# SIEMENS

## Product data sheet

### 3RA2110-1GD15-1AP0



LOAD FEEDER FUSELESS DIRECT START, AC 400V, SZ S00 4.5. . .6.3A, AC 230V SCREW CONNECTION FOR BUSBAR SYSTEMS 60MM TYPE OF COORDINATION 1, IQ = 150KA 1NO (CONTACTOR)

General technical data:		
Product brand name		SIRIUS
product designation		non-fused load feeders 3RA2
Design of the product		direct starter
Size of the load feeder		S00
Protection class IP / on the front		IP20
Degree of pollution		3
Insulation voltage / rated value	V	690
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
during transport	°C	-55 80
during storage	°C	-55 80
during operating	°C	-20 60
Impulse voltage resistance / rated value	kV	6
Active power loss / per conductor / typical	W	2.3
Item designation		
<ul> <li>according to DIN 40719 extendable after IEC 204-2 / according to IEC 750</li> </ul>		Q
according to DIN EN 61346-2		Q
Type of assignement		1

10,000,000
10,000,000
3RV2011-1GA10
3RT2015-1AP01
3RA1921-1DA00
8US1251-5DS10
mechanical
bimetal
4.5 6.3
No
No
No
No
No
3
0
3
690
6.3
4.9
4.9
4.9
2,200
2,200
3,000
4,000
2,200
10,000
1,000

• at AC-2 / according to IEC 60947-6-2 / maximum1h750• at AC-3 / according to IEC 60947-6-2 / maximum1h750• at AC-4 / according to IEC 60947-6-2 / maximum1h250Control circuitType of voltage / of the controlled supply voltageACControl supply voltage frequency-• 1 / rated valueHz50Control supply voltage / 1-• at 60 Hz / for AC / rated valueV230Apparent holding power / of the solenoid / for ACV/A4.2Inductive power factor / with the pull-in power of the coll0.25Auxiliary circuit:V230Product extension / auxiliary contacts0Number of NC contacts / for auxiliary contacts0Inputs/ Outputs:0Number of digital inputs0Short-circuit-Product extension / auxiliary contacts0Inputs/ Outputs:0Number of digital inputs0Short-circuit-Product power due to the coll0.0,000• at 400 V / rited valueA• at 600 V			
th250Control circuit:Type of voltage / of the controlled supply voltageACControl supply voltage frequencyHz50- 1 / rated valueHz50Control supply voltage / 1V230- at 50 Hz / for AC / rated valueV230Apparent holding power / of the solenoid / for ACV.A4.2Inductive power factor / with the pull-in power of the coll0.25Axiliary circuit:YesProduct extension / auxiliary contacts0Number of NC contacts / for auxiliary contacts0Number of Change-over switche / for auxiliary contacts0Number of Change-over switches / for auxiliary contacts0Number of MS contacts / for auxiliary contacts0Number of NC contacts / for auxiliary contacts0Number of NC contacts / for auxiliary contacts0Number of Change-over switches / for auxiliary contacts0Number of MS contacts / for auxiliary contacts0Number of Utup (incline)0Short-circuit0Short-circuit0Short-circuit0Short-circuit0	• at AC-2 / according to IEC 60947-6-2 / maximum	1/h	750
Control circuit:       AC         Type of voltage / of the controlled supply voltage       AC         Control supply voltage / 1       +tz         • at 50 Hz / for AC / rated value       V       230         • at 50 Hz / for AC / rated value       V       230         Apparent holding power / of the solenoid / for AC       V.A       4.2         Inductive power factor / with the pull-in power of the coll       0.25         Axiliary circuit:       Product extension / auxiliary contacts       0         Number of NC contacts / for auxiliary contacts       0       0         Number of NC contacts / for auxiliary contacts       0       0         Inputs/ Outputs:       0       0       0         Number of digital inputs       0       0       0         Short-circuit       Yes       0       0         Product function / short circuit protection       icruit-breakers       0         Beign of the short-circuit protection       icruit-breakers       0         Type of voltage apply value       A       100,000       4.4.000         • at 600 V/ rated value       A       100,000       4.4.000       0         • at 600 V / rated value       A       100,000       4.4.000       0       0       0	• at AC-3 / according to IEC 60947-6-2 / maximum	1/h	750
Type of voltage / of the controlled supply voltage         AC           Control supply voltage frequency         Hz         50           Control supply voltage / 1         50           • at 50 Hz / for AC / rated value         V         230           · at 50 Hz / for AC / rated value         V         230           Apparent holding power / of the solenoid / for AC         V.A         4.2           Inductive power factor / with the pull-in power of the coil         0.25           Auxiliary circuit:         Product extension / auxiliary switch         Yes           Number of NC contacts / for auxiliary contacts         0         1           Number of change-over switches / for auxiliary contacts         0         1           Number of digital inputs         0         1           Short-circuit:         Product function / short circuit protection         res           Design of the short-circuit protection         Yes         1           Inductive value         A         100,000         1           • at 400 V / rated value         A         100,000         1           • at 400 V / rated value         A         4,000         1           • at 400 V / rated value         A         4,000         1           • at 400 V / rated value         A <th>• at AC-4 / according to IEC 60947-6-2 / maximum</th> <th>1/h</th> <th>250</th>	• at AC-4 / according to IEC 60947-6-2 / maximum	1/h	250
Control supply voltage frequencyHz50Control supply voltage /150• at 60 Hz / for AC / rated valueV230• at 60 Hz / for AC / rated valueV230• at 60 Hz / for AC / rated valueV230Apparent holding power / of the selenoid / for ACV-A4.2Inductive power fotor / with the pull-in power of the coil0.25Auxiliary circuit:0Product extension / auxiliary contacts0Number of NC contacts / for auxiliary contacts1Number of Ac contacts / for auxiliary contacts0Number of digital inputs0Short-circuit:0Product function / short circuit protection0Short-circuit protection1Breaking capacity limit short-circuit protection41 al 00,000100,000• at 400 V / rated valueA• at 600 V / rated valu	Control circuit:		
• 1/rated valueHz50Control supply voltage / 1	Type of voltage / of the controlled supply voltage		AC
Control supply voltage / 1         v         230           • at 50 Hz / for AC / rated value         V         230           Apparent holding power / of the solenoid / for AC         V.A         4.2           Inductive power factor / with the pull-in power of the coli         0.25           Auxiliary circuit:         0           Product extension / auxiliary switch         Yes           Number of NC contacts / for auxiliary contacts         0           Number of NC contacts / for auxiliary contacts         0           Number of change-over switches / for auxiliary contacts         0           Number of digital inputs         0           Short-circuit         0           Product function / short circuit protection         1           exit do V / rated value         0           • at 600 V / rated value         A           • at 600 V / rated value         M           • at 600 V / rated value         A           • at 600 V / rated value         M           • at 600 V / rated value         M           • at 600 V / rated value	Control supply voltage frequency		
• at 50 Hz / for AC / rated valueV230at 60 Hz / for AC / rated valueV230Apparent holding power / of the solenoid / for ACV.A4.2Inductive power factor / with the pull-in power of the coil0.25Axxillary circuit:VesProduct extension / auxiliary switch1Number of NC contacts / for auxiliary contacts0Number of NC contacts / for auxiliary contacts0Number of change-over switches / for auxiliary contacts0Number of digital inputs0Stort-circuit:0Product function / short circuit protection0Design of the short-circuit protectionVes• at 600 V/ rated valueA• at 600 V/ rated valueM• backwardsM• forwards	• 1 / rated value	Hz	50
v at 60 Hz / for AC / rated valuev330Apparent holding power / of the solenoid / for ACVA4.2Inductive power factor / with the pull-in power of the coil0.25Axillary circuit:VS0.Number of NC contacts / for auxillary contacts0Number of NC contacts / for auxillary contacts0Number of digital inputs0Product function / short circuit protection0Stort-circuit:0Product function / short circuit protection0Stort-circuit protection0Stort-circuit and value0e at 400 V/ rated valueAi at 600 V/ rated valueAi at 600 V/ rated valueAStort-circuit protection0i at 600 V/ rated valueAi at 600 V/ rated valueAWith in orientationmmType of mounting/dimensions:Built in orientationmmYinge functionmmStort-Circuit protectionStort AppliedmmA doolProduct functionAA doolA doolStort and valueMmStort and valueA doolStort and valueA doolStort and valueA doolStort and valueA doolA doolStort and valueA doolStort and valueA doolStort and valueA doolA doolA doolA doolA	Control supply voltage / 1		
Apparent holding power / of the solenoid / for ACV.A4.2Inductive power factor / with the pull-in power of the coil0.25Auxiliary circuit:VesProduct extension / auxiliary contacts0Number of NC contacts / for auxiliary contacts0Number of NC contacts / for auxiliary contacts0Number of change-over switches / for auxiliary contacts0Number of digital inputs0Inputs/ Outputs:0Number of digital inputs0Short-circuit:0Product function / short circuit protection1Design of the short-circuit protection1eark of volumeAi at 400 V/ rated valueAi at 400 V/ rated valueAi at 600 V/ rated valueAi at 600 V/ rated valueMfor auxiliary contacts1Built in orientationmmType of mounting/mmHeightmmDepthmmCenter line spacingmmDistance, to be maintained, to the ranks assemblymm· backwardsmm· backwardsmm· backwardsmm	• at 50 Hz / for AC / rated value	V	230
Inductive power factor / with the pull-in power of the coil       0.25         Auxiliary circuit:       Yes         Product extension / auxiliary switch       0         Number of NC contacts / for auxiliary contacts       0         Number of NC contacts / for auxiliary contacts       1         Number of NC contacts / for auxiliary contacts       0         Number of Change-over switches / for auxiliary contacts       0         Inputs/ Outputs:       0         Number of digital inputs       0         Short-circuit:       0         Product function / short circuit protection       Gene         Design of the short-circuit protection       circuit-breakers         etak dot V/ rated value       A       100.000         • at 400 V/ rated value       A       100.000         • at 600 V/ rated value       A       4.000         • at 600 V/ rated value       A       100.000         • at 600 V/ rated value       For snapping onto 60 mm busbar systems         Fuget       mm	• at 60 Hz / for AC / rated value	V	230
Auxiliary circuit:YesProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts0Number of NC contacts / for auxiliary contacts1Number of change-over switches / for auxiliary contacts0Inputs/ Outputs:0Number of digital inputs0Short-circuit:0Product function / short circuit protectionYesDesign of the short-circuit protectioncircuit-breakersBreaking capacity limit short-circuit current (lcu)-• at 400 V / rated valueA100,000• at 600 V / rated valueM60• at 600 V / rated valueM60 </td <td>Apparent holding power / of the solenoid / for AC</td> <td>V·A</td> <td>4.2</td>	Apparent holding power / of the solenoid / for AC	V·A	4.2
Product extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts0Number of NO contacts / for auxiliary contacts1Number of NO contacts / for auxiliary contacts0Inputs/ Outputs:0Number of digital inputs0Short-circuit:0Product function / short circuit protectionYesDesign of the short-circuit protectionYesBreaking capacity limit short-circuit current (Icu)Yes• at 400 V / rated valueA100,000• at 690 V / rated valueA100,000• at 690 V / rated valueA4,000Installation/mounting/dimensions:VerticalBuilt in orientationYesType of mountingImmYesImmYesYesInstallation/mounting/dimensions:Built in orientationYes <td>Inductive power factor / with the pull-in power of the coil</td> <td></td> <td>0.25</td>	Inductive power factor / with the pull-in power of the coil		0.25
Number of NC contacts / for auxiliary contacts0Number of NO contacts / for auxiliary contacts1Number of change-over switches / for auxiliary contacts0Inputs/ Outputs:0Number of digital inputs0Short-circuit:0Product function / short circuit protectionImputs / Sealand (Imputs)Design of the short-circuit protectionImputs / Sealand (Imputs)Inputs / V rated valueA10,000Imputs / Sealand (Imputs)Imputs / V rated valueAImputs / V rated valueAImput / V rate valueA<	Auxiliary circuit:		
Number of NO contacts / for auxiliary contacts1Number of change-over switches / for auxiliary contacts0Inputs/ Outputs:0Number of digital inputs0Short-circuit:vesProduct function / short circuit protection100,000Breaking capacity limit short-circuit current (Icu)·• at 400 V / rated valueA• at 600 V / rated valueA• at 600 V / rated valueA• at 600 V / rated valueA• at 690 V / rated valueB• at 690 V / rated valueM• billt in orientationM• billt in orientationM• billt in orientationM• billt in orientationM• billt in orientation <td>Product extension / auxiliary switch</td> <td></td> <td>Yes</td>	Product extension / auxiliary switch		Yes
Number of change-over switches / for auxiliary contacts0Inputs/ Outputs:0Number of digital inputs0Short-circuit:0Product function / short circuit protectionIPreduct function / short circuit protectionIBreaking capacity limit short-circuit current (lcu)Yes• at 400 V / rated valueA100,000• at 600 V / rated valueA100,000• at 600 V / rated valueA100,000• at 690 V / rated valueA100,000• billt in orientationII• at 690 V / rated valueA100,000• at 690 V / rated valueA100,000• billt in orientationII• billt in orientationI </td <td>Number of NC contacts / for auxiliary contacts</td> <td></td> <td>0</td>	Number of NC contacts / for auxiliary contacts		0
Inputs/ Outputs:       Imputs/ Outputs:         Number of digital inputs       0         Short-circuit:       Yes         Product function / short circuit protection       icrouit-breakers         Design of the short-circuit protection       circuit-breakers         Breaking capacity limit short-circuit current (Icu)       icrouit-breakers         • at 400 V/ rated value       A       100,000         • at 500 V/ rated value       A       100,000         • at 690 V/ rated value       A       4,000         • at 690 V/ rated value       A       4,000         Installation/mounting/dimensions:       mm       45         Built in orientation       imm       45         Vidth       mm       45         Height       mm       55.1         Center line spacing       mm       60         Distance, to be maintained, to the ranks assembly       mm       0         • forwards       mm       0	Number of NO contacts / for auxiliary contacts		1
Number of digital inputs0Short-circuit:Product function / short circuit protectionYesDesign of the short-circuit protectionYesBreaking capacity limit short-circuit current (Icu)Yes• at 400 V / rated valueA100,000• at 500 V / rated valueA100,000• at 690 V / rated valueA4,000Installation/mounting/dimensions:verticalBuilt in orientationverticalType of mountingMm45WidthMm200DepthMm60Distance, to be maintained, to the ranks assembly • backwardsmm0Output distanceMm0Output distanceMm0Output distanceMm0	Number of change-over switches / for auxiliary contacts		0
Short-circuit:       Product function / short circuit protection     Yes       Design of the short-circuit protection     circuit-breakers       Breaking capacity limit short-circuit current (Icu)     A     100,000       • at 400 V / rated value     A     100,000       • at 500 V / rated value     A     100,000       • at 690 V / rated value     A     100,000       • at 690 V / rated value     A     4,000       Installation/mounting/dimensions:     Vertical       Built in orientation     vertical       Type of mounting     for snapping onto 60 mm busbar systems       Width     mm     45       Height     mm     200       Depth     for     60       Distance, to be maintained, to the ranks assembly     mm     0       • lorwards     mm     0	Inputs/ Outputs:		
Product function / short circuit protectionYesDesign of the short-circuit protectioncircuit-breakersBreaking capacity limit short-circuit current (Icu)-• at 400 V / rated valueA100,000• at 500 V / rated valueA100,000• at 690 V / rated valueA4,000• at 690 V / rated valueA4,000• Installation/mounting/dimensions:	Number of digital inputs		0
Design of the short-circuit protectioncircuit-breakersBreaking capacity limit short-circuit current (Icu)·• at 400 V / rated valueA100,000• at 500 V / rated valueA100,000• at 690 V / rated valueA4,000Installation/mounting/dimensions:Built in orientation·verticalType of mounting·for snapping onto 60 mm busbar systemsWidthmm45Heightmm200Depthmm60Distance, to be maintained, to the ranks assembly • forwardsmm0• backwardsmm0	Short-circuit:		
Breaking capacity limit short-circuit current (Icu)       A       100,000         • at 400 V / rated value       A       100,000         • at 500 V / rated value       A       100,000         • at 690 V / rated value       A       4,000         Installation/mounting/dimensions:         Built in orientation       Image: Colspan="2">Vertical         Type of mounting       for snapping onto 60 mm busbar systems         Width       mm       45         Height       mm       200         Depth       mm       60         Distance, to be maintained, to the ranks assembly       mm       0         • forwards       mm       0         • backwards       mm       0	Product function / short circuit protection		Yes
• at 400 V / rated valueA100,000• at 500 V / rated valueA100,000• at 690 V / rated valueA4,000Installation/mounting/dimensions:Installation/mounting/dimensions:Verticalfor mountingIGroup of mountingImage of mountingIImage of mountingIImage of mountingIImage of mountingImage of mountingI	Design of the short-circuit protection		circuit-breakers
• at 500 V / rated valueA100,000• at 690 V / rated valueA4,000Installation/mounting/dimensions:Euilt in orientationIFupe of mountingIfor snapping onto 60 mm busbar systemsType of mountingImm45WidthMmm200HeightMmm155.1DepthMmm60Distance, to be maintained, to the ranks assembly • forwardsMmm0• backwardsMmm0	Breaking capacity limit short-circuit current (Icu)		
• at 690 V / rated valueA4,000Installation/mounting/dimensions:Built in orientationverticalType of mountingIffor snapping onto 60 mm busbar systemsWidthmm45Heightmm200Depthmm155.1Center line spacingmm60Distance, to be maintained, to the ranks assemblymm0· forwardsmm0· backwardsmm0	• at 400 V / rated value	А	100,000
Installation/mounting/dimensions:       vertical         Built in orientation       Image: status of the stat	• at 500 V / rated value	А	100,000
Built in orientationverticalType of mountingfor snapping onto 60 mm busbar systemsWidthmm45Heightmm200Depthmm155.1Center line spacingmm60Distance, to be maintained, to the ranks assembly • forwardsmm0backwardsmm0	• at 690 V / rated value	А	4,000
Type of mountingfor snapping onto 60 mm busbar systemsWidthnmm45Heightnmm200Depthnmm155.1Center line spacingnmm60Distance, to be maintained, to the ranks assemblynmm0• forwardsnm0• backwardsnm0	Installation/mounting/dimensions:		
Widthnm45Heightnm200Depthnm155.1Center line spacingnm60Distance, to be maintained, to the ranks assemblynm0• forwardsnm0• backwardsnm0	Built in orientation		vertical
Heightnm200Depthnm155.1Center line spacingnm60Distance, to be maintained, to the ranks assembly• forwardsnm0• backwardsnm0	Type of mounting		for snapping onto 60 mm busbar systems
Depthnm155.1Center line spacingnm60Distance, to be maintained, to the ranks assembly• forwardsnm0• backwardsnm0	Width	mm	45
Center line spacingmm60Distance, to be maintained, to the ranks assemblymm60• forwardsmm0• backwardsmm0	Height	mm	200
Distance, to be maintained, to the ranks assembly     mm     0       • forwards     mm     0       • backwards     mm     0	Depth	mm	155.1
• forwards     mm     0       • backwards     mm     0	Center line spacing	mm	60
• backwards mm 0	Distance, to be maintained, to the ranks assembly		
	• forwards	mm	0
	backwards	mm	0
• upwards mm 20	• upwards	mm	20

• downwards	mm	30
• sidewards	mm	0
Distance, to be maintained, to earthed part		0
• forwards	~~~	0
	mm	
• backwards	mm	0
• upwards	mm	20
• downwards	mm	10
• sidewards	mm	9
Distance, to be maintained, conductive elements		
• forwards	mm	0
backwards	mm	0
• upwards	mm	20
downwards	mm	10
• sidewards	mm	9
Connections:		
Design of the electrical connection		
for main current circuit		screw-type terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>		screw-type terminals
Type of the connectable conductor cross-section		
• for main contacts		
• solid		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x (1 4 mm²)
• stranded		2x (0.5 1.5 mm2), 2x (0.75 2.5 mm2), 2x (1 4 mm2)
• finely stranded		
• with conductor end processing		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
• for AWG conductors / for main contacts		2x (20 16), 2x (18 14), 2x 12
• for auxiliary contacts		
• solid		2x (0.5 1.5 mm²), 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)

Certificatesrappiovais.		
Verification of suitability	CE / UL / CSA / CCC	
Varification of suitability / ATEX	No	

General Product Approval	For use in hazardous locations	Test Certificates	
	DEKRA EXAM, DMT	Manufacture	Ţ
Shipping Approval		other	
ABS PRS	RINA	Manufacture	<u>r</u> <u>other</u>
UL/CSA ratings			
yielded mechanical performance (hp)			
<ul> <li>for single-phase squirrel cage motors</li> </ul>			
• at 110/120 V / rated value		hp	0.25
• at 230 V / rated value		hp	0.5
<ul> <li>for three-phase squirrel cage motors</li> </ul>			
• at 200/208 V / rated value		hp	1
• at 220/230 V / rated value		hp	1.5
• at 460/480 V / rated value		hp	3
• at 575/600 V / rated value	• at 575/600 V / rated value		5
Operating current (FLA) / for three-phase squirrel cage motors			
• at 480 V / rated value	• at 480 V / rated value		4.8
• at 600 V / rated value		А	6.1
Contact rating designation / for auxiliary co UL	ntacts / according to		A600 / Q600
Safety:			
B10 value / with high demand rate			
according to SN 31920			1,000,000
Failure rate (FIT value) / with low demand ra	te		
according to SN 31920		FIT	150
Proportion of dangerous failures			
<ul> <li>with low demand rate / according to SN 31920</li> </ul>		%	40
• with high demand rate / according to SN 37	1920	%	75
T1 value / for proof test interval or service li	fe		
according to IEC 61508		а	10
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

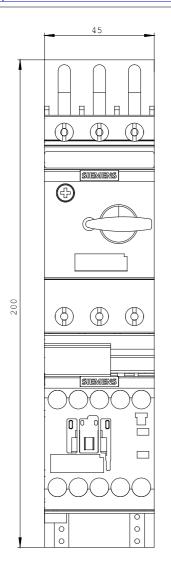
#### CAx-Online-Generator

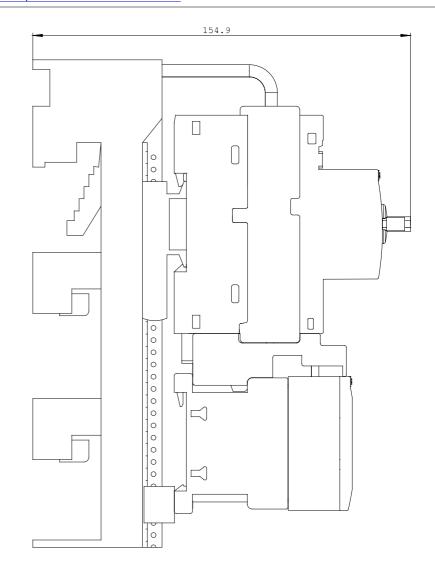
http://www.siemens.com/cax

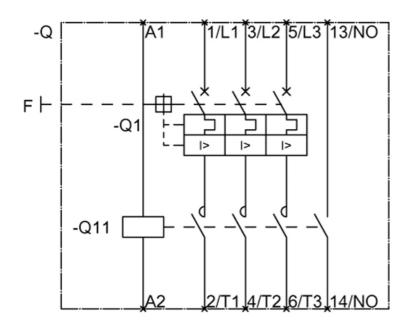
#### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RA2110-1GD15-1AP0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RA2110-1GD15-1AP0







last change:

Oct 24, 2011