SIEMENS

Data sheet



Contactor, AC-3, 32 A/15 kW/400 V, S0, 4-pole, 24 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 	10.4 W
 at AC in hot operating state per pole 	2.6 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

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operational current	
at AC-1 at 400 V at ambient temperature 40 °C	40 A
rated value	
• at AC-1	
 up to 690 V at ambient temperature 40 °C rated value 	40 A
	35 A
 up to 690 V at ambient temperature 60 °C rated value 	35 A
• at AC-3	
— at 400 V rated value	32 A
— at 690 V rated value	21 A
at AC-4 at 400 V rated value	15.5 A
minimum cross-section in main circuit at maximum AC-1	10 mm²
rated value	10 111111
operating power	
at AC-3 at 400 V rated value	15 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 	375 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	299 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
Iimited to 60 s switching at zero current maximum	106 A; Use minimum cross-section acc. to AC-1 rated value
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	. 300
	DC
type of voltage	DC
type of voltage of the control supply voltage	
control supply voltage at DC • rated value	24 V
a raien vanie	74 V
	Z-T V
operating range factor control supply voltage rated	21 V
operating range factor control supply voltage rated value of magnet coil at DC	
operating range factor control supply voltage rated value of magnet coil at DC • initial value	0.8
operating range factor control supply voltage rated value of magnet coil at DC • initial value • full-scale value	0.8 1.1
operating range factor control supply voltage rated value of magnet coil at DC • initial value • full-scale value closing power of magnet coil at DC	0.8 1.1 5.9 W
operating range factor control supply voltage rated value of magnet coil at DC • initial value • full-scale value closing power of magnet coil at DC holding power of magnet coil at DC	0.8 1.1
operating range factor control supply voltage rated value of magnet coil at DC • initial value • full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay	0.8 1.1 5.9 W 5.9 W
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operating range factor control supply voltage rated value of magnet coil at DC • 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	0.8 1.1 5.9 W 5.9 W 50 170 ms
operating range factor control supply voltage rated value of magnet coil at DC • 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	0.8 1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms
operating range factor control supply voltage rated value of magnet coil at DC • 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	0.8 1.1 5.9 W 5.9 W 50 170 ms
operating range factor control supply voltage rated value of magnet coil at DC • 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	0.8 1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
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operating range factor control supply voltage rated value of magnet coil at DC • 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	0.8 1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
operating range factor control supply voltage rated value of magnet coil at DC • 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	0.8 1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
operating range factor control supply voltage rated value of magnet coil at DC • 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	0.8 1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
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operating range factor control supply voltage rated value of magnet coil at DC • 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	0.8 1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
operating range factor control supply voltage rated value of magnet coil at DC • 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	0.8 1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
operating range factor control supply voltage rated value of magnet coil at DC • 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	0.8 1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
operating range factor control supply voltage rated value of magnet coil at DC • 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	0.8 1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
operating range factor control supply voltage rated value of magnet coil at DC 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	0.8 1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
operating range factor control supply voltage rated value of magnet coil at DC 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 500 V rated value at 500 V rated value	0.8 1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
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 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	0.3 A
at 220 V rated value	0.3 A
at 600 V rated value	0.3 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: 80 A (690 V, 100 kA)
with type of assignment 2 required	gG: 35 A (690 V, 100 kA)
for short-circuit protection of the auxiliary switch	gG: 10 A (690 V, 1 kA)
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 60715
side-by-side mounting	Yes
height	85 mm
width	45 mm
depth	107 mm
required spacing	
with side-by-side mounting	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
for grounded parts	
— forwards	10 mm
— upwards	10 mm
— at the side	6 mm
4. 4.0 0.40	·
— downwards	10 mm
	10 mm
• for live parts	
• for live parts — forwards	10 mm
for live partsforwardsupwards	10 mm 10 mm
• for live parts — forwards	10 mm
 for live parts forwards upwards downwards at the side 	10 mm 10 mm 10 mm
 for live parts forwards upwards downwards at the side Connections/ Terminals	10 mm 10 mm 10 mm
 for live parts forwards upwards downwards at the side Connections/ Terminals type of electrical connection	10 mm 10 mm 10 mm 6 mm
 for live parts forwards upwards downwards at the side Connections/ Terminals type of electrical connection for main current circuit 	10 mm 10 mm 10 mm 6 mm screw-type terminals
 for live parts forwards upwards downwards at the side Connections/ Terminals type of electrical connection for main current circuit for auxiliary and control circuit 	10 mm 10 mm 10 mm 6 mm screw-type terminals screw-type terminals
for live parts — forwards — upwards — downwards — at the side Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts	10 mm 10 mm 10 mm 6 mm screw-type terminals screw-type terminals Screw-type terminals
for live parts — forwards — upwards — downwards — 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	10 mm 10 mm 10 mm 6 mm screw-type terminals screw-type terminals
for live parts — forwards — upwards — downwards — 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 type of connectable conductor cross-sections	10 mm 10 mm 10 mm 6 mm screw-type terminals screw-type terminals Screw-type terminals
for live parts — forwards — upwards — downwards — 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 type of connectable conductor cross-sections • for main contacts	10 mm 10 mm 10 mm 6 mm screw-type terminals screw-type terminals Screw-type terminals Screw-type terminals
for live parts — forwards — upwards — downwards — 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 type of connectable conductor cross-sections	10 mm 10 mm 10 mm 6 mm screw-type terminals screw-type terminals Screw-type terminals

 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 mm²
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
proportion of dangerous failures	
 with low demand rate according to SN 31920 	40 %
 with high demand rate according to SN 31920 	73 %
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



Confirmation









Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates

Marine / Shipping

Type Examination Certificate





Type Test Certificates/Test Report





Marine / Shipping









Confirmation

other



Dangerous Good

<u>Transport Information</u>

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=3RT2326-1BB40-4AA0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2326-1BB40-4AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2326-1BB40-4AA0

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

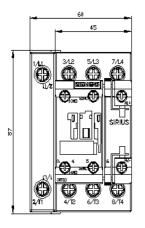
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2326-1BB40-4AA0&lang=en

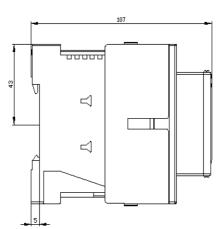
Characteristic: Tripping characteristics, I2t, Let-through current

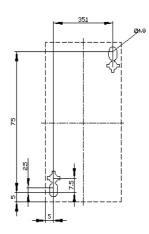
https://support.industry.siemens.com/cs/ww/en/ps/3RT2326-1BB40-4AA0/char

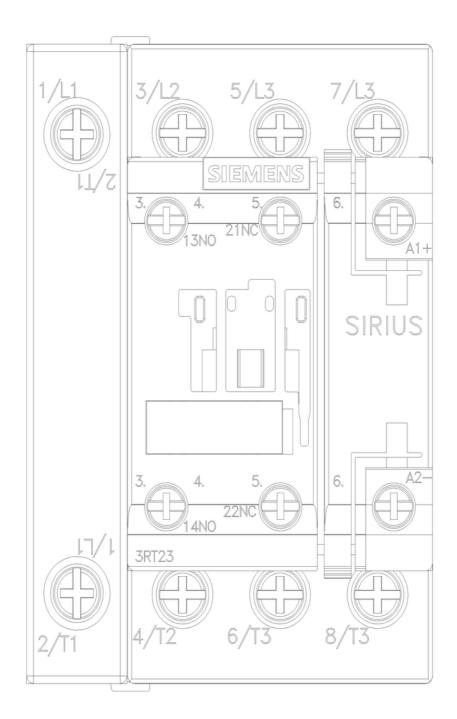
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2326-1BB40-4AA0&objecttype=14&gridview=view1









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