SIEMENS

hoja de datos del producto

3RV2011-1EA15



CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-RELEASE 2.8...4A, N-RELEASE 52A, SCREW CONNECTION, STANDARD SW. CAPACITY, W. TRANSVERSE AUX. SWITCH 1NO+1NC

General technical data:				
product brand name		SIRIUS		
Product designation		3RV2 circuit breaker		
Size of the circuit-breaker		S00		
Number of poles / for main current circuit		3		
Product function				
short circuit protection		Yes		
overload protection		Yes		
phase disturbance recognition		Yes		
plant protection		Yes		
motor protection		Yes		
 motor protection with relais overload functionality 		No		
starter protection		No		
transformer protection		No		
disconnector functionality		Yes		
 main control switches with supply disconnect function and EM- STOP switches 		No		
Design of the operating mechanism		selector switch		
Product component				
auxiliary switch		Yes		
• undervoltage release mechanism		No		

Product extension * auxilary switch * optional / motor drive Insulation voltage / with degree of politation 3 / rated value No Impulse voltage resistance / rated value V Report Protection class IP * of the terminal Pi20	trip indicator		No
• optional / motor drive V 690 Insulation voltage / with degree of pollution 3 / rated value V 690 Impulse voltage resistance / rated value V 690 Protection class IP	Product extension		
Insulation voltage / with degree of poliution 3 / rated value	auxiliary switch		Yes
Impulse voltage resistance / rated value	optional / motor drive		No
Protection class IP of the terminal on the front Protection against electrical shock Installation altitude / at a height over sea level / maximum Relative humidity during operating phase Ambient temperature during storage during storage during operating storage during operating to IEC 60068-2-27 Usage category according to IEC 60068-2-27 Shock resistance / according to IEC 60068-2-27 Poperating voltage / rated value Operating voltage / rated value Operating frequency rated value Operating frequency rated value Operating current / at AC-3 / at 400 V / rated value Protective and monitoring functions: Type of protection Varification of suitability / ATEX Design of the fuse link / for short-circuit protection of the auxiliary switch / required Posign of the overload circuit breaker Adjustable response current / of the current-dependent overload release Trip class Trip class CLASS 10 IP20 IP2	Insulation voltage / with degree of pollution 3 / rated value	V	690
• of the terminal • on the front Protection against electrical shock Installation altitude / at a height over sea level / maximum m 2,000 Relative humidity • during operating phase	Impulse voltage resistance / rated value	kV	6
• on the front Protection against electrical shock Installation altitude / at a height over sea level / maximum Relative humidity • during operating phase Ambient temperature • during operating phase Ambient temperature • during transport • during storage • during storage • during operating Shock resistance / according to IEC 60068-2-27 Usage category • according to IEC 60047-4-1 Active power loss / total / typical W 6.3 Main circuit: Operating voltage / rated value Voltage type / for main circuit Operating frequency • rated value April 50 60 Operating current / at AC-3 / at 400 V / rated value Hit/sstromkreis Design of the fuse link / for short-circuit protection of the auxiliary switch / required Varification of suitability / ATEX Design of the overload circuit breaker Adjustable response current / of the current-dependent overload release Trip class Trip class Trip class Trip class	Protection class IP		
Protection against electrical shock Installation altitude / at a height over sea level / maximum Relative humidity • during operating phase Ambient temperature • during transport • during transport • during storage • during operating by lect 60068-2-27 Shock resistance / according to IEC 60068-2-27 Usage category • according to IEC 60047-4-1 Active power loss / total / typical Working voltage / rated value Voltage type / for main circuit Operating requency • rated value Operating current / at AC-3 / at 400 V / rated value Active short is link / for short-circuit protection of the auxiliary switch / required Protective and monitoring functions: Type of protection Protection Pagin of the fuse link / for short-circuit protection of the auxiliary switch / required Adjustable response current / of the current-dependent overload release Tip class Tip class Tip class Tip class Tip class	of the terminal		IP20
Installation altitude / at a height over sea level / maximum m 2,000 Relative humidity	• on the front		IP20
Relative humidity • during operating phase Ambient temperature • during transport • during storage • during operating Shock resistance / according to IEC 60068-2-27 Usage category • according to IEC 60947-4-1 Active power loss / total / typical W 6.3 Main circuit: Operating voltage / rated value V 690 Voltage type / for main circuit Operating frequency • rated value Hz 50 60 Operating current / at AC-3 / at 400 V / rated value Hz 50 60 Operating current / at AC-3 / at 400 V / rated value Froective and monitoring functions: Type of protection Varification of suitability / ATEX Design of the overload circuit breaker Adjustable response current / of the current-dependent overload release Trip class Tip class C 250 +80 - 400 - 400 - 50 +80 - 400	Protection against electrical shock		finger-safe
- during operating phase Ambient temperature - during transport - during storage - during operating Shock resistance / according to IEC 60068-2-27 Usage category - according to IEC 60947-4-1 Active power loss / total / typical W 6.3 Main circuit: Operating voltage / rated value Voltage type / for main circuit Operating requency - rated value Departing current / at AC-3 / at 400 V / rated value A 4 Hilfsstromkreis Design of the fuse link / for short-circuit protection of the auxiliary switch / required Protective and monitoring functions: Type of protection Varification of suitability / ATEX Design of the overload circuit breaker Adjustable response current / of the current-dependent overload release Trip class Tip class CAC -50 +80 -50 +80 -60 +80	Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature • during transport • during storage • during operating **C	Relative humidity		
<pre>• during transport • during storage • during operating *C</pre>	during operating phase	%	10 95
* during storage *during operating **C -50 +80 **Shock resistance / according to IEC 60068-2-27 Usage category *according to IEC 60947-4-1 Active power loss / total / typical **Main circuit: **Operating voltage / rated value **Vestage type / for main circuit **Operating frequency *rated value **Departing current / at AC-3 / at 400 V / rated value **Hilfsstromkreis **Design of the fuse link / for short-circuit protection of the auxiliary switch / required **Protective and monitoring functions: Type of protection **Vestage type / for protection **Increased safety **Yes **Design of the overload circuit breaker **Adjustable response current / of the current-dependent overload release **Trip class **C -50 +80 **C -20 +60 **Ac-3 **AC-1 *	Ambient temperature		
• during operating • C -20 +60 Shock resistance / according to IEC 60068-2-27 Usage category • according to IEC 60947-4-1 Active power loss / total / typical Main circuit: Operating voltage / rated value V 690 Voltage type / for main circuit Operating frequency • rated value Hz 50 60 Operating current / at AC-3 / at 400 V / rated value A 4 Hilfsstromkreis Design of the fuse link / for short-circuit protection of the auxiliary switch / required Protective and monitoring functions: Type of protection Increased safety Yes Design of the overload circuit breaker Adjustable response current / of the current-dependent overload release Trip class CLASS 10	during transport	°C	-50 +80
Shock resistance / according to IEC 60068-2-27 Usage category	during storage	°C	-50 +80
Usage category * according to IEC 60947-4-1 Active power loss / total / typical W 6.3 Main circuit: Operating voltage / rated value V 690 Voltage type / for main circuit Ac/DC Operating frequency * rated value Hz 50 60 Operating current / at AC-3 / at 400 V / rated value A 4 Hilfsstromkreis Design of the fuse link / for short-circuit protection of the auxiliary switch / required Protective and monitoring functions: Type of protection Varification of suitability / ATEX Design of the overload circuit breaker Adjustable response current / of the current-dependent overload release Trip class AC-3 AC-9 AC/DC AC/D	during operating	°C	-20 +60
* according to IEC 60947-4-1 Active power loss / total / typical Main circuit: Operating voltage / rated value V 690 Voltage type / for main circuit Operating frequency * rated value Hz 50 60 Operating current / at AC-3 / at 400 V / rated value A 4 Hilfsstromkreis Design of the fuse link / for short-circuit protection of the auxiliary switch / required Protective and monitoring functions: Type of protection Varification of suitability / ATEX Design of the overload circuit breaker Adjustable response current / of the current-dependent overload release Trip class AC-3 AC-9 AC/DC AC/CC AC/DC AC/CC AC/C	Shock resistance / according to IEC 60068-2-27		25g / 11 ms
Active power loss / total / typical Main circuit: Operating voltage / rated value V 690 Voltage type / for main circuit Operating frequency • rated value Hz 50 60 Operating current / at AC-3 / at 400 V / rated value A 4 Hilfsstromkreis Design of the fuse link / for short-circuit protection of the auxiliary switch / required Protective and monitoring functions: Type of protection Varification of suitability / ATEX Design of the overload circuit breaker Adjustable response current / of the current-dependent overload release Trip class CLASS 10	Usage category		
Main circuit: Operating voltage / rated value V 690 Voltage type / for main circuit Operating frequency • rated value Hz 50 60 Operating current / at AC-3 / at 400 V / rated value Hilfsstromkreis Design of the fuse link / for short-circuit protection of the auxiliary switch / required Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current lk < 400 A) Protective and monitoring functions: Type of protection Varification of suitability / ATEX Design of the overload circuit breaker Adjustable response current / of the current-dependent overload release Trip class CLASS 10	according to IEC 60947-4-1		AC-3
Operating voltage / rated value Voltage type / for main circuit Operating frequency * rated value Hz 50 60 Operating current / at AC-3 / at 400 V / rated value Hilfsstromkreis Design of the fuse link / for short-circuit protection of the auxiliary switch / required Protective and monitoring functions: Type of protection Voltage type / for main circuit value Fuse 50 60 A 4 Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current lk < 400 A) Protective and monitoring functions: Type of protection Increased safety Ves Design of the overload circuit breaker Adjustable response current / of the current-dependent overload release Trip class CLASS 10	Active power loss / total / typical	W	6.3
Voltage type / for main circuit Operating frequency • rated value Hz 50 60 Operating current / at AC-3 / at 400 V / rated value Hilfsstromkreis Design of the fuse link / for short-circuit protection of the auxiliary switch / required Protective and monitoring functions: Type of protection Varification of suitability / ATEX Design of the overload circuit breaker Adjustable response current / of the current-dependent overload release Trip class AC/DC AC/CC	Main circuit:		
Operating frequency	Operating voltage / rated value	V	690
• rated value Operating current / at AC-3 / at 400 V / rated value A 4 Hilfsstromkreis Design of the fuse link / for short-circuit protection of the auxiliary switch / required Protective and monitoring functions: Type of protection Increased safety Varification of suitability / ATEX Design of the overload circuit breaker Adjustable response current / of the current-dependent overload release Trip class CLASS 10	Voltage type / for main circuit		AC/DC
Operating current / at AC-3 / at 400 V / rated value A 4 Hilfsstromkreis Design of the fuse link / for short-circuit protection of the auxiliary switch / required Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current lk < 400 A) Protective and monitoring functions: Type of protection Increased safety Varification of suitability / ATEX Design of the overload circuit breaker Adjustable response current / of the current-dependent overload release Trip class CLASS 10	Operating frequency		
Hilfsstromkreis Design of the fuse link / for short-circuit protection of the auxiliary switch / required Protective and monitoring functions: Type of protection Varification of suitability / ATEX Design of the overload circuit breaker Adjustable response current / of the current-dependent overload release Trip class CLASS 10	• rated value	Hz	50 60
Design of the fuse link / for short-circuit protection of the auxiliary switch / required Protective and monitoring functions: Type of protection Increased safety Varification of suitability / ATEX Design of the overload circuit breaker Adjustable response current / of the current-dependent overload release Trip class Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current lk < 400 A) Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current lk < 400 A) Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current lk < 400 A) Increased safety Yes CLASS 10	Operating current / at AC-3 / at 400 V / rated value	A	4
auxiliary switch / required (short-circuit current lk < 400 A) Protective and monitoring functions: Type of protection Increased safety Varification of suitability / ATEX Yes Design of the overload circuit breaker thermal Adjustable response current / of the current-dependent overload release Trip class CLASS 10	Hilfsstromkreis		
Type of protection Varification of suitability / ATEX Pesign of the overload circuit breaker Adjustable response current / of the current-dependent overload release Trip class Increased safety Yes thermal 2.8 4 CLASS 10			
Varification of suitability / ATEX Yes Design of the overload circuit breaker thermal Adjustable response current / of the current-dependent overload release A 2.8 4 CLASS 10	Protective and monitoring functions:		
Design of the overload circuit breaker thermal Adjustable response current / of the current-dependent overload release Trip class CLASS 10	Type of protection		Increased safety
Adjustable response current / of the current-dependent overload release Trip class A 2.8 4 CLASS 10	Varification of suitability / ATEX		Yes
overload release Trip class CLASS 10	Design of the overload circuit breaker		thermal
<u> </u>		Α	2.8 4
Design of the short-circuit trip magnetic	Trip class		CLASS 10
	Design of the short-circuit trip		magnetic

Current response value / of the instantaneous short-circuit trip	Α	52
Operational short-circuit current breaking capacity (lcs) / with AC		
at 240 V / rated value	kA	100
at 400 V / rated value	kA	100
at 500 V / rated value	kA	100
at 690 V / rated value	kA	4
Breaking capacity maximum short-circuit current (Icu)		
• at 240 V / for AC / rated value	kA	100
• at 400 V / for AC / rated value	kA	100
• at 500 V / for AC / rated value	kA	100
• at 690 V / for AC / rated value	kA	6
Design of fuse insert / for IT network / for short-circuit protection of the main circuit		
• at 400 V		gL/gG 32 A
• at 500 V		gL/gG 32 A
• at 690 V		gL/gG 25 A
Breaking capacity short-circuit current (lcn)		
 with 1 current path / at 150 V / for DC / rated value 	kA	10
• with 2 current paths in series / at 300 V / for DC / rated value	kA	10
• with 3 current paths in series / at 450 V / for DC / rated value	kA	10
Installation/ mounting/ dimensions:		
Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
mounting position		any
Depth	mm	96
Height	mm	97
Width	mm	45
Connections/ terminals:		
Arrangement of electrical connectors / for main current circuit		Top and bottom
Design of the electrical connection / for main current circuit		screw-type terminals
Type of the connectable conductor cross-section		
• for main contacts		
solid or multi-stranded		2x (0,75 2,5 mm²), 2x 4 mm²
• finely stranded		
 with conductor end processing 		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)

current circuit

• for AWG conductors / for main contacts

Type of the connectable conductor cross-section

Design of the electrical connection / for auxiliary and control

2x (18 ... 14), 2x 12

screw-type terminals

- · for auxiliary contacts
 - solid or multi-stranded
 - finely stranded
 - with conductor end processing
- for AWG conductors / for auxiliary contacts

2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)
2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
2x (20 16), 2x (18 14)

UL/CSA ratings:				
Operating voltage / according to UL 60947 / rated value	V	600		
Full-load current (FLA) / for 3-phase motor				
• at 480 V / rated value	Α	4		
• at 600 V / rated value	Α	4		
Contact rating designation / for auxiliary contacts / according to UL		C300 / R300		

Certificates/ approvals:

General Product Approval







Declaration of



<u>Special Test</u> <u>Type Test</u> <u>Certificate</u> <u>Certificates/Test</u> Report

Shipping Approval













Shipping Approval





other

Confirmation



other

Environmental Confirmations

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

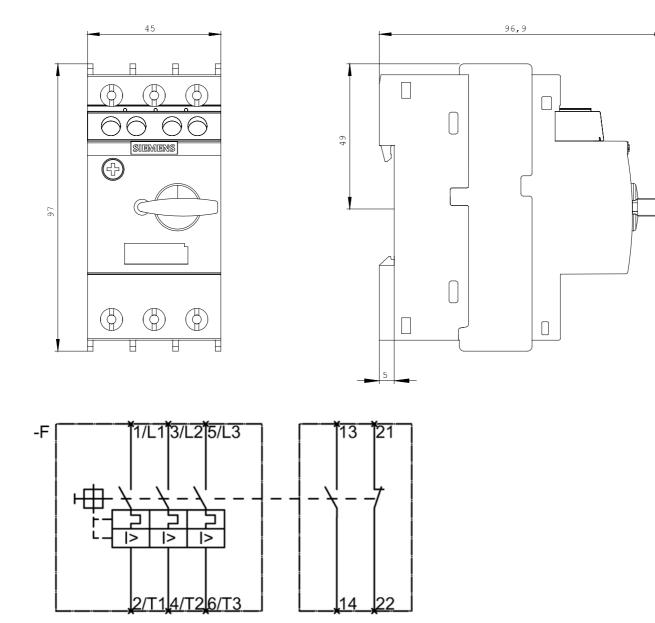
http://www.siemens.com/cax

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

http://support.automation.siemens.com/WW/view/en/3RV2011-1EA15/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

 $\underline{http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2011-1EA15}$



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