SIEMENS

Data sheet

3RT1066-6AF36



CONTACTOR, 160KW/400V/AC-3 AC(40...60HZ)/DC OPERATION UC 110-127V AUXILIARY CONTACTS 2NO+2NC 3-POLE, SIZE S10 BAR CONNECTIONS CONVENT. OPERATING MECHANISM SCREW TERMINAL

product brand name	SIRIUS
Product designation	power contactor
General technical data:	
Size of contactor	S10
Insulation voltage	-
Rated value	1 000 V
Degree of pollution	3
Surge voltage resistance Rated value	8 kV
Mechanical service life (switching cycles)	-
 of the contactor typical 	10 000 000
 of the contactor with added electronics- compatible auxiliary switch block typical 	5 000 000
 of the contactor with added auxiliary switch block typical 	10 000 000
Protection class IP	_
• on the front	IP00
• of the terminal	IP00
Equipment marking	-
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q
Ambient conditions:	
Installation altitude at height above sea level	2 000 m
maximum	
Ambient temperature	
 during operation 	-25 +60 °C

during storage

lain circuit:	
Number of poles for main current circuit	3
Number of NC contacts for main contacts	0
Number of NO contacts for main contacts	3
Connectable conductor cross-section in main circuit	
at AC-1	
• at 60 °C minimum permissible	185 mm²
• at 40 °C minimum permissible	185 mm²
Operating 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 °C Rated value	330 A
— at ambient temperature 60 °C Rated value	300 A
• at AC-3	
— at 400 V Rated value	300 A
— at 690 V Rated value	280 A
• at AC-4 at 400 V Rated value	280 A
Operating current for \geq 200000 operating cycles at AC-4	
at 400 V Rated value	125 A
• at 690 V Rated value	115 A
Operating current	
• with 1 current path at DC-1	
— at 24 V Rated value	300 A
— at 110 V Rated value	33 A
 with 2 current paths in series at DC-1 	
— at 24 V Rated value	300 A
— at 110 V Rated value	300 A
 with 3 current paths in series at DC-1 	
— at 24 V Rated value	300 A
— at 110 V Rated value	300 A
Operating current	
• with 1 current path at DC-3 at DC-5	
— at 24 V Rated value	300 A
— at 110 V Rated value	3 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 110 V Rated value	300 A
— at 24 V Rated value	300 A

— at 110 V Rated value	300 A
— at 24 V Rated value	300 A
Operating power	
• at AC-1	
— at 230 V at 60 °C Rated value	113 kW
— at 690 V at 60 °C Rated value	340 kW
Operating power for ≥ 200000 operating cycles at AC-4	
• at 400 V Rated value	71 kW
• at 690 V Rated value	112 kW
Thermal short-time current restricted to 10 s	2 400 A
Active power loss at AC-3 at 400 V for rated value of	22 W
the operating current per conductor	
No-load switching frequency	
• with AC	2 000 1/h
• for 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	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 with AC	
• at 50 Hz Rated value	110 127 V
• at 60 Hz Rated value	110 127 V

• at 50 Hz Rated value	110 127 V
• at 60 Hz Rated value	110 127 V
Control supply voltage for DC	
Rated value	110 127 V
Rated value	40 Hz
Control supply voltage frequency 2 Rated value	60 Hz
Operating range factor control supply voltage rated value of the magnet coil with AC	
• at 50 Hz	0.8 1.1
• at 60 Hz	0.8 1.1
Operating range factor control supply voltage rated value of the magnet coil for DC	0.8 1.1
Design of the surge suppressor	with varistor
Apparent pick-up power of the magnet coil with AC	590 V·A
Inductive power factor with closing power of the coil	0.9
Apparent holding power of the magnet coil with AC	6.7 V·A
Inductive power factor with the holding power of the coil	0.9
Closing power of the magnet coil for DC	650 W

Holding power of the magnet coil for DC	7.4 W
Closing delay	
• with AC	30 95 ms
• for DC	30 95 ms
Arcing time	10 15 ms
Auxiliary circuit:	
Number of NC contacts	
 for auxiliary contacts 	
— instantaneous contact	2
Number of NO contacts	
 for auxiliary contacts 	
— instantaneous contact	2
Operating current at AC-12 maximum	10 A
Operating current at AC-15	
• at 230 V Rated value	6 A
• at 400 V Rated value	3 A
Operating current at DC-12	
• at 60 V Rated value	6 A
• at 110 V Rated value	3 A
• at 220 V Rated value	1 A
Operating current at DC-13	
• at 24 V Rated value	10 A
• at 60 V Rated value	2 A
• at 110 V Rated value	1 A
• at 220 V Rated value	0.3 A
UL/CSA ratings:	
Contact rating of the auxiliary contacts acc. to UL	A600 / Q600
Short-circuit:	
Design of the fuse link	
 for short-circuit protection of the main circuit 	
— with type of assignment 1 required	fuse gL/gG: 500 A
 — with type of assignment 2 required 	fuse gL/gG: 400 A
 for short-circuit protection of the auxiliary switch 	fuse gL/gG: 10 A
required	
Installation/ mounting/ dimensions:	
Mounting type	screw fixing
 Side-by-side mounting 	Yes
Height	210 mm
Width	145 mm
Depth	202 mm
Required spacing	

• for grounded pa	arts					
— at the side			10 mm			
Connections/ Termir	nals:					
Type of electrical con	nection					
 for main current 	t circuit		screw-type terminals			
 for auxiliary and 	d control current ci	rcuit	screw-type terminals			
Type of connectable	conductor cross-se	ection				
 for AWG condu 	ctors for main con	tacts	2/0 500 kcmil			
Type of connectable	conductor cross-se	ection				
 for auxiliary cor 	ntacts					
— solid			2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max	x. 2x (0.75 4 mm²)	
— finely stran	ded with core end	processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)		
 for AWG condu 	• for AWG conductors for auxiliary contacts 2x			4), 1x 12		
Certificates/ approva	ale:					
General Product	Approval			Functional Safety/Safety of Machinery	Declaration of Conformity	
CCC	CSA CSA	EHC		Type Examination	EG-Konf.	
Test Certificates			Shipping Approval			
<u>Type Test</u> Certificates/Test <u>Report</u>	Special Test Certificate	<u>other</u>	ABS	ĴÅ DNV DNV	GL	
Shipping Approval	other					
RMRS	<u>other</u>	Confirmatio	n Environmental Confirmations			

Further information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system) http://www.siemens.com/industrymall

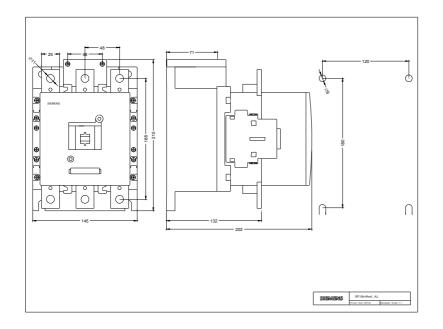
Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10666AF36

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT10666AF36

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10666AF36&lang=en





last modified:

3RT106.-.A..6_01_4_IEC.DXF 3RT107.-.A..6_01_4_IEC.DXF

02.06.2015