## **SIEMENS**

## Data sheet

## 3VA2163-6JQ32-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS H ICU=85KA @ 415 V 3POLE, LINE PROTECTION ETU560, LSIG, IN=63A OVERLOAD PROTECTION IR=25A ...63A SHORT CIRCUIT PROTECTION ISD=0,6..10X IN, II=1,5..12X IN NEUTRAL PROTECTION OPTIONAL WITH EXT. CT,UPTO 160% GROUNDFAULT, SWITCHABLE IG=0,2... 1 X IN, TG=0,050,8MS 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	-	Summation current formation L-conductor
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	_	ETU560
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		25
Electrical endurance (switching cycles)	-	
• at AC-1 / at 380/415 V / at 50/60 Hz		12 000
Total disconnection time / for G-tripping / with standard characteristic / initial value	S	0.05
Total disconnection time / for G-tripping / with standard characteristic / Full-scale value	S	0.8
circuit-breaker / Design		3VA
Mechanical service life (switching cycles) / typical		20 000

Voltage       V       800         Protection class       Protection class IP       IP40         Protection class IP / on the front       IP40         Protection class IP / on the front       IP40         Protection class IP / on the front       IP40         Protective function of the overcurrent release       LSIG         Switching capacity       Switching capacity class of the circuit breaker       H         Dissipation       Active power loss <ul> <li>maximum</li> <li>W</li> <li>4</li> </ul> Electricity       Continuous current / Rated value / maximum       A       160         Continuous current / Rated value       A       63         Adjustable response value current / of the instantaneous short-circuit release / initial value       A       1.5         Main circuit       Operating voltage       V       690         Operating current       V       690		Insulation voltage / Rated value Protection class	800
Protection class IP       IP40         Protection class IP / on the front       IP40         Protective function of the overcurrent release       LSIG         Switching capacity       Switching capacity class of the circuit breaker       H         Dissipation       Active power loss <ul> <li>maximum</li> <li>W</li> <li>4</li> </ul> Electricity           Continuous current / Rated value / maximum         A         160           Continuous current / Rated value         A         63           Adjustable response value current / of the instantaneous short-circuit release / initial value         A         1.5           Main circuit         Operating voltage         V         690			
Protection class IP       IP40         Protection class IP / on the front       IP40         Protective function of the overcurrent release       LSIG         Switching capacity       Switching capacity class of the circuit breaker       H         Dissipation       Active power loss <ul> <li>maximum</li> <li>W</li> <li>4</li> </ul> Electricity           Continuous current / Rated value / maximum         A         160           Continuous current / Rated value         A         63           Adjustable response value current / of the instantaneous short-circuit release / initial value         A         1.5           Main circuit         Operating voltage         V         690			
Protection class IP / on the front       IP40         Protective function of the overcurrent release       LSIG         Switching capacity       H         Switching capacity class of the circuit breaker       H         Dissipation       K         Active power loss       • maximum         • maximum       W         4       Electricity         Continuous current / Rated value / maximum       A       160         Continuous current / Rated value       A       63         Adjustable response value current / of the instantaneous short-circuit release / initial value       A       1.5         Main circuit       V       690			IP40
Protective function of the overcurrent release       LSIG         Switching capacity       H         Switching capacity class of the circuit breaker       H         Dissipation       K         Active power loss       W         • maximum       W         Electricity       K         Continuous current / Rated value / maximum       A         Adjustable response value current / of the instantaneous short-circuit release / initial value       A         Main circuit       V         Operating voltage       V         • with AC / at 50/60 Hz / Rated value       V		Protoction class IP / on the front	
Switching capacity       H         Switching capacity class of the circuit breaker       H         Dissipation       Main circuit         Active power loss       W         • maximum       W         Electricity       W         Continuous current / Rated value / maximum       A         Continuous current / Rated value       A         Adjustable response value current / of the instantaneous short-circuit release / initial value       A         Main circuit       V         Operating voltage       V         • with AC / at 50/60 Hz / Rated value       V			
Switching capacity class of the circuit breaker       H         Dissipation       Active power loss <ul> <li>maximum</li> <li>W</li> <li>4</li> </ul> Electricity       W       4         Continuous current / Rated value / maximum       A       160         Continuous current / Rated value       A       63         Adjustable response value current / of the instantaneous short-circuit release / initial value       A       1.5         Main circuit       Operating voltage       V       690			2010
Dissipation         Active power loss       W       4         • maximum       W       4         Electricity       Image: Continuous current / Rated value / maximum       A       160         Continuous current / Rated value       A       63         Adjustable response value current / of the instantaneous short-circuit release / initial value       A       1.5         Main circuit       Image: Continuous current / Rated value       V       690			
Active power loss       W       4         • maximum       W       4         Electricity       A       160         Continuous current / Rated value / maximum       A       63         Continuous current / Rated value       A       63         Adjustable response value current / of the instantaneous short-circuit release / initial value       A       1.5         Main circuit       V       690		Switching capacity class of the circuit breaker	Н
<ul> <li>maximum</li> <li>W</li> <li>Electricity</li> <li>Continuous current / Rated value / maximum</li> <li>A</li> <li>160</li> <li>Continuous current / Rated value</li> <li>A</li> <li>63</li> <li>Adjustable response value current / of the instantaneous short-circuit release / initial value</li> <li>Main circuit</li> <li>Operating voltage         <ul> <li>with AC / at 50/60 Hz / Rated value</li> <li>V</li> <li>690</li> </ul> </li> </ul>		Dissipation	
Electricity     A     160       Continuous current / Rated value / maximum     A     160       Continuous current / Rated value     A     63       Adjustable response value current / of the instantaneous short-circuit release / initial value     A     1.5       Main circuit     V     690		Active power loss	
Continuous current / Rated value / maximum       A       160         Continuous current / Rated value       A       63         Adjustable response value current / of the instantaneous short-circuit release / initial value       A       1.5         Main circuit       Operating voltage       • with AC / at 50/60 Hz / Rated value       V       690		• maximum	4
Continuous current / Rated value / maximum       A       160         Continuous current / Rated value       A       63         Adjustable response value current / of the instantaneous short-circuit release / initial value       A       1.5         Main circuit       Operating voltage • with AC / at 50/60 Hz / Rated value       V       690		Flectricity	
Continuous current / Rated value       A       63         Adjustable response value current / of the instantaneous short-circuit release / initial value       A       1.5         Main circuit       Operating voltage <ul> <li>with AC / at 50/60 Hz / Rated value</li> <li>V</li> <li>690</li> </ul>			160
Adjustable response value current / of the instantaneous short-circuit release / initial value       A       1.5         Main circuit       Operating voltage <ul> <li>with AC / at 50/60 Hz / Rated value</li> <li>V</li> <li>690</li> </ul>			63
instantaneous short-circuit release / initial value          Main circuit         Operating voltage         • with AC / at 50/60 Hz / Rated value       V       690		Adjustable response value current / of the	1.5
Operating voltage     V     690			
Operating voltage     V     690		Main circuit	
• with AC / at 50/60 Hz / Rated value V 690			
Operating current			690
		Operating current	
• at 40 °C / Rated value A 63			63
• at 50 °C / Rated value A 63		● at 50 °C / Rated value	63
• at 60 °C / Rated value A 63		● at 60 °C / Rated value	63
• at 65 °C / Rated value A 63		• at 65 °C / Rated value	63
• at 70 °C / Rated value A 63			63
Auxiliary circuit       Number of NC contacts / for auxiliary contacts       0			0
Number of NO contacts / for auxiliary contacts     0		-	
			·
Suitability			
Suitability for use system protection	:	Suitability for use	system protection
Adjustable parameters		Adjustable parameters	
Adjustable response value current		Adjustable response value current	
• for G-tripping / with I2t characteristic / initial A 0.25 value			0.25
for G-tripping / with I2t characteristic / Full-scale A 1 value			1
• for G-tripping / with standard characteristic / A 0.25 initial value			0.25
• for G-tripping / with standard characteristic / A 1 Full-scale value			

<ul> <li>of I-trip / Full-scale value</li> </ul>	А	12
<ul> <li>of the short-time delayed short-circuit release / initial value</li> </ul>	A	0.6
<ul> <li>of the short-time delayed short-circuit release / Full-scale value</li> </ul>	A	10
<ul> <li>of S-trip / with standard characteristic / initial value</li> </ul>	A	0.6
<ul> <li>of S-trip / with standard characteristic / Full- scale value</li> </ul>	A	10
Adjustable delay time		
<ul> <li>for G-tripping / with I2t characteristic / initial value</li> </ul>	s	0.05
<ul> <li>for G-tripping / with I2t characteristic / Full-scale value</li> </ul>	S	0.8
• of S-trip / with I2t characteristic / initial value	s	0.05
<ul> <li>of S-trip / with I2t characteristic / Full-scale value</li> </ul>	S	0.5
<ul> <li>of S-trip / with standard characteristic / initial value</li> </ul>	S	0.05
<ul> <li>of S-trip / with standard characteristic / Full- scale value</li> </ul>	s	0.5
Adjustable response value current / of the current- dependent overload release / initial value	A	0.4
Product details		
Product component		
Trip indicator		No
● display		Yes
<ul> <li>undervoltage release</li> </ul>		No
Product property	_	
<ul> <li>of the circuit breaker with tripping unit / Tripping characteristic adjustable</li> </ul>		Yes
<ul> <li>for neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof</li> </ul>		Yes
Product expansion / optional / motor drive		Yes
Product function		
Product function		
<ul> <li>Intrinsic device protection</li> </ul>		Yes
<ul> <li>communication function</li> </ul>		Yes
Phase failure detection		No
<ul> <li>other measurement function</li> </ul>		No

Accessories

Manufacturer article number / of the supplied basic switch

Short circuit		
Operational short-circuit current breaking capacity		
(Ics)		
• at 240 V / Rated value	kA	110
• at 415 V / Rated value	kA	85
• at 440 V / Rated value	kA	85
• at 500 V / Rated value	kA	55
• at 690 V / Rated value	kA	2.5
Maximum short-circuit current breaking capacity (Icu)	-	
• at 240 V / Rated value	kA	110
• at 415 V / Rated value	kA	85
• at 440 V / Rated value	kA	85
• at 500 V / Rated value	kA	55
• at 690 V / Rated value	kA	2.5
Short-circuit current making capacity (Icm)	-	
• at 240 V / Rated value	kA	242
• at 415 V / Rated value	kA	187
• at 440 V / Rated value	kA	187
• at 500 V / Rated value	kA	121
• at 690 V / Rated value	kA	3.75

Connections	
Arrangement of electrical connectors / for main	Front terminal
current circuit	
Type of connectable conductor cross-section	
<ul> <li>for flat-bar terminal connection / minimum</li> </ul>	13 x 1 mm
<ul> <li>for flat-bar terminal connection / maximum</li> </ul>	25 x 8.5
Type of electrical connection / for main current circuit	Lug terminal

Mechanical Design		
Height	mm	181
Width	mm	105
Depth	mm	107
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 mark	ing					
<ul> <li>acc. to DIN</li> </ul>	I EN 61346-2			Q		
<ul> <li>acc. to DIN</li> </ul>	I EN 81346-2			Q		
General Proc	duct Approval		EM	С	Declaration of	Shipping
					Conformity	Approval
	VDE	EAC		other	EG-Konf.	

Shipping	other
Approval	
	other
GL	

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## Further information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)

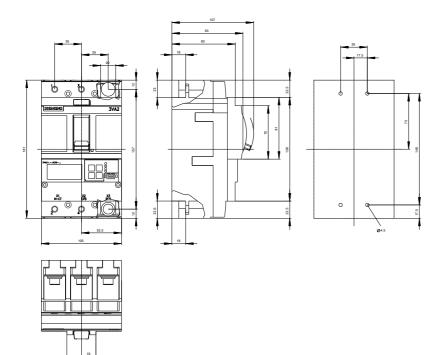
https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA21636JQ320AA0

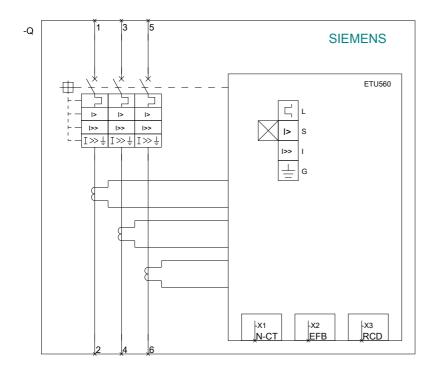
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA21636JQ320AA0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA21636JQ320AA0

CAx-Online-Generator http://www.siemens.com/cax

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





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