# **SIEMENS**

## Data sheet

# 3VA1080-2ED46-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 100 BREAKING CAPACITY CLASS B ICU=16KA @ 415 V 4-POLE, LINE PROTECTION TM210, FTFM, IN=80A OVERLOAD PROTECTION IR=80A FIXED SHORT CIRCUIT PROTECTION II=10 X IN NEUTRAL UNPROTECTED CABLE CONNECTION

Figure similar

Model		
product brand name	SENTRON	
Product designation	Molded case circu	it breaker
Design of the product	Line protection	
Product variations	General Application	ns
Ground fault monitoring version	Without	
Design of the auxiliary release	Without auxiliary r	elease
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	TM210	

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		В
Dissipation		
Active power loss		
• maximum	W	19.2
Electricity		
Continuous current / Rated value / maximum	Α	100
Continuous current / Rated value	Α	80
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 value	Α	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	Α	80
• at 50 °C / Rated value	Α	80
• at 55 °C / Rated value	Α	78
• at 60 °C / Rated value	Α	77
• at 65 °C / Rated value	Α	75
• at 70 °C / Rated value	Α	74
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	Α	1
Product details		
Product component		

		N
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 / optional / motor drive		No
	_	
Product function		
Product function		Vaa
Intrinsic device protection		Yes
• communication function		No
Phase failure detection		No
<ul> <li>other measurement function</li> </ul>		No
Accessories		
Manufacturer article number / of the supplied basic		3VA1080-2ED46-0AA0
switch		
Short circuit		
Operational short-circuit current breaking capacity		
(Ics)		
● at 240 V / Rated value	kA	25
• at 415 V / Rated value	kA	16
• at 440 V / Rated value	kA	8
• at 500 V / Rated value	kA	5
• at 690 V / Rated value	kA	5
Maximum short-circuit current breaking capacity (Icu)		
• at 240 V / Rated value	kA	25
• at 415 V / Rated value	kA	16
• at 440 V / Rated value	kA	8
• at 500 V / Rated value	kA	5
● at 690 V / Rated value	kA	5
Short-circuit current making capacity (Icm)		
• at 240 V / Rated value	kA	52.5
● at 415 V / Rated value	kA	32
• at 690 V / Rated value	kA	7.5
Connections		
Arrangement of electrical connectors / for main		Front terminal
current circuit		
current circuit		

<ul> <li>of the round conductor terminal / str</li> </ul>	randed		1 x (1.5 - 70 mm²)	
Type of electrical connection / for main cu	ırrent circuit		Box terminal	
Mechanical Design				
Height		mm	130	
Width		mm	101.6	
Depth		mm	70	
Mounting type			fixed mounting	
Environmental conditions				
Ambient temperature				
<ul><li>during operation / minimum</li></ul>		°C	-25	
<ul><li>during operation / maximum</li></ul>		°C	70	
<ul><li>during storage / minimum</li></ul>		°C	-40	
<ul><li>during storage / maximum</li></ul>		°C	80	
Certificates				
Equipment marking				
• acc. to DIN EN 61346-2			Q	
• acc. to DIN EN 81346-2			Q	
General EMC	Declaration	n of S	Shipping Approval	other
Product	Conformity	,		
Approval				

## Further information

EAC

Information- and Downloadcenter (Catalogs, Brochures,...)

other

http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)
https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA10802ED460AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA10802ED460AA0/all

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA10802ED460AA0

**CAx-Online-Generator** 

http://www.siemens.com/cax

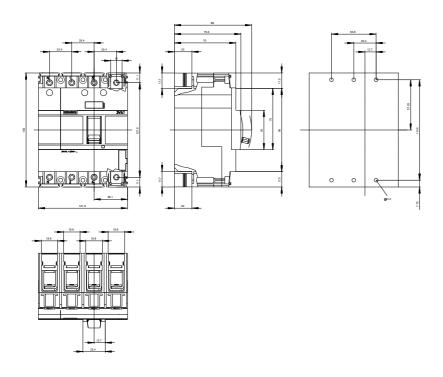
**Tender specifications** 

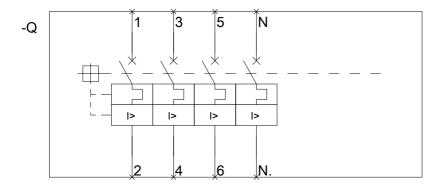
http://ausschreibungstexte.siemens.com/tiplv

other

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