



traction contactor, AC-3e/AC-3, 25 A, 11 kW / 400 V, 3-pole, 24 V DC, 0.7-1.25*
Us, electronic drive, with integrated varistor, auxiliary contacts: 1 NO + 1 NC,
spring-loaded terminal, size: S0

product brand name	SIRIUS
product designation	Power contactor
design of the product	With extended operating range
product type designation	3RT2
General technical data	
size of contactor	S0
product extension	
• function module for communication	No
• auxiliary switch	Yes
power loss [W] for rated value of the current	
• at AC in hot operating state	4.8 W
• at AC in hot operating state per pole	1.6 W
• without load current share typical	1.4 W
type of calculation of power loss depending on pole	quadratic
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 Prohibitation (Date)	10/01/2009
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
• during operation	-40 ... +70 °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 <ul style="list-style-type: none"> at AC-3 rated value maximum at AC-3e rated value maximum 	690 V 690 V
operational current <ul style="list-style-type: none"> at AC-1 at 400 V at ambient temperature 40 °C rated value at AC-1 <ul style="list-style-type: none"> up to 690 V at ambient temperature 40 °C rated value up to 690 V at ambient temperature 60 °C rated value at AC-2 at 400 V rated value at AC-3 <ul style="list-style-type: none"> at 400 V rated value at 500 V rated value at 690 V rated value at AC-3e <ul style="list-style-type: none"> at 400 V rated value at 500 V rated value at 690 V rated value at AC-4 at 400 V rated value 	40 A 40 A 35 A 25 A 25 A 18 A 13 A 25 A 18 A 13 A 15.5 A
minimum cross-section in main circuit <ul style="list-style-type: none"> at maximum AC-1 rated value at maximum Ith rated value 	10 mm ² 10 mm ²
operational current for approx. 200000 operating cycles at AC-4 <ul style="list-style-type: none"> at 400 V rated value at 690 V rated value 	9 A 9 A
operational current <ul style="list-style-type: none"> at 1 current path at DC-1 <ul style="list-style-type: none"> at 24 V rated value at 110 V rated value at 220 V rated value at 440 V rated value at 600 V rated value with 2 current paths in series at DC-1 <ul style="list-style-type: none"> at 24 V rated value at 110 V rated value at 220 V rated value at 440 V rated value at 600 V rated value with 3 current paths in series at DC-1 <ul style="list-style-type: none"> at 24 V rated value at 110 V rated value at 220 V rated value at 440 V rated value at 600 V rated value at 1 current path at DC-3 at DC-5 <ul style="list-style-type: none"> at 24 V rated value at 110 V rated value at 220 V rated value at 440 V rated value at 600 V rated value with 2 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> at 24 V rated value at 110 V rated value at 220 V rated value 	35 A 4.5 A 1 A 0.4 A 0.25 A 35 A 35 A 5 A 1 A 0.8 A 35 A 35 A 35 A 2.9 A 1.4 A 20 A 2.5 A 1 A 0.09 A 0.06 A 35 A 15 A 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 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
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	
● at DC	1 500 1/h
operating frequency	
● at AC-1 maximum	750 1/h
● at AC-2 maximum	750 1/h
● at AC-3 maximum	750 1/h
● at AC-3e maximum	750 1/h
● at AC-2 at AC-3e maximum	750 1/h
● at AC-4 maximum	250 1/h
Ratings for railway applications	
thermal current (I_{th}) up to 690 V	
● up to 40 °C according to IEC 60077 rated value	40 A
● up to 70 °C according to IEC 60077 rated value	30 A
Control circuit/ Control	
type of voltage	DC
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	
● initial value	0.7
● full-scale value	1.25
design of the surge suppressor	with varistor
inrush current peak	3 A
duration of inrush current peak	30 µs
locked-rotor current mean value	0.3 A
locked-rotor current peak	0.52 A
duration of locked-rotor current	180 ms
holding current mean value	45 mA
closing power of magnet coil at DC	6.7 W

holding power of magnet coil at DC	1.4 W
closing delay	
• at DC	50 ... 75 ms
opening delay	
• at DC	30 ... 50 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	1
• instantaneous contact	1
number of NO contacts for auxiliary contacts	1
• instantaneous contact	1
operational current at AC-12 maximum	10 A
operational 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
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	
• 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	0.9 A
• at 220 V rated value	0.3 A
• at 600 V rated value	0.1 A
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	
product function short circuit protection	No
design of the fuse link	
• for short-circuit protection of the main circuit	
— 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)
— 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 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
height	102 mm

width	45 mm
depth	107 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 • for grounded parts <ul style="list-style-type: none"> — forwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards — upwards — downwards — at the side 	10 mm 10 mm 10 mm 0 mm 10 mm 10 mm 6 mm 10 mm 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 	spring-loaded terminals spring-loaded terminals Spring-type terminals Spring-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 • finely stranded without core end processing 	2x (1 ... 10 mm²) 2x (1 ... 10 mm²) 2x (1 ... 6 mm²) 2x (1 ... 6 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 — finely stranded without core end processing • for AWG cables for auxiliary contacts 	2x (0.5 ... 2.5 mm²) 2x (0.5 ... 1.5 mm²) 2x (0.5 ... 2.5 mm²) 2x (20 ... 14)
AWG number as coded connectable conductor cross section	
<ul style="list-style-type: none"> • for main contacts • for auxiliary contacts 	18 ... 8 20 ... 14
Safety related data	
product function	
<ul style="list-style-type: none"> • mirror contact according to IEC 60947-4-1 • positively driven operation according to IEC 60947-5-1 • suitable for safety function 	Yes No Yes
suitability for use safety-related switching OFF	Yes
service life maximum	20 a
test wear-related service life necessary	Yes
proportion of dangerous failures	
<ul style="list-style-type: none"> • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 	40 % 73 %
B10 value with high demand rate according to SN 31920	1 000 000
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
ISO 13849	
device type according to ISO 13849-1	3
overdimensioning according to ISO 13849-2 necessary	Yes
IEC 61508	
safety device type according to IEC 61508-2	Type A
Electrical Safety	
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

Communication/ Protocol	
product function bus communication	No
Approvals Certificates	
General Product Approval	



EG-Konf.



CCC

[Confirmation](#)



UL

[KC](#)

General Product Approval	EMV	Functional Safety	Test Certificates	Marine / Shipping
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RCM

[Type Examination Certificate](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



ABS

Marine / Shipping	other
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BUREAU
VERITAS



DNV



PRS



RINA



RMRS

[Miscellaneous](#)

other	Railway	Dangerous goods	Environment
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[Confirmation](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

[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=3RT2026-2XB40-0LA2>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2026-2XB40-0LA2>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2026-2XB40-0LA2>

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

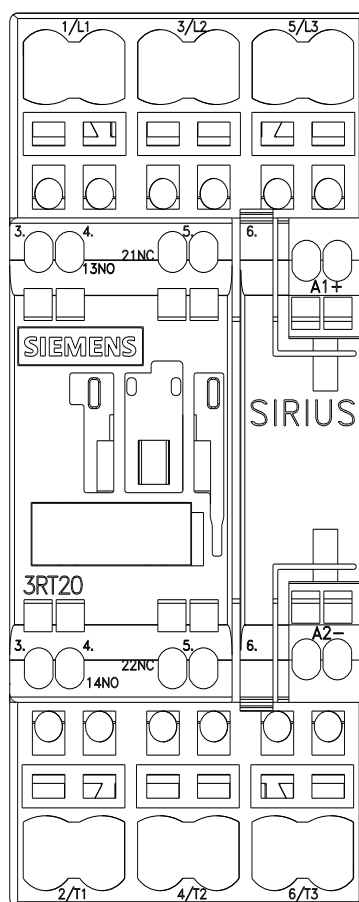
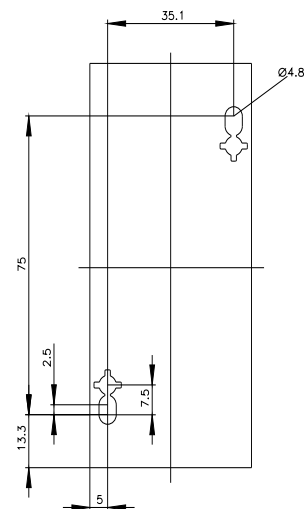
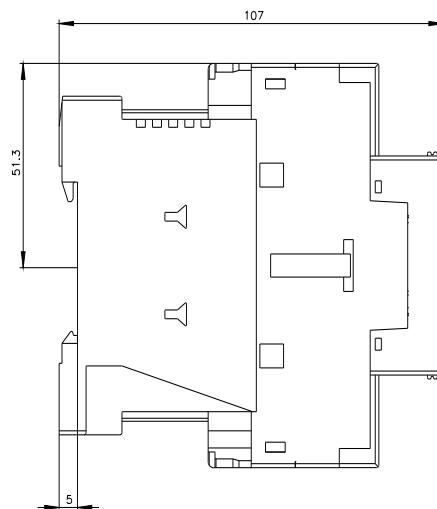
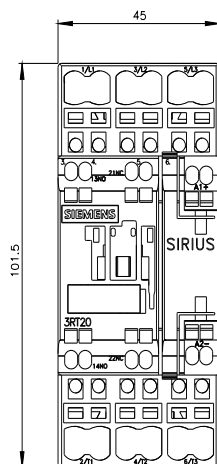
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2026-2XB40-0LA2&lang=en

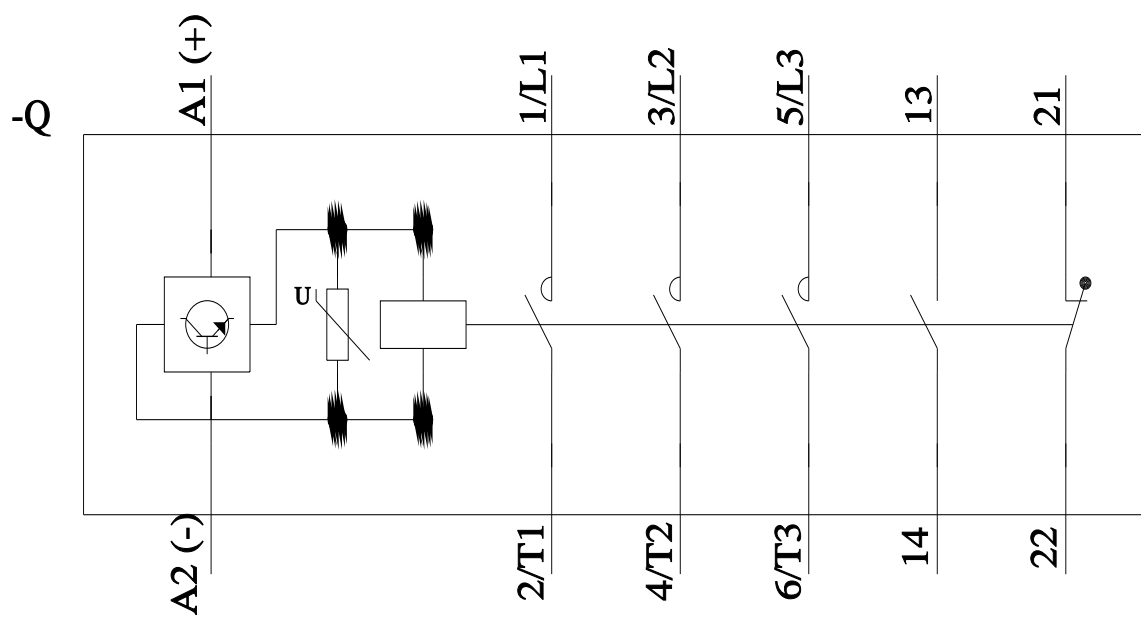
Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2026-2XB40-0LA2/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2026-2XB40-0LA2&objecttype=14&gridview=view1>





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