# **SIEMENS**

# Data sheet

# 3VA2216-5HL42-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 250 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 4POLE, LINE PROTECTION ETU320, LI, IN=160A OVERLOAD PROTECTION IR=64A ...160A SHORT CIRCUIT PROTECTION II=12 X IN NEUTRAL PROTECTION ADJUSTABLE(OFF,50%,100%) BUSBAR CONNECTION

Model		
product brand name		SENTRON
Product designation		Molded case circuit breaker
Design of the product		Line protection
Product variations		Selective Applications
Ground fault monitoring version		Without
Design of the auxiliary release		without auxiliaryrelease
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		ETU320
General technical data		
Number of poles		4
Trip class / of the L-trip / with I2t characteristic / initial		0.5

General technical data	
Number of poles	4
Trip class / of the L-trip / with I2t characteristic / initial value	0.5
Trip class / of the L-trip / with I2t characteristic / Full-scale value	17
Electrical endurance (switching cycles)	
• at AC-1 / at 380/415 V / at 50/60 Hz	10 000
circuit-breaker / Design	3VA
Mechanical service life (switching cycles) / typical	20 000

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		M
Dissipation		
Active power loss		
• maximum	W	19.7
Electricity		
Continuous current / Rated value / maximum	Α	250
Continuous current / Rated value	Α	160
Adjustable response value current / of the	Α	1.5
instantaneous short-circuit release / initial value		
Main circuit		
Operating voltage		
• with AC / at 50/60 Hz / Rated value	V	690
Operating current		
• at 40 °C / Rated value	Α	160
• at 50 °C / Rated value	Α	160
• at 60 °C / Rated value	Α	160
• at 65 °C / Rated value	Α	160
● at 70 °C / Rated value	Α	160
Auxiliary circuit		
Number of NC contacts / for auxiliary contacts		0
Number of NO contacts / for auxiliary contacts		0
Suitability		
Suitability for use		system protection
Adjustable parameters		
Adjustable response value current		
of I-trip / Full-scale value	Α	12
Adjustable response value current / of the current- dependent overload release / initial value	A	0.394
Product details		
Product component		
Trip indicator		No
• display		No
undervoltage release		No
Product property		

<ul> <li>for neutral conductors / upgradeable/retrofittable / Short-circuit and</li> </ul>		No
overload proof		
Product expansion / optional / motor drive		Yes
Product function		
Product function		
<ul> <li>Intrinsic device protection</li> </ul>		Yes
<ul> <li>communication function</li> </ul>		No
Phase failure detection		No
other measurement function		No
Accessories		
Manufacturer article number / of the supplied basic		3VA2216-5HL42-0AA0
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	55
● at 500 V / Rated value	kA	36
● at 690 V / Rated value	kA	3
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	55
• at 500 V / Rated value	kA	36
• at 690 V / Rated value	kA	3
Short-circuit current making capacity (Icm)		
• at 240 V / Rated value	kA	187
● at 415 V / Rated value	kA	121
• at 440 V / Rated value	kA	121
• at 500 V / Rated value	kA	79
• at 690 V / Rated value	kA	4.5
Connections		
Arrangement of electrical connectors / for main current circuit		Front terminal
Type of connectable conductor cross-section		
• for flat-bar terminal connection / minimum		13 x 1 mm
• for flat-bar terminal connection / maximum		25 x 8.5
Type of electrical connection / for main current circuit		Lug terminal
M 1 : 15 :		

Height	mm	181
Width	mm	140
Depth	mm	107
Mounting type		fixed mounting

Environmen <sup>1</sup>	-	conditions

Ambient temperature		
<ul><li>during operation / minimum</li></ul>	°C	-25
<ul><li>during operation / maximum</li></ul>	°C	70
during storage / minimum	°C	-40
<ul><li>during storage / maximum</li></ul>	°C	80

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

General Product Approval	EMC	Declaration of	Shipping
		Conformity	Approval

other











Shipping	other
Approval	



other

GL

## Further information

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

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

Industry Mall (Online ordering system)

 $\underline{\text{https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA22165HL420AA0}}$ 

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

http://support.automation.siemens.com/WW/view/en/3VA22165HL420AA0/all

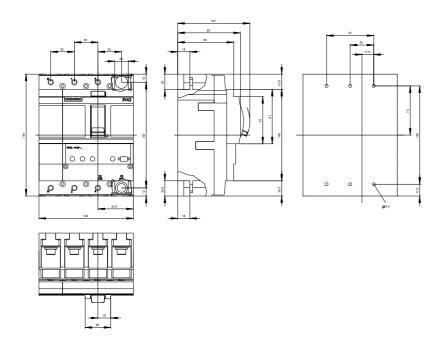
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA22165HL420AA0">http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA22165HL420AA0</a>

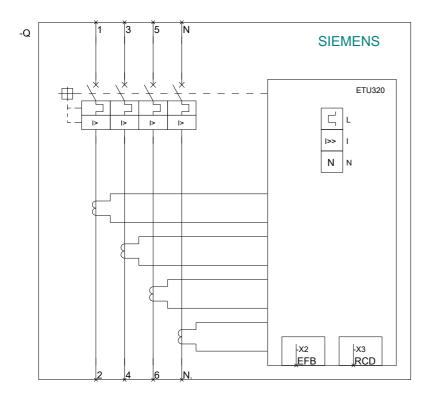
**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://ausschreibungstexte.siemens.com/tiplv





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