# **SIEMENS**

Data sheet 3RT1025-1AP04



CONTACTOR, AC-3 7.5 KW/400 V, AC 230 V, 50 HZ, 3-POLE, 2 NO + 2 NC, SIZE S0, SCREW CONNECTION

Figure similar

product brand name	SIRIUS
Product designation	power contactor

General technical data:	
Size of contactor	S0
Degree of pollution	3
Mechanical service life (switching cycles)	
of the contactor typical	10 000 000
<ul> <li>of the contactor with added electronics- compatible auxiliary switch block typical</li> </ul>	5 000 000
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000
Protection class IP	
• on the front	IP20
• of the terminal	IP20
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

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
Operating current	
• at AC-1 at 400 V	
— at ambient temperature 40 °C Rated value	40 A
• at AC-1 up to 690 V	
— at ambient temperature 40 °C Rated value	40 A
— at ambient temperature 60 °C Rated value	35 A
• at AC-3	
— at 400 V Rated value	17 A
• at AC-4 at 400 V Rated value	15.5 A
Operating current	
<ul><li>with 1 current path at DC-1</li></ul>	
— at 24 V Rated value	35 A
— at 110 V Rated value	4.5 A
• with 2 current paths in series at DC-1	
— at 24 V Rated value	35 A
— at 110 V Rated value	35 A
<ul> <li>with 3 current paths in series at DC-1</li> </ul>	
— at 24 V Rated value	35 A
— at 110 V Rated value	35 A
Operating current	
• with 1 current path at DC-3 at DC-5	
— at 24 V Rated value	20 A
— at 110 V Rated value	2.5 A
• with 2 current paths in series at DC-3 at DC-5	
— at 110 V Rated value	15 A
— at 24 V Rated value	35 A
• with 3 current paths in series at DC-3 at DC-5	
— at 110 V Rated value	35 A
— at 24 V Rated value	35 A
Active power loss at AC-3 at 400 V for rated value of	0.9 W
the operating current per conductor	
Control circuit/ Control:	
Type of voltage of the control supply voltage	AC
Control supply voltage with AC	
• at 50 Hz Rated value	230 V
Rated value	50 Hz
Operating range factor control supply voltage rated value of the magnet coil with AC	
● at 50 Hz	0.8 1.1
Apparent pick-up power of the magnet coil with AC	61 V·A
Inductive power factor with closing power of the coil	0.82

Apparent holding power of the magnet coil with AC	7.8 V·A
Inductive power factor with the holding power of the coil	0.24
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
Contact reliability of the auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
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: 63 A
— with type of assignment 2 required	fuse gL/gG: 25 A
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gL/gG: 10 A
nstallation/ mounting/ dimensions:	
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
Side-by-side mounting	Yes
Height	85 mm
Width	45 mm
Depth	140 mm
Required spacing	

for grounded parts— at the side

6 mm

Connections/ Terminals:	
Type of electrical connection	
• for main current circuit	screw-type terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>	screw-type terminals
Type of connectable conductor cross-section	
• for main contacts	
— solid	2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²
<ul> <li>single or multi-stranded</li> </ul>	2x (1 2,5 mm²), 2x (2,5 6 mm²), max. 2x 10 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 2.5 mm²), 2x (2.5 6 mm²)
<ul> <li>for AWG conductors for main contacts</li> </ul>	2x (16 12), 2x (14 10), 1x 8
Type of connectable conductor cross-section	
• for auxiliary contacts	
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>for AWG conductors for auxiliary contacts</li> </ul>	2x (20 16), 2x (18 14), 1x 12

Certificates/	approvals:

#### **General Product Approval Functional** Declaration of Safety/Safety Conformity of Machinery









Type Examination



## **Test Certificates**

Type Test Certificates/Test Report

**Special Test** Certificate







### **Shipping Approval**





Environmental Confirmations

other

Confirmation

other

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

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

Industry Mall (Online ordering system)

Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10251AP04

https://support.industry.siemens.com/cs/ww/en/ps/3RT10251AP04

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=3RT10251AP04&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT10251AP04&lang=en</a>



