



CONT. F. RAILW. A., AC-3, 5.5KW 400V,
DC 24V, 0.7...1.25*US,
W.SUPPRESSORDIODE INTEGRATED, 3-POLE,
SIZE S00, SPRING-TYPE TERM.

General technical data:

product brand name		SIRIUS
product designation		3RT2 contactor
Size of the contactor		S00
Protection class IP / on the front		IP20
Degree of pollution		3
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
• during storage	°C	-55 ... 80
• during the operating phase	°C	-40 ... 70
• during transport	°C	-55 ... 80
Resistance against shock		9.8g / 5 ms and 5.9g / 10 ms
Impulse voltage resistance / rated value	kV	6
Insulation voltage / rated value	V	690
Resistive loss		
• per conductor / typical	W	1.2
• of the magnet coil / for DC / typical	W	4
Item designation		
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		K

• according to DIN EN 61346-2		Q
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
• of the contactor with added electronics-compatible auxiliary switch block / typical		5,000,000
Main circuit:		
Number of poles / for main current circuit		3
Number of NC contacts / for main contacts		0
Number of NO contacts / for main contacts		3
Operating voltage / at AC-3 / rated value		
• maximum	V	690
Operating current / at AC-1 / at 400 V		
• at 40 °C ambient temperature / rated value	A	22
• at 60 °C ambient temperature / rated value	A	20
Operating current		
• at AC-2 / at 400 V / rated value	A	12
• at AC-3 / at 400 V / rated value	A	12
• at AC-4 / at 400 V / rated value	A	8.5
• with 1 current path / at DC-1		
• at 24 V / rated value	A	20
• at 110 V / rated value	A	2.1
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	A	20
• at 110 V / rated value	A	12
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	A	20
• at 110 V / rated value	A	20
• with 1 current path / at DC-3 / at DC-5		
• at 24 V / rated value	A	20
• at 110 V / rated value	A	0.1
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	A	20
• at 110 V / rated value	A	0.35
• with 3 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	A	20
• at 110 V / rated value	A	20
Service power		
• at AC-2 / at 400 V / rated value	W	5,500

<ul style="list-style-type: none"> • at AC-3 <ul style="list-style-type: none"> • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value • at AC-4 / at 400 V / rated value 	W	5,500
	W	5,500
	W	5,500
	W	4,000
Operating reactive power / at AC-6b		
<ul style="list-style-type: none"> • at 230 V / rated value 	var	0
<ul style="list-style-type: none"> • at 400 V / rated value 	var	0
<ul style="list-style-type: none"> • at 690 V / rated value 	var	0
Off-load operating frequency	1/h	10,000
Frequency of operation		
<ul style="list-style-type: none"> • at AC-1 / according to IEC 60947-6-2 / maximum 	1/h	1,000
<ul style="list-style-type: none"> • at AC-2 / according to IEC 60947-6-2 / maximum 	1/h	750
<ul style="list-style-type: none"> • at AC-3 / according to IEC 60947-6-2 / maximum 	1/h	750
<ul style="list-style-type: none"> • at AC-4 / according to IEC 60947-6-2 / maximum 	1/h	250

Control circuit:		
Design of activation of the operating mechanism		conventional
Design of the surge suppressor		with suppressor diode
Type of voltage / of the controlled supply voltage		DC
Control supply voltage / 1		
<ul style="list-style-type: none"> • for DC • rated value 	V	24
Operating range factor control supply voltage rated value / of the solenoid		
<ul style="list-style-type: none"> • for DC 		0.7 ... 1.25
Pull-in power / of the solenoid / for DC	W	12
Holding power / of the solenoid / for DC	W	4

Auxiliary circuit:		
Product extension / auxiliary switch		Yes
Contact reliability / of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)
Number of NC contacts / for auxiliary contacts		
<ul style="list-style-type: none"> • instantaneous switching 		0
<ul style="list-style-type: none"> • lagging switching 		0
Number of NO contacts / for auxiliary contacts		
<ul style="list-style-type: none"> • instantaneous switching 		0
<ul style="list-style-type: none"> • leading switching 		0
Operating current / of the auxiliary contacts		
<ul style="list-style-type: none"> • at AC-12 / maximum • at AC-15 	A	10

- at 230 V
- at 400 V
- at DC-12
 - at 48 V
 - at 60 V
 - at 110 V
 - at 220 V
- at DC-13
 - at 24 V
 - at 48 V
 - at 60 V
 - at 110 V
 - at 220 V

A	10
A	3
A	6
A	6
A	3
A	1
A	6
A	2
A	2
A	1
A	0.3

Short-circuit:

Design of the fuse link

- for short-circuit protection of the auxiliary switch / required
- for short-circuit protection of the main circuit
 - with type of assignment 1 / required
- at type of coordination 2 / required

fuse gL/gG: 10 A

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20A

Installation/mounting/dimensions:

Built in orientation

vertical

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 70

Depth

mm 123

Distance, to be maintained, to the ranks assembly

- forwards
- backwards
- upwards
- downwards
- sideways

mm 0
mm 0
mm 6
mm 6
mm 0

Distance, to be maintained, to earthed part

- forwards
- backwards
- upwards
- downwards

mm 6
mm 0
mm 6
mm 6

• sideways	mm	6
Distance, to be maintained, conductive elements		
• forwards	mm	6
• backwards	mm	6
• upwards	mm	6
• downwards	mm	10
• sideways	mm	6

Connections:

Design of the electrical connection		
• for main current circuit		spring-loaded terminals
• for auxiliary and control current circuit		spring-loaded terminals
Type of the connectable conductor cross-section		
• for main contacts		
• solid		2x (0.5 ... 4 mm ²)
• stranded		2x (0.5 ... 4 mm ²)
• finely stranded		
• with conductor end processing		2 x (0.5 ... 2.5 mm ²)
• without conductor final cutting		2x (0.5 ... 2.5 mm ²)
• for AWG conductors / for main contacts		2x (20 ... 12)
• for auxiliary contacts		
• solid		2x (0.5 ... 4 mm ²)
• finely stranded		
• with conductor end processing		2x (0.5 ... 2.5 mm ²)
• without conductor final cutting		2x (0.5 ... 2.5 mm ²)
• for AWG conductors / for auxiliary contacts		2x (20 ... 12)

Certificates/approvals:

Verification of suitability		CE / UL / CSA / CCC
General Product Approval	Test Certificates	other
CQC	Manufacturer	Manufacturer



UL ratings

yielded mechanical performance (hp)		
• for single-phase squirrel cage motors		
• at 110/120 V / rated value	hp	0.5
• at 230 V / rated value	hp	2
• for three-phase squirrel cage motors		
• 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	A	11
• at 600 V / rated value	A	11
Contact rating designation / for auxiliary contacts / according to UL		A600 / Q600

Safety:

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	a	20
Proportion of dangerous failures		
• with low demand rate / according to SN 31920	%	40
• with high demand rate / according to SN 31920	%	75
Failure rate (FIT value) / with low demand rate		
• according to SN 31920	FIT	100
Protection against electrical shock		finger-safe

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

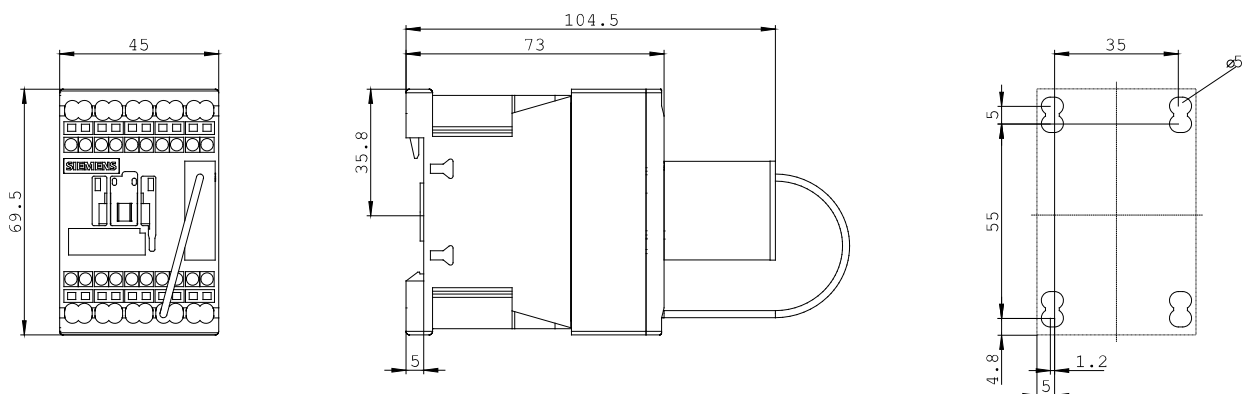
<http://www.siemens.com/cax>

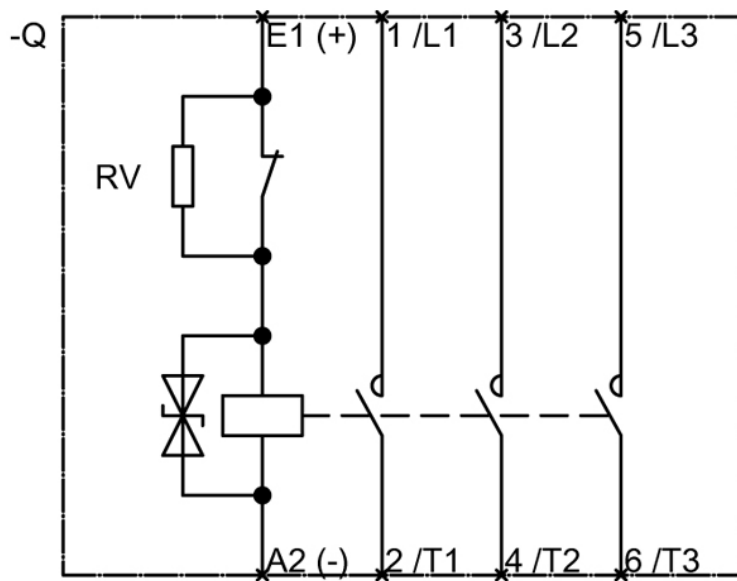
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/VW/view/en/3RT2017-2KB42-0LA0/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2017-2KB42-0LA0





last change:

Feb 14, 2011