SIEMENS

Data sheet 3RT2526-1AL20



Contactor, 2 NO + 2 NC, AC-3, 11 kW, 230 V AC, 50/60 Hz, 4-pole, 2 NO + 2 NC, Size S0, screw terminal 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 acc. 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 acc. to IEC 81346-2	Q
Substance Prohibitance (Date)	01.10.2009
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 acc. 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 as the sta	2
number of NC contacts for main contacts	2
operational current	
• at AC-1 up to 690 V	40.4
— at ambient temperature 40 °C rated value	40 A
— at ambient temperature 60 °C rated value	35 A
• at AC-2 at AC-3 at 400 V	05.4
— per NO contact rated value	25 A
— per NC contact rated value	25 A
minimum cross-section in main circuit at maximum AC-1 rated value	10 mm ²
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 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	15 A
— at 220 V per NC contact rated value	1.5 A
— 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	0.27 A
operating power at AC-2 at AC-3	
at 230 V per NC contact rated value	5.5 kW
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	200 A. Llee minimum error and to A.C. 4 . 1 . 1
Ilimited to 1 s switching at zero current maximum	200 A; Use minimum cross-section acc. to AC-1 rated value
Ilimited 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
Ilimited 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 operational current per conductor	1.6 W
no-load switching frequency	
• at AC	5 000 1/h
• at DC	1 500 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	230 V

and CO I Immediately and the	220.1/
at 60 Hz rated value	230 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	87 V·A
• at 50 Hz	87 V-A
• at 60 Hz	87 V·A
inductive power factor with closing power of the coil • at 50 Hz	0.82 0.76
• at 60 Hz	0.76
apparent holding power of magnet coil at AC	9.4 V·A
• at 50 Hz	9.4 V·A
• at 60 Hz	9.4 V·A
inductive power factor with the holding power of the coil	0.28
• at 50 Hz	0.28
• at 60 Hz	0.28
closing delay	V.E0
• at AC	8 40 ms
opening delay	V 10 III0
• at AC	4 16 ms
arcing time	10 10 ms
residual current of the electronics for control with	10 10 1115
signal <0>	
at AC at 230 V maximum permissible	0.007 A
Auxiliary circuit	
number of NC contacts for auxiliary contacts	1
instantaneous contact	·
number of NO contacts for auxiliary contacts 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 120 V rated value 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	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	7,000 / 4,000
Short-circuit protection	
design of the fuse link	

- 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 0 mm — forwards - 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 0 mm forwards backwards 0 mm - upwards 0 mm 0 mm - downwards - 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 for main contacts - solid 2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²) - solid or stranded 2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²) 2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm² - finely stranded with core end processing • at AWG cables for main contacts 2x (16 ... 12), 2x (14 ... 8) type of connectable conductor cross-sections • for auxiliary contacts - solid 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) - solid or stranded - finely stranded with core end processing 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (20 ... 16), 2x (18 ... 14) · at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross 16 ... 8 section for main contacts Safety related data T1 value for proof test interval or service life acc. to 20 y protection class IP on the front acc. to IEC 60529 touch protection on the front acc. to IEC 60529 finger-safe, for vertical contact from the front Certificates/ approvals **General Product Approval EMC**

• for short-circuit protection of the main circuit



Confirmation









Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates

Marine / Shipping

Type Examination Certificate UK Declaration of Conformity



Special Test Certificate

Type Test Certificates/Test Report



Marine / Shipping

other











Confirmation

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=3RT2526-1AL20

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2526-1AL20

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2526-1AL20

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

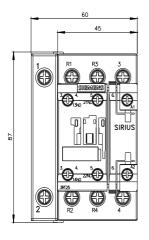
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2526-1AL20\&lang=en}}$

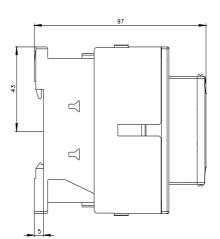
Characteristic: Tripping characteristics, I2t, Let-through current

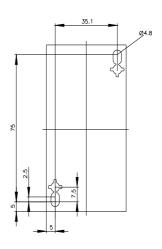
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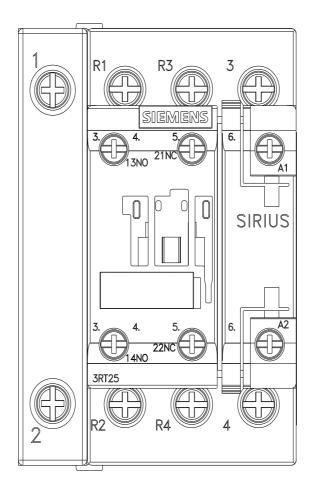
Further characteristics (e.g. electrical endurance, switching frequency)

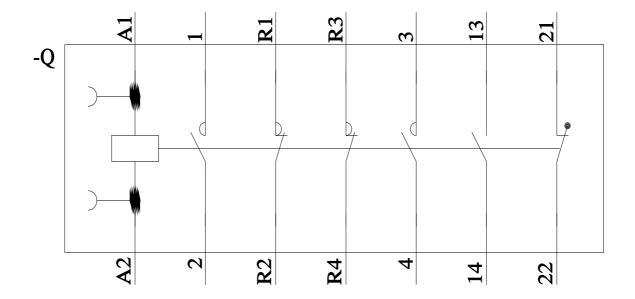
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2526-1AL20&objecttype=14&gridview=view1











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