SIEMENS

Product data sheet

CONTACTOR, AC-3, 15KW/400V, 1NO+1NC, DC 24V, 3-POLE, SZ S0 SCREW TERMINAL

General technical data:		
Product brand name		SIRIUS
Product designation		3RT2 contactor
Size of the contactor		S0
Protection class IP / frontal/front side	-	IP20
Degree of pollution		3
Altitude of installation site / at a height over sea level / maximum	m	2,000
Ambient temperature		
during storage	°C	-55 80
during the operating phase	°C	-25 60
during transport	°C	-55 80
Resistance against shock		12.5g / 5 ms and 7.8g / 10 ms
Impulse voltage resistance / rated value	kV	6
Insulation voltage / rated value	V	690
Resistive loss		
• per conductor / typical	W	2.7
of the magnet coil / at DC / typical	W	5.9
Item designation		
 according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 		к
according to DIN EN 61346-2		Q
Mechanical operating cycles as operating time		
of the contactor / typical		10,000,000
 of the contactor with added auxiliary switch block / typical 		10,000,000
 of the contactor with added electronics-compatible auxiliary switch block / typical 		10,000,000
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 3 AC / rated value		
	V	690

Operating current / at AC-1 / at 400 V		
• at 40 °C ambient temperature / rated value	А	50
• at 60 °C ambient temperature / rated value	А	45
Operating current		
• at AC-2 / at 400 V / rated value	А	32
• at AC-3 / at 400 V / rated value	А	32
• at AC-4 / at 400 V / rated value	А	20
• with 1 current path / at DC-1		
• at 24 V / rated value	А	35
• at 110 V / rated value	А	4.5
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	А	35
• at 110 V / rated value	А	35
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	А	35
• at 110 V / rated value	А	35
• with 1 current path / at DC-3 / at DC-5		
• at 24 V / rated value	А	20
• at 110 V / rated value	А	2.5
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	А	35
• at 110 V / rated value	А	15
• with 3 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	А	35
• at 110 V / rated value	А	35
Service power		
• at AC-2 / at 400 V / rated value	kW	15
• at AC-3		
• at 400 V / rated value	kW	15
• at 500 V / rated value	kW	15
• at 690 V / rated value	kW	15
• at AC-4 / at 400 V / rated value	kW	15
Operating reactive power / at AC-6b		
• at 230 V / rated value	var	0
• at 400 V / rated value	var	0
• at 690 V / rated value	var	0
Off-load operating frequency	1/h	1,500
Switching frequency		
• at AC-1 / according to IEC 60947-6-2 / maximum	1/h	1,000
• at AC-2 / according to IEC 60947-6-2 / maximum	1/h	750

• at AC-3 / according to IEC 60947-6-2 / maximum	1/h	750
• at AC-4 / according to IEC 60947-6-2 / maximum	1/h	250

Control circuit:		
Design of activation of the operating mechanism		conventional
Type of voltage / of the controlled supply voltage		DC
Control supply voltage / 1		
• for DC		
rated value	V	24
Operating range factor control supply voltage rated value / of solenoid		
• for DC		0.8 1.1
Pull-in power / of the solenoid / with DC	W	5.9
Holding power / of solenoid / with DC	W	5.9

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		
 instantaneous switching 		1
lagging switching		0
Number of NO contacts / for auxiliary contacts		
 instantaneous switching 		1
leading switching		0
Operating current / of the auxiliary contacts		
• at AC-12 / maximum	А	10
• at AC-15		
• at 230 V	А	10
• at 400 V	А	3
• at DC-12		
• at 48 V	А	6
• at 60 V	А	6
• at 110 V	А	3
• at 220 V	А	1
• at DC-13		
• at 24 V	А	6
• at 48 V	A	2
• at 60 V	А	2
• at 110 V	А	1
• at 220 V	А	0.3

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		
at type of coordination 1 / required		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 100 A
at type of coordination 2 / required		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35A
Installation/mounting/dimensions:		
built in orientation		vertical
Type of fixing/fixation		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	85
Depth	mm	102
distance, to be maintained, to the ranks assembly		
• forwards	mm	0
backwards	mm	0
• upwards	mm	6
downwards	mm	6
• sidewards	mm	0
distance, to be maintained, to earthed part		

forwards	mm	6
backwards	mm	0
• upwards	mm	6
downwards	mm	6
• sidewards	mm	6
distance, to be maintained, conductive elements		
forwards	mm	6
backwards	mm	6
• upwards	mm	6
downwards	mm	10

Connections: Second Second

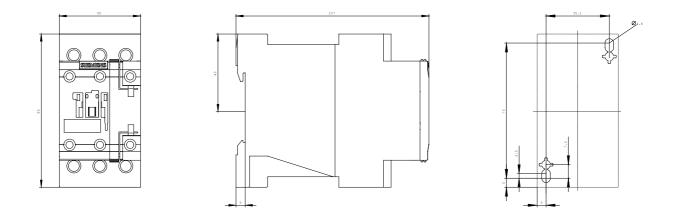
6

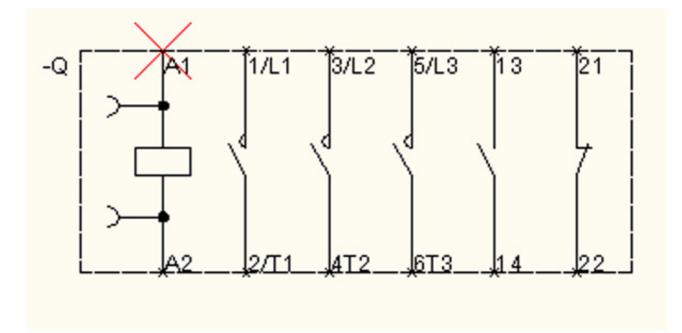
mm

sidewards

• for main contacts		
• unifilar		2x (1 2.5 mm2), 2x (2.5 10 mm2)
stranded wire		2x (1 2.5 mm2), 2x (2.5 10 mm2)
stranded wire		
 with conductor end processing 		2x (1 2.5 mm2), 2x (2.5 6 mm2), 1x 10 mm2
• at AWG-conductors / for main contacts		2x (16 12), 2x (14 8)
 for auxiliary contact 		
• solid		2x (0.5 1.5 mm2), 2x (0.75 2.5 mm2)
stranded wire		
• with wire end processing		2x (0.5 1.5 mm2), 2x (0.75 2.5 mm2)
• for AWG conductors / for auxiliary contacts		2x (20 16), 2x (18 14)
Certificates/approvals:		
verification of suitability		CE / UL / CSA / CCC
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	а	20
Proportion of dangerous failures		
 with low demand rate / according to SN 31920 	%	75
• with high demand rate / according to SN 31920	%	75
Failure rate (FIT value) / with low demand rate		
according to SN 31920	FIT	50
Protection against electrical shock		finger-safe
Further information:		
Information- and Downloadcenter (Catalogs, Brochures,) http://www.siemens.com/industrial-controls/catalogs		
Global Industry Mall (Online ordering system) http://www.siemens.com/industrial-controls/mall		
Service&Support (Manuals, Certificates, Characteristics, FAQs http://support.automation.siemens.com/WW/view/en/3RT2027-1BE	-	

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2027-1BB40





last change:

May 8, 2010