## **SIEMENS**

Data sheet 3RT2535-1AL20



Power contactor, AC-3 40 A, 18.5 kW / 400 V 2 NO + 2 NC 230 V AC, 50/60 Hz 4-pole size S2 screw terminals 1 NO + 1 NC integrated

product brand name	SIRIUS
product designation	contactor
product type designation	3RT25
General technical data	
size of contactor	S2
product extension	
<ul> <li>function module for communication</li> </ul>	No
auxiliary switch	Yes
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	
<ul> <li>of main circuit rated value</li> </ul>	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	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 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)	10/01/2014
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
during operation	-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	2

number of NC contacts for main contacts	2
operational current	
• at AC-1 up to 690 V	
— at ambient temperature 40 °C rated value	60 A
— at ambient temperature 40 °C rated value	55 A
• at AC-2 at AC-3 at 400 V	
— per NO contact rated value	35 A
— per NO contact rated value  — per NC contact rated value	35 A
minimum cross-section in main circuit at maximum AC-1	16 mm²
rated value	10 111111
operational current	
• at 1 current path at DC-1	
— at 24 V rated value	55 A
— at 110 V rated value	4.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.4 A
<ul> <li>with 2 current paths in series at DC-1</li> </ul>	
— at 24 V rated value	55 A
— at 110 V rated value	45 A
— at 220 V rated value	5 A
— at 440 V rated value	1 A
<ul> <li>at 1 current path at DC-3 at DC-5</li> </ul>	
<ul> <li>— at 24 V per NC contact rated value</li> </ul>	35 A
<ul> <li>— at 24 V per NO contact rated value</li> </ul>	35 A
<ul> <li>— at 110 V per NC contact rated value</li> </ul>	1.25 A
— at 110 V per NO contact rated value	2.5 A
<ul> <li>— at 220 V per NC contact rated value</li> </ul>	0.5 A
— at 220 V per NO contact rated value	1 A
— at 440 V per NC contact rated value	0.045 A
— at 440 V per NO contact rated value	0.1 A
• with 2 current paths in series at DC-3 at DC-5	
— at 24 V per NC contact rated value	55 A
— at 24 V per NO contact rated value	55 A
— at 110 V per NC contact rated value	12.5 A
at 110 V per NO contact rated value	25 A
at 220 V per NC contact rated value	2.5 A
— at 220 V per NO contact rated value	5 A
— at 440 V per NC contact rated value	0.135 A
— at 440 V per NO contact rated value	0.27 A
operating power at AC-2 at AC-3	
at 230 V per NC contact rated value	11 kW
at 230 V per NO contact rated value	11 kW
at 400 V per NC contact rated value	18.5 kW
at 400 V per NO contact rated value	18.5 kW
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>	546 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	443 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 10 s switching at zero current maximum</li> </ul>	334 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 30 s switching at zero current maximum</li> </ul>	241 A; Use minimum cross-section acc. to AC-1 rated value
limited to 60 s switching at zero current maximum	196 A; Use minimum cross-section acc. to AC-1 rated value
power loss [W] at AC-3 at 400 V for rated value of the operational current per conductor	4 W
no-load switching frequency	
• at AC	5 000 1/h
operating frequency	0 000 mi
• at AC-1 maximum	1 200 1/h
Control circuit/ Control	. 200 1/11
	۸۲
type of voltage of the control supply voltage	AC
control supply voltage at AC	230 V
at 50 Hz rated value	230 V

at 60 Hz rated value	230 V
	250 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	0.00 1.1
• at 50 Hz	210 VA
• at 60 Hz	188 VA
3.0 0 0 1	0.72
inductive power factor with closing power of the coil  • at 50 Hz	0.69
● at 50 Hz	0.65
apparent holding power of magnet coil at AC	17.2 VA
• at 50 Hz	17.2 VA
• at 60 Hz	16.5 VA
inductive power factor with the holding power of the coil	0.36
• at 50 Hz	0.36
• at 60 Hz	0.39
closing delay	
• at AC	10 80 ms
opening delay	
• at AC	10 18 ms
arcing time	10 20 ms
control version of the switch operating mechanism	AC
Auxiliary circuit	AC
	1
number of NC contacts for auxiliary contacts instantaneous contact	
number of NO contacts for auxiliary contacts	1
instantaneous contact	
operational current at AC-12 maximum	10 A
operational current at AC-15	
at 230 V rated value	6 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 60 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)
UL/CSA ratings	, , , , , , , , , , , , , , , , , , ,
yielded mechanical performance [hp]	
• for 3-phase AC motor at 460/480 V rated value	20 hp
contact rating of auxiliary contacts according to UL	A600 / P600
	7,000 / 1 000
Short-circuit protection	
design of the fuse link	
for short-circuit protection of the main circuit	0.405 4.7000 1/.400 1.40
— with type of coordination 1 required	gG: 125 A (690 V, 100 kA)
<ul> <li>— with type of assignment 2 required</li> </ul>	gG: 63A (690V, 100kA)

insuruting position  **ideb by-side mounting  **ideb side side mounting  **ideb side side side side by-side mounting sides  **ideb side side side side side side side side	required	fuse gG: 10 A
Asserting method  side-by-side mounting  side-by-side mounting  side-by-side mounting  side-by-side mounting  yes  114 mm  15 mm  required spacing  with side-by-side mounting  - forwards - backwards - upwards - downwards - at the side - upwards - backwards - upwards - forgrounded parts - forgrounded parts - forwards - upwards - at the side - upwards - backwards - upwards - backwards - upwards - on mm - downwards - on mm - of orgrounded parts - forwards - on mm - one-ctoops - for live parts - forwards - on mm - one-ctoops of mm - backwards - on mm - one-ctoops of mm - backwards - on mm - one-ctoops of mm - backwards - on mm - one-ctoops of mm - one-ctoops of mm - backwards - on mm - one-ctoops of mm - one-ctoops of mm - upwards - backwards - on mm - one-ctoops of mm - one-ctoop	stallation/ mounting/ dimensions	
• side-by-side mounting	mounting position	
Meight	fastening method	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
### A	side-by-side mounting	Yes
required spacing  - with side-by-side mounting  - horwards - backwards - of mm - upwards - of mm - of grounded parts - for mards - backwards - of mm - backwards - of mm - backwards - of mm - upwards - of mm - backwards - of mm - odwnwards - of mm - of mm - odwnwards - odwnwards - odwnwards - odwnwards - of mm - odwnwards - odwnwards - of mm - odwnwards	height	114 mm
evith side-by-side mounting  - forwards - backwards - upwards - downwards - at the side - for grounded parts - forwards - backwards - upwards - forwards - upwards - upwards - upwards - downwards - upwards - for live parts - forwards - downwards - for live parts - forwards - downwards - upwards - backwards - upwards - for live parts - forwards - upwards - backwards - upwards - for main current - backwards - upwards - upwards - backwards - upwards - upward	width	75 mm
with side-by-side mounting     — forwards     — backwards     — upwards     — downwards     — at the side     of or grounded parts     — forwards     — backwards     — ownwards     — backwards     — ownwards     — backwards     — upwards     — at the side     — ownwards     — at the side     — ownwards     — ownwards     — ownwards     — of orwards     — ownwards     — backwards     — ownwards     — own	depth	130 mm
forwards backwards upwards dommards at the side of grounded parts forwards backwards of grounded parts forwards backwards backwards backwards backwards backwards backwards backwards backwards backwards of mm backwards of mm backwards of mm backwards of mm of mm backwards of mm of mm backwards of mm of mm backwards of mm of m	required spacing	
backwards	<ul><li>with side-by-side mounting</li></ul>	
- upwards - downwards - at the side • for grounded parts - forwards - backwards - upwards - at the side - upwards - at the side - upwards - at the side - downwards - downwards - downwards - for live parts - forwards - backwards - backwards - backwards - backwards - backwards - upwards - backwards - upwards - backwards - upwards - backwards - upwards - downwards - downwards - at the side - upwards - downwards - at the side - upwards - downwards - at the side - upwards - so mm - upwards - downwards - at the side - upwards - so mm - upwards - so mm - upwards - downwards - at the side - upwards - so mm	— forwards	0 mm
- downwards - at the side	— backwards	0 mm
- at the side  • for grounded parts  - forwards  - backwards  - upwards  - at the side  10 mm  - downwards  • for live parts  - forwards  - upwards  - backwards  0 mm  • for live parts  - forwards  - backwards  0 mm  - backwards  0 mm  - backwards  0 mm  - backwards  0 mm  - downwards  50 mm  - downwards  50 mm  - downwards  50 mm  - downwards  - upwards  - downwards  - downwards  50 mm  - at the side  10 mm  - at the side  10 mm  - at the side  - at the side  10 mm  - at the side  10 mm  - at the side  10 mm  - at the side  - at manual trent circuit  • for auxiliary and control circuit  • for auxiliary and control circuit  • for auxiliary and control circuit  - solid  - solid or stranded  - finely stranded with core end processing  • at AWG cables for main contacts  - solid  - solid or stranded  - finely stranded with core end processing  • at AWG cables for auxiliary contacts  - solid or stranded  - finely stranded with core end processing  • at AWG cables for auxiliary contacts  - solid or stranded  - finely stranded with core end processing  • at AWG cables for auxiliary contacts  - solid or stranded  - finely stranded with core end processing  • at AWG cables for auxiliary contacts  - solid or stranded  - finely stranded with core end processing  • at AWG cables for auxiliary contacts  - solid or stranded  - finely stranded with core end processing  • at AWG cables for auxiliary contacts  - solid or stranded  - finely stranded with core end processing  • at AWG cables for auxiliary contacts  - solid or stranded  - finely stranded with core end processing  • at AWG cables for auxiliary contacts  - solid or stranded  - finely stranded with core end processing  • at AWG cables for auxiliary contacts  - solid or stranded  - finely stranded with core end processing  • at AWG cables for auxiliary contacts  - solid or stranded  - finely stranded with core end processing  • at AWG cables for auxiliary contacts  - solid or stranded  - solid or stranded  - finely stranded with core end processing  • at AWG cables fo	— upwards	0 mm
• for grounded parts  — forwards — backwards — upwards — at the side — downwards 50 mm  • for live parts — forwards — backwards — upwards — 50 mm — downwards — 50 mm — downwards — at the side — 10 mm — onnections/ Terminals  type of electrical connection • for main current circuit • of magnet coll • at contactor for auxiliary contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for auxillary contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for auxillary contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for auxillary contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for auxillary contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for provided function • mirror contact according to IEC 60947-4-1 • positively driven operation according to IEC 60947-5-1  Pyes  No  touch protection on the front according to IEC 60529  finely stranded contact from the front	— downwards	0 mm
- forwards - backwards - upwards - at the side - downwards - for live parts - forwards - backwards - forwards - backwards - upwards - downwards - for awailiary and control circuit - solid or main cortaction - solid or main cortacts - solid - solid or stranded - finely stranded with core end processing - at AWG cables for main contacts - solid - solid or stranded - finely stranded with core end processing - 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 - 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 - solid or stranded - solid or str	— at the side	0 mm
backwards upwards upwards at the side downwards for live parts forwards backwards backwards backwards upwards backwards upwards backwards upwards downwards downwards at the side solid acontaction for main current circuit for auxiliary and control circuit for auxiliary contacts of magnet coil solid or stranded solid or stranded finely stranded with core end processing at AWG cables for main contacts solid solid or stranded solid or stranded finely stranded with core end processing solid or stranded solid or	<ul> <li>for grounded parts</li> </ul>	
- upwards - at the side - downwards 50 mm  for live parts - forwards - backwards - upwards - downwards - downwards - downwards - downwards - at the side - at contact for auxiliary and control circuit - for auxiliary and control circuit - at contact for auxiliary contacts - a colid action contacts - solid - solid or stranded - finely stranded with core end processing - at AWG cables for main contacts - solid - solid or stranded - finely stranded - finely stranded - solid or strande - solid or strande - solid or strande - solid or str	— forwards	0 mm
- at the side	— backwards	0 mm
• for live parts  • for live parts  — forwards — backwards — upwards — downwards — at the side — of main current circuit • at contactor for auxiliary contacts • of magnet coil — solid — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts  — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts  — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts  — solid — 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  • at AWG cables for auxiliary contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts — solid or stranded — finely stranded with core end processing • at AWG cables for auxili	— upwards	50 mm
• for live parts  — forwards — backwards — upwards — downwards — at the side — at the side — at the side — to main current circuit — for auxiliary and control circuit — at contactor for auxiliary contacts — of magnet coil  **Screw-type terminals **Screw-type terminals **Screw-type terminals **Screw-type terminals  **To magnet coil **Screw-type terminals **Screw-type terminals **Screw-type terminals  **Screw-typ	— at the side	10 mm
fonwards backwards backwards downwards downwards at the side downwards at the side at the side dometions/ Terminals type of electrical connection  for main current circuit for auxiliary and control circuit for auxiliary and control circuit for auxiliary and control circuit for auxiliary contacts for magnet coil solid solid or stranded finely stranded with core end processing at AWG cables for main contacts solid solid or stranded finely stranded with core end processing at AWG cables for main contacts solid solid or stranded finely stranded with core end processing at AWG cables for main contacts solid solid or stranded finely stranded with core end processing finely stranded with core end processing at AWG cables for main contacts solid solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid solid or stranded finely stranded with core end processing solid or stranded finely stranded with core end processing solid or stranded solid or stra	— downwards	50 mm
- backwards - upwards - downwards - downwards - at the side  connections/ Terminals  type of electrical connection  • for main current circuit • at contactor for auxiliary and control 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 • at AWG cables for main contacts - solid - solid or stranded - finely stranded with core end processing • at AWG cables for main contacts - solid - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts - solid - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts - solid - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts - solid - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts - solid - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts - solid - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts - solid - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts - solid - solid or stranded - finely stranded with core end processing - solid - solid or stranded - solid or strander - solid - solid or strander - solid - solid or str	for live parts	
- upwards	— forwards	0 mm
- downwards 50 mm - at the side 10 mm   connections/ Terminals  type of electrical connection	— backwards	0 mm
type of electrical connection  • for main current circuit  • for auxiliary and control circuit  • at contactor for auxiliary contacts  • of main contacts  • of main contacts  — solid — solid or stranded — finely stranded with core end processing • of connectable conductor cross-sections  • for on contacts  • solid 2x (1 35 mm²), 1x (1 50 mm²) — x (1 35 mm²), 1x (1 50 mm²) — 2x (1 35 mm²), 1x (1 50 mm²) — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts  — solid — solid or stranded — finely stranded with core end processing • for auxiliary contacts — solid — 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  AWG number as coded connectable conductor cross section for main contacts  afety related data  product function • mirror contact according to IEC 60947-5-1  protection class IP on the front according to IEC 60529  finger-safe, for vertical contact from the front	— upwards	50 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 • for auxiliary contacts  — solid — solid or stranded (2x (1 35 mm²), 1x (1 50 mm²) — 2x (1 35 mm²), 1x (1 50 mm²) — 2x (1 25 mm²), 1x (1 50 mm²) — 2x (1 25 mm²), 1x (1 50 mm²) — 2x (1 25 mm²), 1x (1 50 mm²) — 2x (1 25 mm²), 1x (1 50 mm²) — finely stranded with core end processing • for auxiliary contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables 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  afety related data  product function • mirror contact according to IEC 60947-4-1 • positively driven operation according to IEC 60947-5-1  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front	— downwards	50 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 • for auxiliary contacts  — solid — solid or stranded conductor cross-sections  • for auxiliary contacts  — solid — solid or stranded with core end processing • at AWG cables for main contacts  — solid — solid or stranded — finely stranded with core end processing • for auxiliary contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables 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  atety related data  product function • mirror contact according to IEC 60947-4-1 • positively driven operation according to IEC 60947-5-1  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  touch protection on the front according to IEC 60529  touch protection on the front according to IEC 60529  touch protection on the front according to IEC 60529  touch protection on the front according to IEC 60529  touch protection on the front according to IEC 60529	— at the side	10 mm
• for main current circuit • for auxiliary and control 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 • at AWG cables for main contacts — solid — solid or auxiliary contacts  • for auxiliary contacts • for auxiliary contacts  • for main contacts — solid — finely stranded with core end processing • for auxiliary contacts • for auxiliary contacts  •	onnections/ Terminals	
• 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 • at AWG cables for main contacts  — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts  • for auxiliary contacts  — solid — solid or stranded — solid or stranded (2x (1 35 mm²), 1x (1 50 mm²)  2x (1 35 mm²), 1x (1 50 mm²)  2x (1 35 mm²), 1x (1 50 mm²)  2x (1 25 mm²), 1x (1 50 mm²)  2x (2	type of electrical connection	
• 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 • at AWG cables for main contacts  — solid — solid — solid or stranded (2x (1 35 mm²), 1x (1 50 mm²) — at AWG cables for main contacts  • for auxiliary contacts — solid — solid or stranded — finely stranded with core end processing • for auxiliary contacts — solid — solid or stranded — finely stranded with core end processing • for auxiliary contacts  — solid — 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  afety related data  product function • mirror contact according to IEC 60947-4-1 • positively driven operation according to IEC 60947-5-1  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front	for main current circuit	screw-type terminals
• of magnet coil  type of connectable conductor cross-sections  • for main contacts  — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts  — solid — solid or stranded  • type of connectable conductor cross-sections • for auxiliary contacts — solid — solid or stranded — solid or stranded — finely stranded with core end processing • for auxiliary contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for maxiliary contacts — solid — 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  afety related data  product function • mirror contact according to IEC 60947-4-1 • positively driven operation according to IEC 60947-5-1  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front	<ul> <li>for auxiliary and control circuit</li> </ul>	screw-type terminals
type of connectable conductor cross-sections  • for main contacts  — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts  — solid — solid or stranded (2x (1 35 mm²), 1x (1 50 mm²)  2x (1 25 mm²), 1x (1 35 mm²)  2x (1 25 mm²), 1	at contactor for auxiliary contacts	Screw-type terminals
• for main contacts	of magnet coil	Screw-type terminals
- solid - solid or stranded - solid or stranded - finely stranded with core end processing - at AWG cables for main contacts - solid - solid or stranded - solid or stranded - solid -	type of connectable conductor cross-sections	
- solid or stranded - finely stranded with core end processing • at AWG cables for main contacts  • for auxiliary contacts - solid - solid or stranded with core end processing - solid or stranded with core end processing - at AWG cables for auxiliary contacts  AWG number as coded connectable conductor cross section for main contacts  afety related data  product function - mirror contact according to IEC 60947-4-1 - positively driven operation according to IEC 60947-5-1  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front	• for main contacts	
- finely stranded with core end processing  • at AWG cables for main contacts  type of connectable conductor cross-sections  • for auxiliary contacts  - solid - solid 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) - solid 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) - 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  afety related data  product function - mirror contact according to IEC 60947-4-1 - positively driven operation according to IEC 60947-5-1  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front	— solid	2x (1 35 mm²), 1x (1 50 mm²)
at AWG cables for main contacts      type of connectable conductor cross-sections         • for auxiliary contacts	— solid or stranded	2x (1 35 mm²), 1x (1 50 mm²)
type of connectable conductor cross-sections  • for auxiliary contacts  — solid — solid or stranded — 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  afety related data  product function • mirror contact according to IEC 60947-4-1 • positively driven operation according to IEC 60947-5-1  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front	<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 25 mm²), 1x (1 35 mm²)
type of connectable conductor cross-sections		
<ul> <li>for auxiliary contacts         — solid         — solid or stranded         — solid or stranded         — finely stranded with core end processing         — finely stranded with core end processing         — at AWG cables for auxiliary contacts  AWG number as coded connectable conductor cross section for main contacts  afety related data  product function         — mirror contact according to IEC 60947-4-1         — positively driven operation according to IEC 60947-5-1  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front</li> </ul>	type of connectable conductor cross-sections	
- 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  afety related data  product function  • mirror contact according to IEC 60947-4-1 Yes - positively driven operation according to IEC 60947-5-1  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front		
<ul> <li>— finely stranded with core end processing</li> <li>at AWG cables for auxiliary contacts</li> <li>AWG number as coded connectable conductor cross section for main contacts</li> <li>afety related data</li> <li>product function</li> <li>mirror contact according to IEC 60947-4-1</li> <li>positively driven operation according to IEC 60947-5-1</li> <li>protection class IP on the front according to IEC 60529</li> <li>finger-safe, for vertical contact from the front</li> </ul>	— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
at AWG cables for auxiliary contacts  AWG number as coded connectable conductor cross section for main contacts  afety related data  product function     mirror contact according to IEC 60947-4-1     positively driven operation according to IEC 60947-5-1  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front	— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
at AWG cables for auxiliary contacts  AWG number as coded connectable conductor cross section for main contacts  afety related data  product function     mirror contact according to IEC 60947-4-1     positively driven operation according to IEC 60947-5-1  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front	— finely stranded with core end processing	
AWG number as coded connectable conductor cross section for main contacts  afety related data  product function  • mirror contact according to IEC 60947-4-1 • positively driven operation according to IEC 60947-5-1  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front		
product function	-	
Product function	AWG number as coded connectable conductor cross	
mirror contact according to IEC 60947-4-1     positively driven operation according to IEC 60947-5-1  Protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front		
positively driven operation according to IEC 60947-     5-1  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front	section for main contacts	
protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 finger-safe, for vertical contact from the front	section for main contacts afety related data	
60529 touch protection on the front according to IEC 60529 finger-safe, for vertical contact from the front	section for main contacts afety related data product function	Yes
	section for main contacts  afety related data  product function  • mirror contact according to IEC 60947-4-1  • positively driven operation according to IEC 60947-	
ertificates/ approvals	section for main contacts  afety related data  product function  • mirror contact according to IEC 60947-4-1  • positively driven operation according to IEC 60947-5-1  protection class IP on the front according to IEC	No
	section for main contacts  afety related data  product function  • mirror contact according to IEC 60947-4-1  • positively driven operation according to IEC 60947-5-1  protection class IP on the front according to IEC 60529	No IP20





Confirmation



<u>KC</u>



Functional
EMC Safety/Safety of
Machinery

**Declaration of Conformity** 

**Test Certificates** 



Type Examination Certificate



UK Declaration of Conformity Special Test Certificate

Type Test Certificates/Test Report

## Marine / Shipping













Marine / Shipping

other

Railway

**Dangerous Good** 



Confirmation

Vibration and Shock

<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=3RT2535-1AL20

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2535-1AL20

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2535-1AL20

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

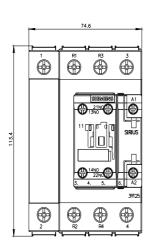
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2535-1AL20&lang=en

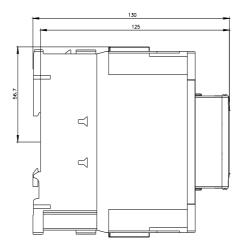
Characteristic: Tripping characteristics, I2t, Let-through current

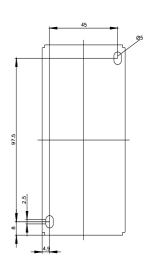
https://support.industry.siemens.com/cs/ww/en/ps/3RT2535-1AL20/char

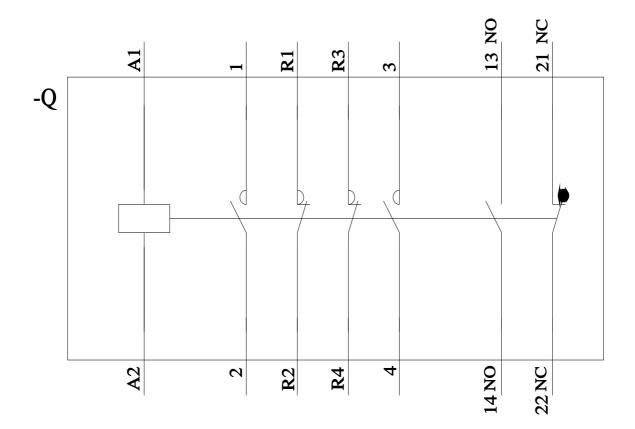
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2535-1AL20&objecttype=14&gridview=view1









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