Data sheet

3VA2125-6KQ42-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS H ICU=85KA @ 415 V 4POLE, LINE PROTECTION ETU860, LSIG, IN=25A OVERLOAD PROTECTION IR=10A ...25A SHORT CIRCUIT PROTECTION ISD=0,6..10X IN, II=1,5...12X IN NEUTRAL PROTECTION ADJUSTABLE (OFF, 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 + 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		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

Insulation voltage / Rated value Protection class P 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 • maximum W 0.6 Electricity Continuous current / Rated value / maximum A 160 Continuous current / Rated value A 25 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 25 • at 60 °C / Rated value A 25 • at 65 °C / Rat	Voltage			
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Dissipation Active power loss • maximum Electricity Continuous current / Rated value / maximum Continuous current / Rated value A 25 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 • at 50 °C / Rated value • at 60 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated val			ш	
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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 25 at 70 °C / Rated value A 25 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 G-tripping / with 12t characteristic / initial value of or G-tripping / with 12t characteristic / Full-scale of or G-tripping / with 12t characteristic / Full-scale A 1	Main circuit			
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 25 • at 70 °C / Rated value A 25 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts 0 Suitability Suitability Suitability or use Adjustable parameters Adjustable response value current • for G-tripping / with l2t characteristic / initial value • for G-tripping / with l2t characteristic / Full-scale • for G-tripping / with l2t characteristic / Full-scale A 1	Operating voltage			
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 At 25 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts Suitability Suitability Suitability Suitabile parameters Adjustable parameters Adjustable response value current after 67 G-tripping / with 12t characteristic / initial value after 68 of 69 G-tripping / with 12t characteristic / Full-scale At 25	• 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 25 at 70 °C / Rated value A 25 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 parameters Adjustable response value current after G-tripping / with 12t characteristic / initial value for G-tripping / with 12t characteristic / Full-scale A 1	Operating current			
at 60 °C / Rated value at 65 °C / Rated value at 70 °C / Rated value A 25 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 for G-tripping / with 12t characteristic / initial value for G-tripping / with 12t characteristic / Full-scale for G-tripping / with 12t characteristic / Full-scale A 25	● at 40 °C / Rated value	Α	25	
at 65 °C / Rated value at 70 °C / Rated value A 25 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 or G-tripping / with 12t characteristic / initial value of or G-tripping / with 12t characteristic / Full-scale A 25 A 25 A 25 A 25 0 Number of NC contacts / for auxiliary contacts 0 Suitability Suitability for use system protection A 0.6 value of or G-tripping / with 12t characteristic / Full-scale A 1	● at 50 °C / Rated value	Α	25	
at 70 °C / Rated value A 25 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts 0 Suitability Suitability for use Suitability for use Adjustable parameters Adjustable response value current • for G-tripping / with l2t characteristic / initial value • for G-tripping / with l2t characteristic / Full-scale • for G-tripping / with l2t characteristic / Full-scale A 1	• at 60 °C / Rated value	Α	25	
Auxiliary circuit Number of NC contacts / for auxiliary contacts 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 value • for G-tripping / with I2t characteristic / Full-scale • for G-tripping / with I2t characteristic / Full-scale A 1	● at 65 °C / Rated value	Α	25	
Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts Suitability Suitability for use Adjustable parameters Adjustable response value current • for G-tripping / with I2t characteristic / initial value • for G-tripping / with I2t characteristic / Full-scale • for G-tripping / with I2t characteristic / Full-scale A 1	● at 70 °C / Rated value	Α	25	
Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts Suitability Suitability for use Adjustable parameters Adjustable response value current • for G-tripping / with I2t characteristic / initial value • for G-tripping / with I2t characteristic / Full-scale • for G-tripping / with I2t characteristic / Full-scale A 1	Auxiliary circuit			
Suitability Suitability for use Adjustable parameters Adjustable response value current • for G-tripping / with I2t characteristic / initial value • for G-tripping / with I2t characteristic / Full-scale • for G-tripping / with I2t characteristic / Full-scale • for G-tripping / with I2t characteristic / Full-scale			0	
Suitability for use Adjustable parameters Adjustable response value current • for G-tripping / with I2t characteristic / initial A value • for G-tripping / with I2t characteristic / Full-scale A 1	Number of NO contacts / for auxiliary contacts		0	
Suitability for use Adjustable parameters Adjustable response value current • for G-tripping / with I2t characteristic / initial A value • for G-tripping / with I2t characteristic / Full-scale A 1	Cuitability			
Adjustable parameters Adjustable response value current • for G-tripping / with I2t characteristic / initial A value • for G-tripping / with I2t characteristic / Full-scale A 1			system protection	
Adjustable response value current • for G-tripping / with I2t characteristic / initial A 0.6 value • for G-tripping / with I2t characteristic / Full-scale A 1	·			
 for G-tripping / with I2t characteristic / initial A 0.6 value for G-tripping / with I2t characteristic / Full-scale A 1 				
value ● for G-tripping / with I2t characteristic / Full-scale A 1		۸	0.6	
or o arphing a man let or lar dotter the coale		A	0.0	
		Α	1	
 for G-tripping / with standard characteristic / A 0.6 initial value 		Α	0.6	
• for G-tripping / with standard characteristic / A 1 Full-scale value	• for G-tripping / with standard characteristic /	Α	1	

● of I-trip / Full-scale value	Α	12
 of the short-time delayed short-circuit release / initial value 	Α	0.6
 of the short-time delayed short-circuit release / Full-scale value 	Α	10
 of S-trip / with standard characteristic / initial value 	Α	0.6
 of S-trip / with standard characteristic / Full- scale value 	Α	10
Adjustable delay time		
 for G-tripping / with I2t characteristic / initial value 	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
 of S-trip / with I2t characteristic / Full-scale value 	S	0.5
 of S-trip / with standard characteristic / initial value 	S	0.05
 of S-trip / with standard characteristic / Full- scale value 	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
 undervoltage release 		No
Product property		
 of the circuit breaker with tripping unit / Tripping characteristic adjustable 		Yes
 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 		Yes

Accessories

• Phase failure detection

• other measurement function

No Yes

Manufacturer article number / of the supplied basic		3VA2125-6KQ42-0AA0
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 (lcm)	_	
● 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 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
Mechanical Design		
Height	mm	181
Width	mm	140
Depth Mounting type	mm	107 fixed mounting
Environmental conditions		
Ambient temperature	0.0	05
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 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/3VA21256KQ420AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA21256KQ420AA0/all

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

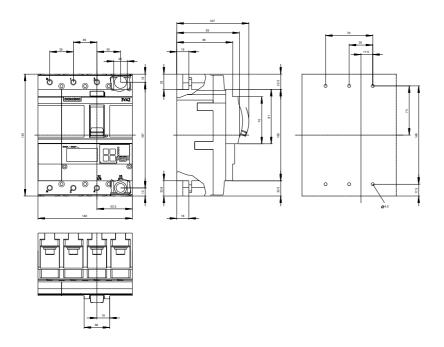
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA21256KQ420AA0

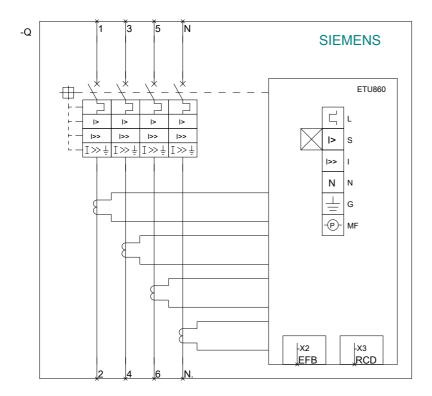
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv





last modified: 11.03.2015