SIEMENS

Data sheet 3RT2325-1BM40



Contactor, AC-1, 35 A/400 V/40 $^{\circ}\text{C},$ S0, 4-pole, 220 V DC, 1 NO+1 NC, screw terminal

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 	7.6 W
 at AC in hot operating state per pole 	1.9 W
 without load current share typical 	5.9 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 DC	10g / 5 ms, 7,5g / 10 ms
shock resistance with sine pulse	
• at DC	15g / 5 ms, 10g / 10 ms
mechanical service life (switching 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 	35 A
rated value	
• at AC-1	
— up to 690 V at ambient temperature 40 °C	35 A
rated value	
— up to 690 V at ambient temperature 60 °C	30 A
rated 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 value	10 mm²
operating power	
	7 E WM
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 40 °C	
limited to 1 s switching at zero current maximum	Use minimum cross-section acc. to AC-1 rated value
limited to 1's switching at zero current maximum 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 limited to 20 s quitching 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
Imited to 60 s switching at zero current maximum	Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	4 500 4/1-
• at DC	1 500 1/h
operating frequency at AC-1 maximum	1 000 1/h
Control circuit/ Control	
type of voltage	DC
type of voltage of the control supply voltage	DC
control supply voltage at DC	
rated value	220 V
operating range factor control supply voltage rated	
value of magnet coil at DC	
• initial value	0.8
initial value full-scale value	1.1
initial value full-scale value closing power of magnet coil at DC	1.1 5.9 W
initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC	1.1
initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay	1.1 5.9 W
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initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay	1.1 5.9 W 5.9 W
initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay	1.1 5.9 W 5.9 W 50 170 ms
initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms
initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time control version of the switch operating mechanism	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms
initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time control version of the switch operating mechanism Auxiliary circuit	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay • at DC opening delay • at DC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts attachable	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts attachable instantaneous contact number of NO contacts for auxiliary contacts attachable instantaneous contact instantaneous contact	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay • at DC opening delay • at DC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts • attachable • instantaneous contact number of NO contacts for auxiliary contacts • attachable • instantaneous contact operational current at AC-12 maximum	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts attachable instantaneous contact number of NO contacts for auxiliary contacts attachable instantaneous contact operational current at AC-12 maximum operational current at AC-15 at 230 V rated value	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts attachable instantaneous contact number of NO contacts for auxiliary contacts attachable instantaneous contact operational current at AC-12 maximum operational current at AC-15 at 230 V rated value at 400 V rated value	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts attachable instantaneous contact number of NO contacts for auxiliary contacts attachable instantaneous contact operational current at AC-12 maximum operational current at AC-15 at 230 V rated value at 400 V rated value at 500 V rated value	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts attachable instantaneous contact number of NO contacts for auxiliary contacts attachable instantaneous contact operational current at AC-12 maximum operational current at AC-15 at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value at 690 V rated value	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts attachable instantaneous contact number of NO contacts for auxiliary contacts attachable instantaneous contact operational current at AC-12 maximum operational current at AC-15 at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value operational current at DC-12	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts attachable instantaneous contact number of NO contacts for auxiliary contacts attachable instantaneous contact operational current at AC-12 maximum operational current at AC-15 at 230 V rated value at 400 V rated value at 690 V rated value at 690 V rated value at 690 V rated value at 24 V rated value operational current at DC-12 at 24 V rated value	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2 1 2 1 1 2 1 1 1 A 10 A 10 A 10 A
initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts attachable instantaneous contact number of NO contacts for auxiliary contacts attachable instantaneous contact operational current at AC-12 maximum operational current at AC-15 at 230 V rated value at 400 V rated value at 690 V rated value at 690 V rated value at 24 V rated value operational current at DC-12 at 24 V rated value at 48 V rated value at 48 V rated value	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2 1 2 1 1 2 1 1 1 A 10 A 3 A 2 A 1 A 10 A 6 A
initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts attachable instantaneous contact number of NO contacts for auxiliary contacts attachable instantaneous contact operational current at AC-12 maximum operational current at AC-15 at 230 V rated value at 400 V rated value at 690 V rated value at 690 V rated value at 690 V rated value at 24 V rated value operational current at DC-12 at 24 V rated value	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2 1 2 1 1 2 1 1 1 A 10 A 10 A 10 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	gG: 10 A (690 V, 1 kA)
required	3
Installation/ mounting/ dimensions	
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted
fastening method	forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail
	according to DIN EN 60715 Yes
side-by-side mounting beight	85 mm
height width	60 mm
depth	107 mm
required spacing	107 111111
with side-by-side mounting	
— forwards	10 mm
	10 mm
— upwards — downwards	10 mm
— at the side	0 mm
for grounded parts	O IIIIII
	10 mm
— forwards	10 mm 10 mm
— upwards	
— at the side	6 mm
— downwards	10 mm
• for live parts	10 mm
— forwards	10 mm
— upwards	10 mm
— downwards	10 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	
 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)
 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 	2x (16 12), 2x (14 8)

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 10 mm²	
connectable conductor cross-section for auxiliary contacts		
 solid or stranded 	0.5 2.5 mm ²	
 finely stranded with core end processing 	0.5 2.5 mm²	
type of connectable conductor cross-sections		
 for auxiliary contacts 		
— 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	
 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 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	
Communication/ Protocol		
product function bus communication	No	
Certificates/ approvals		
General Product Approval		EMC
Tr		





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

Dangerous Good



Transport Information

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=3RT2325-1BM40

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT2325-1BM40}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2325-1BM40

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

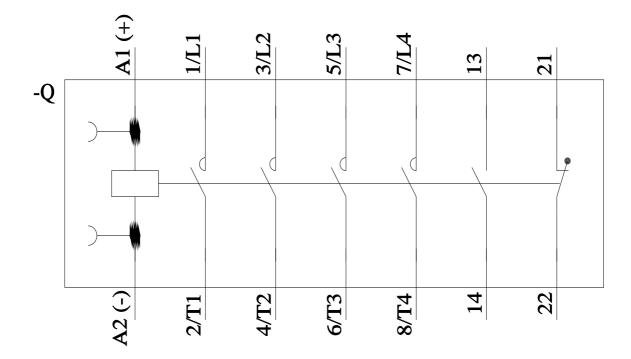
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2325-1BM40&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT2325-1BM40/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2325-1BM40&objecttype=14&gridview=view1



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