# **SIEMENS**

Data sheet 3RT2024-1AU00



power contactor, AC-3e/AC-3, 12 A, 5.5 kW / 400 V, 3-pole, 240 V AC, 50 Hz, auxiliary contacts: 1 NO + 1 NC, screw terminal

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S0
product extension	
<ul> <li>function module for communication</li> </ul>	No
auxiliary switch	Yes
power loss [W] for rated value of the current	
at AC in hot operating state	0.9 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	0.3 W
<ul> <li>without load current share typical</li> </ul>	7.6 W
insulation voltage	
<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	690 V
<ul> <li>of auxiliary circuit with degree of pollution 3 rated value</li> </ul>	690 V
surge voltage resistance	
of main circuit rated value	6 kV
of auxiliary circuit rated value	6 kV
maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1	400 V
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
<ul> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> </ul>	5 000 000
<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)	10/01/2009
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	3
number of NO contacts for main contacts	3
operating voltage	000.1/
at AC-3 rated value maximum	690 V
at AC-3e rated value maximum	690 V
operational current	40.4
<ul> <li>at AC-1 at 400 V at ambient temperature 40 °C rated value</li> </ul>	40 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C	40 A
rated value	40 A
— up to 690 V at ambient temperature 60 °C	35 A
rated value	
• at AC-3	
— at 400 V rated value	12 A
— at 500 V rated value	12 A
— at 690 V rated value	9 A
• at AC-3e	
— at 400 V rated value	12 A
— at 500 V rated value	12 A
— at 690 V rated value	9 A
<ul> <li>at AC-4 at 400 V rated value</li> </ul>	12.5 A
<ul> <li>at AC-5a up to 690 V rated value</li> </ul>	35.2 A
<ul> <li>at AC-5b up to 400 V rated value</li> </ul>	9.9 A
• at AC-6a	
<ul> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	11.4 A
	11.4 A
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	11.4 A
— up to 500 V for current peak value n=20 rated	11.3 A
value	
<ul> <li>up to 690 V for current peak value n=20 rated</li> </ul>	9 A
value	
• at AC-6a	
— up to 230 V for current peak value n=30 rated	7.6 A
value — up to 400 V for current peak value n=30 rated	7.6 A
value	7.0 A
<ul> <li>up to 500 V for current peak value n=30 rated</li> </ul>	7.6 A
value	
<ul> <li>up to 690 V for current peak value n=30 rated</li> </ul>	7.6 A
value	
minimum cross-section in main circuit at maximum AC-1 rated value	10 mm <sup>2</sup>
operational current for approx. 200000 operating	
cycles at AC-4	
at 400 V rated value	5.5 A
at 690 V rated value	5.5 A
operational current	
at 1 current path at DC-1	
— at 24 V rated value	35 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
— at 600 V rated value	0.25 A
<ul> <li>with 2 current paths in series at DC-1</li> </ul>	
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	5 A
— at 440 V rated value	1 A
— at 600 V rated value	0.8 A
with 3 current paths in series at DC-1	05.4
— at 24 V rated value	35 A
— at 60 V rated value	35 A

— at 110 V rated value	35 A
— at 110 V rated value  — at 220 V rated value	35 A 35 A
— at 440 V rated value	2.9 A
— at 600 V rated value	1.4 A
• at 1 current path at DC-3 at DC-5	LTA
— at 24 V rated value	20 A
— at 60 V rated value	5 A
— at 220 V rated value	1A
— at 440 V rated value	0.09 A
— at 600 V rated value	0.06 A
• with 2 current paths in series at DC-3 at DC-5	0.0071
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	15 A
— at 220 V rated value	3 A
— at 440 V rated value	0.27 A
— at 600 V rated value	0.16 A
with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	10 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.6 A
operating power	
at AC-2 at 400 V rated value	5.5 kW
• at AC-3	
— at 230 V rated value	3 kW
— at 400 V rated value	5.5 kW
— at 500 V rated value	5.5 kW
— at 690 V rated value	7.5 kW
• at AC-3e	
— at 230 V rated value	3 kW
— at 400 V rated value	5.5 kW
— at 500 V rated value	5.5 kW
— at 690 V rated value	7.5 kW
operating power for approx. 200000 operating cycles	
at AC-4	
at 400 V rated value	2.6 kW
at 690 V rated value	4.6 kW
operating apparent power at AC-6a	
<ul> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	4.5 kVA
• up to 400 V for current peak value n=20 rated value	7.8 kVA
• up to 500 V for current peak value n=20 rated value	9.8 kVA
• up to 690 V for current peak value n=20 rated value	10.7 kVA
operating apparent power at AC-6a	0.174
• up to 230 V for current peak value n=30 rated value	3 kVA
• up to 400 V for current peak value n=30 rated value	5.2 kVA
• up to 500 V for current peak value n=30 rated value	6.5 kVA
• up to 690 V for current peak value n=30 rated value	9 kVA
short-time withstand current in cold operating state up to 40 °C	
Iimited to 1 s switching at zero current maximum	210 A; 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	210 A; Use minimum cross-section acc. to AC-1 rated value
Ilmited to 3 s switching at zero current maximum     Imited to 10 s switching at zero current maximum	170 A; Use minimum cross-section acc. to AC-1 rated value
limited to 10's switching at zero current maximum     limited to 30 s switching at zero current maximum	126 A; Use minimum cross-section acc. to AC-1 rated value
limited to 50 s switching at zero current maximum	105 A; 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
• at AC-2 maximum	1 000 1/h
• at AC-3 maximum	1 000 1/h
at AC-3e maximum	1 000 1/h

• at AC-4 maximum	300 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
at 50 Hz rated value	240 V
operating range factor control supply voltage rated	
value of magnet coil at AC	
● at 50 Hz	0.8 1.1
apparent pick-up power of magnet coil at AC	
● at 50 Hz	65 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.82
apparent holding power of magnet coil at AC	= 0.1/4
• at 50 Hz	7.6 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.25
closing delay	1
• 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
instantaneous contact	4
number of NO contacts for auxiliary contacts instantaneous contact	1
operational current at AC-12 maximum	10 A
operational current at AC-15	1071
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	
<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
• 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	10.0
<ul> <li>at 24 V rated value</li> <li>at 48 V rated value</li> </ul>	10 A
at 48 V rated value     at 60 V rated value	2 A 2 A
at 110 V rated value     at 110 V rated value	1 A
at 110 V rated value     at 125 V rated value	0.9 A
at 123 V rated value     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)
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	11 A
<ul><li>at 600 V rated value</li></ul>	11 A
yielded mechanical performance [hp]	
<ul> <li>for single-phase AC motor</li> </ul>	
— at 110/120 V rated value	1 hp
— at 230 V rated value	2 hp
• for 3-phase AC motor	O.h.,
— at 200/208 V rated value	3 hp
— at 220/230 V rated value	3 hp
<ul><li>— at 460/480 V rated value</li><li>— at 575/600 V rated value</li></ul>	7.5 hp
— at 3/3/000 v fateu value	10 hp

design of the fuse link	contact rating of auxiliary contacts according to UL	A600 / P600
* for short-circult protection of the main circuit     * with type of assignment 2 required     * for short-circult protection of the auxiliary switch required     * for short-circult protection of the auxiliary switch required     * for short-circul protection of the auxiliary switch required     * for short-circul protection of the auxiliary switch required     * for short-circul protection of the auxiliary switch required     * for short-circul protection of the auxiliary switch required     * stallation/mounting/dimensions     * stallation/mounting/dimensions     * side-by-side mounting     * side-by-side mounting     * side-by-side mounting     * with side-by-side mounting     * with side-by-side mounting     * with side-by-side mounting     * for mounting     * side side	Short-circuit protection	
	design of the fuse link	
with type of assignment 2 required	<ul> <li>for short-circuit protection of the main circuit</li> </ul>	
* for short-circuit protection of the auxillary switch required  **retailation** mounting dimensions**  **mounting position**  **side-by-side mounting**  **solid-by-side mounting**  **sol	<ul> <li>— with type of coordination 1 required</li> </ul>	gG: 63A (690V,100kA), aM: 32A (690V,100kA), BS88: 63A (415V,80kA)
required  mounting position  fastening method  side-by-side mounting  width depth  - Interval of the side - Interv	<ul> <li>— with type of assignment 2 required</li> </ul>	gG: 25A (690V,100kA), aM: 20A (690V,100kA), BS88: 25A (415V,80kA)
installation/ mounting/ dimensions  mounting position  fastening method  side-by-side mounting height  side-by-side mounting height  width depth  forwards  - upwards  - upwards  - downwards  - downwards  - forwards  - upwards  - forwards  - forwards  - upwards  - forwards	<ul> <li>for short-circuit protection of the auxiliary switch</li> </ul>	gG: 10 A (500 V, 1 kA)
##150" rotation possition forward and backward by 4*.25 for wertical mounting surface: can be litted for fastening method soft faste	required	
forward and backward by +f-2 25° on vertical mounting surface fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715  • side-by-side mounting	nstallation/ mounting/ dimensions	
fastening method         screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715           e side-by-side mounting         Yes           with side-by-side mounting         97 mm           e with side-by-side mounting         10 mm           — of owards         10 mm           — downwards         10 mm           — downwards         10 mm           — downwards         10 mm           — of orwards         10 mm           — of orwards         10 mm           — at the side         6 mm           — odownwards         10 mm           — for ilve parts         10 mm           — for owards         10 mm           — for owards         10 mm           — for inverse tricuit         6 mm           — owards         10 mm           — ownwards         10 mm           — ownections/Terminals           type	mounting position	
Neight width	fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN
Might   Migh	side-by-side mounting	Yes
width depth         45 mm           depth required spacing         97 mm           with side-by-side mounting         10 mm           — forwards         10 mm           — upwards         10 mm           — downwards         0 mm           — for grounded parts         10 mm           — forwards         10 mm           — upwards         6 mm           — downwards         10 mm           — downwards         10 mm           — forwards         10 mm           — downwards         10 mm           — downwards         10 mm           — downwards         0 mm           — downwards         10 mm           — downwards         0 mm           — downwards         10 mm           — downwards         10 mm           — downwards         10 mm           — the side         6 mm           Ornections/ Terminals         5 mm           * for auxiliary and control circuit         screw-type terminals           • for auxiliary and control circuit         screw-type terminals           • for auxiliary contacts         \$crew-type terminals           • solid         \$cx (1 2.5 mm²), 2x (2.5 10 mm²)           • solid o		85 mm
depth required spacing  with side-by-side mounting — forwards — upwards — downwards — 10 mm — downwards — 10 mm — of for grounded parts — forwards — upwards — 10 mm — of for grounded parts — forwards — upwards — 10 mm — at the side — downwards — 10 mm — at the side — downwards — 10 mm — at the side — downwards — 10 mm — of five parts — forwards — 10 mm — ownwards — 10 mm — ownwards — 10 mm — upwards — 10 mm — upwards — 10 mm — upwards — at the side — formards — ownwards — 10 mm — ownwards — 10 mm — ownwards — at the side — formal side  connections/ Terminals  type of connectable conductor cross-section for main contacts — solid — solid or stranded — finely stranded with core end processing connectable conductor cross-section for main contacts — solid — stranded — finely stranded with core end processing connectable conductor cross-sections for main contacts — solid or stranded — finely stranded with core end processing connectable conductor cross-section for main contacts — solid or stranded — finely stranded with core end processing connectable conductor cross-section for auxiliary contacts — solid or stranded — finely stranded with core end processing - solid or stranded — finely stranded with core end processing - solid or stranded — finely stranded with core end processing - solid or stranded — finely stranded with core end processing - solid or stranded — finely stranded with core end processing - solid or stranded — finely stranded with core end processing - solid or stranded — finely stranded with core end processing - solid or stranded — finely stranded with core end processing - solid or stranded — finely stranded with core end processing - solid or stranded — finely stranded with core end processing - solid or stranded — finely stranded with core end processing - solid or stranded — finely stranded with core end processing - solid or stranded — finely stranded with core end processing - solid or stranded — finely stranded with core end processing - solid or stranded — finely stranded with core end pro	_	45 mm
with side-by-side mounting		
with side-by-side mounting	·	· · · · · · · ·
forwards upwards downwards downwards at the side forgrounded parts forwards upwards forwards forwards upwards forwards upwards downwards downwards downwards downwards for live parts forwards forwards upwards forwards forwards upwards forwards upwards forwards upwards upwards upwards upwards downwards upwards upwar		
- upwards     - downwards     - at the side     • for grounded parts     - forwards     - upwards     - upwards     - upwards     - upwards     - downwards     - downwards     - downwards     - downwards     - downwards     - forwards     - upwards     - forwards     - upwards     - upwards     - upwards     - upwards     - upwards     - upwards     - downwards     - domnwards     - domnwards     - at the side     - domnwards     - upwards     - upwards     - domnwards     - domnwards     - at the side     - domnwards     - at the side     - domnwards     - at the side     - domnwards     - domnwards     - domnwards     - domnwards     - at the side     - domnwards     - domnwa		10 mm
- downwards		
- at the side • for grounded parts - forwards - upwards - at the side - downwards • for live parts - forwards - upwards - forwards - forwards - forwards - forwards - forwards - forwards - upwards - downwards - downwards - downwards - at the side - downwards - at the side - forwards - at the side - forwards - at the side - for main current circuit - at contactor for auxiliary contacts - of magnet coil - solid - solid - solid - solid - solid - stranded - finely stranded with core end processing - solid or stranded - finely strande	•	
for grounded parts         — forwards         — upwards         — at the side         — downwards         — forwards         — upwards         — upwards         — upwards         — downwards         — downwards         — downwards         — at the side         — at the side         — for main current circuit         • for main current circuit         • for main current circuit         • at contactor for auxiliary contacts         • of magnet coil         • solid         • solid or stranded         • solid or stranded         • finely stranded with core end processing         • solid or stranded         • solid or stranded         • finely stranded with core end processing         • solid or stranded         • finely stranded with core end processing         • solid or stranded         • finely stranded with core end processing         • solid or stranded         — finely stranded with core end processing         • at a AWG cables for auxiliary contacts          • for auxiliary contacts         • for auxiliary contacts         • for auxiliary contacts         • for auxiliary contacts         • for auxiliary contacts         • for auxiliary contacts         • for auxiliary contacts         • for auxiliary contacts         • for auxiliary contacts         • for auxiliary contacts         • for auxiliary contacts         • for auxiliary contacts         • for auxiliary contacts		
- Forwards		UTIIII
- upwards - at the side - downwards • for live parts - forwards - downwards - the side - formal current circuit - for axiliary and control circuit - for axiliary and control circuit - for axiliary and control circuit - for axiliary contacts - of magnet coil - for main current circuit - for axiliary contacts - for main current circuit - for axiliary contacts - formal current circuit - for axiliary contacts - formal current circuit - for axiliary contacts - formal conductor cross-sections for main contacts - solid - finely stranded - finely stranded with core end processing - finely stranded - finely stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - at AWG cables for axililary contacts  AWG number as coded connectable conductor cross-section - for main contacts - for axiliary contacts - for ax		40
- at the side		
<ul> <li>downwards</li> <li>for live parts</li> <li>— forwards</li> <li>— upwards</li> <li>— downwards</li> <li>— downwards</li> <li>— at the side</li> <li>6 mm</li> </ul> Sometions/ Terminals type of electrical connection <ul> <li>• for auxiliary and control circuit</li> <li>• at contactor for auxiliary contacts</li> <li>• of magnet coil</li> <li>type of connectable conductor cross-sections for main contacts</li> <li>• solid</li> <li>• solid or stranded</li> <li>• finely stranded with core end processing</li> <li>• solid</li> <li>• solid or stranded</li> <li>• finely stranded with core end processing</li> <li>connectable conductor cross-section for auxiliary contacts</li> <li>• solid or stranded</li> <li>• finely stranded with core end processing</li> <li>• solid or stranded</li> <li>• finely stranded with core end processing</li> <li>• solid or stranded</li> <li>• finely stranded with core end processing</li> <li>• for auxiliary contacts</li> </ul> • for auxiliary contacts <ul> <li>• for main contacts</li> <li>• for mai</li></ul>	•	
• for live parts  — forwards — upwards — downwards — at the side  - downwards — at the side  - formactions/ Torminals  type of electrical connection • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections for main contacts • solid • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid 110 mm² • siranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid 0.5 2.5 mm²  110 mm² • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts  — solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts  — solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts  — solid or stranded • finely stranded with core end processing at AVMC cables for auxiliary contacts  AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts		
- forwards - upwards - downwards - downwards - at the side - downwards - at the side - formal current circuit - for auxiliary and control circuit - of main current circuit - of magnet coil - of magne	— downwards	10 mm
- upwards - downwards - downwards - at the side  connections/ Terminals  type of electrical connection	for live parts	
- downwards — at the side 6 mm  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 • solid • solid or stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts  • solid or stranded — finely stranded with core end processing • type of connectable conductor cross-sections • for auxiliary contacts  • solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts  AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts	— forwards	10 mm
Type of electrical connection  of or main current circuit  of or auxiliary and control circuit  oscilid or stranded  ofinely stranded with core end processing  ofinely stranded with core end processing  ofinely stranded  ofinely stranded  ofinely stranded  ofinely stranded with core end processing  connectable conductor cross-section for auxiliary contacts  osolid	— upwards	10 mm
type of electrical connection  of or main current circuit of or auxiliary and control circuit of or auxiliary and control circuit of or auxiliary contacts of magnet coil type of connectable conductor cross-sections for main contacts osolid osolid osolid of neely stranded of inely stranded with core end processing of neely stranded with core end processing of neely stranded with core end processing of neely stranded with core end processing osolid of inely stranded with core end processing of neely stranded with core end processing osolid of stranded of inely stranded with core end processing osolid osolid or stranded of inely stranded with core end processing osolid osolid or stranded of neely stranded with core end processing osolid or stranded of neely stranded with core end processing osolid or stranded of osolid or stranded	— downwards	10 mm
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 • solid • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid • solid • finely stranded with core end processing connectable conductor cross-section for main contacts • solid • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-sections • for auxiliary contacts  • solid or stranded • finely stranded with core end processing • for auxiliary contacts  • solid or stranded • finely stranded with core end processing • for auxiliary contacts  • for auxiliary contacts  • for auxiliary contacts  • for main contacts • for main contacts • for main contacts • for main contacts • for main contacts • for main contacts • for main contacts • for main contacts • for auxiliary contacts  • for main contacts • for auxiliary contacts  • for main contacts • for auxiliary contacts  • for main contacts • for auxiliary contacts  • for main contacts • for auxiliary contacts	— at the side	6 mm
<ul> <li>for main current circuit</li> <li>for auxiliary and control circuit</li> <li>at contactor for auxiliary contacts</li> <li>of magnet coil</li> <li>type of connectable conductor cross-section for main contacts</li> <li>solid</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>connectable conductor cross-section for main contacts</li> <li>solid</li> <li>solid</li> <li>finely stranded with core end processing</li> <li>finely stranded with core end processing</li> <li>connectable conductor cross-section for main contacts</li> <li>solid</li> <li>stranded</li> <li>finely stranded with core end processing</li> <li>connectable conductor cross-section for auxiliary contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>type of connectable conductor cross-sections</li> <li>for auxiliary contacts</li> <li>at AWG cables for auxiliary contacts</li> <li>for main contacts</li> <li>for auxiliary contacts</li> </ul>	Connections/ Terminals	
<ul> <li>for auxiliary and control circuit</li> <li>at contactor for auxiliary contacts</li> <li>of magnet coil</li> <li>type of connectable conductor cross-sections for main contacts</li> <li>solid</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>connectable conductor cross-section for main contacts</li> <li>solid</li> <li>stranded</li> <li>finely stranded with core end processing</li> <li>connectable conductor cross-section for main contacts</li> <li>solid</li> <li>finely stranded with core end processing</li> <li>finely stranded with core end processing</li> <li>connectable conductor cross-section for auxiliary contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>for auxiliary contacts</li> <li>for auxiliary contacts</li> <li>at AWG cables for auxiliary contacts</li> <li>for main contacts</li> <li>for auxiliary contacts</li> <li>for auxiliary contacts</li> <li>for main contacts</li> <li>for main contacts</li> <li>for main contacts</li> <li>for auxiliary contacts</li> <li>for auxiliary contacts</li> <li>for main contacts</li> <li>for main contacts</li> <li>for main contacts</li> <li>for auxiliary contacts</li> <li>for auxiliary contacts</li> <li>for auxiliary contacts</li> <li>for main contacts</li> <li>for main contacts</li> <li>for auxiliary contacts</li> </ul>	type of electrical connection	
<ul> <li>at contactor for auxiliary contacts</li> <li>of magnet coil</li> <li>type of connectable conductor cross-sections for main contacts</li> <li>solid</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>solid</li> <li>solid</li> <li>tu. 2.5 mm²), 2x (2.5 10 mm²)</li> <li>2x (1 2.5 mm²), 2x (2.5 10 mm²)</li> <li>2x (1 2.5 mm²), 2x (2.5 10 mm²)</li> <li>tu. 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²</li> <li>solid</li> <li>stranded</li> <li>finely stranded with core end processing</li> <li>finely stranded with core end processing</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>tu. 10 mm²</li> <li>tu. 10 mm²<td><ul> <li>for main current circuit</li> </ul></td><td>screw-type terminals</td></li></ul>	<ul> <li>for main current circuit</li> </ul>	screw-type terminals
of magnet coil      type of connectable conductor cross-sections for main contacts	<ul> <li>for auxiliary and control circuit</li> </ul>	screw-type terminals
type of connectable conductor cross-sections for main contacts  • solid • solid • solid or stranded • finely stranded with core end processing connectable conductor cross-section for main contacts • solid • stranded • stranded • finely stranded with core end processing connectable conductor cross-section for main contacts • solid • stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts  - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts  • for main contacts • for main contacts • for main contacts • for auxiliary contacts	<ul> <li>at contactor for auxiliary contacts</li> </ul>	Screw-type terminals
<ul> <li>contacts</li> <li>solid</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>solid</li> <li>finely stranded with core end processing</li> <li>solid</li> <li>stranded</li> <li>finely stranded with core end processing</li> <li>finely stranded with core end processing</li> <li>solid</li> <li>finely stranded with core end processing</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>for auxiliary contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>type of connectable conductor cross-sections</li> <li>for auxiliary contacts</li> <li>a KWG cables for auxiliary contacts</li> <li>at AWG cables for auxiliary contacts</li> <li>at AWG number as coded connectable conductor crosssection</li> <li>for main contacts</li> <li>for main contacts</li> <li>for auxiliary contacts</li> <li>16 8</li> <li>for auxiliary contacts</li> <li>20 14</li> </ul>	of magnet coil	Screw-type terminals
<ul> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>connectable conductor cross-section for main contacts</li> <li>solid</li> <li>stranded</li> <li>finely stranded with core end processing</li> <li>tu 10 mm²</li> <li>stranded</li> <li>finely stranded with core end processing</li> <li>tu 10 mm²</li> <li>tu 10</li></ul>	31	
<ul> <li>● finely stranded with core end processing</li> <li>connectable conductor cross-section for main contacts</li> <li>● solid</li> <li>● stranded</li> <li>● finely stranded with core end processing</li> <li>connectable conductor cross-section for auxiliary contacts</li> <li>● solid or stranded</li> <li>● finely stranded with core end processing</li> <li>1 10 mm²</li> <li>1 10 mm²</li> <li>1 10 mm²</li> <li>1 10 mm²</li> <li>2 10 mm²</li> <li>2 2.5 mm²</li> <li>1 10 mm²</li> <li>1 10 mm²</li> <li>2 2.5 mm²</li> <li>2 2</li></ul>	• solid	2x (1 2.5 mm²), 2x (2.5 10 mm²)
<ul> <li>finely stranded with core end processing</li> <li>connectable conductor cross-section for main contacts</li> <li>solid</li> <li>stranded</li> <li>finely stranded with core end processing</li> <li>finely stranded with core end processing</li> <li>solid or stranded of inely stranded with core end processing</li> <li>solid or stranded of inely stranded with core end processing</li> <li>finely stranded with core end processing</li> <li>finely stranded with core end processing</li> <li>for auxiliary contacts</li> <li>solid or stranded o</li></ul>	solid or stranded	2x (1 2.5 mm²), 2x (2.5 10 mm²)
connectable conductor cross-section for main contacts	<ul> <li>finely stranded with core end processing</li> </ul>	
<ul> <li>stranded</li> <li>finely stranded with core end processing</li> <li>connectable conductor cross-section for auxiliary contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>for auxiliary contacts</li> <li>solid or stranded</li> <li>for auxiliary contacts</li> <li>solid or stranded</li> <li>for auxiliary contacts</li> <li>finely stranded with core end processing</li> <li>at AWG cables for auxiliary contacts</li> <li>at AWG number as coded connectable conductor cross section</li> <li>for main contacts</li> <li>for auxiliary contacts</li> <li>16 8</li> <li>for auxiliary contacts</li> <li>20 14</li> </ul>	connectable conductor cross-section for main	
<ul> <li>stranded</li> <li>finely stranded with core end processing</li> <li>connectable conductor cross-section for auxiliary contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>for auxiliary contacts</li> <li>solid or stranded</li> <li>for auxiliary contacts</li> <li>solid or stranded</li> <li>for auxiliary contacts</li> <li>for auxiliary contacts</li> <li>finely stranded with core end processing</li> <li>at AWG cables for auxiliary contacts</li> <li>at AWG number as coded connectable conductor cross section</li> <li>for main contacts</li> <li>for auxiliary contacts</li> <li>16 8</li> <li>for auxiliary contacts</li> <li>20 14</li> </ul>	contacts	
<ul> <li>finely stranded with core end processing connectable conductor cross-section for auxiliary contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>for auxiliary contacts</li> <li>solid or stranded</li> <li>for auxiliary contacts</li> <li>for auxiliary contacts</li> <li>finely stranded with core end processing</li> <li>finely stranded with core end processing</li> <li>at AWG cables for auxiliary contacts</li> <li>at AWG number as coded connectable conductor cross section</li> <li>for main contacts</li> <li>for auxiliary contacts</li> <li>for auxiliary contacts</li> <li>1 10 mm²</li> <li>0.5 2.5 mm²</li> <li>0.5 2.5 mm²</li> <li>2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)</li> <li>2x (20 16), 2x (18 14)</li> </ul>		1 10 mm²
connectable conductor cross-section for auxiliary contacts  • solid or stranded • finely stranded with core end processing  • for auxiliary contacts  • solid or stranded • for auxiliary contacts  - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts  AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14)	• solid	
<ul> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>type of connectable conductor cross-sections</li> <li>for auxiliary contacts</li> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> <li>at AWG cables for auxiliary contacts</li> <li>at AWG number as coded connectable conductor cross section</li> <li>for main contacts</li> <li>for auxiliary contacts</li> <li>16 8</li> <li>for auxiliary contacts</li> <li>16 8</li> <li>for auxiliary contacts</li> <li>20 14</li> </ul>	<ul><li>solid</li><li>stranded</li></ul>	1 10 mm²
<ul> <li>finely stranded with core end processing</li> <li>type of connectable conductor cross-sections</li> <li>for auxiliary contacts</li> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> <li>at AWG cables for auxiliary contacts</li> <li>for main contacts</li> <li>for auxiliary contacts</li> <li>2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)</li> <li>2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)</li> <li>2x (20 16), 2x (18 14)</li> </ul> AWG number as coded connectable conductor cross section <ul> <li>for main contacts</li> <li>for auxiliary contacts</li> <li>20 14</li> </ul>	<ul> <li>solid</li> <li>stranded</li> <li>finely stranded with core end processing</li> <li>connectable conductor cross-section for auxiliary</li> </ul>	1 10 mm²
type of connectable conductor cross-sections  • for auxiliary contacts  — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts  AWG number as coded connectable conductor cross section  • for main contacts • for auxiliary contacts  16 8 • for auxiliary contacts  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  2x (20 16), 2x (18 14)	<ul> <li>solid</li> <li>stranded</li> <li>finely stranded with core end processing</li> <li>connectable conductor cross-section for auxiliary contacts</li> </ul>	1 10 mm <sup>2</sup> 1 10 mm <sup>2</sup>
<ul> <li>for auxiliary contacts <ul> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>at AWG cables for auxiliary contacts</li> </ul> </li> <li>AWG number as coded connectable conductor cross section <ul> <li>for main contacts</li> <li>for auxiliary contacts</li> </ul> </li> <li>16 8</li> <li>for auxiliary contacts</li> </ul> <li>16 8</li> <li>for auxiliary contacts</li> <li>2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)</li> <li>2x (20 16), 2x (18 14)</li>	<ul> <li>solid</li> <li>stranded</li> <li>finely stranded with core end processing</li> <li>connectable conductor cross-section for auxiliary contacts</li> <li>solid or stranded</li> </ul>	1 10 mm <sup>2</sup> 1 10 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup>
<ul> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> <li>• at AWG cables for auxiliary contacts</li> <li>• for main contacts</li> <li>• for auxiliary contacts</li> <li>2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)</li> <li>2x (20 16), 2x (18 14)</li> </ul> AWG number as coded connectable conductor cross section <ul> <li>• for main contacts</li> <li>• for auxiliary contacts</li> <li>20 14</li> </ul>	<ul> <li>solid</li> <li>stranded</li> <li>finely stranded with core end processing</li> <li>connectable conductor cross-section for auxiliary contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> </ul>	1 10 mm <sup>2</sup> 1 10 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup>
<ul> <li>— finely stranded with core end processing         <ul> <li>at AWG cables for auxiliary contacts</li> </ul> </li> <li>AWG number as coded connectable conductor cross section         <ul> <li>for main contacts</li> <li>for auxiliary contacts</li> </ul> </li> <li>2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)</li> <li>2x (20 14)</li> <li>4 8</li> <li>6 or auxiliary contacts</li> <li>20 14</li> </ul>	<ul> <li>solid</li> <li>stranded</li> <li>finely stranded with core end processing</li> <li>connectable conductor cross-section for auxiliary contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>type of connectable conductor cross-sections</li> </ul>	1 10 mm <sup>2</sup> 1 10 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup>
<ul> <li>at AWG cables for auxiliary contacts</li> <li>AWG number as coded connectable conductor cross section</li> <li>for main contacts</li> <li>for auxiliary contacts</li> <li>2x (20 16), 2x (18 14)</li> <li>16 8</li> <li>for auxiliary contacts</li> <li>20 14</li> </ul>	<ul> <li>solid</li> <li>stranded</li> <li>finely stranded with core end processing</li> <li>connectable conductor cross-section for auxiliary contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>type of connectable conductor cross-sections</li> <li>for auxiliary contacts</li> </ul>	1 10 mm <sup>2</sup> 1 10 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup>
AWG number as coded connectable conductor cross section  • for main contacts • for auxiliary contacts  20 14	<ul> <li>solid</li> <li>stranded</li> <li>finely stranded with core end processing</li> <li>connectable conductor cross-section for auxiliary contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>type of connectable conductor cross-sections</li> <li>for auxiliary contacts</li> <li>solid or stranded</li> </ul>	1 10 mm <sup>2</sup> 1 10 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup> 2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> )
section	<ul> <li>solid</li> <li>stranded</li> <li>finely stranded with core end processing</li> <li>connectable conductor cross-section for auxiliary contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>type of connectable conductor cross-sections</li> <li>for auxiliary contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> </ul>	1 10 mm <sup>2</sup> 1 10 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup> 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> )
• for auxiliary contacts 20 14	solid     stranded     finely stranded with core end processing     connectable conductor cross-section for auxiliary contacts     solid or stranded     finely stranded with core end processing     type of connectable conductor cross-sections     for auxiliary contacts     — solid or stranded     — finely stranded with core end processing     at AWG cables for auxiliary contacts	1 10 mm <sup>2</sup> 1 10 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup> 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> )
,	solid     stranded     finely stranded with core end processing connectable conductor cross-section for auxiliary contacts     solid or stranded     finely stranded with core end processing type of connectable conductor cross-sections     for auxiliary contacts     — solid or stranded     — finely stranded with core end processing     at AWG cables for auxiliary contacts  AWG number as coded connectable conductor cross section	1 10 mm <sup>2</sup> 1 10 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup> 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> ) 2x (20 16), 2x (18 14)
afety related data	solid     stranded     finely stranded with core end processing connectable conductor cross-section for auxiliary contacts     solid or stranded     finely stranded with core end processing type of connectable conductor cross-sections     for auxiliary contacts     — solid or stranded     — finely stranded with core end processing     at AWG cables for auxiliary contacts  AWG number as coded connectable conductor cross section	1 10 mm <sup>2</sup> 1 10 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup> 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> ) 2x (20 16), 2x (18 14)
	solid     stranded     finely stranded with core end processing     connectable conductor cross-section for auxiliary contacts     solid or stranded     finely stranded with core end processing     type of connectable conductor cross-sections         for auxiliary contacts             — solid or stranded             — finely stranded with core end processing             • at AWG cables for auxiliary contacts  AWG number as coded connectable conductor cross section         • for main contacts	1 10 mm <sup>2</sup> 1 10 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup> 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> ) 2x (20 16), 2x (18 14)

• mirror contact according to IEC 60947-4-1

B10 value with high demand rate according to SN 31920

proportion of dangerous failures • with low demand rate according to SN 31920

• with high demand rate according to SN 31920

failure rate [FIT] with low demand rate according to SN 31920

T1 value for proof test interval or service life according to IEC 61508

protection class IP on the front according to IEC 60529

touch protection on the front according to IEC 60529 suitability for use

• safety-related switching OFF

Yes

450 000

40 % 73 %

100 FIT

20 a

IP20

finger-safe, for vertical contact from the front

Yes

#### Certificates/ approvals

#### **General Product Approval**





Confirmation



KC



**EMC** 

**Functional** Safety/Safety of Machinery

**Declaration of Conformity** 

**Test Certificates** 



**Type Examination Certificate** 





**Special Test Certific-**<u>ate</u>

Type Test Certificates/Test Report

## Marine / Shipping













other

Railway

Confirmation



Confirmation

Vibration and Shock

### **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=3RT2024-1AU00

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT2024-1AU00}$ 

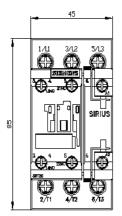
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

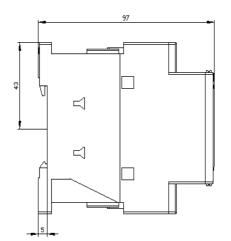
https://support.industry.siemens.com/cs/ww/en/ps/3RT2024-1AU00

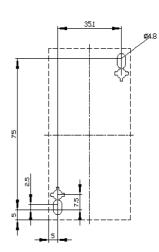
Characteristic: Tripping characteristics, I²t, Let-through current

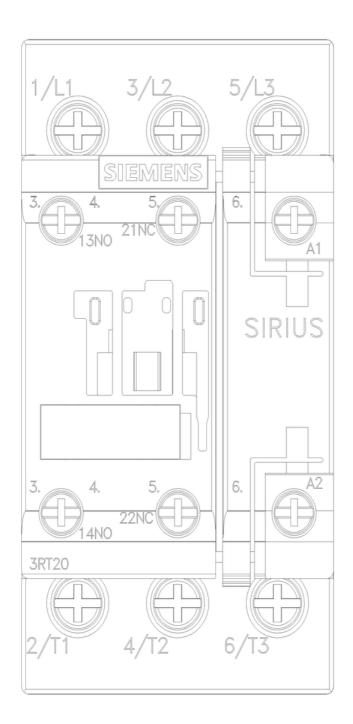
https://support.industry.siemens.com/cs/ww/en/ps/3RT2024-1AU00/char

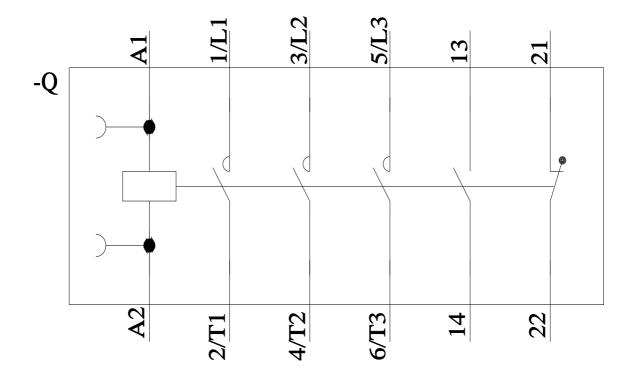
Further characteristics (e.g. electrical endurance, switching frequency)
<a href="http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2024-1AU00&objecttype=14&gridview=view1">http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2024-1AU00&objecttype=14&gridview=view1</a>











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