SIEMENS

Data sheet

3VA1196-4EE36-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS S ICU=36KA @ 415 V 3-POLE, LINE PROTECTION TM220, ATFM, IN=16A OVERLOAD PROTECTION IR=11,2A ...16A SHORT CIRCUIT PROTECTION II=20 X IN CABLE 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	TM220		
General technical data			
Number of poles	3		

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 Protective function of the overcurrent release Switching capacity Switching capacity class of the circuit breaker Dissipation Active power loss • maximum W 10.6 Electricity Continuous current / Rated value / maximum A 16 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 value • of the instantaneous short-circuit release / initial value • for DC / Rated value • for DC / Rated value • at 40 °C / Rated value • at 50 °C / Rated value • at 50 °C / Rated value • at 65 °C / Rated value • at 70 °C / R	Protection class IP		IP40
Switching capacity Switching capacity class of the circuit breaker Dissination Active power loss • maximum W 10.6 Electricity Continuous current / Rated value / maximum A 160 Continuous current / Rated value / Maximum • of the current-dependent overload release / A 1 Full-scale value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the current-dependent overload release / initial value • of letip / Rated value • of letip / Rated value • of relection / Full-scale value	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 • maximum 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 C / Rated value • at 40 °C / Rated value • at 50 °C / Rated value • at 50 °C / Rated value • at 65 °C / R			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 • at 40 °C / Rated value • at 40 °C / Rated value • at 55 °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 response value current • of I-trip / Full-scale value • for N-conductor protection / Full-scale value Adjustable response value current / of the current-			
Continuous current / Rated value / maximum 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 of or DC / Rated value V 500 Operating current at 40 °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 Auxiliary circuit Number of CO contacts / for auxiliary contacts Osultability Suitability for use Adjustable parameters Adjustable response value current of I-trip / Full-scale value A 0 Adjustable response value current / of the current- Adjustable response value current / of the current-	• 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 • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the current-of the cur	Electricity		
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-ci	Continuous current / Rated value / maximum	А	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 15 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 the runner of the current- 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 • at 70 °C / Rated value A 15 Auxiliary circuit Number of CO contacts / for auxiliary contacts O Suitability Suitable parameters Adjustable parameters Adjustable response value current • for N-conductor protection / initial value • for N-conductor protection / Full-scale value A 0 Adjustable response value current / of the current-	Adjustable response value current		
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 16 • at 50 °C / Rated value A 16 • at 55 °C / Rated value A 15 • at 65 °C / Rated value A 15 • at 70 °C / Rated value A 15 • at 70 °C / Rated value A 15 • at 70 °C / Rated value A 15 • at 70 °C / Rated value A 15 • at 70 °C / Rated value A 15 • at 70 °C / Rated value A 15 • at 70 °C / Rated value A 15 • at 70 °C / Rated value A 15 • at 70 °C / Rated value A 15 • at 70 °C / Rated value A 15 • at 70 °C / Rated value B 15 • at 70 °C / Rated value B 15 • at 70 °C / Rate		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 at 50 °C / Rated value at 55 °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 65 °C / Rated value at 67 °C / Rated value at 67 °C / Rated value at 68 °C / Rated value at 70 °C / Rated value at	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 65 °C / Rated value • at 65 °C / Rated value • at 670 °C / Rated value • at 70 °C / Rated value A 15 Auxiliary circuit Number of CO contacts / for auxiliary contacts O Suitability 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 15 at 70 °C / Rated value At 15 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 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-	• for DC / Rated value	V	500
at 50 °C / Rated value at 55 °C / Rated value A 16 at 65 °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 A 10 of or N-conductor protection / initial value of or N-conductor protection / Full-scale value Adjustable response value current of N-conductor protection / Full-scale value Adjustable response value current / of the current- Adjustable response value current / of the current- A 0.7	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 Suitabile 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- 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- 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- A 0 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 0.7			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 0.7 	Adjustable parameters		
 for N-conductor protection / initial value for N-conductor protection / Full-scale value Adjustable response value current / of the current- A 0.7 			
• for N-conductor protection / Full-scale value Adjustable response value current / of the current- A 0.7	• of I-trip / Full-scale value	Α	10
Adjustable response value current / of the current- A 0.7	• for N-conductor protection / initial value	Α	0
	• for N-conductor protection / Full-scale value	Α	0
	•	Α	0.7
Product details	Product details		
Product component			

		N
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		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 switch		3VA1196-4EE36-0AA0
SWILCH		
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 at 690 V / Rated value	kA	5
Maximum short-circuit current breaking capacity (Icu)	IVA	3
• at 240 V / Rated value	kA	55
at 415 V / Rated value	kA	36
at 440 V / Rated value at 440 V / Rated value	kA	25
at 500 V / Rated value	kA	16
	kA	7
at 690 V / Rated value Short-circuit current making capacity (Icm)	NA.	,
J ,	kA	121
at 240 V / Rated value at 415 V / Rated value	kA	75.6
• at 415 V / Rated value		
at 690 V / Rated value	kA	7.5
Connections		
Arrangement of electrical connectors / for main current circuit		Front terminal
Type of connectable conductor cross-section		
. , , , , , , , , , , , , , , , , , , ,		

- (0 1 1 1 1 1 1 1 1 1			1.	(1 E 70 mm²)	
of the round conductor terminal / st				x (1.5 - 70 mm²)	
Type of electrical connection / for main co	urrent circuit		Вс	x terminal	
Mechanical Design					
Height		mm	13	0	
Width		mm	76	.2	
Depth		mm	70		
Mounting type			fix	ed mounting	
Environmental conditions					
Ambient temperature					
during operation / minimum		°C	-2	5	
during operation / maximum		°C	70		
during storage / minimum		°C	-40)	
during storage / maximum		°C	80		
Certificates					
Equipment marking					
• acc. to DIN EN 61346-2			Q		
• acc. to DIN EN 81346-2			Q		
General EMC	Declaration	n of	Shippin	g Approval	other
Product	Conformity	,			
Approval					
other			2 8		other
LUI	(+		中徽	GL	
LIIL	EG-Konf.		DNV	GI	•

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/3VA11964EE360AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11964EE360AA0/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11964EE360AA0

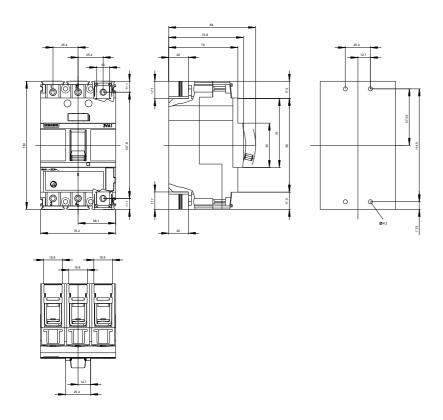
CAx-Online-Generator

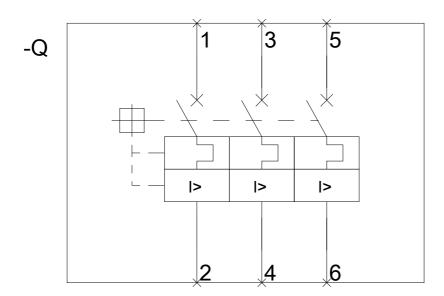
http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv

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