SIEMENS

Product data sheet

3RT1016-1KB41-0KV0



COUPLING RELAY, AC-3,4 KW/400 V DC 24 V / 0.7-1.25 US / 2.3 W, INTEGRATED VARISTOR. 1 S, SPECIAL PACKING LABEL, VW- EQUIPMENT SPECIFICATION

General technical data:		
product brand name		SIRIUS
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 operating	°C	-25 +60
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 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 AC-3 / at 400 V / rated value	Α	9
• at AC-4 / at 400 V / rated value	Α	8.5

with 1 current path / at DC-1 at 24 V / rated value at 110 V / rated value at 110 V / rated value at 110 V / rated value at 24 V / rated value at 24 V / rated value at 24 V / rated value at 110 V / rated value at 24 V / rated value at 110 V / rated value at 110 V / rated value at 110 V / rated value at 24 V / rated value at 25 at 25 V / rated value at 26 V / rated value at 27 V / rated value at 28 V / rated value at 29 V / rated value at 20 V / rated value at 20 V / rated value at 20 V / rated value at 24 V / rated value at 25 V / rated value at 25 V / rated value at 26 V / rated value at 27 V / rated value	Design of the surge suppressor		with varistor
 * at 24 V / rated value * at 110 V / rated value * with 2 current paths in series / at DC-1 * at 24 V / rated value * at 110 V / rated value * with 3 current paths in series / at DC-1 * at 24 V / rated value * at 110 V / rated value * at 110 V / rated value * at 24 V / rated value * at 110 V / rated value * with 1 current path / at DC-3 / at DC-5 * at 24 V / rated value * at 110 V / rated value * with 2 current paths in series / at DC-3 / at DC-5 * at 24 V / rated value * at 110 V / rated value * at 110 V / rated value * at 110 V / rated value * at 24 V / rated value * at 110 V / rated value * at 24 V / rated value * at 110 V / rated value *	Control circuit:		
 * at 24 V / rated value * at 110 V / rated value * with 2 current paths in series / at DC-1 * at 24 V / rated value * at 110 V / rated value * with 3 current paths in series / at DC-1 * at 24 V / rated value * at 110 V / rated value * at 110 V / rated value * at 24 V / rated value * at 110 V / rated value * with 1 current path / at DC-3 / at DC-5 * at 24 V / rated value * at 110 V / rated value * with 2 current paths in series / at DC-3 / at DC-5 * at 24 V / rated value * at 110 V / rated value * at 110 V / rated value * at 110 V / rated value * at 24 V / rated value * at 110 V / rated value * at 24 V / rated value * at 110 V / rated value *	• at AC-4 / at 400 V / rated value	W	4,000
 at 24 V / rated value at 110 V / rated value with 2 current paths in series / at DC-1 at 24 V / rated value at 110 V / rated value at 110 V / rated value at 24 V / rated value at 210 V / rated value at 24 V / rated value at 110 V / rated value at 24 V / rated value at 20 at 24 V / rated value at 20 			
 at 24 V / rated value at 110 V / rated value with 2 current paths in series / at DC-1 at 24 V / rated value at 110 V / rated value at 110 V / rated value at 24 V / rated value at 24 V / rated value at 110 V / rated value at 110 V / rated value at 110 V / rated value at 24 V / rated value at 24 V / rated value at 110 V / rated value at 24 V / rated value at 24 V / rated value at 24 V / rated value at 110 V / rated value at 110 V / rated value at 24 V / rated value at 20 at 110 V / rated value at 20 	• at AC-2 / at 400 V / rated value	kW	4
 at 24 V / rated value at 110 V / rated value with 2 current paths in series / at DC-1 at 24 V / rated value at 110 V / rated value with 3 current paths in series / at DC-1 at 24 V / rated value at 110 V / rated value at 110 V / rated value at 110 V / rated value at 24 V / rated value with 1 current path / at DC-3 / at DC-5 at 24 V / rated value at 110 V / rated value at 110 V / rated value at 24 V / rated value with 2 current paths in series / at DC-3 / at DC-5 at 24 V / rated value at 110 V / rated value at 20 at 110 V / rated value at 20 at 110 V / rated value A 20 at 110 V / rated value A 20 at 110 V / rated value A 20 at 24 V / rated value A 20 at 24 V / rated value A 20 A	Service power		
 at 24 V / rated value at 110 V / rated value with 2 current paths in series / at DC-1 at 24 V / rated value at 110 V / rated value with 3 current paths in series / at DC-1 at 24 V / rated value at 110 V / rated value at 110 V / rated value at 110 V / rated value with 1 current path / at DC-3 / at DC-5 at 24 V / rated value at 110 V / rated value at 110 V / rated value at 24 V / rated value at 24 V / rated value at 24 V / rated value with 2 current paths in series / at DC-3 / at DC-5 at 24 V / rated value at 21 V / rated value at 22 V / rated value at 21 V / rated value at 22 V / rated value at 21 V / rated value at 22 V / rated value<!--</td--><td>• at 110 V / rated value</td><td>Α</td><td>20</td>	• at 110 V / rated value	Α	20
 at 24 V / rated value at 110 V / rated value with 2 current paths in series / at DC-1 at 24 V / rated value at 110 V / rated value with 3 current paths in series / at DC-1 at 24 V / rated value with 3 current paths in series / at DC-1 at 24 V / rated value at 110 V / rated value with 1 current path / at DC-3 / at DC-5 at 24 V / rated value at 110 V / rated value at 110 V / rated value at 24 V / rated value A 20 at 110 V / rated value A 20 A 20 A 35 	• at 24 V / rated value	Α	20
 at 24 V / rated value at 110 V / rated value with 2 current paths in series / at DC-1 at 24 V / rated value at 110 V / rated value with 3 current paths in series / at DC-1 at 24 V / rated value with 3 current paths in series / at DC-1 at 24 V / rated value at 110 V / rated value with 1 current path / at DC-3 / at DC-5 at 24 V / rated value with 2 current paths in series / at DC-3 / at DC-5 at 24 V / rated value A 20 with 2 current paths in series / at DC-3 / at DC-5 at 24 V / rated value A 20 	• with 3 current paths in series / at DC-3 / at DC-5		
 at 24 V / rated value at 110 V / rated value with 2 current paths in series / at DC-1 at 24 V / rated value at 110 V / rated value with 3 current paths in series / at DC-1 at 24 V / rated value at 24 V / rated value at 110 V / rated value at 110 V / rated value at 110 V / rated value with 1 current path / at DC-3 / at DC-5 at 24 V / rated value at 110 V / rated value 	• at 110 V / rated value	Α	0.35
 at 24 V / rated value at 110 V / rated value with 2 current paths in series / at DC-1 at 24 V / rated value at 110 V / rated value with 3 current paths in series / at DC-1 at 24 V / rated value at 110 V / rated value at 110 V / rated value at 20 at 110 V / rated value A 20 	• at 24 V / rated value	Α	20
 at 24 V / rated value at 110 V / rated value with 2 current paths in series / at DC-1 at 24 V / rated value at 110 V / rated value with 3 current paths in series / at DC-1 at 24 V / rated value at 24 V / rated value at 110 V / rated value at 110 V / rated value at 24 V / rated value with 1 current path / at DC-3 / at DC-5 at 24 V / rated value A 20 	• with 2 current paths in series / at DC-3 / at DC-5		
 at 24 V / rated value at 110 V / rated value with 2 current paths in series / at DC-1 at 24 V / rated value at 110 V / rated value with 3 current paths in series / at DC-1 at 24 V / rated value with 3 current paths in series / at DC-1 at 24 V / rated value at 110 V / rated value with 1 current path / at DC-3 / at DC-5 	• at 110 V / rated value	А	0.15
 at 24 V / rated value at 110 V / rated value with 2 current paths in series / at DC-1 at 24 V / rated value at 110 V / rated value with 3 current paths in series / at DC-1 at 24 V / rated value A 20 at 110 V / rated value A 20 at 110 V / rated value A 20 at 110 V / rated value A 20 A 20 	at 24 V / rated value	Α	20
 at 24 V / rated value at 110 V / rated value with 2 current paths in series / at DC-1 at 24 V / rated value at 110 V / rated value with 3 current paths in series / at DC-1 at 24 V / rated value A 20 A 12 with 3 current paths in series / at DC-1 at 24 V / rated value A 20 	• with 1 current path / at DC-3 / at DC-5		
 at 24 V / rated value at 110 V / rated value with 2 current paths in series / at DC-1 at 24 V / rated value at 110 V / rated value with 3 current paths in series / at DC-1 	• at 110 V / rated value	Α	20
 at 24 V / rated value at 110 V / rated value with 2 current paths in series / at DC-1 at 24 V / rated value at 110 V / rated value A 20 A 12 	• at 24 V / rated value	Α	20
 at 24 V / rated value at 110 V / rated value with 2 current paths in series / at DC-1 at 24 V / rated value A 20 	• with 3 current paths in series / at DC-1		
 at 24 V / rated value at 110 V / rated value with 2 current paths in series / at DC-1 A 20 A 2.1	• at 110 V / rated value	Α	12
 at 24 V / rated value at 110 V / rated value A 20 A 2.1 	• at 24 V / rated value	Α	20
• at 24 V / rated value A 20	• with 2 current paths in series / at DC-1		
	• at 110 V / rated value	Α	2.1
• with 1 current path / at DC-1	• at 24 V / rated value	Α	20
	• with 1 current path / at DC-1		

Control circuit:		
Design of the surge suppressor		with varistor
Voltage type / of control feed voltage		DC
Operating range factor control supply voltage rated value / of the magnet coil		
• for DC		0.7 1.25
Pull-in power / of the solenoid / for DC	W	2.3
Holding power / of the solenoid / for DC	W	2.3

Auxiliary circuit:		
Contact reliability / of the auxiliary contacts	1 faulty switching per 100 million (1	7 V, 1 mA)
Number of NC contacts / for auxiliary contacts / instantaneous switching	0	
Number of NO contacts / for auxiliary contacts / instantaneous switching	1	

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 	fuse gL/gG: 35 A
at type of coordination 2 / required	fuse gL/gG: 20 A

Installation/mounting/dimensions:		
Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
series installation		Yes
Width	mm	45
Height	mm	57.5
Depth	mm	72
Distance, to be maintained, to earthed part / sidewards	mm	6

Connection type:		
Design of the electrical connection		
• for main current circuit	screw-type terminals	
• for auxiliary and control current circuit	screw-type terminals	
Type of the connectable conductor cross-section		
• for main contacts		
• solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)	
• finely stranded		
 with conductor end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	
• for AWG conductors / for main contacts	2x (20 16), 2x (18 14), 1x 12	
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 conductor 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	

Certificates/approvals:

General Product Approval

Functional Safety / Safety of Machinery Declaration of Conformity

Test Certificates







Type Examination



Special Test Certificate

Shipping Approval







Lloyd's Register





Shipping Approval

other



Confirmation

other

Environmental Confirmations

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:

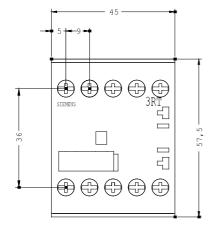
http://www.siemens.com/cax

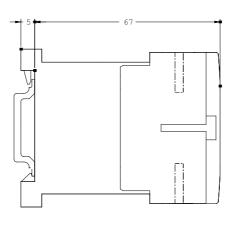
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

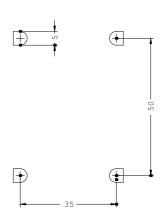
http://support.automation.siemens.com/WW/view/en/3RT1016-1KB41-0KV0/all

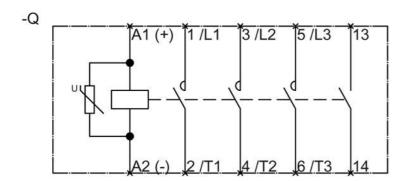
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1016-1KB41-0KV0}}$









last change: Aug 4, 2014