# **SIEMENS**

Data sheet 3RT1064-6NF36

MEMENS

CONTACTOR, 110KW/400V/AC-3 AC(40...60HZ)/DC OPERATION UC 96-127V AUXILIARY CONTACTS 2NO+2NC 3-POLE, SIZE S10 BAR CONNECTIONS ELECTRONIC OPERATING MECHANISM WITH 24V DC PLC INTERFACE SCREW TERMINAL

Figure similar

product brand name

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
maximum permissible voltage for safe isolation	
<ul> <li>between coil and main contacts acc. to EN</li> </ul>	690 V
60947-1	
Protection class IP	
• on the front	IP00
• of the terminal	IP00
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
• with sine pulse	

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— at AC	13,4g / 5 ms, 6,5g / 10 ms
— at DC	13,4g / 5 ms, 6,5g / 10 ms
Mechanical service life (switching cycles)	
of contactor typical	10 000 000
of the contactor with added electronics-	5 000 000
compatible auxiliary switch block typical	
<ul> <li>of the contactor with added auxiliary switch</li> </ul>	10 000 000
block typical	
Ambient conditions:	
Installation altitude at height above sea level	2 000 m
maximum	
Ambient temperature	
<ul><li>during operation</li></ul>	-25 +60 °C
during storage	-55 +80 °C
Main circuit:	
Number of NO contacts for main contacts	3
Number of NC contacts for main contacts	0
Operating current	
● at AC-1 at 400 V	
— at ambient temperature 40 °C rated value	275 A
● at AC-1 up to 690 V	
— at ambient temperature 40 °C rated value	275 A
— at ambient temperature 60 °C rated value	250 A
• at AC-3	
— at 400 V rated value	225 A
— at 690 V rated value	225 A
Connectable conductor cross-section in main circuit	
at AC-1	400 3
<ul> <li>at 60 °C minimum permissible</li> </ul>	120 mm²
at 40 °C minimum permissible	150 mm²
Operating current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	96 A
• at 690 V rated value	85 A
Operating current	
• at 1 current path at DC-1	
— at 24 V rated value	200 A
— at 110 V rated value	18 A
<ul> <li>with 2 current paths in series at DC-1</li> </ul>	
— at 24 V rated value	200 A
— at 110 V rated value	200 A
<ul> <li>with 3 current paths in series at DC-1</li> </ul>	

— at 24 V rated value	200 A
— at 110 V rated value	200 A
Operating current	
<ul> <li>at 1 current path at DC-3 at DC-5</li> </ul>	
— at 24 V rated value	200 A
— at 110 V rated value	2.5 A
<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>	
— at 110 V rated value	200 A
— at 24 V rated value	200 A
<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul>	
— at 110 V rated value	200 A
— at 24 V rated value	200 A
Operating power	
● at AC-1	
— at 230 V at 60 °C rated value	94 kW
— at 400 V rated value	164 kW
— at 690 V rated value	283 kW
— at 690 V at 60 °C rated value	283 kW
• at AC-2 at 400 V rated value	128 kW
• at AC-3	
— at 230 V rated value	73 kW
— at 400 V rated value	128 kW
— at 500 V rated value	160 kW
— at 690 V rated value	223 kW
Operating power for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	54 kW
● at 690 V rated value	82 kW
Thermal short-time current limited to 10 s	1 800 A
Power loss [W] at AC-3 at 400 V for rated value of	17 W
the operating current per conductor	
No-load switching frequency	0.000 4/1
• at AC	2 000 1/h
• at DC	2 000 1/h
Operating frequency	750 1/h
• at AC-1 maximum	250 1/h
• at AC-2 maximum	
• 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 at AC	

• at 50 Hz rated value	96 127 V
• at 60 Hz rated value	96 127 V
Control supply voltage at DC	
• rated value	96 127 V
• rated value	50 Hz
Control supply voltage frequency 2 rated value	60 Hz
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
Operating range factor control supply voltage rated value of magnet coil at DC	0.8 1.1
Design of the surge suppressor	with varistor
Apparent pick-up power of magnet coil at AC	530 V·A
Inductive power factor with closing power of the coil	0.8
Apparent holding power of magnet coil at AC	8.5 V·A
Inductive power factor with the holding power of the coil	0.4
Closing power of magnet coil at DC	580 W
Holding power of magnet coil at DC	3.4 W
Closing delay	
• at AC	45 80 ms
• at DC	45 80 ms
Opening delay	
• at AC	80 100 ms
• at DC	80 100 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 1 A

# Operating current at DC-13 • at 24 V rated value • at 60 V rated value • at 110 V rated value • at 220 V rated value 0.3 A

UL/CSA ratings:	
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	
<ul> <li>— with type of coordination 1 required</li> </ul>	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
<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

screw-type terminals
screw-type terminals
2/0 500 kcmil
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

## **General Product Approval**

Declaration of Conformity

Test Certificates











spezielle Prüfbescheinigunge n

rest	
Certificates	

**Shipping Approval** 

other

Typprüfbescheinigu ng/Werkszeugnis









Umweltbestätigung

### other

Bestätigungen

sonstig

### Further information

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

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

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT10646NF36

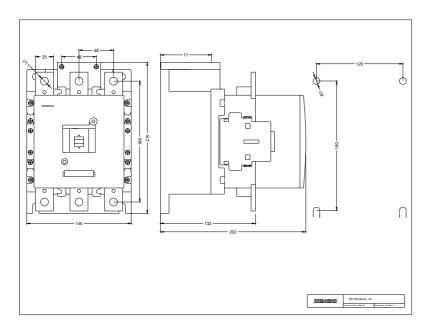
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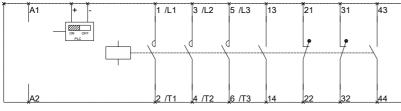
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10646NF36

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT10646NF36

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT10646NF36&lang=en





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