SIEMENS

Data sheet

3VA1116-4EE42-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS S ICU=36KA @ 415 V 4-POLE, LINE PROTECTION TM220, ATFM, IN=160A OVERLOAD PROTECTION IR=112A ...160A SHORT CIRCUIT PROTECTION II=10 X IN NEUTRAL UNPROTECTED BUSBAR CONNECTION

Figure similar

Model		
product brand name		SENTRON
Product designation		Molded case circuit breaker
Design of the product		Line protection
Product variations		General Applications
Ground fault monitoring version		Without
Design of the auxiliary release		Without auxiliary release
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		TM220
General technical data		
Number of poles		4
Trip class / of the L-trip / with I2t characteristic / initial value		1
Trip class / of the L-trip / with I2t characteristic / Full- scale value		1
Electrical endurance (switching cycles)		
• at AC-1 / at 380/415 V / at 50/60 Hz		8 000
circuit-breaker / Design		3VA
Mechanical service life (switching cycles) / typical		15 000
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	-	LI
Switching capacity		
Switching capacity class of the circuit breaker	_	S
Dissipation	_	
Active power loss	_	
• maximum	W	38
Electricity		
Continuous current / Rated value / maximum	A	160
Continuous current / Rated value	А	160
Adjustable response value current		
 of the current-dependent overload release / Full-scale value 	A	1
 of the instantaneous short-circuit release / initial value 	A	10
Main circuit		
Operating voltage		
• with AC / at 50/60 Hz / Rated value	V	690
 for DC / Rated value 	V	600
Operating current	-	
• at 40 °C / Rated value	А	160
• at 50 °C / Rated value	А	160
● at 55 °C / Rated value	А	158
• at 60 °C / Rated value	А	155
• at 65 °C / Rated value	А	153
• at 70 °C / Rated value	А	150
Auxiliary circuit		
Number of CO contacts / for auxiliary contacts		0
Suitability		
Suitability for use		system protection
Adjustable parameters		
Adjustable response value current		
● of I-trip / Full-scale value	А	10
 for N-conductor protection / initial value 	А	0
 for N-conductor protection / Full-scale value 	А	0
Adjustable response value current / of the current- dependent overload release / initial value	A	0.7
Product details		
Product component		

Trip indicator		No
● display		No
 Voltage trigger 		No
 undervoltage release 		No
 undervoltage release with leading contact 		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 		No
 Phase failure detection 		No
 other measurement function 		No
Accessories		
Manufacturer article number / of the supplied basic		3VA1116-4EE42-0AA0
switch		
Short circuit		
Operational short-circuit current breaking capacity (Ics)		
• at 240 V / Rated value	kA	55
• at 415 V / Rated value	kA	36
• at 440 V / Rated value	kA	25
• at 500 V / Rated value	kA	15
• at 690 V / Rated value	kA	5
Maximum short-circuit current breaking capacity (Icu)	-	
• at 240 V / Rated value	kA	55
• at 415 V / Rated value	kA	36
• at 440 V / Rated value	kA	25
• at 500 V / Rated value	kA	16
• at 690 V / Rated value	kA	7
Short-circuit current making capacity (Icm)		
• at 240 V / Rated value	kA	121
• at 415 V / Rated value	kA	75.6
• at 690 V / Rated value	kA	7.5
Connections		
Arrangement of electrical connectors / for main		Front terminal
current circuit		

Type of connectable conductor cross-section

		EG-Konf.	DNV DNV GL
	other	Conformity	ĴÅ GI 🚳
General Product Approval EM	С	Declaration of	Shipping Approval
• acc. to DIN EN 81346-2		Q	
• acc. to DIN EN 61346-2		Q	
Equipment marking			
ertificates			
 during storage / maximum 	°C	80	
 during storage / minimum 	°C	-40	
 during operation / maximum 	°C	70	
 during operation / minimum 	°C	-25	
mbient temperature			
nvironmental conditions			
lounting type		fixed mount	ung
Depth	mm	70	·
Vidth	mm	101.6	
leight	mm	130	
echanical Design			
ype of electrical connection / for main current c	circuit	Lug termina	
• for flat-bar terminal connection / maximum		17 x 6.5	

-urther	information	
ununun	mornation	

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/3VA11164EE420AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11164EE420AA0/all

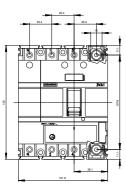
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11164EE420AA0

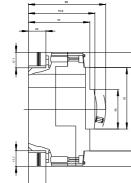
CAx-Online-Generator

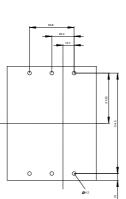
http://www.siemens.com/cax

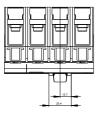
Tender specifications

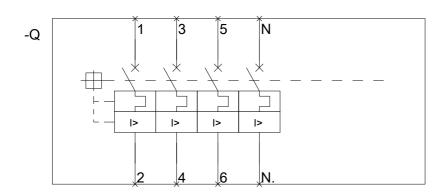
http://ausschreibungstexte.siemens.com/tiplv











last modified:

11.03.2015