# **SIEMENS**

## **Datasheet**

# 3VA1120-3EF46-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS N ICU=25KA @ 415 V 4-POLE, LINE PROTECTION TM240, ATAM, IN=20A OVERLOAD PROTECTION IR=14A ...20A SHORT CIRCUIT PROTECTION II=5...10 X IN NEUTRAL UNPROTECTED 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	TM240

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		
• maximum	W	12
Electricity		
Operating current / at 45 °C / Rated value	А	20
Continuous current / Rated value / maximum	Α	160
Continuous current		
Rated value	Α	20
Adjustable response value current		
<ul> <li>of the current-dependent overload release / Full-scale value</li> </ul>	Α	1
• of the instantaneous short-circuit release / initial	Α	5
value		
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	20
● at 50 °C / Rated value	Α	20
• at 55 °C / Rated value	Α	20
• at 60 °C / Rated value	Α	19
• at 65 °C / Rated value	Α	19
• at 70 °C / Rated value	Α	19
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	Α	10
• for N-conductor protection / initial value	Α	0
• for N-conductor protection / Full-scale value	Α	0

Adjustable response value current / of the current- dependent overload release / initial value	А	0.7
Appearance		
Product details		
Product component		
Trip indicator		No
● display		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
<ul> <li>communication function</li> </ul>		No
Phase failure detection		No
other measurement function		No
Accessories		
Manufacturer article number / of the supplied basic switch		3VA1120-3EF46-0AA0
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

- at 656 V / Nated Value							
Connections							
Arrangement of electrical connectors							
<ul> <li>for main current circuit</li> </ul>			Fron	Front terminal			
Type of connectable conductor cross-sect	tion						
• of the round conductor terminal / stra	anded		1 x	1 x (1.5 - 70 mm²)			
Design of the electrical connection							
<ul> <li>for main current circuit</li> </ul>			Box	termina	I		
Mechanical Design							
Height		mm	130				
Width		mm	101	101.6			
Depth		mm	70	70			
Mounting type			fixed	fixed mounting			
Environmental conditions							
Ambient temperature							
during operation / minimum		°C	-25	-25			
<ul><li>during operation / maximum</li></ul>		°C	70	70			
during storage / minimum		°C	-40	-40			
during storage / maximum		°C	80	80			
Countification			_	-			
Certificates  Reference code							
acc. to DIN EN 61346-2			Q				
			Q				
• acc. to DIN EN 81346-2							
General EMC	Declaration	n of	Shipping		other		

**Approval** 

**Product** 

other



Conformity



GL

**Approval** 

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/3VA11203EF460AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11203EF460AA0/all

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA11203EF460AA0

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

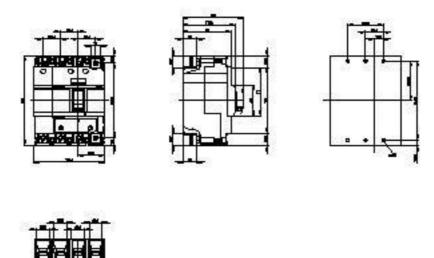


Figure similar

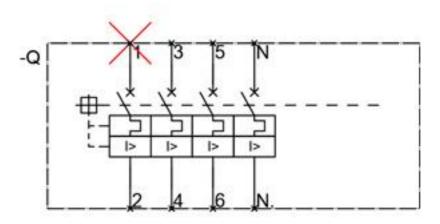


Figure similar

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