# **SIEMENS**

#### Data sheet

## 3VA1180-6ED32-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS H ICU=70KA @ 415 V 3-POLE, LINE PROTECTION TM210, FTFM, IN=80A OVERLOAD PROTECTION IR=80A FIXED SHORT CIRCUIT PROTECTION II=10 X IN 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	TM210

General technical data				
Number of poles		3		
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 / on the front		IP40
Protective function of the overcurrent release		LI
Switching capacity		
Switching capacity class of the circuit breaker		Н
Dissipation		
Active power loss		
• maximum	W	19.2
Electricity		
Continuous current / Rated value / maximum	Α	160
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		
<ul> <li>with AC / at 50/60 Hz / Rated value</li> </ul>	V	690
• for DC / Rated value	V	500
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		

Trip indicator		No
·		No
display     Voltage trigger		No
<ul><li>Voltage trigger</li><li>undervoltage release</li></ul>		No
•		No
undervoltage release with leading contact  Product property		INU
Product property     for neutral conductors /		No
upgradeable/retrofittable / Short-circuit and		140
overload proof		
Product expansion / optional / 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		3VA1180-6ED32-0AA0
switch		
Short circuit		
Operational short-circuit current breaking capacity		
(lcs)		400
• at 240 V / Rated value	kA	100
• at 415 V / Rated value	kA	70
at 440 V / Rated value	kA	36
● at 500 V / Rated value	kA	15
at 690 V / Rated value	kA	5
Maximum short-circuit current breaking capacity (Icu)		400
at 240 V / Rated value	kA	100
● at 415 V / Rated value	kA	70
● at 440 V / Rated value	kA	36
● at 500 V / Rated value	kA	20
at 690 V / Rated value	kA	10
Short-circuit current making capacity (Icm)		
• at 240 V / Rated value	kA	220
● at 415 V / Rated value	kA	154
● at 690 V / Rated value	kA	17
Connections		
Arrangement of electrical connectors / for main		Front terminal
Type of connectable conductor cross-section		

• for flat-bar terminal connection / minimum	12 x 0
• for flat-bar terminal connection / maximum	17 x 6.5
Type of electrical connection / for main current circuit	Lug terminal

Mechanical Design				
Height	mm	130		
Width	mm	76.2		
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 markir	na

Q • acc. to DIN EN 61346-2 Q • acc. to DIN EN 81346-2

General Product Approval	EMC	Declaration of	Shipping Approval
		Conformity	











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/3VA11806ED320AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11806ED320AA0/all

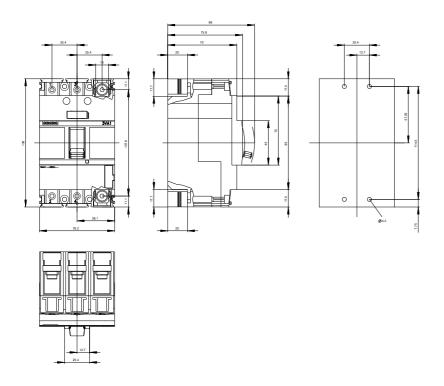
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA11806ED320AA0

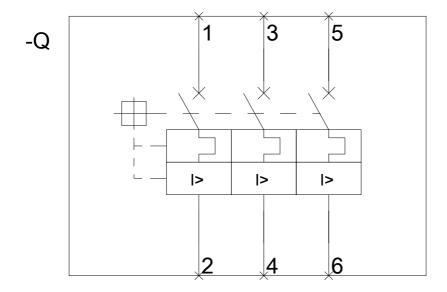
**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://ausschreibungstexte.siemens.com/tiplv





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