SIEMENS

Datasheet

3VA1110-6EE46-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS H ICU=70KA @ 415 V 4-POLE, LINE PROTECTION TM220, ATFM, IN=100A OVERLOAD PROTECTION IR=70A ...100A SHORT CIRCUIT PROTECTION II=10 X IN NEUTRAL UNPROTECTED 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		4	
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 25	Protection class		
Switching capacity class of the circuit breaker	Protective function of the overcurrent release		Ц
Switching capacity class of the circuit breaker	Switching canacity	_	
Dissipation Active power loss • maximum Maximum W 25			Н
Active power loss • maximum W 25 Electricity Operating current / at 45 °C / Rated value • Rated value • Rated value • Of the current-dependent overload release / Ellescale value • 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 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 65 °C / Rated value • at 67 °C /			
Maximum W 25	Dissipation		
Continuous current / at 45 °C / Rated value	·		
Operating current / at 45 °C / Rated value / maximum	• maximum	W	25
Continuous current Rated value A 100 Adjustable response value current of the current-dependent overload release / Full-scale value 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 of the current-dependent overload release / Initial value A 100 of the current-dependent overload release / Initial value A 100 of the current-dependent overload release / Initial value A 100 of the current-dependent overload release / Initial value A 100 of the current-dependent overload release / Initial value A 100 of the current-dependent overload release / Initial value A 100 of the current-dependent overload release / Initial value A 100 of the current-dependent overload release / Initial value A 100 of the current-dependent overload release / Initial value A 100 of the current-dependent overload release / Initial value A 100 of the current-dependent overload release / Initial value A 100 of the current-dependent overload release / Initial value A 100 of the current-dependent overload release / Initial value A 100 of the current-dependent overload release / Initial value A 100 of the current-dependent overload release / Initial value A 100 of the current-dependent overload release / Initial value A 100 of the current-dependent overload release / Initial value A 100 of the current-dependent overload release / Initial value A 100	Electricity		
Continuous current Rated value A 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 r DC / Rated value of A 100 Operating current of A 200 Operating current of A 300 at 50 °C / Rated value of C Rated	Operating current / at 45 °C / Rated value	Α	100
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 Net weight Operating 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 val	Continuous current / Rated value / maximum	Α	160
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 100 of A 1	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 / Rated value of DC / Rated value of C / R	Rated value	Α	100
Full-scale value of the instantaneous short-circuit release / initial value Net weight g 1200 Main circuit Operating voltage of the instantaneous short-circuit release / initial value of the weight Operating voltage of with AC / at 50/60 Hz / Rated value of pr DC / Rated value Operating current of at 40 °C / Rated value A 100 of at 50 °C / Rated value A 100 of at 55 °C / Rated value A 98 of at 65 °C / Rated value A 96 of at 65 °C / Rated value A 94 of contacts of cr auxiliary contacts of cr auxiliary contacts O Suitability Suitabile parameters Adjustable parameters Adjustable response value current of l-trip / Full-scale value A 10 of the first initial value A 10 of the first initial value A 10 of the first initial value A 10 of l-trip / Full-scale value A 10 of re-N-conductor protection / initial value A 0	Adjustable response value current		
• of the instantaneous short-circuit release / initial value Net weight 9 1 200 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 65 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value A 94 • at 70 °C / Rated value A 91 Auxiliary circuit Number of CO contacts • for auxiliary contacts O Suitability • Suitabile parameters 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 10 • for N-conductor protection / initial value A 10 • of r-v-conductor protection / initial value A 10 • for N-conductor protection / initial value A 10 • of r-v-conductor protection / initial value A 10 • of r-v-conductor protection / initial value A 10 • of r-v-conductor protection / initial value A 10	of the current-dependent overload release /	Α	1
value Net weight g 1 200 Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value V 690 • for DC / Rated value V 600 Operating current • at 40 °C / Rated value A 100 • at 55 °C / Rated value A 98 • at 60 °C / Rated value A 96 • at 65 °C / Rated value A 94 • at 70 °C / Rated value A 91 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		Α	10
Main circuit			
Operating voltage	Net weight	g	1 200
with AC / at 50/60 Hz / Rated value v 690 for DC / Rated value V 600 Operating current at 40 °C / Rated value A 100 at 50 °C / Rated value A 98 at 60 °C / Rated value A 996 at 65 °C / Rated value A 996 at 65 °C / Rated value A 991 Auxiliary circuit Number of CO contacts o for auxiliary contacts Suitability Suitability Suitability Suitability or use Adjustable parameters Adjustable response value current of I-trip / Full-scale value A 10 for N-conductor protection / initial value A 0	Main circuit		
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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 94 • at 70 °C / Rated value A 91 Auxiliary circuit Number of CO contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts 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	 with AC / at 50/60 Hz / Rated value 	V	690
at 40 °C / Rated value at 50 °C / Rated value A 100 at 55 °C / Rated value A 98 at 60 °C / Rated value A 96 at 65 °C / Rated value A 91 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 A 10 for N-conductor protection / initial value A 10 A 10 A 10 For N-conductor protection / initial value A 10	• for DC / Rated value	V	600
at 50 °C / Rated value at 55 °C / Rated value at 65 °C / Rated value at 70 °C / Rated value at 70 °C / Rated value A 94 Auxiliary circuit Number of CO contacts at for auxiliary contacts Suitability Suitability Suitability Suitabile parameters Adjustable parameters Adjustable response value current at of I-trip / Full-scale value at 100 At 98 At 100	Operating current		
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at 60 °C / Rated value at 65 °C / Rated value at 70 °C / Rated value A 94 A 91 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 96 A 94 A 91 O Auxiliary circuit Suitability O Suitability A 10 of I-trip / Full-scale value A 0	• at 50 °C / Rated value	Α	100
at 65 °C / Rated value at 70 °C / Rated value A 91 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 94 94 95 91 A 91 A 91 A 91 A 91 B 91 A 91 A 91 B 91 A 91 A 91 B 91 A 91 A 10 A 0	• at 55 °C / Rated value	Α	98
at 70 °C / Rated value Auxiliary circuit Number of CO contacts o 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 60 °C / Rated value	Α	96
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 A U	• at 65 °C / Rated value	Α	94
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	91
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	Auxiliany 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	<u> </u>		
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	Α	0.7
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		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		3VA1110-6EE46-0AA0
Short circuit		
Operational short-circuit current breaking capacity		
(lcs)		
• at 240 V / Rated value	kA	100
• at 415 V / Rated value	kA	70
• at 440 V / Rated value	kA	36
• 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	100
• at 415 V / Rated value	kA	70
• at 440 V / Rated value	kA	36
• at 500 V / Rated value	kA	20
• at 690 V / Rated value	kA	10
Short-circuit current making capacity (Icm)		

• at 240 V / Rated value	kA	220
• at 415 V / Rated value	kA	154
• at 690 V / Rated value	kA	17

Connections		
Arrangement of electrical connectors		
• for main current circuit		Front terminal
Type of connectable conductor cross-section		
• of the round conductor terminal / stranded		1 x (1.5 - 70 mm²)
Design of the electrical connection		
• for main current circuit		Box terminal
Mechanical Design		
Height	mm	130
Width	mm	101.6
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		0

• acc. to DIN EN 61346-2

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• acc. to DIN EN 81346-2

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General	EMC	Declaration of	Shipping	other
Product		Conformity	Approval	
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/3VA11106EE460AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11106EE460AA0/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11106EE460AA0

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

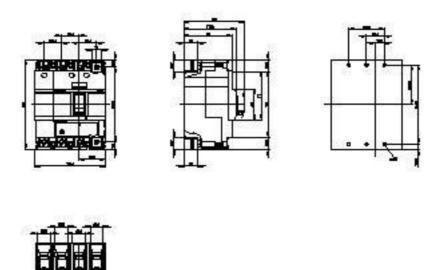


Figure similar

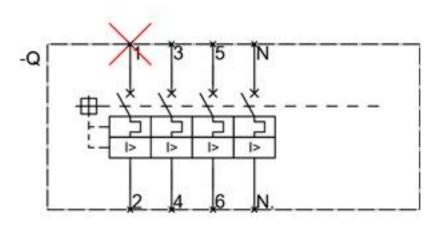


Figure similar

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