SIEMENS

Data sheet 3RT2015-2SB41



COUPLING RELAY, AC-3, 3KW/400V, 1NO, DC 24V, 0,85...1,85*US, W. INTEGR. SUPPRESSORDIODE, 3-POLE SZ S00, SPRING-LOADED TERMINAL

product brand name		SIRIUS
Product designation		Coupling relay
General technical data:		
Insulation voltage		
Rated value	V	690
Degree of pollution		3
Surge voltage resistance Rated value	kV	6
Mechanical service life (switching cycles)		
 of the contactor typical 		30 000 000
Thermal short-time current restricted to 10 s	Α	56
Protection class IP		
• on the front		IP20
• of the terminal		IP20
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 voltage		
 at AC-3 Rated value maximum 	V	690
Operating current		
• at AC-1		

Α	18
Α	18
Α	16
Α	7
Α	7
Α	6
Α	4.9
Α	6.5
Α	15
Α	1.5
Α	0.6
Α	0.42
Α	0.42
Α	15
Α	0.1
Α	15
Α	8.4
Α	1.2
Α	0.6
Α	0.5
Α	0.25
Α	15
Α	15
Α	15
Α	15
Α	0.9
Α	0.7
Α	15
Α	1.2
	A A A A A A A A A A A A A A A A A A A

— at 24 V Rated value	Α	15
— at 440 V Rated value	Α	0.14
— at 600 V Rated value	Α	0.14
Operating power		
• at AC-1 at 400 V Rated value	kW	11
• at AC-2 at 400 V Rated value	kW	3
• at AC-4 at 400 V Rated value	kW	3
Operating power		
• at AC-1		
— at 230 V at 60 °C Rated value	kW	6
— at 230 V Rated value	kW	6.3
— at 400 V at 60 °C Rated value	kW	10.5
— at 690 V at 60 °C Rated value	kW	18
— at 690 V Rated value	kW	19
• at AC-3		
— at 230 V Rated value	kW	1.5
— at 400 V Rated value	kW	3
— at 690 V Rated value	kW	4
Operating power for ≥ 200000 operating cycles at AC-4		
at 400 V Rated value	kW	1.15
at 690 V Rated value	kW	1.15
Operating frequency	_	
• at AC-3 maximum	1/h	750
Control circuit/ Control:		
Type of voltage of the control supply voltage		DC
Control supply voltage for DC		
Rated value	V	24
Operating range factor control supply voltage rated value of the magnet coil for DC		0.85 1.85
Design of the surge suppressor		with suppressor diode
Closing power of the magnet coil for DC	W	1.6
Holding power of the magnet coil for DC	W	1.6
Auxiliary circuit:		
Number of NC contacts		
• for auxiliary contacts		
— instantaneous contact		0
Number of NO contacts		

Number of NO contacts

• for auxiliary contacts

instantaneous contactProduct expansion Auxiliary switch

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No

Operating current at AC-15		
● at 230 V Rated value	Α	10
● at 400 V Rated value	Α	3
● at 690 V Rated value	Α	1
Operating current		
● at DC-12 at 125 V Rated value	Α	2
• at DC-12 at 220 V Rated value	Α	1
• at DC-12 at 600 V Rated value	Α	0.15
● at DC-13 at 125 V Rated value	Α	0.9
• at DC-13 at 220 V Rated value	Α	0.3
• at DC-13 at 600 V Rated value	Α	0.1
Operating current		
• at DC-12		
— at 60 V Rated value	Α	6
— at 110 V Rated value	Α	3
• at DC-13		
— at 24 V Rated value	Α	10
— at 60 V Rated value	Α	2
— at 110 V Rated value	Α	1
Contact reliability of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)
L/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
Full-load current (FLA) for three-phase AC motor • at 480 V Rated value	A	4.8
	A A	4.8 6.1
• at 480 V Rated value		
at 480 V Rated valueat 600 V Rated value		
 at 480 V Rated value at 600 V Rated value yielded mechanical performance [hp] for single-phase AC motor at 110/120 V Rated 	A	6.1
 at 480 V Rated value at 600 V Rated value yielded mechanical performance [hp] for single-phase AC motor at 110/120 V Rated value for single-phase AC motor at 230 V Rated 	A metric hp metric	6.1 0.25
 at 480 V Rated value at 600 V Rated value yielded mechanical performance [hp] for single-phase AC motor at 110/120 V Rated value for single-phase AC motor at 230 V Rated value for three-phase AC motor at 200/208 V Rated 	metric hp metric hp metric	6.10.250.75
 at 480 V Rated value at 600 V Rated value yielded mechanical performance [hp] for single-phase AC motor at 110/120 V Rated value for single-phase AC motor at 230 V Rated value for three-phase AC motor at 200/208 V Rated value for three-phase AC motor at 220/230 V Rated 	metric hp metric hp metric hp metric	6.10.250.751.5
 at 480 V Rated value at 600 V Rated value yielded mechanical performance [hp] for single-phase AC motor at 110/120 V Rated value for single-phase AC motor at 230 V Rated value for three-phase AC motor at 200/208 V Rated value for three-phase AC motor at 220/230 V Rated value for three-phase AC motor at 460/480 V Rated value for three-phase AC motor at 460/480 V Rated 	metric hp metric hp metric hp metric hp metric hp metric	6.10.250.751.52

• for short-circuit protection of the main circuit

— with type of assignment 1 required	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
— with type of assignment 2 required	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20 A
• for short-circuit protection of the auxiliary switch required	fuse gL/gG: 10 A

mounting position		+/-180° rotation possible on vertical mounting
		surface; can be tilted forward and backward by +/-
		22.5° on vertical mounting surface
Mounting type		screw and snap-on mounting onto 35 mm standard
		mounting rail according to DIN EN 50022
 Side-by-side mounting 		Yes
Height	mm	69.5
Width	mm	45
Depth	mm	73
Required spacing		
with side-by-side mounting		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— downwards	mm	0
— at the side	mm	0
• for grounded parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— at the side	mm	6
— downwards	mm	0
• for live parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— downwards	mm	0
— at the side	mm	6

Connections/ Terminals:	
Type of electrical connection	
• for main current circuit	spring-loaded terminals
 for auxiliary and control current circuit 	spring-loaded terminals
Type of connectable conductor cross-section	
• for main contacts	
— single or multi-stranded	2x (0,5 4 mm²)

 finely stranded with core end processing 	2x (0.5 2.5 mm²)
 finely stranded without core end processing 	2x (0.5 2.5 mm²)
 for AWG conductors for main contacts 	2x (20 12)
• for auxiliary contacts	
— single or multi-stranded	2x (0,5 4 mm²)
 finely stranded with core end processing 	2x (0.5 2.5 mm²)
 finely stranded without core end processing 	2x (0.5 2.5 mm²)
• for AWG conductors for auxiliary contacts	2x (20 12)

Safety related data:		
B10 value with high demand rate acc. to SN 31920		1 000 000
Proportion of dangerous failures		
 with low demand rate acc. to SN 31920 	%	40
 with high demand rate acc. to SN 31920 	%	73
Failure rate [FIT] with low demand rate acc. to SN 31920	FIT	100
Product function Mirror contact acc. to IEC 60947-4-1		No
T1 value for proof test interval or service life acc. to IEC 61508	У	20
Protection against electrical shock		finger-safe

Mechanical data:		
S00		
2 000		

maximum	III	2 000
Ambient temperature		
during operation	°C	-25 +60
during storage	°C	-55 + 80

Certificates/ approvals:

General Product Approval

Functional Safety/Safety of Machinery Declaration of Conformity









Type Examination



Test Certificates

Shipping Approval

Type Test
Certificates/Test
Report

Special Test Certificate







other



GL

Shipping Approval











Environmental Confirmations

Confirmation

other



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=3RT20152SB41

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

http://support.automation.siemens.com/WW/view/en/3RT20152SB41/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=3RT20152SB41&lang=en



