## Data sheet

## 3VA2225-8KQ42-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 250 BREAKING CAPACITY CLASS L ICU=150KA @ 415 V 4POLE, LINE PROTECTION ETU860, LSIG, IN=250A OVERLOAD PROTECTION IR=100A ...250A SHORT CIRCUIT PROTECTION ISD=0,6..10X IN, II=1,5..10X IN NEUTRAL PROTECTION ADJUSTABLE (OFF, UPTO 100%) 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 + N 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	ETU860

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		25		
Electrical endurance (switching cycles)				
• at AC-1 / at 380/415 V / at 50/60 Hz		10 000		
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					
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		LSIG			
0.41	_				
Switching capacity Switching capacity class of the circuit breaker		L			
Switching dapacity class of the circuit breaker					
Dissipation					
Active power loss					
• maximum	W	48			
Electricity					
Continuous current / Rated value / maximum	Α	250			
Continuous current / Rated value	Α	250			
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	250			
• at 50 °C / Rated value	Α	250			
• at 60 °C / Rated value	Α	250			
• at 65 °C / Rated value	Α	245			
• at 70 °C / Rated value	Α	227			
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					
for G-tripping / with I2t characteristic / initial	Α	0.2			
value	, ,				
for G-tripping / with I2t characteristic / Full-scale	Α	1			
value					
for G-tripping / with standard characteristic /	Α	0.2			
initial value					
• for G-tripping / with standard characteristic /	Α	1			
Full-scale value					

• of I-trip / Full-scale value	Α	12
<ul> <li>of the short-time delayed short-circuit release / initial value</li> </ul>	А	0.6
<ul> <li>of the short-time delayed short-circuit release / Full-scale value</li> </ul>	Α	10
<ul> <li>of S-trip / with standard characteristic / initial value</li> </ul>	Α	0.6
<ul> <li>of S-trip / with standard characteristic / Full- scale value</li> </ul>	Α	10
Adjustable delay time	_	
<ul> <li>for G-tripping / with I2t characteristic / initial value</li> </ul>	S	0.05
• for G-tripping / with I2t characteristic / Full-scale value	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	А	0.4
Product details		
Product component		
Trip indicator		No
• display		Yes
undervoltage release		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>		No
Product expansion / optional / motor drive		Yes
Product function		
Product function		
Intrinsic device protection		Yes
• communication function		Yes

Accessories

• Phase failure detection

• other measurement function

No Yes

Manufacturer article number / of the supplied basic		3VA2225-8KQ42-0AA0
switch		
Short circuit		
Operational short-circuit current breaking capacity		
(Ics)		
• 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		
<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	140
Depth  Mounting type	mm	107 fixed mounting
		·
Environmental conditions		
Ambient temperature	°C	25
during operation / minimum	°C	-25
during operation / maximum	°C	70
during storage / minimum	°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** 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)

https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA22258KQ420AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA22258KQ420AA0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

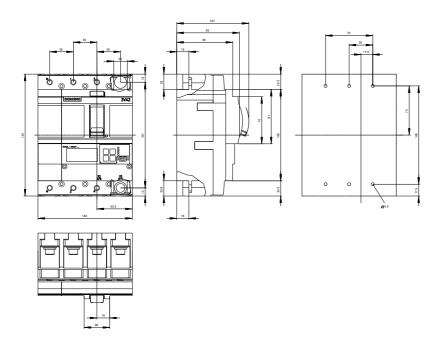
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA22258KQ420AA0

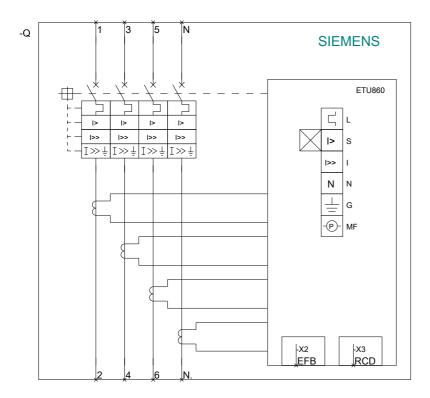
**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://ausschreibungstexte.siemens.com/tiplv





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