SIEMENS

Datasheet

3VA1080-4ED32-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 100 BREAKING CAPACITY CLASS S ICU=36KA @ 415 V 3-POLE, LINE PROTECTION TM210, FTFM, IN=80A OVERLOAD PROTECTION IR=80A 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	

Voltage		
Insulation voltage		
Rated value	V	800

Active power loss • maximum W 19.2	Protection class		
Switching capacity class of the circuit breaker Dissipation Active power loss • maximum Departing current / at 45 °C / Rated value Operating current / at 45 °C / Rated value A 80 Continuous current • Rated value A 100 Continuous current • Of the current-dependent overload release / Full-scale value • of the instantaneous short-circuit release / initial value Net weight Departing voltage • with AC / at 50/60 Hz / Rated value • for DC / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 77 • at 65 °C / Rated value • at 76 • at 70 °C / Rated value	Protective function of the overcurrent release		LI
Switching capacity class of the circuit breaker Dissipation Active power loss • maximum Departing current / at 45 °C / Rated value Operating current / at 45 °C / Rated value A 80 Continuous current • Rated value A 100 Continuous current • Of the current-dependent overload release / Full-scale value • of the instantaneous short-circuit release / initial value Net weight Departing voltage • with AC / at 50/60 Hz / Rated value • for DC / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 77 • at 65 °C / Rated value • at 76 • at 70 °C / Rated value	Switching canacity		
Dissipation Active power loss • maximum Maximum M			S
Active power loss • maximum Maximum Maxi	- , ,		
Maximum W 19.2	Dissipation		
Continuous current / at 45 °C / Rated value	·		
Operating current / at 45 °C / Rated value	• maximum	W	19.2
Continuous current Rated value Rated value A 80 Adjustable response value current of the current-dependent overload release / Full-scale value of the instantaneous short-circuit release / initial value of the instantaneous short-circuit release / initial value Net weight Operating voltage with AC / at 50/60 Hz / Rated value of for DC / Rated value v 500 Operating current at 40 °C / Rated value of 2 / Rated value at 65 °C / Rated value at 65 °C / Rated value at 65 °C / Rated value of at 65 °C / Rated value at 67 °C / Rated value at 67 °C / Rated value of at 67 °C / Rated value at 67 °C / Rated value at 67 °C / Rated value at 68 °C / Rated value at 67 °C / Rated value at 67 °C / Rated value at 67 °C / Rated value at 68 °C / Rated value at 75 at 76 at 77 at 74 Auxiliary circuit Number of CO contacts of or auxiliary contacts of or auxiliary contacts of or auxiliary contacts Adjustable parameters Adjustable response value current of I-trip / Full-scale value at 70 °C - Conductor protection / initial value A 10 of I-trip / Full-scale value at 70 °C - Conductor protection / initial value A 10 at 70 A 10	Electricity		
Continuous current Rated value A 80 Adjustable response value current of the current-dependent overload release / Full-scale value of the instantaneous short-circuit release / initial value Net weight Operating voltage with AC / at 50/60 Hz / Rated value of r DC / Rated value of A 80 Operating current of A 80 Operating current of A 80 at 50 °C / Rated value A 78 of C Rated value A 75 of C Rated value A 76 of C C Rated value A 75 of C Rated value A 75 of C Rated value A 76 of C C Contacts of or auxiliary cortects O Suitability Suitability Suitabile parameters Adjustable parameters Adjustable parameters Adjustable response value current of I-trip / Full-scale value A 10 of I-trip / Full-scale value A 0	Operating current / at 45 °C / Rated value	А	80
Rated value Adjustable response value current of the current-dependent overload release / Full-scale value of the instantaneous short-circuit release / initial value Net weight Poperating voltage with AC / at 50/60 Hz / Rated value of or DC / Rated value of or DC / Rated value at 50 °C / Rated value at 65 °C / Rated value at 70 °C / Rated value at 7	Continuous current / Rated value / maximum	Α	100
Adjustable response value current of the current-dependent overload release / Full-scale value of the instantaneous short-circuit release / initial value Net weight Operating voltage with AC / at 50/60 Hz / Rated value of DC / Rated value value Operating current of A 80 of	Continuous current		
of the current-dependent overload release / Full-scale value of the instantaneous short-circuit release / initial value Net weight Departing voltage of the C / At 50/60 Hz / Rated value of DC / Rated value of DC / Rated value of C / Rated	Rated value	Α	80
Full-scale value of the instantaneous short-circuit release / initial value Net weight g 900 Main circuit Operating voltage of the instantaneous short-circuit release / initial value of the weight Operating voltage of the instantaneous short-circuit release / initial value of the weight Operating voltage of the instantaneous short-circuit release / initial value of the weight Operating voltage of the instantaneous short-circuit release / initial value of the weight Operating voltage of the instantaneous short-circuit release / initial value of the weight of the instantaneous short-circuit release / initial value of the instantaneous shor	Adjustable response value current		
of the instantaneous short-circuit release / initial value Net weight 9 900 Main circuit Operating voltage with AC / at 50/60 Hz / Rated value v 690 for DC / Rated value v 500 Operating current at 40 °C / Rated value A 80 at 55 °C / Rated value A 78 at 60 °C / Rated value A 77 at 65 °C / Rated value A 75 at 70 °C / Rated value A 74 Auxiliary circuit Number of CO contacts for auxiliary contacts Osuitability Suitability for use Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value A 10 of the formal formal formal formal formal for the formal	·	Α	1
value g 900 Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value V 690 • for DC / Rated value V 500 Operating current • at 40 °C / Rated value A 80 • at 50 °C / Rated value A 78 • at 60 °C / Rated value A 77 • at 65 °C / Rated value A 75 • at 70 °C / Rated value A 74 Auxiliary circuit Number of CO contacts • for auxiliary contacts 0 Suitability • Suitability for use system protection Adjustable parameters Adjustable response value current • of I-trip / Full-scale value A 10 • for N-conductor protection / initial value A 0	Full-scale value		
Net weight g 900		Α	10
Main circuit Operating voltage			
Operating voltage	Net weight	g	900
with AC / at 50/60 Hz / Rated value v 500 for DC / Rated value v 500 Operating current at 40 °C / Rated value A 80 at 50 °C / Rated value A 78 at 60 °C / Rated value A 77 at 60 °C / Rated value A 77 at 65 °C / Rated value A 75 at 70 °C / Rated value A 74 Auxiliary circuit Number of CO contacts o for auxiliary contacts o suitability • Suitability • Suitability or use Adjustable parameters Adjustable response value current o of I-trip / Full-scale value A 10 o for N-conductor protection / initial value A 0	Main circuit		
for DC / Rated value V 500 Operating current at 40 °C / Rated value	Operating voltage		
Operating current • at 40 °C / Rated value • at 50 °C / Rated value • at 55 °C / Rated value • at 60 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value • at 70 °C / Rated value A 74 Auxiliary circuit Number of CO contacts • for auxiliary contacts • for auxiliary contacts • for lauxiliary contacts Adjustable parameters Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / initial value • at 40 °C / Rated value A 80 A 78 A 77 A 78 A 77 A 74 A 74 Auxiliary circuit O 3 Suitability • Suitability for use Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / initial value A 0	 with AC / at 50/60 Hz / Rated value 	V	690
at 40 °C / Rated value at 50 °C / Rated value at 55 °C / Rated value at 60 °C / Rated value at 65 °C / Rated value at 77 at 65 °C / Rated value A 75 at 70 °C / Rated value A 74 Auxiliary circuit Number of CO contacts for auxiliary contacts Suitability Suitability Suitability for use Adjustable parameters Adjustable response value current of I-trip / Full-scale value A 10 for N-conductor protection / initial value A 80 80 80 80 80 80 80 80 80 80	• for DC / Rated value	V	500
at 50 °C / Rated value at 50 °C / Rated value A 78 at 60 °C / Rated value A 77 at 65 °C / Rated value A 75 at 70 °C / Rated value A 75 at 70 °C / Rated value A 74 Auxiliary circuit Number of CO contacts for auxiliary contacts Suitability Suitability Suitability Adjustable parameters Adjustable response value current of I-trip / Full-scale value A 10 for N-conductor protection / initial value A 0	Operating current		
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at 60 °C / Rated value at 65 °C / Rated value At 75 at 70 °C / Rated value At 74 Auxiliary circuit Number of CO contacts for auxiliary contacts Suitability Suitability Suitabile parameters Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value A 75 A 74 A 74 A 75 A 74 A 74 A 75 A 74 A 74 A 75 A 74 A 74 A 75 A 74 A 74 A 74 A 75 A 74 A 74 A 75 A 74 A 74 A 75 A 74 A 74 A 74 A 75 A 74 A 75 A 74 A 74 A 74 A 75 A 10 A 0	• at 50 °C / Rated value	Α	80
at 65 °C / Rated value at 70 °C / Rated value A 75 A 74 Auxiliary circuit Number of CO contacts for auxiliary contacts Suitability Suitability Suitability for use Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value A 75 A 74 75 A 74 10 A 10 A 0	• at 55 °C / Rated value	Α	78
at 70 °C / Rated value A 74 Auxiliary circuit Number of CO contacts • for auxiliary contacts • for auxiliary contacts • Suitability • Suitability for use Adjustable parameters Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / initial value A 10 • for N-conductor protection / initial value A 0	• at 60 °C / Rated value	Α	77
Auxiliary circuit Number of CO contacts • for auxiliary contacts • Suitability • Suitability for use Adjustable parameters Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / initial value A unitial value	• at 65 °C / Rated value	Α	75
Number of CO contacts • for auxiliary contacts • Suitability • Suitability for use Adjustable parameters Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / initial value A 0	• at 70 °C / Rated value	Α	74
Number of CO contacts • for auxiliary contacts • Suitability • Suitability for use Adjustable parameters Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / initial value A 0	Auviliany circuit		
● for auxiliary contacts Suitability Suitability for use Suitability for use Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value O O O O O O O O O O O O O			
Suitability Suitability for use System protection Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value A 0			0
Suitability for use Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value System protection A 10 A 0			
Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value A 0			
Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value A 10 O	Suitability for use		system protection
 of I-trip / Full-scale value for N-conductor protection / initial value A D 	Adjustable parameters		
• for N-conductor protection / initial value A 0	Adjustable response value current		
	• of I-trip / Full-scale value	Α	10
● for N-conductor protection / Full-scale value A 0	• for N-conductor protection / initial value	Α	0
	• for N-conductor protection / Full-scale value	Α	0

Adjustable response value current / of the current- dependent overload release / initial value	A	1
Appearance		
Product details		
Product component		
Trip indicator		No
• display		No
 Voltage trigger 		No
undervoltage release		No
 undervoltage release with leading contact 		No
Product property		
 for neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof 		No
Product expansion		
• optional		
— motor drive		No
Product function		
Product function		
 Intrinsic device protection 		Yes
communication function		No
Phase failure detection		No
 other measurement function 		No
Accessories		
Manufacturer article number / of the supplied basic switch		3VA1080-4ED32-0AA0
Short circuit		
Operational short-circuit current breaking capacity (Ics)		
• at 240 V / Rated value	kA	55
• at 415 V / Rated value	kA	36
• at 440 V / Rated value	kA	25
• at 500 V / Rated value	kA	15
at 690 V / Rated value	kA	5
Maximum short-circuit current breaking capacity (Icu)		
● at 240 V / Rated value	kA	55
at 415 V / Rated value	kA	36
• at 440 V / Rated value	kA	25
at 500 V / Rated value	kA	16
at 690 V / Rated value	kA	7
Short-circuit current making capacity (Icm)		
· • · · · · · · · · · · · · · · · · · ·		

• at 240 V / Rated value	kA	121
• at 415 V / Rated value	kA	75.6
• at 690 V / Rated value	kA	11.9

Connections			
Arrangement of electrical connectors			
• for main current circuit	Front terminal		
Type of connectable conductor cross-section			
• for flat-bar terminal connection / minimum	12 x 0		
• for flat-bar terminal connection / maximum	17 x 6.5		
Design of the electrical connection			
• for main current circuit	Lug terminal		

Mechanical Design			
Height	mm	130	
Width	mm	76.2	
Depth	mm	70	
Mounting type		fixed mounting	

Environmental conditions				
Ambient temperature				
during operation / minimum	°C	-25		
during operation / maximum	°C	70		
during storage / minimum	°C	-40		
during storage / maximum	°C	80		

Certificates Reference code

• acc. to DIN EN 61346-2 Q Q • acc. to DIN EN 81346-2

General Product Approval	EMC	Declaration of	Shipping	other
		Conformity	Approval	





other





other

Further information

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/3VA10804ED320AA0

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

http://support.automation.siemens.com/WW/view/en/3VA10804ED320AA0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA10804ED320AA0

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

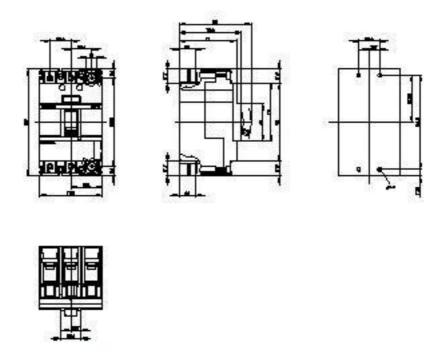


Figure similar

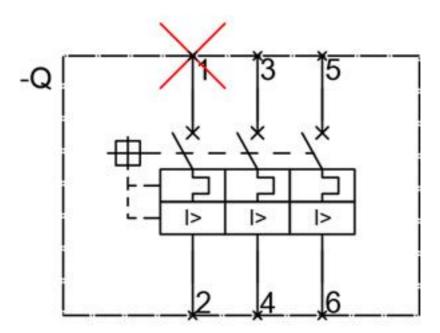


Figure similar

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