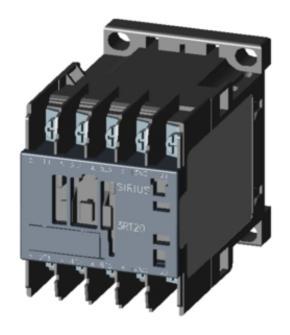
# **SIEMENS**

Product data sheet 3RT2017-4AP61



CONTACTOR, AC-3, 5.5KW/400V, 1NO, AC 220V 50HZ / 240V 60HZ 3POLE, SZ. S00 RING CABLE LUG CONNECTION

General technical data:		
product brand name		SIRIUS
Size of the contactor		S00
Product extension / auxiliary switch		Yes
Product extension / function module for communication		No
Protection class IP / on the front		IP20
Protection against electrical shock		finger-safe
Degree of pollution		3
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
during storage	°C	-55 +80
during operating	°C	-25 +60
Shock resistance		
at rectangular impulse		
• at AC		7,3g / 5 ms, 4,7g / 10 ms
at sine pulse		
• at AC		11,4g / 5 ms, 7,3g / 10 ms
Impulse voltage resistance / rated value	kV	6
Insulation voltage / rated value	V	690

Maximum permissible voltage for protective separation / between coil and main contacts / in accordance with EN 60947-1	V	400
Mechanical operating cycles as operating time		
of the contactor / typical		30,000,000
• of the contactor with added auxiliary switch block / typical		10,000,000
<ul> <li>of the contactor with added electronics-compatible auxiliary switch block / typical</li> </ul>		5,000,000

Main circuit:		
Number of NC contacts / for main contacts		0
Number of NO contacts / for main contacts		3
Operating current / at AC-1 / at 400 V		
• at 40 °C ambient temperature / rated value	Α	22
• at 60 °C ambient temperature / rated value	Α	20
Connectable conductor cross-section / in main circuit		
• at AC-1		
• at 40 °C / minimum permissible	m²	4
• at 60 °C / minimum permissible	m²	2.5
Operational current		
• at AC-2 / at 400 V / rated value	Α	12
• at AC-3		
• at 400 V / rated value	Α	12
• at 500 V / rated value	Α	9.2
• at 690 V / rated value	Α	6.7
• at AC-4 / at 400 V / rated value	Α	8.5
Operational current		
• with 1 current path / at DC-1		
• at 24 V / rated value	Α	20
• at 110 V / rated value	Α	2.1
• at 220 V / rated value	Α	0.8
• at 440 V / rated value	Α	0.6
• at 600 V / rated value	Α	0.6
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	Α	20
• at 110 V / rated value	Α	12
at 220 V / rated value	Α	1.6
at 440 V / rated value	Α	0.8
• at 600 V / rated value	Α	0.7
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	Α	20
• at 110 V / rated value	Α	20

• at 220 V / rated value	Α	20
• at 440 V / rated value	Α	1.3
• at 600 V / rated value	Α	1
Operational current		
• with 1 current path / at DC-3 / at DC-5		
• at 24 V / rated value	Α	20
• at 110 V / rated value	Α	0.1
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	Α	20
• at 110 V / rated value	Α	0.35
• with 3 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	Α	20
• at 110 V / rated value	Α	20
• at 220 V / rated value	Α	1.5
• at 440 V / rated value	Α	0.2
• at 600 V / rated value	Α	0.2
Service power		
• at AC-1		
• at 230 V / rated value	kW	7.5
• at 400 V / rated value	kW	13
• at 500 V / rated value	kW	17
• at 690 V / rated value	kW	22
at AC-2 / at 400 V / rated value	kW	5.5
• at AC-3		
• at 230 V / rated value	kW	3
• at 400 V / rated value	kW	5.5
• at 690 V / rated value	kW	5.5
at AC-4 / at 400 V / rated value	kW	4
Active power loss / at AC-3 / at 400 V / with rated operational current value / per conductor	W	1.2
Off-load operating frequency		
• at AC	1/h	10,000
• at DC	1/h	10,000
Frequency of operation		
• at AC-1 / according to IEC 60947-6-2	1/h	1,000
• at AC-2 / according to IEC 60947-6-2	1/h	750
• at AC-3 / according to IEC 60947-6-2	1/h	750
• at AC-4 / according to IEC 60947-6-2	1/h	250

#### Control circuit

Type of voltage / of the controlled supply voltage		AC
Control supply voltage		
• at 50 Hz / at AC / rated value	V	220
• at 60 Hz / at AC / rated value	V	240
operating range factor control supply voltage rated value / of the magnet coil		
• at 50 Hz / for AC		0.8 1.1
• at 60 Hz / for AC		0.85 1.1
Apparent pull-in power / of the solenoid / for AC	V·A	43
Apparent holding power / of the solenoid / for AC	V·A	6.5
Inductive power factor		
• with the pull-in power of the coil		0.8
• with the pull-in power of the coil		0.25
Closing delay		
• at AC	ms	8 33
Opening delay		
• at AC	ms	4 15
Arcing time	ms	10 15
Residual current / of electronics / for control with signal <0>		
• at 230 V / with AC / maximum permissible	mA	4
• at 24 V / with DC / maximum permissible	mA	10
Auxiliary circuit:		
Contact reliability / of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)
Number of NC contacts / for auxiliary contacts / instantaneous switching		0
Number of NO contacts / for auxiliary contacts / instantaneous switching		1
Operating current / of the auxiliary contacts		
• [nicht versorgt: PMD_ABP551_001_000]		
•	Α	2
• at 690 V	А	1
UL/CSA ratings:		
yielded mechanical performance (hp)		

UL/CSA ratings:		
yielded mechanical performance (hp)		
<ul> <li>for single-phase squirrel cage motors</li> </ul>		
• at 110/120 V / rated value	hp	0.5
• at 230 V / rated value	hp	2
<ul> <li>for three-phase squirrel cage motors</li> </ul>		
• at 200/208 V / rated value	hp	3
• at 220/230 V / rated value	hp	3

• at 460/480 V / rated value	hp	7.5
• at 575/600 V / rated value	hp	10
Operating current (FLA) / for three-phase squirrel cage motors		
• at 480 V / rated value	Α	11
• at 600 V / rated value	Α	11
Contact rating designation / for auxiliary contacts / according to UL		A600 / Q600
Short-circuit:		
Design of the fuse link		
for short-circuit protection of the auxiliary switch / required		fuse gL/gG: 10 A
for short-circuit protection of the main circuit		
• with type of assignment 1 / required		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
at type of coordination 2 / required		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20A
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
Type of mounting		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
Type of fixing/fixation / series installation		Yes
Width	mm	45
Height	mm	57.5
Depth	mm	73
Distance, to be maintained, to the ranks assembly / sidewards	mm	0
Connections:		
Design of the electrical connection		
for main current circuit		ring cable connection
for auxiliary and control current circuit		ring cable connection
Sicherheitsrelevante Kenngrößen:		
B10 value / with high demand rate		
according to SN 31920		1,000,000
T1 value / for proof test interval or service life		
according to IEC 61508	а	20
Proportion of dangerous failures		
with low demand rate / according to SN 31920	%	40

• with high demand rate / according to SN 31920

Failure rate (FIT value) / with low demand rate

%

73

according to SN 31920
 FIT 100
 Product function
 mirror contact to IEC 60947-4-1
 comment
 positively driven operation to IEC 60947-5-1
 FIT 100
 Yes
 with 3RH29
 No

## Certificates/approvals:

#### **General Product Approval**

Functional Safety / Safety of Machinery Declaration of Conformity









Type Examination



#### **Test Certificates**

Special Test Certificate

### **Shipping Approval**













**Shipping Approval** 

other







## Further information:

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

http://www.siemens.com/industrial-controls/mall

#### Cax online generator

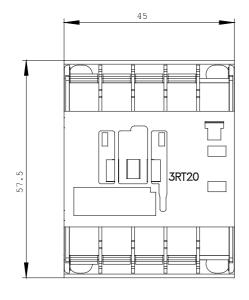
http://www.siemens.com/cax

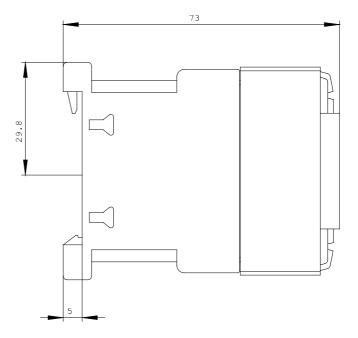
 $Service \& Support \ (Manuals, \ Certificates, \ Characteristics, \ FAQs, ...)$ 

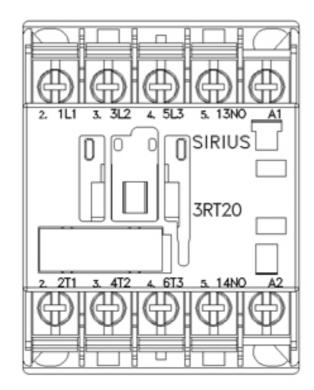
http://support.automation.siemens.com/WW/view/en/3RT2017-4AP61/all

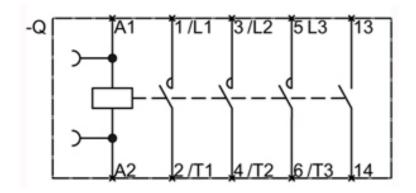
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ ...)$ 

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RT2017-4AP61}}$ 









last change: Feb 15, 2013