SIEMENS

Data sheet

3VA2040-8HL32-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 100 BREAKING CAPACITY CLASS L ICU=150KA @ 415 V 3POLE, LINE PROTECTION ETU320, LI, IN=40A OVERLOAD PROTECTION IR=16A ...40A SHORT CIRCUIT PROTECTION II=12 X IN BUSBAR CONNECTION

Figure similar

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	3
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	12 000
circuit-breaker / Design	3VA
Mechanical service life (switching cycles) / typical	20 000

Voltage		
Insulation voltage / Rated value	V	800

Protection class

Protection class IP / on the front Protective function of the overcurrent release Switching capacity Switching capacity Switching capacity class of the circuit breaker Dissipation Active power loss • maximum W 1.2 Electricity Continuous current / Rated value / maximum A 100 Continuous current / Rated value / A 40 Adjustable response value current / of the instantaneous short-circuit release / initial value Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value • at 60 °C / Rated value • at 70 °C / Rated value • at 80 °C	Protection class IP		IP40
Switching capacity Switching capacity class of the circuit breaker Dissipation Active power loss • maximum W 1.2 Electricity Continuous current / Rated value / maximum A 100 Continuous current / Rated value Adjustable response value current / of the instantaneous short-circuit release / initial value Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value 1 at 40 °C / Rated value • at 40 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rated valu	Protection class IP / on the front		IP40
Switching capacity class of the circuit breaker Dissipation Active power loss • maximum W 1.2 Electricity Continuous current / Rated value / maximum A 100 Continuous current / Rated value Adjustable response value current / of the instantaneous short-circuit release / initial value Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value A 40 Operating current • at 40 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rated value A 40 Auxiliary circuit Number of NO contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts O 30 Sultability Sultability Sultability for use Adjustable parameters Adjustable parameters Adjustable response value current • of I-trip / Full-scale value A 12 Adjustable response value current / of the current-dependent overload release / initial value Product details Product details Product component • Trip indicator • display • undervoltage release	Protective function of the overcurrent release		LI
Switching capacity class of the circuit breaker Dissipation Active power loss • maximum W 1.2 Electricity Continuous current / Rated value / maximum A 100 Continuous current / Rated value Adjustable response value current / of the instantaneous short-circuit release / initial value Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value A 40 Operating current • at 40 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rated value A 40 Auxiliary circuit Number of NO contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts O 30 Sultability Sultability Sultability for use Adjustable parameters Adjustable parameters Adjustable response value current • of I-trip / Full-scale value A 12 Adjustable response value current / of the current-dependent overload release / initial value Product details Product details Product component • Trip indicator • display • undervoltage release		_	
Dissipation Active power loss • maximum W 1.2 Electricity Continuous current / Rated value / maximum			
Active power loss	Switching capacity class of the circuit breaker		L
Electricity Continuous current / Rated value / maximum Continuous current / Rated value Adjustable response value current / of the 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 A 40 • at 50 °C / Rated value A 40 • at 60 °C / Rated value A 40 • at 65 °C / Rated value A 40 • at 65 °C / Rated value A 40 Suitability circuit Number of NC contacts / for auxiliary contacts Number of NC contacts / for auxiliary contacts Outside the contacts / f	Dissipation		
Electricity Continuous current / Rated value / maximum A 100 Continuous current / Rated value Adjustable response value current / of the instantaneous short-circuit release / initial value Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value Operating current • at 40 °C / Rated value • at 50 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value A 40 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts O Suitability Suitability Suitability Suitability for use Adjustable response value current • of I-trip / Full-scale value A 12 Adjustable response value current / of the current-dependent overload release / initial value Product details Product details Product component • Trip indicator • display • undervoltage release	Active power loss		
Continuous current / Rated value / maximum	• maximum	W	1.2
Continuous current / Rated value Adjustable response value current / of the instantaneous short-circuit release / initial value Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value Operating current • 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 65 °C / Rated value • at 70 °C / Rated value A 40 Au Au Au Au Au Au Au Au Au A	Electricity		
Adjustable response value current / of the instantaneous short-circuit release / initial value Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value Operating current • at 40 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value A 40 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts O Suitability Suitability for use Adjustable parameters Adjustable response value current • of I-trip / Full-scale value A 12 Adjustable response value current • of I-trip / Full-scale value A 12 Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator • display • undervoltage release	Continuous current / Rated value / maximum	Α	100
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 • 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 A 40 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts O Suitability Suitability for use Adjustable parameters Adjustable response value current • of I-trip / Full-scale value A 12 Adjustable response value current • of I-trip / Full-scale value Product details Product component • Trip indicator • display • undervoltage release	Continuous current / Rated value	Α	40
Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value Operating current • 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 65 °C / Rated value • at 70 °C / Rated value A 40 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts O Suitability Suitability Suitabile parameters Adjustable parameters Adjustable response value current • of 1-trip / Full-scale value A 12 Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator • display • undervoltage release No	Adjustable response value current / of the	Α	1.5
Operating voltage • with AC / at 50/60 Hz / Rated value Operating current • 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 A 40 Au • at 70 °C / Rated value A 40 Au • at 70 °C / Rated value A 40 Au Au Au Au Au Au Au Au Au A	instantaneous short-circuit release / initial value		
with AC / at 50/60 Hz / Rated value Operating current	Main circuit		
Operating current • 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 65 °C / Rated value • at 70 °C / Rated value A 40 • at 70 °C / Rated value A 40 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts O Suitability Suitability Suitabile parameters Adjustable parameters Adjustable response value current • of I-trip / Full-scale value A 12 Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator • display • undervoltage release No	Operating voltage		
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 A 40 Au Au Au Au Au Au Au Au Au A	• with AC / at 50/60 Hz / Rated value	V	690
at 50 °C / Rated value at 60 °C / Rated value at 65 °C / Rated value at 65 °C / Rated value at 70 °C / Rated value A A A A A A A A A A A A A	Operating current		
at 60 °C / Rated value at 65 °C / Rated value A 40 at 70 °C / Rated value A 40 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts O Suitability Suitability Suitability for use Adjustable parameters Adjustable response value current of I-trip / Full-scale value A 12 Adjustable response value current / of the current-dependent overload release / initial value Product details Product component Trip indicator odisplay undervoltage release No	• at 40 °C / Rated value	Α	40
at 65 °C / Rated value at 70 °C / Rated value A 40 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts 0 Suitability Suitability Suitability for use Adjustable parameters Adjustable response value current of I-trip / Full-scale value A 12 Adjustable response value current / of the current-dependent overload release / initial value Product details Product component Trip indicator of display oundervoltage release No	• at 50 °C / Rated value	Α	40
● at 70 °C / Rated value Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts 0 Suitability Suitability for use Adjustable parameters Adjustable response value current ● of I-trip / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component ● Trip indicator ● display ● undervoltage release No	• at 60 °C / Rated value	Α	40
Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts 0 Suitability Suitability for use Adjustable parameters Adjustable response value current • of I-trip / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator • display • undervoltage release	• at 65 °C / Rated value	Α	40
Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts 0 Suitability Suitability for use Adjustable parameters Adjustable response value current • of I-trip / Full-scale value Adjustable response value current-dependent overload release / initial value Product details Product component • Trip indicator • display • undervoltage release	• at 70 °C / Rated value	Α	40
Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts 0 Suitability Suitability for use Adjustable parameters Adjustable response value current • of I-trip / Full-scale value Adjustable response value current-dependent overload release / initial value Product details Product component • Trip indicator • display • undervoltage release	Auxiliary circuit		
Suitability Suitability for use Adjustable parameters Adjustable response value current • of I-trip / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator • display • undervoltage release No			0
Suitability for use system protection Adjustable parameters Adjustable response value current • of I-trip / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator • display • undervoltage release	Number of NO contacts / for auxiliary contacts		0
Suitability for use system protection Adjustable parameters Adjustable response value current • of I-trip / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator • display • undervoltage release	0.31.133		
Adjustable parameters Adjustable response value current • of I-trip / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator • display • undervoltage release No			system protection
Adjustable response value current of I-trip / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component Trip indicator display undervoltage release No	Catability for use		System protection
of I-trip / Full-scale value A 12 Adjustable response value current / of the current-dependent overload release / initial value Product details Product component Trip indicator display undervoltage release No No			
Adjustable response value current / of the current- dependent overload release / initial value Product details Product component • Trip indicator • display • undervoltage release No			
Product details Product component Trip indicator display undervoltage release No			
Product details Product component • Trip indicator • display • undervoltage release No		Α	0.4
Product component	dependent overload release / initial value		
 Trip indicator display undervoltage release No No 			
 ◆ display ◆ undervoltage release No 	Product component		
• undervoltage release No	Trip indicator		No
and the state of t	• display		No
Product property	• undervoltage release		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		3VA2040-8HL32-0AA0
switch		
Short circuit		
Operational short-circuit current breaking capacity		
(lcs)		
● at 240 V / Rated value	kA	200
● at 415 V / Rated value	kA	150
● at 440 V / Rated value	kA	150
● at 500 V / Rated value	kA	100
• at 690 V / Rated value	kA	18
Maximum short-circuit current breaking capacity (Icu)		
● at 240 V / Rated value	kA	200
● at 415 V / Rated value	kA	150
● at 440 V / Rated value	kA	150
• at 500 V / Rated value	kA	100
• at 690 V / Rated value	kA	24
Short-circuit current making capacity (lcm)		
• at 240 V / Rated value	kA	440
● at 415 V / Rated value	kA	330
• at 440 V / Rated value	kA	330
• at 500 V / Rated value	kA	220
• at 690 V / Rated value	kA	48
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

Height	mm	181
Width	mm	105
Depth	mm	107
Mounting type		fixed mounting

Environmen	tal conditions
	iai 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 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)

 $\underline{\text{https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA20408HL320AA0}}$

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

http://support.automation.siemens.com/WW/view/en/3VA20408HL320AA0/all

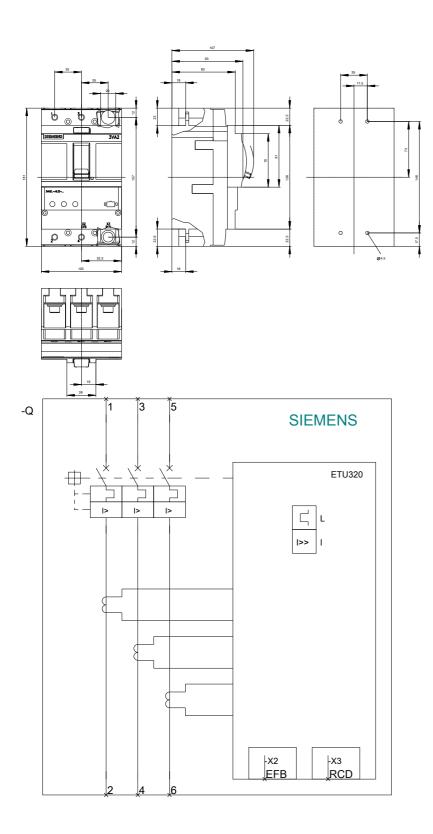
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA20408HL320AA0

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv



last modified: 11.03.2015