SIEMENS

Data sheet

3VA2116-6KQ42-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS H ICU=85KA @ 415 V 4POLE, LINE PROTECTION ETU860, LSIG, IN=160A OVERLOAD PROTECTION IR=64A ...160A 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		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
Protection class		
Protection class IP		IP40
Protection class IP / on the front		IP40
Protective function of the overcurrent release		LSIG
Switzhing congoity		
Switching capacity Switching capacity class of the circuit breaker		H
Dissipation		
Active power loss	W	25.5
• maximum	VV	25.5
Electricity		
Continuous current / Rated value / maximum	Α	160
Continuous current / Rated value	Α	160
Adjustable response value current / of the instantaneous short-circuit release / initial value	Α	1.5
instantaneous snort-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	160
● at 50 °C / Rated value	Α	160
• at 60 °C / Rated value	Α	160
• at 65 °C / Rated value	Α	160
• at 70 °C / Rated value	Α	160
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 value	Α	1
 for G-tripping / with standard characteristic / initial value 	Α	0.2
 for G-tripping / with standard characteristic / Full-scale value 	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	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		3VA2116-6KQ42-0AA0
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	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 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/3VA21166KQ420AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA21166KQ420AA0/all

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

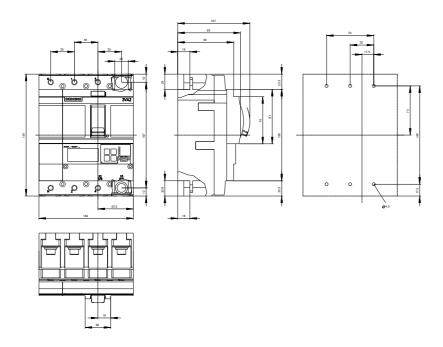
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA21166KQ420AA0

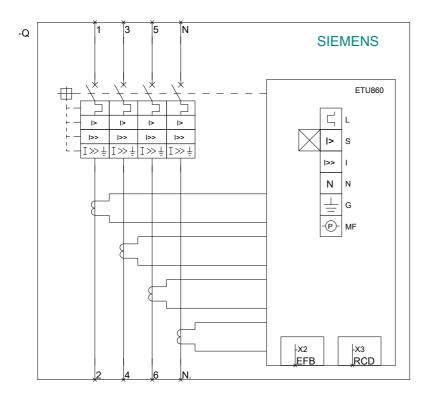
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv





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