Data sheet

3VA2140-5KQ42-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 4POLE, LINE PROTECTION ETU860, LSIG, IN=40A OVERLOAD PROTECTION IR=16A ...40A 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	

Voltage				
Insulation voltage / Rated value	V	800		
Distriction class				
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		M		
Switching capacity class of the circuit breaker		IVI		
Dissipation				
Active power loss				
• maximum	W	1.6		
Electricity				
Continuous current / Rated value / maximum	Α	160		
Continuous current / Rated value	Α	40		
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	40		
● at 50 °C / Rated value	Α	40		
• at 60 °C / Rated value	Α	40		
• at 65 °C / Rated value	Α	40		
● at 70 °C / Rated value	Α	40		
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	0.4		
• for G-tripping / with 12t characteristic / initial value	A	0.4		
• for G-tripping / with I2t characteristic / Full-scale	Α	1		
value				
• for G-tripping / with standard characteristic /	Α	0.4		
initial value				
• for G-tripping / with standard characteristic /	Α	1		
Full-scale value				

• 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 	A	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	Α	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
. Di		Ne

Accessories

• Phase failure detection

• other measurement function

No Yes

Manufacturer article number / of the supplied basic switch		3VA2140-5KQ42-0AA0
Short circuit		
Operational short-circuit current breaking capacity		
(Ics)		
● 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	2.5
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	2.5
Short-circuit current making capacity (lcm)	_	
• 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	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		404
Height Width	mm	181
Depth	mm	140 107
Mounting type	111111	fixed mounting
Environmental 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 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/3VA21405KQ420AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA21405KQ420AA0/all

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

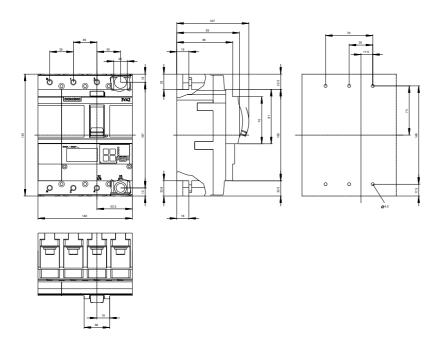
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA21405KQ420AA0

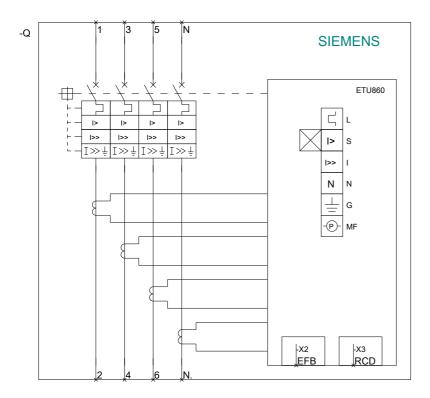
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv





last modified: 11.03.2015