# **SIEMENS**

### **Datasheet**

## 3VA1110-5FE42-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 4-POLE, LINE PROTECTION TM220, ATFM, IN=100A OVERLOAD PROTECTION IR=70A ...100A SHORT CIRCUIT PROTECTION II=10 X IN NEUTRAL PROTECTION 50% BUSBAR 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

Protection class		
Protective function of the overcurrent release		Ц
Cuitching canacity		
Switching capacity Switching capacity class of the circuit breaker		M
containing capacity class of the container		· · ·
Dissipation		
Active power loss		
• maximum	W	25
Electricity		
Operating current / at 45 °C / Rated value	Α	100
Continuous current / Rated value / maximum	Α	160
Continuous current		
Rated value	Α	100
Adjustable response value current		
<ul><li>of the current-dependent overload release /</li></ul>	Α	1
Full-scale value		
of the instantaneous short-circuit release / initial	Α	10
value		4.000
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	Α	100
• at 50 °C / Rated value	Α	100
• at 55 °C / Rated value	Α	98
• at 60 °C / Rated value	Α	96
• at 65 °C / Rated value	Α	94
• at 70 °C / Rated value	Α	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	Α	10
• for N-conductor protection / initial value	A	0.5
for N-conductor protection / Full-scale value	A	0.5
• 101 14-conductor protection / Full-scale value	7.	0.0

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
<ul> <li>Voltage trigger</li> </ul>		No
<ul> <li>undervoltage release</li> </ul>		No
<ul> <li>undervoltage release with leading contact</li> </ul>		No
Product property		
<ul> <li>for neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof</li> </ul>		No
Product expansion		
<ul><li>optional</li></ul>		
— motor drive		Yes
Product function		
Product function		
<ul> <li>Intrinsic device protection</li> </ul>		Yes
communication function		No
Phase failure detection		No
<ul> <li>other measurement function</li> </ul>		No
Accessories		
Manufacturer article number / of the supplied basic switch		3VA1110-5FE42-0AA0
Short circuit		
Operational short-circuit current breaking capacity		
(Ics)		
• 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 current circuit	Front terminal
Type of connectable conductor cross-section	
• for flat-bar terminal connection / minimum	12 x 0
• for flat-bar terminal connection / maximum	17 x 6.5
Design of the 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				
<ul><li>during operation / minimum</li></ul>	°C	-25		
<ul><li>during operation / maximum</li></ul>	°C	70		
<ul><li>during storage / minimum</li></ul>	°C	-40		
during storage / maximum	°C	80		

Certificates		
Reference code		
• acc. to DIN EN 61346-2	Q	
● acc. to DIN EN 81346-2	Q	

General Prod	luct Approval	EMC	Declaration of Conformity	Shipping Approval	other
		other			other







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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/3VA11105FE420AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3VA11105FE420AA0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA11105FE420AA0">http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA11105FE420AA0</a>

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

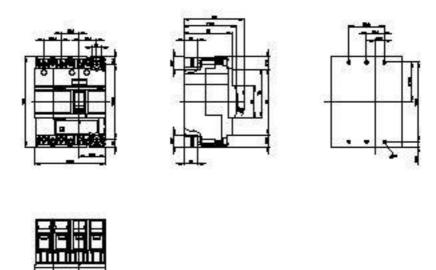


Figure similar

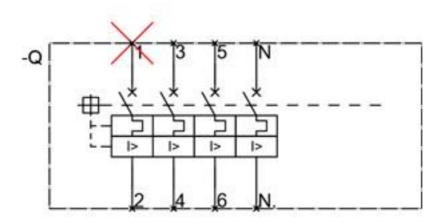


Figure similar

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