# **SIEMENS**

## Data sheet

# 3VA1132-5EE42-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 4-POLE, LINE PROTECTION TM220, ATFM, IN=32A OVERLOAD PROTECTION IR=22,4A ...32A SHORT CIRCUIT PROTECTION II=10 X IN NEUTRAL UNPROTECTED 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  LI  Switching capacity Switching capacity class of the circuit breaker  M  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  • at 40 °C / Rated value  • at 55 °C / Rated value  • at 60 °C / Rated value  • at 60 °C / Rated value  • at 70 °C / Rated value					
Switching capacity  Switching capacity class of the circuit breaker  M  Dissipation  Active power loss  • maximum  W  10.6  Electricity  Continuous current / Rated value / maximum  A  160  Continuous current / Rated value  A  Adjustable response value current  • 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  Operating current  • at 40 °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 60 °C / Rated value  • at 70 °C / Rated value  • at 70 °C / Rated value  • at 70 °C / Rated value					
Switching capacity class of the circuit breaker    Dissipation					
Switching capacity class of the circuit breaker    Dissipation					
Active power loss  • maximum    Maximum   Maxi					
Active power loss  • maximum    Maximum   Maxi					
Electricity  Continuous current / Rated value / maximum  Continuous current / Rated value  A 32  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  at 40 °C / Rated value  at 50 °C / Rated value  at 60 °C / Rated value  at 60 °C / Rated value  at 65 °C / Rated value  at 70 °C / Rated value  at 30  at 70 °C / Rated value					
Continuous current / Rated value / maximum  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 of the for DC / Rated value of the for DC / Rated value A 32  Operating current at 40 °C / Rated value A 32  at 55 °C / Rated value A 31.04 at 65 °C / Rated value A 30 at 70 °C / Rated value A 30					
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 690  Operating current  at 40 °C / Rated value  A 32  at 55 °C / Rated value  A 31.04  at 60 °C / Rated value  at 65 °C / Rated value  A 30  at 70 °C / Rated value  A 30  at 70 °C / Rated value  A 30					
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 the current-dependent overload release / initial A  10  Main circuit  Operating voltage  of with AC / at 50/60 Hz / Rated value  of the current A  of the instantaneous short-circuit release / initial A  10  Main circuit  Operating voltage  of the instantaneous short-circuit release / initial A  10  of the instantan					
of the current-dependent overload release / Full-scale value  of the instantaneous short-circuit release / initial value  Main circuit  Operating voltage  of with AC / at 50/60 Hz / Rated value  of or DC / Rated value  value  Operating current  at 40 °C / Rated value  of at 50 °C / Rated value  at 60 °C / Rated value					
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 55 °C / Rated value  • at 55 °C / Rated value  • at 65 °C / Rated value  • at 60 °C / Rated value  • at 60 °C / Rated value  • at 70 °C / Rated value					
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         32           • at 50 °C / Rated value         A         32           • at 55 °C / Rated value         A         31.04           • at 60 °C / Rated value         A         31           • at 65 °C / Rated value         A         30           • at 70 °C / Rated value         A         30					
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<ul> <li>with AC / at 50/60 Hz / Rated value</li> <li>for DC / Rated value</li> <li>Operating current</li> <li>at 40 °C / Rated value</li> <li>at 50 °C / Rated value</li> <li>at 55 °C / Rated value</li> <li>at 60 °C / Rated value</li> <li>at 60 °C / Rated value</li> <li>at 60 °C / Rated value</li> <li>at 65 °C / Rated value</li> <li>at 70 °C / Rated value</li> <li>at 70 °C / Rated value</li> </ul>					
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Operating current         • at 40 °C / Rated value       A       32         • at 50 °C / Rated value       A       31.04         • at 60 °C / Rated value       A       31         • at 65 °C / Rated value       A       30         • at 70 °C / Rated value       A       30					
<ul> <li>at 40 °C / Rated value</li> <li>at 50 °C / Rated value</li> <li>at 55 °C / Rated value</li> <li>at 60 °C / Rated value</li> <li>at 60 °C / Rated value</li> <li>at 65 °C / Rated value</li> <li>at 70 °C / Rated value</li> <li>at 70 °C / Rated value</li> </ul>					
<ul> <li>at 50 °C / Rated value</li> <li>at 55 °C / Rated value</li> <li>at 60 °C / Rated value</li> <li>at 65 °C / Rated value</li> <li>at 65 °C / Rated value</li> <li>at 70 °C / Rated value</li> <li>A 30</li> <li>A 30</li> </ul>					
<ul> <li>at 55 °C / Rated value</li> <li>at 60 °C / Rated value</li> <li>at 65 °C / Rated value</li> <li>at 65 °C / Rated value</li> <li>at 70 °C / Rated value</li> <li>A 30</li> <li>A 30</li> </ul>					
<ul> <li>at 60 °C / Rated value</li> <li>at 65 °C / Rated value</li> <li>at 70 °C / Rated value</li> <li>A 30</li> <li>A 30</li> </ul>					
at 65 °C / Rated value     at 70 °C / Rated value     A 30  A 30  A 30					
• at 70 °C / Rated value A 30					
Auxiliary circuit	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					
• for N-conductor protection / Full-scale value A 0					
Adjustable response value current / of the current- A 0.7 dependent overload release / initial value					
Product details					
Product component					

		Ne
Trip indicator		No
• display		No
Voltage trigger		No
undervoltage release		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 / optional / 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		3VA1132-5EE42-0AA0
switch		
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 (lcm)		
• at 240 V / Rated value	kA	187
<ul><li>at 240 V / Rated value</li><li>at 415 V / Rated value</li></ul>	kA kA	187 121
• at 415 V / Rated value	kA	121
at 415 V / Rated value     at 690 V / Rated value  Connections  Arrangement of electrical connectors / for main	kA	121
at 415 V / Rated value     at 690 V / Rated value  Connections	kA	121 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			
<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	
<ul><li>during storage / maximum</li></ul>	°C	80	

## Certificates

#### **Equipment marking**

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

General Product Approval	EMC	Declaration of	Shipping Approval
		Conformity	





other







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#### 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/3VA11325EE420AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11325EE420AA0/all

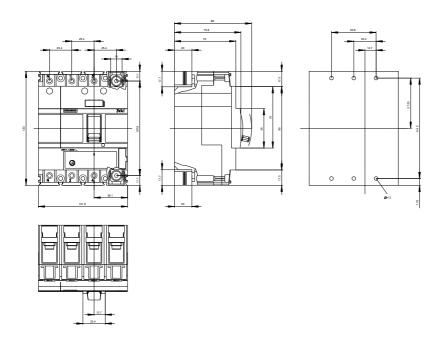
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA11325EE420AA0

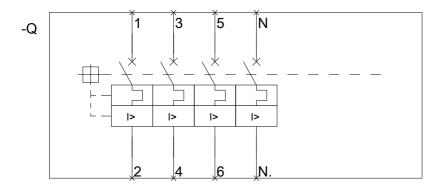
**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://ausschreibungstexte.siemens.com/tiplv





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