SIEMENS

Data sheet

3VA1140-3GF46-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS N ICU=25KA @ 415 V 4-POLE, LINE PROTECTION TM240, ATAM, IN=40A OVERLOAD PROTECTION IR=28A ...40A SHORT CIRCUIT PROTECTION II=5...10 X IN NEUTRAL PROTECTION 100% CABLE CONNECTION

Figure similar

Model		
product brand name	SENTRON	
Product designation	Molded case circuit brea	aker
Design of the product	Line protection	
Product variations	General Applications	
Ground fault monitoring version	Without	
Design of the auxiliary release	Without auxiliary release	е
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

Protection class IP / on the front Protective function of the overcurrent release LI Switching capacity Switching capacity class of the circuit breaker N Dissipation Active power loss • maximum W 10.8 Electricity Continuous current / Rated value / maximum A 160 Continuous current / Rated value A Adjustable response value current	
Switching capacity Switching capacity class of the circuit breaker Dissipation Active power loss • maximum W 10.8 Electricity Continuous current / Rated value / maximum A 160 Continuous current / Rated value A 40	
Switching capacity class of the circuit breaker Dissipation Active power loss • maximum W 10.8 Electricity Continuous current / Rated value / maximum A 160 Continuous current / Rated value A 40	
Switching capacity class of the circuit breaker Dissipation Active power loss • maximum W 10.8 Electricity Continuous current / Rated value / maximum A 160 Continuous current / Rated value A 40	
Active power loss • maximum W 10.8 Electricity Continuous current / Rated value / maximum A 160 Continuous current / Rated value A 40	
● maximum W 10.8 Electricity Continuous current / Rated value / maximum A 160 Continuous current / Rated value A 40	
Electricity Continuous current / Rated value / maximum A 160 Continuous current / Rated value A 40	
Continuous current / Rated value / maximum A 160 Continuous current / Rated value A 40	
Continuous current / Rated value A 40	
Adjustable response value current	
 of the current-dependent overload release / A 1 Full-scale value 	
• of the instantaneous short-circuit release / initial A 5 value	
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 A 40	
at 50 °C / Rated value A 40	
at 55 °C / Rated value A 39	
• at 60 °C / Rated value A 39	
• at 65 °C / Rated value A 38	
• at 70 °C / Rated value A 37	
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 A 10	
• for N-conductor protection / initial value A 100	
• for N-conductor protection / Full-scale value A 100	
Adjustable response value current / of the current- A 0.7 dependent overload release / initial value	
Product details	
Product component	

		Ma
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		3VA1140-3GF46-0AA0
switch		
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 (lcm)		
• at 240 V / Rated value	kA	75.6
• at 415 V / Rated value	kA	52.5
• at 690 V / Rated value	kA	7.5
Connections		
Arrangement of electrical connectors / for main		Front terminal
current circuit		

 of the round conductor terminal / stranded 		1 x (1.5 - 70 mm²)
Type of 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		
Ambient temperature		
during operation / minimum	°C	-25
during operation / maximum	°C	70
 during storage / minimum 	°C	-40
during storage / maximum	°C	80
Certificates		
Equipment marking		
• acc. to DIN EN 61346-2		Q
• acc. to DIN EN 81346-2		Q

General

Product

Approval

other

EMC



Declaration of

Conformity



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/3VA11403GF460AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11403GF460AA0/all

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

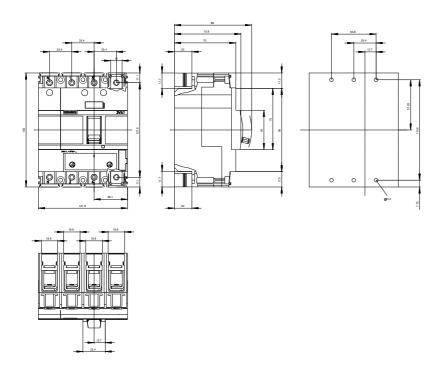
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11403GF460AA0

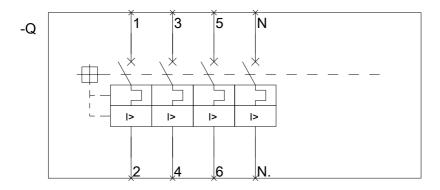
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv





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