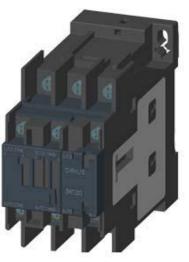
## **SIEMENS**

## Data sheet

## 3RT2027-4VB40



COUPLING RELAY, AC-3, 15KW/400V, 1NO+1NC, DC 24V, W. INTEGRATED DIODE COMBINATION 3POLE, SZ. S0 RING CABLE LUG CONNECTION

product brand name		SIRIUS
Product designation		Coupling relay
eneral technical data:		
Insulation voltage		
Rated value	V	690
Degree of pollution		3
Surge voltage resistance Rated value	kV	6
Mechanical service life (switching cycles)		
<ul> <li>of the contactor typical</li> </ul>		10 000 000
<ul> <li>of the contactor with added electronics-</li> </ul>		5 000 000
compatible auxiliary switch block typical		
<ul> <li>of the contactor with added auxiliary switch</li> </ul>		10 000 000
block typical		
Thermal short-time current restricted to 10 s	A	260
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
1ain 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

<ul> <li>at AC-3 Rated value maximum</li> </ul>	V	690
Operating current		
• at AC-1		
— at 400 V at ambient temperature 40 °C	А	50
Rated value		
— up to 690 V at ambient temperature 40 $^\circ C$	А	50
Rated value		
— up to 690 V at ambient temperature 60 °C Rated value	A	42
• at AC-2 at 400 V Rated value	А	32
● at AC-3		
— at 400 V Rated value	А	32
— at 500 V Rated value	А	32
— at 690 V Rated value	А	21
• at AC-4 at 400 V Rated value	А	22
Operating current with 1 current path		
● at DC-1		
— at 24 V Rated value	А	35
— at 110 V Rated value	А	4.5
— at 220 V Rated value	А	1
— at 440 V Rated value	А	0.4
— at 600 V Rated value	А	0.25
• at DC-3 at DC-5		
— at 24 V Rated value	А	20
— at 110 V Rated value	А	2.5
— at 220 V Rated value	А	1
— at 440 V Rated value	А	0.09
— at 600 V Rated value	А	0.06
Operating current with 2 current paths in series		
● at DC-1		
— at 24 V Rated value	А	35
— at 110 V Rated value	А	35
— at 220 V Rated value	А	5
— at 440 V Rated value	А	1
— at 600 V Rated value	А	0.8
• at DC-3 at DC-5		
— at 110 V Rated value	А	15
— at 220 V Rated value	А	3
— at 24 V Rated value	А	35
— at 440 V Rated value	А	0.27
— at 600 V Rated value	А	0.16
Operating current with 3 current paths in series		

• at DC-1		
— at 24 V Rated value	А	35
— at 110 V Rated value	А	35
— at 220 V Rated value	А	35
— at 440 V Rated value	А	2.9
— at 600 V Rated value	А	1.4
• at DC-3 at DC-5		
— at 110 V Rated value	А	35
— at 220 V Rated value	А	10
— at 24 V Rated value	А	35
— at 440 V Rated value	А	0.6
— at 600 V Rated value	А	0.6
Operating power	_	
• at AC-1 at 400 V Rated value	kW	28
• at AC-2 at 400 V Rated value	kW	15
• at AC-4 at 400 V Rated value	kW	11
Operating power		
● at AC-1		
— at 230 V at 60 °C Rated value	kW	15.5
— at 230 V Rated value	kW	16
— at 400 V at 60 °C Rated value	kW	27.5
— at 690 V at 60 °C Rated value	kW	47.5
— at 690 V Rated value	kW	48
• at AC-3		
— at 230 V Rated value	kW	7.5
— at 400 V Rated value	kW	15
— at 690 V Rated value	kW	18.5
Operating power for $\geq$ 200000 operating cycles at	_	
AC-4		
• at 400 V Rated value	kW	6
at 690 V Rated value	kW	10.3
Operating frequency		750
• 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		0.7 1.25
value of the magnet coil for DC		
Design of the surge suppressor Closing power of the magnet coil for DC	W	with diode assemblies 4.5
Holding power of the magnet coil for DC	W	4.5
I WARING POWER OF THE HIAGHER CONTINUE DO	vv	T.U

Auxiliary circuit:				
Number of NC contacts				
<ul> <li>for auxiliary contacts</li> </ul>				
— instantaneous contact		1		
Number of NO contacts				
<ul> <li>for auxiliary contacts</li> </ul>				
— instantaneous contact		1		
Product expansion Auxiliary switch		No		
Operating current at AC-15				
• at 230 V Rated value	А	10		
● at 400 V Rated value	А	3		
• at 690 V Rated value	А	1		
Operating current				
<ul> <li>at DC-12 at 125 V Rated value</li> </ul>	А	2		
<ul> <li>at DC-12 at 220 V Rated value</li> </ul>	А	1		
<ul> <li>at DC-12 at 600 V Rated value</li> </ul>	А	0.15		
• at DC-13 at 125 V Rated value	А	0.9		
<ul> <li>at DC-13 at 220 V Rated value</li> </ul>	А	0.3		
• at DC-13 at 600 V Rated value	А	0.1		
Operating current				
• at DC-12				
— at 60 V Rated value	А	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		
Contact reliability of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)		

UL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	А	27
• at 600 V Rated value	А	27
yielded mechanical performance [hp]		
<ul> <li>for single-phase AC motor at 110/120 V Rated value</li> </ul>	metric hp	2
<ul> <li>for single-phase AC motor at 230 V Rated value</li> </ul>	metric hp	5
<ul> <li>for three-phase AC motor at 200/208 V Rated value</li> </ul>	metric hp	10
<ul> <li>for three-phase AC motor at 220/230 V Rated value</li> </ul>	metric hp	10

<ul> <li>for three-phase AC motor at 460/480 V Rated value</li> </ul>	metric hp	20
<ul> <li>for three-phase AC motor at 575/600 V Rated</li> </ul>	metric	25
value	hp	20
Contact rating of the auxiliary contacts acc. to UL		A600 / Q600
Short-circuit:		
Design of the fuse link		
<ul> <li>for short-circuit protection of the main circuit</li> </ul>		
— with type of assignment 1 required		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 100 A
— with type of assignment 2 required		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
<ul> <li>for short-circuit protection of the auxiliary switch</li> </ul>		fuse gL/gG: 10 A
required		
Installation/ mounting/ dimensions:		
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
<ul> <li>Side-by-side mounting</li> </ul>		Yes
Height	mm	85
Width	mm	45
Depth	mm	107
Required spacing		
<ul> <li>with side-by-side mounting</li> </ul>		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— downwards	mm	0
— at the side	mm	0
<ul> <li>for grounded parts</li> </ul>		
— 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
aprialae		•

— at the side	mm	6			
Connections/ Terminals:					
Type of electrical connection					
<ul> <li>for main current circuit</li> </ul>		ring cable connection			
<ul> <li>for auxiliary and control current circuit</li> </ul>		ring cable connection			
Safety related data:					
B10 value with high demand rate acc. to SN 31920		1 000 000			
Proportion of dangerous failures					
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	%	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		Yes			
T1 value for proof test interval or service life acc. to IEC 61508	У	20			
Protection against electrical shock		finger-safe			
Mechanical data:					
Size of contactor		S0			
Ambient conditions:	Ambient conditions:				
Installation altitude at height above sea level	m	2 000			
maximum					
Ambient temperature					
<ul> <li>during operation</li> </ul>	°C	-25 +60			
• during storage	°C	-55 +80			
Certificates/ approvals:					

General Produc	t Approval		EMC	Functional Safety/Safety of Machinery	Declaration of Conformity
	CSA CSA	EHC	С-тіск	Type Examination	EG-Konf.
Test Certificates	Shipping App	proval			
Special Test Certificate	ABS	BUREAU VERITAS		GL	Lloyd's Register LRS
Shipping Approv	val		other		
PRS	RINA	RMRS	Environmental Confirmations	VDE	

## 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=3RT20274VB40

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RT20274VB40/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=3RT20274VB40&lang=en

