SIEMENS

Product data sheet

3RV2011-0EA40



CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-REL. 0.28...0.4A, N-RELEASE5.2A RING CABLE LUG CONNECTION STANDARD SW. CAPACITY

General technical data:		
Product brand name		SIRIUS
product designation		3RV2 circuit breaker
Size of the circuit-breaker		S00
Trip class		CLASS 10
Protection class IP / on the front		IP00
Degree of pollution		3
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
during storage	°C	-50 80
during operating	°C	-20 60
during transport	°C	-50 80
Resistance against shock		25g / 11 ms
Impulse voltage resistance / rated value	kV	6
Insulation voltage / rated value	V	690
Active power loss / total / typical	W	5.5
Item designation		
 according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 		F
according to DIN EN 61346-2		F

• of the main contacts / typical100,000• of the auxiliary contacts / typical100,000Type of the driving mechanism / motor drive0Design of the operating mechanismselector switchProduct function	Mechanical operating cycles as operating time	_	
Type of the driving mechanism / motor drive No Design of the operating mechanism selector switch Product function Yes • overload protection Yes • phase disturbance recognition Yes Product component Yes • audilary switch No • undervoltage release mechanism No • tip indicator No Product extension / optional / motor drive No Main circuit: No Number of poles / for main current circuit 3 Operating current / at AC-3 / at 400 V / rated value A • at 400 V / rated value W 90 • at 400 V / rated value W 120 • at 600 V / rated value W 120 • at 600 V / rated value W 120 • at 600 V / rated value W 120 • at 600 V / rated value W 120 • at 600 V / rated value W 120 • at 600 V / rated value W 120 • at 600 V / rated value W 120 <t< td=""><td>of the main contacts / typical</td><td></td><td>100,000</td></t<>	of the main contacts / typical		100,000
Design of the operating mechanism selector switch Product function Yes • overload protection Yes • has disturbance recognition Yes Product component Yes • sublingy switch No • undervoltage release mechanism No • tip indicator No Product extension / optional / motor drive No Main circuit: 3 Number of poles / for main current circuit 3 Operating voltage / at AC-3 / rated value / maximum V 690 Operating voltage / at AC-3 / rated value / maximum V 690 • at 400 V / rated value W 90 • • at 400 V / rated value W 120 • • at 800 V / rated value W 120 • • at 800 V / rated value W 180 Frequency of operation / at AC-3 / according to IEC 60947-6-2 / 1/h 15 Arrangement of electrical connectors / for main current circuit Top and bottom Accenter date • of the non-delayed short-circuit release A 52 5.2	 of the auxiliary contacts / typical 		100,000
Product function Yes • overload protection Yes • phase disturbance recognition Yes Product component No • auxiliary switch No • undervoltage release mechanism No • trip indicator No Product extension / optional / motor drive No Main circuit: No Number of poles / for main current circuit 3 Operating voltage / at AC-3 / rated value / maximum V Operating current / at AC-3 / rated value / maximum V Operating current / at AC-3 W 90 0 • at 400 V / rated value A • at 400 V / rated value W • at 400 V / rated value M • at 400 V / rated value A •	Type of the driving mechanism / motor drive		No
• overlead protectionYes• phase disturbance recognitionYesProduct componentYes• suxiliary switchNo• undervoltage release mechanismNo• indicatorNoProduct extension / optional / motor driveNoProduct extension / optional / motor driveNoMumber of poles / for main current circuit3Operating voltage / at AC-3 / rated value / maximumVService power / at AC-3800• at 400 V / rated valueW• at 400 V / rated valueNo• at 400 V / rated valu	Design of the operating mechanism		selector switch
• phase distributione recognition Yes Product component	Product function		
Product component No • auxiliary switch No • undervoltage release mechanism No • trip indicator No Product extension / optional / motor drive No Main circuit: No Number of poles / for main current circuit 3 Operating voltage / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / rated value A 0.3 Service power / at AC-3 U 100 • at 400 V / rated value W 90 • at 400 V / rated value W 100 • at 600 V / rated value W 100 • at 600 V / rated value W 100 • at 600 V / rated value W 100 • of the non-delayed short-circuit release A 5.2 5.2 • of the current-dependent overload release A 0.4 Service power / at AC-3 / at 230 V / rated value W 60 Continuous current / rated value W 60 Continuous current / rated value Ves 0	overload protection		Yes
• auxiliary switchNo• undervoltage release mechanismNo• trip indicatorNoProduct extension / optional / motor driveNoMumber of poles / for main current circuit3Operating voltage / at AC-3 / rated value / maximumV660Operating current / at AC-3 / rated value / maximumV0Operating current / at AC-3 / rated value / maximumV000	phase disturbance recognition		Yes
• undervoltage release mechanismNo• trip indicatorNoProduct extension / optional / motor driveNoMumber of poles / for main current circuit3Operating voltage / at AC-3 / rated value / maximumV690Operating current / at AC-3 / at 400 V / rated valueA0.3Service power / at AC-3 / at 400 V / rated valueA0.10• at 400 V / rated valueW90• at 500 V / rated value• at 400 V / rated valueW90 / valueW• at 600 V / rated valueW100 V / rated valueW90 / valueW• at 600 V / rated valueW100 V / rated valueW11/h15Arrangement of electrical connectors / for main current circuitTop and bottomAdjustable response currentA5.2 5.2• of the non-delayed short-circuit releaseA0.28 0.4Service power / at AC-3 / at 230 V / rated valueW60Continuous current / rated valueA0.4Auxiliary circuit:YeesNomber of NC contacts / for auxiliary contacts / instantaneous switching0Number of NO contacts / for auxiliary contacts / instantaneous switching00Number of change-over switches / for auxiliary contact	Product component		
• trip indicator No Product extension / optional / motor drive No Main circuit: No Number of poles / for main current circuit 3 Operating voltage / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / rated value / maximum V 690 • at 400 V / rated value A 0.3 Service power / at AC-3 W 90 • at 400 V / rated value W 120 • at 600 V / rated value W 180 • at 690 V / rated value W 180 • at 690 V / rated value W 180 • at 690 V / rated value W 180 • at 690 V / rated value W 180 • at 690 V / rated value W 180 • at 690 V / rated value W 180 • of the non-delayed short-circuit release A 52 5.2 • of the current-dependent overload release A 0.4 Continuous current / rated value W 60 Continuous current / rated value	auxiliary switch		No
Product extension / optional / motor drive No Main circuit: 3 Number of poles / for main current circuit 3 Operating voltage / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / at 400 V / rated value A 0.3 Service power / at AC-3 400 V / rated value W 90 • at 400 V / rated value W 90 90 • at 400 V / rated value W 90 90 • at 400 V / rated value W 90 90 • at 400 V / rated value W 90 90 • at 400 V / rated value W 90 90 • at 400 V / rated value W 90 90 • at 690 V / rated value W 120 90 • at 690 V / rated value W 180 90 Frequency of operation / at AC-3 / according to IEC 60947-6-2 / at dymatue 1/h 15 • of the non-delayed short-circuit release A 5.2 5.2 2 • of the non-delayed short-circuit release A 0.4 2 Product extension / auxiliary sontacts / instantaneous switching <td>undervoltage release mechanism</td> <td></td> <td>No</td>	undervoltage release mechanism		No
Main circuit: 3 Operating voltage / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / at 400 V / rated value A 0.3 Service power / at AC-3 W 90 • at 400 V / rated value W 90 • at 500 V / rated value W 120 • at 600 V / rated value W 180 Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum Top and bottom Arrangement of electrical connectors / for main current circuit Top and bottom Adjustable response current - - • of the non-delayed short-circuit release A 5.2 5.2 • of the current-dependent overload release A 0.4 Service power / at AC-3 / at 230 V / rated value W 60 Continuous current / rated value A 0.4 Auxiliary circuit: Yes Product extension / auxiliary sontacts / instantaneous switching 0 Number of NC contacts / for auxiliary contacts / instantaneous switching 0 Number of change-over switches / for auxiliary contacts 0	trip indicator		No
Number of poles / for main current circuit3Operating voltage / at AC-3 / rated value / maximumV630Operating current / at AC-3 / at 400 V / rated valueA0.3Service power / at AC-3W90• at 400 V / rated valueW90• at 600 V / rated valueW120• at 600 V / rated valueW180Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum1/h15Arrangement of electrical connectors / for main current circuitTop and bottomAdjustable response currentV60• of the non-delayed short-circuit releaseA5.2 5.2• of the current-dependent overload releaseA0.28 0.4Service power / at AC-3 / a 230 V / rated valueW60Continuous current / rated valueW60Auxiliary circuit:YesProduct extension / auxiliary contacts / instantaneous switching0Number of NO contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts / instantaneous switching0	Product extension / optional / motor drive		No
Operating voltage / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / at 400 V / rated value A 0.3 Service power / at AC-3 W 90 • at 400 V / rated value W 90 • at 600 V / rated value W 90 • at 600 V / rated value W 120 • at 600 V / rated value W 180 Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum Top and bottom Arrangement of electrical connectors / for main current circuit Top and bottom Adjustable response current - - • of the non-delayed short-circuit release A 5.2 5.2 • of the current-dependent overload release A 0.4 Service power / at AC-3 / at 230 V / rated value W 60 Continuous current / rated value A 0.4 Auxiliary circuit: Yes Product extension / auxiliary contacts / instantaneous switching 0 Number of NC contacts / for auxiliary contacts / instantaneous switching 0 Number of change-over switches / for auxiliary contacts 0 <td>Main circuit:</td> <td></td> <td></td>	Main circuit:		
Operating current / at AC-3 / at 400 V / rated valueA0.3Service power / at AC-3V90• at 400 V / rated valueW90• at 500 V / rated valueW120• at 690 V / rated valueW180Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum1/h15Arrangement of electrical connectors / for main current circuitTop and bottomAdjustable response currentA5.2 5.2• of the non-delayed short-circuit releaseA0.28 0.4Service power / at AC-3 / at 230 V / rated valueW60Continuous current / rated valueA0.4Auxiliary circuit:Yes1/hProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0Number of NO contacts / for auxiliary contacts / instantaneous switching0Number of ND contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts / instantaneous switching0	Number of poles / for main current circuit		3
Service power / at AC-3 W 90 • at 400 V / rated value W 90 • at 500 V / rated value W 120 • at 690 V / rated value W 180 Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum 1/h 15 Arrangement of electrical connectors / for main current circuit Top and bottom Adjustable response current • of the non-delayed short-circuit release A 5.2 5.2 • of the current-dependent overload release A 0.28 0.4 Service power / at AC-3 / at 230 V / rated value W 60 Continuous current / rated value A 0.4 Auxiliary circuit: Yes Product extension / auxiliary switch Yes 0 Number of NC contacts / for auxiliary contacts / instantaneous switching 0 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 0 Number of Change-over switches / for auxiliary contacts / instantaneous switching 0 0 Number of Change-over switches / for auxiliary contacts / instantaneous switching 0 0	Operating voltage / at AC-3 / rated value / maximum	V	690
• at 400 V / rated valueW90• at 500 V / rated valueW120• at 690 V / rated valueW180Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum1/h15Arrangement of electrical connectors / for main current circuitTop and bottomAdjustable response current • of the non-delayed short-circuit releaseA5.2 5.2• of the current-dependent overload releaseA0.28 0.4Service power / at AC-3 / at 230 V / rated valueW60Continuous current / rated valueW60Auxiliary circuit:Product extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0Number of change-over switches / for auxiliary contacts0	Operating current / at AC-3 / at 400 V / rated value	А	0.3
• at 500 V / rated valueW120• at 690 V / rated valueW180Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum1/h15Arrangement of electrical connectors / for main current circuitTop and bottomAdjustable response current • of the non-delayed short-circuit releaseA5.2 5.2• of the current-dependent overload releaseA0.28 0.4Service power / at AC-3 / at 230 V / rated valueW60Continuous current / rated valueW60Auxiliary circuit:YesProduct extension / auxiliary contacts / instantaneous switching0Number of NC contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0Number of change-over switches / for auxiliary contacts0Number of change-over switches / for auxiliary contacts0Number of change-over switches / for auxiliary contacts0	Service power / at AC-3		
• at 690 V / rated valueW180Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum1/h15Arrangement of electrical connectors / for main current circuitTop and bottomAdjustable response current• of the non-delayed short-circuit releaseA5.2 5.2• of the current-dependent overload releaseA0.28 0.4Service power / at AC-3 / at 230 V / rated valueW60Continuous current / rated valueW60Auxiliary circuit:-YesProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0Inputs/Outputs:-0	• at 400 V / rated value	W	90
Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum 1/h 15 Arrangement of electrical connectors / for main current circuit Top and bottom Adjustable response current 52 5.2 • of the non-delayed short-circuit release A 5.2 5.2 • of the current-dependent overload release A 0.28 0.4 Service power / at AC-3 / at 230 V / rated value W 60 Continuous current / rated value A 0.4 Auxiliary circuit: Yes Product extension / auxiliary switch Yes Number of NC contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of change-over switches / for auxiliary contacts 0 Inputs/ Outputs: Inputs/ Outputs:	• at 500 V / rated value	W	120
maximum Imaximum Imaximum Arrangement of electrical connectors / for main current circuit Top and bottom Adjustable response current Imaximum Top and bottom • of the non-delayed short-circuit release A 5.2 5.2 • of the current-dependent overload release A 0.28 0.4 Service power / at AC-3 / at 230 V / rated value W 60 Continuous current / rated value W 60 Auxiliary circuit: A 0.4 Product extension / auxiliary switch Yes Number of NC contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of change-over switches / for auxiliary contacts 0 Inputs/ Outputs: Imaxiliary contacts / for auxiliary contacts	• at 690 V / rated value	W	180
Adjustable response currentImage: constraint of the non-delayed short-circuit releaseA5.2 5.2• of the current-dependent overload releaseA0.28 0.4Service power / at AC-3 / at 230 V / rated valueW60Continuous current / rated valueA0.4Auxiliary circuit:YesProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0Number of NO contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0Inputs/ Outputs:Imputs/ Outputs:		1/h	15
• of the non-delayed short-circuit releaseA5.2 5.2• of the current-dependent overload releaseA0.28 0.4Service power / at AC-3 / at 230 V / rated valueW60Continuous current / rated valueA0.4Auxiliary circuit:YesProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0Number of NO contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0Inputs/ Outputs:U	Arrangement of electrical connectors / for main current circuit		Top and bottom
• of the current-dependent overload releaseA0.28 0.4Service power / at AC-3 / at 230 V / rated valueW60Continuous current / rated valueA0.4Auxiliary circuit:YesProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0Number of NO contacts / for auxiliary contacts / instantaneous switching0Number of NO contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0Inputs/ Outputs:U	Adjustable response current		
Service power / at AC-3 / at 230 V / rated value W 60 Continuous current / rated value A 0.4 Auxiliary circuit: Yes Product extension / auxiliary switch Yes Number of NC contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of change-over switches / for auxiliary contacts 0 Inputs/ Outputs: U	of the non-delayed short-circuit release	А	5.2 5.2
Continuous current / rated value A 0.4 Auxiliary circuit: Yes Product extension / auxiliary switch Yes Number of NC contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of change-over switches / for auxiliary contacts 0 Inputs/ Outputs: Inputs/ Outputs:	of the current-dependent overload release	А	0.28 0.4
Auxiliary circuit: Yes Product extension / auxiliary switch Yes Number of NC contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of change-over switches / for auxiliary contacts 0 Inputs/ Outputs: 0	Service power / at AC-3 / at 230 V / rated value	W	60
Product extension / auxiliary switch Yes Number of NC contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of change-over switches / for auxiliary contacts 0 Inputs/ Outputs: 0	Continuous current / rated value	А	0.4
Number of NC contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of change-over switches / for auxiliary contacts 0 Inputs/ Outputs: 0	Auxiliary circuit:		
switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of change-over switches / for auxiliary contacts 0 Inputs/ Outputs: 0	Product extension / auxiliary switch		Yes
switching 0 Number of change-over switches / for auxiliary contacts 0	-		0
Inputs/ Outputs:			0
	Number of change-over switches / for auxiliary contacts		0
Number of digital inputs 0	Inputs/ Outputs:		
	Number of digital inputs		0

Short-circuit:			
Breaking capacity limit short-circuit current (lcu)			
• at 400 V / rated value	А	100,000	
• at 500 V / rated value	А	100,000	
• at 690 V / rated value	А	100,000	
Design of the overcurrent release and short-circuit release		thermomagnetic	
Installation/mounting/dimensions:			
Built in orientation		any	
Type of mounting		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715	
Width	mm	45	
Height	mm	97	
Depth	mm	91	
Distance, to be maintained, to the ranks assembly			
• forwards	mm	0	
backwards	mm	0	
• upwards	mm	50	
• downwards	mm	50	
• sidewards	mm	0	
Distance, to be maintained, to earthed part			
• forwards	mm	0	
backwards	mm	0	
• upwards	mm	50	
• sidewards	mm	30	
• downwards	mm	50	
Distance, to be maintained, conductive elements			
• forwards	mm	0	
backwards	mm	0	
• upwards	mm	50	
downwards	mm	50	
• sidewards	mm	30	
Connections:			
Product function			
removable terminal for main circuit		No	
removable terminal for auxiliary and control circuit		No	
Design of the electrical connection			
for main current circuit		ring cable connection	
Certificates/approvals:			

Verification of suita	bility		C	E/UL/CSA	
• für Staubexplosio	onsschutz für Zone 2	1/22	no	D	
 for gas explosion 	n protection for zone 1	/2	na	o	
General Product A	pproval			For use in hazar	dous locations
COC	(SA)	ROSTEST		DEKRA EXAM, DMT	
Test Certificates					
Manufacturer	other				
Shipping Approva	1				
ABS	GL	Lloyd's Kegister Lrs	PRS	RINA	RMRS
other					
Manufacturer	other	VDE			

Safety:

Galety.		
B10 value / with high demand rate		
according to SN 31920		50,000
T1 value / for proof test interval or service life		
according to IEC 61508	а	10
Failure rate (FIT value) / with low demand rate		
according to SN 31920	FIT	50
Proportion of dangerous failures		
with low demand rate / according to SN 31920	%	40
• with high demand rate / according to SN 31920	%	40
Protection against electrical shock		finger-safe

Further information:

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

Industry Mall (Online ordering system)

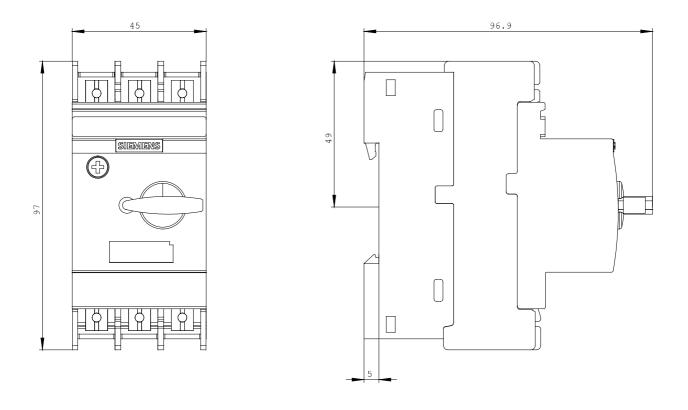
http://www.siemens.com/industrial-controls/mall

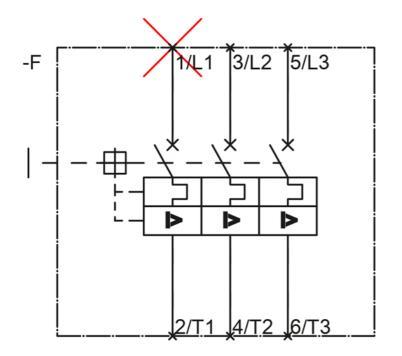
CAx-Online-Generator

http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RV2011-0EA40/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2011-0EA40





last change:

Oct 17, 2011