SIEMENS

Data sheet

3VA1196-4ED36-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS S ICU=36KA @ 415 V 3-POLE, LINE PROTECTION TM210, FTFM, IN=16A OVERLOAD PROTECTION IR=16A FIXED SHORT CIRCUIT PROTECTION II=20 X IN CABLE CONNECTION

Figure similar

product brand name Product designation Molded case circuit breaker Design of the product Product variations General Applications Ground fault monitoring version Without Design of the auxiliary release Without auxiliary release	
Design of the product Line protection Product variations General Applications Ground fault monitoring version Without	
Product variations General Applications Ground fault monitoring version Without	
Ground fault monitoring version Without	
Design of the quality release	
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

Protection class

Protection class IP / on the front IP40 Protective function of the overcurrent release Switching capacity Switching capacity Switching capacity class of the circuit breaker S Dissipation Active power loss • maximum W 10.6 Electricity Continuous current / Rated value / maximum A 160 Continuous current / Rated value A 16 Adjustable response value current • of the current-dependent overload release / Full-scale value • of the instantaneous short-circuit release / initial A 10 Wain circuit Operating voltage • with AC / at 50/80 Hz / Rated value V 690 • for DC / Rated value A 16 • at 50 °C / Rated value A 16 • at 50 °C / Rated value A 16 • at 55 °C / Rated value A 15 • at 65 °C / Rated value A 15 • at 65 °C / Rated value A 15 Auxiliary circuit Number of CO contacts / for auxiliary contacts Osultability Switchility for use system protection Adjustable parameters Adjustable response value current / of the current-dependent overload release / initial value • for N-conductor protection / Full-scale value A 0 Adjustable response value current / of the current-dependent overload release / initial value A 10 Adjustable response value current / of the current-dependent overload release / initial value A 11 Adjustable response value current / of the current-dependent overload release / initial value A 11 Adjustable response value current / of the current-dependent overload release / initial value A 11	Protection class IP		IP40
Switching capacity Switching capacity class of the circuit breaker Dissipation Active power loss • maximum W 10.6 Electricity Continuous current / Rated value / maximum A 160 Continuous current / Rated value • 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 • with AC / at 50/60 Hz / Rated value • of rDC / Rated value • of the C / Rated value • at 40 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rate	Protection class IP / on the front		IP40
Switching capacity class of the circuit breaker Dissipation	Protective function of the overcurrent release		Ц
Switching capacity class of the circuit breaker Dissipation	Switching capacity		
Active power loss			S
Active power loss • maximum M	Dissipation		
Electricity Continuous current / Rated value / maximum A 160 Continuous current / Rated value 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 Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value • for DC / Rated value • of ro DC / Rated value • at 40 °C / Rated value • at 50 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value A 15 Auxiliary circuit Number of CO contacts / for auxiliary contacts O Suitability for use Adjustable parameters Adjustable parameters Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / Full-scale value • for N-conductor protection / Full-scale value • for N-conductor protection / Full-scale value A 0 Adjustable response value current / of the current-			
Continuous current / Rated value / maximum	• maximum	W	10.6
Continuous current / Rated value Adjustable response value current of the current-dependent overload release / Full-scale value of the instantaneous short-circuit release / initial value Main circuit Operating voltage with AC / at 50/60 Hz / Rated value of or DC / Rated value v 500 Operating current at 40 °C / Rated value A 16 at 55 °C / Rated value A 16 at 66 °C / Rated value A 16 at 65 °C / Rated value A 15 at 70 °C / Rated value A 15 at 70 °C / Rated value A 15 Auxiliary circuit Number of CO contacts / for auxiliary contacts O Suitability Suitability for use Adjustable parameters Adjustable response value current of I-trip / Full-scale value A 0 Adjustable response value current of or N-conductor protection / Full-scale value A 0 Adjustable response value current / of the current-	Electricity		
Adjustable response value current • of the current-dependent overload release / Full-scale value • of the instantaneous short-circuit release / initial value • of the current-of the current-of the current-of the current-of the current-of initial value A	Continuous current / Rated value / maximum	Α	160
of the current-dependent overload release / Full-scale value of the instantaneous short-circuit release / initial value Main circuit Operating voltage with AC / at 50/60 Hz / Rated value of or DC / Rated value V 500 Operating current at 40 °C / Rated value A 16 at 55 °C / Rated value A 16 at 65 °C / Rated value A 16 at 65 °C / Rated value A 15 at 70 °C / Rated value A 15 Auxiliary circuit Number of CO contacts / for auxiliary contacts Adjustable parameters Adjustable response value current of or N-conductor protection / Full-scale value A 10 Adjustable response value current / of the current- Adjustable response value current / of the current-	Continuous current / Rated value	Α	16
Full-scale value • of the instantaneous short-circuit release / initial value Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value • for DC / Rated value • at 40 °C / Rated value • at 40 °C / Rated value • at 55 °C / Rated value • at 60 °C / Rated value • at 60 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rated value A 15 Auxiliary circuit Number of CO contacts / for auxiliary contacts O Suitability Suitabile parameters Adjustable parameters Adjustable response value current / of the current- • for N-conductor protection / Full-scale value A 10 Adjustable response value current / of the current-	Adjustable response value current		
Main circuit		Α	1
Operating voltage		Α	10
with AC / at 50/60 Hz / Rated value for DC / Rated value v 500 Operating current at 40 °C / Rated value A 16 at 50 °C / Rated value A 16 at 55 °C / Rated value A 16 at 60 °C / Rated value A 15 at 60 °C / Rated value A 15 at 60 °C / Rated value A 15 at 70 °C / Rated value A 15 at 70 °C / Rated value A 15 Auxiliary circuit Number of CO contacts / for auxiliary contacts O Suitability Suitability for use Adjustable parameters Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value of or N-conductor protection / Full-scale value Adjustable response value current / of the current- Adjustable response value current / of the current-	Main circuit		
for DC / 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 60 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value A 15 Auxiliary circuit Number of CO contacts / for auxiliary contacts O Suitability Suitability for use Adjustable parameters Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / initial value • for N-conductor protection / Full-scale value • Adjustable response value current / of the current- Adjustable response value current / of the current- Adjustable response value current / of the current-	• 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 60 °C / Rated value at 65 °C / Rated value at 65 °C / Rated value at 70 °C / Rated value At 15 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 for N-conductor protection / Full-scale value Adjustable response value current for N-conductor protection / Full-scale value Adjustable response value current / of the current- Adjustable response value current / of the current-	• for DC / Rated value	V	500
at 50 °C / Rated value at 50 °C / Rated value A 16 at 60 °C / Rated value A 15 at 65 °C / Rated value A 15 at 65 °C / Rated value A 15 at 70 °C / Rated value A 15 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 of or N-conductor protection / initial value of or N-conductor protection / Full-scale value Adjustable response value current / Of the current-	Operating current		
at 55 °C / Rated value at 60 °C / Rated value at 65 °C / Rated value At 15 at 65 °C / Rated value At 15 at 70 °C / Rated value At 15 Auxiliary circuit Number of CO contacts / for auxiliary contacts Suitability Suitability Suitable parameters Adjustable parameters Adjustable response value current of I-trip / Full-scale value of or N-conductor protection / initial value of or N-conductor protection / Full-scale value Adjustable response value current / of the current- Adjustable response value current / of the current-	• at 40 °C / Rated value	Α	16
at 60 °C / Rated value at 65 °C / Rated value A 15 at 70 °C / Rated value A 15 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 for N-conductor protection / Full-scale value Adjustable response value current / of the current- Adjustable response value current / of the current-	• at 50 °C / Rated value	Α	16
at 65 °C / Rated value at 70 °C / Rated value A 15 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 for N-conductor protection / Full-scale value Adjustable response value current / of the current- Adjustable response value current / of the current-	• at 55 °C / Rated value	Α	16
at 70 °C / Rated value A 15 Auxiliary circuit Number of CO contacts / for auxiliary contacts 0 Suitability Suitability for use Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value for N-conductor protection / Full-scale value Adjustable response value current / of the current- Adjustable response value current / of the current-	• at 60 °C / Rated value	Α	15
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 for N-conductor protection / Full-scale value Adjustable response value current / of the current- Adjustable response value current / of the current-	• at 65 °C / Rated value	Α	15
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 • for N-conductor protection / Full-scale value Adjustable response value current / of the current- Adjustable response value current / of the current-	• at 70 °C / Rated value	Α	15
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 • for N-conductor protection / Full-scale value Adjustable response value current / of the current- Adjustable response value current / of the current-	Auxiliary circuit		
Suitability for use Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value for N-conductor protection / Full-scale value Adjustable response value current / of the current- Adjustable response value current / of the current-			0
Suitability for use Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value for N-conductor protection / Full-scale value Adjustable response value current / of the current- Adjustable response value current / of the current-	Suitability		
Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value for N-conductor protection / Full-scale value Adjustable response value current / of the current- A 1	· · · · · · · · · · · · · · · · · · ·		system protection
 of I-trip / Full-scale value for N-conductor protection / initial value for N-conductor protection / Full-scale value Adjustable response value current / of the current- A 10 A 0 Adjustable response value current / of the current- A 1 	Adjustable parameters		
 for N-conductor protection / initial value for N-conductor protection / Full-scale value Adjustable response value current / of the current- A 0 Adjustable response value current / of the current- A 1	Adjustable response value current		
• for N-conductor protection / Full-scale value A 0 Adjustable response value current / of the current- A 1	● of I-trip / Full-scale value	Α	10
Adjustable response value current / of the current- A 1	• for N-conductor protection / initial value	Α	0
	• for N-conductor protection / Full-scale value	Α	0
	•	Α	1
Product details	Product details		
Product component			

Trip indicator		No
		No
display Voltage trigger		No
Voltage triggerundervoltage release		No
•		No
undervoltage release with leading contact Product property		INO
Product property for neutral conductors /		No
upgradeable/retrofittable / Short-circuit and		140
overload proof		
Product expansion / optional / motor drive		Yes
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		3VA1196-4ED36-0AA0
switch		
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 (lcm)		
• at 240 V / Rated value	kA	121
• at 415 V / Rated value	LΛ	75.6
	kA	
• at 690 V / Rated value	kA	7.5
Connections		7.5
Connections Arrangement of electrical connectors / for main		
Connections		7.5

• of the round of	onductor terminal / str	anded			1 x (1.5 - 70 mm²)	
Type of electrical co	onnection / for main cu	rrent circuit			Box terminal	
Mechanical Design						
Height			mm		130	
Width			mm		76.2	
Depth			mm		70	
Mounting type					fixed mounting	
Environmental con	ditions					
Ambient temperatur	re					
during operati	on / minimum		°C		-25	
during operati	on / maximum		°C		70	
 during storage 	e / minimum		°C		-40	
 during storage 	e / maximum		°C		80	
Certificates						
Equipment marking						
• acc. to DIN El	N 61346-2				Q	
• acc. to DIN EN 81346-2				Q		
General	EMC	Declaration		Ship	oping Approval	other
Product Approval		Conformity	/			
	other			0	2	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/3VA11964ED360AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11964ED360AA0/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11964ED360AA0

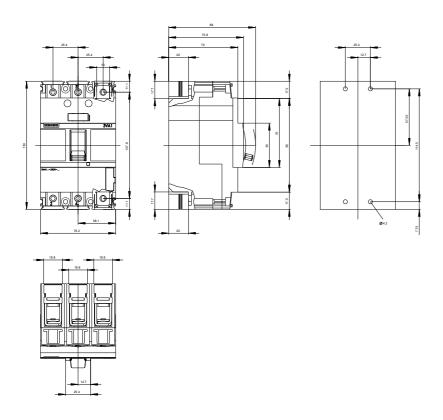
CAx-Online-Generator

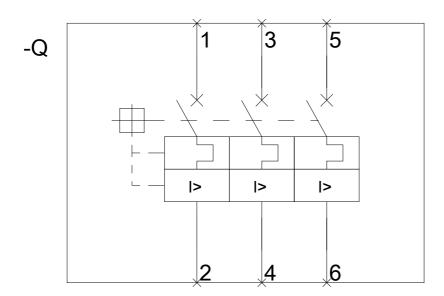
http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv

GL





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