SIEMENS

Datasheet

3VA1116-3GE46-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS N ICU=25KA @ 415 V 4-POLE, LINE PROTECTION TM220, ATFM, IN=160A OVERLOAD PROTECTION IR=112A ...160A SHORT CIRCUIT PROTECTION II=10 X IN NEUTRAL PROTECTION 100% CABLE CONNECTION

Figure similar

Model		
product brand name	SENTRO	DN
Product designation	Molded o	case circuit breaker
Design of the product	Line prot	ection
Product variations	General A	Applications
Ground fault monitoring version	Without	
Design of the auxiliary release	Without a	auxiliary release
Design of the auxiliary switch	Without	
Design of the operating mechanism	toggle ha	andle
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		
Protective function of the overcurrent release		Ц
Switching capacity		
Switching capacity class of the circuit breaker		N
Dissipation		
Active power loss	W	20
• maximum	VV	38
Electricity		
Operating current / at 45 °C / Rated value	Α	160
Continuous current / Rated value / maximum	Α	160
Continuous current		
Rated value	Α	160
Adjustable response value current		
 of the current-dependent overload release / Full-scale value 	Α	1
 of the instantaneous short-circuit release / initial value 	Α	10
Net weight	g	1 200
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	Α	160
• at 50 °C / Rated value	Α	160
• at 55 °C / Rated value	Α	158
• at 60 °C / Rated value	Α	155
• at 65 °C / Rated value	Α	153
• at 70 °C / Rated value	Α	150
Auxiliary circuit		
Number of CO contacts		
for auxiliary contacts		0
Suitability		
Suitability for use		system protection
Adjustable parameters		
Adjustable response value current	^	10
of I-trip / Full-scale value	A	10
• for N-conductor protection / initial value	A	100
• for N-conductor protection / Full-scale value	Α	100

Adjustable response value current / of the current- dependent overload release / initial value	Α	0.7
Appearance		
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 switch		3VA1116-3GE46-0AA0
Short circuit		
Operational short-circuit current breaking capacity		
(Ics)		
• at 240 V / Rated value	kA	36
● at 415 V / Rated value	kA	25
• at 440 V / Rated value	kA	16
• at 500 V / Rated value	kA	8
• at 690 V / Rated value	kA	5
Maximum short-circuit current breaking capacity (Icu)		
• at 240 V / Rated value	kA	36
• at 415 V / Rated value	kA	25
• at 440 V / Rated value	kA	16
• at 500 V / Rated value	kA	8
• at 690 V / Rated value	kA	7
Short-circuit current making capacity (Icm)		

• at 240 V / Rated value	kA	75.6
• at 415 V / Rated value	kA	52.5
• at 690 V / Rated value	kA	7.5

at 690 V / Rated value		N/A	7.5		
Connections					
Arrangement of electrical connectors					
 for main current circuit 			Front termina	al	
Type of connectable conductor cross-secti	on				
 of the round conductor terminal / stra 	anded		1 x (1.5 - 70	mm²)	
Design of the electrical connection					
• for main current circuit			Box terminal		
Mechanical Design					
Height		mm	130		
Width		mm	101.6		
Depth		mm	70		
Mounting type			fixed mounting		
Environmental conditions	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					
Reference code					
• acc. to DIN EN 61346-2			Q		
• acc. to DIN EN 81346-2			Q		
General EMC	Declaration	n of Sh	ipping	other	

Product

Approval

Conformity



GL

Approval

other

Further information

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

other

Industry Mall (Online ordering system)

https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA11163GE460AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11163GE460AA0/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11163GE460AA0

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

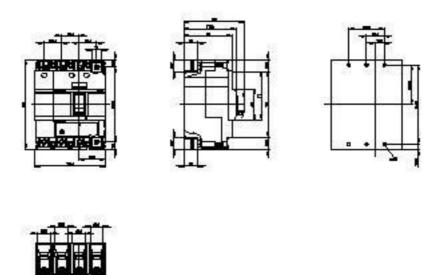


Figure similar

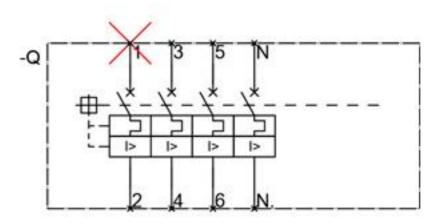


Figure similar

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