SIEMENS

Data sheet

3RT2026-2AK60-Z W96



power contactor, AC-3e/AC-3, 25 A, 11 kW / 400 V, 3-pole, 110 V AC, 50 Hz / 120 V, 60 Hz, auxiliary contacts: 1 NO + 1 NC, spring-loaded terminal, size: S0, multi-unit packaging, pack = 18 units

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	SO
product extension	
 function module for communication 	No
auxiliary switch	Yes
power loss [W] for rated value of the current	
 at AC in hot operating state 	5.7 W
 at AC in hot operating state per pole 	1.9 W
 without load current share typical 	10.5 W
surge voltage resistance	
 of main circuit rated value 	6 kV
 of auxiliary circuit rated value 	6 kV
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at AC	8,3g / 5 ms, 5,3g / 10 ms
shock resistance with sine pulse	
• at AC	13,5g / 5 ms, 8,3g / 10 ms
mechanical service life (operating cycles)	
 of contactor typical 	10 000 000
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000
 of the contactor with added auxiliary switch block typical 	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
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	
 at AC-3 rated value maximum 	690 V

 at AC-3e rated value maximum 	690 V
operational current	050 V
at AC-1 at 400 V at ambient temperature 40 °C rated value	40 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated	40 A
value	
— up to 690 V at ambient temperature 60 °C rated value	35 A
• at AC-3	
— at 400 V rated value	25 A
— at 500 V rated value	18 A
— at 690 V rated value	13 A
• at AC-3e	
— at 400 V rated value	25 A
— at 500 V rated value	18 A
— at 690 V rated value	13 A
• at AC-4 at 400 V rated value	15.5 A
 at AC-5a up to 690 V rated value 	35.2 A
• at AC-5b up to 400 V rated value	20.7 A
● at AC-6a	
 — up to 230 V for current peak value n=20 rated value 	20.2 A
 — up to 400 V for current peak value n=20 rated value 	20.2 A
 — up to 500 V for current peak value n=20 rated value 	20.2 A
 — up to 690 V for current peak value n=20 rated value 	12.9 A
● at AC-6a	
 — up to 230 V for current peak value n=30 rated value 	13.5 A
 — up to 400 V for current peak value n=30 rated value 	13.5 A
 — up to 500 V for current peak value n=30 rated value 	13.5 A
— up to 690 V for current peak value n=30 rated value	13 A
minimum cross-section in main circuit at maximum AC-1 rated value	10 mm²
operational current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	9 A
• at 690 V rated value	9 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
 with 2 current paths in series at DC-1 	
— 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 	
— 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	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	
- at 24 V rated value	20 A
— at 24 V rated value — at 60 V rated value	
	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
 with 2 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	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	11 kW
• at AC-3	
— at 230 V rated value	5.5 kW
— at 400 V rated value	11 kW
— at 500 V rated value	11 kW
— at 690 V rated value	11 kW
• at AC-3e	
— at 230 V rated value	5.5 kW
— at 400 V rated value	11 kW
— at 500 V rated value	11 kW
— at 690 V rated value	11 kW
operating power for approx. 200000 operating cycles at AC-	
4	
• at 400 V rated value	4.4 kW
at 690 V rated value	7.7 kW
operating apparent power at AC-6a	
• up to 230 V for current peak value n=20 rated value	8 kVA
 up to 400 V for current peak value n=20 rated value 	13.9 kVA
 up to 500 V for current peak value n=20 rated value 	17.4 kVA
 up to 690 V for current peak value n=20 rated value 	15.4 kVA
operating apparent power at AC-6a	
 up to 230 V for current peak value n=30 rated value 	5.3 kVA
 up to 400 V for current peak value n=30 rated value 	9.3 kVA
 up to 500 V for current peak value n=30 rated value 	11.6 kVA
 up to 690 V for current peak value n=30 rated value 	15.5 kVA
short-time withstand current in cold operating state up to 40 °C	
 limited to 1 s switching at zero current maximum 	375 A: Use minimum cross-section acc. to AC 1 rated value
	375 A; Use minimum cross-section acc. to AC-1 rated value 300 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum limited to 10 s switching at zero current maximum 	210 A; Use minimum cross-section acc. to AC-1 rated value
 Imited to 10's switching at zero current maximum Imited to 30's switching at zero current maximum 	144 A; Use minimum cross-section acc. to AC-1 rated value
 Imited to 30's switching at zero current maximum Imited to 60's switching at zero current maximum 	118 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	750 1/h
• at AC-2 maximum • at AC-3 maximum	750 1/h
• at AC-3e maximum	750 1/h 250 1/h
at AC-4 maximum	250 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	440.14
 at 50 Hz rated value 	110 V

- et CO Lie reted velue	100.1/
at 60 Hz rated value operating range factor control supply voltage rated value of	120 V
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	81 VA
• at 60 Hz	79 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.72
• at 60 Hz	0.74
apparent holding power of magnet coil at AC	
• at 50 Hz	10.5 VA
• at 60 Hz	8.5 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.25
• at 60 Hz	0.28
closing delay	
• at AC	8 40 ms
opening delay	
• at AC	4 16 ms
arcing time	10 10 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous	1
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	21 A
• at 600 V rated value	22 A
yielded mechanical performance [hp]	
 for single-phase AC motor 	
— at 110/120 V rated value	2 hp
— at 230 V rated value	3 hp
 for 3-phase AC motor 	
— at 200/208 V rated value	5 hp

at 220/230 V rated value	7.5 hp
— at 220/230 V rated value — at 460/480 V rated value	7.5 hp 15 hp
— at 575/600 V rated value	20 hp
contact rating of auxiliary contacts according to UL	A600 / P600
Short-circuit protection	A00071000
design of the fuse link	
for short-circuit protection of the main circuit	
 — with type of coordination 1 required 	gG: 100 A (690 V, 100 kA), aM: 50 A (690 V, 100 kA), BS88: 100 A (415 V, 80
····· ····	kA)
 — with type of assignment 2 required 	gG: 35A (690V, 100kA), aM: 20A (690V, 100kA), BS88: 35A (415V, 80kA)
 for short-circuit protection of the auxiliary switch required 	gG: 10 A (500 V, 1 kA)
Installation/ mounting/ dimensions	
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
side-by-side mounting	Yes
height	102 mm
width	45 mm
depth	97 mm
required spacing	
with side-by-side mounting	10
— forwards	10 mm
— upwards	10 mm
- downwards	10 mm
— at the side	0 mm
for grounded parts for used	10
— forwards	10 mm 10 mm
— upwards — at the side	6 mm
— downwards	10 mm
for live parts	10 mm
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	6 mm
Connections/ Terminals	
type of electrical connection	
for main current circuit	spring-loaded terminals
 for auxiliary and control circuit 	spring-loaded terminals
 at contactor for auxiliary contacts 	Spring-type terminals
• of magnet coil	Spring-type terminals
type of connectable conductor cross-sections for main contacts	
• solid	2x (1 10 mm²)
solid or stranded	2x (1 10 mm²)
 finely stranded with core end processing 	2x (1 6 mm²)
 finely stranded without core end processing 	2x (1 6 mm²)
connectable conductor cross-section for main contacts	
• solid	1 10 mm ²
• stranded	1 10 mm ²
 finely stranded with core end processing 	1 6 mm²
finely stranded without core end processing	1 6 mm²
connectable conductor cross-section for auxiliary contacts	
solid or stranded	0.5 2.5 mm ²
• finely stranded with core end processing	0.5 1.5 mm ²
finely stranded without core end processing	0.5 2.5 mm²
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid or stranded	2x (0.5 2.5 mm ²)
 finely stranded with core end processing 	2x (0.5 1.5 mm ²)
— finely stranded without core end processing	2x (0.5 2.5 mm ²)
 for AWG cables for auxiliary contacts 	2x (20 14)

18 8
20 14
Yes
450 000
40 %
73 %
100 FIT
20 a
IP20
finger-safe, for vertical contact from the front
Yes
Yes
own-russian-business ates. f the EAC certification if you intend to import or offer to supply these products to an ates Russia or Belarus).
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Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2026-2AK60-Z W96

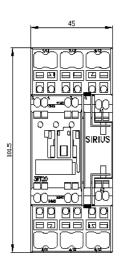
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT2026-2AK60-Z W96 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

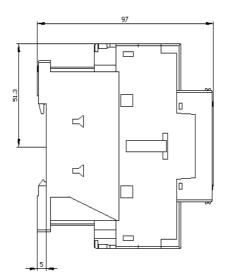
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2026-2AK60-Z W96&lang=en

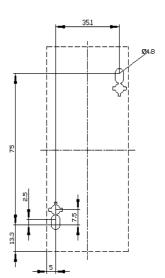
Characteristic: Tripping characteristics, I²t, Let-through current

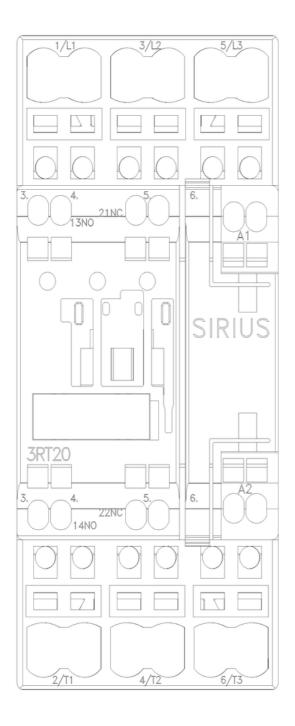
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Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2026-2AK60-Z W96&objecttype=14&gridview=view1











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