# **SIEMENS**

Data sheet 3RT2526-1BB40

2NO+2NC CONTACTOR, AC3: 11KW DC 24V 4-POLE, 2NO+2NC, SZ: S0, SCREW TERMINAL 1NO+1NC INTEGR. NO + 1 NC integrated



Product brand name	SIRIUS
Product designation	contactor
Product type designation	3RT25

General technical data	
Size of contactor	S0
Product extension	
<ul> <li>function module for communication</li> </ul>	No
Auxiliary switch	Yes
Insulation voltage	
• rated value	690 V
Degree of pollution	3
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
<ul> <li>between coil and main contacts acc. to EN</li> </ul>	400 V
60947-1	
Protection class IP	
• on the front	IP20
• of the terminal	IP20
Shock resistance at rectangular impulse	

• at DC	10g / 5 ms, 7,5g / 10 ms
Shock resistance with sine pulse	
• at DC	15g / 5 ms, 10g / 10 ms
Mechanical service life (switching cycles)	
of contactor typical	10 000 000
<ul> <li>of the contactor with added electronics-</li> </ul>	5 000 000
compatible auxiliary switch block typical	
<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	
• maximum	2 000 m
Ambient temperature	
<ul><li>during operation</li></ul>	-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 $^{\circ}\text{C}$ rated value	40 A
— up to 690 V at ambient temperature 60 $^{\circ}\text{C}$ rated value	35 A
• at AC-2 at AC-3 at 400 V	
— per NO contact rated value	25 A
— per NC contact rated value	20 A
Connectable conductor cross-section in main circuit at AC-1	
at 60 °C minimum permissible	10 mm²
at 40 °C minimum permissible	10 mm²
Operating current	
• at 1 current path at DC-1	
— at 24 V rated value	35 A
— at 110 V rated value	4.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.4 A
<ul> <li>with 2 current paths in series at DC-1</li> </ul>	
— at 24 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	5 A

— at 440 V rated value	1 A
Operating current	
<ul> <li>at 1 current path at DC-3 at DC-5</li> </ul>	
<ul> <li>— at 24 V per NC contact rated value</li> </ul>	20 A
<ul> <li>— at 24 V per NO contact rated value</li> </ul>	20 A
<ul> <li>— at 110 V per NC contact rated value</li> </ul>	1.25 A
<ul> <li>— at 110 V per NO contact rated value</li> </ul>	2.5 A
<ul> <li>— at 220 V per NC contact rated value</li> </ul>	0.5 A
<ul> <li>— at 220 V per NO contact rated value</li> </ul>	1 A
— at 440 V per NC contact rated value	0.045 A
<ul> <li>— at 440 V per NO contact rated value</li> </ul>	0.09 A
• with 2 current paths in series at DC-3 at DC-5	
— at 24 V per NC contact rated value	35 A
— at 24 V per NO contact rated value	35 A
— at 110 V per NC contact rated value	7.5 A
— at 110 V per NO contact rated value	15 A
— at 220 V per NC contact rated value	1.5 A
— at 220 V per NO contact rated value	3 A
— at 440 V per NC contact rated value	0.135 A
— at 440 V per NO contact rated value	0.27 A
Operating power	
● at AC-1	
— at 230 V rated value	15 kW
— at 400 V rated value	26 kW
• at AC-2 at AC-3	
— at 230 V per NC contact rated value	5.5 kW
— at 230 V per NO contact rated value	5.5 kW
<ul> <li>— at 400 V per NC contact rated value</li> </ul>	7.5 kW
<ul> <li>— at 400 V per NO contact rated value</li> </ul>	11 kW
Power loss [W] at AC-3 at 400 V for rated value of	1.6 W
the operating current per conductor  No-load switching frequency	
at AC	5 000 1/h
• at DC	1 500 1/h
Operating frequency	1 300 1/11
• 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	u
• initial value	0.8
Full-scale value	1.1
Closing power of magnet coil at DC	5.9 W
Holding power of magnet coil at DC	5.9 W
Closing delay	0.5 **
• at DC	50 170 ms
Opening delay	
• at DC	15 17.5 ms
Arcing time	10 10 ms
uxiliary circuit	
Number of NC contacts	
• for auxiliary contacts	
— instantaneous contact	1
Number of NO contacts	
• for auxiliary contacts	
<ul> <li>instantaneous contact</li> </ul>	1
Operating current at AC-12 maximum	10 A
Operating current at AC-15	
• at 230 V rated value	10 A
● at 400 V rated value	3 A
• at 500 V rated value	2 A
• at 690 V rated value	1 A
Operating current at DC-12	
• at 24 V rated value	10 A
● at 48 V rated value	6 A
• at 60 V rated value	6 A
● at 110 V rated value	3 A
• at 125 V rated value	2 A
• at 220 V rated value	1 A
• at 600 V rated value	0.15 A
Operating current at DC-13	
• at 24 V rated value	10 A
• at 48 V rated value	2 A
• at 60 V rated value	2 A
• at 110 V rated value	1 A

• at 125 V rated value

at 220 V rated valueat 600 V rated value

Contact reliability of auxiliary contacts

1 faulty switching per 100 million (17 V, 1 mA)

0.9 A

0.3 A

0.1 A

UL/CSA ratings	
Yielded mechanical performance [hp]	
<ul> <li>for single-phase AC motor</li> </ul>	
— at 110/120 V rated value	2 hp
— at 230 V rated value	3 hp
Contact rating of auxiliary contacts according to UI	A600 / Q600

#### 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

gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 63 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A

fuse gG: 10 A

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nstallation/ mounting/ dimensions	
Mounting position	+/-180° rotation possible on vertical mounting surface; can be
	tilted forward and backward by +/- 22.5° on vertical mounting
	surface
Mounting type	screw and snap-on mounting onto 35 mm standard mounting ra
	according to DIN EN 50022
Side-by-side mounting	Yes
Height	85 mm
Width	61 mm
Depth	107 mm
Required spacing	
<ul><li>with side-by-side mounting</li></ul>	
— forwards	0 mm
— Backwards	0 mm
— upwards	0 mm
— downwards	0 mm
— at the side	0 mm
• for grounded parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	0 mm
— at the side	6 mm
— downwards	0 mm
• for live parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	0 mm
— downwards	0 mm
40111114140	

— at the side	6 mm
— at the side	0 111111

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-sections	
• for main contacts	
— solid	2x (1 2.5 mm²), 2x (2.5 10 mm²)
<ul><li>— single or multi-stranded</li></ul>	2x (1 2,5 mm²), 2x (2,5 10 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
<ul> <li>at AWG conductors for main contacts</li> </ul>	2x (16 12), 2x (14 8)
Type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>single or multi-stranded</li> </ul>	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
• at AWG conductors for auxiliary contacts	2x (20 16), 2x (18 14)

Safety related data	
B10 value	
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	1 000 000
Proportion of dangerous failures	
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	40 %
• with high demand rate acc. to SN 31920	73 %
Failure rate [FIT]	
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	100 FIT
Product function	
<ul> <li>Mirror contact acc. to IEC 60947-4-1</li> </ul>	Yes
• positively driven operation acc. to IEC 60947-5-	No
1	
T1 value for proof test interval or service life acc. to IEC 61508	20 y

## Certificates/approvals

#### **General Product Approval**

**EMC** 

**Functional** Safety/Safety of Machinery











Type Examination

Declaration of	
Conformity	

**Test** Certificates

Marine / Shipping













GL

### Marine / Shipping

other













### 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=3RT2526-1BB40

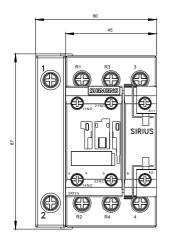
Cax online generator

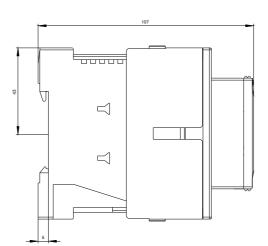
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2526-1BB40

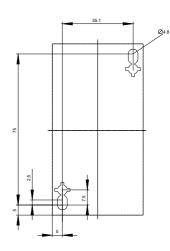
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

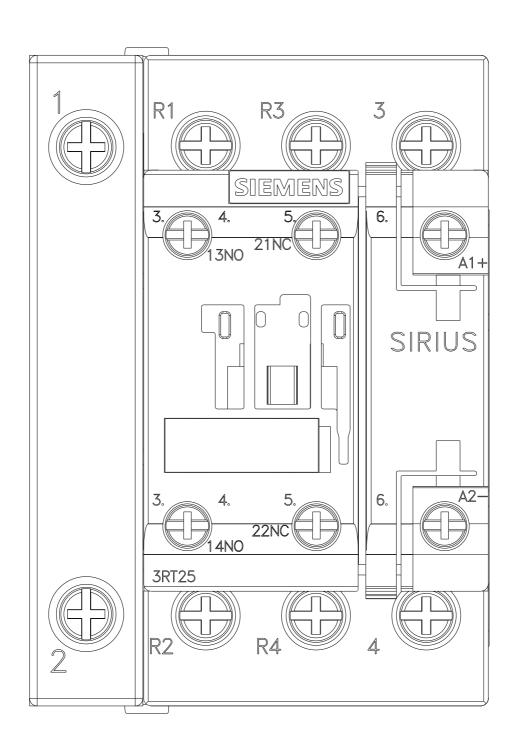
https://support.industry.siemens.com/cs/ww/en/ps/3RT2526-1BB40

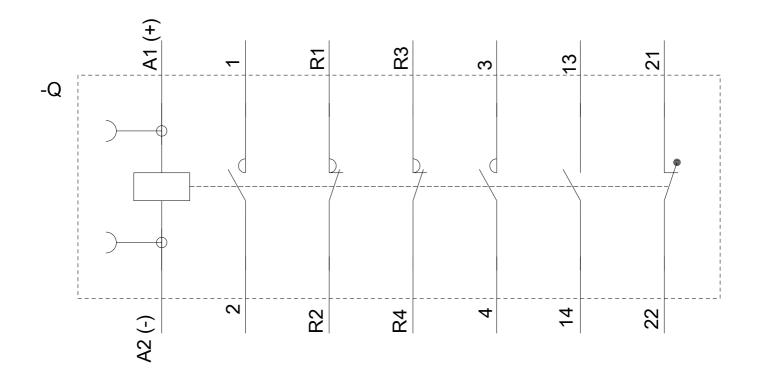
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2526-1BB40&lang=en











last modified: 01/17/2018