SIEMENS

Data sheet

3RT1054-6NB36



CONTACTOR, 55KW/400V/AC-3 AC(40...60HZ)/DC OPERATION UC 21...27.3V AUXIL. CONTACTS 2NO+2NC 3-POLE, SIZE S6 BAR CONNECTIONS ELECTRONIC OPERATING MECHANISM WITH PLC INTERFACE 24V DC SCREW TERMINAL

Figure similar		
product brand name		SIRIUS
Product designation		power contactor
General technical data:		
Insulation voltage		
Rated value	V	1 000
Degree of pollution		3
Surge voltage resistance Rated value	kV	8
Mechanical service life (switching cycles)		
 of the contactor typical 		10 000 000
 of the contactor with added electronics- compatible auxiliary switch block typical 		5 000 000
 of the contactor with added auxiliary switch block typical 		10 000 000
Thermal short-time current restricted to 10 s	А	1 100
Protection class IP		
• on the front		IP00
• of the terminal		IP00
Equipment marking		
• acc. to DIN EN 61346-2		Q
• acc. to DIN EN 81346-2		Q
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 current		

	● at AC-1		
Rated valueA- up to 690 V at ambient temperature 60 °CA140Rated valueA140- up to 690 V at ambient temperature 60 °CA140Rated valueA115- at 400 V Rated valueA115- at 400 V Rated valueA97Operating current with 1 current pathA180- at 24 V Rated valueA180- at 24 V Rated valueA180- at 100 V Rated valueA25Operating current with 2 current pathA160- at 110 V Rated valueA160- at 110 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueA160- at 110 V Rated valueA160- at 110 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueA160- at 24 V Rated valueA160- at 110 V Rated value <td< td=""><td>— at 400 V at ambient temperature 40 °C</td><td>А</td><td>160</td></td<>	— at 400 V at ambient temperature 40 °C	А	160
Rated valueA140- up to 680 V at ambient temperature 60 °CA140Rated valueA115- at 400 V Rated valueA115- at 660 V Rated valueA115- at 640 V Rated valueA97Operating current with 1 current pathA160- at 10 V Rated valueA160- at 24 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueA160- at 24 V Rated valueA160- at 110 V Rated valueA160- at 110 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueA160- at 24 V Rated valueA160- at 110 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueA16			
	— up to 690 V at ambient temperature 40 °C	А	160
Rated valueAInstrument exponents of a bit	Rated value		
• at AC-3 Image: Constraint of the second of t		А	140
- at 400 V Rated value A 115 - at 690 V Rated value A 97 Operating current with 1 current path A 160 - at 24 V Rated value A 18 - at 10 V Rated value A 18 - at 10 V Rated value A 160 - at 110 V Rated value A 160 - at 124 V Rated value A 160 - at 10 V Rated value A 160 - at 110 V Rated value A 160 - at 24 V Rated value A 160 - at 110 V Rated value A 160 - at 24 V Rated value A 160 - at 110 V Rated value A <td>Rated value</td> <td></td> <td></td>	Rated value		
	• at AC-3		
at AC-4 at 400 V Rated valueA97Operating current with 1 current path • at DC-1A160- at 24 V Rated valueA18• at DC-3 at DC-5A160- at 24 V Rated valueA2.5Operating current with 2 current paths in seriesA160- at 110 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueA160- at 110 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueA160- at 110 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueA160- at 10 V Rated valueA160- at 24 V Rated valueA160- at 10 V Rated valueA160- at 24 V Rated valueA160- at 24 V Rated valueA160- at 24 V Rat	— at 400 V Rated value	A	115
Operating current with 1 current path • at DC-1 Image: Constant of the second seco	— at 690 V Rated value	А	115
• at DC-1 A 160 - at 24 V Rated value A 18 • at DC-3 at DC-5 - - - at 24 V Rated value A 160 - at 110 V Rated value A 2.5 Operating current with 2 current paths in series - - • at DC-1 - - - - at 24 V Rated value A 160 - - at 24 V Rated value A 160 - - at 24 V Rated value A 160 - - at 10 V Rated value A 160 - - at 110 V Rated value A 160 - - at 24 V Rated value A 160 - - at 24 V Rated value A 160 - - at 24 V Rated value A 160 - - - at 10 V Rated value A 160 -	• at AC-4 at 400 V Rated value	А	97
- at 24 V Rated valueA160- at 110 V Rated valueA18• at DC-3 at DC-5 at 24 V Rated valueA160- at 110 V Rated valueA2.5Operating current with 2 current paths in series • at DC-1-160- at 24 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueA160- at 110 V Rated valueA160- at 110 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueA160- at 24 V Rated valueA160- at 24 V Rated valueKW92- at 24 V Rated valueKW64- at 240 V Rated valueKW64- at 240 V Rated valueKW64- at 240 V Rated valueKW53- at 240 V Rated valueKW159	Operating current with 1 current path		
at 110 V Rated value A 18 at 24 V Rated value A 160 at 24 V Rated value A 2.5 Operating current with 2 current paths in series - - - at 24 V Rated value A 160 - at 10 V Rated value A 160 - at 24 V Rated value A 160 - at 10 V Rated value A 160 - at 110 V Rated value A 160 - at 110 V Rated value A 160 - at 110 V Rated value A 160 - at 24 V Rated value A 160 - at 110 V Rated value A 160 - at 110 V Rated value A 160 - at 24 V Rated value	● at DC-1		
• at DC-3 at DC-5I- at 24 V Rated valueA160- at 110 V Rated valueA2.5Operating current with 2 current paths in seriesI• at DC-1 at 24 V Rated valueA160- at 110 V Rated valueA160• at DC-3 at DC-5 at 110 V Rated valueA160• at DC-3 at DC-5 at 110 V Rated valueA160- at 24 V Rated valueA160- at 24 V Rated valueA160- at 24 V Rated valueA160- at DC-1 at 24 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueKW92• at AC-1 at 400 V Rated valueW55 000Operating power• at AC-1• at AC-1 at 690 V at 60 °C Rated value <td< td=""><td>— at 24 V Rated value</td><td>А</td><td>160</td></td<>	— at 24 V Rated value	А	160
- at 24 V Rated valueA160- at 110 V Rated valueA2.5Operating current with 2 current paths in series • at DC-1 at 24 V Rated valueA160- at 24 V Rated valueA160- at 110 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueA160- at 100 V Rated valueA160- at 24 V Rated valueKW92- at 24 V Rated valueKW55 000Operating power at 230 V at 60 °C Rated valueKW53- at 690 V at 60 °C Rated valueKW53- at 690 V Rated valueKW159- at 690 V Rated valueKW159	— at 110 V Rated value	А	18
	● at DC-3 at DC-5		
Operating current with 2 current paths in series Image: current with 2 current paths in series • at DC-1 - - at 24 V Rated value A - at 24 V Rated value A - at 10 V Rated value A - at 10 V Rated value A - at 10 V Rated value A - at 110 V Rated value A - at 24 V Rated value A - at 10 V Rated value A - at 10 V Rated value A - at 10 V Rated value A - at 24 V Rated value A - at 24 V Rated value A - at 24 V Rated value A - at 10 V Rated value A - at 24 V Rated value A - at 24 V Rated value B - at AC-1 at 400 V Rated value	— at 24 V Rated value	А	160
• at DC-1 A 160 - at 24 V Rated value A 160 - at 110 V Rated value A 160 • at DC-3 at DC-5 - - - at 110 V Rated value A 160 - at 24 V Rated value A 160 - at 10 V Rated value A 160 - at 10 V Rated value A 160 - at 10 V Rated value A 160 - at 24 V Rated value KW 92 • at AC-1 at 400 V Rated value KW 64 • at AC-2 at 400 V Rated value KW 55 000 Operating power - -	— at 110 V Rated value	А	2.5
A160- at 24 V Rated valueA160- at 10 V Rated valueA160- at 10 V Rated valueA160- at 24 V Rated valueA160- at 24 V Rated valueA160Operating current with 3 current paths in series at 24 V Rated valueA160- at 24 V Rated valueA160- at 24 V Rated valueA160- at 110 V Rated valueA160- at 110 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueA160- at 24 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueKW92- at 44 V Rated valueKW55 000Operating power at 230 V at 60 °C Rated valueKW53- at 690 V Rated valueKW159- at 690 V Rated valueKW159- at 690 V Rated valueKW159	Operating current with 2 current paths in series	-	
A the function functionA160- at 110 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueA160- at 24 V Rated valueA160Operating current with 3 current paths in series at 24 V Rated valueA160- at 24 V Rated valueA160- at 10 V Rated valueA160- at 110 V Rated valueA160- at 110 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueKW92- at AC-1 at 400 V Rated valueKW55 000Operating power at 230 V at 60 °C Rated valueKW53- at 690 V at 60 °C Rated valueKW159- at 690 V Rated valueKW159	● at DC-1		
at DC-3 at DC-5A160- at 110 V Rated valueA160- at 24 V Rated valueA160Operating current with 3 current paths in series at 24 V Rated valueA160- at 24 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueKW92• at AC-1 at 400 V Rated valueKW55 000Operating power• at AC-4 at 400 V Rated valueKW55 000Operating power• at AC-1 at 230 V at 60 °C Rated valueKW53- at 690 V at 60 °C Rated valueKW159- at 690 V Rated valueKW159	— at 24 V Rated value	А	160
- at 110 V Rated valueA160- at 24 V Rated valueA160Operating current with 3 current paths in series • at DC-1 at 24 V Rated valueA160- at 24 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueA160- at 24 V Rated valueA160- at 24 V Rated valueKW92- at 24 V Rated valueKW64- at 400 V Rated valueW55 000Operating power at 230 V at 60 °C Rated valueKW53- at 690 V at 60 °C Rated valueKW159	— at 110 V Rated value	А	160
at 24 V Rated valueA160Operating current with 3 current paths in series • at DC-1 - at 24 V Rated valueA160 at 24 V Rated valueA160 at 110 V Rated valueA160 at 24 V Rated valueA160 at 24 V Rated valueA160 at 24 V Rated valueA160Operating power• at AC-1 at 400 V Rated valueKW92• at AC-2 at 400 V Rated valueKW64• at AC-2 at 400 V Rated valueW55 000Operating power• at AC-1 at 230 V at 60 °C Rated valueKW53 at 690 V Rated valueKW159 at 690 V Rated valueKW159	• at DC-3 at DC-5		
Operating current with 3 current paths in seriesA160- at 24 V Rated valueA160- at 110 V Rated valueA160- at 24 V Rated valueA160- at 24 V Rated valueA160- at 24 V Rated valueA160Operating power• at AC-1 at 400 V Rated valueKW92• at AC-2 at 400 V Rated valueKW64• at AC-4 at 400 V Rated valueW55 000Operating power• at AC-1 at 230 V at 60 °C Rated valueKW53- at 690 V at 60 °C Rated valueKW159- at 690 V Rated valueKW159	— at 110 V Rated value	А	160
• at DC-1 A 160 - at 24 V Rated value A 160 - at 110 V Rated value A 160 • at DC-3 at DC-5 - - - at 110 V Rated value A 160 - at 24 V Rated value A 160 - at AC-1 at 400 V Rated value KW 92 • at AC-2 at 400 V Rated value KW 64 • at AC-4 at 400 V Rated value W 55 000 Operating power - - • at AC-1 - - • at 690 V at 60 °C Rated value KW 53 - at 690 V Rated value	— at 24 V Rated value	А	160
at 24 V Rated valueA160 at 110 V Rated valueA160• at DC-3 at DC-5 at 110 V Rated valueA160 at 24 V Rated valueA160 at 24 V Rated valueKW92• at AC-1 at 400 V Rated valueKW92• at AC-2 at 400 V Rated valueKW64• at AC-2 at 400 V Rated valueKW55 000• at AC-155 000• at AC-1• at AC-1• at AC-153- at 230 V at 60 °C Rated valueKW53- at 690 V at 60 °C Rated valueKW159	Operating current with 3 current paths in series		
- at 110 V Rated valueA160• at DC-3 at DC-5A160- at 110 V Rated valueA160- at 24 V Rated valueA160• at 24 V Rated valueKW92• at AC-1 at 400 V Rated valueKW64• at AC-2 at 400 V Rated valueW55 000• at AC-4 at 400 V Rated valueW53• at AC-1	• at DC-1		
• at DC-3 at DC-5 - A 160 - at 110 V Rated value A 160 - at 24 V Rated value A 160 - at 24 V Rated value A 92 • at AC-1 at 400 V Rated value KW 92 • at AC-2 at 400 V Rated value KW 64 • at AC-2 at 400 V Rated value W 55 000 • at AC-4 at 400 V Rated value W 55 000 • at AC-1 - - - at 230 V at 60 °C Rated value KW 53 - at 690 V Rated value KW 159 - at 690 V Rated value KW 159	— at 24 V Rated value	А	160
- at 110 V Rated valueA160- at 24 V Rated valueA160Operating power at AC-1 at 400 V Rated valueKW92- at AC-2 at 400 V Rated valueKW64- at AC-4 at 400 V Rated valueW55 000Operating power at AC-1 at 230 V at 60 °C Rated valueKW53- at 690 V Rated valueKW159- at 690 V Rated valueKW159	— at 110 V Rated value	А	160
at 24 V Rated valueA160Operating power• at AC-1 at 400 V Rated valuekW92• at AC-2 at 400 V Rated valuekW64• at AC-2 at 400 V Rated valueW55 000Operating power• at AC-1• at AC-1 at 230 V at 60 °C Rated valuekW53- at 690 V at 60 °C Rated valuekW159- at 690 V Rated valuekW159	• at DC-3 at DC-5		
Operating power-• at AC-1 at 400 V Rated valuekW• at AC-2 at 400 V Rated valuekW• at AC-2 at 400 V Rated valueW• at AC-4 at 400 V Rated valueW• at AC-4 at 400 V Rated valueW• at AC-1 at 230 V at 60 °C Rated valuekW- at 690 V at 60 °C Rated valuekW- at 690 V Rated valuekW at 690 V Rated valuekW	— at 110 V Rated value	А	160
• at AC-1 at 400 V Rated valuekW92• at AC-2 at 400 V Rated valuekW64• at AC-4 at 400 V Rated valueW55 000Operating power- at AC-1- at 600 °C Rated valueKW- at 690 V at 60 °C Rated valuekW53- at 690 V at 60 °C Rated valuekW159- at 690 V Rated valuekW159	— at 24 V Rated value	А	160
 at AC-2 at 400 V Rated value at AC-2 at 400 V Rated value W 64 55 000 Operating power at AC-1 - at 230 V at 60 °C Rated value KW 53 - at 690 V at 60 °C Rated value KW 159 - at 690 V Rated value KW 159 	Operating power		
• at AC-4 at 400 V Rated valueW55 000Operating power• at AC-1 at 230 V at 60 °C Rated valuekW53- at 690 V at 60 °C Rated valuekW159- at 690 V Rated valuekW159	• at AC-1 at 400 V Rated value	kW	92
Operating powerImage: Constraint of the c	• at AC-2 at 400 V Rated value	kW	64
• at AC-1 — at 230 V at 60 °C Rated value	• at AC-4 at 400 V Rated value	W	55 000
- at 230 V at 60 °C Rated value kW 53 - at 690 V at 60 °C Rated value kW 159 - at 690 V Rated value kW 159	Operating power		
at 690 V at 60 °C Rated valuekW159 at 690 V Rated valuekW159	• at AC-1		
- at 690 V Rated value kW 159	— at 230 V at 60 °C Rated value	kW	53
	— at 690 V at 60 °C Rated value	kW	159
• at AC-3	— at 690 V Rated value	kW	159
	• at AC-3		

— at 230 V Rated value	kW	37
— at 400 V Rated value	kW	64
— at 500 V Rated value	kW	81
— at 690 V Rated value	kW	113
Operating power for ≥ 200000 operating cycles at AC-4	_	
• at 400 V Rated value	kW	29
• at 690 V Rated value	kW	48
Operating frequency		
• at AC-3 maximum	1/h	1 000
Control circuit/ Control:		
Type of voltage of the control supply voltage		AC/DC
Control supply voltage with AC		
• at 50 Hz Rated value	V	21 27.3
● at 60 Hz Rated value	V	21 27.3
Control supply voltage for DC		
Rated value	V	21 27.3
Rated value	Hz	40
Control supply voltage frequency 2 Rated value	Hz	60
Operating range factor control supply voltage rated		
value of the magnet coil with AC		
• at 50 Hz		0.8 1.1
• at 60 Hz		0.8 1.1
Operating range factor control supply voltage rated value of the magnet coil for DC		0.8 1.1
Design of the surge suppressor	_	with varistor
Apparent pick-up power of the magnet coil with AC	V·A	280
Apparent holding power of the magnet coil with AC	V·A	4.4
Closing power of the magnet coil for DC	W	320
Holding power of the magnet coil for DC	W	2.8
Inductive power factor		
 with closing power of the coil 		0.8
 with the holding power of the coil 		0.4
Auxiliary circuit:		
Number of NC contacts		
 for auxiliary contacts 		
— instantaneous contact		2
Number of NO contacts		
 for auxiliary contacts 		
— instantaneous contact		2
Operating current at AC-15		
• at 230 V Rated value	А	6

	٨	0
at 400 V Rated value	A	3
Operating current		
• at DC-12 at 220 V Rated value	A	1
at DC-13 at 220 V Rated value	A	0.3
Operating current		
• at DC-12		
— at 60 V Rated value	A	6
— at 110 V Rated value	А	3
• at DC-13		
— at 24 V Rated value	А	10
— at 60 V Rated value	А	2
— at 110 V Rated value	А	1
UL/CSA ratings:		
Contact rating of the auxiliary contacts acc. to UL		A600 / Q600
Short-circuit:		
Design of the fuse link		
 for short-circuit protection of the main circuit 		
— with type of assignment 1 required		fuse gL/gG: 355 A
— with type of assignment 2 required		fuse gL/gG: 315 A
 for short-circuit protection of the auxiliary switch 		fuse gL/gG: 10 A
required		
Installation/ mounting/ dimensions:		
Mounting type		screw fixing
 Side-by-side mounting 		Yes
Height	mm	172
Width	mm	120
Depth	mm	170
Required spacing		
 for grounded parts 		
— at the side	mm	10
Connections/ Terminals:		
Type of electrical connection		
 for main current circuit 		screw-type terminals
 for auxiliary and control current circuit 		screw-type terminals
Type of connectable conductor cross-section		
 for AWG conductors for main contacts 		4 250 kcmil
 for auxiliary contacts 		
— solid		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)
— finely stranded with core 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), 1x 12
		(· · · · , · · · · , · · · ·

Mechanical data:		
Size of contactor		S6
Ambient conditions:		
Installation altitude at height above sea level maximum	m	2 000
Ambient temperature		
 during operation 	°C	-25 +60
 during storage 	°C	-55 +80

General Produc	t Approval		Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates
(SA)		EHC	Type Examination	CE EG-Konf.	Special Test Certificate
Test Certificates	Shipping Ap	proval			other

other Environmental

Confirmations

Confirmation

Further information

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

Industry Mall (Online ordering system) http://www.siemens.com/industrymall

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10546NB36

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RT10546NB36/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10546NB36&lang=en



