SIEMENS

Data sheet

3VA1120-6ED42-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS H ICU=70KA @ 415 V 4-POLE, LINE PROTECTION TM210, FTFM, IN=20A OVERLOAD PROTECTION IR=20A FIXED SHORT CIRCUIT PROTECTION II=10 X IN NEUTRAL UNPROTECTED BUSBAR CONNECTION

Figure similar

Model			
product brand name	SI	ENTRON	
Product designation	М	lolded case circuit breaker	
Design of the product	Li	ine protection	
Product variations	G	eneral Applications	
Ground fault monitoring version	W	/ithout	
Design of the auxiliary release	W	/ithout auxiliary release	
Design of the auxiliary switch	W	/ithout	
Design of the operating mechanism	to	oggle handle	
Type of the driving mechanism / motor drive	N	0	
Design of the overcurrent release	TI	M210	

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

Protection class

Protection class IP		IP40
Protection class IP / on the front		IP40
Protective function of the overcurrent release		LI
Switching capacity		
Switching capacity class of the circuit breaker		Н
Dissipation Active power loss		
maximum	W	12
■ maximum	VV	12
Electricity		
Continuous current / Rated value / maximum	Α	160
Continuous current / Rated value	Α	20
Adjustable response value current		
 of the current-dependent overload release / Full-scale value 	Α	1
 of the instantaneous short-circuit release / initial value 	Α	10
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	Α	20
• at 50 °C / Rated value	Α	20
• at 55 °C / Rated value	Α	20
• at 60 °C / Rated value	Α	19
• at 65 °C / Rated value	Α	19
• at 70 °C / Rated value	Α	19
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	Α	10
• 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	1
Product details		
Product component		

Trip indicator		No
		No
• display		No
Voltage trigger		No
undervoltage release		
undervoltage release with leading contact		No
Product property		No
 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
Accessories		
Manufacturer article number / of the supplied basic		3VA1120-6ED42-0AA0
switch		
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		
at 240 V / Nated Value	kA	100
• at 415 V / Rated value	kA kA	100 70
● at 415 V / Rated value	kA	70
at 415 V / Rated valueat 440 V / Rated value	kA kA	70 36
 at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value 	kA kA kA	70 36 20
 at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value 	kA kA kA	70 36 20
 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	70 36 20 10
 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 	kA kA kA kA	70 36 20 10
 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 415 V / Rated value at 690 V / Rated value Connections	kA kA kA kA	70 36 20 10 220 154 17
 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 415 V / Rated value at 690 V / Rated value Connections Arrangement of electrical connectors / for main	kA kA kA kA	70 36 20 10 220 154
 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 415 V / Rated value at 690 V / Rated value Connections	kA kA kA kA	70 36 20 10 220 154 17

• for flat-bar terminal connection / minimum	12 x 0
• for flat-bar terminal connection / maximum	17 x 6.5
Type of electrical connection / for main current circuit	Lug 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	
Equipment mark	king

• acc. to DIN EN 61346-2 Q • acc. to DIN EN 81346-2 Q

General Product Approval	EMC	Declaration of	Shipping Approval	
		Conformity		











other

other

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)

 $\underline{\text{https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA11206ED420AA0}}$

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11206ED420AA0/all

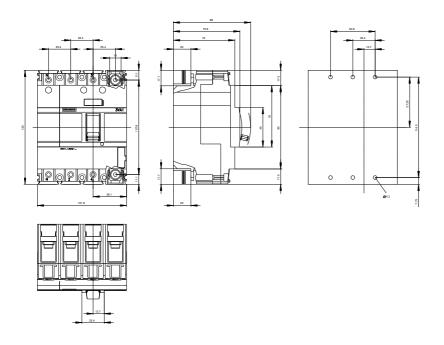
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11206ED420AA0

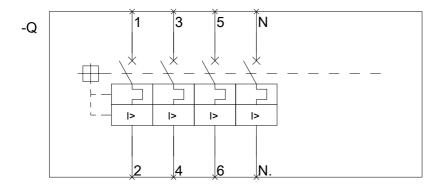
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv





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