SIEMENS

Product data sheet

3RV2811-1HD10



CIRCUIT-BREAKER SZ S00, FOR TRANSFORMER PROTECTION, WITH APPROBATION CIRCUIT-BREAKER UL 489. CSA C22.2 NO.5-02. A-RELEASE 8 A, N-RELEASE 163 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	7.3
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 main contacts / typical		100,000
 of the auxiliary contacts / typical 		100,000
Type of the driving mechanism / motor drive		No
Design of the operating mechanism		selector switch
Product function		
overload protection		Yes
phase disturbance recognition		No
Product component	-	
auxiliary switch		No
undervoltage release mechanism		No
• trip indicator		No
Product extension / optional / motor drive		No
Main circuit:		
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	А	6.5
Service power / at AC-3	-	
• at 400 V / rated value	W	3,000
• at 500 V / rated value	W	4,000
• at 690 V / rated value	W	5,500
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 current-dependent overload release 	А	88
Service power / at AC-3 / at 230 V / rated value	W	1,500
Continuous current / rated value	А	8
Auxiliary circuit:		
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:		
Number of digital inputs		0
Short-circuit:		
Breaking capacity limit short-circuit current (lcu)		

• if 400 V / rated valueA100.000• art 600 V / rated valueA42.000• art 600 V / rated valueA6,000Design of the overcurrent release and short-circuit releaseA6,000InstanceIntermonagneticInstanceIntermonagneticInstanceIntermonagneticBuilt in orientationIntermonagneticType of mounting diamensions:IntermonagneticBuilt in orientationIntermonagneticWidthIntermonagneticHeightIntermonagneticHeightIntermonagnetic </th <th></th> <th></th> <th></th>				
A 600Constraint of the overcurrent (cut) / at 480 AC Y2777 Vaccording to UL 489 / raid valueA6.000Design of the overcurrent release at short-circuit releaseI termonagneticInstallation/mounting/dimensions:I termonagneticBuilt norientationmanyType of mountingI mail anyBuilt norientationm5Widhm4Depthm91Obstance, to be maintained, to the ranks assemblym0• convardsm0• convardsm <td< td=""><td>• at 400 V / rated value</td><td>А</td><td>100,000</td></td<>	• at 400 V / rated value	А	100,000	
Preaking capacity limit short-circuit current (licu) / at 490 AC A 65:000 V277 V according to UL 489 / rated value itermomagnetic Design of the overcurrent release and short-circuit release in monitory and sap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Width nm 45 Height nm 144 Depth mm 0 Option 0 1 • lowards mm 0 • dowards mm	• at 500 V / rated value	А	42,000	
Y277 V i according to UL 489 / rated value itermomagnetic Design of the overcurrent release and short-circuit release itermomagnetic Installation/incounting/dimensions: any Built in orientation any Type of mounting any Width nm 45 Height nm 144 Dpth 0 144 Distance, to be maintained, to the ranks assembly - - • forwards nm 0 144 • downwards nm 0 144	• at 690 V / rated value	А	6,000	
Installation/nounting/dimensions: event of e		A	65,000	
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 91 Distance, to be maintained, to the ranks assembly mm 0 • forwards mm 0 0 • dowards mm	Design of the overcurrent release and short-circuit release	_	thermomagnetic	
Type of mounting serve and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Width mm 45 Height mm 144 Depth mm 91 Istance, to be maintained, to the ranks assembly mm 0 • forwards mm 0 0 • downwards mm 50 0 • downwards mm 0 0 • downward	Installation/mounting/dimensions:			
Widthmounting rail according to DIN EN 60715Widthmm45Heightmm144Dethmm91Obtance, to be maintained, to the ranks assemblymm0· forwardsmm0· dowardsmm50· dowardsmm50· dowardsmm0· downardsmm0· downardsmm0<	Built in orientation		any	
Heightmm144Depthmm91Distance, to be maintained, to the ranks assemblymm0•forwardsmm0•backwardsmm50•downwardsmm50•downwardsmm0•isdiewardsmm0•backwardsmm0•backwardsmm0•backwardsmm0•backwardsmm0•backwardsmm0•backwardsmm0•backwardsmm0•backwardsmm0•backwardsmm0•backwardsmm50•backwards </td <td>Type of mounting</td> <td></td> <td colspan="2"></td>	Type of mounting			
Depth mm 91 Distance, to be maintained, to the ranks assembly mm 0 • forwards mm 0 • backwards mm 50 • downwards mm 0 • downwards mm 50 • downwards mm 0 • sidewards mm 0 Distance, to be maintained, to earthed part - - • forwards mm 0 - • backwards mm 0 - • backwards mm 0 - • orwards mm 0 - • orwards mm 50 - • orwards	Width	mm	45	
Distance, to be maintained, to the ranks assembly Imm Output • forwards mm 0 • backwards mm 50 • upwards mm 50 • downwards mm 0 • sidewards mm 0 • sidewards mm 0 • forwards mm 0 • backwards mm 0 • downwards mm 0 • downwards mm 0 • downwards mm 0 • downwards mm 0 • backwards mm 0 • downwards mm 0	Height	mm	144	
• forwardsnm0• backwardsnm0• upwardsnm0• downwardsnm0• sidewardsnm0• forwardsnm0• backwardsnm0• backwardsnm0• backwardsnm0• backwardsnm0• backwardsnm0• upwardsnm0• downwardsnm0• downwardsnm0• downwardsnm0• downwardsnm0• forwardsnm0• forwardsnm0• downwardsnm0• downwardsnm0• downwardsnm0• downwardsnm0• forwardsnm0• downwardsnm0• downwardsnmNo• removable terminal for main circuit<	Depth	mm	91	
backwardsnm0upwardsnm50downwardsnm0sidewardsnm0Distance, to be maintained, to earthed partnm0backwardsnm0backwardsnm50upwardsnm50sidewardsnm50upwardsnm50downwardsnm50downwardsnm50downwardsnm50instrace, to be maintained, conductive elementsnm50upwards <t< td=""><td>Distance, to be maintained, to the ranks assembly</td><td></td><td></td></t<>	Distance, to be maintained, to the ranks assembly			
inductioninitial initial part of the connectable conductor cross-sectioninitial part of the connectable conductor cross-section	• forwards	mm	0	
Normardsmm50sidewardsmm0Distance, to be maintained, to earthed partmm0• forwardsmm0• backwardsmm0• backwardsmm50• upwardsmm30• downwardsmm50• downwardsmm50Distance, to be maintained, conductive elementsmm50• forwardsmm0• backwardsmm50• convections:mm50Ventertionsmm50• removable terminal for main circuitmm50• removable terminal for main circuitNo• removable terminal for main circuitNo• removable terminal for nain circuitNo• removable terminal for nain circuitNo• removable terminal for nain circuitSidewards• removable terminal	backwards	mm	0	
sidewardsmm0Distance, to be maintained, to earthed partimm0• forwardsmm0• backwardsmm0• upwardsmm50• idewardsmm50• downwardsmm0• downwardsmm0Distance, to be maintained, conductive elementsmm0• forwardsmm0• backwardsmm0• backwardsmm50• backwardsmm50• backwardsmm50• downwardsmm30• downwardsmm30• oftwardsmm30• connections:NoProduct functionNo• removable terminal for main circuitNo• removable terminal for main circuitNo• removable terminal for auxiliary and control circuitNo• for main current circuitscrew-type terminals• for main current circuitscrew-type terminals	• upwards	mm	50	
Distance, to be maintained, to earthed partImm0• forwardsmm0• backwardsmm50• upwardsmm30• downwardsmm50• downwardsmm50• forwardsmm0• forwardsmm0• forwardsmm50• forwardsmm50• forwardsmm50• forwardsmm50• backwardsmm50• upwardsmm50• upwardsmm50• upwardsmm50• downwardsmm50• downwardsmm	downwards	mm	50	
inwardsnmm0ibackwardsnmm0iupwardsnmm50isdewardsnmm30idownwardsnmm50Distance, to be maintained, conductive elementsnmm0iforwardsnmm0iforwardsnmm50ibackwardsnmm50ibackwardsnmm50ibackwardsnmm50ibackwardsnmm50ibackwardsnmm30ibackwardsnmm50ibackwards<	• sidewards	mm	0	
backwardsnm0upwardsnm50sidewardsnm30odwnwardsnm50Distance, to be maintained, conductive elementsnm0forwardsnm0obackwardsnm0obackwardsnm50obackwardsnm50odwnwardsnm50odwnwardsnm30odwnwardsnm50odwnwardsnm50otacted tunctionnm50removable terminal for main circuitnm50removable terminal for auxiliary and control circuitNopeign of the electrical connectioniscew-type terminalsof train current circuitiscew-type terminals	Distance, to be maintained, to earthed part			
• upwardsmm50• sidewardsmm30• downwardsmm50Distance, to be maintained, conductive elementsmm50• forwardsmm0• backwardsmm0• backwardsmm50• upwardsmm50• downwardsmm50• downwardsmm30• sidewardsmm30• sidewardsmm30• sidewardsmm30• removable terminal for main circuitmmNo• removable terminal for auxiliary and control circuitNo• removable terminal for auxiliary and control circuitNo• for main current circuitImmscrew-type terminals• for main current circuitImmscrew-type terminals	• forwards	mm	0	
· sidewardsmm30· downwardsmm50Distance, to be maintained, conductive elementsmm0· forwardsmm0· backwardsmm0· backwardsmm50· downwardsmm50· downwardsmm30· downwardsmm30· downwardsmm50· downwardsmm30· emovable terminal for main circuitmm30· removable terminal for main circuitNo· removable terminal for auxiliary and control circuitNoDesign of the electrical connectionImmscrew-type terminals· for main current circuitImmscrew-type terminals	backwards	mm	0	
• downwardsmm50Distance, to be maintained, conductive elementsmm0• forwardsmm0• backwardsmm0• upwardsmm50• downwardsmm50• downwardsmm30• sidewardsmm30• connections:NoProduct functionNo• removable terminal for main circuitNo• removable terminal for main circuitNo• for main current circuitSirew-type terminals• for main current circuitscrew-type terminals	• upwards	mm	50	
Distance, to be maintained, conductive elementsImmImm• forwardsmm0• backwardsmm0• upwardsmm50• downwardsmm30• sidewardsmm30• connections:VerticeProduct functionMNo• removable terminal for main circuitNo• removable terminal for auxiliary and control circuitNoDesign of the electrical connectionFor main current circuit• for main current circuitImmType of the connectable conductor cross-sectionImm	• sidewards	mm	30	
• forwardsmm0• backwardsmm0• upwardsmm50• downwardsmm30• sidewardsmm30• removable terminal for main circuitMoNo• removable terminal for auxiliary and control circuitNo• for main current circuitMoNo• for main current circuitMoSo• for main current circuitSoSo• for main current circuitS	downwards	mm	50	
• backwardsnmm0• upwardsnmm50• downwardsmm30• sidewardsmm30Product function• removable terminal for main circuitImmNo• removable terminal for auxiliary and control circuitNoNoDesign of the electrical connectionImmscrew-type terminals• for main current circuitImmscrew-type terminals	Distance, to be maintained, conductive elements			
• upwardsnm50• downwardsmm50• sidewardsmm30Connections:Connections:Product functionImmNo• removable terminal for main circuitImmNo• removable terminal for auxiliary and control circuitNoNoDesign of the electrical connectionScrew-type terminals• for main current circuitImmScrew-type terminals	• forwards	mm	0	
• downwardsmm50• sidewardsmm30Connections:Product function• removable terminal for main circuitImage: Second Se	• backwards	mm	0	
• sidewardsmm30Connections:Product functionII• removable terminal for main circuitINo• removable terminal for auxiliary and control circuitNoNoDesign of the electrical connectionII• for main current circuitIscrew-type terminalsType of the connectable conductor cross-sectionII	• upwards	mm	50	
Connections: Section (Connection) Product function Image: Connection (Connection) • removable terminal for main circuit No • removable terminal for auxiliary and control circuit No Design of the electrical connection Image: Connection • for main current circuit Image: Connection • for main current circuit Image: Connection Type of the connectable conductor cross-section Image: Connection	downwards	mm	50	
Product functionNo• removable terminal for main circuitNo• removable terminal for auxiliary and control circuitNoDesign of the electrical connectionNo• for main current circuitScrew-type terminalsType of the connectable conductor cross-sectionImage: Strew-type terminal screw-type termi	• sidewards	mm	30	
 removable terminal for main circuit removable terminal for auxiliary and control circuit No Design of the electrical connection for main current circuit Type of the connectable conductor cross-section 	Connections:			
• removable terminal for auxiliary and control circuitNoDesign of the electrical connection • for main current circuitscrew-type terminalsType of the connectable conductor cross-sectionscrew-type terminals	Product function			
Design of the electrical connection screw-type terminals • for main current circuit screw-type terminals Type of the connectable conductor cross-section screw-type terminals	 removable terminal for main circuit 		No	
• for main current circuit screw-type terminals Type of the connectable conductor cross-section screw-type terminals	 removable terminal for auxiliary and control circuit 		No	
Type of the connectable conductor cross-section	Design of the electrical connection			
	for main current circuit		screw-type terminals	
for main contacts	Type of the connectable conductor cross-section			
	for main contacts			

• solid				2x (1 10 mm2)	
 stranded 				1.5 25 mm²	
 finely strand 	ded				
• with cond	ductor end processing			2x (1 16 mm2)	
 for AWG conduct 	uctors / for main contact	S		2x (14 10)	
Certificates/app	provals:				
Verification of sui	itability			CE / UL / CSA	
 für Staubexplo 	sionsschutz für Zone 21	/22		no	
 for gas explosi 	ion protection for zone 1	/2		no	
General Product Approval		Test Certific	Test Certificates		
(SA)	ROSTEST		Manufacture	ī	
Shipping Approv	val				
ABS	GL	Lloyd's Register Lrs	PRS	RINA	RMRS
other					
Manufacturer	other				

Safety:			
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

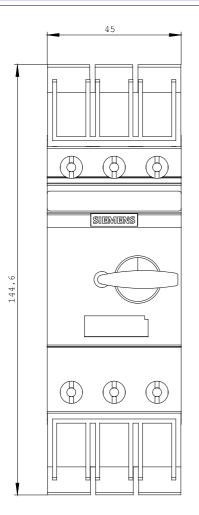
Industry Mall (Online ordering system)

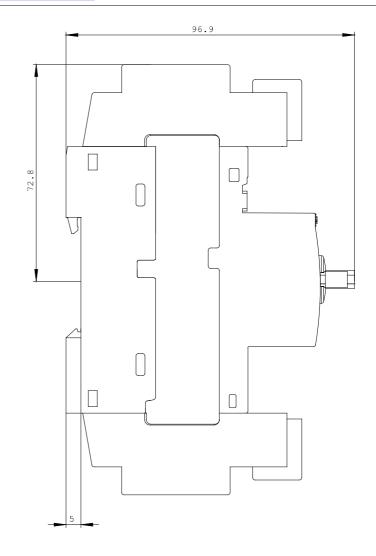
http://www.siemens.com/industrial-controls/mall

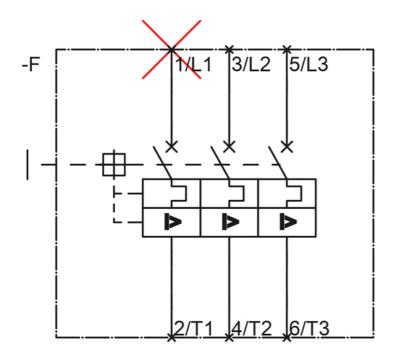
CAx-Online-Generator http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RV2811-1HD10/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2811-1HD10







last change:

Oct 17, 2011