SIEMENS

Data sheet 3RT2526-1AH20



Power contactor, AC-3 25 A, 11 kW / 400 V 2 NO + 2 NC 48 V AC, 50/60 Hz 4-pole size S0 screw terminals 1 NO + 1 NC integrated

product brand name	SIRIUS
product designation	contactor
product type designation	3RT25
General technical data	
size of contactor	S0
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 according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at AC	8,3g / 5 ms, 5,3g / 10 ms
shock resistance with sine pulse	
• at AC	13,5g / 5 ms, 8,3g / 10 ms
mechanical service life (switching 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
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 %
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	40 A
— at ambient temperature 40 °C rated value	35 A
at AC-2 at AC-3 at 400 V	00 A
— per NO contact rated value	25 A
per NC contact rated value	25 A
minimum cross-section in main circuit at maximum AC-1	10 mm ²
rated value	10 111111
operational current	
• at 1 current path at DC-1	
— at 24 V rated value	35 A
— at 110 V rated value	4.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.4 A
with 2 current paths in series at DC-1	
— at 24 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 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	1.25 A
— at 110 V per NO contact rated value	2.5 A
— at 220 V per NC contact rated value	0.5 A
— at 220 V per NO contact rated value	1 A
— at 440 V per NC contact rated value	0.045 A
— at 440 V per NO contact rated value	0.09 A
with 2 current paths in series at DC-3 at DC-5 at 24 V per NC centest rated value.	2F A
— at 24 V per NC contact rated value	35 A
— at 24 V per NO contact rated value	35 A
— at 110 V per NC contact rated value	7.5 A
— at 110 V per NO contact rated value— at 220 V per NC contact rated value	15 A 1.5 A
at 220 V per NC contact rated value at 220 V per NO contact rated value	3 A
— at 440 V per NC contact rated value	0.135 A
— at 440 V per NO contact rated value — at 440 V per NO contact rated value	0.135 A 0.27 A
operating power at AC-2 at AC-3	0.2171
• at 230 V per NC contact rated value	5.5 kW
at 230 V per NO contact rated value at 230 V per NO contact rated value	5.5 kW
at 400 V per NC contact rated value	11 kW
at 400 V per NO contact rated value	11 kW
short-time withstand current in cold operating state	
up to 40 °C	
 limited to 1 s switching at zero current maximum 	200 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	200 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	200 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	128 A; Use minimum cross-section acc. to AC-1 rated value
limited to 60 s switching at zero current maximum	106 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	1.6 W
operational current per conductor	
no-load switching frequency	5 000 1/b
• at AC	5 000 1/h
at DC congrating fraguency	1 500 1/h
operating frequency ● at AC-1 maximum	1 000 1/h
	1 000 1/h
Control circuit/ Control	AC
type of voltage of the control supply voltage	AC
control supply voltage at AC	

at 50 Hz rated value	48 V
at 60 Hz rated value	48 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	77 VA
• at 50 Hz	81 VA
• at 60 Hz	79 VA
inductive power factor with closing power of the coil	0.82
• at 50 Hz	0.72
• at 60 Hz	0.74
apparent holding power of magnet coil at AC	10.5 VA
● at 50 Hz	10.5 VA
● at 60 Hz	8.5 VA
inductive power factor with the holding power of the coil	0.25
• at 50 Hz	0.05
	0.25
• at 60 Hz	0.28
closing delay	0. 40
• at AC	8 40 ms
opening delay	
• at AC	4 16 ms
arcing time	10 10 ms
residual current of the electronics for control with signal <0>	
at AC at 230 V maximum permissible	0.007 A
·	0.007 A
Auxiliary circuit	•
number of NC contacts for auxiliary contacts instantaneous contact	1
number of NO contacts for auxiliary contacts	1
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
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	1A
at 600 V rated value	0.15 A
operational current at DC-13	0.1071
• at 24 V rated value	10 A
• at 48 V rated value	2 A
• at 60 V rated value	2 A
at 100 V rated value at 110 V rated value	1A
at 125 V rated value at 125 V rated value	0.9 A
at 125 V rated value at 220 V rated value	0.3 A
at 600 V rated value	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	3 hp
• for 3-phase AC motor at 460/480 V rated value	15 hp
contact rating of auxiliary contacts according to UL	A600 / Q600
Short-circuit protection	

design of the free link	
design of the fuse link	
for short-circuit protection of the main circuit	
 — with type of coordination 1 required 	gG: 63 A (690 V, 100 kA)
 — with type of assignment 2 required 	gG: 35 A (690 V, 50 kA)
for short-circuit protection of the auxiliary switch	fuse gG: 10 A
required	
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	85 mm
width	61 mm
depth	97 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 of magnet soil	Screw-type terminals
of magnet coil type of connectable conductor cross-sections	Screw-type terminals
type of connectable conductor cross-sections	
• for main contacts	Ov. (4 O. F. mans 2) Ov. (0. F. 40 mans 2)
— solid	2x (1 2.5 mm²), 2x (2.5 10 mm²)
— solid or stranded	2x (1 2.5 mm²), 2x (2.5 10 mm²)
— finely stranded with core end processing	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
at AWG cables for main contacts type of connectable conductor gross sections	2x (16 12), 2x (14 8)
type of connectable conductor cross-sections	
for auxiliary contacts	2v (0 F 4 F mm²) 2v (0 7F 9 F mm²)
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 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)
AWG number as coded connectable conductor cross section for main contacts	16 8
Safety related data	
product function	
 mirror contact according to IEC 60947-4-1 	Yes
 positively driven operation according to IEC 60947- 5-1 	No
T1 value for proof test interval or service life according to IEC 61508	20 y

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

Certificates/ approvals

General Product Approval

EMC





Confirmation







Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates

Marine / Shipping

Type Examination Certificate



Type Test Certificates/Test Report

Special Test Certificate



Marine / Shipping









Confirmation

other

other



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=3RT2526-1AH20

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2526-1AH20

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2526-1AH20

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2526-1AH20&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT2526-1AH20/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2526-1AH20&objecttype=14&gridview=view1

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