# **SIEMENS**

### Datasheet

### 3VA1050-3ED32-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 100 BREAKING CAPACITY CLASS N ICU=25KA @ 415 V 3-POLE, LINE PROTECTION TM210, FTFM, IN=50A OVERLOAD PROTECTION IR=50A FIXED SHORT CIRCUIT PROTECTION II=10 X IN BUSBAR CONNECTION

Figure similar

Model		
product brand name		SENTRON
Product designation		Molded case circuit breaker
Design of the product	-	Line protection
Product variations	-	General Applications
Ground fault monitoring version	_	Without
Design of the auxiliary release		Without auxiliary release
Design of the auxiliary switch		Without
Design of the operating mechanism		toggle handle
Type of the driving mechanism / motor drive		No
Design of the overcurrent release	_	TM210
General technical data		
Number of poles		3
Trip class / of the L-trip / with I2t characteristic / initial value		1
Trip class / of the L-trip / with I2t characteristic / Full- scale value	-	1
Electrical endurance (switching cycles)	-	
• at AC-1 / at 380/415 V / at 50/60 Hz		8 000
circuit-breaker / Design		3VA
Mechanical service life (switching cycles) / typical		15 000
/oltage		
Insulation voltage		
Rated value	V	800

Protection class		
Protective function of the overcurrent release		LI
Switching capacity		
Switching capacity class of the circuit breaker		N
	_	
Dissipation	_	
Active power loss	W	14.6
• maximum	vv	14.0
Electricity		
Operating current / at 45 °C / Rated value	A	50
Continuous current / Rated value / maximum	А	100
Continuous current	_	
Rated value	А	50
Adjustable response value current		
<ul> <li>of the current-dependent overload release /</li> </ul>	А	1
Full-scale value		
<ul> <li>of the instantaneous short-circuit release / initial</li> </ul>	А	10
value		
Net weight	g	900
Main circuit		
Operating voltage		
<ul> <li>with AC / at 50/60 Hz / Rated value</li> </ul>	V	690
<ul> <li>for DC / Rated value</li> </ul>	V	500
Operating current		
• at 40 °C / Rated value	А	50
• at 50 °C / Rated value	А	50
● at 55 °C / Rated value	А	49
● at 60 °C / Rated value	А	48
● at 65 °C / Rated value	А	46
● at 70 °C / Rated value	А	45
Auxiliary circuit	_	
Number of CO contacts	_	
• for auxiliary contacts		0
-		
Suitability		aveter protection
Suitability for use		system protection
Adjustable parameters		
Adjustable response value current		
<ul> <li>of I-trip / Full-scale value</li> </ul>	А	10
<ul> <li>for N-conductor protection / initial value</li> </ul>	А	0
<ul> <li>for N-conductor protection / Full-scale value</li> </ul>	А	0

Adjustable response value current / of the current-	A	1
dependent overload release / initial value		
ppearance		
Product details		
Product component		
Trip indicator		No
• display		No
Voltage trigger		No
<ul> <li>undervoltage release</li> </ul>		No
<ul> <li>undervoltage release with leading contact</li> </ul>		No
Product property	-	
• for neutral conductors /		No
upgradeable/retrofittable / Short-circuit and		
overload proof		
Product expansion		
optional		
— motor drive		No
Product function		
Product function		
<ul> <li>Intrinsic device protection</li> </ul>		Yes
<ul> <li>communication function</li> </ul>		No
Phase failure detection		No
<ul> <li>other measurement function</li> </ul>		No
ccessories		
Manufacturer article number / of the supplied basic		3VA1050-3ED32-0AA0
switch		
Short circuit		
Operational short-circuit current breaking capacity (Ics)		
at 240 V / Rated value	kA	36
• at 415 V / Rated value	kA	25
• at 440 V / Rated value	kA	16
• at 500 V / Rated value	kA	8
at 690 V / Rated value	kA	5
Maximum short-circuit current breaking capacity (Icu)		
at 240 V / Rated value	kA	36
	kA	25
• at 415 V / Rated value		16
<ul> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> </ul>	kA	16 8
• at 415 V / Rated value		16 8 5

at 415 V / Rated value       kA       52.5         at 690 V / Rated value       kA       7.5         Connections       Front terminal         Arrangement of electrical connectors       Front terminal         • for main current circuit       Front terminal         Type of connectable conductor cross-section       12 x 0         • for flat-bar terminal connection / mximum       17 x 6.5         Design of the electrical connection       Lug terminal         • for main current circuit       Lug terminal         techanical Design       mm         Height       mm         Width       mm         Depth       mc         Mounting type       fixed mounting         environmental conditions       *C         Armbient temperature       • during operation / mximum         • during operation / mximum       °C         • during storage / maximum       °C         *C       80         Certificates       Q         Seference code       Q         • acc. to DIN EN 61346-2       Q         • acc. to DIN EN 81346-2       Q         • acc. to DIN EN 81346-2       Q         • acc. to DIN EN 81346-2       Q         • General Product Appro							
e at 690 V / Rated value       KA       7.5         Connections       Front terminal         • for main current circuit       Front terminal         Type of connectable conductor cross-section       12 x 0         • for flat-bar terminal connection / minimum       12 x 0         • for flat-bar terminal connection / maximum       17 x 6.5         Design of the electrical connection       Lug terminal         • for main current circuit       Lug terminal         Atchanical Design       Mitter in a 130         Height       mm       130         Width       mm       76.2         Depth       mm       70         Mounting type       fixed mounting         enving operation / minimum       °C       -25         • during operation / minimum       °C       70         • during operation / maximum       °C       70         • during storage / maximum       °C       80         Certificates       Q       Certificates         Reference code       Q       Q         • acc. to DIN EN 81346-2       Q       Q         General Product Approval       EMC       Declaration of Approval       Shipping Approval         @ther       Cere       Cere	• at 240 V / Rated value		kA	75.6			
Arrangement of slectrical connectors       Front terminal         • for main current circuit       Front terminal         Type of connectable conductor cross-section       12 x 0         • for flat-bar terminal connection / maximum       17 x 6.5         Design of the electrical connection       Lug terminal         • for main current circuit       Lug terminal         Attract terminal connection / maximum       17 x 6.5         Design of the electrical connection       Lug terminal         • for main current circuit       Lug terminal         Atchanical Design       mm         Height       mm         Mounting type       fixed mounting         environmental conditions       mm         Amblent temperature       -         • during operation / maximum       °C         • during storage / minimum       °C         • during storage / maximum       °C         °C       80         Certificates       Q         Reference code       Q         • acc. to DIN EN 81346-2       Q         General Product Approval       EMC       Declaration of Approval         Conformity       Shipping Approval       other	• at 415 V / Rated value		kA	52.5			
<ul> <li>for main current circuit</li> <li>Front terminal</li> <li>Type of connectable conductor cross-section</li> <li>for flat-bar terminal connection / minimum</li> <li>for flat-bar terminal connection / maximum</li> <li>for flat-bar terminal connection / maximum</li> <li>for main current circuit</li> <li>for main current circuit</li></ul>	• at 690 V / Rated value		kA	7.5			
<ul> <li>for main current circuit</li> <li>Font terminal</li> <li>Type of connectable conductor cross-section</li> <li>for flat-bar terminal connection / minimum</li> <li>for flat-bar terminal connection / maximum</li> <li>for flat-bar terminal connection / maximum</li> <li>for flat-bar terminal connection / maximum</li> <li>for main current circuit</li> <li>tug terminal</li> <li>tug termina</li></ul>							
Type of connectable conductor cross-section       12 x 0         i for flat-bar terminal connection / maximum       12 x 0         i for flat-bar terminal connection / maximum       17 x 6.5         Design of the electrical connection       Lug terminal         i for main current circuit       Lug terminal         Wechanical Design       mm         Height       mm       130         Width       mm       76.2         Depth       mm       70         Mounting type       fixed mounting         Environmental conditions       ************************************	Arrangement of electrical connectors						
<ul> <li>for flat-bar terminal connection / minimum</li> <li>for flat-bar terminal connection / maximum</li> <li>for flat-bar terminal connection</li> <li>for main current circuit</li> <li>tug terminal</li> <li>tug terminal</li></ul>	<ul> <li>for main current circuit</li> </ul>			Front	termina	l	
	Type of connectable conductor cross-se	ction					
Design of the electrical connection       Lug terminal         Performance of the electrical connection       Lug terminal         • for main current circuit       Lug terminal         Mechanical Design       mm         Height       mm         Width       mm         Depth       mm         Mounting type       fixed mounting         Environmental conditions       Fixed mounting         Amblent temperature       • during operation / maximum         • during operation / maximum       °C         • during storage / minimum       °C         • during storage / maximum       °C         °C       80         Certificates       Q         Reference code       Q         • acc. to DIN EN 61346-2       Q         • acc. to DIN EN 81346-2       Q         Centeral Product Approval       EMC       Declaration of Conformity         Maproval       Certeration of Conformity       Shipping Approval         Other       Certeration of Conformity       Shipping Approval	<ul> <li>for flat-bar terminal connection / m</li> </ul>	inimum		12 x (	D		
• for main current circuit       Lug terminal         Mechanical Design       mm       130         Height       mm       76.2         Depth       mm       76.2         Depth       mm       70         Mounting type       fixed mounting         Environmental conditions       Fixed mounting         Ambient temperature       •       •         • during operation / minimum       °C       -25         • during operation / maximum       °C       70         • during storage / minimum       °C       -25         • during storage / minimum       °C       -40         • during storage / maximum       °C       -40         • contificates       Eme       Q       -40         • acc. to DIN EN 61346-2       Q       -40         • acc. to DIN EN 81346-2       Eme       Eme       Shipping       other         • acc. to DIN EN 81346-2       © ther       Eme       Eme       Eme       Eme       <	<ul> <li>for flat-bar terminal connection / m</li> </ul>	aximum		17 x (	6.5		
Mechanical Design     mm     130       Height     mm     76.2       Depth     mm     70       Mounting type     fixed mounting       Environmental conditions     mm     70       Ambient temperature         e during operation / minimum     °C     -25       e during operation / maximum     °C     70       é during storage / minimum     °C     -40       e during storage / minimum     °C     -40       e during storage / maximum     °C     80       Certificates     Q       Reference code     Q       e acc. to DIN EN 61346-2     Q       e acc. to DIN EN 81346-2     Q       e acc. t	Design of the electrical connection						
Height       mm       130         Width       mm       76.2         Depth       mm       70         Mounting type       fixed mounting         Environmental conditions       fixed mounting         Ambient temperature       eduring operation / minimum       °C       -25         • during operation / maximum       °C       70         • during storage / minimum       °C       40         • during storage / maximum       °C       80         Certificates       Reference code       Q         • acc. to DIN EN 61346-2       Q         • acc. to DIN EN 81346-2       Q         General Product Approval       EMC       Declaration of Conformity       Shipping Approval         Other       Other       Other       Other       Other	• for main current circuit			Lug te	erminal		
Width       mm       76.2         Depth       mm       70         Mounting type       fixed mounting         Environmental conditions       Fixed mounting         Ambient temperature       -       -         • during operation / maximum       °C       -25       -         • during storage / minimum       °C       70         • during storage / minimum       °C       40       -         • during storage / maximum       °C       80       -         Certificates       Efference code       Q       -         • acc. to DIN EN 61346-2       Q       -       -         • acc. to DIN EN 81346-2       Q       -       -       -         • acc. to DIN EN 81346-2       Q       -       -       -       -         • acc. to DIN EN 81346-2       Q       - </td <td>lechanical Design</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	lechanical Design						
Depth       mm       70         Mounting type       fixed mounting         Environmental conditions       fixed mounting         Ambient temperature       0       -25         I during operation / minimum       °C       70         I during operation / maximum       °C       -25         I during operation / maximum       °C       70         I during storage / minimum       °C       -40         I during storage / maximum       °C       80         Certificates       Reference code       Q         I acc. to DIN EN 61346-2       Q       Q         I acc. to DIN EN 81346-2       Q       Other         I acc. to DIN EN 81346-2       Declaration of Conformity       Shipping Approval       Other         I General Product Approval       EMC       Declaration of Conformity       Shipping Approval       other         I General Product Approval       I General       I General       General       I Genera       I General       I Genera <td>Height</td> <td></td> <td>mm</td> <td>130</td> <td></td> <td></td> <td></td>	Height		mm	130			
Mounting type       fixed mounting         Environmental conditions       Environmental conditions         Ambient temperature       °C       -25         • during operation / maximum       °C       70         • during storage / minimum       °C       -40         • during storage / maximum       °C       80         Certificates       80         Certificates       Q         General Product Approval       EMC       Dectaration of Conformity       Shipping Approval         Other       Certificate       Q       Certificate       O         Efference code       Q       Certificate       O       Certificate       O       Certificate	Width		mm	76.2			
Environmental conditions         Ambient temperature         • during operation / minimum         • during operation / maximum         • during storage / minimum         • during storage / minimum         • during storage / maximum         • during storage / maximum         • C       40         • during storage / maximum         • C       80         Certificates         Reference code         • acc. to DIN EN 61346-2       Q         • acc. to DIN EN 81346-2       Q         General Product Approval       EMC       Declaration of Conformity       Shipping Approval         • Other       Certificates       Certificates       Certificates         • acc. to DIN EN 81346-2       Q       Certificates       Certificates         • acc. to DIN EN 81346-2       Q       Conformity       Approval         • Certificates       Certificates       Certificates       Certificates         • Certificates       Certificates       Q       Certificates         • Certificates       EMC       Declaration of Conformity       Shipping Approval         • Certificates       Certificates       Certificates       Certificates         • Certificates       Certificates <td>Depth</td> <td></td> <td>mm</td> <td>70</td> <td></td> <td></td> <td></td>	Depth		mm	70			
Ambient temperature       °C       -25         • during operation / maximum       °C       70         • during storage / minimum       °C       -40         • during storage / minimum       °C       -40         • during storage / maximum       °C       80         Certificates       Performed code       -25         Reference code       Q       -240         • acc. to DIN EN 61346-2       Q       -26         • acc. to DIN EN 81346-2       Q       -26         General Product Approval       EMC       Declaration of Conformity       Shipping Approval         Other       Certificates       -25       -25       -25         Image: Certificate Code       -240       -240       -240         • acc. to DIN EN 81346-2       Q       -26       -26         • acc. to DIN EN 81346-2       Q       -26       -26         • General Product Approval       EMC       Declaration of Conformity       Shipping Approval         • Other       Certificates       -26       -27       -27         • Certificate       Declaration of Conformity       Shipping Approval       -27	Mounting type			fixed	mountin	g	
• during operation / minimum°C-25• during operation / maximum°C70• during storage / minimum°C-40• during storage / maximum°C80• acc. to DIN EN 61346-2Q• acc. to DIN EN 81346-2Q• acc. to DIN EN 81346-2Q• acc. to DIN EN 81346-2O• acc. to DIN EN 8136-2O• ac							
<ul> <li>during operation / maximum</li> <li>during storage / minimum</li> <li>during storage / minimum</li> <li>C</li> <li>40</li> <li>during storage / maximum</li> <li>C</li> <li>C</li> <li>A0</li> <li>C</li> <lic< li=""> <lic< li=""> <li>C</li> <lic< li=""> <li>C<td></td><td></td><td></td><td></td><td></td><td></td><td></td></li></lic<></lic<></lic<></ul>							
<ul> <li>during storage / minimum</li> <li>during storage / maximum</li> <li>C</li> <li>during storage / maximum</li> <li>C</li> <lic< li=""> <li>C</li> <li>C</li> <li>C</li> <lic< td=""><td><ul> <li>during operation / minimum</li> </ul></td><td></td><td>°C</td><td>-25</td><td></td><td></td><td></td></lic<></lic<></ul>	<ul> <li>during operation / minimum</li> </ul>		°C	-25			
• during storage / maximum     °C     80       Certificates       Reference code       • acc. to DIN EN 61346-2       • acc. to DIN EN 81346-2       • acc. to DIN EN 81346-2       General Product Approval       EMC       Declaration of Conformity       Approval       other       • other       • other	<ul> <li>during operation / maximum</li> </ul>		°C	70			
Certificates         Reference code         • acc. to DIN EN 61346-2         • acc. to DIN EN 81346-2         General Product Approval         EMC       Declaration of Conformity         Output         Other	<ul> <li>during storage / minimum</li> </ul>		°C	-40			
Reference code       Q         • acc. to DIN EN 61346-2       Q         • acc. to DIN EN 81346-2       Q         General Product Approval       EMC       Declaration of Conformity       Shipping Approval         Other       Other       Other       Other	<ul> <li>during storage / maximum</li> </ul>		°C	80			
<ul> <li>acc. to DIN EN 61346-2</li> <li>acc. to DIN EN 81346-2</li> <li>General Product Approval</li> <li>EMC</li> <li>Declaration of Conformity</li> <li>Approval</li> <li>other</li> <li>other</li> <li>other</li> <li>other</li> </ul>	Certificates						
• acc. to DIN EN 81346-2 Q General Product Approval EMC Declaration of Conformity Approval other Conformity Conformity Other	Reference code						
General Product Approval     EMC     Declaration of Conformity     Shipping Approval     other       Image: Conformity     Image: Con	• acc. to DIN EN 61346-2			Q			
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Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system) https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA10503ED320AA0

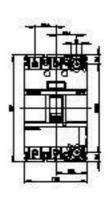
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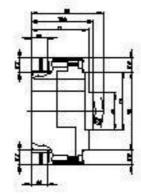
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA10503ED320AA0

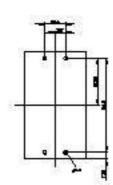
## CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications http://ausschreibungstexte.siemens.com/tiplv







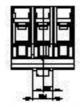


Figure similar

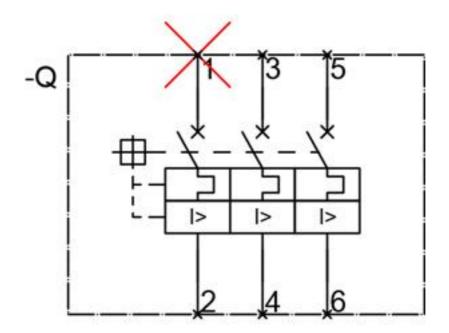


Figure similar

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