SIEMENS

Data sheet

3VA2116-6KP42-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS H ICU=85KA @ 415 V 4POLE, LINE PROTECTION ETU850, LSI, 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%) 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	Without
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	ETU850
General technical data	

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
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		LSI
Switching capacity		
Switching capacity class of the circuit breaker		Н
Dissipation Active power loss		
maximum	W	25.5
• maximum	• •	20.0
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 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	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		
of I-trip / Full-scale value	Α	12
of the short-time delayed short-circuit release /	A	0.6
initial value		
 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		
• of S-trip / with I2t characteristic / initial value	S	0.05

 of S-trip / with l2t characteristic / Full-scale value 	S	0.5
	6	0.05
 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-	Α	0.4
dependent overload release / initial value		
Product details		
Product component		
Trip indicator		No
• display		Yes
undervoltage release		No
Product property		
 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		Yes
^i	_	
Accessories Manufacturer article number / of the supplied basic		3VA2116-6KP42-0AA0
switch		<u> </u>
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 kA	85 85
at 440 V / Rated valueat 500 V / Rated value		
	kA	85
● at 500 V / Rated value	kA kA	85 55
at 500 V / Rated valueat 690 V / Rated value	kA kA	85 55
 at 500 V / Rated value at 690 V / Rated value Maximum short-circuit current breaking capacity (Icu) 	kA kA kA	85 55 2.5
 at 500 V / Rated value at 690 V / Rated value Maximum short-circuit current breaking capacity (Icu) at 240 V / Rated value 	kA kA kA	85 55 2.5
 at 500 V / Rated value at 690 V / Rated value Maximum short-circuit current breaking capacity (Icu) at 240 V / Rated value at 415 V / Rated value 	kA kA kA kA	85 55 2.5 110 85
 at 500 V / Rated value at 690 V / Rated value Maximum short-circuit current breaking capacity (Icu) at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value 	kA kA kA kA kA	85 55 2.5 110 85 85

• 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	
• acc. to DIN EN 81346-2	Q	

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/3VA21166KP420AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA21166KP420AA0/all

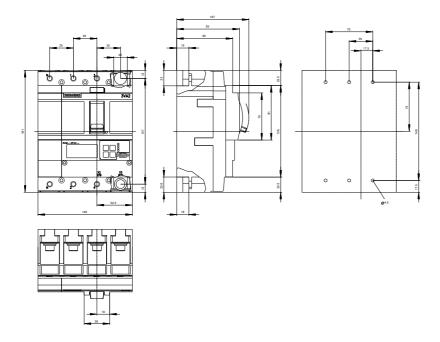
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA21166KP420AA0

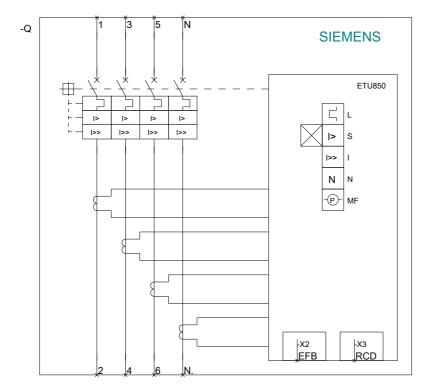
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv





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