SIEMENS

Data sheet 3RT2517-1AF00



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

product designation product type designation general technical data size of contactor product extension	product brand name	SIRIUS
Solition Solition	product designation	contactor
size of contactor product extension • function module for communication • auxiliary switch of main circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value surge voltage resistance • of main circuit rated value • of auxiliary circuit rated value • 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 tyth added electronically optimized auxiliary switch block typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor w	product type designation	3RT25
product extension • function module for communication • auxiliary switch insulation voltage • of main circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit rated value • at AC shock resistance at rectangular impulse • at AC shock resistance with sine pulse • at AC mechanical service life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with adde	General technical data	
• function module for communication • auxiliary switch insulation voltage • of main circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value surge voltage resistance • of main circuit rated value • of auxiliary circuit rated value • of auxiliary circuit rated value maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1 shock resistance at rectangular impulse • at AC shock resistance with sine pulse • at AC shock resistance with sine pulse • at AC mechanical service life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage relative humidity minimum	size of contactor	S00
auxiliary switch of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value surge voltage resistance of main circuit rated value of auxiliary contacts acc. to EN 60947-1 shock resistance at rectangular impulse of at AC at AC 11,4g / 5 ms, 7,3g / 10 ms mechanical service life (switching cycles) of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum of uring operation of uring storage of melative humidity minimum Yes 690 V 690	product extension	
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of auxiliary circuit with degree of pollution 3 rated value surge voltage resistance of main circuit rated value of auxiliary circuit rated value maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1 shock resistance at rectangular impulse ot AC	insulation voltage	
surge voltage resistance of main circuit rated value of auxiliary circuit rated value maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1 shock resistance at rectangular impulse of at AC shock resistance with sine pulse of contactor typical of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation of melanical service of auxiliary switch of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation of mainleint temperation of the conditions of the	 of main circuit with degree of pollution 3 rated value 	690 V
of main circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value aximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1 shock resistance at rectangular impulse ot AC		690 V
of auxiliary circuit rated value maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1 shock resistance at rectangular impulse ot AC shock resistance with sine pulse ot AC shock resistance with sine pulse ot AC interpolate service life (switching cycles) of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with	surge voltage resistance	
maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1 shock resistance at rectangular impulse	 of main circuit rated value 	6 kV
coil and main contacts acc. to EN 60947-1 shock resistance at rectangular impulse	of auxiliary circuit rated value	6 kV
• at AC shock resistance with sine pulse • at AC nechanical service life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage relative humidity minimum 7,3g / 5 ms, 4,7g / 10 ms 10 ms 10 ms 10 ms 10 000 000 5 000 000 10 000 000 10 000 000 10 000 00		400 V
shock resistance with sine pulse	shock resistance at rectangular impulse	
at AC mechanical service life (switching cycles) of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation of the contactor with added auxiliary switch block typical 2 000 m ambient temperature of during storage of during storage relative humidity minimum	• at AC	7,3g / 5 ms, 4,7g / 10 ms
mechanical service life (switching cycles) of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Questional Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation of the contactor with added electronically optimized and sumiliary switch block typical 10 000 000 10 000 000 10 000 000 10 000 00	shock resistance with sine pulse	
 of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation during storage relative humidity minimum 30 000 000 5 000 000 10 000	• at AC	11,4g / 5 ms, 7,3g / 10 ms
 of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation during storage relative humidity minimum 5 000 000 000 000 000 10 000 000 000 001.10.2009 01.10.2009 Ambient conditions 2 000 m ambient temperature 10 %	mechanical service life (switching cycles)	
auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation during storage relative humidity minimum 10 000 000 10 000 001.10.2009 01.10.2009 2000 m 2000 m	 of contactor typical 	30 000 000
typical reference code acc. to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage relative humidity minimum Q Q 01.10.2009 01.10.2009 01.10.2009 01.10.2009 01.10.2009 01.10.2009 01.10.2009		5 000 000
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage -55 +80 °C relative humidity minimum 01.10.2009 2 000 m 2 000 m -25 +60 °C -55 +80 °C		10 000 000
Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during storage 10 %	reference code acc. to IEC 81346-2	Q
installation altitude at height above sea level maximum ambient temperature during operation during storage during storage relative humidity minimum 2 000 m -25 +60 °C -55 +80 °C	Substance Prohibitance (Date)	01.10.2009
ambient temperature	Ambient conditions	
 during operation during storage relative humidity minimum -25 +60 °C 10 % 	installation altitude at height above sea level maximum	2 000 m
• during storage -55 +80 °C relative humidity minimum 10 %	ambient temperature	
relative humidity minimum 10 %	 during operation 	-25 +60 °C
,	during storage	-55 +80 °C
relative humidity at 55 °C acc. to IEC 60068-2-30 95 %		10 %
maximum	relative humidity at 55 °C acc. to IEC 60068-2-30 maximum	95 %
Main circuit	Main circuit	
number of poles for main current circuit 4	number of poles for main current circuit	4
number of NO contacts for main contacts 2	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	22 A
— at ambient temperature 60 °C rated value	20 A
at AC-2 at AC-3 at 400 V	20 A
	12 A
— per NC contact rated value	9 A
— per NC contact rated value minimum cross-section in main circuit at maximum AC-1	4 mm²
rated value	4 111117
operational current	
• at 1 current path at DC-1	
— at 24 V rated value	20 A
— at 110 V rated value	2.1 A
— at 220 V rated value	0.8 A
— at 440 V rated value	0.6 A
with 2 current paths in series at DC-1	
— at 24 V rated value	20 A
— at 110 V rated value	12 A
— at 220 V rated value	1.6 A
— at 440 V rated value	0.8 A
at 1 current path at DC-3 at DC-5	
 — at 24 V per NC contact rated value 	20 A
 — at 24 V per NO contact rated value 	20 A
 — at 110 V per NC contact rated value 	0.075 A
 — at 110 V per NO contact rated value 	0.15 A
 — at 220 V per NC contact rated value 	0.375 A
 at 220 V per NO contact rated value 	0.75 A
 with 2 current paths in series at DC-3 at DC-5 	
 — at 24 V per NC contact rated value 	20 A
 at 24 V per NO contact rated value 	20 A
 at 110 V per NC contact rated value 	0.175 A
— at 110 V per NO contact rated value	0.35 A
operating power at AC-2 at AC-3	
 at 230 V per NC contact rated value 	2.2 kW
 at 230 V per NO contact rated value 	3 kW
 at 400 V per NC contact rated value 	4 kW
at 400 V per NO contact rated value	5.5 kW
short-time withstand current in cold operating state up to 40 °C	
limited to 1 s switching at zero current maximum	125 A; Use minimum cross-section acc. to AC-1 rated value
limited to 5 s switching at zero current maximum	123 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	96 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	74 A; Use minimum cross-section acc. to AC-1 rated value
limited to 60 s switching at zero current maximum	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	1.2 W
operational current per conductor	
no-load switching frequency	40.000 44
• at AC	10 000 1/h
• at DC	10 000 1/h
operating frequency at AC-1 maximum	1 000 1/h
Control circuit/ Control	10
type of voltage of the control supply voltage	AC
control supply voltage at AC	110 V
• at 50 Hz rated value	110 V
at 60 Hz rated value	110 V
operating range factor control supply voltage rated value of magnet coil at AC	
• at 50 Hz	0.8 1.1
● at 60 Hz	0.85 1.1
apparent pick-up power of magnet coil at AC	37 V·A

 at 50 Hz at 60 Hz at 60 Hz at 50 Hz at 50 Hz at 60 Hz at 60 Hz at 60 Hz at 50 Hz at 50 Hz at 50 Hz at 60 Hz at 50 Hz at 50 Hz at 60 Hz at 7 13 ms at 60 Hz at	
inductive power factor with closing power of the coil • at 50 Hz • at 60 Hz apparent holding power of magnet coil at AC • at 50 Hz • at 60 Hz • at 60 Hz inductive power factor with the holding power of the coil • at 50 Hz • at 50 Hz • at 60 Hz • at 60 Hz • at 60 Hz coil • at 50 Hz • at 60 Hz • at 60 Hz closing delay • at AC opening delay • at AC opening delay • at AC otherwise AC	
• at 50 Hz • at 60 Hz • at 60 Hz apparent holding power of magnet coil at AC • at 50 Hz • at 60 Hz • at 60 Hz inductive power factor with the holding power of the coil • at 50 Hz • at 60 Hz • at 60 Hz closing delay • at AC opening delay • at AC other inductive power factor with the holding power of the coil 7 13 ms	
• at 60 Hz apparent holding power of magnet coil at AC • at 50 Hz • at 60 Hz • at 60 Hz inductive power factor with the holding power of the coil • at 50 Hz • at 60 Hz • at 60 Hz • at 60 Hz closing delay • at AC opening delay • at AC other inductive power factor with the holding power of the coil 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25	
apparent holding power of magnet coil at AC	
• at 50 Hz • at 60 Hz • at 60 Hz inductive power factor with the holding power of the coil • at 50 Hz • at 60 Hz closing delay • at AC opening delay • at AC	
• at 60 Hz	
inductive power factor with the holding power of the coil • at 50 Hz • at 60 Hz • at 60 Hz closing delay • at AC opening delay • at AC 7 13 ms	
coil	
● at 60 Hz closing delay ● at AC opening delay ● at AC 7 13 ms	
closing delay	
● at AC 9 35 ms opening delay ● at AC 7 13 ms	
opening delay ● at AC 7 13 ms	
• at AC 7 13 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 Auxilians sixuit	
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous contact 0	
number of NO contacts for auxiliary contacts 0 instantaneous contact	
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 at 220 V rated value 1 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 220 V rated value 0.3 A • at 600 V rated value 0.1 A	
	g per 100 million (17 V, 1 mA)
UL/CSA ratings	, po. 100 million (17 4, 1 mill)
yielded mechanical performance [hp]	
• for single-phase AC motor at 230 V rated value 2 hp	
• for 3-phase AC motor at 460/480 V rated value 5 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,	·
• for short-circuit protection of the auxiliary switch fuse gG: 10 A	,
required	
Installation/ mounting/ dimensions	
forward and bac	possible on vertical mounting surface; can be tilted kward by +/- 22.5° on vertical mounting surface
fastening method screw and snap- according to DIN	on mounting onto 35 mm standard mounting rail I EN 50022

side-by-side mounting	Yes	
height	57.5 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	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	- Co.o. type toa.c	
• for main contacts		
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²	
solid or stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x 4 mm²	
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	
at AWG cables for main contacts	2x (20 16), 2x (18 14), 2x 12	
type of connectable conductor cross-sections	2x (20 iii 10), 2x (10 iii 11), 2x 12	
for auxiliary contacts		
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²	
solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²	
finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	
at AWG cables for auxiliary contacts	2x (20 16), 2x (18 14), 2x 12	
AWG number as coded connectable conductor cross section for main contacts	20 12	
Safety related data		
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
- Philippin		



Confirmation









Functional Safety/Safety of Declaration of Conformity Machinery	Test Certificates	Marine / Shipping
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UK Declaration of Conformity Special Test Certificate

Type Test Certificates/Test Report



Marine / Shipping













other

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=3RT2517-1AF00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2517-1AF00

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2517-1AF00

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

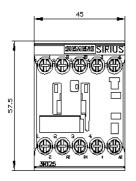
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2517-1AF00&lang=en

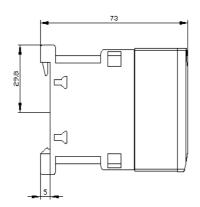
Characteristic: Tripping characteristics, I2t, Let-through current

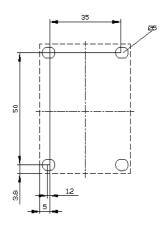
https://support.industry.siemens.com/cs/ww/en/ps/3RT2517-1AF00/char

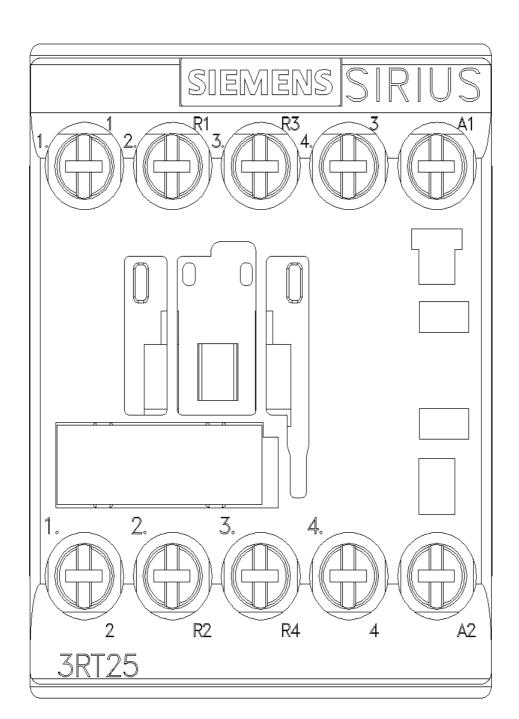
Further characteristics (e.g. electrical endurance, switching frequency)

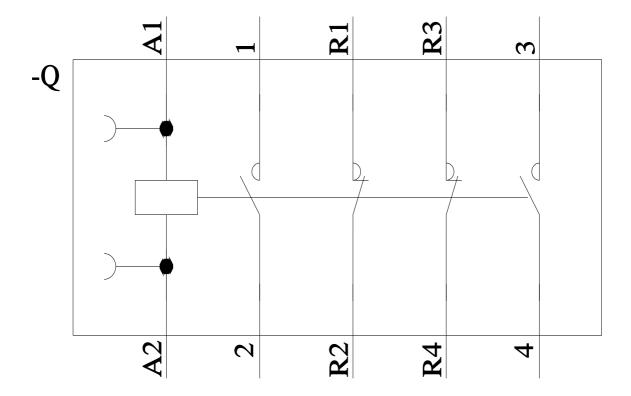
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2517-1AF00&objecttype=14&gridview=view1











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