# **SIEMENS**

## **Datasheet**

## 3VA1116-3FE46-0AA0



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 50% CABLE 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		
Protective function of the overcurrent release		Ц
Switching capacity		
Switching capacity class of the circuit breaker		N
Dissipation		
Active power loss	W	38
• maximum	VV	30
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		
<ul> <li>of the current-dependent overload release / Full-scale value</li> </ul>	Α	1
<ul> <li>of the instantaneous short-circuit release / initial value</li> </ul>	Α	10
Net weight	g	1 200
Main circuit		
Operating voltage		
<ul> <li>with AC / at 50/60 Hz / Rated value</li> </ul>	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	٨	40
of I-trip / Full-scale value	A	10
• for N-conductor protection / initial value	A	0.5
• for N-conductor protection / Full-scale value	Α	0.5

Adjustable response value current / of the current- dependent overload release / initial value	Α	0.7
Appearance		
Product details		
Product component		
Trip indicator		No
<ul><li>display</li></ul>		No
Voltage trigger		No
undervoltage release		No
<ul> <li>undervoltage release with leading contact</li> </ul>		No
Product property		
<ul> <li>for neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof</li> </ul>		No
Product expansion		
<ul><li>optional</li></ul>		
— 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		3VA1116-3FE46-0AA0
Short circuit		
Operational short-circuit current breaking capacity		
(lcs)		
• 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

	Front terminal
	1 x (1.5 - 70 mm²)
	Box terminal
mm	130
mm	101.6
mm	70
	fixed mounting
°C	-25
°C	70
°C	-40
°C	80
	Q
	Q
	mm mm °C °C °C

General

**Product** 

**Approval** 

other

**EMC** 



**Declaration of** 

Conformity



GL

**Shipping** 

**Approval** 

other

other

## 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/3VA11163FE460AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11163FE460AA0/all

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA11163FE460AA0

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

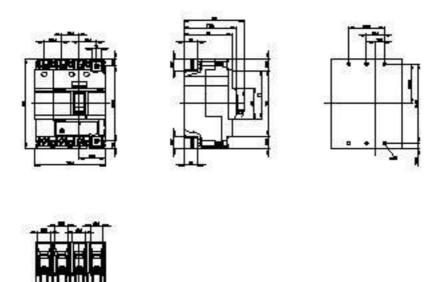


Figure similar

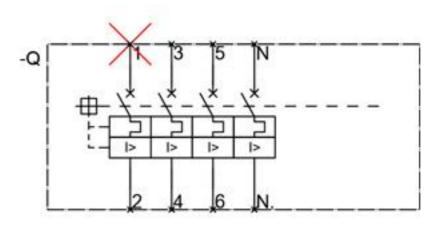


Figure similar

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