## **SIEMENS**

Data sheet 3RT2025-2AP60



power contactor, AC-3 17 A, 7.5 kW / 400 V 1 NO + 1 NC, 220 V AC, 50 Hz, 240 V, 60 Hz, 3-pole, Size S0, Spring-type 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	2.7 W
• per pole	0.9 W
power loss [W] for rated value of the current without load current share typical	7.9 W
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 acc. 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 (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 acc. to IEC 81346-2	Q
Substance Prohibitance (Date)	01.10.2009 00:00:00
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
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage at AC-3 rated value maximum	690 V

operational current	
at AC-1 at 400 V at ambient temperature 40 °C     reted value.	40 A
rated value  ● at AC-1	
	40.4
<ul> <li>— up to 690 V at ambient temperature 40 °C rated value</li> </ul>	40 A
— up to 690 V at ambient temperature 60 °C	35 A
rated value	
• at AC-3	
— at 400 V rated value	17 A
— at 500 V rated value	17 A
— at 690 V rated value	13 A
<ul> <li>at AC-4 at 400 V rated value</li> </ul>	15.5 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>	14.1 A
• at AC-6a	
<ul> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	11.4 A
— up to 400 V for current peak value n=20 rated value	11.4 A
— up to 500 V for current peak value n=20 rated value	11.4 A
— up to 690 V for current peak value n=20 rated value	11.3 A
• at AC-6a	7.6 A
— up to 230 V for current peak value n=30 rated value	
— up to 400 V for current peak value n=30 rated value	7.6 A
— up to 500 V for current peak value n=30 rated value	7.6 A
— up to 690 V for current peak value n=30 rated value	7.6 A
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	7.7 A
at 690 V rated value	7.7 A
operational current	
<ul> <li>at 1 current path at DC-1</li> </ul>	
— at 24 V rated value	35 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
with 2 current paths in series at DC-1  at 24 V reted value.	25.4
— at 24 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
<ul><li>with 3 current paths in series at DC-1</li><li>— at 24 V rated value</li></ul>	35 A
— at 110 V rated value	35 A
— at 220 V rated value	35 A
— at 440 V rated value	2.9 A
— at 600 V rated value	1.4 A
operational current	
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	20 A
at =	

— at 110 V rated value	2.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.09 A
— at 600 V rated value	0.06 A
<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>	
— at 24 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
<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul>	
— at 24 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-3	
— at 230 V rated value	4 kW
— at 400 V rated value	7.5 kW
— at 500 V rated value	7.5 kW
— at 690 V rated value	11 kW
operating power for approx. 200000 operating cycles	
at AC-4	
<ul> <li>at 400 V rated value</li> </ul>	3.5 kW
at 690 V rated value	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 kV·A
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	7.8 kV·A
<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	9.9 kV·A
up to 690 V for current peak value n=20 rated value	13.6 kV·A
operating apparent power at AC-6a	
<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	3 kV·A
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	5.2 kV·A
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	6.6 kV·A
up to 690 V for current peak value n=30 rated value	9.1 kV·A
short-time withstand current in cold operating state up to 40 °C	
Iimited to 1 s switching at zero current maximum	225 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	225 A; Use minimum cross-section acc. to AC-1 rated value
	180 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> </ul>	115 A; Use minimum cross-section acc. to AC-1 rated value
limited to 50 s switching at zero current maximum     limited to 60 s switching at zero current maximum	96 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	OO 71, OOC HIIIIIII GIOGO SECTION ACC. TO AC-1 TALEU VAIUE
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-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	220 V
at 60 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
• at 60 Hz	0.8 1.1

apparent pick-up power of magnet coil at AC  • at 50 Hz • at 60 Hz  inductive power factor with closing power of the coil • at 50 Hz • at 60 Hz  • at 60 Hz  o at 60 Hz  apparent holding power of magnet coil at AC • at 50 Hz • at 60 Hz  inductive power factor with the holding power of the coil • at 50 Hz  • at 50 Hz  o .25	
at 60 Hz  inductive power factor with closing power of the coil  at 50 Hz  at 60 Hz  0.72  at 60 Hz  other inductive power of magnet coil at AC  at 50 Hz  at 60 Hz  7.9 V·A  at 60 Hz  inductive power factor with the holding power of the coil	
inductive power factor with closing power of the coil  • at 50 Hz • at 60 Hz  apparent holding power of magnet coil at AC  • at 50 Hz • at 60 Hz  • at 60 Hz  • at 60 Hz  inductive power factor with the holding power of the coil	
<ul> <li>at 50 Hz</li> <li>at 60 Hz</li> <li>apparent holding power of magnet coil at AC</li> <li>at 50 Hz</li> <li>at 50 Hz</li> <li>at 60 Hz</li> <li>inductive power factor with the holding power of the coil</li> </ul>	
<ul> <li>at 60 Hz</li> <li>apparent holding power of magnet coil at AC</li> <li>at 50 Hz</li> <li>at 60 Hz</li> <li>at 60 Hz</li> <li>inductive power factor with the holding power of the coil</li> </ul>	
apparent holding power of magnet coil at AC  • at 50 Hz  • at 60 Hz  inductive power factor with the holding power of the coil	
<ul> <li>at 50 Hz</li> <li>at 60 Hz</li> <li>inductive power factor with the holding power of the coil</li> </ul>	
• at 60 Hz  inductive power factor with the holding power of the coil	
inductive power factor with the holding power of the coil	
coil	
at 50 Hz	
♥ at 00 HZ	
● at 60 Hz 0.28	
closing delay	
● at AC 8 40 ms	
opening delay	
• at AC 4 16 ms	
arcing time 10 10 ms	
control version of the switch operating mechanism  Standard A1 - A2	
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous contact	
number of NO contacts for auxiliary contacts instantaneous contact  1	
operational current at AC-12 maximum 10 A	
operational current at AC-15	
• at 230 V rated value 10 A	
• at 400 V rated value 3 A	
at 500 V rated value     2 A	
at 690 V rated value     1 A	
operational current at DC-12	
• at 24 V rated value 10 A	
• at 48 V rated value 6 A	
• at 60 V rated value 6 A	
• at 110 V rated value 3 A	
• at 125 V rated value 2 A	
at 220 V rated value     1 A	
at 600 V rated value     0.15 A	
operational current at DC-13	
• at 24 V rated value 10 A	
• at 48 V rated value 2 A	
• at 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	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value 14 A	
at 600 V rated value  17 A	
yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V rated value 1 hp	
— at 230 V rated value 3 hp	
• for 3-phase AC motor	
— at 200/208 V rated value 3 hp	

A600 / P600	— at 575/600 V rated value	15 hp
design of the fuse link   - for short-circuit protection of the main circuit   - with type of coordination 1 required   - with type of assignment 2 required   - with type of assignment 2 required   - for short-circuit protection of the auxiliary switch required   for short-circuit protection of the auxiliary switch required   - for short-circuit protection of the auxiliary switch required   - for short-circuit protection of the auxiliary switch required   - for short-circuit protection of the auxiliary switch required   - for short-circuit protection of the auxiliary switch required   - for short-circuit protection of the auxiliary switch required   - for short-circuit protection of the auxiliary switch required   - for short-circuit protection of the auxiliary switch required   - forwards   - forw		
• for short-circuit protection of the main circuit — with type of assignment 2 required 6 or short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary contacts • side-by-side mounting • side-by-side mounting • side-by-side mounting • with side by-side mounting • with side by-side mounting • forwards • of grounded parts - lowards - at the side • downwards - at the side • downwards - downwards - at the side - downwards - downwards - for live parts - for five parts - for five parts - for five parts - for main current circuit • of a usuiting and control circuit • of or auxiliary and control circuit • of main current circuit • of main		
with type of assignment 2 required	design of the fuse link	
	<ul> <li>for short-circuit protection of the main circuit</li> </ul>	
• for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fasterning method  • side-by-side mounting  height  forward and backward by ** 22.5" on vertical mounting surface: can be tilted orward and backward by ** 22.5" on vertical mounting surface: screw and snap-on mounting onto 35 mm standard mounting rall according to DN EN 60716  **Yes  **Pess or a snap-on mounting onto 35 mm standard mounting rall according to DN EN 60716  **Pess or a snap-on mounting onto 35 mm standard mounting rall according to DN EN 60716  **Pess or a snap-on mounting onto 35 mm standard mounting rall according to DN EN 60716  **Pess or a snap-on mounting onto 35 mm standard mounting rall according to DN EN 60716  **Pess or a snap-on mounting onto 35 mm standard mounting rall according to DN EN 60716  **Pess or a snap-on mounting onto 35 mm standard mounting rall according to DN EN 60716  **Pess or a snap-on mounting onto 35 mm standard mounting rall according to DN EN 60716  **Pess or an ap-on mounting onto 35 mm standard mounting rall according to DN EN 60716  **Pess or an ap-on mounting onto 35 mm standard mounting rall according to DN EN 60716  **Pess or an ap-on mounting onto 35 mm standard mounting rall according to DN EN 60716  **Pess or an ap-on mounting onto 35 mm standard mounting rall according to DN EN 60716  **Pess or an ap-on mounting onto 35 mm standard mounting rall according to DN EN 60716  **Pess or an ap-on mounting onto 35 mm standard mounting rall according to DN EN 60716  **Pess or an ap-on mounting onto 35 mm standard mounting rall according to DN EN 60716  **Pess or an ap-on mounting onto 35 mm standard mounting rall according to DN EN 60716  **Pess or an ap-on mounting onto 35 mm standard mounting rall according to DN EN 60716  **Pess or an ap-on mounting onto 35 mm standard mounting rall according to DN EN 60716  **Pess or an ap-on mounting onto 35 mm standard mounting rall according to DN EN 60716  **Pess or an ap-on mounting onto 35 mm standard mo	<ul> <li>— with type of coordination 1 required</li> </ul>	gG: 63A (690V,100kA), aM: 32A (690V,100kA), BS88: 63A (415V,80kA)
required muniting dimensions  mounting position  fastering method  side-by-side mounting  • side-by-side mounting  • side-by-side mounting  **Page of the side of	<ul> <li>— with type of assignment 2 required</li> </ul>	gG: 25A (690V,100kA), aM: 20A (690V,100kA), BS88: 25A (415V,80kA)
mounting position    4/-180" rotation possible on vertical mounting surface: can be titled forward and backward by 4/- 22,5" on vertical mounting surface: screw and snap-on mounting onto 35 mm standard mounting rail according to DN EN 60715   4		gG: 10 A (500 V, 1 kA)
forward and backward by +- 22.5° on vertical mounting surface  side-by-side mounting  side-by-side mounting  height  width  depth  102 mm  required spacing  with side-by-side mounting  - forwards  - upwards  - downwards  - for grounded parts  - forwards  - the side  for grounded parts  - forwards  - upwards  - the side  for grounded parts  - forwards  - upwards  - the side  for grounded parts  - forwards  - upwards  - the side  for live parts  - forwards  - townwards  for live parts  - forwards  - townwards  for live parts  - forwards  - upwards  for live parts  - forwards  - townwards  for live parts  - forwards  - townwards  for live parts  - downwards  - townwards  - townwards  for live parts  - downwards  - townwards  -	Installation/ mounting/ dimensions	
Session   Sess	mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted
side-by-side mounting  Yes  height  width  45 mm  depth  97 mm  required spacing  • with side-by-side mounting  — forwards — upwards — downwards — downwards — the side • for grounded parts — forwards — upwards — 10 mm  — downwards — upwards — 10 mm  — downwards — upwards — 10 mm  — of orwards — upwards — 10 mm  — other lies side — downwards — upwards — 10 mm  — other lies side — downwards — 10 mm  • for live parts — forwards — upwards — the side — downwards — 10 mm  • for live parts — forwards — upwards — 10 mm — odownwards — of main current circuit — of in auxiliary and control circuit • for auxiliary and control circuit • for auxiliary and control circuit • for fampent 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 • stranded • finely stranded with core end processing • at AWG cables for main contacts • solid • stranded • finely stranded with core end processing • finely stranded with core end processin		· · · · · · · · · · · · · · · · · · ·
eside-by-side mounting   Mes	fastening method	
width     45 mm       depth     97 mm       required spacing     97 mm       • with side-by-side mounting     10 mm       — upwards     10 mm       — downwards     10 mm       — downwards     10 mm       — for grounded parts     10 mm       — upwards     10 mm       — downwards     10 mm       — downwards     10 mm       — forwards     10 mm       — downwards     10 mm       — ownwards     10 mm       — downwards     10 mm       — ownwards     10 mm       — ownwards     10 mm       — ownections? Tominals     spring-loaded terminals       type of electrical connection     spring-loaded terminals       > for main contacts     spring-loaded terminals   <	• side-by-side mounting	
required spacing  • with side-by-side mounting  — forwards — upwards — downwards — 10 mm — downwards — 10 mm — for grounded parts — for grounded parts — for grounded parts — upwards — upwards — upwards — upwards — at the side — downwards — 10 mm — downwards — to mm — downwards — 10 mm — downwards — upwards — for live parts — forwards — upwards — downwards — 10 mm — downwards — upwards — the side — downwards — upwards — the side — downwards — to mm — to real validary and control circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil — solid or stranded — finely stranded with core end processing • at AVNC cables for main contacts • solid • stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded withou		102 mm
required spacing  with side-by-side mounting — forwards — upwards — downwards — at the side — of or grounded parts — forwards — upwards — 10 mm — other side — of mm — other side — of mm — other side —	width	45 mm
• with side-by-side mounting  - forwards - upwards - downwards - at the side • for grounded parts - forwards - upwards - at the side • for grounded parts - forwards - upwards - at the side - downwards - at the side - downwards - for live parts - for forwards - upwards - for live parts - forwards - upwards - downwards - 10 mm - for live parts - forwards - upwards - upwards - upwards - downwards - 10 mm - for min current circuit - at the side - at the side - at the side - at the side  Connections/ Terminals  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 - finely stranded with core e	depth	97 mm
forwards	required spacing	
- upwards - downwards - at the side • for grounded parts - forwards - upwards - upwards - at the side • for min contacts - at the side - downwards - downwards - downwards - downwards - for live parts - forwards - upwards - for live parts - forwards - upwards - downwards - upwards - downwards - downwards - at the side - domnwards - at the side - forman current circuit - for auxiliary and control circuit - for auxiliary and control circuit - so for main current circuit - for auxiliary and control circuit - so loid - solid - finely stranded without core end processing - at AWG cables for main contacts - solid - solid - solid - solid - solid - solid - finely stranded without core end processing - finely s	<ul> <li>with side-by-side mounting</li> </ul>	
- downwards - at the side • for grounded parts - forwards - upwards - at the side • for many side of man side of m	— forwards	10 mm
- at the side  • for grounded parts  - forwards  - upwards  - at the side  - downwards  • for live parts  - forwards  - upwards  - forwards  - forwards  - forwards  - forwards  - forwards  - forwards  - upwards  - upwards  - downwards  - at the side  - at the side  - at the side  - forwards  - at the side  - forwards	— upwards	10 mm
• for grounded parts	— downwards	10 mm
- forwards	— at the side	0 mm
- upwards - at the side - downwards 10 mm  for live parts - forwards 10 mm  - upwards 10 mm  - upwards 10 mm  - upwards 10 mm  - downwards 10 mm  - at the side 6 mm  Connections/ Terminals  type of electrical connection • 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 current sircuit • at contactor for auxiliary contacts - solid - solid or stranded - finely stranded with core end processing • at AWG cables for main contacts • solid • stranded • finely stranded with core end processing • finely stranded without core end processing	<ul> <li>for grounded parts</li> </ul>	
- at the side — downwards — 10 mm  • for live parts — forwards — 10 mm  — ownwards — 10 mm — downwards — 10 mm — at the side — 6 mm  Connections/ Terminals  type of electrical connection  • for main current circuit — spring-loaded terminals • of magnet coil — spring-loaded terminals • spring-loaded	— forwards	10 mm
- downwards  • for live parts  - forwards  - upwards  - downwards  - at the side  Connections/ Torminals  type of electrical connection  • for main current circuit  • for auxiliary and control circuit  • for auxiliary and control circuit  • at contactor for auxiliary contacts  • for main contacts  - solid  - solid or stranded  - finely stranded with core end processing  • at AWG cables for main contacts  • solid  • 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  • finely stranded without core end processing	— upwards	10 mm
• for live parts  — forwards — upwards — downwards — at the side  Connections/ Terminals  type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil  type of connectable conductor cross-sections • for main contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts  • solid • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • solid or stranded • finely stranded with core end processing	— at the side	6 mm
forwards		10 mm
- upwards - downwards - at the side  Connections/ Terminals  type of electrical connection  • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil  type of connectable conductor cross-sections • for main contacts  - solid - solid or stranded - finely stranded with out core end processing • at AWG cables for main contacts  • solid • stranded • finely stranded with out core end processing • finely stranded with out core end processing • finely stranded with out core end processing • solid • stranded • finely stranded with out core end processing • solid • stranded • finely stranded without core end processing • finely stranded without core end processing • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • solid or stranded • finely stranded with core end processing • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing	•	
- downwards - at the side  Connections/ Terninals  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 without core end processing • at AWG cables for main contacts  connectable conductor cross-section for main contacts  • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded without core end processing • solid or stranded • finely stranded without core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • finely stranded without core end processing		
- at the side  Connections/ Terminals  type of electrical connection  • for main current circuit spring-loaded terminals • at contactor for auxiliary contacts Spring-type terminals • of magnet coil Spring-type terminals  • for main contacts  - solid Syring-type terminals  - solid or stranded - solid Syring-type terminals  - solid Syring-ty	•	
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 without core end processing • at AWG cables for main contacts  • solid • stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • solid • stranded • finely stranded without core end processing • solid 0 1 10 mm² 1 6 mm² 2 2 connectable conductor cross-section for auxiliary contacts • solid 0 stranded 0 0.5 2.5 mm² • finely stranded with core end processing 0.5 1.5 mm² • finely stranded with core end processing 0.5 2.5 mm²		
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 with core end processing  • at AWG cables for main contacts  • solid  • stranded  • stranded  • finely stranded with core end processing  • finely stranded with core end processing  • solid  • stranded  • finely stranded with core end processing  • solid  • stranded  • finely stranded with core end processing  • solid  • stranded  • finely stranded with core end processing  • finely stranded with core end processing  • finely stranded without core end processing  • finely stranded  • finely stranded with core end processing		6 mm
• for main current circuit     • for auxiliary and control circuit     • at contactor for auxiliary contacts     • of magnet coil     • of magnet coil     type of connectable conductor cross-sections     • for main contacts     — solid     — solid confinely stranded with core end processing     — finely stranded with core end processing     • at AWG cables for main contacts     • solid     • solid     • stranded     • stranded     • finely stranded with core end processing     • at AWG cables for main contacts     • solid     • stranded     • finely stranded with core end processing     • stranded     • finely stranded with core end processing     • solid     • stranded     • finely stranded with core end processing     • finely stranded without core end processing     • finely stranded without core end processing     • finely stranded     • finely stranded with core end processing     • finely stranded with core e		
• 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     • at AWG cables for main contacts      • solid     • stranded     • finely stranded with core end processing     • solid or stranded     • solid or stranded     • solid or stranded     • finely stranded with core end processing     • finely stranded with core end processing     • solid or stranded     • solid or stranded     • finely stranded with core end processing		anting landed towningle
<ul> <li>at contactor for auxiliary contacts</li> <li>of magnet coil</li> <li>type of connectable conductor cross-sections</li> <li>for main contacts</li> <li>solid</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>at AWG cables for main contacts</li> <li>solid</li> <li>tyne of connectable conductor cross-sections</li> <li>at AWG cables 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</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>finely stranded without core end processing</li> <li>finely stranded</li> <li>finely stranded without core end processing</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>finel</li></ul>		· · ·
of magnet coil      type of connectable conductor cross-sections         of or main contacts	•	
type of connectable conductor cross-sections  • for main contacts  — solid — solid 2x (1 10 mm²) — finely stranded with core end processing — finely stranded without core end processing — at AWG cables for main contacts  • solid • stranded • stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded • finely stranded without core end processing • finely stranded • finely stranded • finely stranded without core end processing • solid or stranded • finely stranded with core end processing • finely stranded without core end processing		
for main contacts         — solid         — solid or stranded         — solid or stranded         — finely stranded with core end processing         — finely stranded without core end processing         — at AWG cables for main contacts         • solid         • solid         • stranded         • stranded         • finely stranded with core end processing         • stranded         • finely stranded with core end processing         • finely stranded without core end processing         • finely stranded without core end processing         • solid or stranded         • finely stranded without core end processing         • solid or stranded         • solid or stranded         • finely stranded with core end processing         • finely stranded without core end processing		Opinig-type terminals
solid		
- solid or stranded - finely stranded with core end processing - finely stranded without core end processing - finely stranded without core end processing - at AWG cables for main contacts  connectable conductor cross-section for main contacts  • solid • stranded • stranded • finely stranded with core end processing - finely stranded without core end processing - finely stranded without core end processing - finely stranded without core end processing - finely stranded with core end processing - finely stranded with core end processing - finely stranded without core end		2x (1 10 mm²)
- finely stranded with core end processing - finely stranded without core end processing  • at AWG cables for main contacts  • solid • stranded • finely stranded with core end processing • finely stranded without core end processing • solid • stranded • finely stranded without core end processing • finely stranded without core end processing • solid or stranded • finely stranded without core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing		
<ul> <li>— finely stranded without core end processing</li> <li>● at AWG cables for main contacts</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 without core end processing</li> <li>Connectable conductor cross-section for auxiliary contacts</li> <li>● solid or stranded</li> <li>● solid or stranded</li> <li>● finely stranded with core end processing</li> <li>O.5 2.5 mm²</li> <li>● finely stranded without core end processing</li> <li>O.5 2.5 mm²</li> <li>● finely stranded without core end processing</li> <li>O.5 2.5 mm²</li> </ul>		,
<ul> <li>at AWG cables for main contacts</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 without core end processing</li> <li>of inely stranded without core end processing</li> <li>media for auxiliary contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>0.5 2.5 mm²</li> <li>finely stranded without core end processing</li> <li>finely stranded without core end processing</li> <li>0.5 2.5 mm²</li> <li>finely stranded without core end processing</li> <li>0.5 2.5 mm²</li> </ul>		
connectable conductor cross-section for main contacts  • solid • stranded • stranded with core end processing • finely stranded without core end processing  connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing		
<ul> <li>solid</li> <li>stranded</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>finely stranded without 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>finely stranded without core end processing</li> <li>finely stranded without core end processing</li> <li>0.5 2.5 mm²</li> <li>finely stranded without core end processing</li> <li>0.5 2.5 mm²</li> </ul>		
<ul> <li>stranded</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>finely stranded without 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>finely stranded without core end processing</li> <li>finely stranded without core end processing</li> <li>2.5 mm²</li> <li>finely stranded without core end processing</li> </ul>		1 10 mm <sup>2</sup>
<ul> <li>finely stranded with core end processing</li> <li>finely stranded without 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>finely stranded without core end processing</li> <li>finely stranded without core end processing</li> <li>2.5 mm²</li> <li>1 6 mm²</li> <li>0.5 2.5 mm²</li> <li>0.5 2.5 mm²</li> <li>0.5 2.5 mm²</li> </ul>		
<ul> <li>finely stranded without 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>finely stranded without core end processing</li> <li>finely stranded without core end processing</li> <li>0.5 2.5 mm²</li> <li>0.5 2.5 mm²</li> </ul>		
connectable conductor cross-section for auxiliary contacts  • solid or stranded  • finely stranded with core end processing  • finely stranded without core end processing  0.5 2.5 mm²  0.5 2.5 mm²		
<ul> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>0.5 1.5 mm²</li> <li>0.5 2.5 mm²</li> </ul>	connectable conductor cross-section for auxiliary	5
<ul> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>0.5 1.5 mm²</li> <li>0.5 2.5 mm²</li> </ul>		0.5 2.5 mm²
• finely stranded without core end processing 0.5 2.5 mm²		
type of connectable conductor cross-sections		

• for auxiliary contacts

- solid or stranded

- finely stranded with core end processing

- finely stranded without core end processing

• at AWG cables for auxiliary contacts

AWG number as coded connectable conductor cross

· for main contacts

• for auxiliary contacts

2x (0.5 ... 2.5 mm<sup>2</sup>)

2x (0.5 ... 1.5 mm²)

2x (0.5 ... 2.5 mm<sup>2</sup>)

2x (20 ... 14)

section

18 ... 8

Safety related data

product function mirror contact acc. to IEC 60947-4-1 B10 value with high demand rate acc. to SN 31920

proportion of dangerous failures

• with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920

failure rate [FIT] with low demand rate acc. to SN 31920

T1 value for proof test interval or service life acc. to

**IEC 61508** 

protection class IP on the front acc. to IEC 60529 touch protection on the front acc. to IEC 60529 suitability for use

· safety-related switching OFF

Yes 450 000

20 ... 14

40 %

73 %

100 FIT

20 y

IP20

finger-safe, for vertical contact from the front

Yes

Certificates/ approvals

## **General Product Approval**

**EMC** 













**Functional** Safety/Safety of Machinery

**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping

**Type Examination Certificate** 



**UK Declaration of** Conformity

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

Type Test Certificates/Test Report



## Marine / Shipping













other

Confirmation



Confirmation

## **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=3RT2025-2AP60

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2025-2AP60

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2025-2AP60

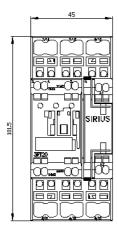
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2025-2AP60&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2025-2AP60&lang=en</a>

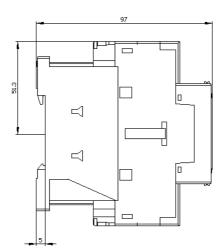
Characteristic: Tripping characteristics, I2t, Let-through current

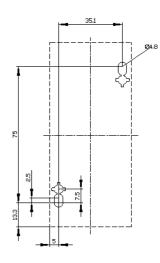
https://support.industry.siemens.com/cs/ww/en/ps/3RT2025-2AP60/char

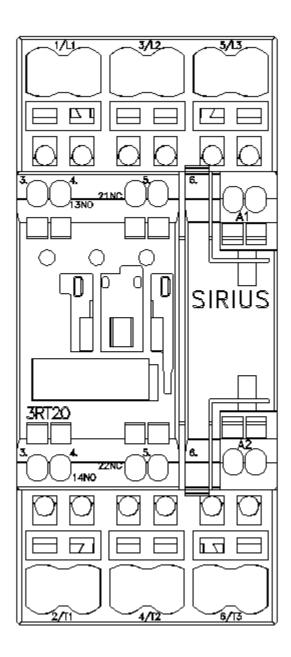
Further characteristics (e.g. electrical endurance, switching frequency)

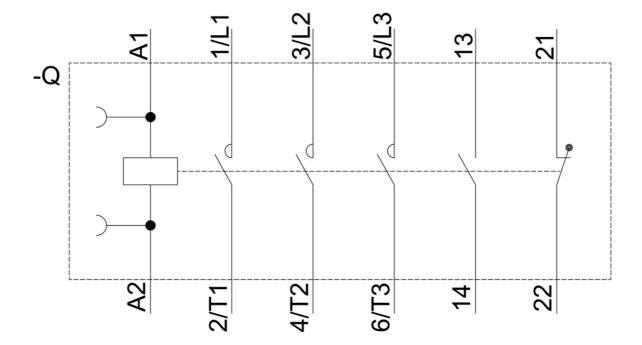
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2025-2AP60&objecttype=14&gridview=view1











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