SIEMENS

Data sheet

3VA1120-5EF36-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 3-POLE, LINE PROTECTION TM240, ATAM, IN=20A OVERLOAD PROTECTION IR=14A ...20A SHORT CIRCUIT PROTECTION II=5...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	TM240

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 M Dissipation Active power loss • maximum W 12 Electricity Continuous current / Rated value / maximum A 160 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 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 55 °C / Rated value • at 60	Protection class IP		IP40
Switching capacity Switching capacity class of the circuit breaker M Dissipation Active power loss • maximum W 12 Electricity Continuous current / Rated value / maximum A A A A A Continuous current / Rated value • 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 Operating current • at 40 °C / Rated value • at 50 °C / Rated value • at 50 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 65 °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 Active power loss • maximum W 12	Protective function of the overcurrent release	_	LI
Switching capacity class of the circuit breaker Dissipation Active power loss • maximum W 12	Switching capacity		
Active power loss • maximum M 12			M
• maximum Part	Dissipation		
Electricity Continuous current / Rated value / maximum A 160 Continuous current / Rated value A 20 Adjustable response value current • of the current-dependent overload release / Full-scale value • of the instantaneous short-circuit release / initial • 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 r DC / Rated value • at 40 °C / Rated value • at 55 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rate	Active power loss		
Continuous current / Rated value / maximum	• maximum	W	12
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 of CRated value at 55 °C / Rated value at 55 °C / Rated value at 65 °C / Rated value at 70 °C / Rat	Electricity		
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 • for DC / Rated value • at 40 °C / Rated value • at 55 °C / Rated value • at 55 °C / Rated value • at 65 °C / Rated value • at 60 °C / Rated value • at 67 °C / Rated value • at 70 °C / Rated valu	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 volume Operating current at 40 °C / Rated value at 55 °C / Rated value at 55 °C / Rated value at 65 °C / Rated value at 65 °C / Rated value at 65 °C / Rated value at 67 °C / Rated value a	Continuous current / Rated value	Α	20
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 50 °C / Rated value • at 50 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rated value A 19 Auxiliary circuit Number of CO contacts / for auxiliary contacts O Suitability Suitability Suitability for use system protection Adjustable 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 • for N-conductor protection / Full-scale value • for N-conductor protection / Full-scale value	Adjustable response value current		
Main circuit		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 20 • at 50 °C / Rated value A 20 • at 55 °C / Rated value A 19 • at 60 °C / Rated value A 19 • at 65 °C / Rated value A 19 • at 70 °C / Rated value A 19 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		Α	5
with AC / at 50/60 Hz / Rated value for DC / Rated value v 500 Operating current at 40 °C / Rated value A 20 at 50 °C / Rated value A 20 at 55 °C / Rated value A 19 at 60 °C / Rated value A 19 at 65 °C / Rated value A 19 at 65 °C / Rated value A 19 at 70 °C / Rated value A 19 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 A 0	Main circuit		
for DC / Rated value V 500 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 65 °C / Rated value at 70 °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 19 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	• with AC / at 50/60 Hz / Rated value	V	690
at 40 °C / Rated value at 50 °C / Rated value at 50 °C / Rated value at 65 °C / Rated value at 66 °C / Rated value at 65 °C / Rated value at 70 °C / Rated value A 19 Auxiliary circuit Number of CO contacts / for auxiliary contacts Adjustable 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 A 0	• for DC / Rated value	V	500
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 65 °C / Rated value At 19 at 70 °C / Rated value At 19 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 of rN-conductor protection / Full-scale value for N-conductor protection / Full-scale value At 0	Operating current	_	
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 A 19 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 of or N-conductor protection / Full-scale value A 0 of or N-conductor protection / Full-scale value A 0	• at 40 °C / Rated value	Α	20
at 60 °C / Rated value at 65 °C / Rated value at 70 °C / Rated value A 19 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 for N-conductor protection / Full-scale value for N-conductor protection / Full-scale value A 10 of or N-conductor protection / Full-scale value A 0	• at 50 °C / Rated value	Α	20
at 65 °C / Rated value at 70 °C / Rated value A 19 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 or N-conductor protection / Full-scale value A 10 of N-conductor protection / Full-scale value A 0	● at 55 °C / Rated value	Α	20
at 70 °C / Rated value A 19 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 • for N-conductor protection / Full-scale value A 0	• at 60 °C / Rated value	Α	19
Auxiliary circuit Number of CO contacts / for auxiliary contacts Suitability Suitability for use system protection 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 A 0 • for N-conductor protection / Full-scale value A 0	• at 65 °C / Rated value	Α	19
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 A 0 • for N-conductor protection / Full-scale value A 0	• at 70 °C / Rated value	Α	19
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 A 0 • for N-conductor protection / Full-scale value A 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 A 0 of N-conductor protection / Full-scale 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 for N-conductor protection / Full-scale value A 0 of N-conductor protection / Full-scale value A 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 0 of I-trip / Full-scale value A 0			system protection
 of I-trip / Full-scale value for N-conductor protection / initial value for N-conductor protection / Full-scale value A 0 A 0 	Adjustable parameters		
 for N-conductor protection / initial value for N-conductor protection / Full-scale value A 0 A 0 	Adjustable response value current		
• for N-conductor protection / Full-scale value A 0	● of I-trip / Full-scale value	Α	10
	• for N-conductor protection / initial value	Α	0
A Particular Communication of the communication of	• for N-conductor protection / Full-scale value	Α	0
Adjustable response value current / of the current- A 0.7 dependent overload release / initial value	Adjustable response value current / of the current- dependent overload release / initial value	Α	0.7
Product details	Product details		
Product component			

		NI-
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		3VA1120-5EF36-0AA0
Short circuit		
Operational short-circuit current breaking capacity		
(lcs)		
• at 240 V / Rated value	kA	85
• at 415 V / Rated value	kA	55
• at 440 V / Rated value	kA	30
• 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	85
• at 415 V / Rated value	kA	55
• at 440 V / Rated value	kA	30
• 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	187
• at 415 V / Rated value	kA	121
• at 690 V / Rated value	kA	17
Connections		
Arrangement of electrical connectors / for main		Front terminal
current circuit		
Type of connectable conductor cross-section		

• of the round co	onductor terminal / stra	anded		1)	κ (1.5 - 70 mm²)		
Type of electrical cor	nnection / for main cur	rent circuit			x terminal		
						_	
Mechanical Design							
Height			mm	13	0		
Width			mm	76	.2		
Depth			mm	70			
Mounting type				fix	ed mounting		
Environmental cond	litions						
Ambient temperature							
 during operation 	on / minimum		°C	-2	5		
 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	Shippin	g Approval		other
Product		Conformity	,				
Approval							
	other	4 4		2 2			other
СПС	<u>—</u>			小	GL®		<u> </u>
CNL				div			
		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/3VA11205EF360AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11205EF360AA0/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11205EF360AA0

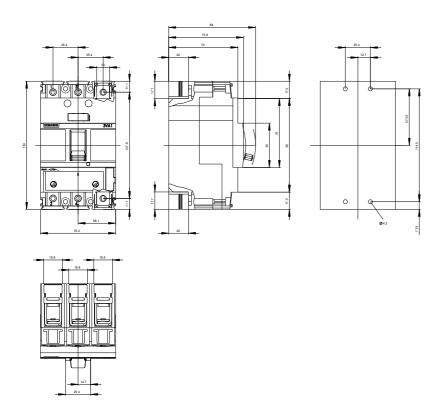
CAx-Online-Generator

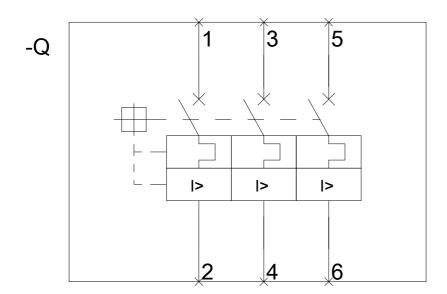
http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv

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