## Data sheet

CONTACTOR, AC-3, 5.5KW/400V, AC-1, 22A, 24V DC, 4-POLE, 2NO+2NC, SIZE S00, CAGE CLAMP TERMINAL REUSABLE PACKAGING 1 PACK = 144 UNITS



product brand name	SIRIUS
Product designation	power contactor
General technical data	
Size of contactor	S00
Insulation voltage	
• rated value	690 V
Degree of pollution	3
Protection class IP	
• on the front	IP20
Mechanical service life (switching cycles)	
of contactor typical	30 000 000
<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
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	4
Number of NO contacts for main contacts	2
Number of NC contacts for main contacts	2
Operating current	
• at AC-1	
— up to 690 V at ambient temperature 40 °C	22 A
rated value	
— up to 690 V at ambient temperature 60 °C rated value	20 A
• at AC-2 at AC-3 at 400 V	
per NO contact rated value	12 A
— per NC contact rated value	12 A
Connectable conductor cross-section in main circuit	
at AC-1	
• at 60 °C minimum permissible	2.5 mm <sup>2</sup>
• at 40 °C minimum permissible	2.5 mm <sup>2</sup>
Operating current	
• at 1 current path at DC-1	
— at 24 V rated value	20 A
— at 110 V rated value	2.1 A
— at 220 V rated value	0.8 A
— at 440 V rated value	0.6 A
<ul><li>with 2 current paths in series at DC-1</li></ul>	
— at 24 V rated value	20 A
— at 110 V rated value	12 A
— at 220 V rated value	1.6 A
— at 440 V rated value	0.8 A
Operating current	
• at 1 current path at DC-3 at DC-5	
— at 24 V per NC contact rated value	20 A
— at 24 V per NO contact rated value	20 A
— at 110 V per NC contact rated value	0.075 A
— at 110 V per NO contact rated value	0.15 A
— at 220 V per NC contact rated value	0.375 A
— at 220 V per NO contact rated value	0.75 A
• with 2 current paths in series at DC-3 at DC-5	
— at 110 V per NC contact rated value	0.175 A
— at 110 V per NO contact rated value	0.35 A
— at 24 V per NC contact rated value	20 A

— at 24 V per NO contact rated value	20 A
Operating power	
• at AC-1	
— at 230 V rated value	7.5 kW
— at 400 V rated value	13 kW
• at AC-2 at AC-3	
— at 230 V per NC contact rated value	3 kW
— at 230 V per NO contact rated value	3 kW
— at 400 V per NC contact rated value	5.5 kW
— at 400 V per NO contact rated value	5.5 kW
Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor	0.7 W
Operating frequency	
• at AC-1 maximum	1 000 1/h
Control circuit/ Control	
Type of voltage of the control supply voltage	DC
Control supply voltage at DC	
• rated value	24 V
Operating range factor control supply voltage rated value of magnet coil at DC	0.85 1.1
Closing power of magnet coil at DC	3.3 W
Holding power of magnet coil at DC	3.3 W
Closing delay	
• at AC	8 35 ms
• at DC	25 100 ms
Opening delay	
• at AC	4 30 ms
• at DC	7 10 ms
Arcing time	10 15 ms
Control version of the switch operating mechanism	conventional
Residual current of the electronics for control with signal <0>	
<ul> <li>at DC at 24 V maximum permissible</li> </ul>	0.01 A
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

● 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

required

sign 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: 35 A
<ul> <li>— with type of assignment 2 required</li> </ul>	fuse gL/gG: 20 A
• for short-circuit protection of the auxiliary switch	fuse gL/gG: 10 A

Installation/ mounting/ dimensions	
Mounting position	with vertical mounting surface +/-180° rotatable, with vertical mounting surface +/- 30° tiltable to the front and back
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
<ul> <li>Side-by-side mounting</li> </ul>	Yes
Height	60 mm
Width	45 mm
Depth	72 mm
Required spacing	
<ul> <li>for grounded parts</li> </ul>	
— at the side	6 mm

Connections/Terminals	
Type of electrical connection	
• for main current circuit	spring-loaded terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>	spring-loaded terminals
Type of connectable conductor cross-sections	
• for main contacts	
— solid	2x (0.25 2.5 mm²)
<ul> <li>single or multi-stranded</li> </ul>	2x (0,25 2,5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.25 1.5 mm²)

<ul> <li>finely stranded without core end processing</li> </ul>	2x (0.25 2.5 mm²)
<ul> <li>at AWG conductors for main contacts</li> </ul>	2x (24 14)
Type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
— solid	2x (0.25 2.5 mm²)
<ul> <li>single or multi-stranded</li> </ul>	2x (0,25 2,5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.25 1.5 mm²)
<ul> <li>finely stranded without core end</li> </ul>	2x (0.25 2.5 mm²)
processing	
<ul> <li>at AWG conductors for auxiliary contacts</li> </ul>	2x (24 14)

#### Safety related data

#### Failure rate [FIT]

• with low demand rate acc. to SN 31920

100 FIT

#### Certificates/approvals

### **General Product Approval**

Functional Safety/Safety of Machinery Declaration of Conformity









Baumusterprüfbesc heinigung



Test	Shipping Approval
Certificates	

spezielle Prüfbescheinigunge

<u>n</u>





GL



LRS





#### other

Umweltbestätigung

Bestätigungen

sonstig

#### Further information

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

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

Industry Mall (Online ordering system)

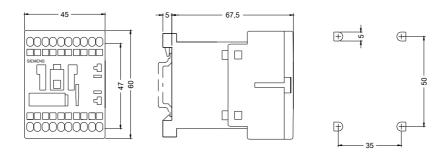
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1517-2BB40-Z X95

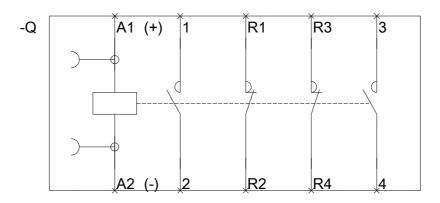
Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1517-2BB40-Z X95

 $\underline{\text{https://support.industry.siemens.com/cs/ww/en/ps/3RT1517-2BB40-Z~X95}}$ 

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=3RT1517-2BB40-Z X95&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT1517-2BB40-Z X95&lang=en</a>





last modified: 09/20/2016