## SIEMENS

## Data sheet

## 3RT2336-1AN20



Contactor, AC-1, 60 A/400 V/40 °C, S2, 4-pole, 220 V AC, 50/60 Hz, 1 NO+1 NC, screw terminal

product brand name	SIRIUS	
product designation	Contactor	
product type designation	3RT23	
General technical data		
size of contactor	S2	
product extension		
<ul> <li>function module for communication</li> </ul>	No	
auxiliary switch	Yes	
power loss [W] for rated value of the current		
<ul> <li>at AC in hot operating state</li> </ul>	12.8 W	
<ul> <li>at AC in hot operating state per pole</li> </ul>	3.2 W	
insulation voltage		
<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	690 V	
<ul> <li>of the auxiliary and control circuit with degree of pollution 3 rated value</li> </ul>	690 V	
surge voltage resistance		
<ul> <li>of main circuit rated value</li> </ul>	6 kV	
<ul> <li>of auxiliary circuit rated value</li> </ul>	6 kV	
shock resistance at rectangular impulse		
• at AC	11.8g / 5 ms, 7.4g / 10 ms	
shock resistance with sine pulse		
• at AC	18.5g / 5 ms, 11.6g / 10 ms	
mechanical service life (switching cycles)		
<ul> <li>of contactor typical</li> </ul>	10 000 000	
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000	
reference code according to IEC 81346-2	Q	
Substance Prohibitance (Date)	10/01/2014	
Ambient conditions		
installation altitude at height above sea level maximum	2 000 m	
ambient temperature		
<ul> <li>during operation</li> </ul>	-40 +70 °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	60 A
<ul> <li>at AC-1         <ul> <li>up to 690 V at ambient temperature 40 °C</li> <li>rated value</li> </ul> </li> </ul>	60 A
— up to 690 V at ambient temperature 60 °C rated value	55 A
● at AC-3	
— at 400 V rated value	38 A
minimum cross-section in main circuit at maximum AC-1 rated value	16 mm <sup>2</sup>
short-time withstand current in cold operating state up to 40 °C	
<ul> <li>limited to 1 s switching at zero current maximum</li> </ul>	Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 10 s switching at zero current maximum</li> </ul>	Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 30 s switching at zero current maximum</li> </ul>	Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 60 s switching at zero current maximum</li> </ul>	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	700 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	220 V
• at 60 Hz rated value	220 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	210 VA
• at 60 Hz	188 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.69
• at 60 Hz	0.65
apparent holding power of magnet coil at AC	
• at 50 Hz	17.2 VA
• at 60 Hz	16.5 VA
inductive power factor with the holding power of the coil	
● at 50 Hz	0.36
• at 60 Hz	0.39
closing delay	
• at AC	10 80 ms
opening delay	40 40
• at AC	10 18 ms 10 20 ms
arcing time	Standard A1 - A2
control version of the switch operating mechanism	Standard AT - AZ
Auxiliary circuit	
number of NC contacts for auxiliary contacts	1
attachable	2
instantaneous contact	1
<ul> <li>number of NO contacts for auxiliary contacts</li> <li>attachable</li> </ul>	1 2
altachable     instantaneous contact	2
operational current at AC-12 maximum	10 A
operational current at AC-12 maximum	
at 230 V rated value	10 A
at 400 V rated value	3 A
	•

<ul> <li>at 500 V rated value</li> </ul>	2 A
• at 690 V rated value	1 A
operational current at DC-12	
<ul> <li>at 24 V rated value</li> </ul>	10 A
<ul> <li>at 48 V rated value</li> </ul>	6 A
<ul> <li>at 60 V rated value</li> </ul>	6 A
<ul> <li>at 110 V rated value</li> </ul>	3 A
<ul> <li>at 125 V rated value</li> </ul>	2 A
<ul> <li>at 220 V rated value</li> </ul>	1 A
<ul> <li>at 600 V rated value</li> </ul>	0.15 A
operational current at DC-13	
<ul> <li>at 24 V rated value</li> </ul>	10 A
<ul> <li>at 48 V rated value</li> </ul>	2 A
<ul> <li>at 110 V rated value</li> </ul>	1A
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	gG: 10 A (230 V, 400 A)
protection of the auxiliary switch required	go. 1077 (200 V, 10077)
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 / P600
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: 160 A (690 V, 100 kA)
— with type of assignment 2 required	gG: 63 A (690 V,100 kA)
<ul> <li>for short-circuit protection of the auxiliary switch</li> </ul>	gG: 10 A (690 V, 1 kA)
required	90. 10 A (000 V, 11A)
Installation/ mounting/ dimensions	
Installation/ mounting/ dimensions mounting position	+/-180° rotation possible on vertical mounting surface: can be tilted
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
	forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail
mounting position 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
mounting position fastening method • side-by-side mounting	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
mounting position fastening method o side-by-side mounting height	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 114 mm
mounting position fastening method <ul> <li>side-by-side mounting</li> <li>height</li> <li>width</li> </ul>	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 114 mm 75 mm
mounting position fastening method  • side-by-side mounting height width depth	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 114 mm
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing	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 114 mm 75 mm
mounting position fastening method  • side-by-side mounting height width depth	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 114 mm 75 mm 130 mm
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing	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 114 mm 75 mm 130 mm
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting	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 114 mm 75 mm 130 mm
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards	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 114 mm 75 mm 130 mm
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards	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 114 mm 75 mm 130 mm 10 mm
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards         — downwards	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 114 mm 75 mm 130 mm 10 mm 10 mm
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards         — downwards         — at the side	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 114 mm 75 mm 130 mm 10 mm 10 mm
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards         — downwards         — at the side         • for grounded parts	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 114 mm 75 mm 130 mm 10 mm 10 mm 0 mm
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards         — at the side         • for grounded parts         — forwards	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 114 mm 75 mm 130 mm 10 mm 10 mm 0 mm 10 mm
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards         — downwards         — at the side         • for grounded parts         — upwards         — upwards	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 114 mm 75 mm 130 mm 10 mm 10 mm 10 mm 10 mm 10 mm
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards         — at the side         • for grounded parts         — upwards         — at the side         — at the side         — at the side         — at the side	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 114 mm 75 mm 130 mm 10 mm 10 mm 10 mm 10 mm 10 mm 6 mm
mounting position         fastening method         • 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         — oforwards         — upwards         — other side         — ownwards         — at the side         — downwards         — at the side         — downwards         — at the side         — downwards	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 114 mm 75 mm 130 mm 10 mm 10 mm 10 mm 10 mm 10 mm 6 mm
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards         — downwards         — at the side         • for grounded parts         — oforwards         — at the side         — at the side         — at the side         — ownwards         — ownwards         — in the side         — ownwards         — in the side         — ownwards         — in the side         — i	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 114 mm 75 mm 130 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards         — downwards         — at the side         • for grounded parts         — forwards         — at the side         • for grounded parts         — forwards         — at the side         — forwards         — at the side         — forwards         — at the side         — forwards         — for live parts         — forwards         • for live parts         — forwards	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 114 mm 75 mm 130 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards         — downwards         — at the side         • for grounded parts         — forwards         — at the side         • for grounded parts         — ownwards         — at the side         — ownwards         — at the side         — ownwards         — ownwards         — upwards         — upwards         — upwards         — upwards         — upwards         • for live parts         — upwards         — upwards	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 114 mm 75 mm 130 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards         — downwards         — at the side         • for grounded parts         — oforwards         — at the side         — downwards         — at the side         — oforwards         — upwards         — at the side         — downwards         — at the side         — downwards         • for live parts         — forwards         — upwards         — at the side         — downwards         — at the side	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 114 mm 75 mm 130 mm 10 mm
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         - forwards         - upwards         - downwards         - at the side         • for grounded parts         - forwards         - at the side         • for grounded parts         - forwards         - at the side         - forwards         - at the side         - downwards         • for live parts         - forwards         - upwards         - at the side         - downwards         - at the side	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 114 mm 75 mm 130 mm 10 mm
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards         — downwards         — at the side         • for grounded parts         — forwards         — at the side         • for live parts         — forwards         — upwards         — at the side         — downwards         • for live parts         — forwards         — upwards         — at the side         — downwards         • for live parts         — at the side         — downwards         — at the side         — upwards         — at the side         — downwards         — at the side         Oconnections/ Terminals         type of electrical connection	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 114 mm 75 mm 130 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 6 mm 10 mm 10 mm 10 mm
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         - forwards         - upwards         - downwards         - at the side         • for grounded parts         - forwards         - at the side         - downwards         • for live parts         - forwards         - upwards         - at the side         - downwards         - at the side         - downwards         - at the side         - of electrical connection         • for main current circuit	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 114 mm 75 mm 130 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
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards         — downwards         — at the side         • for grounded parts         — forwards         — at the side         • for live parts         — forwards         — upwards         — at the side         — downwards         • for live parts         — forwards         — upwards         — at the side         — downwards         • for live parts         — at the side         — downwards         — at the side         — upwards         — at the side         — downwards         — at the side         Oconnections/ Terminals         type of electrical connection	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 114 mm 75 mm 130 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 6 mm 10 mm 10 mm 10 mm

of magnet coil	Screw-type terminals
type of connectable conductor cross-sections	
for main contacts	
— solid or stranded	2x (1 35 mm²), 1x (1 50 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 25 mm <sup>2</sup> ), 1x (1 35 mm <sup>2</sup> )
• at AWG cables for main contacts	2x (18 2), 1x (18 1)
connectable conductor cross-section for main contacts	
<ul> <li>solid or stranded</li> </ul>	1 50 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	1 35 mm²
connectable conductor cross-section for auxiliary contacts	
<ul> <li>solid or stranded</li> </ul>	0.5 2.5 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm <sup>2</sup>
<ul> <li>finely stranded without core end processing</li> </ul>	0.5 2.5 mm <sup>2</sup>
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
— solid — solid or stranded	2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> )
	2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> )
<ul> <li>finely stranded with core end processing</li> <li>at AWG cables for auxiliary contacts</li> </ul>	2x (0.5 1.5 mm <sup>-</sup> ), 2x (0.75 2.5 mm <sup>-</sup> ) 2x (20 16), 2x (18 14)
AWG number as coded connectable conductor crossection	
for main contacts	18 1
	20 14
for auxiliary contacts	20 14
Safety related data	
product function	
<ul> <li>mirror contact according to IEC 60947-4-1</li> </ul>	Yes
positively driven operation according to IEC 609     5-1	47- No
T1 value for proof test interval or service life according IEC 61508	to 20 y
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 605	<b>29</b> finger-safe, for vertical contact from the front
Communication/ Protocol	
product function bus communication	No
Certificates/ approvals	
General Product Approval	
Confirmation (	
EMC Safety/Safety of Declar Machinery	ation of Conformity Test Certificates
RCM Type Examination Certificate	JK EG-Konf. <u>Type Test Certific-ates/Test Report</u> <u>Special Test Certific-ate</u>

Marine / Shipping



<u>tion</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=3RT2336-1AN20

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2336-1AN20

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2336-1AN20

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

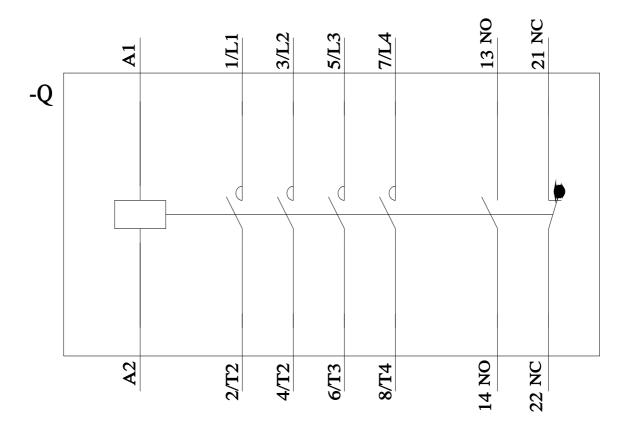
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2336-1AN20&lang=en

Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT2336-1AN20/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2336-1AN20&objecttype=14&gridview=view1



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