SIEMENS

Data sheet 3RT2325-1AM20



contactor AC-1, 35 A, 400 V / 40 °C, 4-pole, 208 V AC, 50/60 Hz, auxiliary contacts: 1 NO + 1 NC, screw 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 	7.6 W
• at AC in hot operating state per pole	1.9 W
type of calculation of power loss depending on pole	quadratic
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	7,5g / 5 ms, 4,7g / 10 ms
shock resistance with sine pulse	
• at AC	11,8g / 5 ms, 7,4g / 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
Weight	0.475 kg
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 %
Environmental footprint	
Environmental Product Declaration(EPD)	Yes
global warming potential [CO2 eq] total	166 kg
global warming potential [CO2 eq] during manufacturing	2.26 kg

alabal warming natantial ICCC and during accounting	164 kg
global warming potential [CO2 eq] during operation global warming potential [CO2 eq] after end of life	164 kg -0.152 kg
Main circuit	-0.102 hy
number of poles for main current circuit	4
number of NO contacts for main contacts	4
type of voltage for main current circuit	AC
operational current	
 at AC-1 at 400 V at ambient temperature 40 °C rated 	35 A
value	
• at AC-1	
 — up to 690 V at ambient temperature 40 °C rated value 	35 A
— up to 690 V at ambient temperature 60 °C rated	30 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 value	10 mm ²
operational current	
• at 1 current path at DC-1	
— at 24 V rated value	30 A
— at 60 V rated value	20 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	30 A
— at 60 V rated value	30 A
— at 110 V rated value	30 A
— at 220 V rated value	1 A
— at 440 V rated value	1 A
with 3 current paths in series at DC-1 — at 24 V rated value	30 A
— at 24 V rated value — at 60 V rated value	30 A
— at 110 V rated value	30 A
— at 220 V rated value	30 A
— at 440 V rated value	2.9 A
at 1 current path at DC-3 at DC-5	
— at 24 V rated value	20 A
— at 60 V rated value	5 A
— at 110 V rated value	2.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.09 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	30 A
— at 60 V rated value	30 A
— at 110 V rated value	15 A
— at 220 V rated value	3 A
— at 440 V rated value	0.27 A
with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value	30 A
— at 60 V rated value	30 A
— at 110 V rated value	30 A
— at 220 V rated value	10 A
— at 440 V rated value	0.6 A
operating powerat AC-3 at 400 V rated value	7.5 kW
at AC-3 at 400 V rated value at AC-4 at 400 V rated value	7.5 kW
no-load switching frequency	1.0 (1)
• at AC	5 000 1/h
operating frequency at AC-1 maximum	1 000 1/h
1 0 - 47	

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	208 V
at 60 Hz rated value	208 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	
● at 50 Hz	81 VA
• at 60 Hz	79 VA
inductive power factor with closing power of the coil	
● at 50 Hz	0.72
• at 60 Hz	0.74
apparent holding power of magnet coil at AC	
● 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
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
JL/CSA ratings	
contact rating of auxiliary contacts according to UL	A600 / Q600
Short-circuit protection	
design of the miniature circuit breaker for short-circuit protection	C characteristic: 10 A; 0.4 kA

of the conditions about them to 000 M	
of the auxiliary circuit up to 230 V	
design of the fuse link	
for short-circuit protection of the main circuit	0.00.4 (000.1)
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 side-by-side mounting	Yes
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
height	85 mm
width	60 mm
depth	97 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
— downwards	10 mm
• for live parts	
— 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
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 mm ²
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)
for AWG cables for auxiliary contacts	2x (20 16), 2x (18 14)
AWG number as coded connectable conductor cross	
section	
section ● for main contacts	16 8
	16 8 20 14
• for main contacts	
for main contacts for auxiliary contacts	
for main contacts for auxiliary contacts Safety related data	

 positively driven operation according to IEC 60947-5-1 	No	
Electrical Safety		
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	
Approvals Certificates		
General Product Approval		EMV













Test Certificates

Marine / Shipping

Special Test Certific-

Type Test Certificates/Test Report









Marine / Shipping

other

Railway

Environment





Miscellaneous

Confirmation

Special Test Certificate



Environment

Environmental Confirmations

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=3RT2325-1AM20

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2325-1AM20

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2325-1AM20

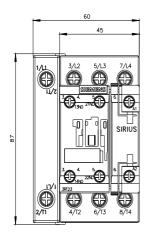
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

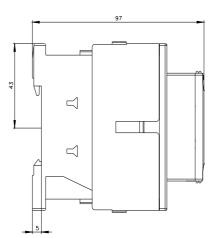
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2325-1AM20&lang=en

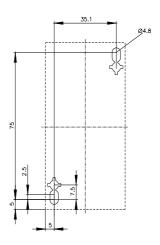
Characteristic: Tripping characteristics, I2t, Let-through current

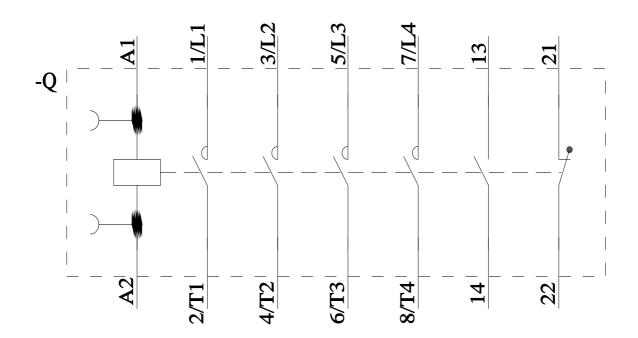
https://support.industry.siemens.com/cs/ww/en/ps/3RT2325-1AM20/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2325-1AM20&objecttype=14&gridview=view1









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