SIEMENS

Product data sheet



CIRCUIT-BREAKER SZ S00, FOR PLANT PROTECTION, WITH APPROBATION CIRCUIT-BREAKER UL 489. CSA C22.2 NO.5-02. A-RELEASE 0.25 A, N-RELEASE 3.3 A, SCREW CONNECTION, STANDARD SW. CAPACITY

General technical data:		
Product brand name		SIRIUS
product designation		3RV2 circuit breaker
Size of the circuit-breaker		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 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	4.8
Item designation		
 according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 		F
according to DIN EN 61346-2		F
Mechanical operating cycles as operating time		

• of the diving mechanism / motor drive100,000Type of the driving mechanism / motor driveNoDesign of the operating mechanismISelector switchrevealed protectionII• overland protectionII• overland protectionNo• overland protectionNo• outdro drive processionNoProduct componentNo• undervolling relases mechanismNo• undervolling value (1 A C3 / rated valueNoPortuce tracting value (1 A C3 / rated valueNu• at 400 V rated value	of the main contacts / typical		100,000
Design of the operating mechanism Image: Selector switch Product function Yes • verified protection Yes • standing system No • undervoltage release mechanism No • tip indicator No Product stension / optional / motor drive No Service power / at AC-3 / act do V / rate value A operating current / at AC-3 / act do V / rate value NO • at 400 V / rated value WW 60 • at 600 V / rated value WW 10 • at 600 V / rated value WW 10 Service power / at AC-3 / according to IEC 60947-6-2 / A Top and bottom Service power / at AC-3 / according to IEC 60947-6-2 / A YW 10 Aurangement of electrical connectors / for main current circuit <th>of the auxiliary contacts / typical</th> <th></th> <th>100,000</th>	of the auxiliary contacts / typical		100,000
Product function Yes • overfoad protection No • phase disturbance recognition No Product component No • acuiliary switch No • undervoltage release mechanism No • tip indicator No Product extension / optional / motor drive No Mumber of poles / for main current circuit 3 Operating current / at AC-3 / at 400 V / rated value A 0.2 Service power / at AC-3 W 600 • at 400 V / rated value W 60 • at 400 V / rated value W 60 • at 600 V / rated value W 120 Prequency of operation / at AC-3 / according to IEC 60947-621/ maximum Top and bottom Service power / at AC-3 / according to IEC 60947-621/ maximum Top and bottom Continuous current / rated value W 0 Continuous current / rated value M 0 Continuous current / rated value M 0 Service power / at AC-3 / according to IEC 60947-621/ maximum No 0 Mumber of electrica	Type of the driving mechanism / motor drive	-	No
• overload protectionYes• phase disturbance recognitionNoProduct componentNo• undervoltage release mechanismNo• undervoltage release mechanismNo• trip indicatorNoProduct stension / pational / motor driveNoProduct stension / pational / motor driveSoProduct stension / pational / motor driveNoProduct stension / pational / motor driveNoProduct stension / pation / at AC-3 / rated value / maximumVService power / at AC-3W• at 400 V / rated valueW• at 400 V rated valueNo• at 400 V rated valueW• at 400 V rated valueW• at 400 V rated valueNo• at 400 V rated valueNo <tr< th=""><th>Design of the operating mechanism</th><th>-</th><th>selector switch</th></tr<>	Design of the operating mechanism	-	selector switch
• phase distributions encognitionNoProduct componentNo• auxiliary switchNo• undervoltage release mechanismNo• trip indicatorNoProduct extension / optional / motor driveNoProduct extension / optional / motor driveNoMulter of poles / for main current circuitSOperating current / at AC-3 / rated value / maximumVOperating current / at AC-3 / at 400 V / rated valueW00.2Service power / at AC-3W• at 400 V / rated valueW• at 400 V rated valueImage• at 400 V rated valueImage• at 400 V rated valueImage <t< th=""><th>Product function</th><th>-</th><th></th></t<>	Product function	-	
Product component No • auxiliary switch No • inp 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 voltage / at AC-3 / rated value / maximum V 690 Operating voltage / at AC-3 / rated value A 0.2 • at 400 V / rated value W 60 • at 400 V / rated value W 60 • at 400 V / rated value W 60 • at 400 V / rated value W 60 • at 400 V / rated value W 90 • at 400 V / rated value W 60 • at 600 V / rated value W 60 • at 600 V / rated value W 60 • at 600 V / rated value W 40 Continuous current / rated value W 40 Continuous current / rated value A 0.25 Number of NC contacts / for auxiliary conta	overload protection		Yes
auxiliary witchImage: Image: Imag	phase disturbance recognition		No
• undervoltage release mechanismNo• trip indicatorNoProduct extension / optional / motor driveNoMumber of poles / for main current circuit3Operating yoltage / at AC-3 / rated value / maximumVService power / at AC-3 / rated value / maximumV0 perating outrent / at AC-3 / rated value / maximumV0 perating outrent / at AC-3 / rated valueA0.2Service power / at AC-3W0 at 400 V rated valueW0 at 500 V rated valueW0 at 600 V rated valueW0 at 600 V rated valueW1 at 600 V rated valueW2 at 600 V rated valueW1 at 600 V rated valueW2 at 600 V rated valueM2 at 600 V rated valueW2 at 600 V rated valueW2 at 600 V rated valueW3 at 600 V rated valueM2 at 600 V rated valueM3 at 60	Product component	-	
• trip indicatorNoProduct extension / optional / motor driveNoMain circuit:NoNumber of poles / for main current circuit3Operating voltage / at AC-3 / rated value / maximumV690Operating current / at AC-3 / at 400 V / rated valueA0.2Service power / at AC-3W60• at 400 V / rated valueW60• at 600 V / rated valueW90• at 600 V / rated valueW15Frequency of operation / at AC-3 / according to IEC 60947-6271/h15maximumW40Continuous current / rated valueW40Continuous current / rated valueW60Number of NC contacts / for auxiliary contacts / instantaneous switchingYesNumber of NC contacts / for auxiliary contacts / instantaneous switchingYesNumber of NC contacts / for auxiliary contacts / instantaneous switching90Number of NC contacts / for auxiliary contacts / instantaneous switching90Number of digital inputs0Inputs/ Outputs:10Enerking capacity limit short-circuit (lcu) • at 400 V/ rated value4Breaking capacity limit short-circuit current (lcu) • at 400 V/ rated valueAInputs/ OutputsInputs/ Outputs	auxiliary switch		No
Product extension / optional / motor drive No Main circuit: Image: state 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 0.2 Service power / at AC-3 W 60 • at 400 V / rated value W 90 • at 400 V / rated value W 90 • at 400 V / rated value W 90 • at 400 V / rated value W 90 • at 600 V / rated value W 90 • at 600 V / rated value W 90 • at 600 V / rated value W 90 • at 600 V / rated value W 90 • at 600 V / rated value W 90 • at 600 V / rated value W 90 • at 600 V / rated value W 90 • at 600 V / rated value W 90 • at 600 V / rated value W 90 • at 600 V / rated value W 40 Continuous current / rated value M 90 • Auxillary contacts / for auxillary contacts / instantaneous switching 90 • Mumber of NO contacts / for auxillary contacts / instantaneous switching 0 • Number of dig	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 A 0.2 Service power / at AC-3 W 60 • at 400 V / rated value W 60 • at 400 V / rated value W 90 • at 600 V / rated value W 90 • at 600 V / rated value W 90 • at 600 V / rated value W 90 • at 600 V / rated value W 120 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 Service power / at AC-3 / at 230 V / rated value W 40 Continuous current / rated value A 0.25 Auxiliary circuit: Ves 0 Number of NC contacts / for auxiliary contacts / instantaneous switching 0 0 Number of ND contacts / for auxiliary contacts / instantaneous switching 0 0 Number of ND contacts / for auxiliary contacts / instantaneous switching 0 0 Number of digital inputs 0	• trip indicator		No
Number of poles / for main current circuit3Operating voltage / at AC-3 / rated value / maximumV690Operating current / at AC-3 / at 400 V / rated valueA0.2Service power / at AC-3W60• at 400 V / rated valueW60• at 600 V / rated valueW90• at 600 V / rated valueW120Frequency of operation / at AC-3 / according to IEC 60947-6-2/ maximum1/h15Arrangement of electrical connectors / for main current circuitV40Service power / at AC-3 / at 230 V / rated valueW40Continuous current / rated valueV40Continuous current / rated valueV90Auxillary circuit:Yes10Product extension / auxillary contacts / instantaneous switching0Number of NC contacts / for auxillary contacts / instantaneous switching0Number of digital inputs00Short-circuit:0Encuts0Service power of digital inputs0Auxiliary contacts / for auxiliary contacts / instantaneous switching0Number of NO contacts / for auxiliary contacts0Number of digital inputs0Short-circuit:1Breaking capacity limit short-circuit current (lcu) • at 400 V/ rated valueAA100,000	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 0.2 Service power / at AC-3 W 60 • at 400 V / rated value W 60 • at 600 V / rated value W 90 • at 600 V / rated value W 120 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 Service power / at AC-3 / at 230 V / rated value W 40 Continuous current / rated value W 60 Number of NC contacts / for auxiliary contacts / instantaneous switching Person 90 Number of NC contacts / for auxiliary contacts / instantaneous switching 0 0 Number of ND contacts / for auxiliary contacts / instantaneous switching 0 0 Number of ND contacts / for auxiliary contacts / instantaneous switching 0 0 Number of digital inputs 0 0 Short-circuit: V 10 Enesking capacity limit short-circuit current (Icu) 0 + at 400 V / rated value A 100,000	Main circuit:		
A read of the second	Number of poles / for main current circuit		3
Service power / at AC-3W60• at 400 V / rated valueW60• at 600 V / rated valueW90• at 690 V / rated valueW120Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum1/h15Arrangement of electrical connectors / for main current circuitTop and bottomService power / at AC-3 / at 230 V / rated valueW40Continuous current / rated valueW40Continuous current / rated valueW0.25Auxilliary circuit:YesProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0Number of NO contacts / for auxiliary contacts / instantaneous switching0Inputs/ Outputs:0Number of digital inputs0Short-circuit:2Breaking capacity limit short-circuit current (Icu) • at 400 V / rated valueAInputs/ V rated valueAInputs/ OutputsAInputs/ Outputs0	Operating voltage / at AC-3 / rated value / maximum	V	690
• at 400 V / rated valueW60• at 500 V / rated valueW90• at 690 V / rated valueW120Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum1/h15Arrangement of electrical connectors / for main current circuitTop and bottomService power / at AC-3 / at 230 V / rated valueW40Continuous current / rated valueW40Auxiliary circuit:YesProduct extension / auxiliary contacts / instantaneous switching0Number of NC contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0Inputs/ Outputs:0Number of digital inputs0Short-circuit:0Preaking capacity limit short-circuit current (Icu) • at 400 V / rated valueAInputs/ V rated valueAInp	Operating current / at AC-3 / at 400 V / rated value	А	0.2
• at 500 V / rated valueW90• at 600 V / rated valueW120Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum1/h15Arrangement of electrical connectors / for main current circuitW40Service power / at AC-3 / at 230 V / rated valueW40Continuous current / rated valueA0.25Arkilfary circuit:YesProduct extension / auxiliary switchService power / at AC-3 for auxiliary contacts / instantaneous switching0Number of NC contacts / for auxiliary contacts / instantaneous switching0Number of NC contacts / for auxiliary contacts / instantaneous switching0Number of Change-over switches / for auxiliary contacts0Number of digital inputs0Short-circuit:0Preaking capacity limit short-circuit current (Icu) • at 400 V / rated valueAAuxiliary capacity limit short-circuit current (Icu) • at 400 V / rated valueA	Service power / at AC-3	-	
• at 690 V / rated valueW120Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum1/h15Arrangement of electrical connectors / for main current circuitTop and bottomService power / at AC-3 / at 230 V / rated valueW40Continuous current / rated valueA0.25Auxiliary circuit:YesProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0Number of NC contacts / for auxiliary contacts / instantaneous switching0Number of NC contacts / for auxiliary contacts / instantaneous switching0Number of digital inputs0Short-circuit:0Preaking capacity limit short-circuit current (Icu) • at 400 V / rated valueANumber of V / rated valueA	• at 400 V / rated value	W	60
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 Service power / at AC-3 / at 230 V / rated value W 40 Continuous current / rated value W 0.25 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 Number of digital inputs 0 Short-circuit: Breaking capacity limit short-circuit current (lcu) A * at 400 V/ rated value A 100,000	• at 500 V / rated value	W	90
maximumImage: maximumArrangement of electrical connectors / for main current circuitTop and bottomService power / at AC-3 / at 230 V / rated valueW40Continuous current / rated valueA0.25Auxiliary circuit:Product extension / auxiliary switchImage: MaximumProduct extension / auxiliary switchImage: Maximum0Number of NC contacts / for auxiliary contacts / instantaneous switching00Number of NO contacts / for auxiliary contacts / instantaneous switching00Number of change-over switches / for auxiliary contacts00Number of digital inputsImage: Maximum00Short-circuit:Breaking capacity limit short-circuit current (lcu) • at 400 V / rated valueA100,000	• at 690 V / rated value	W	120
Service power / at AC-3 / at 230 V / rated valueW40Continuous current / rated valueA0.25Auxiliary 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 NO contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0Inputs/ Outputs:0Short-circuit:0Breaking capacity limit short-circuit current (Icu) • at 400 V / rated valueA100,000		1/h	15
Continuous current / rated valueA0.25Auxiliary circuit:YesProduct extension / auxiliary switchMYesNumber 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 NO contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0Inputs/ Outputs:0Short-circuit:Inputs/ Output short-circuit current (Icu) • at 400 V / rated valueA100,000	Arrangement of electrical connectors / for main current circuit		Top and bottom
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 Number of digital inputs 0 Short-circuit: 0 Breaking capacity limit short-circuit current (lcu) A • at 400 V / rated value A	Service power / at AC-3 / at 230 V / rated value	W	40
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 Short-circuit: 0 Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value A 100,000	Continuous current / rated value	А	0.25
Number of NC contacts / for auxiliary contacts / instantaneous switching0Number of NO contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0Inputs/ Outputs:0Number of digital inputs0Short-circuit:0Breaking capacity limit short-circuit current (Icu) • at 400 V / rated valueA100,000100,000	Auxiliary circuit:		
switchingImage: switchingImage: switchingNumber of NO contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0Inputs/ Outputs:0Short-circuit:Short-circuit current (Icu) • at 400 V / rated valueAInputs/ Outputs:A	Product extension / auxiliary switch		Yes
switching inferior Number of change-over switches / for auxiliary contacts 0 Inputs/ Outputs: Inputs/ Outputs Number of digital inputs 0 Short-circuit: Inputs/ Outputs Short-circuit: Inputs/ Outputs Breaking capacity limit short-circuit current (Icu) A 100,000	-		0
Inputs/ Outputs: Number of digital inputs Short-circuit: Breaking capacity limit short-circuit current (lcu) • at 400 V / rated value	•		0
Number of digital inputs 0 Short-circuit: Image: Short-circuit current (lcu) • at 400 V / rated value A 100,000	Number of change-over switches / for auxiliary contacts	-	0
Short-circuit: Breaking capacity limit short-circuit current (lcu) • at 400 V / rated value A	Inputs/ Outputs:		
Breaking capacity limit short-circuit current (Icu) A 100,000	Number of digital inputs		0
• at 400 V / rated value A 100,000	Short-circuit:		
	Breaking capacity limit short-circuit current (Icu)		
• at 500 V / rated value A 100,000	• at 400 V / rated value	А	100,000
	• at 500 V / rated value	А	100,000

• at 690 V / rated value	А	100,000		
Breaking capacity limit short-circuit current (lcu) / at 480 AC	A	65,000		
Y/277 V / according to UL 489 / rated value	~	05,000		
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	144		
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	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		screw-type terminals		
Type of the connectable conductor cross-section				
• for main contacts				
• solid		2x (1 10 mm2)		
stranded		1.5 25 mm²		

 finely strande with conduct 	ed uctor end processing			2x (1 16 mm2)	
 for AWG conduct 	ctors / for main contacts	5		2x (14 10)	
Certificates/appr	ovals:				
Verification of suit	ability			CE / UL / CSA	
 f ür Staubexplos 	ionsschutz für Zone 21/	22		no	
 for gas explosio 	n protection for zone 1/	2		no	
General Product	Approval			Test Certificates	
coc	(SA)	<u>ROSTEST</u>		Manufacturer	
Shipping Approva	al				
ABS	G L C	Lloyd's Register	PRS		RMRS
other					
Manufacturer	other				

	50,000
а	10
FIT	50
%	40
%	40
	finger-safe
	FIT %

Further information:

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

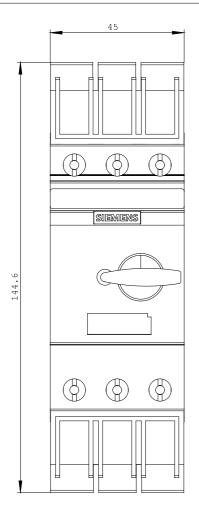
Industry Mall (Online ordering system) http://www.siemens.com/industrial-controls/mall

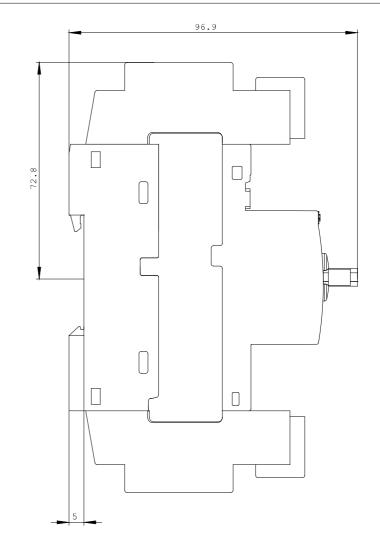
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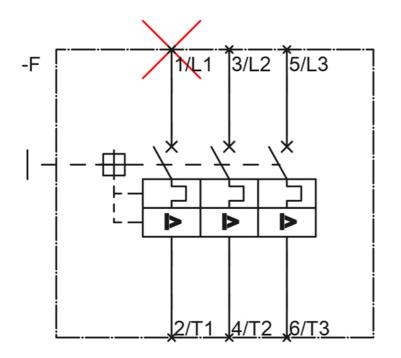
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last change:

Oct 17, 2011