SIEMENS

Data sheet 3RT2026-1BB40

> CONTACTOR, AC-3, 11KW/400V, 1NO+1NC, DC 24V, 3-POLE, SZ S0 SCREW TERMINAL



product brandname	SIRIUS
Product type designation	3RT2

General technical data	
Size of contactor	S0
Product extension	
 function module for communication 	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	
 between coil and main contacts acc. to EN 	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
with sine pulse	
— at DC	15g / 5 ms, 10g / 10 ms
Mechanical service life (switching cycles)	
of 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

- of the contactor with added advinding switch	
block typical	
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	3
Number of NO contacts for main contacts	3
Number of NC contacts for main contacts	0
Operating voltage	
 at AC-3 rated value maximum 	690 V
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 $^{\circ}\text{C}$ rated value	35 A
• at AC-2 at 400 V rated value	25 A
• at AC-3	
— at 400 V rated value	25 A
— at 500 V rated value	18 A
— at 690 V rated value	13 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 for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	9 A
• at 690 V rated value	9 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
— at 220 V rated value	1 A
— at 440 V rated value	0.4 A
— at 600 V rated value	0.25 A
 with 2 current paths in series at DC-1 	
— 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
— at 600 V rated value	0.8 A
• with 3 current paths in series at DC-1	
— at 24 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	35 A
— at 440 V rated value	2.9 A
— at 600 V rated value	1.4 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
— at 220 V rated value	1 A
— at 440 V rated value	0.09 A
— at 600 V rated value	0.06 A
• with 2 current paths in series at DC-3 at DC-5	
— at 110 V rated value	15 A
— at 220 V rated value	3 A
— at 24 V rated value	35 A
— at 440 V rated value	0.27 A
— at 600 V rated value	0.16 A
• with 3 current paths in series at DC-3 at DC-5	
— at 110 V rated value	35 A
— at 220 V rated value	10 A
— at 24 V rated value	35 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.6 A
Operating power	
• at AC-1	
— at 230 V rated value	13.3 kW

— at 230 V at 60 °C rated value	13.3 kW
— at 400 V rated value	23 kW
— at 400 V at 60 °C rated value	23 kW
— at 690 V rated value	40 kW
— at 690 V at 60 °C rated value	40 kW
• at AC-2 at 400 V rated value	11 kW
● at AC-3	
— at 230 V rated value	5.5 kW
— at 400 V rated value	11 kW
— at 690 V rated value	11 kW
Operating power for approx. 200000 operating cycles	
at AC-4	
● at 400 V rated value	4.4 kW
• at 690 V rated value	7.7 kW
Thermal short-time current limited to 10 s	200 A
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	
• at AC-1 maximum	1 000 1/h
• at AC-2 maximum	750 1/h
• at AC-3 maximum	750 1/h
• at AC-4 maximum	250 1/h
Control circuit/ Control	

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	0.8 1.1
value of magnet coil at DC	
Closing power of magnet coil at DC	5.9 W
Holding power of magnet coil at DC	5.9 W
Closing delay	
• at DC	50 170 ms
Opening delay	
• at DC	15 17.5 ms
Arcing time	10 10 ms
Residual current of the electronics for control with	
signal <0>	
 at AC at 230 V maximum permissible 	7 mA
 at DC at 24 V maximum permissible 	16 mA

Auxiliary circuit		
Number of NC contacts		
• for auxiliary contacts		
— instantaneous contact	1	
Number of NO contacts		
 for auxiliary contacts 		
 instantaneous contact 	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	0.3 A	
• at 220 V rated value	0.3 A	
● at 600 V rated value	0.3 A	
Contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)	
UL/CSA ratings		
Full-load current (FLA) for three-phase AC motor		
● at 480 V rated value	21 A	
• at 600 V rated value	22 A	
Yielded mechanical performance [hp]		
• for single-phase AC motor		
— at 110/120 V rated value	2 hp	
— at 230 V rated value	3 hp	
• for three-phase AC motor		
— at 200/208 V rated value	5 hp	
— at 220/230 V rated value	7.5 hp	

— at 460/480 V rated value
 — at 575/600 V rated value
 Contact rating of auxiliary contacts according to UL
 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: 100 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A

fuse gG: 10 A

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 rai
	according to DIN EN 50022
Side-by-side mounting	Yes
Height	85 mm
Width	45 mm
Depth	107 mm
Required spacing	
with side-by-side mounting	
— 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
— at the side	6 mm

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 10 mm²)	
— single or multi-stranded	2x (1 2,5 mm²), 2x (2,5 10 mm²)	
 finely stranded with core end processing 	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²	
 at AWG conductors for main contacts 	2x (16 12), 2x (14 8)	
Type of connectable conductor cross-sections		
 for auxiliary contacts 		
— single or multi-stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 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)	

Safety related data	
B10 value	
 with high demand rate acc. to SN 31920 	1 000 000
Proportion of dangerous failures	
 with low demand rate acc. to SN 31920 	40 %
 with high demand rate acc. to SN 31920 	73 %
Failure rate [FIT]	
 with low demand rate acc. to SN 31920 	100 FIT
Product function	
 Mirror contact acc. to IEC 60947-4-1 	Yes
T1 value for proof test interval or service life acc. to	20 y
IEC 61508	
Protection against electrical shock	finger-safe

Certificates/approvals

General Product Approval







KTL





EMC

Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates		Shipping Approval
Baumusterbescheini gung	C E EG-Konf.	Typprüfbescheinigu spezielle ng/Werkszeugnis Prüfbescheinigunge n	sonstig	ABS

Shipping Approval

















Shipping	other
Approval	



Bestätigungen

Umweltbestätigung



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=3RT2026-1BB40

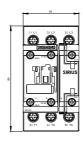
Cax online generator

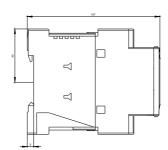
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2026-1BB40

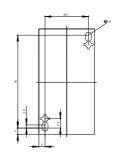
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

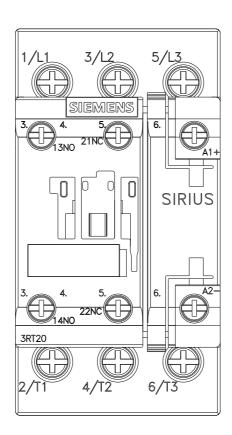
https://support.industry.siemens.com/cs/ww/en/ps/3RT2026-1BB40

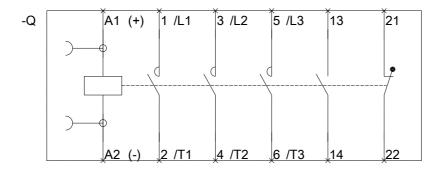
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2026-1BB40&lang=en











last modified: 12/18/2016