at AC-6a	100 000 \/A
• up to 230 V for current peak value n=30 rated value	100 000 VA
• up to 400 V for current peak value n=30 rated value	180 000 VA
• up to 500 V for current peak value n=30 rated value	220 000 VA
• up to 690 V for current peak value n=30 rated value	310 000 VA
up to 1000 V for current peak value n=30 rated value hout time with stand surrent in sold apprehing state up to	310 000 VA
short-time withstand current in cold operating state up to	

40 °C			
 limited to 1 s switching at zero current maximum 	6 600 A; Use minimum cross-section acc. to AC-1 rated value		
 limited to 5 s switching at zero current maximum 	5 761 A; Use minimum cross-section acc. to AC-1 rated value		
 limited to 10 s switching at zero current maximum 	4 143 A; Use minimum cross-section acc. to AC-1 rated value		
 limited to 30 s switching at zero current maximum 	2 635 A; Use minimum cross-section acc. to AC-1 rated value		
 limited to 60 s switching at zero current maximum 	2 088 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	700 1/h		
• at AC-2 maximum	200 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	130 1/11		
	AOIDO		
type of voltage of the control supply voltage	AC/DC		
control supply voltage at AC	F7F 000 V		
at 50 Hz rated value	575 600 V		
at 60 Hz rated value	575 600 V		
control supply voltage at DC			
rated value	575 600 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	700 VA		
— at 60 Hz	700 VA		
 at maximum rated control supply voltage at AC 			
— at 60 Hz	830 VA		
— at 50 Hz	830 VA		
apparent pick-up power of magnet coil at AC			
● at 50 Hz	830 VA		
● at 60 Hz	830 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	8.5 VA		
at maximum rated control supply voltage at DC at maximum rated control supply voltage at DC	10 VA		
apparent holding power			
at minimum rated control supply voltage at AC			
at minimum rated control supply voltage at AC at 50 Hz	7.6 VA		
— at 60 Hz	7.6 VA		
at maximum rated control supply voltage at AC	0.01/4		
— at 50 Hz	9.2 VA		
— at 60 Hz	9.2 VA		
apparent holding power of magnet coil at AC			
• at 50 Hz	9.2 VA		
● at 60 Hz	9.2 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	920 W		

	40.14		
holding power of magnet coil at DC	10 W		
closing delay			
• at AC	45 100 ms		
• at DC	45 100 ms		
opening delay			
• at AC	60 100 ms		
• at DC	60 100 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 100 V rated value 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		
	0.13 A		
operational current at DC-13	40.4		
• 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	361 A		
at 600 V rated value	382 A		
yielded mechanical performance [hp]			
• for 3-phase AC motor			
 at 200/208 V rated value 	125 hp		
— at 220/230 V rated value	150 hp		
— at 460/480 V rated value	300 hp		
— at 575/600 V rated value	400 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: 630 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 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	214 mm		
width	160 mm		
WIGHT	100 mill		

depth	225 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	70 240 11111				
solid or stranded	0.5 4 mm²				
finely stranded with core end processing	0.5 4 mm² 0.5 2.5 mm²				
type of connectable conductor cross-sections	0.0 2.0 111111				
• for auxiliary contacts					
— solid	2v (0.5	2.5 mm²) may 2y (0.75	4 mm²\		
	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	10 111 11				
product function					
mirror contact according to IEC 60947-4-1	Yes				
 positively driven operation according to IEC 60947-5-1 	Yes				
suitability for use safety-related switching OFF	No Yea				
B10 value with high demand rate according to SN 31920		Yes			
		1 000 000			
T1 value for proof test interval or service life according to IEC 61508	20 a				
protection class IP on the front according to IEC 60529	IP00; IP20 with box terminal/cover				
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front with box terminal/cover				
Certificates/ approvals					
			Functional		
General Product Approval		EMC	Safety/Safety of Ma- chinery		



Confirmation







Type Examination Certificate **Declaration of Conformity**

Test Certificates

Marine / Shipping





Type Test Certificates/Test Report Special Test Certificate





Marine / Shipping

other







Miscellaneous

Confirmation

Confirmation

other Railway

Miscellaneous Special Test Certific-

ate

Vibration and Shock

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=3RT1075-6AT36

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1075-6AT36

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT1075-6AT36

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

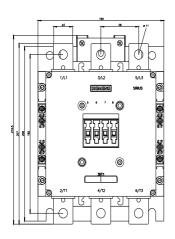
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1075-6AT36&lang=en

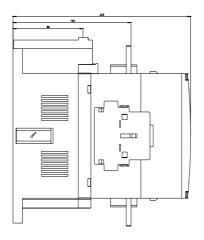
Characteristic: Tripping characteristics, I²t, Let-through current

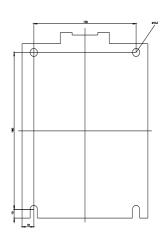
https://support.industry.siemens.com/cs/ww/en/ps/3RT1075-6AT36/char

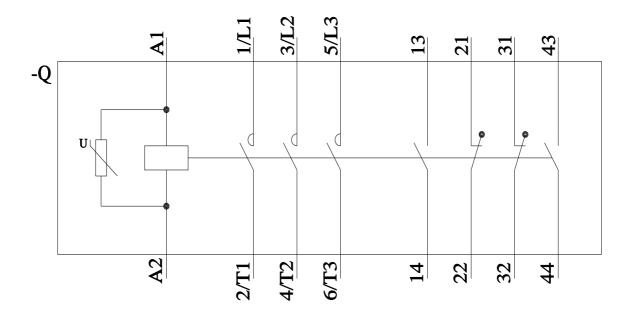
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1075-6AT36&objecttype=14&gridview=view1









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