



Contactor, 2 NO + 2 NC, AC-3, 5.5 kW, 110 V AC, 50/60 Hz, 4-pole, 2 NO+ 2 NC, Size S00, spring-type terminal

product brand name	SIRIUS
product designation	contactor
product type designation	3RT25
General technical data	
size of contactor	S00
product extension	
• function module for communication	No
• auxiliary switch	Yes
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 acc. to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at AC	7,3g / 5 ms, 4,7g / 10 ms
shock resistance with sine pulse	
• at AC	11,4g / 5 ms, 7,3g / 10 ms
mechanical service life (switching cycles)	
• of contactor typical	30 000 000
• 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 acc. to IEC 81346-2	Q
Substance Prohibitance (Date)	01.10.2009 00:00:00
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
• ambient temperature during operation	-25 ... +60 °C
• ambient temperature 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
operational current	

• at AC-1 up to 690 V — at ambient temperature 40 °C rated value — at ambient temperature 60 °C rated value • at AC-2 at AC-3 at 400 V — per NO contact rated value — per NC contact rated value	22 A 20 A 12 A 9 A
minimum cross-section in main circuit at maximum AC-1 rated value	4 mm ²
operational current	
• at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value	20 A 2.1 A 0.8 A 0.6 A 20 A 12 A 1.6 A 0.8 A
operational current	
• at 1 current path at DC-3 at DC-5 — at 24 V per NC contact rated value — at 24 V per NO contact rated value — at 110 V per NC contact rated value — at 110 V per NO contact rated value — at 220 V per NC contact rated value — at 220 V per NO contact rated value • with 2 current paths in series at DC-3 at DC-5 — at 24 V per NC contact rated value — at 24 V per NO contact rated value — at 110 V per NC contact rated value — at 110 V per NO contact rated value	20 A 20 A 0.075 A 0.15 A 0.375 A 0.75 A 20 A 20 A 0.175 A 0.35 A
operating power at AC-2 at AC-3	
• at 230 V per NC contact rated value • at 230 V per NO contact rated value • at 400 V per NC contact rated value • at 400 V per NO contact rated value	2.2 kW 3 kW 4 kW 5.5 kW
short-time withstand current in cold operating state up to 40 °C	
• limited to 1 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 30 s switching at zero current maximum • limited to 60 s switching at zero current maximum	125 A; Use minimum cross-section acc. to AC-1 rated value 123 A; Use minimum cross-section acc. to AC-1 rated value 96 A; Use minimum cross-section acc. to AC-1 rated value 74 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value
power loss [W] at AC-3 at 400 V for rated value of the operational current per conductor	1.2 W
no-load switching frequency	
• at AC • at DC	10 000 1/h 10 000 1/h
operating frequency at AC-1 maximum	1 000 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
• at 50 Hz rated value • at 60 Hz rated value	110 V 110 V
operating range factor control supply voltage rated value of magnet coil at AC	
• at 50 Hz • at 60 Hz	0.8 ... 1.1 0.85 ... 1.1

apparent pick-up power of magnet coil at AC • at 50 Hz • at 60 Hz	37 V·A 27 V·A 24.3 V·A
inductive power factor with closing power of the coil • at 50 Hz • at 60 Hz	0.8 0.8 0.75
apparent holding power of magnet coil at AC • at 50 Hz • at 60 Hz	4.2 V·A 4.2 V·A 3.3 V·A
inductive power factor with the holding power of the coil • at 50 Hz • at 60 Hz	0.25 0.25 0.25
closing delay • at AC	8 ... 33 ms
opening delay • at AC	4 ... 15 ms
arcing time	10 ... 15 ms
residual current of the electronics for control with signal <0> • at AC at 230 V maximum permissible	0.004 A
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous contact	0
number of NO contacts for auxiliary contacts instantaneous contact	0
operational current at AC-12 maximum	10 A
operational current at AC-15 • at 230 V rated value • at 400 V rated value	10 A 3 A
operational current at DC-12 • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value	6 A 6 A 3 A 2 A 1 A 0.15 A
operational current at DC-13 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 220 V rated value • at 600 V rated value	10 A 2 A 2 A 1 A 0.3 A 0.1 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	
yielded mechanical performance [hp] for single-phase AC motor at 230 V rated value	2 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 — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required	gG: 35 A (690 V, 100 kA) gG: 20A (690V, 100kA) fuse gG: 10 A
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 standard mounting rail according to DIN EN 50022		
• side-by-side mounting	Yes		
height	70 mm		
width	45 mm		
depth	73 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		
Connections/ Terminals			
type of electrical connection			
• for main current circuit	spring-loaded terminals		
• for auxiliary and control circuit	spring-loaded terminals		
type of connectable conductor cross-sections			
• for main contacts			
— solid	2x (0.5 ... 4 mm²)		
— solid or stranded	2x (0,5 ... 4 mm²)		
— finely stranded with core end processing	2x (0.5 ... 2.5 mm²)		
— finely stranded without core end processing	2x (0.5 ... 2.5 mm²)		
• at AWG cables for main contacts	2x (20 ... 12)		
type of connectable conductor cross-sections			
• for auxiliary contacts			
— solid	2x (0.5 ... 4 mm²)		
— solid or stranded	2x (0,5 ... 4 mm²)		
— finely stranded with core end processing	2x (0.5 ... 2.5 mm²)		
— finely stranded without core end processing	2x (0.5 ... 2.5 mm²)		
• at AWG cables for auxiliary contacts	2x (20 ... 12)		
AWG number as coded connectable conductor cross section for main contacts	20 ... 12		
Safety related data			
product function			
• mirror contact acc. to IEC 60947-4-1	Yes; with 3RH29		
• positively driven operation acc. to IEC 60947-5-1	No		
T1 value for proof test interval or service life acc. to IEC 61508	20 y		
protection class IP on the front acc. to IEC 60529	IP20		
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front		
Certificates/ approvals			
General Product Approval		EMC	Declaration of Conformity



Declaration of
Conformity

Test Certificates

Marine / Shipping

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Marine / Shipping

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[Confirmation](#)



Further information

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=3RT2517-2AF00>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2517-2AF00>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2517-2AF00>

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

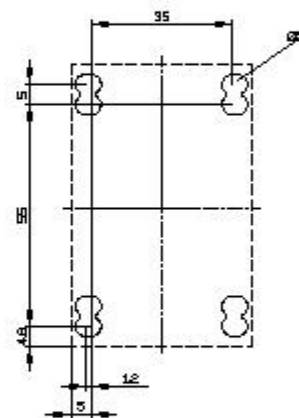
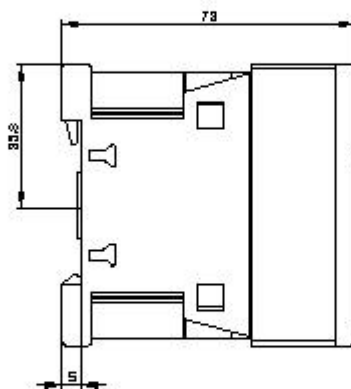
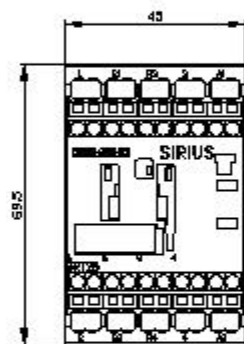
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2517-2AF00&lang=en

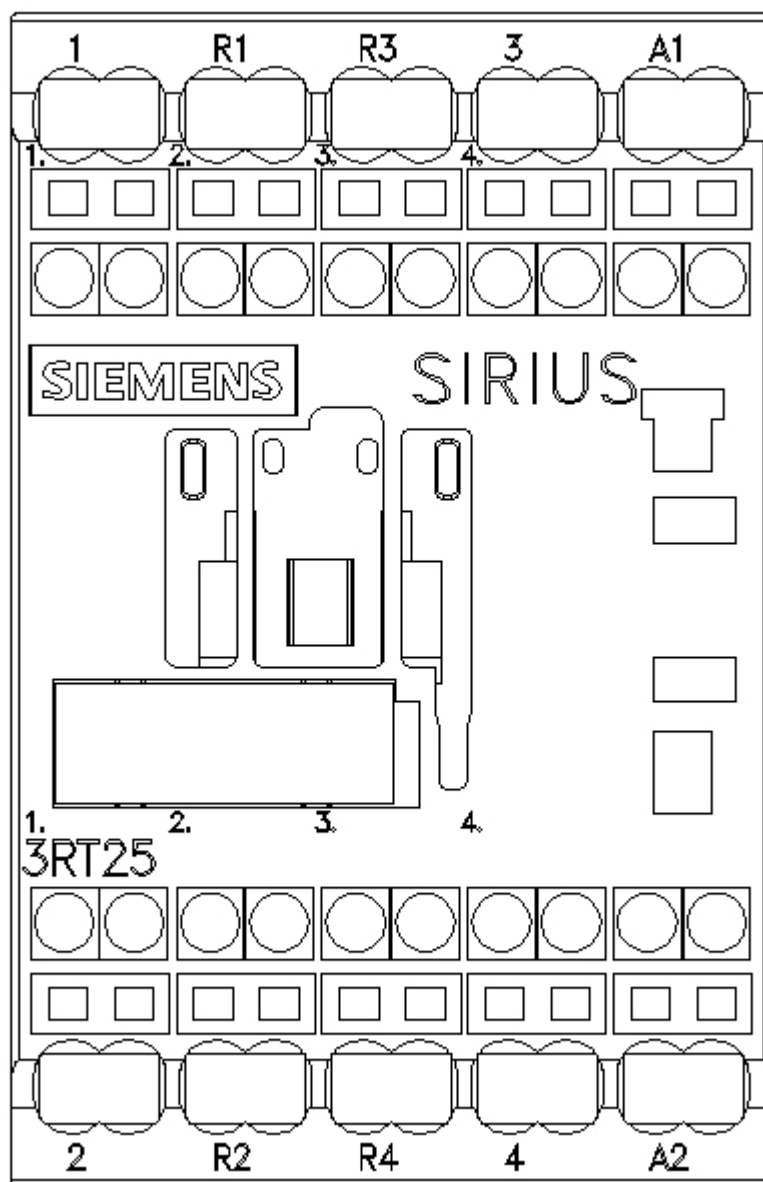
Characteristic: Tripping characteristics, I_t, Let-through current

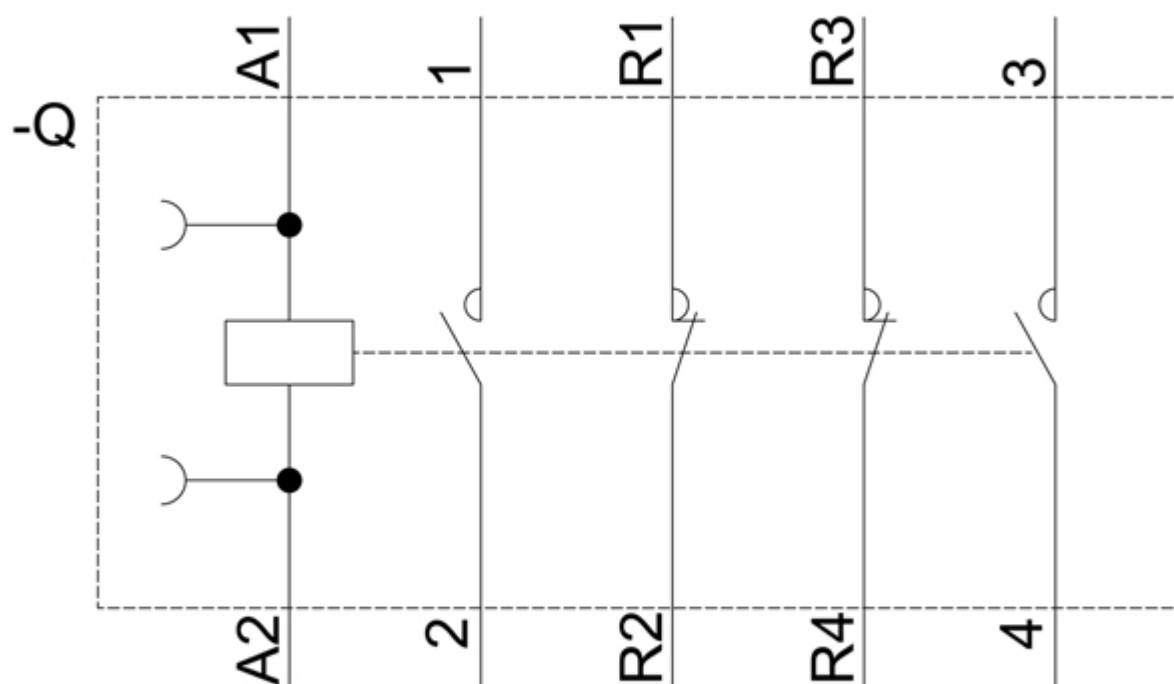
<https://support.industry.siemens.com/cs/ww/en/ps/3RT2517-2AF00/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2517-2AF00&objecttype=14&gridview=view1>







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12/15/2020 