SIEMENS

Data sheet 3RT2026-1BG44



power contactor, AC-3e/AC-3, 25 A, 11 kW / 400 V, 3-pole, 125 V DC, auxiliary contacts: 2 NO + 2 NC, screw terminal, removable auxiliary switch

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S0
product extension	
 function module for communication 	No
auxiliary switch	No
power loss [W] for rated value of the current	
 at AC in hot operating state 	5.7 W
 at AC in hot operating state per pole 	1.9 W
 without load current share typical 	5.9 W
insulation voltage	
 of main circuit with degree of pollution 3 rated value 	690 V
 of auxiliary circuit with degree of pollution 3 rated value 	690 V
surge voltage resistance	
 of main circuit rated value 	6 kV
 of auxiliary circuit rated value 	6 kV
maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1	400 V
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 (operating cycles)	
 of contactor typical 	10 000 000
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000
 of the contactor with added auxiliary switch block typical 	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
 during operation 	-25 +60 °C
 during storage 	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
Main circuit	

number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	000 \
at AC-3 rated value maximum	690 V
at AC-3e rated value maximum	690 V
operational current	40.4
 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	40 A
rated value	40 A
— up to 690 V at ambient temperature 60 °C	35 A
rated value	
• at AC-3	
— at 400 V rated value	25 A
— at 500 V rated value	18 A
— at 690 V rated value	13 A
• at AC-3e	
— at 400 V rated value	25 A
— at 500 V rated value	18 A
— at 690 V rated value	13 A
• at AC-4 at 400 V rated value	15.5 A
 at AC-5a up to 690 V rated value 	35.2 A
• at AC-5b up to 400 V rated value	20.7 A
• at AC-6a	
— up to 230 V for current peak value n=20 rated	20.2 A
value	
 up to 400 V for current peak value n=20 rated 	20.2 A
value	
— up to 500 V for current peak value n=20 rated	20.2 A
value	12.9 A
 up to 690 V for current peak value n=20 rated value 	12.9 A
• at AC-6a	
— up to 230 V for current peak value n=30 rated	13.5 A
value	
 up to 400 V for current peak value n=30 rated 	13.5 A
value	
 up to 500 V for current peak value n=30 rated 	13.5 A
value	
 up to 690 V for current peak value n=30 rated value 	13 A
minimum cross-section in main circuit at maximum AC-1	10 mm²
rated value	10 111111
operational current for approx. 200000 operating	
cycles at AC-4	
 at 400 V rated value 	9 A
 at 690 V rated value 	9 A
operational current	
• at 1 current path at DC-1	
— at 24 V rated value	35 A
— at 60 V rated value	20 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 60 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 60 V rated value	35 A

-14401/	05 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
 at 1 current path at DC-3 at DC-5 	
— at 24 V rated value	20 A
— at 60 V rated value	5 A
— at 110 V rated value	2.5 A
— at 220 V rated value	1A
	0.09 A
— at 440 V rated value	
— at 600 V rated value	0.06 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	15 A
— at 220 V rated value	3 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 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	10 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.6 A
operating power	
 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 500 V rated value	11 kW
— at 690 V rated value	11 kW
• at AC-3e	I I NVV
	E E LAM
— at 230 V rated value	5.5 kW
— at 400 V rated value	11 kW
— at 500 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
operating apparent power at AC-6a	
• up to 230 V for current peak value n=20 rated value	8 kVA
 up to 400 V for current peak value n=20 rated value 	13.9 kVA
• up to 500 V for current peak value n=20 rated value	17.4 kVA
• up to 690 V for current peak value n=20 rated value	15.4 kVA
operating apparent power at AC-6a	
• up to 230 V for current peak value n=30 rated value	5.3 kVA
·	
• up to 400 V for current peak value n=30 rated value	9.3 kVA
• up to 500 V for current peak value n=30 rated value	11.6 kVA
 up to 690 V for current peak value n=30 rated value 	15.5 kVA
short-time withstand current in cold operating state up to 40 °C	
 limited to 1 s switching at zero current maximum 	375 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	300 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	210 A; Use minimum cross-section acc. to AC-1 rated value
limited to 30 s switching at zero current maximum	144 A; Use minimum cross-section acc. to AC-1 rated value
limited to 60 s switching at zero current maximum	118 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
	1.500.1/b
• at DC	1 500 1/h
operating frequency	4 000 4 //-
• at AC-1 maximum	1 000 1/h
at AC-2 maximum	750 1/h
at AC-3 maximum	750 1/h

at AC 2a manyimum	750 1/h
• at AC-3e maximum	
at AC-4 maximum Control circuit/ Control	250 1/h
	DO.
type of voltage of the control supply voltage	DC
control supply voltage at DC • rated value	125 V
	125 V
operating range factor control supply voltage rated value of magnet coil at DC	
• 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	
• at DC	50 170 ms
opening delay	
• at DC	15 18 ms
arcing time	10 10 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts	2
instantaneous contact number of NO contacts for auxiliary contacts	2
instantaneous contact	2
operational current at AC-12 maximum	10 A
operational current at AC-15	
at 230 V rated value	6 A
 at 400 V rated value 	3 A
 at 500 V rated value 	2 A
 at 690 V rated value 	1 A
operational 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
operational current at DC-13	C A
at 24 V rated valueat 48 V rated value	6 A 2 A
at 46 V rated value at 60 V rated value	2 A
at 100 V rated value at 110 V rated value	1A
at 110 V rated value at 125 V rated value	0.9 A
at 123 V rated value at 220 V rated value	0.3 A
at 600 V rated value	0.1 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	
full-load current (FLA) for 3-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 3-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	15 hp
— at 575/600 V rated value	20 hp
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 	

gG: 100 A (690 V, 100 kA), aM: 50 A (690 V, 100 kA), BS88: 100 A (415 - with type of coordination 1 required V, 80 kA) - with type of assignment 2 required gG: 35A (690V, 100kA), aM: 20A (690V, 100kA), BS88: 35A (415V, 80kA) • for short-circuit protection of the auxiliary switch gG: 10 A (500 V, 1 kA) required Installation/ mounting/ dimensions mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 • side-by-side mounting Yes height 85 mm width 45 mm depth 151 mm required spacing • with side-by-side mounting 10 mm — forwards - upwards 10 mm 10 mm - downwards - at the side 0 mm • for grounded parts - forwards 10 mm - upwards 10 mm 6 mm - at the side downwards 10 mm for live parts 10 mm - forwards - upwards 10 mm downwards 10 mm - at the side 6 mm **Connections/ Terminals** type of electrical connection • for main current circuit screw-type terminals • for auxiliary and control circuit screw-type terminals • at contactor for auxiliary contacts Screw-type terminals · of magnet coil Screw-type terminals type of connectable conductor cross-sections for main contacts solid 2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²) solid or 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 connectable conductor cross-section for main contacts solid 1 ... 10 mm² 1 ... 10 mm² stranded 1 ... 10 mm² • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts 0.5 ... 2.5 mm² solid or stranded • finely stranded with core end processing 0.5 ... 2.5 mm² type of connectable conductor cross-sections • for auxiliary contacts - solid or 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) 2x (20 ... 16), 2x (18 ... 14) • at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts 16 ... 8 for auxiliary contacts 20 ... 14 Safety related data product function • mirror contact according to IEC 60947-4-1 Yes • positively driven operation according to IEC 60947-No 5-1

B10 value with high demand rate according to SN 31920 proportion of dangerous failures

• with low demand rate according to SN 31920

• with high demand rate according to SN 31920

failure rate [FIT] with low demand rate according to SN 31920

T1 value for proof test interval or service life according to IEC 61508

protection class IP on the front according to IEC 60529

touch protection on the front according to IEC 60529 suitability for use

• safety-related switching OFF

450 000

40 %

73 %

100 FIT

20 a

IP20

finger-safe, for vertical contact from the front

Yes

Certificates/ approvals

General Product Approval



Confirmation





<u>KC</u>



EMC

Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates



Type Examination Certificate





Special Test Certificate

Type Test Certificates/Test Report

Marine / Shipping













other

Railway

Dangerous Good

Environment

Confirmation



Vibration and Shock

Transport Information

Environmental Confirmations

Further information

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2026-1BG44

Cax online generator

 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT2026-1BG44}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2026-1BG44

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

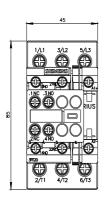
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2026-1BG44&lang=en

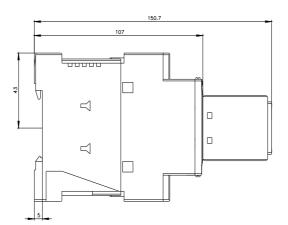
Characteristic: Tripping characteristics, I2t, Let-through current

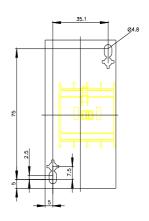
https://support.industry.siemens.com/cs/ww/en/ps/3RT2026-1BG44/char

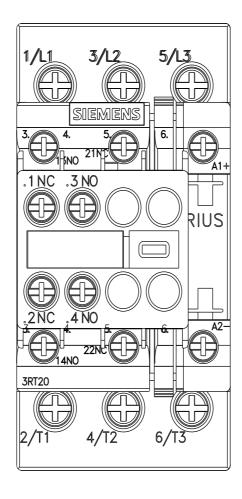
Further characteristics (e.g. electrical endurance, switching frequency)

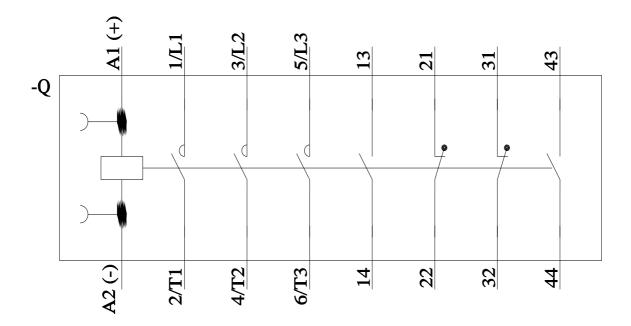
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2026-1BG44&objecttype=14&gridview=view1











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