SIEMENS

Product data sheet 3RF3405-1BB04

SOLID-STATE CONTACTOR 3-PH 3RF3 AC53 5.2A 40 DEGREES C 48-480V / 24V DC 2-PH. CONTROLLED INSTANTANEOUS SCREW TERMINALS

General technical data:		
product brand name		SIRIUS
product designation		solid-state motor contactor
• _1 / of the accessories that can be ordered		Link module
• _2 / of the accessories that can be ordered		Connection adapter
Manufacturer article number		
• _1 / of the accessories that can be ordered		3RA2921-1BA00
• _2 / of the accessories that can be ordered		3RF3900-0QA88
Protection class IP		IP20
Insulation voltage / rated value	V	600
Installation altitude / at a height over sea level / maximum	m	1,000
Ambient temperature		
• during storage	°C	-55 … +80
• during operating	°C	-25 … +60
Resistance against shock		
• according to IEC 60068-2-27		15g / 11 ms
Resistance against vibration		
• according to IEC 60068-2-6		2g
Resistance against the impulse current / rated value	A	200
Active power loss / total / typical	W	10

Item designation		
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		K
• according to DIN EN 61346-2		Q
Product function		instantaneous switching

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		2
Operating frequency		
• rated value	Hz	60 … 50
Operating voltage		
• at 60 Hz / at AC / rated value	V	48 … 480
• at 50 Hz / at AC / rated value	V	48 … 480
Operating current		
• minimum	mA	100
• at AC-3 / at 400 V / rated value	A	5.2
Working area related to the operating voltage		
• at 50 Hz / for AC	V	40 … 506
• at 60 Hz / for AC	V	40 … 506
Service power / at AC-3 / at 400 V		
• rated value	kW	2.2
Derating temperature	°C	40
Tolerance of the line frequency	Hz	5
Relative symmetrical tolerance / of the operation frequency	%	10
I2t-level / maximum	$A^2 \cdot s$	200
Voltage slew rate / at the thyristor / for main contacts		
• maximum permissible	V/µs	1,000
Block voltage / at the thyristor / for main contacts		
• maximum permissible	V	1,200
Reverse current / of the thyristor	mA	10

Control circuit:

Type of voltage / of the controlled supply voltage		DC
Control supply voltage		
• 1		
• for DC		
• initial rated value	V	15
• final rated value	V	30
• for DC / final value for signal<0>-recognition	V	5

Control current		
• for DC / rated value	mA	15
• at minimum control supply voltage / for DC	mA	2

Auxiliary circuit:		
Number of NC contacts / for auxiliary contacts		0
Number of NO contacts / for auxiliary contacts		0
Number of change-over switches / for auxiliary contacts		0

Installation/mounting/dimensions:		
Built in orientation		vertical
Type of mounting		screw and snap-on mounting onto 35 mm standard mounting rail
Type of fixing/fixation / series installation		Yes
Tightening torque / of the screw for fastening of the operating resource	N·m	1.5
Design of the thread / of the screw for fastening of the operating resource		M4
Width	mm	45
Height	mm	95
Depth	mm	100.8
Distance, to be maintained, to the ranks assembly		
• upwards	mm	70
• downwards	mm	50

Connections:		
Design of the electrical connection		
• for main current circuit		screw-type terminals
• for auxiliary and control current circuit		screw-type terminals
Design of the thread / of the connection screw		
• for main contacts		M4
• of the auxiliary and control pins		M3
Product function / removable terminal for auxiliary and control circuit		Yes
Type of the connectable conductor cross-section		
• for main contacts		
• solid		2x (1.5 ... 2.5 mm²), 2x (2.5 ... 6 mm²)
• finely stranded		
• with conductor end processing		2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm²
• for AWG conductors / for main contacts		2x (14 ... 10)
• for auxiliary and control contacts		
• solid		1x (0.5 ... 2.5 mm²), 2x (0.5 ... 1.0 mm²)

• finely stranded		
• with conductor end processing		1x (0.5 ... 2.5 mm²), 2x (0.5 ... 1.0 mm²)
• without conductor final cutting		1x (0.5 ... 2.5 mm²), 2x (0.5 ... 1.0 mm²)
• for AWG conductors / for auxiliary and control contacts		1x (AWG 20 ... 12)
Tightening torque		
• for main contacts / with screw-type terminals	N·m	2 … 2.5
• for auxiliary and control contacts / with screw-type terminals	N·m	0.5 … 0.6
Tightening torque (lbf·in)		
• for main contacts / with screw-type terminals	lbf·in	18 … 22
• for auxiliary and control contacts / with screw-type terminals	lbf·in	7.5 … 5.3
Skinning length / of the cable		
• for main contacts	mm	7
• for auxiliary and control contacts	mm	7

Certificates/approvals:

Verification of suitability		CE / UL / CSA / CCC / C-TICK

General Product Approval	Test Certificates	other
GOST	Type Test Certificates/Test Report	Declaration of Conformity

UL/CSA ratings

yielded mechanical performance (hp) / for three-phase squirrel cage motors		
• at 200/208 V / rated value	hp	0.5
• at 220/230 V / rated value	hp	0.75
• at 460/480 V / rated value	hp	2
Operating current (FLA) / for three-phase squirrel cage motors		
• at 480 V / rated value	A	3.4

Further information:

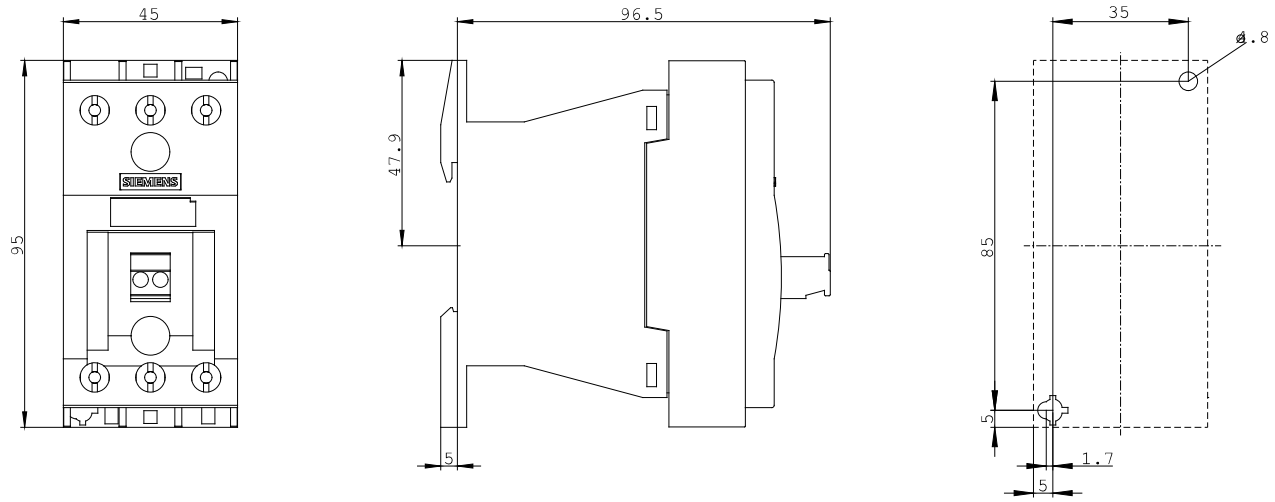
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

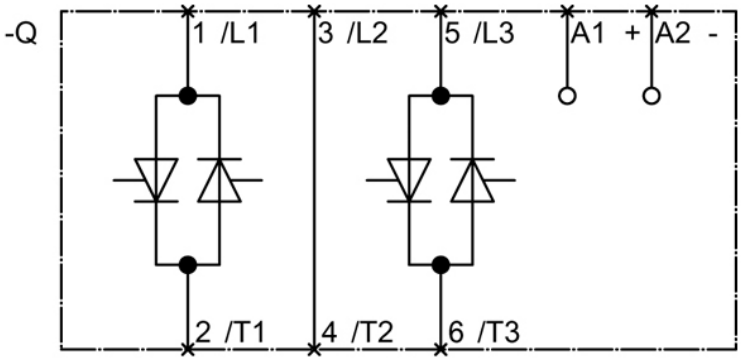
Industry Mall (Online ordering system)
http://www.siemens.com/industrial-controls/mall

CAx-Online-Generator
http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3RF3405-1BB04/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RF3405-1BB04





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