SIEMENS

Data sheet 3RT2327-2AK60



contactor AC-1, 50 A, 400 V / 40 °C, 4-pole, 110 V AC, 50 Hz / 120 V, 60 Hz, auxiliary contacts: 1 NO + 1 NC, spring-loaded terminal, size: S0

product brand name	SIRIUS
product designation	Contactor
product type designation	3RT23
General technical data	
size of contactor	S0
product extension	
 function module for communication 	No
auxiliary switch	Yes
power loss [W] for rated value of the current	
 at AC in hot operating state 	12 W
 at AC in hot operating state per pole 	3 W
insulation voltage	
 of main circuit with degree of pollution 3 rated value 	690 V
 of the auxiliary and control 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
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 (operating cycles)	
 of contactor typical 	10 000 000
 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	4
operational current	
• at AC-1 at 400 V at ambient temperature 40 °C rated value	50 A

-1.004	
• at AC-1	F0.A
 up to 690 V at ambient temperature 40 °C rated value 	50 A
— up to 690 V at ambient temperature 60 °C rated	42 A
value	
• at AC-3	
— at 400 V rated value	15.5 A
at AC-4 at 400 V rated value	15.5 A
minimum cross-section in main circuit at maximum AC-1 rated	10 mm ²
value	
operating power • at AC-3 at 400 V rated value	7.5 kW
• at AC-4 at 400 V rated value	7.5 kW
short-time withstand current in cold operating state up to	1.0 KW
40 °C	
 limited to 1 s switching at zero current maximum 	Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	Use minimum cross-section acc. to AC-1 rated value
Iimited to 60 s switching at zero current maximum	Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at AC	5 000 1/h
operating frequency at AC-1 maximum	1 000 1/h
Control circuit/ Control	
type of voltage	AC
type of voltage of the control supply voltage	AC
control supply voltage at AC	
at 50 Hz rated value	110 V
at 60 Hz rated value	120 V
operating range factor control supply voltage rated value of magnet coil at AC	
• at 50 Hz	0.8 1.1
• at 60 Hz	0.8 1.1
apparent pick-up power of magnet coil at AC	0.0 1.1
• at 50 Hz	81 VA
• at 60 Hz	79 VA
inductive power factor with closing power of the coil	10 VA
• at 50 Hz	0.72
• at 60 Hz	0.74
apparent holding power of magnet coil at AC	V.17
• at 50 Hz	10.5 VA
• at 60 Hz	8.5 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.25
• at 60 Hz	0.28
closing delay	
• at AC	8 40 ms
opening delay	
• at AC	4 16 ms
arcing time	10 10 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts	1
attachable	2
instantaneous contact	1
number of NO contacts for auxiliary contacts	1
attachable	2
• 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 110 V rated value 	1 A
 at 125 V rated value 	0.9 A
 at 220 V rated value 	0.3 A
at 600 V rated value	0.1 A
design of the miniature circuit breaker for short-circuit protection of the auxiliary switch required	gG: 10 A (230 V, 400 A)
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	
contact rating of auxiliary contacts according to UL	A600 / Q600
Short-circuit protection	
product function short circuit protection	No
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: 20 A (690 V, 100 kA)
 for short-circuit protection of the auxiliary switch required 	gG: 10 A (690 V, 1 kA)
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 DIN rail according to DIN EN 60715
fastening method • side-by-side mounting	
•	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
• side-by-side mounting	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes
side-by-side mounting height	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm
side-by-side mounting height width	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm
side-by-side mounting height width depth	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm
side-by-side mounting height width depth required spacing	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm
side-by-side mounting height width depth required spacing • with side-by-side mounting	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm
side-by-side mounting height width depth required spacing • with side-by-side mounting — forwards	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm
side-by-side mounting height width depth required spacing	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm 10 mm
side-by-side mounting height width depth required spacing • with side-by-side mounting — forwards — upwards — downwards	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm 10 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — upwards — at the side • for wards — upwards — at the side	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — at the side — downwards — at the side — downwards	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — at the side of or grounded parts — forwards — upwards — at the side — downwards — at the side — for live parts	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — at the side of for grounded parts — forwards — upwards — at the side — downwards — at the side — downwards for live parts — forwards	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — at the side of for grounded parts — forwards — upwards — at the side — downwards for live parts — forwards — upwards upwards of or live parts — forwards — upwards upwards	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — at the side of or grounded parts — forwards — upwards — at the side — downwards for live parts — forwards — upwards — downwards of or live parts — forwards — upwards — downwards — downwards — downwards	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — at the side of for grounded parts — forwards — upwards — at the side — downwards for live parts — forwards — upwards — upwards — at the side — downwards — at the side — downwards — at the side Connections/ Terminals	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — at the side of for grounded parts — forwards — upwards — at the side — downwards for live parts — forwards — upwards — upwards — at the side — downwards — at the side — downwards — at the side	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — at the side — downwards — at the side — downwards — if or live parts — forwards — upwards — upwards — at the side — downwards — to remain side — downwards — upwards — at the side Connections/ Terminals type of electrical connection for main current circuit	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 6 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — at the side — downwards — at the side — downwards of or live parts — forwards — upwards — upwards — at the side Connections/ Terminals type of electrical connection of or auxiliary and control circuit	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 6 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — at the side — downwards — upwards — upwards — at the side Connections/ Terminals type of electrical connection for main current circuit for auxiliary and control circuit at contactor for auxiliary contacts	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 5 mm 10 mm 10 mm 5 mm 10 mm 5 mm 10 mm 10 mm 5 mm 10 mm
side-by-side mounting height width depth required spacing with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — at the side — downwards — at the side — downwards for live parts — forwards — upwards — at the side — downwards for live parts — forwards — upwards — at the side Connections/ Terminals type of electrical connection for main current circuit for auxiliary and control circuit at contactor for auxiliary contacts of magnet coil	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 6 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — at the side — downwards — upwards — upwards — at the side Connections/ Terminals type of electrical connection for main current circuit for auxiliary and control circuit at contactor for auxiliary contacts	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 5 mm 10 mm 10 mm 5 mm 10 mm 5 mm 10 mm 10 mm 5 mm 10 mm

 solid or stranded 	2x (1 10 mm²)		
 finely stranded with core end processing 	2x (1 6 mm²)		
finely stranded without core end processing	2x (1 6 mm²)		
connectable conductor cross-section for main contacts			
• solid	1 10 mm²		
 solid or stranded 	1 10 mm²		
• stranded	1 10 mm²		
 finely stranded with core end processing 	1 6 mm²		
 finely stranded without core end processing 	1 6 mm²		
connectable conductor cross-section for auxiliary contacts			
 solid or stranded 	0.5 2.5 mm²		
 finely stranded with core end processing 	0.5 1.5 mm²		
 finely stranded without core end processing 	0.5 2.5 mm²		
type of connectable conductor cross-sections			
 for auxiliary contacts 			
— solid	2x (0.5 2.5 mm²)		
— solid or stranded	2x (0.5 2.5 mm²)		
 finely stranded with core end processing 	2x (0.5 1.5 mm²)		
 finely stranded without core end processing 	2x (0.5 2.5 mm²)		
 for AWG cables for auxiliary contacts 	2x (20 14)		
AWG number as coded connectable conductor cross section			
• for main contacts	18 8		
 for auxiliary contacts 	20 14		
Safety related data			
product function			
mirror contact according to IEC 60947-4-1	Yes		
T1 value for proof test interval or service life according to IEC 61508	20 a		
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		
Communication/ Protocol			
product function bus communication	No		
Certificates/ approvals			
General Product Approval		EMC	



Confirmation









Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates

Marine / Shipping

Type Examination Certificate





Special Test Certificate

Type Test Certificates/Test Report



Marine / Shipping













other Railway Environment



Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3RT2327-2AK60

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2327-2AK60

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2327-2AK60

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

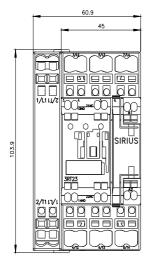
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2327-2AK60&lang=en

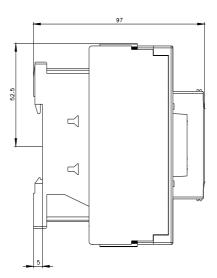
Characteristic: Tripping characteristics, I2t, Let-through current

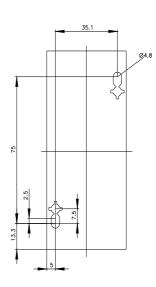
https://support.industry.siemens.com/cs/ww/en/ps/3RT2327-2AK60/char

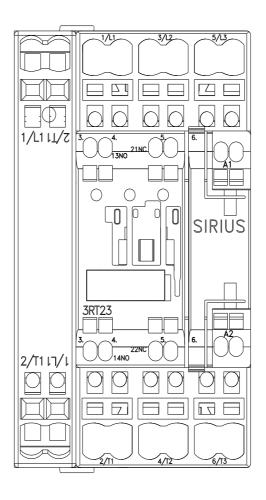
Further characteristics (e.g. electrical endurance, switching frequency)

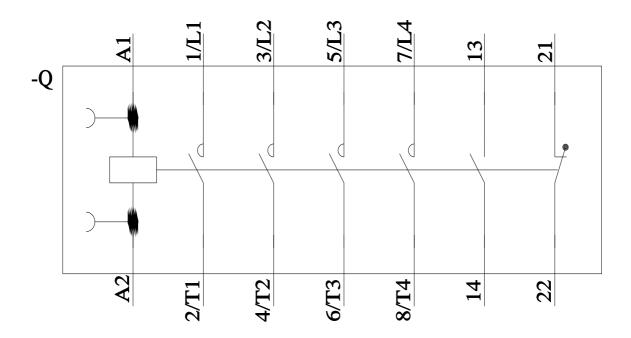
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2327-2AK60&objecttype=14&gridview=view1











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