SIEMENS

Data sheet

3RT1024-1AC20-Z W95

CONTACTOR, AC-3, 5.5KW/400V, 24V AC, 50/60HZ, 3-POLE, SIZE S0, SCREW TERMINAL MULTI-UNIT PACKAGING 1 PACK = 96 UNITS



product brand name	SIRIUS	
Product designation	power contactor	
General technical data		
Size of contactor	S0	
Degree of pollution	3	
Protection class IP		
• on the front	IP20	

IP20

Mechanical service life	(switching cycles)

compatible auxiliary switch block typical

• of the terminal

of contactor typical	10 000 000
of the contactor with added electronics-	5 000 000

• of the contactor with added auxiliary switch	10 000 000
block typical	

Ambient conditions	
Installation altitude at height above sea level maximum	2 000 m
Ambient temperature	
during operation	-25 +60 °C

lain circuit	
Number of poles for main current circuit	3
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	40 A
• at AC-1	
 up to 690 V at ambient temperature 40 °C rated value 	40 A
 up to 690 V at ambient temperature 60 °C rated value 	35 A
• at AC-3	
— at 400 V rated value	12 A
Operating current	
• at 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	
• at 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
Operating power	
• at AC-1	
— at 400 V rated value	23 kW
• at AC-2 at 400 V rated value	5.5 kW
• at AC-3	
— at 400 V rated value	5.5 kW
— at 500 V rated value	7.5 kW

— at 690 V rated value	7.5 kW	
Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor	0.5 W	
Control circuit/ Control		
Type of voltage of the control supply voltage	AC	
Control supply voltage at AC		
at 50 Hz rated value	24 V	

Control circuit/ Control	
Type of voltage of the control supply voltage	AC
Control supply voltage at AC	
● at 50 Hz rated value	24 V
• at 60 Hz rated value	24 V
Control supply voltage frequency 1 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	0.85 1.1
Apparent pick-up power of magnet coil at AC	64 V·A
Inductive power factor with closing power of the coil	0.72
Apparent holding power of magnet coil at AC	8.4 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 auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)

Short-circuit protection	
Design of the fuse link	

• for short-circuit protection of the main circuit

— with type of coordination 1 required

— with type of assignment 2 required

• for short-circuit protection of the auxiliary switch required

fuse gL/gG: 63 A fuse gL/gG: 25 A fuse gL/gG: 10 A

Installation/ mounting/ dimensions	
screw and snap-on mounting onto 35 mm standard mounting rail	
according to DIN EN 50022	
Yes	
85 mm	
45 mm	
91 mm	
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-sections		
• 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)	
 at AWG conductors for main contacts 	2x (16 12), 2x (14 10), 1x 8	
Type of connectable conductor cross-sections		
 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)	
• at AWG conductors for auxiliary contacts	2x (20 16), 2x (18 14), 1x 12	

Certificates/approvals

General Product Approval

Declaration of Conformity

Test Certificates









Typprüfbescheinigu ng/Werkszeugnis

<u>spezielle</u> Prüfbescheinigunge

n

Shipping Approval













other

Umweltbestätigung

sonstig

Bestätigungen

Further information

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

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

Industry Mall (Online ordering system)

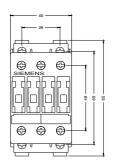
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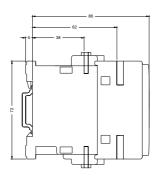
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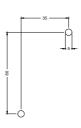
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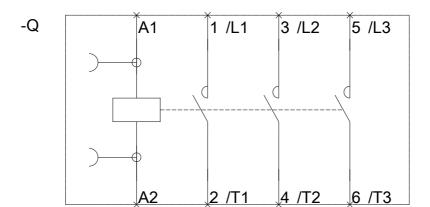
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT1024-1AC20-Z W95

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1024-1AC20-Z W95&lang=en









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