SIEMENS

Data sheet

3VA2140-8KQ42-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS L ICU=150KA @ 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
Distoction close	_	
Protection 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		L
Dissipation		
Active power loss		
● maximum	W	1.2
Electricity		
Continuous current / Rated value / maximum	А	160
Continuous current / Rated value	А	40
Adjustable response value current / of the	A	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	А	40
● at 50 °C / Rated value	А	40
• at 60 °C / Rated value	А	40
● at 65 °C / Rated value	А	40
● at 70 °C / Rated value	А	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 value 	A	0.4
 for G-tripping / with I2t characteristic / Full-scale value 	A	1
 for G-tripping / with standard characteristic / initial value 	А	0.4
 for G-tripping / with standard characteristic / Full-scale value 	A	1

 of I-trip / Full-scale value 	А	12
 of the short-time delayed short-circuit release / initial value 	А	0.6
 of the short-time delayed short-circuit release / Full-scale value 	А	10
 of S-trip / with standard characteristic / initial value 	A	0.6
 of S-trip / with standard characteristic / Full- scale value 	A	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-	A	0.4
dependent overload release / initial value		
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
 Phase failure detection 		No

other measurement function

Accessories

Yes

Manufacturer article number / of the supplied basic 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 (Icm)	-	
• 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	Front terminal
current circuit	
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	mm	107
Mounting type		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 mark	ing					
 acc. to DIN 	I EN 61346-2			Q		
 acc. to DIN 	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	

GL

Further information

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

Industry Mall (Online ordering system)

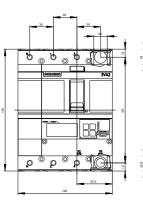
https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA21408KQ420AA0

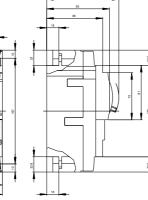
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA21408KQ420AA0/all

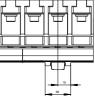
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA21408KQ420AA0

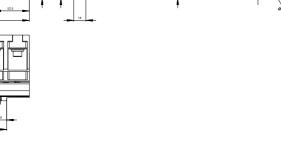
CAx-Online-Generator http://www.siemens.com/cax

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

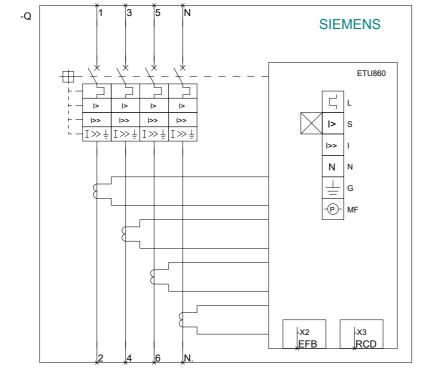








o 0



last modified:

11.03.2015