SIEMENS

Data sheet 3RT1024-1AP00



CONTACTOR, AC-3 5.5 KW/400 V, AC 230 V, 50 HZ, 3-POLE, 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
 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	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	12 A
• at AC-4 at 400 V Rated value	12.5 A
Operating current	
with 1 current path at DC-1	
— 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
 with 3 current paths in series at DC-1 	
— 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	0.5 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	0
Number of NO contacts	
• for auxiliary contacts	
— instantaneous contact	0
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	
 for short-circuit protection of the main circuit 	
 — with type of assignment 1 required 	fuse gL/gG: 63 A
— with type of assignment 2 required	fuse gL/gG: 25 A
 for short-circuit protection of the auxiliary switch required 	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	91 mm
Required spacing	

• for grounded parts

— at the side

6 mm

Connections/ Terminals:	
Type of electrical connection	
• for main current circuit	screw-type terminals
 for auxiliary and control current circuit 	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
 single or multi-stranded 	2x (1 2,5 mm²), 2x (2,5 6 mm²), max. 2x 10 mm²
 finely stranded with core end processing 	2x (1 2.5 mm²), 2x (2.5 6 mm²)
 for AWG conductors for main contacts 	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)
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 for AWG conductors for auxiliary contacts 	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







GL



Shipping Approval

other

RIMA BIMA



Confirmation

other

Environmental Confirmations

Further information

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

 $\underline{\text{http://www.siemens.com/industrial-controls/catalogs}}$

Industry Mall (Online ordering system)

http://www.siemens.com/industrymal

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10241AP00

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10241AP00&lang=en







