# **SIEMENS**

Data sheet 3RT1066-6AB36



CONTACTOR, 160KW/400V/AC-3 AC(40...60HZ)/DC OPERATION UC 23-26V AUXILIARY CONTACTS 2NO+2NC 3-POLE, SIZE S10 BAR CONNECTIONS CONVENT. OPERATING MECHANISM SCREW TERMINAL

Figure similar

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)	
<ul> <li>of the contactor typical</li> </ul>	10 000 000
<ul> <li>of the contactor with added electronics-</li> </ul>	5 000 000
compatible auxiliary switch block typical	
<ul> <li>of the contactor with added auxiliary switch</li> </ul>	10 000 000
block typical	
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	-55 +80 °C

Main 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	40F mm²
at 60 °C minimum permissible	185 mm²
at 40 °C minimum permissible	185 mm²
Operating current	
• at AC-1 at 400 V	200 A
— at ambient temperature 40 °C Rated value	330 A
● at AC-1 up to 690 V	000 4
— 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 ≥ 200000 operating cycles at AC-4	
• at 400 V Rated value	125 A
• at 690 V Rated value	115 A
Operating current	
<ul><li>with 1 current path at DC-1</li></ul>	
— at 24 V Rated value	300 A
— at 110 V Rated value	33 A
<ul><li>with 2 current paths in series at DC-1</li></ul>	
— 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
• with 3 current paths in series at DC-3 at DC-5	

— 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	23 26 V
at 60 Hz Rated value	23 26 V
Control supply voltage for DC	
Rated value	23 26 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	0.8 1.1
value of the magnet coil for DC	
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	
<ul><li>instantaneous contact</li></ul>	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	
<ul> <li>for short-circuit protection of the main circuit</li> </ul>	
<ul> <li>— with type of assignment 1 required</li> </ul>	fuse gL/gG: 500 A
<ul> <li>— with type of assignment 2 required</li> </ul>	fuse gL/gG: 400 A
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gL/gG: 10 A

Installation/ mounting/ dimensions:	
Mounting type	screw fixing
<ul> <li>Side-by-side mounting</li> </ul>	Yes
Height	210 mm
Width	145 mm
Depth	202 mm
Required spacing	

• for grounded parts

- at the side

10 mm

<u> </u>	rection			
		'C/ I A		10
	ICCLIOII	5/ I C	HIIIII	10.

## Type of electrical connection

- for main current circuit
- for auxiliary and control current circuit

screw-type terminals screw-type terminals

## Type of connectable conductor cross-section

• for AWG conductors for main contacts

2/0 ... 500 kcmil

#### Type of connectable conductor cross-section

- for auxiliary contacts
  - solid
  - finely stranded with core end processing
- for AWG conductors for auxiliary contacts

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²)

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (20 ... 16), 2x (18 ... 14), 1x 12

#### Certificates/ approvals

## **General Product Approval**

Functional Safety/Safety of Machinery Declaration of Conformity









Type Examination



## **Test Certificates**

Special Test Certificate Type Test
Certificates/Test
Report

other



**Shipping Approval** 





GL

Shipping	other
Approval	



other

Environmental Confirmations

Confirmation

#### Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

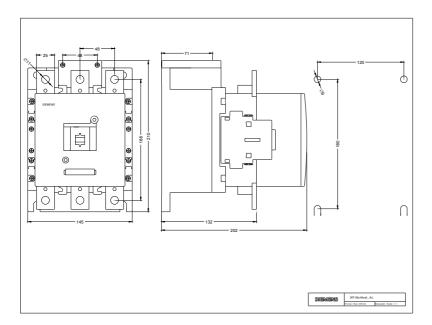
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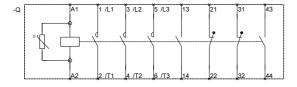
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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT10666AB36&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT10666AB36&lang=en</a>





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