



power contactor, AC-3e/AC-3, 25 A, 11 kW / 400 V, 3-pole, 24 V DC, with plugged-in diode combination, auxiliary contacts: 2 NO + 2 NC, screw terminal, size: S0, captive 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 protective separation 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
SVHC substance name	Blei - 7439-92-1
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 %
Environmental footprint	

Environmental Product Declaration(EPD)	Yes
Global Warming Potential [CO2 eq] total	221 kg
Global Warming Potential [CO2 eq] during manufacturing	2.65 kg
Global Warming Potential [CO2 eq] during operation	219 kg
global warming potential [CO2 eq] after end of life	-0.639 kg
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
• at AC-3 rated value maximum	690 V
• at AC-3e rated value maximum	690 V
operational 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	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 value	20.2 A
— up to 400 V for current peak value n=20 rated value	20.2 A
— up to 500 V for current peak value n=20 rated value	20.2 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 value	13.5 A
— up to 400 V for current peak value n=30 rated value	13.5 A
— up to 500 V for current peak value n=30 rated value	13.5 A
— up to 690 V for current peak value n=30 rated value	13 A
minimum cross-section in main circuit at maximum AC-1 rated value	10 mm ²
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
— 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	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 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	
— 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	

<ul style="list-style-type: none"> • at DC 	1 500 1/h
operating frequency	
<ul style="list-style-type: none"> • at AC-1 maximum 	1 000 1/h
<ul style="list-style-type: none"> • at AC-2 maximum 	750 1/h
<ul style="list-style-type: none"> • at AC-3 maximum 	750 1/h
<ul style="list-style-type: none"> • at AC-3e maximum 	750 1/h
<ul style="list-style-type: none"> • at AC-4 maximum 	250 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	DC
control supply voltage at DC	
<ul style="list-style-type: none"> • rated value 	24 V
operating range factor control supply voltage rated value of magnet coil at DC	
<ul style="list-style-type: none"> • initial value 	0.8
<ul style="list-style-type: none"> • full-scale value 	1.1
design of the surge suppressor	with diode assemblies
closing power of magnet coil at DC	5.9 W
holding power of magnet coil at DC	5.9 W
closing delay	
<ul style="list-style-type: none"> • at DC 	50 ... 170 ms
opening delay	
<ul style="list-style-type: none"> • 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 instantaneous contact	2
number of NO contacts for auxiliary contacts instantaneous contact	2
operational current at AC-12 maximum	10 A
operational current at AC-15	
<ul style="list-style-type: none"> • at 230 V rated value 	6 A
<ul style="list-style-type: none"> • at 400 V rated value 	3 A
<ul style="list-style-type: none"> • at 500 V rated value 	2 A
<ul style="list-style-type: none"> • at 690 V rated value 	1 A
operational current at DC-12	
<ul style="list-style-type: none"> • at 24 V rated value 	10 A
<ul style="list-style-type: none"> • at 48 V rated value 	6 A
<ul style="list-style-type: none"> • at 60 V rated value 	6 A
<ul style="list-style-type: none"> • at 110 V rated value 	3 A
<ul style="list-style-type: none"> • at 125 V rated value 	2 A
<ul style="list-style-type: none"> • at 220 V rated value 	1 A
<ul style="list-style-type: none"> • at 600 V rated value 	0.15 A
operational current at DC-13	
<ul style="list-style-type: none"> • at 24 V rated value 	6 A
<ul style="list-style-type: none"> • at 48 V rated value 	2 A
<ul style="list-style-type: none"> • at 60 V rated value 	2 A
<ul style="list-style-type: none"> • at 110 V rated value 	1 A
<ul style="list-style-type: none"> • at 125 V rated value 	0.9 A
<ul style="list-style-type: none"> • at 220 V rated value 	0.3 A
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • at 480 V rated value 	21 A
<ul style="list-style-type: none"> • at 600 V rated value 	22 A
yielded mechanical performance [hp]	
<ul style="list-style-type: none"> • for single-phase AC motor <ul style="list-style-type: none"> — at 110/120 V rated value — at 230 V rated value 	2 hp 3 hp
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> for short-circuit protection of the main circuit <ul style="list-style-type: none"> with type of coordination 1 required 	gG: 100 A (690 V, 100 kA), aM: 50 A (690 V, 100 kA), BS88: 100 A (415 V, 80 kA)
<ul style="list-style-type: none"> with type of assignment 2 required 	gG: 35A (690V, 100kA), aM: 20A (690V, 100kA), BS88: 35A (415V, 80kA)
<ul style="list-style-type: none"> for short-circuit protection of the auxiliary switch required 	gG: 10 A (500 V, 1 kA)
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
<ul style="list-style-type: none"> side-by-side mounting 	Yes
height	85 mm
width	45 mm
depth	151 mm
required spacing	
<ul style="list-style-type: none"> with side-by-side mounting <ul style="list-style-type: none"> forwards upwards downwards at the side 	10 mm 10 mm 10 mm 0 mm
<ul style="list-style-type: none"> for grounded parts <ul style="list-style-type: none"> forwards upwards at the side downwards 	10 mm 10 mm 6 mm 10 mm
<ul style="list-style-type: none"> for live parts <ul style="list-style-type: none"> forwards upwards downwards at the side 	10 mm 10 mm 10 mm 6 mm
Connections/ Terminals	
type of electrical connection	
<ul style="list-style-type: none"> for main current circuit for auxiliary and control circuit at contactor for auxiliary contacts of magnet coil 	screw-type terminals screw-type terminals Screw-type terminals Screw-type terminals
type of connectable conductor cross-sections for main contacts	
<ul style="list-style-type: none"> solid solid or stranded finely stranded with core end processing 	2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²) 2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²) 2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm²
connectable conductor cross-section for main contacts	
<ul style="list-style-type: none"> solid stranded finely stranded with core end processing 	1 ... 10 mm² 1 ... 10 mm² 1 ... 10 mm²
connectable conductor cross-section for auxiliary contacts	
<ul style="list-style-type: none"> solid or stranded finely stranded with core end processing 	0.5 ... 2.5 mm² 0.5 ... 2.5 mm²
type of connectable conductor cross-sections	
<ul style="list-style-type: none"> for auxiliary contacts <ul style="list-style-type: none"> solid or stranded finely stranded with core end processing for AWG cables for auxiliary contacts 	2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (20 ... 16), 2x (18 ... 14)
AWG number as coded connectable conductor cross section	
<ul style="list-style-type: none"> 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 60947-5-1	No
suitability for use safety-related switching OFF	Yes
B10 value with high demand rate according to SN 31920	450 000
proportion of dangerous failures	
• with low demand rate according to SN 31920	40 %
• with high demand rate according to SN 31920	73 %
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
T1 value for proof test interval or service life according to IEC 61508	20 a
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front

Approvals Certificates

General Product Approval


[Confirmation](#)

[KC](#)


EMC	Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates
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[Type Examination Certificate](#)


EG-Konf.


[Special Test Certificate](#)
[Type Test Certificates/Test Report](#)

Marine / Shipping



other	Railway	Dangerous Good	Environment
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[Household and similar appliances](#)
[Confirmation](#)
[Vibration and Shock](#)
[Transport Information](#)
[Environmental Confirmations](#)

Further information

Siemens has decided to exit the Russian market (see here).

<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=3RT2026-1FB44-3MA0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2026-1FB44-3MA0>

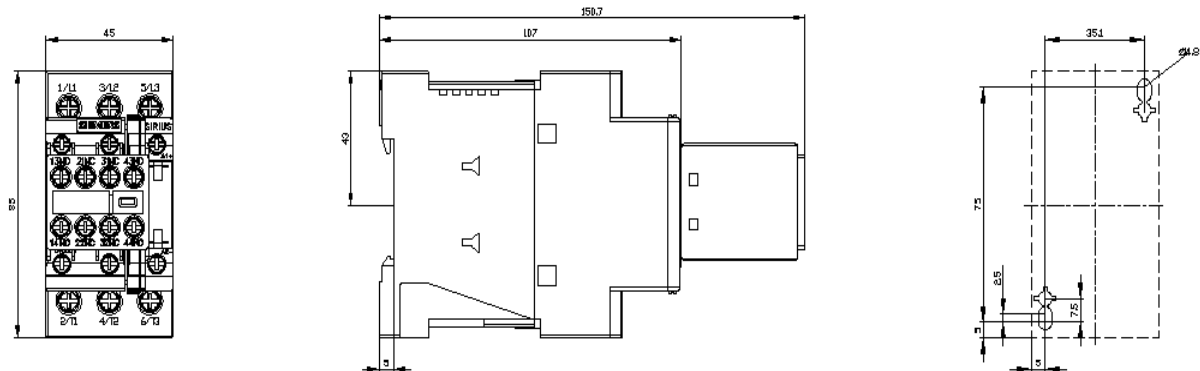
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2026-1FB44-3MA0>

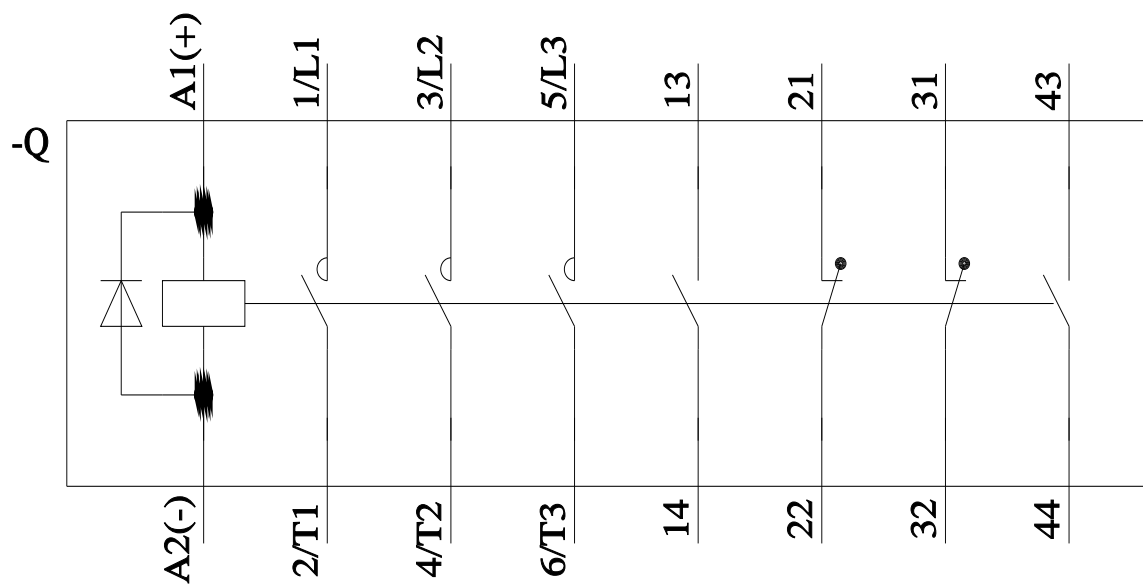
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2026-1FB44-3MA0&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current







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