



Power contactor, AC-3 12 A, 5.5 kW / 400 V 2 NO + 2 NC 220 V DC, 50 Hz 240 V, 60 Hz 4-pole Size S00 Spring-type terminals

product brand name	SIRIUS
product designation	contactor
product type designation	3RT25
General technical data	
size of contactor	S00
product extension	
<ul style="list-style-type: none"> function module for communication auxiliary switch 	<p>No</p> <p>Yes</p>
insulation voltage	
<ul style="list-style-type: none"> of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value 	<p>690 V</p> <p>690 V</p>
surge voltage resistance	
<ul style="list-style-type: none"> of main circuit rated value of auxiliary circuit rated value 	<p>6 kV</p> <p>6 kV</p>
maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1	400 V
shock resistance at rectangular impulse	
<ul style="list-style-type: none"> at AC 	7,3g / 5 ms, 4,7g / 10 ms
shock resistance with sine pulse	
<ul style="list-style-type: none"> at AC 	11,4g / 5 ms, 7,3g / 10 ms
mechanical service life (switching cycles)	
<ul style="list-style-type: none"> of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical 	<p>30 000 000</p> <p>5 000 000</p> <p>10 000 000</p>
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
<ul style="list-style-type: none"> ambient temperature during operation ambient temperature during storage 	<p>-25 ... +60 °C</p> <p>-55 ... +80 °C</p>
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	

<ul style="list-style-type: none"> ● at AC-1 up to 690 V <ul style="list-style-type: none"> — at ambient temperature 40 °C rated value — at ambient temperature 60 °C rated value ● at AC-2 at AC-3 at 400 V <ul style="list-style-type: none"> — 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	
<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 ● 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 	20 A 2.1 A 0.8 A 0.6 A 20 A 12 A 1.6 A 0.8 A
operational current	
<ul style="list-style-type: none"> ● at 1 current path at DC-3 at DC-5 <ul style="list-style-type: none"> — 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 <ul style="list-style-type: none"> — 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	
<ul style="list-style-type: none"> ● 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	
<ul style="list-style-type: none"> ● 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	
<ul style="list-style-type: none"> ● 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	
<ul style="list-style-type: none"> ● at 50 Hz rated value ● at 60 Hz rated value 	220 V 240 V
operating range factor control supply voltage rated value of magnet coil at AC	
<ul style="list-style-type: none"> ● at 50 Hz ● at 60 Hz 	0.8 ... 1.1 0.8 ... 1.1

apparent pick-up power of magnet coil at AC	43 V·A
• at 50 Hz	43 V·A
• at 60 Hz	43 V·A
inductive power factor with closing power of the coil	0.8
• at 50 Hz	0.77
• at 60 Hz	0.77
apparent holding power of magnet coil at AC	6.5 V·A
• at 50 Hz	6.5 V·A
• at 60 Hz	6.5 V·A
inductive power factor with the holding power of the coil	0.25
• at 50 Hz	0.25
• at 60 Hz	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	10 A
• at 400 V rated value	3 A
operational current at DC-12	
• 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 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	
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	gG: 35 A (690 V, 100 kA)
— with type of assignment 2 required	gG: 20A (690V, 100kA)
• for short-circuit protection of the auxiliary switch required	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 mm ²)	
— solid or stranded	2x (0,5 ... 4 mm ²)	
— finely stranded with core end processing	2x (0.5 ... 2.5 mm ²)	
— finely stranded without core end processing	2x (0.5 ... 2.5 mm ²)	
• at AWG cables for main contacts	2x (20 ... 12)	
type of connectable conductor cross-sections		
• for auxiliary contacts		
— solid	2x (0.5 ... 4 mm ²)	
— solid or stranded	2x (0,5 ... 4 mm ²)	
— finely stranded with core end processing	2x (0.5 ... 2.5 mm ²)	
— finely stranded without core end processing	2x (0.5 ... 2.5 mm ²)	
• 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



EG-Konf.

Declaration of Conformity	Test Certificates	Marine / Shipping
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[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



LRS

Marine / Shipping	other
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[Confirmation](#)



VDE

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=3RT2517-2AP60>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2517-2AP60>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2517-2AP60>

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

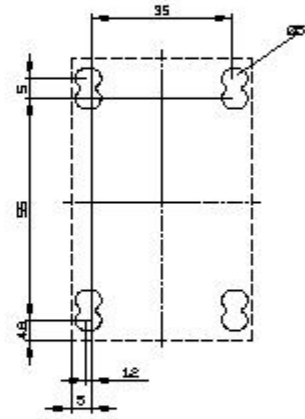
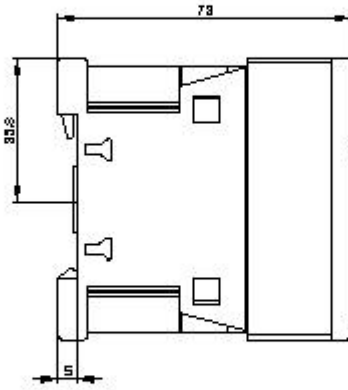
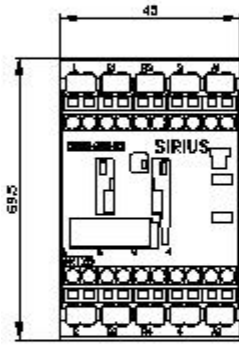
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2517-2AP60&lang=en

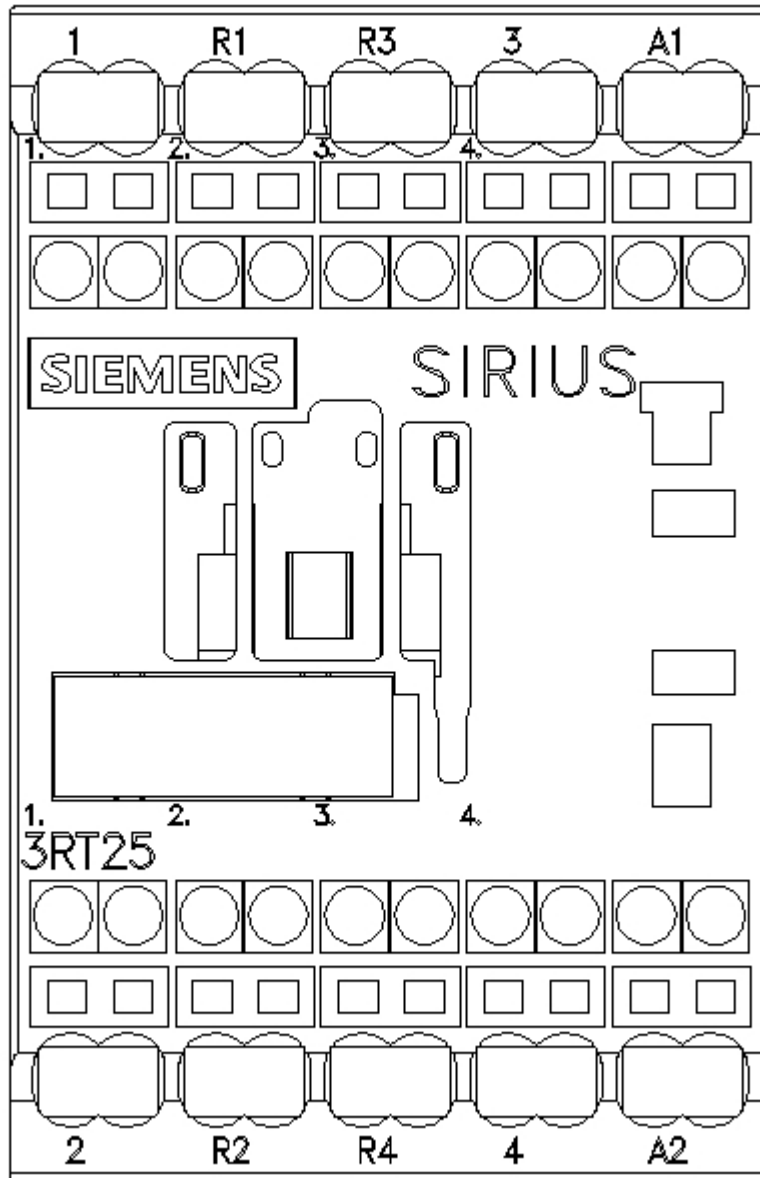
Characteristic: Tripping characteristics, I_t, Let-through current

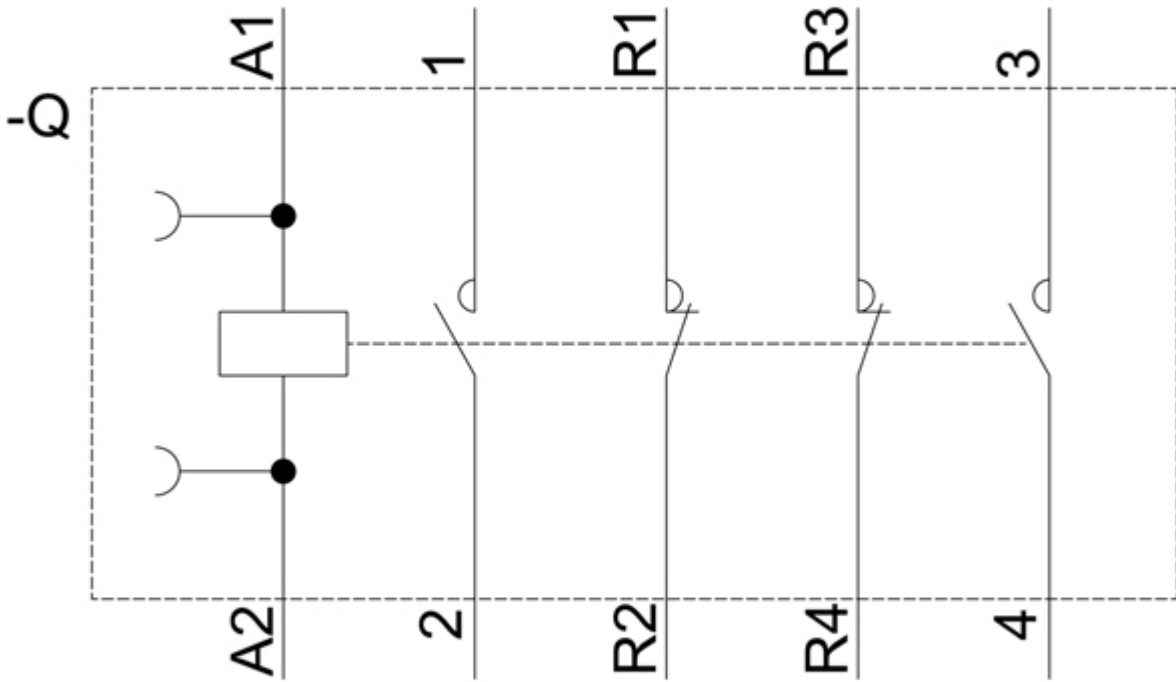
<https://support.industry.siemens.com/cs/ww/en/ps/3RT2517-2AP60/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2517-2AP60&objecttype=14&gridview=view1>







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