SIEMENS

Data sheet

3VA1196-6EE36-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS H ICU=70KA @ 415 V 3-POLE, LINE PROTECTION TM220, ATFM, IN=16A OVERLOAD PROTECTION IR=11,2A ...16A SHORT CIRCUIT PROTECTION II=10 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		
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 Switching capacity class of the circuit breaker Dissipation Active power loss • maximum W 10.6 Electricity Continuous current / Rated value / maximum	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 • 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 • for DC / Rated 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 60 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rated val	Protection class IP / on the front		IP40			
Switching capacity class of the circuit breaker Dissipation Active power loss • maximum W 10.6 Electricity Continuous current / Rated value / maximum • 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 • for DC / Rated value • at 40 °C / Rated value • at 50 °C / Rated value • at 55 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value •	Protective function of the overcurrent release		LI			
Switching capacity class of the circuit breaker Dissipation Active power loss • maximum W 10.6 Electricity Continuous current / Rated value / maximum • of the current-dependent overload release / A 16 Adjustable response value current • of the current-dependent overload release / Full-scale value • of the instantaneous short-circuit release / initial A 10 Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value • for DC / Rated value • at 40 °C / Rated value • at 50 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rated va	Switching capacity					
Active power loss • maximum Maximum Maxi	Switching capacity class of the circuit breaker		Н			
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 50/60 Hz / Rated value of rDC / Rated value verif at 0° C / Rated value at 40° C / Rated value at 50° C / Rated value at 50° C / Rated value at 65° C / Rated v	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 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 65 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value •	Active power loss					
Continuous current / Rated value / maximum Continuous current / Rated value A	• 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 r DC / Rated value of r DC / Rated value at 40 °C / Rated value at 55 °C / Rated value at 60 °C / Rated value at 70 °C /	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-dependent overload release / initial value	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 v	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 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 60 °C / Rated value A 15 • at 70 °C / Rated value A 15 Auxiliary circuit Number of CO contacts / for auxiliary contacts O Suitability Suitability Suitabile parameters Adjustable parameters Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / Full-scale value A 10 Adjustable response value current / of the current-dependent overload release / initial value A 0.7	Adjustable response value current					
Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value • for DC / Rated value Operating current • at 40 °C / Rated value • at 50 °C / Rated value • at 50 °C / Rated value • at 50 °C / Rated value • at 60 °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 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 system protection 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-dependent overload release / initial value		Α	1			
Operating voltage • 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 65 °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 • of I-trip / Full-scale value • for N-conductor protection / initial value Adjustable response value current / of the current-dependent overload release / initial value Adjustable response value current / of the current-dependent overload release / initial value A 0.7		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 50 °C / Rated value at 50 °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 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 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 70 °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-dependent overload release / initial value A 0.7	• 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 65 °C / Rated value at 670 °C / Rated value at 70 °C / Rated value buildiary circuit Number of CO contacts / for auxiliary contacts Suitability Suitability or use Suitability or use system protection 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-dependent overload release / initial value A 0.7	• for DC / Rated value	V	500			
at 55 °C / Rated value at 55 °C / Rated value at 60 °C / Rated value at 65 °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 for use Suitability for use 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-dependent overload release / initial value A 0.7	Operating current					
at 55 °C / Rated value at 60 °C / Rated value At 15 at 60 °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 N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value A 0.7	• 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 for use Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value of N-conductor protection / Full-scale value Adjustable response value current / Of the current-dependent overload release / initial value A 0.7	• 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 0 Suitability Suitability for use 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-dependent overload release / initial value A 0.7	• at 55 °C / Rated value	Α	16			
• at 70 °C / Rated value A 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-dependent overload release / initial value A 10 Adjustable response value current / of the current-dependent overload release / initial value	• 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-dependent overload release / initial value	● 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-dependent overload release / initial value 0 System protection A	• 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-dependent overload release / initial value 0 System protection A 10 0 0 0 0 0 0 0 0 0 0 0 0	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-dependent overload release / initial value system protection A 10 0 0 0 0 0 0 0 0 0 0 0 0			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-dependent overload release / initial value system protection A 10 0 0 0 0 0 0 0 0 0 0 0 0	Suitability					
Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value for N-conductor protection / Full-scale value A of I-trip / Full-scale value A of I-trip / Full-scale value A of I of N-conductor protection / Full-scale value A of I of N-conductor protection / Full-scale value A of I of N-conductor protection / Full-scale value A of I of N-conductor protection / Full-scale value A of I of N-conductor protection / Full-scale value A of I of N-conductor protection / Full-scale value A of I of N-conductor protection / Full-scale value A of I of N-conductor protection / Full-scale value A of I of N-conductor protection / Full-scale value A of I of N-conductor protection / Full-scale value A of I of N-conductor protection / Full-scale value A of I of N-conductor protection / Full-scale value A of N-conductor protection			system protection			
Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value for N-conductor protection / Full-scale value A A A A A A A A A A A A A	Adjustable parameters					
of I-trip / Full-scale value for N-conductor protection / 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 A 0 A 0 O 0 Adjustable response value current / of the current-dependent overload release / initial value						
 for N-conductor protection / initial value for N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value A 0 0.7	·	Α	10			
• for N-conductor protection / Full-scale value Adjustable response value current / of the current- dependent overload release / initial value						
Adjustable response value current / of the current- dependent overload release / initial value	•					
Product details	Adjustable response value current / of the current-					
	Product details	Product details				
Product component						

Trip indicator		No
		No
• display		No
Voltage trigger		No
undervoltage release		
undervoltage release with leading contact		No
Product property		Na
 for neutral conductors / upgradeable/retrofittable / Short-circuit and 		No
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
• Other measurement function		No
Accessories		
Manufacturer article number / of the supplied basic		3VA1196-6EE36-0AA0
switch		
Short circuit		
Operational short-circuit current breaking capacity		
(1)		
(Ics)	lσΔ	400
• at 240 V / Rated value	kA	100
at 240 V / Rated valueat 415 V / Rated value	kA	70
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value 	kA kA	70 36
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value 	kA kA kA	70 36 15
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value 	kA kA	70 36
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value Maximum short-circuit current breaking capacity (Icu)	kA kA kA kA	70 36 15 5
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value Maximum short-circuit current breaking capacity (Icu) at 240 V / Rated value 	kA kA kA kA	70 36 15 5
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value Maximum short-circuit current breaking capacity (Icu)	kA kA kA kA	70 36 15 5 100 70
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value Maximum short-circuit current breaking capacity (Icu) at 240 V / Rated value 	kA kA kA kA	70 36 15 5
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value Maximum short-circuit current breaking capacity (Icu) at 240 V / Rated value at 415 V / Rated value 	kA kA kA kA	70 36 15 5 100 70
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value Maximum short-circuit current breaking capacity (Icu) at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value 	kA kA kA kA kA kA	70 36 15 5 100 70 36
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value Maximum short-circuit current breaking capacity (Icu) at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value 	kA kA kA kA kA kA	70 36 15 5 100 70 36 20
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value Maximum short-circuit current breaking capacity (Icu) at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value 	kA kA kA kA kA kA	70 36 15 5 100 70 36 20
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value Maximum short-circuit current breaking capacity (Icu) at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value Short-circuit current making capacity (Icm)	kA kA kA kA kA kA kA	70 36 15 5 100 70 36 20
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value Maximum short-circuit current breaking capacity (Icu) at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value Short-circuit current making capacity (Icm) at 240 V / Rated value Short-circuit current making capacity (Icm) at 240 V / Rated value 	kA kA kA kA kA kA kA	70 36 15 5 100 70 36 20 10
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value Maximum short-circuit current breaking capacity (Icu) at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value Short-circuit current making capacity (Icm) at 240 V / Rated value at 240 V / Rated value At 240 V / Rated value at 240 V / Rated value at 240 V / Rated value 	kA kA kA kA kA kA kA kA kA	70 36 15 5 100 70 36 20 10 220 154
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value Maximum short-circuit current breaking capacity (Icu) at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value Short-circuit current making capacity (Icm) at 240 V / Rated value at 690 V / Rated value at 690 V / Rated value Connections Arrangement of electrical connectors / for main	kA kA kA kA kA kA kA kA kA	70 36 15 5 100 70 36 20 10 220 154
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value Maximum short-circuit current breaking capacity (Icu) at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value Short-circuit current making capacity (Icm) at 240 V / Rated value at 690 V / Rated value at 690 V / Rated value Connections Connections	kA kA kA kA kA kA kA kA kA	70 36 15 5 100 70 36 20 10 220 154 17

• of the round co	onductor terminal / str	anded		1 x (1.5	- 70 mm²)	
Type of electrical cor	nnection / for main cu	rrent circuit		Box tern	ninal	
Mechanical Design						
Height			mm	130		
Width			mm	76.2		
Depth			mm	70		
Mounting type				fixed mo	unting	
Environmental cond	litions					
Ambient temperature)					
during operation	on / minimum		°C	-25		
 during operation 	on / 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	Shipping App	proval	other
Product		Conformity	<i>'</i>			
Approval						
FMF	other			₽ &		other
FHI				$\Phi \Phi$		
LIIL		EG-Konf.		DNV	GL	

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/3VA11966EE360AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11966EE360AA0/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11966EE360AA0

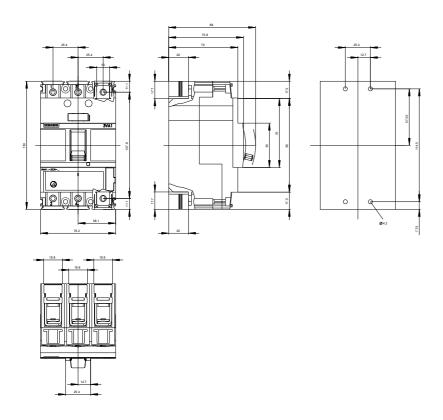
CAx-Online-Generator

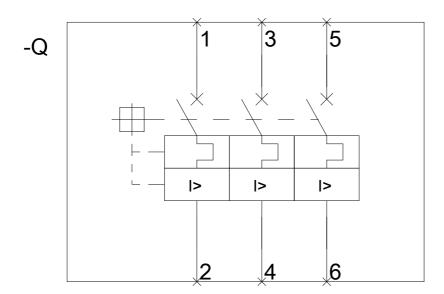
http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv

GL





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